# 2016 **ESCAPE Owner's Manual**







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Introduction	Driver and Passenger Airbags	36
About This Manual7	Front Passenger Sensing System	
Symbols Glossary7	Side Airbags	
Data Recording9	Driver Knee Airbag	40
California Proposition 6511	Safety Canopy™	40
Perchlorate11	Crash Sensors and Airbag Indicator	
Ford Credit11	Airbag Disposal	43
Replacement Parts		
Recommendation11	Keys and Remote Controls	
Special Notices12	Principle of Operation	44
Mobile Communications Equipment13	General Information on Radio Frequencies	
Export Unique Options13	Remote Control	45
Environment	Replacing a Lost Key or Remote Control	48
Protecting the Environment14	MyKey™	
Child Safety	Principle of Operation	/ <sub>1</sub> C
_	Creating a MyKey	
General Information15 Installing Child Seats16	Clearing All MyKeys	
Booster Seats22	Checking MyKey System Status	
Child Seat Positioning24	Using MyKey With Remote Start	
Child Safety Locks25	Systems	53
Clilia Salety Locks25	MyKey Troubleshooting	53
Safety Belts		
Principle of Operation27	Locks	
Fastening the Safety Belts28	Locking and Unlocking	
Safety Belt Height Adjustment31	Manual Liftgate	
Safety Belt Warning Lamp and Indicator	Power Liftgate	
Chime31	Keyless Entry	65
Safety Belt Minder32	Security	
Child Restraint and Safety Belt Maintenance33	_	65
Mairiteriarice	Passive Anti-Theft System Anti-Theft Alarm	
Personal Safety System™	Anti-mert Atam	00
Personal Safety System™34	Steering Wheel	
	Adjusting the Steering Wheel	67
Supplementary Restraints	Audio Control	
System	Voice Control	
Principle of Operation35	Cruise Control	

Information Display Control Heated Steering Wheel		Hints on Controlling the Interior Climate Heated Windows and Mirrors	106
Wipers and Washers		Cabin Air Filter	
Windshield Wipers		Remote Start	107
Autowipers		Seats	
Windshield Washers			100
Rear Window Wiper and Washers	72	Sitting in the Correct Position  Head Restraints	
Lighting		Manual Seats	
	7.6	Power Seats	
Lighting Control Autolamps		Memory Function	
Instrument Lighting Dimmer		Rear Seats	
Headlamp Exit Delay		Heated Seats	114
Daytime Running Lamps		Rear Seat Armrest	
Front Fog Lamps			
Direction Indicators		Universal Garage Door	
Interior Lamps		Opener	
		Universal Garage Door Opener	116
Windows and Mirrors		Auviliam Dawar Bainta	
Power Windows	78	Auxiliary Power Points	101
Exterior Mirrors	79	Auxiliary Power Points	121
Interior Mirror	81	Storage Compartments	
Sun Visors		Center Console	172
Moonroof	81	Overhead Console	
In aturament Chapter		Overriead Corisole	123
Instrument Cluster		Starting and Stopping the	
Gauges		Engine	
Warning Lamps and Indicators		General Information	124
Audible Warnings and Indicators	0/	Ignition Switch	124
Information Displays		Keyless Starting	124
General Information	88	Starting a Gasoline Engine	
Trip Computer		Engine Block Heater	128
Information Messages			
ea.eeeeagee		Fuel and Refueling	
Climate Control		Safety Precautions	
Manual Climate Control	101	Fuel Quality	
Automatic Climate Control	102	Fuel Filler Funnel Location	
		Running Out of Fuel	IJI

Refueling	Eco Mode167 Steering168  Load Carrying
Transmission	Rear Under Floor Storage170
Automatic Transmission138	Luggage Covers170
Four-Wheel Drive Principle of Operation141	Roof Racks and Load Carriers171 Load Limit172
Using Four-Wheel Drive141	Towing
_	Towing a Trailer179
Brakes	Trailer Sway Control180
General Information146	Recommended Towing Weights180
Hints on Driving With Anti-Lock Brakes146	Essential Towing Checks182
Parking Brake147	Towing Points
Hill Start Assist147	Transporting the Vehicle186 Towing the Vehicle on Four Wheels186
Traction Control	_
	Driving Hints
Principle of Operation149 Using Traction Control149	Breaking-In188
Using fraction control149	Economical Driving188
Stability Control	Driving Through Water189
Principle of Operation150	Floor Mats189
Using Stability Control151	Roadside Emergencies
<b>.</b>	Roadside Assistance191
Parking Aids	Hazard Warning Flashers192
Principle of Operation152	Fuel Shutoff192
Rear Parking Aid	Jump Starting the Vehicle193
Front Parking Aid153 Active Park Assist154	Post-Crash Alert System195
Rear View Camera158	Customer Assistance
Theat The Weather Carrier Carr	
Cruise Control	Getting the Services You Need196 In California (U.S. Only)197
Principle of Operation161	The Better Business Bureau (BBB) Auto
Using Cruise Control161	Line Program (U.S. Only)198
Bulledon of Addis	Utilizing the Mediation/Arbitration
Driving Aids	Program (Canada Only)198 Getting Assistance Outside the U.S. and
Blind Spot Information System162 Cross Traffic Alert164	Canada199

Ordering Additional Owner's Literature200	Vehicle Care
Reporting Safety Defects (U.S. Only)200	General Information234 Cleaning Products234
Reporting Safety Defects (Canada Only)201	Cleaning the Exterior234 Waxing235
Fuses	Cleaning the Engine235 Cleaning the Windows and Wiper
Fuse Specification Chart202	Blades236
Changing a Fuse211	Cleaning the Interior236 Cleaning the Instrument Panel and Instrument Cluster Lens237
Maintenance	
General Information212	Cleaning Leather Seats237
Opening and Closing the Hood212	Repairing Minor Paint Damage238
Under Hood Overview - 1.6L	Cleaning the Alloy Wheels238
EcoBoost™214	Vehicle Storage238
Under Hood Overview - 2.0L EcoBoost™215	Wheels and Tires
Under Hood Overview - 2.5L216	General Information241
	Tire Care244
Engine Oil Dipstick - 1.6L EcoBoost™217	Using Snow Chains257
Engine Oil Dipstick - 2.0L EcoBoost™/	Tire Pressure Monitoring System258
2.5L217	Changing a Road Wheel262
Engine Oil Check217	Technical Specifications266
Engine Coolant Check218	·
Automatic Transmission Fluid Check221	Capacities and Specific- ations
Brake Fluid Check221	
Power Steering Fluid Check221	Engine Specifications - 1.6L EcoBoost™268
Washer Fluid Check221	Engine Specifications - 2.0L
Fuel Filter222	ĒcoBoost™268
Changing the 12V Battery222	Engine Specifications - 2.5L269
Checking the Wiper Blades223	Motorcraft Parts - 1.6L EcoBoost™270
Changing the Wiper Blades223	Motorcraft Parts - 2.0L EcoBoost™271
Adjusting the Headlamps224	Motorcraft Parts - 2.5L272
Removing a Headlamp226	Vehicle Identification Number273
Changing a Bulb226	Vehicle Certification Label274
Bulb Specification Chart230	Transmission Code Designation274
Changing the Engine Air Filter232	Capacities and Specifications - 1.6L EcoBoost™275
	Capacities and Specifications - 2.0L EcoBoost™278

Capacities and Specifications - 2.5L282	Appendices
Audio System	End User License Agreement365
General Information286	
Audio Unit - Vehicles With: AM/FM/CD287	
Audio Unit - Vehicles With: AM/FM/CD/ SYNC289	
Audio Unit - Vehicles With: AM/FM/CD/ SYNC/Satellite Radio291	
Audio Unit - Vehicles With: Premium AM/ FM/CD293	
Audio Unit - Vehicles With: Sony AM/FM/ CD295	
Digital Radio298	
Satellite Radio301	
USB Port303 Media Hub303	
Wedia Flob	
SYNC™	
General Information304	
Using Voice Recognition306	
Using SYNC™ With Your Phone308	
SYNC™ Applications and Services320 Using SYNC™ With Your Media	
Player325	
SYNC™ Troubleshooting334	
Accessories	
Accessories342	
Extended Service Plan	
(ESP)	
Extended Service Plan (ESP)344	
Scheduled Maintenance	
General Maintenance Information346	
Normal Scheduled Maintenance349	
Special Operating Conditions Scheduled	
Maintenance352 Scheduled Maintenance Record355	
Scrieduled Maintenance Record355	

#### **ABOUT THIS MANUAL**

Thank you for choosing Ford. We recommend that you take some time to get to know your vehicle by reading this manual. The more that you know about your vehicle, the greater the safety and pleasure you will get from driving it.

#### WARNING



Driving while distracted can result in loss of vehicle control, crash and injury. We strongly recommend that

you use extreme caution when using any device that may take your focus off the road. Your primary responsibility is the safe operation of your vehicle. We recommend against the use of any hand-held device while driving and encourage the use of voice-operated systems when possible. Make sure you are aware of all applicable local laws that may affect the use of electronic devices while driving.

**Note:** This manual describes product features and options available throughout the range of available models, sometimes even before they are generally available. It may describe options not fitted to the vehicle you have purchased.

**Note:** Some of the illustrations in this manual may show features as used in different models, so they may appear different to you on your vehicle.

**Note:** Always use and operate your vehicle in line with all applicable laws and regulations.

**Note:** Pass on this manual when selling your vehicle. It is an integral part of your vehicle.

This manual may qualify the location of a component as left-hand side or right-hand side. The side is determined when facing forward in the seat.



E154903

- A Right-hand side.
- B Left-hand side.

#### SYMBOLS GLOSSARY

These are some of the symbols you may see on your vehicle.



Safety alert



See Owner's Manual



Air conditioning system



Anti-lock braking system



Avoid smoking, flames or sparks



Battery



Battery acid



Brake fluid - non petroleum based



Brake system



Cabin air filter



Check fuel cap



Child safety door lock or unlock



Child seat lower anchor



Child seat tether anchor



Cruise control



Do not open when hot



Engine air filter



Engine coolant



Engine coolant temperature



Engine oil



Explosive gas



Fan warning



Fasten safety belt



Front airbag



Front fog lamps



Fuel pump reset



Fuse compartment



Hazard warning flashers



Heated rear window



Heated windshield



Interior luggage compartment release



Jack



Keep out of reach of children



Lighting control



Low tire pressure warning



Maintain correct fluid level



Note operating instructions



Panic alarm



Parking aid



Parking brake



Power steering fluid



Power windows front/rear



Power window lockout



Service engine soon



Side airbag



Shield the eyes



Stability control



Windshield wash and wipe

#### **DATA RECORDING**

### **Service Data Recording**

Service data recorders in your vehicle are capable of collecting and storing diagnostic information about your vehicle. This potentially includes information about the performance or status of various systems and modules in the vehicle, such as engine, throttle, steering or brake systems. In order to properly diagnose and service your vehicle, Ford Motor Company, Ford of Canada, and service and repair

facilities may access or share among them vehicle diagnostic information received through a direct connection to your vehicle when diagnosing or servicing your vehicle. Additionally, when your vehicle is in for service or repair. Ford Motor Company. Ford of Canada, and service and repair facilities may access or share among them data for vehicle improvement purposes. For U.S. only (if equipped), if you choose to use the SYNC Vehicle Health Report, you consent that certain diagnostic information may also be accessed electronically by Ford Motor Company and Ford authorized service facilities, and that the diagnostic information may be used for any purpose. See **SYNC™** (page 304).

#### **Event Data Recording**

This vehicle is equipped with an event data recorder. The main purpose of an event data recorder is to record, in certain crash or near crash-like situations, such as an airbag deployment or hitting a road obstacle; this data will assist in understanding how a vehicle's systems performed. The event data recorder is designed to record data related to vehicle dynamics and safety systems for a short period of time, typically 30 seconds or less.

The event data recorder in this vehicle is designed to record such data as:

- How various systems in your vehicle were operating;
- Whether or not the driver and passenger safety belts were buckled/fastened;
- How far (if at all) the driver was depressing the accelerator and/or the brake pedal; and
- How fast the vehicle was traveling; and
- Where the driver was positioning the steering wheel.

This data can help provide a better understanding of the circumstances in which crashes and injuries occur.

Note: Event data recorder data is recorded by your vehicle only if a non-trivial crash situation occurs; no data is recorded by the event data recorder under normal driving conditions and no personal data or information (e.g., name, gender, age, and crash location) is recorded (see limitations regarding 911 Assist and Traffic, directions and Information privacy below). However, parties, such as law enforcement, could combine the event data recorder data with the type of personally identifying data routinely acquired during a crash investigation.

To read data recorded by an event data recorder, special equipment is required. and access to the vehicle or the event data recorder is needed. In addition to the vehicle manufacturer, other parties, such as law enforcement, that have such special equipment, can read the information if they have access to the vehicle or the event data recorder. Ford Motor Company and Ford of Canada do not access event data recorder information without obtaining consent. unless pursuant to court order or where required by law enforcement. other government authorities or other third parties acting with lawful authority. Other parties may seek to access the information independently of Ford Motor Company and Ford of Canada.

**Note:** Including to the extent that any law pertaining to Event Data Recorders applies to SYNC or its features, please note the following: Once 911 Assist (if equipped) is enabled (set ON), 911 Assist may, through any paired and connected cell phone, disclose to emergency services that the vehicle has been in a crash involving the deployment of an airbag or. in certain vehicles. the activation of the fuel pump shut-off. Certain versions or updates to 911 Assist may also be capable of being used to electronically or verbally provide to 911 operators the vehicle location (such as latitude and longitude), and/or other details about the vehicle or crash or personal information about the occupants to assist 911 operators to provide the most appropriate emergency services. If you do not want to disclose this information, do not activate the 911 Assist feature. See SYNC™ (page 304).

Additionally, when you connect to Traffic. Directions and Information (if equipped. U.S. only). the service uses GPS technology and advanced vehicle sensors to collect the vehicle's current location, travel direction, and speed ("vehicle travel information"), only to help provide you with the directions, traffic reports, or business searches that you request. If you do not want Ford or its vendors to receive this information, do not activate the service. For more information, see Traffic. Directions and Information. Terms and Conditions. See SYNC™ (page 304).

#### **CALIFORNIA PROPOSITION 65**

#### WARNING

Some constituents of engine exhaust, certain vehicle components, certain fluids contained in vehicles

and certain products of component wear. contain or emit chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

#### **PERCHLORATE**

Certain components in your vehicle such as airbag modules, safety belt pretensioners and remote control batteries may contain perchlorate material. Special handling may apply for service or vehicle end of life disposal.

#### For more information visit:

#### Web Address

www.dtsc.ca.gov/hazardouswaste/ perchlorate

#### **FORD CREDIT**

#### (U.S. Only)

Ford Credit offers a full range of financing and lease plans to help you acquire your vehicle. If you have financed or leased your vehicle through Ford Credit, thank you for vour business.

For your convenience we offer a number of ways to contact us, as well as to help manage your account.

Phone: 1-800-727-7000

For more information regarding Ford Credit, as well as to access Account Manager. please go to www.fordcredit.com.

#### REPLACEMENT PARTS RECOMMENDATION

Your vehicle has been built to the highest standards using quality parts. We recommend that you demand the use of genuine Ford and Motorcraft parts whenever your vehicle requires scheduled maintenance or repair. You can clearly identify genuine Ford and Motorcraft parts by looking for the Ford, FoMoCo or Motorcraft branding on the parts or their packaging.

#### Scheduled Maintenance and **Mechanical Repairs**

One of the best ways for you to make sure that your vehicle provides years of service is to have it maintained in line with our recommendations using parts that conform to the specifications detailed in this Owner's Manual. Genuine Ford and Motorcraft parts meet or exceed these specifications.

#### **Collision Repairs**

We hope that you never experience a collision, but accidents do happen. Genuine Ford replacement collision parts meet our stringent requirements for fit, finish. structural integrity, corrosion protection and dent resistance. During vehicle development we validate these parts deliver the intended level of protection as a whole system. A great way to know for sure you are getting this level of protection is to use genuine Ford replacement collision parts.

#### **Warranty on Replacement Parts**

Genuine Ford and Motorcraft replacement parts are the only replacement parts that benefit from a Ford Warranty, Damage caused to your vehicle as a result of the failure of non-Ford parts may not be covered by the Ford Warranty. For additional information, refer to the terms and conditions of the Ford Warranty.

#### SPECIAL NOTICES

#### **New Vehicle Limited Warranty**

For a detailed description of what is covered and what is not covered by your vehicle's New Vehicle Limited Warranty. refer to the Warranty Manual that is provided to you along with your Owner's Manual.

#### **Special Instructions**

result in personal injury.

For your added safety, your vehicle is fitted with sophisticated electronic controls.

#### WARNINGS

You risk death or serious injury to yourself and others if you do not follow the instruction highlighted by the warning symbol. Failure to follow the specific warnings and instructions could



Front seat mounted rear-facing child or infant seats should **NEVER** be placed in front of an active passenger airbag.

### **On-board Diagnostics (OBD-II)**

Your vehicle's On-board Diagnostics (OBD-II) system has a data port for diagnostics, repair and reprogramming services with diagnostic scan tools. Installing a non-Ford-approved aftermarket OBD plug-in device that uses the port during normal driving, for example remote insurance company monitoring. remote vehicle diagnostics, telematics or engine reprogramming, may cause interference or damage to vehicle systems. We do not recommend or endorse the use of any non-Ford-approved aftermarket OBD plug-in devices. The vehicle Warranty may not cover damage caused by any non-Ford-approved aftermarket OBD plug-in device.

#### Notice to Owners of Pickup Trucks and Utility Type Vehicles

#### WARNING



Utility vehicles have a significantly higher rollover rate than other types of vehicles.

Before you drive your vehicle, please read this Owner's Guide carefully. Your vehicle is not a passenger car. As with other vehicles of this type, failure to operate this vehicle correctly may result in loss of vehicle control, vehicle rollover, personal injury or death.

#### Using Your Vehicle With a Snowplow

#### Do not use this vehicle for snowplowing.

Your vehicle is not equipped with a snowplowing package.

#### Using Your Vehicle as an Ambulance

#### Do not use this vehicle as an ambulance.

Your vehicle is not equipped with the Ford Ambulance Preparation Package.

# MOBILE COMMUNICATIONS EQUIPMENT

Using mobile communications equipment is becoming increasingly important in the conduct of business and personal affairs. However, you must not compromise your own or others' safety when using such equipment. Mobile communications can enhance personal safety and security when appropriately used, particularly in emergency situations. Safety must be paramount when using mobile communications equipment to avoid negating these benefits. Mobile communication equipment includes, but is not limited to, cellular phones, pagers. portable email devices, text messaging devices and portable two-way radios.

WARNING

Driving while distracted can result in loss of vehicle control, crash and injury. We strongly recommend that you use extreme caution when using any device that may take your focus off the road. Your primary responsibility is the safe operation of your vehicle. We recommend against the use of any hand-held device while driving and encourage the use of voice-operated systems when possible. Make sure you are aware of all applicable local laws that may affect the use of electronic devices while driving.

**EXPORT UNIQUE OPTIONS** 

For your particular global region, your vehicle may be equipped with features and options that are different from the features and options that are described in this Owner's Manual. A market unique supplement may be supplied that complements this book. By referring to the market unique supplement, if provided, you can properly identify those features, recommendations and specifications that

are unique to your vehicle. This Owner's Manual is written primarily for the U.S. and Canadian Markets. Features or equipment listed as standard may be different on units built for Export. Refer to this Owner's Manual for all other required information and warnings.

### **Environment**

# PROTECTING THE ENVIRONMENT

You must play your part in protecting the environment. Correct vehicle usage and the authorized disposal of waste, cleaning and lubrication materials are significant steps toward this aim.

#### **GENERAL INFORMATION**

See the following sections for directions on how to properly use safety restraints for children

#### **WARNINGS**

Always make sure your child is secured properly in a device that is appropriate for their height, age and weight. Child safety restraints must be bought separately from your vehicle. Failure to follow these instructions and guidelines may result in an increased risk of serious injury or death to your child.

The recommendations for safety restraints are based on probable child height, age and weight thresholds from National Highway Traffic Safety Administration and other safety organizations, or are the minimum. requirements of law. Ford recommends checking with a NHTSA Certified Child Passenger Safety Technician (CPST) and consult your pediatrician to make sure your

child seat is appropriate for your child, and

All children are shaped differently.

#### WARNINGS

is compatible with and properly installed in your vehicle. To locate a child seat fitting station and CPST, contact the NHTSA toll free at 1-888-327-4236 or go to http://www.nhtsa.dot.gov. In Canada, check with your local St. John Ambulance office for referral to a CPST or for further information, contact your provincial ministry of transportation, locate your local St. John Ambulance office by searching for St. John Ambulance on the internet, or Transport Canada at 1-800-333-0371 (http://www.tc.gc.ca). Failure to properly restrain children in safety seats made especially for their height, age, and weight may result in an increased risk of serious injury or death to your child.

Do not leave children or animals unattended in the vehicle. On hot days, the temperature in the trunk or vehicle interior can rise very quickly. Exposure of people or animals to these high temperatures for even a short time

can cause death or serious heat-related injuries, including brain damage, Small children are particularly at risk.

#### **Recommendations for Safety Restraints for Children**

Child	Child size, height, weight, or age	Recommended restraint type
Infants or toddlers	Children weighing 40 lb (18 kg) or less (generally age four or younger).	Use a child safety seat (sometimes called an infant carrier, convertible seat, or toddler seat).
Small children	Children who have outgrown or no longer properly fit in a child safety seat (generally children who are less than 4 ft. 9 in. (1.45 m) tall, are greater than age four and less than age 12, and between 40 lb (18 kg) and 80 lb (36 kg) and upward to 100 lb (45 kg) if recommended by your child restraint manufacturer).	Use a belt-positioning booster seat.
Larger children	Children who have outgrown or no longer properly fit in a belt-positioning booster seat (generally children who are at least 4 ft. 9 in. (1.45 m) tall or greater than 80 lb (36 kg) or 100 lb (45 kg) if recommended by child restraint manufacturer).	Use a vehicle safety belt having the lap belt snug and low across the hips, shoulder belt centered across the shoulder and chest, and seat back upright.

- You are required by law to properly use safety seats for infants and toddlers in the United States and Canada.
- Many states and provinces require that small children use approved booster seats until they reach age eight, a height of 4 feet 9 inches (1.45 meters) tall, or 80 pounds (36 kilograms). Check your local and state or provincial laws for specific requirements about the safety of children in your vehicle.
- When possible, always properly restrain children 12 years of age and under in a rear seating position of your vehicle. Accident statistics suggest that children are safer when properly restrained in the rear seating positions than in a front seating position. See Front Passenger Sensing System (page 37).

# INSTALLING CHILD SEATS Child Seats



E142594

Use a child safety seat (sometimes called an infant carrier, convertible seat, or toddler seat) for infants, toddlers, or children weighing 40 pounds (18 kilograms) or less (generally age four or vounger).

#### Using Lap and Shoulder Belts

#### WARNINGS

Airbags can kill or injure a child in a child seat. Never place a rear-facing child seat in front of an active airbag. If you must use a forward-facing child seat in the front seat, move the seat upon which the child seat is installed all the way back.



Airbags can kill or injure a child in a child seat. Children 12 and under should be properly restrained in the rear seat whenever possible.



Depending on where you secure a child restraint, and depending on the child restraint design, you may block access to certain safety belt buckle assemblies and LATCH lower anchors. rendering those features potentially unusable. To avoid risk of injury, occupants should only use seating positions where they are able to be properly restrained.

When installing a child safety seat with combination lap and shoulder belts:

- Use the correct safety belt buckle for that seating position.
- Insert the belt tongue into the proper buckle until you hear a snap and feel it latch. Make sure the tongue is securely fastened in the buckle.
- Keep the buckle release button pointing up and away from the safety seat, with the tongue between the child seat and the release button, to prevent accidental unbuckling.

- Place the vehicle seat upon which the child seat will be installed in the upright position.
- Put the safety belt in the automatic locking mode. See Step 5. This vehicle does not require the use of a locking clip.

Perform the following steps when installing the child seat with combination lap and shoulder belts:

**Note:** Although the child seat illustrated is a forward facing child seat, the steps are the same for installing a rear facing child seat.



E142528

Position the child safety seat in a seat with a combination lap and shoulder belt.



2. Pull down on the shoulder belt and then grasp the shoulder belt and lap belt together.



3. While holding the shoulder and lap belt portions together, route the tongue through the child seat according to the child seat manufacturer's instructions. Be sure the belt webbing is not twisted.



4. Insert the belt tongue into the proper buckle (the buckle closest to the direction the tongue is coming from) for that seating position until you hear a snap and feel the latch engage. Make sure the tongue is latched securely by pulling on it.



E142875

5. To put the retractor in the automatic locking mode, grasp the shoulder portion of the belt and pull downward until all of the belt is pulled out.

**Note:** The automatic locking mode is available on the front passenger and rear seats.

- Allow the belt to retract to remove slack. The belt will click as it retracts to indicate it is in the automatic locking mode.
- Try to pull the belt out of the retractor to make sure the retractor is in the automatic locking mode (you should not be able to pull more belt out). If the retractor is not locked, unbuckle the belt and repeat Steps 5 and 6.



- 8. Remove remaining slack from the belt. Force the seat down with extra weight. for example, by pressing down or kneeling on the child restraint while pulling up on the shoulder belt in order to force slack from the belt. This is necessary to remove the remaining slack that will exist once the extra weight of the child is added to the child restraint. It also helps to achieve the proper snugness of the child seat to your vehicle. Sometimes, a slight lean toward the buckle will additionally help to remove remaining slack from the belt.
- 9. Attach the tether strap (if the child seat is equipped).



E142534

Before placing the child in the seat. 10. forcibly move the seat forward and back to make sure the seat is securely held in place. To check this, grab the seat at the belt path and attempt to move it side to side and forward and back. There should be no more than 1 inch (2.5 centimeters) of movement for proper installation.

Ford recommends checking with a NHTSA Certified Child Passenger Safety Technician to make certain the child restraint is properly installed. In Canada, check with your local St. John Ambulance office for referral to a Certified Passenger Seat Technician.

#### **Using Lower Anchors and Tethers** for CHildren (LATCH)

#### WARNINGS

Never attach two child safety seats to the same anchor. In a crash, one anchor may not be strong enough to hold two child safety seat attachments and may break, causing serious injury or

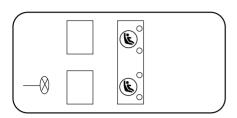
death.

Depending on where you secure a child restraint, and depending on the child restraint design, you may block

access to certain safety belt buckle assemblies or LATCH lower anchors. rendering those features potentially unusable. To avoid risk of injury, occupants should only use seating positions where they are able to be properly restrained.

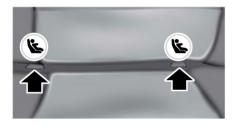
The LATCH system is composed of three vehicle anchor points: two lower anchors located where seat back and seat cushion meet (called the seat bight) and one top tether anchor located behind that seating position.

LATCH compatible child safety seats have two rigid or webbing mounted attachments that connect to the two lower anchors at the LATCH equipped seating positions in your vehicle. This type of attachment method eliminates the need to use safety belts to attach the child seat. however the safety belt can still be used to attach the child seat. For forward-facing child seats, the top tether strap must also be attached to the proper top tether anchor, if a top tether strap has been provided with your child seat.



#### E142535

Your vehicle has LATCH lower anchors for child seat installation at the seating positions marked with the child seat symbol.



#### E144054

The LATCH anchors are located at the rear section of the rear seat between the cushion and seat back below the symbols as shown. Follow the child seat manufacturer's instructions to properly install a child seat with LATCH attachments. Follow the instructions on attaching child safety seats with tether straps.

Attach LATCH lower attachments of the child seat only to the anchors shown.

# Use of Inboard Lower Anchors from the Outboard Seating Positions (Center Seating Use)

#### WARNING

The standardized spacing for LATCH lower anchors is 11 inches (28 centimeters) center to center. Do not use LATCH lower anchors for the center seating position unless the child seat manufacturer's instructions permit and specify using anchors spaced at least as far apart as those in this vehicle.

The lower anchors at the center of the second row rear seat are spaced 18 inches (46 centimeters) apart. A child seat with rigid LATCH attachments cannot be installed at the center seating position. LATCH compatible child seats (with attachments on belt webbing) can only be used at this seating position provided that the child seat manufacturer's instructions permit use with the anchor spacing stated. Do not attach a child seat to any lower anchor if an adjacent child seat is attached to that anchor.

Each time you use the safety seat, check that the seat is properly attached to the lower anchors and tether anchor, if applicable. Tug the child seat from side to side and forward and back where it is secured to your vehicle. The seat should move less than one inch when you do this for a proper installation.

If the safety seat is not anchored properly, the risk of a child being injured in a crash greatly increases.

#### Combining Safety Belt and LATCH Lower Anchors for Attaching Child Safety Seats

When used in combination, either the safety belt or the LATCH lower anchors may be attached first, provided a proper installation is achieved. Attach the tether strap afterward, if included with the child seat.

#### **Using Tether Straps**



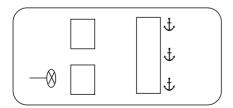
Many forward-facing child safety seats include a tether strap which extends from the back of

the child safety seat and hooks to an anchoring point called the top tether anchor. Tether straps are available as an accessory for many older safety seats.

Contact the manufacturer of your child seat for information about ordering a tether strap, or to obtain a longer tether strap if the tether strap on your safety seat does not reach the appropriate top tether anchor in your vehicle.

Once the child safety seat has been installed using either the safety belt, the lower anchors of the LATCH system, or both, you can attach the top tether strap.

The tether strap anchors in your vehicle are in the following positions (shown from top view):



E142537

Perform the following steps to install a child safety seat with tether anchors:

**Note:** If you install a child seat with rigid LATCH attachments, do not tighten the tether strap enough to lift the child seat off your vehicle seat cushion when the child is seated in it. Keep the tether strap just snug without lifting the front of the child seat. Keeping the child seat just touching your vehicle seat gives the best protection in a severe crash.

 Route the child safety seat tether strap over the back of the seat. For outboard seating positions, route the tether strap under the head restraint and between the head restraint posts. For the center seating positions, route the tether strap over the top of the head restraint. If needed, the head restraints can also be removed.



 Locate the correct anchor on the back panel of the rear seat for the selected seating position. The anchors are labeled with the tether strap symbol and are partially covered by the gap panel. Pull the panel back to fully expose the anchors.



#### E142539

- 3. Clip the tether strap to the anchor as shown.
- 4. Tighten the child safety seat tether strap according to the manufacturer's instructions. If your child restraint system is equipped with a tether strap, and the child restraint manufacturer recommends its use, Ford also recommends its use.

#### **BOOSTER SEATS**

#### WARNING



Never place, or allow a child to place, the shoulder belt under a child's arm or behind the back because it

or bening the back because it reduces the protection for the upper part of the body and may increase the risk of injury or death in a crash.

Use a belt-positioning booster seat for children who have outgrown or no longer properly fit in a child safety seat (generally children who are less than 4 feet 9 inches (1.45 meters) tall, are greater than age four (4) and less than age twelve (12), and between 40 pounds (18 kilograms) and 80 pounds (36 kilograms) and upward to 100 pounds (45 kilograms) if

recommended by your child restraint manufacturer). Many state and provincial laws require that children use approved booster seats until they reach age eight, a height of 4 feet 9 inches (1.45 meters) tall, or 80 pounds (36 kilograms).

Booster seats should be used until you can answer YES to ALL of these questions when seated without a booster seat:



#### F142595

- Can the child sit all the way back against their vehicle seat back with knees bent comfortably at the edge of the seat cushion?
- Can the child sit without slouching?
- Does the lap belt rest low across the hips?
- Is the shoulder belt centered on the shoulder and chest?
- Can the child stay seated like this for the whole trip?

Always use booster seats in conjunction with your vehicle lap and shoulder belt.

#### **Types of Booster Seats**



#### E68924

#### Backless booster seats

If your backless booster seat has a removable shield, remove the shield. If a vehicle seating position has a low seat back or no head restraint, a backless booster seat may place your child's head (as measured at the tops of the ears) above the top of the seat. In this case, move the backless booster to another seating position with a higher seat back or head restraint and lap and shoulder belts, or consider using a high back booster seat.



#### E70710

#### High back booster seats

If, with a backless booster seat, you cannot find a seating position that adequately supports your child's head, a high back booster seat would be a better choice.

Children and booster seats vary in size and shape. Choose a booster that keeps the lap belt low and snug across the hips, never up across the stomach, and lets you adjust the shoulder belt to cross the chest and rest snugly near the center of the shoulder. The following drawings compare the ideal fit (center) to a shoulder belt uncomfortably close to the neck and a shoulder belt that could slip off the shoulder. The drawings also show how the lap belt should be low and snug across the child's hips.







23



If the booster seat slides on the vehicle seat upon which it is being used, placing a rubberized mesh sold as shelf or carpet liner under the booster seat may improve this condition. Do not introduce any item thicker than this under the booster seat. Check with the booster seat manufacturer's instructions.

#### **CHILD SEAT POSITIONING**

#### **WARNINGS**

Airbags can kill or injure a child in a child seat. Never place a rear-facing child seat in front of an active airbag. If you must use a forward-facing child seat in the front seat, move the vehicle seat upon which the child seat is installed all the way back. When possible, all children age 12 and under should be properly restrained in a rear seating position. If all children cannot be seated and restrained properly in a rear seating position, properly restrain the largest child in the front seat.

Always carefully follow the instructions and warnings provided by the manufacturer of any child restraint to determine if the restraint device is appropriate for your child's size, height, weight, or age. Follow the child restraint manufacturer's instructions and warnings provided for installation and use in conjunction with the instructions and

#### **WARNINGS**

warnings provided by your vehicle manufacturer. A safety seat that is improperly installed or utilized, is inappropriate for your child's height, age, or weight or does not properly fit the child may increase the risk of serious injury or death.

Never let a passenger hold a child on his or her lap while your vehicle is moving. The passenger cannot protect the child from injury in a crash, which may result in serious injury or death.

Never use pillows, books, or towels to boost a child. They can slide around and increase the likelihood of injury or death in a crash.

Always restrain an unoccupied child seat or booster seat. These objects may become projectiles in a crash or sudden stop, which may increase the risk of serious injury.

Never place, or allow a child to place, the shoulder belt under a child's arm or behind the back because it reduces the protection for the upper part of the body and may increase the risk of injury or death in a crash.

To avoid risk of injury, do not leave children or pets unattended in your vehicle.

#### Recommendations for attaching child safety restraints for children

	Use any attachment method as indicated b				ndicated bel	ow by X
Restraint Type	Combined weight of child and child seat	LATCH (lower anchors and top tether anchor)	LATCH (lower anchors only)	Safety belt and top tether anchor	Safety belt and LATCH (lower anchors and top tether anchor)	Safety belt only
Rear facing child seat	Up to 65 lb (29.5 kg)		х			х
Rear facing child seat	Over 65 lb (29.5 kg)					х
Forward facing child seat	Up to 65 lb (29.5 kg)	x		х	x	
Forward facing child seat	Over 65 lb (29.5 kg)			х	x	

**Note:** The child seat must rest tightly against the vehicle seat upon which it is installed. It may be necessary to lift or remove the head restraint. See **Seats** (page 108).

#### **CHILD SAFETY LOCKS**

When these locks are set, the rear doors cannot be opened from the inside.



The childproof locks are located on the rear edge of each rear door and must be set separately for each door.

#### **Left-Hand Side**

Turn counterclockwise to lock and clockwise to unlock.

### **Right-Hand Side**

Turn clockwise to lock and counterclockwise to unlock.

#### PRINCIPLE OF OPERATION

#### WARNINGS



Always drive and ride with your seatback upright and the lap belt snug and low across the hips.



To reduce the risk of injury, make sure children sit where they can be properly restrained.



Never let a passenger hold a child on his or her lap while your vehicle is moving. The passenger cannot protect the child from injury in a crash.



All occupants of your vehicle. including the driver, should always properly wear their safety belts, even when an airbag supplemental restraint system is provided.



It is extremely dangerous to ride in a cargo area, inside or outside of a vehicle. In a crash, people riding in these areas are more likely to be seriously

injured or killed. Do not allow people to ride in any area of your vehicle that is not equipped with seats and safety belts. Be sure everyone in your vehicle is in a seat and using a safety belt properly.



In a rollover crash, an unbelted person is significantly more likely to die than a person wearing a safety

belt.



Each seating position in your vehicle has a specific safety belt assembly

which is made up of one buckle and one tongue that are designed to be used as a pair. 1) Use the shoulder belt on the outside shoulder only. Never wear the shoulder belt under the arm. 2) Never swing the safety belt around your neck over the inside shoulder. 3) Never use a single belt for more than one person.



When possible, all children 12 years old and under should be properly restrained in a rear seating position.

#### WARNINGS



Safety belts and seats can become hot in a vehicle that has been closed up in sunny weather: they could burn

a small child. Check seat covers and buckles before you place a child anywhere near them

Front and rear seat occupants, including pregnant women, should wear safety belts for optimum protection in an accident.

All seating positions in this vehicle have lap and shoulder safety belts. All occupants of the vehicle should always properly wear their safety belts, even when an airbag supplemental restraint system is provided.

The safety belt system consists of:

- lap and shoulder safety belts
- shoulder safety belt with automatic locking mode, (except driver safety belt)
- height adjuster at the front outboard seating positions
- retractor and anchor pretensioner at the front outboard seating positions
- belt tension sensor at the front outboard passenger seating position



safety belt warning light and chime



crash sensors and monitoring system with readiness indicator.

The safety belt pretensioners are designed to activate in frontal, near-frontal and side crashes, and in rollovers. The safety belt pretensioners on the retractor and anchor at the front seating positions are designed to tighten the safety belts firmly against the occupant's body when activated. This helps increase the effectiveness of the safety belts. In frontal crashes, the safety belt pretensioners can be activated alone or, if the crash is of sufficient severity, together with the front airbags.

# FASTENING THE SAFETY BELTS

The front outboard and rear safety restraints in the vehicle are combination lap and shoulder belts.



 Insert the belt tongue into the proper buckle (the buckle closest to the direction the tongue is coming from) until you hear a snap and feel it latch. Make sure the tongue is securely fastened in the buckle.



2. To unfasten, press the release button and remove the tongue from the buckle.



When in use, the rear safety belts should be placed in the belt guides on the outboard seatbacks.

# Using Safety Belts During Pregnancy

#### WARNING

Δ

F142589

Always ride and drive with your seatback upright and the safety belt properly fastened. The lap portion of a safety belt should fit soug and be

the safety belt should fit snug and be positioned low across the hips. The shoulder portion of the safety belt should be positioned across the chest. Pregnant women should also follow this practice. See the following figure.



Pregnant women should always wear their safety belt. The lap belt portion of a combination lap and shoulder belt should be positioned low across the hips below the belly and worn as tight as comfort will allow. The shoulder belt should be positioned to cross the middle of the shoulder and the center of the chest.

#### **Safety Belt Locking Modes**

#### **WARNINGS**

After any vehicle crash, the safety belt system at all passenger seating positions must be checked by an authorized dealer to verify that the automatic locking retractor feature for child seats is still functioning properly. In addition, all safety belts should be checked for proper function.

BELT AND RETRACTOR ASSEMBLY MUST BE REPLACED if the safety belt assembly automatic locking retractor feature or any other safety belt function is not operating properly when checked by an authorized dealer. Failure to replace the belt and retractor assembly could increase the risk of injury in crashes.

All safety restraints in the vehicle are combination lap and shoulder belts. The driver safety belt has the first type of locking mode, and the front outboard passenger and rear seat safety belts have both types of locking modes described as follows:

#### **Vehicle Sensitive Mode**

This is the normal retractor mode, which allows free shoulder belt length adjustment to your movements and locking in response to vehicle movement. For example, if the driver brakes suddenly or turns a corner sharply, or the vehicle receives an impact of about 5 mph (8 km/h) or more, the combination safety belts will lock to help reduce forward movement of the driver and passengers.

In addition, the retractor is designed to lock if the webbing is pulled out too quickly. If this occurs, let the belt retract slightly and pull webbing out again in a slow and controlled manner.

#### **Automatic Locking Mode**

In this mode, the shoulder belt is automatically pre-locked. The belt will still retract to remove any slack in the shoulder belt. The automatic locking mode is not available on the driver safety belt.

# When to Use the Automatic Locking Mode

This mode should be used any time a child safety seat, except a booster, is installed in passenger front or rear seating positions. Children 12 years old and under should be properly restrained in a rear seating position whenever possible. See **Child Safety** (page 15).

# How to Use the Automatic Locking Mode



E142591

- Buckle the combination lap and shoulder belt.
- 2. Grasp the shoulder portion and pull downward until the entire belt is pulled out.

Allow the belt to retract. As the belt retracts, you will hear a clicking sound. This indicates the safety belt is now in the automatic locking mode.

# How to Disengage the Automatic Locking Mode

Unbuckle the combination lap and shoulder belt and allow it to retract completely to disengage the automatic locking mode and turn on the vehicle sensitive (emergency) locking mode.

# How to Extract Safety Belts in the Rear Outboard Positions

Safety belts in the rear outboard positions can lock if the seatback is returned firmly to its upright position. You can unlock the safety belts using the following procedures.

For vehicles where the rear seats recline:

- Recline the seat to its full rear recline position.
- 2. The safety belt should then unlock.

3. Return the seatback to its desired upright position.

For vehicles with rear seats that do not recline or are locked with the seat in its full rear recline position:

- 1. Grasp the safety belt webbing at the top of the seatback.
- 2. Pull the safety belt webbing forward, firmly.
- 3. After pulling the safety belt forward, allow the safety belt to feed back into the safety belt retractor as much as possible. If necessary, press the seatback down to allow the safety belt webbing to retract further.
- 4. The safety belt should then unlock.
- 5. If the safety belt does not unlock, repeat steps 1-3.

#### Safety Belt Extension Assembly

#### **WARNING**



Do not use extensions to change the fit of the shoulder belt across the torso.

If the safety belt is too short when fully extended, you can obtain a safety belt extension assembly from an authorized dealer.

Use only extensions manufactured by the same supplier as the safety belt. Manufacturer identification is on a label located either at the end of the webbing or on the retractor behind the trim. Also, use the safety belt extension only if the safety belt is too short for you when fully extended.

# SAFETY BELT HEIGHT ADJUSTMENT

#### WARNING

Position the safety belt height adjusters so that the belt rests across the middle of your shoulder. Failure to adjust the safety belt correctly could reduce the effectiveness of the safety belt and increase the risk of injury in a crash.



To adjust the shoulder belt height, squeeze the button and slide the height adjuster up or down. Release the button and pull down on the height adjuster to make sure it is locked in place.

# SAFETY BELT WARNING LAMP AND INDICATOR CHIME



This lamp illuminates and an audible warning will sound if the driver's safety belt has not been

fastened when the vehicle's ignition is turned on.

### **Conditions of operation**

If	Then
The driver's safety belt is not buckled before the ignition switch is turned to the on position	The safety belt warning light illuminates 1-2 minutes and the warning chime sounds 4-8 seconds.
The driver's safety belt is buckled while the indicator light is illuminated and the warning chime is sounding	The safety belt warning light and warning chime turn off.
The driver's safety belt is buckled before the ignition switch is turned to the on position	The safety belt warning light and indicator chime remain off.

#### **SAFETY BELT MINDER**

#### Belt-Minder™

This feature supplements the safety belt warning function by providing additional reminders that intermittently sound a tone and illuminate the safety belt warning light when you are in the driver seat or you have a front seat passenger and a safety belt is unbuckled.

The system uses information from the front passenger sensing system to determine if a front seat passenger is present and therefore potentially in need of a warning. To avoid activating the Belt-Minder feature for objects you place in the front passenger seat, only the front seat passengers receive warnings as determined by the front passenger sensing system.

If the Belt-Minder warnings expire (warnings for about five minutes) for one passenger (driver or front passenger), the other passenger can still cause the Belt-Minder feature to turn on.

If	Then
You and the front seat passenger buckle your safety belts before you switch the ignition on or less than 1-2 minutes elapse after you switch the ignition on	The Belt-Minder feature will not activate.
You or the front seat passenger do not buckle your safety belts before your vehicle reaches at least 6 mph (9.7 km/h) and 1-2 minutes elapse after you switch the ignition on	The Belt-Minder feature activates, the safety belt warning light illuminates and a warning tone sounds for 6 seconds every 25 seconds, repeating for about 5 minutes or until you and the front seat passenger buckle your safety belts.
The safety belt for the driver or front passenger is unbuckled for about 1 minute while the vehicle is traveling at least 6 mph (9.7 km/h) and more than 1-2 minutes elapse after you switch the ignition on	The Belt-Minder feature activates, the safety belt warning light illuminates and a warning tone sounds for 6 seconds every 25 seconds, repeating for about 5 minutes or until you and the front seat passenger buckle your safety belts.

# Deactivating and Activating the Belt-Minder Feature

#### WARNING

While the system allows you to deactivate it, this system is designed to improve your chances of being

safely belted and surviving an accident. We recommend you leave the system activated for yourself and others who may use your vehicle.

**Note:** The driver and front passenger warnings switch on and off independently. When you perform this procedure for one seating position, do not buckle the other position as this will terminate the process.

Read Steps 1 - 4 thoroughly before proceeding with the programming procedure.

Before following the procedure, make sure that:

- The parking brake is set.
- The transmission is in park (P).
- The ignition is off.
- The driver and front passenger safety belts are unbuckled.
- 1. Switch the ignition on. Do not start the engine.
- Wait until the safety belt warning light turns off (about one minute). After Step 2, wait an additional five seconds before proceeding with Step 3. Once you start Step 3, you must complete the procedure within 60 seconds.
- For the seating position you are switching off, buckle then unbuckle the safety belt three times at a moderate speed, ending in the unbuckled state. After Step 3, the safety belt warning light turns on.

- While the safety belt warning light is on, buckle and then unbuckle the safety belt. After Step 4, the safety belt warning light flashes for confirmation.
- This will switch the feature off for that seating position if it is currently on.
- This will switch the feature on for that seating position if it is currently off.

# CHILD RESTRAINT AND SAFETY BELT MAINTENANCE

Inspect the vehicle safety belts and child safety seat systems periodically to make sure they work properly and are not damaged. Inspect the vehicle and child seat safety belts to make sure there are no nicks, tears or cuts. Replace if necessary. All vehicle safety belt assemblies, including retractors, buckles, front safety belt buckle assemblies, buckle support assemblies (slide bar-if equipped), shoulder belt height adjusters (if equipped), shoulder belt guide on seat back (if equipped), child safety seat LATCH and tether anchors, and attaching hardware, should be inspected after a crash. Read the child restraint manufacturer's instructions for additional inspection and maintenance information specific to the child restraint.

Ford Motor Company recommends that all safety belt assemblies in use in vehicles involved in a crash be replaced. However, if the crash was minor and an authorized dealer finds that the belts do not show damage and continue to operate properly, they do not need to be replaced. Safety belt assemblies not in use during a crash should also be inspected and replaced if either damage or improper operation is noted

Properly care for safety belts. See **Vehicle Care** (page 234).

## Personal Safety System™

The Personal Safety System provides an improved overall level of frontal crash protection to front seat occupants and is designed to help further reduce the risk of airbag-related injuries. The system is able to analyze different occupant conditions and crash severity before activating the appropriate safety devices to help better protect a range of occupants in a variety of frontal crash situations.

The Vehicle Personal Safety System consists of:

- Driver and passenger dual-stage airbag supplemental restraints.
- Front seat outboard safety belts with pretensioners, energy management retractors and safety belt usage sensors.
- Driver seat position sensor.
- Front passenger sensing system.
- Passenger airbag off and on indicator lamp.
- Front crash severity sensors.
- Restraints control module with impact and safing sensors.
- Restraint system warning light and backup tone.
- The electrical wiring for the airbags, crash sensors, safety belt pretensioners, front safety belt usage sensors, driver seat position sensor, front passenger sensing system and indicator lights.

## How Does the Personal Safety System Work?

The Personal Safety System can adapt the deployment strategy of the safety devices according to crash severity and occupant conditions. A collection of crash and occupant sensors provides information to the restraints control module. During a crash, the restraints control module may deploy the safety belt pretensioners, one or both stages of the dual-stage airbags based on crash severity and occupant conditions.

#### PRINCIPLE OF OPERATION

#### WARNINGS

Airbags do not inflate slowly or gently, and the risk of injury from a deploying airbag is the greatest close to the trim covering the airbag module.

All occupants of your vehicle, including the driver, should always properly wear their safety belts, even when an airbag supplemental restraint system is provided. Failure to properly wear your safety belt could seriously increase the risk of injury or death.

Always transport children 12 years old and under in the back seat and always properly use appropriate child restraints. Failure to follow this could seriously increase the risk of injury or death.

Never place your arm over the airbag module as a deploying airbag can result in serious arm fractures or other injuries.

Airbags can kill or injure a child in a child seat. Never place a rear-facing child seat in front of an active airbag. If you must use a forward-facing child seat in the front seat, move the seat upon which the child seat is installed all the way back.

Do not attempt to service, repair, or modify the airbag supplemental restraint systems or its fuses as you could be seriously injured or killed. Contact your authorized dealer as soon as possible.

Several airbag system components get hot after inflation. Do not touch them after inflation as this may result in serious injury.

If the airbag has deployed, the airbag will not function again and must be replaced immediately. If the airbag is not replaced, the unrepaired area will increase the risk of injury in a crash.

The airbags are a supplemental restraint system and are designed to work with the safety belts to help protect the driver and right front passenger from certain upper body injuries. Airbags do not inflate slowly; there is a risk of injury from a deploying airbag.

**Note:** You will hear a loud bang and see a cloud of harmless powdery residue if an airbag deploys. This is normal.

The airbags inflate and deflate rapidly upon activation. After airbag deployment, it is normal to notice a smoke-like, powdery residue or smell the burnt propellant. This may consist of cornstarch, talcum powder (to lubricate the bag) or sodium compounds (for example, baking soda) that result from the combustion process that inflates the airbag. Small amounts of sodium hydroxide may be present which may irritate the skin and eyes, but none of the residue is toxic.

While the system is designed to help reduce serious injuries, contact with a deploying airbag may also cause abrasions or swelling. Temporary hearing loss is also a possibility as a result of the noise associated with a deploying airbag. Because airbags must inflate rapidly and with considerable force, there is the risk of death or serious injuries such as fractures, facial and eve injuries or internal injuries. particularly to occupants who are not properly restrained or are otherwise out of position at the time of airbag deployment. Thus, it is extremely important that occupants be properly restrained as far away from the airbag module as possible while maintaining vehicle control.

Routine maintenance of the airbags is not required.

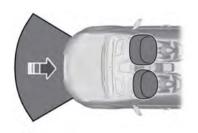
### **DRIVER AND PASSENGER AIRBAGS**

#### WARNINGS

Never place your arm or any objects over an airbag module. Placing your

arm over a deploying airbag can result in serious arm fractures or other injuries. Objects placed on or over the airbag inflation area may cause those objects to be propelled by the airbag into your face and torso causing serious injury.

Airbags can kill or injure a child in a child seat. Never place a rear-facing child seat in front of an active airbag. If you must use a forward-facing child seat in the front seat, move the seat upon which the child seat is installed all the way back.



E151127

The driver and front passenger airbags will deploy during significant frontal and near frontal crashes.

The driver and passenger front airbag system consists of:

- Driver and passenger airbag modules.
- Front passenger sensing system.



· Crash sensors and monitoring system with readiness indicator. See Crash Sensors and Airbag

Indicator (page 42).

#### Proper Driver and Front Passenger Seating Adjustment

#### WARNING

National Highway Traffic Safety Administration (NHTSA)

recommends a minimum distance of at least 10 inches (25 centimeters) between an occupant's chest and the driver airbag module.

To properly position yourself away from the airbag:

- Move your seat to the rear as far as you can while still reaching the pedals comfortably.
- Recline the seat slightly (one or two degrees) from the upright position.

After all occupants have adjusted their seats and put on safety belts, it is very important that they continue to sit properly. A properly seated occupant sits upright, leaning against the seat back, and centered on the seat cushion, with their feet comfortably extended on the floor. Sitting improperly can increase the chance of injury in a crash event. For example, if an occupant slouches, lies down, turns sideways, sits forward, leans forward or sideways, or puts one or both feet up, the chance of injury during a crash is greatly increased.

### **Children and Airbags**

#### WARNING

Airbags can kill or injure a child in a child seat. Never place a rear-facing child seat in front of an active airbag.

If you must use a forward-facing child seat in the front seat, move the seat upon which the child seat is installed all the way back.



E142846

Children must always be properly restrained. Accident statistics suggest that children are safer when properly restrained in the rear seating positions than in the front seating position. Failure to follow these instructions may increase the risk of injury in a crash.

# FRONT PASSENGER SENSING SYSTEM

#### WARNINGS

Even with Advanced Restraints
Systems, children 12 and under
should be properly restrained in a
rear seating position. Failure to follow this
could seriously increase the risk of injury or
death.

Sitting improperly out of position or with the seatback reclined too far can take off weight from the seat cushion and affect the decision of the front passenger sensing system, resulting in serious injury or death in a crash.



Always sit upright against your seat back, with your feet on the floor.

Any alteration or modification to the front passenger seat may affect the performance of the front passenger sensing system which could seriously increase the risk of injury or death.



#### F145987

The indicator lamp is located in the center stack of the instrument panel.

The front passenger sensing system is designed to disable (will not inflate) the front passenger frontal airbag under certain conditions:

- The front passenger seat is unoccupied.
- The system determines an infant is present in a child restraint.
- A passenger takes their weight off the seat for a period of time.
- If there is a problem with the airbag system or the passenger sensing system.

Even with this technology, parents are **strongly** encouraged to always properly restrain children in the rear seat.

- When the front passenger sensing system disables (will not inflate) the front passenger frontal airbag, the passenger airbag status indicator will illuminate and stay lit to remind you that the front passenger frontal airbag is disabled
- If the passenger airbag status indicator lamp indicates the passenger airbag is enabled, after the child restraint has been installed, turn the vehicle off, remove the child restraint from the vehicle and reinstall the restraint following the child restraint manufacturer's instructions.
- If the passenger airbag status indicator lamp continues to indicate the passenger airbag is enabled, the child should be properly restrained in a rear seating position.

The front passenger sensing system works with sensors that are part of the front passenger seat and safety belt. The sensors are designed to detect the presence of a properly—seated occupant and determine if the front passenger frontal airbag should be enabled.

 When the front passenger sensing system enables the front passenger frontal airbag (may inflate), the passenger airbag status indicator will not illuminate.

If a person of adult size is sitting in the front passenger seat, but the passenger airbag is disabled, it is possible that the person is not sitting properly in the seat. If this happens:

- Turn the vehicle off and ask the person to place the seatback in the full upright position.
- Have the person sit upright in the seat, centered on the seat cushion, with the person's legs comfortably extended.

- Restart the vehicle and have the person remain in this position for about two minutes. This will allow the system to detect that person and enable the passenger's frontal airbag.
- If the passenger airbag status indicator lamp remains lit even after this, the person should be advised to ride in the rear seat.

**Note:** When the passenger airbag status indicator lamp is illuminated, the passenger side airbag (seat mounted) may be disabled to avoid the risk of airbag deployment injuries.

After all occupants have adjusted their seats and put on safety belts, it is very important that they continue to sit properly. A properly seated occupant sits upright, leaning against the seatback, and centered on the seat cushion, with their feet comfortably extended on the floor. Sitting improperly can increase the chance of injury in a crash event. For example, if an occupant slouches, lies down, turns sideways, sits forward, leans forward or sideways, or puts one or both feet up, the chance of injury during a crash is greatly increased.

If you think that the status of the passenger airbag off indicator lamp is incorrect, check for the following:

- Objects lodged underneath the seat.
- Objects between the seat cushion and the center console.
- Objects hanging off the seatback.
- Objects stowed in the seatback map pocket.
- Objects placed on the occupant's lap.
- Cargo interference with the seat.
- Other passengers pushing or pulling on the seat.
- Rear passenger feet and knees resting or pushing on the seat.

The conditions listed above may cause the weight of a properly seated occupant to be incorrectly interpreted by the passenger sensing system. The person in the front passenger seat may appear heavier or lighter due to the conditions described in the list above



Make sure the front passenger sensing system is operating properly. See Crash Sensors

and Airbag Indicator (page 42).

#### If the airbag readiness lamp is lit, do the following:

Check for objects that are lodged underneath the front passenger seat, or cargo interfering with the seat.

If there are lodged objects, or cargo is interfering with the seat, take the following steps to remove the obstruction:

- Pull the vehicle over.
- Turn the vehicle off.
- Driver or adult passengers should check for any objects lodged underneath the front passenger seat or cargo interfering with the seat.
- Remove the obstruction(s) (if found).
- Restart the vehicle.
- Wait at least two minutes and verify that the airbag readiness lamp is no longer illuminated.
- If the airbag readiness lamp remains illuminated, this may or may not be a problem due to the front passenger sensing system.

Do not attempt to repair or service the system; take your vehicle immediately to an authorized dealer.

If it is necessary to modify an advanced front airbag system to accommodate a person with disabilities, contact your authorized dealer.

#### SIDE AIRBAGS

#### WARNINGS

Do not place objects or mount equipment on or near the airbag cover, on the side of the seatbacks (of the front seats), or in front seat areas that may come into contact with a deploying airbag. Failure to follow these instructions may increase the risk of

personal injury in the event of a crash.

Do not use accessory seat covers. The use of accessory seat covers may prevent the deployment of the side airbags and increase the risk of injury in an accident.

Do not lean your head on the door. The side airbag could injure you as it deploys from the side of the seatback.

Do not attempt to service, repair, or modify the airbag, its fuses or the

seat cover on a seat containing an airbag as you could be seriously injured or killed. Contact your authorized dealer as soon as possible.

If the side airbag has deployed, the airbag will not function again. The side airbag system (including the seat) must be inspected and serviced by an authorized dealer. If the airbag is not replaced, the unrepaired area will increase the risk of injury in a crash.

The side airbags are located on the outboard side of the seatbacks of the front seats. In certain sideways crashes, the airbag on the side affected by the crash will be inflated. The airbag was designed to inflate between the door panel and occupant to further enhance the protection provided occupants in side impact crashes.



The system consists of the following:

- A label or embossed side panel indicating that side airbags are fitted to your vehicle.
- Side airbags located inside the driver and front passenger seatbacks.
- Front passenger sensing system.



Crash sensors and monitoring system with readiness indicator. See Crash Sensors and Airbag Indicator (page 42).

**Note:** The passenger sensing system will deactivate the passenger seat-mounted side airbag if it detects an empty passenger seat.

The design and development of the side airbag system included recommended testing procedures that were developed by a group of automotive safety experts known as the Side Airbag Technical Working Group. These recommended testing procedures help reduce the risk of injuries related to the deployment of side airbags.

#### DRIVER KNEE AIRBAG

A driver's knee airbag is located under the instrument panel. During a crash, the restraints control module may activate the driver's knee airbag based on crash severity and occupant conditions. Under certain crash and occupant conditions, the driver's knee airbag may deploy but the driver's front airbag may not activate. As with front and side airbags, it is important to be properly seated and restrained to reduce the risk of death or serious injury.



Make sure the knee airbag is operating properly. See Crash **Sensors and Airbag Indicator** 

(page 42).

#### SAFETY CANOPY™

#### WARNINGS

Do not place objects or mount equipment on or near the headliner at the siderail that may come into contact with a deploying curtain airbag. Failure to follow these instructions may increase the risk of personal injury in the event of a crash.



Do not lean your head on the door. The curtain airbag could injure you as it deploys from the headliner.

as soon as possible.

Do not attempt to service, repair, or modify the curtain airbags, its fuses, the A, B, or C pillar trim, or the headliner on a vehicle containing curtain airbags as you could be seriously injured or killed. Contact your authorized dealer

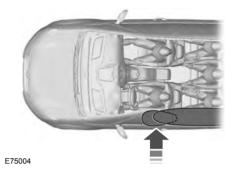
#### **WARNINGS**

All occupants of your vehicle including the driver should always wear their safety belts even when an airbag supplemental restraint system and curtain airbag is provided. Failure to properly wear your safety belt could seriously increase the risk of injury or death.

To reduce risk of injury, do not obstruct or place objects in the deployment path of the curtain airbag.

If the curtain airbags have deployed, the curtain airbags will not function again. The curtain airbags (including the A, B and C pillar trim and headliner) must be inspected and serviced by an authorized dealer. If the curtain airbag is not replaced, the unrepaired area will increase the risk of injury in a crash.

The Safety Canopy will deploy during significant side crashes or when a certain likelihood of a rollover event is detected by the rollover sensor. The Safety Canopy is mounted to the roof side-rail sheet metal, behind the headliner, above each row of seats. In certain sideways crashes or rollover events, the Safety Canopy will be activated, regardless of which seats are occupied. The Safety Canopy is designed to inflate between the side window area and occupants to further enhance protection provided in side impact crashes and rollover events.



The system consists of the following:

- Safety canopy curtain airbags located above the trim panels over the front and rear side windows identified by a label or wording on the headliner or roof-pillar trim.
- A flexible headliner which opens above the side doors to allow air curtain deployment



· Crash sensors and monitoring system with a readiness indicator. See **Crash Sensors** 

and Airbag Indicator (page 42).

Children 12 years old and under should always be properly restrained in the rear seats. The Safety Canopy will not interfere with children restrained using a properly installed child or booster seat because it is designed to inflate downward from the headliner above the doors along the side window opening.

The design and development of the Safety Canopy included recommended testing procedures that were developed by a group of automotive safety experts known as the Side Airbag Technical Working Group. These recommended testing procedures help reduce the risk of injuries related to the deployment of side airbags (including the Safety Canopy).

# CRASH SENSORS AND AIRBAG INDICATOR

#### WARNING

Modifying or adding equipment to the front end of the vehicle (including frame, bumper, front end body structure and tow hooks) may affect the performance of the airbag system, increasing the risk of injury. Do not modify the front end of the vehicle.

Your vehicle has a collection of crash and occupant sensors which provide information to the restraints control module. The restraints control module deploys (activates) the front safety belt pretensioners, driver airbag, passenger airbag, knee airbag(s), seat mounted side airbags and Safety Canopy airbags. Based on the type of crash (frontal impact or side impact), the restraints control module will deploy the appropriate safety devices.

The restraints control module also monitors the readiness of the above safety devices plus the crash and occupant sensors. The readiness of the safety system is indicated by a warning indicator light in the instrument cluster or by a backup tone if the warning light is not working. Routine maintenance of the airbag is not required.

A difficulty with the system is indicated by one or more of the following:



The readiness light will not illuminate immediately after the ignition is turned on.

- The readiness light will either flash or stay lit.
- A series of five beeps will be heard. The tone pattern will repeat periodically until the problem, the light or both are repaired.

If any of these things happen, even intermittently, have the supplemental restraint system serviced at an authorized dealer immediately. Unless serviced, the system may not function properly in the event of a crash.

The safety belt pretensioners and the front airbag supplemental restraint system are designed to activate when the vehicle sustains frontal deceleration sufficient to cause the restraints control module to deploy a safety device.

The fact that the safety belt pretensioners or front airbags did not activate for both front seat occupants in a crash does not mean that something is wrong with the system. Rather, it means the restraints control module determined the accident conditions (crash severity, belt usage) were not appropriate to activate these safety devices.

- The design of the front airbags is to activate only in frontal and near-frontal crashes (not rollovers, side impacts or rear impacts unless the crash causes sufficient frontal deceleration).
- The safety belt pretensioners are designed to activate in frontal, near-frontal and side crashes.
- The knee airbag(s) may deploy based on crash severity and occupant conditions.
- The design of the side airbags is to inflate in certain side crashes. The design of the Safety Canopy is to inflate in certain side impact crashes and when a certain likelihood of rollover is detected by the rollover sensor. Side airbags and Safety Canopy airbags may activate in other types of crashes if the vehicle experiences sufficient sideways motion or deformation.

### **AIRBAG DISPOSAL**

Contact your authorized dealer as soon as possible. Airbags must be disposed of by qualified personnel.

#### PRINCIPLE OF OPERATION

The remote control allows you to:

- Remotely lock or unlock the vehicle doors.
- Unlock the doors without actively using a key or remote control (intelligent access only).
- Remotely open the power liftgate (if equipped).
- Remotely start or stop the engine and user pre-set features (if equipped).
- Arm and disarm the anti-theft system.
- Activate the panic alarm.

# GENERAL INFORMATION ON RADIO FREQUENCIES

This device complies with Part 15 of the FCC Rules and with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

**Note:** Changes or modifications not expressively approved by the party responsible for compliance could void the user's authority to operate the equipment. The term **IC** before the radio certification number only signifies that Industry Canada technical specifications were met.

The typical operating range for your transmitter is approximately 33 ft (10 m). Vehicles with the remote start feature will have a greater range.

One of the following could cause a decrease in operating range:

- Weather conditions.
- Nearby radio towers.

- Structures around the vehicle.
- Other vehicles parked next to your vehicle.

The radio frequency used by your remote control can also be used by other radio transmitters, for example amateur radios, medical equipment, wireless headphones, wireless remote controls, cell phones, battery chargers and alarm systems. If the frequencies are jammed, you will not be able to use your remote control. You can lock and unlock the doors with the key.

**Note:** Make sure to lock your vehicle before leaving it unattended.

**Note:** If you are in range, the remote control will operate if you press any button unintentionally.

#### Intelligent Access (If Equipped)

The system uses a radio frequency signal to communicate with your vehicle and authorize your vehicle to unlock when one of the following conditions are met:

- You activate the front exterior door handle switch.
- You press the luggage compartment button.
- You press a button on the transmitter.

If excessive radio frequency interference is present in the area or if the transmitter battery is low, you may need to mechanically unlock your door. You can use the mechanical key blade in your intelligent access key to open the driver door in this situation. See **Remote Control** (page 45).

#### **REMOTE CONTROL**

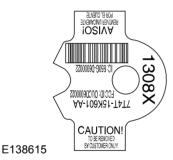
## **Integrated Keyhead Transmitters**

(If Equipped)



E142585

Use the key blade to start your vehicle and unlock or lock the driver door from outside your vehicle. The transmitter portion functions as the remote control.



**Note:** Your vehicle's keys came with a security label that provides important vehicle key cut information. Keep the label in a safe place for future reference.

### Intelligent Access Key (If Equipped)

**Note:** A three-button remote control operates similarly.



Your intelligent access keys operate the power locks and the remote start system. The key must be in your vehicle to activate the push-button start system.



E142431

The intelligent access key also contains a removable mechanical key blade that you can use to unlock the driver door. Slide the release on the back of the transmitter to release the key blade, then pull the blade out.



#### E138618

**Note:** Your vehicle's back-up keys came with a security tag that provides important vehicle key cut information. Keep the tag in a safe place for future reference.

#### Replacing the Battery

**Note:** Refer to local regulations when disposing of transmitter batteries.

**Note:** Do not wipe off any grease on the battery terminals or on the back surface of the circuit board.

**Note:** Replacing the battery does not delete the transmitter from the vehicle. The transmitter should operate normally.

The remote control uses one coin-type three-volt lithium battery CR2032 or equivalent.

#### **Integrated Keyhead Transmitter**



#### F138619

- Twist a thin coin in the slot of the transmitter near the key ring to remove the battery cover.
- 2. Remove the old battery.



- Insert the new battery. Refer to the instructions inside the transmitter for the correct orientation of the battery. Press the battery down to make sure it is fully in the housing.
- 4. Snap the battery cover back onto the transmitter.

#### **Intelligent Access Transmitter**

1. Remove the backup key from the transmitter.



#### E142432

2. Twist a thin coin under the tab hidden behind the backup key head to remove the battery cover. Do not use the backup key to remove the cover or you could damage the intelligent access key.



3. Remove the old battery.

- 4. Insert a new battery with the + facing downward. Press the battery down to make sure it is fully in the housing.
- 5. Snap the battery cover back onto the transmitter and install the backup key.

#### **Car Finder**



Press the button twice within three seconds. The horn sounds and the direction indicators

flash. We recommend you use this method to locate your vehicle, rather than using the panic alarm.

**Note:** If locking was not successful or if any door or the liftgate is open, or if the hood is open on vehicles with a perimeter alarm or remote start, the horn sounds twice and the lamps do not flash.

#### Sounding a Panic Alarm

**Note:** The panic alarm only operates when the ignition is off.



Press the button to activate the alarm. Press the button again or switch the ignition on to

deactivate.

#### Remote Start (If Equipped)

#### WARNING



To avoid exhaust fumes, do not use remote start if your vehicle is parked indoors or areas that are not well ventilated.

**Note:** Do not use remote start if your vehicle is low on fuel.



The remote start button is on the transmitter.

This feature allows you to start your vehicle from outside the vehicle. The transmitter has an extended operating range.

Vehicles with automatic climate control. can be configured to operate when the vehicle is remote started. See **Automatic** Climate Control (page 102).

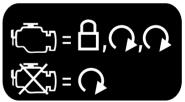
Many states and provinces have restrictions for the use of remote start. Check your local and state or provincial laws for specific requirements regarding remote start systems.

The remote start system does not work if:

- The ignition is on.
- The alarm system is triggered.
- You disable the feature.
- The hood is open.
- The transmission is not in park (P).
- The vehicle battery voltage is too low.
- The service engine soon indicator was on the last time your vehicle was driven.

#### **Remote Starting the Vehicle**

**Note:** You must press each button within three seconds of each other. If you do not follow this sequence your vehicle does not remote start, the exterior lamps do not flash twice and the horn does not sound.



