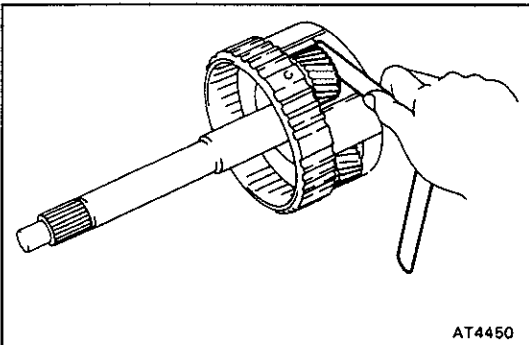


5. **CHECK OVERDRIVE PLANETARY GEAR BUSHINGS**
Using a dial indicator, measure the inside diameter of the planetary gear bushing.

Maximum inside diameter:

11.27 mm (0.4437 in.)

If the inside diameter is greater than the maximum, replace the planetary gear.



6. **MEASURE PLANETARY PINION GEAR THRUST CLEARANCE**

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

Standard clearance:

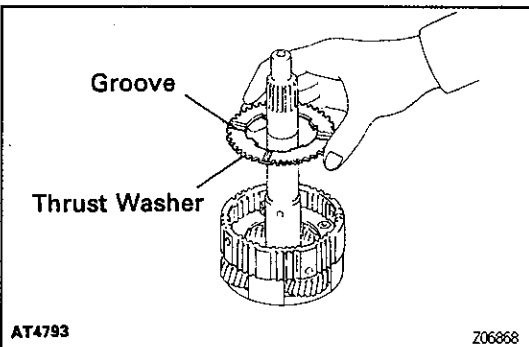
0.2–0.6 mm (0.008–0.024 in.)

Maximum clearance:

1.0 mm (0.039 in.)

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

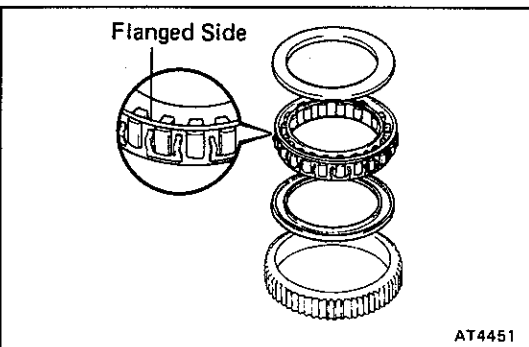
AT00R-03



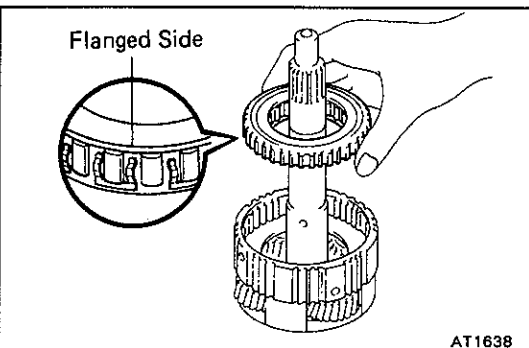
OVERDRIVE PLANETARY GEAR, OVERDRIVE DIRECT CLUTCH AND OVERDRIVE ONE-WAY CLUTCH ASSEMBLY

1. **INSTALL OVERDRIVE ONE-WAY CLUTCH**

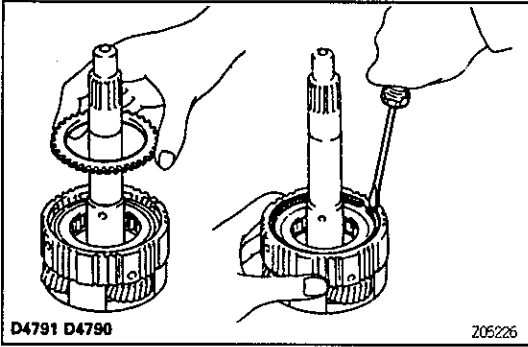
(a) Install the thrust washer to the overdrive planetary gear, the grooved side facing upward.



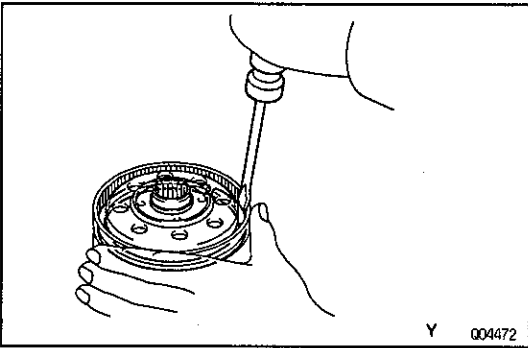
(b) Install the one-way clutch into the outer race the flanged side of the one-way clutch facing upward.



