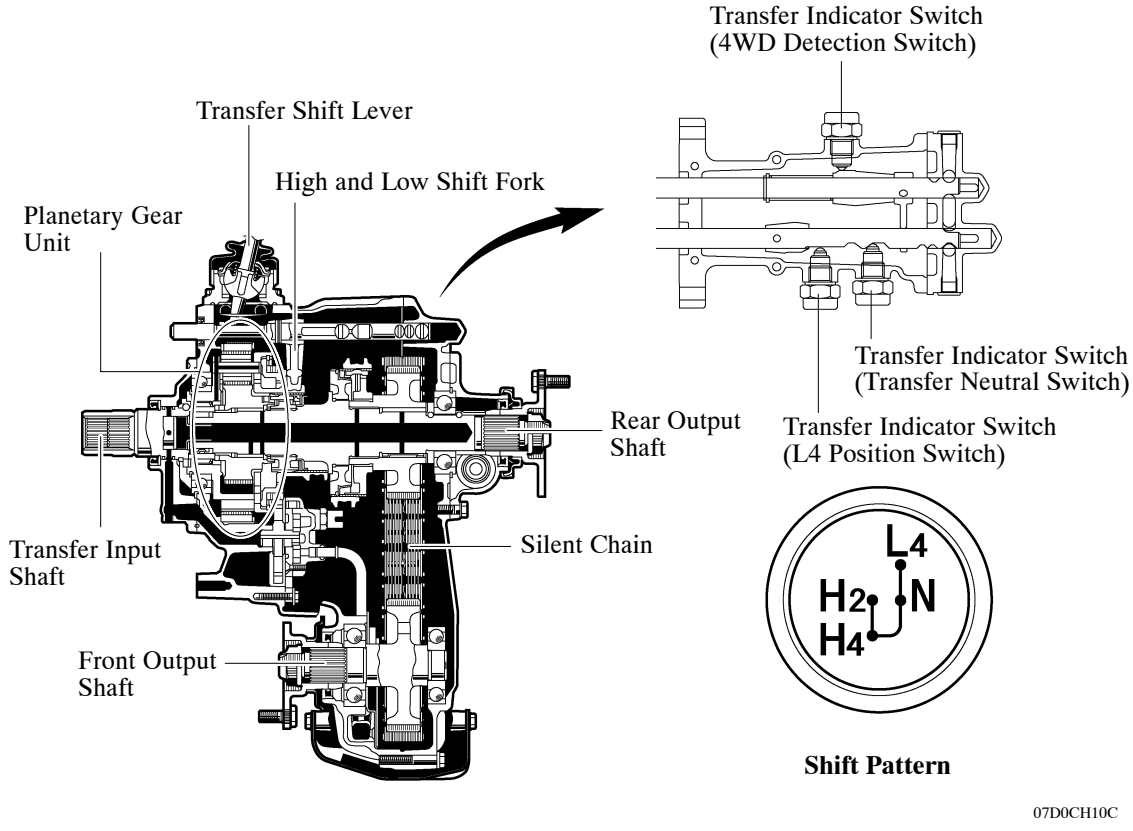
■VF2A TRANSFER

1. General

The VF2A transfer is a part-time 2-speed transfer case. In this transfer, a planetary gear unit is used as a reduction mechanism and a silent chain is used to quietly transfer power to the front output shaft.

- When shifting from H4 to L4, the transfer shift lever operates the high and low shift fork.