E138626

The label on your transmitter details the starting procedure.

To remote start your vehicle:

Press the lock button to lock all the doors.

2. Press the remote start button twice. The exterior lamps flash twice.

The horn sounds if the system fails to start, unless quiet start is on. Quiet start runs the blower fan at a slower speed to reduce noise. You can switch it on or off in the information display. See (page 88).

**Note:** If you remote start your vehicle with an integrated keyhead transmitter, you must switch the ignition on before driving your vehicle. If you remote start your vehicle with an intelligent access transmitter, you must press the **START/STOP** button on the instrument panel once while applying the brake pedal before driving your vehicle.

Remote start does not turn on the power windows and does not automatically start the radio

The parking lamps remain on and the vehicle runs for 5, 10 or 15 minutes, depending on the setting.

#### Extending the Vehicle Run Time

Repeat Steps 1 and 2 with the vehicle still running to extend the run time for another remote start duration. If the duration is set to last 10 minutes, you can extend the duration for another 10 minutes. For example, if the vehicle had been running from the first remote start for five minutes, the vehicle continues to run now for a total of 20 minutes. You can only extend the remote start once. You may be able to extend late-build vehicles successively up to 30 minutes.

Wait at least five seconds before remote starting after a vehicle shutdown.

## Turning the Vehicle Off After Remote Starting



Press the button once. The parking lamps turn off.

You may have to be closer to the vehicle than when starting due to ground reflection and the added noise of the running vehicle.

You can disable or enable the remote start system through the information display. See (page 88).

# REPLACING A LOST KEY OR REMOTE CONTROL

Replacement keys or remote controls can be purchased from an authorized dealer. Authorized dealers can program remote controls for your vehicle. See **Passive Anti-Theft System** (page 65).

To re-program the passive anti-theft system see an authorized dealer.

## **MyKey**<sup>TM</sup>

#### PRINCIPLE OF OPERATION

MyKey allows you to program keys with restricted driving modes to promote good driving habits. All but one of the keys programmed to the vehicle can be activated with these restricted modes.

Any keys that have not been programmed are referred to as administrator keys or admin keys. These can be used to:

- Create a MvKev.
- Program configurable MyKey settings.
- Clear all MyKey features.

When you have created a MyKey, you can access the following information using the information display:

- How many admin keys and MyKeys are programmed to your vehicle.
- The total distance your vehicle has traveled using any MyKey.

**Note:** All MyKeys are programmed to the same settings. You cannot program them individually.

**Note:** For vehicles with keyless start, when both a MyKey transmitter and an admin transmitter are present, the admin transmitter will be recognized by the vehicle to start the engine.

#### Non-configurable Settings

The following settings cannot be changed by an admin key user:

- Belt-minder. You cannot disable this feature. The audio system will mute when the safety belts are not fastened.
- Early low fuel warning. The low-fuel warning activates earlier, giving the MyKey user more time to refuel.
- Driver assist features, if equipped on your vehicle, are forced on: parking aid, blind spot information system (BLIS) with cross traffic alert, lane departure warning and forward collision warning system.

#### **Configurable Settings**

With an admin key, you can configure certain MyKey settings when you first create a MyKey and before you recycle the key or restart the vehicle.

You can also change the settings afterward with an admin key:

A vehicle speed limit can be set.
 Warnings will be shown in the display
 followed by an audible tone when your
 vehicle reaches the set speed. You
 cannot override the set speed by fully
 depressing the accelerator pedal or by
 setting the cruise control.

#### WARNING



Do not set MyKey maximum speed limit to a limit that will prevent the driver from maintaining a safe speed

considering posted speed limits and prevailing road conditions. The driver is always responsible to drive in accordance with local laws and prevailing conditions. Failure to do so could result in accident or injury.

## **МуКеу**<sup>тм</sup>

- Vehicle speed minders. Once you select a speed, it will be shown in the display followed by an audible tone when the set vehicle speed is exceeded.
- Audio system maximum volume of 45%. A message will be shown in the display when you attempt to exceed the limited volume. Also, the speed sensitive compensated volume (automatic volume control) feature will be disabled.
- Always on setting. When this is selected you will not be able to disable the traction control system (if your vehicle is equipped with this feature).

#### **CREATING A MYKEY**

Use the information display to create a MyKey:

- 1. Insert the key you want to program into the ignition. If your vehicle is equipped with a push-button start, hold the intelligent access key next to the steering column. Details on the correct fob placement and position is in another chapter. See **Starting and Stopping the Engine** (page 124).
- 2. Switch the ignition on.
- 3. Access the main menu on the information display controls, and select **Settings** and then **MyKey** by pressing **OK** or the > button.
- 4. Press **OK** or the **>** button to select **Create MvKev**.
- 5. When prompted, hold the **OK** button until you see a message informing you to label this key as a MyKey. The key will be restricted at your vehicle's next start.

MyKey is successfully created. Make sure you label it so you can distinguish it from the admin keys.

You can also program configurable settings for the key(s). Refer to **Programming/Changing Configurable Settings**.

## Programming/Changing Configurable Settings

Use the information display to access your configurable MyKey settings:

- 1. Switch the ignition on using an admin key or fob.
- Access the main menu on the information display controls, and select Settings, then MyKey by pressing OK or the > button.
- 3. Use the arrow buttons to get to a configurable feature.
- 4. Press **OK** or **>** to make a selection.

**Note:** You can clear or change your MyKey settings at any time during the same key cycle as you created the MyKey. Once you have switched the engine off, however, you will need an admin key to change or clear your MyKey settings.

#### **CLEARING ALL MYKEYS**

You can clear or change your MyKey settings using the information display control on the steering wheel. See **Information Displays** (page 88).

Switch the ignition on using an admin key or remote control.

## MyKey™

## To clear all MyKeys of all MyKey settings, press the left arrow button to access the main menu and scroll to:

Message	Action and Description
Settings	Press the <b>OK</b> button.
MyKey	Press the <b>OK</b> button.
Clear MyKey	Press and hold the <b>OK</b> button until the following message displays.
All MyKeys	
Cleared	

**Note:** When you clear your MyKeys, you remove all restrictions and return all MyKeys to their original admin key status.

## **MyKey**<sup>TM</sup>

# CHECKING MYKEY SYSTEM STATUS

You can find information on programmed MyKey(s) using the information display control on the steering wheel. See **Information Displays** (page 88).

## To find information on programmed MyKey(s), press the left arrow button to access the main menu and scroll to:

Message	Description	
Settings	Press the <b>OK</b> button.	
MyKey	Press the <b>OK</b> button.	
Select one of the following:		
MyKey Dist.	Tracks the distance when drivers use a MyKey. The only way to delete the accumulated distance is by using an admin key to clear your MyKeys. If the distance does not accumulate as expected, then the intended user is not using the MyKey, or an admin key user recently cleared and then recreated a MyKey.	
{0} MyKeys	Indicates the number of MyKeys programmed to your vehicle. Use this feature to detect how many MyKeys you have for your vehicle and determine when a MyKey has been deleted.	
{0} Admin Keys	Indicates how many admin keys are programmed to your vehicle. Use this feature to determine how many unrestricted keys you have for your vehicle, and detect if an additional MyKey has been programmed.	

## **МуКеу**<sup>тм</sup>

# USING MYKEY WITH REMOTE START SYSTEMS

MyKey is not compatible with non

Ford-approved, aftermarket remote start systems. If you choose to install a remote start system, see an authorized dealer for a Ford-approved remote start system.

### **MYKEY TROUBLESHOOTING**

Condition	Potential Causes
I cannot create a MyKey.	The key or transmitter used to start the vehicle does not have admin privileges.
	The key or transmitter used to start the vehicle is the only admin key (there always has to be at least one admin key).
	<ul> <li>Vehicles with keyless start: The keyless start transmitter is not placed in the backup position. See <b>Starting a Gasoline Engine</b> (page 125).</li> </ul>
	SecuriLock passive anti-theft system is disabled or in unlimited mode.
I cannot program the configurable settings.	<ul> <li>The key or transmitter used to start your vehicle does not have admin privileges.</li> <li>No MyKeys are created. See Creating a MyKey (page 50).</li> </ul>
I cannot clear the MyKeys.	<ul> <li>The key or transmitter used to start your vehicle does not have admin privileges.</li> <li>No MyKeys are created. See Creating a MyKey (page 50).</li> </ul>
I lost the only admin key.	Purchase a new key from an authorized dealer.

## $MyKey^{TM}$

Condition	Potential Causes
I lost a key.	Program a spare key. See <b>Passive Anti-Theft System</b> (page 65).
MyKey distances do not accumulate.	<ul> <li>The MyKey user is not using the MyKey.</li> <li>An admin key holder cleared the MyKeys and created new MyKeys.</li> <li>The key system has been reset.</li> </ul>
No MyKey functions with the keyless entry transmitter.	<ul> <li>An admin transmitter is present at vehicle start.</li> <li>No MyKeys are created. See Creating a MyKey (page 50).</li> </ul>

#### LOCKING AND UNLOCKING

You can use the power door lock control or the remote control to lock and unlock your vehicle.

#### **Power Door Locks**

The power door lock control is on the driver and front passenger door panels.



E138628

- A Unlock
- B Lock

#### **Door Lock Indicator**

An LED on the instrument panel will light when you lock the doors. It is not a functional control.

#### **Remote Control**

## Unlocking the Doors (Two-Stage Unlock)



Press the button to unlock the driver door.

Press the button again within three seconds to unlock all doors. The turn signals will flash.

Press and hold both the lock and unlock buttons on the remote control for four seconds to disable or enable two-stage unlocking. Disabling two-stage unlocking allows all vehicle doors to unlock with one press of the button. The turn signals will flash twice to indicate a change to the unlocking mode. The unlocking mode applies to the remote control, keyless entry keypad and intelligent access.

Intelligent access at the driver door will unlock all doors when you disable two-stage unlocking.

#### **Locking the Doors**



Press the button to lock all the doors. The turn signals will flash.

Press the button again within three seconds to confirm that all the doors are closed. The doors will lock again, the horn will sound and the turn signals will flash if all the doors and the luggage compartment are closed.

**Note:** If locking was not successful or any door or the liftgate is open, or if the hood is open on vehicles with a perimeter alarm or remote start, the horn will sound twice and the lamps will not flash.

#### Liftgate

#### WARNINGS



Make sure all persons are clear of the liftgate area before using the liftgate control.



Make sure to close and latch the liftgate to prevent drawing exhaust fumes into your vehicle. This will also

rumes into your vehicle. This will also prevent passengers and cargo from falling out. If you must drive with the liftgate open, keep the vents or windows open so outside air comes into your vehicle. Failure to follow this warning could result in serious personal injury.

**Note:** Be careful when opening or closing the liftgate in a garage or other enclosed area to avoid damaging the liftgate.



Press twice within three seconds to:

- unlatch a manual liftgate
- open, close or stop the movement of a power liftgate. See **Power Liftgate** (page 60).

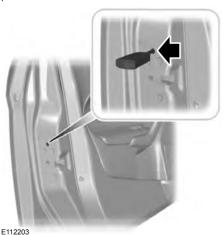
#### **Mechanical Key**

Turn the top of the key toward the front of your vehicle once to lock all doors.

Turn the top of the key toward the rear of your vehicle once to unlock the driver door only.

#### **Locking the Doors Individually**

If the power locks fail to operate, lock the doors individually using the key in the position shown.



#### Left-Hand Side

Turn clockwise to lock.

#### Right-Hand Side

Turn counterclockwise to lock.

#### Opening a Rear Door from Inside

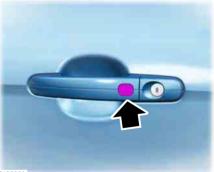
Pull the interior door release handle twice to unlock and open a rear door. The first pull unlocks the door and the second pull will unlatch the door.

## Activating Intelligent Access (If Equipped)

The intelligent access key must be within 3 feet (1 meter) of your vehicle.

#### At the Front Doors

Pull a front exterior door handle to unlock and open the door. The unlock sensor is on the back of the handle. Make sure not to touch the lock sensor area on the front of the handle.



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Touch the lock sensor area for a few seconds to lock your vehicle. To avoid inadvertently unlocking the door, make sure you only touch the lock sensor and no other area of the door handle.

After locking the doors with the lock sensor, there is a brief delay before you can unlock your vehicle. This delay lets you pull the handle to make sure it locked.

**Note:** Keep the door handle surface clean to avoid issues with operation.

#### At the Liftgate

Press the exterior liftgate release button on the top of the liftgate pull-cup handle.

#### Smart Unlocks For Integrated Keyhead Transmitter

This feature helps to prevent you from locking yourself out of your vehicle if your key is still in the ignition.

When you open one of the front doors and lock your vehicle with the power door lock control, all the doors will lock then unlock if your key is still in the ignition.

You can still lock your vehicle with the key in the ignition by either:

- using the keyless entry keypad with the driver door closed
- pressing the lock button on the transmitter even if the doors are not closed.

If both front doors are closed, you can lock your vehicle by any method, regardless of whether the key is in the ignition or not.

## Smart Unlocks For Intelligent Access Keys (If Equipped)

This feature helps to prevent you from unintentionally locking your intelligent access key inside your vehicle's passenger compartment or rear cargo area.

When you lock your vehicle using the power door lock control (with the door open, vehicle in park and ignition off), your vehicle will search for an intelligent access key in the passenger compartment after you close the door. If your vehicle finds a key, all of the doors will immediately unlock.

In order to override the smart unlock feature and intentionally lock the intelligent access key inside your vehicle, you can lock your vehicle after all doors are closed by using the keyless entry keypad, pressing the lock button on another intelligent access key or touching the locking area on the handle with another intelligent access key in your hand.

When you open one of the front doors and lock your vehicle using the power door lock control, all doors will lock then unlock if the ignition is on.

#### Autolock (If Equipped)

The autolock feature will lock all the doors when:

- all doors are closed.
- the ignition is on,
- you shift into any gear putting your vehicle in motion, and
- your vehicle attains a speed greater than 4 mph (7 km/h).

#### Autounlock (If Equipped)

The autounlock feature will unlock all the doors when:

- the ignition is on, all the doors are closed, and your vehicle has been in motion at a speed greater than 4 mph (7 km/h);
- your vehicle comes to a stop and you switch the ignition off or to accessory;
   and
- you open the driver door within 10 minutes of the switching the ignition off or to accessory.

**Note:** The doors will not autounlock if you electronically lock your vehicle after you switch the ignition off and before you open the driver door.

## Enabling or Disabling Autolock and Autounlock

**Note:** Your authorized dealer can perform this procedure, or you can do the procedure yourself.

To enable or disable these features, do the following:

**Note:** You will have 30 seconds to complete the procedure.

- 1. Switch the ignition on.
- 2. Press the power door unlock button three times.
- 3. Switch the ignition off.
- 4. Press the power door unlock button three times.
- Switch the ignition on. The horn will sound indicating your vehicle is in programming mode.

**Autolock:** Press the power door unlock button then the lock button. The horn will sound once if disabled or twice (one short and one long) if enabled.

**Autounlock:** Press the power door lock button then the unlock button. The horn will sound once if disabled or twice (one short and one long) if enabled.

After programming the feature, switch the ignition off. The horn will sound once indicating programming is complete.

**Note:** You can enable or disable the autounlock feature independently of the autolock feature.

#### **Illuminated Entry**

The interior lamps and select exterior lamps will illuminate when you unlock the doors with the remote entry system.

The illuminated entry system will turn off the lights if:

- · you start your vehicle,
- you press the remote control lock button, or
- after 25 seconds of illumination.

The lights will not turn off if:

- you turn them on with the lamp control, or
- any door is open.

#### Illuminated Exit

The interior lamps and select exterior lamps will illuminate when all doors are closed and you switch the ignition off.

The lamps will turn off if all the doors remain closed and:

- 25 seconds elapse, or
- vou lock your vehicle from the outside.

#### **Battery Saver**

If you leave the courtesy lamps or dome lamps on and switch the ignition off, the battery saver shuts them off after some time.

## Accessory Mode Battery Saver for Intelligent Access Keys (If Equipped)

If you leave the ignition on after leaving your vehicle, it will shut off 15 minutes after you close all of the doors.

#### MANUAL LIFTGATE

#### **WARNINGS**

It is extremely dangerous to ride in a cargo area, inside or outside of a vehicle. In a crash, people riding in these areas are more likely to be seriously injured or killed. Do not allow people to ride in any area of your vehicle that is not equipped with seats and safety belts. Be sure everyone in your vehicle is in a seat and using a safety belt properly. Failure to follow this warning could result in serious personal injury or death.

Make sure to close and latch the liftgate to prevent drawing exhaust fumes into your vehicle. This will also prevent passengers and cargo from falling out. If you must drive with the liftgate open, keep the vents or windows open so outside air comes into your vehicle. Failure to follow this warning could result in serious personal injury.

**Note:** Be careful when opening or closing the liftgate in a garage or other enclosed area to avoid damaging the liftgate.

**Note:** Do not hang anything, for example a bike rack, from the glass or liftgate. This could damage the liftgate and its components.

**Note:** Do not leave the liftgate open while driving. This could damage the liftgate and its components.

# Opening the Liftgate Manually



#### E138632

Press the button located in the top of the liftgate pull cup handle to unlatch the liftgate, and then pull on the outside handle.

#### With the Remote Control



Press the button twice within three seconds.

### **Closing the Liftgate**



A handle is located inside the liftgate to help with closing.

#### POWER LIFTGATE (If Equipped)

#### WARNINGS

It is extremely dangerous to ride in a cargo area, inside or outside of a vehicle. In a crash, people riding in these areas are more likely to be seriously injured or killed. Do not allow people to ride in any area of your vehicle that is not equipped with seats and safety belts. Make sure everyone in your vehicle is in a seat and properly using a safety belt. Failure to follow this warning could result in serious personal injury or death.

Make sure to close and latch the liftgate to prevent drawing exhaust fumes into your vehicle. This will also prevent passengers and cargo from falling out. If you must drive with the liftgate open, keep the vents or windows open so outside air comes into your vehicle. Failure to follow this warning could result in serious personal injury.

Keep keys out of reach of children.
Do not allow children to operate or
play near an open or moving power
liftgate. You should supervise the
operation of the power liftgate at all times.

**Note:** Make sure that you close the liftgate before operating or moving your vehicle, especially in an enclosure, like a garage or a parking structure. This could damage the liftgate and its components.

**Note:** Do not hang anything, for example a bike rack, from the glass or liftgate. This could damage the liftgate and its components.

The liftgate only operates with the transmission in park (P).

Three warning tones sound once as the liftgate begins to power close. Five short chimes indicate a problem with the open or close request, caused by:

- The ignition is on and the transmission is not in park (P).
- The battery voltage is below the minimum operating voltage.
- The vehicle speed is at or above 1 mph (1 km/h).

If the liftgate starts to close after it has fully opened, this indicates there may be excessive weight on the liftgate or a possible gas strut failure. A repetitive chime sounds and the liftgate closes under control. Remove any excessive weight from the liftgate. If the liftgate continues to close after opening, have the system checked by an authorized dealer.

#### Opening and Closing the Liftgate

#### WARNING



Make sure all persons are clear of the power liftgate area before using the power liftgate control.

**Note:** Be careful when opening or closing the liftgate in a garage or other enclosed area to avoid damaging the liftgate.

**Note:** Do not leave the liftgate open while driving. This could damage the liftgate and its components.

#### From the Instrument Panel



Press the button on the instrument panel near the lighting control.

#### With the Remote Control



Press the button twice within three seconds.

#### With the Outside Control Button

#### Opening the Liftgate

1. Unlock the liftgate with the remote control or power door unlock control. If an intelligent access key is within 3 ft (1 m) of the liftgate, the liftgate unlocks when you press the liftgate release button.



#### E138632

2. Press the button in the top of the liftgate pull-cup handle.

**Note:** Allow the system to open the liftgate. Manually pushing or pulling the liftgate may turn on obstacle detection and stop the power operation or reverse its direction. Manually interfering with the liftgate motion may also replicate a gas strut failure.

#### Closing the Liftgate

#### WARNING



Keep clear of the liftgate when activating the rear switch.



Press and release the liftgate control hutton

### Stopping the Liftgate Movement

You can stop the liftgate movement by doing any of the following:

- Pressing the liftgate control button.
- Pressing the liftgate button on the remote control twice.
- Pressing the liftgate button on the instrument panel.
- Activating the obstacle detection feature.
- Moving your foot under and away from the center rear bumper in a single-kick motion.

\*This method only works for vehicles with the hands-free liftgate feature.

## **Setting the Liftgate Open Height**

- 1. Open the liftgate.
- 2. Stop the liftgate by pressing the control button on the liftgate when it reaches the desired height.

**Note:** When the liftgate has stopped moving, you can also manually move it to the desired height.

 Press and hold the liftgate control button on the liftgate until a tone sounds, indicating programming is complete.

**Note:** You can only use the liftgate control button to program the height.

**Note:** You cannot program the height if the liftgate position is too low.

The new open liftgate height is recalled when the power liftgate is opened. To change the programmed height, repeat the above procedure. Once you open the power liftgate, you can manually move it to a different height. You can fully open the liftgate by manually pushing it upward to the maximum open position.

**Note:** The system recalls the new programmed height, even if you disconnect the battery.

#### **Obstacle Detection**

#### When Closing

The system stops when it detects an obstacle. Two short tones sound and the system reverses to open. When you remove the obstacle, you can power close the liftgate.

**Note:** Entering your vehicle while the liftgate is closing can cause your vehicle to bounce and activate obstacle detection. To prevent this, let the power liftgate close completely before you enter your vehicle. Before driving off, check the instrument cluster for a liftgate or door ajar message or warning indicator. Failure to do this could result in unintentionally leaving the liftgate open while driving.

### When Opening

The system stops when it detects an obstacle and two short tones sound. When you remove the obstacle, you can continue to operate the liftgate.

#### Hands-Free Feature (If Equipped)

Make sure you have an intelligent access transmitter within 3 ft (1 m) of the liftgate.



E161602

- Move your foot under and away from the rear bumper detection area in a single-kick motion. Do not move your foot sideways or the sensors may not detect the motion.
- 2. The liftgate powers open or close.

**Note:** Allow the power system to open the liftgate. Manually pushing or pulling the liftgate may activate the system's obstacle detection feature and stop the power operation or reverse its direction. Manually interfering with the liftgate motion may also replicate a gas strut failure.

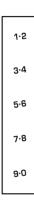
**Note:** Splashing water may cause the hands-free liftgate to open. Keep the intelligent access key away from the rear bumper detection area when washing your vehicle.

#### KEYLESS ENTRY (If Equipped)

## SECURICODE™ KEYLESS ENTRY KEYPAD

The keypad is located near the driver window. It is invisible until touched and then it lights up so you can see and touch the appropriate buttons.

**Note:** If you enter your entry code too fast on the keypad, the unlock function may not work. Re-enter your entry code more slowly.



E138637

You can use the keypad to:

- · lock or unlock the doors
- program and erase user codes
- arm and disarm the anti-theft alarm.

You can operate the keypad with the factory-set five-digit entry code. The code is located on the owner's wallet card in the glove box and is available from an authorized dealer. You can also create up to five of your own five-digit personal entry codes.

#### **Programming a Personal Entry Code**

To create your own personal entry code:

- 1. Enter the factory-set code.
- 2. Press **1-2** on the keypad within five seconds.
- Enter your personal five-digit code. You must enter each number within five seconds of each other.
- Press 1-2 on the keypad to save personal code 1.

The doors will lock then unlock to confirm that programming was successful.

To program additional personal entry codes, repeat Steps 1-3, then for Step 4:

- press 3-4 to save personal code 2
- press **5·6** to save personal code 3
- press 7-8 to save personal code 4
- press 9.0 to save personal code 5.

#### Tips:

- Do not set a code that uses five of the same number.
- Do not use five numbers in sequential order.
- The factory-set code will work even if you have set your own personal code.

#### **Erasing a Personal Code**

- 1. Enter the factory-set five-digit code.
- Press and release 1-2 on the keypad within five seconds.
- 3. Press and hold **1-2** for two seconds. This must be done within five seconds of completing Step 2.

All personal codes will erase and only the factory-set five-digit code will work.

#### **Anti-Scan Feature**

The keypad will go into an anti-scan mode if you enter the wrong code seven times (35 consecutive button presses). This mode disables the keypad for one minute and the keypad lamp will flash.

The anti-scan feature will turn off after:

- · one minute of keypad inactivity
- pressing the unlock button on the remote control
- switching the ignition on
- unlocking the vehicle using intelligent access.

#### **Unlocking and Locking the Doors**

#### To Unlock the Driver Door

Enter the factory-set five-digit code or your personal code. You must press each number within five seconds of each other. The interior lamps will illuminate.

**Note:** All doors will unlock if the two-stage unlocking feature is disabled. See **Locking** and **Unlocking** (page 55).

#### To Unlock All Doors

Enter the factory-set code or your personal code, then press **3-4** control within five seconds.

#### To Lock All Doors

Press and hold **7-8** and **9-0** at the same time with the driver door closed. You do not need to enter the keypad code first.

## Security

# PASSIVE ANTI-THEFT SYSTEM

**Note:** The system is not compatible with non-Ford aftermarket remote start systems. Use of these systems may result in vehicle starting problems and a loss of security protection.

**Note:** Metallic objects, electronic devices or a second coded key on the same key chain may cause vehicle starting problems if they are too close to the key when starting the engine. Prevent these objects from touching the coded key while starting the engine. Switch the ignition off, move all objects on the key chain away from the coded key and restart the engine if a problem occurs.

**Note:** Do not leave a duplicate coded key in the vehicle. Always take your keys and lock all doors when leaving the vehicle.

#### SecuriLock®

The system is an engine immobilization system. It is designed to help prevent the engine from being started unless a coded key programmed to your vehicle is used. Using the wrong key may prevent the engine from starting. A message may appear in the information display.

If you are unable to start the engine with a correctly coded key, a malfunction has happened and a message may appear in the information display.

#### **Automatic Arming**

The vehicle arms immediately after you switch the ignition off.

#### **Automatic Disarming**

Switching the ignition on with a coded key disarms the vehicle.

#### Replacement Keys

**Note:** Your vehicle comes equipped with two integrated keyhead transmitters or two intelligent access keys.

The integrated keyhead transmitter functions as a programmed ignition key that operates all the locks and starts the vehicle, as well as a remote control.

The intelligent access key functions as a programmed key that operates the driver door lock and activates the intelligent access with push button start system, as well as a remote control.

If your programmed transmitters or standard SecuriLock coded keys (integrated keyhead transmitters only) are lost or stolen and you do not have an extra coded key, you will need to have your vehicle towed to an authorized dealer. You need to erase the key codes from your vehicle and program new coded keys.

Store an extra programmed key away from the vehicle in a safe place to help prevent any inconveniences. See your authorized dealer to purchase additional spare or replacement keys.

## Programming a Spare Integrated Keyhead Transmitter

**Note:** You can program a maximum of eight coded keys to your vehicle. All eight can be integrated keyhead transmitters.

You can program your own integrated keyhead transmitter or standard SecuriLock coded keys to your vehicle. This procedure will program both the engine immobilizer keycode and the remote entry portion of the remote control to your vehicle

Only use integrated keyhead transmitters or standard SecuriLock keys.

## Security

You must have two previously programmed coded keys and the new unprogrammed key readily accessible. See your authorized dealer to have the spare key programmed if two previously programmed coded keys are not available.

Read and understand the entire procedure before you begin.

- 1. Insert the first previously programmed coded key into the ignition.
- 2. Switch the ignition from off to on. Keep the ignition on for at least three seconds, but no more than 10 seconds.
- 3. Switch the ignition off and remove the first coded key from the ignition.
- After three seconds but within 10 seconds of switching the ignition off, insert the second previously coded key into the ignition.
- Switch the ignition from off to on. Keep the ignition on for at least three seconds, but no more than 10 seconds.
- Switch the ignition off and remove the second previously programmed coded key from the ignition.
- After three seconds but within 10 seconds of switching the ignition off and removing the previously programmed coded key, insert the new unprogrammed key into the ignition.
- 8. Switch the ignition from off to on. Keep the ignition on for at least six seconds.
- 9. Remove the newly programmed coded key from the ignition.

If the key has been successfully programmed it will start the engine and operate the remote entry system (if the new key is an integrated keyhead transmitter).

If programming was not successful, wait 10 seconds and repeat Steps 1 through 8. If you are still unsuccessful, take your vehicle to your authorized dealer.

## Programming a Spare Intelligent Access Key

See your authorized dealer to have additional keys programmed to your vehicle.

#### ANTI-THEFT ALARM (If Equipped)

The system will warn you of an unauthorized entry to your vehicle. It will be triggered if any door, the luggage compartment or the hood is opened without using the key, remote control or keyless entry keypad.

The direction indicators will flash and the horn will sound if unauthorized entry is attempted while the alarm is armed.

Take all remote controls to an authorized dealer if there is any potential alarm problem with your vehicle.

#### **Arming the Alarm**

The alarm is ready to arm when there is not a key in the ignition. Electronically lock the vehicle to arm the alarm.



The message indicator flashes when theft protection is active.

### **Disarming the Alarm**

Disarm the alarm by any of the following actions:

- Unlock the doors or luggage compartment with the remote control or keyless entry keypad.
- Switch the ignition on or start the vehicle.
- Use a key in the driver's door to unlock the vehicle, then switch the ignition on within 12 seconds.

**Note:** Pressing the panic button on the remote control will stop the horn and signal indicators, but will not disarm the system.

## **Steering Wheel**

# ADJUSTING THE STEERING WHEEL

#### **WARNING**

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Do not adjust the steering wheel when your vehicle is moving.

**Note:** Make sure that you are sitting in the correct position. See **Sitting in the Correct Position** (page 108).



E95178

- Unlock the steering column.
- 2. Adjust the steering wheel to the desired position.



E95179

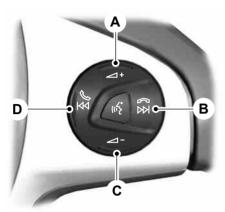
3. Lock the steering column.

### AUDIO CONTROL (If Equipped)

Select the required source on the audio unit.

## **Steering Wheel**

You can operate the following functions with the control:



E159789

- A Volume up.
- B Seek up, next or end call.
- C Volume down.
- D Seek down, previous or accept call.

#### Seek, Next or Previous

Press the seek button to:

- Tune the radio to the next or previous stored preset.
- · Play the next or the previous track.

Press and hold the seek button to:

- Tune the radio to the next station up or down the frequency band.
- Seek through a track.

### VOICE CONTROL (If Equipped)



E186192

Press the control to select or deselect voice control. See SYNC supplement.

#### **CRUISE CONTROL**



See Cruise Control (page 161).

## **Steering Wheel**

# INFORMATION DISPLAY CONTROL



E130248

See Information Displays (page 88).

## **HEATED STEERING WHEEL (1f**

**Equipped**)

Press the button to switch the heated steering wheel on and off.

**Note:** You can locate the heated steering wheel control under the climate controls.

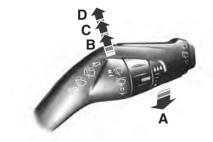
#### **WINDSHIELD WIPERS**

**Note:** Fully defrost the windshield before you switch the windshield wipers on.

**Note:** Make sure you switch the windshield wipers and vehicle power off before using an automatic car wash.

**Note:** If streaks or smears appear on the windshield, clean the windshield and the wiper blades. See **Checking the Wiper Blades** (page 223). If that does not resolve the issue, install new wiper blades. See **Changing the Wiper Blades** (page 223).

**Note:** Do not operate the wipers on a dry windshield. This may scratch the glass, damage the wiper blades or cause the wiper motor to burn out. Always use the windshield washers before wiping a dry windshield.

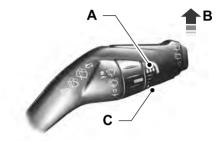


#### E197525

- A Single wipe.
- B Intermittent wipe.
- C Normal wipe.
- D High-speed wipe.

**Note:** Move to position **O** marked on the wiper lever to switch off.

#### **Intermittent Wipe**



E197526

- A Short-wipe interval.
- B Intermittent wipe.
- C Long-wipe interval.

Push the wiper lever up to switch the wipers on, and then use the rotary control to adjust the intermittent wipe interval.

### Speed Dependent Wipers (If Equipped)

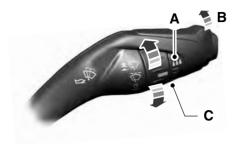
When your vehicle speed increases, the interval between wipes decreases.

## AUTOWIPERS (If Equipped)

**Note:** Fully defrost the windshield before switching on the windshield wipers.

**Note:** Check your wipers before you enter a car wash to make sure you switched them off.

The autowipers feature uses a rain sensor. You can find it in the area around the interior mirror. The rain sensor monitors the amount of moisture on the windshield and automatically turns on the wipers. It adjusts the wiper speed by the amount of moisture that the sensor detects on the windshield.



E197429

- A Highest sensitivity.
- B On.
- C Lowest sensitivity.

Switch the autowipers on by moving the wiper lever up to the first position.

Switch the autowipers off by moving the wiper lever down.

Use the rotary control to adjust the sensitivity of the rain sensor:

- Rotate the control down to low sensitivity, and the wipers turn on when the rain sensor detects a large amount of moisture on the windshield.
  - When you move the wiper lever up to the first position and the autowiper system is on, the autowiper sensitivity setting adjusts the wiper speed according to the moisture on the windshield only.
  - When you lower the sensitivity, the wipers remain in their ready position only. They do not wipe the windshield automatically unless the sensor detects moisture.
  - Move the wiper lever position up to the second position to wipe the windshield on-demand.
- Rotate the control up to high sensitivity, and the wipers turn on when the rain sensor detects a small amount of moisture on the windshield.
  - When you set the wiper control to a higher sensitivity, the wipers wipe the windshield once.
  - Remember to move the wiper lever position up to the second position to wipe the windshield on-demand.

The autowipers feature is active and ready when the wiper lever is in the first position and selected in the information display. You can change the autowipers feature to intermittent wipers through the information display. See (page 88).

**Note:** Check your wiper function in the information display. See (page 88). The autowipers feature functions only when you select the menu choice in the information display and you move the wiper lever up to the first position. The autowipers feature then remains on in the information display menu until you change it to intermittent wipe.

**Note:** If you switch autolamps on in conjunction with autowipers, your low beam headlamps turn on automatically when the rain sensor activates the windshield wipers continuously. See **Autolamps** (page 74).

Keep the outside of the windshield clean. The rain sensor is very sensitive. If the area around the mirror is dirty, then the wipers may operate if dirt, mist or insects hit the windshield.

Wet or winter driving conditions with ice, snow or salty road mist can cause inconsistent and unexpected wiping or smearing. In these conditions, you can do the following to help keep your windshield clear:

- Lower the sensitivity of the autowipers to reduce the amount of smearing.
- Switch to normal or high-speed wipe by moving the wiper lever up.
- Switch the autowipers off and switch intermittent mode on through the information display. See (page 88).
- Switch the autowipers off by moving the wiper lever down.

**Note:** Clean the windshield and wiper blades if they begin to leave streaks or smears. If that does not resolve the issue, install new wiper blades. See **Changing the Wiper Blades** (page 223).

### WINDSHIELD WASHERS

**Note:** Do not operate the washers when the washer reservoir is empty. This may cause the washer pump to overheat.



E197528

To operate the washers and spray the windshield, pull the lever toward you. When you release the lever, the wipers will operate for a short time.

# REAR WINDOW WIPER AND WASHERS

#### **Rear Window Wiper**

**Note:** Make sure you switch the rear window wiper and ignition off before using an automatic car wash.



E197647

- A Intermittent wipe.
- B Low speed wipe.
- C Off.

Press the top of the button to switch intermittent wipe on. Press the top of the button again to switch low speed wipe on. Press the bottom of the button to switch the rear window wiper off.

When you switch on the front wipers and move the gearshift lever to reverse (R), rear intermittent wipe automatically turns on.

#### **Rear Window Washer**



E197529

Push the lever away from you to operate the rear window washer. When you release the lever, wiping continues for a short period of time.

#### LIGHTING CONTROL



E142449

- A Off
- B Parking lamps, instrument panel lamps, license plate lamps and tail lamps
- C Headlamps

## **High Beams**



E162679

Push the lever forward to switch the high beams on.

Push the lever forward again or pull the lever toward you to switch the high beams off.

### **Headlamp Flasher**



E162680

Pull the lever toward you slightly and release it to flash the headlamps.

#### AUTOLAMPS (If Equipped)

#### **WARNING**

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The autolamps switch position may not activate the headlamps in all low visibility conditions, such as daytime

fog. Always ensure that your headlamps are switched to auto or on, as appropriate, during all low visibility conditions. Failure to do so may result in a collision.



E142451

When the lighting control is in the autolamps position, the headlamps automatically turn on in low light situations or when the wipers activate.

If equipped, the following also activate when the lighting control is in the autolamps position and you switch them on in the information display:

- Configurable daytime running lamps.
- Automatic high beam control.
- Adaptive headlamp control.

The headlamps remain on for a period of time after you switch the ignition off. Use the information display controls to adjust the period of time that the headlamps remain on. See **Information Displays** (page 88).

**Note:** With the headlamps in the autolamps position, you cannot switch the high beam headlamps on until the autolamps system turns the low beam headlamps on.

## Windshield Wiper Activated Headlamps

The windshield wiper activated headlamps turn on within 10 seconds when you switch the windshield wipers on and the lighting control is in the autolamps position. They turn off approximately 60 seconds after you switch the windshield wipers off.

The headlamps will not turn on by wiper activation:

- During a mist wipe.
- When the wipers are on to clear washer fluid during a wash condition.
- If the wipers are in intermittent mode.

**Note:** If you switch autolamps and autowipers on, the headlamps will automatically turn on when the windshield wipers continuously operate.

# INSTRUMENT LIGHTING DIMMER

**Note:** You disable the manual dimmer when you adjust the setting to Auto Dimming in the information display. See *Information Displays* (page 88).

**Note:** If you disconnect the battery or it becomes discharged, the illuminated components will switch to the maximum setting.



E161902

Press repeatedly or press and hold until you reach the desired level.

### **HEADLAMP EXIT DELAY**

After you switch the ignition off, you can switch the headlamps on by pulling the direction indicator lever toward you. You will hear a short tone. The headlamps will switch off automatically after three minutes with any door open or 30 seconds after the last door has been closed. You can cancel this feature by pulling the direction indicator toward you again or switching the ignition on.

#### **DAYTIME RUNNING LAMPS (1f**

Equipped)

#### WARNING

The daytime running lamps system does not activate the rear lamps and may not provide adequate lighting

during low visibility driving conditions. Also, the autolamps switch position may not activate the headlamps in all low visibility conditions, such as daytime fog. Make sure the headlamps are switched to auto or on, as appropriate, during all low visibility conditions. Failure to do so may result in a crash.

#### Type 1 - Conventional (Non-Configurable)

The daytime running lamps turn on when:

- 1. The ignition is switched to the on position.
- The transmission is not in park (P) for vehicles with automatic transmissions or the parking brake is released for vehicles with manual transmissions.
- 3. The lighting control is in the off, parking lamp or autolamps positions.
- 4. The headlamps are off.

## Type 2 - Configurable

Switch the daytime running lamps on or off using the information display controls. See **Information Displays** (page 88).

The daytime running lamps turn on when:

- They are switched on in the information display. See Information Displays (page 88).
- 2. The ignition is switched to the on position.

- The transmission is not in park (P) for vehicles with automatic transmissions or the parking brake is released for vehicles with manual transmissions.
- 4. The lighting control is in the autolamps position.
- 5. The headlamps are off.

The other lighting control switch positions do not activate the daytime running lamps, and you can use them to temporarily override autolamp control.

When switched off in the information display, the daytime running lamps are off in all lighting control switch positions.

#### FRONT FOG LAMPS



E210814

Press the button to switch the fog lamps on or off.

You can switch the fog lamps on when the lighting control is in any position except off

#### **DIRECTION INDICATORS**



E162681

Push the lever up or down to use the direction indicators.

**Note:** Tap the lever up or down to make the direction indicators flash three times to indicate a lane change.

#### **INTERIOR LAMPS**

The lamps will switch on when:

- · You open any door.
- · You press a remote control button.

## **Front Interior Lamp**



E181171

- A. Left-hand lamp.
- B. Right-hand lamp.

## Rear Interior Lamp (If Equipped)



E142455

You can switch individual map lamps on independently by pressing switch A.

#### **POWER WINDOWS**

#### WARNINGS

Do not leave children unattended in your vehicle and do not let them play with the power windows. They may seriously injure themselves.

When closing the power windows, you should verify they are free of obstructions and make sure that children and pets are not in the proximity of the window openings.



Press the control to open the window. Lift the control to close the window.

**Note:** You may hear a pulsing noise when just one of the windows is open. Lower the opposite window slightly to reduce this noise.

#### One-Touch Down (If Equipped)

Press the control fully and release it. Press again or lift it to stop the window.

#### One-Touch Up (If Equipped)

Lift the control fully and release it. Press or lift it again to stop the window.

#### Window Lock



Press the control to lock or unlock the rear window controls. It lights when the rear window controls lock

#### Bounce-Back (If Equipped)

The window stops automatically while closing. It reverses some distance if there is an obstacle in the way.

#### **Overriding the Bounce-Back Feature**

#### WARNING

When you override the bounce-back feature the window will not reverse if it detects an obstacle. Take care when closing the windows to avoid personal injury or damage to your vehicle.

Proceed as follows to override this protection feature when there is a resistance, for example in winter:

- Close the window twice until it reaches the point of resistance and let it reverse.
- Close the window a third time to the point of resistance. You disabled the bounce-back feature and you can now close the window manually. The window travels past the point of resistance and you can close it fully.

Contact an authorized dealer as soon as possible if the window does not close after the third attempt.

#### **Resetting the Bounce-Back Feature**

#### WARNING



The bounce-back feature remains turned off until you reset the memory.

If you have disconnected the battery, you must reset the bounce-back memory separately for each window.

- Lift and hold the control until the window is fully closed.
- 2. Release the control.
- 3. Lift and hold the control again for a few seconds.
- 4. Release the control.
- 5. Lift and hold the control again for a few seconds.
- Release the control.
- 7. Press and hold the control until the window is fully open.
- 8. Lift and hold the control until the window is fully closed.
- 9. Release the control.
- 10. Open the window and then try to close it automatically.
- 11. Repeat the procedure if the window does not close automatically.

#### Accessory Delay (If Equipped)

You can use the window controls for several minutes after switching off the ignition or until opening either front door.

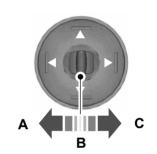
#### **EXTERIOR MIRRORS**

#### **Power Exterior Mirrors**

#### WARNING

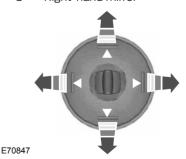


Do not adjust the mirrors when your vehicle is moving.



F70846

- A Left-hand mirror
- B Off
- C Right-hand mirror



Press the arrows to adjust the mirror.

#### **Fold-Away Exterior Mirrors**

Push the mirror toward the door window glass. Make sure that you fully engage the mirror in its support when returning it to its original position.

#### Heated Exterior Mirrors (If Equipped)

See **Heated Windows and Mirrors** (page 106).

#### Memory Mirrors (If Equipped)

You can save and recall the mirror positions through the memory function. See **Memory Function** (page 113).

## Integrated Blind Spot Mirrors (If Equipped)

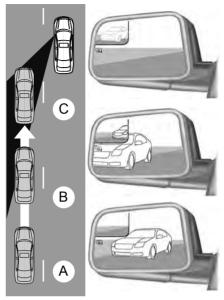
#### WARNING

 $\Lambda$ 

Objects in the blind spot mirror are closer than they appear.

Blind spot mirrors have an integrated convex mirror built into the upper outboard corner of the exterior mirrors. They are designed to increase your visibility along the side of your vehicle.

Check the main mirror first before a lane change, then check the blind spot mirror. If no vehicles are present in the blind spot mirror and the traffic in the adjacent lane is at a safe distance, signal that you intend to change lanes. Glance over your shoulder to verify traffic is clear and carefully change lanes.



E138665

The image of the approaching vehicle is small and near the inboard edge of the main mirror when it is at a distance. The image becomes larger and begins to move outboard across the main mirror as the vehicle approaches (A). The image will transition from the main mirror and begin to appear in the blind spot mirror as the vehicle approaches (B). The vehicle will transition to your peripheral field of view as it leaves the blind spot mirror (C).

## Blind Spot Monitor (If Equipped)

See **Blind Spot Information System** (page 162).

#### **INTERIOR MIRROR**

#### WARNING



Do not adjust the mirror when your vehicle is moving.

**Note:** Do not clean the housing or glass of any mirror with harsh abrasives, fuel or other petroleum or ammonia-based cleaning products.

You can adjust the interior mirror to your preference. Some mirrors also have a second pivot point. This lets you move the mirror head up or down and from side to side.

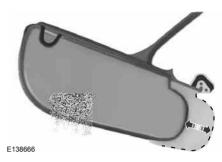
Pull the tab below the mirror toward you to reduce glare at night.

#### Auto-Dimming Mirror (If Equipped)

**Note:** Do not block the sensors on the front and back of the mirror. Mirror performance may be affected. A rear center passenger or raised rear center head restraint may also block light from reaching the sensor.

The mirror will dim automatically to reduce glare when bright lights are detected from behind your vehicle. It will automatically return to normal reflection when you select reverse gear to make sure you have a clear view when backing up.

#### **SUN VISORS**



Rotate the sun visor toward the side window and extend it rearward for extra shade.

#### Illuminated Vanity Mirror (If Equipped)



E162197

Lift the cover to switch the lamp on.

## MOONROOF (If Equipped)

#### **WARNINGS**



Do not let children play with the moonroof or leave them unattended in the vehicle. They may seriously

hurt themselves.

#### **WARNINGS**

When closing the moonroof, you should verify that it is free of obstructions and make sure that children and pets are not in the proximity of the roof opening.

The moonroof and sunscreen controls are located on the overhead console.

The moonroof and sunscreen have a one-touch open and close feature. To stop them during one-touch operation, press the control a second time.

## Opening and Closing the Sunscreen



F138668

Press and release the rear of the control to open the sunscreen.

Press and release the front of the control to close the sunscreen. If it is open, the moonroof will automatically close before the sunscreen closes.

## Opening and Closing the Moonroof



E138669

Press and release the rear of the control to open the moonroof. If it is closed, the sunscreen will automatically open before the moonroof opens. The moonroof will stop short of the fully opened position.

**Note:** This position helps to reduce wind noise or rumbling which may happen with the moonroof fully open. Press and hold the control again to fully open the moonroof.

Press and release the front of the control to close the moonroof.

#### **Bounce-Back**

The moonroof will stop automatically while closing. It will reverse some distance if there is an obstacle in the way.

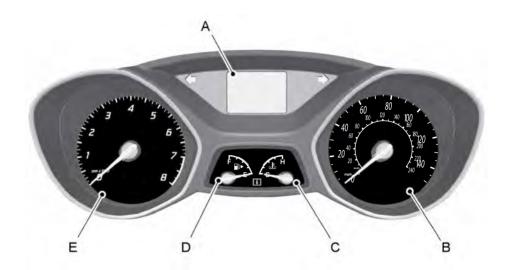
Press and hold the front of the control within two seconds of a bounce-back event to override this function. While bounce-back is active, the closing force increases for each of the next three times that you close the moonroof.

### **Venting the Moonroof**

Press and release the front of the control to vent the moonroof. Press and release the rear of the control to close the moonroof.

**Note:** When you vent the moonroof it will rise to 1.57 in (4 cm) and then lower slightly. This is normal. You cannot stop the moonroof in the higher position.

#### **GAUGES**



#### E171213

- A Information display
- B Speedometer
- C Engine coolant temperature gauge
- D Fuel gauge
- E Tachometer

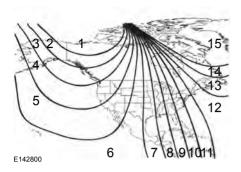
## **Information Display**

## Compass (If Equipped)

Displays the vehicle's heading direction.

To calibrate and set the compass zone use the information display menu. See **Information Displays** (page 88).

Use the diagram to determine your magnetic zone.



#### **Odometer**

Located in the bottom of the information display, it registers the accumulated distance your vehicle has traveled.

#### **Outside Air Temperature**

Shows the outside air temperature.

#### **Trip Computer**

See Trip Computer (page 91).

#### **Vehicle Settings and Personalization**

See (page 88).

## Engine Coolant Temperature Gauge

#### WARNING



Never remove the coolant reservoir cap while the engine is running or hot.

At normal operating temperature, the needle will remain in the center section.

**Note:** Do not restart the engine until the cause of overheating has been resolved.

If the needle enters the red section, the engine is overheating. Stop the engine, switch the ignition off and determine the cause once the engine has cooled down. See **Engine Coolant Check** (page 218).

#### **Fuel Gauge**

**Note:** The fuel gauge level may vary slightly when your vehicle is moving or when driving on a slope.

Switch the ignition on. The fuel gauge will indicate approximately how much fuel is in the fuel tank. The arrow next to the fuel pump symbol shows the fuel filler door side of your vehicle.

The needle will move toward full when you refuel your vehicle. If the needle still points to empty after adding fuel, have your vehicle repaired.

After refueling the needle may not always return to exactly the same position. This is normal.

**Note:** It may take a short time for the needle to reach full after refueling and driving. This is normal and may be due to the slope of pavement at the service station.

**Note:** The fuel pumped into the tank may differ slightly from the fuel gauge. This is normal and may be due to the slope of payement at the service station.

**Note:** If the service station nozzle shuts off before the tank is full, complete refueling at a different pump.

#### **Low Fuel Level Reminder**

#### Vehicles with Trip Computer

A low fuel level reminder displays and sounds when the distance to empty reaches 75 mi (120 km) to empty for MyKey, and at 50 mi (80 km), 25 mi (40 km), 10 mi (20 km) and 0 mi (0 km) for all vehicle keys.

#### Vehicles without Trip Computer

A low fuel level reminder displays and sounds when the fuel gauge needle is at 1/16th.

**Note:** The low fuel warning and distance-to-empty warning can appear at different fuel gauge positions depending on fuel economy conditions. This variation is normal

# WARNING LAMPS AND INDICATORS

The following warning lamps and indicators will alert you to a vehicle condition that may become serious. Some lamps will illuminate when you start your vehicle to make sure they work. If any lamps remain on after starting your vehicle, refer to the respective system warning lamp for further information.

**Note:** Some warning indicators appear in the information display and function the same as a warning lamp but do not display when you start your vehicle.

### **Airbag - Front**



If it fails to illuminate when you start your vehicle, continues to flash or remains on, it indicates

a malfunction. Have the system checked by your authorized dealer.

## **Anti-Lock Braking System**



If it illuminates when you are driving, this indicates a malfunction. You will continue

to have the normal braking system (without ABS) unless the brake system warning lamp is also illuminated. Have the system checked by your authorized dealer.

## **Battery**



If it illuminates while driving, it indicates a malfunction. Switch off all unnecessary electrical

equipment and have the system checked by your authorized dealer immediately.

#### Blind Spot Monitor (If Equipped)



It will illuminate when you switch this feature off or in conjunction with a message. See **Blind Spot** 

Information System (page 162). See Information Messages (page 91).

#### **Brake System**



It will illuminate when you engage the parking brake with the ignition on.

If it illuminates when you are driving, check that the parking brake is not engaged. If the parking brake is not engaged, this indicates low brake fluid level or a brake system malfunction. Have the system checked immediately by your authorized dealer.

#### WARNING



Driving your vehicle with the warning lamp on is dangerous. A significant decrease in braking performance

may occur. It will take you longer to stop your vehicle. Have your vehicle checked by your authorized dealer immediately. Driving extended distances with the parking brake engaged can cause brake failure and the risk of personal injury.

#### Cruise Control (If Equipped)



It will illuminate when you switch this feature on. See **Using Cruise Control** (page 161).

#### **Direction Indicator**



Illuminates when the left or right turn signal or the hazard warning flasher is turned on. If the

indicators stay on or flash faster, check for a burned out bulb. See **Changing a Bulb** (page 226).

#### **Engine Oil**



If it illuminates with the engine running or when you are driving, this indicates a malfunction.

Stop your vehicle as soon as it is safe to do so and switch the engine off. Check the engine oil level. See **Engine Oil Check** (page 217).

**Note:** Do not resume your journey if it illuminates despite the level being correct. Have the system checked by your authorized dealer immediately.

## **Fasten Safety Belt**



It will illuminate and a chime will sound to remind you to fasten your safety belt. See **Safety** 

Belt Minder (page 32).

#### Fog Lamps - Front (If Equipped)



It will illuminate when you switch the front fog lamps on.

## **High Beam**



It will illuminate when you switch the high beam headlamps on. It will flash when you use the

headlamp flasher.

### Information (If Equipped)



It will illuminate when a new message is stored in the information display. It will be red

or amber in color depending on the severity of the message and will remain on until the cause of the message has been rectified. See **Information Messages** (page 91).

#### **Low Fuel Level**



It will illuminate when the fuel level is low or the fuel tank is nearly empty. Refuel as soon as

possible.

## **Low Tire Pressure Warning**



It will illuminate when your tire pressure is low. If the lamp remains on with the engine

running or when driving, check your tire pressure as soon as possible.

It will also illuminate momentarily when you switch the ignition on to confirm the lamp is functional. If it does not illuminate when you switch the ignition on, or begins to flash at any time, have the system checked by your authorized dealer.

#### **Parking Lamps**



It will illuminate when you switch the parking lamps on.

## Service Engine Soon



If the service engine soon indicator light stays illuminated after the engine is started, it

indicates that the On-Board Diagnostics (OBD-II) system has detected a malfunction of the vehicle emissions control system. Refer to On-Board Diagnostics (OBD-II) in the Fuel and Refueling chapter for more information about having your vehicle serviced. See **Emission Control System** (page 135).

If the light is blinking, engine misfire is occurring which could damage your catalytic converter. Drive in a moderate fashion (avoid heavy acceleration and deceleration) and have your vehicle serviced immediately.

#### **WARNING**

Under engine misfire conditions, excessive exhaust temperatures could damage the catalytic converter, the fuel system, interior floor coverings or other vehicle components, possibly causing a fire. Have an authorized dealer service your vehicle immediately.

The service engine soon indicator light illuminates when the ignition is first turned on prior to engine start to check the bulb and to indicate whether the vehicle is ready for Inspection/Maintenance (I/M) testing.

Normally, the service engine soon light will stay on until the engine is cranked, then turn itself off if no malfunctions are present. However, if after 15 seconds the service engine soon light blinks eight times, it means that the vehicle is not ready for I/M testing. See **Emission Control**System (page 135).

#### **Traction and Stability Control**



It will flash when the system is active. If it remains illuminated or does not illuminate when you

switch the ignition on, this indicates a malfunction. During a malfunction the system will switch off. Have the system checked by your authorized dealer immediately.

## **Traction and Stability Control Off**



It will illuminate when you switch the system off. It will go out when you switch the system

back on or when you switch the ignition off.

# AUDIBLE WARNINGS AND INDICATORS

#### **Kev in Ignition Warning Chime**

Sounds when you open the driver's door and you have left the key in the ignition.

### **Engine On Warning Chime**

A warning chime will sound when any door is opened if the vehicle exceeds a relatively low speed.

#### Keyless Warning Alert (If Equipped)

Sounds the horn twice when you exit the vehicle and the keyless vehicle is in RUN, indicating the vehicle is still on.

#### **Headlamps On Warning Chime**

Sounds when you remove the key from the ignition and open the driver's door and you have left the headlamps or parking lamps on.

## Parking Brake On Warning Chime

Sounds when you have left the parking brake on and drive your vehicle. If the warning chime remains on after you have released the parking brake, have the system checked by your authorized dealer immediately.

## Automatic Transmission Warning Chime

Sounds when you have not moved the transmission selector lever to position **P**. A message will be shown in the display.

#### **GENERAL INFORMATION**

#### WARNING

Driving while distracted can result in loss of vehicle control, crash and injury. We strongly recommend that you use extreme caution when using any device that may take your focus off the road. Your primary responsibility is the safe operation of your vehicle. We recommend against the use of any handheld device while driving and encourage the use of voice-operated systems when possible. Make sure you are aware of all applicable local laws that may affect the use of electronic devices while driving.

Various systems on your vehicle can be controlled using the information display controls on the steering wheel.
Corresponding information is displayed in the information display.

### **Information Display Controls**



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- Press the up and down arrow buttons to scroll through and highlight the options within a menu.
- Press the right arrow button to enter a sub-menu.
- Press the left arrow button to exit a menu.
- Press and hold the left arrow button at any time to return to the main menu display (escape button).
- Press the OK button to choose and confirm settings or messages. The OK button may also be used to reset some Trip values.

# Menu Structure - Information Display

#### **All Vehicles**

You can access the menu using the information display control.

**Note:** Some options may appear slightly different or not at all if the items are optional.

Trip I and 2'				
Distance to E				
Trip Odometer				
Trip Timer				
Inst Fuel Econ	Inst Fuel Econ			
Average Fuel	Ford EcoMode <sup>2</sup>	Anticipation		
		Speed		
Average Speed				
Digital Speedo				
All Value - Distance to E, Trip Odometer, Instantaneous Fuel and Average Fuel				

<sup>&</sup>lt;sup>2</sup> See **Eco Mode** (page 167).

Information
Seatbelt
Intelligent 4WD
MyKey Dist.
MyKey Info
System Check

Settings		
Driver Assist	Traction Ctrl	On or Off
	Blind spot	On or Off
	Cross traffic alert	On or Off
Lighting	Rain Light	On or Off
	Dimming	Auto or Manual
	Hdlamp delay	Manual or xx Seconds

<sup>&</sup>lt;sup>1</sup> See **Trip Computer** (page 91).

Settings				
	Daytime Running Light	On or Off		
Display	Navigation info	On or Off		
	Language	Choose your applic	able setting	
	Distance	Choose your applic	able setting	
	Temperature	Choose your applic	able setting	
Chimes	Park Slot	On or Off		
Convenience	Auto engine off	On or Off		
	Compass	Display	On or Off	
	Remote Start	Climate Control	Heater – A/C / Auto or Last Settings	
			Front Defrost / Auto or Off	
			Rear Defrost / Auto or Off	
		Duration	(5, 10 or 15 minutes)	
		Quiet Start	On/Off	
		Restore Default		
		System	On or Off	
MyKey	Create MyKey	Hold OK to Create MyKey		
	Traction Ctrl	Always On or User	Selectable	
	Max Speed	80 MPH (130 km/h) or Off		
	Speed Warning	45 mph (75 km/h), 55 mph (90 km/h), 65 mp (105 km/h) or Off		
	Volume Limiter	On or Off		
	Clear MyKeys	Hold OK to Clear Al	l MyKeys	

#### System Check

All active warnings will display first if applicable. The system check menu may appear different based upon equipment options and current vehicle status. Use the up/down arrow buttons to scroll through the list.

#### TRIP COMPUTER

### **Resetting the Trip Computer**

Press and hold OK on the current screen to reset the respective trip, distance, time and average fuel information.

#### Distance to E

Indicates the approximate distance the vehicle will travel on the fuel remaining in the tank. Changes in driving pattern may cause the value to vary.

#### **Trip Odometer**

Registers the distance traveled of individual journeys.

## **Trip Timer**

Registers the time of individual journeys.

#### Instantaneous Fuel

Shows your instantaneous fuel usage.

### **Average Fuel**

Indicates the average fuel consumption since the function was last reset.

## **Digital Speedo**

Shows a digital display of your vehicle speed.

#### **All Value**

Indicates all the respective remaining fuel, distance, time and average fuel information.

#### INFORMATION MESSAGES

**Note:** Depending on your vehicle options and instrument cluster type, not all of the messages display or are available. Additionally, the information display may abbreviate or shorten certain messages.



E130248

Press the OK button to acknowledge and remove some messages from the information display. The information display automatically removes other messages after a short time.

You need to confirm certain messages before you can access the menus.

## Message indicator (If Equipped)



The message indicator illuminates to supplement some messages. It is red or amber

depending on the severity of the message and remains on until you or your authorized dealer have fixed the vehicle concern.

A system specific symbol with a message indicator may supplement some

messages.

## Airbag

Message	Message Indicator	Action
Airbag fault Service now	Amber	Displays when the system requires service due to a malfunction. Contact your authorized dealer.

#### Alarm

Message	Message Indicator	Action
Alarm activated Check Vehicle	Amber	Displays when the alarm has been triggered due to unauthorized entry. See <b>Anti-Theft Alarm</b> (page 66).
Alarm fault Service required	-	Displays when the system requires service due to a malfunction. Contact your authorized dealer.

## **Automatic Engine Shutdown**

Message	Message Indicator	Action
Engine Shuts Off For Fuel Economy	-	Displays when the engine has shut off to help increase fuel economy.
Engine Shuts Off in XX Seconds OK to Override	-	Displays when the engine is getting ready to shut off. You can press OK on the left steering wheel button to override the shut down.

## **Battery and Charging System**

Message	Message Indicator	Action
Electrical system over- voltage Stop safely	Red	Stop your vehicle as soon as it is safe to do so and switch off the ignition. Contact your authorized dealer.
Battery low See manual	Amber	Displays to warn of a low battery condition. Turn off all unneeded electrical accessories. Contact your authorized dealer.

## **Blind Spot Information and Cross Traffic Alert System**

Message	Message Indicator	Action
BLIS Low visibility See manual	Amber	Displayed when the blind spot information system and cross traffic alert system sensors are blocked. See <b>Blind Spot Information System</b> (page 162).
BLIS: X sensor fault Service required	Amber	Displayed when a fault with the system has occurred. Contact your authorized dealer as soon as possible.
BLIS not available Trailer attached	Amber	Displayed when the system is not available due to trailer use. See <b>Blind Spot Information System</b> (page 162).
Cross Traffic Vehicle coming from X	Amber	Displayed when the system detects a vehicle. See <b>Blind Spot Information System</b> (page 162).
Cross Traffic Sensor blocked See manual	Amber	Displayed when the blind spot information system and cross traffic alert system sensors are blocked. See <b>Blind Spot Information System</b> (page 162).
Cross Traffic fault Service required	Amber	Displays when the system requires service due to a malfunction. Contact your authorized dealer.
Cross Traffic disabled Trailer attached	-	Displayed when the system is not available due to trailer use. See <b>Blind Spot Information System</b> (page 162).

## **Doors**

Message	Message Indicator	Action
X door open	Red	Displays when the door(s) listed is not completely closed and the vehicle is moving.
	-	Displays when the door(s) listed is not completely closed.
Liftgate ajar	Red	Displays when the luggage compartment is not completely closed and the vehicle is moving.
	-	Displays when the luggage compartment is not completely closed.
Hood open	Red	Displays when the hood is not completely closed and the vehicle is moving.
	-	Displays when the hood is not completely closed.

## **Engine**

Message	Message Indicator	Action
Engine fault Service now	Amber	Engine service is required. Contact your authorized dealer.
High engine temperature Stop safely	Red	Displays when the engine temperature is too high. Stop the vehicle in a safe place and allow to engine to cool. If the problem persists, contact your authorized dealer. See <b>Engine Coolant Check</b> (page 218).
Power reduced to lower temperature	-	Displays when the engine has reduced power in order to help reduce high coolant temperature.

## **Hill Start Assist**

Message	Message Indicator	Action
Hill start assist not available	Amber	Displays when hill start assist is not available. Contact your authorized dealer.

## **Keyless Vehicle**

Message	Message Indicator	Action
Ford KeyFree Key inside vehicle	Amber	Displays to remind you that the key is in the trunk. See <b>Keyless Starting</b> (page 124).
Ford KeyFree No key detected	-	Displayed if the key is not detected by the system. See <b>Keyless Starting</b> (page 124).
Switch ign. off Press ENGINE Start/Stop button	Red	Displayed as a reminder to turn off the vehicle. See <b>Keyless Starting</b> (page 124).
Press brake to start	-	Displayed as a reminder to press the brake while starting the vehicle.
Ford KeyFree Key not inside car	Red	Displayed when a valid key is not detected within the vehicle. See <b>Keyless Starting</b> (page 124).
Key Battery low Replace soon	-	Displays when the key battery is low. Change the battery as soon as possible. See <b>Remote Control</b> (page 45).

## Lighting

Message	Message Indicator	Action
Brake lamp Bulb fault	-	Displays when the brake lamp bulb has burned out. Contact your authorized dealer.
Low beam Bulb fault	-	Displays when the low beam headlamp bulb has burned out. Contact your authorized dealer.
Headlamp fault Service required	Amber	Displays when an electrical system problem occurs with the headlamp system. Contact your authorized dealer.

## Maintenance

Message	Message Indicator	Action
Engine oil change due	-	Displays when the engine oil life is depleted and requires a change. See <b>Engine Oil Check</b> (page 217).
Brake fluid level low Service now	Red	Indicates the brake fluid level is low and the brake system should be inspected immediately. See <b>Brake Fluid Check</b> (page 221).

## MyKey

Message	Message Indicator	Action
MyKey active Drive Safely	-	Displays when MyKey is active.
MyKey Speed Limited to XX MPH/km/h	-	Displays when starting the vehicle and MyKey is in use and the MyKey speed limit is on.
MyKey Vehicle Near Top Speed	Amber	Displays when a MyKey is in use and the MyKey speed limit is on and the vehicle speed is approaching 80 mph (130 km/h).
MyKey Vehicle at Top Speed	Amber	Displays when a MyKey is in use and the MyKey speed limit is reached.

Message	Message Indicator	Action
MyKey Check Speed Drive Safely	-	Displays when MyKey is active.
MyKey Buckle Up to Unmute Audio	-	Displays when a MyKey is in use and Belt- Minder is activated.
MyKey Park aid cannot be deactivated	-	Displays when a MyKey is in use and park aid is activated.
Key is Already a MyKey	-	Displays when trying to create a MyKey with a key already designated as a MyKey.
Hold key next to symbol on steering column	-	Displays when programming a MyKey.
MyKey ESC cannot be deactivated	-	Displays when programming a MyKey.

## **Park Aid**

Message	Message Indicator	Action
Parking aid malfunction Service required	Amber	Displays when the system has detected a condition that requires service. Contact your authorized dealer. See <b>Rear Parking Aid</b> (page 152).

## **Park Brake**

Message	Message Indicator	Action
Park brake applied	Red	Displays when the parking brake is set, the engine is running and the vehicle is driven more than 3 mph (5 km/h). If the warning stays on after the parking brake is released, contact your authorized dealer.

## **Power Steering**

Message	Message Indicator	Action
Steering loss Stop safely	Red	The power steering system is not working. Stop the vehicle a safe place. Contact your authorized dealer.
Steering assist fault Service required	Amber	The power steering system is not working. Stop the vehicle a safe place. Contact your authorized dealer.
Steering fault Service now	Amber	The power steering system has detected a condition within the power steering system or passive entry or passive start system requires service. Contact your authorized dealer.

## **Starting System**

Message	Message Indicator	Action
Press brake to start	-	Displays when starting the vehicle as a reminder to apply the brake.
Cranking time exceeded	-	Displays when the vehicle fails to start.

## Transmission and Four-Wheel Drive

Message	Message Indicator	Action
Transmission fault Service now	-	See your authorized dealer.
Transmission overtem- perature Stop safely	Amber	The transmission is overheating and needs to cool. Stop in a safe place as soon as it's possible.
Transmission Service required	Amber	See your authorized dealer.
Transmission Hot Stop or Speed Up	-	Transmission is getting hot. Stop to let it cool or speed up.

Message	Message Indicator	Action
Transmission Hot Wait	-	Transmission is hot. Wait as needed to let it cool.
4WD fault Service required	Amber	The system is not functioning correctly and defaulted to front-wheel drive. See your authorized dealer. See <b>Using Four-Wheel Drive</b> (page 141).
4WD Off	Amber	Displays when the system disables automatically and enters front-wheel drive only mode to protect driveline components. See <b>Using Four-Wheel Drive</b> (page 141).
4WD temporarily disabled	Amber	The system has overheated and defaulted to front-wheel drive. See <b>Using Four-Wheel Drive</b> (page 141).
4WD restored	-	Displays when system operation has been restored. See <b>Using Four-Wheel Drive</b> (page 141).
Transmission not in Park Select P	-	Displays as a reminder to shift into park.
Press brake to unlock gearshift lever	-	Displays to request the operator to apply the brake as needed by the transmission.
Gearshift lever unlocked	-	Displays when the transmission shift lever is unlocked and free to select gears.

## **Tire Pressure Monitoring System**

Message	Message Indicator	Action
Low Tire Pressure	Amber	Displays when one or more tires on your vehicle have low tire pressure. See <b>Tire Pressure Monitoring System</b> (page 258).
Tire Pressure Monitor Fault	Amber	Displays when the tire pressure monitoring system is malfunctioning. If the warning stays on or continues to come on, contact your authorized dealer. See <b>Tire Pressure Monitoring System</b> (page 258).
Tire Pressure Sensor Fault	Amber	Displayed when a tire pressure sensor is malfunctioning, or your spare tire is in use. For more information on how the system operates under these conditions, see See <b>Tire Pressure Monitoring System</b> (page 258). If the warning stays on or continues to come on, contact your authorized dealer as soon as possible.

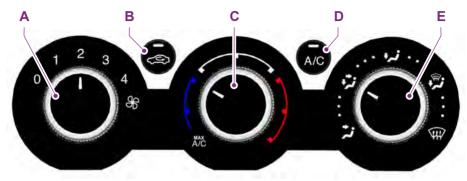
## **Traction Control**

Message	Message Indicator	Action
Traction control off	-	Displays when the traction control system has been switched off. See <b>Using Traction Control</b> (page 149).

