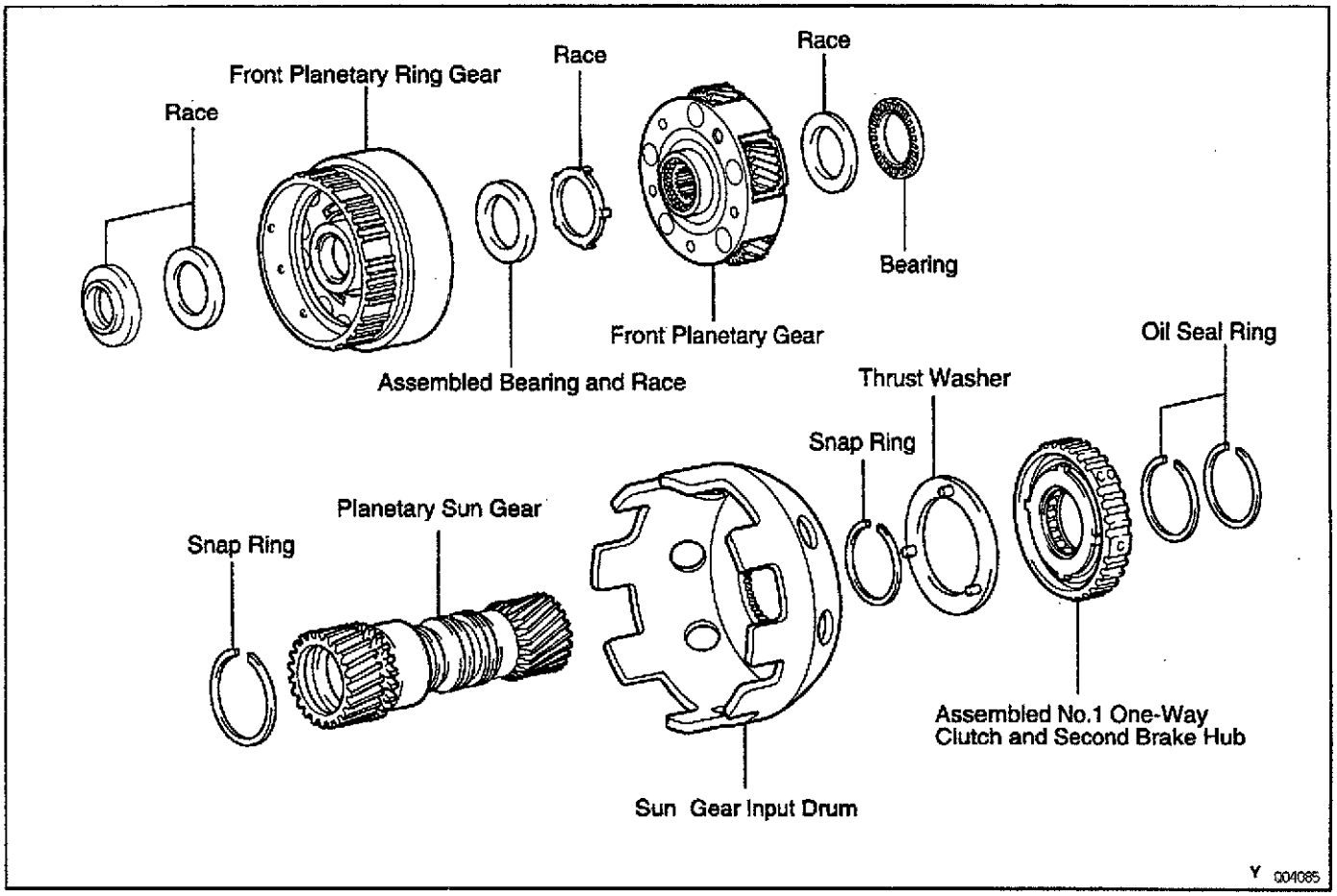
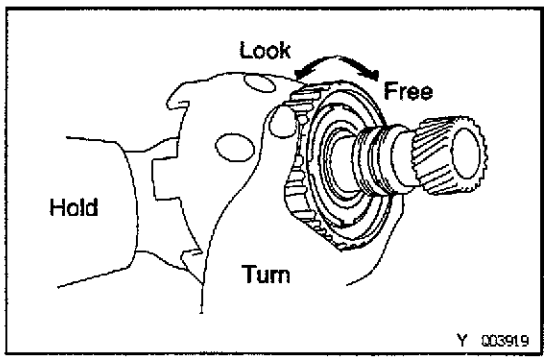
FRONT PLANETARY GEAR