(c) Install the overdrive one-way clutch with the outer race to the overdrive planetary gear.

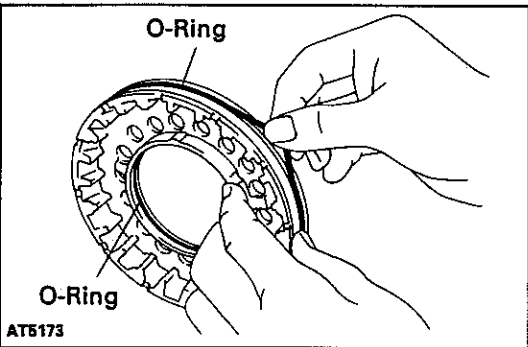


- (d) Install the retaining plate.
- (e) Using a screwdriver, install the snap ring.



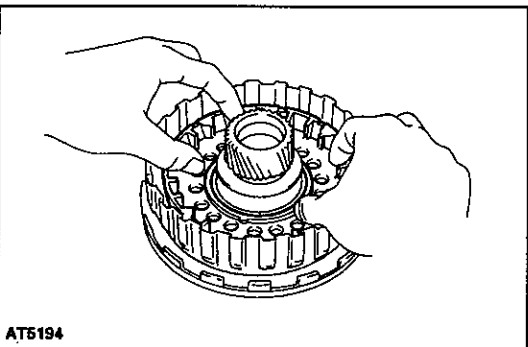
2. INSTALL RING GEAR FLANGE TO OVERDRIVE PLANETARY RING GEAR

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

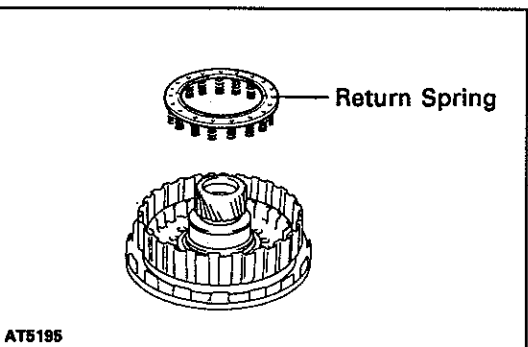


3. INSTALL OVERDRIVE DIRECT CLUTCH PISTON

- (a) Coat new O-rings with ATF and install them on the O/D direct clutch piston.

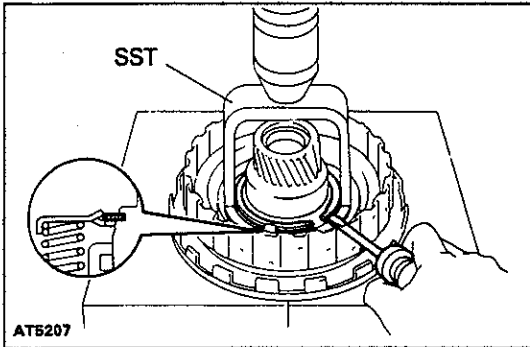


- (b) Being careful not to damage the O-rings, press the direct clutch piston into the clutch drum with both hands.

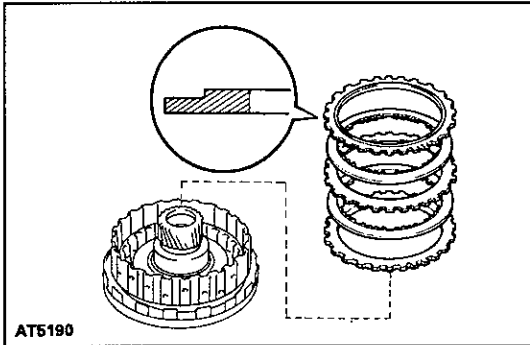


4. INSTALL PISTON RETURN SPRING

- (a) Install the piston return spring to the piston.

