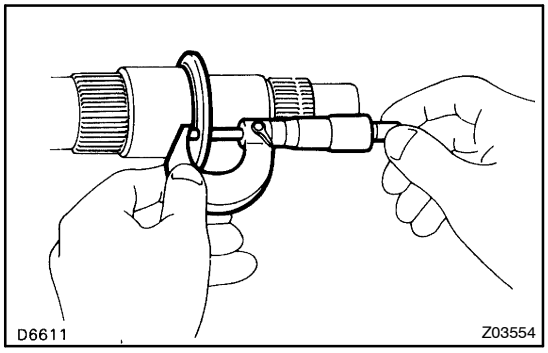
MT0DV–01

INSPECTION

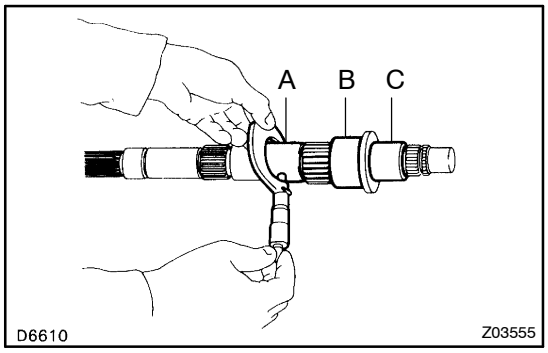


1. INSPECT OUTPUT SHAFT

(a) Using a micrometer, measure the output shaft flange thickness.

Minimum thickness: 4.8 mm (0.1890 in.)

If the thickness is less than the minimum, replace the output shaft.



(b) Using a micrometer, measure the outer diameter of the output shaft journal.

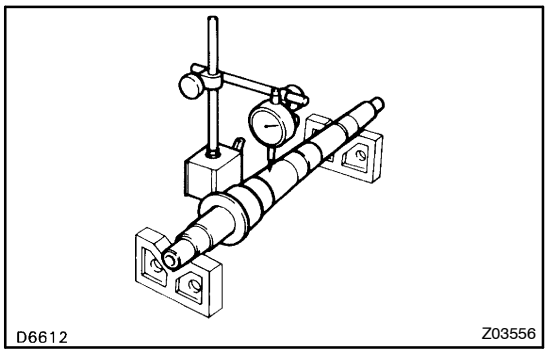
Minimum diameter:

A 1st gear: 38.979 mm (1.5346 in.)

B 2nd gear: 46.984 mm (1.8498 in.)

C 3rd gear: 37.984 mm (1.4954 in.)

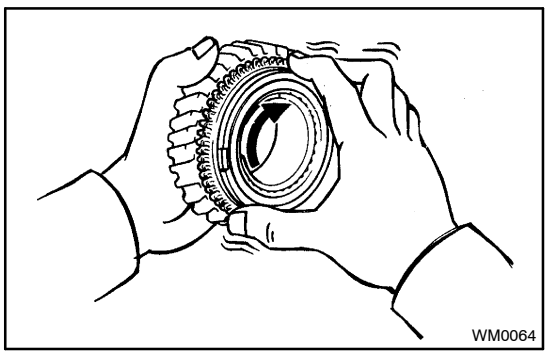
If the outer diameter is less than the minimum, replace the output shaft.



(c) Using a dial indicator, check the shaft runout.

Maximum runout: 0.03 mm (0.0012 in.)

If the runout exceeds the maximum, replace the output shaft.



2. INSPECT 1ST AND 3RD GEARS SYNCHRONIZER RING

(a) Check for wear or damage.

(b) Check the braking effect of the synchronizer ring.

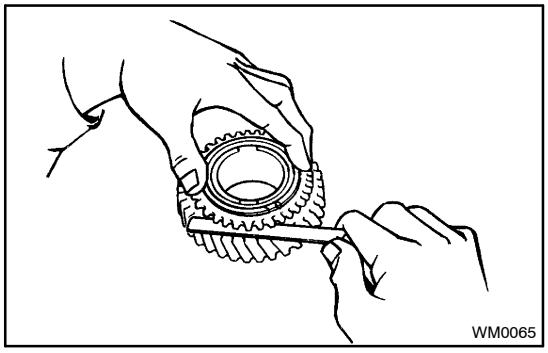
Turn the synchronizer ring in one direction while pushing it to the gear cone. Check that the ring locks.

If the braking effect is insufficient, apply a small amount of the fine lapping compound between the synchronizer ring and gear cone. Lightly rub the synchronizer ring and gear cone together.

NOTICE:

Ensure the fine lapping compound is completely washed off after rubbing.

(c) Check again the braking effect of the synchronizer ring.