COMPONENTS

AT0E4–02

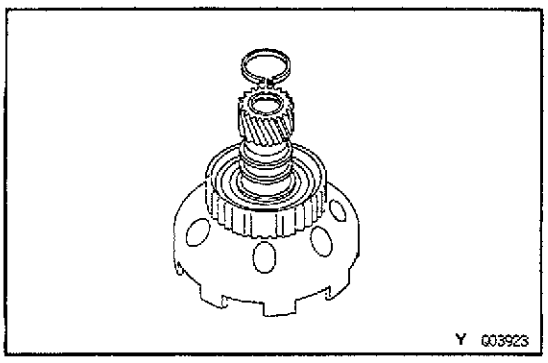




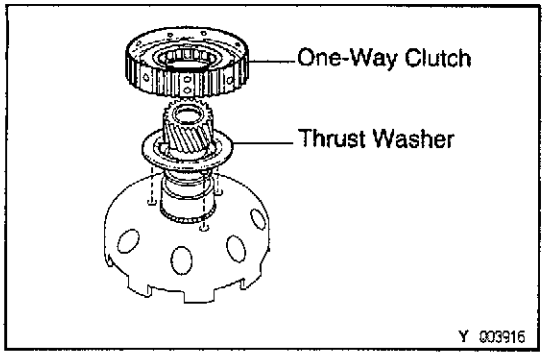
PLANETARY SUN GEAR AND NO.1 ONE–WAY CLUTCH DISASSEMBLY

AT0E5–02

1. **CHECK OPERATION OF NO.1 ONE–WAY CLUTCH**
   Hold the planetary sun gear and turn the second brake hub. Check that the second brake hub turns freely clockwise and locks counterclockwise.

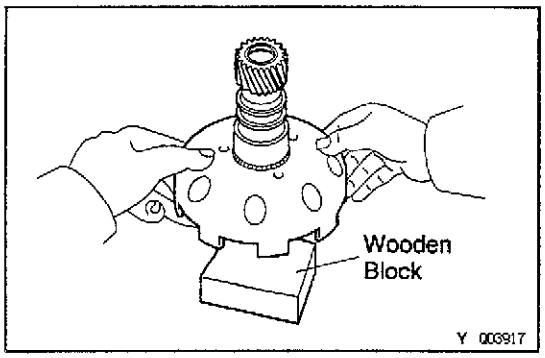


2. **REMOVE 2 OIL SEAL RINGS**



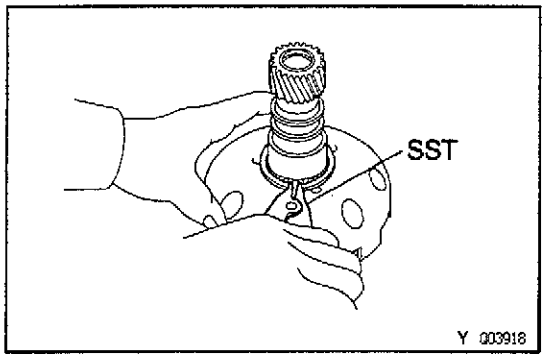
AT

3. REMOVE NO.1 ONE-WAY CLUTCH AND THRUST WASHER FROM SUN GEAR INPUT DRUM



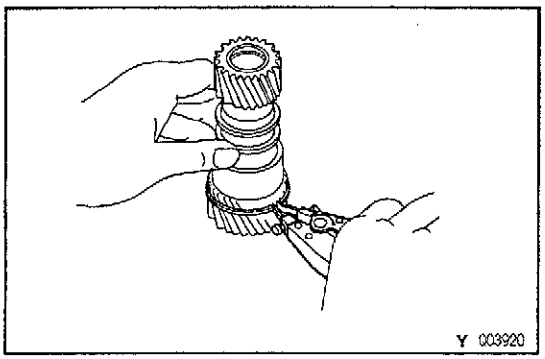
4. REMOVE SUN GEAR INPUT DRUM FROM PLANETARY SUN GEAR

(a) Use a wooden block, etc. as a work stand.



