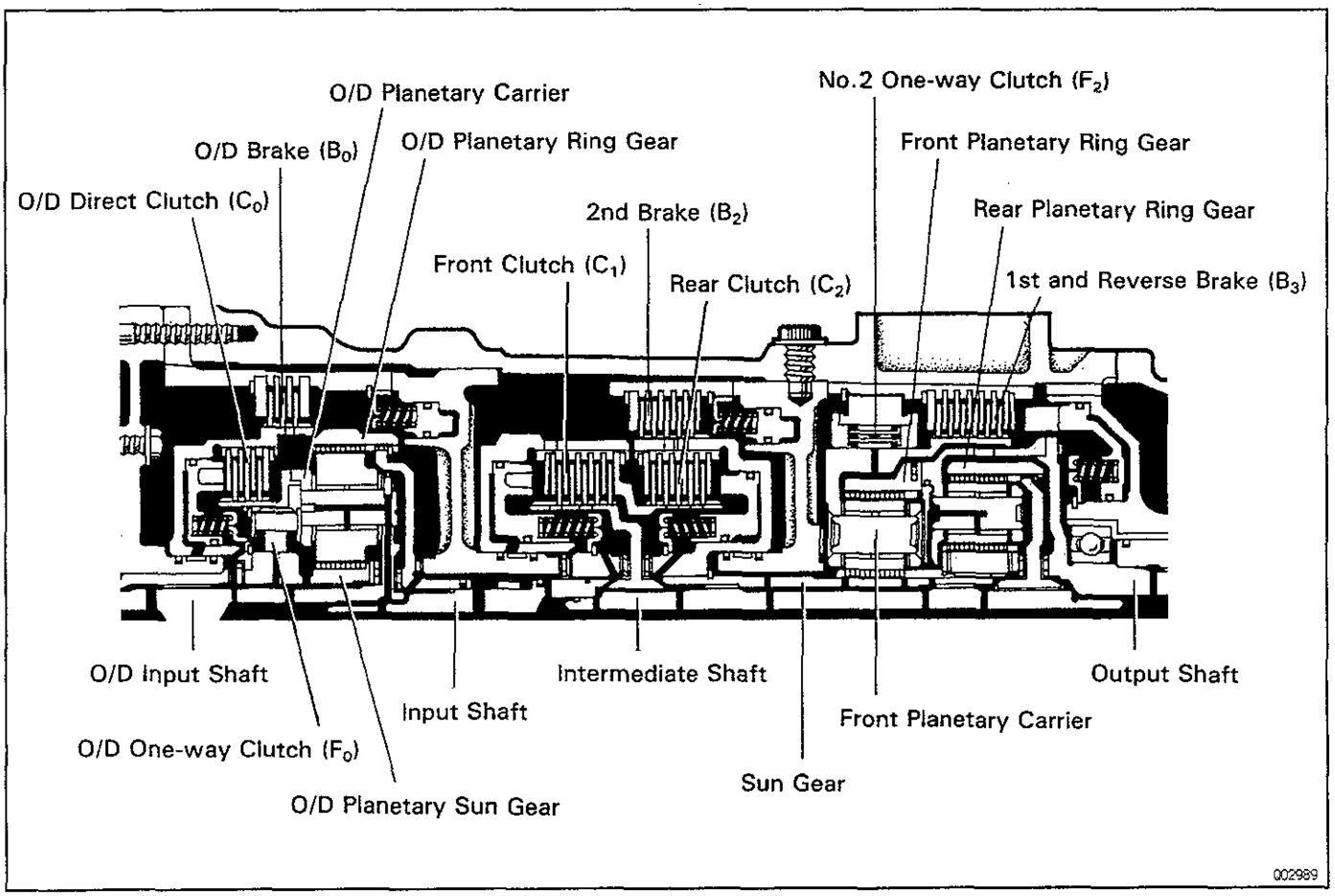
OPERATION

OPERATING CONDITIONS

AT07J–01



Shift lever position	Gear position	C_0	C_1	C_2	B_0	B_2	B_3	F_0	F_2
P	Parking	○						○	
R	Reverse	○		○			○	○	
N	Neutral	○						○	
D	1st	○	○					○	○
	2nd		○			○		○	
	3rd	○	○	○				○	
	O/D		○	○	○				
2	2nd	○	○			○		○	
L	1st	○	○				○	○	○

