

## DISASSEMBLY

### 1. INSPECT EACH GEAR THRUST CLEARANCE

Measure the thrust clearance of each gear.

**Standard clearance:**

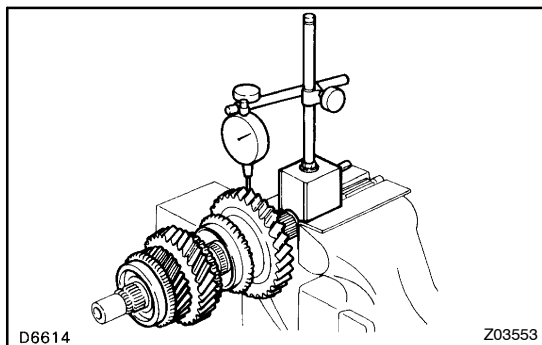
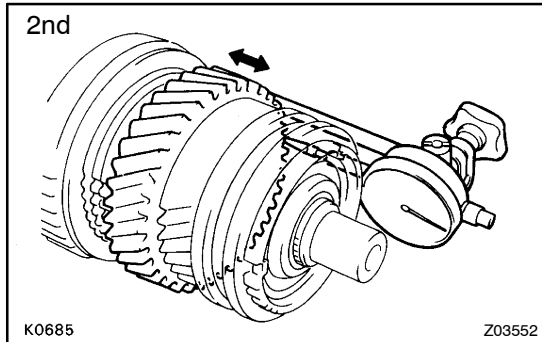
**1st gear:** 0.20 – 0.45 mm (0.0078 – 0.0177 in.)

**2nd and 3rd gears:** 0.10 – 0.25 mm (0.0039 – 0.0098 in.)

**Maximum clearance:**

**1st gear:** 0.50 mm (0.0197 in.)

**2nd and 3rd gears:** 0.30 mm (0.0118 in.)



### 2. INSPECT EACH GEAR RADIAL CLEARANCE

Using a dial indicator, measure the radial clearance of each gear.

**Standard clearance:**

**1st gear:** 0.020 – 0.073 mm (0.0008 – 0.0029 in.)

**2nd and 3rd gears:**

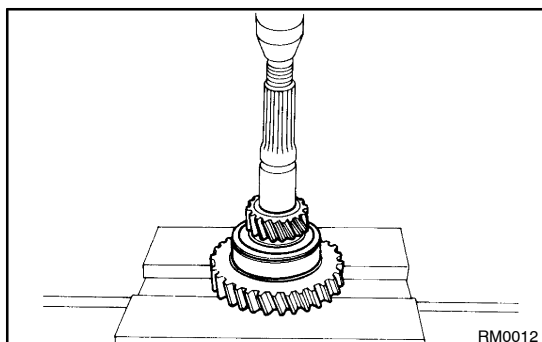
0.015 – 0.068 mm (0.0006 – 0.0027 in.)

**Maximum clearance:**

**1st gear:** 0.160 mm (0.0063 in.)

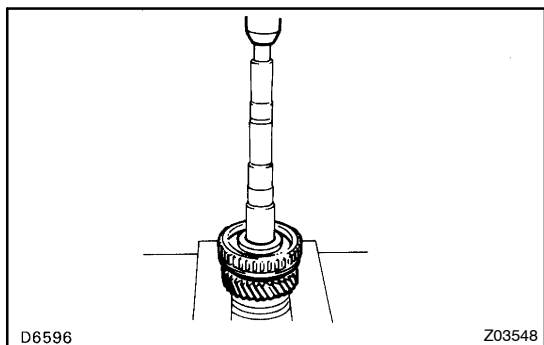
**2nd and 3rd gears:** 0.160 mm (0.0063 in.)

If the clearance exceeds the maximum, replace the gear, needle roller bearing or shaft.



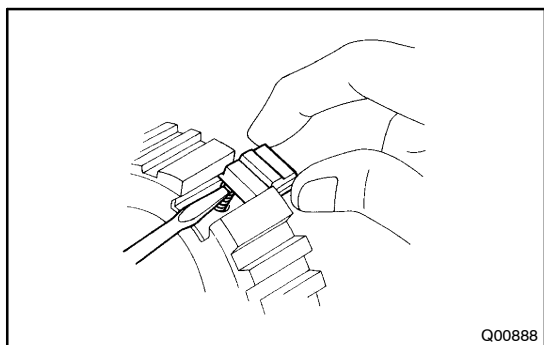
### 3. REMOVE 5TH GEAR, OUTPUT SHAFT CENTER BEARING AND 1ST GEAR ASSEMBLY

- Using a press, remove the 5th gear, center bearing, thrust washer and 1st gear.
- Remove the synchronizer inner ring, middle ring and outer ring from the 1st gear.
- Remove the straight pin and needle roller bearing.
- Remove the spacer.



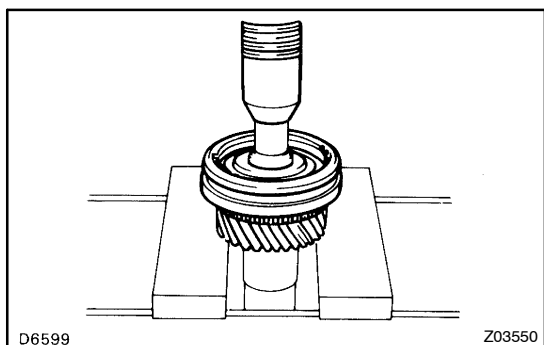
#### 4. REMOVE REVERSE GEAR ASSEMBLY AND 2ND GEAR ASSEMBLY

- (a) Using 2 screwdrivers and a hammer, tap out the snap ring.
- (b) Using a press, remove the reverse gear assembly and 2nd gear assembly.
- (c) Remove the needle roller bearing.
- (d) Remove the synchronizer inner ring, middle ring and outer ring from the 2nd gear.



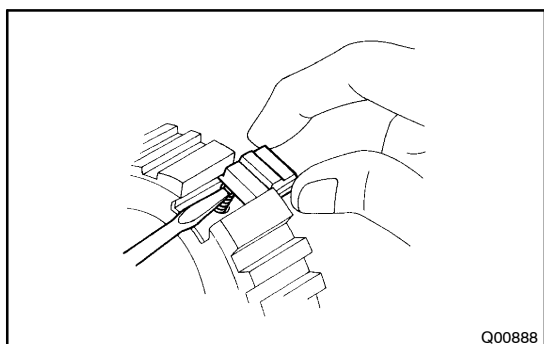
#### 5. REMOVE REVERSE GEAR, SHIFTING KEY AND SPRING FROM CLUTCH HUB NO. 1

- (a) Remove the reverse gear from the clutch hub No. 1.
- (b) Push the shifting key spring with a screwdriver, remove the 3 shifting keys and key springs from clutch hub No. 1.



#### 6. REMOVE HUB SLEEVE NO.2 ASSEMBLY AND 3RD GEAR ASSEMBLY

- (a) Using a snap ring expander, remove the snap ring.
- (b) Using a press, remove the hub sleeve No.2 assembly and 3rd gear assembly.
- (c) Remove the needle roller bearing.
- (d) Remove the synchronizer inner ring, middle ring and outer ring from the 3rd gear.



#### 7. REMOVE HUB SLEEVE NO.2, SHIFTING KEY AND SPRING FROM CLUTCH HUB NO.2

- (a) Remove the hub sleeve No.2 from the clutch hub No.2.
- (b) Push the shifting key spring with a screwdriver, remove the 3 shifting keys and key springs from clutch hub No.2.