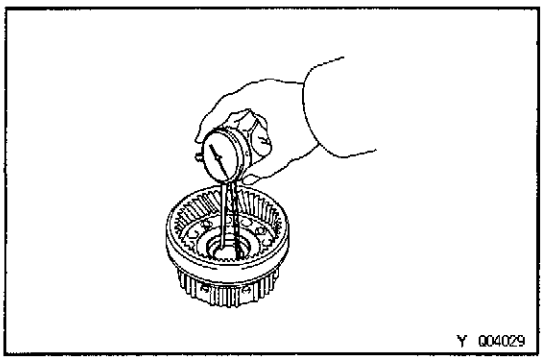
(b) Using SST, remove the snap ring.
SST 09350-30020 (09350-07070)

(c) Remove the sun gear input drum from the planetary sun gear.



5. REMOVE SNAP RING FROM PLANETARY SUN GEAR

Using a snap ring expander, remove the snap ring from the planetary sun gear.



FRONT PLANETARY GEAR INSPECTION

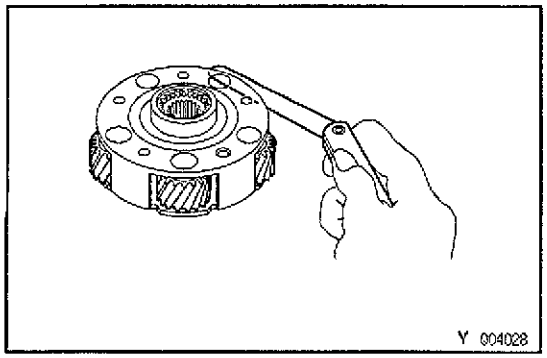
1. CHECK FRONT PLANETARY RING GEAR BUSHING

Using dial indicator, measure the inside diameter of the planetary ring gear bushing.

Maximum inside diameter:

24.08 mm (0.9480 in.)

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


Y 004028

2. MEASURE PLANETARY PINION GEAR THRUST CLEARANCE

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

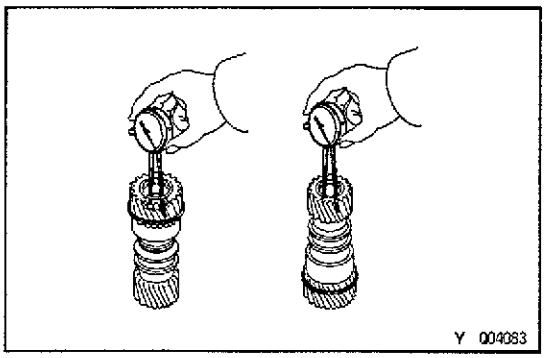
Standard clearance:

0.2−0.6 mm (0.008−0.0024 in.)

Maximum clearance:

1.0 mm (0.039 in.)

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


Y 004083

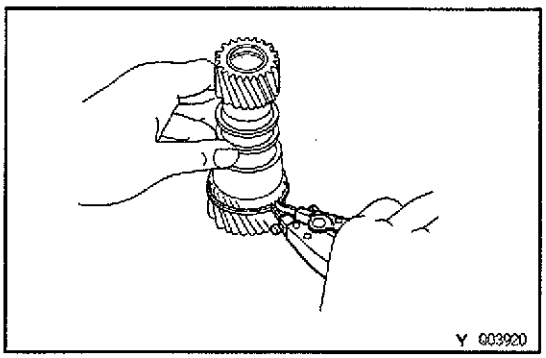
3. CHECK PLANETARY SUN GEAR BUSHINGS

Using a dial indicator, measure the inside diameter of the planetary ring gear bushing.

Maximum inside diameter:

27.08 mm (1.0661 in.)

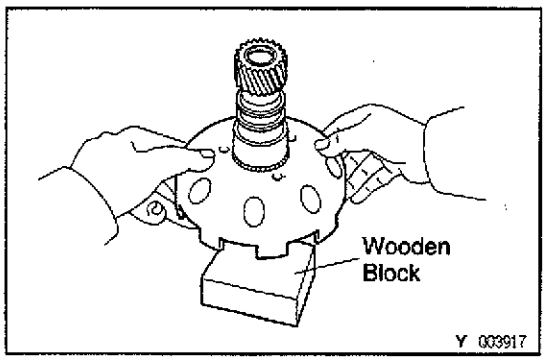
If the inside diameter is greater then the maximum, replace the planetary sun gear.


Y 003920

PLANETARY SUN GEAR AND NO.1 ONE−WAY CLUTCH ASSEMBLY AT0E7-06

1. INSTALL SNAP RING TO PLANETARY SUN GEAR

Using a snap ring expander, remove the snap ring from the planetary sun gear.

