

Engine Specifications	
Model	GX120 T1
Type	4-stroke, OHV, single cylinder inclined by 25°
Displacement	118 cm ³ (7.2 cu-in)
Max. Horsepower	4.0 HP (2.9 kW) at 4,000 rpm
Max. Torque (Crank PTO)	7.5 N·m (0.75 kg·m, 5.4 ft·lb) at 2,500 rpm
Carburetor	Horizontal type, butterfly valve
Cooling System	Forced-air
Ignition System	Transistorized magneto ignition
Lubricating System	Splash
Starting System	Recoil starter
Stopping System	Ignition primary circuit ground
Fuel Used	Unleaded gasoline (octane number 86 or higher)
Fuel Tank Capacity	2.5 L (0.66 US Gal, 0.55 Imp Gal.)
Fuel Consumption	230 g/PSh
PTO Shaft Rotation	Counterclockwise (from PTO shaft side)

Cylinder Block and Head	
Compression Ratio	7.5:1 or 8.5:1

Bore x Stroke	60 X 42 mm (2.4 x 1.7 in)
Sleeve Internal Diameter	60.00 mm (2.36 in)
Piston Skirt Outer Diameter	59.985 mm (2.3616 in)
Number of Piston Rings (Compression / Oil)	2 / 1
Ring Side Clearance	Top: 0.015-0.045 mm (0.0006-0.0018 in)
	Second/Oil: 0.015-0.045 mm (0.0006-0.0018 in)
Ring End Gap	Top/Second: 0.20-0.40 mm (0.008-0.016 in)
	Oil: 0.15-0.35 mm (0.006-0.014 in)
Ring Width	Top/Second: 1.5 mm (0.06 in)
	Oil: 2.5 mm (0.10 in)
Connecting Rod Small End ID	13.005 mm (0.5120 in)
Connecting Rod Big End ID	26.02 mm (1.024 in)
Piston Pin Outer Diameter	13.0 mm (0.51 in)
Crankshaft Crank Pin Outer Diameter	25.98 mm (1.023 in)

Cylinder Head	
Warpage (Limit)	0.10 mm (0.004 in)
Valve Arrangement	OHV
Valves	2
Stem Outer Diameter (Standard)	Intake: 5.48 mm (0.216 in)

	Exhaust: 5.44 mm (0.214 in)
Valve Spring Free Length	30.5 mm (1.20 in)
Camshaft Outer Diameter	13.984 mm (0.5506 in)
Cam Height	Intake: 27.7 mm (1.09 in)
	Exhaust: 27.75 mm (1.093 in)

Tightening Torque Specs	
Connecting Rod Bolt	12 Nm; 1.2 kg·m; 9 ft·lb
Cylinder Head Bolt	24 Nm; 2.4 kg·m; 17 ft·lb
Flywheel Nut	75 Nm; 7.5 kg·m; 54 ft·lb
Rocker Arm Pivot Lock Nut	10 Nm; 1.0 kg·m; 7 ft·lb
Rocker Arm Pivot Bolt	24 Nm; 2.4 kg·m; 17 ft·lb
Crankcase Cover Bolt	12 Nm; 1.2 kg·m; 9 ft·lb
Oil Level Switch Joint Nut	10 Nm; 1.0 kg·m; 7 ft·lb
Oil Drain Bolt	18 Nm; 1.8 kg·m; 13 ft·lb

Standard Torque Values	
Bolt, Nut (5 mm)	5.5 Nm; 0.55 kg·m; 4.0 ft·lb
Bolt, Nut (6 mm)	10 Nm; 1.0 kg·m; 7 ft·lb
Bolt, Nut (8 mm)	24 Nm; 2.4 kg·m; 17 ft·lb

Bolt, Nut (10 mm)	37.5 Nm; 3.75 kg·m; 27 ft·lb
Bolt, Nut (12 mm)	55 Nm; 5.5 kg·m; 40 ft·lb

Service Information	
Engine Maximum Speed	3,900 ± 100 rpm
Idle Speed	1,400 ± 150 rpm
Cylinder Compression	6.0-8.5 kg/cm ² (85-121 psi) at 600 rpm

Valve Clearance	
Intake Valve Clearance	0.15±0.02 mm (0.006±0.001 in)
Exhaust Valve Clearance	0.20±0.02 mm (0.008±0.001 in)

Oil System	
Oil Type	Honda 4-stroke or an equivalent (SE or SF)
Recommended Oil	SAE 10W-30
Oil Capacity	0.6 L (0.63 US. qt, 0.53 Imp. qt.)

Carburetor	
Main Jet	Externally vented carburetor bowl: #60
	Internally vented carburetor bowl: #62
Float Height	13.7 mm (0.54 in)
Pilot Screw Opening	Externally vented carburetor bowl: 2 turns out

	Internally vented carburetor bowl: 2-3/8 turns out
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Ignition System	
Ignition Timing	25° B.T.D.C. (Fixed)
Spark Plug	NGK: BP6ES, BPR6ES
	NIPPONDENSO: W20EP-U, W20EPR-U
Spark Plug Gap	0.7-0.8 mm (0.028-0.031 in)
Primary Ignition Coil Resistance	0.8-1.0 Ω
Secondary Ignition Coil Resistance	5.9-7.1 kΩ
Ignition Coil Air Gap	0.4 ± 0.2 (0.016 ± 0.008)

Starter Motor	
Brush Length	11.0 mm (0.43 in)
Mica Depth	1.6 mm (0.06 in)