## **Trailer**

Message	Message Indicator	Action
Trailer Sway Reduce Speed	-	Displays when the trailer sway control has detected a trailer sway. See <b>Trailer Sway Control</b> (page 180).

#### MANUAL CLIMATE CONTROL



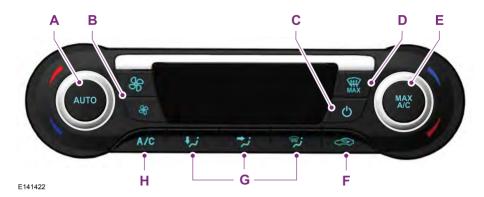
E141421

- A **Fan speed control:** Adjust the volume of air circulated in the vehicle.
- B **Recirculated air:** Press the button to switch between outside air and recirculated air. The air currently in the passenger compartment recirculates. This can reduce the time needed to cool the interior and reduce unwanted odors from entering your vehicle.

**Note:** Recirculated air may turn off automatically (or be prevented from turning on) in all airflow modes except **MAX A/C** to reduce risk of fogging. Recirculated air may also turn on and off automatically in **Panel** or **Panel and Floor** airflow modes during hot weather in order to improve cooling efficiency.

- C **Temperature control:** Controls the temperature of the air circulated in your vehicle
  - **MAX A/C:** Adjust the control for maximum cooling. Recirculated air flows through the instrument panel vents, air conditioning automatically turns on and the fan automatically adjusts to the highest speed.
- D **A/C:** Press the button to turn air conditioning compressor on or off. Use air conditioning with recirculated air to improve cooling performance and efficiency.
- E **Air distribution control:** Adjust the control to turn airflow from the windshield, instrument panel, or footwell vents on or off. You can distribute air through any combination of these vents.

#### **AUTOMATIC CLIMATE CONTROL**



- A **AUTO:** Press the button to switch on automatic operation. Select the desired temperature using the temperature control. The system adjusts fan speed, air distribution, air conditioning operation, and selects outside air or recirculated air to heat or cool the vehicle in order to maintain the desired temperature.
- B **Fan speed control:** Adjust the volume of air circulated in the vehicle.
- C **Power:** Press the button to switch the system on and off. When the system is off, it prevents outside air from entering the vehicle.
- D **MAX Defrost:** Press the button to switch on defrost. Outside air flows through the windshield vents, air conditioning automatically turns on, and fan automatically adjusts to the highest speed. You can also use this setting to defrost and clear the windshield of a thin covering of ice. The heated rear window also automatically turns on when you select maximum defrost.

**Note:** To prevent window fogging, you cannot select recirculated air when maximum defrost is on.

- E **MAX A/C:** Press the button to maximize cooling. Recirculated air flows through the instrument panel vents, air conditioning automatically turns on, and the fan automatically adjusts to the highest speed.
- F Recirculated air: Press the button to switch between outside air and recirculated air. When you select recirculated air, the air currently in the passenger compartment recirculates. This may reduce the time needed to cool the interior (when used with A/C) and may reduce unwanted odors from entering your vehicle.

**Note:** Recirculated air may turn off automatically (or be prevented from turning on) in all airflow modes except **MAX A/C** to reduce risk of fogging. Recirculated air may also turn on and off automatically in **Panel** or **Panel and Floor** airflow modes during hot weather in order to improve cooling efficiency.

- G **Air distribution control:** Adjust the control to turn airflow from the windshield, instrument panel, or footwell vents on or off. You can distribute air through any combination of these vents.
- H **A/C:** Press the button to turn air conditioning compressor on or off. Use air conditioning with recirculated air to improve cooling performance and efficiency.

**Note:** In certain conditions (for example, maximum defrost), the air conditioning compressor may continue to operate even though the air conditioning is switched off.

### **Temperature Control**



E133115

You can set the temperature between 60°F (15.5°C) and 85°F (29.5°C) in steps of 1°F (0.5°C). In position **LO**, 59°F (15°C), the system switches to permanent cooling. In position **HI**, 86°F (30°C), the system switches to permanent heating.

#### Single Zone Temperature Control

In this mode, the climate control system links the temperature settings for both the driver's side and passenger's side. If you adjust the setting using the rotary control on the driver's side, the system adjusts the temperature to the same setting on the passenger's side.

#### **Dual Zone Temperature Control**

Select a temperature for the passenger's side using the rotary control on the passenger's side. Single zone temperature control automatically switches off. The temperature on the driver's side remains unchanged. You can now adjust the driver's side and passenger's side temperatures independently. The display shows the temperature settings for each side.

## Switching Back to Single Zone Temperature Control

Press and hold the **AUTO** button. The passenger side temperature is adjusted to the driver side temperature setting.

# HINTS ON CONTROLLING THE INTERIOR CLIMATE

#### **General Hints**

**Note:** Prolonged use of recirculated air may cause the windows to fog up.

**Note:** You may feel a small amount of air from the floor air vents regardless of the air distribution setting.

**Note:** To reduce humidity build-up inside your vehicle, do not drive with the system switched off or with recirculated air always switched on.

**Note:** Do not place objects under the front seats as this may interfere with the airflow to the rear seats.

**Note:** Remove any snow, ice or leaves from the air intake area at the base of the windshield.

#### **Manual Climate Control**

**Note:** To reduce fogging of the windshield during humid weather, adjust the air distribution control to the windshield air vents position. Increase the temperature and fan speed to improve clearing, if required.

#### **Automatic Climate Control**

**Note:** Adjusting the settings when your vehicle interior is extremely hot or cold is not necessary. The system automatically adjusts to heat or cool the cabin to your selected temperature as quickly as possible. For the system to function efficiently, the instrument panel and side air vents should be fully open.

**Note:** At low ambient temperatures with **AUTO** selected, the system directs airflow to the windshield and side window vents and fan may run at a slow speed until the engine warms up.

## **Heating the Interior Quickly**

	Vehicle with manual climate control	Vehicle with automatic climate control
1	Adjust the fan speed to the highest speed setting.	Press the high fan speed button.
2	Adjust the temperature control to the highest setting.	Adjust the temperature control to the highest setting.
3	Adjust the air distribution control to the floor air vents position.	Press the floor button to distribute air to the floor air vents.

## **Recommended Settings for Heating**

	Vehicle with manual climate control	Vehicle with automatic climate control
1	Adjust the fan speed to the second speed setting.	Press the <b>AUTO</b> button.
2	Adjust the temperature control to the midway point of the hot settings.	Set the temperature to 72°F (22°C).
3	Adjust the air distribution control to the floor and windshield air vents position.	

## **Cooling the Interior Quickly**

	Vehicle with manual climate control	Vehicle with automatic climate control
1	Adjust the fan speed to the highest speed setting.	Press the MAX A/C button.
2	Adjust the temperature control to the MAX A/C position.	
3	Adjust the air distribution control to the instrument panel air vents position.	

## **Recommended Settings for Cooling**

	Vehicle with manual climate control	Vehicle with automatic climate control
1	Adjust the fan speed to the second speed setting.	Press the <b>AUTO</b> button.
2	Adjust the temperature control to the midway point of the cold settings.	Set the temperature to 72°F (22°C).
3	Adjust the air distribution control to the instrument panel air vents position.	

# Vehicle Stationary for Extended Periods during Extreme High Ambient Temperatures

	Vehicle with manual climate control	Vehicle with automatic climate control
1	Apply the parking brake.	Apply the parking brake.
2	Move the transmission selector lever to position <b>P</b> .	Move the transmission selector lever to position <b>P</b> .
3	Adjust the temperature control to the MAX A/C position.	Press the MAX A/C button.
4	Adjust the fan speed to the lowest speed setting.	

# **Climate Control**

## Side Window Defogging in Cold Weather

	Vehicle with manual climate control	Vehicle with automatic climate control
1	Adjust the air distribution control to the instrument panel and floor air vents positions.	Press the windshield defrosting and defogging button.
2	Press the <b>A/C</b> button.	Adjust the temperature control to the desired setting.
3	Adjust the temperature control to the desired setting.	
4	Adjust the fan speed to the highest setting.	
5	Direct the instrument panel side air vents toward the side windows.	
6	Close the center instrument panel vents.	

### Maximum Cooling Performance in Instrument Panel or Instrument Panel and Footwell Positions

- Adjust the temperature control to the lowest setting.
- Press the A/C and recirculated air buttons.
- Adjust the fan speed to the highest setting initially and then adjust it to suit the desired comfort level.

# HEATED WINDOWS AND MIRRORS

### **Heated Rear Window**

**Note:** *Make sure the engine is running before operating the heated windows.* 



The heated rear window button is below the climate control unit.

Press the button to clear the heated rear window of thin ice and fog. The heated rear window will automatically turn off after a short period of time. Start the engine before you switch the heated rear window on.

Do not use razor blades or other sharp objects to clean or remove decals from the inside of the heated rear window. The vehicle warranty does not cover damage caused to the heated rear window grid lines.

### **Heated Exterior Mirror**

When you switch the heated rear window on, the heated exterior mirrors will automatically turn on.

**Note:** Do not remove ice from the mirrors with a scraper or adjust the mirror glass when it is frozen in place.

**Note:** Do not clean the mirror housing or glass with harsh abrasives, fuel or other petroleum-based cleaning products.

# **Climate Control**

## **CABIN AIR FILTER**

Your vehicle is equipped with a cabin air filter, which gives you and your passengers the following benefits:

- It improves your driving comfort by reducing particle concentration.
- It improves the interior compartment cleanliness.
- It protects the climate control components from particle deposits.

Your cabin air filter is located under the instrument panel in the passenger footwell area.

**Note:** Make sure you have a cabin air filter installed at all times. This prevents foreign objects from entering the system. Running the system without a filter in place could result in degradation or damage to the system.

Replace the filter at regular intervals. See **Maintenance** (page 212).

For additional cabin air filter information, or to replace the filter, see an authorized dealer.

### REMOTE START (If Equipped)

The climate control system adjusts the cabin temperature during remote start.

You cannot adjust the system during remote start operation. Switch on the ignition to return the system to its previous settings. You can now make adjustments. You need to switch on certain vehicle-dependent features, such as:

- Heated seats.
- Heated mirrors.
- · Heated rear window.

You can adjust the settings using the information display controls. See **Information Displays** (page 88).

### **Automatic Settings**

You can set the climate control to operate in AUTO mode through the information display setting: Remote Start > Climate Control > Heater-A/C > Auto. The climate control system automatically sets the interior temperature to 72°F (22°C).

In hot weather, the system is set to 72°F (22°C). Cooled seats are set to high (if available, and selected to AUTO in the information display).

In moderate weather, the system either heats or cools (based on previous settings). The rear defroster, heated mirrors and heated or cooled seats do not automatically turn on.

In cold weather, the system is set to 72°F (22°C). The rear defroster and heated mirrors automatically turn on.

# **Last Settings**

You can set the climate control to operate using the last climate control settings through the information display setting: Remote Start > Climate Control > Heater—A/C > Last Settings. The climate control system automatically uses the settings last selected before you turned off the vehicle.

### **Heated and Cooled Devices**

The climate control system controls other heated and cooled devices inside the vehicle. You can switch these devices on (if available, and selected to AUTO in the information displays) during remote start. Heated devices typically switch on during cold weather, and cooled devices during hot weather.

# SITTING IN THE CORRECT POSITION

### WARNINGS

Sitting improperly, out of position or with the seatback reclined too far can take weight off the seat cushion and affect the decision of the passenger sensing system, resulting in serious injury or death in the event of a crash. Always sit upright against your seat back, with your

Do not recline the seatback as this can cause the occupant to slide under the safety belt, resulting in serious injury in the event of a crash.

feet on the floor.

Do not place objects higher than the seatback to reduce the risk of serious injury in the event of a crash or during heavy braking.



When you use them properly, the seat, head restraint, safety belt and airbags will provide optimum protection in the event of a crash.

We recommend that you follow these guidelines:

- Sit in an upright position with the base of your spine as far back as possible.
- Do not recline the seatback more than 30 degrees.
- Adjust the head restraint so that the top of it is level with the top of your head and as far forward as possible. Make sure that you remain comfortable.
- Keep sufficient distance between yourself and the steering wheel. We recommend a minimum of 10 in (25 cm) between your breastbone and the airbag cover.
- Hold the steering wheel with your arms slightly bent.
- Bend your legs slightly so that you can press the pedals fully.
- Position the shoulder strap of the safety belt over the center of your shoulder and position the lap strap tightly across your hips.

Make sure that your driving position is comfortable and that you can maintain full control of your vehicle.

# **HEAD RESTRAINTS**

### **WARNINGS**

Fully adjust the head restraint before you sit in or operate your vehicle. This will help minimize the risk of neck

injury in the event of a crash. Do not adjust the head restraint when your vehicle is moving.

The head restraint is a safety device.
Whenever possible it should be installed and properly adjusted when

the seat is occupied. An improperly adjusted head restraint may not adequately protect an occupant during an impact from the rear.

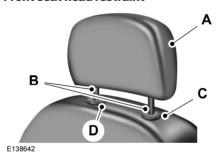
### **WARNINGS**



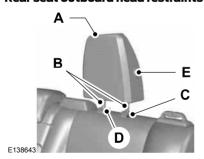
Install the head restraint properly to help minimize the risk of neck injury in the event of a crash.

**Note:** Adjust the seatback to an upright driving position before adjusting the head restraint. Adjust the head restraint so that the top of it is level with the top of your head and as far forward as possible. Make sure that you remain comfortable. If you are extremely tall, adjust the head restraint to its highest position.

### Front seat head restraint



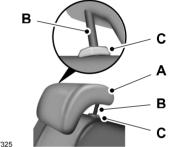
### Rear seat outboard head restraints



### The head restraints consist of:

- A An energy absorbing head restraint.
- B Two steel stems.
- C Guide sleeve adjust and unlock button.
- D Guide sleeve unlock and remove
- E Fold button

### Rear center head restraint



F187325

### The rear center head restraint consists of:

- A An energy absorbing head restraint.
  - R Two steel stems
- C Guide sleeve unlock and remove button.

# **Adjusting the Head Restraint**

# **Raising the Head Restraint**

Pull the head restraint up.

# **Lowering the Head Restraint**

- Press and hold button C.
- 2. Push the head restraint down.

### **Removing the Head Restraint**

- 1. Pull the head restraint up until it reaches its highest position.
- 2. Press and hold buttons C and D.
- 3. Pull the head restraint up.

### **Installing the Head Restraint**

Align the steel stems into the guide sleeves and push the head restraint down until it locks.

### **Folding the Head Restraint**

- 1. Press and hold button E.
- 2. Pull it back up to reset.

### **Tilting Head Restraints**

The front head restraints tilt for extra comfort. To tilt the head restraint, do the following:



#### E144727

- 1. Adjust the seatback to an upright driving or riding position.
- 2. Pivot the head restraint forward toward your head to the desired position.

After the head restraint reaches the forward-most tilt position, pivot it forward again to release it to the rearward, un-tilted position.

### **MANUAL SEATS**

### WARNING



Do not adjust the driver seat or seatback when your vehicle is moving.

# Moving the Seat Backward and Forward

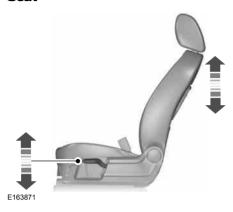


### WARNING



Rock the seat backward and forward after releasing the lever to make sure that it is fully engaged.

### **Adjusting the Height of the Driver** Seat



## **Recline Adjustment**



### E163872

### **WARNING**

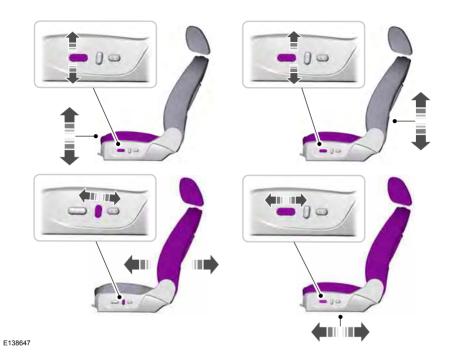
Do not place cargo or any objects behind the seatback before returning it to the original position. Pull on the seatback to make sure that it has fully latched after returning the seatback to its original position. An unlatched seat may become dangerous if you stop suddenly or have a crash.

# POWER SEATS (If Equipped)

### WARNINGS

Do not adjust the driver's seat or seatback when your vehicle is moving. Adjusting your seatback while your vehicle is in motion may cause loss of control of your vehicle.

Do not place cargo or any objects behind the seatback before returning it to the original position.



### Power Lumbar (If Equipped)



## MEMORY FUNCTION (If Equipped)

### WARNINGS



Before activating the seat memory, make sure that the area immediately surrounding the seat is clear of obstructions and that all occupants are

clear of moving parts.



Do not use the memory function when your vehicle is moving.

This feature will automatically recall the position of the driver seat and power mirrors. The memory control is located on the driver door. You can save up to three memory position presets.



E142554

# **Saving a PreSet Position**

- Switch the ignition on.
- 2. Adjust the seat and exterior mirrors to vour desired position.
- 3. Press and hold the desired memory button until you hear a single tone.

### **Recalling a Pre-Set Position**

Press and release the memory button associated with your desired driving position. The seat and mirrors will move to the position stored for that preset.

**Note:** Pressing any driver seat control, any of the memory buttons or any mirror control switch will stop seat movement during a recall. You cannot use the seat memory recall while the vehicle is moving.

### **REAR SEATS**



E155554

# Folding the Seatback

With the seat empty, pull the lever up to fold the seatback forward. You may need to fold the outboard head restraints and lower the center head restraint first.

# **Unfolding the Seatback**

Pull the seatback upward to unfold the seatback.

# Recline Adjustment (If Equipped)

With the seat occupied, pull the lever up to recline the seatback.

## HEATED SEATS (If Equipped)

#### WARNING

Λ

People who are unable to feel pain to their skin because of advanced age, chronic illness, diabetes, spinal

cord injury, medication, alcohol use, exhaustion or other physical conditions, must exercise care when using the heated seat. The heated seat may cause burns even at low temperatures, especially if used for long periods of time. Do not place anything on the seat that insulates against heat, such as a blanket or cushion. This may cause the heated seat to overheat. Do not puncture the seat with pins, needles or other pointed objects. This may damage the heating element which may cause the heated seat to overheat. An overheated seat may cause serious personal injury.

Do not do the following:

- · Place heavy objects on the seat.
- Operate the heated seat if water or any other liquid is spilled on the seat. Allow the seat to dry thoroughly.
- Operate the heated seats unless the engine is running. Doing so can cause the battery to lose charge.



E138653

Adjust the control to the desired heat setting.

# REAR SEAT ARMREST (If Equipped)



Fold the armrest down to use the armrest and cupholder.

# HomeLink Wireless Control System

### WARNINGS

Make sure that the garage door and security device are free from obstruction when you are programming. Do not program the system with the vehicle in the garage.

Do not use the system with any garage door opener that does not have the safety stop and reverse feature as required by U.S. Federal Safety Standards (this includes any garage door opener manufactured before April 1, 1982). A garage door opener which cannot detect an object, signaling the door to stop and reverse, does not meet current federal safety standards. Using a garage door opener without these features increases the risk of serious injury or death.

**Note:** Make sure you keep the original remote control transmitter for use in other vehicles as well as for future system programming.

**Note:** We recommend that upon the sale or lease termination of your vehicle, you erase the programmed function buttons for security reasons. See **Erasing the Function Button Codes**.

**Note:** You can program a maximum of three devices. To change or replace any of the three devices after it has been initially programmed, you must first erase the current settings. See **Erasing the Function Button Codes** 



F142657

The universal garage door opener replaces the common hand-held garage door opener with a three-button transmitter that is integrated into the driver's sun visor.

The system includes two primary features, a garage door opener and a platform for remote activation of devices within the home. As well as being programmed for garage doors, the system transmitter can be programmed to operate entry gate operators, security systems, entry door locks and home or office lighting.

Additional system information can be found online at www.homelink.com, www.youtube.com/HomeLinkGentex or by calling the toll-free help line on 1-800-355-3515.

### **In-Vehicle Programming**

This process is to program your hand-held transmitter and your in-vehicle HomeLink button.

**Note:** The programming steps below assume you will be programming HomeLink that was not previously programmed.

**Note:** Put a new battery in the hand-held transmitter. This will ensure quicker training and accurate transmission of the radio-frequency signal.



- With your vehicle parked outside of the garage, turn your ignition to the on position, but do not start your vehicle.
- 2. Hold your hand-held garage door transmitter 2-6 in (5-14 cm) away from the HomeLink button you want to program.
- 3. Using both hands, simultaneously. press and hold the desired HomeLink button and the hand-held transmitter button, DO NOT release either one until the HomeLink indicator light flashes slowly and then rapidly. When the indicator light flashes rapidly, both buttons may be released. The rapid flashing indicates successful training.

Note: You may need to use a different method if you live in Canada or have difficulties programming your gate operator or garage door opener. See Gate Operator / Canadian Programming.

4. Press and hold the HomeLink button you programmed for two seconds, then release. You may need to do this twice to activate the door. If your garage door does not operate, watch the HomeLink indicator light.

### If the indicator light stays on, the programming is complete. No further action is needed.

If the indicator light flashes rapidly for 2 seconds and then turns to a constant light, the HomeLink button is not programmed vet. See **Programming Your Garage Door** Opener Motor.

To program additional buttons, repeat Steps 1-4.

For questions or comments, please contact HomeLink at www.homelink.com, www.voutube.com/HomeLinkGentex or 1-800-355-3515.

### **Programming Your Garage Door** Opener Motor

**Note:** You may need a ladder to reach the unit and you may need to remove the cover or lamp lens on your garage door opener.



E142659

- 1. Press the learn button on the garage door opener motor and then you have 30 seconds to complete the next two steps.
- 2. Return to your vehicle.



F142658

3. Press and hold the function button you want to program for 2 seconds, then release. Repeat this step. Depending on your brand of garage door opener, you may need to repeat this sequence a third time.

# Gate Operator / Canadian Programming

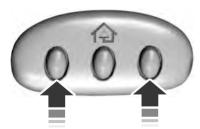
Canadian radio-frequency laws require transmitter signals to "time-out" (or quit) after several seconds of transmission – which may not be long enough for HomeLink to pick up the signal during programming. Similar to this Canadian law, some U.S. gate operators are designed to "time-out" in the same manner.

**Note:** If programming a garage door opener or gate operator, it is advised to unplug the device during the "cycling" process to prevent possible overheating.

- Press and hold the HomeLink button while you press and release, every two seconds, your hand-held transmitter until the HomeLink indicator light changes from a slow to a rapidly blinking light.
- 2. Release both the HomeLink and hand-held transmitter buttons.
- 3. Continue programing HomeLink. See **In-Vehicle Programming**.

## **Erasing the Function Button Codes**

**Note:** You cannot erase individual buttons.



E142660

- Press and hold the outer two function buttons simultaneously for approximately 20 seconds until the indicator lights above the buttons flash rapidly.
- When the indicator lights flash, release the buttons. The codes for all buttons are erased.

### Reprogramming a Single Button

To program a device to a previously trained button, follow these steps:

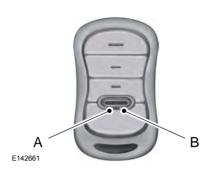
- Press and hold the desired button. Do NOT release the button.
- The indicator light will begin to flash after 20 seconds. Without releasing the button, follow Step 1 in the Programming section.

For questions or comments, contact HomeLink at www.homelink.com, www.youtube.com/HomeLinkGentex or 1-800-355-3515.

# Programming to a Genie Intellicode 2 Garage Door Opener

**Note:** The Genie Intellicode 2 transmitter must already be programmed to operate with the garage door opener.

**Note:** To program HomeLink to the transmitter you must first put the transmitter into programming mode.



- A. Red indicator light
- B. Green indicator light
- Press and hold one of the buttons on the hand-held transmitter for 10 seconds. The indicator light will change from green to red and green.
- Press the same button twice to confirm the change to programming mode. If done properly the indicator light will appear red.
- Hold the transmitter within 1–3 inches (2–8 centimeters) of the button on the visor you want to program.
- Press and hold both the programmed Genie button on the hand-held transmitter and the button you want to program. The indicator light on the visor will flash rapidly when the programming is successful.

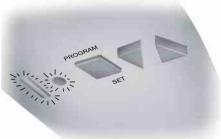
**Note:** The Genie transmitter will transmit for up to 30 seconds. If HomeLink does not program within 30 seconds the Genie transmitter will need to be pressed again. If the Genie transmitter indicator light displays green and red, release the button until the indicator light turns off before pressing the button again.

Once HomeLink has been programmed successfully, the Genie transmitter must be changed out of program mode. To do this:

- Press and hold the previously programmed Genie button on the hand-held transmitter for 10 seconds. The indicator light will change from red to red and green.
- Press the same button twice to confirm the change. If done correctly the indicator light will turn green.

# Programming HomeLink to the Genie Intellicode Garage Door Opener Motor

**Note:** You may need a ladder to access the garage door opener motor.



### E142662

- Press and hold the program button on the garage door opener motor until both blue indicator lights turn on.
- Release the program button. Only the smaller round indicator light should be on.
- Press and release the program button. The larger purple indicator light will flash.

**Note:** The next two steps must be completed in 30 seconds.

4. Press and release the Genie Intellicode 2 hand-held transmitter's previously programmed button. Both indicator lights on the garage door opener motor unit should now flash purple.

5. Press and hold the previously programmed button on the visor for 2 seconds. Repeat this step up to 3 times until the garage door moves.

Programming is now complete.

### **Clearing a HomeLink Device**

To erase programming from the three HomeLink buttons press and hold the two outer HomeLink buttons until the indicator light begins to flash. The indicator light will begin flashing in 10 to 20 seconds, at which time both buttons should be released. Programming has now been erased, and the indicator light should blink slowly to indicate the device is in train mode when any of the three HomeLink buttons are pressed.

# FCC and RSS-210 Industry Canada Compliance

This device complies with Part 15 of the FCC Rules and with RSS-210 of Industry Canada. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications to your device not expressly approved by the party responsible for compliance can void the user's authority to operate the equipment.

# **Auxiliary Power Points**

### 12 Volt DC Power Point

#### WARNINGS

Do not plug optional electrical accessories into the cigar lighter socket. Incorrect use of the cigar

lighter can cause damage not covered by the vehicle warranty, and can result in fire or serious injury.

injury.

Do not use a power point for operating a cigar lighter. Incorrect use of the power points can cause damage not covered by the vehicle warranty, and can result in fire or serious

**Note:** When you switch the ignition on, you can use the socket to power 12 volt appliances with a maximum current rating of 15 amps.

If the power supply does not work after you switch the ignition off, switch the ignition on.

Note: Do not hang any accessory from the accessory plug.

**Note:** Do not use the power point over the vehicle capacity of 12 volt DC 180 watts or a fuse may blow.

**Note:** Always keep the power point caps closed when not in use.

Do not insert objects other than an accessory plug into the power point. This will damage the power point and blow the fuse.

Run the vehicle for full capacity use of the power point.

To prevent the battery from running out of charge:

- Do not use the power point longer than necessary when the vehicle is not running.
- Do not leave devices plugged in overnight or when you park your vehicle for extended periods.

#### Locations

Power points may be in the following locations:

- On the front of the center console.
- Inside the center console
- On the rear of the center console.
- Inside the luggage compartment.

### 110 Volt AC Power Point (If Equipped)

### WARNING



Do not keep electrical devices plugged in the power point whenever the device is not in use. Do not use

any extension cord with the 110 volt AC power point, since it will defeat the safety protection design. Doing so may cause the power point to overload due to powering multiple devices that can reach beyond the 150 watt load limit and could result in fire or serious injury.

**Note:** The power point will turn off when the ignition is switched off or the battery voltage drops below 11 volts.



E143941

Use the power point for powering electric devices that require up to 150 watts. It is on the rear of the center console.

# **Auxiliary Power Points**

When the indicator light on the power point is:

- On: The power point is working, the ignition is on and a device is plugged in.
- Off: The power point is off, the ignition is off or no device is plugged in.
- Flashing: The power point is in fault mode.

The power outlet temporarily turns off power when in fault mode if the device exceeds the 150 watt limit. Unplug your device and switch the ignition off. Switch the ignition back on, but do not plug your device back in. Let the system cool off and switch the ignition off to reset the fault mode. Switch the ignition back on and make sure the indicator light remains on.

Do not use the power point for certain electric devices, including:

- · Cathode-ray, tube-type televisions.
- Motor loads, such as vacuum cleaners, electric saws and other electric power tools or compressor-driven refrigerators.
- Measuring devices, which process precise data, such as medical equipment or measuring equipment.
- Other appliances requiring an extremely stable power supply such as microcomputer-controlled electric blankets or touch-sensor lamps.

# **Storage Compartments**

## **CENTER CONSOLE**

Stow items in the cup holder carefully as items may become loose during hard braking, acceleration or crashes, including hot drinks which may spill.

Available console features include:



- A Cup holder.
- B Storage compartment with auxiliary power point, auxiliary input jack, USB port and media hub.
- C Auxiliary power point.

# **OVERHEAD CONSOLE**



E131605

Press near the rear edge of the door to open it.

### **GENERAL INFORMATION**

### **WARNINGS**

Extended idling at high engine speeds can produce very high temperatures in the engine and exhaust system, creating the risk of fire or other damage.

Do not park, idle or drive your vehicle on dry grass or other dry ground cover. The emission system heats up the engine compartment and exhaust system, creating the risk of fire.

Do not start the engine in a closed garage or in other enclosed areas. Exhaust fumes can be toxic. Always open the garage door before you start the engine.

If you smell exhaust fumes inside your vehicle, have your vehicle checked by an authorized dealer immediately. Do not drive your vehicle if you smell exhaust fumes.

If you disconnect the battery, your vehicle may exhibit some unusual driving characteristics for approximately 5 miles (8 kilometers) after you reconnect it. This is because the engine management system must realign itself with the engine. You can disregard any unusual driving characteristics during this period.

The powertrain control system meets all Canadian interference-causing equipment standard requirements regulating the impulse electrical field or radio noise.

When you start the engine, avoid pressing the accelerator pedal before and during operation. Only use the accelerator pedal when you have difficulty starting the engine.

## IGNITION SWITCH (If Equipped)



F72128

• (off) - The ignition is off.

**Note:** When you switch the ignition off and leave your vehicle, do not leave your key in the ignition. This could cause your vehicle battery to lose charge.

I (accessory) - Allows the electrical accessories, such as the radio, to operate while the engine is not running.

**Note:** Do not leave the ignition key in this position for too long. This could cause your vehicle battery to lose charge.

II (on) - All electrical circuits are operational and the warning lamps and indicators illuminate.

**III** (start) - cranks the engine.

# KEYLESS STARTING (If Equipped)

**Note:** The keyless starting system may not function if the key is close to metal objects or electronic devices such as cellular phones

**Note:** A valid key must be located inside your vehicle to switch the ignition on and start the engine.

## **Ignition Modes**



The keyless starting system has three modes:

Off: Turns the ignition off.

 Without applying the brake pedal, press and release the button once when the ignition is in the on mode, or when the engine is running but the vehicle is not moving.

**On:** All electrical circuits are operational and the warning lamps and indicators illuminate.

 Without applying the brake pedal, press and release the button once.

**Start:** Starts the engine.

 Press the brake pedal, and then press and hold the button until the engine starts.

# STARTING A GASOLINE ENGINE

When you start the engine, the idle speed increases, this helps to warm up the engine. If the engine idle speed does not slow down automatically, have your vehicle checked by an authorized dealer.

Before starting the engine check the following:

- Make sure all occupants have fastened their safety belts.
- Make sure the headlamps and electrical accessories are off.
- Make sure the parking brake is on.
- Move the transmission selector lever to position P.
- Turn the ignition key to position II. If your vehicle is equipped with a keyless ignition, see the following instructions.

# Vehicles with an Ignition Key

**Note:** Do not touch the accelerator pedal.

- 1. Fully press the brake pedal.
- Turn the key to position III to start the engine. Release the key when the engine starts.

**Note:** The engine may continue cranking for up to 15 seconds or until it starts.

**Note:** If you cannot start the engine on the first try, wait for a short period and try again.

# **Vehicles with Keyless Start**

**Note:** Do not touch the accelerator pedal.

- 1. Fully press the brake pedal.
- Press the button.

The system does not function if:

- · The key frequencies are jammed.
- The key battery has no charge.

If you are unable to start the engine, do the following:

#### 3-button remote



### 5-button remote



E142874

- 1. Hold the key next to the symbol on the steering column.
- 2. With the key in this position, you can use the start button to switch the ignition on and start your vehicle.

### **Fast Restart**

The fast restart feature allows you to restart the engine within 20 seconds of switching it off, even if a valid key is not present.

Within 20 seconds of switching the engine off, press the brake pedal and press the button. After 20 seconds have expired, you can no longer restart the engine without the key present inside your vehicle.

Once the engine has started, it remains running until you press the button, even if the system does not detect a valid key. If you open and close a door while the engine is running, the system searches for a valid key. You cannot restart the engine if the system does not detect a valid key within 20 seconds.

### **Failure to Start**

If you cannot start the engine after three attempts, wait 10 seconds and follow this procedure:

- 1. Fully press the brake pedal.
- 2. Fully press the accelerator pedal and hold it there.
- 3. Start the engine.

# **Automatic Engine Shutdown**

If your vehicle is equipped with a keyless ignition, it has a feature that automatically shuts down the engine if it has been idling for an extended period. The ignition also turns off in order to save battery power. Before the engine shuts down, a message appears in the information display showing a timer counting down from 30 seconds. If you do not intervene within 30 seconds, the engine shuts down. Another message appears in the information display to inform you that the engine has shut down in order to save fuel. Start your vehicle as you normally do.

## **Automatic Engine Shutdown Override**

**Note:** You cannot permanently switch off the automatic engine shutdown feature. When you switch it off temporarily, it turns on at the next ignition cycle.

You can stop the engine shutdown, or reset the timer, at any point before the 30-second countdown has expired by doing any of the following:

- You can reset the timer by interacting with your vehicle (such as pressing the brake pedal or accelerator pedal).
- You can temporarily switch off the shutdown feature any time the ignition is on (for the current ignition cycle only). Use the information display to do so. See **Information Displays** (page 88).
- During the countdown before engine shutdown, you are prompted to press OK or RESET (depending on your type of information display) to temporarily switch the feature off (for the current ignition cycle only).

# Stopping the Engine When Your Vehicle is Stationary

### Vehicles with an Ignition Key

- Move the transmission selector lever to position P.
- 2. Turn the key to position **0**.
- Apply the parking brake.

## **Vehicles with Keyless Start**

- 1. Move the transmission selector lever to position **P**.
- Press the button once.
- 3. Apply the parking brake.

**Note:** This switches off the ignition, all electrical circuits, warning lamps and indicators.

# Stopping the Engine When Your Vehicle is Moving

### WARNING



Switching off the engine when the vehicle is still moving will result in a loss of brake and steering assistance.

The steering will not lock, but higher effort will be required. When the ignition is switched off, some electrical circuits, including air bags, warning lamps and indicators may also be off. If the ignition was turned off accidentally, you can shift into neutral (N) and re-start the engine.

### Vehicles with an Ignition Key

- Move the transmission selector lever to position N and use the brakes to bring your vehicle to a safe stop.
- When your vehicle has stopped, move the transmission selector lever to position P and turn the key to position
- 3. Apply the parking brake.

## **Vehicles with Keyless Start**

- Move the transmission selector lever to position N and use the brakes to bring your vehicle to a safe stop.
- 2. When your vehicle has stopped, move the transmission selector lever to position **P**.
- Press and hold the button for one second, or press it three times within two seconds.
- 4. Apply the parking brake.

## **Guarding Against Exhaust Fumes**

#### WARNING

If you smell exhaust fumes inside your vehicle, have your vehicle checked by your authorized dealer immediately. Do not drive your vehicle if you smell exhaust fumes. Carbon monoxide is present in exhaust fumes. Take precautions to avoid its dangerous effects.

# **Important Ventilating Information**

If you stop your vehicle and the leave the engine idling for long periods of time, we recommend that you do one of the following:

- Open the windows at least 1 inch (2.5 centimeters)
- Set your climate control to outside air.

## ENGINE BLOCK HEATER (IF

Equipped)

#### WARNINGS



Failure to follow engine block heater instructions could result in property damage or serious personal injury.



Do not use your heater with ungrounded electrical systems or two-pronged adapters. There is a risk

two-pronged adapters. There is a risk of electrical shock.



Do not fully close the hood, or allow it to drop under its own weight when using the engine block heater. This

could damage the power cable and may cause an electrical short resulting in fire, injury and property damage.

**Note:** The heater is most effective when outdoor temperatures are below 0°F (-18°C).

The heater acts as a starting aid by warming the engine coolant. This allows the climate control system to respond quickly. The equipment includes a heater element (installed in the engine block) and a wire harness. You can connect the system to a grounded 120-volt AC electrical source.

We recommend that you do the following for a safe and correct operation:

- Use a 16-gauge outdoor extension cord that is product certified by Underwriter's Laboratory (UL) or Canadian Standards Association (CSA). This extension cord must be suitable for use outdoors, in cold temperatures, and be clearly marked Suitable for Use with Outdoor Appliances. Do not use an indoor extension cord outdoors. This could result in an electric shock or become a fire hazard.
- Use as short an extension cord as possible.
- Do not use multiple extension cords.
- Make sure that when in operation, the extension cord plug and heater cord plug connections are free and clear of water. This could cause an electric shock or fire.
- Make sure your vehicle is parked in a clean area, clear of combustibles.
- Make sure the heater, heater cord and extension cord are firmly connected.
- Check for heat anywhere in the electrical hookup once the system has been operating for approximately 30 minutes.

- Make sure the system is unplugged and properly stowed before starting and driving your vehicle. Make sure the protective cover seals the prongs of the block heater cord plug when not in use.
- Make sure the heater system is checked for proper operation before winter.

# **Using the Engine Block Heater**

Make sure the receptacle terminals are clean and dry prior to use. Clean them with a dry cloth if necessary.

The heater uses 0.4 to 1.0 kilowatt-hours of energy per hour of use. The system does not have a thermostat. It achieves maximum temperature after approximately three hours of operation. Using the heater longer than three hours does not improve system performance and unnecessarily uses electricity.

## **SAFETY PRECAUTIONS**

### WARNINGS

Do not overfill the fuel tank. The pressure in an overfilled tank may cause leakage and lead to fuel spray and fire.

The fuel system may be under pressure. If you hear a hissing sound near the fuel filler door (Easy Fuel capless fuel system), do not refuel until the sound stops. Otherwise, fuel may spray out, which could cause serious personal injury.



Automotive fuels can cause serious injury or death if misused or mishandled.

Flow of fuel through a fuel pump nozzle can produce static electricity. This can cause a fire if you are filling an ungrounded fuel container.



Fuel ethanol and gasoline may contain benzene, which is a cancer-causing agent.

When refueling always shut the engine off and never allow sparks or open flames near the filler neck.

Never smoke or use a cell phone while refueling. Fuel vapor is extremely hazardous under certain conditions. Avoid inhaling excess fumes.

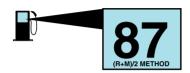
Observe the following guidelines when handling automotive fuel:

- Extinguish all smoking materials and any open flames before refueling your vehicle.
- Always turn off the vehicle before refueling.

- Automotive fuels can be harmful or fatal if swallowed. Fuel such as gasoline is highly toxic and if swallowed can cause death or permanent injury. If fuel is swallowed, call a physician immediately, even if no symptoms are immediately apparent. The toxic effects of fuel may not be visible for hours.
- Avoid inhaling fuel vapors. Inhaling too much fuel vapor of any kind can lead to eye and respiratory tract irritation.
   In severe cases, excessive or prolonged breathing of fuel vapor can cause serious illness and permanent injury.
- Avoid getting fuel liquid in your eyes. If fuel is splashed in the eyes, remove contact lenses (if worn), flush with water for 15 minutes and seek medical attention. Failure to seek proper medical attention could lead to permanent injury.
- Fuels can also be harmful if absorbed through the skin. If fuel is splashed on the skin, clothing or both, promptly remove contaminated clothing and wash skin thoroughly with soap and water. Repeated or prolonged skin contact with fuel liquid or vapor causes skin irritation.
- Be particularly careful if you are taking "Antabuse" or other forms of disulfiram for the treatment of alcoholism. Breathing gasoline vapors, or skin contact could cause an adverse reaction. In sensitive individuals, serious personal injury or sickness may result. If fuel is splashed on the skin, promptly wash skin thoroughly with soap and water. Consult a physician immediately if you experience an adverse reaction.

# **FUEL QUALITY**

# Choosing the Right Fuel



#### E161513

We recommend regular unleaded gasoline with a pump (R+M)/2 octane rating of 87. Some fuel stations offer fuels posted as regular unleaded gasoline with an octane rating below 87, particularly in high altitude areas. We do not recommend fuels with an octane rating below 87.

For vehicles with EcoBoost engines, to provide improved performance, we recommend premium fuel for severe duty usage such as trailer tow.

Do not use any fuel other than those recommended because they could lead to engine damage that may not be covered by the vehicle Warranty.

**Note:** Use of any fuel other than those recommended can impair the emission control system and cause a loss of vehicle performance.

#### Do not use:

- Diesel fuel.
- Fuels containing kerosene or paraffin.
- Fuel containing more than 15% ethanol or E85 fuel.
- Fuels containing methanol.
- Fuels containing metallic-based additives, including manganese-based compounds.

- Fuels containing the octane booster additive, methylcyclopentadienyl manganese tricarbonyl (MMT).
- Leaded fuel (using leaded fuel is prohibited by law).

The use of fuels with metallic compounds such as methylcyclopentadienyl manganese tricarbonyl (commonly known as MMT), which is a manganese-based fuel additive, will impair engine performance and affect the emission control system.

Do not be concerned if the engine sometimes knocks lightly. However, if the engine knocks heavily while using fuel with the recommended octane rating, contact an authorized dealer to prevent any engine damage.

# FUEL FILLER FUNNEL LOCATION

The fuel filler funnel is located in the spare wheel storage tray.

### **RUNNING OUT OF FUEL**

Running out of fuel can cause damage not covered by the vehicle Warranty.

If your vehicle runs out of fuel:

- Add a minimum of 1.3 gal (5 L) of fuel to restart the engine. If your vehicle is out of fuel and on a steep slope, more fuel may be required.
- You may need to switch the ignition from off to on several times after refueling to allow the fuel system to pump the fuel from the tank to the engine. When restarting, cranking time takes a few seconds longer than normal.

## Filling a Portable Fuel Container

Use the following guidelines to avoid electrostatic charge build-up when filling an ungrounded fuel container:

- Only use an approved fuel container to transfer fuel to your vehicle. Place the container on the ground when filling it.
- Do not fill a fuel container when it is inside your vehicle (including the cargo area).
- Keep the fuel pump nozzle in contact with the fuel container when filling it.
- Do not use a device that holds the fuel pump nozzle lever in the fill position.

### Adding Fuel From a Portable Fuel Container

### **WARNINGS**

Do not insert the nozzle of a fuel container or an aftermarket funnel into the fuel system filler neck. This may damage the fuel system filler neck or its seal and cause fuel to run onto the

ground.

Do not try to pry open or push open the capless fuel system with foreign objects. This could damage the fuel system and its seal and cause injury to you or others.

Do not dispose of fuel in the household refuse or the public sewage system. Use an authorized waste disposal facility.

When refueling the vehicle fuel tank from a fuel container, use the plastic funnel included with your vehicle. See Fuel Filler Funnel Location (page 131).

**Note:** Do not use aftermarket funnels as they will not work with the capless fuel system and can damage it.

When refueling the vehicle fuel tank from a fuel container, do the following:

Fully open the fuel tank filler door until it engages and remove the fuel tank filler cap.

Note: Capless fuel systems do not have a fuel tank filler cap.

Fully insert the plastic funnel into the fuel tank filler pipe opening.



- Add fuel to your vehicle from the fuel container.
- 4. Remove the plastic funnel from the fuel tank filler pipe opening.
- 5. Replace the fuel tank filler cap and close the fuel tank filler door.
- 6. Clean the plastic funnel and place it back in your vehicle or properly dispose of it.

**Note:** Extra funnels can be purchased from an authorized dealer if you choose to dispose of the funnel.

### REFUELING

#### WARNINGS



Fuel vapor burns violently and a fuel fire can cause severe injuries.



Read and follow all the instructions on the pump island.

### **WARNINGS**

When refueling always shut the engine off and never allow sparks or open flames near the fuel tank filler valve. Never smoke or use a cell phone while refueling. Fuel vapor is extremely hazardous under certain conditions. Avoid inhaling excess fumes.

Stay outside your vehicle and do not leave the fuel pump unattended when refueling your vehicle. This is against the law in some places.

Keep children away from the fuel pump; never let children pump fuel.

Wait at least 10 seconds before removing the fuel pump nozzle to allow any residual fuel to drain into the fuel tank.

Stop refueling after the fuel pump nozzle automatically shuts off for the second time. Failure to follow this will fill the expansion space in the fuel tank and could lead to fuel overflowing.

Do not remove the fuel pump nozzle from its fully inserted position when refueling.

Use the following guidelines to avoid electrostatic charge build-up, which can produce a spark, when filling an ungrounded fuel container:

- Place approved fuel container on the ground.
- Do not fill a fuel container while it is in the vehicle (including the cargo area).
- Keep the fuel pump nozzle in contact with the fuel container while filling.
- Do not use a device that would hold the fuel pump handle in the fill position.

## Easy Fuel™ Capless Fuel System

#### WARNING

The fuel system may be under pressure. If you hear a hissing sound near the fuel filler door, do not refuel until the sound stops. Otherwise, fuel may spray out, which could cause serious personal injury.

When fueling your vehicle:

- When your vehicle has stopped, shift into park (P) and switch the ignition off.
- 2. Fully open the fuel tank filler door until it engages.



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 Insert the fuel pump nozzle up to the first notch on the nozzle. Hold handle higher during insertion for easier access. Leave the fuel pump nozzle fully inserted until you are done pumping.



4. Remove the fuel filler nozzle and fully close the fuel tank filler door.

**Note:** A fuel spillage concern may occur if overfilling the fuel tank. Do not overfill the tank. The fill pipe is equipped with a drain hole. Excess fuel due to overfill may drain through the drain hole and drip onto the ground.

If the fuel fill inlet was not properly closed, a service engine warning lamp may appear on the instrument cluster.

At the next opportunity, do the following:

- Stop your vehicle as soon as safely possible and shift the transmission into park (P).
- 2. Switch the ignition off.
- Open the fuel filler door and remove any visible debris from the fuel fill opening.
- Insert either the fuel fill nozzle or the fuel fill funnel provided with the vehicle several times to allow the inlet to close properly. This will dislodge any debris preventing the inlet from sealing.

If this action corrects the problem, the message may not reset immediately. It may take several driving cycles for the message to turn off. A driving cycle consists of an engine start-up (after 4 or more hours with the engine off) followed by city or highway driving. Continuing to drive with the message on may cause the service engine soon lamp to turn on as well.

### **FUEL CONSUMPTION**

**Note:** The amount of usable fuel in the empty reserve varies and should not be relied upon to increase driving range. When refueling your vehicle after the fuel gauge indicates empty, you might not be able to refuel the full amount of the advertised capacity of the fuel tank due to the empty reserve still present in the tank.

Empty reserve is the amount of fuel remaining in the tank after the fuel gauge indicates empty. Do not rely on this fuel for driving. The usable capacity of the fuel tank is the amount of fuel that can be put into the tank after the gauge indicates empty. The advertised capacity is the total fuel tank size — it is the combined usable capacity plus the empty reserve.

# Filling the Tank

For consistent results when filling the fuel tank:

- Turn the ignition off before fueling; an inaccurate reading results if the engine is left running.
- Use the same fill rate (low-medium-high) each time the tank is filled.
- Allow no more than two automatic click-offs when filling.

Results are most accurate when the filling method is consistent.

## **Calculating Fuel Economy**

Do not measure fuel economy during the first 1000 miles (1600 kilometers) of driving (this is your engine's break-in period); a more accurate measurement is obtained after 2000 miles - 3000 miles (3200 kilometers - 4800 kilometers). Also, fuel expense, frequency of fill ups or fuel gauge readings are not accurate ways to measure fuel economy.

- 1. Fill the fuel tank completely and record the initial odometer reading.
- 2. Each time you fill the tank, record the amount of fuel added.
- 3. After at least three to five tank fill ups, fill the fuel tank and record the current odometer reading.
- 4. Subtract your initial odometer reading from the current odometer reading.
- Calculate fuel economy by dividing miles traveled by gallons used (For Metric: Multiply liters used by 100, then divide by kilometers traveled).

Keep a record for at least one month and record the type of driving (city or highway). This provides an accurate estimate of the vehicle's fuel economy under current driving conditions. Additionally, keeping records during summer and winter show how temperature impacts fuel economy. In general, lower temperatures mean lower fuel economy.

# **EMISSION CONTROL SYSTEM**

### WARNINGS

Do not park, idle, or drive your vehicle in dry grass or other dry ground cover. The emission system heats up the engine compartment and exhaust system, which can start a fire.

### WARNINGS

Exhaust leaks may result in entry of harmful and potentially lethal fumes into the passenger compartment. If

you smell exhaust fumes inside your vehicle, have your dealer inspect your vehicle immediately. Do not drive if you smell exhaust fumes.

Your vehicle is equipped with various emission control components and a catalytic converter that will enable your vehicle to comply with applicable exhaust emission standards. To make sure that the catalytic converter and other emission control components continue to work properly:

- Use only the specified fuel listed.
- Avoid running out of fuel.
- Do not turn off the ignition while your vehicle is moving, especially at high speeds.
- Have the items listed in scheduled maintenance information performed according to the specified schedule.

The scheduled maintenance items listed in scheduled maintenance information are essential to the life and performance of your vehicle and to its emissions system.

If you use parts other than Ford, Motorcraft or Ford-authorized parts for maintenance replacements, or for service of components affecting emission control, such non-Ford parts should be the equivalent to genuine Ford Motor Company parts in performance and durability.

Illumination of the service engine soon indicator, charging system warning light or the temperature warning light, fluid leaks, strange odors, smoke or loss of engine power could indicate that the emission control system is not working properly.

An improperly operating or damaged exhaust system may allow exhaust to enter the vehicle. Have a damaged or improperly operating exhaust system inspected and repaired immediately.

Do not make any unauthorized changes to your vehicle or engine. By law, vehicle owners and anyone who manufactures, repairs, services, sells, leases, trades vehicles, or supervises a fleet of vehicles are not permitted to intentionally remove an emission control device or prevent it from working. Information about your vehicle's emission system is on the Vehicle Emission Control Information Decal located on or near the engine. This decal also lists engine displacement

Please consult your warranty information for complete details.

# **On-Board Diagnostics (OBD-II)**

Your vehicle has a computer known as the on-board diagnostics system (OBD-II) that monitors the engine's emission control system. The system protects the environment by making sure that your vehicle continues to meet government emission standards. The OBD-II system also assists a service technician in properly servicing your vehicle.



When the service engine soon indicator illuminates, the OBD-II system has detected a

malfunction. Temporary malfunctions may cause the service engine soon indicator to illuminate.

Examples of temporary malfunctions are:

- the vehicle has run out of fuel—the engine may misfire or run poorly
- poor fuel quality or water in the fuel—the engine may misfire or run poorly

- the fuel fill inlet may not have closed properly. See **Refueling** (page 132).
- driving through deep water—the electrical system may be wet.

You can correct these temporary malfunctions by filling the fuel tank with good quality fuel, properly closing the fuel fill inlet or letting the electrical system dry out. After three driving cycles without these or any other temporary malfunctions present, the service engine soon indicator should stay off the next time you start the engine. A driving cycle consists of a cold engine startup followed by mixed city/highway driving. No additional vehicle service is required.

If the service engine soon indicator remains on, have your vehicle serviced at the first available opportunity. Although some malfunctions detected by the OBD-II may not have symptoms that are apparent, continued driving with the service engine soon indicator on can result in increased emissions, lower fuel economy, reduced engine and transmission smoothness, and lead to more costly repairs.

## Readiness for Inspection/Maintenance (I/M) Testing

Some state/provincial and local governments may have Inspection/Maintenance (I/M) programs to inspect the emission control equipment on your vehicle. Failure to pass this inspection could prevent you from getting a vehicle registration.



If the service engine soon indicator is on or the bulb does not work, you may need to have

the vehicle serviced. See On-Board Diagnostics (OBD-II).

Your vehicle may not pass the I/M test if the service engine soon indicator is on or not working properly (bulb is burned out), or if the OBD-II system has determined that some of the emission control systems have not been properly checked. In this case, your vehicle is not ready for I/M testing.

If the vehicle's engine or transmission has just been serviced, or the battery has recently run down or been replaced, the OBD-II system may indicate that the vehicle is not ready for I/M testing. To determine if the vehicle is ready for I/M testing, turn the ignition key to the on position for 15 seconds without cranking the engine. If the service engine soon indicator blinks eight times, it means that the vehicle is not ready for I/M testing; if the service engine soon indicator stays on solid, it means that the vehicle is ready for I/M testing.

The OBD-II system monitors the emission control system during normal driving. A complete check may take several days. If the vehicle is not ready for I/M testing, you may need to perform the following driving cycle consisting of mixed city and highway driving:

Drive on an expressway or highway for a steady 15 minutes, followed by 20 minutes of stop-and-go driving with at least four 30-second idle periods.

Allow the vehicle to sit for at least eight hours without starting the engine. Then, start the engine and complete the above driving cycle. The engine must warm up to its normal operating temperature. Once started, do not turn off the engine until the above driving cycle is complete. If the vehicle is still not ready for I/M testing, you will have to repeat the above driving cycle.

# **Transmission**

## **AUTOMATIC TRANSMISSION**

### WARNINGS

Always set the parking brake fully and make sure the gearshift is latched in park (P). Turn the ignition to the off position and remove the key whenever you leave your vehicle.

Do not apply the brake pedal and accelerator pedal simultaneously. Applying both pedals simultaneously for more than three seconds will limit engine rpm, which may result in difficulty maintaining speed in traffic and could lead to serious injury.

# Understanding the Positions of Your Automatic Transmission

### Putting your vehicle in gear:

- 1. Fully press down the brake pedal.
- 2. Press and hold the button on the front of the gearshift lever.
- 3. Move the gearshift lever into the desired gear.
- Release the button and your transmission will remain in the selected gear.



### Park (P)

This position locks the transmission and prevents the wheels from turning.

### Reverse (R)

With the gearshift lever in reverse (R), your vehicle will move backward. Always come to a complete stop before shifting into and out of reverse (R).

### Neutral (N)

With the gearshift lever in neutral (N), your vehicle can be started and is free to roll. Hold the brake pedal down while in this position.

### Drive (D)

Drive (D) is the normal driving position for the best fuel economy. The overdrive function allows automatic upshifts and downshifts through gears one through six.

### Sport (S)

Moving the gearshift lever to sport (S):

- Provides additional grade (engine) braking and extends lower gear operation to enhance performance for uphill climbs, hilly terrain or mountainous areas. This will increase engine RPM during engine braking.
- Provides additional lower gear operation through the automatic transmission shift strategy.
- Gears are selected more quickly and at higher engine speeds.

### SelectShift Automatic™ Transmission

Your SelectShift automatic transmission gives you the ability to manually change gears.

E142629

# **Transmission**

To use SelectShift, move the gearshift lever into sport (S). Use the +/- buttons on the side of your gearshift lever to manually change gears.

- Press the (+) button to upshift.
- Press the (-) button to downshift.

**Note:** After you have assumed manual control with SelectShift your vehicle will remain in this mode until you return the gearshift lever from sport (S), back to drive (D).

Upshift to the recommended shift speeds according to the following chart:

Upshifts when accelerating (recom- mended for best fuel economy)		
Shift from:		
1-2	15 mph (24 km/h)	
2 - 3	25 mph (40 km/h)	
3 - 4	40 mph (64 km/h)	
4 - 5	45 mph (72 km/h)	
5-6	50 mph (80 km/h)	

The instrument cluster will display the selected gear that you are currently in and a shift indicator arrow to assist in optimizing shifting.

SelectShift will automatically make some shifts for you in the event that your engine speed is running at too high, or too low an RPM.

**Note:** Engine damage may occur if excessive engine revving is held without shifting.

#### **Brake-Shift Interlock**

### **WARNINGS**



Do not drive your vehicle until you verify that the brake lamps are working.

### WARNINGS

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When doing this procedure, you will be taking the vehicle out of park which means the vehicle can roll

freely. To avoid unwanted vehicle movement, always fully set the parking brake prior to doing this procedure. Use wheel chocks if appropriate.



If the parking brake is fully released, but the brake warning lamp remains illuminated, the brakes may not be

working properly. See your authorized dealer.

Use the brake shift interlock lever to move the gearshift lever from the park position in the event of an electrical malfunction or if your vehicle has a dead battery.

Apply the parking brake and turn the ignition off before performing this procedure.

- Insert a screwdriver (or similar tool) between the shifter bezel and the top finish panel.
- 2. Use the tool to unsnap the shifter bezel from the finish panel.



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- 3. Locate the white lever located on the left side of the shifter.
- 4. Using the tool move the white lever towards the rear of the shifter.

# **Transmission**

- While holding the white lever in the rear position, move the shifter from the park position.
- Press the shifter bezel back into the top finish panel until it snaps back into position.
- 7. Apply the brake pedal, start the vehicle and release the parking brake.

**Note:** See your authorized dealer as soon as possible if this procedure is used.

# If Your Vehicle Gets Stuck In Mud or Snow

**Note:** Do not rock the vehicle if the engine is not at normal operating temperature or damage to the transmission may occur.

**Note:** Do not rock the vehicle for more than a minute or damage to the transmission and tires may occur, or the engine may overheat.

If your vehicle gets stuck in mud or snow, it may be rocked out by shifting between forward and reverse gears, stopping between shifts in a steady pattern. Press lightly on the accelerator in each gear.

# Four-Wheel Drive (If Equipped)

# **PRINCIPLE OF OPERATION**

This system is a proactive system. It has the ability to anticipate wheel slip and transfer torque to the rear wheels before slip occurs. Even when wheel slip is not present, the system is continuously making adjustments to the torque distribution, in an attempt to improve straight line and cornering behavior, both on and off road.

The system automatically turns on every time you switch the ignition on.

All components of the system are sealed and do not require maintenance.

### **USING FOUR-WHEEL DRIVE**

**Note:** When a system malfunction is present, a warning message will be displayed in the information display. See (page 88). This means the system is not functioning correctly and has defaulted to front-wheel drive only. Have your vehicle checked by an authorized dealer.

**Note:** A message will be displayed in the information display when the system overheats and switches to front-wheel drive. This condition may occur if you operate your vehicle in extreme high load conditions or with excessive wheel slip, (i.e. deep sand). To resume four-wheel drive function as soon as possible, stop your vehicle in a safe location and switch the ignition off. After the system cools and normal four-wheel drive functionality resumes, a message will be displayed for approximately five seconds.

**Note:** If a warning message appears in the information display when using the spare tire, it should turn off after reinstalling the repaired or replaced road tire and you switch the ignition on.

**Note:** It is recommended that you reinstall the repaired tire or replace the tire as soon as possible. Major dissimilar tire sizes between the front and rear axles could cause system damage or default the system to front-wheel drive.

The system gives your vehicle some limited off-road capabilities. Operating your vehicle in conditions other than moderate sand, snow, mud or rough roads could subject it to excessive stress and heat which could result in system damage. This will not be covered by your vehicle warranty.



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A graphic will be displayed in the information display to advise you of the power distribution between the front and rear wheels. The more the area is filled the more power is being distributed to that wheel.

# Driving in Special Conditions With Four-Wheel Drive

Four-wheel drive vehicles are suitable for driving on sand, snow, mud and rough roads and have operating characteristics that are somewhat different from conventional vehicles, both on and off the freeway.

**Note:** It may be useful to switch Traction control off. This allows for more wheel spin and engine torque in certain off road conditions or if your vehicle becomes stuck.

When driving at slow speeds off road under high load conditions, use a low gear when possible. Low gear operation will maximize the engine and transmission cooling capability.

Under severe operating conditions, the air conditioning may cycle on and off to prevent the engine from overheating.

#### **Basic Operating Principles**

- Drive slower in strong crosswinds which can affect the normal steering characteristics of your vehicle.
- When driving your vehicle on surfaces made slippery by loose sand, water, gravel, snow or ice proceed with care.

#### If Your Vehicle leaves the Road

If your vehicle leaves the road, reduce your vehicle speed and avoid severe braking. When your vehicle speed has been reduced ease your vehicle back onto the road. Do not turn the steering wheel sharply while returning your vehicle to the road.

It may be safer to stay on the shoulder of the road and slow down gradually before returning to the road. You may lose control if you do not slow down or if you turn the steering wheel too sharply or abruptly.

It may be less risky to strike small objects, such as freeway reflectors, with minor damage to your vehicle rather than attempt a sudden return to the road which could cause your vehicle to slide sideways out of control or roll over. Remember, your safety and the safety of others should be your primary concern.

#### **Emergency Maneuvers**

In an unavoidable emergency situation where a sudden sharp turn must be made, remember to avoid over-driving your vehicle (i.e. turn the steering wheel only as rapidly and as far as required to avoid the emergency). Excessive steering can result

in loss of vehicle control. Apply smooth pressure to the accelerator pedal or brake pedal when changes in vehicle speed are required. Avoid abrupt steering,

acceleration and braking. This could result in an increased risk of vehicle roll over, loss of vehicle control and personal injury. Use all available road surface to bring your vehicle to a safe direction of travel.

In the event of an emergency stop, avoid skidding the tires and do not attempt any sharp steering wheel movements.

If your vehicle goes from one type of surface to another (i.e. from concrete to gravel) there will be a change in the way your vehicle responds to a maneuver (i.e. steering, acceleration or braking).

#### Sand

When driving over sand, try to keep all four wheels on the most solid area of the trail. Avoid reducing the tire pressures but shift to a lower gear and drive steadily through the terrain. Apply the accelerator slowly and avoid excessive wheel slip.

Do not drive your vehicle in deep sand for an extended period of time. This will cause the system to overheat. A message will be displayed in the information display. See (page 88).

To resume operation, switch the ignition off and allow the system to cool down for a minimum of 15 minutes. After the system has cooled down, a message will be displayed briefly in the information display. See (page 88).

When driving at slow speeds in deep sand under high outside temperatures, use a low gear when possible. Low gear operation will maximize the engine and transmission cooling capability.

Avoid driving at excessive speeds, this causes vehicle momentum to work against you and your vehicle could become stuck to the point that assistance may be required from another vehicle. Remember, you may be able to back out the way you came if you proceed with caution.

#### **Mud and Water**

#### Mud

Be cautious of sudden changes in vehicle speed or direction when you are driving in mud. Even four-wheel drive vehicles can lose traction in slick mud. If your vehicle does slide, steer in the direction of the slide until you regain control of your vehicle.

After driving through mud, clean off residue stuck to rotating driveshafts and tires. Excess mud stuck on tires and rotating driveshafts can cause an imbalance that could damage drive components.

#### Water

If you must drive through high water, drive slowly. Traction or brake capability may be limited.

When driving through water, determine the depth and avoid water higher than the bottom of the wheel rims. If the ignition system gets wet, your vehicle may stall.

Once through water, always try the brakes. Wet brakes do not stop your vehicle as effectively as dry brakes. Drying can be improved by applying light pressure to the brake pedal while moving slowly.

**Note:** Driving through deep water may damage the transmission. If the front or rear axle is submerged in water, the axle lubricant and power transfer unit lubricant should be checked and changed if necessary.

#### **Driving on Hilly or Sloping Terrain**

Although natural obstacles may make it necessary to travel diagonally up or down a hill or steep incline, you should always try to drive straight up or straight down.

**Note:** Avoid turning on steep slopes or hills. A danger lies in losing traction, slipping sideways and possible vehicle roll over. Whenever driving on a hill, determine beforehand the route you will use. Do not drive over the crest of a hill without seeing what conditions are on the other side. Do not drive in reverse over a hill without the aid of an observer.

When climbing a steep slope or hill, start in a lower gear rather than downshifting to a lower gear from a higher gear once the ascent has started. This reduces strain on the engine and the possibility of stalling.

If your vehicle stalls, do not try to turn around because this could cause vehicle roll over. It is better to reverse back to a safe location.

Apply just enough power to the wheels to climb the hill. Too much power will cause the tires to slip, spin or lose traction, resulting in loss of vehicle control.



Descend a hill in the same gear you would use to climb up the hill to avoid excessive brake application and brake overheating. Do not descend in neutral. Disengage overdrive or move the transmission selector lever to a lower gear. When descending a steep hill, avoid sudden hard braking as you could lose control. The front wheels have to be turning in order to steer your vehicle.

Your vehicle has anti-lock brakes, therefore apply the brakes steadily. Do not pump the brake pedal.

#### **Driving on Snow and Ice**

#### WARNING

If you are driving in slippery conditions that require tire chains or cables, then it is critical that you drive cautiously. Keep speeds down, allow for longer stopping distances and avoid aggressive steering to reduce the chances of a loss of vehicle control which can lead to serious injury or death. If the rear end of your vehicle slides while cornering, steer in the direction of the slide until you regain control of your vehicle.

**Note:** Excessive tire slippage can cause transmission damage.

Four-wheel drive vehicles have advantages over two-wheel drive vehicles in snow and ice but can skid like any other vehicle. Should you start to slide while driving on snowy or icy roads, turn the steering wheel in the direction of the slide until you regain control.

Avoid sudden applications of power and quick changes of direction on snow and ice. Apply the accelerator slowly and steadily when starting from a full stop.

Avoid sudden braking. Although a four-wheel drive vehicle may accelerate better than a two-wheel drive vehicle in snow and ice, it will not stop any faster as braking occurs at all four wheels. Do not become overconfident as to road conditions.

Make sure you allow sufficient distance between you and other vehicles for stopping. Drive slower than usual and consider using one of the lower gears. In emergency stopping situations, apply the brake steadily. As your vehicle has a four wheel anti-lock brake system, do not pump the brake pedal. See **Hints on Driving With Anti-Lock Brakes** (page 146).

## If Your Vehicle Gets Stuck In Mud or Snow

If your vehicle gets stuck in mud or snow, it may be rocked out by shifting between forward and reverse gears, stopping between shifts in a steady pattern. Press lightly on the accelerator in each gear.

**Note:** Do not rock your vehicle if the engine is not at normal operating temperature, damage to the transmission may occur.

**Note:** Do not rock your vehicle for more than a minute, damage to the transmission and tires may occur or the engine may overheat.

#### **Maintenance and Modifications**

The suspension and steering systems on your vehicle have been designed and tested to provide predictable performance whether loaded or empty. For this reason, we strongly recommend that you do not make modifications such as adding or removing parts (i.e. lift kits or stabilizer bars) or by using replacement parts not equivalent to the original factory equipment.

We recommend that you use caution when your vehicle has either a high load or device (i.e. ladder or luggage racks). Any modifications to your vehicle that raise the center of gravity may cause your vehicle to roll over when there is a loss of vehicle control

Failure to maintain your vehicle correctly may void the warranty, increase your repair cost, reduce vehicle performance and operational capabilities and adversely affect you and your passenger's safety. We recommend you frequently inspect your vehicle's chassis components when your vehicle is subject to off road usage.

#### **Brakes**

#### **GENERAL INFORMATION**

**Note:** Occasional brake noise is normal. If a metal-to-metal, continuous grinding or continuous squeal sound is present, the brake linings may be worn-out and an authorized dealer should check them. If the vehicle has continuous vibration or shudder in the steering wheel while braking, an authorized dealer should check your vehicle.

**Note:** Brake dust may accumulate on the wheels, even under normal driving conditions. Some dust is inevitable as the brakes wear and does not contribute to brake noise. See **Cleaning the Alloy Wheels** (page 238).



See Warning Lamps and Indicators (page 85).

Wet brakes result in reduced braking efficiency. Gently press the brake pedal a few times when driving from a car wash or standing water to dry the brakes.

#### **Brake Over Accelerator**

In the event the accelerator pedal becomes stuck or entrapped, apply steady and firm pressure to the brake pedal to slow the vehicle and reduce engine power. If you experience this condition, apply the brakes and bring your vehicle to a safe stop. Switch the engine off, move the transmission to park (P) and apply the parking brake. Inspect the accelerator pedal and the area around it for any items or debris that may be obstructing its movement. If none are found and the condition persists, have your vehicle towed to the nearest authorized dealer.

#### **Emergency Brake Assist**

Emergency brake assist detects when you brake heavily by measuring the rate at which you press the brake pedal. It provides maximum braking efficiency as long as you press the pedal. Emergency brake assist can reduce stopping distances in critical situations.

#### **Anti-lock Brake System**

This system helps you maintain steering control during emergency stops by keeping the brakes from locking.



This lamp momentarily illuminates when you switch the ignition on. If the light does not

illuminate during start up, remains on or flashes, the anti-lock braking system may be disabled. Have the system checked by an authorized dealer. If the anti-lock brake system is disabled, normal braking is still effective.



If the brake warning lamp illuminates with the parking brake released, have your brake

system serviced immediately.

# HINTS ON DRIVING WITH ANTI-LOCK BRAKES

**Note:** When the system is operating, the brake pedal will pulse and may travel further. Maintain pressure on the brake pedal. You may also hear a noise from the system. This is normal.

The anti-lock braking system will not eliminate the risks when:

- You drive too closely to the vehicle in front of you.
- · Your vehicle is hydroplaning.
- You take corners too fast.
- The road surface is poor.

