Output State Control (OSC)

Description

WARNING: SAFETY MUST BE OBSERVED WHEN USING OSC. FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN PERSONAL INJURY.

The OSC aids in diagnosing output actuators associated with the powertrain control module (PCM) for the engine. This mode allows the technician to command the individual actuator state. For example: the output can be enabled or disabled, the duty cycle or the angle of the output can be increased or decreased. The OSC is used to help test the electrical, hydraulic or mechanical components of the vehicle. This function is supported by the vehicle strategy but may not be present on all vehicles or available on all scan tools.

Retrieve the continuous codes and carry out a key on, engine off (KOEO) and key on, engine running (KOER) on demand self-test before using any OSC. Any diagnostic trouble codes (DTCs) related to the transmission range (TR) sensor, output shaft sensor (OSS) or the vehicle speed sensor (VSS) must be fixed or the PCM does not allow the OSC to operate.

The OSC has two options for operation, the Bench Mode and the Drive Mode. The Bench Mode is functional only when the vehicle gear selector is in the PARK or NEUTRAL position. The Bench Mode may be used when the engine is on (running) or off (not running).

Each OSC function has a unique set of vehicle operating requirements that the technician is required to meet before operating the OSC. If the vehicle requirements are not met while commanding the OSC value, an error message appears. When the error message is received, OSC is canceled.

To confirm the scan tool sent the OSC value and the PCM has accepted the OSC substitution, a corresponding parameter identification (PID) for each OSC parameter must be monitored.

One Touch Integrated Start System

Some vehicles are equipped with one touch integrated start system. It may be necessary to disable the one touch integrated start system to carry out diagnostic procedures that require extended cranking. Connect the scan tool, access the PCM and select the one touch integrated start system control PID to disable the system.