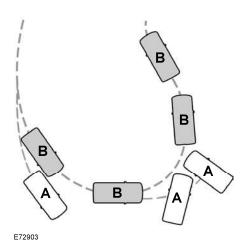
# **Stability Control**



A Vehicle without AdvanceTrac

skidding off its intended route.

B Vehicle with AdvanceTrac maintaining control on a slippery surface.

## **USING STABILITY CONTROL**

### AdvanceTrac™

The system automatically activates when you start your engine. The electronic stability control portion of the system is disabled when the transmission is in reverse (R) or, on some models, if you press and hold the stability control button for more than five seconds when you apply the brakes and the vehicle is at a stop. You can switch off the traction control portion of the system independently. See **Using Traction Control** (page 141).

AdvanceTrac features						
Button functions	Mode	Stability control off light	Electronic stability control	Traction control system	Collision warning with brake support	
Default at start-up	Stability and traction control fully enabled	On during bulb check	Enabled	Enabled	Enabled	
Button pressed momentarily	Traction control off	On	Enabled	Disabled	Enabled	

## **Stability Control**

AdvanceTrac features						
Button pressed twice rapidly	Sport mode (if equipped)	On	Enabled	Enabled	Disabled	
Button pressed and held more than five seconds	AdvanceTrac disabled	On	Disabled	Disabled	Disabled	
Button pressed again after deactivation	AdvanceTrac fully enabled	Off	Enabled	Enabled	Enabled	

**Note:** Do not use Sport mode on public roadways.

Some models may also come equipped with a sport mode which allows the driver to reduce normal AdvanceTrac system intervention and provide a more spirited driving experience. To enter sport mode, toggle the stability control button twice rapidly. The message appears in the information display that the system is now in sport mode.

For vehicles equipped with the selectable drive mode feature, AdvanceTrac sport mode is not available. You can utilize the performance oriented AdvanceTrac mode by selecting track drive mode. In this mode, AdvanceTrac intervention is reduced and tuned specifically for track use only and is not for use on public roads. In all of the selectable drive modes, you can disable traction control and AdvanceTrac with the AdvanceTrac switch.

#### Line Lock (If Equipped)

Line Lock is a feature intended for use at tracks only and should not be used on public roadways. Use of this feature will result in significantly increased rear tire wear. It is intended to condition the rear tires to maximize traction prior to track use. Line Lock maintains brake force at the front wheels, allowing the rear wheels to spin with minimal vehicle movement.

This feature is located in the Track Apps menu. Make selections through the 5-way information display control and OK button located on the steering wheel.

#### **Using Line Lock**

There are three Line Lock stages:

- · Initiated.
- Engaged.
- Off.

#### **Initiating Line Lock**

The initiation stage verifies that the vehicle is ready for Line Lock function, and confirms driver intent. Follow the prompts in the information display in to initiate Line Lock.

## **Stability Control**

The following conditions must be met to initialize Line Lock:

- The vehicle is on a level surface.
- The engine is running.
- The vehicle is traveling less than 25 mph (40 km/h).
- Selectable Drive Mode is not in wet mode (if equipped).
- There are no AdvanceTrac faults.

If you want to cancel Line Lock once it is initialized, press the left information display control. Once initiated, Line Lock is prepared for activation and will remain initiated up to 25 mph (40 km/h). If vehicle speed exceeds 25 mph (40 km/h), Line Lock will be automatically canceled.

#### **Engaging Line Lock**

Follow the prompts in the information display to engage Line Lock after it is initialized. To engage, firmly apply the brakes. Then press the OK button. Once engaged, release the brake pedal. The front brakes will remain applied and the rear brakes will release. At this point, the engagement timer is initiated and shown on the driver information display.

The following conditions must be met to engage Line Lock:

- The vehicle is on a level surface.
- The engine is running.
- · The vehicle is stopped.
- The parking brake is not applied.
- The driver door is closed.
- The transmission is in a forward gear.
- Selectable Drive Mode is not in wet mode (if equipped).
- There are no AdvanceTrac faults.
- The steering wheel must be in the straight ahead position.

#### **Releasing Line Lock**

While Line Lock is engaged, you can exit (release) the feature using the OK button. When you press the OK button, Line Lock releases immediately and normal vehicle function will resume. When Line Lock is engaged, a countdown timer shows the remaining time before Line Lock is released automatically. If you exceed the time limit, or another vehicle condition requires Line Lock to release, the system will safely disengage and normal vehicle function will resume.

**Note:** If the brake pedal is applied while Line Lock is engaged, Line Lock automatically cancels and normal brake function resumes.