#### **Rrakes**

#### PARKING BRAKE

#### WARNING

Always set the parking brake fully and make sure you shift the gearshift lever to park (P). Switch the ignition

off and remove the key whenever you leave vour vehicle.

**Note:** Do not press the release button while pulling the lever up.

To apply the parking brake:

- Press the foot brake pedal firmly.
- 2. Pull the parking brake lever up to its fullest extent

**Note:** If you park your vehicle on a hill and facing uphill, shift the gearshift lever to park (P) and turn the steering wheel away from the curb.

Note: If you park your vehicle on a hill and facing downhill, shift the gearshift lever to park (P) and turn the steering wheel toward the curb.

To release the parking brake:

- Press the brake pedal firmly.
- 2. Pull the lever up slightly.
- 3. Press the release button and push the lever down.

#### HILL START ASSIST

#### WARNINGS



The system does not replace the parking brake. When you leave your

vehicle, always apply the parking brake and shift the transmission into park (P) (automatic transmission) or first gear (1) (manual transmission).



You must remain in your vehicle once you have activated the system.

#### WARNINGS



During all times, you are responsible for controlling your vehicle, supervising the system and intervening, if required.



If the engine is revved excessively, or if a malfunction is detected, the system will be deactivated.

The system makes it easier to pull away when your vehicle is on a slope without the need to use the parking brake.

When the system is active, your vehicle will remain stationary on the slope for two to three seconds after you release the brake pedal. This allows you time to move your foot from the brake to the accelerator pedal. The brakes release automatically when the engine has sufficient torque to prevent your vehicle from rolling down the grade. This is an advantage when pulling away on a slope, for example from a car park ramp, traffic lights or when reversing uphill into a parking space.

The system will activate automatically on any slope that will cause significant vehicle rollback. For vehicles with a manual transmission, you can switch this feature off using the information display. See Information Displays (page 88). The system will remain on or off depending on how it was last set.

**Note:** There is no warning lamp to indicate the system is either on or off.

**Note:** If your vehicle is equipped with Auto Hold. Hill Start Assist will not be available while Auto Hold is active.

### **Using Hill Start Assist**

Bring your vehicle to a complete standstill. Keep the brake pedal pressed and select and uphill gear (for example, first (1) when facing uphill or reverse (R) when facing downhill).

#### **Brakes**

- 2. If the sensors detect that your vehicle is on a slope, the system will activate automatically.
- When you remove your foot from the brake pedal, your vehicle will remain on the slope without rolling away for about two or three seconds. This hold time will automatically be extended if you are in the process of driving off.
- 4. Drive off in the normal manner. The brakes will release automatically.

#### Switching the System On and Off

You can switch this feature on or off if your vehicle is equipped with a manual transmission and an information display. See **General Information** (page 88). The system remembers the last setting when you start your vehicle.

If your vehicle is not equipped with a manual transmission and an information display, you cannot turn the system on or off. When you switch the ignition on, the system automatically turns on.

#### **Traction Control**

### **PRINCIPLE OF OPERATION**

The traction control system helps avoid drive wheel spin and loss of traction.

If your vehicle begins to slide, the system applies the brakes to individual wheels and, when needed, reduces engine power at the same time. If the wheels spin when accelerating on slippery or loose surfaces, the system reduces engine power in order to increase traction.

#### **USING TRACTION CONTROL**

# **WARNING**The stability and traction control

light illuminates steadily if the system detects a failure. Make sure you did not manually disable the traction control system using the information display controls or the switch. If the stability control and traction control light is still illuminating steadily, have the system serviced by an authorized dealer immediately. Operating your vehicle with the traction control disabled could lead to an increased risk of loss of vehicle control, vehicle rollover, personal injury and death.

The system automatically turns on each time you switch the ignition on.

If your vehicle is stuck in mud or snow, switching traction control off may be beneficial as this allows the wheels to spin.

**Note:** When you switch traction control off, stability control remains fully active.

## **Switching the System Off**

When you switch the system off or on, a message appears in the information display showing system status.

You can switch the system off by either using the information display controls or the switch.

## Using the Information Display Controls

You can switch this feature off or on in the information display. See **General Information** (page 88).

#### Using a Switch (If Equipped)

Use the traction control switch on the instrument panel to switch the system off or on.

The switch illuminates when traction control is off

## System Indicator Lights and Messages



The stability and traction control light:

- Temporarily illuminates on engine start-up.
- Flashes when a driving condition activates either of the systems.
- Illuminates if a problem occurs in either of the systems.



The stability and traction control off light temporarily illuminates on engine start-up and stays on

when you switch the traction control system off.

## **Stability Control**

#### PRINCIPLE OF OPERATION

#### WARNINGS

Vehicle modifications involving braking system, aftermarket roof racks, suspension, steering system. tire construction and wheel and tire size may change the handling characteristics of your vehicle and may adversely affect the performance of the electronic stability control system. In addition, installing any stereo loudspeakers may interfere with and adversely affect the electronic stability control system. Install any aftermarket stereo loudspeaker as far as possible from the front center console, the tunnel, and the front seats in order to minimize the risk of interfering with the electronic stability control sensors. Reducing the effectiveness of the electronic stability control system could lead to an increased risk of loss of vehicle control, vehicle rollover, personal injury and death.

Remember that even advanced technology cannot defy the laws of physics. It's always possible to lose control of a vehicle due to inappropriate driver input for the conditions. Aggressive driving on any road condition can cause you to lose control of your vehicle increasing the risk of personal injury or property damage. Activation of the electronic stability control system is an indication that at least some of the tires have exceeded their ability to grip the road; this could reduce the operator's ability to control the vehicle potentially resulting in a loss of vehicle control, vehicle rollover. personal injury and death. If your electronic stability control system activates, SLOW DOWN.

The system automatically turns on each time you switch the ignition on.

If a driving condition activates either the stability control or the traction control system you may experience the following conditions:

- The stability and traction control light flashes.
- Your vehicle slows down.
- Reduced engine power.
- A vibration in the brake pedal.
- The brake pedal is stiffer than usual.
- If the driving condition is severe and your foot is not on the brake, the brake pedal may move as the systems applies higher brake forces.

The stability control system has several features built into it to help you maintain control of your vehicle:

#### **Electronic Stability Control**

The system enhances your vehicle's ability to prevent skids or lateral slides by applying brakes to one or more of the wheels individually and, if necessary, reducing engine power.

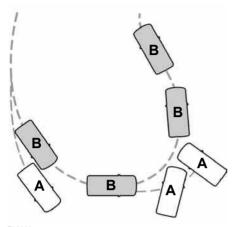
#### **Roll Stability Control**

The system enhances your vehicle's ability to prevent rollovers by detecting your vehicle's roll motion and the rate at which it changes by applying the brakes to one or more wheels individually.

#### **Traction Control**

The system enhances your vehicle's ability to maintain traction of the wheels by detecting and controlling wheel spin. See **Using Traction Control** (page 149).

## **Stability Control**



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- A Vehicle without stability control skidding off its intended route.
- B Vehicle with stability control maintaining control on a slippery surface.

#### **USING STABILITY CONTROL**

# AdvanceTrac® with Roll Stability Control™ (RSC®)

The system automatically activates when you start your vehicle. The AdvanceTrac with RSC system cannot be completely turned off, but the electronic stability control and roll stability control portions of the system are disabled when the transmission is in position **R.** You can turn off the traction control portion of the system independently. See **Using Traction Control** (page 149).

#### PRINCIPLE OF OPERATION

#### WARNINGS

To help avoid personal injury, please read and understand the limitations of the system as contained in this section. Sensing is only an aid for some (generally large and fixed) objects when moving on a flat surface at parking speeds. Certain objects with surfaces that absorb ultrasonic waves, surrounding vehicle's parking aid systems, traffic control systems, fluorescent lamps, inclement weather, air brakes, and external motors and fans may also affect the function of the sensing system; this may include reduced performance or a false activation.

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To help avoid personal injury, always use caution when in reverse (R) and when using the sensing system.

This system is not designed to prevent contact with small or moving objects. The system is designed to provide a warning to assist the driver in detecting large stationary objects to avoid damaging your vehicle. The system may not detect smaller objects, particularly those close to the ground.

Certain add-on devices such as large trailer hitches, bike or surfboard racks and any device that may block the normal detection zone of the system, may create false beeps.

**Note:** Keep the sensors, located on the bumper or fascia, free from snow, ice and large accumulations of dirt. If the sensors are covered, the system's accuracy can be affected. Do not clean the sensors with sharp objects.

**Note:** If your vehicle sustains damage to the bumper or fascia, leaving it misaligned or bent, the sensing zone may be altered causing inaccurate measurement of obstacles or false alarms.

**Note:** The sensing system cannot be turned off when a MyKey is present. See (page 49).

**Note:** If you attach certain add-on devices such as a trailer or bike rack, the rear sensing system may detect that add-on device and therefore provide warnings. It is suggested that you disable the rear sensing system when you attach an add-on device to your vehicle to prevent these warnings.

The sensing system warns the driver of obstacles within a certain range of your vehicle. The system turns on automatically whenever you switch the ignition on.

The system can be switched off through the information display menu or from the pop-up message that appears once you shift the transmission into reverse (R). See (page 88).

**Note:** On vehicles with front parking aid you can use the parking aid switch to switch the system off.

If a fault is present in the system, a warning message appears in the information display. See **Information Messages** (page 91).

#### **REAR PARKING AID**

The rear sensors are only active when the transmission is in reverse (R). As your vehicle moves closer to the obstacle, the rate of the audible warning increases. When the obstacle is less than 12 in (30 cm) away, the warning sounds continuously. If the system detects a stationary or receding object farther than 12 in (30 cm) from the corners of the bumper, the tone sounds for only three seconds. Once the system detects an object approaching, the warning sounds again.



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Coverage area of up to 6 ft (1.8 m) from the rear bumper. There may be decreased coverage area at the outer corners of the bumper.

The system detects certain objects while the transmission is in reverse (R):

- Your vehicle is moving toward a stationary object at a speed of 3 mph (5 km/h) or less.
- Your vehicle is not moving, but a moving object is approaching the rear of your vehicle at a speed of 3 mph (5 km/h) or less.
- Your vehicle is moving at a speed of less than 3 mph (5 km/h) and a moving object is approaching the rear of your vehicle at a speed of less than 3 mph (5 km/h).

The system provides audio warnings only when your vehicle is moving or when your vehicle is stationary and the detected obstacle is less than 12 in (30 cm) away from the bumper.

#### FRONT PARKING AID

The front sensors are active when the transmission is in any position other than park (P).



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Coverage area of up to 28 in (70 cm) from the front bumper. The coverage area decreases at the outer corners.

When your vehicle approaches an object, a warning tone sounds. When your vehicle moves closer to an object, the warning tone repeat rate increases. The warning tone sounds continuously when an object is 12 in (30 cm) or less from the front bumper.

If the transmission is in reverse (R), the front sensing system provides audio warnings when your vehicle is moving and the detected obstacle is stationary or moving towards your vehicle.

If the transmission is in drive (D) or any other forward gear (for example, low (L), sport (S) or any forward gear in a manual transmission), the front sensing system provides audio warnings when your vehicle is moving below a speed of 7 mph (12 km/h) and an obstacle is located inside the detection area.

#### ACTIVE PARK ASSIST (If Equipped)

#### WARNING

Designed to be a supplementary park aid, this system may not work in all conditions. This system cannot replace the driver's attention and judgment. The driver is responsible for avoiding hazards and maintaining a safe distance and speed, even when the system is in use.

**Note:** The driver is always responsible for controlling the vehicle, supervising the system and intervening if required.

The system detects an available parallel parking space and automatically steers your vehicle into the space (hands-free) while you control the accelerator, gearshift and brakes. The system visually and audibly instructs you to park your vehicle.

The system may not function correctly if something passes between the front bumper and the parking space (a pedestrian or cyclist) or if the edge of the neighboring parked vehicle is high off the ground (for example, a bus, tow truck or flatbed truck).

**Note:** The blindspot information system does not detect traffic alongside or behind your vehicle during a park assist maneuver.

**Note:** The sensors may not detect objects in heavy rain or other conditions that cause disruptive reflections.

**Note:** The sensors may not detect objects with surfaces that absorb ultrasonic waves or cause ultrasonic interference (motorcycle exhaust, truck air brakes or horns).

Do not use the system if:

- You have attached a foreign object (bike rack or trailer) to the front or rear of your vehicle or attached close to the sensors.
- You have attached an overhanging object (surfboard) to the roof.
- The front bumper or side sensors are damaged or obstructed by a foreign object (front bumper cover).
- · A mini-spare tire is in use.

#### **Using Active Park Assist**



Press the button located on the center console near the gearshift lever or the right side of the

center stack.

The touchscreen displays a message and a corresponding graphic to indicate it is searching for a parking space. Use the direction indicator to indicate which side of your vehicle you want the system to search.

**Note:** If the direction indicator is not on, the system automatically searches on your vehicle's passenger side.



When the system finds a suitable space, the touchscreen displays a message and a tone sounds. Slow down, continue moving forward and stop when another tone sounds and a message displays on the touchscreen (at approximately position A), then follow the instructions on the touchscreen.

**Note:** You must observe that the selected space remains clear of obstructions at all times in the maneuver.

**Note:** Active park assist may not detect vehicles with overhanging loads (a bus or a truck), street furniture and other items. You must make sure the selected space is suitable for parking.

**Note:** You should drive your vehicle within 4.9 ft (1.5 m) to the other vehicles while passing a parking space.

**Note:** The system always offers the last detected parking space (for example, if the vehicle detects multiple spaces while you are driving, it offers the last one).

**Note:** If driven above approximately 22 mph (35 km/h), the touchscreen shows a message to alert you to reduce your vehicle speed.

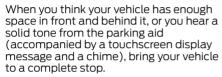
# Automatic Steering into Parking Space

**Note:** If your vehicle speed exceeds 6 mph (9 km/h), the system switches off and you need to take full control of your vehicle.

**Note:** If a maneuver is interrupted before completion, the system switches off. The steering wheel position will not indicate the actual position of the steering and you have to full take control of your vehicle.

When you shift the transmission into reverse (R), with your hands off the wheel (and nothing obstructing its movement), your vehicle steers itself into the space. Indicated by tones, instructions to move your vehicle back and forth in the space, display on the touchscreen.





When automatic steering is finished, the touch screen displays a message and a tone sounds, indicating that the active park assist process is done. The driver is responsible for checking the parking job and making any necessary corrections before putting the transmission in park (P).

## Deactivating the Park Assist Feature

Manually deactivate the system by:

- Pressing the active park assist button.
- · Grabbing the steering wheel.



- Driving above approximately 22 mph (35 km/h) for 10 seconds during an active park search.
- Driving above 6 mph (9 km/h) during automatic steering.
- Turning off the traction control system.

Certain vehicle conditions can also deactivate the system, such as:

- Traction control has activated on a slippery or loose surface.
- There is an anti-lock brake system activation or failure.
- Something touches the steering wheel.

If a problem occurs with the system, a warning message is displayed, followed by a tone. Occasional system messages may occur in normal operation. For recurring or frequent system faults, contact an authorized dealer to have your vehicle serviced.

## **Troubleshooting the System**

#### The system does not look for a space

The traction control system may be off

The transmission is in Reverse (R); your vehicle must be moving forward to detect a parking space

#### The system does not offer a particular space

Something may be contacting the front bumper or side sensors

There is not enough room on both sides of your vehicle in order to park

There is not enough space for the parking maneuver on the opposite side of the parking space

The parking space is farther than 4.9 ft (1.5 m) or closer than 15.7 in (0.4 m) away.

The transmission is in Reverse (  $\mbox{\it R}\mbox{\it R}\mbox{\it R}\mbox{\it i}$  ; your vehicle must be moving forward to detect a parking space

Your vehicle is going faster than 22 mph (35 km/h)

#### The system does not position the vehicle where I want in the space

Your vehicle is rolling in the opposite direction of the transmission (rolling forward when Reverse [R] is selected)

An irregular curb along the parking space prevents the system from aligning your vehicle properly

Vehicles or objects bordering the space may not be positioned correctly

You pulled your vehicle too far past the parking space. The system performs best when you drive the same distance past the parking space

The tires may not be installed or maintained correctly (not inflated correctly, improper size, or of different sizes)

A repair or alteration has changed detection capabilities

A parked vehicle has a high attachment (salt sprayer, snowplow, moving truck bed, etc.)

The parking space length or position of parked objects changed after your vehicle passed

The temperature around your vehicle changes quickly (driving from a heated garage into the cold, or after leaving a car wash)

#### REAR VIEW CAMERA (If Equipped)

#### WARNINGS

The rear view camera system is a reverse aid supplement device that still requires the driver to use it in conjunction with the interior and exterior mirrors for maximum coverage.

Objects that are close to either corner of the bumper or under the bumper, might not be seen on the screen due to the limited coverage of the camera system.

Back up as slow as possible since higher speeds might limit your reaction time to stop your vehicle.

Use caution when using the rear video camera and the luggage compartment door is ajar. If the luggage compartment door is ajar, the camera will be out of position and the video image may be incorrect. All guidelines disappear when the luggage compartment door is ajar.

Use caution when turning camera features on or off. Make sure your vehicle is not moving.

The rear view camera system provides a video image of the area behind your vehicle.

During operation, lines appear in the display which represent your vehicle's path and proximity to objects behind your vehicle.



E142435

The camera is located on the luggage compartment door.

#### Using the Rear View Camera System

The rear view camera system displays what is behind your vehicle when you place the transmission in reverse (R).

**Note:** The reverse sensing system is not effective at speeds above 7 mph (12 km/h) and may not detect certain angular or moving objects.

The system uses three types of guides to help you see what is behind your vehicle:

- Active guidelines: Show the intended path of your vehicle when reversing.
- Fixed guidelines: Show the actual path your vehicle is moving in while reversing in a straight line. This can be helpful when backing into a parking space or aligning your vehicle with another object behind you.
- Centerline: Helps align the center of your vehicle with an object (for example, a trailer).

**Note:** If the transmission is in reverse (R) and the luggage compartment door or liftgate is open, no rear view camera features will display.

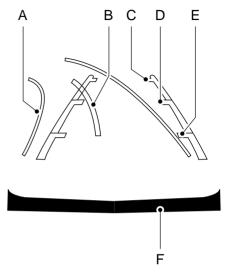
**Note:** When towing, the camera only sees what you are towing. This might not provide adequate coverage as it usually provides in normal operation and some objects might not be seen. In some vehicles, the guidelines may disappear when you connect the trailer tow connector.

The camera may not operate correctly under the following conditions:

- Nighttime or dark areas if one or both reverse lamps are not operating.
- Mud, water or debris obstructs the camera's view. Clean the lens with a soft, lint-free cloth and non-abrasive cleaner.
- The rear of your vehicle is hit or damaged, causing the camera to become misaligned.

#### **Camera Guidelines**

**Note:** Active guidelines are only available when the transmission is in reverse (R).



#### E142436

- A Active guidelines
- B Centerline
- C Fixed guideline: Green zone
- D Fixed guideline: Yellow zone
- E Fixed guideline: Red zone
- F Rear bumper

Active guidelines are only shown with fixed guidelines. To use active guidelines, turn the steering wheel to point the guidelines toward an intended path. If you change the steering wheel position while reversing, your vehicle might deviate from the original intended path.

The fixed and active guidelines fade in and out depending on the steering wheel position. The active guidelines do not display when the steering wheel position is straight.

Always use caution while reversing. Objects in the red zone are closest to your vehicle and objects in the green zone are farther away. Objects are getting closer to your vehicle as they move from the green zone to the vellow or red zones. Use the side view mirrors and rear view mirror to get better coverage on both sides and rear of the vehicle.

#### **Manual Zoom**

#### WARNING

When manual zoom is on, the full area behind your vehicle may not show. Be aware of your surroundings when using the manual zoom feature.

**Note:** Manual zoom is only available when the transmission is in reverse (R).

**Note:** When you enable manual zoom, only the centerline is shown.

Selectable settings for this feature are Zoom in (+) and Zoom out (-). Press the symbol in the camera screen to change the view. The default setting is Zoom OFF.

This allows you to get a closer view of an object behind your vehicle. The zoomed image keeps the bumper in the image to provide a reference. The zoom is only active while the transmission is in reverse (R).

#### **Camera System Settings**

To access any of the rear view camera system settings, make the following selections in the multifunctional display when the transmission is not in reverse (R):

Main Menu	
Settings	
Vehicle	
Camera Settings	

#### Enhanced Park Aids or Park Pilot

The system uses red, yellow and green highlights that appear on top of the video image when any of the sensing systems detect an object.

#### Rear Camera Delay

Selectable settings for this feature are ON and OFF.

The default setting for the rear camera delay is OFF.

When shifting the transmission out of reverse (R) and into any gear other than park (P), the camera image remains in the display until:

- Your vehicle speed sufficiently increases.
- You shift your vehicle into park (P).

#### **Cruise Control**

#### PRINCIPLE OF OPERATION

Cruise control lets you maintain a set speed without keeping your foot on the accelerator pedal. You can use cruise control when your vehicle speed is greater than 20 mph (30 km/h).

#### **USING CRUISE CONTROL**

#### **WARNINGS**

Do not use cruise control in heavy traffic, on winding roads or when the road surface is slippery. This could result in loss of vehicle control, serious injury or death.

When you are going downhill, your vehicle speed may increase above the set speed. The system will not apply the brakes. Change down a gear to assist the system in maintaining the set speed. Failure to do so could result in loss of vehicle control, serious injury or death.

**Note:** Cruise control will disengage if your vehicle speed decreases more than 10 mph (16 km/h) below your set speed while driving uphill.



The cruise controls are located on the steering wheel.

#### **Switching Cruise Control On**

Press and release ON.



The indicator will display in the instrument cluster.

#### Setting a Speed

- Accelerate to the desired speed.
- Press and release SET+.
- 3. Take your foot off the accelerator pedal.

#### **Changing the Set Speed**

- Press and release SET+ or SET-. When you select kph as the display measurement in the information display, the set speed changes in approximately 2 kph increments. When you select mph as the display measurement in the information display, the set speed changes in approximately 1 mph increments.
- Press the accelerator or brake pedal until you reach the desired speed. Press and release SET+.
- Press and hold SET+ or SET-. Release the control when you reach the desired speed.

#### **Canceling the Set Speed**

Pull **CAN** toward you and release, or tap the brake pedal. The set speed will not be erased

#### **Resuming the Set Speed**

Pull **RES** toward you and release.

## **Switching Cruise Control Off**

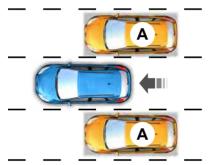
**Note:** You will erase the set speed if you switch the system off.

Press and release **OFF** or switch the ignition off.

# BLIND SPOT INFORMATION SYSTEM

#### WARNING

To help avoid injuries, NEVER use the Blind Spot Information System as a replacement for using the interior and exterior mirrors or looking over your shoulder before changing lanes. The Blind Spot Information System is not a replacement for careful driving.



E124788

The Blind Spot Information System is designed to aid you in detecting vehicles that may have entered the blind spot zone (A). The detection area is on both sides of your vehicle, extending rearward from the exterior mirrors to approximately 13 ft (4 m) beyond the bumper. The system is designed to alert you if certain vehicles enter the blind spot zone while driving.

**Note:** The Blind Spot Information System does not prevent contact with other vehicles or objects; nor detect parked vehicles, people, animals or infrastructure (fences, guardrails, trees). It's only designed to alert you to vehicles in the blind spot zones.

**Note:** When a vehicle passes quickly through the blind spot zone, typically fewer than two seconds, the system does not trigger.

#### Using the System

The Blind Spot Information System turns on when you start the engine and you drive your vehicle forward above 5 mph (8 km/h).

For automatic transmissions, the Blind Spot Information System remains on while the transmission is in drive (D). If shifted into reverse (R) or park (P) the Blind Spot Information System turns off. Once shifted back into drive (D), the Blind Spot Information System turns back on when you drive your vehicle above 5 mph (8 km/h).

For manual transmissions, the Blind Spot Information System is on for all gears except the reverse (R).

**Note:** The Blind Spot Information System does not function in reverse (R) or park (P).

## System Lights and Messages



E142442

The Blind Spot Information System illuminates an amber alert indicator in the outside mirror on the side of your vehicle the approaching vehicle is coming from. When the Blind Spot Information System is alerting on a vehicle and the corresponding turn signal is ON, the Blind Spot Information System alert indicator flashes as an increased warning level.

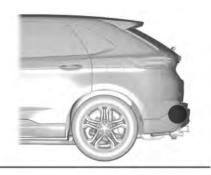
The alert indicator dims when the system detects nighttime darkness.

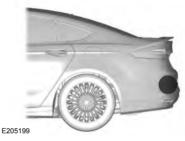
**Note:** The alert indicator flashes in case of an alert and the turn signal is set to that side at the same time.

#### System Sensor Blockage

#### WARNING

To help avoid injuries, NEVER use the Blind Spot Information System as a replacement for using the interior and exterior mirrors or looking over your shoulder before changing lanes. The Blind Spot Information System is not a replacement for careful driving.





The system uses radar sensors that are located behind the bumper fascia on each side of your vehicle. Any dirt, mud and snow in front of the sensors and/or driving in heavy rain can cause system degradation. Also, other types of obstructions in front of the sensor can cause system degradation. This is referred to as a 'blocked' condition.

**Note:** Do not apply bumper stickers and/or repair compound to these areas, this can cause degraded system performance.

If the system detects a degraded performance condition, a message warning of a blocked sensor will appear in the information display. Also the BLIS alert indicators will remain ON and BLIS will no longer provide any vehicle warnings. You can clear the information display warning but the alert indicators will remain illuminated.

A "blocked" condition can be cleared in two ways:

- After the blockage in front of the sensors is removed or the rainfall/snowfall rate decreases or stops, drive for a few minutes in traffic to allow the sensors to detect passing vehicles.
- By cycling the ignition from ON to OFF and then back ON.

**Note:** If your vehicle has a tow bar with a factory equipped trailer tow module and it is towing a trailer, the sensors will automatically turn the Blind Spot Information System off. If your vehicle has a tow bar but no factory equipped trailer tow module, it is recommended to turn the Blind Spot Information System off manually. Operating the Blind Spot Information System with a trailer attached will cause poor system performance.

### **System Errors**

If the system senses a problem with the left or right sensor, the telltale will illuminate and a message will appear in the information display. See **Information Messages** (page 91).

#### Switching the System Off and On

You can temporarily switch the Blind Spot Information System off in the information display. See **General Information** (page 88). When the Blind Spot Information System switches off, you will not receive alerts and the information display shows a system off message. The telltale in the cluster also illuminates. When you switch the Blind Spot Information System on or off. the alert indicators flash twice.

**Note:** The Blind Spot Information System remembers the last selected on or off setting.

You can also have the Blind Spot Information System switched off permanently at an authorized dealer. Once switched off permanently, the system can only be switched back on at an authorized dealer.

#### **CROSS TRAFFIC ALERT**

#### WARNING

To help avoid personal injury, NEVER use the Cross Traffic Alert system as a replacement for using the interior and exterior mirrors and looking over your

and exterior mirrors and looking over you shoulder before backing out of a parking space. Cross Traffic Alert is not a replacement for careful driving.

Cross Traffic Alert is designed to warn you of vehicles approaching from the sides when the transmission is in reverse (R).

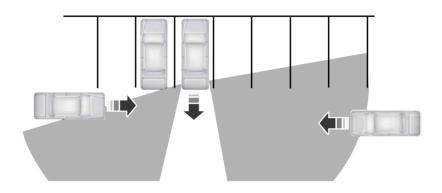
## **Using the System**

Cross Traffic Alert turns on when you start the engine and you shift into reverse (R). Once shifted out of reverse (R), Cross Traffic Alert turns off.

**Note:** Cross Traffic Alert only functions while your transmission is in reverse (R).

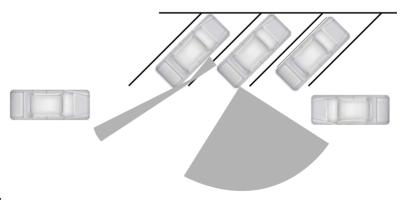
Cross Traffic Alert is designed to detect vehicles that approach with a speed up to 37 mph (60 km/h). Coverage decreases when the sensors are partially, mostly or

fully obstructed. Reversing slowly helps increase the coverage area and effectiveness.



#### E142440

In this first example, the left sensor is only partially obstructed; zone coverage to the right is nearly maximized.



E142441

Zone coverage also decreases when parking at shallow angles. Here, the left sensor is mostly obstructed; zone coverage on that side is severely limited.

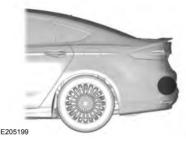
## System Lights, Messages and Audible Alerts



E142442

The Cross Traffic Alert illuminates an amber alert indicator in the outside mirror on the side of your vehicle the approaching vehicle is coming from. Cross Traffic Alert also sounds an audible alert and a message appears in the information display indicating a vehicle is coming from the right or left. Cross Traffic Alert works with the reverse sensing system that sounds its own series of tones. See **Rear Parking Aid** (page 152).





The system uses radar sensors that are located behind the bumper fascia on each side of your vehicle. Do not allow mud, snow or bumper stickers to obstruct these areas, this can cause degraded system performance. See **Blind Spot Information System** (page 162). If the Blind Spot Information System is blocked, Cross Traffic Alert is also blocked. A corresponding message appears in the information display as soon as you shift the transmission into reverse (R).

## **System Limitations**

Cross Traffic Alert has its limitations; situations such as severe weather conditions or debris build-up on the sensor area may limit vehicle detection.

The following are other situations that may limit the Cross Traffic Alert performance:

- Adjacently parked vehicles or objects obstructing the sensors.
- Approaching vehicles passing at speeds greater than 37 mph (60 km/h).
- Driving in reverse faster than 7 mph (12 km/h).
- Backing out of an angled parking spot.

#### **False Alerts**

**Note:** If your vehicle has a tow bar with a factory equipped trailer tow module and it is towing a trailer, the sensors will automatically turn the Cross Traffic Alert off. If your vehicle has a tow bar but no factory equipped trailer tow module, it is recommended to turn the Cross Traffic Alert off manually. Operating Cross Traffic Alert with a trailer attached will cause poor Cross Traffic Alert performance.

There may be certain instances when there is a false alert by the Cross Traffic Alert system that illuminates the alert indicator with no vehicle in the coverage zone. Some amount of false alerts are normal; they are temporary and self-correct.

### **System Errors**

If Cross Traffic Alert senses a problem with the left or right sensor a message will appear in the information display. See **Information Messages** (page 91).

## Switching the System Off and On

You can temporarily switch Cross Traffic Alert off in the information display. See **General Information** (page 88). When you switch Cross Traffic Alert off, you will not receive alerts and the information display will display a system off message.

**Note:** The Cross Traffic Alert switches on whenever the ignition is switched on and ready to provide appropriate alerts when the transmission is in reverse (R). Cross Traffic Alert will not remember the last selected on or off setting.

You can also have Cross Traffic Alert switched off permanently at an authorized dealer. Once switched off permanently, the system can only be switched back on at an authorized dealer.

#### **ECO MODE**

This system assists you in driving more efficiently by constantly monitoring characteristics of gear changing, anticipation of traffic conditions and speeds while driving.

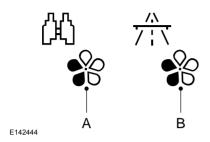
The value of these characteristics is represented by petals shown in the display, with five petals being the most efficient. The more efficiently you drive, the better the rating, and the better your overall fuel economy.

**Note:** These efficiency values do not result in a defined fuel consumption figure. It might vary as it is not only related to these driving habits, but also influenced by many other factors such as short trips and cold starts.

**Note:** Frequent short trips, where the engine does not fully warm up, will also increase fuel consumption.

The system is accessed using the information display control. See (page 88).

#### Type 1



- A Anticipation
- B Efficient speed

#### **Gear Shifting**

Using the highest drivable gear appropriate for the road conditions will improve fuel consumption.

#### **Anticipation**

Adjust your vehicle speed and the distance to other vehicles to avoid the need for heavy braking or acceleration to improve fuel economy.

### **Efficient speed**

Reduce your cruising speed on open roads to improve economy. Higher speeds use more fuel.

## Type 2 and 3

The relevant information is shown in the display.

## **Resetting Eco Mode**

Reset the average fuel consumption by using the information display control.

**Note:** New values may take a short time to calculate.

#### **STEERING**

#### **Electric Power Steering**

#### WARNINGS

The electric power steering system has diagnostic checks that

continuously monitor the system to ensure proper operation. When a system error is detected a steering message will appear in the information display.

Λ

The electric power steering system has diagnostic checks that continuously monitor the system to

continuously monitor the system to ensure proper operation of the electronic system. When an electronic error is detected, a message will be displayed in the information display. If this happens, stop the vehicle in a safe place, and turn off the engine. After at least 10 seconds, reset the system by restarting the engine, and watch the information display for a steering message. If a steering message returns, or returns while driving, take the vehicle to your dealer to have it checked.

Λ

Obtain immediate service if a system error is detected. You may not notice any difference in the feel of your

steering, but a serious condition may exist. Failure to do so may result in loss of steering control.

Your vehicle is equipped with an electric power-assisted steering system. There is no fluid reservoir to check or fill.

If your vehicle loses electrical power while you are driving (or if the ignition is turned off), you can steer the vehicle manually, but it takes more effort. Extreme continuous steering may increase the effort it takes for you to steer. This occurs to prevent internal overheating and permanent damage to your steering

system. If this should occur, you will neither lose the ability to steer the vehicle manually nor will it cause permanent damage. Typical steering and driving maneuvers will allow the system to cool and steering assist will return to normal.

#### **Steering Tips**

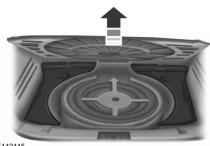
If the steering wanders or pulls, check for:

- an improperly inflated tire
- uneven tire wear
- loose or worn suspension components
- loose or worn steering components
- improper vehicle alignment

A high crown in the road or high crosswinds may also make the steering seem to wander or pull.

### **REAR UNDER FLOOR STORAGE**

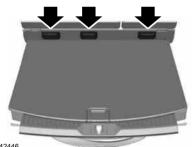
#### Cargo Management System (1) Equipped)



E142445

The system is located in the floor of the cargo area. Lift the handle to open.

#### Adjustable Load Floor (If Equipped)



E142446

Vehicles with the standard size spare tire can adjust the load floor to two positions. The front of the load floor can be placed either on (for high position) or below (for low position) the ledges behind the rear seats. The rear of the load floor always sits on the two small shelves located on the liftgate trim.

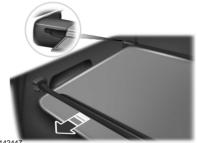
#### **LUGGAGE COVERS**

#### WARNINGS

Make sure that the posts are properly latched in mounting features. The cover may cause injury in a sudden stop or accident if it is not securely installed.

Do not place any objects on the cargo area shade. They may obstruct vour vision or strike occupants of your vehicle in a sudden stop or crash.

Use the cargo shade to cover items in the cargo area of your vehicle.



Insert the ends of the cargo shade into the mounting features located behind the rear seat on the rear trim panels to install the cargo shade.

To operate the cargo shade:

- Pull the rear edge of the cargo shade rearward.
- 2. Secure both ends of the support rod into the retention slots located on the rear quarter trim panels.

# ROOF RACKS AND LOAD CARRIERS

#### WARNING

When loading the roof racks, we recommend you evenly distribute the load, as well as maintain a low center of gravity. Loaded vehicles, with higher centers of gravity, may handle differently than unloaded vehicles. Take extra precautions, such as slower speeds and increased stopping distance, when driving a heavily loaded vehicle.

The maximum recommended load, evenly distributed on the crossbars, is:

- 100 pounds (45 kilograms) for vehicles without a moonroof
- 45 pounds (20 kilograms) for vehicles with a moonroof.

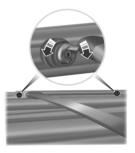
**Note:** Never place loads directly on the roof panel. The roof panel is not designed to directly carry a load.

For correct roof rack system function, you must place loads directly on crossbars affixed to the roof rack side rails. When using the roof rack system, we recommend you use Ford Genuine Accessory crossbars designed specifically for your vehicle.

Make sure that you securely fasten the load. Check the tightness of the load before driving and at each fuel stop.

#### Adjusting the Crossbar (If Equipped)

**Note:** For less wind noise and better aerodynamics, only install the crossbars when you need them for carrying cargo. If you prefer to keep the crossbars installed, the front crossbar has two positions. The front position is quieter for wind noise. The rear position may help to reduce wind noise from an open moonroof. Follow the steps to reposition or remove the front crossbar. You can remove the rear crossbar fasteners by unscrewing the assembly.



#### F142448

 Remove the crossbar thumbwheels at both sides of the front crossbar by turning them counterclockwise.

**Note:** If you cannot loosen the thumbwheel with your hand, loosen the fastener head. You can also use a small screwdriver or similar tool to loosen the thumbwheel by inserting the shaft between the two paddles of the thumbwheel and rotating it loose.

- 2. Remove the crossbar by sliding the ends off of the shoulder bolts in the side rails.
- 3. Move the crossbar to the new side rail position and slide the crossbar onto the shoulder bolt at that position.
- 4. Replace and tighten the thumbwheels at both sides of the crossbar by turning them clockwise until tight. You can use a small screwdriver or similar tool to tighten if necessary.

Make sure to check that the thumbwheels are tight each time you add or remove load from the roof rack, and periodically while traveling. Make sure that the load is secure before traveling.

#### **LOAD LIMIT**

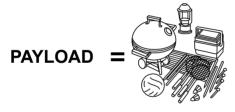
# Vehicle Loading - with and without a Trailer

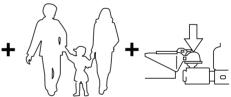
This section will guide you in the proper loading of your vehicle, trailer or both, to keep your loaded vehicle weight within its design rating capability, with or without a trailer. Properly loading your vehicle will provide maximum return of vehicle design performance. Before loading your

vehicle, familiarize yourself with the following terms for determining your vehicle's weight ratings, with or without a trailer, from the vehicle's Tire Label or Safety Compliance Certification Label:

**Base Curb Weight -** is the weight of the vehicle including a full tank of fuel and all standard equipment. It does not include passengers, cargo, or optional equipment.

**Vehicle Curb Weight -** is the weight of your new vehicle when you picked it up from your authorized dealer plus any aftermarket equipment.





E143816

**Payload** - is the combined weight of cargo and passengers that the vehicle is carrying. The maximum payload for your vehicle can be found on the Tire Label on the B-Pillar or the edge of the driver door (vehicles exported outside the US and Canada may not have a Tire Label). Look for **"THE** 

# COMBINED WEIGHT OF OCCUPANTS AND CARGO

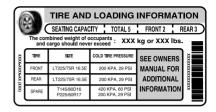
**SHOULD NEVER EXCEED XXX kg OR XXX lb."** for maximum payload. The payload listed on the Tire Label is the maximum payload for the vehicle as built by the assembly plant. If you install any aftermarket or

authorized-dealer installed equipment on the vehicle, you must subtract the weight of the equipment from the payload listed on the Tire Label in order to determine the new payload.

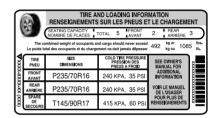
#### WARNING

The appropriate loading capacity of your vehicle can be limited either by volume capacity (how much space is available) or by payload capacity (how much weight the vehicle should carry). Once you have reached the maximum payload of your vehicle, do not add more cargo, even if there is space available. Overloading or improperly loading your vehicle can contribute to loss of vehicle control and vehicle rollover.

#### Example only:



E210944



E210945

CARGO = +

E143817

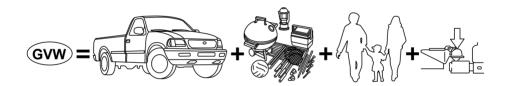
**Cargo Weight -** includes all weight added to the Base Curb Weight, including cargo and optional equipment. When towing, trailer tongue load or king pin weight is also part of cargo weight.

**GAW (Gross Axle Weight) -** is the total weight placed on each axle (front and rear) including vehicle curb weight and all payload.

**GAWR (Gross Axle Weight Rating) -** is the maximum allowable weight that can be carried by a single axle (front or rear). These numbers are shown on the Safety Compliance

Certification Label. The label shall be affixed to either the door hinge pillar, door-latch post, or the door edge that meets the door-latch post, next to the driver seating position. The total load on each axle must never exceed its Gross Axle Weight Rating.

**Note:** For trailer towing information refer to the RV and Trailer Towing Guide available at an authorized dealer.



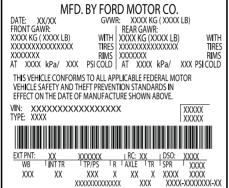
E143818

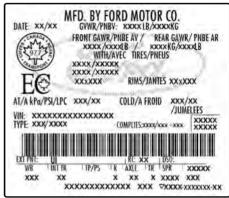
**GVW (Gross Vehicle Weight)** - is the Vehicle Curb Weight, plus cargo, plus passengers.

GVWR (Gross Vehicle Weight Rating) - is the maximum allowable weight of the fully loaded vehicle (including all options, equipment, passengers and cargo). It is shown on the

Safety Compliance Certification Label. The label shall be affixed to either the door hinge pillar, door-latch post, or the door edge that meets the door-latch post, next to the driver seating position. The Gross Vehicle Weight must never exceed the Gross Vehicle Weight Rating.

#### Example only:





E198828

#### **WARNING**

Exceeding the Safety
Compliance Certification
Label vehicle weight rating limits
could result in substandard
vehicle handling or performance,
engine, transmission and/or
structural damage, serious
damage to the vehicle, loss of
control and personal injury.



E143819

## **GCW (Gross Combined Weight)**

 is the Gross Vehicle Weight plus the weight of the fully loaded trailer

**GCWR (Gross Combined** Weight Rating) - is the maximum allowable weight of the vehicle and the loaded trailer, including all cargo and passengers, that the vehicle can handle without risking damage. (Important: The towing vehicle's braking system is rated for operation at Gross Vehicle Weight Rating, not at Gross Combined Weight Rating.) Separate functional brakes should be used for safe control of towed vehicles and for trailers where the Gross Combined Weight of the towing vehicle plus the trailer exceed the Gross Vehicle Weight Rating of the towing vehicle. **The Gross Combined Weight must** 

never exceed the Gross **Combined Weight Rating.** 

Maximum Loaded Trailer **Weight -** is the highest possible weight of a fully loaded trailer the vehicle can tow. It assumes a vehicle with mandatory options, driver and front passenger weight (150 pounds [68 kilograms] each), no cargo weight (internal or external) and a tongue load of 10–15% (conventional trailer) or king pin weight of 15–25% (fifth wheel trailer). Consult an authorized dealer (or the RV and Trailer Towing Guide available at an authorized dealer) for more detailed information.

Tongue Load or Fifth Wheel King Pin Weight - refers to the amount of the weight that a trailer pushes down on a trailer hitch.

**Examples:** For a 5000 pound (2268 kilogram) conventional trailer, multiply 5000 by 0.10 and 0.15 to obtain a proper tongue load range of 500 to 750 pounds (227 to 340 kilograms). For an 11500 pound (5216 kilogram) fifth wheel trailer, multiply by 0.15 and 0.25 to obtain a proper king pin load range of 1725 to 2875 pounds (782 to 1304 kilograms).

#### WARNINGS

Do not exceed the GVWR or the GAWR specified on the Safety Compliance Certification Label.

Do not use replacement tires with lower load carrying capacities than the original tires because they may lower the vehicle's GVWR and GAWR limitations. Replacement tires with a higher limit than the original tires do not increase the GVWR and GAWR limitations.

Exceeding any vehicle weight rating limitation could result in serious damage to the vehicle and/or personal injury.

Steps for determining the correct load limit:

- Locate the statement "The combined weight of occupants and cargo should never exceed XXX kg or XXX lb." on your vehicle's placard.
- Determine the combined weight of the driver and passengers that will be riding in your vehicle.
- Subtract the combined weight of the driver and passengers from XXX kg or XXX lb.
- 4. The resulting figure equals the available amount of cargo and luggage load capacity. For example, if the "XXX" amount equals 1,400 lb. and there will be five 150 lb. passengers in your vehicle, the amount of available cargo and luggage load capacity is 650 lb. (1400-750 (5 x 150) = 650 lb.).
- Determine the combined weight of luggage and cargo being loaded on the vehicle. That weight may not safely exceed the available cargo and luggage load capacity calculated in Step 4.
- If your vehicle will be towing a trailer, load from your trailer will be transferred to your vehicle. Consult this manual to determine how this reduces the available cargo and luggage load capacity of your vehicle.

The following gives you a few examples on how to calculate the available amount of cargo and luggage load capacity:

\*Suppose your vehicle has a 1400-pound (635-kilogram) cargo and luggage capacity. You decide to go golfing. Is there enough load capacity to carry you, four of your friends and all the golf bags? You and four friends average 220 pounds (99 kilograms) each and the golf bags weigh approximately 30 pounds (13.5 kilograms) each. The calculation would be: 1400 - $(5 \times 220) - (5 \times 30) = 1400 - 1100$  150 = 150 pounds. Yes. you have enough load capacity in your vehicle to transport four friends and your golf bags. In metric units, the calculation would be: 635 kilograms - (5 x 99 kilograms) - $(5 \times 13.5 \text{ kilograms}) = 635 - 495 -$ 67.5 = 72.5 kilograms.

\*Suppose your vehicle has a 1400-pound (635-kilogram) cargo and luggage capacity. You and one of your friends decide to pick up cement from the local home improvement store to finish that patio you have been planning for the past two years. Measuring the inside of the vehicle with the rear seat folded down, you have room for twelve 100-pound (45-kilogram) bags of cement. Do you have enough load capacity to transport the cement to your home? If you and your friend each weigh 220 pounds (99 kilograms), the calculation would be: 1400 - $(2 \times 220) - (12 \times 100) = 1400 - 440$ - 1200 = - 240 pounds. No. you do not have enough cargo capacity to carry that much weight. In metric units, the calculation would

# **Load Carrying**

be: 635 kilograms - (2 x 99 kilograms) - (12 x 45 kilograms) = 635 - 198 - 540 = -103 kilograms. You will need to reduce the load weight by at least 240 pounds (104 kilograms). If you remove three 100-pound (45-kilogram) cement bags, then the load calculation would be: 1400 - (2 x 220) - (9 x 100) = 1400 - 440 -900 = 60 pounds. Now you have the load capacity to transport the cement and vour friend home. In metric units. the calculation would be: 635 kilograms - (2 x 99 kilograms) - (9 x 45 kilograms) = 635 - 198 - 405 = 32 kilograms.

The above calculations also assume that the loads are positioned in your vehicle in a manner that does not overload the Front or the Rear Gross Axle Weight Rating specified for your vehicle on the Safety Compliance Certification Label. The label shall be affixed to either the door hinge pillar, door-latch post, or the door edge that meets the door-latch post, next to the driver seating position.

# Special Loading Instructions for Owners of Pick-up Trucks and Utility-type Vehicles

#### **WARNING**

Loaded vehicles may handle differently than unloaded vehicles. Extra precautions, such as slower speeds and increased stopping distance, should be taken when driving a heavily loaded vehicle.

Your vehicle can haul more cargo and people than most passenger cars. Depending upon the type and placement of the load, hauling cargo and people may raise the center of gravity of the vehicle.

#### **TOWING A TRAILER**

#### WARNINGS

Do not exceed the GVWR or the GAWR specified on the certification label.

Towing trailers beyond the maximum recommended gross trailer weight exceeds the limit of the vehicle and could result in engine damage, transmission damage, structural damage, loss of vehicle control, vehicle rollover and personal injury.

Your vehicle may have electrical items, such as fuses or relays, related to towing. See the **Fuses** chapter.

Your vehicle's load capacity designation is by weight, not by volume, so you cannot necessarily use all available space when loading a vehicle or trailer.

Towing a trailer places an extra load on your vehicle's engine, transmission, axle, brakes, tires and suspension. Inspect these components periodically during, and after, any towing operation.

## **Load Placement**

To help minimize how trailer movement affects your vehicle when driving:

- Load the heaviest items closest to the trailer floor.
- Load the heaviest items centered between the left and right side trailer tires.
- Load the heaviest items above the trailer axles or just slightly forward toward the trailer tongue. Do not allow the final trailer tongue weight to go above or below 10-15% of the loaded trailer weight.
- Select a tow bar with the correct rise or drop. When both the loaded vehicle and trailer are connected, the trailer frame should be level, or slightly angled down toward your vehicle, when viewed from the side.

When driving with a trailer or payload, a slight takeoff vibration or shudder may be present due to the increased payload weight. Additional information regarding proper trailer loading and setting your vehicle up for towing is located in another chapter of this manual. See **Load Limit** (page 172).

You can also find information in the **RV & Trailer Towing Guide** available at your authorized dealer, or online.

# **RV & Trailer Towing Guide Online**

Website http://www.fleet.ford.com/towing-guides/

#### TRAILER SWAY CONTROL (15

Equipped)

#### WARNING

Turning off trailer sway control increases the risk of loss of vehicle control, serious injury or death. Ford does not recommend disabling this feature except in situations where speed reduction may be detrimental (such as hill climbing), the driver has significant trailer towing experience, and can control trailer sway and maintain safe operation.

**Note:** This feature does not prevent trailer sway, but reduces it when it begins.

**Note:** This feature cannot stop all trailers from swaving.

**Note:** In some cases, if your vehicle speed is too high, the system may turn on multiple times, gradually reducing your vehicle speed.

The system applies the brakes to the individual wheels and reduces engine torque to aid vehicle stability. If the trailer begins to sway, the stability control warning lamp flashes and a message appears in the information display. See **Information Messages** (page 91). Slow your vehicle down, pull safely to the side of the road and check for correct load distribution.

You can switch this feature off in the information display. When you switch the ignition on, the system automatically turns on.

# RECOMMENDED TOWING WEIGHTS

**Note:** Do not exceed the trailer weight for your vehicle configuration listed in the chart below.

**Note:** Be sure to take into consideration trailer frontal area. Do not exceed 20 feet (1.86 meters²) if your vehicle is not equipped with a towing package or 30 feet (2.79 meters²) if your vehicle is equipped with a towing package.

**Note:** For high altitude operation, reduce the gross combined weight by 2% per 1000 feet (300 meters) starting at the 1000 foot (300 meter) elevation point.

**Note:** Certain states require electric trailer brakes for trailers over a specified weight. Be sure to check state regulations for this specified weight. The maximum trailer weights listed may be limited to this specified weight, as the vehicle's electrical system may not include the wiring connector needed to activate electric trailer brakes.

Your vehicle may tow a trailer provided the maximum trailer weight is less than or equal to the

maximum trailer weight listed for your vehicle configuration on the following chart.

Powertrain	Maximum GCWR	Maximum trailer weight¹
2.5L 2WD	5351 lb (2427 kg)	1500 lb (681 kg)
1.6L GTDI 2WD	5862 lb (2659 kg)	2000 lb (907 kg)
2.0L GTDI 2WD <sup>2</sup>	5957 lb (2702 kg)	2000 lb (907 kg)
2.0L GTDI 2WD <sup>3</sup>	7457 lb (3382 kg)	3500 lb (1588 kg)
1.6L GTDI 4WD	6005 lb (2724 kg)	2000 lb (907 kg)
2.0L GTDI 4WD <sup>2</sup>	6091 lb (2763 kg)	2000 lb (907 kg)
2.0L GTDI 4WD <sup>3</sup>	7591 lb (3443 kg)	3500 lb (1588 kg)

<sup>&</sup>lt;sup>1</sup>Calculated with SAE J2807 method.

<sup>&</sup>lt;sup>2</sup>Without trailer towing package.

<sup>&</sup>lt;sup>3</sup> With trailer towing package.

## **ESSENTIAL TOWING CHECKS**

Follow these guidelines for safe towing:

- Do not tow a trailer until you drive your vehicle at least 1000 miles (1600 kilometers).
- Consult your local motor vehicle laws for towing a trailer.
- See the instructions included with towing accessories for the proper installation and adjustment specifications.
- Service your vehicle more frequently if you tow a trailer. See your scheduled maintenance information.
- If you use a rental trailer, follow the instructions the rental agency gives you.

You can find information on load specification terms found on the tire label and Safety Compliance label as well as instructions on calculating your vehicle's load in the Load Carrying chapter. See **Load Limit** (page 172).

Remember to account for the trailer tongue weight as part of your vehicle load when calculating the total vehicle weight.

# **Hitches**

Do not use a hitch that either clamps onto the bumper or attaches to the axle.

Distribute the trailer load so 10-15% of the total trailer weight is on the tongue.

# **Weight-distributing Hitches**

#### WARNING

Do not adjust a weight-distributing hitch to any position where the rear bumper of the vehicle is higher than it was before attaching the trailer. Doing so will defeat the function of the weight-distributing hitch, which may cause unpredictable handling, and could result in serious personal injury.

When hooking-up a trailer using a weight-distributing hitch, always use the following procedure:

- Park the loaded vehicle, without the trailer, on a level surface.
- Measure the height to the top of your vehicle's front wheel opening on the fender. This is H1.
- Attach the loaded trailer to your vehicle without the weight-distributing bars connected.
- Measure the height to the top of your vehicle's front wheel opening on the fender a second time. This is H2.
- Install and adjust the tension in the weight-distributing bars so that the height of your vehicle's front wheel opening on the fender is approximately half the way down from H2, toward H1.

 Check that the trailer is level or slightly nose down toward your vehicle. If not, adjust the ball height accordingly and repeat Steps 2-6.

When the trailer is level or slightly nose down toward the vehicle:

- Lock the bar tension adjuster in place.
- Check that the trailer tongue securely attaches and locks onto the hitch.
- Install safety chains, lighting, and trailer brake controls as required by law or the trailer manufacturer.

# **Safety Chains**

**Note:** *Never attach safety chains to the bumper.* 

Always connect the safety chains to the hook retainers of your vehicle hitch.

To connect the trailer's safety chains, cross them under the trailer tongue and allow enough slack for turning tight corners. Do not allow the chains to drag on the ground.

## **Trailer Brakes**

#### WARNING

Do not connect a trailer's hydraulic brake system directly to your vehicle's brake system. Your vehicle may not have enough braking power and your chances of having a collision greatly increase.

Electric brakes and manual, automatic or surge-type trailer brakes are safe if you install them properly and adjust them to the manufacturer's specifications. The trailer brakes must meet local and federal regulations.

The rating for the tow vehicle's braking system operation is at the gross vehicle weight rating, not the gross combined weight rating.

Separate functioning brake systems are required for safe control of towed vehicles and trailers weighing more than 1500 pounds (680 kilograms) when loaded.

## **Trailer Lamps**

#### **WARNING**

Never connect any trailer lamp wiring to the vehicle's tail lamp wiring; this may damage the electrical system resulting in fire. Contact your authorized dealer as soon as possible for assistance in proper trailer tow wiring installation. Additional electrical equipment may be required.

Trailer lamps are required on most towed vehicles. Make sure all running lights, brake lights, turn signals and hazard lights are working.

# **Before Towing a Trailer**

Practice turning, stopping and backing up to get the feel of your vehicle-trailer combination before starting on a trip. When turning, make wider turns so the trailer wheels clear curbs and other obstacles.

# When Towing a Trailer

- Do not drive faster than 70 mph (113 km/h) during the first 500 miles (800 kilometers).
- Do not make full-throttle starts.
- Check your hitch, electrical connections and trailer wheel lug nuts thoroughly after you have traveled 50 miles (80 kilometers).

- When stopped in congested or heavy traffic during hot weather, place the gearshift in position P to aid engine and transmission cooling and to help A/C performance.
- Turn off the speed control with heavy loads or in hilly terrain.
   The speed control may turn off automatically when you are towing on long, steep grades.
- Shift to a lower gear when driving down a long or steep hill. Do not apply the brakes continuously, as they may overheat and become less effective
- If your transmission is equipped with a Grade Assist or Tow/Haul feature, use this feature when towing. This provides engine braking and helps eliminate excessive transmission shifting for optimum fuel economy and transmission cooling.
- Allow more distance for stopping with a trailer attached. Anticipate stops and brake gradually.
- Avoid parking on a grade. However, if you must park on a grade:
- Turn the steering wheel to point your vehicle tires away from traffic flow.
- 2. Set your vehicle parking brake.
- 3. Place the automatic transmission in position **P**.

 Place wheel chocks in front and back of the trailer wheels. (Chocks not included with vehicle.)

# Launching or Retrieving a Boat or Personal Watercraft (PWC)

**Note:** Disconnect the wiring to the trailer **before** backing the trailer into the water.

**Note:** Reconnect the wiring to the trailer **after** removing the trailer from the water.

When backing down a ramp during boat launching or retrieval:

- Do not allow the static water level to rise above the bottom edge of the rear bumper.
- Do not allow waves to break higher than 6 inches (15 centimeters) above the bottom edge of the rear bumper.

Exceeding these limits may allow water to enter vehicle components:

- Causing internal damage to the components.
- Affecting driveability, emissions, and reliability.

Replace the rear axle lubricant anytime the rear axle has been submerged in water. Water may have contaminated the rear axle lubricant, which is not normally checked or changed unless a leak is suspected or other axle repair is required.

#### **TOWING POINTS**

Due to local market requirements in some countries, some vehicles may be equipped with a recovery hook.

## **Recovery Hook Location**

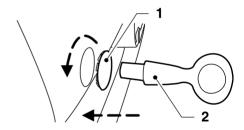
If your vehicle is equipped with a screw-in recovery hook, it is located in the luggage compartment under the floor cover.

If your vehicle is not equipped with a recovery hook, you can purchase one from your dealer.

## **Installing the Recovery Hook**

There is an installation point for the recovery hook located behind the fascia.

**Note:** The screw-in recovery hook has a left-hand thread. Turn it counterclockwise to install it. Make sure that the recovery hook is fully tightened.



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Insert a suitable object to pry open the cover (1). Use the recessed (notched) portion of the cover. Screw in the recovery hook (2).

# Towing the Vehicle on Four Wheels

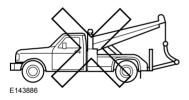
Switch the ignition to the on position. Failure to do so results in steering lock and non-function of indicator and brake lamps.

Braking and steering efforts are high if the engine is not running. Maintain increased stopping distances.

#### **TRANSPORTING THE VEHICLE**







If you need to have your vehicle towed, contact a professional towing service or, if you are a member of a roadside assistance program, your roadside assistance service provider.

We recommend the use of a wheel lift and dollies or flatbed equipment to tow your vehicle. Do not tow with a slingbelt. Ford Motor Company has not approved a slingbelt towing procedure. Vehicle damage may occur if towed incorrectly, or by any other means.

Ford Motor Company produces a towing manual for all authorized tow truck operators. Have your tow truck operator refer to this manual for proper hook-up and towing procedures for your vehicle.

It is acceptable to have your front-wheel drive vehicle towed from the front if using proper wheel lift equipment to raise the front wheels off the ground. When towing in this manner, the rear wheels can remain on the ground.

Front-wheel drive vehicles must have the front wheels placed on a tow dolly when towing your vehicle from the rear using wheel lift equipment. This prevents damage to the transmission.

Towing a four-wheel drive vehicle requires that all wheels be off the ground, such as using a wheel lift and dollies or flatbed equipment. This prevents damage to the transmission, four-wheel drive system and vehicle.

# TOWING THE VEHICLE ON FOUR WHEELS

# **Emergency Towing**

If your vehicle becomes inoperable (without access to wheel dollies, car-hauling trailer, or flatbed transport vehicle), it can be flat-towed (all wheels on the ground, regardless of the powertrain and transmission configuration) under the following conditions:

- Your vehicle is facing forward for towing in a forward direction.
- Place the transmission in position N. If you cannot move the transmission into N, you may need to override it. See Transmission (page 138).
- Maximum speed is 35 mph (56 km/h).
- Maximum distance is 50 mi (80 km).

#### WARNING

If your vehicle has a steering wheel lock make sure the ignition is in the accessory or on position when being towed.

#### **Recreational Towing**

Note: Put your climate control system in recirculated air mode to prevent exhaust fumes from entering the vehicle. See Climate Control (page 101).

Follow these guidelines if you have a need for recreational (RV) towing. An example of recreational towing would be towing vour vehicle behind a motorhome. We designed these guidelines to prevent damage to your transmission.

Front-wheel drive vehicles **CANNOT** be flat-towed (all wheels on the ground) as vehicle or transmission damage may occur. You must place the front wheels on a two-wheel tow dolly. If you are using a tow dolly, follow the instructions specified by the equipment provider.

Four-wheel drive vehicles **CANNOT** be flat-towed (all wheels on the ground), as vehicle or transmission damage may occur. It is recommended to tow your vehicle with all four (4) wheels off the ground such as when using a car-hauling trailer. Otherwise, vou cannot recreational tow your vehicle.

# **Driving Hints**

#### **BREAKING-IN**

You need to break in new tires for approximately 300 miles (480 kilometers). During this time, your vehicle may exhibit some unusual driving characteristics.

Avoid driving too fast during the first 1000 miles (1600 kilometers). Vary your speed frequently and change up through the gears early. Do not labor the engine.

Do not tow during the first 1000 miles (1600 kilometers).

#### **ECONOMICAL DRIVING**

Your fuel economy is affected by several things, such as how you drive, the conditions you drive under, and how you maintain your vehicle.

You may improve your fuel economy by keeping these things in mind:

- Accelerate and slow down in a smooth, moderate fashion.
- Drive at steady speeds without stopping.
- Anticipate stops; slowing down may eliminate the need to stop.
- Combine errands and minimize stop-and-go driving.
- Close the windows for high-speed driving.
- Drive at reasonable speeds (traveling at 55 mph [88 km/h] uses 15% less fuel than traveling at 65 mph [105 km/h]).
- Keep the tires properly inflated and use only the recommended size.
- Use the recommended engine oil.
- Perform all regularly scheduled maintenance.

Avoid these actions; they reduce your fuel economy:

- Sudden accelerations or hard accelerations.
- · Revving the engine before turning it off.
- Idle for periods longer than one minute.
- Warm up your vehicle on cold mornings.
- Use the air conditioner or front defroster
- · Use the speed control in hilly terrain.
- Rest your foot on the brake pedal while driving.
- Drive a heavily loaded vehicle or tow a trailer
- Carry unnecessary weight (approximately 1 mpg [0.4 km/L] is lost for every 400 lb [180 kilogram] of weight carried).
- Driving with the wheels out of alignment.

#### Conditions

- Heavily loading a vehicle or towing a trailer may reduce fuel economy at any speed.
- Adding certain accessories to your vehicle (for example bug deflectors, rollbars, light bars, running boards, ski racks or luggage racks) may reduce fuel economy.
- To maximize the fuel economy, drive with the tonneau cover installed (if equipped).
- Using fuel blended with alcohol may lower fuel economy.
- Fuel economy may decrease with lower temperatures during the first 8–10 miles (12–16 kilometers) of driving.
- Driving on flat terrain offers improved fuel economy as compared to driving on hilly terrain.

# **Driving Hints**

- Transmissions give their best fuel economy when operated in the top cruise gear and with steady pressure on the gas pedal.
- Four-wheel-drive operation (if equipped) is less fuel efficient than two-wheel-drive operation.
- Close the windows for high-speed driving.

#### DRIVING THROUGH WATER

#### WARNING



Do not drive through flowing or deep water as you may lose control of your vehicle

**Note:** Driving through standing water can cause vehicle damage.

Note: Engine damage can occur if water enters the air filter.

Before driving through standing water. check the depth. Never drive through water that is higher than the bottom of the front rocker area of your vehicle.



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When driving through standing water, drive very slowly and do not stop your vehicle. Your brake performance and traction may be limited. After driving through water and as soon as it is safe to do so:

- Lightly press the brake pedal to dry the brakes and to check that they work.
- Check that the horn works.
- Check that the exterior lights work.
- Turn the steering wheel to check that the steering power assist works.

#### **FLOOR MATS**

#### WARNINGS

Always use floor mats that are designed to fit the foot well of your vehicle. Only use floor mats that

leave the pedal area unobstructed. Only use floor mats that are firmly secured to retention posts so that they cannot slip out of position and interfere with the pedals or impair safe operation of your vehicle in other ways.



Pedals that cannot move freely can cause loss of vehicle control and increase the risk of serious personal

injury.

Always make sure that the floor mats are properly attached to the retention posts in the carpet that are supplied with your vehicle. Floor mats must be properly secured to both retention posts to make sure mats do not shift out of position.

Never place floor mats or any other

covering in the vehicle foot well that cannot be properly secured to prevent them from moving and interfering with the pedals or the ability to control the

vehicle.

Never place floor mats or any other covering on top of already installed floor mats. Floor mats should always

rest on top of vehicle carpeting surface and not another floor mat or other covering. Additional floor mats or any other covering will reduce the pedal clearance and potentially interfere with pedal operation.

# **Driving Hints**

#### **WARNINGS**

Check attachment of floor mats on a regular basis. Always properly reinstall and secure floor mats that have been removed for cleaning or replacement.

Always make sure that objects cannot fall into the driver foot well while the vehicle is moving. Objects that are loose can become trapped under the pedals causing a loss of vehicle control.

Failure to properly follow floor mat installation or attachment instructions can potentially cause interference with pedal operation causing a loss of vehicle control.



To install floor mats, position the floor mat so that the eyelet is over the retention post and press down to lock in.

To remove the floor mat, reverse the installation procedure.

#### **ROADSIDE ASSISTANCE**

## Vehicles Sold in the United States: Getting Roadside Assistance

To fully assist you should you have a vehicle concern, Ford Motor Company offers a complimentary roadside assistance program. This program is separate from the New Vehicle Limited Warranty. The service is available:

- 24 hours a day, seven days a week.
- For the coverage period listed on the Roadside Assistance Card included in your Owner's Manual portfolio.

#### Roadside Assistance covers:

- A flat tire change with a good spare, if provided with the vehicle (except vehicles supplied with a tire inflation kit).
- Battery jump start.
- Lock-out assistance (key replacement cost is the customer's responsibility).
- Fuel delivery independent service contractors, if not prohibited by state, local or municipal law, shall deliver up to 2 gal (7.6 L) of gasoline or 5 gal (18.9 L) of diesel fuel to a disabled vehicle. Roadside Assistance limits fuel delivery service to two no-charge occurrences within a 12-month period.
- Winch out available within 100 ft (30.5 m) of a paved or county maintained road, no recoveries.
- Towing independent service contractors, if not prohibited by state, local or municipal law, shall tow Ford eligible vehicles to an authorized dealer within 35 mi (56 km) of the disablement location or to the nearest

authorized dealer. If a member requests a tow to an authorized dealer that is more than 35 mi (56 km) from the disablement location, the member shall be responsible for any mileage costs in excess of 35 mi (56 km).

Roadside Assistance includes up to \$200 for a towed trailer if the disabled eligible vehicle requires service at the nearest authorized dealer. If the towing vehicle is operational but the trailer is not, then the trailer does not qualify for any roadside services.

## Vehicles Sold in the United States: Using Roadside Assistance

Complete the roadside assistance identification card and place it in your wallet for quick reference. This card is in the owner's information portfolio in the glove compartment.

United States Ford vehicle customers who require Roadside Assistance, call 1-800-241-3673.

If you need to arrange roadside assistance for yourself, Ford Motor Company reimburses a reasonable amount for towing to the nearest dealership within 35 mi (56 km). To obtain reimbursement information, United States Ford vehicle customers call 1-800-241-3673. Customers need to submit their original receipts.

# Vehicles Sold in Canada: Getting Roadside Assistance

Canadian customers who require roadside assistance. call 1-800-665-2006.

# Vehicles Sold in Canada: Using Roadside Assistance

For your convenience, you may complete the roadside assistance identification card found in the centerfold of your warranty guide and retain for future reference.

Canadian roadside coverage and benefits may differ from the U.S. coverage. If you require more information, please refer to the coverage section of your warranty guide, call us in Canada at 1-800-665-2006, or visit our website at www.ford.ca.

Sykes Assistance Services Corporation administers the Roadside Assistance program. You must receive covered services in Canada or the continental United States. Coverage extends to vehicles that use public, non-seasonal, annually traveled roadways. Roadside Assistance coverage does not extend to vehicles involved in cross-country driving, logging, autocross and any other form of off-road use. Well maintained roads and surfaces help ensure safe travel for the supplier, and allow their representatives to perform service as per the standard operating procedures.

#### In Remote Locations

If our supplier cannot take your vehicle by road to the nearest authorized dealership, transportation by rail or water may be necessary. The program covers a tow to the dock or rail terminal and also to the dealership at the end of the trip.

For rail or water transportation, however, contact your authorized dealer to confirm if you are eligible for additional coverage before you authorize or pay for the service.

Call Ford Roadside Assistance at 1-800-665-2006 for additional information.

# **HAZARDWARNINGFLASHERS**

**Note:** If used when the vehicle is not running, the battery will lose charge. There may be insufficient power to restart your vehicle.



The hazard warning button is located on the instrument panel. Use it when your vehicle is

creating a safety hazard for other motorists.

- Press the button to turn on the hazard warning function, and the front and rear direction indicators will flash.
- Press the button again to turn them off.

## **FUEL SHUTOFF**

#### **WARNING**



Failure to inspect and, if necessary, repair fuel leaks after a collision may increase the risk of fire and serious

injury. Ford Motor Company recommends that the fuel system be inspected by an authorized dealer after any collision.

In the event of a moderate to severe collision, this vehicle includes a fuel pump shutoff feature that stops the flow of fuel to the engine. Not every impact will cause a shutoff.

