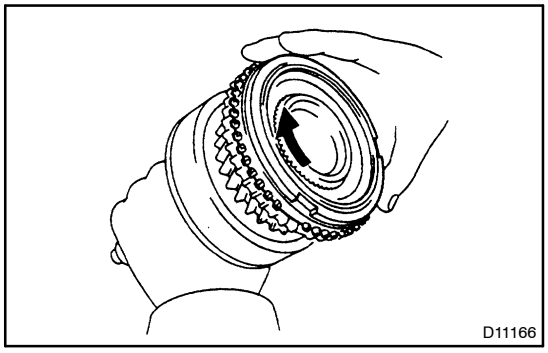
410CW–01

OVERHAUL



1. INSPECT SYNCHRONIZER RING

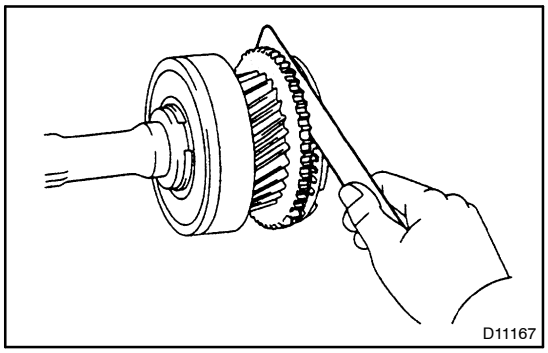
(a) Check for wear or damage.

(b) Check the braking effect of the synchronizer ring.
Turn the synchronizer ring in one direction while pushing it to the gear cone. Check that the ring locks.

If the braking effect is insufficient, apply a small amount of fine lapping compound between the synchronizer ring and gear cone. Then, lightly rub the synchronizer ring and gear cone together.

HINT:

Wash off the fine lapping compound completely after rubbing.

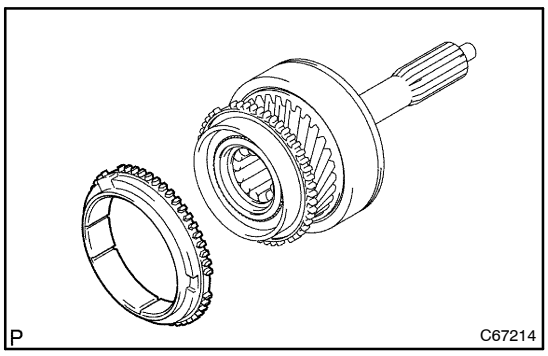


(c) Check the braking effect of the synchronizer ring again.
If it does not lock, replace the synchronizer ring.

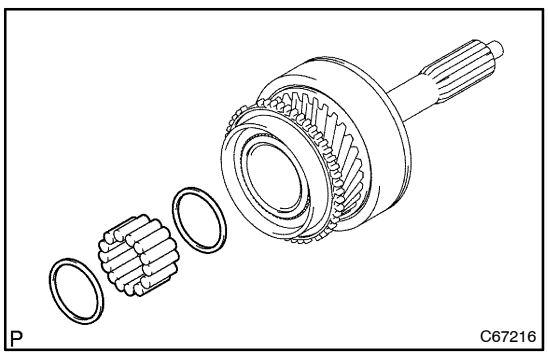
(d) Using a feeler gauge, measure the clearance between the synchronizer ring back and gear spline end.
Minimum clearance: 0.8 mm (0.031 in.)

HINT:

- When replacing either the synchronizer ring or gear, apply a small amount of fine lapping compound between the synchronizer ring and gear corn.
- Lightly rub the synchronizer ring and gear cone together.
- Wash off the fine lapping compound completely after rubbing.
- When replacing both the synchronizer ring and gear, it is not neccesary to apply any compound or to rub them together.



