

B Clutch

Symptom Chart

B Clutch

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

B Clutch

Condition	Possible Sources	Action
B clutch does not apply	SSB 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).
	B clutch control valve or latch valve stuck OFF	DISASSEMBLE, CLEAN and INSPECT the B clutch control and latch valves. 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).
	B CL CONTR hydraulic circuit blocked/leaking	REMOVE the main control valve body. INSPECT the main control manifold seal for damage and leaks. 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).
		CARRY OUT the air pressure test on the B 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).
		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, Overhaul).
	Front support	REMOVE and INSPECT the front support 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).
	B clutch friction plates	DISASSEMBLE and INSPECT the B 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).
	B clutch piston seals	DISASSEMBLE and INSPECT the B 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).

B clutch always applied	SSB 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).
	B clutch control valve or latch valve stuck ON	DISASSEMBLE, CLEAN and INSPECT the B clutch control and latch valves. 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).
	B 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).
	Front support	REMOVE and INSPECT the front support 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).
	B clutch friction plates	DISASSEMBLE and INSPECT the B 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).
	B clutch piston return spring	DISASSEMBLE and INSPECT the B 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).
B 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).
	SSB 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).
	B clutch control valve or latch valve sticking	DISASSEMBLE, CLEAN and INSPECT the B clutch control and latch valves. 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).
	B CL CONTR hydraulic circuits blocked/leaking	REMOVE the main control valve body. INSPECT the main control manifold seal for damage and leaks. 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).

		CARRY OUT the air pressure test on the B 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). 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, Overhaul).
	B clutch friction plates	DISASSEMBLE and INSPECT the B 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).
	B clutch piston seals	DISASSEMBLE and INSPECT the B 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).
B 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).
	SSB 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).
	B clutch control valve or latch valve sticking	DISASSEMBLE, CLEAN and INSPECT the B clutch control and latch valves. 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).
	B 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).
	B clutch friction plates	DISASSEMBLE and INSPECT the B 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).
	B clutch piston return spring	DISASSEMBLE and INSPECT the B 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).

