

INSPECTION

1. INSPECT SYNCHRONIZER RING SET NO.1

- (a) Using a feeler gauge, measure the clearance between the synchronizer ring set No.1 and the 1st gear.

Standard clearance:

Inner: 1.48 to 2.12 mm (0.0583 to 0.0835 in.)

Middle: 0.68 to 1.92 mm (0.0268 to 0.0756 in.)

Outer: 0.88 to 1.72 mm (0.0346 to 0.0677 in.)

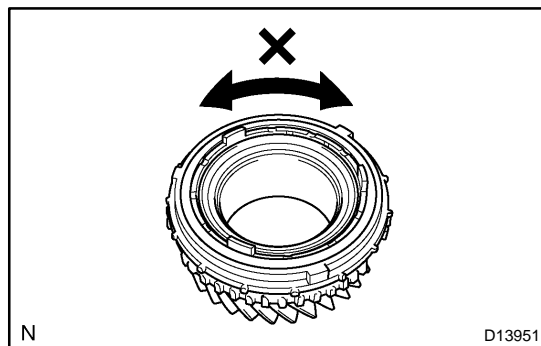
Minimum clearance:

Inner: 1.48 mm (0.0583 in.)

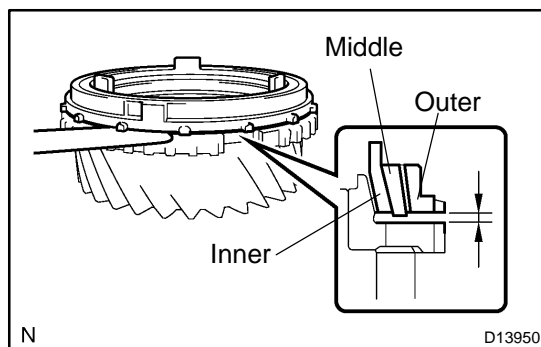
Middle: 0.68 mm (0.0268 in.)

Outer: 0.88 mm (0.0346 in.)

If the clearance is less than the minimum, replace the synchronizer ring set No.1.



- (b) Coat the 1st gear cone with gear oil. Check the braking effect of the synchronizer ring. Turn the synchronizer ring in one direction while pushing it against the 1st gear cone. Check that the ring locks.



2. INSPECT SYNCHRONIZER RING SET NO.2

- (a) Using a feeler gauge, measure the clearance between the synchronizer ring set No.1 and the 2nd gear.

Standard clearance:

Inner: 1.48 to 2.12 mm (0.0583 to 0.0835 in.)

Middle: 0.68 to 1.92 mm (0.0268 to 0.0756 in.)

Outer: 0.88 to 1.72 mm (0.0346 to 0.0677 in.)

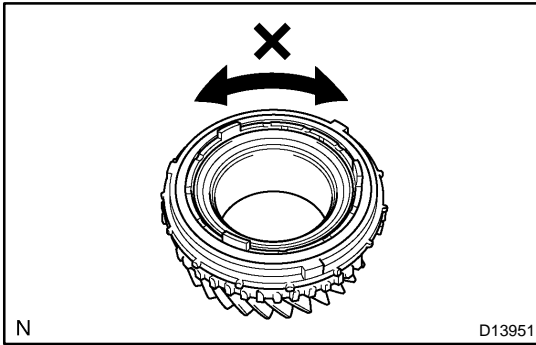
Minimum clearance:

Inner: 1.48 mm (0.0583 in.)

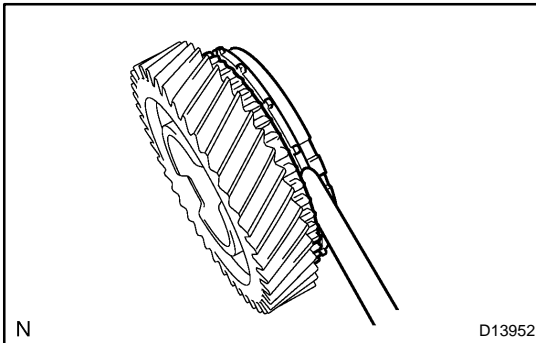
Middle: 0.68 mm (0.0268 in.)

Outer: 0.88 mm (0.0346 in.)

If the clearance is less than the minimum, replace the synchronizer ring set No.2.



- (b) Coat the 2nd gear cone with gear oil. Check the braking effect of the synchronizer ring. Turn the synchronizer ring in one direction while pushing it against the 2nd gear cone. Check that the ring locks.



3. INSPECT REVERSE SYNCHRONIZER RING

- (a) Using a feeler gauge, measure the clearance between the synchronizer ring and the reverse gear.

