1. General

The manual transmission is of a full-time all-wheel-drive design integrating a transmission assembly, front differential, and transfer gear assembly with center differential into a single unit. The transmission creates five forward speeds and one reverse using the corresponding gears all provided with inertia lock-key type synchronizers.

The transmission and front differential are housed in an aluminum case which is split into right and left halves and constitutes also a clutch housing. Located at the rear and joined each other are the transfer case and extension case which house the transfer gears and center differential as well as part of the transmission assembly.
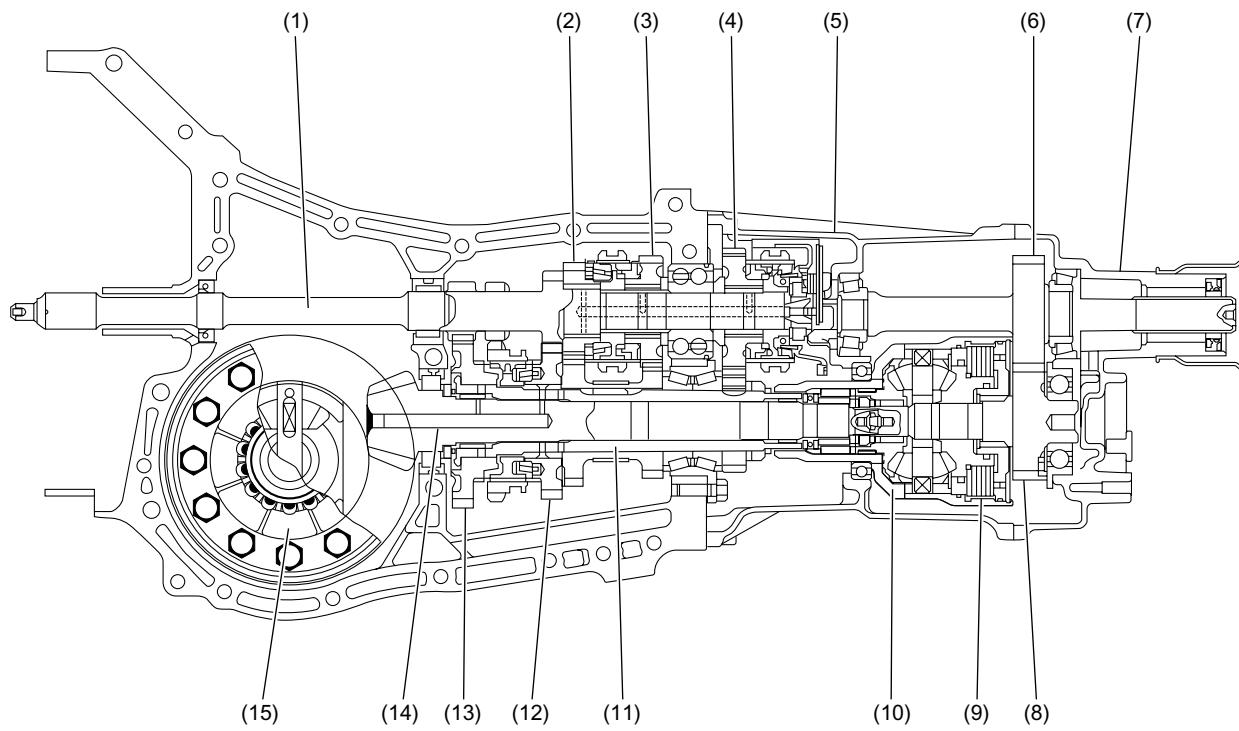
The major features of the transmission are as follows:

● The forward speed gears are helical gears featuring high tooth face strength, large tooth contact areas, and quiet operation.

● Reversing rotation is achieved by making a slidable reverse idler gear engage with both the reverse drive gear on the main shaft and the reverse driven gear integral with the 1st-2nd synchronizer hub on the drive pinion shaft.

The center differential compensates for the difference in front and rear axle speeds. It consists of a bevel gear set and a viscous coupling located at its rear end which are housed in a single case. The center differential, together with a pair of transfer gears, transmits the power from the transmission to the drive pinion shaft (front wheel drive shaft) and the rear drive shaft. The viscous coupling functions as a differential-action-limiting element.

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(1) Main shaft	(7) Extension case	(13) 1st driven gear
(2) 3rd drive gear	(8) Transfer drive gear	(14) Drive pinion shaft
(3) 4th drive gear	(9) Viscous coupling	(15) Front differential assembly
(4) 5th drive gear	(10) Center differential assembly	
(5) Transfer Case	(11) Driven shaft (countershaft)	
(6) Transfer driven gear	(12) 2nd driven gear	