

DIAGNOSIS AND TESTING (Continued)

2. Output cycling test mode:

- After all KOEO DTC's have been received, the output test mode is entered. Actuator outputs will turn ON and OFF each time the throttle is depressed to WOT and then returned to closed position.

Quick Test 5.0 Key On Engine Running (KOER)

The Engine Running Self-Test provides "hard" DTC's only.

Some special considerations for Engine Running On-Board Diagnostic include the following:

- After the engine ID code (STO LO flashes), push and release the brake pedal, turn steering wheel one-half turn and release.
NOTE: For SHO applications, you must also press and release the transmission control switch (TCS).
- If a DTC appears after the KOER test, a malfunction is present. Refer to and look up the DTC on the PCM On-Board Diagnostic Diagnostic Trouble Code Description Chart in this Section for service information.

KOER On-Board Diagnostic:

NOTE: Engine must be warm or DTC 116—ECT out of range will occur.

1. Connect SUPER STAR II Tester (if not already connected) with mode switch set to FAST mode.
2. Start and run engine until engine reaches operating temperature.
3. Turn OFF engine and wait 10 seconds.
4. Activate Self-Test (press center button on SUPER STAR II Tester).
5. Start engine.
 - On-Board Diagnostic begins when the engine ID code is received. (This code consists of the number of cylinders divided by 2 plus an added zero.)

Numbers of Cylinders	Engine ID Code
4	20
6	30
8	40

- After the ID code is entered, the technician must cycle the TCS. Then press and release the service brake pedal to check BOO switch, turn steering wheel one-half turn and release to check PSP switch.
 - A single output pulse (10) is sent to signal the technician to quickly press the throttle to wide open and immediately release. SUPER STAR II Tester will display the word DYNAMIC.
 - Diagnostic Trouble Codes (DTC's) are then sent.
6. The Engine Running wiggle test is entered automatically upon completion of the KOER Self-Test.

Special Test Mode:

NOTE: The wiggle test may also be entered by "latching" STI; ON, OFF, ON.

1. Wiggle test mode:

- After all KOER DTC's have been received the wiggle test mode is entered by pressing center button of Star Tester twice. This will unlatch and latch STI.

The wiggle test allows the technician to attempt to re-create an intermittent malfunction. Tap, move and wiggle the suspected sensor and/or wire harness. When a malfunction is detected the STO will be turned on as long as the concern is present. STO ON will cause the STAR Tester to sound a continuous tone. The malfunction indicator lamp (MIL) will also illuminate.

Quick Test 6.0 (Computed Timing Check)

This Quick Test is used to diagnose engine idle concerns only. Any engine concerns or DTC's should be serviced **BEFORE** the transaxle concerns are serviced.

Drive Cycle Test

After performing the Quick Test, use the following Drive Cycle Test for checking AXODE (AX4S) continuous codes:

NOTE: The Drive Cycle Test must be followed exactly.

All Except SHO

1. Record and then erase Quick Test codes.
2. Warm engine to normal operating temperature.
3. Make sure transmission fluid level is correct.
4. With transaxle In OVERDRIVE, moderately accelerate from stop to 80 Km/h (50 mph). This allows the transaxle to shift into fourth gear. Hold speed and throttle opening steady for a minimum of 15 seconds.
5. With transaxle in fourth gear and maintaining steady speed and throttle opening, lightly apply and release brake (to operate stoplamps). Then hold speed and throttle steady for an additional five seconds minimum.
6. Brake to a stop and remain stopped for a minimum of 20 seconds.
7. Repeat Steps 4 through 6 at least five times.
8. Perform Quick Test and record continuous codes.

SHO Only

1. Record and then erase Quick Test codes.
2. Warm engine to normal operating temperature.
3. Make sure transmission fluid level is correct.