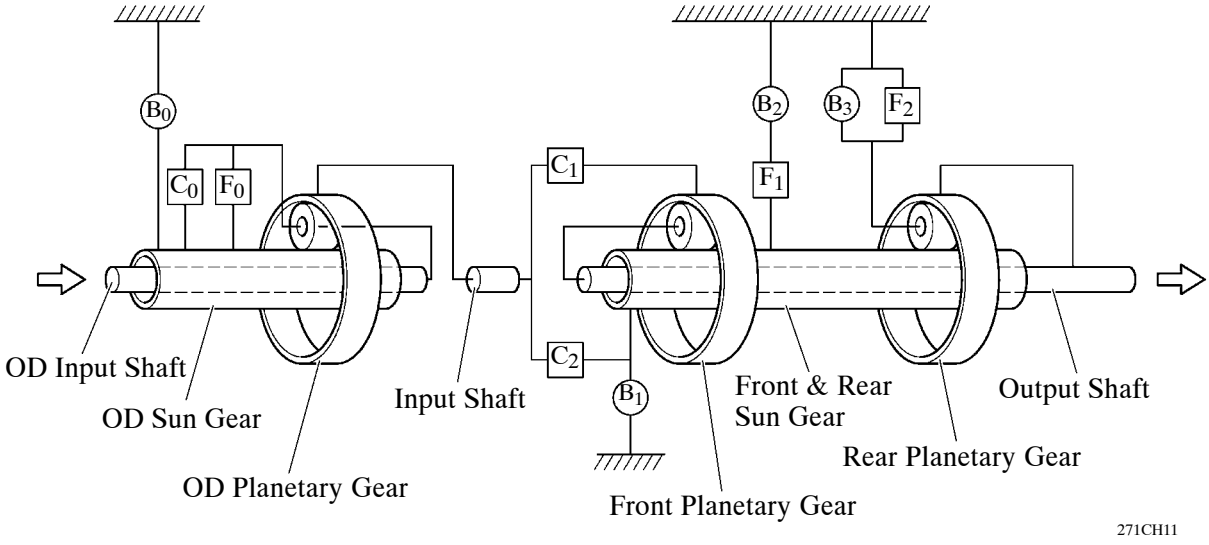
■ PLANETARY GEAR UNIT

1. Construction

The gear train consists of three multi-plate clutches, three multi-plate brakes, a single band type brake, three one-way clutches, and three planetary gear sets each consisting of a sun gear, a pinion gear and a ring gear.



