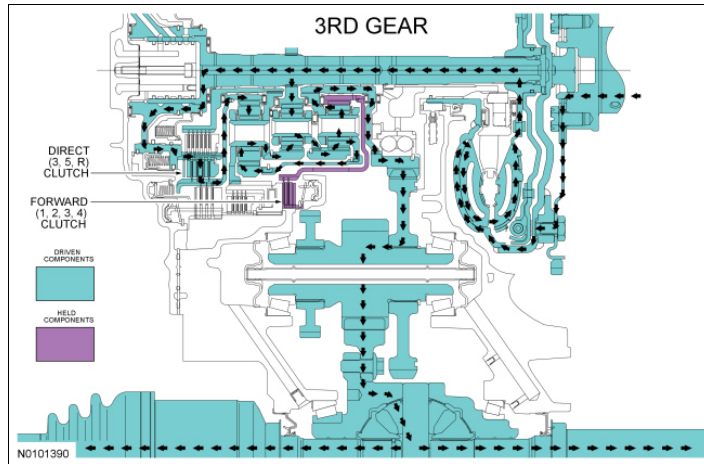


Power Flow



Hydraulic Operation

Line pressure hydraulic circuits:

- Line pressure from the pump is supplied to the manual valve.
- Line pressure is regulated by the pressure regulator valve.
- The pressure regulator valve is controlled by varying pressure from the LPC solenoid through the LPC circuit.

Torque converter circuits:

- Regulated line pressure from the pressure regulator valve is directed to the TCC control valve through the CONV FD hydraulic circuit.
- When the TCC is released, CONV FD pressure is directed to the TCC RELEASE circuit by the TCC control valve. Pressure from the TCC RELEASE circuit releases the TCC .
- Transmission fluid from the TCC RELEASE returns to the TCC control valve through the TCC APPLY circuit.

Cooler and lubrication hydraulic circuits:

- The TCC control valve directs transmission fluid from the TCC APPLY circuit (return circuit from the torque converter when the TCC is released) to the COOLER FEED circuit.
- In the COOLER FEED circuit, transmission fluid flows through the transmission fluid cooler or the thermal bypass valve to the LUBE circuit.

Solenoid hydraulic circuits:

- The LPC solenoid applies varying pressure to the pressure control valve through the LPC hydraulic circuit. The LPC solenoid regulates line pressure by controlling the position of the pressure regulator valve.
- SSA applies pressure to the forward (1, 2, 3, 4) clutch regulator valve to apply the forward clutch.
- SSB applies pressure to the direct (3, 5, R) clutch regulator valve to apply the direct clutch.

Clutch hydraulic circuits:

- Line pressure from the manual valve is directed to the multiplex shift valve through the DRIVE 1 hydraulic circuit.
- The multiplex shift valve directs DRIVE 1 pressure to the forward (1, 2, 3, 4) clutch regulator valve through the DRIVE 2, CB26FD/CB1234FD and CB1234 SUP hydraulic circuits. The DRIVE 2

hydraulic circuit also feeds the C35R SUPPLY hydraulic circuit which supplies the direct (3, 5, R) clutch regulator valve with pressure.

- The low/reverse/overdrive (4, 5, 6) clutch regulator valve directs DRIVE 2 pressure to the multiplex shift valve through the VALVE LATCH hydraulic circuit to latch the multiplex shift valve.
- Regulated CB1234 SUP pressure from the forward (1, 2, 3, 4) clutch regulator valve is directed to the forward (1, 2, 3, 4) clutch through the CB1234 hydraulic circuit to apply the clutch.
- To apply the direct (3, 5, R) clutch, SSB applies varying solenoid pressure to the C35R clutch regulator and boost valves. As the C35R regulator valve moves, it supplies the direct (3, 5, R) clutch and C35R boost valve with regulated line pressure through the C35R circuit. The C35R boost valve directs the regulated line pressure to the opposite side of the C35R clutch regulator valve through the C35R FDBK circuit for gradual direct (3, 5, R) clutch engagement.

For additional hydraulic circuit and information, refer to [Hydraulic Circuits](#) in this section.

Electrical Operation

Solenoid operation:

3rd Gear (TCC Released) Solenoid Operation Chart

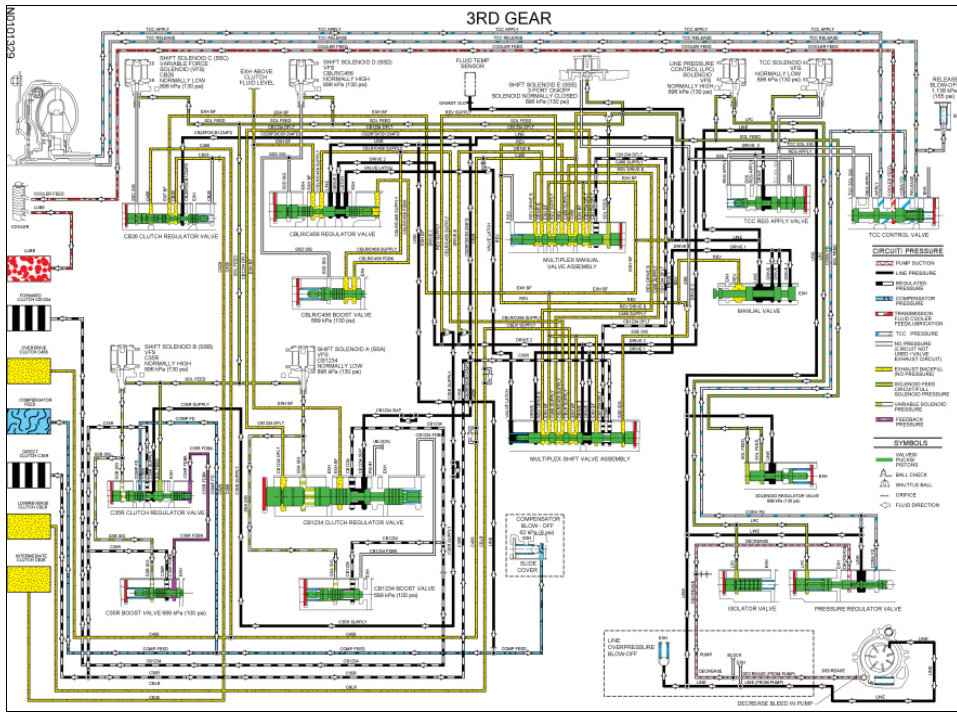
Base Selector Lever Position	PCM Commanded Gear	Shift Solenoid					TCC (VFS) NL
		SSA (VFS) NL (1, 2, 3, 4)	SSB (VFS) NH (3, 5, R)	SSC (VFS) NL (2, 6)	SSD (VFS) NH (L, R/4, 5, 6)	SSE (On/Off) NC	
D	3	On	Off	Off	On	Off	Off

NC = Normally closed

NH = Normally high

NL = Normally low

 [Printable / zoomable view of this graphic](#)



4th Gear

