

Engine Specifications	
Model	GXV140
Type	4-stroke, OHV, single cylinder
Displacement	135 cm ³ (8.2 cu-in)
Max. horsepower	5.0 HP (3.7 kW) at 3,600 rpm
Max. torque (crank PTO)	10.3 Nm (1.05 kg·m, 7.6 ft·lb) at 2,700 rpm
Carburetor	Horizontal type, butterfly valve
Cooling system	Forced-air
Ignition system	CDI
Lubricating system	Forced splash
Starting system	Recoil starter
Stopping system	Ignition primary circuit ground
Fuel used	Unleaded gasoline (octane number 86 or higher)
Fuel tank capacity	1.0 L (0.26 US qt)
Fuel consumption	250 g/HPh
PTO shaft rotation	Counterclockwise (from PTO shaft side)
CYLINDER BLOCK AND HEAD	
Compression ratio	8.0:1
Bore x Stroke	64 X 42 mm (2.5 x 1.7 in)

Sleeve internal diameter	64.00 mm (2.52 in)
Piston skirt outer diameter	63.985 mm (2.5190 in)
Number of piston rings (compression / oil)	2 / 1
Ring side clearance	Top: 0.015-0.045 mm (0.0006-0.0018 in) Second: 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)
Ring width	Top/Second: 1.5 mm (0.06 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 (0.5118 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: 5.480 mm (0.216 in) EXHAUST: 5.440 mm (0.214 in)
Valve spring free length	30.5 mm (1.2007 in)
Camshaft outer diameter	13.984 mm (0.5506 in)
Cam height	INTAKE: 27.70 mm (1.09 in) EXHAUST: 27.75 mm (1.093 in)

TIGHTENING TORQUE SPECS	
Connecting rod lower cap	12 Nm; 1.2 kg·m; 9 ft·lb
Cylinder head bolt	24 Nm; 2.4 kg·m; 17 ft·lb
Flywheel nut	52 Nm; 5.2 kg·m; 38 ft·lb
Pivot adjusting nut	10 Nm; 1.0 kg·m; 7 ft·lb
Pivot bolt	24 Nm; 2.4 kg·m; 17 ft·lb
Oil drain bolt	18 Nm; 1.8 kg·m; 13 ft·lb
Oil pan bolt	12 Nm; 1.2 kg·m; 9 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	3,100 ± 100 rpm
Idle speed	2,100 ± 150 rpm
Cylinder compression	6.0-8.5 kg/cm ² 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	#60
Float height	12.2-15.2 mm (0.48-0.60 in)
Pilot screw opening	1/2 turns out
Ignition system	
Ignition timing	25° B.T.D.C.
Spark plug	NGK: BP5ES, BPR5ES NIPPONDENSO: W16EP-U, W16EPR-U
Spark plug gap	0.7-0.8 mm (0.028-0.031 in)