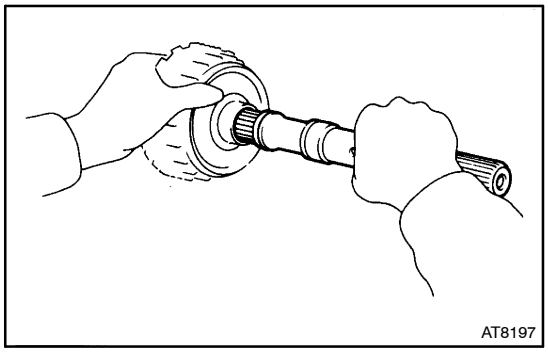
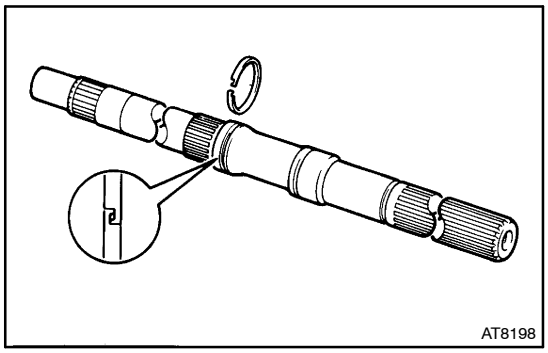
400X8–01

OVERHAUL



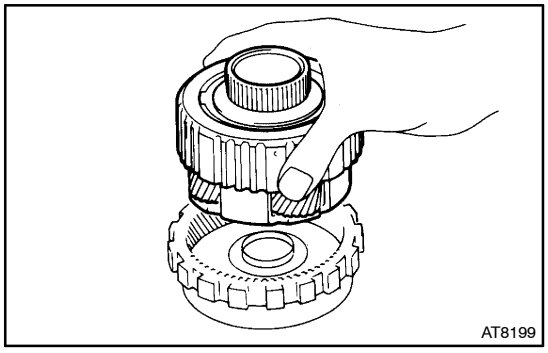
1. REMOVE REAR PLANETARY GEAR ASSY

(a) Remove the output shaft from the rear planetary gear.



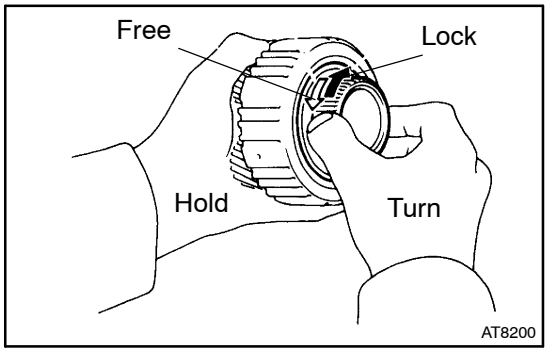
2. REMOVE PLANETARY OUTPUT SHAFT OIL SEAL RING

(a) Remove the oil seal ring from the output shaft.



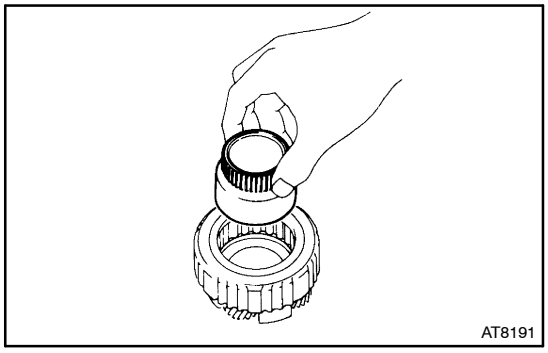
3. REMOVE REAR PLANETARY RING GEAR

(a) Remove the rear planetary gear from the rear planetary ring gear.