Should your vehicle shut off after a collision, you may restart your vehicle. For vehicles equipped with a key system:

- 1. Switch off the ignition.
- 2. Switch on the ignition.
- 3. Repeat Steps 1 and 2 to re-enable the fuel pump.

For vehicles equipped with a push button start system:

- Press the **START/STOP** button to switch off the ignition.
- Press the brake pedal and press the START/STOP button to switch on the ignition.

- 3. Remove your foot from the brake pedal and press the **START/STOP** button to switch off the ignition.
- 4. You can either attempt to start the engine by pressing the brake pedal and the **START/STOP** button, or switch on the ignition only by pressing the **START/STOP** button without pressing the brake pedal. Both ways re-enable the fuel system.

**Note:** When you try to restart your vehicle after a fuel shutoff, the vehicle makes sure that various systems are safe to restart. Once your vehicle determines that the systems are safe, then the vehicle will allow vou to restart.

**Note:** In the event that your vehicle does not restart after your third attempt, contact an authorized dealer.

### **JUMP STARTING THE VEHICLE**

#### **WARNINGS**

The gases around the battery can explode if exposed to flames, sparks, or lit cigarettes. An explosion could result in personal injury or vehicle damage.



Batteries contain sulfuric acid which can burn skin, eves and clothing, if contacted.



Use only an adequate-sized cable with insulated clamps.

# **Preparing Your Vehicle**

**Note:** Do not attempt to push-start your automatic transmission vehicle. Automatic transmissions do not have push-start capability. Attempting to push-start a vehicle with an automatic transmission may cause transmission damage.

**Note:** Use only a 12-volt supply to start your vehicle

**Note:** Do not disconnect the battery of the disabled vehicle as this could damage the vehicle's electrical system.

Park the booster vehicle close to the hood of the disabled vehicle, making sure the two vehicles do not touch. Turn all accessories off.

## **Connecting the Jumper Cables**

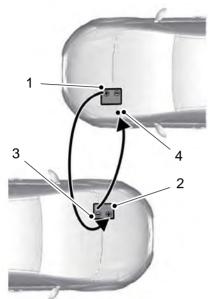
#### WARNING

Do not attach the cables to fuel lines.



engine rocker covers, the intake manifold or electrical components as grounding points. Stay clear of moving parts. To avoid reverse polarity connections, make sure that you correctly identify the positive (+) and negative (-) terminals on both the disabled and booster vehicles before connecting the cables. Battery positions may vary.

**Note:** In the illustration, the bottom vehicle represents the booster vehicle.



F142664

- 1. Connect the positive (+) jumper cable to the positive (+) terminal of the discharged battery.
- 2. Connect the other end of the positive (+) cable to the positive (+) terminal of the assisting battery.
- 3. Connect the negative (-) cable to the negative (-) terminal of the assisting battery.



E152134

4. Make the final connection of the negative (-) cable to an exposed metal part of the stalled vehicle's engine, or connect the negative (-) cable to the ground connection point, if available.

#### WARNING

Do not connect the end of the second cable to the negative (-) terminal of the battery to be jumped.

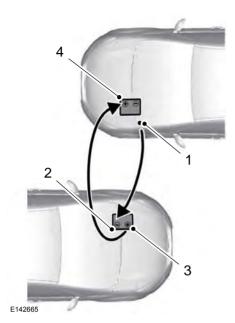
A spark may cause an explosion of the gases that surround the battery.

# Jump Starting

- Start the engine of the booster vehicle and rev the engine moderately, or press the accelerator gently to keep your engine speed between 2000 and 3000 rpms, as shown in your tachometer.
- 2. Start the engine of the disabled vehicle.
- 3. After starting the disabled vehicle, run both vehicle engines for an additional three minutes before disconnecting the iumper cables.

# **Removing the Jumper Cables**

Remove the jumper cables in the reverse order that they were connected.



- Remove the jumper cable from the ground metal surface or connecting point, if available.
- Remove the jumper cable on the negative (-) terminal of the booster vehicle's battery.
- 3. Remove the jumper cable from the positive (+) terminal of the booster vehicle's battery.
- 4. Remove the jumper cable from the positive (+) terminal of the disabled vehicle's battery.

After starting your disabled vehicle and removing the jumper cables, allow your vehicle to idle for several minutes so the battery can recharge.

#### POST-CRASH ALERT SYSTEM

The system flashes the direction indicators and sounds the horn (intermittently) in the event of a serious impact that deploys an airbag (front, side, side curtain or Safety Canopy) or the safety belt pretensioners.

The horn and indicators will turn off when:

- · You press the hazard control button.
- You press the panic button on the remote entry transmitter (if equipped).
- · Your vehicle runs out of power.

# GETTING THE SERVICES YOU NEED

Warranty repairs to your vehicle must be performed by an authorized dealer. While any authorized dealer handling your vehicle line will provide warranty service, we recommend you return to your selling authorized dealer who wants to ensure your continued satisfaction.

Please note that certain warranty repairs require special training and equipment, so not all authorized dealers are authorized to perform all warranty repairs. This means that, depending on the warranty repair needed, you may have to take your vehicle to another authorized dealer.

A reasonable time must be allowed to perform a repair after taking your vehicle to the authorized dealer. Repairs will be made using Ford or Motorcraft® parts, or remanufactured or other parts that are authorized by Ford.

## **Away From Home**

If you are away from home when your vehicle needs service, contact the Ford Customer Relationship Center or use the online resources listed below to find the nearest authorized dealer.

In the United States:

#### **Mailing address**

Ford Motor Company Customer Relationship Center P.O. Box 6248 Dearborn, MI 48121

#### **Telephone**

1-800-392-3673 (FORD) (TDD for the hearing impaired: 1-800-232-5952)

#### Online

Additional information and resources are available online at www.fordowner.com

These are some of the items that can be found online:

- U.S. dealer locator by Dealer Name, City/State or Zip Code.
- Owner Manuals.
- Maintenance Schedules.
- Recalls.
- Ford Extended Service Plans.
- Ford Genuine Accessories.
- Service specials and promotions.

In Canada:

#### **Mailing address**

Customer Relationship Centre Ford Motor Company of Canada, Limited P.O. Box 2000 Oakville. Ontario L6K OC8

#### Telephone

1-800-565-3673 (FORD)

#### Online

www.ford.ca

#### Twitter

@FordServiceCA (English Canada) @FordServiceQC (Quebec)

#### **Additional Assistance**

If you have questions or concerns, or are unsatisfied with the service you are receiving, follow these steps:

- Contact your Sales Representative or Service Advisor at your selling/servicing authorized dealer.
- If your inquiry or concern remains unresolved, contact the Sales Manager, Service Manager or Customer Relations Manager.
- If you require assistance or clarification on Ford Motor Company policies, please contact the Ford Customer Relationship Center.

In order to help us serve you better, please have the following information available when contacting a Customer Relationship Center:

- Vehicle Identification Number.
- Your telephone number (home and business).
- The name of the authorized dealer and city where located.
- The vehicle's current odometer reading.

In some states, you must directly notify Ford in writing before pursuing remedies under your state's warranty laws. Ford is also allowed a final repair attempt in some states.

In the United States, a warranty dispute must be submitted to the BBB AUTO LINE before taking action under the Magnuson-Moss Warranty Act, or to the extent allowed by state law, before pursuing replacement or repurchase remedies provided by certain state laws. This dispute handling procedure is not required prior to enforcing state created rights or other rights which are independent of the Magnuson-Moss Warranty Act or state replacement or repurchase laws.

# IN CALIFORNIA (U.S. ONLY)

California Civil Code Section 1793.2(d) requires that, if a manufacturer or its representative is unable to repair a motor vehicle to conform to the vehicle's applicable express warranty after a reasonable number of attempts, the manufacturer shall be required to either replace the vehicle with one substantially identical or repurchase the vehicle and reimburse the buyer in an amount equal to the actual price paid or payable by the consumer (less a reasonable allowance for consumer use). The consumer has the right to choose whether to receive a refund or replacement vehicle.

California Civil Code Section 1793.22(b) presumes that the manufacturer has had a reasonable number of attempts to conform the vehicle to its applicable express warranties if, within the first 18 months of ownership of a new vehicle or the first 18000 miles (29 000 km), whichever occurs first:

- Two or more repair attempts are made on the same non-conformity likely to cause death or serious bodily injury OR
- 2. Four or more repair attempts are made on the same nonconformity (a defect or condition that substantially impairs the use, value or safety of the vehicle) OR
- 3. The vehicle is out of service for repair of nonconformities for a total of more than 30 calendar days (not necessarily all at one time).

In the case of 1 or 2 above, the consumer must also notify the manufacturer of the need for the repair of the nonconformity at the following address:

Ford Motor Company 16800 Executive Plaza Drive Mail Drop 3NE-B Dearborn, MI 48126

You are required to submit your warranty dispute to BBB AUTO LINE before asserting in court any rights or remedies conferred by California Civil Code Section 1793.22(b). You are also required to use BBB AUTO LINE before exercising rights or seeking remedies created by the Federal Magnuson-Moss Warranty Act, 15 U.S.C. sec. 2301 et seq. If you choose to seek redress by pursuing rights and remedies not created by California Civil Code Section 1793.22(b) or the Magnuson-Moss Warranty Act, resort to BBB AUTO LINE is not required by those statutes.

# THE BETTER BUSINESS BUREAU (BBB) AUTO LINE PROGRAM (U.S. ONLY)

Your satisfaction is important to Ford Motor Company and to your dealer. If a warranty concern has not been resolved using the three-step procedure outlined earlier in this chapter in the Getting the Services you need section, you may be eligible to participate in the BBB AUTO LINE program.

The BBB AUTO LINE program consists of two parts – mediation and arbitration. During mediation, a representative of the BBB will contact both you and Ford Motor Company to explore options for settlement of the claim. If an agreement is not reached during mediation or you do not want to participate in mediation, and if your claim is eligible, you may participate in the arbitration process. An arbitration hearing will be scheduled so that you can present your case in an informal setting before an impartial person. The arbitrator will consider the testimony provided and make a decision after the hearing.

Disputes submitted to the BBB AUTO LINE program are usually decided within forty days after you file your claim with the BBB. You are not bound by the decision, and may reject the decision and proceed to court where all findings of the BBB Auto Line dispute, and decision, are admissible in the court action. Should you choose to accept the BBB AUTO LINE decision, Ford is then bound by the decision, and must comply with the decision within 30 days of receipt of your acceptance letter.

BBB AUTO LINE Application: Using the information provided below, please call or write to request a program application. You will be asked for your name and address, general information about your new vehicle, information about your warranty concerns, and any steps you have

already taken to try to resolve them. A Customer Claim Form will be mailed that will need to be completed, signed and returned to the BBB along with proof of ownership. Upon receipt, the BBB will review the claim for eligibility under the Program Summary Guidelines.

# You can get more information by calling BBB AUTO LINE at 1-800-955-5100. or writing to:

#### BBB AUTO LINE 3033 Wilson Boulevard, Suite 600 Arlington, Virginia 22201

BBB AUTO LINE applications can also be requested by calling the Ford Motor Company Customer Relationship Center at 1-800-392-3673.

**Note:** Ford Motor Company reserves the right to change eligibility limitations, modify procedures, or to discontinue this process at any time without notice and without obligation.

# UTILIZING THE MEDIATION/ARBITRATION PROGRAM (CANADA ONLY)

For vehicles delivered to authorized Canadian dealers. In those cases where you continue to feel that the efforts by Ford of Canada and the authorized dealer to resolve a factory-related vehicle service concern have been unsatisfactory, Ford of Canada participates in an impartial third party mediation/arbitration program administered by the Canadian Motor Vehicle Arbitration Plan (CAMVAP).

The CAMVAP program is a straight forward and relatively speedy alternative to resolve a disagreement when all other efforts to produce a settlement have failed. This procedure is without cost to you and is designed to eliminate the need for lengthy and expensive legal proceedings.

In the CAMVAP program, impartial third-party arbitrators conduct hearings at mutually convenient times and places in an informal environment. These impartial arbitrators review the positions of the parties, make decisions and, when appropriate, render awards to resolve disputes. CAMVAP decisions are fast, fair, and final as the arbitrator's award is binding on both you and Ford of Canada.

CAMVAP services are available in all Canadian territories and provinces. For more information, without charge or obligation, call your CAMVAP Provincial Administrator directly at 1-800-207-0685 or visit www.camvap.ca.

# GETTING ASSISTANCE OUTSIDE THE U.S. AND CANADA

Before exporting your vehicle to a foreign country, contact the appropriate foreign embassy or consulate. These officials can inform you of local vehicle registration regulations and where to find unleaded fuel.

If you cannot find unleaded fuel or can only get fuel with an anti-knock index lower than is recommended for your vehicle, contact our Customer Relationship Center.

The use of leaded fuel in your vehicle without proper conversion may damage the effectiveness of your emission control system and may cause engine knocking or serious engine damage. Ford Motor Company or Ford of Canada is not responsible for any damage caused by use of improper fuel. Using leaded fuel may also result in difficulty importing your vehicle back into the United States.

If your vehicle must be serviced while you are traveling or living in Asia-Pacific Region, Sub-Saharan Africa, U.S. Virgin Islands, Central America, the Caribbean, and Israel, contact the nearest authorized dealer. If the authorized dealer cannot help you, contact:

FORD MOTOR COMPANY Customer Relationship Center 1555 Fairlane Drive Fairlane Business Park #3 Allen Park, Michigan 48101 U.S.A.

Telephone: (313) 594-4857 Fax: (313) 390-0804 Email: expcac@ford.com

For customers in Guam, the Commonwealth of the Northern Mariana Islands (CNMI), America Samoa, and the U.S. Virgin Islands, please feel free to call our Toll-Free Number: (800) 841-FORD (3673).

If your vehicle must be serviced while you are traveling or living in Puerto Rico, contact the nearest authorized dealer. If the authorized dealer cannot help you, contact:

FORD MOTOR COMPANY Customer Relationship Center 1555 Fairlane Drive Fairlane Business Park #3 Allen Park, Michigan 48101 U.S.A. Telephone: (800) 841-FORD (3673) FAX: (313) 390-0804 Email: prcac@ford.com www.ford.com.pr

If your vehicle must be serviced while you are traveling or living in the Middle East, contact the nearest authorized dealer. If the authorized dealer cannot help you, contact:

FORD MOTOR COMPANY Customer Relationship Center 1555 Fairlane Drive Fairlane Business Park #3 Allen Park, Michigan 48101 U.S.A

Ford: 80004443673 Lincoln: 80004441067

If calling from the UAE: 80004441066
If calling from the Kingdom of Saudi

**Arabia:** 8008443673

If calling from Kuwait: 22280384

FAX: +971 4 3327266 Email: menacac@ford.com www.me.ford.com

If you buy your vehicle in North America and then relocate to any of the above locations, register your vehicle identification number (VIN) and new address with Ford Motor Company Export Operations & Global Growth Initiatives by emailing expcac@ford.com.

If you are in another foreign country, contact the nearest authorized dealer. In the event your inquiry is unresolved, communicate your concern with the dealership's Sales Manager, Service Manager or Customer Relations Manager. If you require additional assistance or clarification, please contact the respective Customer Relationship Center as previously listed.

Customers in the U.S. should call 1-800-392-3673.

# ORDERING ADDITIONAL OWNER'S LITERATURE

To order the publications in this portfolio, contact Helm, Incorporated at:

HELM, INCORPORATED 47911 Halyard Drive Plymouth, Michigan 48170 Attention: Customer Service Or to order a free publication catalog, call toll free: 1-800-782-4356

Monday-Friday 8:00 a.m. - 6:00 p.m. EST

Helm, Incorporated can also be reached by their website:

www.helminc.com

(Items in this catalog may be purchased by credit card, check or money order.)

# Obtaining a French Owner's Manual

French Owner's Manual can be obtained from your authorized dealer or by contacting Helm, Incorporated using the contact information listed previously in this section

# REPORTING SAFETY DEFECTS (U.S. ONLY)



E142557

If you believe that your vehicle has a defect which could cause a crash or could cause injury or death, you should immediately inform the National Highway Traffic Safety Administration (NHTSA) in addition to notifying Ford Motor Company.

If NHTSA receives similar complaints, it may open an investigation, and if it finds that a safety defect exists in a group of vehicles, it may order a recall and remedy campaign. However, NHTSA cannot become involved in individual problems between you, your dealer, or Ford Motor Company.

To contact NHTSA, you may call the Vehicle Safety Hotline toll-free at 1-888-327-4236 (TTY: 1-800-424-9153); go to http://www.safercar.gov; or write to:

Administrator

1200 New Jersey Avenue, Southeast

Washington, D.C. 20590

You can also obtain other information about motor vehicle safety from http://www.safercar.gov.

# REPORTING SAFETY DEFECTS (CANADA ONLY)

If you believe that your vehicle has a defect which could cause a crash or could cause injury or death, you should immediately inform Transport Canada.

Transport Canada Contact Information		
Website	http://www.tc.gc.ca/eng/roadsafety/menu.htm	
Phone	1-800-333-0510	

#### FUSES

#### **FUSE SPECIFICATION CHART**

#### **Pre-Fuse Box**

The pre-fuse box is in the engine compartment attached to the positive battery post. This box contains several high current fuses. If you need to replace one of these high current fuses, see an authorized dealer.

### **Power Distribution Box**

#### WARNINGS



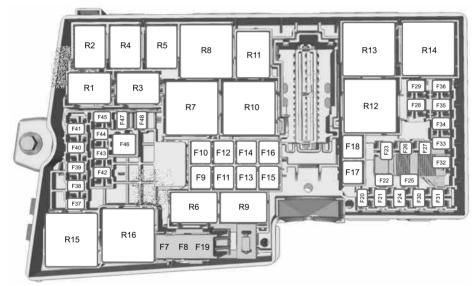
Always disconnect the battery before servicing high current fuses.

#### WARNINGS

To reduce risk of electrical shock, always replace the cover to the power distribution box before reconnecting the battery or refilling fluid reservoirs

The power distribution box is in the engine compartment. It has high-current fuses that protect your vehicle's main electrical systems from overloads.

You will need to reset some features if you disconnect and reconnect the battery. See Changing the 12V Battery (page 222).



Lift the release lever at the rear of the cover to remove it.

Fuse or relay number	Fuse amp rating	Protected components
F7	50A**	Anti-lock brake system and electronic stability program pump.
F8	30A**	Electronic stability program valve.
F9	_	Not used.
F10	40A**	Heater blower motor.
FII	_	Not used.
F12	30A**	Powertrain control module relay.
F13	30A**	Starter relay.
F14	25A**	Rear power window (without door control unit).
F15	20A**	Front cigar lighter or power outlet.
F16	25A**	Front power window (without door control unit).
F17	20A**	Rear power outlet.
F18	20A**	Center power outlet.
F19	5A*	Anti-lock brake system and electronic stability program 15 feed.
F20	15A*	Horn.
F21	5A*	Stop light switch.
F22	15A*	Battery monitor system.
F23	5A*	Relay coils.
F24	5A*	Light switch module.
F25	10A*	Power exterior mirror (without door control unit).
F26	5A*	Keep-alive power
F27	15A*	Air conditioner clutch.
F28	10A*	Vehicle power - fuel injector (2.5L engine).
F29	25A*	Rear window defroster.

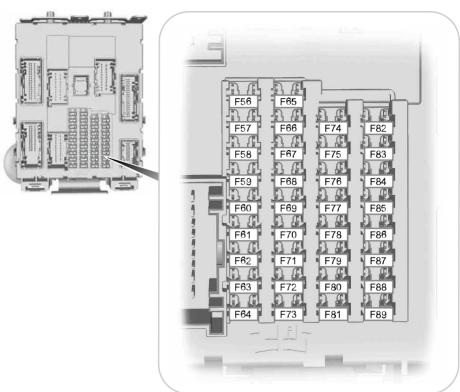
Fuse or relay number	Fuse amp rating	Protected components
F30	15A*	Heated mirror (less door control unit). Heated wiper park.
F31	_	Not used.
F32	15A*	Vehicle power.
F33	10A*	Vehicle power 2.
F34	10A*	Vehicle power 3.
F35	15A*	Vehicle power 4.
F36	5A*	Active grill shutters.
F37	10A*	Occupant classification sensor. Passenger airbag deactivation indicator.
F38	5A*	Engine control module and transmission control module ignition feed.
F39	20A*	Heated driver seat.
F40	5A*	Electronic power assist steering 15 feed.
F41	20A*	Body control module 15 feed.
F42	15A*	Rear wiper.
F43	15A*	Headlamp control module supply. Daytime running light.
F44	15A*	Front fog daytime running lamps.
F45	20A*	Heated passenger seat.
F46	40A**	Smart wiper motor modules.
F47	5A*	Heated mirror (less door control unit). Heated wiper park relay feed.
F48	5A*	Keypad.
R1	_	Not used.
R2	Micro relay	Horn.
R3	Micro relay	Heated mirror relay (less door control unit). Heated wiper park relay.
R4	Micro relay	Front fog daytime running lamps.

Fuse or relay number	Fuse amp rating	Protected components
R5	_	Not used.
R6	_	Not used.
R7	_	Not used.
R8	Power relay	Delayed accessory relay.
R9	_	Not used.
R10	Mini relay	Starter relay.
RII	Micro relay	Air conditioner clutch.
R12	Power relay	Cooling fan.
R13	Mini relay	Heater blower.
R14	Mini relay	Engine control relay.
R15	Power relay	Heated rear window.
R16	Power relay	Ignition 15.

<sup>\*</sup>Mini fuses \*\*Cartridge fuses

# Passenger Compartment Fuse Panel

The fuse panel is on the right side below the glove box.



E129926

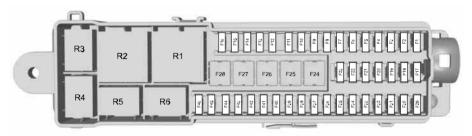
Fuse or relay number	Fuse amp rating	Protected components
F56	20A	Fuel pump supply, Air mass meter.
F57	_	Not used.
F58	5A	Not used (spare).
F59	5A	Passive anti-theft transceiver.
F60	10A	Interior light. Driver door switch pack. Glove box light. Overhead console switch bank.

Fuse or relay number	Fuse amp rating	Protected components
F61	20A	Cigar lighter. Power point.
F62	5A	Rain sensor module. Auto-dimming mirror.
F63	10A	Not used (spare).
F64	_	Not used.
F65	10A	Liftgate release.
F66	20A	Driver door unlock.
F67	7.5A	SYNC. Multifunction display. Global positioning system module.
F68	_	Not used.
F69	5A	Instrument cluster.
F70	20A	Central lock and unlock supply.
F71	7.5A	Heating control head (manual air conditioner). Dual electronic automatic temperature control.
F72	7.5A	Steering wheel module.
F73	7.5A	Data link connector.
F74	15A	High beam headlamp supply.
F75	15A	Fog lamp.
F76	10A	Reversing lamp.
F77	20A	Washer pump.
F78	5A	Ignition switch. Start button.
F79	15A	Radio. Navigation DVD player. Touch screen. Hazard light switch. Door lock switch.
F80	20A	Moonroof supply.

Fuse or relay number	Fuse amp rating	Protected components
F81	5A	Radio frequency receiver.
F82	20A	Washer pump.
F83	20A	Central locking.
F84	20A	Drive door unlock.
F85	7.5A	Electronic 15 feed.
F86	10A	Air bag module. Occupant classification system. Passenger air bag deactivation indicator.
F87	15A	Not used (spare).
F88	25A	Supply for F67, F69, F71 and F79.
F89	_	Not used.

# Luggage Compartment Fuse Panel

The fuse panel is in the luggage compartment behind the passenger side wheel well. Remove the fuse panel cover to gain access to the fuses.



E129927

Fuse or relay number	Fuse amp rating	Protected components
Fl	5A	Hands-free liftgate entry module.
F2	10A	Keyless vehicle module.
F3	5A	Keyless vehicle door handles.
F4	25A	Door control unit front left.
F5	25A	Door control unit front right.
F6	25A	Door control unit rear left.
F7	25A	Door control unit rear right.
F8	25A	Passenger seat.
F9	25A	Driver seat.
F10	5A	Driver seat memory module logic feed.
FII	5A	Rear ignition coil feed.
F12	_	Not used.
F13	_	Not used.
F14	_	Not used.
F15	_	Not used.
F16	_	Not used.
F17	_	Not used.
F18	_	Not used.
F19	_	Not used.
F20	_	Not used.
F21	_	Not used.
F22	_	Not used.
F23	25A	Audio amplifier.
F24	30A	DC/AC power converter.
F25	25A	Power liftgate.
F26	40A	Accessories, Trailer tow module 30 feed 1.

Fuse or relay number	Fuse amp rating	Protected components
F27	20A	Luggage compartment power outlet.
F28	_	Not used.
F29	5A	Blind spot detection system. Rear view camera with park assist.
F30	5A	Parking aid module.
F31	_	Not used.
F32	5A	DC/AC power converter.
F33	_	Not used.
F34	_	Not used.
F35	_	Not used.
F36	_	Not used.
F37	_	Not used.
F38	_	Not used.
F39	_	Not used.
F40	_	Not used.
F41	_	Not used.
F42	_	Not used.
F43	_	Not used.
F44	_	Not used.
F45	_	Not used.
F46	_	Not used.
RI	Power relay	Rear 15 relay.
R2	_	Not used.
R3	_	Not used.
R4	_	Not used.
R5	_	Not used.
R6	_	Not used.

## **CHANGING A FUSE**

#### **Fuses**

#### WARNING

You must replace a failed fuse with one that has the specified amperage rating. If you use a fuse with a higher amperage rating, you may cause severe wire damage and may start a fire.



E142430

A fuse may fail if electrical components in the vehicle are not properly working. A broken wire inside the fuse indicates a failed fuse. Check the appropriate fuses before replacing any electrical components.

## **Maintenance**

#### **GENERAL INFORMATION**

Have your vehicle serviced regularly to help maintain its roadworthiness and resale value. There is a large network of authorized dealers that are there to help you with their professional servicing expertise. We believe that their specially trained technicians are best qualified to service your vehicle properly and expertly. They are supported by a wide range of highly specialized tools developed specifically for servicing your vehicle.

To help you service your vehicle, we provide scheduled maintenance information which makes tracking routine service easy. See Scheduled Maintenance (page 346).

If your vehicle requires professional service. an authorized dealer can provide the necessary parts and service. Check your warranty information to find out which parts and services are covered.

Use only recommended fuels, lubricants, fluids and service parts conforming to specifications. Motorcraft® parts are designed and built to provide the best performance in your vehicle.

#### **Precautions**

- Do not work on a hot engine.
- Make sure that nothing gets caught in moving parts.
- Do not work on a vehicle with the engine running in an enclosed space. unless you are sure you have enough ventilation.
- Keep all open flames and other burning material (such as cigarettes) away from the battery and all fuel related parts.

## Working with the Engine Off

- Set the parking brake and shift to park (P).
- 2. Switch off the engine.
- Block the wheels.

## Working with the Engine On

#### WARNING

To reduce the risk of vehicle damage and/or personal burn injuries, do not start your engine with the air cleaner removed and do not remove it while the engine is running.

- Set the parking brake and shift to park (P).
- 2 Block the wheels

# OPENING AND CLOSING THE HOOD

# Opening the Hood



- E142457
- Pull the hood release lever.
- 2. Slightly lift the hood.

# **Maintenance**



3. Move the catch to the right to release the hood.



#### E87786

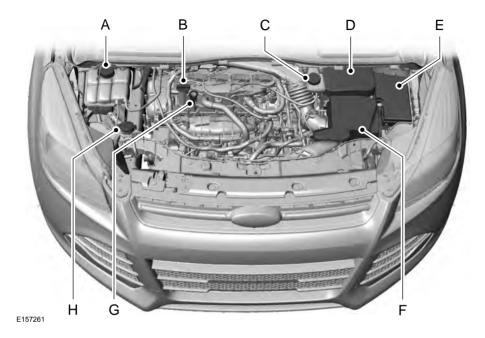
4. Open the hood and support it with the hood strut.

# **Closing the Hood**

- 1. Remove the hood strut from the catch and secure it correctly in the clip.
- 2. Lower the hood and allow it to drop under its own weight for the last 8-12 in (20-30 cm).

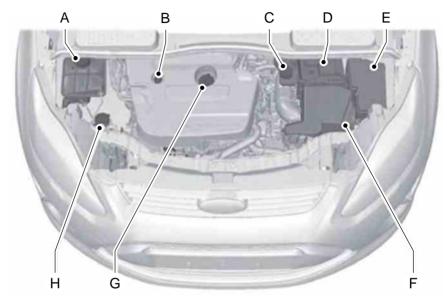
**Note:** Make sure that the hood is correctly closed.

## UNDER HOOD OVERVIEW - 1.6L ECOBOOST™



- A Engine coolant reservoir
- B Engine oil filler cap
- C Brake fluid reservoir
- D Battery
- E Power distribution box
- F Air filter assembly
- G Engine oil dipstick
- H Windshield washer fluid reservoir cap

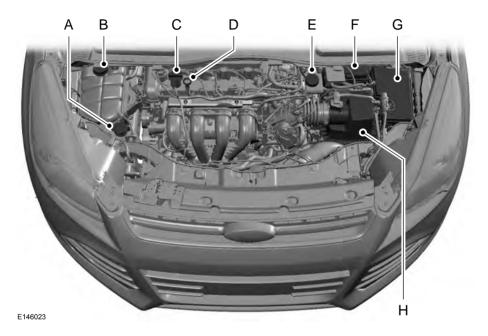
## UNDER HOOD OVERVIEW - 2.0L ECOBOOST™



E146022

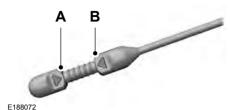
- A Engine coolant reservoir
- B Engine oil dipstick
- C Brake fluid reservoir
- D Battery
- E Power distribution box
- F Air filter assembly
- G Engine oil filler cap
- H Windshield washer fluid reservoir

## **UNDER HOOD OVERVIEW - 2.5L**



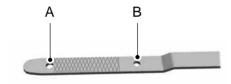
- A Windshield washer fluid reservoir
- B Engine coolant reservoir
- C Engine oil filler cap
- D Engine oil dipstick
- E Brake fluid reservoir
- F Battery
- G Power distribution box
- H Air filter assembly

## ENGINE OIL DIPSTICK - 1.6L ECOBOOST™



- A Minimum.
- B Maximum.

## ENGINE OIL DIPSTICK - 2.0L ECOBOOST™/2.5L



#### E169062

- A Minimum.
- B Maximum.

## **ENGINE OIL CHECK**

 Make sure that your vehicle is on level ground.

- 2. Check the oil level before starting the engine, or switch the engine off and wait 15 minutes for the oil to drain into the oil pan.
- 3. Remove the dipstick and wipe it with a clean, lint free cloth. Replace the dipstick and remove it again to check the oil level.

If the oil level is at the minimum mark, add oil immediately. See **Capacities and Specifications** (page 268).

Do not use supplemental engine oil additives because they are unnecessary and could lead to engine damage that may not be covered by your vehicle warranty.

**Note:** Make sure that the oil level is between the minimum and the maximum marks.

**Note:** The oil consumption of new engines reaches its normal level after approximately 3,000 mi (5,000 km).

## **Adding Engine Oil**



E142732

Only use oils certified for gasoline engines by the American Petroleum Institute (API). An oil with this trademark symbol conforms to the current engine and emission system protection standards and fuel economy requirements of the International Lubricants Specification Advisory Council (ILSAC), comprised of U.S. and Japanese automobile manufacturers.

#### WARNINGS



Only add oil when the engine is cold. If the engine is hot, wait 10 minutes for the engine to cool down.



Do not remove the filler cap when the engine is running.

- 1. Remove the engine oil filler cap.
- 2. Add engine oil that meets Ford specifications. See Capacities and **Specifications** (page 268).
- 3. Wipe off any spilled oil.
- 4. Replace the engine oil filler cap. Turn it clockwise until vou feel a strong resistance.

**Note:** Do not add oil further than the maximum mark. Oil levels above the maximum mark may cause engine damage.

Note: Soak up any spillage with an absorbent cloth immediately.

## **ENGINE COOLANT CHECK**

## **Checking the Engine Coolant**

#### **WARNINGS**

Do not add engine coolant when the engine is hot. Steam and scalding liquids released from a hot cooling system can burn you badly. Also, you can be burned if you spill coolant on hot engine parts.

#### WARNINGS

Do not put engine coolant in the windshield washer fluid container. If sprayed on the windshield, engine coolant could make it difficult to see. through the windshield.



To reduce the risk of personal injury, make sure the engine is cool before unscrewing the coolant pressure

relief cap. The cooling system is under pressure; steam and hot liquid can come out forcefully when the cap is loosened slightly.



Do not add coolant further than the MAX mark.

Note: Automotive fluids are not interchangeable. Do not use engine coolant or antifreeze or windshield washer fluid outside of its specified function and vehicle location.

**Note:** Do not use stop leak pellets, cooling system sealants, or additives as they can cause damage to the engine cooling or heating systems. This damage would not be covered under your vehicle's warranty.

**Note:** During normal vehicle operation, the engine coolant may change color from orange to pink or light red. As long as the engine coolant is clear and uncontaminated, this color change does not indicate the engine coolant has degraded nor does it require the engine coolant to be drained, the system to be flushed, or the engine coolant to be replaced.

When the engine is cold, check the concentration and level of the engine coolant at the intervals listed in the scheduled maintenance information. See Scheduled Maintenance (page 346).

**Note:** *Make sure that the level is between* the MIN and MAX marks on the coolant reservoir.

**Note:** Coolant expands when it is hot. The level may extend beyond the MAX mark.

**Note:** If the level is at the MIN mark, below the MIN mark, or empty, add coolant immediately. See **Adding Engine Coolant** in this chapter.

The coolant concentration should be maintained within 48% to 50%, which equates to a freeze point between -30°F (-34°C) and -34°F (-37°C).

**Note:** For best results, coolant concentration should be tested with a refractometer such as Robinair® Coolant and Battery Refractometer 75240. We do not recommend the use of hydrometers or coolant test strips for measuring coolant concentrations.

#### **Adding Engine Coolant**

- Do not mix different colors or types of coolant in your vehicle. Make sure the correct coolant is used. Mixing of engine coolants may harm your engine's cooling system. The use of an improper coolant may harm engine and cooling system components and may void the warranty. Use prediluted engine coolant meeting the Ford specification. See **Capacities and Specifications** (page 268).
- In case of emergency, a large amount of water without engine coolant may be added in order to reach a vehicle service location. In this instance, the cooling system must be drained, chemically cleaned with Motorcraft Premium Cooling System Flush, and refilled with engine coolant as soon as possible. Water alone (without engine coolant) can cause engine damage from corrosion, overheating or freezing.

- Do not use alcohol, methanol, brine or any engine coolants mixed with alcohol or methanol antifreeze (coolant).
   Alcohol and other liquids can cause engine damage from overheating or freezing.
- Do not add extra inhibitors or additives to the coolant. These can be harmful and compromise the corrosion protection of the engine coolant.

Unscrew the cap slowly. Any pressure will escape as you unscrew the cap.

Add prediluted engine coolant meeting the Ford specification. See **Capacities and Specifications** (page 268).

Whenever coolant has been added, the coolant level in the coolant reservoir should be checked the next few times you drive the vehicle. If necessary, add enough prediluted engine coolant to bring the coolant level to the proper level.

#### **Recycled Engine Coolant**

Ford Motor Company does not recommend the use of recycled engine coolant since a Ford-approved recycling process is not yet available.

Used engine coolant should be disposed of in an appropriate manner. Follow your community's regulations and standards for recycling and disposing of automotive fluids.

#### Severe Climates

If you drive in extremely cold climates:

- It may be necessary to have a Ford authorized dealer increase the coolant concentration above 50%.
- A coolant concentration of 60% will provide improved freeze point protection. Engine coolant concentrations above 60% will decrease the overheat protection characteristics of the engine coolant and may cause engine damage.

If you drive in extremely hot climates:

- It may be necessary to have a Ford authorized dealer decrease the coolant concentration to 40%.
- A coolant concentration of 40% will provide improved overheat protection. Engine coolant concentrations below 40% will decrease the freeze and corrosion protection characteristics of the engine coolant and may cause engine damage.

Vehicles driven year-round in non-extreme climates should use prediluted engine coolant for optimum cooling system and engine protection.

#### What You Should Know About Fail-Safe Cooling

If the engine coolant supply is depleted, this feature allows the vehicle to be driven temporarily before incremental component damage is incurred. The "fail-safe" distance depends on ambient temperatures, vehicle load and terrain.

#### **How Fail-Safe Cooling Works**

If the engine begins to overheat, the engine coolant temperature gauge will move to the red (hot) area and:



A high engine temperature message will appear in the information display.

The service engine soon indicator will light.

If the engine reaches a preset over-temperature condition, the engine will automatically switch to alternating cylinder operation. Each disabled cylinder acts as an air pump and cools the engine.

When this occurs the vehicle will still operate. However:

- · The engine power will be limited.
- The air conditioning system will be disabled.

Continued operation will increase the engine temperature and the engine will completely shut down, causing steering and braking effort to increase.

Once the engine temperature cools, the engine can be re-started. Take your vehicle to an authorized dealer as soon as possible to minimize engine damage.

#### When Fail-Safe Mode Is Activated

#### WARNINGS

Fail-safe mode is for use during emergencies only. Operate your vehicle in fail-safe mode only as long

as necessary to bring your vehicle to rest in a safe location and seek immediate repairs. When in fail-safe mode, the vehicle will have limited power, will not be able to maintain high-speed operation, and may completely shut down without warning, potentially losing engine power, power steering assist, and power brake assist, which may increase the possibility of a crash resulting in serious injury.



Never remove the coolant reservoir cap while the engine is running or hot.

You have limited engine power when in the fail-safe mode, so drive your vehicle with caution. Your vehicle will not be able to maintain high-speed operation and the engine will run rough. Remember that the engine is capable of completely shutting down automatically to prevent engine damage, therefore:

- 1. Pull off the road as soon as safely possible and switch the engine off.
- 2. Arrange for your vehicle to be taken to an authorized dealer.
- 3. If this is not possible, wait a short period for the engine to cool.
- 4. Check the coolant level and replenish if low.
- 5. Re-start the engine and take your vehicle to an authorized dealer.

**Note:** Driving your vehicle without repairing the engine problem increases the chance of engine damage. Take your vehicle to an authorized dealer as soon as possible.

## AUTOMATIC TRANSMISSION FLUID CHECK

The automatic transmission does not have a transmission fluid dipstick.

Have an authorized dealer check and change the transmission fluid at the correct service interval. See **Scheduled Maintenance** (page 346). Your transmission does not consume fluid. However, if the transmission slips, shifts slowly or if you notice a sign of leaking fluid. contact an authorized dealer.

Do not use supplemental transmission fluid additives, treatments or cleaning agents. The use of these materials may affect transmission operation and result in damage to internal transmission components.

#### **BRAKE FLUID CHECK**

Fluid levels between the MIN and MAX lines are within the normal operating range; there is no need to add fluid. If the fluid levels are outside of the normal operating range, the performance of the system could be compromised; seek service from your authorized dealer immediately.

## POWER STEERING FLUID CHECK

Your vehicle is equipped with an electric power steering (EPS) system. There is no fluid reservoir to check or fill.

#### **WASHER FLUID CHECK**

#### WARNING

If you operate your vehicle in temperatures below 40°F (5°C), use washer fluid with antifreeze

protection. Failure to use washer fluid with antifreeze protection in cold weather could result in impaired windshield vision and increase the risk of injury or accident.

**Note:** The front and rear washer systems are supplied from the same reservoir.

Add fluid to fill the reservoir if the level is low. Only use a washer fluid that meets Ford specifications. See **Capacities and Specifications** (page 268).

State or local regulations on volatile organic compounds may restrict the use of methanol, a common windshield washer antifreeze additive. Washer fluids containing non-methanol antifreeze agents should be used only if they provide cold weather protection without damaging the vehicle's paint finish, wiper blades or washer system.

#### **FUEL FILTER**

Your vehicle is equipped with a lifetime fuel filter that is integrated with the fuel tank. Regular maintenance or replacement is not needed.

#### CHANGING THE 12V BATTERY

#### WARNINGS

Batteries normally produce explosive gases which can cause personal injury. Therefore, do not allow

flames, sparks or lighted substances to come near the battery. When working near the battery, always shield your face and protect your eyes. Always provide correct ventilation.



When lifting a plastic-cased battery, excessive pressure on the end walls could cause acid to flow through the

vent caps, resulting in personal injury and damage to the vehicle or battery. Lift the battery with a battery carrier or with your hands on opposite corners.



Keep batteries out of reach of children. Batteries contain sulfuric acid. Avoid contact with skin, eyes or

clothing. Shield your eyes when working near the battery to protect against possible splashing of acid solution. In case of acid contact with skin or eves. flush immediately with water for a minimum of 15 minutes and get prompt medical attention. If acid is swallowed, call a physician immediately.



Battery posts, terminals and related accessories contain lead and lead compounds. Wash hands after handling.

Your vehicle has a Motorcraft® maintenance-free battery which normally does not require additional water during its life of service.

**Note:** If your vehicle's battery has a cover or shield, make sure it is reinstalled after the battery has been cleaned or replaced.

**Note:** See an authorized dealer for low voltage battery access, testing, or replacement.

When a low voltage battery replacement is necessary, see an authorized dealer to replace the low voltage battery with a Ford recommended replacement low voltage battery that matches the electrical requirements of the vehicle.

To ensure proper operation of the battery management system (BMS), do not allow a technician to connect any electrical device ground connection directly to the low voltage battery negative post. A connection at the low voltage battery negative post can cause inaccurate measurements of the battery condition and potential incorrect system operation.

**Note:** If a person adds electrical or electronic accessories or components to the vehicle, the accessories or components may adversely affect the low voltage battery performance and durability and may also affect the performance of other electrical systems in the vehicle.

For longer, trouble-free operation, keep the top of the battery clean and dry. Also, make certain the battery cables are always tightly fastened to the battery terminals.

If you see any corrosion on the battery or terminals, remove the cables from the terminals and clean with a wire brush. You can neutralize the acid with a solution of baking soda and water.

When a battery replacement is required. the battery should only be replaced with a Ford recommended replacement battery that matches the electrical requirements of the vehicle.

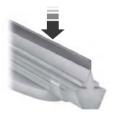
Because your vehicle's engine is electronically-controlled by a computer, some engine control settings are maintained by power from the low voltage battery. Some engine computer settings, like the idle trim and fuel trim strategy, optimize the driveability and performance of the engine. Some other computer settings, like the clock and radio station presets, are also maintained in memory by power from the low voltage battery. When a technician disconnects and connects the low voltage battery, these settings are erased. Complete the following procedure in order to restore the settings:

- 1. With the vehicle at a complete stop, set the parking brake.
- 2. Shift into park (P).
- 3. Switch off all accessories.
- Fully press the brake pedal and start the vehicle.
- Run the engine until it reaches normal operating temperature. While the engine is warming up, complete the following: Reset the clock. See Audio System (page 286). Reset the power windows bounce-back feature. See Windows and Mirrors (page 78). Reset the radio station presets. See Audio System (page 286).
- Allow the engine to idle for at least one minute. If the engine turns off, press the accelerator pedal to start the engine.
- 7. While the engine is running, press the brake pedal and shift into neutral (N).
- Allow the engine to run for at least one minute by pressing on the accelerator pedal.
- Drive the vehicle at least 12 mi (20 km) to completely relearn the idle and fuel trim strategy.

**Note:** If you do not allow the engine to relearn the idle and fuel trim strategy, the idle quality of your vehicle may be adversely affected until the engine computer eventually relearns the idle trim and fuel trim strategy.

Make sure that you dispose of old batteries in an environmentally friendly way. Seek advice from your local authority about recycling old batteries.

## CHECKING THE WIPER BLADES



E142463

Run the tip of your fingers over the edge of the blade to check for roughness.

Clean the wiper blades with washer fluid or water applied with a soft sponge or cloth.

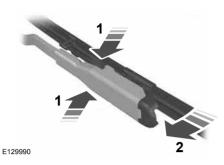
## CHANGING THE WIPER BLADES

Poor wiper quality can be improved by cleaning the wiper blades and the windshield.

Replace wiper blades annually for optimum performance.

#### **Front Wiper Blades**

Lift the wiper arms away from the windshield.



- 1. Press the locking buttons together.
- 2. Remove the wiper blade.
- 3. Install in the reverse order.

**Note:** Make sure that the wiper blade locks into place. Lower the wiper arm and blade back to the windshield. The wiper arms will automatically return to their normal position when you switch the ignition on.

#### **Rear Wiper Blade**

Lift the wiper arms away from the rear window.



Remove the wiper blade.

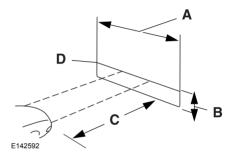
2. Install in the reverse order.

**Note:** Make sure that the wiper blade locks into place.

#### ADJUSTING THE HEADLAMPS

### **Vertical Aim Adjustment**

The headlamps on your vehicle are properly aimed at the assembly plant. If your vehicle has been in an accident, the alignment of your headlamps should be checked by your authorized dealer.



- A 8 feet (2.4 meters)
- B Center height of lamp to ground
- C 25 feet (7.6 meters)
- D Horizontal reference line

## **Vehicles With Halogen Headlamps**

- Park the vehicle directly in front of a wall or screen on a level surface, approximately 25 feet (7.6 meters) away.
- 2. Measure the height of the headlamp bulb center from the ground and mark an 8 foot (2.4 meter) horizontal reference line on the vertical wall or screen at this height.

**Note:** To see a clearer light pattern for adjusting, you may want to block the light from one headlamp while adjusting the other.

3. Turn on the low beam headlamps to illuminate the wall or screen and open the hood.



#### E142465

4. On the wall or screen you will observe a flat zone of high intensity light located at the top of the right hand portion of the beam pattern. If the top edge of the high intensity light zone is not at the horizontal reference line, the headlamp will need to be adjusted.



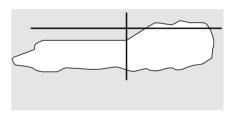
- Locate the vertical adjuster on each headlamp. Using a Phillips #2 screwdriver, turn the adjuster either clockwise or counterclockwise in order to aim the headlamp. The horizontal edge of the brighter light should touch the horizontal reference line.
- 6. Close the hood and turn off the lamps.

## Vehicles With High Intensity Discharge Headlamps

- Park the vehicle directly in front of a wall or screen on a level surface, approximately 25 feet (7.6 meters) away.
- Measure the height of the headlamp bulb center from the ground and mark an 8 foot (2.4 meter) horizontal reference line on the vertical wall or screen at this height.

**Note:** To see a clearer light pattern for adjusting, you may want to block the light from one headlamp while adjusting the other.

 Turn on the low beam headlamps to illuminate the wall or screen and open the hood



E142466

4. There is a distinct cut-off (change from light to dark) in the left portion of the beam pattern. The top edge of this cut-off should be positioned two inches (5 centimeters) below the horizontal reference line.

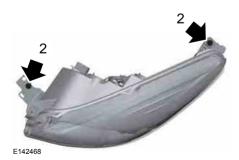


- Locate the vertical adjuster on each headlamp. Using a Phillips #2 screwdriver, turn the adjuster either clockwise or counterclockwise in order to aim the headlamp.
- 6. Close the hood and turn off the lamps.

## **Horizontal Aim Adjustment**

Horizontal aim is not required for this vehicle and is non-adjustable.

## **REMOVING A HEADLAMP**



- 1. Switch all of the lamps and the ignition off.
- 2. Remove the screws that secure the lamp assembly.
- Pull the headlamp toward the front of your vehicle to disengage it from its locating points and then lift the headlamp up.
- 4. Disconnect the electrical connector.

## **CHANGING A BULB**

#### **Lamp Assembly Condensation**

Exterior lamps are vented to accommodate normal changes in pressure. Condensation can be a natural by-product of this design. When moist air enters the lamp assembly through the vents, there is a possibility that condensation can occur when the temperature is cold. When normal condensation occurs, a thin film of mist can form on the interior of the lens. The thin mist eventually clears and exits through the vents during normal operation. Clearing time may take as long as 48 hours under dry weather conditions.

Examples of acceptable condensation are:

- Presence of thin mist (no streaks, drip marks or droplets).
- Fine mist covers less than 50% of the lens.

Examples of unacceptable moisture (usually caused by a lamp water leak) are:

- Water puddle inside the lamp.
- Large water droplets, drip marks or streaks present on the interior of the lens.

Take your vehicle to a dealer for service if any of the above conditions of unacceptable moisture are present.

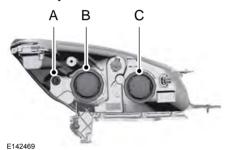
## **Replacing Headlamp Bulbs**

#### WARNING

Handle a halogen headlamp bulb carefully and keep out of children's reach. Grasp the bulb by only its plastic base and do not touch the glass. The oil from your hand could cause the bulb to break the next time the headlamps are operated.

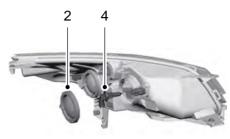
**Note:** If the bulb is accidentally touched, it should be cleaned with rubbing alcohol before being used.

#### Headlamp:



- A Side marker
- B Low beam headlamp
- C High beam headlamp

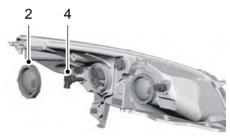
High beam headlamp:



#### E142470

- 1. Remove the headlamp.
- 2. Remove service cap.
- Disconnect the electrical connector.
- Remove bulb from the headlamp assembly by turning it counterclockwise, then pull it straight out.

Low beam headlamp:



#### E142471

- 1. Remove the headlamp.
- 2. Remove service cap.
- 3. Disconnect the electrical connector.
- Remove bulb from the headlamp assembly by turning it counterclockwise, then pull it straight out.

Install the new bulbs in reverse order from the steps above. Be sure that the spring clip is not damaged or detached from the headlamp assembly during the replacement procedure.

## Replacing HID Headlamp Bulbs (If Equipped)

The low beam headlamps on your vehicle use a high intensity discharge source. These lamps operate at a high voltage. When the bulb is burned out, the bulb and starter capsule assembly must be replaced by your authorized dealer.

## **Replacing Side Marker Bulbs**

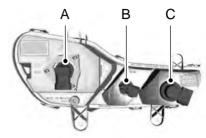


#### E142472

- Remove the bulb socket from the headlamp assembly by turning it counterclockwise.
- 2. Remove the bulb by gently pull the bulb straight out of the socket.

Install the new bulb in reverse order.

#### Replacing Fog, Park and Turn Signal Bulbs



E142797

- A Fog Lamp
- B Park Lamp
- C Turn Signal lamp



E142798

1. Remove the screws from the splash shield at the wheel well to gain access to the lamp assembly.

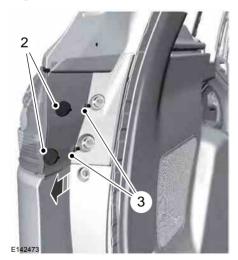


#### E142799

- Remove the bulb holder from the lamp assembly by turning it counterclockwise.
- 3. Disconnect the electrical connector.
- 4. Remove the bulb from the bulb holder by pulling it straight out.

Install the new bulbs in reverse order from the steps above.

#### Replacing Tail, Brake and Turn Signal Bulbs



- 1. Make sure the headlamp control is in the off position and open the liftgate.
- 2. Remove the two bolt covers using a standard flat tip screwdriver.
- 3. Remove the two bolts from the lamp assembly.
- 4. Gently pull the lamp assembly away from the vehicle.



#### E142475

- 5. Disconnect the electrical connector.
- Remove the turn signal bulb or the tail and brake bulb by turning the bulb socket counterclockwise. Gently pull the bulb straight out of the socket.

Install the new bulb in reverse order.

## Replacing Reverse Lamp Assembly

For bulb replacement, see your authorized dealer.

#### Replacing License Plate Lamp Bulb



#### E72789

- 1. Carefully release the spring clip.
- 2. Remove the lamp.
- 3. Remove the bulb.

Reverse steps to reinstall bulb.

## Replacing High-Mount Brake Lamp Bulb

Your vehicle is equipped with an LED center high-mount stop lamp located in the spoiler. It is designed to last the life of the vehicle. If replacement is required, see your authorized dealer.

#### **BULB SPECIFICATION CHART**

Replacement bulbs are specified in the chart below. Headlamp bulbs must be marked with an authorized "D.O.T." for North America to ensure lamp performance, light brightness and pattern and safe visibility. The correct bulbs will not damage the lamp assembly or void the lamp assembly warranty and will provide quality bulb burn time.

Function	Trade number
Headlamps high beam (Halogen)	9005LL
* Headlamps high beam (HID)	Hì
Headlamp low beam (Halogen)	HIILL
* Headlamp low beam (HID)	D3S
Sidemarker - front	168
Park lamp - front (HI Series)	WY5W
Park lamp - front (Low Series)	194
Turn lamp - front (HI Series)	WY21W
Turn lamp - front (Low Series)	W21W
Fog lamps	H10 (9145)
Tail/brake lamp	3157K
Turn lamp - rear	T20
Backup lamp	921
License plate lamp	W5W

Function	Trade number
* High-mount brake lamp	LED
* Interior lamps	LED

<sup>\*</sup> To replace these lamps - see your authorized dealer.

To replace all instrument panel lights - see your authorized dealer

## CHANGING THE ENGINE AIR FILTER

#### WARNING

To reduce the risk of vehicle damage and personal burn injuries do not start your engine with the air cleaner removed and do not remove it while the engine is running.

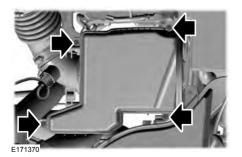
When changing the air filter element, use only the air filter element listed. See **Capacities and Specifications** (page 268).

For EcoBoost equipped vehicles: When servicing the air cleaner, it is important that no foreign material enter the air induction system. The engine and turbocharger are susceptible to damage from even small particles.

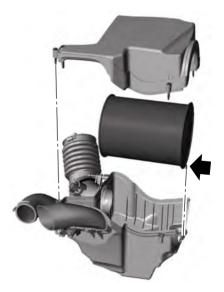
Change the air filter element at the proper interval. See **Scheduled Maintenance** (page 346).

**Note:** Failure to use the correct air filter element may result in severe engine damage. The customer warranty may be void for any damage to the engine if the correct air filter element is not used.

## 1.6L and 2.0L EcoBoost Engines



- 1. Loosen the four fasteners and remove the air cleaner assembly lid.
- 2. Remove the air filter element from the air filter housing.
- 3. Wipe any dirt or debris from the air cleaner assembly to make sure no dirt gets in the engine and to make sure you have a good seal.



#### E170433

4. Install the new air filter element. Slide the open end of the air filter element in first, below the tab. Then push the closed end of the air filter into the bottom of the tray. The closed end should fit inside the groove in the tray. The tab of the closed end of the air filter should be oriented down and fit between the forks on the tray as shown at the arrow above.

**Note:** Make sure you align the tab in the air filter element with the fork in the air cleaner assembly tray.

5. Install the air cleaner assembly lid and tighten the four fasteners.

#### 2.5L Engine



- E142711
- 1. Detach the 2 clips that secure the air filter cover to the housing.
- Carefully remove the air filter cover from the housing. Do not detach any connections or tubes from the cover.
- 3. Remove the air cleaner from the housing.
- 4. Wipe any dirt or debris from the air filter housing and cover to make sure that no dirt gets into the engine.
- 5. Load the air filter into the housing.
- 6. Replace the air filter cover and secure the clips.

#### **GENERAL INFORMATION**

Your Ford or Lincoln authorized dealer has many quality products available to clean your vehicle and protect its finishes.

#### **CLEANING PRODUCTS**

For best results, use the following products or products of equivalent quality:

- Motorcraft Bug and Tar Remover (ZC-42)
- Motorcraft Custom Bright Metal Cleaner (ZC-15)
- Motorcraft Detail Wash (ZC-3-A)
- Motorcraft Dusting Cloth (ZC-24)
- Motorcraft Engine Shampoo and Degreaser (U.S. only) (ZC-20)
- Motorcraft Engine Shampoo (Canada only) (CXC-66-A)
- Motorcraft Multi-Purpose Cleaner (Canada only) (CXC-101)
- Motorcraft Premium Glass Cleaner (Canada only) (CXC-100)
- Motorcraft Premium Quality Windshield Washer Fluid (Canada only) [CXC-37-(A, B, D or F)]
- Motorcraft Premium Windshield Wash Concentrate with Bitterant (U.S. only) (ZC-32-B2)
- Motorcraft Professional Strength Carpet & Upholstery Cleaner (ZC-54)
- Motorcraft Premium Leather and Vinyl Cleaner (ZC-56)
- Motorcraft Spot and Stain Remover (U.S. only) (ZC-14)
- Motorcraft Ultra-Clear Spray Glass Cleaner (ZC-23)
- Motorcraft Wheel and Tire Cleaner (ZC-37-A)

#### **CLEANING THE EXTERIOR**

Wash your vehicle regularly with cool or lukewarm water and a neutral pH shampoo, we recommend Motorcraft Detail Wash.

- Never use strong household detergents or soap, for example dish washing or laundry liquid. These products can discolor and spot painted surfaces.
- Never wash your vehicle when is hot to the touch, or during strong or direct sunlight.
- Dry your vehicle with a chamois or soft terry cloth towel to eliminate water spotting.
- Immediately remove fuel spillages, bird droppings, insect deposits and road tar. These may cause damage to your vehicle's paintwork or trim over time. We recommend Motorcraft Bug and Tar Remover.
- Remove any exterior accessories, for example antennas, before entering a car wash.

**Note:** Suntan lotions and insect repellents can damage painted surfaces. If these substances come in contact with your vehicle, wash the affected area as soon as possible.

#### **Exterior Chrome Parts**

- Apply a high quality-cleaning product to bumpers and other chrome parts.
   Follow the manufacturer's instructions.
   We recommend Motorcraft Custom Bright Metal Cleaner.
- Do not apply the cleaning product to hot surfaces. Do not leave the cleaning product on chrome surfaces longer than the time recommended.
- Using other non-recommended cleaners can result in severe and permanent cosmetic damage.

**Note:** Never use abrasive materials, for example steel wool or plastic pads as they can scratch the chrome surface.

**Note:** Do not use chrome cleaner, metal cleaner or polish on wheels or wheel covers.

#### **Exterior Plastic Parts**

For routine cleaning we recommend Motorcraft Detail Wash. If tar or grease spots are present, we recommend Motorcraft Bug and Tar Remover.

#### Stripes or Graphics (If Equipped)

Do not use a commercial or high-pressure sprayer on the surface or edge of stripes and graphics. This can damage them and cause the edges to peel away from the vehicle surface.

#### Underbody

Flush the complete underside of your vehicle frequently. Keep body and door drain holes free of debris or foreign material.

#### WAXING

Regular waxing is necessary to protect your car's paint from the elements. We recommend that you wash and wax the painted surface once or twice a year.

When washing and waxing, park your vehicle in a shaded area out of direct sunlight. Always wash your vehicle before applying wax.

- Use a quality wax that does not contain abrasives.
- Follow the manufacturer's instructions to apply and remove the wax.
- Apply a small amount of wax in a back-and-forth motion, not in circles.

- Do not allow wax to come in contact with any non-body (low-gloss black) colored trim. The wax will discolor or stain the parts over time.
  - · Roof racks.
  - Bumpers.
  - Grained door handles.
  - Side moldings.
  - · Mirror housings.
  - Windshield cowl area.
- Do not apply wax to glass areas.
- After waxing, your car's paint should feel smooth, and be free of streaks and smudges.

#### **CLEANING THE ENGINE**

Engines are more efficient when they are clean because grease and dirt buildup keep the engine warmer than normal.

#### When washing:

- Take care when using a power washer to clean the engine. The high-pressure fluid could penetrate the sealed parts and cause damage.
- Do not spray a hot engine with cold water to avoid cracking the engine block or other engine components.
- Spray Motorcraft Engine Shampoo and Degreaser on all parts that require cleaning and pressure rinse clean. In Canada, use Motorcraft Engine Shampoo.
- Never wash or rinse the engine while it is hot or running; water in the running engine may cause internal damage.

- Never wash or rinse any ignition coil. spark plug wire or spark plug well, or the area in and around these locations.
- Cover the battery, power distribution box, and air filter assembly to prevent water damage when cleaning the engine.

## **CLEANING THE WINDOWS AND WIPER BLADES**

Car wash chemicals and environmental fallout can result in windshield and winer blade contamination. Dirty windshield and wipers will result in poor windshield wiper operation. Keep the windshield and wiper blades clean to maintain windshield wiper performance.

To clean the windshield and wiper blades:

- Clean the windshield with a non-abrasive glass cleaner. When cleaning the interior of the windshield, avoid getting any glass cleaner on the instrument panel or door panels. Wipe any glass cleaner off these surfaces immediately.
- For windshields contaminated with tree sap, chemicals, wax or bugs, clean the entire windshield using steel wool (no greater than 0000 grade) in a circular motion and rinse with water.
- Clean the wiper blades with isopropyl rubbing alcohol or windshield washer concentrate.

**Note:** Do not use razor blades or other sharp objects to clean or remove decals from the inside of the heated rear window. The vehicle warranty does not cover damage caused to the heated rear window grid lines.

#### **CLEANING THE INTERIOR**

#### WARNINGS

Do not use cleaning solvents, bleach or dve on the vehicle's safety belts. as these actions may weaken the belt webbing.



On vehicles equipped with seat-mounted airbags, do not use chemical solvents or strong

detergents. Such products could contaminate the side airbag system and affect performance of the side airbag in a collision.

For fabric, carpets, cloth seats, safety belts and seats equipped with side airbags:

- Remove dust and loose dirt with a vacuum cleaner
- Remove light stains and soil with Motorcraft Professional Strength Carpet & Upholstery Cleaner.
- If grease or tar is present on the material, spot-clean the area first with Motorcraft Spot and Stain Remover, In Canada, use Motorcraft Multi-Purpose Cleaner.
- If a ring forms on the fabric after spot cleaning, clean the entire area immediately (but do not oversaturate) or the ring will set.
- Do not use household cleaning products or glass cleaners, which can stain and discolor the fabric and affect the flame retardant abilities of the seat materials

# CLEANING THE INSTRUMENT PANEL AND INSTRUMENT CLUSTER LENS

#### WARNING

Do not use chemical solvents or strong detergents when cleaning the steering wheel or instrument panel to avoid contamination of the airbag system.

**Note:** Follow the same procedure as cleaning leather seats for cleaning leather instrument panels and leather interior trim surfaces. See **Cleaning Leather Seats** (page 237).

Clean the instrument panel and cluster lens with a clean, damp and soft cloth, then use a clean, dry and soft cloth to dry these areas.

- Avoid cleaners or polishes that increase the gloss of the upper portion of the instrument panel. The dull finish in this area helps protect you from undesirable windshield reflection.
- Do not use any household cleaning products or glass cleaners as these may damage the finish of the instrument panel, interior trim and cluster lens.
- Wash or wipe your hands clean if you have been in contact with certain products such as insect repellent and suntan lotion to avoid possible damage to the interior painted surfaces.
- Do not allow air fresheners and hand sanitizers to spill onto interior surfaces.
   If a spill occurs, wipe off immediately.
   Your warranty may not cover these damages.

If a staining liquid like coffee or juice has been spilled on the instrument panel or on interior trim surfaces:

- 1. Wipe up spilled liquid using a clean, soft cloth as quickly as possible.
- Use Motorcraft Premium Leather and Vinyl Cleaner or a commercially available leather cleaning product for automotive interiors. Test any cleaner or stain remover on an inconspicuous area.
- Alternatively, wipe the surface with a clean, soft cloth and a mild soap and water solution. Dry the area with a clean, soft cloth.
- If necessary, apply more soap and water solution or cleaning product to a clean, soft cloth and press it onto the soiled area. Allow this to set at room temperature for 30 minutes.
- Remove the soaked cloth, then with a clean, damp cloth, use a rubbing motion for 60 seconds on the soiled area.
- 6. Dry the area with a clean, soft cloth.

### **CLEANING LEATHER SEATS (15**

#### Equipped)

**Note:** Follow the same procedure as cleaning leather seats for cleaning leather instrument panels and leather interior trim surfaces.

For routine cleaning, wipe the surface with a soft, damp cloth and a mild soap and water solution. Dry the area with a clean, soft cloth.

For cleaning and removing stains such as dye transfer, use Motorcraft Premium Leather and Vinyl Cleaner or a commercially available leather cleaning product for automotive interiors.

**Note:** Test any cleaner or stain remover on an inconspicuous area.

You should:

- Remove dust and loose dirt with a vacuum cleaner.
- Clean and treat spills and stains as soon as possible.

Do not use the following products as these may damage the leather:

- Oil and petroleum or silicone-based leather conditioners.
- Household cleaners.
- Alcohol solutions.
- Solvents or cleaners intended specifically for rubber, vinyl and plastics.

## REPAIRING MINOR PAINT DAMAGE

Authorized dealers have touch-up paint to match your vehicle's color. Your vehicle color code is printed on a sticker on the front, left-hand side door jamb. Take your color code to your authorized dealer to make sure you get the correct color.

Before repairing minor paint damage, use a cleaner such as Motorcraft Bug and Tar Remover to remove particles such as bird droppings, tree sap, insect deposits, tar spots, road salt and industrial fallout.

Always read the instructions before using cleaning products.

## CLEANING THE ALLOY WHEELS (If Equipped)

**Note:** Do not apply a cleaning chemical to warm or hot wheel rims and covers.

**Note:** Some automatic car washes may cause damage to the finish on your wheel rims and covers.

**Note:** Industrial-strength or heavy-duty cleaners in combination with brush agitation to remove brake dust and dirt, could wear away the clear coat finish over a period time.

**Note:** Do not use hydrofluoric acid-based or high caustic-based wheel cleaners, steel wool, fuels or strong household detergents.

**Note:** If you intend parking your vehicle for an extended period after cleaning the wheels with a wheel cleaner, drive your vehicle for a few minutes before doing so. This will reduce the risk of increased corrosion of the brake discs.

Alloy wheels and wheel covers are coated with a clear coat paint finish. To maintain their condition we recommend that you:

- Clean the wheels weekly using Motorcraft Wheel and Tire Cleaner. Apply using manufacturer's instructions.
- Use a sponge to remove heavy deposits of dirt and brake dust accumulation.
- Rinse thoroughly with a strong stream of water when you have completed the cleaning process.
- To remove tar and grease, use Motorcraft Bug and Tar Remover.

#### **VEHICLE STORAGE**

If you plan on storing your vehicle for 30 days or more, read the following maintenance recommendations to make sure your vehicle stays in good operating condition.

We engineer and test all motor vehicles and their components for reliable, regular driving. Under various conditions, long-term storage may lead to degraded engine performance or failure unless you use specific precautions to preserve engine components.

#### General

- Store all vehicles in a dry, ventilated place.
- Protect from sunlight, if possible.
- If vehicles are stored outside, they require regular maintenance to protect against rust and damage.

#### **Body**

- Wash your vehicle thoroughly to remove dirt, grease, oil, tar or mud from exterior surfaces, rear-wheel housing and the underside of front fenders.
- Periodically wash your vehicle if it is stored in exposed locations.
- Touch-up exposed or primed metal to prevent rust.
- Cover chrome and stainless steel parts with a thick coat of auto wax to prevent discoloration. Re-wax as necessary when you wash your vehicle.
- Lubricate all hood, door and luggage compartment hinges and latches with a light grade oil.
- Cover interior trim to prevent fading.
- Keep all rubber parts free from oil and solvents.

#### **Engine**

- Change the engine oil and filter prior to storage because used engine oil contains contaminates which may cause engine damage.
- Start the engine every 15 days for a minimum of 15 minutes. Run at fast idle with the climate controls set to defrost until the engine reaches normal operating temperature.

- With your foot on the brake, shift through all the gears while the engine is running.
- We recommend that you change the engine oil before you use your vehicle again.

#### Fuel system

 Fill the fuel tank with high-quality fuel until the first automatic shutoff of the fuel pump nozzle.

#### Cooling system

- · Protect against freezing temperatures.
- When removing your vehicle from storage, check coolant fluid level.
   Confirm that there are no cooling system leaks and that fluid is at the recommended level.

#### **Battery**

- Check and recharge as necessary. Keep connections clean.
- If storing your vehicle for more than 30 days without recharging the battery, we recommend that you disconnect the battery cables to maintain battery charge for quick starting.

**Note:** It is necessary to reset memory features if battery cables are disconnected.

#### **Brakes**

 Make sure the brakes and parking brake release fully.

#### **Tires**

Maintain recommended air pressure.

#### Miscellaneous

- Make sure all linkages, cables, levers and pins under your vehicle are covered with grease to prevent rust.
- Move vehicles at least 25 ft (7.5 m) every 15 days to lubricate working parts and prevent corrosion.

#### **Removing Vehicle From Storage**

When your vehicle is ready to come out of storage, do the following:

- Wash your vehicle to remove any dirt or grease film build-up on window surfaces.
- Check windshield wipers for any deterioration.
- Check under the hood for any foreign material that may have collected during storage such as mice or squirrel nests.
- Check the exhaust for any foreign material that may have collected during storage.
- Check tire pressures and set tire inflation per the Tire Label.
- Check brake pedal operation. Drive your vehicle 15 ft (4.5 m) back and forth to remove rust build-up.
- Check fluid levels (including coolant, oil and gas) to make sure there are no leaks, and fluids are at recommended levels
- If you remove the battery, clean the battery cable ends and check for damage.