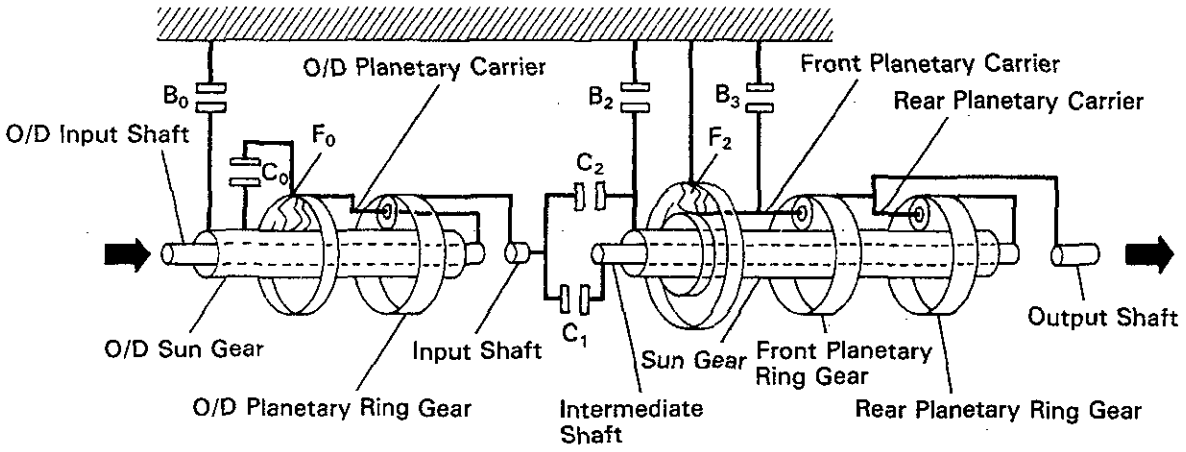
○.....Operating

V01779

AT07K–01

FUNCTION OF COMPONENTS

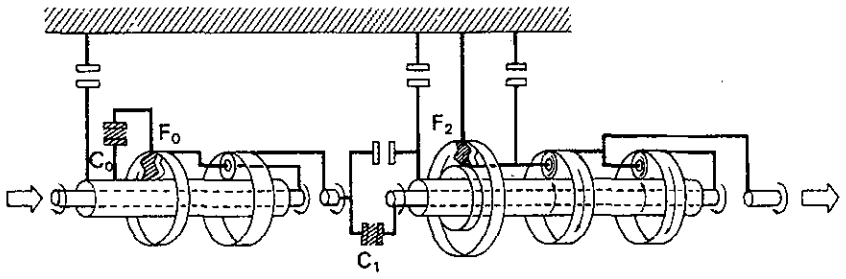
NOMENCLATURE	OPERATION
O/D Direct Clutch (C_0)	Connects overdrive sun gear and overdrive carrier
O/D Brake (B_0)	Prevents overdrive sun gear from turning either clockwise or counterclockwise
O/D One-Way Clutch (F_0)	When transmission is being driven by engine, connects overdrive sun gear and overdrive carrier
Front Clutch (C_1)	Connects input shaft and intermediate shaft
Rear Clutch (C_2)	Connects input shaft and front & rear planetary sun gear
2nd Brake (B_2)	Prevents front & rear planetary sun gear from turning either clockwise or counterclockwise
1st & Reverse Brake (B_3)	Prevents front planetary carrier from turning either clockwise or counterclockwise
No.2 One-Way Clutch (F_2)	Prevents front planetary carrier from turning counterclockwise



AT3917

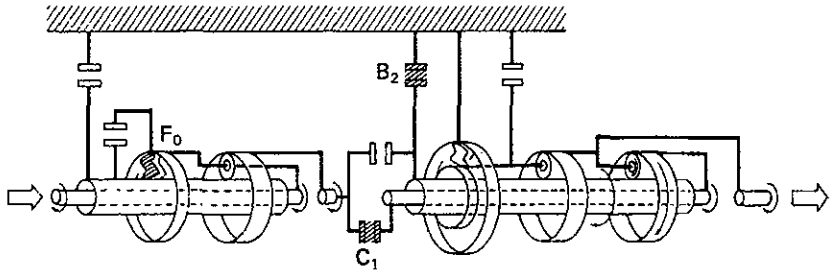
The condition of operation for each gear position are shown on the following illustration:

D or 2 Position 1st Gear



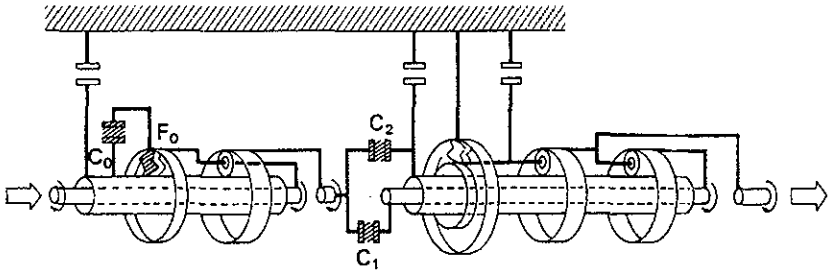
AT5949

D or 2 Position 2nd Gear



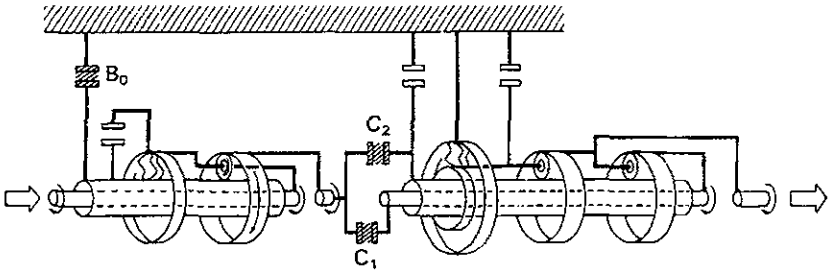
AT5950

D Position 3rd Gear



AT5951

D Position O/D



AT5952

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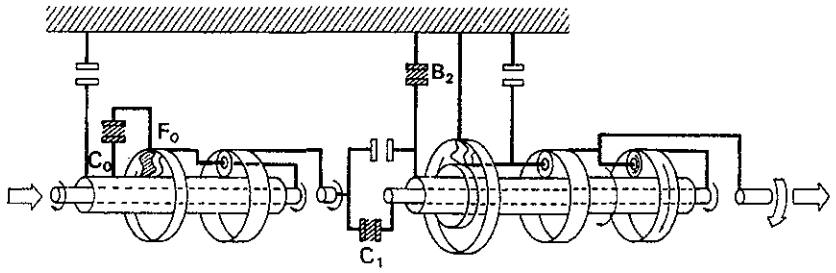
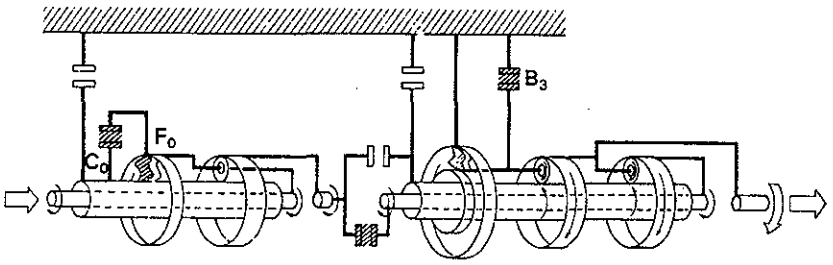
2 Position 2nd Gear



