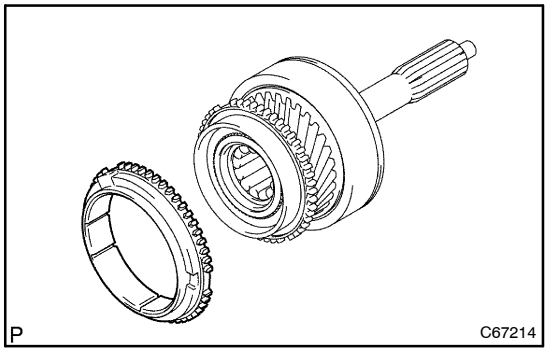
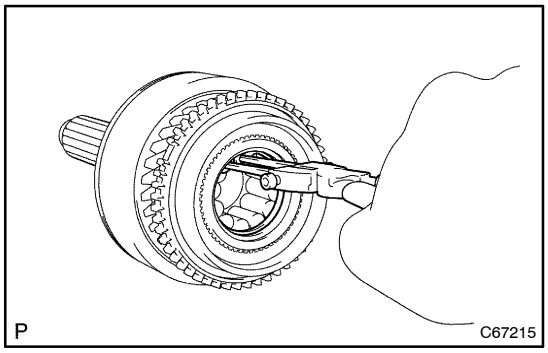
4106X–01

# OVERHAUL

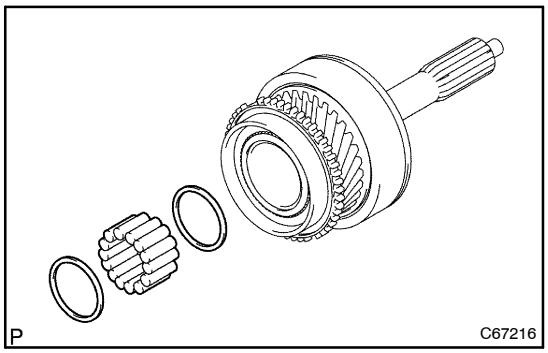



**1. REMOVE 5TH GEAR SYNCHRONIZER RING**



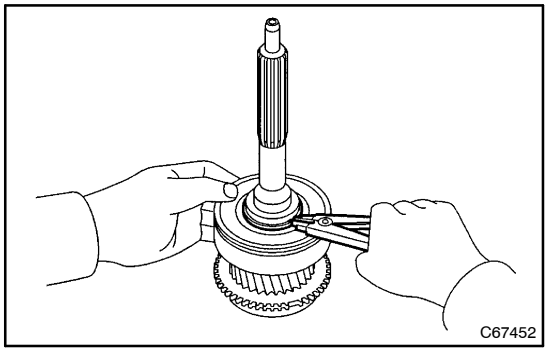

**2. REMOVE NEEDLE ROLLER HOLE SNAP RING**

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



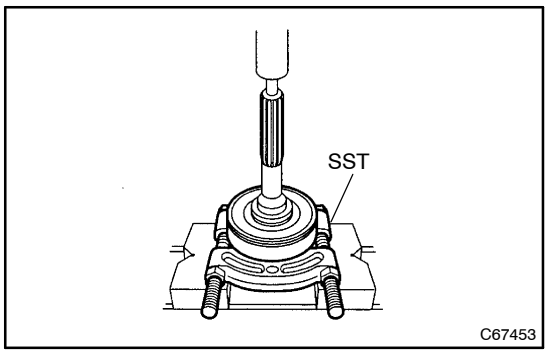

**3. REMOVE INPUT SHAFT BEARING**

(a) Remove the 12 rollers and 2 spacers.



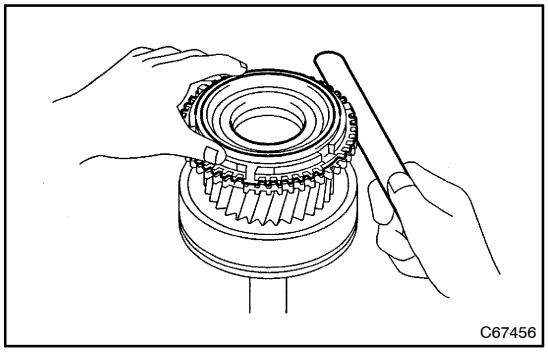

**4. REMOVE INPUT SHAFT REAR BEARING SHAFT SNAP RING**

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




**5. REMOVE INPUT SHAFT FRONT BEARING**

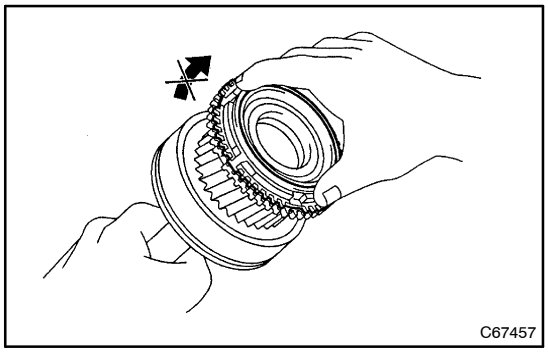
(a) Using SST and a press, press out the front bearing.
SST 09950–00020



