

F Clutch

Principles of Operation

Symptom Chart

F Clutch

For F clutch operation,
REFER to: [F Clutch](#) (307-01B Automatic Transmission - 10-Speed Automatic Transmission - 10R80,
Description and Operation).

F Clutch

Condition	Possible Sources	Action
F clutch does not apply	SSF is mechanically stuck OFF	INSTALL a new solenoid. REFER to: Shift Solenoids (SS) (307-01B Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Removal and Installation).

F Clutch regulator valve stuck OFF	DISASSEMBLE, CLEAN and INSPECT the regulator valve. If bore or valve is damaged, INSTALL a new main control valve body. REFER to: Main Control Valve Body (307-01) . REFER to: Main Control Valve Body (307-01B Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Removal and Installation). PERFORM the Transmission Strategy Download, REFER to: Transmission Strategy Download (307-01B Automatic Transmission - 10-Speed Automatic Transmission - 10R80, General Procedures).
F CL CONTR, hydraulic circuit blocked/leaking	DISASSEMBLE and INSPECT the main control valve body and separator plate passages for debris/blockage. CLEAN as necessary. REFER to: Main Control Valve Body (307-01) . REFER to: Main Control Valve Body (307-01B Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Removal and Installation).
F clutch hub	INSPECT components wear and damage. CLEAN and/or INSTALL new components as necessary. REFER to: Transmission (307-01B Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Overhaul).
F clutch friction plates	INSPECT components wear and damage. CLEAN and/or INSTALL new components as necessary. REFER to: Transmission (307-01B Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Overhaul).

	F clutch piston seals	INSPECT components wear and damage. CLEAN and/or INSTALL new components as necessary. REFER to: Transmission (307-01B Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Overhaul).
F clutch always applied	SSF mechanically stuck	INSTALL a new solenoid. REFER to: Shift Solenoids (SS) (307-01B Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Removal and Installation).
	F Clutch regulator valve or CL F latch valve stuck ON	DISASSEMBLE, CLEAN and INSPECT the regulator valve. If bore or valve is damaged, INSTALL a new main control valve body. REFER to: Main Control Valve Body (307-01) . REFER to: Main Control Valve Body (307-01B Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Removal and Installation). PERFORM the Transmission Strategy Download, REFER to: Transmission Strategy Download (307-01B Automatic Transmission - 10-Speed Automatic Transmission - 10R80, General Procedures).
	F CL CONTR, hydraulic circuit cross leaks	DISASSEMBLE and INSPECT the main control valve body and separator plate passages for debris/blockage. CLEAN as necessary. REFER to: Main Control Valve Body (307-01) . REFER to: Main Control Valve Body (307-01B Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Removal and Installation).

	F clutch hub, clutch and planetary carrier, No.4 ring gear	INSPECT components wear and damage. CLEAN and/or INSTALL new components necessary. REFER to: Transmission (307-01B Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Overhaul).
	F clutch friction plates	INSPECT components wear and damage. CLEAN and/or INSTALL new components necessary. REFER to: Transmission (307-01B Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Overhaul).
	F clutch piston seals	INSPECT components wear and damage. CLEAN and/or INSTALL new components necessary. REFER to: Transmission (307-01B Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Overhaul).
F clutch delayed/soft/slipping apply	Incorrect transmission strategy programmed into PCM/ TCM.	PERFORM the Transmission Strategy Download, REFER to: Transmission Strategy Download (307-01B Automatic Transmission - 10-Speed Automatic Transmission - 10R80, General Procedures).
	Low line pressure	PERFORM the line pressure test. REFER to: Special Testing Procedures (307-01B Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
	SSF mechanically sticking	INSTALL a new solenoid. REFER to: Shift Solenoids (SS) (307-01B Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Removal and Installation).

F Clutch regulator valve sticking	DISASSEMBLE, CLEAN and INSPECT the valves. If bore or valve is damaged, INSTALL a new main control valve body. REFER to: Main Control Valve Body (307-01) . REFER to: Main Control Valve Body (307-01B Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Removal and Installation). PERFORM the Transmission Strategy Download, REFER to: Transmission Strategy Download (307-01B Automatic Transmission - 10-Speed Automatic Transmission - 10R80, General Procedures).
F CL CONTR, hydraulic circuits blocked/leaking	DISASSEMBLE and INSPECT the main control valve body and separator plate passages for debris/blockage. CLEAN as necessary. REFER to: Main Control Valve Body (307-01) . REFER to: Main Control Valve Body (307-01B Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Removal and Installation).
F clutch friction plates	DISASSEMBLE and INSPECT the transmission passages for debris/blockage. CLEAN as necessary. REFER to: Transmission (307-01B Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Overhaul).
F clutch piston seals	DISASSEMBLE and INSPECT the transmission passages for debris/blockage. CLEAN as necessary. REFER to: Transmission (307-01B Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Overhaul).

F clutch harsh apply	Incorrect transmission strategy programmed into PCM/ TCM.	PERFORM the Transmission Strategy Download, REFER to: Transmission (307-01B Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Overhaul).
	High line pressure	PERFORM line pressure test. REFER to: Special Testing Procedures (307-01B Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
	SSF mechanically sticking	INSTALL a new solenoid. REFER to: Shift Solenoids (SS) (307-01B Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Removal and Installation).
	F Clutch regulator valve sticking	DISASSEMBLE, CLEAN and INSPECT the valves. If bore or valve is damaged, INSTALL a new main control valve body. REFER to: Main Control Valve Body (307-01) . REFER to: Main Control Valve Body (307-01B Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Removal and Installation). PERFORM the Transmission Strategy Download, REFER to: Transmission Strategy Download (307-01B Automatic Transmission - 10-Speed Automatic Transmission - 10R80, General Procedures).

F CL CONTR hydraulic circuit blocked/leaking	DISASSEMBLE and INSPECT the main control valve body and separator plate passages for debris/blockage. CLEAN as necessary. REFER to: Main Control Valve Body (307-01) . REFER to: Main Control Valve Body (307-01B Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Removal and Installation).
F clutch friction plates	DISASSEMBLE and INSPECT the transmission passages for debris/blockage. CLEAN as necessary. REFER to: Transmission (307-01B Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Overhaul).
F clutch piston return springs	DISASSEMBLE and INSPECT the transmission passages for debris/blockage. CLEAN as necessary. REFER to: Transmission (307-01B Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Overhaul).