▶ Specification ◀

Type		VF2A
Drive Type		Part-time
Gear Ratio	H2	1.000
	H4	1.000
	L4	2.566
Reduction Gear Type		Single Pinion Planetary
Oil Capacity	Liters (US qts, Imp.qts)	1.0 (1.1, 0.9)
Oil Viscosity		SAE 75W-90
Oil Grade		API GL-3
Weight (Reference)*	kg (lb)	33.7 (74.3)

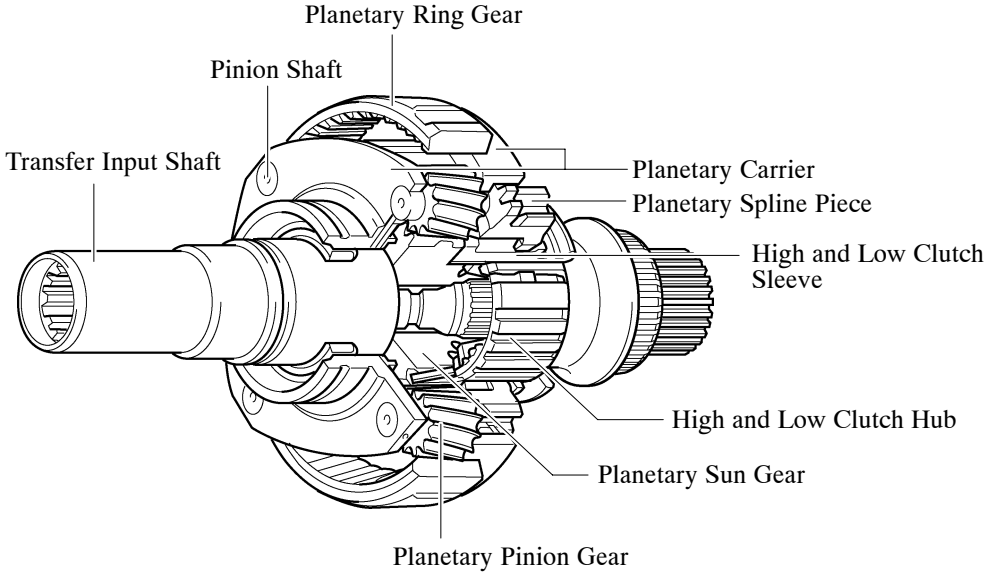
*: The figure shown is the weight of the part including the oil.

2. Planetary Gear Unit

General

The planetary gear unit consists of the planetary sun gear, 4 planetary pinion gears, and planetary carrier.

- The planetary sun gear is integrated with the transfer input shaft.
- 4 planetary pinion gears are fitted to the planetary carrier. Each pinion gear shaft is fixed to the planetary carrier. A planetary spline piece is fitted to the rear of the planetary carrier. When the planetary carrier is to be connected to the output shaft, the power is transferred after engaging the splines on the spline piece with the splines on the high and low clutch sleeve. The high and low clutch sleeve is installed rearward of the transfer input shaft on the high and low clutch hub that is splined to the output shaft.
- The planetary ring gear is fixed to the transfer case and its internal teeth mesh with the planetary pinion gears.

