

TRANSMISSION

TRANSMISSION INSPECTION

Disassemble the mainshaft and countershaft. Inspect each gear for wear or damage and replace if necessary. Check the gear teeth and engagement dogs for wear or damage. Check the mainshaft and countershaft splines and sliding surfaces for wear or damage.

Measure the I.D. of each spinning gear.

SERVICE LIMITS:

- M4:** 28.04 mm (1.104 in)
- M5:** 28.04 mm (1.104 in)
- C1:** 23.04 mm (0.907 in)
- C2:** 28.04 mm (1.104 in)
- C3:** 31.05 mm (1.222 in)

Measure the I.D. and O.D. of the gear bushings.

SERVICE LIMITS:

- I.D. :** **M4:** 25.02 mm (0.985 in)
- C1:** 20.04 mm (0.789 in)
- C2:** 25.04 mm (0.986 in)
- C3:** 28.04 mm (1.104 in)
- O.D. :** **M4:** 27.93 mm (1.100 in)
- M5:** 27.93 mm (1.100 in)
- C1:** 22.93 mm (0.903 in)
- C2:** 27.93 mm (1.100 in)
- C3:** 30.92 mm (1.217 in)

Calculate the clearances between the gears and bushings.

SERVICE LIMITS:

- M4:** 0.10 mm (0.004 in)
- M5:** 0.10 mm (0.004 in)
- C1:** 0.10 mm (0.004 in)
- C2:** 0.10 mm (0.004 in)
- C3:** 0.13 mm (0.005 in)

Measure the O.D. of the mainshaft and countershaft in the locations shown.

SERVICE LIMITS:

- M4 bushing:** 24.94 mm (0.982 in)
- C1 bushing:** 19.94 mm (0.785 in)
- C2 bushing:** 24.95 mm (0.982 in)
- C3 bushing:** 27.93 mm (1.100 in)

Calculate the clearances between the shafts and bushings.

SERVICE LIMITS:

- M4 bushing:** 0.06 mm (0.002 in)
- C1 bushing:** 0.06 mm (0.002 in)
- C2 bushing:** 0.06 mm (0.002 in)
- C3 bushing:** 0.06 mm (0.002 in)