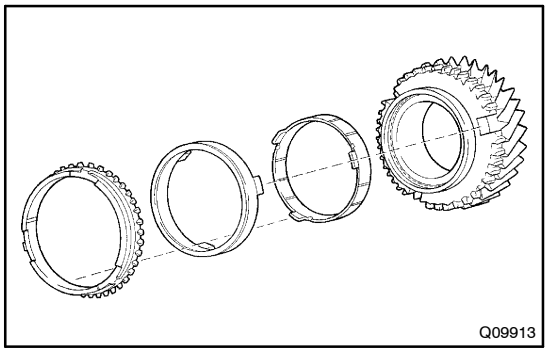
(d) Using a feeler gauge, measure the clearance between the synchronizer ring back and gear spline end.

Minimum clearance: 0.75 mm (0.030 in.)

If the clearance is less than the minimum, replace the synchronizer ring, and apply a small amount of the fine lapping compound on gear cone.

NOTICE:

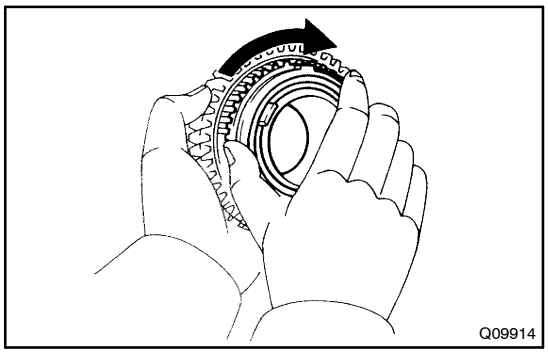
Ensure the fine lapping compound is completely washed off after rubbing.



3. INSPECT 2ND GEAR SYNCHRONIZER RING

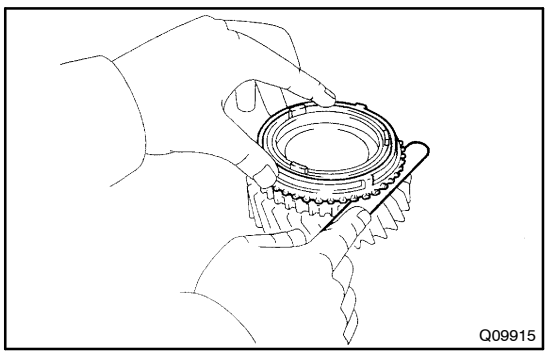
(a) Check for wear or damage.

(b) Install the synchronizer inner ring, middle ring and outer ring to each gear.



(c) Check the braking effect of the synchronizer ring. Turn the synchronizer ring in one direction while pushing it to the gear cone. Check that the ring locks.

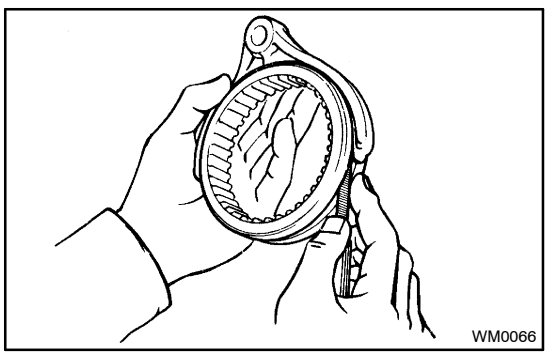
If it does not lock, replace the synchronizer ring.



(d) Using a feeler gauge, measure the clearance between the synchronizer ring back and gear spline end.

Minimum clearance: 0.65 mm (0.026 in.)

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

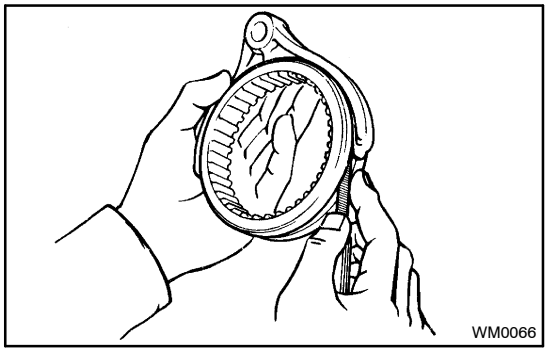


4. INSPECT SHIFT FORK NO. 2 AND HUB SLEEVE NO.2 CLEARANCE

Using a feeler gauge, measure the clearance between the hub sleeve No. 2 and shift fork No. 2.

Maximum clearance: 0.35 mm (0.014 in.)

If the clearance exceeds the maximum, replace the shift fork No. 2 or hub sleeve No. 2.



5. INSPECT SHIFT FORK NO. 1 AND REVERSE GEAR CLEARANCE

Using a feeler gauge, measure the clearance between the reverse gear and shift fork No. 1.

Maximum clearance: 0.41 mm (0.016 in.)

If the clearance exceeds the maximum, replace the shift fork No. 1 or reverse gear.