

MODEL 185400

Engine Specifications (185400)

Armature Air Gap	.012 -.020 in. (.30 -.50 mm)
Bolt Circle (1)	3.937 in. (100 mm)
Bolt Circle (2)	6.5 in. (165.1 mm)
Bore	3.150 in. (80.0 mm)
Crankshaft End Play	.001 -.008 in. (.02 -.20 mm)
Displacement	18.06 cu. in. (296 cc)
Fuel Tank Capacity	6.3 qt. (.6 liter)
Oil Capacity - No Filter	32 oz. (.9 liter)
Spark Plug Gap	.030 in. (.76 mm)
Stroke	2.323 in. (59.0 mm)
Valve Clearance - Intake	.002 -.004 in. (.05 -.10 mm)
Valve Clearance - Exhaust	.002 -.004 in. (.05 -.10 mm)

Fastener Torque Specifications (185400)

	Tool Size	Torque
Air Cleaner Base / Backplate	10 mm	45 lb-in. (5 Nm)
Air Cleaner Cover	Wing Knob	N/A
Air Cleaner Support Bracket		
Armature	10 mm	30 lb-in. (3 Nm)
Blower Housing	10 mm	45 lb-in. (5 Nm)
Carburetor Bowl Screw	12 mm	85 lb-in. (10 Nm)
Connecting Rod	10 mm	175 lb-in. (20 Nm)
Control Bracket	10 mm	45 lb-in. (5 Nm)
Control Panel Trim	10 mm	45 lb-in. (5 Nm)
Cylinder Cover	12 mm	175 lb-in. (20 Nm)
Cylinder Head	14 mm	310 lb-in. (35 Nm)
Cylinder Shield	10 mm	45 lb-in. (5 Nm)
Flywheel Nut	21 mm	63 lb-ft. (85 Nm)
Fuel Shut-Off Valve	10 mm	70 lb-in. (8 Nm)
Fuel Tank	10 mm	90 lb-in. (10 Nm)
Fuel Tank Bracket		
Governor Lever Nut	10 mm	60 lb-in. (7 Nm)
Idle Down Control	12 mm	140 lb-in. (16 Nm)
Muffler	12 mm	175 lb-in. (20 Nm)
Muffler Guard	Phillips	90 lb-in. (10 Nm)
Oil Drain Plug	12 mm	175 lb-in. (20 Nm)
Oil Fill Cap	Wing Knob	40 lb-in. (5 Nm)
Oil Guard Module	10 mm	45 lb-in. (5 Nm)
Oil Guard Float Switch	Phillips	45 lb-in. (5 Nm)

Fastener Torque Specifications (185400)

	Tool Size	Torque
Rewind Retainer Screw	Phillips	70 lb-in. (8 Nm)
Rewind Starter	10 mm	55 lb-in. (6 Nm)
Rocker Arm Pivot	14 mm	N/A
Rocker Arm Shaft	12 mm	175 lb-in. (20 Nm)
Rocker Ball Set Screw or Nut	10 mm	35 lb-in. (4 Nm)
Spark Plug	5/8 in.	180 lb-in. (20 Nm)
Starter Contactor	10 mm	45 lb-in. (5 Nm)
Starter Key Switch Panel	10 mm	45 lb-in. (5 Nm)
Starter Motor Bracket	12 mm	140 lb-in. (16 Nm)
Starter Motor Thorough Bolts	7 mm	50 lb-in. (6 Nm)
Stator	10 mm	45 lb-in. (5 Nm)
Valve Cover	10 mm	35 lb-in. (4 Nm)
Voltage Regulator / Rectifier	10 mm	45 lb-in. (5 Nm)

Reject Dimensions (185400)

	Standard Size	Reject Size
Cylinder (185400)		
Magneto Bearing	Ball	NA
Camshaft Bearing	.5909 in. (15.01 mm)	.5917 in. (15.03 mm)
Bore Diameter	3.1496 in. (80.0 mm)	3.1508 in. (80.03 mm)
Bore Out-Of-Round	N/A	.0015 in. (.04 mm)
Cylinder Head (185400)		
	Standard Size	Reject Size
Intake Valve Seat Angle	45°	N/A
Intake Valve Seat Width	3/64-4/64 in. (1.19-1.59 mm)	N/A
Intake Valve Stem Diameter	.2346 in. (5.96 mm)	.2338 in. (5.94 mm)
Intake Valve Guide	.2368 in. (6.02 mm)	.2378 in. (6.04 mm)
Exhaust Valve Seat Angle	45°	N/A
Exhaust Valve Seat Width	3/64-4/64 in. (1.19-1.59 mm)	N/A
Exhaust Valve Stem Diameter	.2346 in. (5.96 mm)	.2338 in. (5.94 mm)
Exhaust Valve Guide	.2368 in. (5.50 mm)	.2378 in. (6.04 mm)
Cylinder Cover (185400)		
PTO Bearing	Ball	N/A
Camshaft Bearing	.5909 in (15.01 mm)	.5917 in. (15.03 mm)
Crankshaft (185400)		
Crank Pin Journal	1.3386 in. (34.0 mm)	1.3370 in. (33.96 mm)
Mag-Side Journal	1.1811 in. (30.0 mm)	1.1803 in. (29.98 mm)
PTO-Side Journal	1.1811 in. (30.0 mm)	1.1803 in. (29.98 mm)

Reject Dimensions (185400)	Standard Size	Reject Size
Camshaft (185400)		
Mag-Side Journal	.5905 in. (15.00 mm)	.5898 in. (14.98 mm)
PTO-Side Journal	.5905 in. (15.00 mm)	.5898 in. (14.98 mm)
Intake lobes	1.2657 in. (32.15 mm)	1.2402 in. (31.50 mm)
Exhaust lobes	1.2657 in. (32.15 mm)	1.2402 in. (31.50 mm)
Connecting Rod (185400)		
Crank Pin Bearing	1.3392 in. (34.02 mm)	1.3402 in. (34.04 mm)
Piston Pin Bearing	.7091 in. (18.01 mm)	.7098 in. (18.03 mm)
Piston (185400)		
Piston Pin Diameter	.7086 in. (18.00 mm)	.7078 in. (17.98 mm)
Piston Pine Bore	.7091 in. (18.01 mm)	.7098 in. (18.03 mm)
Ring End Gap (Top)	.006-.014 in. (.15-.35 mm)	.040 in. (1.0 mm)
Ring End Gap (Middle)	.006-.014 in. (.15-.35 mm)	.040 in. (1.0 mm)
Ring End Gap (Oil Control)	.014-.028 in. (.35-.70 mm)	.060 in. (1.5 mm)
Ring Land Clearance (Top)	.001-.003 in. (.03-.07 mm)	.008 in. (.20 mm)
Ring Land Clearance (Middle)	.001-.003 in. (.03-.07 mm)	.008 in. (.20 mm)
Ring Land Clearance (Oil Control)	.001-.003 in. (.03-.07 mm)	.008 in. (.20 mm)
Starter Rope (185400)		
Rope Size	#5 (3.97 mm)	N/A
Rope Length	79 in. (2.0 m)	N/A