2. Function of Components

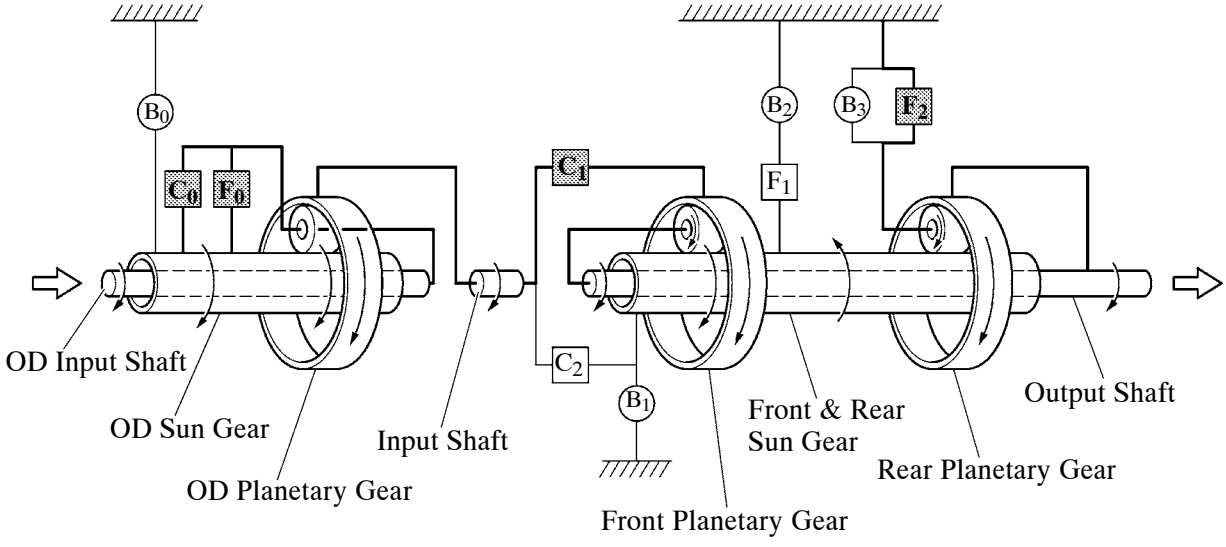
Component		Function
C_0	OD Direct Clutch	Connects OD planetary sun gear and OD planetary carrier.
C_1	Forward Clutch	Connects input shaft and front planetary ring gear.
C_2	Direct Clutch	Connects input shaft and front & rear planetary sun gear.
B_0	OD Brake	Prevents OD planetary sun gear from turning either clockwise or counterclockwise.
B_1	2nd Coast Brake	Prevents front & rear 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 front & rear sun gear from turning counterclockwise.
B_3	1st & Reverse Brake	Prevents rear planetary carrier from turning either clockwise or counterclockwise.
F_0	OD One-way Clutch	When engine power is transmitted to OD input shaft, connects OD planetary sun gear and planetary carrier.
F_1	No. 1 One-way Clutch	When B_2 is operating, prevents front & rear planetary sun gear from turning counterclockwise.
F_2	No. 2 One-way Clutch	Prevents rear planetary carrier from turning counterclockwise.
Planetary Gears		Change power transmission route according to clutch and brake operation, and increase or decrease output shaft revolution accordingly.

3. Transmission Power Flow

Operating Conditions

Shift Lever Position	Gear	Solenoid Valve S1	Solenoid Valve S2	Clutch			Brake				One-way Clutch		
				C_0	C_1	C_2	B_0	B_1	B_2	B_3	F_0	F_1	F_2
P	Park	ON	OFF	○									
R	Reverse	ON	OFF	○		○				○	○		
N	Neutral	ON	OFF	○									
D	1st	ON	OFF	○	○						○		○
	2nd	ON	ON	○	○				○		○	○	
	3rd	OFF	ON	○	○	○			○		○		
	4th	OFF	OFF		○	○	○		○				
3	1st	ON	OFF	○	○						○		○
	2nd	ON	ON	○	○				○		○	○	
	3rd	OFF	ON	○	○	○			○		○		
2	1st	ON	OFF	○	○						○		○
	2nd	ON	ON	○	○			○	○		○	○	
L	1st	ON	OFF	○	○					○	○		○

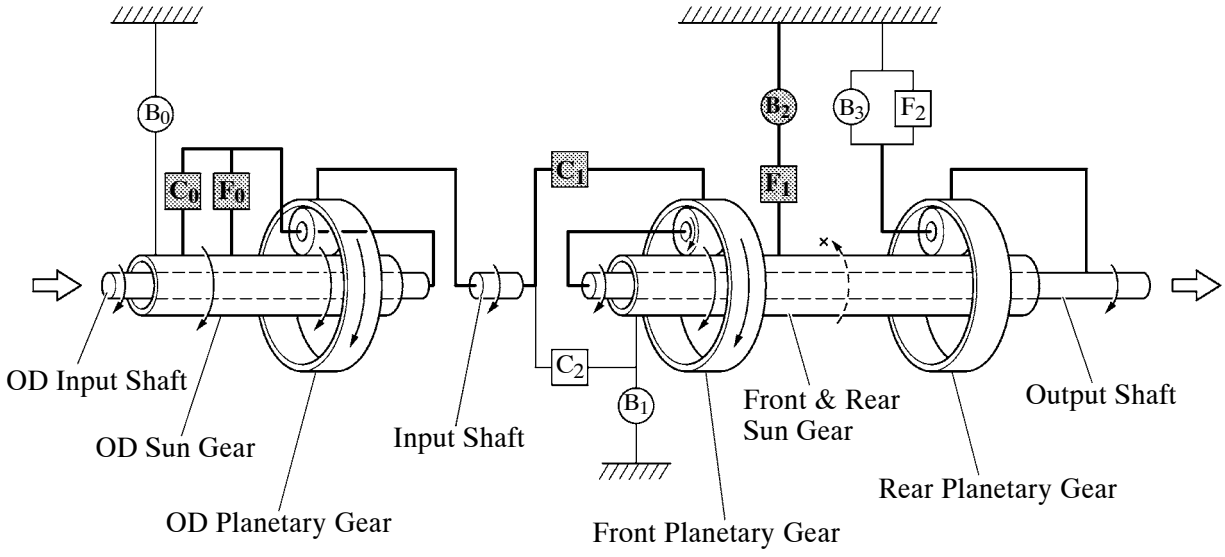
1st Gear (D, 3 or 2 Position)