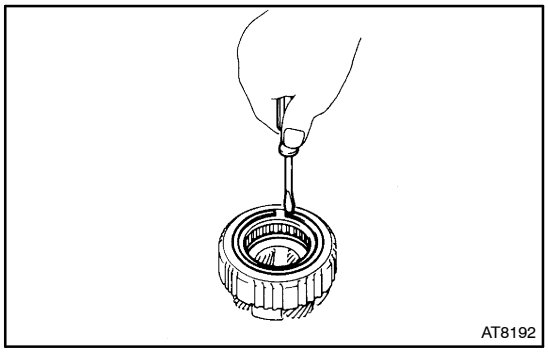
4. INSPECT 1 WAY CLUTCH NO.2

(a) Hold the planetary gear and turn the one–way clutch inner race. Check that the one–way clutch inner race can be turned freely counterclockwise and locked clockwise.

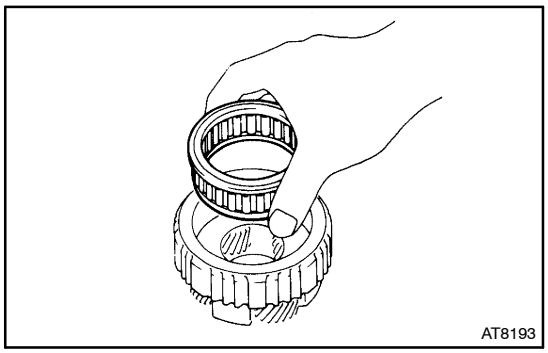

AT8191

5. REMOVE 1 WAY CLUTCH NO.2

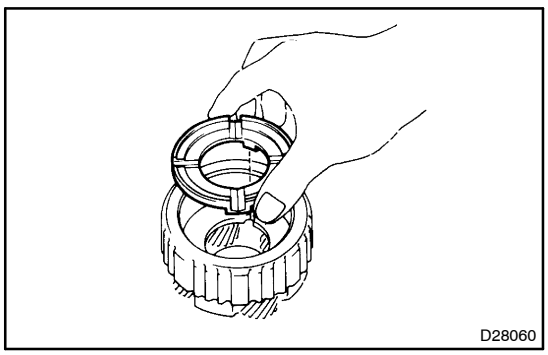
(a) Remove the one–way clutch inner race from the rear planetary gear.


AT8192

(b) Using a screwdriver, remove the snap ring.

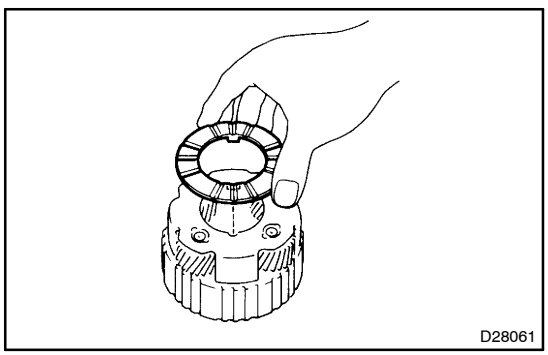

AT8193

(c) Remove the No.2 one–way clutch with the retainers from the rear planetary gear.


D28060

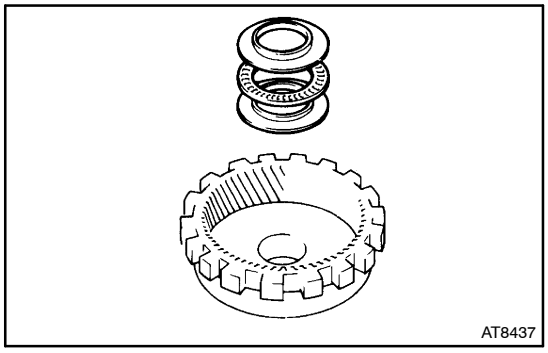
6. REMOVE PLANETARY CARRIER THRUST WASHER NO.2

(a) Remove the thrust washer No.2 from the rear planetary gear.


