

DIAGNOSIS AND TESTING (Continued)

(Continued)

PINPOINT TEST A: DIAGNOSTIC TROUBLE CODES: 621, 622 AND 641 SOLENOID CIRCUIT FAILURES; 645, 646, 647 and 648 INCORRECT GEAR RATIO OBTAINED

TEST STEP	RESULT	ACTION TO TAKE
A1 AXODE (AX4S) ELECTRONIC DIAGNOSTICS <ul style="list-style-type: none"> The following items must be checked before proceeding: <ul style="list-style-type: none"> Check the PCM assembly for proper function. (On-Board Diagnostics) Check vehicle wiring harness for continuity and shorts to ground. Make sure all connectors are engaged properly. Make sure all terminals in connectors are properly seated. Check all connectors for damage, corrosion, water, bent pins and missing or damaged seals. Have items been checked? 	Yes No	GO to A2. PERFORM checks.
A2 CHECK HARNESS CONNECTIONS <ul style="list-style-type: none"> Check that vehicle harness connector is fully engaged on transaxle connector. Check that transaxle harness connector terminals are fully engaged in connector. Are harness/terminals fully engaged? 	Yes No	GO to A3. SERVICE as required.
A3 TRANSAXLE FUNCTIONAL TEST <p>CAUTION: Do not pry connector. Pull vehicle harness connector.</p> <ul style="list-style-type: none"> Disconnect vehicle harness at transaxle. Install Rotunda Transmission Tester (007-00085) or equivalent to transaxle connector. Using tests outlined under Transmission Tester Instructions: <ul style="list-style-type: none"> Perform Solenoid Function Tests outlined under Tester Instructions. <p>NOTE: LED will turn GREEN when solenoid activates and turn OFF when deactivated. LED will turn RED if an activated solenoid/harness is shorted to B+. LED will remain OFF if an activated solenoid/harness is shorted to ground or no continuity (open circuit).</p> <ul style="list-style-type: none"> Do the solenoids (LED) activate (LED GREEN)? 	Yes No	GO to A4. GO to A5.
A4 TRANSAXLE DRIVE TEST <ul style="list-style-type: none"> Perform Drive Test as outlined under Transmission Tester Instructions. Does the vehicle upshift when commanded by the tester? 	Yes No	REFER to the Powertrain Control/Emissions Diagnosis Manual ²⁶ to DIAGNOSE PCM or vehicle harness concerns. ERASE all codes and perform Drive Cycle Test as outlined in this Section. RERUN On-Board Diagnostics. If DTC's are still present, REFER to Hydraulic/Mechanical Diagnosis charts under Diagnosis By Symptom. GO to A5.

²⁶ Can be purchased as a separate item.