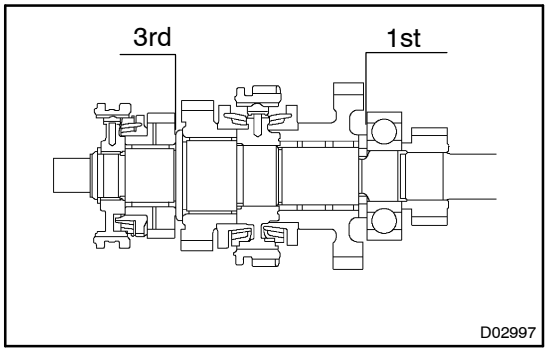
MT09L–02

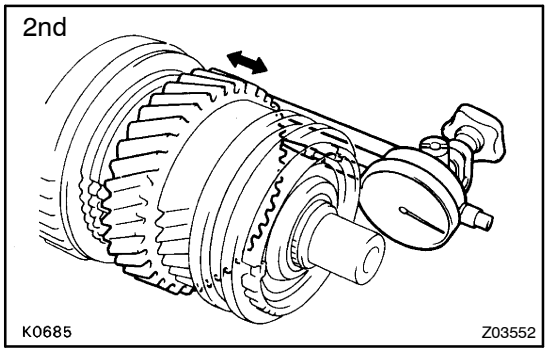
DISASSEMBLY



1. INSPECT EACH GEAR THRUST CLEARANCE

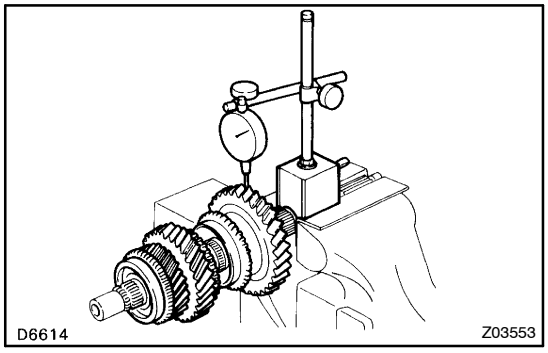
(a) Using a feeler gauge, measure the thrust clearance of the 1st and 3rd gear.

Standard clearance:
1st gear: 0.20 – 0.45 mm (0.0078 – 0.0177 in.)
3rd gear: 0.10 – 0.25 mm (0.0039 – 0.0098 in.)
Maximum clearance:
1st gear: 0.45 mm (0.0177 in.)
3rd gear: 0.25 mm (0.0098 in.)



(b) Using a dial indicator, measure the thrust clearance of the 2nd gear.

Standard clearance:
2nd gear: 0.10 – 0.25 mm (0.0039 – 0.0098 in.)
Maximum clearance:
2nd gear: 0.25 mm (0.0098 in.)

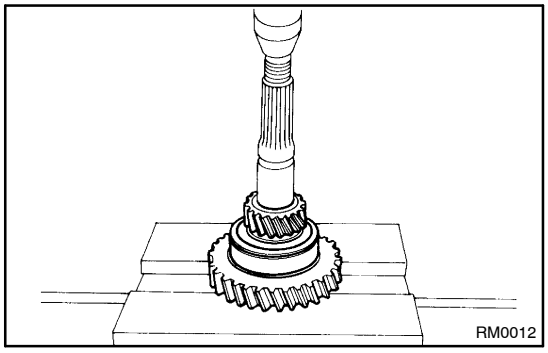


2. INSPECT EACH GEAR RADIAL CLEARANCE

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

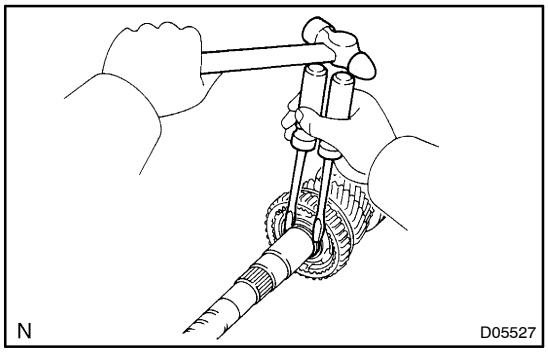
Standard clearance:
1st gear: 0.020 – 0.073 mm (0.0008 – 0.0029 in.)
2nd and 3rd gears:
0.015 – 0.068 mm (0.0006 – 0.0027 in.)
Maximum clearance:
1st gear: 0.073 mm (0.0029 in.)
2nd and 3rd gears: 0.068 mm (0.0027 in.)