Contact an authorized dealer if you have any concerns or issues.

#### **GENERAL INFORMATION**

Use only approved wheel and tire sizes, using other sizes could damage your vehicle. If you change the diameter of the tires from that fitted at the factory, the speedometer may not display the correct speed. Take your vehicle to an authorized Ford dealer to have the system reprogrammed. If you intend to change the size of the wheels from that fitted by the manufacturer, you can check the suitability with an authorized dealer.

Additional information related to the functionality and maintenance of your tires can be found later in this chapter. See **Tire Care** (page 244).

The Ford recommended tire inflation pressures can be found on the Tire Label, which is located on the B-pillar or the edge of the driver's door. This information can also be found on the Safety Compliance Certification Label (affixed to either the door hinge pillar, door-latch post, or the door edge that meets the door last post; next to the driver's seating position).

Ford strongly recommends maintaining these tire pressures at all times. Failure to follow the tire pressure recommendations can cause uneven treadwear patterns, reduced fuel economy, and adversely affect the way your vehicle handles.

**Note:** Check and set the tire pressure at the ambient temperature in which you are intending to drive your vehicle and when the tires are cold.

**Note:** Check your tire pressures at least once per month.

Set the pressure for your spare tire to the highest value given for your vehicle and tire size combination (if equipped).

## Notice to utility vehicle and truck owners

#### **WARNINGS**

Utility vehicles have a significantly higher rollover rate than other types of vehicles. To reduce the risk of serious injury or death from a rollover or other crash you must avoid sharp turns and abrupt maneuvers, drive at safe speeds for the conditions, keep tires inflated to Ford recommended pressures, never overload or improperly load your vehicle, and make sure every passenger is properly restrained.

In a rollover crash, an unbelted person is significantly more likely to die than a person wearing a seat belt. All occupants must wear seat belts and children/infants must use appropriate restraints to minimize the risk of injury or ejection.

Do not become overconfident in the ability of four-wheel drive vehicles. Although a four-wheel drive vehicle may accelerate better than a two-wheel drive vehicle in low traction situations, it won't stop any faster than two-wheel drive

vehicles. Always drive at a safe speed.



Utility vehicles and trucks handle differently than passenger cars in the various driving conditions that are encountered on streets, highways and off-road. Utility vehicles and trucks are not designed for cornering at speeds as high as passenger cars any more than low-slung sports cars are designed to perform satisfactorily under off-road conditions.

Study your owner's manual and any supplements for specific information about equipment features, instructions for safe driving and additional precautions to reduce the risk of an accident or serious injury.

#### Four-wheel drive system (If Equipped)

#### **WARNING**

Do not become overconfident in the ability of four-wheel drive vehicles. Although a four-wheel drive vehicle may accelerate better than a two-wheel drive vehicle in low traction situations, it won't stop any faster than two-wheel drive

vehicles. Always drive at a safe speed.

A vehicle equipped with four-wheel drive (when selected) has the ability to use all four wheels to power itself. This increases traction which may enable you to safely drive over terrain and road conditions that a conventional two-wheel drive vehicle cannot.

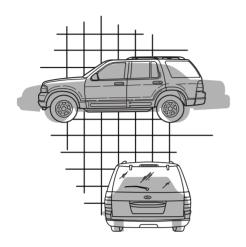
Power is supplied to all four wheels through a transfer case or power transfer unit. Four-wheel drive vehicles allow you to select different modes as necessary. For information on transfer case operation and shifting procedures, See **Four-Wheel Drive** (page 141). For information on transfer case maintenance, See **Maintenance** (page 212). You should become thoroughly familiar with this information before you operate your vehicle.

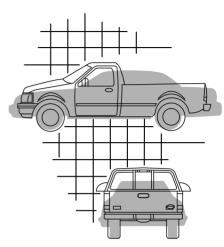
On some four-wheel drive vehicles, the initial shift from two-wheel to four-wheel drive while the vehicle is moving can cause a momentary clunk and ratcheting sound. These sounds are normal and are not cause for concern.

For four-wheel drive vehicles, a spare tire of a different size other than the tire provided should never be used. A dissimilar spare tire size (other than the spare tire provided) or major dissimilar tire sized between the front and rear axles could cause the four-wheel drive system to stop functioning and default to front-wheel drive. See **Principle of Operation** (page 141).

## How your vehicle differs from other vehicles

Sport utility vehicles and trucks can differ from some other vehicles in a few noticeable ways. Your vehicle may be:





#### E145299

- Higher to allow higher load carrying capacity and to allow it to travel over rough terrain without getting hung up or damaging underbody components.
- Shorter to give it the capability to approach inclines and drive over the crest of a hill without getting hung up or damaging underbody components. All other things held equal, a shorter wheelbase may make your vehicle quicker to respond to steering inputs than a vehicle with a longer wheelbase.
- Narrower to provide greater maneuverability in tight spaces, particularly in off-road use.

#### E168583

As a result of the above dimensional differences, Sport utility vehicles and trucks often will have a higher center of gravity and a greater difference in center of gravity between the loaded and unloaded condition. These differences that make your vehicle so versatile also make it handle differently than an ordinary passenger car.

#### **TIRE CARE**

## Information About Uniform Tire Quality Grading



E142542

Tire Quality Grades apply to new pneumatic passenger car tires. The Quality grades can be found where applicable on the tire sidewall between tread shoulder and maximum section width. For example: **Treadwear 200 Traction AA Temperature A**.

These Tire Quality Grades are determined by standards that the United States Department of Transportation has set.

Tire Quality Grades apply to new pneumatic passenger car tires. They do not apply to deep tread, winter-type snow tires, space-saver or temporary use spare tires, light truck or LT type tires, tires with nominal rim diameters of 10 to 12 inches or limited production tires as defined in Title 49 Code of Federal Regulations Part 575.104 (c)(2).

U.S. Department of Transportation Tire quality grades: The U.S. Department of Transportation requires Ford Motor Company to give you the following information about tire grades exactly as the government has written it.

#### **Treadwear**

The treadwear grade is a comparative rating based on the wear rate of the tire when tested under controlled conditions on a specified government test course. For example, a tire graded 150 would wear 1½ times as well on the government course as a tire graded 100. The relative performance of tires depends upon the actual conditions of their use, however, and may depart significantly from the norm due to variations in driving habits, service practices, and differences in road characteristics and climate.

#### Traction AA A B C

## WARNING

The traction grade assigned to this tire is based on straight-ahead braking traction tests, and does not include acceleration, cornering, hydroplaning or peak traction characteristics.

The traction grades, from highest to lowest are AA, A, B, and C. The grades represent the tire's ability to stop on wet pavement as measured under controlled conditions on specified government test surfaces of asphalt and concrete. A tire marked C may have poor traction performance.

### Temperature A B C

#### **WARNING**

The temperature grade for this tire is established for a tire that is properly inflated and not overloaded. Excessive speed, underinflation, or excessive loading, either separately or in combination, can cause heat buildup and possible tire failure.

The temperature grades are A (the highest), B and C, representing the tire's resistance to the generation of heat and its ability to dissipate heat when tested under controlled conditions on a specified indoor laboratory test wheel. Sustained high temperature can cause the material of the tire to degenerate and reduce tire life, and excessive temperature can lead to sudden tire failure. The grade C corresponds to a level of performance which all passenger car tires must meet under the

Federal Motor Vehicle Safety Standard No. 139. Grades B and A represent higher levels of performance on the laboratory test wheel than the minimum required by law.

## **Glossary of Tire Terminology**

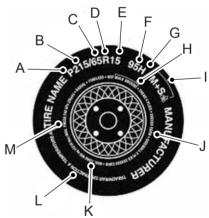
- \*Tire label: A label showing the original equipment tire sizes, recommended inflation pressure and the maximum weight the vehicle can carry.
- \*Tire Identification Number (TIN): A number on the sidewall of each tire providing information about the tire brand and manufacturing plant, tire size and date of manufacture. Also referred to as DOT code.
- \*Inflation pressure: A measure of the amount of air in a tire.
- \*Standard load: A class of P-metric or Metric tires designed to carry a maximum load at set pressure. For example: For P-metric tires 35 psi (2.4 bar) or 36 psi (2.5 bar) depending on tires size and for Metric tires 36 psi (2.5 bar). Increasing the inflation pressure beyond this pressure will not increase the tire's load carrying capability.
- \*Extra load: A class of P-metric or Metric tires designed to carry a heavier maximum load at 42 psi (2.9 bar). Increasing the inflation pressure beyond this pressure will not increase the tire's load carrying capability.

- \***kPa:** Kilopascal, a metric unit of air pressure.
- \***PSI:** Pounds per square inch, a standard unit of air pressure.
- \*Cold tire pressure: The tire pressure when the vehicle has been stationary and out of direct sunlight for an hour or more and prior to the vehicle being driven for 1 mi (1.6 km).
- \*Recommended inflation pressure: The cold inflation pressure found on the Safety Compliance Certification Label (affixed to either the door hinge pillar, door-latch post, or the door edge that meets the door-latch post, next to the driver's seating position), or Tire Label located on the B-Pillar or the edge of the driver door.
- \* **B-pillar:** The structural member at the side of the vehicle behind the front door
- \*Bead area of the tire: Area of the tire next to the rim.
- \* Sidewall of the tire: Area between the bead area and the tread
- \*Tread area of the tire: Area of the perimeter of the tire that contacts the road when mounted on the vehicle.
- \*Rim: The metal support (wheel) for a tire or a tire and tube assembly upon which the tire beads are seated.

## Information Contained on the Tire Sidewall

Both United States and Canada Federal regulations require tire manufacturers to place standardized information on the sidewall of all tires. This information identifies and describes the fundamental characteristics of the tire and also provides a U.S. DOT Tire Identification Number for safety standard certification and in case of a recall.

## **Information on P Type Tires**



E142543

P215/65R15 95H is an example of a tire size, load index and speed rating. The definitions of these items are listed below. (Note that the tire size, load index and speed rating for your vehicle may be different from this example.)

A. **P:** Indicates a tire, designated by the Tire and Rim Association, that may be used for service on cars, sport utility vehicles, minivans and light trucks. **Note:** If your tire size does not begin with a letter this may mean it is designated by either the European Tire and Rim Technical Organization or the Japan Tire Manufacturing Association.

B. **215:** Indicates the nominal width of the tire in millimeters from sidewall edge to sidewall edge. In general, the larger the number, the wider the tire.

C. **65:** Indicates the aspect ratio which gives the tire's ratio of height to width.

D. R: Indicates a radial type tire.

E. **15:** Indicates the wheel or rim diameter in inches. If you change your wheel size, you will have to purchase new tires to match the new wheel diameter.

F. **95:** Indicates the tire's load index. It is an index that relates to how much weight a tire can carry. You may find this information in your owner's manual. If not, contact a local tire dealer.

**Note:** You may not find this information on all tires because it is not required by federal law.

G. **H:** Indicates the tire's speed rating. The speed rating denotes the speed at which a tire is designed to be driven for extended periods of time under a standard condition of load and inflation pressure. The tires on your vehicle may operate at different conditions for load and inflation pressure. These speed ratings may need to be adjusted for the difference in conditions. The ratings range from 81 mph (130 km/h) to 186 mph (299 km/h). These ratings are listed in the following chart.

**Note:** You may not find this information on all tires because it is not required by federal law.

Letter rating	Speed rating
М	81 mph (130 km/h)
N	87 mph (140 km/h)
Q	99 mph (159 km/h)
R	106 mph (171 km/h)
S	112 mph (180 km/h)
Т	118 mph (190 km/h)
U	124 mph (200 km/h)
Н	130 mph (210 km/h)
V	149 mph (240 km/h)

Letter rating	Speed rating
W	168 mph (270 km/h)
Υ	186 mph (299 km/h)

**Note:** For tires with a maximum speed capability over 149 mph (240 km/h), tire manufacturers sometimes use the letters ZR. For those with a maximum speed capability over 186 mph (299 km/h), tire manufacturers always use the letters ZR.

H. U.S. DOT Tire Identification Number (TIN): This begins with the letters DOT and indicates that the tire meets all federal standards. The next two numbers or letters are the plant code designating where it was manufactured, the next two are the tire size code and the last four numbers represent the week and year the tire was built. For example, the numbers 317 mean the 31st week of 1997. After 2000. the numbers go to four digits. For example, 2501 means the 25th week of 2001. The numbers in between are identification codes used for traceability. This information is used to contact customers if a tire defect requires a recall.

I. M+S or M/S: Mud and Snow, or

AT: All Terrain, or AS: All Season.

J. **Tire Ply Composition and Material Used:** Indicates the number of plies or the number of layers of rubber-coated fabric in the tire tread and sidewall. Tire manufacturers also must indicate the ply materials in the tire and the sidewall, which include steel, nylon, polyester, and others.

K. **Maximum Load:** Indicates the maximum load in kilograms and pounds that can be carried by the tire. See the Safety Compliance Certification Label (affixed to either the door hinge pillar, door-latch post, or the door edge that meets the door-latch post, next to the driver's seating position), for the correct tire pressure for your vehicle.

## L. Treadwear, Traction and Temperature Grades:

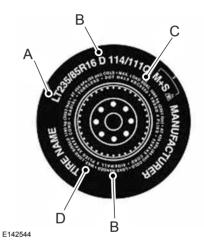
\*Treadwear The treadwear grade is a comparative rating based on the wear rate of the tire when tested under controlled conditions on a specified government test course. For example, a tire graded 150 would wear one and one-half times as well on the government course as a tire graded 100.

- \*Traction: The traction grades, from highest to lowest are AA, A, B, and C. The grades represent the tire's ability to stop on wet pavement as measured under controlled conditions on specified government test surfaces of asphalt and concrete. A tire marked C may have poor traction performance.
- \*Temperature: The temperature grades are A (the highest), B and C, representing the tire's resistance to the generation of heat and its ability to dissipate heat when tested under controlled conditions on a specified indoor laboratory test wheel.
- M. Maximum Inflation **Pressure:** Indicates the tire manufacturers' maximum permissible pressure or the pressure at which the maximum load can be carried by the tire. This pressure is normally higher than the vehicle manufacturer's recommended cold inflation pressure which can be found on the Safety Compliance Certification Label (affixed to either the door hinge pillar, door-latch post, or the door edge that meets the door-latch post, next to the driver's seating position), or Tire Label which is located on the B-Pillar or the edge of the driver's door. The cold inflation pressure should never be set lower than the recommended pressure on the vehicle label.

The tire suppliers may have additional markings, notes or warnings such as standard load or radial tubeless.

## Additional Information Contained on the Tire Sidewall for LT Type Tires

**Note:** Tire Quality Grades do not apply to this type of tire.



LT type tires have some additional information beyond those of P type tires; these differences are described below.

- A. **LT:** Indicates a tire, designated by the Tire and Rim Association, that is intended for service on light trucks.
- B. Load Range and Load Inflation Limits: Indicates the tire's load-carrying capabilities and its inflation limits.

C. Maximum Load Dual lb (kg) at psi (kPa) cold: Indicates the maximum load and tire pressure when the tire is used as a dual, defined as four tires on the rear axle (a total of six or more tires on the vehicle).

D. Maximum Load Single lb (kg) at psi (kPa) cold: Indicates the maximum load and tire pressure when the tire is used as a single, defined as two tires (total) on the rear axle.

### **Information on T Type Tires**

T145/80D16 is an example of a tire size.

**Note:** The temporary tire size for your vehicle may be different from this example. Tire Quality Grades do not apply to this type of tire.



E142545

T type tires have some additional information beyond those of P type tires; these differences are described below:

A. **T:** Indicates a type of tire, designated by the Tire and Rim Association, that is intended for temporary service on cars, sport utility vehicles, minivans and light trucks.

B. **145:** Indicates the nominal width of the tire in millimeters from sidewall edge to sidewall edge. In general, the larger the number, the wider the tire.

C. **80:** Indicates the aspect ratio which gives the tire's ratio of height to width. Numbers of 70 or lower indicate a short sidewall.

D. D: Indicates a diagonal type tire.

R: Indicates a radial type tire.

E. **16:** Indicates the wheel or rim diameter in inches. If you change your wheel size, you will have to purchase new tires to match the new wheel diameter.

## Recommended Tire Pressures and Inflating Your Tires

Safe operation of your vehicle requires that your tires are properly inflated. Remember that a tire can lose up to half of its air pressure without appearing flat. Every day before you drive, check your tires. If one looks lower than the others, use a tire gauge to check the pressure of all tires and adjust if required.

At least once a month and before long trips, inspect each tire and check the tire pressure with a tire gauge (including spare, if equipped). Inflate all tires to the inflation pressure recommended by Ford Motor Company.

#### WARNING

↑ Under-inflation is the most common cause of tire failures and may result in severe tire cracking, tread separation, or blowout, with unexpected loss of vehicle control and increased risk of injury. Under-inflation increase sidewall flexing and rolling resistance, resulting in heat build-up and internal damage to the tire. It also may result in unnecessary tire stress, irregular wear, loss of vehicle control, and accidents. A tire can lose up to half of its air pressure and not appear flat.

You are strongly urged to buy a reliable tire pressure gauge, as automatic service station gauges may be inaccurate. Ford recommends the use of a digital or dial-type tire pressure gauge rather than a stick-type tire pressure gauge. Use the recommended cold inflation pressure for optimum tire performance and wear. Under-inflation or over-inflation may cause uneven treadwear patterns.

Always inflate your tires to the Ford recommended inflation pressure even if it is less than the maximum inflation pressure information found on the tire. You will find a Tire Label containing the Ford recommended tire inflation pressure by the tire size and other important information located on the B-Pillar or the edge of the driver's door.

The Ford recommended tire inflation pressure is also found on the Safety Compliance Certification Label (affixed to either the door hinge pillar, door-latch post, or the door edge that meets the door-latch on the B-pillar, or on the edge of the driver's door.

Failure to follow the tire pressure recommendations can cause uneven treadwear patterns and adversely affect the way your vehicle handles.

## Inspecting Your Tires and Wheel Valve Stems

Periodically inspect the tire treads for uneven or excessive wear and remove objects such as stones, nails or glass that may be wedged in the tread grooves. Check the tire and valve stems for holes, cracks, or cuts that may permit air leakage and repair or replace the tire and replace the valve stem. Inspect the tire sidewalls for cracking, cuts, bruises and other signs of damage or excessive wear. If internal damage to the tire

is suspected, have the tire demounted and inspected in case it needs to be repaired or replaced. For your safety, tires that are damaged or show signs of excessive wear should not be used because they are more likely to blow out or fail.

Improper or inadequate vehicle maintenance can cause tires to wear abnormally. Inspect all your tires, including the spare, frequently, and replace them if one or more of the following conditions exist:

#### **Tire Wear**



E142546

When the tread is worn down to one sixteenth of an inch (2 mm), tires must be replaced to help prevent your vehicle from skidding and hydroplaning. Built-in treadwear indicators, or wear bars, which look like narrow strips of smooth rubber across the tread will appear on the tire when the tread is worn down to one sixteenth of an inch (2 mm).

When the tire tread wears down to the same height as these wear bars, the tire is worn out and must be replaced.

### **Damage**

Periodically inspect the tire treads and sidewalls for damage (such as bulges in the tread or sidewalls, cracks in the tread groove and separation in the tread or sidewall). If damage is observed or suspected, have the tire inspected by a tire professional. Tires can be damaged during off-road use, so inspection after off-road use is also recommended.

#### Age

#### WARNING

Tires degrade over time depending on many factors such as weather, storage conditions, and conditions of use (load, speed, inflation pressure) the tires experience throughout their lives.

In general, tires should be replaced after six years regardless of tread wear. However, heat caused by hot climates or frequent high loading conditions can accelerate the aging process and may require tires to be replaced more frequently.

You should replace your spare tire when you replace the road tires or after six years due to aging even if it has not been used.

## U.S. DOT Tire Identification Number

Both United States and Canada Federal regulations require tire manufacturers to place standardized information on the sidewall of all tires. This information identifies and describes the fundamental characteristics of the tire and also provides a U.S. DOT Tire Identification Number for safety standard certification and in case of a recall.

This begins with the letters DOT and indicates that the tire meets all federal standards. The next two numbers or letters are the plant code designating where it was manufactured, the next two are the tire size code and the last four numbers represent the week and year the tire was built. For example, the numbers 317 mean the 31st week of 1997. After 2000. the numbers go to four digits. For example, 2501 means the 25th week of 2001. The numbers in between are identification codes used for traceability. This information is used to contact customers if a tire defect requires a recall.

## Tire Replacement Requirements

Your vehicle is equipped with tires designed to provide a safe ride and handling capability.

#### **WARNINGS**

Only use replacement tires and wheels that are the same size, load index, speed rating and type (such as P-metric versus LT-metric or all-season versus all-terrain) as those originally provided by Ford. The recommended tire and wheel size may be found on either the Safety Compliance Certification Label (affixed to either the door hinge pillar, door-latch post, or the door edge that meets the door-latch post, next to the driver's seating position). or the Tire Label which

#### WARNINGS

is located on the B-Pillar or edge of the driver's door. If this information is not found on these labels then you should contact vour authorized dealer as soon as possible. Use of any tire or wheel not recommended by Ford can affect the safety and performance of your vehicle, which could result in an increased risk of loss of vehicle control, vehicle rollover. personal injury and death. Additionally the use of non-recommended tires and wheels could cause steering. suspension, axle, transfer case or power transfer unit failure. If you have questions regarding tire replacement, contact your authorized dealer as soon as possible.

To reduce the risk of serious injury, when mounting replacement tires and wheels, you should not exceed the maximum pressure indicated on the sidewall of the tire to set the beads without additional precautions listed below. If the beads do not seat at the maximum pressure indicated, re-lubricate and try again.

When inflating the tire for mounting pressures up to 20 psi (1.38 bar) greater than the maximum pressure on the tire sidewall, the following precautions must be taken to protect the person mounting the tire.

#### WARNINGS

- 1. Make sure that you have the correct tire and wheel size.
- 2. Lubricate the tire bead and wheel bead seat area again.
- 3. Stand at a minimum of 12 feet (3.66 meters) away from the wheel and tire assembly.
- Use both eye and ear protection.

For a mounting pressure more than 20 psi (1.38 bar) greater than the maximum pressure, a Ford dealer or other tire service professional should do the mounting.

Always inflate steel carcass tires with a remote air fill with the person inflating standing at a minimum of 12 feet (3.66 meters) away from the wheel and tire assembly.

**Important:** Remember to replace the wheel valve stems when the road tires are replaced on your vehicle

It is recommended that the two front tires or two rear tires generally be replaced as a pair.

The tire pressure sensors mounted in the wheels (originally installed on your vehicle) are not designed to be used in aftermarket wheels.

The use of wheels or tires not recommended by Ford Motor Company may affect the operation of your tire pressure monitoring system.

If the tire pressure monitoring system indicator is flashing, your system is malfunctioning. Your replacement tire might be incompatible with your tire pressure monitoring system, or some component of the system may be damaged.

#### **Safety Practices**

#### **WARNINGS**

If your vehicle is stuck in snow, mud, or sand, do not rapidly spin the tires. Spinning the tires can tear the tire and cause an explosion. A tire can explode in as little as three to five seconds.

Do not spin the wheels at over 35 mph (56 km/h). The tires may fail and injure a passenger or bystander.

# Driving habits have a great deal to do with your tire mileage and safety.

- \*Observe posted speed limits
- \*Avoid fast starts, stops and turns
- \*Avoid potholes and objects on the road
- \*Do not run over curbs or hit the tire against a curb when parking

#### **Highway Hazards**

No matter how carefully you drive, there is always the possibility that you may eventually have a flat tire on the highway. Drive slowly to the closest safe area out of traffic. This may further damage the flat tire, but your safety is more important.

If you feel a sudden vibration or ride disturbance while driving, or you suspect your tire or vehicle has been damaged, immediately reduce your speed. Drive with caution until you can safely pull off the road. Stop and inspect the tires for damage. If a tire is under-inflated or damaged, deflate it, remove wheel and replace it with your spare tire and wheel. If you cannot detect a cause, have the vehicle towed to the nearest repair facility or tire dealer to have the vehicle inspected.

### **Tire and Wheel Alignment**

A bad jolt from hitting a curb or pothole can cause the front end of your vehicle to become misaligned or cause damage to your tires. If your vehicle seems to pull to one side when you are driving, the wheels may be out of alignment. Have an authorized dealer check the wheel alignment periodically.

Wheel misalignment in the front or the rear can cause uneven and rapid treadwear of your tires and should be corrected by an authorized dealer. Front-wheel drive vehicles and those with an independent rear suspension (if equipped) may require alignment of all four wheels.

The tires should also be balanced periodically. An unbalanced tire and wheel assembly may result in irregular tire wear.

#### **Tire Rotation**

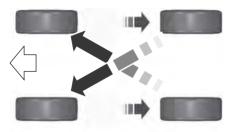
**Note:** If your tires show uneven wear, ask an authorized dealer to check for and correct any wheel misalignment, tire imbalance or mechanical problem involved before tire rotation.

**Note:** Your vehicle may be equipped with a dissimilar spare wheel and tire assembly. A dissimilar spare wheel and tire assembly is defined as a spare wheel and tire assembly that is different in brand, size or appearance from the road tires and wheels. If you have a dissimilar spare wheel and tire assembly, it is intended for temporary use only and should not be used in a tire rotation.

**Note:** After having your tires rotated, inflation pressure must be checked and adjusted to the vehicle requirements.

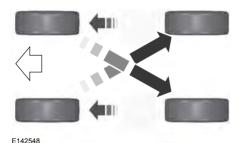
Rotating your tires at the recommended interval (as indicated in the Scheduled Maintenance chapter) will help your tires wear more evenly, providing better tire performance and longer tire life. Sometimes irregular tire wear can be corrected by rotating the tires.

#### Front-wheel drive vehicles

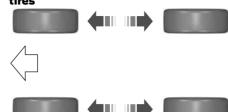


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#### 4-wheel drive vehicles



## Vehicles equipped with directional tires



E70415

#### **USING SNOW CHAINS**

#### **WARNING**

Snow tires must be the same size, load index, speed rating as those originally provided by Ford. Use of any tire or wheel not recommended by Ford can affect the safety and performance of your vehicle, which could result in an increased risk of loss of vehicle control, vehicle rollover, personal injury and death. Additionally, the use of non-recommended tires and wheels could

non-recommended tires and wheels could cause steering, suspension, axle, transfer case or power transfer unit failure.

The tires on your vehicle have all-weather treads to provide traction in rain and snow. However, in some climates, you may need to use snow tires and cables. If you need to use cables, it is recommended that steel wheels (of the same size and specifications) be used, as cables may chip aluminum wheels.

Follow these guidelines when using snow tires and traction devices

- If possible, avoid fully loading your vehicle
- Purchase chains or cables from a manufacturer that clearly labels body to tire dimension restrictions.
- Use 10 mm cables or chains only on front axle with 235/55R17 tires.
- Not all S-class snow chains or cables meet these restrictions. Chains of this size restriction will include a tensioning device.
- The snow chains or cables must be mounted in pairs on the front axle.
- Do not use chains or cables on 235/50R18 and 235/45R19 tires.
- Install cables securely, verifying that the cables do not touch any wiring, brake lines or fuel lines.
- When driving with tire cables do not exceed 30 mph (48 km/h) or the maximum speed recommended by the chain manufacturer, whichever is less.
- Drive cautiously. If you hear the cables rub or bang against the vehicle, stop and retighten them. If this does not work, remove the cables to prevent vehicle damage.
- Remove the cables when they are no longer needed. Do not use cables on dry roads.

If you have any questions regarding snow chains or cables, please contact your authorized dealer.

## TIRE PRESSURE MONITORING SYSTEM

#### WARNING

The tire pressure monitoring system is not a substitute for manually checking tire pressure. The tire pressure should be checked periodically (at least monthly) using a tire gauge, see Inflating your tires in this chapter. Failure to properly maintain your tire pressure could increase the risk of tire failure, loss of control, vehicle rollover and personal injury.



Each tire, including the spare (if provided), should be checked monthly when cold and inflated

to the inflation pressure recommended by the vehicle manufacturer on the vehicle placard or tire inflation pressure label. (If your vehicle has tires of a different size than the size indicated on the vehicle placard or tire inflation pressure label, you should determine the proper tire inflation pressure for those tires.)

As an added safety feature, your vehicle has been equipped with a Tire Pressure Monitoring System (TPMS) that illuminates a low tire pressure telltale when one or more of your tires is significantly under-inflated. Accordingly, when the low tire pressure telltale illuminates, you should stop and check your tires as soon as possible, and inflate them to the proper pressure. Driving on a significantly under-inflated tire causes the tire to overheat and can lead to tire failure. Under-inflation also reduces fuel efficiency and tire tread life, and may affect the vehicle's handling and stopping ability.

Please note that the TPMS is not a substitute for proper tire maintenance, and it is the driver's responsibility to maintain correct tire pressure, even if under-inflation has not reached the level to trigger illumination of the TPMS low tire pressure telltale

Your vehicle has also been equipped with a TPMS malfunction indicator to indicate when the system is not operating properly. The TPMS malfunction indicator is combined with the low tire pressure telltale. When the system detects a malfunction, the telltale will flash for approximately one minute and then remain continuously illuminated. This sequence will continue upon subsequent vehicle start-ups as long as the malfunction exists.

When the malfunction indicator is illuminated, the system may not be able to detect or signal low tire pressure as intended. TPMS malfunctions may occur for a variety of reasons, including the installation of replacement or alternate tires or wheels on the vehicle that prevent the TPMS from functioning properly. Always check the TPMS malfunction telltale after replacing one or more tires or wheels on your vehicle to ensure that the replacement or alternate tires and wheels allow the TPMS to continue to function properly.

The tire pressure monitoring system complies with part 15 of the FCC rules and with RSS-210 of Industry Canada. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

## Changing Tires With a Tire Pressure Monitoring System



**Note:** Each road tire is equipped with a tire pressure sensor located inside the wheel and tire assembly cavity. The pressure sensor is attached to the valve stem. The pressure sensor is covered by the tire and is not visible unless the tire is removed. Take care when changing the tire to avoid damaging the sensor

You should always have your tires serviced by an authorized dealer.

Check the tire pressure periodically (at least monthly) using an accurate tire gauge. See Inflating Your Tires in this chapter.

#### Understanding Your Tire Pressure Monitoring System

The tire pressure monitoring system measures pressure in your four road tires and sends the tire pressure readings to your vehicle. The low tire pressure warning light will turn on if the tire pressure is significantly low. Once the light is illuminated, your tires are under-inflated and need to be inflated to the manufacturer's recommended tire pressure. Even if the light turns on and a short time later turns off, your tire pressure still needs to be checked.

## When Your Temporary Spare Tire is Installed

When one of your road tires needs to be replaced with the temporary spare, the system will continue to identify an issue to remind you that the damaged road wheel and tire assembly needs to be repaired and put back on your vehicle.

To restore the full function of the tire pressure monitoring system, have the damaged road wheel and tire assembly repaired and remounted on your vehicle.

## When You Believe Your System is Not Operating Properly

The main function of the tire pressure monitoring system is to warn you when your tires need air. It can also warn you in the event the system is no longer capable of functioning as intended. See the following chart for information concerning your tire pressure monitoring system:

Low tire pressure warning light	Possible cause	Customer action required
Solid warning light	Tire(s) under-inflated	Make sure tires are at the proper pressure. See Inflating your tires in this chapter. After inflating your tires to the manufacturer's recommended pressure as shown on the Tire Label (located on the edge of driver's door or the B-Pillar), the vehicle must be driven for at least two minutes over 20 mph (32 km/h) before the light turns off.
	Spare tire in use	Repair the damaged road wheel and tire assembly and reinstall it on the vehicle to restore system function. For a description on how the system functions, see <b>When your temporary spare tire is installed</b> in this section.
	TPMS malfunction	If the tires are properly inflated and the spare tire is not in use but the light remains on, contact your authorized dealer as soon as possible.
Flashing warning light	Spare tire in use	Repair the damaged road wheel and tire assembly and reinstall it on the vehicle to restore system function. For a description on how the system functions, see <b>When your temporary spare tire is installed</b> in this section.
	TPMS malfunction	If the tires are properly inflated and the spare tire is not in use but the light remains on, contact your authorized dealer as soon as possible.

### **When Inflating Your Tires**

When putting air into your tires (such as at a gas station or in your garage), the tire pressure monitoring system may not respond immediately to the air added to your tires.

It may take up to two minutes of driving over 20 mph (32 km/h) for the light to turn off after you have filled your tires to the recommended inflation pressure

#### **How Temperature Affects Your Tire Pressure**

The tire pressure monitoring system monitors tire pressure in each pneumatic tire. While driving in a normal manner, a typical passenger tire inflation pressure may increase about 2 to 4 psi (14 to 28 kPa) from a cold start situation. If the vehicle is stationary overnight with the outside temperature significantly lower than the daytime temperature, the tire pressure may decrease about 3 psi (21 kPa) for a drop of 30°F (17°C) in ambient temperature. This lower pressure value may be detected by the tire pressure monitoring system as being significantly lower than the recommended inflation pressure and activate the system warning light for low tire pressure. If the low tire pressure warning light is on, visually check each tire to verify that no tire is flat. If one or more tires are flat, repair as necessary. Check the air pressure in the road tires. If any tire is under-inflated, carefully drive the vehicle to the nearest location where air can be added to the tires. Inflate all the tires to the recommended inflation. pressure.

#### CHANGING A ROAD WHEEL

#### WARNINGS

The use of tire sealant may damage vour tire pressure monitoring system and should only be used in roadside emergencies. If you must use a sealant, the Ford Tire Mobility Kit sealant should be used. The tire pressure monitoring system sensor and valve stem on the wheel must be replaced by an authorized dealer after use of the sealant.



See Tire Pressure Monitoring **System** (page 258). If the tire pressure monitor sensor becomes damaged, it will no longer function.

**Note:** The tire pressure monitoring system indicator light will illuminate when the spare tire is in use. To restore the full function of the monitoring system, all road wheels equipped with tire pressure monitoring sensors must be mounted on the vehicle.

If you get a flat tire while driving, do not apply the brake heavily. Instead, gradually decrease your speed. Hold the steering wheel firmly and slowly move to a safe place on the side of the road.

Have a flat serviced by an authorized dealer in order to prevent damage to the tire pressure monitoring system sensors. See Tire Pressure Monitoring System (page 258). Replace the spare tire with a road tire as soon as possible. During repairing or replacing of the flat tire, have the authorized dealer inspect the tire pressure monitoring system sensor for damage.

#### Dissimilar Spare Wheel and Tire **Assembly Information**

#### WARNING



Failure to follow these guidelines could result in an increased risk of loss of vehicle control, injury or death.

If you have a dissimilar spare wheel and tire, then it is intended for temporary use only. This means that if you need to use it. you should replace it as soon as possible with a road wheel and tire assembly that is the same size and type as the road tires and wheels that were originally provided by Ford. If the dissimilar spare tire or wheel is damaged, it should be replaced rather than repaired.

A dissimilar spare wheel and tire assembly is defined as a spare wheel and tire assembly that is different in brand, size or appearance from the road tires and wheels and can be one of three types:

- 1. **T-type mini-spare:** This spare tire begins with the letter T for tire size and may have Temporary Use Only molded in the sidewall.
- 2. Full-size dissimilar spare with label on wheel: This spare tire has a label on the wheel that states: THIS WHEEL AND TIRE ASSEMBLY FOR TEMPORARY USE ONLY

When driving with one of the dissimilar spare tires listed above, do not:

- Exceed 50 mph (80 km/h).
- Load the vehicle beyond maximum vehicle load rating listed on the Safety Compliance Label.
- Tow a trailer.
- Use snow chains on the end of the vehicle with the dissimilar spare tire.
- Use more than one dissimilar spare tire at a time.
- Use commercial car washing equipment.
- Try to repair the dissimilar spare tire.

Use of one of the dissimilar spare tires listed above at any one wheel location can lead to impairment of the following:

- Handling, stability and braking performance.
- Comfort and noise.
- Ground clearance and parking at curbs.
- Winter weather driving capability.
- Wet weather driving capability.
- All-wheel driving capability

## 3. Full-size dissimilar spare without label on wheel

When driving with the full-size dissimilar spare wheel and tire assembly, do not:

- Exceed 70 mph (113 km/h).
- Use more than one dissimilar spare wheel and tire assembly at a time.

- Use commercial car washing equipment.
- Use snow chains on the end of the vehicle with the dissimilar spare wheel and tire assembly.

The usage of a full-size dissimilar spare wheel and tire assembly can lead to impairment of the following:

- Handling, stability and braking performance.
- Comfort and noise.
- · Ground clearance and parking at curbs.
- · Winter weather driving capability.
- Wet weather driving capability.
- All-wheel driving capability

When driving with the full-size dissimilar spare wheel and tire assembly additional caution should be given to:

- · Towing a trailer.
- Driving vehicles equipped with a camper body.
- Driving vehicles with a load on the cargo rack.

Drive cautiously when using a full-size dissimilar spare wheel and tire assembly and seek service as soon as possible.

### **Tire Change Procedure**

#### WARNINGS

When one of the front wheels is off the ground, the transmission alone will not prevent your vehicle from moving or slipping off the jack, even if the

moving or slipping off the jack, even if the transmission is in park (P) or neutral (N).



To help prevent your vehicle from moving when you change a tire, be sure to place the transmission in park

(P) or neutral (N), set the parking brake, and block (in both directions) the wheel that is diagonally opposite (other side and end of your vehicle) to the tire being changed.

#### **WARNINGS**

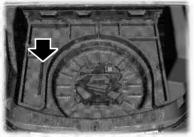
Never get underneath a vehicle that is supported only by a jack. If the vehicle slips off the jack, you or someone else could be seriously injured.

Do not attempt to change a tire on the side of the vehicle close to moving traffic. Pull far enough off the road to avoid the danger of being hit when operating the jack or changing the wheel.

Always use the jack provided as original equipment with your vehicle. If using a jack other than the one provided as original equipment with your vehicle, make sure the jack capacity is adequate for the vehicle weight, including any vehicle cargo or modifications.

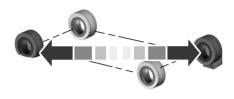
**Note:** Passengers should not remain in your vehicle when the vehicle is being jacked.

- 1. Park on a level surface, set the parking brake and activate the hazard flashers.
- 2. Place the transmission in park (P) and turn the engine off.
- 3. Remove the carpeted wheel cover.
- Remove the wing nut that secures the spare tire by turning it counterclockwise.



E160855

5. Remove the jack from the foam holder. The lug wrench is located in the left side storage foam next to the spare tire. Remove the flat tire retainer strap from the jack base.



#### E142551

- 6. Block the diagonally opposite wheel.
- 7. Loosen each wheel lug nut one-half turn counterclockwise, but do not remove them until the wheel is raised off the ground.

**Note:** *Jack at the specified locations to avoid damage to the vehicle.* 

8. The vehicle jacking points are shown here, and are depicted on the warning label on the jack.



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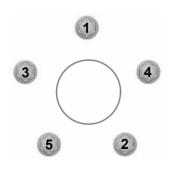
9. Small arrow-shaped marks on the sills show the location of the jacking points.



10. Remove the lug nuts with the lug wrench.

**Note:** If equipped with full wheel covers with exposed wheel nuts, remove the wheel nuts prior to removing the wheel cover or damage to the wheel cover may occur.

- Replace the flat tire with the spare tire, making sure the valve stem is facing outward. Reinstall the lug nuts until the wheel is snug against the hub. Do not fully tighten the lug nuts until the wheel has been lowered.
- 12. Lower the wheel by turning the jack handle counterclockwise.



 Remove the jack and fully tighten the lug nuts in the order shown. See Technical Specifications (page 266).

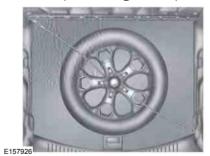
#### Stowing the flat tire

- Put the jack and lug wrench away. Make sure the jack is fastened so it does not rattle when you drive.
- Unblock the wheels.
- Stow the flat tire on the floor in the cargo area. Secure with the flat tire retainer strap by following the next steps:



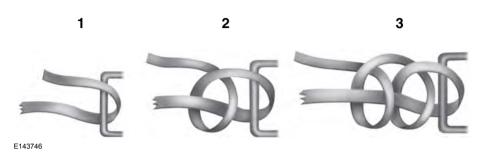
E142906

4. Locate the cargo tie-down near the seatback. Push the loop of the retainer strap through the tie-down. Thread the non-loop end through the loop.



E75442

- 5. Weave the retainer strap through the wheel openings.
- Locate the front cargo tie-down at the opposite corner of the cargo area to the tie-down used in Step 4. Thread the retainer strap through the tie-down and pull tight.
- 7. Secure by tying a 2-half hitch knot.



#### **TECHNICAL SPECIFICATIONS**

#### **Wheel Lug Nut Torque Specifications**

#### WARNING

When a wheel is installed, always remove any corrosion, dirt or foreign materials present on the mounting surfaces of the wheel or the surface of the wheel hub, brake drum or brake disc that contacts the wheel. Make sure that any fasteners that attach the rotor to the hub are secured so they do not interfere with the mounting surfaces of the wheel. Installing wheels without correct metal-to-metal contact at the wheel mounting surfaces can cause the wheel nuts to loosen and the wheel to come off while your vehicle is in motion, resulting in loss of control.

Bolt size	lb-ft (Nm) <sup>*</sup>
M12 x 1.5	100 (135)

<sup>\*</sup>Torque specifications are for nut and bolt threads free of dirt and rust. Use only Ford recommended replacement fasteners.

Retighten the lug nuts to the specified torque within 100 miles (160 kilometers) after any wheel disturbance (such as tire rotation, changing a flat tire, wheel removal).



A Wheel pilot bore

Inspect the wheel pilot bore and mounting surface prior to installation. Remove any visible corrosion or loose particles.

### ENGINE SPECIFICATIONS - 1.6L ECOBOOST™

Engine Component	1.6L EcoBoost Engine	
Cubic inches	98	
Required fuel	Minimum 87 octane	
Compression ratio	10.0:1	
Spark plug gap	0.027 - 0.031 in. (0.70 - 0.80 mm)	

### **Drivebelt Routing**

#### 1.6L Ecoboost engine

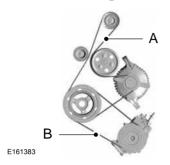
E161372



ENGINE SPECIFICATIONS - 2.0L ECOBOOST™

Engine Component	2.0L EcoBoost Engine
Cubic inches	122
Required fuel	Minimum 87 octane
Compression ratio 9.3:1	
Spark plug gap	0.027 - 0.031 in. (0.70 - 0.80 mm)

### **Drivebelt Routing**

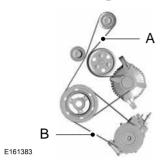


- A. The long drivebelt is on the first pulley groove closest to the engine.
- B. The short drivebelt is on the second pulley groove farthest from engine.

### **ENGINE SPECIFICATIONS - 2.5L**

Engine Component	2.5L Engine
Cubic inches	152
Required fuel Minimum 87 octane	
Compression ratio 9.7:1	
Spark plug gap	0.049 - 0.053 in. (1.25 - 1.35 mm)

#### **Drivebelt Routing**



- A. The long drivebelt is on the first pulley groove closest to the engine.
- B. The short drivebelt is on the second pulley groove farthest from the engine.

#### MOTORCRAFT PARTS - 1.6L ECOBOOST™

Component	1.6L EcoBoost Engine
Air filter element	FA-1908
Oil filter	FL-910-S
Battery	BXT-96R-590
Spark plugs	SP-532
Cabin air filter	FP-70
Windshield wiper blade	WW-2750 (driver side) WW-2705 (passenger side) WW-1106 (rear window)

We recommend Motorcraft replacement parts available at your Ford dealer or at fordparts.com for scheduled maintenance. These parts meet or exceed Ford Motor Company's specifications and are engineered for your vehicle. Use of other parts may impact vehicle performance, emissions and durability. Your warranty may be void for any damage related to use of other parts.

If a Motorcraft oil filter is not available, use an oil filter that meets industry performance specification SAE/USCAR-36.

For spark plug replacement, contact an authorized dealer. Replace the spark plugs at the appropriate intervals.

#### MOTORCRAFT PARTS - 2.0L ECOBOOST™

Component	2.0L EcoBoost Engine
Air filter element	FA-1908
Oil filter	FL-910-S
Battery	BXT-96R-590
Spark plugs	SP-537
Cabin air filter	FP-70
Windshield wiper blade	WW-2750 (driver side) WW-2705 (passenger side) WW-1106 (rear window)

We recommend Motorcraft replacement parts available at your Ford dealer or at fordparts.com for scheduled maintenance. These parts meet or exceed Ford Motor Company's specifications and are engineered for your vehicle. Use of other parts may impact vehicle performance, emissions and durability. Your warranty may be void for any damage related to use of other parts.

If a Motorcraft oil filter is not available, use an oil filter that meets industry performance specification SAE/USCAR-36.

For spark plug replacement, contact an authorized dealer. Replace the spark plugs at the appropriate intervals.

#### **MOTORCRAFT PARTS - 2.5L**

Component	2.5L Engine
Air filter element	FA-1910
Oil filter	FL-910-S
Battery	BXT-96R-590
Spark plugs	SP-530
Cabin air filter	FP-70
Windshield wiper blade	WW-2750 (driver side) WW-2705 (passenger side) WW-1106 (rear window)

We recommend Motorcraft replacement parts available at your Ford dealer or at fordparts.com for scheduled maintenance. These parts meet or exceed Ford Motor Company's specifications and are engineered for your vehicle. Use of other parts may impact vehicle performance, emissions and durability. Your warranty may be void for any damage related to use of other parts.

If a Motorcraft oil filter is not available, use an oil filter that meets industry performance specification SAE/USCAR-36.

For spark plug replacement, contact an authorized dealer. Replace the spark plugs at the appropriate intervals.

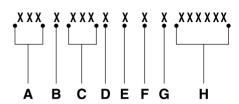
## VEHICLE IDENTIFICATION NUMBER

The vehicle identification number is located on the left-hand side of the instrument panel.



Please note that in the graphic, XXXX is representative of your vehicle identification number.

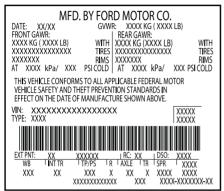
The Vehicle Identification Number contains the following information:



#### E142477

- A World manufacturer identifier
- B Brake system, Gross Vehicle Weight Rating, Restraint Devices and their locations
- C Make, vehicle line, series, body type
- D Engine type
- E Check digit
- F Model year
- G Assembly plant
- H Production sequence number

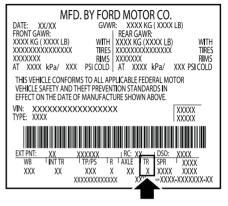
## VEHICLE CERTIFICATION LABEL



E167469

The National Highway Traffic Safety Administration Regulations require that a Safety Compliance Certification Label be affixed to a vehicle and prescribe where the Safety Compliance Certification Label may be located. The Safety Compliance Certification Label shall be affixed to either the door hinge pillar, the door latch post, or the edge of the door near the door latch, next to the driver's seating position.

## TRANSMISSION CODE DESIGNATION



#### E167814

The transmission code is on the Safety Compliance Certification Label. The following table shows the transmission code along with the transmission description.

Description	Code
Six-speed automatic transmission 6F35	6

#### CAPACITIES AND SPECIFICATIONS - 1.6L ECOBOOST™

#### **Capacities**

#### WARNING

Δ

The air conditioning refrigerant system contains refrigerant R-134a under high pressure. Only qualified personnel should service the air conditioning refrigerant system. Opening the air conditioning refrigerant system can cause personal injury.

Item	Capacity
Engine oil	4.3 qt (4.1 L)
Engine coolant	11.1 qt (10.5 L)
Brake fluid	Between MIN/MAX on brake fluid reservoir
Rear differential fluid	2.4 pt (1.15L)
Power Transfer Unit (PTU) fluid	17.9 fl oz (0.53 L)
Automatic transmission fluid	9.0 qt (8.5 L) *
Windshield washer fluid	Fill as required
Fuel tank	15.5 gal (58.7 L)
A/C refrigerant	24 oz (0.68 kg)
A/C refrigerant compressor oil	4.5 fl oz (133 ml)

<sup>\*</sup>Approximate dry fill capacity. Actual amount may vary during fluid changes.

## **Specifications**

#### **Materials**

Name	Specification
Recommended motor oil (U.S.): Motorcraft SAE 5W-20 Premium Synthetic Blend Motor Oil XO-5W20-QSP	WSS-M2C945-A
Recommended motor oil (Canada): Motorcraft SAE 5W-20 Super Premium Blend Motor Oil CXO-5W20-LSP12	WSS-M2C945-A
Recommended motor oil (Mexico): Motorcraft SAE 5W-20 Synthetic Motor Oil	WSS-M2C945-A

Name	Specification
MXO-5W20-QSP	
Optional motor oil (U.S. and Mexico): Motorcraft SAE 5W-20 Full Synthetic Motor Oil XO-5W20-QFS	WSS-M2C945-A
Optional motor oil (Canada): Motorcraft SAE 5W-20 Synthetic Motor Oil CXO-5W20-LFS12	WSS-M2C945-A
Engine coolant (U.S. and Mexico): Motorcraft Orange Antifreeze/Coolant Prediluted VC-3DIL-B	WSS-M97B44-D2
Engine coolant (Canada): Motorcraft Orange Antifreeze/Coolant Prediluted CVC-3DIL-B	WSS-M97B44-D2
Brake fluid: Motorcraft DOT 4 Low Viscosity (LV) High Performance Motor Vehicle Brake Fluid PM-20	WSS-M6C65-A2
Rear differential fluid (U.S.): Motorcraft SAE 80W-90 Premium Rear Axle Lubricant XY-80W90-QL	WSP-M2C197-A
Rear differential fluid (Canada): Motorcraft SAE 80W-90 Premium Rear Axle Lubricant CXY-80W90-1L	WSP-M2C197-A
Rear differential fluid (Mexico): Motorcraft SAE 80W-90 Premium Rear Axle Lubricant MXY-80W90-QL	WSP-M2C197-A
Power Transfer Unit (PTU) fluid (U.S. and Mexico): Motorcraft SAE 75W-140 Synthetic Rear Axle Lubricant XY-75W140-QL	WSL-M2C192-A
Power Transfer Unit (PTU) fluid (Canada): Motorcraft SAE 75W-140 Synthetic Rear Axle Lubricant CXY-75W140-1L	WSL-M2C192-A
Automatic transmission fluid (U.S. and Mexico): Motorcraft MERCON LV Automatic Transmission Fluid XT-10-QLVC	WSS-M2C938-A MERCON LV
Automatic transmission fluid (Canada): Motorcraft MERCON LV Automatic Transmission Fluid	WSS-M2C938-A MERCON LV

Name	Specification
CXT-10-LV12	
Windshield washer fluid (U.S. and Mexico): Motorcraft Premium Windshield Wash Concentrate with Bitterant ZC-32-B2	WSS-M14P19-A
Windshield washer fluid (Canada): Motorcraft Premium Quality Windshield Washer Fluid CXC-37-(A, B, D, F)	WSS-M14P19-A
A/C refrigerant (U.S.): Motorcraft R-134a Refrigerant YN-19	WSH-M17B19-A
A/C refrigerant (Canada): Motorcraft R-134a Refrigerant CYN-16-R	WSH-M17B19-A
A/C refrigerant (Mexico): Motorcraft R-134a Refrigerant MYN-19	WSH-M17B19-A
A/C refrigerant compressor oil: Motorcraft PAG Refrigerant Compressor Oil YN-12-D	WSH-M1C231-B
Multi-purpose grease: Motorcraft Multi-Purpose Grease Spray XL-5	ESB-M1C93-B
Lock cylinders (U.S.): Penetrating and Lock Lubricant XL-1	
Lock cylinders (Canada): Penetrating Fluid CXC-51-A	
Lock cylinders (Mexico): Penetrating and Lock Lubricant MXL-1	

If you use oil and fluids that do not meet the defined specification and viscosity grade, this may lead to:

- Component damage which is not covered by the vehicle warranty.
- Longer engine cranking periods.
- Increased emission levels.
- Reduced engine performance.
- Reduced fuel economy.
- Degraded brake performance.

We recommend Motorcraft motor oil for your vehicle. If Motorcraft oil is not available, use motor oils of the recommended viscosity grade that meet API SN requirements and display the API Certification Mark for gasoline engines. Do not use oil labeled with API SN service category unless the label also displays the API certification mark.



An oil that displays this symbol conforms to current engine, emission system and fuel economy performance standards of the International Lubricants Specification Advisory Council (ILSAC).

Do not use supplemental engine oil additives because they are unnecessary and could lead to engine damage that may not be covered by your vehicle warranty.

Note: Ford recommends using DOT 4 Low Viscosity (LV) High Performance Brake Fluid or equivalent meeting WSS-M6C65-A2. Use of any fluid other than the recommended fluid may cause degraded brake performance and not meet the Ford performance standards. Keep brake fluid clean and dry. Contamination with dirt, water, petroleum products or other materials may result in brake system damage and possible failure.

**Note:** Automatic transmissions that require MERCON LV transmission fluid should only use MERCON LV transmission fluid. The use of any other fluid may cause transmission damage.

E142732

### CAPACITIES AND SPECIFICATIONS - 2.0L ECOBOOST™

#### Capacities

#### WARNING



The air conditioning refrigerant system contains refrigerant R-134a under high pressure. Only qualified personnel should service the air conditioning refrigerant system. Opening the air conditioning refrigerant system can cause personal injury.

Item	Capacity
Engine oil	5.7 qt (5.4 L)
Engine coolant	9.7 qt (9.2 L)
Brake fluid	Between MIN/MAX on brake fluid reservoir
Rear differential fluid	2.4 pt (1.15L)
Power Transfer Unit (PTU) fluid	17.9 fl oz (0.53 L)
Automatic transmission fluid	9.0 qt (8.5 L) *
Windshield washer fluid	Fill as required
Fuel tank	15.5 gal (58.7 L)
A/C refrigerant	27 oz (0.76 kg)
A/C refrigerant compressor oil	4.5 fl oz (133 ml)

<sup>\*</sup>Approximate dry fill capacity. Actual amount may vary during fluid changes.

### **Specifications**

#### **Materials**

Name	Specification
Recommended motor oil (U.S.): Motorcraft SAE 5W-30 Premium Synthetic Blend Motor Oil XO-5W30-QSP	WSS-M2C946-A
Recommended motor oil (Canada): Motorcraft SAE 5W-30 Super Premium Motor Oil CXO-5W30-LSP12	WSS-M2C946-A
Recommended motor oil (Mexico): Motorcraft SAE 5W-30 Synthetic Motor Oil MXO-5W30-QSP	WSS-M2C946-A
Optional motor oil (U.S. and Mexico): Motorcraft SAE 5W-30 Full Synthetic Motor Oil XO-5W30-QFS	WSS-M2C946-A
Optional motor oil (Canada): Motorcraft SAE 5W-30 Synthetic Motor Oil CXO-5W30-LFS12	WSS-M2C946-A

Name	Specification
Engine coolant (U.S. and Mexico): Motorcraft Orange Antifreeze/Coolant Prediluted VC-3DIL-B	WSS-M97B44-D2
Engine coolant (Canada): Motorcraft Orange Antifreeze/Coolant Prediluted CVC-3DIL-B	WSS-M97B44-D2
Brake fluid: Motorcraft DOT 4 Low Viscosity (LV) High Performance Motor Vehicle Brake Fluid PM-20	WSS-M6C65-A2
Rear differential fluid (U.S.): Motorcraft SAE 80W-90 Premium Rear Axle Lubricant XY-80W90-QL	WSP-M2C197-A
Rear differential fluid (Canada): Motorcraft SAE 80W-90 Premium Rear Axle Lubricant CXY-80W90-1L	WSP-M2C197-A
Rear differential fluid (Mexico): Motorcraft SAE 80W-90 Premium Rear Axle Lubricant MXY-80W90-QL	WSP-M2C197-A
Power Transfer Unit (PTU) fluid (U.S. and Mexico): Motorcraft SAE 75W-140 Synthetic Rear Axle Lubricant XY-75W140-QL	WSL-M2C192-A
Power Transfer Unit (PTU) fluid (Canada): Motorcraft SAE 75W-140 Synthetic Rear Axle Lubricant CXY-75W140-1L	WSL-M2C192-A
Automatic transmission fluid (U.S. and Mexico): Motorcraft MERCON LV Automatic Transmission Fluid XT-10-QLVC	WSS-M2C938-A MERCON LV
Automatic transmission fluid (Canada): Motorcraft MERCON LV Automatic Transmission Fluid CXT-10-LV12	WSS-M2C938-A MERCON LV
Windshield washer fluid (U.S. and Mexico): Motorcraft Premium Windshield Wash Concentrate with Bitterant ZC-32-B2	WSS-M14P19-A
Windshield washer fluid (Canada): Motorcraft Premium Quality Windshield Washer Fluid CXC-37-(A, B, D, F)	WSS-M14P19-A

Name	Specification
A/C refrigerant (U.S.): Motorcraft R-134a Refrigerant YN-19	WSH-M17B19-A
A/C refrigerant (Canada): Motorcraft R-134a Refrigerant CYN-16-R	WSH-M17B19-A
A/C refrigerant (Mexico): Motorcraft R-134a Refrigerant MYN-19	WSH-M17B19-A
A/C refrigerant compressor oil: Motorcraft PAG Refrigerant Compressor Oil YN-12-D	WSH-M1C231-B
Multi-purpose grease: Motorcraft Multi-Purpose Grease Spray XL-5	ESB-M1C93-B
Lock cylinders (U.S.): Penetrating and Lock Lubricant XL-1	
Lock cylinders (Canada): Penetrating Fluid CXC-51-A	
Lock cylinders (Mexico): Penetrating and Lock Lubricant MXL-1	

If you use oil and fluids that do not meet the defined specification and viscosity grade, this may lead to:

- Component damage which is not covered by the vehicle warranty.
- Longer engine cranking periods.
- Increased emission levels.
- · Reduced engine performance.
- Reduced fuel economy.
- Degraded brake performance.

We recommend Motorcraft motor oil for your vehicle. If Motorcraft oil is not available, use motor oils of the recommended viscosity grade that meet API SN requirements and display the API Certification Mark for gasoline engines. Do not use oil labeled with API SN service category unless the label also displays the API certification mark.



E142732

An oil that displays this symbol conforms to current engine, emission system and fuel economy performance standards of the International Lubricants Specification Advisory Council (ILSAC).

Do not use supplemental engine oil additives because they are unnecessary and could lead to engine damage that may not be covered by your vehicle warranty.

Note: Ford recommends using DOT 4 Low Viscosity (LV) High Performance Brake Fluid or equivalent meeting WSS-M6C65-A2. Use of any fluid other than the recommended fluid may cause degraded brake performance and not meet the Ford performance standards. Keep brake fluid clean and dry. Contamination with dirt, water, petroleum products or other materials may result in brake system damage and possible failure.

**Note:** Automatic transmissions that require MERCON LV transmission fluid should only use MERCON LV transmission fluid. The use of any other fluid may cause transmission damage.

#### **CAPACITIES AND SPECIFICATIONS - 2.5L**

#### **Capacities**

#### WARNING



The air conditioning refrigerant system contains refrigerant R-134a under high pressure. Only qualified personnel should service the air conditioning refrigerant system. Opening the air conditioning refrigerant system can cause personal injury.

Item	Capacity
Engine oil	5.7 qt (5.4 L)
Engine coolant	9.2 qt (8.7 L)
Brake fluid	Between MIN/MAX on brake fluid reservoir
Automatic transmission fluid	9.0 qt (8.5 L) *
Windshield washer fluid	Fill as required
Fuel tank	15.5 gal (58.7 L)

Item	Capacity
A/C refrigerant	24 oz (0.68 kg)
A/C refrigerant compressor oil	4.5 fl oz (133 ml)

<sup>\*</sup>Approximate dry fill capacity. Actual amount may vary during fluid changes.

### **Specifications**

#### **Materials**

Name	Specification
Recommended motor oil (U.S.): Motorcraft SAE 5W-20 Premium Synthetic Blend Motor Oil XO-5W20-QSP	WSS-M2C945-A
Recommended motor oil (Canada): Motorcraft SAE 5W-20 Super Premium Blend Motor Oil CXO-5W20-LSP12	WSS-M2C945-A
Recommended motor oil (Mexico): Motorcraft SAE 5W-20 Synthetic Motor Oil MXO-5W20-QSP	WSS-M2C945-A
Optional motor oil (U.S. and Mexico): Motorcraft SAE 5W-20 Full Synthetic Motor Oil XO-5W20-QFS	WSS-M2C945-A
Optional motor oil (Canada): Motorcraft SAE 5W-20 Synthetic Motor Oil CXO-5W20-LFS12	WSS-M2C945-A
Engine coolant (U.S. and Mexico): Motorcraft Orange Antifreeze/Coolant Prediluted VC-3DIL-B	WSS-M97B44-D2
Engine coolant (Canada): Motorcraft Orange Antifreeze/Coolant Prediluted CVC-3DIL-B	WSS-M97B44-D2
Brake fluid: Motorcraft DOT 4 Low Viscosity (LV) High Performance Motor Vehicle Brake Fluid PM-20	WSS-M6C65-A2
Automatic transmission fluid (U.S. and Mexico): Motorcraft MERCON LV Automatic Transmission Fluid	WSS-M2C938-A MERCON LV

Name	Specification
XT-10-QLVC	
Automatic transmission fluid (Canada): Motorcraft MERCON LV Automatic Transmission Fluid CXT-10-LV12	WSS-M2C938-A MERCON LV
Windshield washer fluid (U.S. and Mexico): Motorcraft Premium Windshield Wash Concentrate with Bitterant ZC-32-B2	WSS-M14P19-A
Windshield washer fluid (Canada): Motorcraft Premium Quality Windshield Washer Fluid CXC-37-(A, B, D, F)	WSS-M14P19-A
A/C refrigerant (U.S.): Motorcraft R-134a Refrigerant YN-19	WSH-M17B19-A
A/C refrigerant (Canada): Motorcraft R-134a Refrigerant CYN-16-R	WSH-M17B19-A
A/C refrigerant (Mexico): Motorcraft R-134a Refrigerant MYN-19	WSH-M17B19-A
A/C refrigerant compressor oil: Motorcraft PAG Refrigerant Compressor Oil YN-12-D	WSH-M1C231-B
Multi-purpose grease: Motorcraft Multi-Purpose Grease Spray XL-5	ESB-MIC93-B
Lock cylinders (U.S.): Penetrating and Lock Lubricant XL-1	
Lock cylinders (Canada): Penetrating Fluid CXC-51-A	
Lock cylinders (Mexico): Penetrating and Lock Lubricant MXL-1	

If you use oil and fluids that do not meet the defined specification and viscosity grade, this may lead to:

- Component damage which is not covered by the vehicle warranty.
- Longer engine cranking periods.
- Increased emission levels.
- Reduced engine performance.
- Reduced fuel economy.
- Degraded brake performance.

We recommend Motorcraft motor oil for your vehicle. If Motorcraft oil is not available, use motor oils of the recommended viscosity grade that meet API SN requirements and display the API Certification Mark for gasoline engines. Do not use oil labeled with API SN service category unless the label also displays the API certification mark

Note: Ford recommends using DOT 4 Low Viscosity (LV) High Performance Brake Fluid or equivalent meeting WSS-M6C65-A2. Use of any fluid other than the recommended fluid may cause degraded brake performance and not meet the Ford performance standards. Keep brake fluid clean and dry. Contamination with dirt, water, petroleum products or other materials may result in brake system damage and possible failure.

**Note:** Automatic transmissions that require MERCON LV transmission fluid should only use MERCON LV transmission fluid. The use of any other fluid may cause transmission damage.



#### E142732

An oil that displays this symbol conforms to current engine, emission system and fuel economy performance standards of the International Lubricants Specification Advisory Council (ILSAC).

Do not use supplemental engine oil additives because they are unnecessary and could lead to engine damage that may not be covered by your vehicle warranty.

#### **GENERAL INFORMATION**

## Radio Frequencies and Reception Factors

AM and FM frequencies are established by the Federal Communications Commission (FCC) and the Canadian Radio and Telecommunications Commission (CRTC). Those frequencies are:

- AM: 530, 540-1700, 1710 kHz
- FM: 87.9-107.7, 107.9 MHz

Radio Reception Factors		
Distance and strength	The further you travel from an AM or FM station, the weaker the signal and the weaker the reception.	
Terrain	Hills, mountains, tall buildings, bridges, tunnels, freeway overpasses, parking garages, dense tree foliage and thunderstorms can interfere with the reception.	
Station overload	When you pass a ground-based broadcast repeating tower, a stronger signal may overtake a weaker one and result in the audio system muting.	

#### **CD and CD Player Information**

**Note:** CD units play commercially pressed 4.75-inch (12 centimeter) audio compact discs only. Due to technical incompatibility, certain recordable and re-recordable compact discs may not function correctly when used in Ford CD players.

**Note:** Do not insert CDs with homemade paper (adhesive) labels into the CD player as the label may peel and cause the CD to become jammed. You should use a permanent felt tip marker rather than adhesive labels on your homemade CDs. Please contact an authorized dealer for further information.

**Note:** Do not use any irregularly shaped discs or discs with a scratch protection film attached.

Always handle discs by their edges only. Clean the disc with an approved CD cleaner only. Wipe it from the center of the disc toward the edge. Do not clean in a circular motion.

Do not expose discs to direct sunlight or heat sources for extended periods.

#### **MP3 Track and Folder Structure**

Audio systems capable of recognizing and playing MP3 individual tracks and folder structures work as follows:

- There are two different modes for MP3 disc playback: MP3 track mode (system default) and MP3 folder mode.
- MP3 track mode ignores any folder structure on the MP3 disc. The player numbers each MP3 track on the disc (noted by the .mp3 file extension) from T001 to a maximum of T255. The maximum number of playable MP3 files may be less depending on the structure of the CD and exact model of radio present.

- MP3 folder mode represents a folder structure consisting of one level of folders. The CD player numbers all MP3 tracks on the disc (noted by the .mp3 file extension) and all folders containing MP3 files, from F001 (folder) T001 (track) to F253 T255.
- Creating discs with only one level of folders helps with navigation through the disc files

If you are burning your own MP3 discs, it is important to understand how the system reads the structures you create. While various files may be present. (files with extensions other than mp3), only files with the .mp3 extension are played; other files are ignored by the system. This enables you to use the same MP3 disc for a variety of tasks on your work computer, home computer and your in-vehicle system.

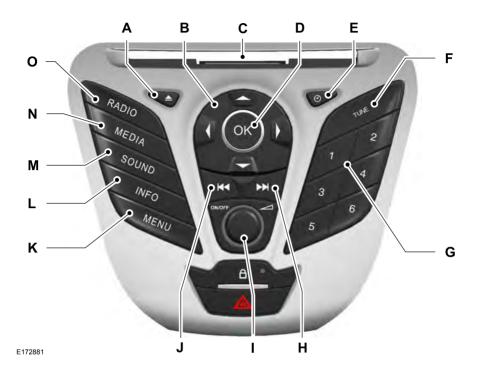
In track mode, the system displays and plays the structure as if it were only one level deep (all .mp3 files play, regardless of being in a specific folder). In folder mode, the system only plays the .mp3 files in the current folder.

### **AUDIOUNIT-VEHICLES WITH:** AM/FM/CD

#### WARNING

Driving while distracted can result in loss of vehicle control, crash and injury. We strongly recommend that

you use extreme caution when using any device that may take your focus off the road. Your primary responsibility is the safe operation of your vehicle. We recommend against the use of any hand-held device while driving and encourage the use of voice-operated systems when possible. Make sure you are aware of all applicable local laws that may affect the use of electronic devices while driving.



- A **Eject:** Press to eject a CD.
- B **Cursor arrows:** Press to scroll through on-screen audio system choices, menus or other on-screen functions.
- C CD slot: Insert a CD.
- D **OK:** Press to confirm menu selections.
- E **Clock:** Press to set the time. Use the cursor arrows to set the hours and minutes. Press **OK** to confirm the time. You can also set the clock by pressing **MENU** and scrolling to Clock Settings.
- F **TUNE:** Press to manually search the frequency band. Use the cursor arrows to change the frequency.
- G **Number block:** In radio mode, store your favorite radio stations. To store a radio station, tune to the station, then press and hold a preset button until sound returns. In CD mode, press one of these buttons to select a track.

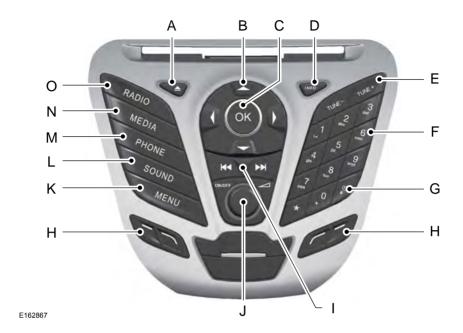
- H **Seek forward:** Press and release the right side of the control to go to the next preset radio station or disc track. Press and hold this side of the control to fast forward to the next strong radio station, memory preset or through the current disc track.
- **ON/OFF:** Press to switch the system on and off. Turn to adjust the volume.
- J **Seek reverse:** Press and release the left side of the control to go to the previous preset radio station or disc track. Press and hold this side of the control to reverse to the previous strong radio station, memory preset or disc track.
- K **MENU:** Press to access different audio system features. See **Menu Structure** later in this section.
- L INFO Press to access any available radio or media information.
- M **SOUND:** Press to access settings for Treble, Middle, Bass, Fade or Balance. Use the up and down arrow buttons to select the various settings. When you make your selection, press the left and right arrow buttons to change the settings. Press OK to set or press **MENU** to exit. Sound settings can be set for each audio source independently.
- N **MEDIA:** Press to access LINE IN (auxiliary input jack) mode or CD or switch between both media sources
- O **RADIO:** Press to listen to the radio or change radio frequencies.

