### Hill descent control (HDC)

#### HDC CONTROLS



Hill Descent Control (HDC) is designed to restrict vehicle speed to a set limit when traveling downhill.

### AWARNING

# Do not attempt a steep descent if HDC is inoperative or warning messages are displayed.

1. HDC on/off.

HDC can be selected at speeds below 50 mph (80 km/h), but will only operate at speeds of less than 31 mph (50 km/h). HDC can be used in Drive (**D**), Reverse (**R**) and all the Commandshift gears, see **126**, **MANUAL GEAR SELECTION**. With the gearbox engaged in **D**, the vehicle will select the most appropriate gear.

**Note:** HDC is automatically selected by some of the Terrain response special programs.



If the system's operation criteria have not been met, the HDC warning lamp will flash, to indicate that the system has been selected but is not operating. See **64**, **HILL DESCENT CONTROL (GREEN)**.

Once set, the HDC target speed will be indicated by a green marker on the speedometer.

If HDC is deselected while operating, the lamp will flash and the system will fade out, allowing the vehicle's speed to gradually increase.

If HDC is already selected and the vehicle's speed exceeds 31 mph (50 km/h), HDC is suspended. The HDC indicator will flash and a message will appear in the Message center.

If the vehicle's speed exceeds 50 mph (80 km/h), HDC will disengage and the HDC lamp will extinguish.

If the brake pedal is pressed when HDC is active, a pulsation might be felt through the brake pedal. When the brake pedal is released, HDC will resume. **Note:** HDC is automatically deselected if the ignition is switched off for more than 6 hours.

2. Increase the descent speed. Each gear has a predetermined maximum speed.

**Note:** Vehicle speed will only increase on a slope steep enough to increase momentum. Use of the + switch may; therefore, not increase vehicle speed on a gentle slope.

**3.** Decrease the descent speed. Each gear has a predetermined minimum speed.

If a fault is detected in the HDC system, HDC FAULT SYSTEM NOT AVAILABLE will appear in the Message center and HDC assistance will fade out.

If the fault is detected while the system is operating, HDC assistance will fade out. Contact a Retailer/Authorized Repairer as soon as possible.

### GRADIENT RELEASE CONTROL (GRC)

With Hill Descent Control (HDC) activated, if the vehicle is stopped on a slope using the brake pedal, GRC will become active (except in the Terrain response system's Sand program). During a hill ascent, when the brake pedal is released, GRC will automatically delay and graduate the brake release, to allow the vehicle to move smoothly away. When descending a hill, a similar brake hold and gradual release is employed to provide a smooth transition into HDC control.

GRC operates in forward and reverse gears and requires no driver intervention.

## WARNING MESSAGES

Do not attempt a steep descent if Hill Descent Control (HDC) is inoperative or if any warning messages are displayed in the Message center.

#### BRAKE TEMPERATURE

In extreme circumstances, the Hill Descent Control (HDC) system may cause brake temperatures to exceed their preset limits. If this occurs, the warning **HDC TEMPORARILY UNAVAILABLE** will be displayed in the Message center. HDC will then fade out and become temporarily inactive.

Once the brakes have reached an acceptable temperature, the message will disappear (or the warning lamp will extinguish) and HDC will, if required, resume operation.