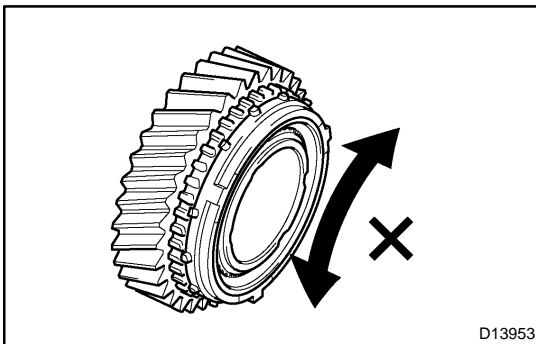
Standard clearance:

0.70 to 1.30 mm (0.0278 to 0.0512 in.)

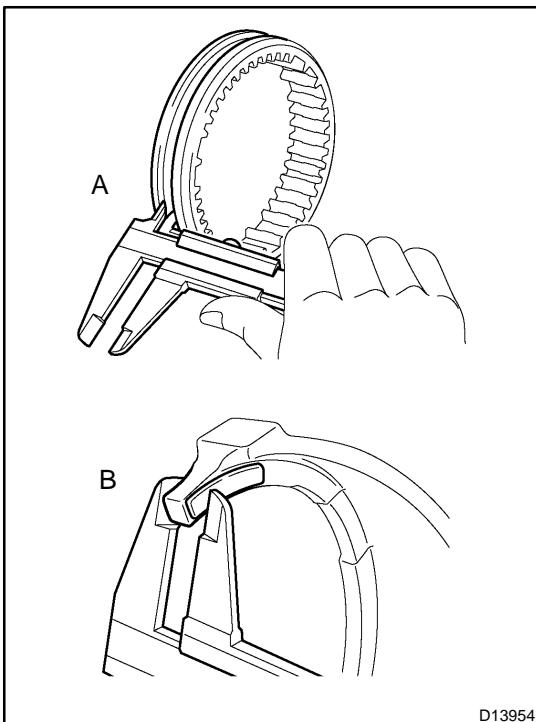
Minimum clearance:

0.70 mm (0.0278 in.)

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



- (b) Coat the reverse gear cone with gear oil. Check the braking effect of the synchronizer ring. Turn the synchronizer ring in one direction while pushing it against the reverse gear cone. Check that the ring locks.



4. INSPECT HUB SLEEVE

- (a) Using a vernier caliper, measure the width of the groove of the hub sleeve (A) and thickness of both the gear shift forks No.1 and No.4 (B) as shown in the illustration.

Width of the groove of the hub sleeve (A):

No. 1: 11.95 to 12.05 mm (0.4705 to 0.4744 in.)

No. 4: 10.5 to 10.6 mm (0.4134 to 0.4173 in.)

Thickness of the gear shift fork (B):

No. 1: 11.7 to 11.8 mm (0.4606 to 0.4646 in.)

No. 4: 9.76 to 10.24 mm (0.3843 to 0.4031 in.)

- (b) Calculate the clearance using the formula below.

Formula:

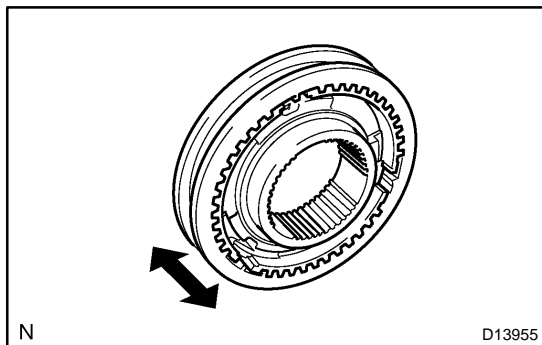
Clearance = A – B

Standard:

No.1: 0.15 to 0.55 mm (0.0059 to 0.0217 in.)

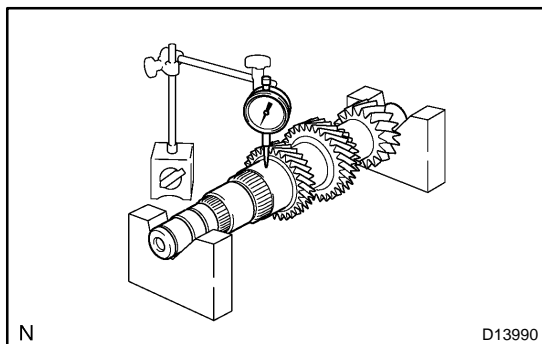
No.4: 0.26 to 0.84 mm (0.0102 to 0.0331 in.)

If the clearance is not as specified, replace the hub sleeve and gear shift fork.



- (c) Make sure that the hub sleeve and clutch hub slide smoothly.

If the hub sleeve and clutch hub do not slide smoothly, replace them.

