

# 4-Speed Transmission

## Countershaft Clearance Measurement

NOTE: On adjusting the countershaft clearance, select the correct spacer 28 mm, flanged spacer, and 1st gear thrust washer from the tables below.

1. Assemble the mainshaft and countershaft as shown below.

### THRUST WASHER THICKNESS

#### CLASS THICKNESS

A	1.95–1.98 mm (0.077–0.078 in)
B	1.92–1.95 mm (0.076–0.077 in)
C	1.89–1.92 mm (0.074–0.076 in)

### SPACER 28 mm

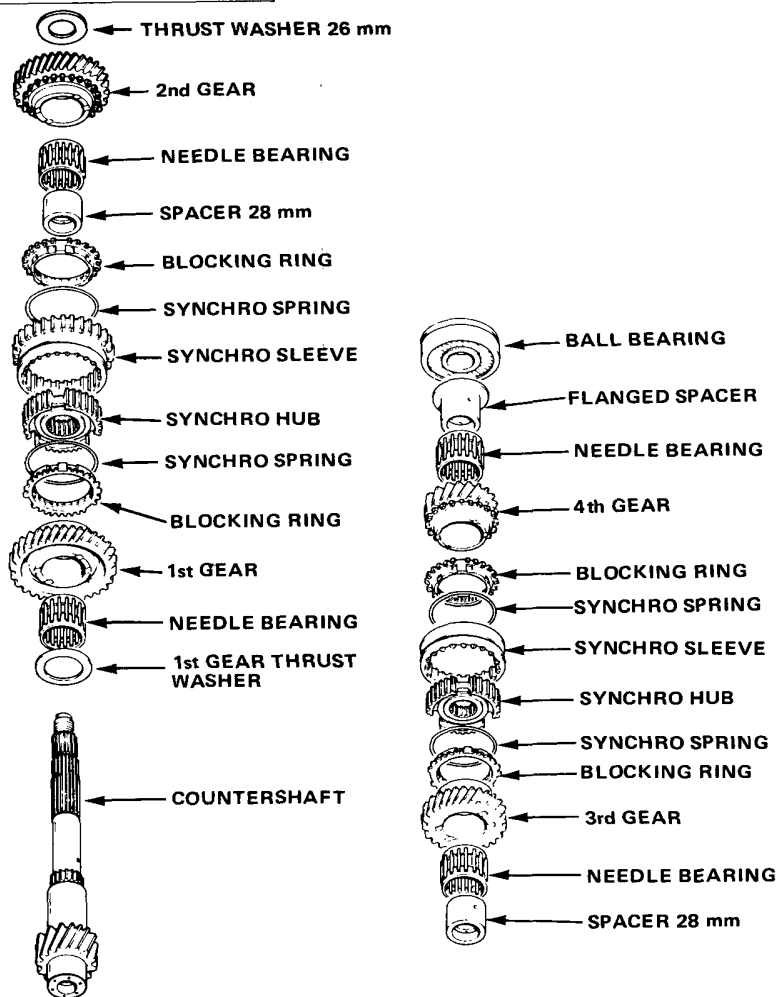
#### LENGTH

28.01–28.04 mm (1.103–1.104 in)
28.04–28.07 mm (1.104–1.105 in)
28.07–28.10 mm (1.105–1.106 in)
28.10–28.13 mm (1.106–1.107 in)

### FLANGED SPACER

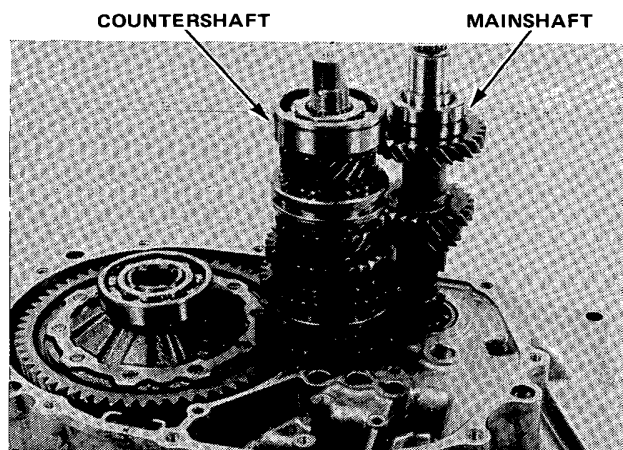
#### LENGTH

28.01–28.04 mm (1.103–1.104 in)
28.04–28.07 mm (1.104–1.105 in)
28.07–28.10 mm (1.105–1.106 in)
28.10–28.13 mm (1.106–1.107 in)

