

# 1.3 RevTech Engine Specifications

RevTech Engine Specifications					
Generation	Gen 2 88"	Gen 3 100"	Gen 3 110"	Gen 4 115"	Gen 4 125"
Engine Type	4-cycle, 45-deg. V	4-cycle, 45-deg. V	4-cycle, 45-deg. V	4-cycle, 45-deg. V	4-cycle, 45-deg. V
Number of Cylinders	2	2	2	2	2
Bore and Stroke	3.623" x 4.25"	4" x 4"	4" x 4.375"	4.125" x 4.30"	4.25" x 4.41"
Displacement	88 cu-in / 1440cc	100 cu-in / 1636cc	110 cu-in / 1800cc	115 cu-in / 1880cc	125 cu-in / 2050cc
Compression Ratio	9.5:1	10:01	10:01	9.5:1	9.5:1
Connecting Rod Length	7.440 in	7.440 in	7.440 in	7.667 in	7.667 in
Horsepower	82 hp @ 5700	96 hp @ 5000	106 hp @ 5500	108 hp @ 5700	115 hp @ 5500
Torque	88 ft/lbs @ 4500	109 ft/lbs @ 4250	112 ft/lbs @ 4100	115 ft/lbs @ 3750	135 ft @ 3700

Rocker Box Assembly		
Item	Standard Fit	Wear Limits
Rocker arm to bushing (press fit)	0.002-0.004	Less than 0.002
Rocker arm shaft to bushing	0.0005-0.002	Exceeds 0.0035
Rocker arm end play	0.005-0.015	Exceeds 0.020
Cylinder Head		
Item	Standard Fit	Wear Limits
Valve Guide fit into head	0.002-0.0035	Less than 0.002
Valve Seat fit into head	0.004-0.006	Less than 0.004
Intake Valve fit in guide	0.0012-0.0020	0.0035
Exhaust Valve fit in guide	0.0015-0.0025	0.0040
Valve seat width	0.040-0.060	0.090
Valve stem protrusion, Gen 2 engines	1.800-1.900	1.900
Valve stem protrusion, Gen 3&4 engines	1.900-2.025	2.035
Valve face runout	0.002	0.002
Piston		
Item	Standard Fit	Wear Limits
Fit into cylinder	0.0025-0.0030	0.0050
Wrist pin to piston	0.0004-0.0007	0.0010
Wrist pin to rod bushing	0.0005-0.0010	0.0015
Compression ring end gap	0.015-0.025	0.030
Oil control ring end gap	0.010-0.040	0.050
Flywheels		
Item	Standard Fit	Wear Limits
Runout at shafts	0.000-0.002	0.004
Connecting rod side play, Gen 2&3 engines	0.030-0.045	0.050
Connecting rod side play, Gen 4 engines	0.010-0.030	0.040
Timken endplay, Gen 2&4 engines	0.001-0.005	0.006
Timken endplay, Gen 3 engines	0.002-0.006	0.007
Crank pin running clearance	0.0008-0.0012	0.0020
Pinion bearing running clearance	0.0004-0.0010	0.0015

Gearcase		
Item	Standard Fit	Wear Limits
Breather gear endplay	0.005-0.015	0.016
Camshaft endplay	0.005-0.020	0.021
Camshaft in bushing	0.0007-0.0020	0.0030
Pinion shaft in bushing	0.001-0.0025	0.0035
Bushing fit into cover	0.0007-0.0025	Less than 0.0006
Lifter fit in guide	0.0008-0.0020	0.0030
Torque Specifications		
Rocker box	1/4" hardware	90-120 in/lbs
	5/16" hardware	18 ft/lbs
Rocker arm support		18 ft/lbs
Head bolts		8ft/lbs, 16ft/lbs, 90deg
Cylinder studs		90-120 in/lbs
Crankcase	1/4" hardware	12 ft/lbs
	5/16" hardware	18 ft/lbs
Cam cover		90-120 in/lbs
Oil pump		90-120 in/lbs
Plugs, oil pump, tappet screen, timing hole		90-120 in/lbs
Tappet guide		90-120 in/lbs
Ignition cup, sensor plate		20-30 in/lbs
Intake manifold flanges		16 ft/lbs
Pinion nut		35-45 ft.lbs
Spark plug		18 ft/lbs
Air cleaner mount to head		120-150 in/lbs