

ENGINE MANAGEMENT SYSTEM - V8

Operation - cruise control

Cruise control activation

Cruise control is a passive system. The driver must activate it. Switching on the cruise control master switch located on the instrument panel activates cruise control. An LED in the switch illuminates, indicating cruise control is available. The driver must accelerate the vehicle to the desired speed using the accelerator pedal. When the desired speed is reached, pressing the SET+ switch activates cruise control. Cruise control will only activate if the following conditions are met:

- Vehicle speed is between 28 - 125 mph (45 - 200 km/h).
- The brake pedal is not pressed.
- The clutch pedal is not pressed (manual gearbox only).
- The gearbox is not in park, reverse or neutral (automatic gearbox only).

Function

The cruise control ECU receives the set signal and determines the vehicle speed provided by the SLABS ECU. The cruise control ECU activates the vacuum pump assembly to move the pneumatic actuator and the linkage to the throttle disc to maintain set road speed. It does this by controlling the vacuum to the pneumatic actuator.

Cruise control cancellation

Cancelling cruise control enables the driver to regain control of the vehicle speed by using the accelerator pedal. Cruise control is cancelled if any of the following conditions occur:

- The brake pedal is pressed.
- The RES switch button is pressed.
- The clutch pedal is pressed (manual gearbox only).
- The cruise control master switch is turned off.
- The gearbox is placed in park, neutral, or reverse (automatic gearbox only).

Function

The cruise control ECU cancels cruise control operation by opening a vacuum control valve in the vacuum pump assembly. This releases the throttle linkage from the control of the pneumatic actuator and returns it to the control of the accelerator pedal.

The set speed will be stored in the cruise control ECU unless:

- The cruise control master switch is turned off.
- The ignition switch is turned off.

If cruise control is deactivated using either of the above methods, the set speed will be erased from the memory of the cruise control ECU.

Cruise control resume

Cruise control can be resumed at the previously set speed, provided the set speed has not been erased from the cruise control ECU memory as described above. To resume cruise control operation to the previously set speed, depress the RES switch once when the following conditions are met:

- A set speed is stored in the cruise control ECU.
- Vehicle speed is between 28 - 125 mph (45 - 200 km/h).
- The brake pedal is not pressed.
- The clutch pedal is not pressed (manual gearbox only).
- The gearbox is not in park, reverse or neutral (automatic gearbox only).

Function

The cruise control ECU activates the vacuum pump assembly to move the pneumatic actuator. This moves the throttle to the set speed by adjusting the position of the throttle disc.

**Accelerating while cruise control is active**

There are three ways of increasing vehicle speed when cruise control is active:

- Temporarily increase vehicle speed (e.g. when overtaking another vehicle).
- Increase vehicle set speed in 1 mph (1.5 km/h) increments.
- Increase vehicle set speed.

To temporarily increase vehicle speed press the accelerator pedal until the desired speed is reached. When the accelerator pedal is released, the vehicle coasts back to the set speed. When it reaches the set speed, cruise control operation continues.

To increase the vehicle set speed in 1 mph (1.5 km/h) increments, tap the SET+ switch. Each tap on the switch increases vehicle speed.

To increase the vehicle set speed, press and hold the SET+ switch until the desired set speed is reached.

The vehicle set speed will increase if the following conditions are met:

- The vehicle is under cruise control operation.
- Vehicle speed is between 28 - 125 mph (45 - 200 km/h).
- The brake pedal is not pressed.
- The clutch pedal is not pressed (manual gearbox only).
- The gearbox is not in park, reverse or neutral (automatic gearbox only).

Function

The vehicle responds as follows:

- If the driver accelerates using the accelerator pedal, vehicle speed increases overriding pneumatic actuator position. When the driver releases the accelerator pedal, the vehicle returns to the set speed.
- If the SET+ switch is tapped, the driver increases the stored speed and vehicle speed by 1 mph (1.5 km/h) per tap on the switch.
- If the driver presses and holds the SET+ switch, the vehicle speed increases until the SET+ switch is released. This becomes the new set speed for the cruise control ECU.

Switching off cruise control

Switching off cruise control allows the driver to regain control of vehicle speed. It erases the set road speed from the cruise control ECU memory.

To switch off cruise control, press the cruise control master switch to the off position.

Function

When the cruise control master switch is turned off, the cruise control ECU switches off power to the vacuum pump assembly. The vacuum dump valve opens releasing the vacuum in the pneumatic actuator, returning the throttle disc to driver control via the accelerator pedal.