



SERVICE INFORMATION	12-1
TROUBLESHOOTING	12-2
TRANSMISSION DISASSEMBLY	12-3
KICK STARTER DISASSEMBLY	12-8
KICK STARTER ASSEMBLY	12-9
TRANSMISSION ASSEMBLY	12-11

SERVICE INFORMATION

GENERAL INSTRUCTIONS

- The crankcase must be separated to service the transmission and kick starter.

SPECIFICATIONS

ITEM	STANDARD	SERVICE LIMIT	
Gear backlash	Low, 2nd	0.044–0.133 mm (0.0017–0.0052 in)	
	3rd, 4th, top	0.046–0.140 mm (0.0018–0.0055 in)	
Gear side clearance	M 4th	0.06–0.41 mm (0.002–0.016 in)	
	M Top	0.05–0.58 mm (0.002–0.023 in)	
	C Low	0.05–0.22 mm (0.002–0.009 in)	
	C 3rd	0.06–0.41 mm (0.002–0.016 in)	
Gear dog clearance (neutral)		0.3 mm (0.01 in)	
Shaft-to-gear clearance	M 4, M top	0.040–0.082 mm (0.0016–0.0032 in)	
	C 2nd, C 3rd	0.040–0.082 mm (0.0016–0.0032 in)	
Shaft-to-C Low gear bushing clearance		0.020–0.054 mm (0.0008–0.0021 in)	
Bushing-to-C Low gear clearance		0.015–0.057 mm (0.0006–0.0022 in)	
Gear I.D.	C 3rd, C Top	25.020–25.041 mm (0.9850–0.9859 in)	
	M 4th, M Top	25.020–25.041 mm (0.9850–0.9859 in)	
C Low gear bushing	I.D.	20.020–20.041 mm (0.7882–0.7890 in)	
	O.D.	25.005–25.016 mm (0.9844–0.9849 in)	
Mainshaft	O.D.	24.959–24.980 mm (0.9826–0.9835 in)	
		19.987–20.000 mm (0.7869–0.7874 in)	
Countershaft	O.D.	19.987–20.000 mm (0.7869–0.7874 in)	
		24.959–24.980 mm (0.9826–0.9835 in)	
		26.959–26.980 mm (1.0614–1.0622 in)	
		19.95 mm (0.785 in)	
Shift fork	Shift fork I.D. Center fork	12.000–12.021 mm (0.4724–0.4733 in)	
		15.000–15.021 mm (0.5906–0.5914 in)	
	R/L forks	Fork claw thickness	4.93–5.00 mm (0.194–0.197 in)
		Guide shaft O.D. Center shaft	11.966–11.984 mm (0.4711–0.4718 in)
	R/L shafts	14.966–14.984 mm (0.5892–0.5899 in)	
Shift drum	Drum O.D.	11.966–11.984 mm (0.4711–0.4718 in)	
Lower case	Case I.D.	12.000–12.027 mm (0.4724–0.4735 in)	
Kick starter	Starter pinion I.D.	22.000–22.021 mm (0.8661–0.8670 in)	
	Starter spindle O.D.	21.959–21.980 mm (0.8645–0.8654 in)	