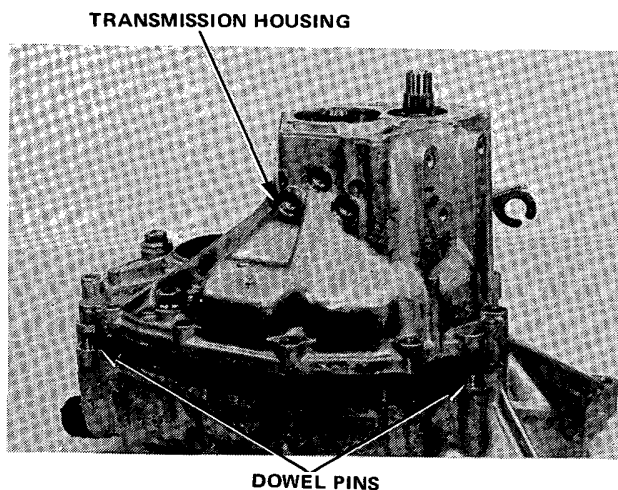




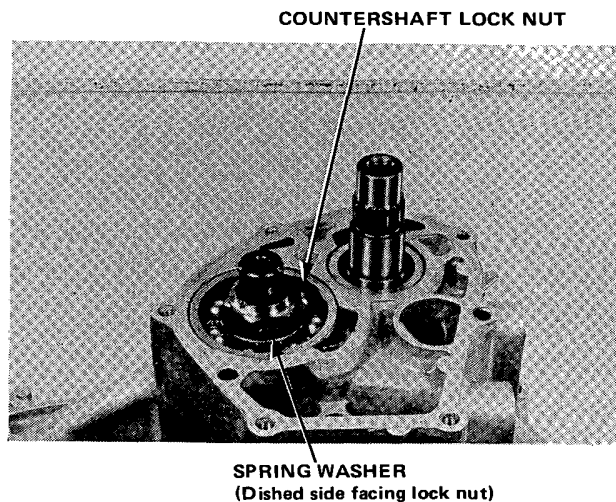
2. Install the mainshaft and countershaft as an assembly.



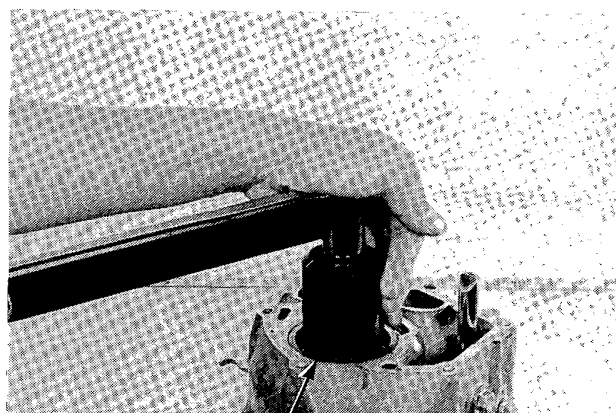
3. Lift the countershaft 2nd and reverse gear to shift in to 2nd gear.
4. Install the transmission housing and dowel pins as shown.



5. Install the spring washer and countershaft lock nut on the countershaft.



6. Install the mainshaft holder. See page 14-8.
7. Install the countershaft lock nut and tighten to 90 N·m (9.0 kg-m, 65 lb-ft).