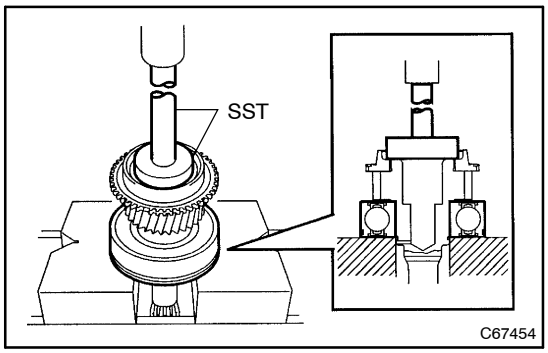

**6. INSPECT 5TH GEAR SYNCHRONIZER RING**

(a) Using a feeler gauge, measure the clearance between synchronizer ring and input shaft while the synchronizer ring is pushed to the taper cone of the input shaft.

**Standard clearance:**
**0.80 – 1.60 mm (0.0315 – 0.0630 in.)**
**Minimum clearance: 0.80 mm (0.0315 in.)**




(b) Apply the gear oil to the taper cone of the input shaft, and check that it dose not rotate to the circumference direction while synchronizer ring is pushed.

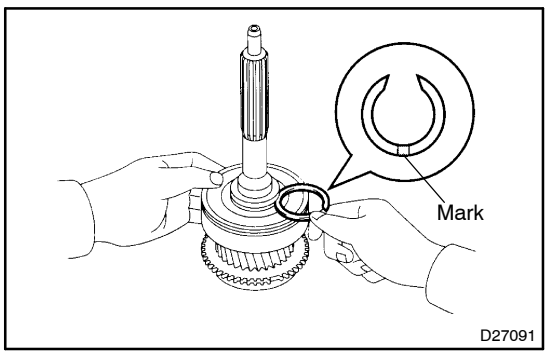



**7. INSTALL INPUT SHAFT FRONT BEARING**

(a) Using SST and a press, press in the new bearing to the input shaft.

SST 09950–60010 (09951–00570), 09950–70010 (09951–07100)

(b) Check that the bearing rotates smoothly.

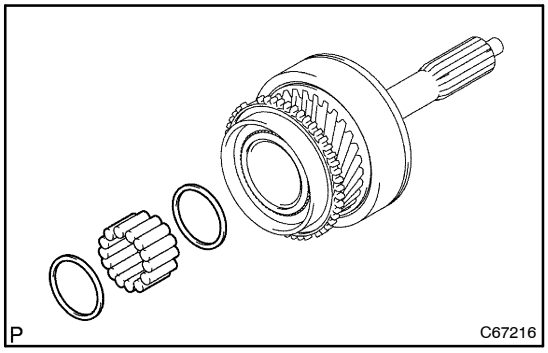



**8. INSTALL INPUT SHAFT REAR BEARING SHAFT SNAP RING**

(a) Select a snap ring that allows the minimum axial play.

| Mark | Thickness mm (in.) |
|---|---|
| A | 2.50 – 2.55 (0.0984 – 0.1004) |
| B | 2.55 – 2.60 (0.1004 – 0.1024) |
| C | 2.60 – 2.65 (0.1024 – 0.1044) |
| D | 2.65 – 2.70 (0.1044 – 0.1063) |
| E | 2.70 – 2.75 (0.1063 – 0.1083) |
| F | 2.75 – 2.80 (0.1083 – 0.1102) |

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

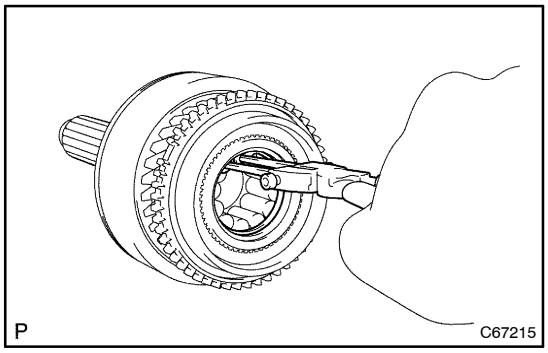



**9. INSTALL INPUT SHAFT BEARING**

(a) Install the 12 rollers and 2 spacers.

HINT:

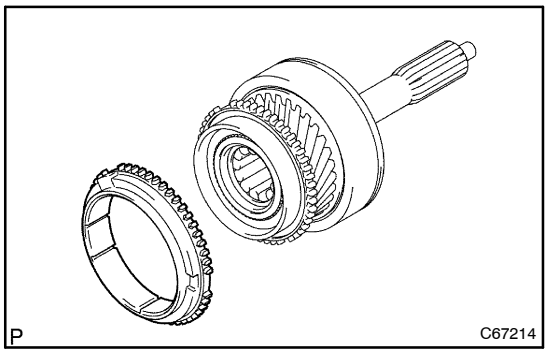
Apply MP grease to the 12 rollers and install it into the input shaft.




**10. INSTALL NEEDLE ROLLER HOLE SNAP RING**

(a) Using snap ring pliers (expander), install the snap ring.

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




**11. INSTALL 5TH GEAR SYNCHRONIZER RING**

(a) Apply gear oil to the taper cone of the input shaft.

(b) Install the 5th gear synchronizer ring to the input shaft.