D28061

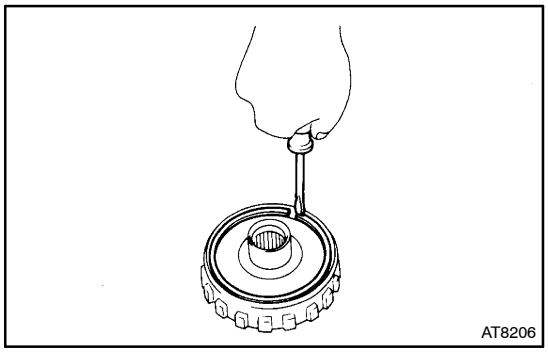
7. REMOVE PLANETARY CARRIER THRUST WASHER NO.1

(a) Remove the thrust washer No.1 from the rear planetary gear.



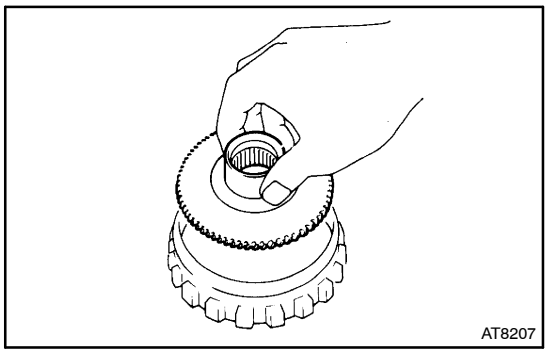
8. REMOVE REAR PLANETARY FLANGE THRUST NEEDLE ROLLER BEARING

(a) Remove the 2races and the bearing from the rear planetary ring gear.

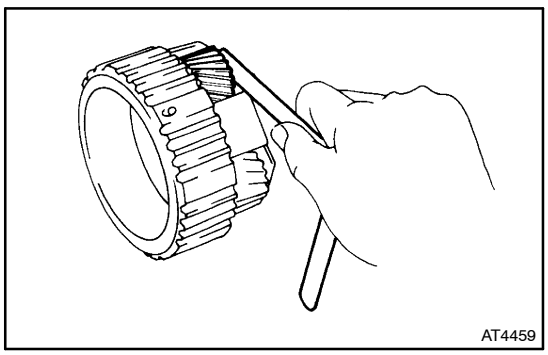


9. REMOVE REAR PLANETARY RING GEAR FLANGE

(a) Using a screwdriver, remove the snap ring.



(b) Remove the ring gear flange.

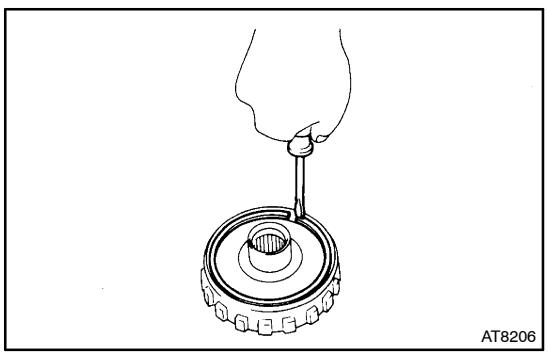


10. INSPECT PLANETARY PINION GEAR THRUST CLEARANCE

(a) Using a feeler gauge, measure the planetary pinion gear thrust clearance.

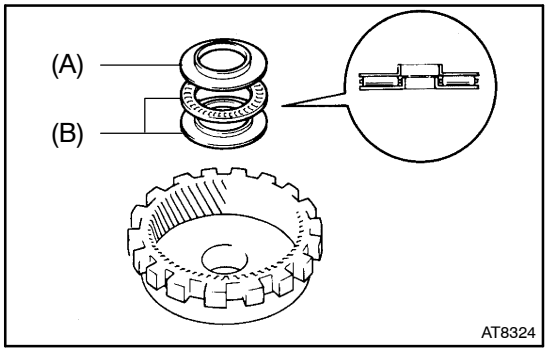
Standard clearance:
0.20 – 0.60 mm (0.0079 – 0.0236 in.)
Maximum clearance: 0.65 mm (0.0256 in.)

If the clearance is greater than the maximum, replace the planetary gear assembly.



11. INSTALL REAR PLANETARY RING GEAR FLANGE

(a) Install the ring gear flange.
(b) Using a screwdriver, install the snap ring.

