

307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80
 Diagnosis and Testing

2019 Ranger

Procedure revision date: 05/17/2018

C Clutch

Symptom Chart

C Clutch

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

C Clutch

Condition	Possible Sources	Action
C clutch does not apply	SSC is mechanically stuck OFF	INSTALL a new solenoid. REFER to: Shift Solenoids (SS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Removal and Installation).
	C 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 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Removal and Installation). REFER to: Main Control Valve Body - Vehicles With: Auto-Start-Stop (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Removal and Installation). REFER to: Main Control Valve Body - Vehicles With: Auto-Start-Stop (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Removal and Installation). PERFORM the Transmission Strategy Download, REFER to: Transmission Strategy Download (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, General Procedures).
	C 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 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Removal and Installation). REFER to: Main Control Valve Body - Vehicles With: Auto-Start-Stop (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Removal and Installation). REFER to: Main Control Valve Body - Vehicles With: Auto-Start-Stop (307-01 Automatic Transmission - 10-

		Speed Automatic Transmission - 10R80, Removal and Installation).
	C clutch hub	INSPECT components wear and damage. CLEAN and/or INSTALL new components necessary. REFER to: Transmission (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Overhaul).
	C clutch friction plates	INSPECT components wear and damage. CLEAN and/or INSTALL new components necessary. REFER to: Transmission (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Overhaul).
	C clutch piston seals	INSPECT components wear and damage. CLEAN and/or INSTALL new components necessary. REFER to: Transmission (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Overhaul).
C clutch always applied	<u>SSC</u> mechanically stuck	INSTALL a new solenoid. REFER to: Shift Solenoids (SS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Removal and Installation).
	C Clutch regulator valve or CL C 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 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Removal and Installation). REFER to: Main Control Valve Body - Vehicles With: Auto-Start-Stop (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Removal and Installation). REFER to: Main Control Valve Body - Vehicles With: Auto-Start-Stop (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Removal and Installation). REFER to: Transmission Strategy Download (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, General Procedures).
	C 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 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Removal and Installation). REFER to: Main Control Valve Body - Vehicles With: Auto-Start-Stop (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Removal and Installation). REFER to: Main Control Valve Body - Vehicles With: Auto-Start-Stop (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Removal and Installation).
	C clutch hub, clutch and planetary carrier, No.4	INSPECT components wear and damage. CLEAN and/or INSTALL new components necessary.

	ring gear	REFER to: Transmission (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Overhaul).
	C clutch friction plates	INSPECT components wear and damage. CLEAN and/or INSTALL new components necessary. REFER to: Transmission (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Overhaul).
	C clutch piston seals	INSPECT components wear and damage. CLEAN and/or INSTALL new components necessary. REFER to: Transmission (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Overhaul).
C clutch delayed/soft/slipping apply	Incorrect transmission strategy programmed into <u>PCM/ TCM</u> .	PERFORM the Transmission Strategy Download, REFER to: Transmission Strategy Download (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, General Procedures).
	Low line pressure	PERFORM line pressure test. REFER to: Special Testing Procedures (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
	<u>SSC</u> mechanically sticking	INSTALL a new solenoid. REFER to: Shift Solenoids (SS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Removal and Installation).
	C 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 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Removal and Installation). REFER to: Main Control Valve Body - Vehicles With: Auto-Start-Stop (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Removal and Installation). REFER to: Main Control Valve Body - Vehicles With: Auto-Start-Stop (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Removal and Installation). PERFORM the transmission strategy download. REFER to: Transmission Strategy Download (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, General Procedures).
	C 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 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Removal and Installation). REFER to: Main Control Valve Body - Vehicles With: Auto-Start-Stop (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Removal and Installation). REFER to: Main Control Valve Body - Vehicles With:

		Auto-Start-Stop (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Removal and Installation).
	C clutch friction plates	DISASSEMBLE and INSPECT the transmission passages for debris/blockage. CLEAN as necessary. REFER to: Transmission (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Overhaul).
	C clutch piston seals	DISASSEMBLE and INSPECT the transmission passages for debris/blockage. CLEAN as necessary. REFER to: Transmission (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Overhaul).
C clutch harsh apply	Incorrect transmission strategy programmed into <u>PCM/ TCM</u> .	PERFORM the Transmission Strategy Download, REFER to: Transmission (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Overhaul).
	High line pressure	PERFORM line pressure test. REFER to: Special Testing Procedures (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
	<u>SSC</u> mechanically sticking	INSTALL a new solenoid. REFER to: Shift Solenoids (SS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Removal and Installation).
	C 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 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Removal and Installation). REFER to: Main Control Valve Body - Vehicles With: Auto-Start-Stop (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Removal and Installation). REFER to: Main Control Valve Body - Vehicles With: Auto-Start-Stop (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Removal and Installation). PERFORM the Transmission Strategy Download, REFER to: Transmission Strategy Download (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, General Procedures).
	C 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 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Removal and Installation). REFER to: Main Control Valve Body - Vehicles With: Auto-Start-Stop (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Removal and Installation). REFER to: Main Control Valve Body - Vehicles With:

		Auto-Start-Stop (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Removal and Installation).
	C clutch friction plates	DISASSEMBLE and INSPECT the transmission passages for debris/blockage. CLEAN as necessary. REFER to: Transmission (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Overhaul).
	C clutch piston return springs	DISASSEMBLE and INSPECT the transmission passages for debris/blockage. CLEAN as necessary. REFER to: Transmission (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Overhaul).

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