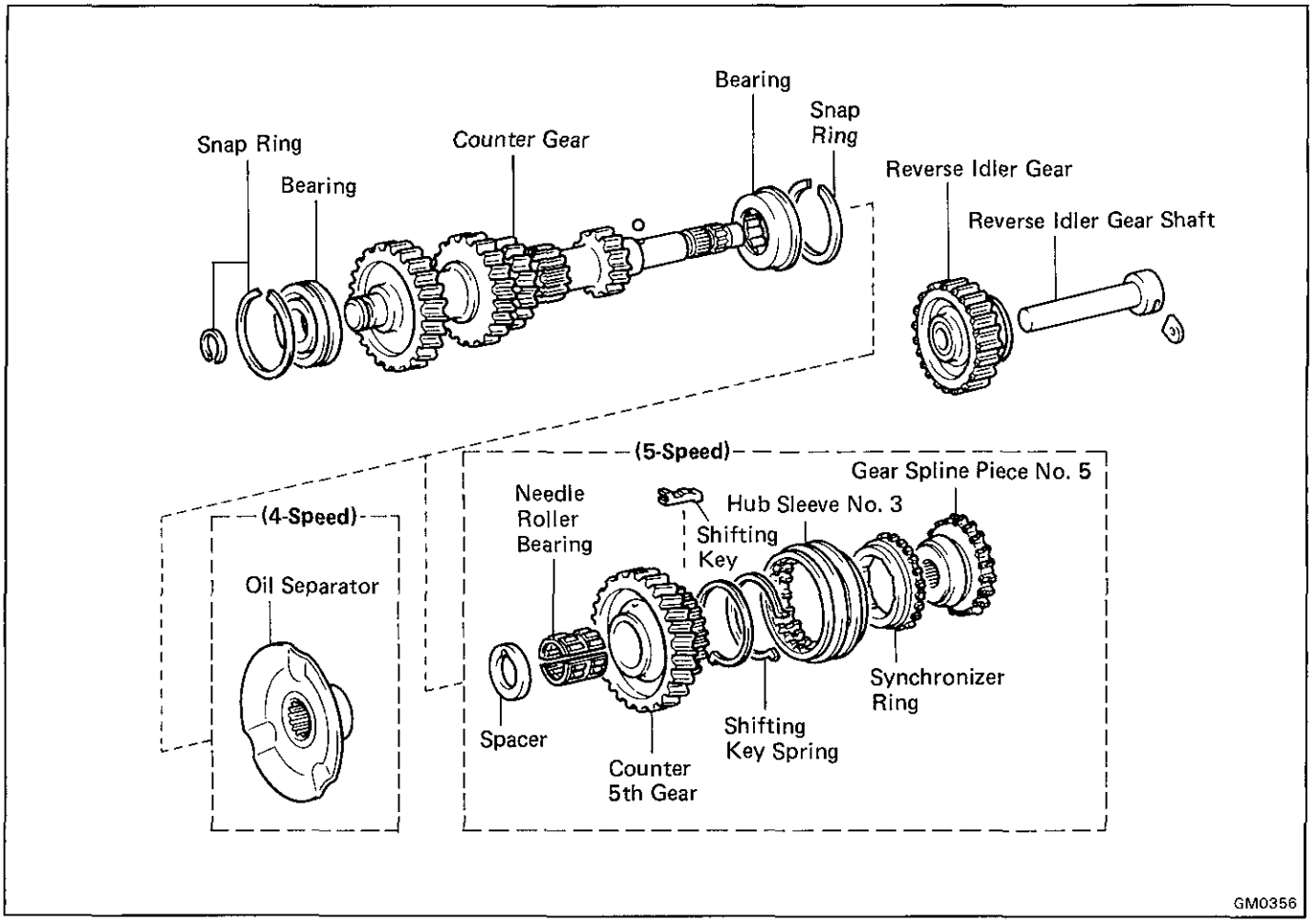
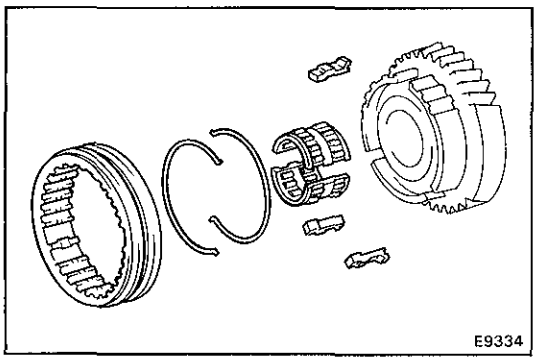
Counter Gear Assembly and Reverse Idler Gear