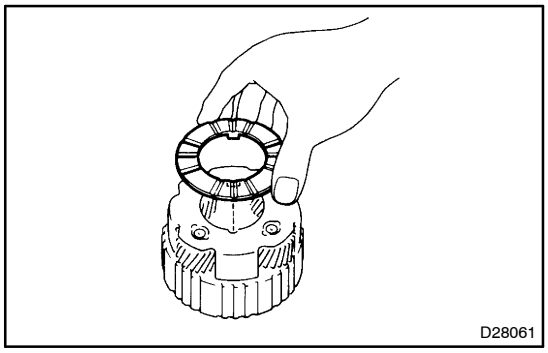


12. INSTALL REAR PLANETARY FLANGE THRUST NEEDLE ROLLER BEARING

(a) Coat the races and the bearing with petroleum jelly, and install them onto the rear planetary ring gear.

Races and bearing diameter:

	Inside	Out side
Race (A)	28.5 mm (1.122 in.)	44.2 mm (1.740 in.)
Assembled Bearing & Race (B)	27.7 mm (1.091 in.)	44.2 mm (1.740 in.)



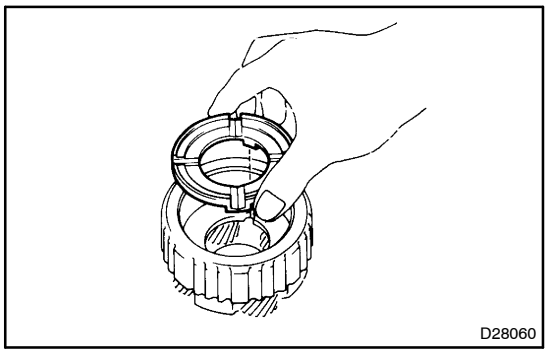
13. INSTALL PLANETARY CARRIER THRUST WASHER NO.1

(a) Coat the thrust washer with petroleum jelly.

(b) Install the thrust washer No.1 onto both sides of the rear planetary gear.

HINT:

Make sure that the lug shapes fit into the cutout portions of the rear planetary gear.



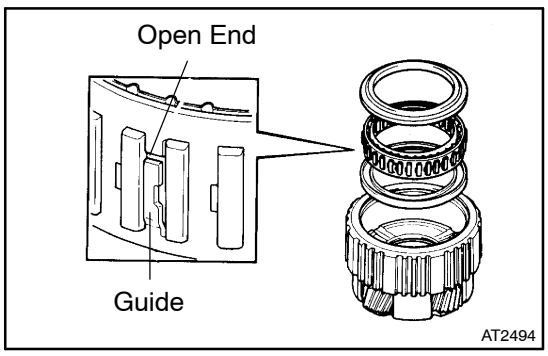
14. INSTALL PLANETARY CARRIER THRUST WASHER NO.2

(a) Coat the thrust washer with petroleum jelly.

(b) Install the thrust washer No.2 onto both sides of the rear planetary gear.

HINT:

Make sure that the lug shapes fit into the cutout portions of the rear planetary gear.

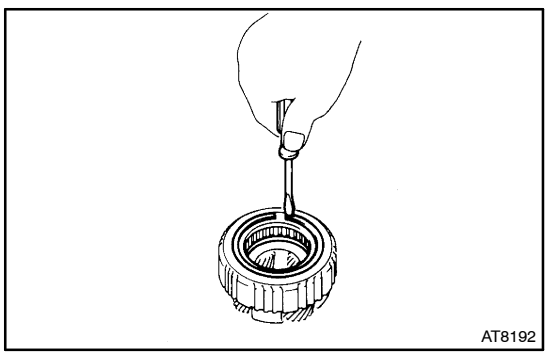


15. INSTALL 1 WAY CLUTCH NO.2

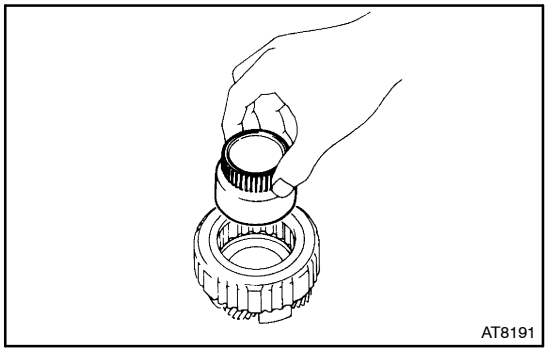
(a) Install the one–way clutch and 2 retainers into the rear planetary gear.

