

F Clutch

Symptom Chart

F Clutch

For F clutch operation,
REFER to: F Clutch (307-01B Automatic Transmission, Transfer Case and Power Transfer Unit - 10-Speed Automatic Transmission â€“ 10R140, Description and Operation).

F Clutch

Condition	Possible Sources	Action
F clutch does not apply	SSF mechanically stuck OFF	INSTALL a new solenoid. REFER to: Shift Solenoids (SS) (307-01B Automatic Transmission, Transfer Case and Power Transfer Unit - 10-Speed Automatic Transmission â€“ 10R140, Removal and Installation).
	F clutch control valve stuck OFF	DISASSEMBLE, CLEAN and INSPECT the F clutch control valve. If the bore or valve is damaged, INSTALL a new main control valve body. REFER to: Main Control Valve Body (307-01B Automatic Transmission, Transfer Case and Power Transfer Unit - 10-Speed Automatic Transmission â€“ 10R140, Removal and Installation). REFER to: Main Control Valve Body (307-01B Automatic Transmission, Transfer Case and Power Transfer Unit - 10-Speed Automatic Transmission â€“ 10R140, Overhaul).
	F CL CONTR hydraulic circuit blocked/leaking	DISASSEMBLE and INSPECT the main control valve body and separator plate passages for debris, blockage and leaks. CLEAN as necessary. REFER to: Main Control Valve Body (307-01B Automatic Transmission, Transfer Case and Power Transfer Unit - 10-Speed Automatic Transmission â€“ 10R140, Removal and Installation). REFER to: Main Control Valve Body (307-01B Automatic Transmission, Transfer Case and Power Transfer Unit - 10-Speed Automatic Transmission â€“ 10R140, Overhaul).
		CARRY OUT the air pressure test on the F clutch. REFER to: Special Testing Procedures (307-01B Automatic Transmission, Transfer Case and Power Transfer Unit - 10-Speed Automatic Transmission â€“ 10R140, Diagnosis and Testing).
	Clutch and planetary container cylinder, CDF clutch cylinder, input shaft	DISASSEMBLE and INSPECT the components for wear and damage. INSPECT all seals and hydraulic passages for debris, blockage and leaks. INSTALL new components as necessary. REFER to: Transmission (307-01B Automatic Transmission, Transfer Case and Power Transfer Unit - 10-Speed Automatic Transmission â€“ 10R140, Overhaul).
	F clutch friction plates	DISASSEMBLE and INSPECT the F clutch friction and steel plates for wear and damage. INSTALL new components as necessary. REFER to: Transmission (307-01B Automatic Transmission, Transfer Case and Power Transfer Unit - 10-Speed Automatic Transmission â€“ 10R140, Overhaul).
	F clutch piston seals	DISASSEMBLE and INSPECT the F clutch piston seals for wear and damage. INSTALL new seals. REFER to: Transmission (307-01B Automatic Transmission, Transfer Case and Power Transfer Unit - 10-Speed Automatic Transmission â€“ 10R140, Overhaul).

F clutch always applied	SSF mechanically stuck ON	INSTALL a new solenoid. REFER to: Shift Solenoids (SS) (307-01B Automatic Transmission, Transfer Case and Power Transfer Unit - 10-Speed Automatic Transmission â€“ 10R140, Removal and Installation).
	F clutch control valve stuck ON	DISASSEMBLE, CLEAN and INSPECT the F clutch control valve. If the bore or valve is damaged, INSTALL a new main control valve body. REFER to: Main Control Valve Body (307-01B Automatic Transmission, Transfer Case and Power Transfer Unit - 10-Speed Automatic Transmission â€“ 10R140, Removal and Installation). REFER to: Main Control Valve Body (307-01B Automatic Transmission, Transfer Case and Power Transfer Unit - 10-Speed Automatic Transmission â€“ 10R140, Overhaul).
	F CL CONTR hydraulic circuit cross leaks	DISASSEMBLE and INSPECT the main control valve body and separator plate passages for cracks, warping, and damage. If damage is found, INSTALL a new main control valve body. REFER to: Main Control Valve Body (307-01B Automatic Transmission, Transfer Case and Power Transfer Unit - 10-Speed Automatic Transmission â€“ 10R140, Removal and Installation). REFER to: Main Control Valve Body (307-01B Automatic Transmission, Transfer Case and Power Transfer Unit - 10-Speed Automatic Transmission â€“ 10R140, Overhaul).
	Clutch and planetary container cylinder, CDF clutch cylinder, input shaft	DISASSEMBLE and INSPECT the components for wear and damage. INSPECT all seals and hydraulic passages for debris, blockage and leaks. INSTALL new components as necessary. REFER to: Transmission (307-01B Automatic Transmission, Transfer Case and Power Transfer Unit - 10-Speed Automatic Transmission â€“ 10R140, Overhaul).
	F clutch friction plates	DISASSEMBLE and INSPECT the F clutch friction and steel plates for wear and damage. INSTALL new components as necessary. REFER to: Transmission (307-01B Automatic Transmission, Transfer Case and Power Transfer Unit - 10-Speed Automatic Transmission â€“ 10R140, Overhaul).
	F clutch piston return spring	DISASSEMBLE and INSPECT the F clutch piston return spring for damage. INSTALL new components as necessary. REFER to: Transmission (307-01B Automatic Transmission, Transfer Case and Power Transfer Unit - 10-Speed Automatic Transmission â€“ 10R140, Overhaul).
F clutch delayed/soft/slipping apply	Incorrect transmission strategy programmed into PCM/ TCM.	CARRY OUT the Transmission Strategy Download and the Adaptive Learning Drive Cycle. REFER to: Transmission Strategy Download (307-01D) . REFER to: Adaptive Learning Drive Cycle (307-01B Automatic Transmission, Transfer Case and Power Transfer Unit - 10-Speed Automatic Transmission â€“ 10R140, General Procedures).
	Low line pressure	CARRY OUT the line pressure test. REFER to: Special Testing Procedures (307-01B Automatic Transmission, Transfer Case and Power Transfer Unit - 10-Speed Automatic Transmission â€“ 10R140, Diagnosis and Testing).
	SSF mechanically sticking	INSTALL a new solenoid. REFER to: Shift Solenoids (SS) (307-01B Automatic Transmission, Transfer Case and Power Transfer Unit - 10-Speed Automatic Transmission â€“ 10R140, Removal and Installation).
	F clutch control valve sticking	DISASSEMBLE, CLEAN and INSPECT the F clutch control valve. If the bore or valve is damaged, INSTALL a new main control valve body. REFER to: Main Control Valve Body (307-01B Automatic Transmission, Transfer Case and Power Transfer Unit - 10-Speed Automatic Transmission â€“ 10R140, Removal and Installation). REFER to: Main Control Valve Body (307-01B Automatic Transmission, Transfer Case and Power Transfer Unit - 10-Speed Automatic Transmission â€“ 10R140, Overhaul).
	F CL CONTR, hydraulic circuits blocked/leaking	DISASSEMBLE and INSPECT the main control valve body and separator plate passages for debris, blockage and leaks. CLEAN as necessary. REFER to: Main Control Valve Body (307-01B Automatic Transmission, Transfer Case and Power Transfer Unit - 10-Speed Automatic Transmission â€“ 10R140, Removal and Installation). REFER to: Main Control Valve Body (307-01B Automatic Transmission, Transfer Case and Power Transfer Unit - 10-Speed Automatic Transmission â€“ 10R140, Overhaul).

