

pressure low, EPC pressure low	high/low, check the following possible component: main control.
Filter and Seal Assembly	
<ul style="list-style-type: none"> Filter damaged, plugged; seal damaged, cut or missing 	<ul style="list-style-type: none"> Inspect for damage and install new parts.
Main Control Assembly	
<ul style="list-style-type: none"> Screw out of torque specification 	<ul style="list-style-type: none"> Tighten to specification.
<ul style="list-style-type: none"> Gasket damaged, off location 	<ul style="list-style-type: none"> Inspect and install a new gasket.
<ul style="list-style-type: none"> Separator plate damaged 	<ul style="list-style-type: none"> Inspect for damage. Repair as required.
<ul style="list-style-type: none"> EPC, solenoid stuck, damaged, O-ring damaged or out of bore 	<ul style="list-style-type: none"> Inspect for damage. Carry out solenoid function test as listed in electrical routine. Repair as required.
<ul style="list-style-type: none"> EPC blow-off valve, spring, damaged, missing, misassembled, stuck, bore damaged 	<ul style="list-style-type: none"> Inspect for damage. If damaged, install a new main control. If parts are missing, install new parts or main control. If misassembled, reassemble correctly. Do not stone, file or sand valves. This will remove the anodized finish and may result in further main control or transmission damage.
<ul style="list-style-type: none"> Wrong component used in rebuild 	<ul style="list-style-type: none"> Verify that correct components were used.
Pump Assembly	
<ul style="list-style-type: none"> Screws out of torque specification 	<ul style="list-style-type: none"> Tighten screws to specification.
<ul style="list-style-type: none"> Cross leaks 	<ul style="list-style-type: none"> Inspect for damage. Repair as required.
<ul style="list-style-type: none"> Front Pump seal worn or damaged 	<ul style="list-style-type: none"> Inspect for damage. Repair as required.
<ul style="list-style-type: none"> Seal on inner pump gear damaged 	<ul style="list-style-type: none"> Inspect for damage. Repair as required.
Front One-Way Clutch Assembly	
<ul style="list-style-type: none"> Overdrive one-way clutch damaged 	<ul style="list-style-type: none"> Inspect for damage. Repair as required.

Engagement Concerns: No Forward in (D) Position and No Reverse

Possible Component	Reference/Action
207B — ELECTRICAL ROUTINE	
Powertrain Control System	• Run Self-Test; refer to the Powertrain Control/Emissions Diagnosis (PC/ED) manual. Carry out pinpoint tests using the diagnostic tool. Repair as required. Clear DTCs, road test and rerun Self-Test.
• Electrical inputs/outputs, vehicle wiring harnesses, internal transmission wiring harness, PCM, TP, RPM, VSS, EPC	
307B — HYDRAULIC/MECHANICAL ROUTINE	
Fluid	

• Incorrect level	• Adjust to correct level.
Incorrect Pressures	
• Incorrect band/clutch application pressures, line pressure low, EPC pressure low	• Check line pressure at tap. Carry out line pressure and stall speed tests. See the line pressure chart for specifications. If pressure is high/low, check the following possible components: main control, pump assembly.
Filter and Seal Assembly	
• Filter damaged, plugged; seal damaged, cut or missing	• Inspect for damage and install new parts.
Main Control Assembly	
• Screw out of torque specification	• Tighten to specification.
• Gasket damaged, off location	• Inspect and install a new gasket.
• Separator plate damaged	• Inspect for damage. Repair as required.
• EPC, solenoid stuck, damaged, O-ring damaged or out of bore	• Inspect for damage. Carry out solenoid function test as listed in electrical routine. Repair as required.
• Forward modulator valve/EPC boost valve (207), pressure boost valve (208), EPC blow off valve, spring, damaged, missing, misassembled, stuck, bore damaged	• Inspect for damage. If damaged, install a new main control. If parts are missing, install new parts or main control. If misassembled, reassemble correctly. Do not stone, file or sand valves. This will remove the anodized finish and may result in further main control or transmission damage.
• Wrong component used in rebuild	• Verify that correct components were used.
Pump Assembly	
• Screws out of torque specification	• Tighten screws to specification.
• Cross leaks	• Inspect for damage. Repair as required.
• Front pump seal worn or damaged	• Inspect for damage. Repair as required.
• Seal on inner pump gear damaged	• Inspect for damage. Repair as required.
Front One-Way Clutch Assembly	
• Front one-way clutch damaged	• Determine cause of condition. Repair as required.
Mechanical	
• Mechanical damage	• Check splines on turbine input shaft and overdrive carrier, overdrive one-way clutch, center shaft, forward clutch, forward carrier and output shaft.