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



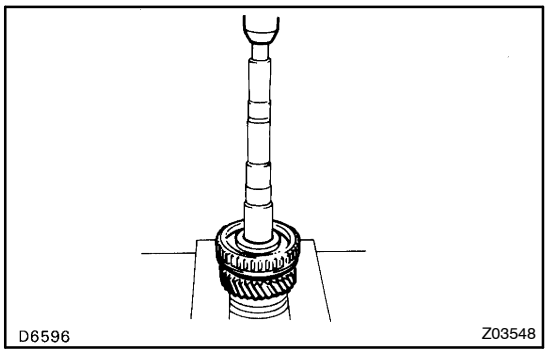
3. REMOVE 5TH GEAR, OUTPUT SHAFT CENTER BEARING AND 1ST GEAR ASSEMBLY

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

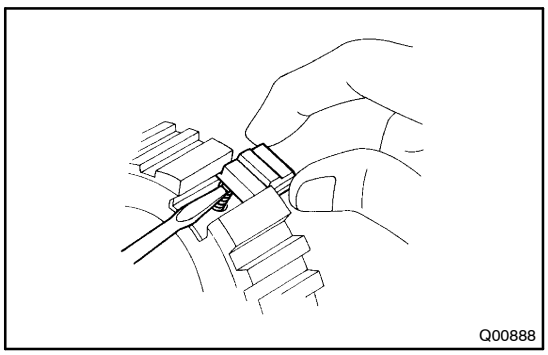


4. REMOVE REVERSE GEAR ASSEMBLY AND 2ND GEAR ASSEMBLY

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

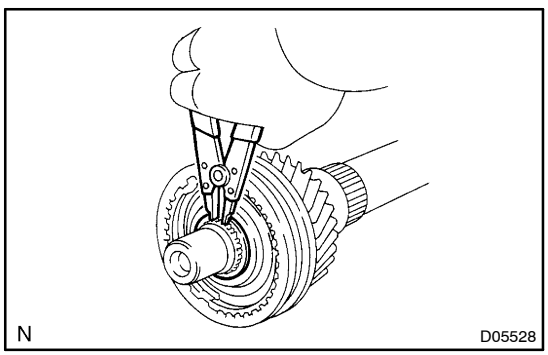


(b) Using a press, remove the reverse gear assembly and 2nd gear assembly from the output shaft.
(c) Remove the needle roller bearing from the output shaft.
(d) Remove the synchronizer inner ring, middle ring and outer ring from the 2nd gear.



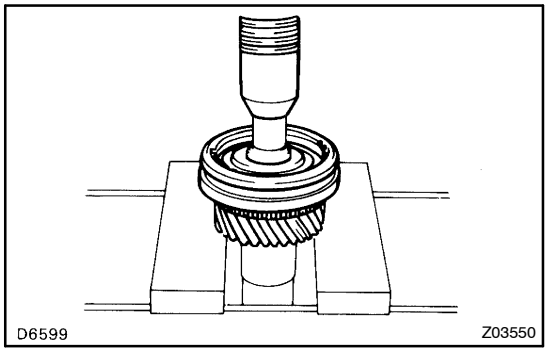
5. REMOVE REVERSE GEAR, SHIFTING KEY AND SPRING FROM CLUTCH HUB NO. 1

(a) Remove the reverse gear from the clutch hub No. 1.
(b) Using a screwdriver, push the shifting key spring, remove the 3 shifting keys and key springs from the 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 from the output shaft.
(c) Remove the needle roller bearing from the output shaft.
(d) Remove the synchronizer 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) Using a screwdriver, push the shifting key spring, and remove the 3 shifting keys and 2 key springs from the clutch hub No. 2.