

INSPECTION

1. INSPECT SYNCHRONIZER RING SET NO.3

- (a) Using a feeler gauge, measure the clearance between the synchronizer ring set No.3 and the 3rd gear.

Standard clearance:

Inner: 1.20 to 2.20 mm (0.0472 to 0.0866 in.)

Middle: 0.60 to 1.80 mm (0.0236 to 0.0709 in.)

Outer: 0.80 to 1.80 mm (0.0315 to 0.0709 in.)

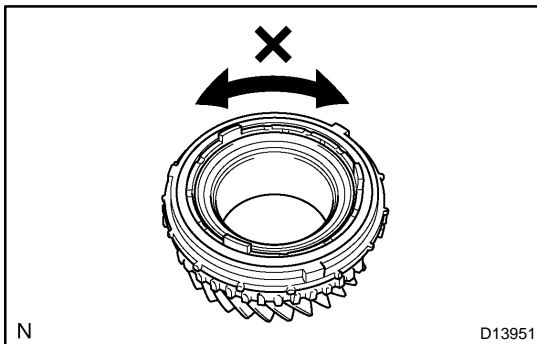
Minimum clearance:

Inner: 1.20 mm (0.0472 in.)

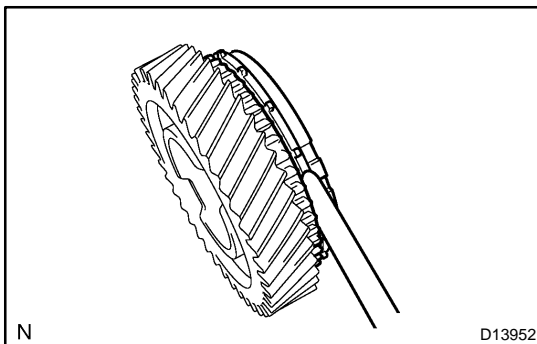
Middle: 0.60 mm (0.0236 in.)

Outer: 0.80 mm (0.0315 in.)

If the clearance is less than the minimum, replace the synchronizer ring set No.3.



- (b) Coat the 3rd 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 3rd gear cone. Check that the ring locks.



2. INSPECT SYNCHRONIZER RING NO.3

- (a) Using a feeler gauge, measure the clearance between the synchronizer ring No.3 and the 4th gear.

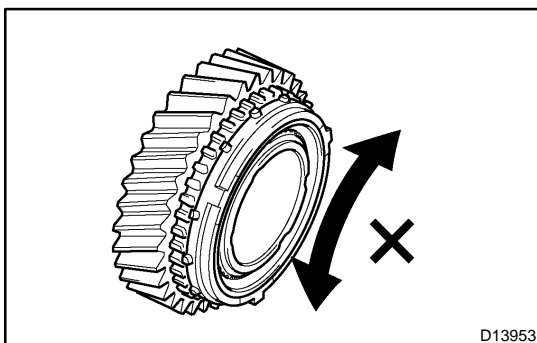
Standard clearance:

0.70 to 1.50 mm (0.0276 to 0.0591 in.)

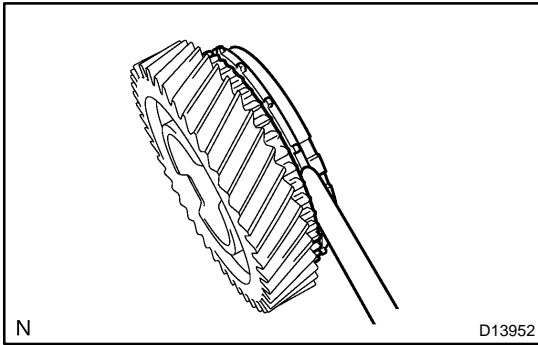
Minimum clearance:

0.70 mm (0.0276 in.)

If the clearance is less than the minimum, replace the synchronizer ring No.3.



- (b) Coat the 4th 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 4th gear cone. Check that the ring locks.



3. INSPECT SYNCHRONIZER RING NO.3

- (a) Using a feeler gauge, measure the clearance between the synchronizer ring No.3 and the 6th gear.

