

MODEL 120000 HORIZONTAL SERIES

ENGINE SPECIFICATIONS	
Armature Air Gap	.010 - .014 in. (.25 - .36 mm)
Crankshaft End Play	.002 - .028 in. (.05 - .71 mm)
Spark Plug Gap	.030 in. (.76 mm)
Valve Clearance – Intake	.004 - .006 in. (.10 - .15 mm)
Valve Clearance – Exhaust	.009 - .011 in. (.23 - .28 mm)
FASTENER TORQUE SPECIFICATIONS	
	TORQUE
Air Cleaner Base / Backplate	40 lb-in. (5 Nm)
Armature	30 lb-in. (3 Nm)
Blower Housing	90 lb-in. (10 Nm)
Bracket to Carburetor (Snow)	45 lb-in. (5 Nm)
Carburetor Bowl Screw	90 lb-in. (10 Nm)
Carburetor to Cylinder Head	85 lb-in. (10 Nm)
Connecting Rod	100 lb-in. (11 Nm)
Control Bracket	100 lb-in. (11 Nm)
Control Panel Trim	40 lb-in. (5 Nm)
Crankcase Cover	100 lb-in. (11 Nm)
Cylinder Head	220 lb-in. (25 Nm)
Cylinder Head Plate	100 lb-in. (11 Nm)
Cylinder Shield	30 lb-in. (3 Nm)
Exhaust Manifold / Adapter	180 lb-in. (20 Nm)
Flywheel Nut	100 lb-ft. (135 Nm)
Flywheel Fan	180 lb-in. (20 Nm)
Flywheel Guard	30 lb-in. (3 Nm)
Fuel Tank	85 lb-in. (10 Nm)
Governor Lever Nut	45 lb-in. (5 Nm)
Muffler	100 lb-in. (11 Nm)
Muffler Support Bracket	45 lb-in. (5 Nm)
Oil Drain Cap – Front (Snow)	130 lb-in. (15 Nm)
Oil Drain Plug – Side	100 lb-in. (11 Nm)
Oil Fill Tube	50 lb-in. (6 Nm)
Rewind Starter	30 lb-in. (3 Nm)
Rocker Arm Stud	100 lb-in. (11 Nm)
Rocker Ball Set Screw or Nut	45 lb-in. (5 Nm)
Spark Plug	180 lb-in. (20 Nm)
Starter Cover	20 lb-in. (2 Nm)
Starter Motor	140 lb-in. (16 Nm)
Rocker Cover	55 lb-in. (6 Nm)
Snow Hood	40 lb-in. (5 Nm)
Snow Shield	50 lb-in. (6 Nm)

REJECT DIMENSIONS	STANDARD SIZE	REJECT SIZE
CYLINDER		
Main Bearing	.876 in. (22.25 mm)	.878 in. (22.30 mm)
Camshaft Bearing	.5011 in. (12.72 mm)	.5040 in. (12.80 mm)
Bore Diameter	2.970 in. (75.44 mm)	2.974 in. (75.54 mm)
Bore Out-Of-Round	N/A	.0015 in. (.04 mm)
CYLINDER HEAD		
Valve Guide	.249 in. (6.32 mm)	.267 in. (6.78 mm)
Intake Valve Stem Diameter	.247 in. (6.28 mm)	.244 in. (6.20 mm)
Exhaust Valve Stem Diameter	.247 in. (6.28 mm)	.244 in. (6.20 mm)
CYLINDER COVER		
Main Bearing	1.063 in. (27.00 mm)	1.065 in. (27.05 mm)
Camshaft Bearing	.501 in. (12.72 mm)	.504 in. (12.80 mm)
CRANKSHAFT		
Crank Pin Journal	1.098 in. (27.89 mm)	1.097 in. (27.86 mm)
Mag-Side Journal	.874 in. (22.20 mm)	.876 in. (22.17 mm)
PTO-Side Journal	1.062 in. (26.96 mm)	1.060 in. (26.92 mm)
CAMSHAFT		
Mag-Side Journal	.499 in. (12.67 mm)	.498 in. (12.65 mm)
PTO-Side Journal	.499 in. (12.67 mm)	.498 in. (12.65 mm)
Intake Lobes	1.112 in. (28.24 mm)	1.098 in. (27.29 mm)
Exhaust Lobes	1.112 in. (28.24 mm)	1.098 in. (27.29 mm)
CONNECTING ROD		
Crank Pin Bearing	1.100 in. (37.06 mm)	1.102 in. (27.99 mm)
Piston Pin Bearing	.6728 in. (17.09 mm)	.6742 in. (17.12 mm)
PISTON		
Piston Pin	.6722 in. (17.07 mm)	.6717 in. (17.06 mm)
Piston Pin Bearing	.6728 in. (17.09 mm)	.6742 in. (17.12 mm)
Ring End Gap (Top)	.008-.016 in. (.15-.25 mm)	.030 in. (.76 mm)
Ring End Gap (Middle)	.008-.016 in. (.15-.25 mm)	.030 in. (.76 mm)
Ring End Gap (Oil Control)	.008-.016 in. (.15-.25 mm)	.030 in. (.76 mm)
Ring Land Clearance (Top)	.002-.003 in. (.05-.08 mm)	.004 in. (.10 mm)
Ring Land Clearance (Middle)	.001-.003 in. (.05-.08 mm)	.004 in. (.10 mm)
Ring Land Clearance (Oil Control)	.002-.004 in. (.05-.10 mm)	.005 in. (.12 mm)