271CH12

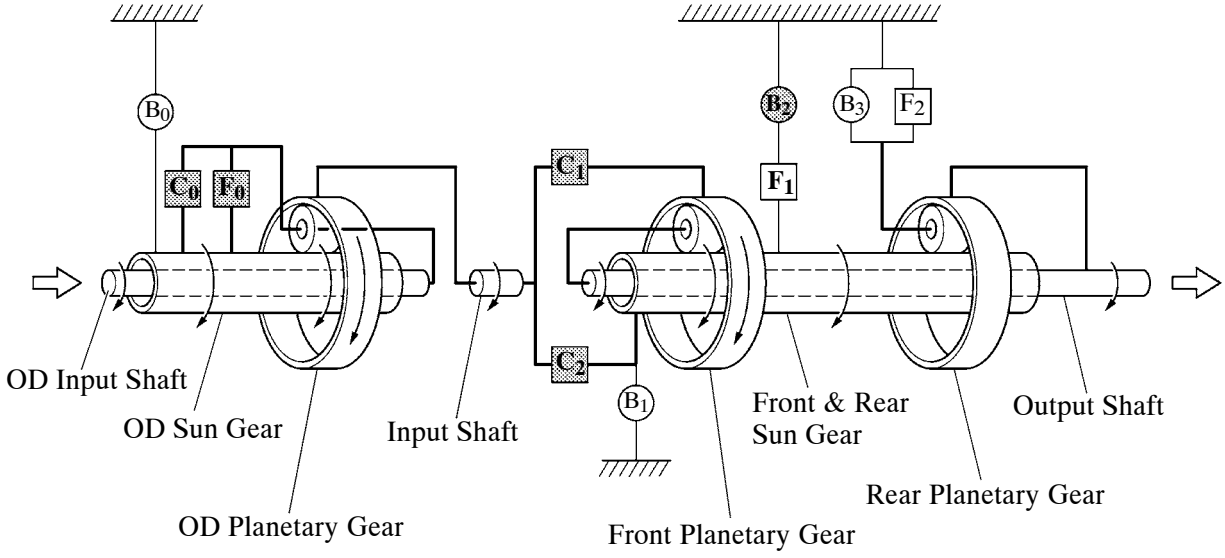
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2nd Gear (D or 3 Position)



