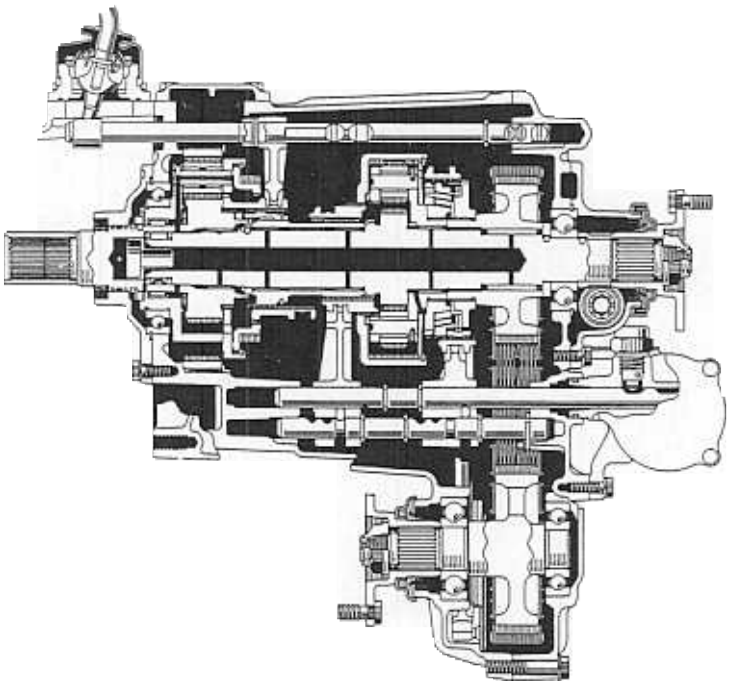
# TRANSFER (4WD Models)

## ■DESCRIPTION

- As in the '01 4Runner, the VF3AM transfer has been adopted on 4WD models.
- The multi-mode 4WD system that is adopted an one-touch 4WD select switch enables the driver to make a 2WD – 4WD selection.



196CH41

▶ **Specifications** ◀

| Item | | VF3AM |
|---|---|---|
| Drive System | | Multi-Mode 4WD (Part-Time and Full-Time) |
| Gear Ratio | H2 and H4 | 1.000 |
| | L4 | 2.566 |
| Center Differential Gear Type | | Double Pinion Planetary Gear |
| Oil Capacity liters (US qts, Imp. qts) | | 1.2 (1.3, 1.1) |
| Oil Viscosity | | SAE 75W-90 |
| Oil Grade | | API GL-4 or GL-5 |

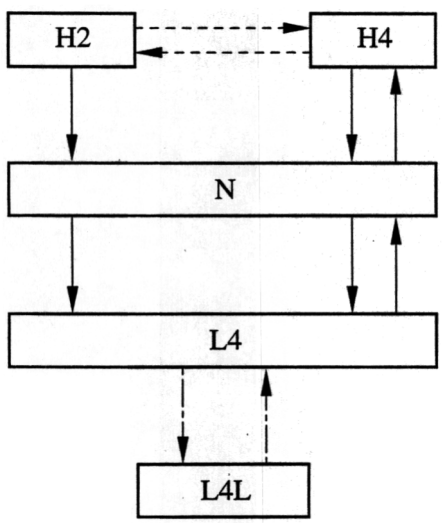
## ■VF3AM TRANSFER

### 1. General

This transfer is a multi-mode 4WD transfer that offers the advantages of a part-time 4WD that switches between 4WD and 2WD mode as necessary, and of a full-time 4WD that excels in driving performance.

### 2. Driving Mode

The switching between the ranges by operating the switch and the lever is performed as described below.



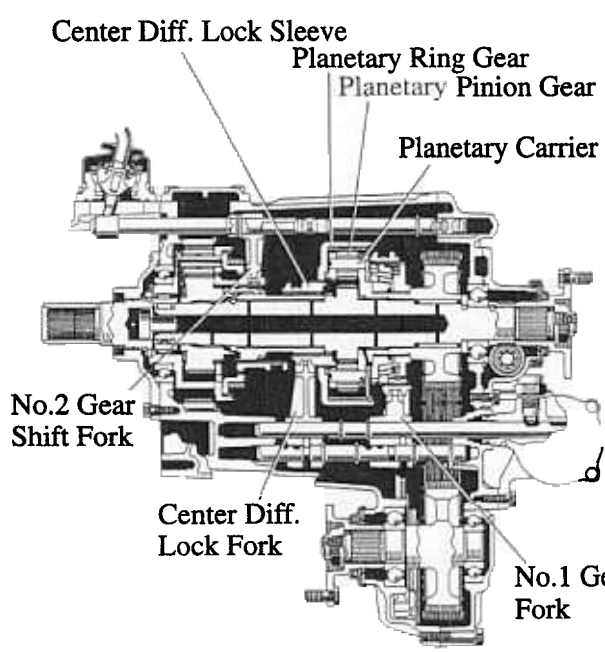

196CH02

**——► : Operating the Transfer Shift Lever**
**- - -► : Operating the 4WD Select Switch**
**—·—► : Operating the A/T Shift Lever (Detecting "L" Position)**