# AUDIOUNIT-VEHICLES WITH: AM/FM/CD/SYNC

#### WARNING

Driving while distracted can result in loss of vehicle control, crash and injury. We strongly recommend that you use extreme caution when using any device that may take your focus off the road. Your primary responsibility is the safe operation of your vehicle. We recommend against the use of any hand-held device while driving and encourage the use of voice-operated systems when possible. Make sure you are aware of all applicable local laws that may affect the use of electronic devices while driving.

**Note:** You can operate your audio system for up to one hour after you switch off the ignition. Press the **ON/OFF** control to operate the system with the ignition turned off. The system automatically turns off after one hour.



- A **Eject:** Press this button to eject a CD.
- B **Cursor arrows:** Press these buttons to scroll through on-screen audio system choices.
- C **OK:** Press this button to confirm menu selections.
- D **INFO:** Press this button to access any available radio or CD information.
- **TUNE:** Press these buttons to manually search the frequency band.
- F **Number block:** In radio mode, store your favorite radio stations. To store a radio station, tune to the station, then press and hold a preset button until sound returns. In CD mode, select a track. In phone mode, enter a phone number.
- G **Clock or Phone mode:** Push to access clock settings. You can also set the clock by pressing the **MENU** button and scrolling to Clock Settings.
- H **Function buttons:** Select different functions of the audio system depending on which mode you are in (such as Radio mode or CD mode).
- I **Seek:** Press and release these buttons to go to the previous or next preset radio station or disc track. Press and hold these buttons to fast forward to the previous or next strong radio station or through the current disc track.

- J **ON/OFF/Volume:** Press this button to switch the system off and on. Adjust the control to adjust the volume.
- Κ MENU: Press this button to access different audio system features. See Menu Structure later in this section.
- 1 **SOUND:** Press this button to access settings for Treble. Middle. Bass. Fade and Balance. Use the up and down arrow buttons to select the various settings. When you make your selection, press the left and right arrow buttons to change the settings. Press **OK** to set or press **MENU** to exit. Sound settings can be set for each audio source independently.
- M **PHONE:** Press this button to access the phone features of the SYNC system. See SYNC section.
- Ν **MEDIA:** Press this button to switch between listening to a CD and the SYNC-Media menu. To change the SYNC-Media device (such as switching from a device plugged into the USB port to a Bluetooth audio device), press **MENU** and scroll to Select Source.
- $\cap$ **RADIO:** Press this button to listen to the radio or change radio frequency bands.

### **AUDIOUNIT-VEHICLES WITH:** AM/FM/CD/SYNC/SATELLITE **RADIO**

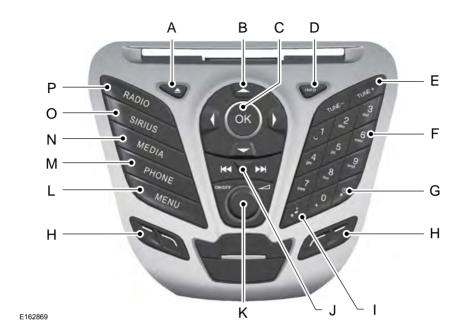
#### WARNING

Driving while distracted can result in loss of vehicle control, crash and injury. We strongly recommend that you use extreme caution when using any device that may take your focus off the road. Your primary responsibility is the safe operation of your vehicle. We recommend against the use of any hand-held device while driving and encourage the use of voice-operated systems when possible. Make sure you are aware of all applicable local laws that may affect the use of

electronic devices while driving.

**Note:** You can operate your audio system for up to one hour after you switch off the ignition. Press the **ON/OFF** control to operate the system with the ignition turned off. The system automatically turns off after one hour.

Note: Some features, such as SIRIUS satellite radio, may not be available in your location. Check with an authorized dealer.



- A **Eject:** Press this button to eject a CD.
- B **Cursor arrows:** Press these buttons to scroll through on-screen audio system choices.
- C **OK:** Press this button to confirm menu selections.
- D **INFO:** Press this button to access any available radio or CD information.
- E **TUNE and TUNE +:** Press these buttons to manually search the frequency band.
- F **Number block:** In radio mode, store your favorite radio stations. To store a radio station, tune to the station, then press and hold a preset button until sound returns. In CD mode, select a track. In phone mode, enter a phone number.
- G **Clock:** Push to access clock settings. You can also set the clock by pressing the **MENU** button and scrolling to Clock Settings.
- H **Function buttons:** Select different functions of the audio system depending on which mode you are in (such as Radio mode or CD mode).

- Sound: Press this button to access settings for Treble, Middle, Bass, Fade and Balance. Use the up and down arrow buttons to select the various settings. When you make your selection, press the left and right arrow buttons to change the settings. Press OK to set or press MENU to exit. Sound settings can be set for each audio source independently.
- J Seek: Press and release these buttons to go to the previous or next preset radio station or disc track. Press and hold these buttons to fast forward to the previous or next strong radio station, memory preset or through the current disc track.
- K ON/OFF: Press this button to switch the system off and on. Turn to adjust the volume.
- L **MENU:** Press this button to access different audio system features. See **Menu Structure** later in this section.
- M **PHONE:** Press this button to access the phone features of the SYNC system. See **SYNC**<sup>TM</sup> (page 304).
- N **MEDIA:** Press this button to switch between listening to a CD and the SYNC-Media menu. To change the SYNC-Media device (such as switching from a device plugged into the USB port to a Bluetooth audio device), press **MENU** and scroll to Select Source.
- O **SIRIUS:** Press this button to listen to SIRIUS satellite radio.
- P **RADIO:** Press this button to listen to the radio or change radio frequencies. Press the function buttons below the radio screen to select different radio functions.

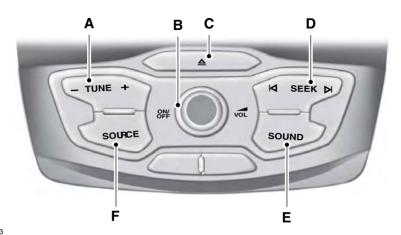
# AUDIOUNIT-VEHICLES WITH: PREMIUM AM/FM/CD

#### WARNING

Driving while distracted can result in loss of vehicle control, crash and injury. We strongly recommend that you use extreme caution when using any device that may take your focus off the road. Your primary responsibility is the safe operation of your vehicle. We recommend against the use of any hand-held device while driving and encourage the use of voice-operated systems when possible. Make sure you are aware of all applicable local laws that may affect the use of electronic devices while driving.

**Note:** The CD slot is directly above the touchscreen.

**Note:** The touchscreen system controls most of the audio features. See SYNC Supplement.



#### E143843

- A **TUNE:** Press this button to manually search through the radio frequency band.
- B **ON/OFF and VOL:** Press this button to switch the audio system off and on. Turn to adjust the volume.
- C **Eject:** Press this button to eject a CD.
- D **SEEK:** Press this button to go to the next station up or down the radio frequency band or the next or previous track on a CD.
- E **SOUND:** Press this button to adjust the sound settings for Bass, Treble, Balance and Fade.
- F **SOURCE:** Press this button to access different audio modes, such as AM, FM and A/V Input.

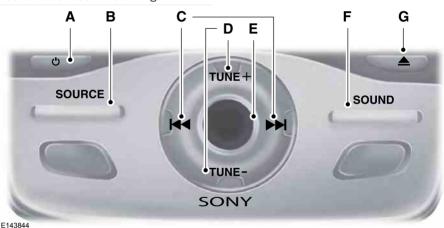
# AUDIOUNIT-VEHICLES WITH: SONY AM/FM/CD

#### WARNING

Driving while distracted can result in loss of vehicle control, crash and injury. We strongly recommend that you use extreme caution when using any device that may take your focus off the road. Your primary responsibility is the safe operation of your vehicle. We recommend against the use of any hand-held device while driving and encourage the use of voice-operated systems when possible. Make sure you are aware of all applicable local laws that may affect the use of electronic devices while driving.

**Note:** The CD slot is directly above the touchscreen.

**Note:** The touchscreen system controls most of the audio features. See SYNC Supplement.



- A **Power:** Press this button to switch the system off and on.
- B **SOURCE:** Press this button to access different audio modes, such as AM, FM and A/V Input.

- C **Seek, Reverse and Fast Forward:** In radio mode, select a frequency band and press these buttons. The system stops at the first station it finds in that direction. In SIRIUS mode, press these buttons to select the previous or next channel. If a specific category is selected (such as Jazz, Rock or News), use these buttons to find the previous or next channel in the selected category. In CD mode, press these buttons to select the previous or next track.
- D **TUNE:** In radio mode, press these buttons to manually search through the radio frequency band. In SIRIUS mode, press these buttons to find the next or previous available satellite radio station.
- E **Volume:** Turn this control to adjust the volume.
- F **SOUND:** Press this button to access settings for Treble, Midrange, Bass, Balance or Fade.
- G **Eject:** Press this button to eject a CD.

#### Menu Structure

**Note:** Depending on your system, some options may appear slightly different.

Press **MENU**.

Press the up and down arrow buttons to scroll through the options.

Press the right arrow to enter a menu. Press the left arrow to exit a menu.

Press **OK** to confirm a selection.

Radio		
Manual tune	Use the left and right arrows to go up or down the frequency band.	
Scan	Select for a brief sampling of all available channels.	
AST	Select to store the six strongest local stations on the AM 2 and FM 2 frequency bands.	
PTY/Set Category	Select to have the system search by certain music categories (such as Rock, Pop or Country).	
RBDS/RDS	Select to view additional broadcast data, if available. This feature defaults to off. RBDS must be on for you to set a category.	

SIRIUS		
Scan	Select for a brief sampling of all available channels.	
Show ESN	Select to view your satellite radio electronic serial number (ESN). You will need this number when communicating with Sirius to activate, modify or track your account.	
Channel Guide	Select to view available satellite radio channels. Press <b>OK</b> to open a list of the following options for this channel: Tune Channel, Skip Channel or Lock Channel. Once you skip or lock a channel, you can only access it by pressing Direct and entering the channel number. Locking or unlocking a channel requires your PIN.	
Set Category	Select to view channel categories (such as Pop, Rock or News). If you select a category, seek and scan functions only stop on channels in that category.	
Alerts	Select to turn off or turn on alerts for songs, artists or teams. The system alerts you when the selection is playing on another channel. Save up to 20 alerts.	
Unlock All Stations	Use your PIN to unlock previously locked stations.	
Skip No stations	Use to restore any channels you previously skipped.	
Parental Lock (PIN)	Select to create a PIN, which allows you to lock or unlock channels. Your initial PIN is 1234.	

Audio Settings		
Spd. Comp. Vol.	Automatically adjusts the volume to compensate for speed and wind noise. You can set the system between 0 and +7.	
Sound	Select to adjust settings for Treble, Midrange, Bass, Fade or Balance.	
Occupancy Mode	Select to optimize sound quality for the chosen seating position.	
RBDS/RDS Text	Select to view additional broadcast data, if available. This feature defaults to off. RBDS must be on for you to set a category.	
DSP	Choose between stereo modes.	

CD Settings	
Scan All	Select to scan all disc selections.
Scan Folder	Select to scan all music in the current MP3 folder.
CD Compression	Select to bring soft and loud passages together for a more consistent listening level.

Clock Settings		
Set Time	Select to set the time.	
Set Date	Select to set the calendar date.	
24h Mode	Select to view clock time in a 12-hour mode or 24-hour mode.	

<b>Display Settings</b>		
Dimming	Select to change display brightness.	
Language	Select to display the language in English, French or Spanish.	
Temp. setting	Select to display the outside temperature in Fahrenheit or Celsius.	

#### **DIGITAL RADIO**

**Note:** HD Radio broadcasts are not available in all markets.

HD Radio technology is the digital evolution of analog AM/FM radio. Your system has a special receiver that allows it to receive digital broadcasts (where available) in addition to the analog broadcasts, it already receives. Digital broadcasts provide a better sound quality

than analog broadcasts with free, crystal-clear audio and no static or distortion. For more information, and a guide to available stations and programming, please visit www.hdradio.com.

When HD Radio is on and you tune to a station broadcasting HD Radio technology, you may notice the HD Radio logo on your screen. When this logo is available, you may also see Title and Artist fields on-screen.

The multicast indicator appears in FM mode (only) if the current station is broadcasting multiple digital broadcasts. The highlighted numbers signify available digital channels where new or different content is available. HD1 signifies the main programming status and is available in analog and digital broadcasts. Other multicast stations (HD2 through HD7) are only available digitally.

When HD Radio broadcasts are active, you can access the following functions:

- Scan allows you to hear a brief sampling of all available stations. This feature still works when HD Radio reception is on, although it does not scan for HD2-HD7 channels. You may see the HD logo appear if the station has a digital broadcast.
- Memory presets allow you to save an active channel as a memory preset.
   Touch and hold a memory preset slot until the sound returns. There is a brief mute while the radio saves the station. Sound returns when finished. When switching to an HD2 or HD3 memory preset, the sound mutes before the digital audio plays, because the system has to reacquire the digital signal.

**Note:** As with any saved radio station, you cannot access the saved station if your vehicle is outside the station's reception area.

#### **HD Radio Reception and Station Troubleshooting**

Potential reception issues		
Reception area	If you are listening to a multicast station and you are on the fringe of the reception area, the station may mute due to weak signal strength.	
	If you are listening to HD1, the system switches back to the analog broadcast until the digital broadcast is available again. However, if you are listening to any of the possible HD2-HD7 multicast channels, the station mutes and stays muted unless it is able to connect to the digital signal again.	
Station blending	When the system first receives a station (aside from HD2-HD7 multicast stations), it first plays the station in the analog version. Once the receiver verifies the station is an HD Radio station, it shifts to the digital version. Depending on the station quality, you may hear a slight sound change when the station changes from analog to digital. Blending is the shift from analog to digital sound or digital back to analog sound.	

In order to provide the best possible experience, use the contact form to report any station issues found while listening to a station broadcasting with HD Radio

technology. Independent entities own and operate each station. These stations are responsible for ensuring all audio streams and data fields are accurate.

Potential station issues		
Issues	Cause	Action
Echo, stutter, skip or repeat in audio. Increase or decrease in audio volume.	This is poor time alignment by the radio broadcaster.	No action required. This is a broadcast issue.
Sound fading or blending in and out.	The radio is shifting between analog and digital audio.	No action required. The reception issue may clear up as you continue to drive.
There is an audio mute delay when selecting HD2 or HD3, multicast preset or <b>Direct Tune</b> .	The digital multicast is not available until the HD Radio broadcast is decoded. Once decoded, the audio is available.	No action required. This is normal behavior. Wait until the audio is available.
Cannot access HD2 or HD3 multicast channel when recalling a preset or from a direct tune.	The previously stored multicast preset or direct tune is not available in your current reception area.	No action required. The station is not available in your current location.
Text information does not match currently playing audio.	Data service issue by the radio broadcaster.	Fill out the station issue form at website listed below.*
There is no text information shown for currently selected frequency.	Data service issue by the radio broadcaster.	Fill out the station issue form at website listed below.*
HD2-HD7 stations not found when <b>Scan</b> is pressed.	Pressing <b>Scan</b> disables HD2-HD7 channel search.	No action required. This is normal behavior.

<sup>\*</sup> http://www.ibiquity.com/automotive/report\_radio\_station\_experiences

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#### SATELLITE RADIO (If Equipped)

SIRIUS® broadcasts a variety of music, news, sports, weather, traffic and entertainment satellite radio channels. For more information and a complete list of SIRIUS satellite radio channels, visit www.siriusxm.com in the United States, www.siriusxm.ca in Canada, or call SIRIUS at 1-888-539-7474

**Note:** This receiver includes the eCos real-time operating system. eCos is published under the eCos License.

#### **Satellite Radio Reception Factors**

Potential satellite radio reception issues		
Antenna obstructions	For optimal reception performance, keep the antenna clear of snow and ice build-up and keep luggage and other material as far away from the antenna as possible.	
Terrain	Hills, mountains, tall buildings, bridges, tunnels, freeway overpasses, parking garages, dense tree foliage and thunderstorms can interfere with your reception.	
Station overload	When you pass a ground-based broadcast-repeating tower, a stronger signal may overtake a weaker one and the audio system may mute.	
Satellite radio signal interference	Your display may show ACQUIRING to indicate the interference and the audio system may mute.	

#### SIRIUS® Satellite Radio Service

**Note:** SIRIUS reserves the unrestricted right to change, rearrange, add or delete programming including canceling, moving or adding particular channels, and its prices, at any time, with or without notice to you. Ford Motor Company shall not be responsible for any such programming changes.



SIRIUS satellite radio is a subscription-based satellite radio service that broadcasts a variety of music, sports, news, weather, traffic and entertainment programming. Your factory-installed SIRIUS satellite radio system includes hardware and a limited subscription term, which begins on the date of sale or lease of your vehicle. See an authorized dealer for availability.

For more information on extended subscription terms (a service fee is required), the online media player and a complete list of SIRIUS satellite radio channels, and other features, please visit www.siriusxm.com in the United States, www.siriusxm.ca in Canada, or call SIRIUS at 1-888-539-7474.

## Satellite Radio Electronic Serial Number (ESN)

You need your ESN to activate, modify or track your satellite radio account. When in satellite radio mode, tune to channel 0.

#### **Troubleshooting**

Message	Condition	Action
Acquiring	Radio requires more than two seconds to produce audio for the selected channel.	No action required. This message should disappear shortly.
Satellite antenna fault SIRIUS system failure	There is an internal module or system failure present.	If this message does not clear shortly, or with an igni- tion key cycle, your receiver may have a fault. See an authorized dealer for service.
Invalid Channel	The channel is no longer available.	Tune to another channel or choose another preset.
Unsubscribed Channel	Your subscription does not include this channel.	Contact SIRIUS at 1-888- 539-7474 to subscribe to the channel, or tune to another channel.
No Signal	The signal is lost from the SIRIUS satellite or SIRIUS tower to your vehicle antenna.	The signal is blocked. When you move into an open area, the signal should return.
Updating	Update of channel programming in progress.	No action required. The process may take up to three minutes.

Message	Condition	Action
Questions? Call 1-888-539-7474	Your satellite service is no longer available.	Contact SIRIUS at 1-888- 539-7474 to resolve subscription issues.
None found Check Channel Guide	All the channels in the selected category are either skipped or locked.	Use the channel guide to turn off the Lock or Skip function on that station.
Subscription Updated	SIRIUS has updated the channels available for your vehicle.	No action required.

## USB PORT (If Equipped)

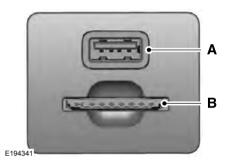


E205592

The USB port allows you to plug in media playing devices, memory sticks and charge devices (if supported). See SYNC supplement.

## MEDIA HUB (If Equipped)

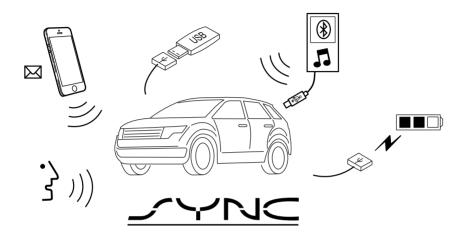
The media hub is located in the center console or in front of the gear shift.



A USB Port

B SD card slot

#### **GENERAL INFORMATION**



#### E198355

SYNC is an in-vehicle communications system that works with your Bluetooth-enabled cellular phone and portable media player. This allows you to:

- Make and receive calls.
- Access and play music from your portable music player.
- Use 911 Assist and applications, such as Pandora and Stitcher, via SYNC AppLink.\*
- Access phonebook contacts and music using voice commands.
- Stream music from your connected phone.
- Text message.

- Use the advanced voice recognition system.
- Charge your USB device (if your device supports this).

\*These features are not available in all markets and may require activation. Available AppLink enabled apps vary by market.

Make sure that you review your device's manual before using it with SYNC.

#### Support

The SYNC support team is available to help you with any questions you cannot answer on your own.

Monday-Saturday, 8:30am-9:00pm EST.

Sunday, 10:30am-7:30pm EST.

In the United States, call 1-800-392-3673.

In Canada, call 1-800-565-3673.

Times are subject to change due to holidays.

#### **SYNC Owner Account**

Why do I need a SYNC owner account?

- Essential for keeping up with the latest software downloads available for SYNC.
- Access to customer support for any questions you may have.

#### **Driving Restrictions**

For your safety, certain features are speed-dependent and restricted when your vehicle is traveling over 3 mi (5 km).

#### **Safety Information**

#### WARNING

Driving while distracted can result in loss of vehicle control, crash and

loss of vehicle control, crash and injury. We strongly recommend that you use extreme caution when using any device that may take your focus off the road. Your primary responsibility is the safe operation of your vehicle. We recommend against the use of any hand-held device while driving and encourage the use of voice-operated systems when possible. Make sure you are aware of all applicable local laws that may affect the use of electronic devices while driving.

#### When using SYNC:

- Do not operate playing devices if the power cords or cables are broken, split or damaged. Place cords and cables out of the way, so they do not interfere with the operation of pedals, seats, compartments or safe driving abilities.
- Do not leave playing devices in your vehicle during extreme conditions as it could cause them damage. See your device's manual for further information.
- Do not attempt to service or repair the system. See an authorized dealer.

### **Privacy Information**

When a cellular phone is connected to SYNC, the system creates a profile within your vehicle that is linked to that cellular phone. This profile is created in order to offer you more cellular features and to operate more efficiently. Among other things, this profile may contain data about your cellular phone book, text messages (read and unread), and call history. including history of calls when your cellular phone was not connected to the system. In addition, if you connect a media device, the system creates and retains an index of supported media content. The system also records a short development log of approximately 10 minutes of all recent system activity. The log profile and other system data may be used to improve the system and help diagnose any problems that may occur.

The cellular profile, media device index, and development log will remain in the vehicle unless you delete them and are generally accessible only in the vehicle when the cellular phone or media player is connected. If you no longer plan to use the system or the vehicle, we recommend you perform a Master Reset to erase all stored information.

System data cannot be accessed without special equipment and access to the vehicle's SYNC module. Ford Motor Company and Ford of Canada will not access the system data for any purpose other than as described absent consent, a court order, or where required by law enforcement, other government authorities, or other third parties acting with lawful authority. Other parties may seek to access the information independently of Ford Motor Company and Ford of Canada, For further privacy information, see the section on 911 Assist. See SYNC™ Applications and Services (page 320).

#### **USING VOICE RECOGNITION**

This system helps you control many features using voice commands. This allows you to keep your hands on the wheel and focus on what is around you.

#### **Initiating a Voice Session**



Press the voice button. A list of available voice commands appears in the display.

#### **Global Voice Commands**

These voice commands are always available. You can say them at any time.

Global voice commands	
(cancel   exit)	This command ends the voice session. You can also cancel a session by holding the voice button for two or more seconds.
Help	This command provides you with hints, examples and instructions.
(main menu   start again)	This command restarts the voice session from the initial starting point.

You can say any of the voice commands that appear within open and close brackets that are separated by |. For example, where; (cancel | exit) appears you say; cancel or exit.

#### **Helpful Hints**

- Make sure the interior of your vehicle is as quiet as possible. Wind noise from open windows and road vibrations may prevent the system from correctly recognizing spoken commands.
- Before giving a voice command, wait for the system announcement to finish, followed by a single tone. Any command spoken before this does not register with the system.
- Speak naturally, without long pauses between words.
- You can interrupt the system at any time while it is speaking by pressing the voice button. You can cancel a voice session by pressing and holding the voice button.

### **System Interaction and Feedback**

The system provides feedback through audible tones, prompts, questions and spoken confirmations depending on the situation and the chosen level of interaction. You can customize the voice recognition system to provide more or less instruction and feedback.

The default setting is to a higher level of interaction in order to help you learn to use the system. You can change these settings at any time.

#### **Adjusting the Interaction Level**



Press the voice button. When prompted, say:

Voice Command	Action and Description
voice settings	
Then either of the following:	·
interaction mode novice	Provides more detailed interaction and guidance. (Recommended for first time users.)
interaction mode advanced	Provides less audible interaction and guidance.

#### **Confirmation Prompts**

Confirmation prompts are short questions the system asks when it is not sure of your request or when there is more than one possible response to your request.

#### To adjust this setting press the voice button, when prompted say:

Voice Command	Action and Description
voice settings	
Then either of the following:	
confirmation prompts off	Make a best guess from the command; you may still occasionally be asked to confirm settings.
confirmation prompts on	Clarify your voice command with a short question.

#### **Phone Confirmation**

Using phone confirmations the system asks you to verify before placing any calls.

#### To adjust this setting press the voice button, when prompted say:

Voice Command	Action and Description
voice settings	
Then any of the following:	
phone confirmation on	When enabled, this feature will prompt you to confirm any voice initiated call command prior to the call being placed.
phone confirmation off	The system will make a best guess; you may still occasionally be asked to confirm settings.

#### **Changing the Voice Settings**

In addition to using voice commands to change the voice settings, you can also use the menu in the audio display.

## To change the voice settings press the Menu button then select:

Menu Item
SYNC-Settings
Voice settings

# USING SYNC™ WITH YOUR PHONE

Hands-free calling is one of the main features of SYNC. While the system supports a variety of features, many are dependent on your cellular phone's functionality. At a minimum, most cellular phones with Bluetooth wireless technology support the following functions:

- Answering an incoming call.
- Ending a call.
- Using privacy mode.
- Dialing a number.
- Redialing.

- Call waiting notification.
- · Caller ID.

Other features, such as text messaging using Bluetooth and automatic phonebook download, are phone-dependent features. To check your phone's compatibility, see your phone's manual and visit www.SYNCMyRide.com, www.SYNCMyRide.ca or www.syncmaroute.ca.

## Pairing a Phone for the First Time

Wirelessly pairing your phone with SYNC allows you to make and receive hands-free calls.

**Note:** SYNC can support downloading up to approximately 4000 entries per Bluetooth-enabled cellular phone.

**Note:** Make sure to switch on the ignition and the radio. Shift the transmission into park (P) for automatic transmission or first gear for manual transmission.

#### **Using the Audio System**

**Note:** To scroll through the menus, press the up and down arrows on your audio system.

- Make sure to switch on your phone's Bluetooth feature before starting the search. See your device's manual if necessary.
- Press the **PHONE** button. When the audio display indicates there is no paired phone, select the option to add.
- When a message to begin pairing appears in the audio display, search for SYNC on your phone to start the pairing process.
- 4. Confirm that the six-digit PIN appearing on your phone matches the six-digit PIN that displays on the SYNC screen. Once you have confirmed the PIN, the display indicates when the pairing is successful.

Depending on your phone's capability and your market, the system may prompt you with questions, such as setting the current phone as the primary phone (the phone SYNC automatically tries to connect with first upon vehicle start-up) and downloading your phonebook.

#### **Using Voice Commands**



Make sure to switch on your phone's Bluetooth feature before starting the search. See

your device's manual if necessary.

## Press the voice and when prompted say:

Voice Command	Action and Description
(pair ([Bluetooth] device   phone   Bluetooth audio)   add [a] phone)	Follow the instructions on the audio display.

You can say any of the voice commands that appear within open and close brackets that are separated by |. For example, where; (what's | what is) appears you say; what's or what is.

The commands that have [] around the word means that the word is optional.

Depending on your phone's capability and your market, the system may prompt you with questions, such as setting the current phone as the primary phone (the phone SYNC automatically tries to connect with first upon vehicle start-up) and downloading your phonebook.

### **Pairing Subsequent Phones**

**Note:** Make sure to switch on the ignition and the radio. Shift the transmission into park (P) for automatic transmission or first gear for manual transmission.

**Note:** To scroll through the menus, press the up and down arrows on your audio system.

- Make sure to switch on your phone's Bluetooth feature before starting the search. See your device's manual if necessary.
- 2. Press the **PHONE** button.
- 3. Select the option for Bluetooth Devices.
- 4. Press the **OK** button.

- 5. Select the option to add. This starts the pairing process.
- When a message to begin pairing appears in the audio display, search for SYNC on your device.
- Confirm that the six-digit PIN appearing on your phone matches the six-digit PIN that displays on the SYNC screen. Once you have confirmed the PIN, the display indicates when the pairing is successful.

Depending on your phone's capability and your market, the system may prompt you with questions, such as setting the current phone as the primary phone (the phone SYNC automatically tries to connect with first upon vehicle start-up) and downloading your phonebook.

#### **Phone Voice Commands**



Press the voice button. When prompted, say any of the following:

Voice Command	
(phone   Blackberry   iPhone   Mobile	9)
Then say any of the following:	
call ()	
call at home	
call([at] work [(in at)[the]] off	ice)
call on (cell   mobile)	
call on other	
dial [[a] number]	1
([go to] privacy   transfer to phone   privacy on)	2
(hold call [on]   (put   place) call on hold)	2

Voice Command	
join (call   calls)	2
mute [call] [on]	2
(mute [call] off   Unmute [call])	2
(turn ringer on   silent mode off)	
(turn ringer off   silent mode [on])	
[text] (messages   message)	3
Help	

\_\_ is a dynamic listing that should be the name of a contact in your phonebook. For example you could say "Call Mom".

#### **Dial Commands**

Press the voice button and when prompted say any of the following commands:

Voice Commands
411 (four-one-one), 911 (nine-one-one)
700 (seven hundred)
800 (eight hundred)
900 (nine hundred)
Clear (deletes all entered digits)
Delete (deletes last set of digits entered)
Number < 0-9>

<sup>&</sup>lt;sup>1</sup> See **Dial** table below.

<sup>&</sup>lt;sup>2</sup> These commands are only valid while in a phone call.

<sup>&</sup>lt;sup>3</sup> See the text message table below.

Voice Commands	
Plus	
Pound (#)	
Star (*)	

**Note:** To exit dial mode, press and hold the phone button or press any button on the audio system.

#### To access text messages say:

Voice Command
[text] (messages   message)
Then say any of the following:
(listen to   read) ([text] message)
forward (text   [text] message)
reply to (text   [text] message)
call [sender]

#### **Phonebook Hints**

To hear how the SYNC system speaks a name browse phonebook, select a contact and press:

Menu Item	
Hear it	

### **Making Calls**



## Press the voice button. When prompted, say:

Voice Command		
call (someone   [[a] name])		
dial [[a] number]	SYNC prompts you to say the numbers that you wish to dial. After you say the numbers, the system confirms it. You can then say:	

## When the system has stated the number, you say any of the following:

Voice Command	
(dial   send)	This initiates the call.
(delete   correct)	This erases the spoken digits.

To end the call, press the end call button on the steering wheel or select the end call option in the audio display.

### **Receiving Calls**

#### **Accepting calls**

When receiving a call, you can answer the call by pressing the accept call button on the steering wheel or use the screen.

## To use the screen to accept a call select:

	Menu Item
Accept	

#### **Rejecting Calls**

When receiving a call, you can reject the call by pressing the reject call button on the steering wheel or use the screen.

#### To use the screen to reject a call select:

Menu Item	1
Reject	

Ignore the call by doing nothing.

## Phone Options during an Active Call

During an active call, you have more menu features that become available, such as putting a call on hold or joining calls.

To access this menu, choose one of the options available at the bottom of the audio display or select **More** to choose from the following options:

Menu Item	Description and action
Mic. off	Switch your vehicle's microphone off. To switch the microphone on, select the option again.
Privacy	Switch a call from an active hands-free environment to your cellular phone for a more private conversation. When selected, the audio display indicates the call is private.
Hold	Put an active call on hold. When selected, the audio display indicates the call is on hold.
Dial a number	Enter numbers using the audio system's numeric keypad (for example, numbers for passwords).
Join calls	Join two separate calls. The system supports a maximum of three callers on a multiparty or conference call.  1. Select the <b>More</b> option.  2. Access the desired contact through the system or use voice commands to place the second call. Once actively in the second call, select the <b>More</b> option.  3. Scroll to the option to join calls and press the <b>OK</b> button.
Phonebook	Access your phonebook contacts.  1. Select the <b>More</b> option.  2. Scroll to the option for phonebook and press the <b>OK</b> button.  3. Scroll through your phonebook contacts.

Menu Item	Description and action
	<ul><li>4. Press the <b>OK</b> button again when the desired contact appears in the audio display.</li><li>5. Press the <b>OK</b> button or dial button to call the selection.</li></ul>
Call History	Access your call history log.  1. Select the <b>More</b> option.  2. Scroll to the option for call history and press the <b>OK</b> button.  3. Scroll through your call history options (incoming, outgoing or missed).  4. Press the <b>OK</b> button again when the desired selection appears in the audio display.  5. Press the <b>OK</b> button or dial button to call the selection.

# Accessing Features through the Phone Menu

You can access your call history, phonebook, sent text messages, as well as access phone and system settings.

- 1. Press the **PHONE** button to enter the phone menu.
- 2. Select one of the options available.

Display	<b>Description and action</b>
Dial a number	Enter numbers using the audio system's numeric keypad.
Phonebook	Access your downloaded phonebook.  1. Press the <b>OK</b> button to confirm and enter. You can use the options at the bottom of the screen to access an alphabetical category quickly. You can also use the letters on the audio system's numeric keypad to jump in the list.  2. Scroll through your phonebook contacts.  3. Press the <b>OK</b> button again when the desired selection appears in the audio display.  4. Press the <b>OK</b> button or dial button to call the selection.
Call History	Access any previously dialed, received or missed calls.  1. Press the <b>OK</b> button to select.  2. Scroll to select incoming, outgoing or missed calls. Press the <b>OK</b> button to make your selection.  3. Press the <b>OK</b> button or dial button to call the selection.
Speed Dial	Select 1 of 10 speed dial entries. To set a speed dial entry, go to the phonebook and then press and hold one of the numbers on the audio system's numeric keypad.

Display	Description and action
Text messaging	Send, download and delete text messages.
BT Devices	Access the option for Bluetooth Device menu listings (add, connect, set as primary, on or off, delete).
Phone settings	View various settings and features on your phone.

#### **Text Messaging**

**Note:** This is a phone-dependent feature.

SYNC allows you to receive, send, download and delete text messages. The system can also read incoming text messages to you so that you do not have to take your eyes off the road.

#### **Receiving a Text Message**

**Note:** This is a phone-dependent feature. Your phone must support downloading text messages using Bluetooth to receive incoming text messages. **Note:** This is a speed-dependent feature and is only available when your vehicle is traveling at 3.1 mph (5 km/h) or less.

When a new message arrives, an audible tone sounds and the audio display indicates you have a new message.

#### To hear the message you can say:

Voice command	Description and action
(listen to   read) ([text] message)	Select this option to have the system read the message to you.

#### Using the screen you also have the following options:

Menu Item	Description and action		
Ignore	Select thi inbox.	Select this option, or do nothing, and the message goes into your text message inbox.	
View	Select the view option to open the text message. Once selected, you have the ability to have the message read to you, to view other messages. For additional options select:		
	More	If you select this option, use the arrow button to scroll through the following options:	

Menu Item	Description and action		
	Reply to sender	Press the <b>OK</b> button to access, and then scroll through a list of pre-defined messages to send.	
	Call sender	Press the <b>OK</b> button to call the sender of the message.	
	Forward msg.	Press the <b>OK</b> button to forward the message to anyone in your phonebook or call history. You can also choose to enter a number.	

#### Sending, Downloading and Deleting Your Text Messages

2. Select the text messaging option, and then press the **OK** button.

1. Press the **PHONE** button.

#### Choose from the following options:

Menu Item	Description and action
New	Allows you to send a new text message based on a pre-defined set of 15 messages.
View	Allows you to read the full message and, in addition, provides the option to have the system read the message to you. To go to the next message, select the <b>More</b> option. This allows you to reply to the sender, call the sender or forward the message.
Delete	Allows you to delete current text messages from the system (not your cellular phone). The audio display indicates when the system has deleted all your text messages.
More	Allows you to delete all messages or manually trigger a download of all unread messages from your cellular phone.

#### Sending a Text Message

**Note:** You can only send a text message to one recipient at a time.

- Select the send option when the desired selection highlights in the audio display.
- 2. Select the confirmation option when the contact appears.

 Press the OK button again to confirm when the system asks if you want to send the message. A pre-defined signature appears on each text message.

**Note:** You can send text messages either by choosing a contact from the phonebook and selecting the text option from the audio display or by replying to a received message in the inbox.

### **Accessing Your Phone Settings**

These are phone-dependent features. Your phone settings allow you to access and adjust features such as your ring tone and text message notification, modify your

phonebook, and set up automatic download.

- 1. Press the **PHONE** button.
- 2. Scroll until the phone settings option appears, and then press the **OK** button.

### Scroll to select from the following options:

Menu Item	Description and action
Set as master	If this option is checked, the system uses the cellular phone as the master when there is more than one cellular phone paired to the system. This option can be changed for all cellular phones (not only the active phone) using the Bluetooth Devices menu.
Phone status	See the cellular phone name, provider name, cellular phone number, and signal level. When done, press the left arrow buttons to return to the phone status menu.
Set ringtone	Select which ringtone sounds during an incoming call (one of the system's tones or your cellular phone's). If your phone supports in-band ringing, your phone's ringtone sounds when you choose the cellular phone ringtone option.  1. Press the <b>OK</b> button to select and scroll to hear each ringtone.  2. Press the <b>OK</b> button to select a ringtone.
Text msg notify	Have the option of hearing an audible tone to notify you when a text message arrives. Press the <b>OK</b> button to switch the audible tone off or on.
Phonebook pref.	Modify the contents of your phonebook (such as add, delete or download). Press the <b>OK</b> button to select and scroll between the choices in the phonebook preferences table below.

Menu Item	Phonebook preferences
Add contacts	Push the desired contacts on your cellular phone. See your device's manual on how to push contacts. Press the <b>OK</b> button to add more contacts from your phonebook.
Delete	When a message asking you to delete appears, select the option to confirm. Press the <b>OK</b> button to delete the current phonebook and call history. The system takes you back to the menu for phone settings.
Download now	Press the OK button to select and download your phone-book to the system.
Auto-download	When automatic download is on, the system deletes any changes (additions or deletions) saved in the system since your last download.
	When automatic download is off, the system does not download your phonebook when your cellular phone connects to SYNC.
	You can only access your phonebook, call history and text messages when your paired cellular phone connects to the system. Check or uncheck this option to download your phonebook automatically each time your phone connects to the system. Download times are phonedependent and quantity-dependent.

#### **Bluetooth Devices**

The Bluetooth Devices menu allows you to add, connect and delete devices as well as set a phone as primary.

- 1. Press the **PHONE** button.
- 2. Scroll until Bluetooth Devices appears, and then press the **OK** button.

### Select from the following options:

Menu Item	Phonebook preferences
Add	Pair additional phones to the system.  1. Select the option to add to start the pairing process.  2. When a message to begin pairing appears in the audio display, search for SYNC on your phone. See your phone's manual if necessary.  3. When prompted on your phone's display, enter the six-digit PIN provided by the system in the radio display. The display indicates when the pairing is successful.

Menu Item	Phonebook preferences
	4. When the option to set the phone as primary appears, select either yes or no. 5. Depending on the functionality of your phone, the system may prompt you with questions (such as if you want to download your phonebook). Select either yes or no to confirm your responses.
Delete	Select the delete option and confirm when the system asks to delete the selected device. After deleting a phone from the list, you have to repeat the pairing process to pair it again.
Master	The system attempts to connect with the primary cellular phone each time you switch on the ignition. When you select a cellular phone as primary, it appears first in the list, marked with an asterisk. Set a previously paired phone as master by selecting the master option and confirming it as the primary.
Conn.	Connect a previously connected phone. You can only have one phone connected at a time to use the phone's functionality. When you connect another phone, the previous phone disconnects from the telephone services. The system allows you to use different Bluetooth devices for the cellular phone functionality and the Bluetooth audio music playback feature at the same time.
Discon.	Disconnects the selected cellular phone. Select this option and confirm when asked. After disconnecting a phone, you can reconnect it again without repeating the full pairing process.

## **System Settings**

1. Press the **MENU** button.

2. Select the SYNC settings option, and then press the **OK** button.

## Scroll to select from the following options:

Display	Description and action
Bluetooth on	Check or uncheck this option to switch the system's Bluetooth interface off or on. Select this option, and then press the <b>OK</b> button to change the option's status.
Set defaults	Return to the factory default settings without erasing your indexed information (such as phonebook, call history, text messages and paired devices). Select this option and confirm when prompted in the audio display.
Master reset	Completely erase all information stored in the system (such as phonebook, call history, text messages and paired devices) and return to factory default settings.
Install on SYNC	Install downloaded applications or software updates. Select this option and confirm when prompted in the audio display. There must be a valid SYNC application or update available on the USB drive in order to finish an installation successfully.
System info	Display the system's version numbers as well as its serial number. Press the <b>OK</b> button to select.
Voice settings	The voice settings submenu contains various options. See <b>Using Voice Recognition</b> (page 306).
Browse USB	Browse the actual menu structure of the connected USB device. Press the <b>OK</b> button and use the up and down arrow buttons to scroll through the folders and files. Use the left or right arrow buttons to enter or leave a folder. You can select media content for playback from this menu.

# SYNCTM APPLICATIONS AND SERVICES (If Equipped)

In order for the following features to work, your cellular phone must be compatible with SYNC. To check your phone's compatibility, visit www.SYNCMyRide.com, www.SYNCMyRide.ca or www.syncmaroute.ca.

- 911 Assist: Can alert 911 in the event of an emergency.
- SYNC AppLink: Allows you to connect to and use certain applications such as Pandora and Stitcher (if your phone is compatible).

These features may require activation. Available AppLink enabled apps vary by market.

#### 911 Assist

#### **WARNINGS**

Unless the 911 Assist setting is set on before a crash, the system will not dial for help which could delay response time, potentially increasing the risk of serious injury or death after a crash.

Do not wait for 911 Assist to make an emergency call if you can do it yourself. Dial emergency services immediately to avoid delayed response time which could increase the risk of serious injury or death after a crash. If you do not hear 911 Assist within five seconds of the crash, the system or phone may be damaged or non-functional.

Always place your phone in a secure location in your vehicle so it does not become a projectile or get damaged

in a crash. Failure to do so may cause serious injury to someone or damage the phone which could prevent 911 Assist from working properly.

**Note:** The SYNC 911 Assist feature must be set on before the incident.

**Note:** Before setting this feature on, make sure that you read the 911 Assist Privacy Notice later in this section for important information.

**Note:** If any user switches 911 Assist to on or off, that setting applies for all paired phones. If 911 Assist is switched off, either a voice message plays or a display message or an icon comes on when your vehicle is started and after a previously paired phone connects.

**Note:** Every phone operates differently. While SYNC 911 Assist works with most cellular phones, some may have trouble using this feature.

If a crash deploys an airbag (excluding knee airbags and rear inflatable safety belts [if equipped]) or activates the fuel pump shut-off, your SYNC-equipped vehicle may be able to contact emergency services by dialing 911 through a paired and connected Bluetooth-enabled phone. You can learn more about the 911 Assist feature, visit www.SYNCMyRide.com, www.SYNCMyRide.ca or www.syncmaroute.ca.

See **Supplementary Restraints System** (page 35). Important information about airbag deployment is in this chapter.

See **Roadside Emergencies** (page 191). Important information about the fuel pump shut-off is in this chapter.

#### Setting 911 Assist On or Off

## Press the phone button to enter the phone menu then select:

Menu Item	Action and Description
911 Assist	Press <b>OK</b> to confirm and enter the 911 Assist menu.
	Scroll to activate this option then press <b>OK</b> when the desired option appears in the radio display.

# If you choose not to activate this feature you will have the following options:

Menu Item	Action and Description
Voice Reminder ON	Provides a display and voice reminder at phone connection at vehicle start.
Voice Reminder OFF	Provides a display reminder only without a voice reminder at phone connection.

To make sure that 911 Assist works properly:

- SYNC must be powered and working properly at the time of the incident and throughout feature activation and use.
- The 911 Assist feature must be set on before the incident.
- You must pair and connect a Bluetooth-enabled and compatible cell phone to SYNC.
- A connected Bluetooth-enabled phone must have the ability to make and maintain an outgoing call at the time of the incident.

- A connected Bluetooth-enabled phone must have adequate network coverage, battery power and signal strength.
- The vehicle must have battery power and be located in the U.S., Canada or in a territory in which 911 is the emergency number.

#### In the Event of a Crash

Not all crashes deploy an airbag or activate the fuel pump shut-off (the triggers for 911 Assist). If a connected cell phone sustains damage or loses its connection to SYNC during a crash, SYNC searches for and tries to connect to a previously paired cell phone; SYNC then attempts to call the emergency services.

Before making the call:

- SYNC provides a short window of time (about 10 seconds) to cancel the call.
   If you fail to cancel the call, SYNC attempts to dial 911.
- SYNC says the following, or a similar message: "SYNC will attempt to call 911, to cancel the call, press Cancel on your screen or press and hold the phone button on your steering wheel".

If you do not cancel the call, and SYNC makes a successful call, a pre-recorded message plays for the 911 operator, and then the occupant(s) in your vehicle is able to talk with the operator. Be prepared to provide your name, phone number and location immediately, because not all 911 systems are capable of receiving this information electronically.

### 911 Assist May Not Work If

- Your cellular phone or 911 Assist hardware sustains damage in a crash.
- The vehicle's battery or the SYNC system has no power.
- The phone(s) thrown from your vehicle are the ones paired and connected to the system.

#### 911 Assist Privacy Notice

When you switch on 911 Assist, it may disclose to emergency services that your vehicle has been in a crash involving the deployment of an airbag or activation of the fuel pump shut-off. Certain versions or updates to 911 Assist may also be capable of electronically or verbally disclosing to 911 operators your vehicle location or other details about your vehicle or crash to assist 911 operators to provide the most appropriate emergency services. If you do not want to disclose this information, do not switch the feature on.

#### **SYNC Mobile Apps**

The system enables voice and steering wheel control of SYNC AppLink enabled smartphone apps. When an app is running through AppLink, you can control main features of the app through voice commands and steering wheel controls.

**Note:** You must pair and connect your smartphone to SYNC to access AppLink.

**Note:** *iPhone users need to connect the phone to the USB port.* 

**Note:** Android users need to connect the phone to SYNC using Bluetooth.

**Note:** For information on available apps, supported smartphone devices and troubleshooting tips please visit the Ford website.

Availability of SYNC AppLink enabled Apps will vary by region.

Note: Make sure you have an active account for the app that you have downloaded. Some apps work automatically with no setup. Other apps want you to configure your personal settings and personalize your experience by creating stations or favorites. We recommend you do this at home or outside of your vehicle.

**Note:** AppLink is not available if your vehicle is equipped with the MyFordTouch system.

#### To Access Using the SYNC Menu

# Press the MENU button to access the menu on-screen. Then select:

Menu Item	Action and Description
SYNC-Apps	
Mobile Apps	Scroll through the list of available applications and select a particular app or select:
	Find New Apps

**Note:** If you cannot find a compatible SYNC AppLink app, make sure the required app is running on the mobile device.

#### Accessing an App's Menu

When an app is running through SYNC, press the right arrow button on the steering wheel control to access the app menu.

You can access various app features from here, for example thumbs up and thumbs down.

Press the left arrow button on the steering wheel control to exit the app menu.

#### **To Access Using Voice Commands**

#### Press the voice button then when prompted say:

Menu Item	Action and Description
mobile (apps   applications)	Say the name of the application after the tone. The app should start. When an app is running through SYNC, you can press the voice button and speak commands specific to the app, for example "Play Playlist Road Trip".
Help	Use this command to discover the available voice commands.

#### **SYNC Mobile App Voice Commands**

#### The following voice commands are always available:

Menu Item	Action and Description	
mobile (apps   applications)	SYNC prompts you to say the name of an app to start it on SYNC.	
list [mobile] (apps   applications)	SYNC lists all of the currently available mobile apps.	
find [new] [mobile] (apps   applications)	Searches your connected mobile device for SYNC-compatible mobile apps.	
help		
You can say the name of a mobile app at any time to start the mobile app on SYNC.		

#### **App Permissions**

App permissions are organized by groups. You can grant these group permissions individually. You can change a permission group status any time when not driving, by using the settings menu.

When you launch an app using SYNC, the system may ask you to grant certain permissions, for example:

- To allow your vehicle to provide vehicle information to the app such as, but not limited to: Fuel level, fuel economy, fuel consumption, engine speed, rain sensor, odometer, VIN, external temperature, gear position, tire pressure, and head lamp status.
- To allow your vehicle to provide driving characteristic information such as, but not limited to: MyKey, seat belt status, engine revolutions per minute, gear position, braking events, steering wheel angle, and accelerator pedal position.

- To allow your vehicle to provide location information, including: GPS and speed.
- To allow the app to send push notifications using the vehicle display and voice capabilities while running in a background state. Push notifications may be particularly useful for news or

location based apps.

**Note:** You only need to grant permissions the first time you use an app with SYNC.

**Note:** Ford is not responsible or liable for any damages or loss of privacy relating to usage of an app, or dissemination of any vehicle data that you approve Ford to provide to an app.

#### **Enabling and Disabling App Permissions Using the SYNC Menu**

#### Press the MENU button to access the SYNC menu then select:

Menu Item	Action and Description
SYNC-Apps	
Mobile Apps	
All Apps	You can also select a specific app. If the app supports push notifications, this setting is listed. Select to enable or disable the feature as required.

#### **Enabling SYNC Mobile Apps**

In order to enable mobile apps, SYNC requires user consent to send and receive app authorization information and updates using the data plan associated with the connected device.

Data is sent to Ford in the United States through the connected device. The information is encrypted and includes your VIN, SYNC module number, anonymous usage statistics and debugging information. Updates may take place automatically.

**Note:** You must enable mobile apps for each connected device the first time you select a mobile app using the system.

**Note:** Standard data rates apply. Ford is not responsible for any additional charges you may receive from your service provider, when your vehicle sends or receives data through the connected device. This includes any additional charges incurred due to driving in areas when roaming out of a home network.

#### **App Status**

You can view the current status of an app in the settings menu.

#### There are three possible statuses:

Menu Item	Action and Description
Update Needed	The system has detected a new app requiring authorization or a general permissions update is required.
Up-To-Date	No update is required.
Updating	The system is trying to receive an update.

#### **Update settings**

Menu Item	Action and Description
Request Update	Select this option from the settings menu to manually preform a needed update.
Disable Updates	Select this option from the settings menu to disable automatic updates. Doing so also disables the use of Mobile Apps on SYNC.

# USING SYNC™ WITH YOUR MEDIA PLAYER

You can access and play music from your digital music player over your vehicle's speaker system using the system's media menu or voice commands. You can also sort and play your music by specific categories, such as artist and album.

**Note:** The system is capable of indexing up to 15,000 songs.

SYNC is capable of hosting nearly any digital media player including: iPod, Zune, plays from device players, and most USB drives. SYNC also supports audio formats, such as MP3, WMA, WAV and ACC.

Confirm that the USB device has been formatted correctly and has the following specifications:

- USB 2.0
- File format must be FAT16/32.

The format of the audio files on the USB device must be:

- MP3.
- Non DRM protected WMA.
- · WAV.
- · AAC.

# Connecting Your Digital Media Player to the USB Port

**Note:** If your digital media player has a power switch, make sure you switch it on before plugging it in.

#### **To Connect Using Voice Commands**

Plug the device into your vehicle's USB port.

# Press the voice button and when prompted, say:

Voice Command	Action and Description
(USB [stick]   iPod   MP3 [player])	You can now play music by saying any of the appropriate voice commands. See the media voice commands.

Words in brackets [] are optional and do not have to be spoken for the system to understand the command. For example, for where (USB [stick] | iPOD | MP3 [player]) appears, you can say USB or USB stick

#### To Connect Using the System Menu

- 1. Plug the device into your vehicle's USB port.
- Press the AUX button until an "initializing" message appears in the display. Depending on how many media files are on your connected device, an indexing message may appear in the display. When indexing is complete, the screen returns to the playback menu.

#### To view USB content select:

Message	Description and Action
Browse USB	Depending on how many media files are on your connected device, an indexing message may appear in the display. When indexing is complete, the screen returns to the playback menu.

# You can browse the files on the USB device in categories. Choose from the following:

	Message
Play all	
Playlists	
Songs	
Artists	

Message
Albums
Genres
Browse USB
Reset USB

#### **Media Voice Commands**



Press the voice button and when prompted say:

Voice Command	Description and Action	
(USB [stick]   iPod   MP3 [player])	You can now play music by saying any of the appropriate voice commands.	

You can say any of the voice commands that appear within open and close brackets that are separated by |. For example, where; (what's | what is) appears you say; what's or what is.

You must say any of the voice commands that appear outside of open and close brackets. For example, where; (what's | what is) playing, you must say either "what's playing" or "what is playing".

Command	Description and Action
pause	Pauses device playback.
play	Resumes device playback.
play [album]	
play all	Play all media on the device from the first track to the last.
play [artist]	
play [genre]	
play [playlist]	
next [track   title   song   file   podcast   chapter   episode]	Plays the next track on the current media.
previous [track   title   song   file   podcast   chapter   episode]	Plays the previous track on current media.
[play] (similar music   more like this)	Creates a playlist with a similar genre to the one currently playing.
play [song   track   title   file]	
repeat off	
repeat one [on]	Repeats the current track.

#### **SYNC<sup>TM</sup>** (If Equipped)

Command	Description and Action
shuffle [all] [on]	Plays the current playlist in a random order. (Not all devices support this command.)
shuffle off	
((who's   who is) this   who plays this   (what's   what is) playing [now]   (what   which) (song   track   artist) is this   (who's   who is) playing   (what's   what is) this)	At any time during playback, you can press the voice button and ask the system what is playing. The system reads the metadata tags (if populated) of the current track.

\_\_\_ is a dynamic listing, meaning that it could be the name of anything, such as a group, artist or song. For example you could say "Play artist The Beatles".

#### **Examples of USB Commands**

SYNC provides the user with many intuitive ways to find and play a song using voice. For example, if we have a song called "Penny Lane" from the album "Magical Mystery Tour" we can say the following to play this song:

- · Play song "Penny Lane".
- · Play "Penny Lane".

If we wanted to play the entire album, we can say:

- Play album "Magical Mystery Tour".
- Play "Magical Mystery Tour".

#### **Bluetooth Audio**

The system is also capable of playing music from your cellular phone through Bluetooth.

To switch the Bluetooth audio on, use the **MEDIA** button (next to the audio display) or **Source** button, or press the voice button and when prompted say:

Voice Command	
Bluetooth audio	

#### Then any of the following:

Voice Command
pause
play
next [track   title   song   file   podcast   chapter   episode]
previous [track   title   song   file   podcast   chapter   episode]

#### **SYNC<sup>TM</sup>** (If Equipped)

#### **Media Menu Features**

The media menu allows you to select how to play your music (such as by artist, genre,

shuffle or repeat), find similar music or reset the index of your USB devices.

Press **AUX** to select USB playback.

Message	Description and Action
Options	This will enter the media menu.

#### Then any of the following:

Message	Description and Action
Shuffle	Choose to shuffle or repeat your music. Once you make your choice, it remains on until you switch it off.
Repeat track	Choose to shuffle or repeat your music. Once you make your choice, it remains on until you switch it off.
Similar music	You can play similar types of music to the current playlist from the USB port. The system uses the metadata information of each track to compile a playlist. The system then creates a new list of similar tracks and then begins playing. Each track must have the metadata tags populated for this feature. With certain playing devices, if your metadata tags are not populated, the tracks will not be available in voice recognition, the play menu or this option. However, if you place these tracks onto your playing device in mass storage device mode they are available in voice recognition, the play menu or this option. The system places unknowns into any unpopulated metadata tag.
Reset SYNC USB	Resets the USB index. After the new indexing is complete you can choose what to play from the USB song library.

#### **Accessing Your USB Song Library**

- 2. Press the **MEDIA** button (next to the audio display) to select USB playback.
- Plug the device into your vehicle's USB port.

Message	Description and Action
Browse USB	This menu allows you to select and play your media files by artist, album, genre, playlist or track.

If there are no media files to access, the display indicates there is no media.

#### If there are media files, you have the following options:

Display	Description and Action
Play all	Play all indexed media files from your device one at a time
	in numerical order.* Press the <b>OK</b> button to select. The first track title appears in the display.
Playlists	Access your playlists (from formats like ASX, M3U, WPL,
	or MTP).*  1. Press the <b>OK</b> button to select.  2. Scroll to select the desired playlist, and then press the <b>OK</b> button.
Songs	Search for and play a specific indexed track.*
	<ol> <li>Press the <b>OK</b> button to select.</li> <li>Scroll to select the desired track, and then press the <b>OK</b> button.</li> </ol>
Artists	Sort all indexed media files by artist. The system then lists
	and plays all artists and tracks alphabetically.*  1. Press the <b>OK</b> button to select.  2. Scroll to select the desired artist, and then press the <b>OK</b> button.
Albums	Sort all indexed media files by album.*  1. Press the <b>OK</b> button to select.  2. Scroll to select the desired album, and then press the <b>OK</b> button.
Genres	Sort all indexed media files by genre (category) type.*  1. Press the <b>OK</b> button to select.  2. Scroll to select the desired genre, and then press the <b>OK</b> button.
Browse USB	Browse all supported media files on your media player connected to the USB port. You can only view media files that are compatible with SYNC. (Other files are not visible.)  1. Press the <b>OK</b> button to select.

Display	Description and Action
	2. Scroll to browse indexed media files on the device, and then press the <b>OK</b> button.
Reset USB	Resets the USB index. After the new indexing is complete, you can choose what to play from the USB song library.

<sup>\*</sup>You can use the buttons at the bottom of the audio display to jump to a certain alphabetical category quickly. You can also use the letters on the audio system's numeric keypad to jump in the list.

#### **Using Voice Commands**

You can access and view your USB songs using voice commands.

Plug the device into your vehicle's USB port.

# Press the voice button and when prompted, say any of the following commands:

Accessing and Viewing USB Media
(browse   search   show) all (album   albums)
(browse   search   show) all (artist   artists)
(browse   search   show) all (genre   genres)
(browse   search   show) all (playlist   playlists)
(browse   search   show) all (song   songs   title   titles   file   files   track   tracks)
(browse   search   show) album
(browse   search   show) artist
(browse   search   show) genre
(browse   search   show) playlist

#### USB 2 (If Equipped)

Your vehicle may come equipped with an additional USB port. If so, USB 1 is located at the front of the vehicle at the bottom of the instrument panel. USB 2 is located inside the storage compartment of the vehicle's center console.

You can plug in an additional USB device into the second USB port.

You can access both USB devices by using voice commands.

# To access a USB device press the voice button and when prompted say:

	Voice command
USB1	
USB 2	

**Note:** SYNC only supports one connected iOS (Apple) devices at a time (whichever one you plug in first). When you connect a second iOS device, the systems charges it, but does not support playback from it.

# Bluetooth Devices and System Settings

You can access these menus using the audio display. See **Using SYNC™ With Your Phone** (page 308).

# Voice Commands for Audio Sources

Your voice system allows you to change audio sources with a simple voice command.



# Press the voice button and when prompted say:

#### **Voice Command**

(music | audio | entertainment) [system]

## Below are a few examples of voice commands you can use.

[tune [to]] AM

[tune [to]] AM1

[tune [to]] AM (autostore | AST | autoset)

[tune [to]] AM 2

Bluetooth (audio | stereo)

(disc | CD [player]) play

[tune [to]] FM

[tune [to]] FM1

[tune [to]] FM (autostore | AST | autoset)

[tune [to]] FM 2

((line | AV | audio video) in | AUX | audio video)

Radio

tune [to] SAT

Sirius \*

(USB [stick] | iPod | MP3 [player])

#### **Voice Command**

((who's | who is) this | who plays this | (what's | what is) playing [now] | (what | which) (song | track | artist) is this | (who's | who is) playing | (what's | what is) this)

Help

#### **Radio Voice Commands**



If you are listening to the radio, press the voice button, and then say any of the commands in the

following table.

# If you are not listening to the radio, press the voice button and, after the tone, say:

**Voice Command** 

# Radio You can then say any of the following commands. [tune [to]] AM [tune [to]] AM (autostore | AST | autoset) [tune [to]] AM 2 [tune [to]] (AM \_\_ | \_\_ [AM]) [tune [to]] AM preset \_\_ [tune [to]] AMI preset \_\_ [tune [to]] FM [tune [to]] FM (autostore | AST | autoset) preset \_\_ autoset)

<sup>\*</sup> If equipped.

#### **SYNC<sup>TM</sup>** (If Equipped)

Voice Command
[tune [to]] FM 2
[tune [to]] (FM   [FM])
[tune [to]] FM preset
FM HD
[tune [to]] FM 2 preset
HD
[tune [to]] preset
Tune
help

#### Sirius Satellite Radio Voice Commands (If equipped)



To listen to Sirius satellite radio, press the voice button and, after the tone, say:

# Voice Commands Sirius

# When you are listening to Sirius satellite radio, you can press the voice button, and say any of the commands in the following table.

Voice Commands
tune [to] SAT
[tune [to]] SAT 1
[tune [to]] SAT 2
[tune [to]] SAT 3
[tune [to]] preset
[tune [to]] SAT 1 preset
[tune [to]] SAT 2 preset

Voice Commands			
[tune [to]] SAT 3 preset			
tune [to] [Sirius]	tune [to] [Sirius]		
Help			
[tune [to]] Sirius You can say the channel number (0-233) to listen to that Sirius station.			

#### **CD Voice Commands**



If you are listening to a CD, press the voice button, and then say any of the commands in the

following table.

#### If you are not listening to a CD, press the voice button and, after the tone, say:

Voice Command		
(disc   CD [player]) play		
You can then say any of the following commands.		
pause		
play		
[play] next track		
[play] previous track		
[play   change to] track [number]		
repeat (track   song) [on] *		
repeat folder [on]		
repeat off		
(shuffle   random   mix) [on		

#### **Voice Command**

(shuffle | random | mix) (CD [player] |
disc) [on]

(shuffle | random | mix) folder [on]

shuffle off

\*You need to indicate to the system which track or folder to repeat or shuffle when using these commands.

#### SYNC™ TROUBLESHOOTING

Your SYNC system is easy to use. However, should questions arise, see the tables below.

Use the website at any time to check your phone's compatibility, register your account and set preferences as well as access a customer representative via an online chat (during certain hours). Visit www.SYNCMyRide.com, www.SYNCMyRide.ca or www.syncmaroute.ca for more information.

Phone issues		
Issue	Possible cause(s)	Possible solution(s)
There is excessive back- ground noise during a phone call.	The audio control settings on your phone may be affecting SYNC perform- ance.	Review your phone's manual about audio adjustments.
During a call, I can hear the other person but they cannot hear me.	This may be a possible phone malfunction.	Try turning off the device, resetting the device, removing the device's battery, then trying again.
		Go to the website to review your phone's compatibility.
SYNC is not able to down- load my phonebook.	This is a phone-dependent feature.	Try turning off the device, resetting the device or removing the device's battery, then trying again.
	This may be a possible phone malfunction.	Try pushing your phonebook contacts to SYNC by using the Add Contacts feature.
		Use the SYNCmyphone feature available on the website.
The system says Phonebook Downloaded but the phonebook in SYNC is empty or missing contacts.	This may be a limitation on your phone's capability.	Try pushing your phonebook contacts to SYNC by using the Add Contacts feature.

Phone issues		
Issue	Possible cause(s)	Possible solution(s)
		If the missing contacts are stored on your SIM card, try moving them to the device memory.
		Remove any pictures or special ring tones associated with the missing contact.
		Depending upon your phone, you may have to grant SYNC permission to access your phonebook contacts. Make sure to confirm when prompted by your phone during the phonebook download.
		Go to the website to review your phone's compatibility.
	This is a phone-dependent feature.	Try turning off the device, resetting the device or removing the device's battery, then trying again.
I am having trouble connecting my phone to SYNC.		Try deleting your device from SYNC, deleting SYNC from your device and trying again.
	This may be a possible phone malfunction.	Check the security and auto accept and prompt always settings relative to the SYNC Bluetooth connection on your phone.
		Update your device's firm- ware.

# SYNC<sup>TM</sup> (If Equipped)

Phone issues		
Issue	Possible cause(s)	Possible solution(s)
		Turn off the Auto phone- book download setting.
	This is a phone-dependent feature.	Go to the website to review your phone's compatibility.
Text messaging is not working on SYNC.	This may be a possible phone malfunction.	Try turning off the device, resetting the device or removing the device's battery, then trying again.

USB and media issues		
Issue	Possible cause(s)	Possible solution(s)
	This may be a possible device malfunction.	Try turning off the device, resetting the device, removing the device's battery, then trying again.
Lam baying trouble		Make sure you are using the manufacturer's cable.
I am having trouble connecting my device.		Make sure you insert the USB cable correctly into the device and the USB port.
		Make sure that the device does not have an auto- install program or active security settings.
SYNC does not recognize my device when I turn on the car.	This is a device limitation.	Make sure you are not leaving the device in your vehicle during very hot or cold temperatures.
Bluetooth audio does not stream.	This is a phone-dependent feature.	Review the device compatib- ility chart on the SYNC website to confirm your phone supports the Bluetooth audio streaming function.

# SYNC<sup>TM</sup> (If Equipped)

USB and media issues		
Issue	Possible cause(s)	Possible solution(s)
	The device is not connected.	Make sure you correctly connect the device to SYNC, and that you have pressed play on your device.
	Your music files may not contain the correct artist, song title, album or genre information.	Make sure that all song details are populated.
SYNC does not recognize music that is on my device.	The file may be corrupted.	
,	The song may have copy- right protection, which does not allow it to play.	Some devices require you to change the USB settings from mass storage to MTP class.

Voice command issues		
Issue	Possible cause(s)	Possible solution(s)
	You may be using the wrong voice commands.	Review the phone voice commands and the media voice commands at the beginning of their respective sections.
SYNC does not understand what I am saying.	You may be speaking too soon or at the wrong time.	After pressing the voice icon, wait until after the tone sounds and Listening appears before saying a command. Any command spoken before this does not register with the system.
SYNC does not understand the name of a song or artist.	You may be using the wrong voice commands.	Review the media voice commands at the beginning of the media section.

Voice command issues		
Issue	Possible cause(s)	Possible solution(s)
	You may be saying the name differently than the way you saved it.	Say the song or artist exactly as listed. If you say "Play Artist Prince", the system does not play music by Prince and the Revolution or Prince and the New Power Generation.
		Make sure you are saying the complete title, such as "California remix featuring Jennifer Nettles".
	The system may not be reading the name the same way you are saying it.	If the song titles are in all CAPS, you have to spell them. LOLA requires you to say "L-O-L-A".
		Do not use special characters in the title. The system does not recognize them.
	You may be using the wrong voice commands.	Review the Phone voice commands at the beginning of the phone section.
SYNC does not understand or is calling the wrong		Make sure you are saying the contacts exactly as they are listed. For example, if you save a contact as Joe Wilson, say "Call Joe Wilson".
contact when I want to make a call.	You may be saying the name differently than the way you saved it.	Using the SYNC phone menu, open the phonebook and scroll to the name SYNC is having trouble understanding. SYNC will read the name to you, giving you some idea of the pronunciation SYNC is expecting.

# SYNC<sup>TM</sup> (If Equipped)

Voice command issues		
Issue	Possible cause(s)	Possible solution(s)
	The system may not be reading the name the same way you are saying it.	The system works better if you list full names, such as "Joe Wilson" rather than "Joe".
	Contacts in your phonebook may be very short and similar, or they may contain special characters.	Do not use special characters, such as 123 or ICE, as the system does not recognize them.
	Your phonebook contacts may be in CAPS.	If a contact is in CAPS, you have to spell it. JAKE requires you to say "Call J-A-K-E".

AppLink issues		
Issue	Possible cause(s)	Possible solution(s)
AppLink Mobile Applications: When I select "Find New Apps," SYNC does not find any applications.	An AppLink capable phone is not connected to SYNC.	Ensure you have a compatible smartphone; an Android with OS 2.3 or higher or an iPhone 3GS or newer with iOS 5.0 or higher. Additionally, ensure your phone is paired and connected to SYNC in order to find AppLink-capable apps on your device. iPhone users must also connect to SYNC's USB port with an Apple USB cable.
My phone is connected, but I still cannot find any apps.	AppLink-enabled apps are not installed and running on your mobile device.	Ensure you have down- loaded and installed the latest version of the app from your phone's app store. Ensure the app is running on your phone. Some apps require you to register or

## SYNC<sup>TM</sup> (If Equipped)

AppLink issues		
Issue	Possible cause(s)	Possible solution(s)
		login on the app on the phone before using them with AppLink. Also, some may have a "Ford SYNC" setting, so check the app's settings menu on the phone.
My phone is connected, my app(s) are running, but I still cannot find any apps.	Sometime apps do not properly close and re-open their connection to SYNC, over ignition cycles, for example.	Closing and restarting apps may help SYNC find the application if you cannot discover it inside the vehicle. On an Android device, if apps have an "Exit' or 'Quit' option, select that then restart the app. If the app does not have that option, you can also manually "Force Close" the app by going to the phone's settings menu, selecting 'Apps.' then finding the particular app and choosing 'Force stop.' Don't forget to restart the app afterwards, then select "Find New Apps" on SYNC.  On an iPhone with iOS7+, to force close an app, double tab the home button then swipe up on the app to close it. Tab the home button again, then select the app again to restart it. After a few seconds, the app should then appear in SYNC's Mobile App's Menu.
My Android phone is connected, my app(s) are running, I restarted them, but I still cannot find any apps.	There is a Bluetooth bug on some order versions of the Android operating system that may cause apps that were found on your previous vehicle drive to not be found again if you have not turned off Bluetooth.	Reset the Bluetooth on your phone by turning it off and then turning Bluetooth back on. If you are in your vehicle, SYNC should be able to automatically re-connect to your phone if you press the "Phone" button.

