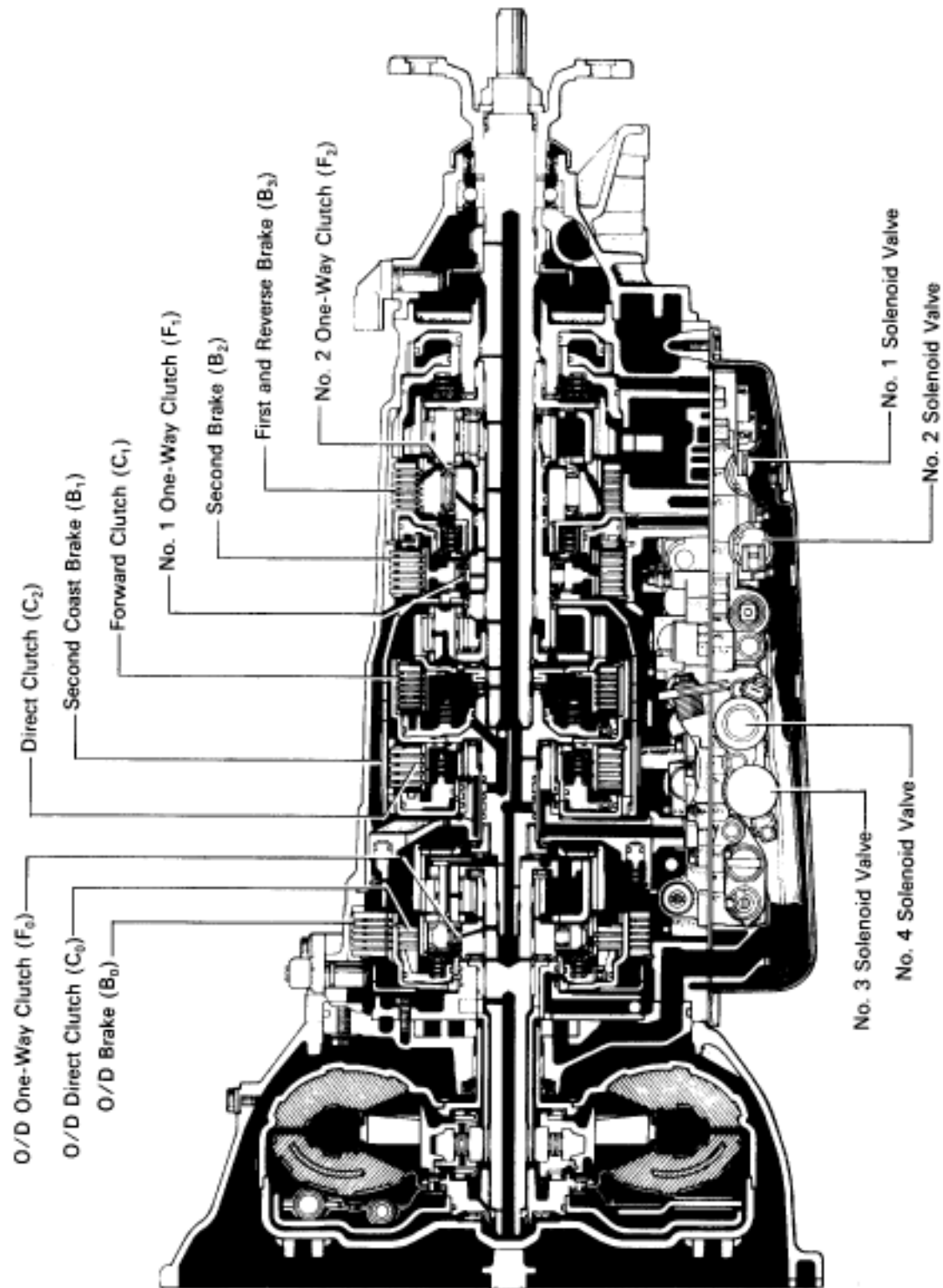


OPERATION

Mechanical Operation

OPERATING CONDITIONS



OPERATING CONDITIONS (Cont'd)

