

Service data

Unit: mm (in)

Item	Standard	Service limit
Cylinder/Piston		
Cylinder I.D.	81.500 – 81.515 (3.2086 – 3.2092)	81.540 (3.2102)
Taper	–	0.05 (0.002)
Out-of-round	–	0.05 (0.002)
Warpage	–	0.05 (0.002)
Piston O.D.	81.470 – 81.480 (3.2074 – 3.2078)	81.440 (3.2062)
Measurement point	3.0 (0.118) from bottom of skirt	–
Pin bore I.D.	16.006 – 16.010 (0.6301 – 0.6303)	16.02 (0.6307)
Piston pin O.D.	15.997 – 16.000 (0.6298 – 0.6299)	15.99 (0.6295)
Piston ring End gap		
Top	0.20 – 0.30 (0.008 – 0.0118)	0.44 (0.0173)
Second	0.35 – 0.50 (0.0137 – 0.0197)	0.64 (0.0251)
Oil (side rail)	0.20 – 0.70 (0.008 – 0.028)	0.90 (0.0354)
Ring-to-groove clearance		
Top	0.070 – 0.110 (0.028 – 0.0043)	0.115 (0.0045)
Second	0.020 – 0.060 (0.008 – 0.0236)	0.065 (0.0026)
Cylinder-to-piston clearance	0.020 – 0.045 (0.008 – 0.0177)	0.08 (0.003)
Piston-to-piston pin clearance	0.006 – 0.013 (0.0002 – 0.0005)	0.03 (0.0011)
Clutch/Gearshift Linkage		
Recommended clutch fluid	DOT 4 brake fluid	–
Clutch spring free length	27.6 (1.09)	26.8 (1.06)
Clutch disc thickness	3.22 – 3.38 (0.127 – 0.133)	3.15 (0.124)
Clutch plate warpage	–	0.10 (0.004)
Clutch slave cylinder I.D.	27.000 – 27.021 (1.0630 – 1.0638)	–
Clutch slave piston O.D.	26.940 – 26.960 (1.0606 – 1.0614)	–
Kickstarter		
Spindle O.D.	16.466 – 16.484 (0.6483 – 0.6490)	16.46 (0.648)
Pinion gear I.D.	16.516 – 16.534 (0.6502 – 0.6509)	16.55 (0.652)
Idle gear I.D.	17.016 – 17.034 (0.6699 – 0.6706)	17.06 (0.672)
Countershaft O.D. at kickstarter idle gear	16.983 – 16.994 (0.6686 – 0.6691)	16.97 (0.668)

Unit: mm (in)

Item	Standard	Service limit
Crankshaft/Transmission		
Crankshaft runout		
Right	–	0.03 (0.001)
Left	–	0.05 (0.002)
Connecting rod big end		
Side clearance	0.30 – 0.75 (0.012 – 0.030)	0.8 (0.03)
Radial clearance	0.06 – 0.18 (0.002 – 0.007)	0.05 (0.002)
Transmission gear I.D.		
M4	23.020 – 23.041 (0.9063 – 0.9071)	23.07 (0.908)
M5	23.020 – 23.041 (0.9063 – 0.9071)	23.07 (0.908)
C1	20.020 – 20.041 (0.7882 – 0.7890)	20.06 (0.790)
C2	25.020 – 25.041 (0.9850 – 0.9859)	25.06 (0.987)
C3	25.020 – 25.041 (0.9850 – 0.9859)	25.06 (0.987)
Gear bushing D.I.		
M5	20.000 – 20.021 (0.7866 – 0.7882)	20.05 (0.789)
C1	17.000 – 17.018 (0.6693 – 0.6700)	17.04 (0.671)
C2	22.000 – 22.021 (0.8661 – 0.8670)	22.04 (0.868)
C3	22.000 – 22.021 (0.8661 – 0.8670)	22.04 (0.868)
O.D.		
M4	22.979 – 23.000 (0.9047 – 0.9055)	22.96 (0.904)
M5	22.979 – 23.000 (0.9047 – 0.9055)	22.96 (0.904)
C1	19.979 – 20.000 (0.7866 – 0.7874)	19.95 (0.785)
C2	24.979 – 25.000 (0.9834 – 0.9843)	24.95 (0.982)
C3	24.979 – 25.000 (0.9834 – 0.9843)	24.95 (0.982)
Countershaft O.D.		
at C1 bushing	16.983 – 16.994 (0.6686 – 0.6691)	16.97 (0.668)
at C2/C3 bushing	21.959 – 21.980 (0.8645 – 0.8654)	21.94 (0.864)
at kickstarter idle gear	16.983 – 16.994 (0.6686 – 0.6691)	16.97 (0.668)
Shift fork I.D.		
C	11.003 – 11.024 (0.4332 – 0.4330)	11.04 (0.435)
R. L	12.035 – 12.056 (0.4738 – 0.4746)	12.07 (0.475)
Shift fork claw thickness		
C	4.93 – 5.00 (0.194 – 0.197)	4.8 (0.19)
R. L	4.93 – 5.00 (0.194 – 0.197)	4.8 (0.19)
Shift fork shaft O.D.		
C	10.983 – 10.994 (0.4324 – 0.4328)	10.97 (0.432)
R. L	11.966 – 11.984 (0.4711 – 0.4718)	11.95 (0.470)
Oil pump		
Tip clearance	–	0.20 (0.008)
Body clearance	0.15 – 0.20 (0.006 – 0.008)	–
Side clearance	0.05 – 0.12 (0.002 – 0.004)	–