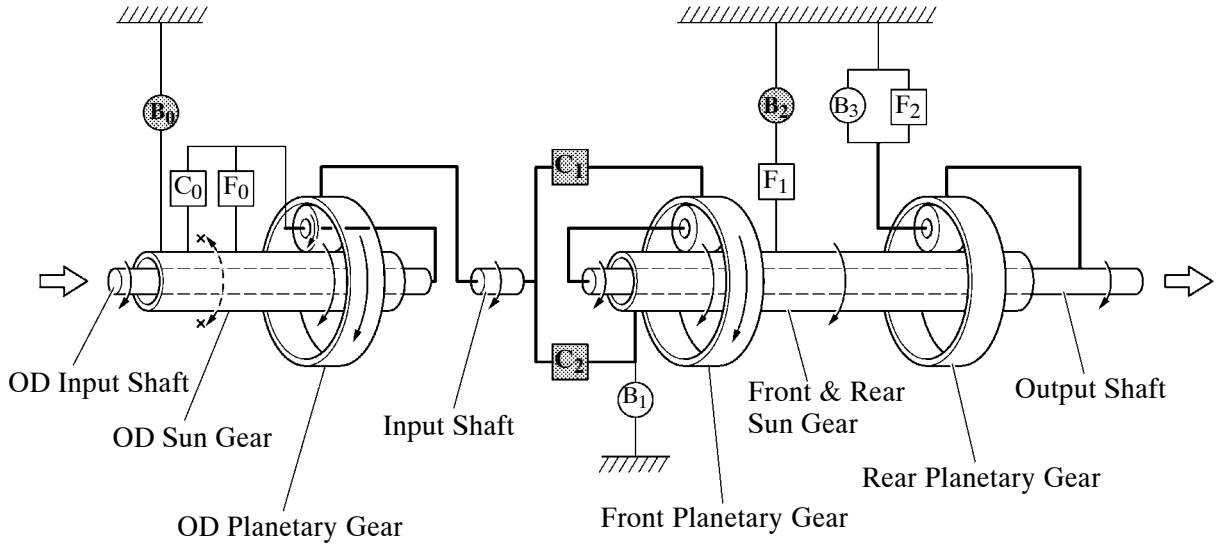
271CH13

3rd Gear (D or 3 Position)



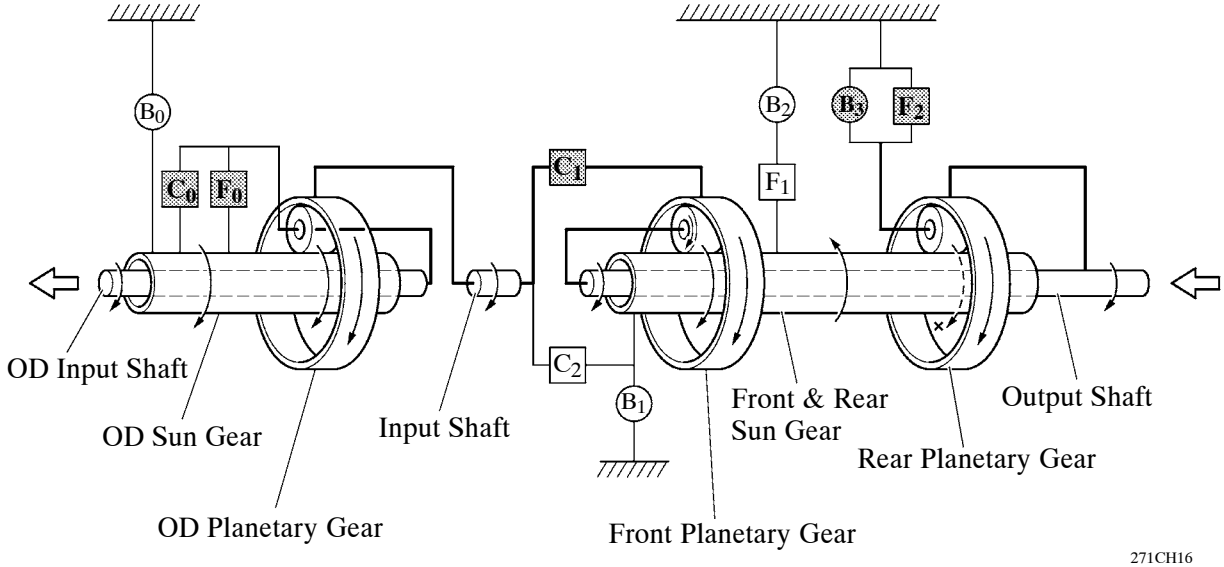
271CH14

4th Gear (D Position)



