Mainshaft Assembly
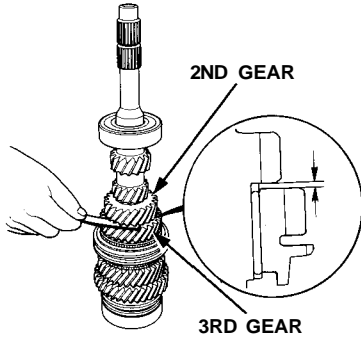
Clearance Inspection
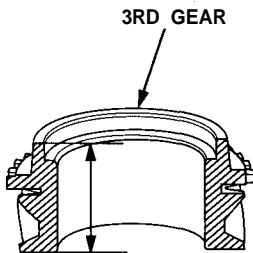
1. Measure the clearance between 2nd and 3rd gears.

   Standard: **0.06 — 0.21 mm**
   (0.002-0.008 in)
   Service Limit: 0.3 mm (0.012 in)

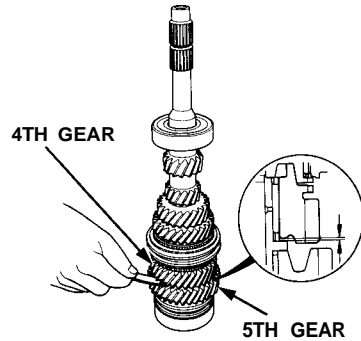2. If the clearance exceeds the service limit, measure the thickness of 3rd gear.

   Standard: **35.92 — 35.97 mm**
   (1.414-1.416 in)
   Service Limit: 35.80 mm (1.409 in)

If the thickness of 3rd gear is less than the service limit, replace 3rd gear with a new one.
If the thickness of 3rd gear is within the service limit, replace the 3rd/4th synchro hub with a new one.
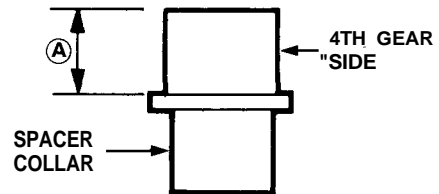
3. Measure the clearance between 4th gear and the spacer collar.

   Standard: **0.06—0.21 mm**
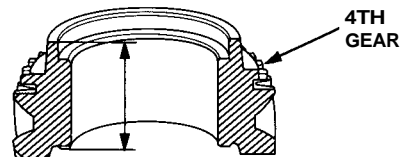   **(0.002-0.008 in)**
   Service Limit: 0.3 mm (0.012 in)

4. If the clearance exceeds the service limit, measure distance (A) on the spacer collar.

   Standard: **29.53 — 29.58 mm**
   (1.163-1.165 in)
   Service Limit: 29.51 mm (1.162 in)

5. If distance (A) is less than the service limit, replace the spacer collar with a new one.
   If distance (A) is within the service limit, measure the thickness of 4th gear.

   Standard: **35.92-35.97 mm**
   (1.414-1.416 in)
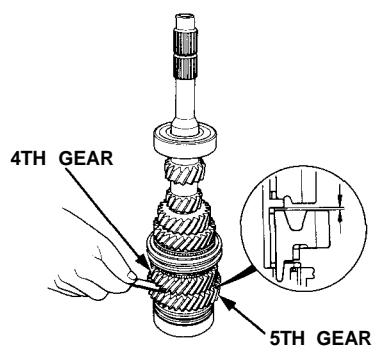   **Service Limit: 35.80 mm (1.409 in)**

If the thickness of 4th gear is less than the service limit, replace 4th gear with a new one.
If the thickness of 4th gear is within the service limit, replace the 3rd/4th synchro hub with a new one.
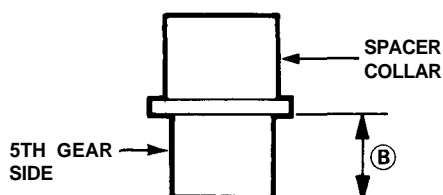
6. Measure the clearance between the spacer collar and 5th gear.

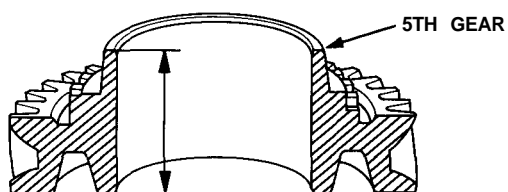**Standard:** **0.06—0.21 mm**
(0.002-0.008 in)
Service Limit: 0.3 mm (0.012 in)

4TH GEAR

5TH GEAR

7. If the clearance exceeds the service limit, measure distance Ⓑ on the spacer collar.

Standard: **28.53—28.58 mm**
(1.123-1.125 in)
Service Limit: 28.51 mm (1.122 in)

SPACER COLLAR

5TH GEAR SIDE

Ⓑ

8. If distance Ⓑ is less than the service limit, replace the spacer collar with a new one.
If distance Ⓑ is within the service limit, measure thickness of 5th gear.

Standard: **34.92-34.97 mm**
(1.375-1.377 in)
Service Limit: 34.80 mm (1.370 in)

5TH GEAR

If the thickness of 5th gear is less than the service limit, replace 5th gear with a new one.
If the thickness of 5th gear is within the service limit, replace the 5th synchro hub with a new one.