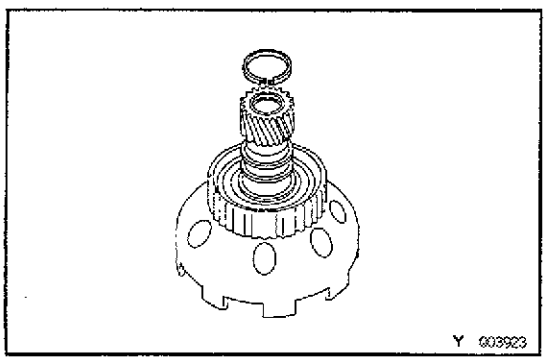


Y 003917

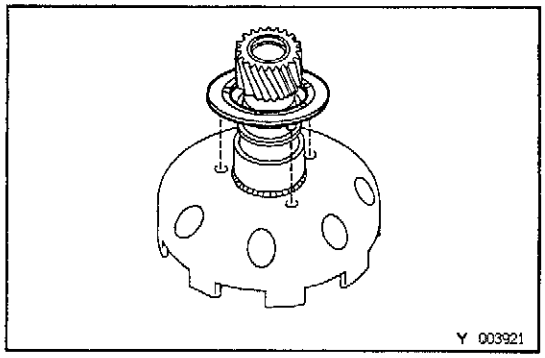
2. INSTALL SUN GEAR INPUT DRUM

(a) Use a wooden block, etc. as a work stand and place the planetary sun gear on it.

(b) Install the sun gear input drum onto the planetary sun gear.

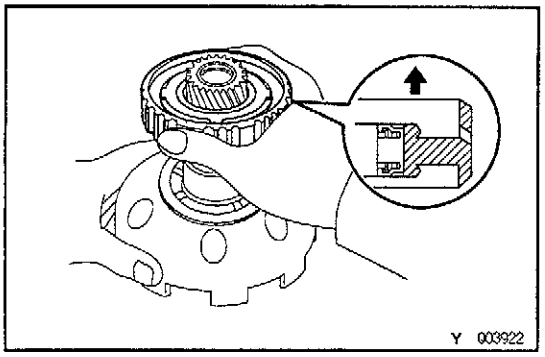

Y 003923

(c) Using SST, install the snap ring.
SST 09350−30020 (09350−07070)

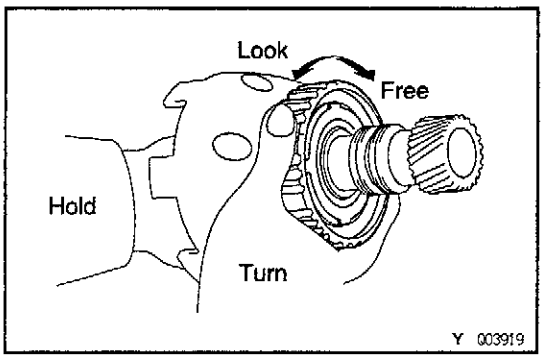


3. INSTALL THRUST WASHER ONTO PLANETARY SUN GEAR

HINT: Make sure that the lug shapes match the holes on the sun gear input drum.



4. INSTALL ASSEMBLED NO.1 ONE−WAY CLUTCH AND SECOND BRAKE HUB ONTO PLANETARY SUN GEAR

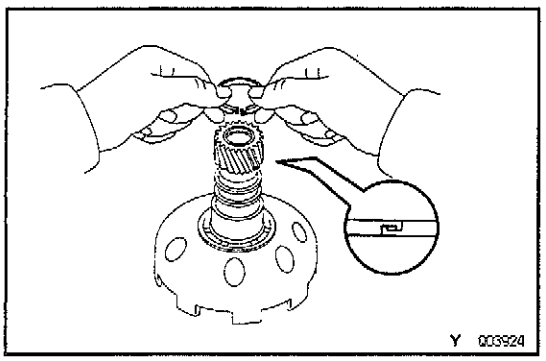


5. CHECK OPERATION OF NO.1 ONE−WAY CLUTCH

(a) Hold the planetary sun gear and turn the second brake hub.

(b) The second brake hub turns freely clockwise and locks counterclockwise.

(c) Remove the one−way clutch and second brake hub.



6. INSTALL OIL SEAL RINGS

(a) Coat the 2 oil seal rings with AFT.

(b) Install the 2 oil seal rings onto the planetary sun gear.

NOTICE: Do not spread the ring ends too much.

HINT: After installing the oil seal rings, check that they rotate smoothly.