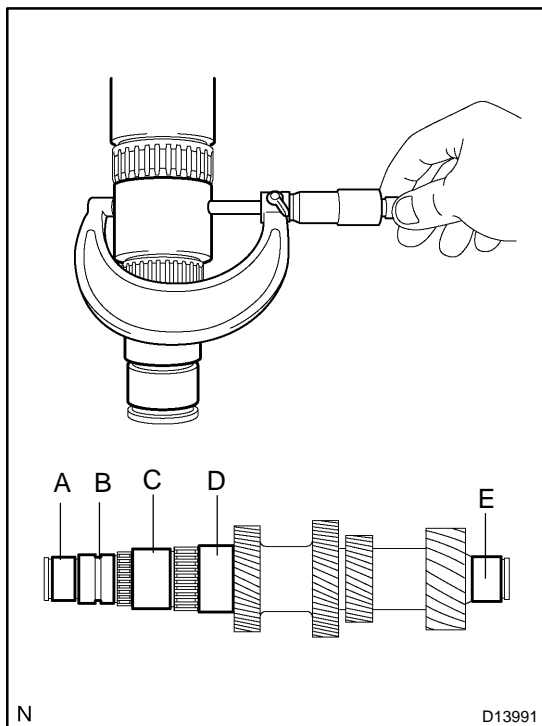


5. INSPECT COUNTER GEAR SHAFT

- (a) Using a dial indicator, measure the shaft runout.

Maximum runout: 0.03 mm (0.0012 in.)

If the runout exceeds the maximum, replace the counter gear shaft.



- (b) Using a micrometer, measure the outside diameter of the counter gear shaft journal surface.

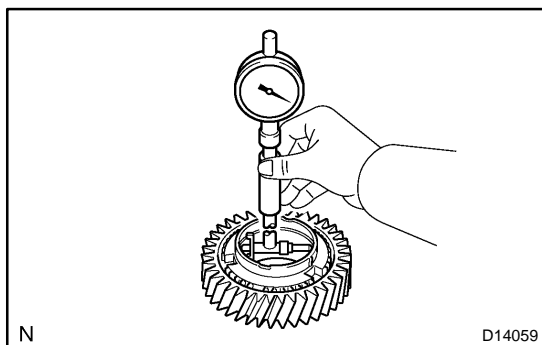
Standard:

Part	Outside diameter mm (in.)
A	34.002 to 34.015 (1.3387 to 1.3392)
B	36.985 to 37.000 (1.4561 to 1.4567)
C	47.985 to 48.000 (1.8892 to 1.8898)
D	53.985 to 54.000 (2.1254 to 2.1260)
E	34.002 to 34.015 (1.3387 to 1.3392)

Minimum:

Part	Outside diameter mm (in.)
A	34.002 (1.3387)
B	36.985 (1.4561)
C	47.985 (1.8892)
D	53.985 (2.1254)
E	34.002 (1.3387)

If the diameter is less than the minimum, replace the counter gear shaft.



6. INSPECT 1ST GEAR

Using a cylinder gauge, measure the inside diameter of the gear.

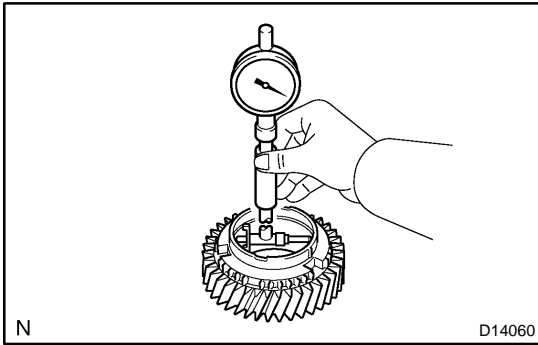
Standard inside diameter:

54.015 to 54.040 mm (2.1266 to 2.1276 in.)

Maximum inside diameter:

54.040 mm (2.1276 in.)

If the inside diameter exceeds the maximum, replace the 1st gear.

**7. INSPECT 2ND GEAR**

Using a cylinder gauge, measure the inside diameter of the gear.

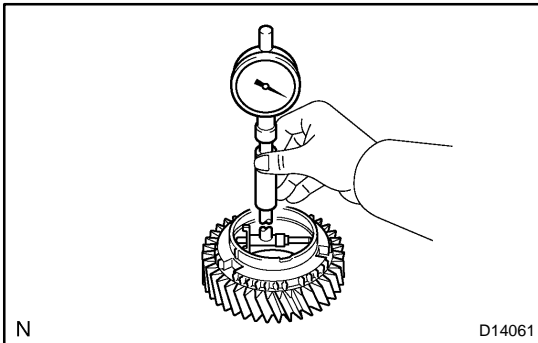
Standard inside diameter:

60.015 to 60.040 mm (2.3628 to 2.3638 in.)

Maximum inside diameter:

60.040 mm (2.3638 in.)

If the inside diameter exceeds the maximum, replace the 2nd gear.

**8. INSPECT REVERSE GEAR**

Using a cylinder gauge, measure the inside diameter of the gear.

Standard inside diameter:

51.015 to 51.040 mm (2.0085 to 2.0094 in.)

Maximum inside diameter:

51.040 mm (2.0094 in.)

If the inside diameter exceeds the maximum, replace the reverse gear.