

12. TRANSMISSION

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SERVICE INFORMATION

GENERAL

- This section covers service of the transmission (including the shift fork and shift drum). For crankshaft and balancer service, refer to section 13.
- The crankcase halves must be separated to service the transmission. To service these parts, the engine must be removed from the frame (section 7).
- The following parts must be removed before disassembling the crankcase.
 - Cylinder head (section 10)
 - Cylinder and piston (section 11)
 - Clutch, primary drive gear, gearshift linkage (section 8)
 - Oil pump (section 4)
 - Flywheel (section 9)
- Be careful not to damage the crankcase mating surfaces when servicing.

SPECIFICATIONS

Unit: mm (in)

ITEM			STANDARD	SERVICE LIMIT
Transmission	Gear I.D.	M5, M6	17.016 – 17.034 (0.6699 – 0.6706)	17.08 (6.724)
		C1	18.000 – 18.021 (0.7087 – 0.7095)	18.07 (0.711)
		C2	23.020 – 23.041 (0.9063 – 0.9071)	23.09 (0.909)
		C3, C4	22.020 – 22.041 (0.8669 – 0.8678)	22.1 (0.87)
	Bushing I.D.	C1	15.000 – 15.018 (0.590 – 0.591)	15.1 (0.59)
		C2	20.020 – 20.041 (0.7882 – 0.7890)	20.10 (0.791)
	Bushing O.D.	C1	17.969 – 17.980 (0.7074 – 0.7079)	17.9 (0.70)
		C2	22.984 – 23.005 (0.9049 – 0.9057)	22.9 (0.90)
	Gear-to-bushing clearance	C1	0.020 – 0.052 (0.0008 – 0.0020)	0.10 (0.004)
		C2	0.036 – 0.057 (0.0014 – 0.0022)	0.10 (0.004)
	Mainshaft O.D.	M5	16.966 – 16.984 (0.6680 – 0.6687)	16.93 (0.667)
	Countershaft O.D.	C1 gear bushing	14.966 – 14.984 (0.5892 – 0.5899)	14.90 (0.587)
		C2 gear bushing	19.978 – 19.989 (0.7866 – 0.7870)	19.92 (0.784)
	Gear-to-shaft clearance	M5	0.032 – 0.068 (0.0012 – 0.0027)	0.10 (0.004)
Bushing-to-shaft clearance	C1	0.016 – 0.052 (0.0001 – 0.0020)	0.10 (0.004)	
	C2	0.031 – 0.063 (0.0012 – 0.0025)	0.10 (0.004)	
Shift fork	Shaft O.D.		9.986 – 9.995 (0.3931 – 0.3935)	9.93 (0.391)
	Fork I.D.		10.000 – 10.018 (0.3937 – 0.3944)	10.03 (0.395)
	Fork claw thickness		4.93 – 5.00 (0.194 – 0.197)	4.90 (0.193)
	Shift drum O.D. at right end		25.959 – 25.980 (1.0220 – 1.0228)	25.90 (1.020)
	Shift drum journal (R.crankcase)		26.000 – 26.021 (1.0236 – 1.0244)	25.08 (0.987)

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