

## DISASSEMBLY

### 1. INSPECT 1ST AND 2ND GEARS THRUST CLEARANCE

Using a feeler gauge, measure the thrust clearance.

**Standard clearance:**

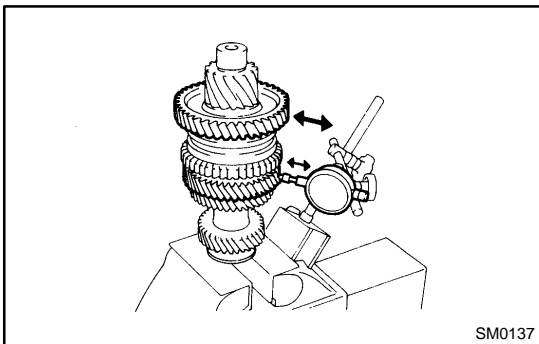
**1st gear: 0.10 - 0.40 mm (0.0039 - 0.0157 in.)**

**2nd gear: 0.10 - 0.55 mm (0.0039 - 0.0217 in.)**

**Maximum clearance:**

**1st gear: 0.40 mm (0.0157 in.)**

**2nd gear: 0.55 mm (0.0217 in.)**



### 2. INSPECT 1ST AND 2ND GEARS RADIAL CLEARANCE

Using a dial indicator, measure the radial clearance between the gear and shaft.

**Standard clearance:**

**KOYO made**

**0.015 - 0.058 mm (0.0006 - 0.0023 in.)**

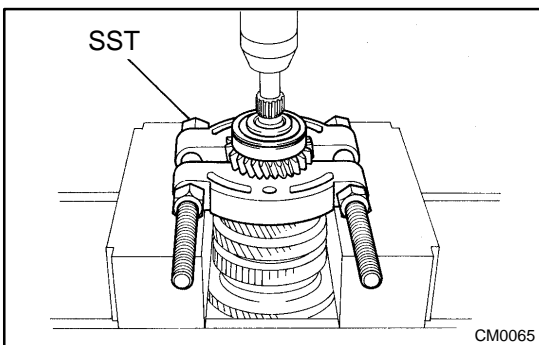
**NSK made:**

**0.015 - 0.056 mm (0.0006 - 0.0022 in.)**

**KOYO made: 0.058 mm (0.0023 in.)**

**NSK made: 0.056 mm (0.0022 in.)**

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

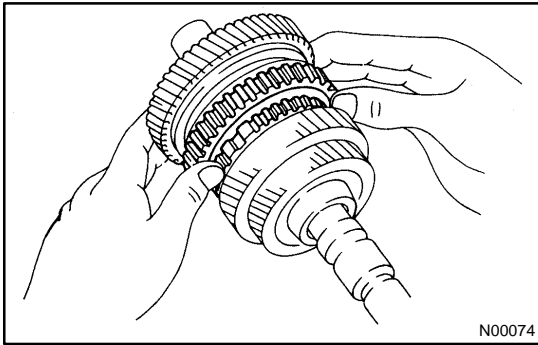


### 3. REMOVE REAR BALL BEARING, 4TH DRIVEN GEAR AND OUTPUT GEAR SPACER FROM OUTPUT SHAFT

(a) Using SST and a press, remove the rear ball bearing and 4th driven gear.

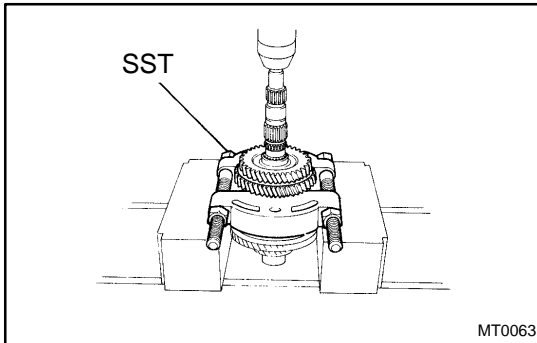
SST 09950-00020

(b) Remove the output gear spacer.



**4. REMOVE 3RD DRIVEN GEAR, 2ND GEAR, NEEDLE ROLLER BEARING AND SYNCHRONIZER RING**

- (a) Shift the reverse gear into the 1st gear.



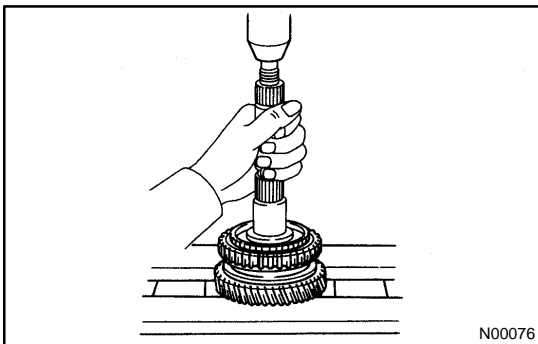
- (b) Using SST and a press, remove the 3rd driven gear and 2nd gear.

SST 09950-00020

- (c) Remove the needle roller bearing and synchronizer ring.

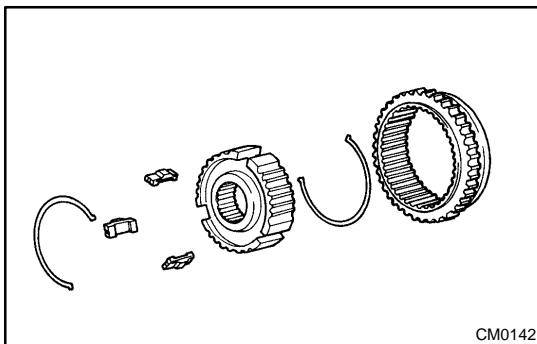
**5. REMOVE SNAP RING**

Using 2 screwdrivers and a hammer, tap out the snap ring.



**6. REMOVE REVERSE GEAR ASSEMBLY, 1ST GEAR, SYNCHRONIZER RING, NEEDLE ROLLER BEARING, THRUST WASHER AND BALL**

- (a) Using a press, remove the reverse gear assembly, 1st gear and synchronizer ring.
- (b) Remove the needle roller bearing, thrust washer and ball.



**7. DISASSEMBLE REVERSE GEAR ASSEMBLY**

- (a) Using a screwdriver, remove the 2 shifting key springs and 3 shifting keys from the No. 1 clutch hub.
- (b) Remove the reverse gear from the No. 1 clutch hub.