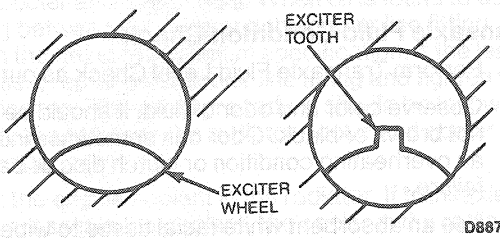
DIAGNOSIS AND TESTING (Continued)

PINPOINT TEST F: DIAGNOSTIC TROUBLE CODE: 639 INSUFFICIENT INPUT FOR TRANSMISSION SPEED SENSOR (Continued)

TEST STEP		RESULT	ACTION TO TAKE
F7	CHECK EXCITER WHEEL		
	• Remove transmission speed sensor. • With remote starter switch start and stop engine until a tooth of the exciter wheel is visible through the TSS hole. NOTE: Ensure a tooth is visible. The exciter wheel will always be visible through the TSS hole.  D8872-A • Measure the depth of the exciter wheel tooth from the outer edge of the chain cover. Distance should not exceed 20.62mm (0.81 inch). MARK tooth with a marker and REPEAT for all four teeth. • **Is depth within specifications?**	Yes ▶ No ▶	REPLACE TSS. RERUN TSS Function Test. SERVICE or REPLACE exciter wheel as required. RERUN TSS Function Test.

TD10349B

Shift Point Road Test

This test verifies that shift control valves are operating properly.

1. Bring engine and transaxle up to normal operating temperature.
2. Operate vehicle with transaxle selector in (D) range.
3. Apply minimum throttle pressure and observe upshift speeds and speed at which torque converter clutch applies.
4. Stop vehicle and move transaxle selector to D range. Repeat Step 3. Transaxle will make all upshifts except 3-4 and torque converter clutch apply should occur above 46 km/h (27 mph).
5. Depress accelerator pedal to floor, wide open throttle (WOT). Transaxle should shift from third to second, or third to first depending on vehicle speed, and torque converter clutch should release.
6. With vehicle speed above 48 km/h (30 mph), move transaxle selector from D range to 1 range (LOW) and remove foot from accelerator pedal. Transaxle should immediately downshift to second gear. When vehicle speed drops below 32 km/h (20 mph), transaxle should downshift into first gear.
7. If transaxle fails to upshift and/or downshift as outlined, refer to Quick Test.

Transaxle Fluid Level Check

CAUTION: Vehicles should not be driven if fluid level is below DO NOT DRIVE hole.

Transaxle—Operating Temperature

The automatic transaxle fluid level can only be established at an operating temperature of 66°C-77°C (150°F-170°F) (dipstick is hot to the touch). The operating temperature may be obtained by driving 24-32km (15-20 miles) of city-type driving with the outside temperature above 10°C (50°F).

Transaxle—Room Temperature

NOTE: The AXODE (AX4S) transaxle cannot have fluid level established at room temperature.

Fluid level can only be checked at room temperature 21°C-35°C (70°F-95°F) (dipstick cool to the touch) to verify that the level is above the DO NOT DRIVE mark. If fluid level is below, then add only enough Synthetic MERCON® Multi-Purpose Automatic Transmission Fluid E6AZ-19582-B (ESR-M2C163-A2) or equivalent to bring the level above the DO NOT DRIVE mark. Operating temperature must be obtained as outlined to establish correct fluid level if any fluid is added during room temperature check.

Dipstick Reading

The fluid level on the dipstick should be within the cross-hatched area at operating temperature. The fluid level on the dipstick should read above the DO NOT DRIVE mark (bottom hole on dipstick) at room temperature.

Check the fluid as follows: