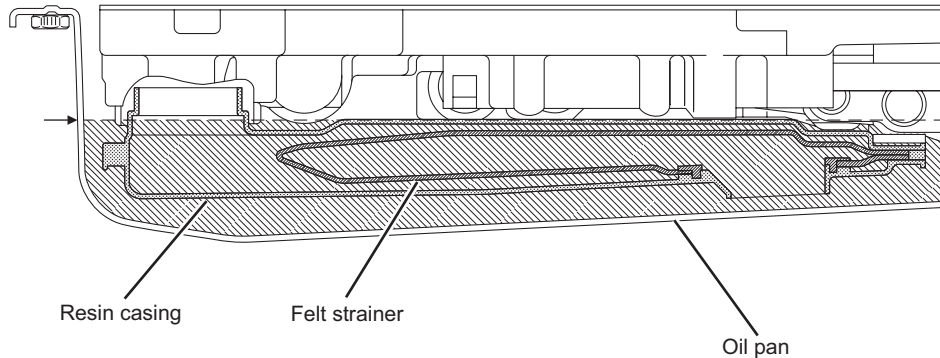


Felt Strainer

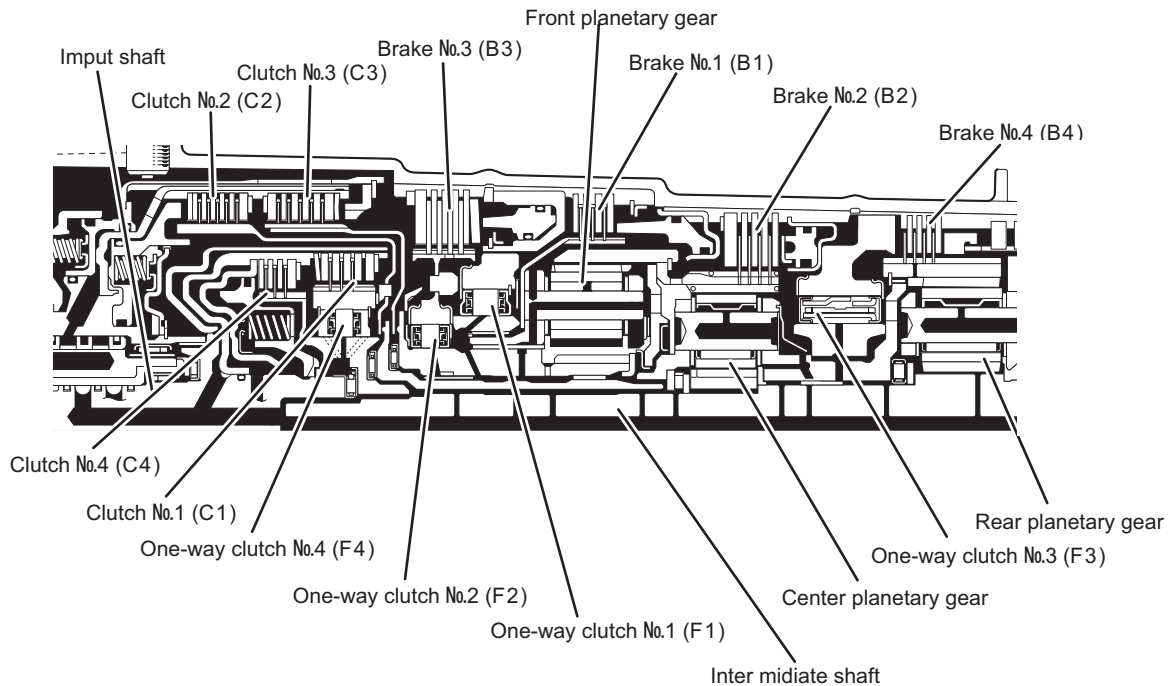
- A felt strainer (with a plastic case) is used. This results in an approximate weight reduction of 40%, as compared to an ordinary metal mesh strainer.
- The felt strainer excels in capturing minute particles of foreign matter, thus improving the reliability of the transmission. Also, the felt strainer counters the flaking of gears and shafts, thus ensuring a longer life.



A4270330P

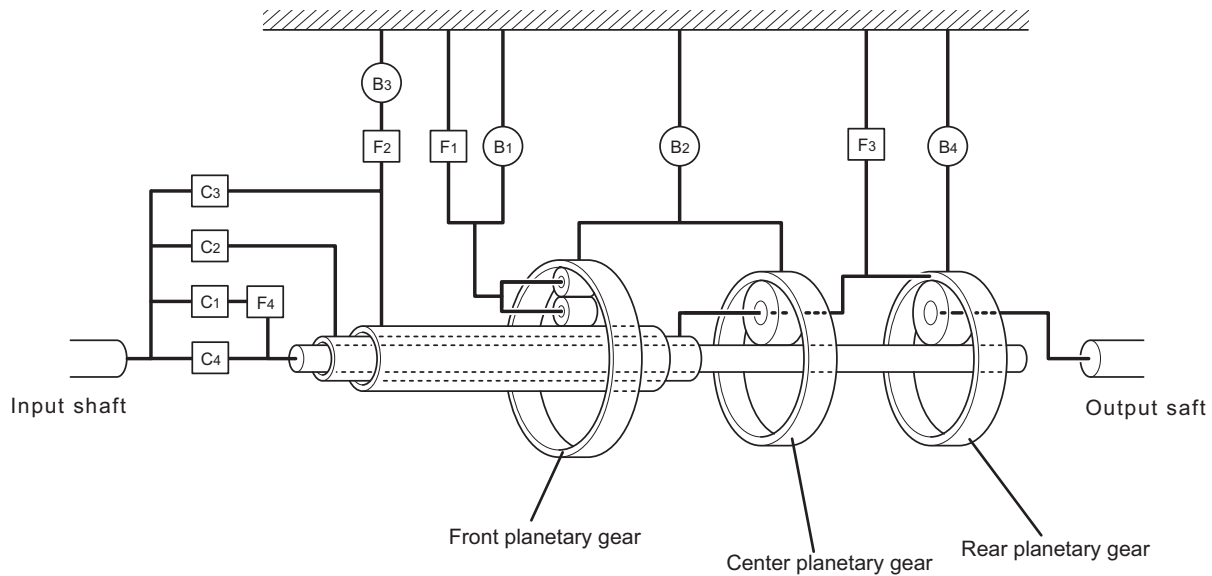
Planetary Gear Unit

- The gear train consists of four sets of multi-disc brakes, four sets of multi-disc clutches, four one-way clutches, and three sets of planetary gears comprising a sun gear, pinion gear, and ring gear.
- The material of the front planetary gear carrier has been changed from the ordinary iron to composite-molded aluminum alloy. As a result, the weight of the gear carrier has been reduced to approximately one-half of an ordinary gear carrier, thus realizing a considerable weight reduction.



A4270366P

A761E/A760E Gear Train Operation



A4270367P

Components and Their Operations

Component		Function
No.1 Clutch	C1	Connect input shaft and intermediate shaft.
No.2 Clutch	C2	Connects input shaft and Center planetary gear carrier.
No.3 Clutch	C3	Connects input shaft and front sun gear.
No.4 Clutch	C4	Connects input shaft and intermediate shaft.
No.1 Brake	B1	Lock the front planetary gear carrier.
No.2 Brake	B2	Lock the front ring gear and center ring gear rotation.
No.3 Brake	B3	Lock the one-way clutch No.2(F2).
No.4 Brake	B4	Lock the ring gear rotation.
No.1 One-way clutch	F1	Prevent front planetary carrier from turning counterclockwise.
No.2 One-way clutch	F2	During operation brake No.3, prevent front sun gear turning from counterclockwise.
No.3 One-way clutch	F3	Prevents ring gear from turning counterclockwise. Prevents center planetary carrier from turning counterclockwise.
No.4 One-way clutch	F4	During operation clutch No.1(C1), prevent intermediate shaft from turning counterclockwise.

Components and Their Operating Conditions

		C1	C2	C3	C4	B1	B2	B3	B4	F1	F2	F3	F4	Gear Ratio	
														(A761E)	(A760E)
P														-	-
R				○		(○)			○	○				2.951	3.224
N														-	-
D	1st	○			(○)				(○)			○	○	3.296	3.520
	2nd	○			(○)		(○)	○		○	○		○	1.958	2.042
	3rd	○		○	(○)	(○)		Δ		○			○	1.348	1.400
	4th	○	○	Δ	(○)			Δ					○	1.000	1.000
	5th	Δ	○	○		○		Δ						0.725	0.716
	6th	Δ	○			Δ	○	Δ						0.582	0.586

❖ REFERENCE ❖

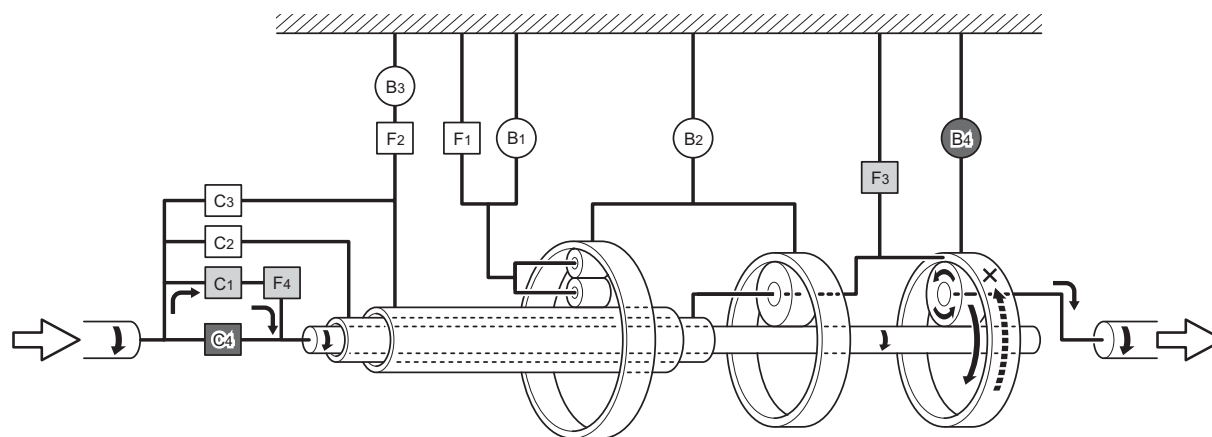
○ : Operation

(○) : During engine braking

Δ : Operate but is not related to power transmission

A761E/A760E Gear Train Structure

1st Gear(D or S-1↔S-6 Position)



□ : Operation

■ : Operation during engine braking

A4270368P

Operating Conditions of Clutches and Brakes

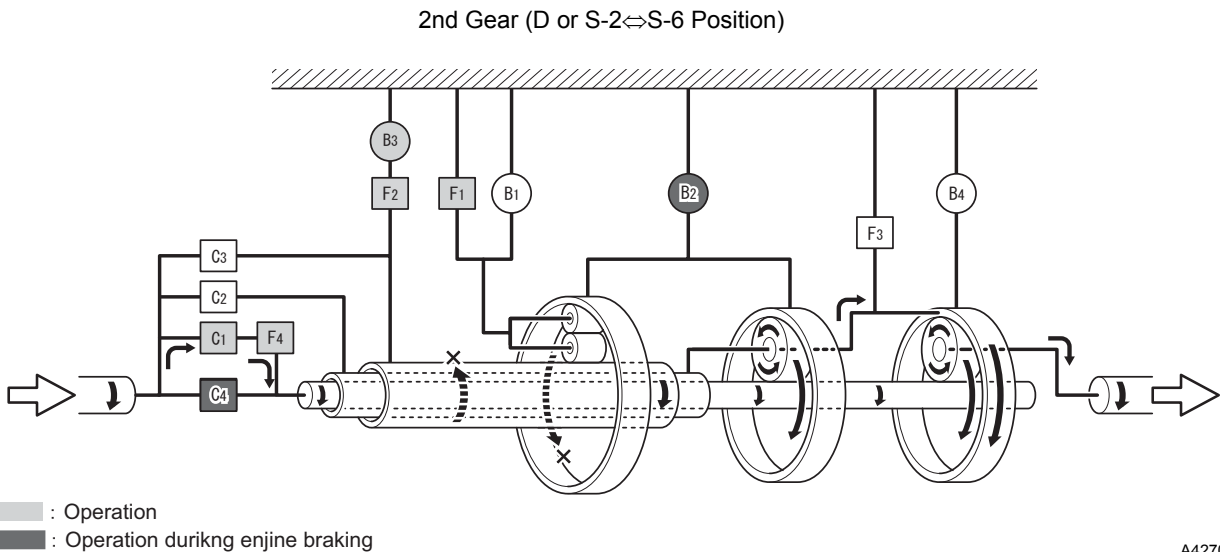
		C1	C2	C3	C4	B1	B2	B3	B4	F1	F2	F3	F4	Gear Ratio	
														(A761E)	(A760E)
1st Gear		○			(○)				(○)			○	○	3.296	3.520

❖REFERENCE❖

○:Operation

(○):During engine braking

Δ :Operate but is not related to power transmission



A4270327P

Operating Conditions of Clutches and Brakes

	C1	C2	C3	C4	B1	B2	B3	B4	F1	F2	F3	F4	Gear Ratio	
													(A761E)	(A760E)
2nd Gear	○			(○)		(○)	○		○	○		○	1.958	2.042

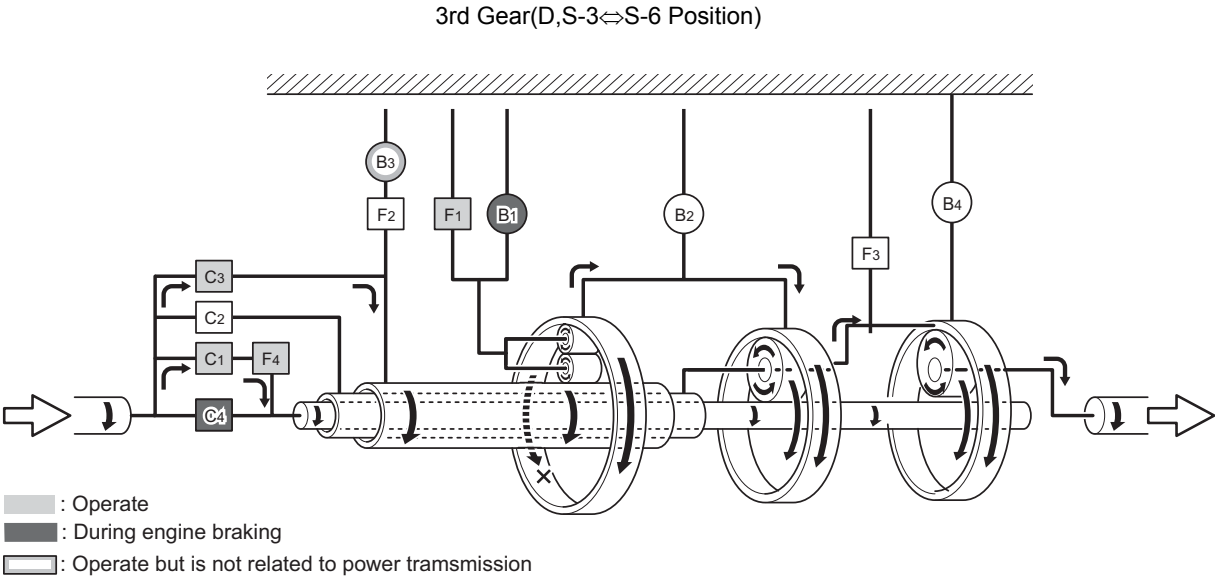
❖REFERENCE❖

○:Operation

(○):During engine braking

Δ :Operate but is not related to power transmission

TM



A4270369P

Operating Conditions of Clutches and Brakes

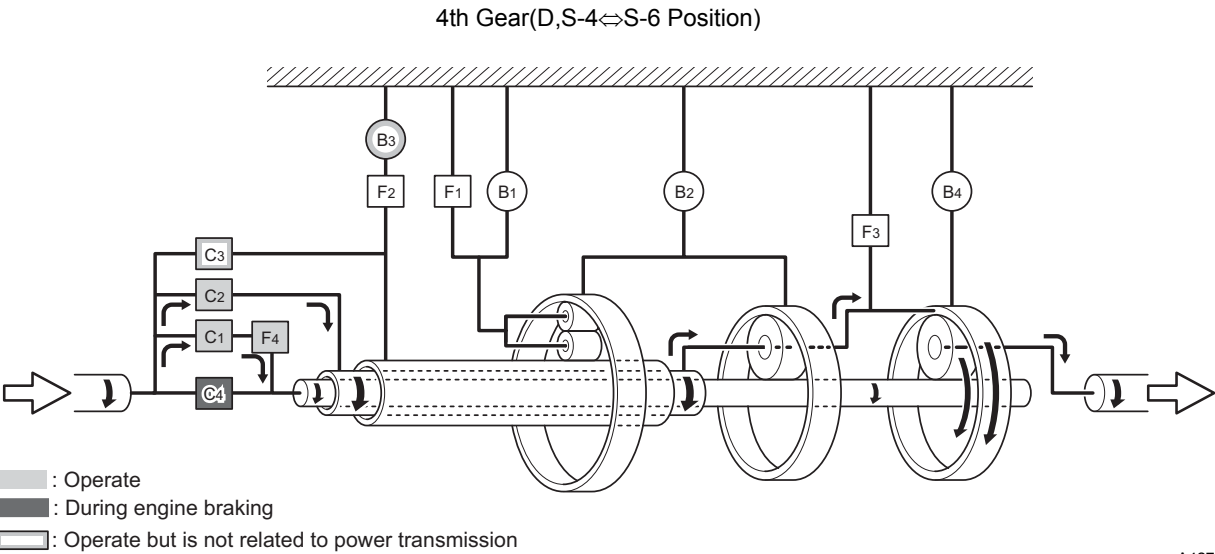
	C1	C2	C3	C4	B1	B2	B3	B4	F1	F2	F3	F4	Gear Ratio	
													(A761E)	(A760E)
3rd Gear	○		○	(○)	(○)		Δ		○			○	1.348	1.400

❖REFERENCE❖

○ :Operation

(○):During engine braking

Δ :Operate but is not related to power transmission



A4270370P

Operating Conditions of Clutches and Brakes

	C1	C2	C3	C4	B1	B2	B3	B4	F1	F2	F3	F4	Gear Ratio	
													(A761E)	(A760E)
4th Gear	○	○	Δ	(○)			Δ					○	1.000	1.000

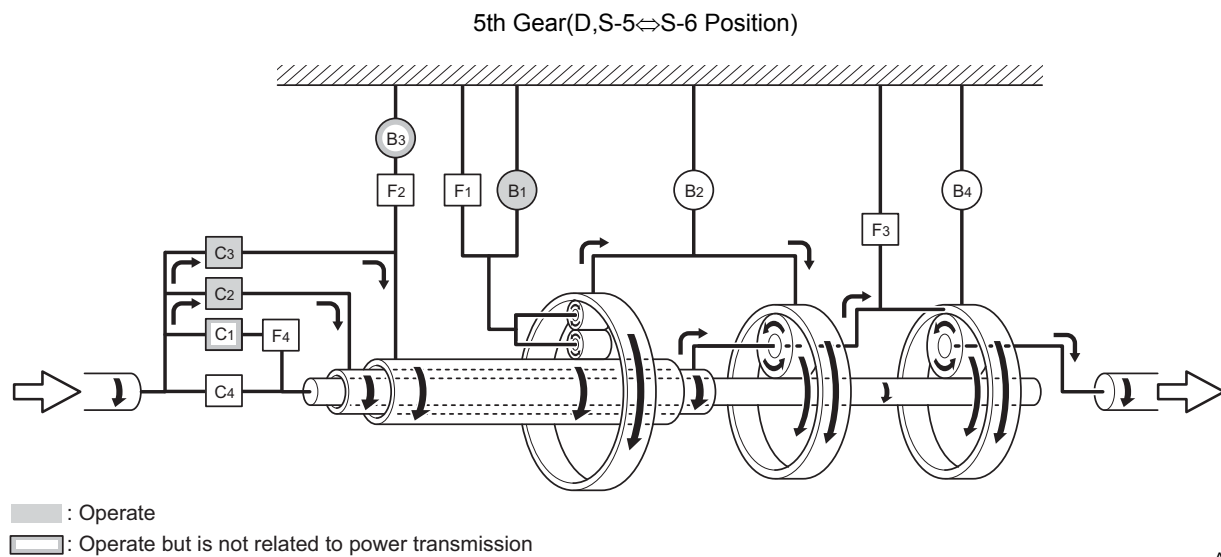
❖REFERENCE❖

○:Operation

(○):During engine braking

Δ :Operate but is not related to power transmission

TM



A4270371P

Operating Conditions of Clutches and Brakes

	C1	C2	C3	C4	B1	B2	B3	B4	F1	F2	F3	F4	Gear Ratio	
													(A761E)	(A760E)
5th Gear	Δ	○	○		○		Δ						0.725	0.716

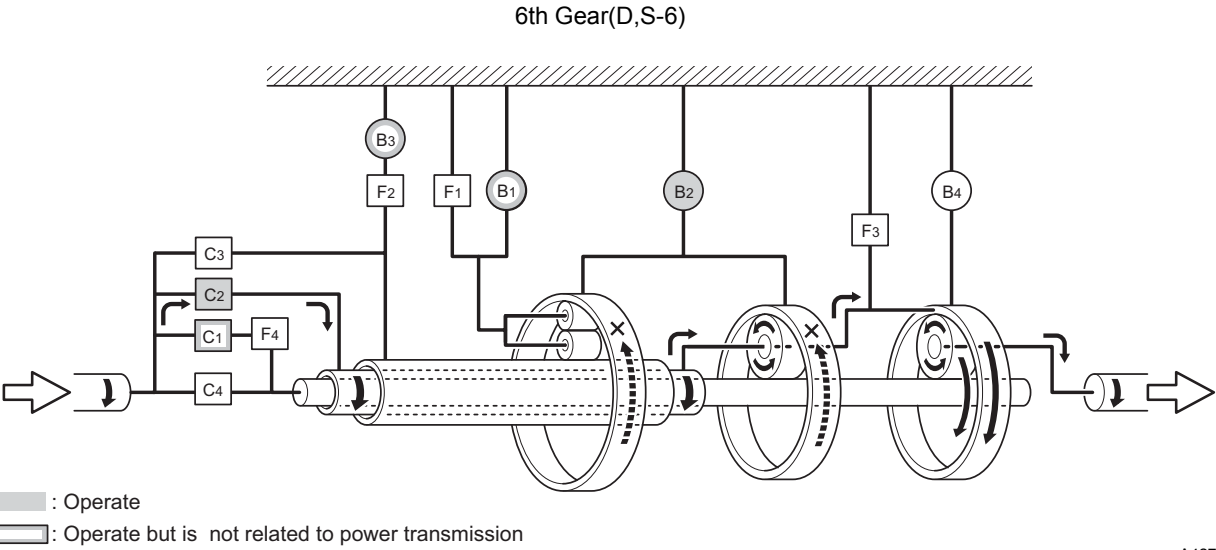
❖REFERENCE❖

○:Operation

(○):During engine braking

Δ :Operate but is not related to power transmission

TM



A4270372P

Operating Conditions of Clutches and Brakes

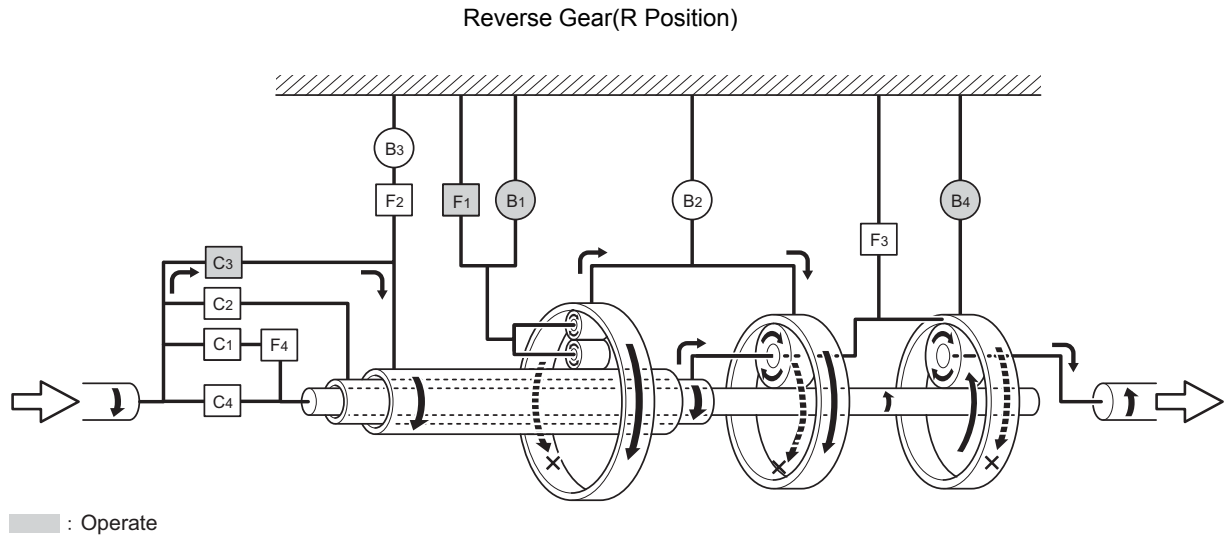
	C1	C2	C3	C4	B1	B2	B3	B4	F1	F2	F3	F4	Gear Ratio	
													(A761E)	(A760E)
6th Gear	Δ	○			Δ	○	Δ						0.582	0.586

❖REFERENCE❖

○ :Operation

(○):During engine braking

Δ :Operate but is not related to power transmission



A4270337P

Operating Conditions of Clutches and Brakes

	C1	C2	C3	C4	B1	B2	B3	B4	F1	F2	F3	F4	Gear Ratio	
													(A761E)	(A760E)
Reverse			○		(○)			○	○				2.951	3.224

❖REFERENCE❖

○:Operation

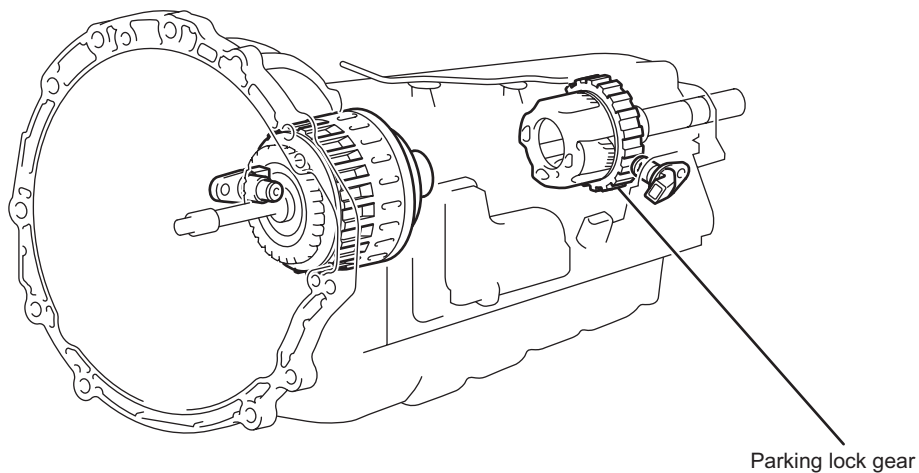
(○):During engine braking

△ :Operate but is not related to power transmission

TM

Parking Lock Mechanism

- A parking lock gear is provided in the rear planetary gear carrier area. A parking lock pawl meshes with the parking lock gear, thus locking the rotational movement of the output shaft.



A4270339P