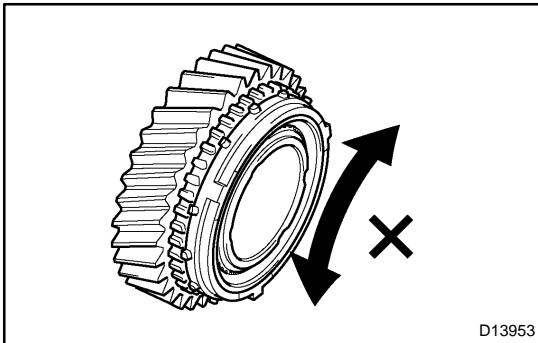
Standard clearance:

0.70 to 1.50 mm (0.0276 to 0.0591 in.)

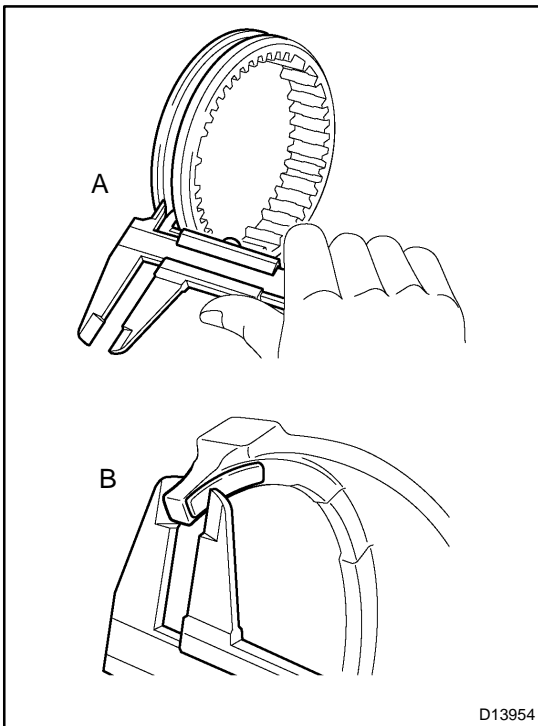
Minimum clearance:

0.70 mm (0.0276 in.)

If the clearance is less than the minimum, replace the synchronizer ring No.3.



- (b) Coat the 6th 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 6th 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.2 and No.3 (B) as shown in the illustration.

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

10.5 to 10.6 mm (0.4134 to 0.4173 in.)

Thickness of the gear shift fork (B):

9.76 to 10.24 mm (0.3843 to 0.4031 in.)

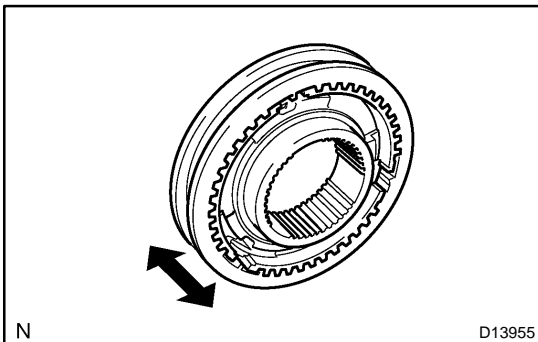
- (b) Calculate the clearance using the formula below.

Formula:

Clearance = A – B

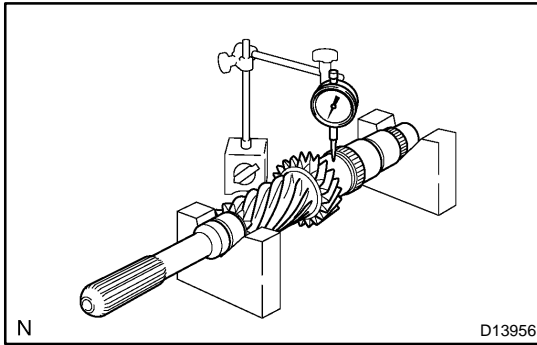
Standard: 0.26 to 0.84 mm (0.0102 to 0.0331 in.)

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.

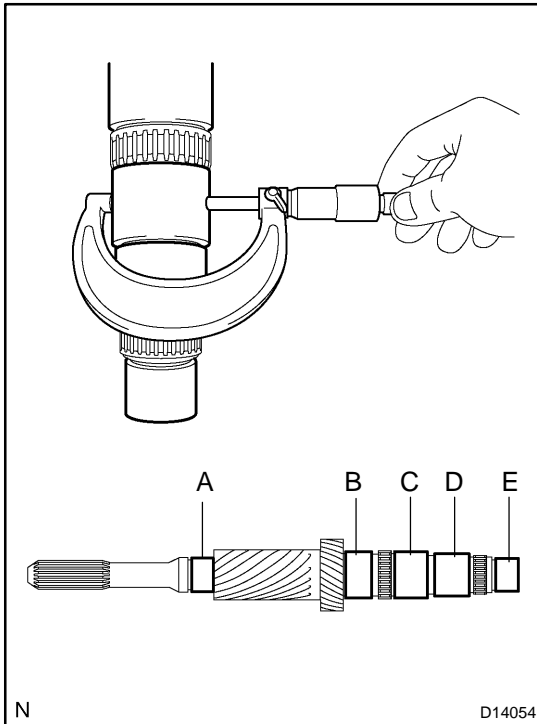


5. INSPECT INPUT SHAFT

- (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 input shaft.



