DESCRIPTION AND OPERATION (Continued)

	Part	
ltem	Number	Description
267	N806944-S1036	Stud-M10 X 1.5 X 60.5 Pilot

TD10661A

DIAGNOSIS AND TESTING

The following diagnosis sequence is a proven method for troubleshooting the AXODE (AX4S) transaxle. DO NOT attempt short cuts or assume the critical checks and adjustments have already been performed.

This diagnosis covers electronic and hydraulic/mechanical concerns from the transaxle connector to internal transaxle components. Refer to the Powertrain Control/Emissions Diagnosis Manual for electronic concerns from the transaxle connector through the vehicle electronic system.

Required Equipment:

- Powertrain Control/Emissions Diagnosis Manual¹
- Rotunda SUPER STAR II Tester 007-0041A or equivalent
- Rotunda Transmission Tester 007-00085 or equivalent
- Rotunda Digital Volt-Ohmmeter 014-00407 or equivalent
- MLP Tester D89T-70010-A or equivalent
- Gear Position Sensor Adjuster T91P-70010-A or equivalent

AXODE (AX4S) Diagnostic Sequence

- Determine customer concern relative to vehicle usage.
 - Hot or cold vehicle operating temperature
 - Hot or cold ambient temperatures
 - Type of terrain
 - Vehicle loaded/unloaded
 - City or highway driving
- 2. Fluid level and condition check. Check for contamination or burnt smell. Check for leaks.
- 3. Road test vehicle to confirm customer concern.
- 4. Inspect vehicle for non-Ford approved add-on devices such as: cellular phones, speed controls, CB radio, linear boosters, back up alarm signals, computers etc., that if not installed properly will affect EEC-IV system or transaxle function. Pay particular attention to add-on wiring splices.
- 5. Check shift linkage for proper adjustment.
- 6. After road test with vehicle at normal operating temperature perform a EEC-IV On-Board Diagnostics Quick Test using SUPER STAR II Tester 007-0041A or equivalent as outlined in Section 5A of the Powertrain Control/Emissions Diagnosis Manual 1.

- 7. Service all diagnostic trouble codes (DTC's) as outlined in the Powertrain Control / Emissions Diagnosis Manual¹. Service all non-transaxle codes first before servicing any transaxle codes. If any transaxle diagnostic trouble codes are still present or if referred to this Section after performing the pinpoint tests outlined in the Powertrain Control / Emissions Diagnosis Manual, ¹ refer to the Pinpoint Test Index in this Section to determine the appropriate pinpoint test required to diagnose the diagnostic trouble code.
- If transaxle continuous codes are set during Quick Test, perform the Drive Cycle Test as outlined in this Section.
- If no transaxle codes are set during Quick Test, use Rotunda Transmission Tester 007-00085 or equivalent as outlined under Transmission Tester Instructions to isolate the condition to the transaxle or to the vehicle harness and powertrain control module (PCM).

Diagnostic Hydraulic/Mechanical Chart Instructions

The AXODE (AX4S) Hydraulic / Mechanical charts are used to separate electrical from mechanical causes or concerns.

Refer to the following guidelines:

- 1. Define major concern.
- 2. Eliminate possible causes in the electrical cause / concern column 200 numbers.
- Eliminate possible causes in the hydraulic / mechanical cause / concern column 300 numbers.

NOTE: The items listed under the main headings are arranged in order of disassembly.

Preliminary Diagnostics

- Check Fluid Level / Condition
- Vehicle at Normal Operating Temperature
- Visual Inspection of Harness Connections / Wiring
- Was On-Board Diagnostic Run?
- Check for Leaks
- Check for Electronic Add-On Items
- Check for Vehicle Modifications
- Check Shift Linkage for Proper Adjustment

¹ Can be purchased as a separate item.