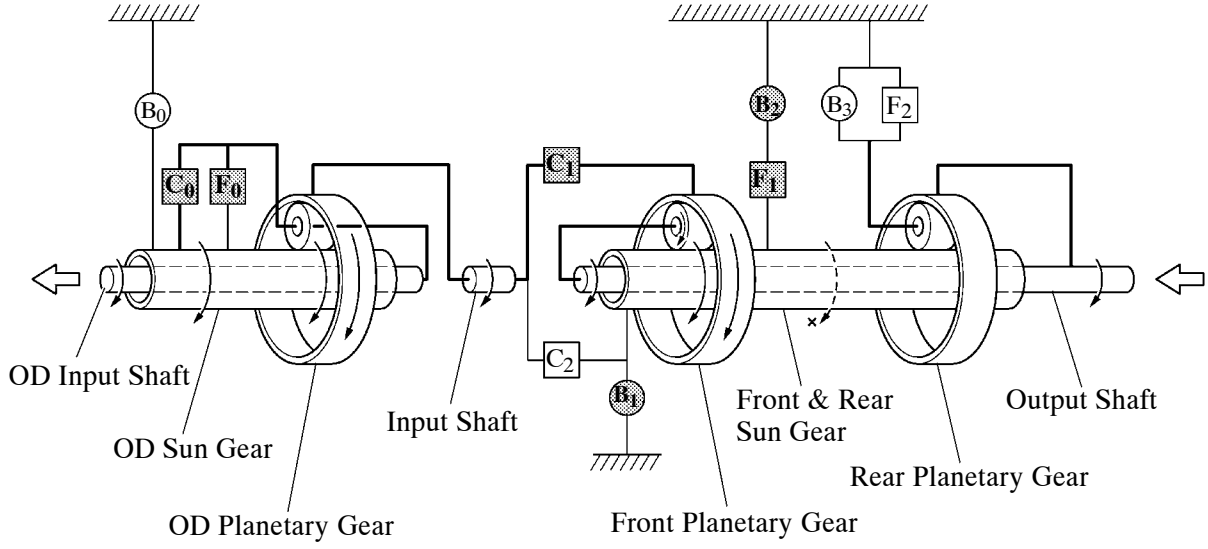
271CH15

Engine Braking in 1st Gear (L Position)



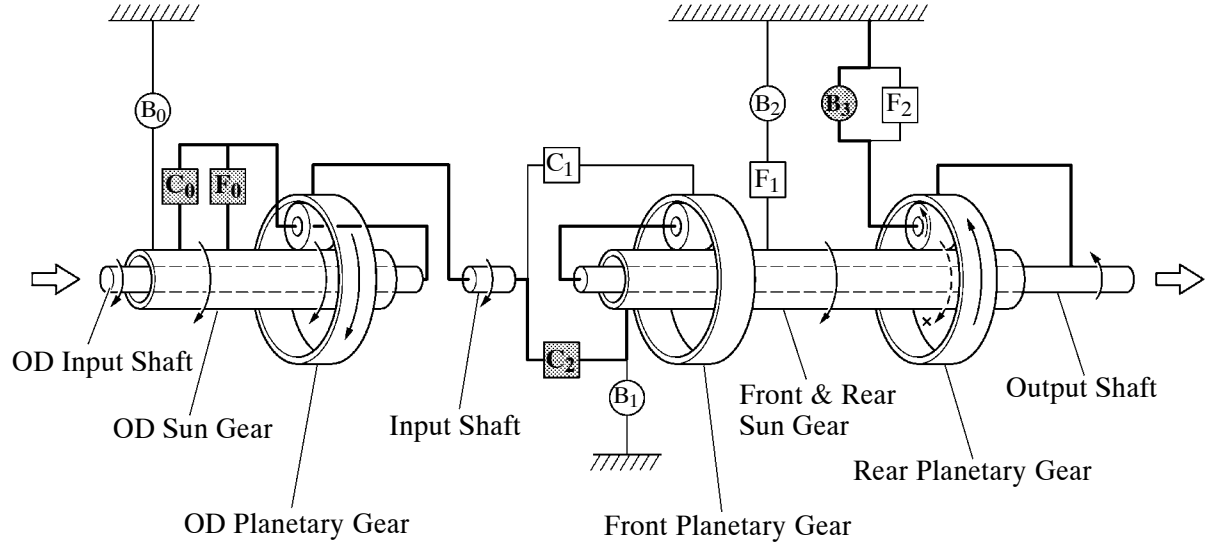
271CH16

Engine Braking in 2nd Gear (2 or L Position)



271CH17

Reverse Gear (R Position)



271CH18