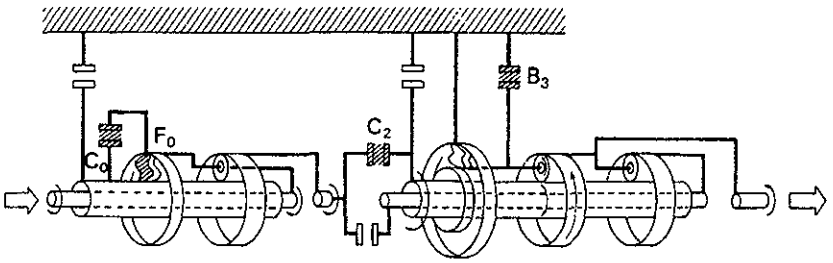
AT5953

L Position 1st Gear



AT5954

R Position Reverse Gear



AT5955

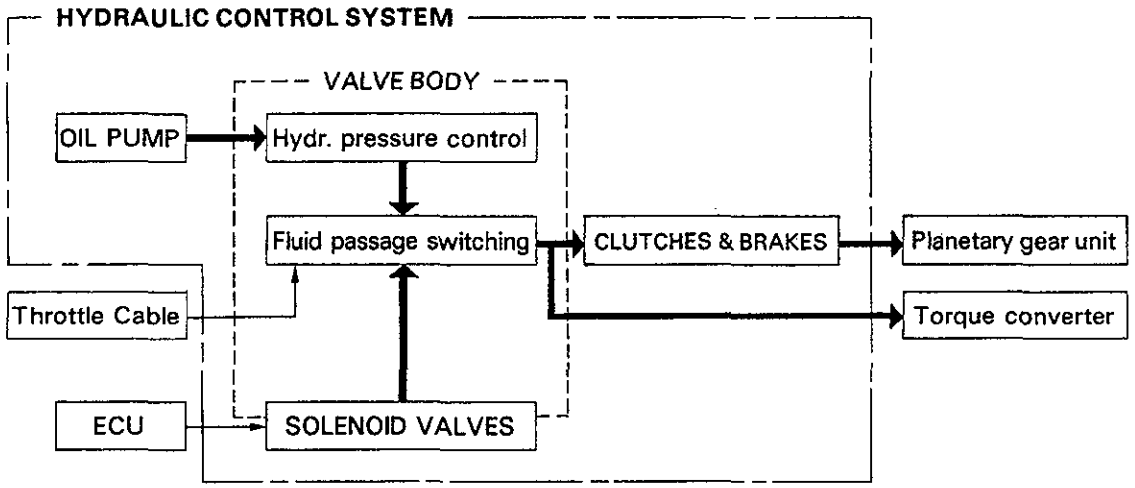
AT07L-02

HYDRAULIC CONTROL SYSTEM

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

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

There are solenoid valves on the valve body.



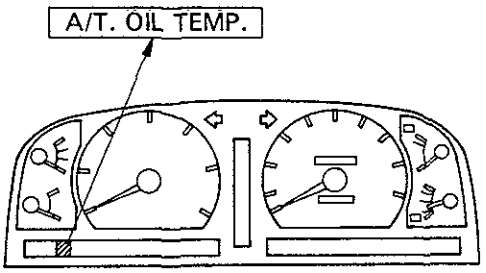
V00332

AT07M-02

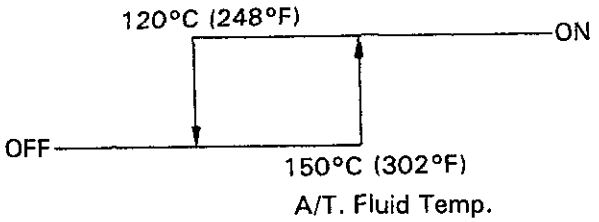
WARNING AND INDICATOR LIGHTS

A.T FLUID TEMPERATURE WARNING SYSTEM

The ECT ECU detects the transmission fluid temperature by means of a fluid temperature sensor fitted to the union. The transmission fluid may become extremely hot when the vehicle is under and extreme load, as when driving on sand or climbing uphill. Should the fluid temperature increases above 150 °C (302°F), the ECT ECU lights the warning light located the combination meter, The light goes off when the temperature falls below 120 °C (248 °F).



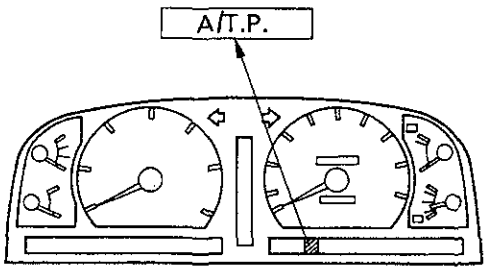
AT6023



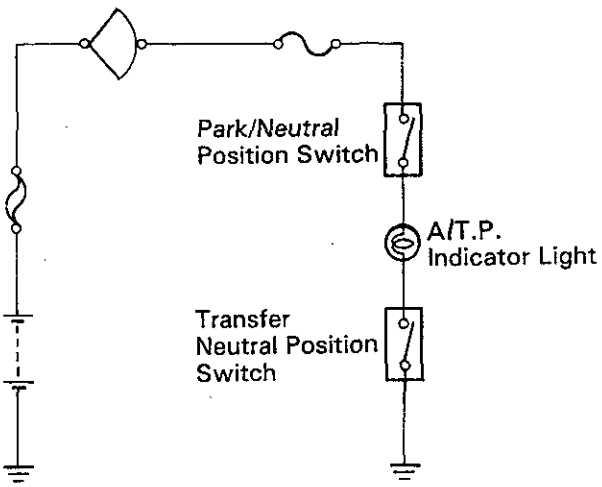
V01585

A.T.P. (Automatic Transmission Parking) INDICATOR

The rear propeller shaft and rear wheels are free even when the transmission shift lever is set to "P" as long as the transfer shift lever is in "neutral" position. The A.T.P. indicator lights up to warn the driver that the propeller shaft and wheels are not locked, If the A.T.P. indicator light does on, the transfer shift lever should be shifted to out of "N" position.



AT6024 AT3920



V01586