



SERVICE INFORMATION	11-1	TRANSMISSION	11-5
TROUBLESHOOTING	11-2	OUTPUT GEAR CASE	11-10
SHIFT FORKS AND SHIFT DRUM	11-3		

SERVICE INFORMATION

GENERAL

- For internal transmission repairs, the crankcase must be separated (Section 10).
- Replace the countershaft and output driven gear as a set.
- When using the lock nut wrench, use a deflecting beam type torque wrench 35–51 cm (14–20 inches) long. The lock nut wrench increases the torque wrench's leverage, so the torque wrench reading will be less than the torque actually applied to the lock nut. The specification given is the actual torque applied to the lock nut, not the reading on the torque wrench when used with the lock nut wrench. The torque wrench scale reading is given with the actual torque specification.

SPECIFICATIONS

			STANDARD	SERVICE LIMIT
Transmission	Backlash	1st, 2nd, 3rd	0.089–0.179 mm (0.0035–0.0070 in)	0.22 mm (0.009 in)
		4th, 5th, 6th	0.068–0.136 mm (0.0013–0.0040 in)	0.18 mm (0.007 in)
	Gear I.D.	M5, M6, C3, C4	28.000–28.021 mm (1.1024–1.1032 in)	28.04 mm (1.104 in)
		C1	24.000–24.021 mm (0.9449–0.9457 in)	24.04 mm (0.946 in)
		C2	29.000–29.021 mm (1.1417–1.1426 in)	29.04 mm (1.143 in)
	Gear bushing O.D.	M5, M6, C3, C4	27.959–27.980 mm (1.1007–1.1016 in)	27.94 mm (1.100 in)
		C2	28.959–28.980 mm (1.1413–1.1409 in)	28.94 mm (1.139 in)
		C1	23.959–23.980 mm (0.9443–0.9451 in)	23.94 mm (0.944 in)
	Gear bushing I.D.	M5, C2	24.985–25.006 mm (0.9837–0.9845 in)	25.04 mm (0.986 in)
		C1	20.016–20.037 mm (0.7880–0.7889 in)	20.06 mm (0.790 in)
	Mainshaft O.D.	M5	24.959–24.980 mm (0.9826–0.9835 in)	24.90 mm (0.980 in)
	Countershaft O.D.	C1	19.987–20.000 mm (0.7869–0.7874 in)	19.94 mm (0.785 in)
		C2	24.959–24.980 mm (0.9826–0.9835 in)	24.90 mm (0.980 in)
	Gear-to-bushing or shaft clearance	M5, M6, C3, C4 gear to bushing	0.020–0.062 mm (0.0008–0.0024 in)	0.08 mm (0.003 in)
		M5, C2 bushing to shaft	0.005–0.047 mm (0.0002–0.0019 in)	0.07 mm (0.003 in)
		C1 gear to bushing	0.015–0.057 mm (0.0006–0.0022 in)	0.08 mm (0.003 in)
		C1 bushing to shaft	0.007–0.041 mm (0.0003–0.0016 in)	0.06 mm (0.002 in)
		C2 gear to bushing	0.020–0.062 mm (0.0008–0.0024 in)	0.08 mm (0.003 in)