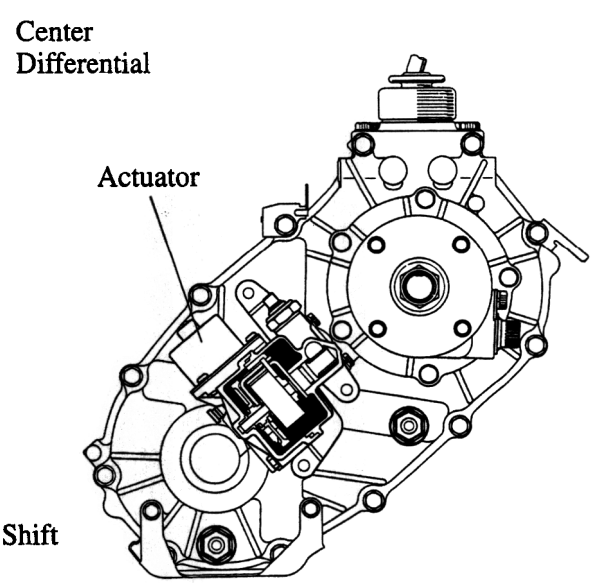
CH

### 3. Construction

The construction of the transfer is shown below.




196CH41

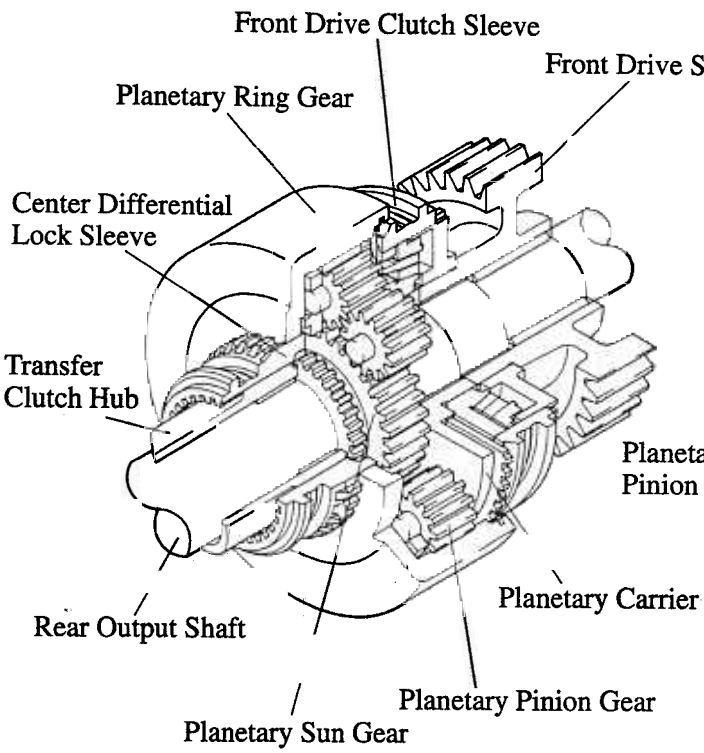



196CH03

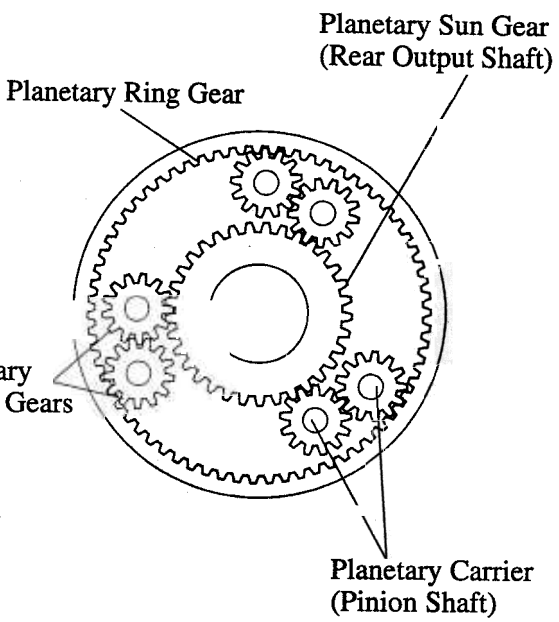
## 4. Center Differential

### Construction

The double pinion planetary gear type center differential consists of a planetary ring gear, a planetary sun gear, a planetary carrier and 6 planetary pinion gears.
Three sets of planetary pinion gears, which are meshed in pairs, are enclosed in the planetary carrier.
One of the paired planetary pinion gears (the outer gear) is meshed with the planetary ring gear and the other side (the inner gear) is meshed with the planetary sun gear of the rear output shaft.
The drive force from the transfer clutch hub is transmitted to the planetary ring gear via the center differential lock sleeve.
The planetary carrier transmits the drive force to the front wheels and the planetary sun gear transmits the drive force to the rear wheels.
In addition, a center differential lock mechanism is provided in the front of the center differential.




160RN13




160RN14