

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

2019 Ranger

Procedure revision date: 05/17/2018

## A Clutch

### Symptom Chart

#### A Clutch Assembly

#### A Clutch

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

#### A Clutch

Condition	Possible Sources	Action
A clutch does not apply	<a href="#">SSA</a> is mechanically stuck OFF	INSTALL a new solenoid. REFER to: <a href="#">Shift Solenoids (SS)</a> (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Removal and Installation).
	A 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: <a href="#">Main Control Valve Body</a> (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Removal and Installation). REFER to: <a href="#">Main Control Valve Body - Vehicles With: Auto-Start-Stop</a> (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Removal and Installation). REFER to: <a href="#">Main Control Valve Body - Vehicles With: Auto-Start-Stop</a> (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Removal and Installation).
	A 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: <a href="#">Main Control Valve Body</a> (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Removal and Installation). REFER to: <a href="#">Main Control Valve Body - Vehicles With: Auto-Start-Stop</a> (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Removal and Installation). REFER to: <a href="#">Main Control Valve Body - Vehicles With: Auto-Start-Stop</a> (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Removal and Installation).

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

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

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

