DIAGNOSIS AND TESTING (Continued)

PINPOINT TEST B: DIAGNOSTIC TROUBLE CODES: 636, 637 and 638 TOT HIGHER/LOWER THAN EXPECTED (Continued)

TEST STEP	RESULT	ACTION TO TAKE
B7 CHECK INTERNAL AXODE (AX4S) HARNESS (SHORTS TO GROUND) ● Check for continuity between BAT- jack (engine ground) and appropriate wire (+TOT and -TOT) with ohmmeter or other low current tester (less than 200 milliamps). ● Connection should show infinite resistance (no continuity). ● **Is there continuity?**	Yes No	REPLACE internal harness. GO to **B8**. GO to **B8**.
B8 CHECK TOT SENSOR RESISTANCE ● Check sensor resistance by connecting an ohmmeter at terminals of TOT sensor assembly. ● Record resistance. ● Resistance should be in range of temperature of vehicle. ● Resistance should be approximately in the following ranges: ● **Is resistance in range?**	Yes No	GO to **B9**. REPLACE TOT sensor.
B9 CHECK TOT SENSOR FOR SHORT TO GROUND ● Check for continuity between BAT- jack (engine ground) and appropriate terminal on TOT with ohmmeter or other low current tester (less than 200 milliamps). ● Connection should show infinite resistance (no continuity). ● **Is there continuity?**	Yes No	REPLACE TOT sensor. RERUN Self-Test. If DTC is still present, REFER to Powertrain Control/Emissions Diagnosis Manual[28] to diagnose vehicle harness or PCM concerns.

Sensor	Wire From Top Connector
TOT+	Black
TOT-	White

TRANSMISSION FLUID TEMPERATURE

°C	°F	Resistance (Ohms)
0-20	32-58	100K-37K
21-40	59-104	37K-16K
41-70	105-158	16K-5K
71-90	159-194	5K-2.7K
91-110	195-230	2.7K-1.5K
111-130	231-266	1.5K-0.8K

Sensor	Terminal
TOT	+/-

TD10346B

28 Can be purchased as a separate item.