Engagement Concerns: Harsh Forward and Reverse

Possible Component	Reference/Action
208 — ELECTRICAL ROUTINE	
Powertrain Control System	
• Electrical inputs/outputs, vehicle wiring harness, internal transmission wiring harness, PCM, EPC, TSS, TFT, VSS, Digital TR, TCC, TP and MAF*	• Run Self-Test; refer to the Powertrain Control/Emissions Diagnosis (PC/ED) manual. Carry out pinpoint tests using the diagnostic tool. Clear DTCs, road test and rerun Self-Test.
	• *Refer to the FMEM — Routine 265 for additional information.

308 — HYDRAULIC/MECHANICAL ROUTINE	
Engine/Driveline	
<ul style="list-style-type: none"> Looseness in the driveshaft, U-joints or engine mounts 	<ul style="list-style-type: none"> Repair as required.
<ul style="list-style-type: none"> Engine idle speed too high 	<ul style="list-style-type: none"> Check engine idle speed. Refer to the Powertrain Control/Emissions Diagnosis (PC/ED) manual.
Fluid	
<ul style="list-style-type: none"> Incorrect level 	<ul style="list-style-type: none"> Adjust to correct level.
Incorrect Pressures	
<ul style="list-style-type: none"> Incorrect band/clutch application pressures, line pressure high 	<ul style="list-style-type: none"> Check line pressure at tap. Carry out line pressure and stall speed tests. Refer to the line pressure chart for specifications. If pressure is high, check the following possible component: main control.
Main Control Assembly	
<ul style="list-style-type: none"> Screw out of torque specification 	<ul style="list-style-type: none"> Tighten to specification.
<ul style="list-style-type: none"> Gasket damaged, off location 	<ul style="list-style-type: none"> Inspect and install a new gasket.
<ul style="list-style-type: none"> Separator plate damaged 	<ul style="list-style-type: none"> Inspect for damage. Repair as required.
<ul style="list-style-type: none"> TCC, EPC, solenoid stuck, damaged, O-ring damaged or out of bore 	<ul style="list-style-type: none"> Inspect for damage. Carry out solenoid function test as listed in electrical routine. Repair as required.
<ul style="list-style-type: none"> Forward modulator valve/EPC boost valve (207), pressure boost valve/main regulator or valve (208), spring, damaged, missing, misassembled, stuck, bore damaged 	<ul style="list-style-type: none"> Inspect for damage. If damaged, install a new main control. If parts are missing, install new parts or main control. If misassembled, reassemble correctly. Do not stone, file or sand valves. This will remove the anodized finish and may result in further main control or transmission damage.
<ul style="list-style-type: none"> Wrong component used in rebuild 	<ul style="list-style-type: none"> Verify that correct components were used.

Engagement Concerns: Delayed/Soft Forward and Reverse

Possible Component	Reference/Action
209 — ELECTRICAL ROUTINE	
No Electrical Concerns	
309 — HYDRAULIC/MECHANICAL ROUTINE	
Fluid	
<ul style="list-style-type: none"> Incorrect level 	<ul style="list-style-type: none"> Adjust to correct level.
<ul style="list-style-type: none"> Fluid contaminated 	<ul style="list-style-type: none"> Inspect fluid for contamination. If contaminated, locate source of contamination. If burnt, inspect mechanical band, clutches. Repair as required.
Incorrect Pressures	
<ul style="list-style-type: none"> Incorrect band/clutch application pressures, line pressure low 	<ul style="list-style-type: none"> Check line pressure at tap. Carry out line pressure and stall speed tests. See the line pressure chart for specifications. If pressure is low, check the following possible components: main control, pump assembly.
Filter and Seal Assembly	
<ul style="list-style-type: none"> Filter damaged, plugged; seal damaged, cut or missing 	<ul style="list-style-type: none"> Inspect for damage and install new parts.