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

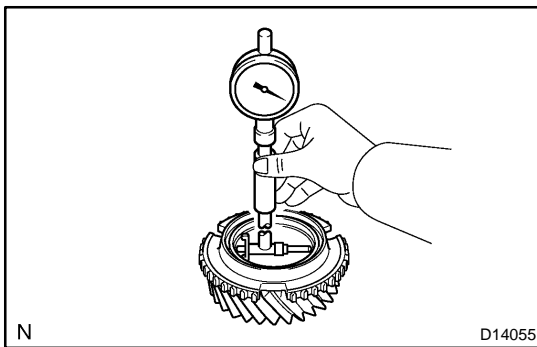
Standard:

Part	Outside diameter mm (in.)
A	34.002 to 34.015 (1.3387 to 1.3392)
B	44.985 to 45.000 (1.7711 to 1.7717)
C	44.985 to 45.000 (1.7711 to 1.7717)
D	41.985 to 42.000 (1.6530 to 1.6535)
E	32.967 to 32.980 (1.2979 to 1.2984)

Minimum:

Part	Outside diameter mm (in.)
A	34.002 (1.3387)
B	44.985 (1.7711)
C	44.985 (1.7711)
D	41.985 (1.6530)
E	32.967 (1.2979)

If the diameter is less than the minimum, replace the input shaft.



6. INSPECT 3RD GEAR

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

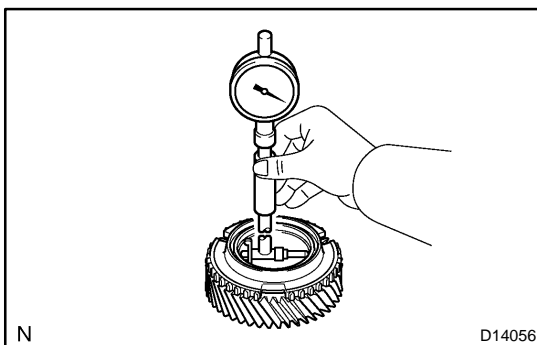
Standard inside diameter:

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 3rd gear.



7. INSPECT 4TH GEAR

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

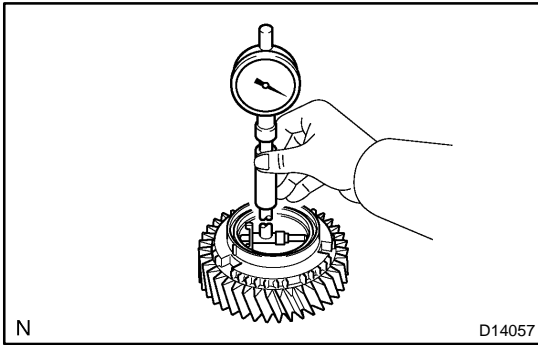
Standard inside diameter:

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 4th gear.

**8. INSPECT 6TH GEAR**

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

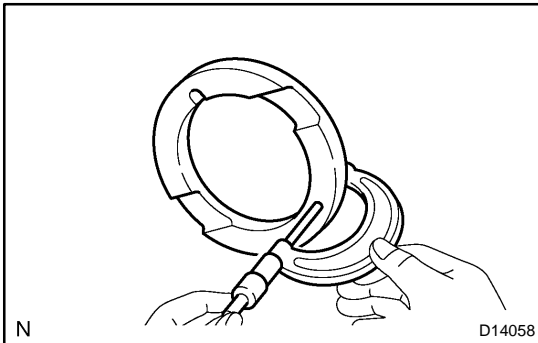
Standard inside diameter:

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 6th gear.

**9. INSPECT 3RD GEAR THRUST WASHER**

Using a micrometer, measure the thrust washer thickness.

Standard thickness:

7.12 to 7.18 mm (0.2803 to 0.2827 in.)

Minimum thickness:

7.12 mm (0.2803 in.)

If the thickness is less than the minimum, replace the 3rd gear thrust washer.