

Cruise Control

Description

The cruise control system uses mechanically and electrically operated devices to maintain vehicle speed at a setting selected by the driver.

The ECM receives command signals from the cruise control main switch and the cruise control set/resume switch. It receives information about operating conditions from the brake switch, vehicle speed sensor (VSS), the clutch switch (with manual transmission), or the A/T gear position switch (with automatic transmission). The ECM sends operational signals to the devices that regulate the throttle position. The throttle position maintains the selected vehicle speed. Essentially, the ECM compares the actual speed of the vehicle to the selected speed. Then, it uses the result of that comparison to open or close the throttle.

The brake switch releases the system's control of the throttle at the instant the driver depresses the brake pedal. The switch sends an electronic signal to the ECM when the brake pedal is depressed; the ECM responds by allowing the throttle to close. The clutch switch (manual transmission) or the A/T gear position switch (automatic transmission) sends a disengage signal to the ECM that also allows the throttle to close.

Operation:

The cruise control system will set and automatically maintain any speed above 25 mph (45 km/h). To set, make sure that the main switch is in the "ON" position. After reaching the desired speed, press the set switch. The ECM will receive a set signal and, in turn, will actuate the throttle valve control motor. When the set switch is depressed and the cruise control system is on, the "cruise control" ON indicator in the gauge assembly will light up. You can cancel the cruise control system by pushing the main switch to "OFF". This erases the set speed from memory. If the system is disengaged temporarily by the brake switch, clutch switch, or A/T gear position switch and vehicle speed is still above 25 mph, press the resume switch. With the resume switch depressed and the set memory retained, the vehicle automatically returns to the previous set speed.

For gradual acceleration without depressing the accelerator pedal, push the resume switch down and hold it there until the desired speed is reached. This will send an acceleration signal to the ECM. When the switch is released, the system will be reprogrammed for the new speed. To slow down, depress the set switch. This will send a deceleration signal to the ECM causing the car to coast until the desired speed is reached. When the desired speed is reached, release the set switch. This will reprogram the system for the new speed.