

10. TRANSMISSION/ CRANKSHAFT

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SERVICE INFORMATION

GENERAL

- Use care not to damage the oil pressure pad on the crankshaft right end.
- The crankcase must be separated to service the crankshaft and transmission.
- Remove the following parts before separating the crankcase.
 - Cylinder head Section 6
 - Cylinder and piston Section 7
 - Clutch and gearshift linkage Section 8
 - Alternator and starter clutch Section 9

SPECIFICATIONS

ITEM			STANDARD	SERVICE LIMIT
Shift fork, guide shaft	Fork	I.D.	12.00–12.02 mm (0.472–0.473 in)	12.04 mm (0.474 in)
		Claw thickness	4.93–5.00 mm (0.194–0.197 in)	4.50 mm (0.177 in)
	Shaft O.D.		11.976–11.994 mm (0.4715–0.4722 in)	11.96 mm (0.471 in)
Trans- mission	Gear I.D.	C1	16.516–16.534 mm (0.6502–0.6509 in)	16.58 mm (0.653 in)
		C3, M4, M5	20.020–20.041 mm (0.7882–0.7890 in)	20.09 mm (0.791 in)
		C2	22.020–22.034 mm (0.8669–0.8675 in)	22.09 mm (0.870 in)
	Shaft O.D.	C1	16.466–16.484 mm (0.6483–0.6490 in)	16.42 mm (0.646 in)
		C2	21.959–21.980 mm (0.8645–0.8654 in)	21.91 mm (0.863 in)
		C3, M4, M5	19.959–19.980 mm (0.7858–0.7866 in)	19.91 mm (0.784 in)
Crankshaft	Connecting rod small end I.D.		15.010–15.028 mm (0.5909–0.5917 in)	15.06 mm (0.593 in)
	Connecting rod big end axial clearance		0.05–0.30 mm (0.002–0.012 in)	0.80 mm (0.032 in)
	Connecting rod big end radial clearance		0–0.008 mm (0–0.0003 in)	0.05 mm (0.002 in)
	Runout		_____	see page 10-3

TOOLS

Special

Bearing remover, 15 mm 07936-KC70000

Common

Attachment, 32 x 35 mm 07746-0010100
 Attachment, 42 x 47 mm 07746-0010300
 Attachment, 52 x 55 mm 07746-0010400
 Pilot, 20 mm 07746-0040500
 Pilot, 30 mm 07746-0040700
 Driver 07749-0010000

TROUBLESHOOTING

Hard to shift

1. Shift fork bent
2. Shift fork shaft bent

Transmission jumps out of gear

1. Gear dogs worn
2. Shift fork bent or damaged
3. Shift fork shaft bent

Crankshaft noisy

1. Worn connecting rod big end bearing
2. Bent connecting rod
3. Worn crankshaft main journal bearing

Gears noisy

1. Worn transmission gear
2. Worn spline shafts