

Engine Specifications:

Parameter	Value
Model	GX31
Type	4-stroke, OHV, single cylinder
Displacement	31 cm ³ (1.9 cu-in)
Max. horsepower	1.52 PS (1.5 HP, 1.12 kW) at 7000 rpm
Max. torque	1.64 Nm (0.17 kg·m, 1.21 ft·lb) at 6500 rpm
Carburetor	Diaphragm type
Cooling system	Forced-air
Ignition system	Transistorized magneto ignition
Lubricating system	Pumping spray
Starting system	Recoil starter
Stopping system	Ignition primary circuit ground
Fuel used	Unleaded gasoline (octane number 86 or higher)
Fuel tank capacity	0.65 L (0.17 US gal, 0.14 Imp gal)
Fuel consumption	340 g/kWh (250 g/HPh, 0.55 lb/HPh)
PTO shaft rotation	Counterclockwise (from PTO shaft side)

Dimensions and Weight:

Parameter	Value
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Length, mm (in)	210 (8.3)
Width, mm (in)	251 (9.9)
Height, mm (in)	250 (9.84)
Dry weight, kg (lb)	3.4 (7.5)

Cylinder Block and Head:

Parameter	Value
Compression ratio	8.0:1
Bore x Stroke	39 X 26 mm (1.5 x 1.0 in)
Sleeve internal diameter	39.00 mm (1.535 in)
Piston skirt outer diameter	38.99 mm (1.535 in)
Ring end gap	Top/second 0.10-0.25 mm (0.004-0.010 in)
Ring width	Top/second 0.98 mm (0.039 in)
Side clearance	Top/second 0.015-0.050 mm (0.006-0.0020 in)
Warpage (max)	0.2 mm (0.01 in)
Valve Arrangement	OHV
Valves	2
Stem outer diameter (standard)	INTAKE 3.985 mm (0.1569 in)
	EXHAUST 3.950 mm (0.1555 in)

Maintenance Data:

Parameter	Value
Idle speed	3100 ± 200 rpm
Cylinder compression	2.9-5.9 kg/cm ² (0.3-0.6 MPa, 41-84 psi) at 1200 rpm
Valve clearance	Intake valve 0.12 ± 0.02
	Exhaust valve 0.15 ± 0.02

Carburetor:

Parameter	Value
Main jet	#40

Oil System:

Parameter	Value
Oil type	Honda 4-stroke or an equivalent (SG, SF)
Recommended oil	SAE 10W-30
Oil capacity	0.1 L (0.1 US gal, 0.1 Imp qt)

Ignition System:

Parameter	Value
Ignition timing	27 ° B.T.D.C (Fixed)
Spark plug	NGK: C5HSB, CR5HSB
	DENSO: U16FS-UB, U16FSR-UB

Spark plug gap	0.6-0.7 mm (0.024-0.028 in)
Primary ignition coil resistance	0.7-0.9 kΩ
Secondary ignition coil resistance	3.6-5.5 kΩ
Ignition coil air gap	0.35-0.5 mm (0.014-0.020 in)

Tightening Torque Specs:

Part	Torque Values
Flywheel nut (M8)	15 Nm; 1.5 kg·m; 11 ft·lb
Crankcase bolt (M5 5×55 mm)	7 Nm; 0.75 kg·m; 5.1 ft·lb
Crankcase bolt (M5 5×18 mm)	5 Nm; 0.55 kg·m; 3.6 ft·lb
Camshaft cover bolt (M4)	3 Nm; 0.35 kg·m; 2.2 ft·lb
Recoil starter pulley (M8)	8 Nm; 0.8 kg·m; 5.8 ft·lb
Clutch bolt (M8)	15 Nm; 1.55 kg·m; 11 ft·lb
Cylinder head cover bolt (M5)	4 Nm; 0.4 kg·m; 2.9 ft·lb

Standard Torque Values:

Part	Torque Values
Bolt, nut (5 mm)	5.5 Nm; 0.55 kg·m; 4.0 ft·lb
Screw (3 mm)	1 Nm; 0.1 kg·m; 0.7 ft·lb
Screw (6 mm)	9 Nm; 0.9 kg·m; 6.5 ft·lb