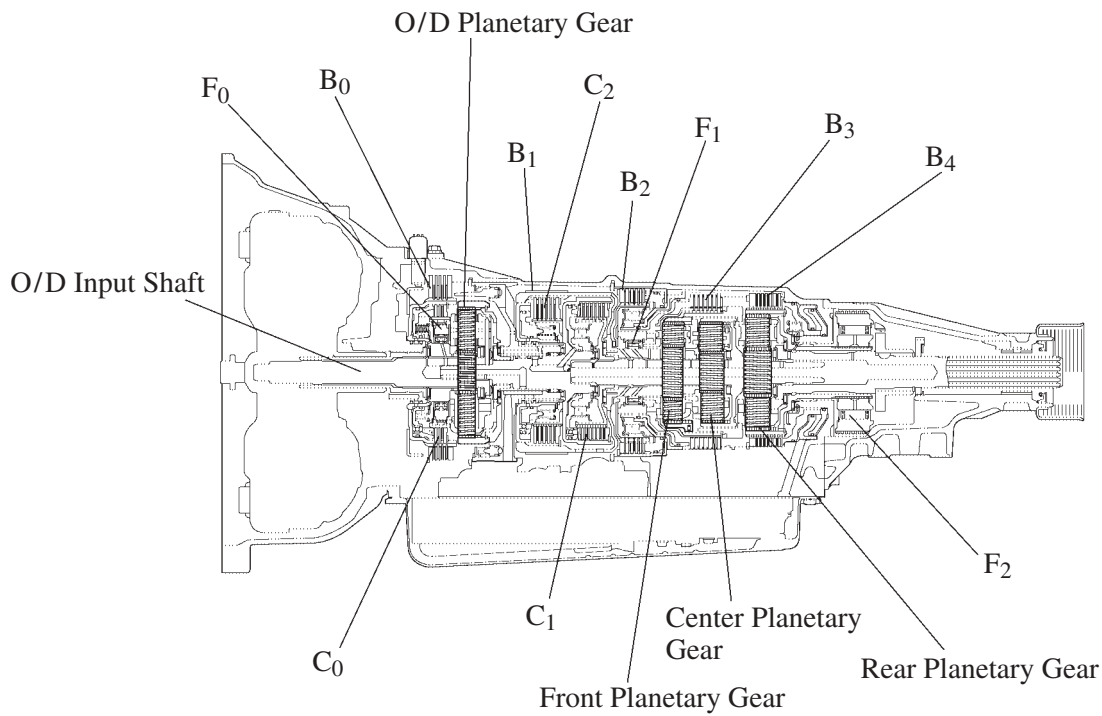


■ PLANETARY GEAR UNIT

1. General

- The planetary gear unit of the A650E automatic transmission that has been adopted on the IS300/IS300 SportCross is the same as in the A650E automatic transmission of the GS300.
- Mechanical loss has been reduced by changing C_0 , C_2 clutch seal ring shape and decreasing the clutch contact area and fuel consumption improved.



NF

► Specifications ◀

Model				IS300/ IS300 SportCross	GS300
Torque Converter			Stall Torque Ratio	1.90	←
Planetary Gear Unit	C ₀	O/D Direct Clutch	The No. of Discs	2	←
	C ₁	Forward Clutch		5	←
	C ₂	Direct Clutch		4	←
	B ₀	O/D Brake		3	←
	B ₁	3rd Coast Brake	Band Width mm (in.)	40 (1.57)	←
	B ₂	3rd Brake	The No. of Discs	4	←
	B ₃	2nd Brake		5	←
	B ₄	1st & Reverse Brake		5	←
	F ₀	O/D One-way Clutch	The No. of Sprags	20	←
	F ₁	No.1 One-way Clutch		16	←
	F ₂	No.2 One-way Clutch		24	←
	O/D Planetary Gear		The No. of Sun Gear Teeth	31	←
			The No. of Pinion Gear Teeth	32	←
			The No. of Ring Gear Teeth	95	←
	Front Planetary Gear		The No. of Sun Gear Teeth	41	←
			The No. of Pinion Gear Teeth	16	←
			The No. of Ring Gear Teeth	73	←
	Center Planetary Gear		The No. of Sun Gear Teeth	31	←
			The No. of Pinion Gear Teeth	21	←
			The No. of Ring Gear Teeth	73	←
	Rear Planetary Gear		The No. of Sun Gear Teeth	28	←
			The No. of Pinion Gear Teeth	19	←
			The No. of Ring Gear Teeth	66	←

2. Motive Power Transmission

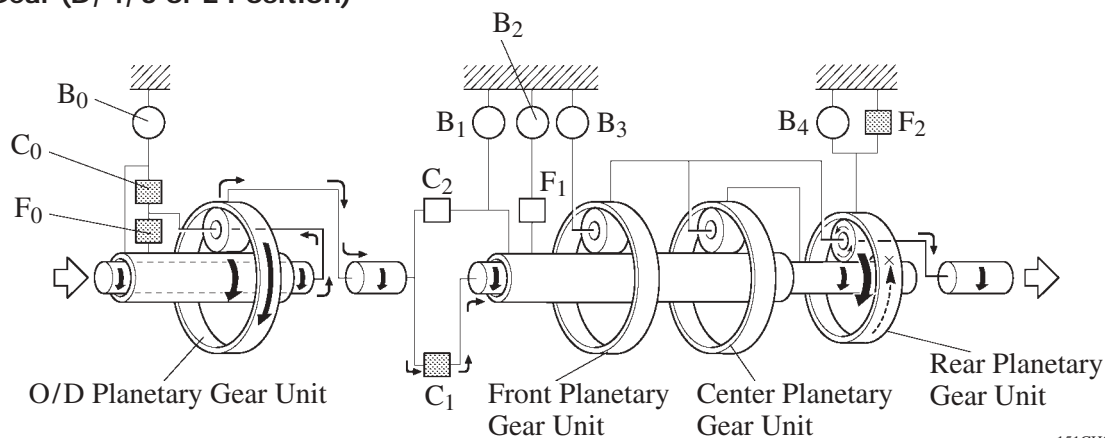
► Operating Conditions ◀

Shift Lever Position	Gear	Solenoid Valve No.1	Solenoid Valve No.2	Solenoid Valve No.3	Solenoid Valve No.4	C ₀	C ₁	C ₂	B ₀	B ₁	B ₂	B ₃	B ₄	F ₀	F ₁	F ₂
P	Park	ON	OFF	ON	OFF	●										
R	Reverse	ON	OFF	OFF	OFF			●	●				●			
N	Neutral	ON	OFF	ON	OFF	●										
D M (5)*	1st	ON	OFF	OFF	OFF	●	●							●		●
	2nd	ON	ON	OFF	OFF	●	●					●		●		
	3rd	OFF	ON	OFF	OFF	●	●				●			●	●	
	4th	OFF	OFF	ON	OFF	●	●	●			○			●		
	5th	OFF	OFF	OFF	ON		●	●	●		○					
3	1st	ON	OFF	OFF	OFF	●	●							●		●
	2nd	ON	ON	OFF	OFF	●	●					●		●		
	3rd	OFF	ON	ON	OFF	●	●			●	●			●	●	
2	1st	ON	OFF	ON	OFF	●	●							●		●
	2nd	ON	ON	OFF	OFF	●	●					●		●		
L	1st	ON	OFF	OFF	OFF	●	●						●	●		●

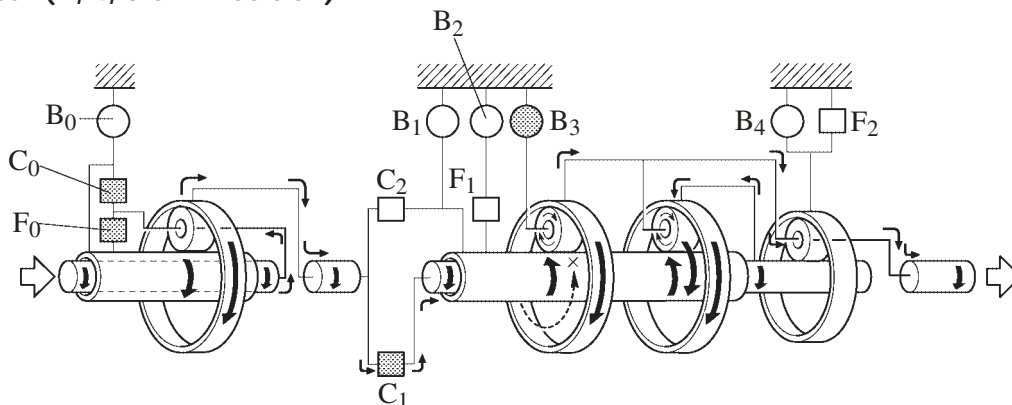
● : Operation

○ : Operate but is not related to power transmission

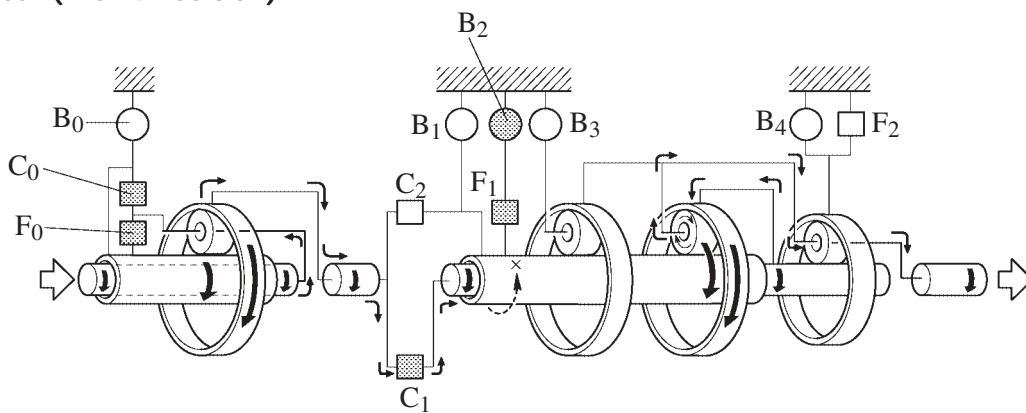
* : When the shift lever position is “M” and the gear position indicator shows “5”

1st Gear (D, 4, 3 or 2 Position)

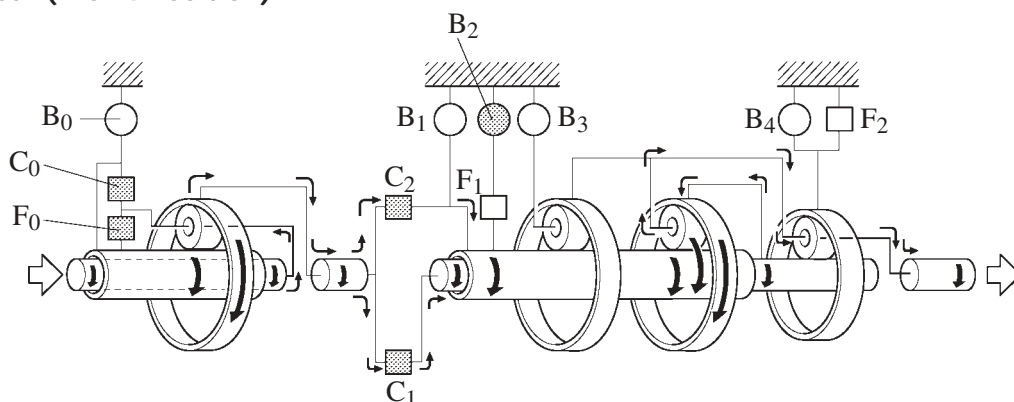
151CH02

2nd Gear (D, 4, 3 or 2 Position)

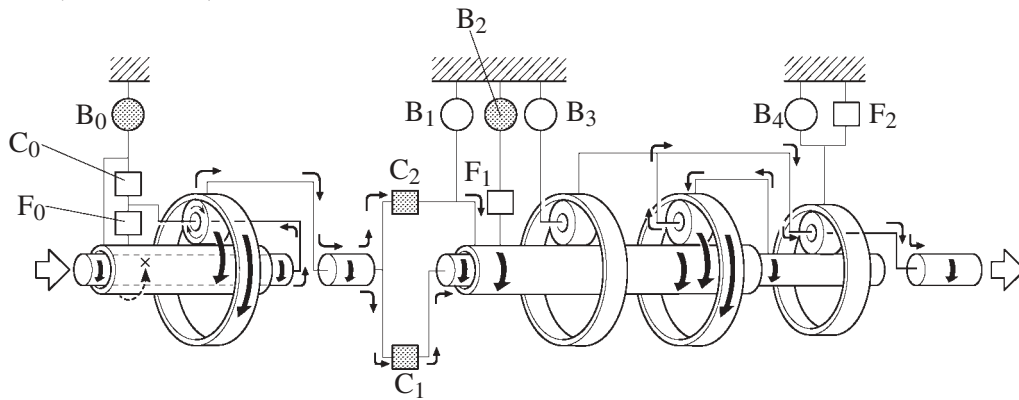
151CH03

3rd Gear (D or 4 Position)

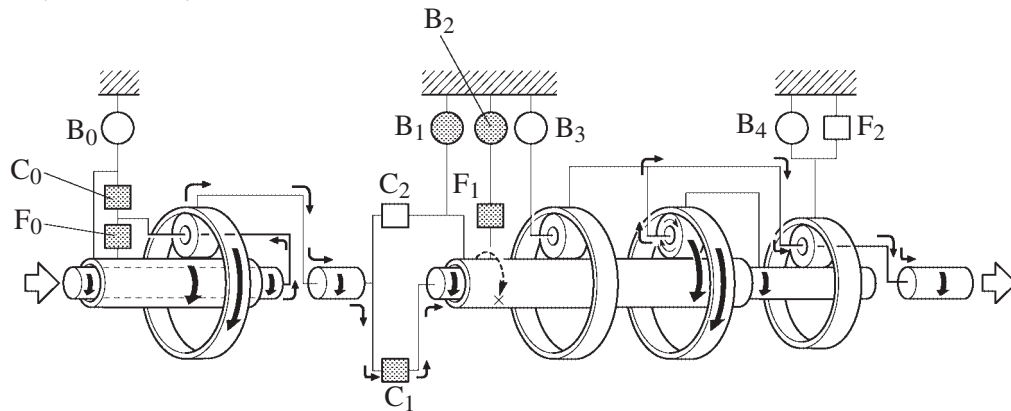
151CH04

4th Gear (D or 4 Position)

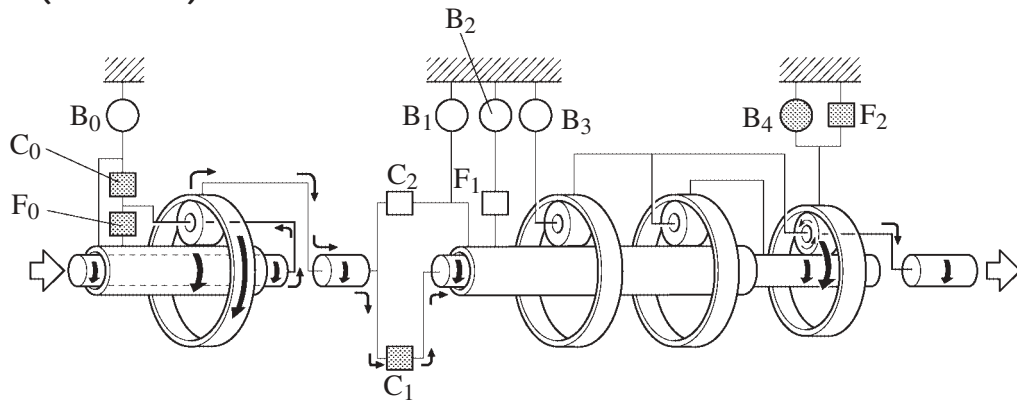
151CH05

5th Gear (D Position)

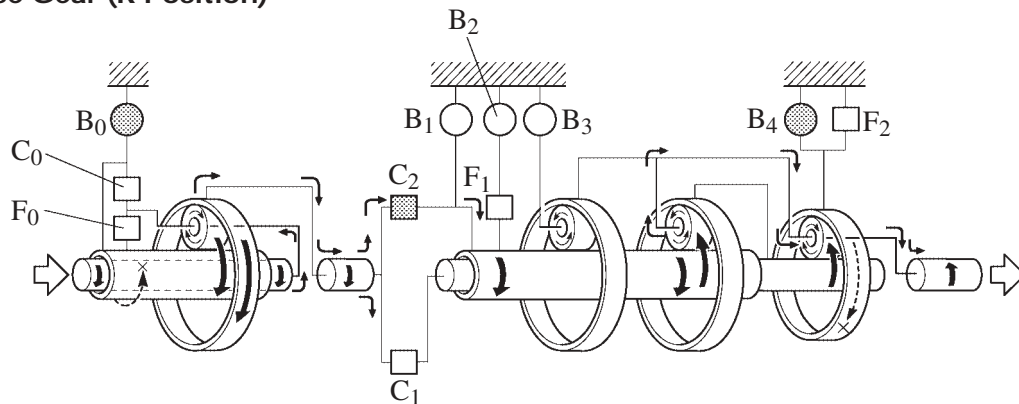
151CH06

NF**3rd Gear (3 Position)**

189CH03

1st Gear (L Position)

189CH04

Reverse Gear (R Position)

151CH09