AppLink issues		
Issue	Possible cause(s)	Possible solution(s)
My iPhone phone is connected, my app is running, I restarted the app but I still cannot find it on SYNC.	The USB connection to SYNC may need to be reset.	Unplug the USB cable from the phone, wait a moment, and plug the USB cable back in to the phone. After a few seconds, the app should appear in SYNC's Mobile Apps Menu. If not, "Force Close" the application and restart it.
I have an Android phone. I found and started my media app on SYNC, but there is no sound or the sound is very low.	The bluetooth volume on the phone may be low.	Try increasing the Bluetooth volume of the device by using the device's volume control buttons which are most often found on the side of the device.
I can only see some of the AppLink apps running on my phone listed in SYNC's Mobile Apps Menu.	Some Android devices have a limited number of bluetooth ports apps can use to connect. If you have more AppLink apps on your phone than the number of availble Bluetooth ports, you will not see all of your apps listed in SYNC's mobile apps menu.	Force close or uninstall the apps you do not want SYNC to find. If the app has a "Ford SYNC" setting, disable that setting in the app's settings menu on the phone.

#### **SYNC System Reset**

The SYNC system in your vehicle has System Reset feature that can be performed if the function of a SYNC feature is lost. This reset is intended to restore functionality and will not erase any information previously stored in the system (Such as paired devices, phonebook, call history, text messages, or user settings). To perform a System Reset, press and hold the Seek Up (>>) button while pressing and holding the Radio Power button. Release both buttons after 2-3 seconds. Please allow a few minutes for the reset to complete. After a few minutes has passed you can resume using the SYNC system.

#### **Accessories**

For a complete listing of the accessories that are available for your vehicle, please contact your authorized dealer or visit the online store web site:

#### Web Address (United States)

www.Accessories.Ford.com

#### Web Address (Canada)

www.Accessories.Ford.ca

Ford Motor Company will repair or replace any properly authorized dealer-installed Ford Original Accessory found to be defective in factory-supplied materials or workmanship during the warranty period, as well as any component damaged by the defective accessories.

Ford Motor Company will warrant your Ford accessory through the warranty that provides the greatest benefit:

- 24 months, unlimited mileage.
- The remainder of your new vehicle limited warranty.

Contact an authorized dealer for details and a copy of the warranty.

#### **Exterior Style**

- Custom graphics\*.
- Hood deflector\*
- · Side window deflectors.
- Splash guards.
- Spoiler winglets.

#### **Interior Style**

- Door sill plates.
- Floor mats.
- Interior light kit.
- Seat covers\*.

#### Lifestyle

- · Ash cup or smoker's packages.
- Camping tent\*.
- · Car cover\*.
- · Cargo area protector.
- · Cargo net\*.
- Cargo shade.
- Rear seat entertainment\*.
- Soft cargo organizers.
- · Roof racks and carriers\*.
- · Recovery hook (towing eye).
- · Trailer towing accessories.

#### **Peace of Mind**

- Keyless entry keypad.
- Remote start.
- Vehicle security systems.
- Wheel locks.
- Bumper mounted warning sensors\*.

\*Ford Licensed Accessories. The accessory manufacturer designs, develops and therefore warrants Ford Licensed Accessories, and does not design or test these accessories to Ford Motor Company engineering requirements. Contact an authorized Ford dealer for the manufacturer's limited warranty details, and request a copy of the Ford Licensed Accessories product limited warranty from the accessory manufacturer.

#### **Accessories**

For maximum vehicle performance, keep the following information in mind when adding accessories or equipment to your vehicle:

- When adding accessories, equipment, passengers and luggage to your vehicle, do not exceed the total weight capacity of the vehicle or of the front or rear axle (GVWR or GAWR as indicated on the Safety Compliance Certification label). Ask an authorized dealer for specific weight information.
- The Federal Communications
   Commission (FCC) and Canadian
   Radio Telecommunications
   Commission (CRTC) regulate the use
   of mobile communications systems
   that are equipped with radio
   transmitters, for example, two-way
   radios, telephones and theft alarms.
   Any such equipment installed in your
   vehicle should comply with Federal
   Communications Commission (FCC)
   and Canadian Radio
   Telecommunications Commission
   (CRTC) regulations and should be
   installed only by an authorized dealer.
- An authorized dealer needs to install mobile communications systems. Improper installation may harm the operation of your vehicle, particularly if the manufacturer did not design the mobile communication system specifically for automotive use.
- If you or an authorized Ford dealer add any non-Ford electrical or electronic accessories or components to your vehicle, you may adversely affect battery performance and durability. In addition, you may also adversely affect the performance of other electrical systems in the vehicle.

#### **Extended Service Plan (ESP)**

PROTECT YOURSELF FROM THE RISING COST OF VEHICLE REPAIRS WITH A FORD FXTENDED SERVICE PLAN.

#### **SERVICE PLANS (U.S. Only)**

More than 32 million Ford owners have discovered the powerful protection of Ford Extended Service Plan. It is the extended service plan backed by Ford Motor Company, and provides peace of mind protection beyond the New Vehicle Limited Warranty coverage.

#### Ford ESP Can Quickly Pay for Itself

One service bill – the cost of parts and labor – can easily exceed the price of your Ford Extended Service Plan. With Ford ESP you minimize your risk for unexpected repair bills and rising repair costs.

# Up to 1,000+ Covered Vehicle Components

There are four core Extended Service Plans with different levels of coverage. Ask your authorized dealer for details.

- PremiumCARE Our most comprehensive coverage. With over 1,000 covered components, this plan is so complete that we generally only discuss what's not covered.
- 2. ExtraCARE Covers 113 components, and includes many high-tech items.
- 3. BaseCARE Covers 84 components.
- PowertrainCARE Covers 29 critical components.

Ford Extended Service Plan is honored by all authorized Ford dealers in the U.S., Canada and Mexico. It is the extended service plan authorized and backed by Ford Motor Company.

That means you get:

- Reliable, quality service at any Ford or Lincoln dealership
- Repairs performed by factory trained technicians, using genuine parts

#### Rental Car Reimbursement

#### 1st day Rental Benefit

You take advantage of replacement transportation if your vehicle is at your authorized dealer for same day covered repairs.

#### Extended Rental Benefits

If your vehicle is kept overnight for covered repairs, you are eligible for rental car coverage, including bumper to bumper warranty repairs, and Field Service Actions.

#### Roadside Assistance

Exclusive 24/7 roadside assistance, including:

- Towing, flat-tire change and battery jump starts
- Out of fuel and lock-out assistance.
- Travel expense reimbursement for lodging, meals and rental car.
- Destination assistance for taxi, shuttle, rental car coverage and emergency transportation.

#### Transferable Coverage

If you sell your vehicle before your Ford Extended Service Plan coverage expires, you can transfer any remaining coverage to the new owner. Whenever you sell your vehicle, prospective buyers may have a higher degree of confidence that vehicle was properly maintained with Ford ESP, thereby improving resale value.

#### **Extended Service Plan (ESP)**

#### Avoid the Rising Cost of Properly Maintaining Your Vehicle!

Ford Extended Service Plan also offers a Premium Maintenance Plan that covers all scheduled maintenance, and selected wear items. The coverage is prepaid, so you never have to worry about affording your vehicle's maintenance. It covers regular checkups, routine inspections, preventive care and replacement of select items that require periodic attention for normal wear:

- · Windshield wiper blades.
- Spark plugs.
- The clutch disc.
- Brake pads and linings.
- Shock absorbers.
- Struts
- Engine Belts.
- Engine coolant hoses, clamps and o-rings.
- Diesel exhaust fluid replenishment.

#### Interest Free Finance Options Available

Take advantage of our interest free installment payment plan. Just a 10% down payment will provide you with an affordable, no interest, no fee payment program allowing you all the security and benefits Ford ESP has to offer while paying over time. You are pre-approved with no credit checks, no hassles! To learn more, call our Ford ESP specialists at 800-367-3377.

Ford ESP P.O. Box 321067 Detroit, MI 48232

#### SERVICE PLANS (CANADA ONLY)

You can get more protection for your vehicle by purchasing a Ford Extended Service Plan. Ford Extended Service Plan is the only service contract backed by Ford Motor Company of Canada, Limited. Depending on the plan you purchase, Ford Extended Service Plan provides benefits such as:

- · Rental reimbursement.
- Coverage for certain maintenance and wear items.
- Protection against repair costs after your New Vehicle Limited Warranty Coverage expires.
- Roadside Assistance benefits.

There are several Ford Extended Service Plans available in various time, distance and deductible combinations. Each plan is tailored to fit your own driving needs, including reimbursement for towing and rental. When you purchase Ford Extended Service Plan, you receive added peace-of-mind protection throughout Canada, the United States and Mexico, provided by a network of participating authorized Ford Motor Company dealers.

**Note:** Repairs performed outside of Canada, the United States and Mexico are not eligible for Ford Extended Service Plan coverage.

This information is subject to change. For more information, visit your local Ford of Canada dealer or www.ford.ca to find the Ford Extended Service Plan that is right for you.

# GENERAL MAINTENANCE INFORMATION

#### Why Maintain Your Vehicle?

Carefully following the maintenance schedule helps protect against major repair expenses resulting from neglect or inadequate maintenance and may help to increase the value of your vehicle when you sell or trade it. Keep all receipts for completed maintenance with your vehicle.

We have established regular maintenance intervals for your vehicle based upon rigorous testing. It is important that you have your vehicle serviced at the proper times. These intervals serve two purposes; one is to maintain the reliability of your vehicle and the second is to keep your cost of owning your vehicle down.

It is your responsibility to have all scheduled maintenance performed and to make sure that the materials used meet the specifications identified in this owner's manual. See **Capacities and Specifications** (page 268).

Failure to perform scheduled maintenance invalidates warranty coverage on parts affected by the lack of maintenance.

# Why Maintain Your Vehicle at Your Dealership?

#### **Factory-Trained Technicians**

Service technicians participate in extensive factory-sponsored certification training to help them become experts on the operation of your vehicle. Ask your dealership about the training and certification their technicians have received.

# Genuine Ford and Motorcraft® Replacement Parts

Dealerships stock Ford, Motorcraft and Ford-authorized branded re-manufactured replacement parts. These parts meet or exceed our specifications. Parts installed at your dealership carry a nationwide 24-month or unlimited mile (kilometer) parts and labor limited warranty.

If you do not use Ford authorized parts they may not meet our specifications and depending on the part, it could affect emissions compliance.

#### Convenience

Many dealerships have extended evening and Saturday hours to make your service visit more convenient and they offer one stop shopping. They can perform any services that are required on your vehicle, from general maintenance to collision repairs.

**Note:** Not all dealers have extended hours or body shops. Please contact your dealer for details.

#### **Protecting Your Investment**

Maintenance is an investment that pays dividends in the form of improved reliability, durability and resale value. To maintain the proper performance of your vehicle and its emission control systems, make sure you have scheduled maintenance performed at the designated intervals.

Your vehicle is equipped with the Intelligent Oil-Life Monitor system, which displays a message in the information display at the proper oil change interval. This interval may be up to one year or 10000 miles (16000 kilometers).

When the oil change message appears in the information display, it is time for an oil change. Make sure you perform the oil change within two weeks or 500 miles (800 kilometers) of the message appearing. Make sure you reset the Intelligent Oil-Life Monitor after each oil change. See (page 88).

If your information display resets prematurely or becomes inoperative, you should perform the oil change interval at six months or 5000 miles (8000 kilometers) from your last oil change. Never exceed one year or 10000 miles (16000 kilometers) between oil change intervals.

Your vehicle is very sophisticated and built with multiple, complex, performance systems. Every manufacturer develops these systems using different specifications and performance features. That is why it is important to rely upon your dealership to properly diagnose and repair your vehicle.

Ford Motor Company has recommended maintenance intervals for various parts and component systems based upon engineering testing. Ford Motor Company relies upon this testing to determine the most appropriate mileage for replacement of oils and fluids to protect your vehicle at the lowest overall cost to you and recommends against maintenance scheduled maintenance information.

We strongly recommend the use of only genuine Ford, Motorcraft or Ford-authorized re-manufactured replacement parts engineered for your vehicle.

#### **Additives and Chemicals**

This owner's manual and the Ford Workshop Manual list the recommended additives and chemicals for your vehicle. We do not recommend using chemicals or additives not approved by us as part of your vehicle's normal maintenance. Please consult your warranty information.

#### Oils, Fluids and Flushing

In many cases, fluid discoloration is a normal operating characteristic and, by itself, does not necessarily indicate a concern or that the fluid needs to be changed. However, a qualified expert, such as the factory-trained technicians at your dealership, should inspect discolored fluids that also show signs of overheating or foreign material contamination immediately.

Make sure to change your vehicle's oils and fluids at the specified intervals or in conjunction with a repair. Flushing is a viable way to change fluid for many vehicle sub-systems during scheduled maintenance. It is critical that systems are flushed only with new fluid that is the same as that required to fill and operate the system or using a Ford-approved flushing chemical.

#### **Owner Checks and Services**

Make sure you perform the following basic maintenance checks and inspections every month or at six-month intervals.

#### Check every month

Engine oil level.

Function of all interior and exterior lights.

Tires (including spare) for wear and proper pressure.

Windshield washer fluid level.

#### Check every six months

Battery connections. Clean if necessary.

Body and door drain holes for obstructions. Clean if necessary.

Cooling system fluid level and coolant strength.

Door weatherstrips for wear. Lubricate if necessary.

Hinges, latches and outside locks for proper operation. Lubricate if necessary.

Parking brake for proper operation.

Safety belts and seat latches for wear and function.

Safety warning lamps (brake, ABS, airbag and safety belt) for operation.

Washer spray and wiper operation. Clean or replace blades as necessary.

#### **Multi-Point Inspection**

In order to keep your vehicle running right, it is important to have the systems on your vehicle checked regularly. This can help identify potential issues and prevent major problems. We recommend having the following multi-point inspection performed at every scheduled maintenance interval to help make sure your vehicle keeps running great.

Multi-Point inspection		
Accessory drive belt(s)	Hazard warning system operation	
Battery performance	Horn operation	
Engine air filter	Radiator, cooler, heater and air conditioning hoses	
Exhaust system	Suspension components for leaks or damage	
Exterior lamps operation	Steering and linkage	
Fluid levels <sup>*</sup> ; fill if necessary	Tires (including spare) for wear and proper pressure**	
For oil and fluid leaks	Windshield for cracks, chips or pits	
Half-shaft dust boots	Washer spray and wiper operation	

<sup>\*</sup> Brake, coolant recovery reservoir, automatic transmission and window washer

Be sure to ask your dealership service advisor or technician about the multi-point vehicle inspection. It is a comprehensive way to perform a thorough inspection of your vehicle. Your checklist gives you immediate feedback on the overall condition of your vehicle.

# NORMAL SCHEDULED MAINTENANCE

#### Intelligent Oil-Life Monitor™

Your vehicle is equipped with an Intelligent Oil-Life Monitor that determines when you should change the engine oil based on how your vehicle is used. By using several important factors in its calculations, the monitor helps reduce the cost of owning your vehicle and reduces environmental waste at the same time.

This means you do not have to remember to change the oil on a mileage-based schedule. Your vehicle lets you know when an oil change is due by displaying a message in the information display.

The following table provides examples of vehicle use and its impact on oil change intervals. It is a guideline only. Actual oil change intervals depend on several factors and generally decrease with severity of use.

<sup>\*</sup>If your vehicle is equipped with a temporary mobility kit, check the tire sealant expiration Use By date on the canister. Replace as needed.

When to expect the message prompting you to change your oil	
Interval	Vehicle use and example
	Normal
7500-10000 miles (12000-16000 km)	Normal commuting with highway driving No, or moderate, load or towing Flat to moderately hilly roads No extended idling
	Severe
5000-7499 miles (8000-11999 km)	Moderate to heavy load or towing Mountainous or off-road conditions Extended idling Extended hot or cold operation
3000-4999 miles	Extreme
(4800-7999 km)	Maximum load or towing Extreme hot or cold operation

#### **Normal Maintenance Intervals**

At every oil change interval as indicated by the information display
Change engine oil and filter.**
Rotate the tires.
Perform a multi-point inspection (recommended).
Inspect the automatic transmission fluid level. Consult your dealer for requirements.
Inspect the brake pads, rotors, hoses and parking brake.
Inspect the engine cooling system strength and hoses.
Inspect the exhaust system and heat shields.
Inspect the rear axle and U-joints.
Inspect the half-shaft boots.
Inspect the steering linkage, ball joints, suspension, tire-rod ends, driveshaft and U-ioints.

#### At every oil change interval as indicated by the information display

Inspect the tires, tire wear and measure the tread depth.

Inspect the wheels and related components for abnormal noise, wear, looseness or drag.

<sup>\*\*</sup> Reset the Intelligent Oil-Life Monitor after engine oil and filter changes. See **Engine Oil Check** (page 217).

Other maintenance items ¹		
Every 20000 miles (32000 km)	Replace cabin air filter.	
Every 30000 miles (48000 km)	Replace engine air filter.	
At 100000 miles (160000 km)	Change engine coolant. 2	
Every 100000 miles	Replace spark plugs.	
(160000 km)	Inspect accessory drive belt(s). <sup>3</sup>	
	Change automatic transmission fluid.⁴	
Every 150000 miles (240000 km)	Replace accessory drive belt(s). 5	
	Replace timing belt (1.6L engine).	

<sup>&</sup>lt;sup>1</sup> Perform these maintenance items within 3000 miles (4800 kilometers) of the last engine oil and filter change. Do not exceed the designated distance for the interval.

<sup>\*</sup>Do not exceed one year or 10000 miles (16000 kilometers) between service intervals.

 $<sup>^2</sup>$  Initial replacement at six years or 100000 miles (160000 kilometers), then every three years or 50000 miles (80000 kilometers).

<sup>&</sup>lt;sup>3</sup> After initial inspection, inspect every other oil change until replaced.

<sup>&</sup>lt;sup>4</sup> Rear-wheel drive vehicles only.

<sup>&</sup>lt;sup>5</sup> If not replaced within the last 100000 miles (160000 kilometers).

#### SPECIAL OPERATING CONDITIONS SCHEDULED MAINTENANCE

If you operate your vehicle **primarily** in any of the following conditions, you need to perform extra maintenance as indicated. If you operate your vehicle **occasionally** under any of these conditions, it is not necessary to perform the extra maintenance. For specific recommendations, see your dealership service advisor or technician.

Perform the services shown in the following tables when specified or within 3000 miles (4800 kilometers) of the message appearing in your information display prompting you to change your oil.

- Example 1: The message comes on at 28751 miles (46270 kilometers).
   Perform the 30000-mile (48000-kilometer) automatic transmission fluid replacement.
- Example 2: The message has not come on, but the odometer reads 30000 miles (48000 kilometers) (for example, the Intelligent Oil-Life Monitor was reset at 25000 miles [40000 kilometers]). Perform the engine air filter replacement.

Towin	Towing a trailer or using a car-top carrier	
As required	Change engine oil and filter as indicated by the information display and perform services listed in the Normal Scheduled Maintenance chart.	
Inspect frequently, service	Inspect U-joints.	
as required	See axle maintenance items under <b>Exceptions</b> .	
Every 30000 miles (48000 km)	Change automatic transmission fluid.	
Every 60000 miles (96000 km)	Replace spark plugs.	

Extensive idling or low-speed driving for long distances, as in heavy commercial use	
As required	Change engine oil and filter as indicated by the information display and perform services listed in the Normal Scheduled Maintenance chart.
Inspect frequently, service as required	Replace cabin air filter.*
	Replace engine air filter.

Extensive idling or low-spe	ed driving for long distances, as in heavy commercial use
Every 30000 miles (48000 km)	Change automatic transmission fluid.
Every 60000 miles (96000 km)	Replace spark plugs.

<sup>\*</sup> This is an optional feature.

Operating in dusty or sandy conditions (such as unpaved or dusty roads)	
Inspect frequently, service as required	Replace cabin air filter.*
as required	Replace engine air filter.
Every 5000 miles (8000 km)	Inspect the wheels and related components for abnormal noise, wear, looseness or drag.
	Rotate tires, inspect tires for wear and measure tread depth.
Every 5000 miles (8000 km) or six months	Change engine oil and filter.**
	Perform multi-point inspection.
Every 30000 miles (48000 km)	Change automatic transmission fluid.

<sup>\*</sup> This is an optional feature.

<sup>\*\*</sup>Reset your Intelligent Oil-Life Monitor after engine oil and filter changes. See **Engine Oil Check** (page 217).

Exclusi	ve use of E85 (flex fuel vehicles only)
Every oil change	If ran exclusively on E85, fill the fuel tank full with regular unleaded fuel.

#### **Exceptions**

There are several exceptions to the Normal Schedule:

Normal vehicle axle maintenance: Rear axles and power take-off (PTO) units with synthetic fluid and light-duty trucks equipped with Ford-design axles are lubricated for life; do not check or change fluid unless a leak is suspected, service is required or the assembly has been submerged in water. During long periods of trailer towing with outside temperatures

above 70°F (21°C) and at wide-open throttle for long periods above 45 mph (72 km/h), change non-synthetic rear axle fluid every 3000 miles (4800 kilometers) or three months, whichever comes first. This interval can be waived if the axle is filled with 75W140 synthetic gear fluid meeting Ford specification WSL-M2C192-A, part number F1TZ-19580-B, or equivalent. Add friction modifier XL-3 (EST-M2C118-A) or equivalent for complete refill of Traction-Lok rear axles. See **Capacities and Specifications** (page 275).

Police, Taxi and Livery vehicle axle maintenance: Change rear axle fluid every 100000 miles (160000 kilometers). Rear axle fluid change may be waived if the axle was filled with 75W140 synthetic gear fluid meeting Ford specification WSL-M2C192-A, part number F1TZ-19580-B, or equivalent. Add four ounces (118 mL) of additive friction modifier XL-3 (EST-M2C118-A) or equivalent for complete refill of Traction-Lok rear axles. Change the axle fluid anytime the axle submerges in water.

**California fuel filter replacement**: If you register your vehicle in California, the California Air Resources Board has determined that the failure to perform this maintenance item does not nullify the emission warranty or limit recall liability

before the completion of your vehicle's useful life. Ford Motor Company, however, urges you to have all recommended maintenance services performed at the specified intervals and to record all vehicle service.

#### Hot climate oil change intervals:

Vehicles operating in the Middle East, North Africa, Sub-Saharan Africa or locations with similar climates using an American Petroleum Institute (API) Certified for Gasoline Engines (Certification mark) oil of SM or SN quality, the normal oil change interval is 5000 miles (8000 kilometers).

If the available API SM or SN oils are not available, then the oil change interval is 3000 miles (4800 kilometers).

Engine air filter and cabin air filter replacement: The life of the engine air filter and cabin air filter is dependent on exposure to dusty and dirty conditions. Vehicles operated in these conditions require frequent inspection and replacement of the engine air filter and cabin air filter.

#### **SCHEDULED MAINTENANCE RECORD**

Repair Order #:	Dealer stamp	
Distance:		
Engine hours (optional):		
Multi-point inspection (recommended):	Signature:	
Repair Order #:	Dealer stamp	
Repair Order #:  Distance:	Dealer stamp	
	Dealer stamp	

Repair Order #:	Dealer stamp	
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Multi-point inspection (recommended):	Signature:	
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Multi-point inspection (recommended):	Signature:	
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Multi-point inspection (recommended):	Signature:	
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Repair Order #:	Dealer stamp	
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Repair Order #:	Dealer stamp	
Distance:		
Engine hours (optional):		J
Multi-point inspection (recommended):	Signature:	
Repair Order #:	Dealer stamp	
Repair Order #:  Distance:	Dealer stamp	
	Dealer stamp	

# END USER LICENSE AGREEMENT

# VEHICLE SOFTWARE END USER LICENSE AGREEMENT (EULA)

- You ("You" or "Your" as applicable)
   have acquired a vehicle having several
   devices, including SYNC ® and various
   control modules, ("DEVICES") that
   include software licensed or owned by
   Ford Motor Company and its affiliates
   ("FORD MOTOR COMPANY"). Those
   software products of FORD MOTOR
   COMPANY origin, as well as associated
   media, printed materials, and "online"
   or electronic documentation
   ("SOFTWARE") are protected by
   international intellectual property laws
   and treaties. The SOFTWARE is
   licensed, not sold. All rights reserved.
- The SOFTWARE may interface with and/or communicate with, or may be later upgraded to interface with and/or communicate with additional software and/or systems provided by FORD MOTOR COMPANY.

IF YOU DO NOT AGREE TO THIS END USER LICENSE AGREEMENT ("EULA") DO NOT USE THE DEVICES OR COPY THE SOFTWARE. ANY USE OF THE SOFTWARE, INCLUDING BUT NOT LIMITED TO USE ON THE DEVICES, WILL CONSTITUTE YOUR AGREEMENT TO THIS EULA (OR RATIFICATION OF ANY PREVIOUS CONSENT).

## **GRANT OF SOFTWARE LICENSE:** This EULA grants you the following license:

 You may use the SOFTWARE as installed on the DEVICES and as otherwise interfacing with systems and/or services provide by or through FORD MOTOR COMPANY or its third party software and service providers.

# Description of Other Rights and Limitations

- Speech Recognition: If the SOFTWARE includes speech recognition component(s), you should understand that speech recognition is an inherently statistical process and that recognition errors are inherent in the process. Neither FORD MOTOR COMPANY nor its suppliers shall be liable for any damages arising out of errors in the speech recognition process. It is your responsibility to monitor any speech recognition functions included in the system.
- Limitations on Reverse Engineering, Decompilation and Disassembly:
   You may not reverse engineer, decompile, translate, disassemble or attempt to discover any source code or underlying ideas or algorithms of the SOFTWARE nor permit others to reverse engineer, decompile or disassemble the SOFTWARE, except and only to the extent that such activity is expressly permitted by applicable law notwithstanding this limitation or to the extent as may be permitted by the licensing terms governing use of any open source components included

with the SOFTWARE.

Copying, Modifying and Creating Derivative Works: You may not distribute, copy, make modifications to or create derivative works based on the SOFTWARE, except and only to the extent that such activity is expressly permitted by applicable law notwithstanding this limitation or to the extent as may be permitted by the licensing terms governing use of any open source components included with the SOFTWARE.

- Single EULA: The end user documentation for the DEVICES and related systems and services may contain multiple EULAs, such as multiple translations and/or multiple media versions (e.g., in the user documentation and in the software). Even if you receive multiple EULAs, you are licensed to use only one (1) copy of the SOFTWARE.
- SOFTWARE Transfer: You may permanently transfer your rights under this EULA only as part of a sale or transfer of the DEVICES, provided you retain no copies, you transfer all of the SOFTWARE (including all component parts, the media and printed materials, any upgrades, and, if applicable, the Certificate(s) of Authenticity), and the recipient agrees to the terms of this EULA. If the SOFTWARE is an upgrade, any transfer must include all prior versions of the SOFTWARE.
- Termination: Without prejudice to any other rights, FORD MOTOR COMPANY may terminate this EULA if you fail to comply with the terms and conditions of this EULA.
- Internet-Based Services **Components:** The SOFTWARE may contain components that enable and facilitate the use of certain Internet-based services, You acknowledge and agree that FORD MOTOR COMPANY, third party software and service suppliers, its affiliates and/or its designated agent may automatically check the version of the SOFTWARE and/or its components that you are utilizing and may provide upgrades or supplements to the SOFTWARE that may be automatically downloaded to your DEVICES.
- Additional Software/Services: The SOFTWARE may permit FORD MOTOR COMPANY, third party software and service suppliers, its affiliates and/or its designated agent to provide or make available to you SOFTWARE updates. supplements, add-on components, or Internet-based services components of the SOFTWARE after the date you obtain your initial copy of the SOFTWARE ("Supplemental Components".) SOFTWARE updates may cause you to incur additional charges from your wireless service provider. If FORD MOTOR COMPANY or third party software and services suppliers provide or make available to you Supplemental Components and no other EULA terms are provided along with the Supplemental Components, then the terms of this EULA shall apply. FORD MOTOR COMPANY, its affiliates and/or its designated agent reserve the right to discontinue without liability any Internet-based services provided to you or made available to you through the use of the SOFTWARE.

- Links to Third Party Sites: The SOFTWARE may provide you with the ability to link to third party sites. The third party sites are not under the control of FORD MOTOR COMPANY. its affiliates and/or its designated agent, Neither FORD MOTOR COMPANY nor its affiliates nor its designated agent are responsible for (i) the contents of any third party sites. any links contained in third party sites, or any changes or updates to third party sites, or (ii) webcasting or any other form of transmission received from any third party sites. If the SOFTWARE provides links to third party sites, those links are provided to you only as a convenience, and the inclusion of any link does not imply an endorsement of the third party site by FORD MOTOR COMPANY, its affiliates and/or its designated agent.
- Obligation to Drive Responsibly:
   You recognize your obligation to drive
   responsibly and keep attention on the
   road. You will read and abide with the
   DEVICES operating instructions
   particularly as they pertain to safety
   and you agree to assume any risk
   associated with the use of the
   DEVICES.

#### UPGRADES AND RECOVERY MEDIA:

If the SOFTWARE is provided by FORD MOTOR COMPANY separate from the DEVICES on media such as a ROM chip, CD ROM disk(s) or via web download or other means, and is labeled "For Upgrade Purposes Only" or "For Recovery Purposes Only" you may install one (1) copy of such SOFTWARE onto the DEVICES as a replacement copy for the existing SOFTWARE, and use it in accordance with this EULA, including any additional EULA terms accompanying the upgrade SOFTWARE.

#### **INTELLECTUAL PROPERTY RIGHTS:**

All title and intellectual property rights in and to the SOFTWARE (including but not limited to any images, photographs, animations, video, audio, music, text and "applets" incorporated into the SOFTWARE), the accompanying printed materials, and any copies of the SOFTWARE, are owned by FORD MOTOR COMPANY, or its affiliates or suppliers. The SOFTWARE is licensed, not sold. You may not copy the printed materials accompanying the SOFTWARE. All title and intellectual property rights in and to the content which may be accessed through use of the SOFTWARE is the property of the respective content owner and may be protected by applicable copyright or other intellectual property laws and treaties. This EULA grants you no rights to use such content outside its intended use. All rights not specifically granted under this EULA are reserved by FORD MOTOR COMPANY, its affiliates. and third party software and service providers and suppliers. Use of any on-line services which may be accessed through the SOFTWARE may be governed by the respective terms of use relating to such services. If this SOFTWARE contains documentation that is provided only in electronic form, you may print one copy of such electronic documentation.

**EXPORT RESTRICTIONS:** You acknowledge that the SOFTWARE is subject to U.S. and European Union export jurisdiction. You agree to comply with all applicable international and national laws that apply to the SOFTWARE, including the U.S. Export Administration Regulations, as well as end-user, end-use and destination restrictions issued by U.S. and other governments.

**TRADEMARKS:** This EULA does not grant you any rights in connection with any trademarks or service marks of FORD MOTOR COMPANY, its affiliates, and third party software and service providers.

**PRODUCT SUPPORT:** Please refer to FORD MOTOR COMPANY instructions provided in the documentation for the DEVICES product support, such as the vehicle owner guide.

Should you have any questions concerning this EULA, or if you desire to contact FORD MOTOR COMPANY for any other reason, please refer to the address provided in the documentation for the DEVICES.

### No Liability for Certain Damages:

EXCEPT AS PROHIBITED BY LAW, FORD MOTOR COMPANY, ANY THIRD PARTY SOFTWARE OR SERVICES SUPPLIERS, AND THEIR AFFILIATES SHALL HAVE NO LIABILITY FOR ANY INDIRECT, SPECIAL, CONSEQUENTIAL OR INCIDENTAL DAMAGES ARISING FROM OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THE SOFTWARE. THIS LIMITATION SHALL APPLY EVEN IF ANY REMEDY FAILS OF ITS ESSENTIAL PURPOSE. THERE ARE NO WARRANTIES OTHER THAN THOSE THAT MAY BE EXPRESSLY PROVIDED FOR YOUR NEW VEHICLE.

# SYNC® Automotive Important Safety Information Read and follow instructions:

 Before using your SYNC® system, read and follow all instructions and safety information provided in this end user manual ("Owner Guide".) Not following precautions found in the Owner Guide can lead to an accident or other serious injuries.

#### **General Operation**

- Voice Command Control: Certain functions within the SYNC® system may be accomplished using voice commands. Using voice commands while driving helps you to operate the system without removing your hands from the wheel or eyes from the road.
- Prolonged Views of Screen: Do not access any function requiring a prolonged view of the screen while you are driving. Pull over in a safe and legal manner before attempting to access a function of the system requiring prolonged attention.
- Volume Setting: Do not raise the volume excessively. Keep the volume at a level where you can still hear outside traffic and emergency signals while driving. Driving while unable to hear these sounds could cause an accident.
- Navigation Features: Any navigation features included in the system are intended to provide turn by turn instructions to get you to a desired destination. Please make certain all persons using this system carefully read and follow instructions and safety information fully.
- Distraction Hazard: Any navigation features may require manual (non-verbal) setup. Attempting to perform such set-up or insert data while driving can distract your attention and could cause an accident or other serious injury. Stop the vehicle in a safe and legal manner before attempting these operations.
- Let Your Judgment Prevail: Any navigation features are provided only as an aid. Make your driving decisions based on your observations of local conditions and existing traffic regulations. Any such feature is not a

substitute for your personal judgment. Any route suggestions made by this system should never replace any local traffic regulations or your personal judgment or knowledge of safe driving practices.

- Route Safety: Do not follow the route suggestions if doing so would result in an unsafe or illegal maneuver, if you would be placed in an unsafe situation, or if you would be directed into an area that you consider unsafe. The driver is ultimately responsible for the safe operation of the vehicle and therefore, must evaluate whether it is safe to follow the suggested directions.
- Potential Map Inaccuracy: Maps used by this system may be inaccurate because of changes in roads, traffic controls or driving conditions. Always use good judgment and common sense when following the suggested routes.
- Emergency Services: Do not rely on any navigation features included in the system to route you to emergency services. Ask local authorities or an emergency services operator for these locations. Not all emergency services such as police, fire stations, hospitals and clinics are likely to be contained in the map database for such navigation features.

Your Responsibilities and Assumptions of Risk

- You agree to each of the following:(a) Any use of the SOFTWARE while driving an automobile or other vehicle in violation of applicable law or otherwise driving in an unsafe manner presents a significant risk of distracted driving and should not be attempted under any circumstances;(b) Use of the SOFTWARE at excessive volume poses a significant risk of hearing damage and should not be attempted under any circumstances;(c) The SOFTWARE may not be compatible with new or different versions of an operating system, third party software, or third party services, and the SOFTWARE may potentially cause a critical failure of an operating system. third party software, or third party service.(d) Any third party service accessed by or third party software used with the SOFTWARE (i) may charge an additional fee for access, (ii) may not work correctly, on an uninterrupted basis, or error free, (iii) may change streaming formats or discontinue operation, (iv) may contain adult, profane or offensive content; and (v) may contain inaccurate, false or misleading traffic, weather, financial or safety information or other content; and (e) Use of the SOFTWARE mav cause you to incur additional charges from your wireless service provider (WSP) and any data or minute calculators that may be included in the software program are for reference only, are not warranted in any way and should not be relied upon in anyway.
- When using the SOFTWARE, you agree to be responsible for and assume the entire risk to the items set forth in Section (a) – (e) above.

#### **Disclaimer of Warranty**

YOU EXPRESSLY ACKNOWLEDGE AND AGREE THAT USE OF THE DEVICES AND SOFTWARE IS AT YOUR SOLE RISK AND THAT THE ENTIRE RISK AS TO SATISFACTORY OUALITY. PERFORMANCE, COMPATIBILITY. ACCURACY AND EFFORT IS WITH YOU. TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW. THE SOFTWARE AND ANY THIRD PARTY SOFTWARE OR THIRD-PARTY SERVICES ARE PROVIDED "AS IS" AND "AS AVAILABLE", WITH ALL FAULTS AND WITHOUT WARRANTY OF ANY KIND, AND FORD MOTOR COMPANY HEREBY DISCLAIMS ALL WARRANTIES AND CONDITIONS WITH RESPECT TO THE SOFTWARE, THIRD PARTY SOFTWARE, AND THIRD-PARTY SERVICES, EITHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING, BUT NOT LIMITED TO. THE IMPLIED WARRANTIES AND/OR CONDITIONS OF MERCHANTABILITY, OF SATISFACTORY **OUALITY, OF FITNESS FOR AN** ARTICULAR PURPOSE, OF ACCURACY. OF OUIET ENJOYMENT, AND NON-INFRINGEMENT OF THIRD-PARTY RIGHTS. FORD MOTOR COMPANY DOES NOT WARRANT (a) AGAINST INTERFERENCE WITH YOUR ENJOYMENT OF THE SOFTWARE, THIRD PARTY SOFTWARE, OR THIRD-PARTY SERVICES, (b) THAT THE SOFTWARE, THIRD PARTY SOFTWARE, OR THIRD-PARTY SERVICES WILL MEET YOUR REQUIREMENTS, (c) THAT THE OPERATION OF THE SOFTWARE, THIRD PARTY SOFTWARE, OR THIRD-PARTY SERVICES WILL BE UNINTERRUPTED OR ERROR-FREE. (d) OR THAT DEFECTS IN THE SOFTWARE. THIRD PARTY SOFTWARE, OR THIRD-PARTY SERVICES WILL BE CORRECTED. NO ORAL OR WRITTEN INFORMATION OR ADVICE GIVEN BY FORD MOTOR COMPANY OR ITS **AUTHORIZED REPRESENTATIVE SHALL** 

CREATE A WARRANTY, SHOULD THE SOFTWARE, THIRD PARTY SOFTWARE. OR THIRD-PARTY SERVICES PROVE DEFECTIVE. YOU ASSUME THE ENTIRE COST OF ALL NECESSARY SERVICING. REPAIR OR CORRECTION. SOME JURISDICTIONS DO NOT ALLOW THE DISCLAIMER OF IMPLIED WARRANTIES OR LIMITATIONS ON APPLICABLE STATUTORY RIGHTS OF A CONSUMER. SO THE ABOVE DISCLAIMER MAY NOT FULLY APPLY TO YOU. THE SOLE WARRANTY PROVIDED BY FORD MOTOR COMPANY SHALL BE FOUND IN THE WARRANTY INFORMATION INCLUDING WITH YOUR OWNER GUIDE. TO THE EXTENT THAT THERE IS ANY CONFLICT BETWEEN THE TERMS OF THIS SECTION AND THE WARRANTY BOOKLET. THE WARRANTY BOOKLET SHALL CONTROL.

#### Applicable Law, Venue, Jurisdiction

The laws of the State of Michigan govern this EULA and Your use of the SOFTWARE. Your use of the SOFTWARE may also be subject to other local, state, national, or international laws. Any litigation arising out of or related to this EULA shall be brought and maintained exclusively in a court of the State of Michigan located in Wayne County or in the United States District Court for the Eastern District of Michigan, You hereby consent to submit to the personal jurisdiction of a court in the State of Michigan located in Wayne County and the United States District Court for the Eastern District of Michigan for any dispute arising out of or relating to this EULA.

# Binding Arbitration and Class Action Waiver

- (a) Application. This Section applies to any dispute EXCEPT IT DOES NOT INCLUDE A DISPUTE RELATING TO COPYRIGHT INFRINGEMENT, OR TO THE ENFORCEMENT OR VALIDITY OF YOUR. FORD MOTOR COMPANY, OR ANY OF FORD MOTOR COMPANY'S LICENSORS' INTELLECTUAL PROPERTY RIGHTS. Dispute means any dispute, action, or other controversy between You and FORD MOTOR COMPANY, other than the exceptions listed above, concerning the SOFTWARE (including its price) or this EULA, whether in contract, warranty, tort, statute, regulation, ordinance, or any other legal or equitable basis.
- **(b) Notice of Dispute.** In the event of a Dispute, You or FORD MOTOR COMPANY must give the other a "Notice of Dispute", which is a written statement of the name, address, and contact information of the party giving it, the facts giving rise to the dispute, and the relief requested. You and FORD MOTOR COMPANY will attempt to resolve any dispute through informal negotiation within 60 days from the date the Notice of Dispute is sent. After 60 days, You or FORD MOTOR COMPANY may commence arbitration.
- (c) Small claims court. You may also litigate any dispute in small claims court in your county of residence or FORD MOTOR COMPANY'S principal place of business, if the dispute meets all requirements to be heard in the small claims court. You may litigate in small claims court whether or not You negotiated informally first.
- **(d) Binding arbitration.** If You and FORD MOTOR COMPANY, do not resolve any dispute by informal negotiation or in small claims court, any other effort to resolve the dispute will be conducted exclusively by binding arbitration. You are giving up

- the right to litigate (or participate in as a party or class member) all disputes in court before a judge or jury. Instead, all disputes will be resolved before a neutral arbitrator, whose decision will be final except for a limited right of appeal under the Federal Arbitration Act. Any court with jurisdiction over the parties may enforce the arbitrator's award.
- **(e) Class action waiver.** Any proceedings to resolve or litigate any dispute in any forum will be conducted solely on an individual basis. Neither you nor FORD MOTOR COMPANY, will seek to have any dispute heard as a class action, as a private attorney general action, or in any other proceeding in which any party acts or proposes to act in a representative capacity. No arbitration or proceeding will be combined with another without the prior written consent of all parties to all affected arbitrations or proceedings.
- **(f) Arbitration procedure.** Any arbitration will be conducted by the American Arbitration Association (the "AAA"), under its Commercial Arbitration Rules. If You are an individual and use the SOFTWARE for personal or vehicle use, or if the value of the dispute is \$75,000 or less whether or not You are an individual or how You use the SOFTWARE, the AAA Supplementary Procedures for Consumer-Related Disputes will also apply. To commence arbitration, submit a Commercial Arbitration Rules Demand for Arbitration form to the AAA. You may request a telephonic or in-person hearing by following the AAA rules. In a dispute involving \$10.000 or less, any hearing will be telephonic unless the arbitrator finds good cause to hold an in-person hearing instead. For more information, see adr.org or call 1-800-778-7879. You agree to commence arbitration only in your county of residence or FORD MOTOR COMPANY'S principal place of business. The arbitrator

may award the same damages to You individually as a court could. The arbitrator may award declaratory or injunctive relief only to You individually, and only to the extent required to satisfy Your individual claim. **Arbitration fees and incentives.** 

- i. Disputes involving \$75,000 or less. FORD MOTOR COMPANY will promptly reimburse your filing fees and pay the AAA's and arbitrator's fees and expenses. If you reject FORD MOTOR COMPANY'S last written settlement offer made before the arbitrator was appointed ("last written offer"), your dispute goes all the way to an arbitrator's decision (called an "award"), and the arbitrator awards you more than the last written offer. FORD MOTOR COMPANY will give you three incentives: (1) pay the greater of the award or \$1,000; (2) pay twice your reasonable attorney's fees, if any; and (3) reimburse any expenses (including expert witness fees and costs) that your attorney reasonably accrues for investigating, preparing, and pursuing your claim in arbitration. The arbitrator will determine the amounts.
- ii. Disputes involving more than \$75,000. The AAA rules will govern payment of filing fees and the AAA's and arbitrator's fees and expenses.
- iii. Disputes involving any amount. In any arbitration you commence, FORD MOTOR COMPANY will seek its AAA or arbitrator's fees and expenses, or Your filing fees it reimbursed, only if the arbitrator finds the arbitration frivolous or brought for an improper purpose. In any arbitration FORD MOTOR COMPANY commences, it will pay all filing, AAA, and arbitrator's fees and expenses. It will not seek its attorney's fees or expenses from you in any arbitration. Fees and expenses are not counted in determining how much a dispute involves.

- (h) Claims or disputes must be filed within one year. To the extent permitted by law, any claim or dispute under this EULA to which this Section applies must be filed within one year in small claims court (Section c) or in arbitration (Section d). The one-year period begins when the claim or dispute first could be filed. If such a claim or dispute is not filed within one year, it is permanently barred.
- (i) Severability. If the class action waiver (Section e) is found to be illegal or unenforceable as to all or some parts of a dispute, then that portion of Section e will not apply to those parts. Instead, those parts will be severed and proceed in a court of law, with the remaining parts proceeding in arbitration. If any other provision of that portion Section e is found to be illegal or unenforceable, that provision will be severed with the remainder of Section e remaining in full force and effect.

#### Telenav Software End User License Agreement

Please read these terms and conditions carefully before you use the TeleNav Software. Your use of the TeleNav Software indicates that you accept these terms and conditions. If you do not accept these terms and conditions, do not break the seal of the package, launch, or otherwise use the TeleNav Software. TeleNav may revise this Agreement and the privacy policy at any time, with or http://www.telenav.com from time to time to review the then current version of this Agreement and of the privacy policy.

#### 1. Safe and Lawful Use

You acknowledge that devoting attention to the TeleNav Software may pose a risk of injury or death to you and others in situations that otherwise require your undivided attention, and you therefore agree to comply with the following when using the TeleNav Software:

- (a) observe all traffic laws and otherwise drive safely;
- (b) use your own personal judgment while driving. If you feel that a route suggested by the TeleNav Software instructs you to perform an unsafe or illegal maneuver, places you in an unsafe situation, or directs you into an area that you consider to be unsafe, do not follow such instructions:
- (c) do not input destinations, or otherwise manipulate the TeleNav Software, unless your vehicle is stationary and parked:
- (d) do not use the TeleNav Software for any illegal, unauthorized, unintended, unsafe, hazardous, or unlawful purposes, or in any manner inconsistent with this Agreement;
- (e) arrange all GPS and wireless devices and cables necessary for use of the TeleNav Software in a secure manner in your vehicle so that they will not interfere with your driving and will not prevent the operation of any safety device (such as an airbag).

You agree to indemnify and hold TeleNav harmless against all claims resulting from any dangerous or otherwise inappropriate use of the TeleNav Software in any moving vehicle, including as a result of your failure to comply with the directions above.

#### 2. Account Information

You agree: (a) when registering the TeleNav Software, to provide TeleNav with true, accurate, current, and complete information about yourself, and (b) to inform TeleNav promptly of any changes to such information, and to keep it true, accurate, current and complete.

#### 3. Software License

Subject to your compliance with the terms of this Agreement, TeleNav hereby grants to you a personal. non-exclusive, non-transferable license (except as expressly permitted below in connection with your permanent transfer of the TeleNay Software license), without the right to sublicense, to use the TeleNav Software (in object code form only) in order to access and use the TeleNav Software. This license shall terminate upon any termination or expiration of this Agreement. You agree that you will use the TeleNav Software only for your personal business or leisure purposes. and not to provide commercial navigation services to other parties.

#### 3.1 License Limitations

(a) reverse engineer, decompile. disassemble, translate, modify, alter or otherwise change the TeleNav Software or any part thereof: (b) attempt to derive the source code. audio library or structure of the TeleNay Software without the prior express written consent of TeleNav; (c) remove from the TeleNav Software, or alter, any of TeleNay's or its suppliers' trademarks, trade names. logos, patent or copyright notices, or other notices or markings: (d) distribute, sublicense or otherwise transfer the TeleNav Software to others, except as part of your permanent transfer of the TeleNav Software: or (e) use the TeleNav Software in any manner that

i. infringes the intellectual property or proprietary rights, rights of publicity or privacy or other rights of any party,

ii. violates any law, statute, ordinance or regulation, including but not limited to laws and regulations related to spamming, privacy, consumer and child protection, obscenity or defamation, or

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FCC ID: ACI-SYNCG3-I

IC: 216B-SYNCG3-L

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- (1) This device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

#### WARNING



Changes or modifications not expressively approved by the party responsible for compliance could void the user's authority to operate the equipment. The term "IC" before the radio certification number only signifies that Industry Canada technical specifications were met.

The antenna used for this transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

4	Audible Warnings and Indicators	87
(MD	Automatic Transmission Warning	0-
4WD	Chime	
See: Four-Wheel Drive141	Engine On Warning Chime	8
٨	Headlamps On Warning Chime	8
A	Key in Ignition Warning Chime	
	Keyless Warning Alert	
A/C	Parking Brake On Warning Chime	
See: Climate Control101	Audio Control	
About This Manual7	Audio System	.286
ABS	General Information	
See: Brakes146	Audio Unit - Vehicles With: AM/FM/C	
ABS driving hints	SYNC/Satellite Radio	
See: Hints on Driving With Anti-Lock	Audio Unit - Vehicles With: AM/FM/C	D/
Brakes146	SYNC	.289
Accessories342	Audio Unit - Vehicles With: AM/FM/	
Exterior Style342	CD	.287
Interior Style342	Audio Unit - Vehicles With: Premium	
Lifestyle342	AM/FM/CD	.293
Peace of Mind342	Audio Unit - Vehicles With: Sony AM/	
Accessories	FM/CD	
See: Replacement Parts	Menu Structure	296
Recommendation11	Autolamps	
Active Park Assist154	Windshield Wiper Activated	
Automatic Steering into Parking	Headlamps	75
Space155	Automatic Climate Control	102
Deactivating the Park Assist Feature156	Temperature Control	
Troubleshooting the System156	Automatic Transmission	138
Using Active Park Assist154	Brake-Shift Interlock	
Adjusting the Headlamps224	If Your Vehicle Gets Stuck In Mud or	
Horizontal Aim Adjustment226	Snow	140
Vertical Aim Adjustment224	SelectShift Automatic™	
Adjusting the Steering Wheel67	Transmission	138
Airbag Disposal43	Understanding the Positions of Your	
Air Conditioning	Automatic Transmission	138
See: Climate Control101	Automatic Transmission Fluid	
Alarm	Check	22.
See: Anti-Theft Alarm66	Autowipers	
Anti-Theft Alarm66	Auxiliary Power Points	12
Arming the Alarm66	110 Volt AC Power Points	
Disarming the Alarm66	12 Volt DC Power Point	
Appendices365	Locations	
ADDELIUICES	LUCATIONIS	1∠

В		Changing a Road Wheel Dissimilar Spare Wheel and Tire Assem	
Blind Spot Information System	162	Information	
Switching the System Off and On		Tire Change Procedure	
System Errors		Changing the 12V Battery	
Using the System		Changing the Engine Air Filter	
Bonnet Lock	102	1.6L and 2.0L EcoBoost Engines	
See: Opening and Closing the Hood	212	2.5L Engine	
Booster Seats		Changing the Wiper Blades	
		Front Wiper Blades	
Types of Booster Seats		Rear Wiper Blade	
Brake Fluid Check			
Brakes		Checking MyKey System Status	52
General Information		Checking the Wiper Blades	223
Breaking-In		Child Restraint and Safety Belt	
Bulb Specification Chart	230	Maintenance	ರ್ವ
$\boldsymbol{C}$		Child Safety	
		General Information	
		Child Safety Locks	
Cabin Air Filter		Left-Hand Side	
California Proposition 65	11	Right-Hand Side	
Capacities and Specifications - 1.6L		Child Seat Positioning	
EcoBoost™	275	Cleaning Leather Seats	
Specifications	275	Cleaning Products	234
Capacities and Specifications - 2.0L		Cleaning the Alloy Wheels	238
EcoBoost™	278	Cleaning the Engine	235
Specifications		Cleaning the Exterior	234
Capacities and Specifications -		Exterior Chrome Parts	
2.5L	282	Exterior Plastic Parts	235
Specifications		Stripes or Graphics	235
Capacities and Specifications	268	Underbody	235
Car Wash		Cleaning the Instrument Panel and	
See: Cleaning the Exterior	234	Instrument Cluster Lens	237
Center Console		Cleaning the Interior	
Changing a Bulb		Cleaning the Windows and Wiper	00
Lamp Assembly Condensation		Blades	236
Replacing Fog, Park and Turn Signal	220	Clearing All MyKeys	
Bulbs	228	Climate Control	
Replacing Headlamp Bulbs		Coolant Check	101
Replacing HID Headlamp Bulbs		See: Engine Coolant Check	218
Replacing High-Mount Brake Lamp	220	Crash Sensors and Airbag Indicator	
	220	Creating a MyKey	
Bulb		Programming/Changing Configurable	50
Replacing License Plate Lamp Bulb			E0
Replacing Reverse Lamp Assembly		Settings	
Replacing Side Marker Bulbs	228		
Replacing Tail, Brake and Turn Signal	220		
Bulbs			
Changing a Fuse	∠		
Fuses	211		

Cross Traffic Alert	164	Emission Control System	135
False Alerts		On-Board Diagnostics (OBD-II)	136
Switching the System Off and On	167	Readiness for Inspection/Maintenan	ce
System Errors		(I/M) Testing	136
System Lights, Messages and Audi	ble	End User License Agreement	
Alerts	166	VEHICLE SOFTWARE END USER LIC	
System Limitations		AGREEMENT (EULA)	
Using the System		Engine Block Heater	
Cruise Control		Using the Engine Block Heater	129
Principle of Operation		Engine Coolant Check	
Cruise control		Adding Engine Coolant	
See: Using Cruise Control	161	Checking the Engine Coolant	
Customer Assistance		Recycled Engine Coolant	
Custoffier Assistance	190	Severe Climates	
D		What You Should Know About Fail-S	
D			
Data Decording	0	Cooling	220
Data Recording		Engine Immobilizer	<b>6</b> F
Event Data Recording		See: Passive Anti-Theft System	
Service Data Recording		Engine Oil Check	
Daytime Running Lamps	/6	Adding Engine Oil	21/
Type 1 - Conventional		Engine Oil Dipstick - 1.6L	217
(Non-Configurable)		EcoBoost™	
Type 2 - Configurable		Engine Oil Dipstick - 2.0L EcoBoos	
Digital Radio	298	_2.5L	21/
HD Radio Reception and Station		Engine Specifications - 1.6L	
Troubleshooting		EcoBoost™	
Direction Indicators		Drivebelt Routing	268
Driver and Passenger Airbags	36	Engine Specifications - 2.0L	
Children and Airbags	36	EcoBoost™	268
Proper Driver and Front Passenger	Seating	Drivebelt Routing	269
Adjustment	36	Engine Specifications - 2.5L	269
Driver Knee Airbag	40	Drivebelt Routing	
Driving Aids	162	Environment	14
Driving Hints		Essential Towing Checks	
Driving Through Water		Before Towing a Trailer	
DRL		Hitches	
See: Daytime Running Lamps	76	Launching or Retrieving a Boat or Per	
_		Watercraft (PWC)	
E		Safety Chains	
_		Trailer Brakes	
Eco Mode	167	Trailer Lamps	
Resetting Eco Mode		When Towing a Trailer	
Type 1		Event Data Recording	
Type 2 and 3		See: Data Recording	a
Economical Driving		Export Unique Options	
LCOHOLLICAL DITAILIE	100	Extended Service Plan (ESP)	
		SERVICE PLANS (CANADA ONLY)	2/5
		SERVICE PLANS (U.S. Only)	344

Exterior Mirrors	Gauges
F	General Maintenance Information346 Multi-Point Inspection348 Owner Checks and Services347
Fastening the Safety Belts	Protecting Your Investment
(U.S. Only)11 Four-Wheel Drive141	Handbrake
Principle of Operation       141         Front Fog Lamps       .76         Front Parking Aid       .153         Front Passenger Sensing System       .37         Fuel and Refueling       .130         Fuel Consumption       .134         Calculating Fuel Economy       .135         Filling the Tank       .134         Fuel Filter Funnel Location       .131         Fuel Puality       .131         Choosing the Right Fuel       .131         Fuel Shutoff       .192         Fuses       .202         Fuse Specification Chart       .202         Luggage Compartment Fuse Panel       .208         Passenger Compartment Fuse       .208         Panel       .205         Power Distribution Box       .202         Pre-Fuse Box       .202	See: Parking Brake
G	
Garage Door Opener See: Universal Garage Door Opener116	

Hints on Controlling the Interior Climate	Information MessagesAirbagAlarmAutomatic Engine Shutdown Battery and Charging System
Maximum Cooling Performance in Instrument Panel or Instrument Panel	Blind Spot Information and Cros Alert System
and Footwell Positions106	Doors
Recommended Settings for Cooling105	Engine
Recommended Settings for Heating104	Hill Start Assist
Side Window Defogging in Cold	Keyless Vehicle
Weather106	Lighting
Vehicle Stationary for Extended Periods	Maintenance
during Extreme High Ambient	Message indicator
Temperatures105	MyKey
Hints on Driving With Anti-Lock	Park Aid
Brakes146	Park Brake
Hood Lock	Power Steering
See: Opening and Closing the Hood212	Starting System
1	Tire Pressure Monitoring System
	Traction Control
	Trailer
Ignition Switch124	Transmission and Four-Wheel D
In California (U.S. Only)197	Installing Child Seats
Information Display Control69	Child Seats
Information Displays88	Using Lap and Shoulder Belts
General Information88	Using Lower Anchors and Tether
	CHildren (LATCH)
	Using Tether Straps
	Instrument Cluster
	Instrument Lighting Dimmer
	Interior Lamps

Information Messages	91
Airbag	
Alarm	92
Automatic Engine Shutdown	92
Battery and Charging System	93
Blind Spot Information and Cross Traffic	
Alert System	93
Doors	94
Engine	94
Hill Start Assist	95
Keyless Vehicle	95
Lighting	96
Maintenance	96
Message indicator	.91
MyKey	
Park Aid	97
Park Brake	
Power Steering	98
Starting System	
Tire Pressure Monitoring System10	00
Traction Control10	00
Trailer10	
Transmission and Four-Wheel Drive	
Installing Child Seats	16
Child Seats	.16
Using Lap and Shoulder Belts	17
Using Lower Anchors and Tethers for	
CHildren (LATCH)	.19
Using Tether Straps	
Instrument Cluster	33
Instrument Lighting Dimmer	75
Interior Lamps	77
Front Interior Lamp	.77
Rear Interior Lamp	
Interior Mirror	81
Auto-Dimming Mirror	
Introduction	7
1	
J	
Jump Starting the Vehicle19	93
Connecting the Jumper Cables1	
Jump Starting	
Preparing Your Vehicle1	93

Removing the Jumper Cables.....194

K	Manual Climate Control Manual Liftgate	
Koyloss Entry 63	Closing the Liftgate	50 50
Keyless Entry63 SECURICODE™ KEYLESS ENTRY	Opening the Liftgate	
	Manual Seats	
KEYPAD63	Adjusting the Height of the Driver Seat	
Keyless Starting124	Moving the Seat Backward and	
Ignition Modes125	_	110
Keys and Remote Controls44	Forward	
Principle of Operation44	Recline Adjustment	
1	Media Hub	
L	Memory Function	
	Saving a PreSet Position	113
Lighting Control74	Message Center	
Headlamp Flasher74	See: Information Displays	88
High Beams74	Mirrors	
Lighting74	See: Heated Windows and Mirrors	
Load Carriers	See: Windows and Mirrors	
See: Roof Racks and Load Carriers171	Mobile Communications Equipment	
Load Carrying170	Moonroof	
Load Limit172	Bounce-Back	
Special Loading Instructions for Owners of	Opening and Closing the Moonroof	
Pick-up Trucks and Utility-type	Opening and Closing the Sunscreen	82
Vehicles178	Venting the Moonroof	82
Vehicle Loading - with and without a	Motorcraft Parts - 1.6L	
Trailer172	EcoBoost™	.270
Locking and Unlocking55	Motorcraft Parts - 2.0L	
Activating Intelligent Access56	EcoBoost™	
Autolock57	Motorcraft Parts - 2.5L	.272
Battery Saver58	MyKey Troubleshooting	
Illuminated Entry58	MyKey <sup>TM</sup>	
Illuminated Exit58	Principle of Operation	
Mechanical Key56		
Opening a Rear Door from Inside56	N	
Power Door Locks55	1 1	
Remote Control55	Normal Scheduled Maintenance	349
Smart Unlocks For Integrated Keyhead	Intelligent Oil-Life Monitor™	
Transmitter57	Normal Maintenance Intervals	
Smart Unlocks For Intelligent Access Keys	_	
57	$\cap$	
Locks55	$\mathbf{O}$	
Luggage Covers170	Oil Check	
	See: Engine Oil Check	217
Lug Nuts	Opening and Closing the Hood	
See: Changing a Road Wheel262	Closing the Hood	
M	Opening the Hood	כו∠ רור
IVI	Ordering Additional Owner's	∠۱∠
Majatanana 212		200
Maintenance212	Literature Obtaining a French Owner's Manual	
General Information212	Obtaining a Fierich Owner's Manual	.200

Overhead Console	123	Rear View Camera	
Г		See: Rear View Camera	
P		Rear Window Wiper and Washers	72
		Rear Window Washer	
Parking Aids		Rear Window Wiper	
Principle of Operation	152	Recommended Towing Weights	180
Parking Brake		Refueling	
Passive Anti-Theft System	65	Easy Fuel™ Capless Fuel System	133
SecuriLock®	65	Remote Control	45
PATS		Car Finder	47
See: Passive Anti-Theft System	65	Integrated Keyhead Transmitters	45
Perchlorate	11	Intelligent Access Key	45
Personal Safety System™	34	Remote Start	47
How Does the Personal Safety System	em	Replacing the Battery	46
Work?	34	Sounding a Panic Alarm	47
Post-Crash Alert System	195	Remote Start	107
Power Door Locks		Automatic Settings	
See: Locking and Unlocking	55	Heated and Cooled Devices	
Power Liftgate		Last Settings	
Hands-Free Feature		Removing a Headlamp	
Obstacle Detection		Repairing Minor Paint Damage	
Opening and Closing the Liftgate		Replacement Parts	200
Setting the Liftgate Open Height		Recommendation	11
Stopping the Liftgate Movement		Collision Repairs	
Power Seats		Scheduled Maintenance and Mechani	
Power Lumbar		Repairs	
Power Steering Fluid Check		Warranty on Replacement Parts	
Power Windows	78	Replacing a Lost Key or Remote	
Accessory Delay		Control	/ <sub>1</sub> Q
Bounce-Back		Reporting Safety Defects (Canada	40
One-Touch Down		Only)	201
One-Touch Up		Reporting Safety Defects (U.S.	201
•			200
Window Lock		Only) Roadside Assistance	
Protecting the Environment	14		
R		Vehicles Sold in Canada: Getting Roac Assistance	
Γ			
Door Dorling Aid	150	Vehicles Sold in Canada: Using Roads	
Rear Parking Aid	152	Assistance	
Rear Seat Armrest		Vehicles Sold in the United States: Ge	
Rear Seats		Roadside Assistance	
Folding the Seatback		Vehicles Sold in the United States: Us	
Recline Adjustment		Roadside Assistance	
Unfolding the Seatback		Roadside Emergencies	
Rear Under Floor Storage		Roof Racks and Load Carriers	
Adjustable Load Floor		Adjusting the Crossbar	171
Cargo Management System	170	Running-In	
Rear View Camera		See: Breaking-In	188
Light the Pear View Camera System	n 158		

Running Out of Fuel131	Starting a Gasoline Engine	125
Adding Fuel From a Portable Fuel	Automatic Engine Shutdown	
Container132	Failure to Start	
Filling a Portable Fuel Container132	Guarding Against Exhaust Fumes	
Titting a Fortable Foet Container	Important Ventilating Information	
S	Stopping the Engine When Your Vehicle	
J	Moving	
Cafety Polt Height Adjustment 21	Stopping the Engine When Your Vehicle	
Safety Belt Height Adjustment31 Safety Belt Minder32	Stationary	
Belt-Minder™32	Vehicles with an Ignition Key	
Safety Belts27	Vehicles with Keyless Start	
Principle of Operation27	Starting and Stopping the Engine	124
Safety Belt Warning Lamp and Indicator	General Information	124
Chime31	Steering	
Conditions of operation31	Electric Power Steering	
Safety Canopy <sup>TM</sup> 40	Steering Wheel	6
Safety Precautions130	Storage Compartments	123
Satellite Radio301	Sunroof	
Satellite Radio Electronic Serial Number	See: Moonroof	
(ESN)302	Sun Visors	
Satellite Radio Reception Factors301	Illuminated Vanity Mirror	
SIRIUS® Satellite Radio Service301	Supplementary Restraints System	35
Troubleshooting302	Principle of Operation	35
Scheduled Maintenance Record355	Symbols Glossary	7
Scheduled Maintenance346	SYNC™ Applications and	
Seats108	Services	320
Security65	911 Assist	
Side Airbags39	SYNC Mobile Apps	322
Sitting in the Correct Position108	SYNC™	.304
Snow Chains	General Information	304
See: Using Snow Chains257	SYNC™ Troubleshooting	334
Special Notices12	<u></u>	
New Vehicle Limited Warranty12	T	
Notice to Owners of Pickup Trucks and	•	
Utility Type Vehicles12	Tailgate	
On-board Diagnostics (OBD-II)12	See: Manual Liftgate	50
Special Instructions12	See: Power Liftgate	
Using Your Vehicle as an Ambulance12	Technical Specifications	
Using Your Vehicle With a Snowplow12	See: Capacities and Specifications	268
Special Operating Conditions Scheduled	The Better Business Bureau (BBB) Au	
Maintenance352	Line Program (U.S. Only)	
Exceptions353	Line Piugiaiti (U.S. Ottiy)	190
Speed Control		
See: Cruise Control161		
Stability Control		
Principle of Operation150		

See: Ignition Switch......124

Tire Care	
Glossary of Tire Terminology	245
Information About Uniform Tire Quality	
Grading	
Information Contained on the Tire	
Sidewall	246
Temperature A B C	245
Traction AA A B C	244
Treadwear	
Tire Pressure Monitoring System	.258
Changing Tires With a Tire Pressure	
Monitoring System	259
Understanding Your Tire Pressure	205
Monitoring System	259
Tires	203
See: Wheels and Tires	241
Towing a Trailer	
Load Placement	179
Towing Points	
Installing the Recovery Hook	
Recovery Hook Location	
Towing the Vehicle on Four Wheels	
Towing the Vehicle on Four	105
Wheels	186
Emergency Towing	186
Recreational Towing	
Towing	
Traction Control	140
Principle of Operation	
Trailer Sway Control	
Transmission Code Designation	27/
Transmission	138
Transmission	150
See: Transmission	138
Transporting the Vehicle	186
Trip Computer	01
All Value	
Att value	91 Q1
Digital Speedo	Ω1
Distance to E	
Instantaneous Fuel	
Resetting the Trip Computer	
Trip Odometer	
Trip Timer	
	91

### IJ

Under Hood Overview - 1.6L	
EcoBoost™	214
EcoBoost™ Under Hood Overview - 2.0L	
EcoBoost™	215
Under Hood Overview - 2.5L	216
Universal Garage Door Opener	116
HomeLink Wireless Control System	116
USB Port	303
Using Cruise Control	161
Switching Cruise Control Off	
Switching Cruise Control On	
Using Four-Wheel Drive	141
Driving in Special Conditions With Four-Wheel Drive	
Four-Wheel Drive	141
Using MyKey With Remote Start	
Systems	53
Using Snow Chains	257
Using Stability Control	151
AdvanceTrac® with Roll Stability Contro	
(RSC®)	151
Using SYNC™ With Your Media	
Player	
Accessing Your USB Song Library	329
Bluetooth Devices and System	221
Settings	331
Connecting Your Digital Media Player to	ine
USB Port	325
Media Menu Features	329
Media Voice Commands	
USB 2Voice Commands for Audio Sources	
Using SYNC™ With Your Phone	
Accessing Features through the Phone	.500
Menu	212
Accessing Your Phone Settings	316
Bluetooth Devices	01 ک 71 ک
Making Calls	راد راد
Pairing a Phone for the First Time	
Pairing Subsequent Phones	
Phone Options during an Active Call	JU 5
Phone Voice Commands	
Receiving Calls	
System Settings	
Text Messaging	

Using Traction Control	
Controls149	
Using Voice Recognition	
System Interaction and Feedback307	
Utilizing the Mediation/Arbitration	
Program (Canada Only)198	
Fiograffi (Carlada Offiy)190	
$\bigvee$	
V	
Vehicle Care       234         General Information       234         Vehicle Certification Label       274         Vehicle Identification Number       273         Vehicle Storage       238         Battery       239         Body       239         Brakes       239         Cooling system       239         Engine       239         Fuel system       239         General       239         Miscellaneous       240         Removing Vehicle From Storage       240         Tires       239         Ventilation       239	
See: Climate Control101	
VIN	
See: Vehicle Identification Number273	
Voice Control68	

### W

Narning Lamps and Indicators	85
Airbag - Front	
Anti-Lock Braking System	
Battery	
Blind Spot Monitor	85
Brake System	
Cruise Control	
Direction Indicator	85
Engine Oil	
Fasten Safety Belt	
Fog Lamps - Front	
High Beam	
Information	
Low Fuel Level	
Low Tire Pressure Warning	86
Parking Lamps	
Service Engine Soon	
Traction and Stability Control	
Traction and Stability Control Off	
Washer Fluid Check	221
Washers	
See: Cleaning the Exterior	
See: Wipers and Washers	
Waxing	235
Wheel Nuts	
See: Changing a Road Wheel	262
Wheels and Tires	
General Information	
Technical Specifications	
Windows and Mirrors	
Windshield Washers	
Windshield Wipers	
Intermittent Wipe	
Speed Dependent Wipers	
Nipers and Washers	70
Wrecker Towing	
See: Transporting the Vehicle	186