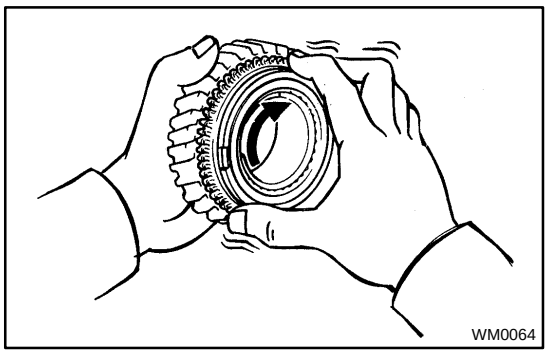
MT02D–01

INSPECTION


WM0064

1. INSPECT 1ST GEAR SYNCHRONIZER RING

(a) Check for wear or damage.

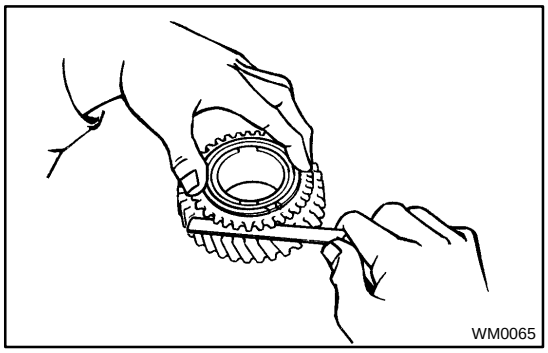
(b) Check for the braking effect of the synchronizer ring.
Turn the synchronizer ring in one direction while pushing it to the gear cone. Check that the ring locks.

If the braking effect is insufficient, apply a small amount of 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.

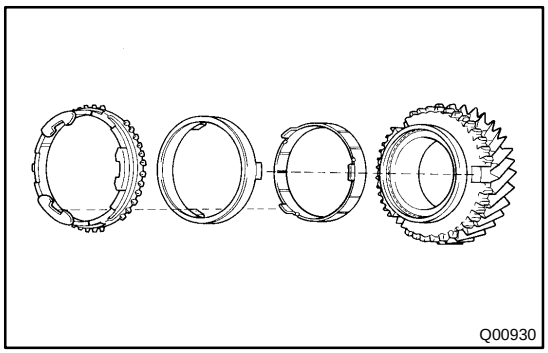

WM0065

(d) Using a feeler gauge, measure the clearance between the synchronizer ring back and gear spline end.
Minimum clearance: 0.5 mm (0.020 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:

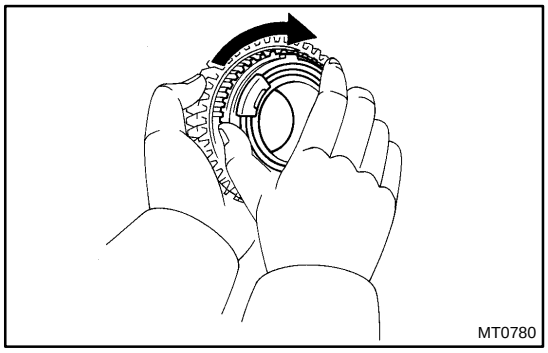
Ensure the fine lapping compound is completely washed off after rubbing.


Q00930

2. INSPECT 2ND AND 3RD GEAR SYNCHRONIZER RINGS

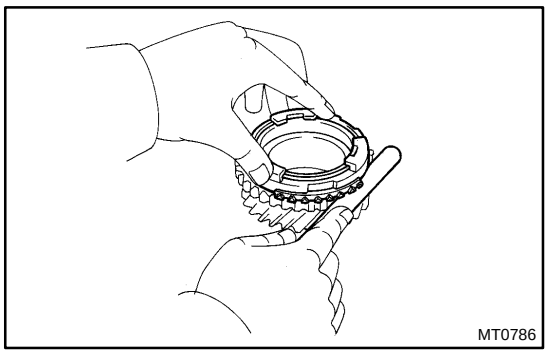
(a) Check for wear or damage.

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


MT0780

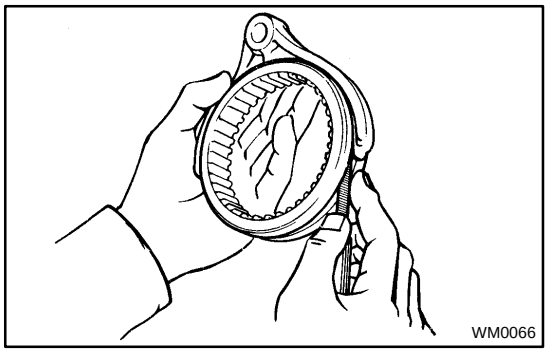
(c) Check the braking effect of the synchronizer ring. Turn the synchronizer ring in one direction while pushing it to the gear cone. Check that the ring locks.