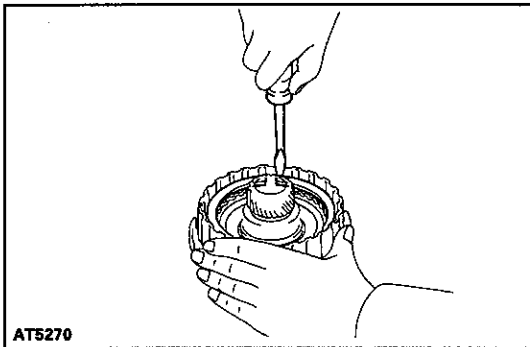


- (b) Place SST on the spring retainer, and compress the return spring with a shop press.
SST 09350-30020 (09350-07040)
- (c) Install the snap ring with SST. Be sure the end gap of the snap ring is not aligned with the spring retainer claw.
SST 09350-30020 (09350-07070)

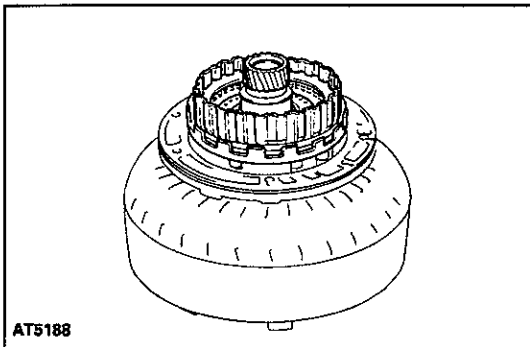


5. INSTALL PLATES, DISCS AND FLANGE

- (a) Install the plates and discs.
Install in order: P = Plate D = Disc
P-D-P-D
- (b) Install the flange, the flat end facing downward.

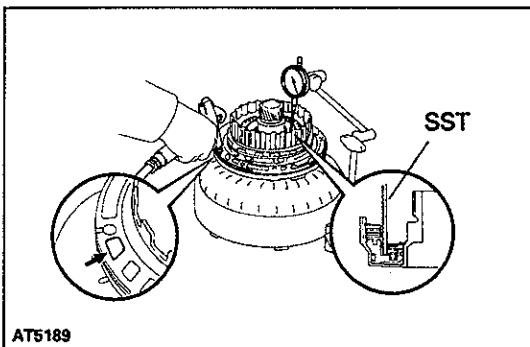


- (c) Using a screwdriver, install the snap ring.



6. CHECK PISTON STROKE OF OVERDRIVE DIRECT CLUTCH

- (a) Place the oil pump onto the torque converter, then place the O/D direct clutch assembly onto the oil pump.



- (b) Using SST and a dial indicator, measure the overdrive direct clutch piston stroke, applying and releasing the compressed air (392-785 kPa, 4-8 kgf/cm² or 57-114 psi), as shown.
SST 09350-30020 (09350-06120)
Piston stroke:
1.45-1.70 mm (0.057-0.067 in.)

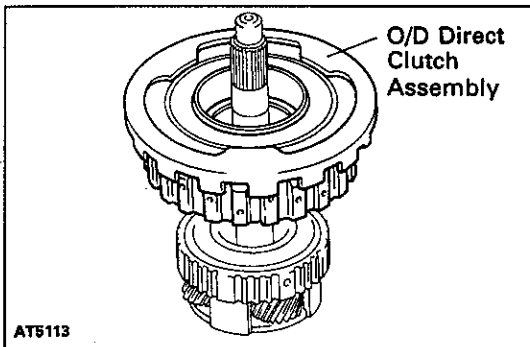
If the piston stroke is less than the limit, parts may have been assembled incorrectly, so check and reassemble again.

If the piston stroke is nonstandard, select another flange.

HINT: There are 6 different flange thicknesses.

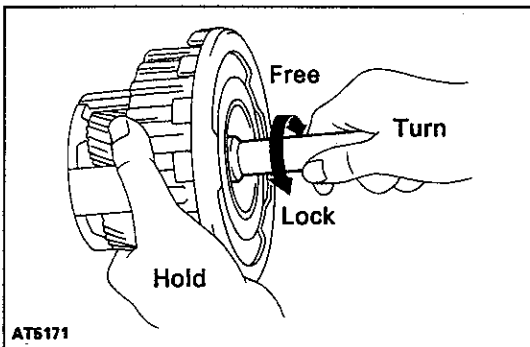
Flange Thickness:

No.	Thickness mm (in.)	No.	Thickness mm (in.)
16	3.6 (0.142)	19	3.3 (0.130)
17	3.5 (0.138)	20	3.2 (0.126)
18	3.4 (0.134)	21	3.1 (0.122)



7. INSTALL OVERDRIVE DIRECT CLUTCH ASSEMBLY

- (a) Align the flukes of the discs in the direct clutch.
- (b) Install the direct clutch assembly onto the O/D planetary gear.



8. CHECK OPERATION OF ONE-WAY CLUTCH

Hold the O/D direct clutch drum and turn the input shaft.

Check that the input shaft turns freely clockwise and locks counterclockwise.