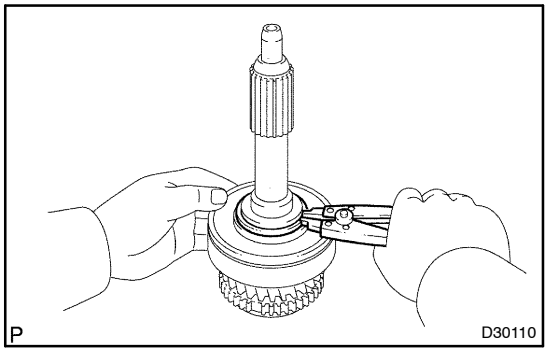
2. REMOVE SYNCHRONIZER RING



3. REMOVE ROLLER

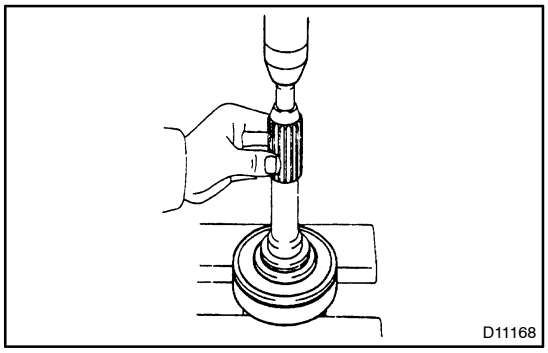
(a) Using snap ring pliers, remove the snap ring.

(b) Remove the 12 rollers and 2 spacers.



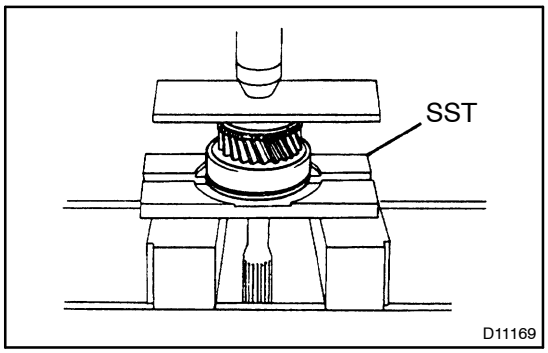
4. REMOVE FRONT BEARING SHAFT SNAP RING

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



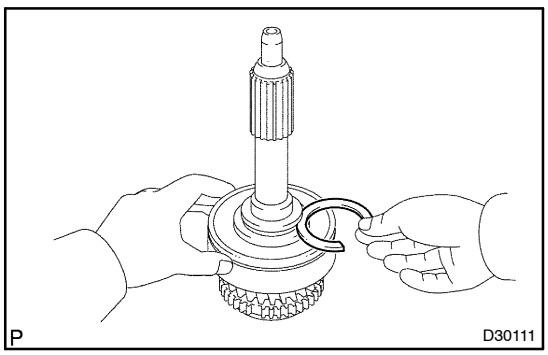
5. REMOVE INPUT SHAFT FRONT BEARING

(a) Using a press, press out the bearing.



6. INSTALL INPUT SHAFT FRONT BEARING

(a) Using SST and a press, press in a new bearing.
SST 09527–30010

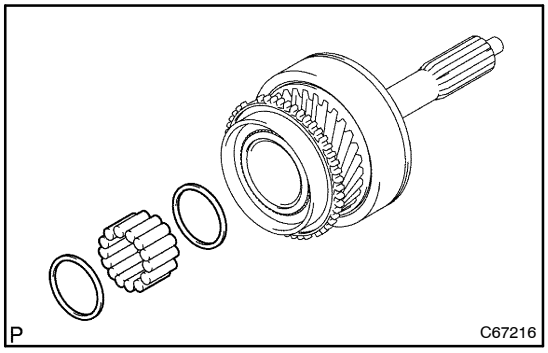


7. INSTALL FRONT BEARING SHAFT SNAP RING

(a) Select a snap ring that allows minimum axial play and install it on the shaft.

Snap ring thickness:

Mark	Thickness mm (in.)
2	2.50 – 2.55 (0.0984 – 0.1004)
3	2.55 – 2.60 (0.1004 – 0.1024)
4	2.60 – 2.65 (0.1024 – 0.1043)
5	2.65 – 2.70 (0.1043 – 0.1063)
6	2.70 – 2.75 (0.1063 – 0.1083)
7	2.75 – 2.80 (0.1083 – 0.1102)



8. INSTALL ROLLER

(a) Install the 12 rollers and 2 spacers.

HINT:

Apply MP grease to the 12 rollers and install them into the input shaft.

(b) Using snap ring pliers, install the snap ring.

(c) Check that the input shaft needle roller bearing rotates smoothly and that it is not stuck.