COMPONENTS

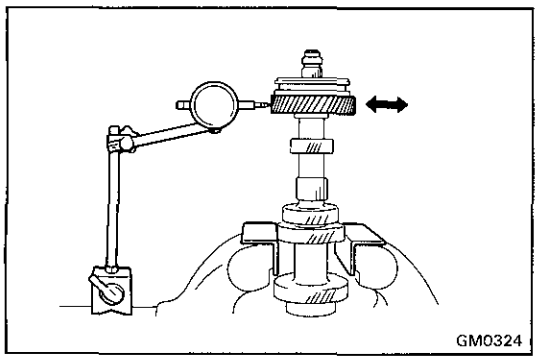




DISASSEMBLY OF COUNTER GEAR ASSEMBLY

REMOVE HUB SLEEVE NO.3, SHIFTING KEYS AND SPRINGS

Using a screwdriver, remove hub sleeve No.3, three shifting keys and two springs.



INSPECTION OF COUNTER GEAR ASSEMBLY

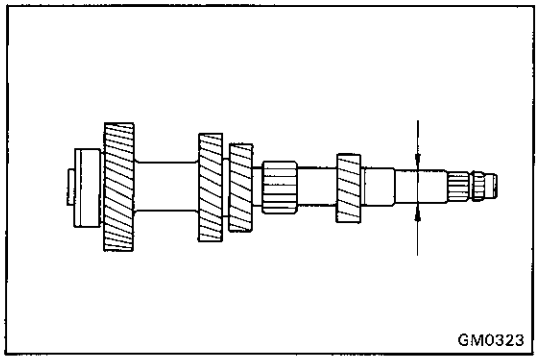
1. MEASURE COUNTER FIFTH GEAR OIL CLEARANCE

(a) Install spacer, needle roller bearing and counter 5th gear to counter gear.

(b) Using a dial indicator, measure counter 5th gear oil clearance.

Standard clearance: **0.009 — 0.032 mm (0.0004 — 0.0013 in.)**

Maximum clearance: **0.032 mm (0.0013 in.)**

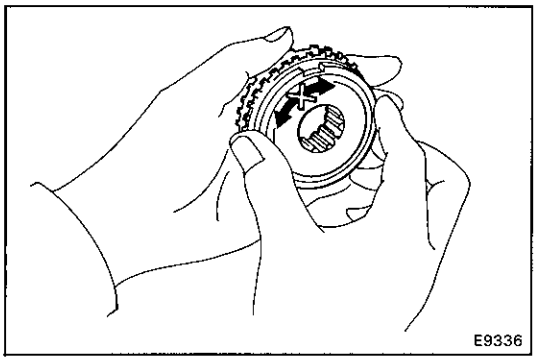

GM0323

2. (5-Speed)
INSPECT COUNTER GEAR

Using a micrometer, measure the outer diameter of needle roller bearing race.

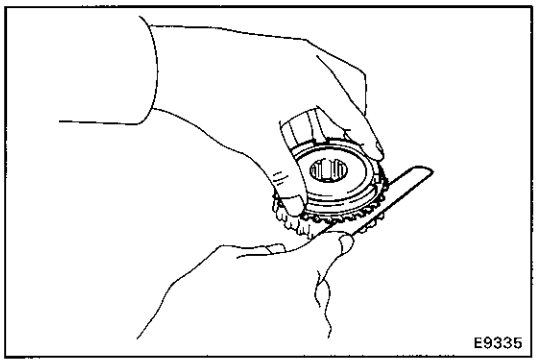
Standard clearance: 25.98 — 26.00 mm (1.0228 — 1.0236 in.)

