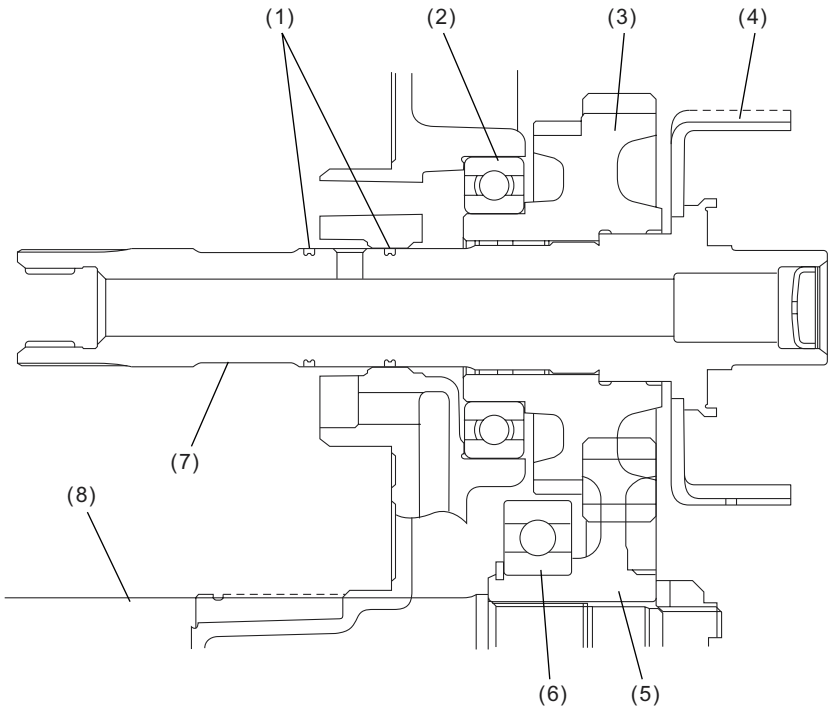
7. Reduction Gears

A: MPT MODELS

Engine torque is transmitted from the rear planetary carrier to the reduction drive shaft and the reduction drive gear. The torque is then transmitted to the front final gears through the reduction driven gear and drive pinion. The torque is also transmitted to the rear wheels from the transfer clutch hub (welded to the side of the reduction drive gear) through the transfer clutch and the following path:
rear drive shaft → propeller shaft → rear differential.

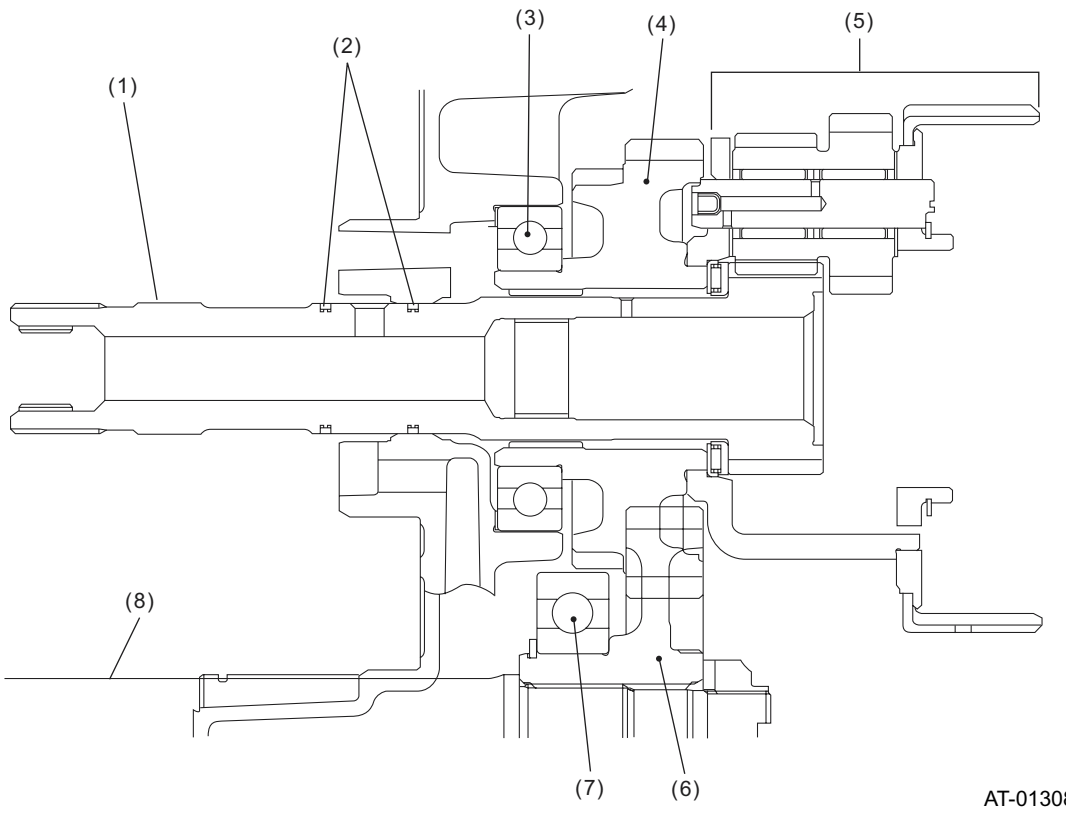


AT-01015

(1) Seal ring
(2) Ball bearing
(3) Reduction drive gear
(4) Transfer clutch hub
(5) Reduction driven gear
(6) Ball bearing
(7) Reduction drive shaft
(8) Drive pinion shaft

B: VTD MODELS

Engine power is transmitted from the rear planetary carrier to the intermediate shaft and the center differential assembly. The input force to the center differential is transmitted from the front sun gear, which is integrated with the intermediate shaft. The center differential front wheel side output is transmitted from the center differential carrier, which is integrated with the reduction drive gear. The rear wheel side output is transmitted from the rear sun gear in the center differential, which is integrated with the rear drive shaft. Power transmission to the front wheels is then transmitted to the final gear through the reduction driven gear and drive pinion. Power to the rear wheels is transmitted sequentially from the rear drive shaft to the propeller shaft, rear differential and rear wheel.



(1) Intermediate shaft
(2) Seal ring
(3) Ball bearing
(4) Reduction drive gear
(5) Center differential assembly
(6) Reduction driven gear
(7) Ball bearing
(8) Drive pinion shaft