62TE

Pre-Diagnostic Troubleshooting Procedure

Have access to a complete wiring diagram

Perform the following steps prior to any diagnostic procedure(s).

1. Many transmission symptoms can be caused by a low fluid level. If the fluid level is low, locate and repair any leaks and fill the transmission to the proper fluid level. Refer to the Service Information for the proper repair and fluid fill procedures.

2. Testing should only be performed with the battery fully charged to avoid false diagnosis.

3. With the scan tool, read Engine (PCM) DTCs. If Engine DTCs are present, refer to the Driveability Category and perform to the appropriate diagnostic procedure(s) before proceeding.

4. With the scan tool, read Transmission (TCM) DTCs. Record all Stored, Active, and Pending DTC information. Diagnose any Pending DTC as a matured DTC.

5. With the scan tool, read DTC EVENT DATA. Use this data to identify the conditions in which the DTC was set.

NOTE: DTC Event Data may exist even if no DTCs are stored. DTC Event Data is only erased by a Battery Disconnect, reflash, or QuickLearn procedure. Clearing DTCs does NOT erase the DTC Event Data. Some DTCs require two “bad trips” before they are stored (and the MIL illuminates). The transmission may enter “limp-in” mode during the first “bad trip,” but if the fault condition is not present after the vehicle is restarted, the pending DTC may be cleared without lighting the MIL. Nevertheless, the DTC Event Data for the pending DTC will remain stored and can still be retrieved with the scan tool. If the customer reports a “limp-in” event but no DTCs are present, check the DTC Event Data.
NOTE: Performing a Battery Disconnect will clear all DTC EVENT DATA and reset all learned Transmission values to the controllers default values which may temporarily result in erratic shift schedules.

6. With the scan tool, perform the Shift Lever Position Test. If the test does not pass, refer to the diagnostic procedure for P0706-TRANSMISSION RANGE SENSOR RATIONALITY.

7. For Gear Ratio Error DTCs, use the scan tool to read and record the Clutch Volume Index (CVI) information.

8. Use the wiring diagram as a guide, inspect the wiring and connectors related to this circuit and repair as necessary.

9. Refer to the When Monitored and Set Conditions for this DTC. DTCs can set at ignition on, at start up, driving under specific conditions, and after controller diagnostic monitors have run.

10. Refer to applicable Technical Service Bulletins (TSBs) for controller software update information. Some conditions can be corrected by upgrading the Engine (PCM) or Transmission (TCM) controller software.

11. Check for any Service Information Tune-ups or Service Bulletins for any possible causes that may apply.

Did any of the above procedures repair the vehicle?

Yes
- Testing is complete.
- Perform 62TE VERIFICATION TEST.

No
- Refer to the transmission category and perform the appropriate diagnostic procedure
NOTE: After completion of the Transmission Verification Test, the Powertrain Verification Test must be performed. Refer to the Engine Category.

Connect the scan tool to the Data Link Connector (DLC).
Reconnect any disconnected components.
With the scan tool, erase all Transmission and Engine DTCs.

NOTE: Erase DTC P0700 under engine to turn off the MIL light off after completion of transmission repairs.

Perform *PRNDL FAULT CLEARING PROCEDURE after completion of repairs for P0706 CHECK SHIFTER SIGNAL.

If the Powertrain Control Module or the Transmission has been repaired or replaced, it is necessary to perform the scan tool Quick Learn Procedure.
If the Torque converter has been replaced, with the scan tool perform TCC BREAK-IN.
If the Powertrain Control Module or Front Control Module has been replaced you must reset the Pinion Factor in the Front Control Module.
With the scan tool, display Transmission Temperature. Start and run the engine until the Transmission Temperature is HOT, above 43° C or 110° F.
Check the transmission fluid and adjust if necessary. Refer to the Service Information for the Fluid Fill procedure.
Road test the vehicle. With the scan tool, monitor the engine RPM. Make 15 to 20 1-2, 2-3, 3-4 upshifts. Perform these shifts from a standing start to 45 mph with a constant throttle opening of 20 to 25 degrees.
With speeds below 25 MPH, make 5 to 8 wide open throttle kickdowns to 1st gear. Allow at least 5 seconds each in 2nd and 3rd gear between each kickdown.
For a specific DTC, drive the vehicle to the Symptom’s When Monitored/When Set conditions to verify the DTC is repaired.
If equipped with AutoStick®, upshift and downshift several times using the AutoStick® feature during the road test.

NOTE: Use the OBDII task manager to run a Good Trip in each gear, this will confirm the repair and to ensure that the DTC has not re-matured.

Check for any Diagnostic Trouble Codes (DTCs) during and after the road test.
Did any Diagnostic Trouble Codes set during the road test?

Yes
· Refer to the Transmission category and perform the appropriate diagnostic procedure(s).

No
· Repair is complete.