HINT:

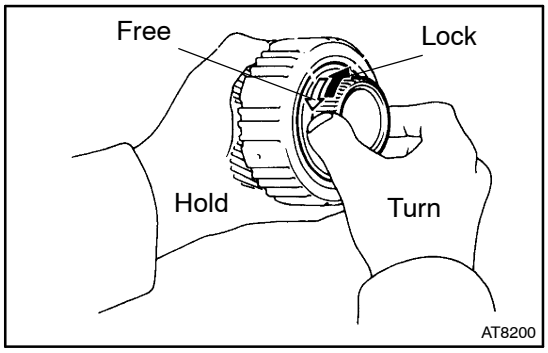
Make sure that the open ends of the guides on the one–way clutch are facing upward.



(b) Using a screwdriver, install the snap ring.

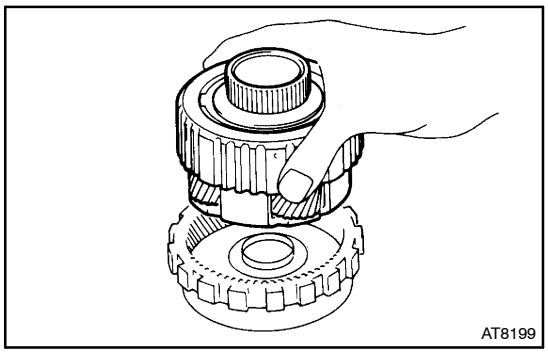


(c) While turning the one–way clutch inner racecounterclockwise, install the one–way clutch inner race to the rear planetary gear.



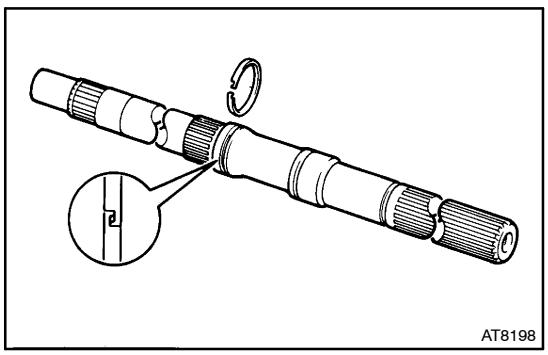
16. INSPECT 1 WAY CLUTCH NO.2

(a) Hold the planetary gear, and turn the one–way clutch inner race. Check that the one–way clutch inner race can be turned freely counterclockwise and locked clockwise.



17. INSTALL REAR PLANETARY RING GEAR

(a) Install the rear planetary gear onto the rear planetary ring gear.



18. INSTALL PLANETARY OUTPUT SHAFT OIL SEAL RING

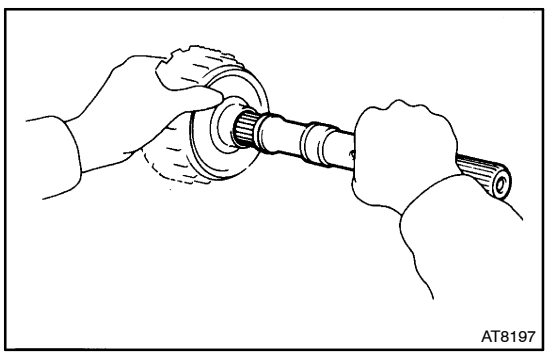
(a) Coat the oil seal ring with ATF, and install it to the output shaft.

NOTICE:

Do not over–spread the ring ends.

HINT:

After installing the oil seal ring, check that it rotates smoothly.



19. INSTALL REAR PLANETARY GEAR ASSY

(a) Install the output shaft into the rear planetary gear assembry.