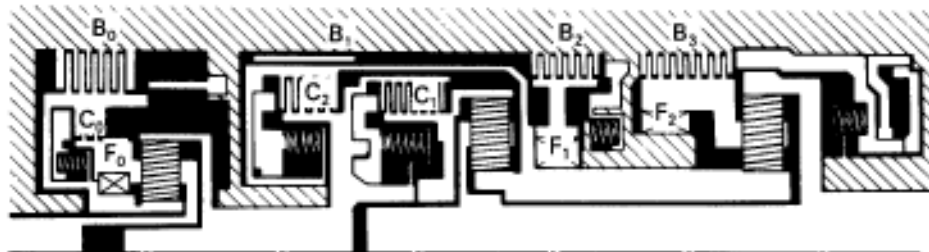
Range (i. e., Shift Lever Position)	Gear	No. 1 Solenoid Valve	No. 2 Solenoid Valve	C ₁	C ₂	C ₀	B ₁	B ₂	B ₃	B ₀	F ₁	F ₂	F ₀
P	Park	ON	OFF			●							●
R	Reverse	ON	OFF		●	●			●				
N	Neutral	ON	OFF			●							●
D	1st	ON	OFF	●		●						●	●
	2nd	ON	ON	●		●		●			●		●
	3rd	OFF	ON	●	●	●		●					●
	O/D	OFF	OFF	●	●			●		●			
2	1st	ON	OFF	●		●						●	●
	2nd	ON	ON	●		●		●			●		●
	*3rd	OFF	ON	●	●	●		●					●
L	1st	ON	OFF	●		●			●			●	●
	*2nd	ON	ON	●		●		●					●

* : Down-shift only 2nd gear in the L range and 3rd gear in the 2 range- no up-shift

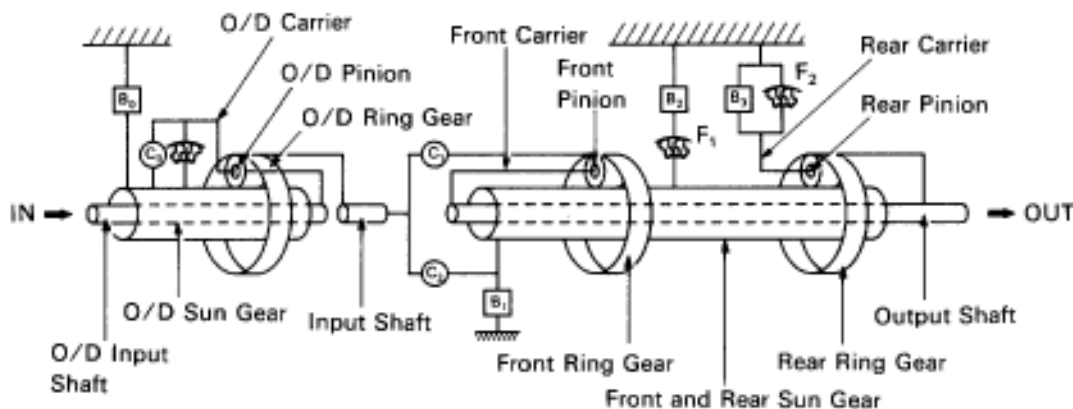
● : Operating

FUNCTION OF COMPONENTS

Component		Function
C ₁	Forward Clutch	Connects input shaft and front planetary ring gear.
C ₂	Direct Clutch	Connects input shaft and front and rear planetary sun gear.
C ₀	O/D Clutch	Connects O/D sun gear and O/D planetary carrier.
B ₁	2nd Coast Brake	Prevents front and rear planetary sun gear from turning either clockwise or counterclockwise.
B ₂	2nd Brake	Prevents outer race of F ₁ from turning either clockwise or counterclockwise thus preventing the front and rear planetary sun gear from turning counterclockwise.
B ₃	1st and Reverse Brake	Prevents rear planetary carrier from turning either clockwise or counterclockwise.
B ₀	O/D Brake	Prevents O/D sun gear from turning either clockwise or counterclockwise.
F ₁	No. 1 One-Way Clutch	When B ₂ is operating, this clutch prevents the front and rear planetary sun gear from turning counterclockwise.
F ₂	No. 2 One-Way Clutch	Prevents rear planetary carrier from turning counterclockwise.
F ₀	O/D One-Way Clutch	When the transmission is being driven by the engine, this clutch connects the O/D sun gear and O/D planetary carrier.
Planetary Gears		These Gears change the route through which driving force is transmitted in accordance with the operation of each clutch and brake in order to increase or reduce the input and output speed.



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Hydraulic Control System

The hydraulic control system is composed of the oil pump, the valve body, the solenoid valves, the accumulators, the clutches and brakes, as well as the fluid passages which connect all of these components.

Based on the hydraulic pressure created by the oil pump, the hydraulic control system governs the hydraulic pressure acting on the torque converter, clutches and brakes in accordance with the vehicle driving conditions.

There are four solenoid valves on the valve body.

The No. 1 and No. 2 solenoid valves are turned on and off by signals from the ECU to operate the shift valves, and change the gear shift position.

The No. 3 solenoid valve is operated by signals from the ECU to engage or disengage the lock-up clutch of the torque converter.

The No. 4 solenoid valve is operated by signals from the ECU to control the engagement speed and reduce gear shift shock.

