Rear planetary gearset driven components:

• None

Front planetary gearset held components:

• None

Center planetary gearset held components:

• Ring gear

Rear planetary gearset held components:

• Planetary carrier

### **Neutral Position Clutch Application Chart**

Gear/Manual Lever Position	Direct (3, 5, R)	Overdrive (4, 5, 6)	Forward (1, 2, 3, 4)	Low/ Reverse (L, R)	Intermediate (2, 6)	One-Way
NEUTRAL				X		

For component information, refer to Mechanical Components and Functions in this section.

#### **Power Flow**



### **Hydraulic Operation**

Line pressure hydraulic circuits:

- Line pressure from the pump is supplied to the main pressure regulator valve, low reverse/456 regulator valve, manual valve, solenoid regulator valve and control pressure regulator.
- Line pressure is controlled by the position of the main pressure regulator valve.
- The position of the main pressure regulator valve is controlled by varying pressure from the LPC solenoid through the VBS LINE circuit.

Torque converter circuits:

- Regulated line pressure from the main 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 .
- 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 fluid from the TCC APPLY circuit (return circuit from the torque converter when the TCC is released) to the COOLER FD circuit.
- In the COOLER FD circuit, transmission fluid flows through the transmission fluid cooler or the thermal bypass valve to the LUBE circuit in the input shaft to supply lubrication to the transaxle.

Solenoid hydraulic circuits:

- The LPC solenoid applies varying pressure to the main pressure regulator valve through the VBS LINE hydraulic circuit. The LPC solenoid regulates line pressure by controlling the position of the main pressure regulator valve.
- SSD applies pressure to the low reverse/456 regulator and latch valves to apply the low/reverse clutch.
- SSE applies pressure to the clutch control bypass valve to position the valve to direct regulated line pressure in the CBR1/C456 circuit to the low/reverse clutch.

Clutch hydraulic circuits:

- Line pressure from the pump is supplied to the low reverse/456 regulator valve. To apply the low/reverse clutch, SSD supplies varying solenoid pressure to the low reverse/456 regulator and latch valves. As the regulator valve moves, it supplies the clutch control bypass valve and low reverse/456 latch valve with regulated line pressure through the CBR1/C456 circuit. The low reverse/456 latch valve directs the regulated line pressure to the opposite side of the regulator valve through the CBR1/C456 FDBK circuit for gradual low/reverse clutch engagement.
- Regulated line pressure at the clutch control bypass valve in the CBR1/C456 circuit is directed to the low/reverse clutch through the CBR1 circuit to apply the clutch.

For additional hydraulic circuit information, refer to <u>Hydraulic Circuits</u> in this section.

### **Electrical Operation**

Solenoid operation:

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

### **Neutral Position Solenoid Operation Chart**

NC = Normally closed

# NH = Normally high

## NL = Normally low



## A Printable / zoomable view of this graphic

## 1st Gear Above 8 km/h (5 mph)