If it does not lock, replace the synchronizer ring.


MT0786

(d) Using a feeler gauge, measure the clearance between the synchronizer ring back and the gear spline end.
Minimum clearance: 0.7 mm (0.028 in.)

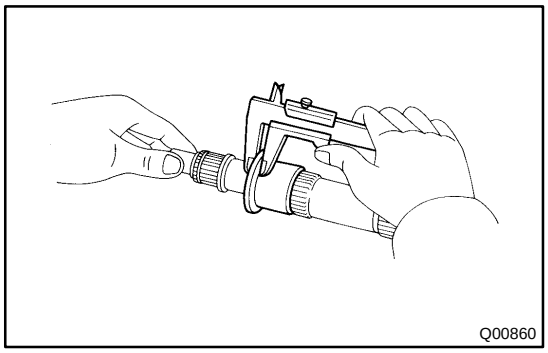
If the clearance is less than the minimum, replace the synchronizer ring.


WM0066

3. INSPECT SHIFT FORK AND HUB SLEEVE CLEARANCE

Using a feeler gauge, measure the clearance between the hub sleeves and shift forks.
Maximum clearance: 1.0 mm (0.039 in.)

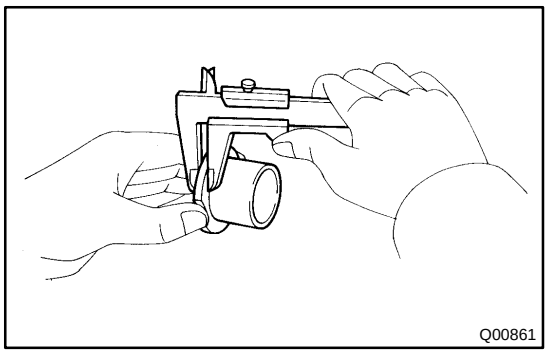
If the clearance exceeds the maximum, replace the shift fork or hub sleeve.


Q00860

4. INSPECT OUTPUT SHAFT AND INNER RACE

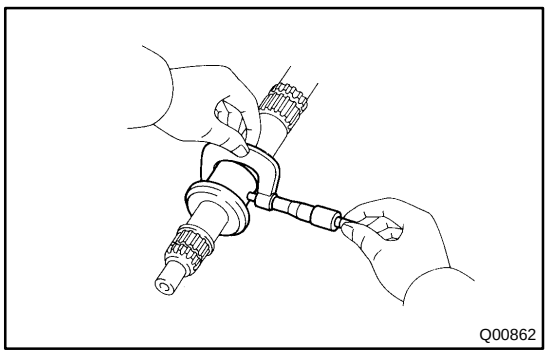
(a) Using vernier calipers, measure the output shaft flange thickness.
Minimum thickness: 5.60 mm (0.2205 in.)

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


Q00861

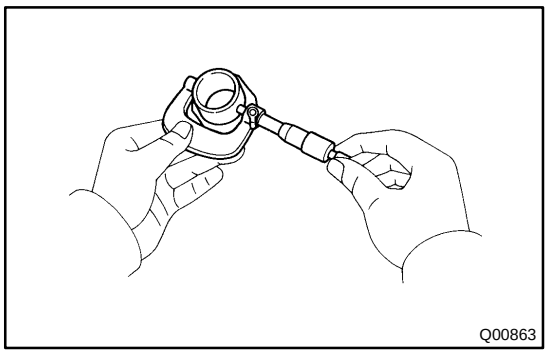
(b) Using vernier calipers, measure the inner race flange thickness.
Minimum thickness: 4.78 mm (0.1881 in.)

If the thickness is less than the minimum, replace the inner race.


Q00862

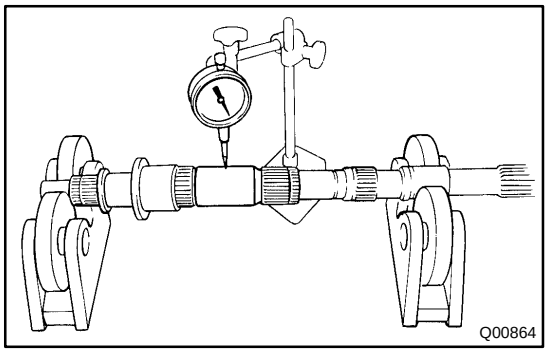
(c) Using a micrometer, measure the outer diameter of the output shaft journal.
Minimum diameter:
2nd gear: 42.975 mm (1.6919 in.)
3rd gear: 31.969 mm (1.2586 in.)

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



(d) Using a micrometer, measure the outer diameter of the inner race.
Minimum diameter: 42.975 mm (1.6919 in.)

If the outer diameter is less than the minimum, replace the inner race.



(e) Using a dial indicator, check for the shaft runout.
Maximum runout: 0.06 mm (0.0024 in.)

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