## **Driving Aids**

Cause	Action		
The surface of the radar in the grille is dirty or obstructed in some way	Clean the grille surface in front of the radar or remove the object causing the obstruc- tion		
The surface of the radar in the grille is clean but the message remains in the display	Wait a short time. It may take several minutes for the radar to detect that it is no longer obstructed		
Heavy rain, spray, snow, or fog is interfering with the radar signals	The collision warning system is temporarily disabled. Collision warning should automatically reactivate a short time after the weather conditions improve		
Swirling water, or snow or ice on the surface of the road may interfere with the radar signals	The collision warning system is temporarily disabled. Collision warning should automatically reactivate a short time after the weather conditions improve		

#### **System Limitations**

#### WARNING

The collision warning system's brake support can only help reduce the speed at which a collision occurs if the driver applies the vehicle's brakes. The brake pedal must be pressed just like any typical braking situation.

Due to the nature of radar technology, there may be certain instances where vehicles do not provide a collision warning. These include:

- Stationary vehicles or vehicles moving below 6 mph (10 km/h).
- Pedestrians or objects in the roadway.
- Oncoming vehicles in the same lane.
- Severe weather conditions (see blocked sensor section).
- Debris build-up on the grille near the headlamps (see blocked sensor section).

- Small distance to vehicle ahead.
- Steering wheel and pedal movements are large (very active driving style).

If the front end of the vehicle is hit or damaged, the radar sensing zone may be altered causing missed or false collision warnings. See your authorized dealer to have your collision warning radar checked for proper coverage and operation.

### **DRIVE CONTROL**

#### **Selectable Drive Modes**

Selectable drive modes delivers a driving experience through a suite of sophisticated electronic vehicle systems. These systems optimize steering, handling and powertrain response. This provides a single location to control multiple systems performance settings.

Selectable drive modes consists of the following systems:

### **Driving Aids**

- Electronically power-assisted steering adjusts steering effort and feel based on your selected mode.
- Electronic stability control and traction control maintain your vehicle control in adverse conditions or high performance driving. See **Stability Control** (page 142).
- Electronic throttle control enhances the powertrain response to your inputs.

#### **Using Selectable Drive Modes**

Selectable drive modes automatically tailors your vehicle configuration for each mode selected.



To change the drive mode setting, toggle the mode button or switch on the instrument

panel under the display. The first press of the mode button or switch illuminates the selected mode, subsequent presses will change the selected mode.

**Note:** Mode changes are not available when the vehicle ignition is off or reverse (R) gear is selected. In gear position drive (D), the available modes are Normal, Sport+, Track and Snow/Wet. In gear position sport (S) Snow/Wet and Normal mode are unavailable.

#### Modes:

- Normal Delivers a balanced combination of comfort and handling. This mode provides an engaging drive experience and a direct connection to the road without sacrificing any of the composure demanded from your vehicle.
- Sport Engages when you shift your automatic transmission into sport (S). Sport mode increases throttle response and helps your vehicle accelerate faster, but does not change the feel of the steering or stability system.

- Sport+ Provides a sportier steering feel and throttle response. Sport+ mode is ideal for use during more spirited driving.
- Track Provides a performance driving experience. The engine responds directly to your inputs and takes on a more powerful tone. Track mode is for use when pure performance is desired. A performance oriented traction control mode is automatically utilized when Track drive mode is selected. In this mode, traction control intervention is reduced and tuned specifically for track usage only and is not intended for public roads. See **Using Stability Control** (page 143).
- Snow/Wet Provides a confident handling driving experience during poor weather. This mode provides a confident drive experience and a direct connection to the road without sacrificing any of the composure demanded from your vehicle.

**Note:** Selectable driving modes has diagnostic checks that continuously monitor the system to ensure proper operation. Certain selectable drive modes will not be available based on gear shifter position (for example, Snow/Wet is not available while in sport (S) position). If a selected mode is unavailable due to a system fault or change in gear shifter position, the selected mode will default to Normal.

**Note:** Collision warning with brake support is automatically disabled when Track mode is selected.

#### Selectable Steering

**Note:** The steering setting defaults to Normal if the battery is disconnected or removed.

## **Driving Aids**

To change the steering feel, toggle the switch on the instrument panel. The first press illuminates the selected mode, subsequent presses will change the selected mode.

### Modes:

- Normal Default factory setting.
- Sport Slightly higher effort required for steering with more road force felt through the steering wheel.
- Comfort Slightly less effort required for steering with less road force felt through the steering wheel.

After selecting the desired setting, you may feel a soft feedback bump in the steering wheel when the changeover occurs.

**Note:** If your vehicle is equipped with the selectable drive modes feature, the steering feel will change when you select a new drive mode. You can override this automatic selection by pressing the steering button or switch.

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