8. Remove the transmission housing by using housing puller. See page 14-8.
9. Remove the countershaft and mainshaft.

(cont'd)

# 4-Speed Transmission

## Countershaft Assembly Clearance (cont'd)

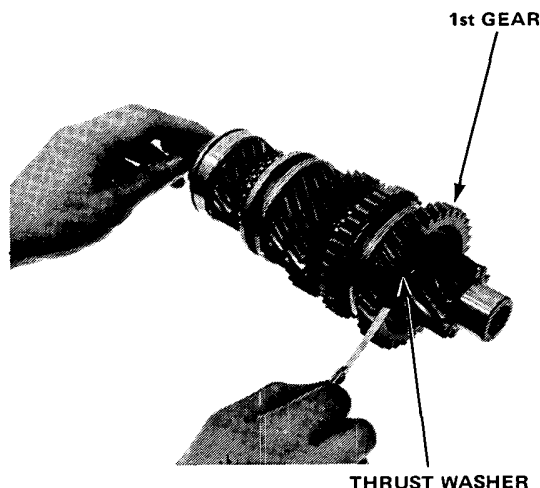
- If any measurement is out of tolerance, the countershaft assembly must be disassembled and spacer collars or the thrust washer changed (see page 15-12).

1. Measure clearance between the thrust washer and the 1st gear.

### 1st Gear Clearance

Standard (New): 0.03–0.08 mm (0.001–0.003 in.)

Service Limit: 0.18 mm (0.007 in.)

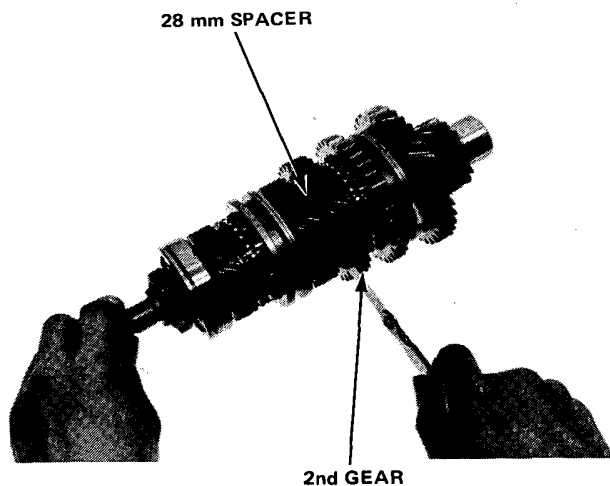


2. Measure clearance between the 28 mm spacer and the 2nd gear.

### 2nd Gear Clearance:

Standard (New): 0.05–0.12 mm (0.002–0.005 in.)

Service Limit: 0.18 mm (0.007 in.)

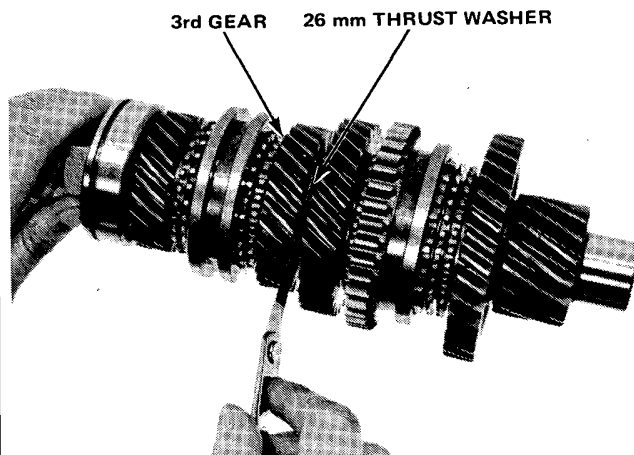


3. Measure the clearance between the 26 mm thrust washer and the 3rd gear.

### 3rd Gear

Standard: 0.05–0.12 mm  
(0.0020–0.0047 in.)

Service Limit: 0.18 mm (0.0071 in.)



4. Measure clearance between the 4th gear and the flanged spacer.

### 4th Gear

Standard: 0.05–0.12 mm  
(0.0020–0.0047 in.)

Service Limit: 0.18 mm (0.0071 in.)

### FLANGED SPACER

