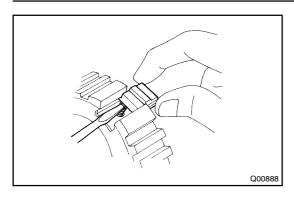
MT01I-03



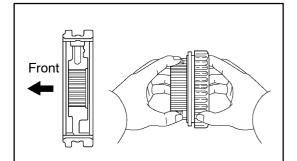
## **REASSEMBLY**

### HINT:

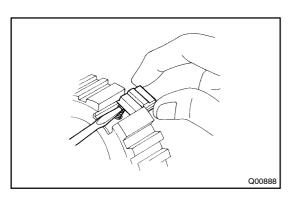
Coat all of the sliding and rotating surfaces with gear oil before reassembly.

### 1. INSTALL CLUTCH HUB NO.2 INTO HUB SLEEVE NO.2

- (a) Install the 3 shifting key springs to the clutch hub No.2.
- (b) While pushing the shifting key spring with a screwdriver, install the 3 shifting keys.

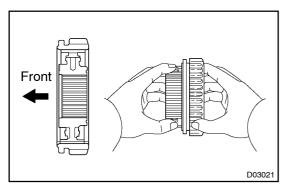


(c) While pushing the 3 shifting keys, install the clutch hub No.1 to the reverse gear, as shown.

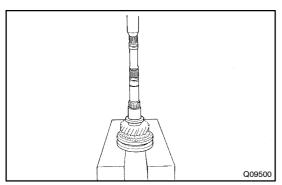


### 2. INSTALL CLUTCH HUBNO. 1 INTO REVERSE GEAR

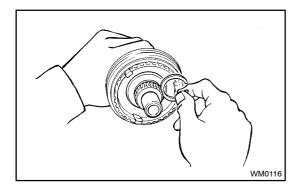
- (a) Install the 3 shifting key springs to the clutch hub No.1.
- (b) While pushing the shifting key spring with a screwdriver, install the 3 shifting keys.



- (c) While pushing the 3 shifting keys, install the clutch hub No.1 to the reverse gear, as shown.
- 3. INSTALL 3RD GEAR AND HUB SLEEVE NO.2 ON OUTPUT SHAFT
- (a) Apply gear oil to the shaft and needle roller bearing.
- (b) Place the synchronizer ring on the gear and align the ring slots with the shifting keys.
- (c) Align the projection of the synchronizer inner ring with the slots of the clutch hub No.2.
- (d) Install the needle roller bearing in the 3rd gear.
- (e) Using a press, install the 3rd gear assembly and hub sleeve No.2 assembly.



LAND CRUISER (W/G) (RM616E)

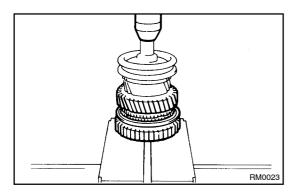


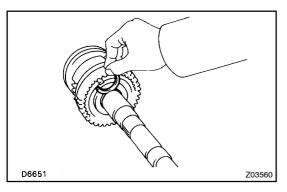
## 4. INSTALL SNAP RING

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

Mark	Thickness mm (in.)
А	1.80 – 1.85 (0.0709 – 0.0728)
В	1.85 – 1.90 (0.0728 – 0.0748)
С	1.90 – 1.95 (0.0748 – 0.0768)
D	1.95 – 2.00 (0.0768 – 0.0787)
E	2.00 – 2.05 (0.0787 – 0.0807)
F	2.05 – 2.10 (0.0807 – 0.0827)
G	2.10 – 2.15 (0.0827 – 0.0846)

- (b) Using a snap ring expander, install the snap ring.
- 5. INSPECT 3RD GEAR THRUST CLEARANCE (See page MT-22)





## 6. INSTALL 2ND GEAR AND REVERSE GEAR

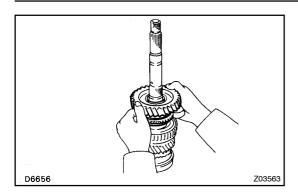
- (a) Apply gear oil to the shaft and needle roller bearing.
- (b) Place the synchronizer ring on the gear and align the ring slots with the shifting keys.
- (c) Align the projection of the synchronizer inner ring with the slots of the clutch hub No.1.
- (d) Install the needle roller bearing in the reverse gear.
- (e) Using a press, install the 2nd gear assembly and reverse gear assembly.

## 7. INSTALL SNAP RING

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

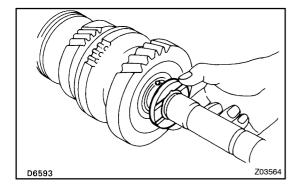
Mark	Thickness mm (in.)
Α	2.30 – 2.35 (0.0906 – 0.0925)
В	2.35 – 2.40 (0.0925 – 0.0945)
С	2.40 – 2.45 (0.0945 – 0.0965)
D	2.45 – 2.50 (0.0965 – 0.0984)
E	2.50 – 2.55 (0.0984 – 0.1004)
F	2.55 – 2.60 (0.1004 – 0.1024)
G	2.60 - 2.65 (0.1024 - 0.1043)

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



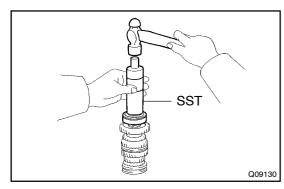
## 8. INSTALL SPACER AND 1ST GEAR ASSEMBLY

- (a) Install the spacer on the output shaft.
- (b) Apply gear oil to the needle roller bearing.
- (c) Assemble the 1st gear, synchronizer rings and needle roller bearing.
- (d) Install the needle roller bearing in the reverse gear.



# 9. INSTALL STRAIGHT PIN AND 1ST GEAR THRUST WASHER

Install the 1st gear thrust washer onto the output shaft with the straight pin aligned with the 1st gear thrust washer.



### 10. INSTALL OUTPUT SHAFT CENTER BEARING

Using SST and a hammer, drive in the bearing with the outer race snap ring groove toward the rear.

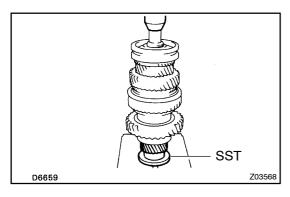
SST09316 -60011 (09316 -00011, 09316 -00071)

11. INSPECT 1ST GEAR THRUST CLEARANCE

(See page MT-22)

12. INSPECT 2ND GEAR THRUST CLEARANCE

(See page MT-22)



## 13. INSTALL 5TH GEAR

Using SST and a press, install the 5th gear. SST 09316 -60011 (09316 -00031)