

DIAGNOSTIC TESTS

When trouble shooting transaxle, first check for stored trouble codes and repair as necessary. If no trouble codes exist, perform manual shift test to determine if problem area is in electrical circuits or a mechanical transaxle problem. See **MANUAL SHIFT TEST** under PERFORMANCE TESTS.

NOTE: For DTC P0750, P0755 and P0770 diagnosis, see **SOLENOIDS** under COMPONENT TESTS.

DTC P0500: VEHICLE SPEED SENSOR (VSS)

1. Access ECT ECU. See **Fig. 1** and **Fig. 2** . Raise one front wheel. Shift vehicle into Neutral. Turn ignition on. Using DVOM, backprobe between terminal SPD of ECT ECU harness connector and ground. For Celica, see **Fig. 7** . For Camry and Camry Solara, see **WIRING DIAGRAMS** . On all models, rotate front wheel.
2. If voltage pulses between 4.5-5.5 volts, check continuity between ECT ECU harness connector terminal E1 and ground. If continuity does not exist, check and repair circuit as needed. If continuity does exist, replace ECT ECU and retest. If voltage is not as specified, check and repair wiring harness or connector between combination meter and ECT ECU. For VSS testing, see **VEHICLE SPEED SENSOR (VSS)** under COMPONENT TESTS.

DTC P0753: NO. 1 SOLENOID

1. Access ECT ECU. See **Fig. 1** and **Fig. 2** . Using ohmmeter, check resistance between terminal S1 and body ground with connector removed from ECT ECU. See **Fig. 5 -Fig. 7** .
2. Resistance should be 11-15 ohms. If resistance is as specified, replace ECT ECU. If resistance is not as specified, remove transaxle oil pan. Disconnect electrical connector (Violet wire) at No. 1 solenoid.
3. Check resistance between electrical terminal on No. 1 solenoid and body ground. Replace No. 1 solenoid if resistance is not 11-15 ohms. If resistance is 11-15 ohms, check and repair wiring between No. 1 solenoid and ECT ECU.

DTC P0758: NO. 2 SOLENOID

1. Access ECT ECU. See **Fig. 1** and **Fig. 2** . Using ohmmeter, check resistance between terminal S2 and body ground with connector removed from ECT ECU. See **Fig. 5 -Fig. 7** .
2. Resistance should be 11-15 ohms. If resistance is as specified, replace ECT ECU. If resistance is not as specified, remove transaxle oil pan. Disconnect electrical connector (Blue/Black wire on Camry and Camry Solara, or Brown/Yellow wire on Celica) at No. 2 solenoid.
3. Check resistance between electrical terminal on No. 2 solenoid and body ground. Replace No. 2 solenoid if resistance is not 11-15 ohms. If resistance is 11-15 ohms, check and repair wiring between No. 2 solenoid and ECT ECU.

DTC P0773: LOCK-UP SOLENOID

1. Access ECT ECU. See **Fig. 1** and **Fig. 2** . Using ohmmeter, check resistance between terminal SL and

body ground with connector removed from ECT ECU. See **Fig. 5 -Fig. 7** .

2. Resistance should be 11-15 ohms. If resistance is as specified, replace ECT ECU. If resistance is not as specified, remove transaxle oil pan. Disconnect electrical connector (Pink wire on Camry and Camry Solara or Yellow/Black wire on Celica) at lock-up solenoid.
3. Check resistance between electrical terminal on lock-up solenoid and body ground. Replace lock-up solenoid if resistance is not 11-15 ohms. If resistance is 11-15 ohms, check and repair wiring between lock-up solenoid and ECT ECU.

DTC P1520: BRAKELIGHT SWITCH

1. Access ECT ECU. See **Fig. 1** and **Fig. 2** . Turn ignition switch to ON position. Using DVOM, measure voltage at terminal STP of ECT ECU harness connector between terminal and body ground. See **WIRING DIAGRAMS** .
2. With brake pedal depressed, voltage should be 7.5-14 volts. With brake pedal released, voltage should be less than 1.5 volts. If voltage is not as specified, go to next step. If voltage is as specified, problem is intermittent. Check wiring harness and connector.
3. If voltage is not as specified, check brakelight switch. See **BRAKELIGHT SWITCH** under COMPONENT TESTS. If brakelight switch is okay, check circuit between brakelight switch and ECT ECU.

DTC P1780: PARK/NEUTRAL POSITION SWITCH

1. Access ECT ECU. See **Fig. 1** and **Fig. 2** . Turn ignition switch to ON position. Using DVOM, measure voltage at terminals NSW, "2", "L" and "R" of ECT ECU harness connector between terminal and body ground with gear selector in each shift position. See **Fig. 5 -Fig. 7** .

NOTE: **Voltage in "R" position will decrease slightly due to back-up light operation.**

2. Ensure 9-14 volts is present at NSW terminal at ECT ECU harness connector in all shift positions. Ensure 9-14 volts is present at "2", "L" and "R" terminals at ECT ECU harness connector with gear selector in "2", "L" and "R" position. If voltage is not as specified, check park/neutral position switch. See **PARK/NEUTRAL POSITION SWITCH** under COMPONENT TESTS.