Minimum clearance: 25.86 mm (1.0181 in.)


E9336

3. **INSPECT SYNCHRONIZER RING**

(a) Turn the ring and push it into check the braking action.

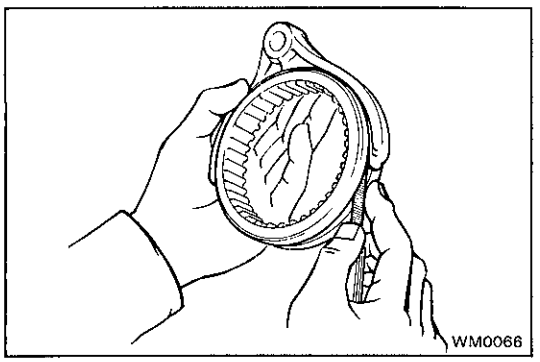

E9335

(b) Measure the clearance between the synchronizer ring back and the gear spline end.

Standard clearance: 1.0 — 2.0 mm (0.039 — 0.079 in.)

Minimum clearance: 0.8 mm (0.031 in.)

If the clearance is less than the limit, replace the synchronizer ring.

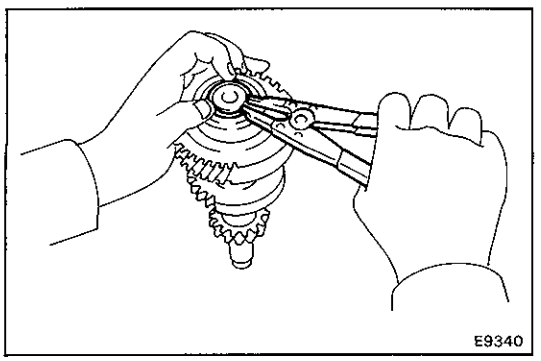

WM0066

4. **MEASURE CLEARANCE OF SHIFT FORK AND HUB SLEEVE**

Using a feeler gauge, measure the clearance between the hub sleeve and shift fork.

Maximum clearance: 1.0 mm (0.039 in.)

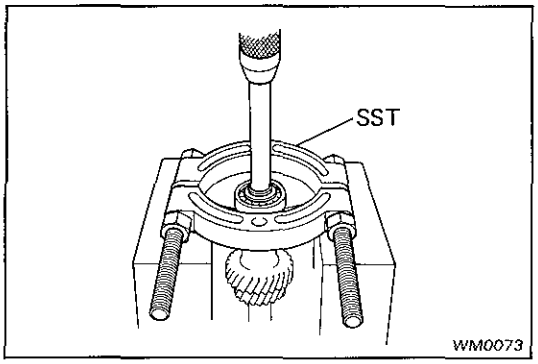
If the clearance more than the limit, replace the shift fork or hub sleeve.


E9340

REPLACEMENT OF BEARING

IF NECESSARY, REPLACE COUNTER GEAR FRONT BEARING

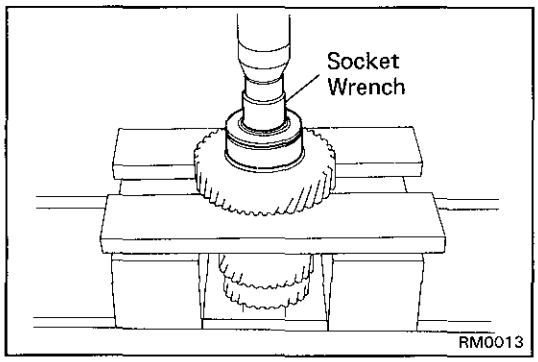
(a) Using snap ring pliers, remove the snap ring.