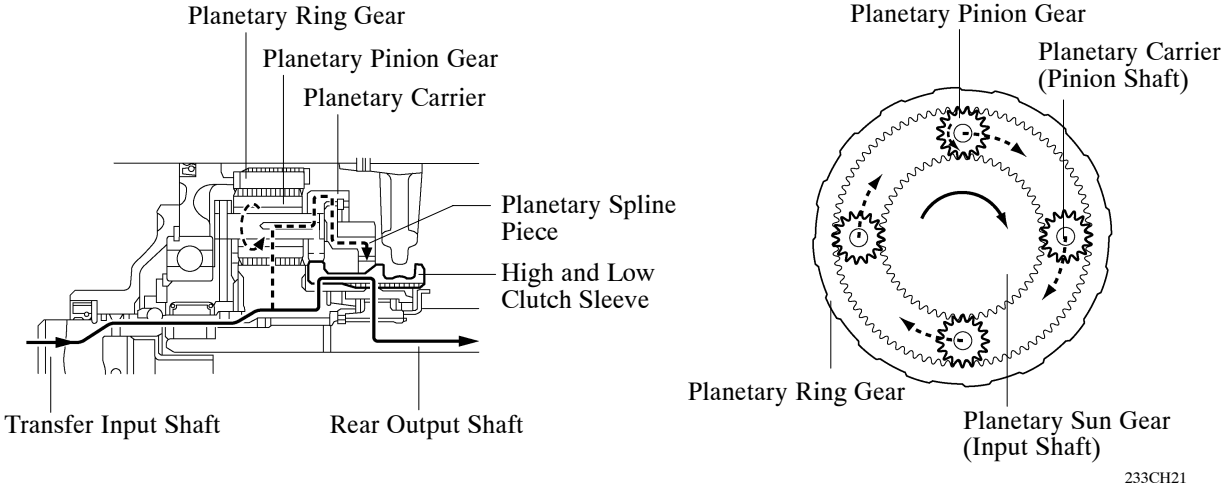


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H2/H4 (or H/HL for VF4B) Position

In the H2/H4 (or H/HL for VF4B) position, the input shaft is directly connected to the output shaft via the splines at the rear of the transfer input shaft which make this connection via the movable high and low clutch sleeve.

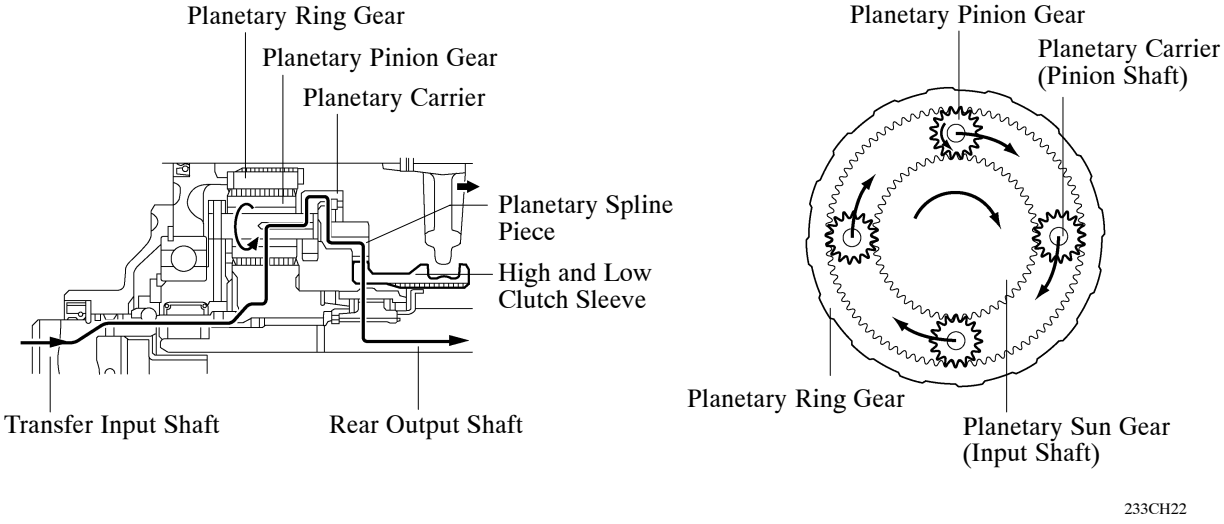
The high and low clutch sleeve is constantly meshed with the rear output shaft via the high and low clutch hub. Thus, the rotation of the input shaft is transmitted to the high and low clutch sleeve, to the high and low clutch hub, then to the rear output shaft.



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L4 (or LL for VF4B) Position

In the L4 (or LL for VF4B) position, the external teeth of the high and low clutch sleeve are meshed with the planetary carrier via the spline piece.
Thus, the rotation of the input shaft is transmitted from the planetary sun gear, to the planetary pinion gears, to the planetary pinion gear shafts, to the planetary carrier, to the planetary spline piece, to the high and low clutch sleeve, through the high and low clutch hub, to the rear output shaft.



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