		CARRY OUT the air pressure test on the F clutch. REFER to: Special Testing Procedures (307-01B Automatic Transmission, Transfer Case and Power Transfer Unit - 10-Speed Automatic Transmission â€“ 10R140, Diagnosis and Testing).
	F clutch friction plates	DISASSEMBLE and INSPECT the F clutch friction and steel plates for wear and damage. INSTALL new components as necessary. REFER to: Transmission (307-01B Automatic Transmission, Transfer Case and Power Transfer Unit - 10-Speed Automatic Transmission â€“ 10R140, Overhaul).
	F clutch piston seals	DISASSEMBLE and INSPECT the F clutch piston seals for wear and damage. INSTALL new seals. REFER to: Transmission (307-01B Automatic Transmission, Transfer Case and Power Transfer Unit - 10-Speed Automatic Transmission â€“ 10R140, Overhaul).
F clutch harsh apply	Incorrect transmission strategy programmed into PCM/ TCM.	CARRY OUT the Transmission Strategy Download and the Adaptive Learning Drive Cycle. REFER to: Transmission Strategy Download (307-01D) . REFER to: Adaptive Learning Drive Cycle (307-01B Automatic Transmission, Transfer Case and Power Transfer Unit - 10-Speed Automatic Transmission â€“ 10R140, General Procedures).
	High line pressure	CARRY OUT the line pressure test. REFER to: Special Testing Procedures (307-01B Automatic Transmission, Transfer Case and Power Transfer Unit - 10-Speed Automatic Transmission â€“ 10R140, Diagnosis and Testing).
	SSF mechanically sticking	INSTALL a new solenoid. REFER to: Shift Solenoids (SS) (307-01B Automatic Transmission, Transfer Case and Power Transfer Unit - 10-Speed Automatic Transmission â€“ 10R140, Removal and Installation).
	F clutch control valve sticking	DISASSEMBLE, CLEAN and INSPECT the F clutch control valve. If the bore or valve is damaged, INSTALL a new main control valve body. REFER to: Main Control Valve Body (307-01B Automatic Transmission, Transfer Case and Power Transfer Unit - 10-Speed Automatic Transmission â€“ 10R140, Removal and Installation). REFER to: Main Control Valve Body (307-01B Automatic Transmission, Transfer Case and Power Transfer Unit - 10-Speed Automatic Transmission â€“ 10R140, Overhaul).
	F CL CONTR hydraulic circuit cross leaks	DISASSEMBLE and INSPECT the main control valve body and separator plate passages for cracks, warping, and damage. If damage is found, INSTALL a new main control valve body. REFER to: Main Control Valve Body (307-01B Automatic Transmission, Transfer Case and Power Transfer Unit - 10-Speed Automatic Transmission â€“ 10R140, Removal and Installation). REFER to: Main Control Valve Body (307-01B Automatic Transmission, Transfer Case and Power Transfer Unit - 10-Speed Automatic Transmission â€“ 10R140, Overhaul).
	F clutch friction plates	DISASSEMBLE and INSPECT the F clutch friction and steel plates for wear and damage. INSTALL new components as necessary. REFER to: Transmission (307-01B Automatic Transmission, Transfer Case and Power Transfer Unit - 10-Speed Automatic Transmission â€“ 10R140, Overhaul).
	F clutch piston return spring	DISASSEMBLE and INSPECT the F clutch piston return spring for damage. INSTALL new components as necessary. REFER to: Transmission (307-01B Automatic Transmission, Transfer Case and Power Transfer Unit - 10-Speed Automatic Transmission â€“ 10R140, Overhaul).

