31. Reduction Drive Gear

A: REMOVAL
1) Remove the transmission assembly from the vehicle. <Ref. to 4AT-36, REMOVAL, Automatic Transmission Assembly.>
2) Remove rear vehicle speed sensor, and separate the transmission case and extension case. <Ref. to 4AT-75, REMOVAL, Extension Case.>
3) Remove the reduction driven gear. <Ref. to 4AT-87, REMOVAL, Reduction Driven Gear.>
4) Using ST, extract the reduction drive gear.
   ST1 499737000 PULLER
   ST2 899524100 PULLER SET

B: INSTALLATION
1) Install the reduction drive gear assembly.
   NOTE:
   Insert it fully into position until the bearing shoulder bottoms.
2) Install the reduction driven gear. <Ref. to 4AT-87, INSTALLATION, Reduction Driven Gear.>
3) Combine the transmission case with the extension case, and install rear vehicle speed sensor. <Ref. to 4AT-75, INSTALLATION, Extension Case.>
4) Install the transmission assembly to the vehicle. <Ref. to 4AT-38, INSTALLATION, Automatic Transmission Assembly.>

C: DISASSEMBLY
1) Take out the seal rings.
2) Using ST, remove the ball bearing.
   ST 498077600 REMOVER
3) Using a press, remove the reduction drive gear.
**D: ASSEMBLY**

1) Press-fit the reduction drive gear to the shaft.
2) Press-fit a new ball bearing to the reduction drive gear.
3) Apply vaseline to the outer surface of seal ring and shaft groove.
4) Attach a new seal rings.

![Diagram of reduction drive gear with labels (A) Seal rings and (B) Reduction drive shaft]

**E: INSPECTION**

- Rotate the bearing by hand, make sure it rotates smoothly.
- Make sure that each component is free of harmful gouges, cuts, or dust.
- Measure the extension end play and adjust it to within specifications.<Ref. to 4AT-82, ADJUSTMENT, Transfer Clutch.>