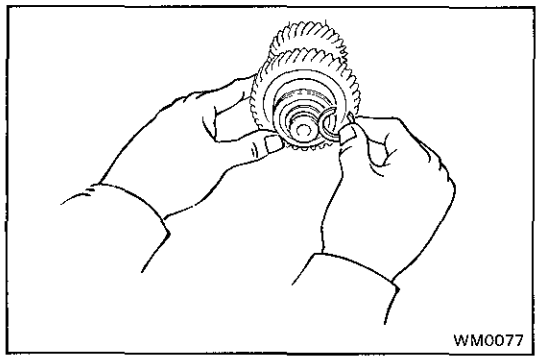
(b) Using SST, press out the bearing.

SST 09950-00020

(c) Replace the side race.

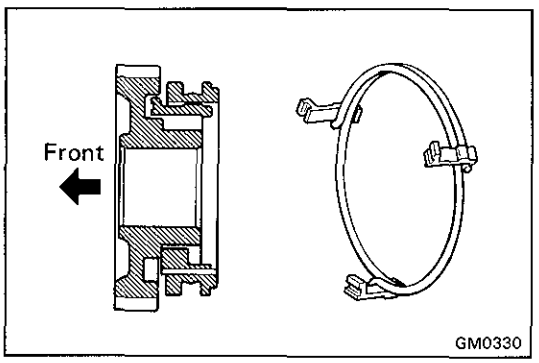


(d) Using a socket wrench, press in the bearing, side race and inner race.



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

Mark	Thickness mm (in.)
1	2.05 – 2.10 (0.0807 – 0.0827)
2	2.10 – 2.15 (0.0827 – 0.0846)
3	2.15 – 2.20 (0.0846 – 0.0866)
4	2.20 – 2.25 (0.0866 – 0.0886)
5	2.25 – 2.30 (0.0886 – 0.0906)
6	2.30 – 2.35 (0.0906 – 0.0925)



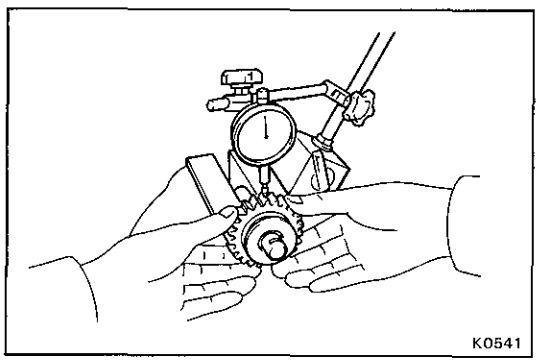
ASSEMBLY OF COUNTER GEAR ASSEMBLY

INSTALL HUB SLEEVE NO.3, SHIFTING KEYS AND SPRINGS

(a) Install the clutch hub and shifting keys to the hub sleeve.

(b) Install the shifting key springs under the sifting keys.

NOTICE: Install the key springs positioned so that their end gaps are not in line.



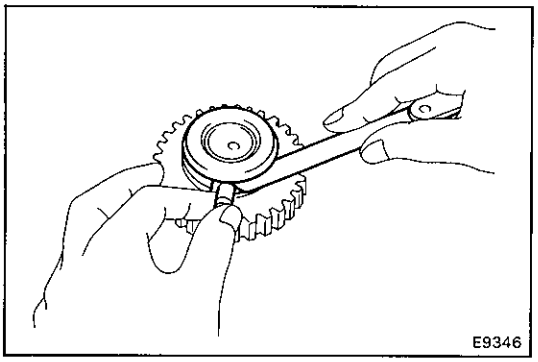
INSPECTION OF REVERSE IDLER GEAR

1. MEASURE REVERSE IDLER GEAR OIL CLEARANCE

Using a dial indicator measure reverse idler gear oil clearance.

Standard clearance: **0.04 – 0.08 mm (0.0016 – 0.0031 in.)**

Maximum clearance: **0.13 mm (0.0051 in.)**



2. MEASURE CLEARANCE OF REVERSE IDLER GEAR AND SHIFT ARM SHOE

Using a feeler gauge, measure the clearance between the reverse idler gear and shift arm shoe.

Standard clearance: **0.05 — 0.27 mm (0.0020 — 0.106 in.)**

Maximum clearance: **0.5 mm (0.197 in.)**