

8. TRANSMISSION/ CRANKSHAFT/BALANCER

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SERVICE INFORMATION

GENERAL

- The crankcase halves must be separated to repair the transmission or crankshaft. Remove the following parts before separating the crankcase.

• Engine removal	Section 4	• Gearshift linkage	Section 7
• Cylinder head	Section 5	• Alternator	Section 6
• Cylinder and piston	Section 5	• Kick starter	Section 7
• Clutch	Section 7	• Balancer	Section 8
- The balancer can be serviced with the engine in the frame, after removing the clutch (Section 8).
- The crankshaft ball bearings are an interference fit on the journals.
Use the special tools to remove them from the crankshaft (page 8-6, 13 and 8-15).

SPECIFICATIONS

ITEM		STANDARD mm (in)	SERVICE LIMIT mm (in)	
Shift fork, Shift fork shaft	Shift fork I.D. (R.L.)	12.041–12.056 (0.4741–0.4746)	12.090 (0.4760)	
	Shift fork I.D. (C)	11.041–11.056 (0.4347–0.4353)	11.090 (0.4366)	
	Mainshaft shift fork shaft O.D.	10.983–10.994 (0.4324–0.4328)	10.97 (0.432)	
	Countershaft shift fork shaft O.D.	11.983–11.994 (0.4718–0.4722)	11.97 (0.471)	
	Shift fork shaft pawl thickness	4.93–5.00 (0.194–0.197)	4.8 (0.19)	
Transmission	Gear I.D.	M6, C4	25.020–25.041 (0.9850–0.9859)	25.06 (0.987)
		M5	28.007–28.028 (1.1026–1.1035)	28.05 (1.104)
		C1	22.020–22.041 (0.8669–0.8678)	22.06 (0.869)
		C2	27.020–27.041 (1.0638–1.0646)	27.06 (1.065)
		C3	28.020–28.041 (1.1032–1.1040)	28.06 (1.105)
	Bushing O.D.	C1	21.979–21.000 (0.8653–0.8268)	21.96 (0.865)
		C2	26.979–27.000 (1.0622–1.0630)	27.96 (1.101)
		C3, M5	27.959–27.979 (1.1007–1.1015)	27.94 (1.100)
	Bushing I.D.	C1	19.000–19.021 (0.748–0.7489)	19.04 (0.750)
		C2	24.000–24.021 (0.9449–0.9457)	24.04 (0.947)
	Mainshaft O.D.	M6	24.959–24.980 (0.9826–0.9835)	24.94 (0.982)
	Countershaft O.D.	C1	18.959–18.980 (0.7464–0.7472)	18.94 (0.746)
		C2	23.959–23.980 (0.9433–0.9441)	23.94 (0.943)
		C4	24.959–24.980 (0.9826–0.9835)	24.94 (0.982)