Engine Specifications	
Model	GCV160 (vertical shaft)
Type	4-stroke, OHC, single cylinder
Displacement	160 cm^3 (9.8 cu-in)
Max. horsepower	4.5 PS (3.3 KW; 4.4 HP) at 3,600 rpm
Max. torque (crank PTO)	9.4 Nm (0.96 kg·m; 6.94 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	1.1 l (0.29 US. Gal, 0.24 Imp. Gal.)
Fuel consumption	230 g/HPh
PTO shaft rotation	Counterclockwise (from PTO shaft side)

Dimensions and Weight				
	N1	N2	N3	N4
Length, mm (in)	367 (14.4)	367 (14.4)	367 (14.4)	367 (14.4)
Width, mm (in)	331 (13.0)	331 (13.0)	331 (13.0)	331 (13.0)
Height, mm (in)	360	347	365	347
Dry weight, kg (lb)	9.8 (21.6)	9.8 (21.6)	9.8 (21.6)	9.8 (21.6)
Operating weight, kg (lb)	11.1 (24.5)	11.1 (24.5)	11.1 (24.5)	11.1 (24.5)

Cylinder Block and Head	
Compression ratio	8.5:1
Bore x Stroke	64.0 mm X 50.0 mm (2.5 x 2.0 in)
Sleeve internal diameter	64.00 mm (2.52 in)
Piston skirt outer diameter	63.969 mm (2.5185 in)
Number of piston rings (compression / oil)	2 / 1
Ring side clearance	Top/second/oil 0.015-0.045 mm (0.0006-0.0018 in)
Ring end gap	Top 0.20-0.35 mm (0.008-0.014 in) Second 0.30-0.45 mm (0.012-0.018 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 (0.512 in)
Connecting rod big end ID	26.02 mm (1.024 in)

Crankpin outer diameter	25.98 mm (1.023 in)
Main journal outer diameter	PTO side 27.993 mm (1.1021 in) Flywheel side 25.393 mm (0.9997 in)
Warpage (limit)	0.10 mm (0.004 in)
Valve Arrangement	OHC
Valves	2
Stem outer diameter (standard)	INTAKE 5.480 mm (0.216 in) EXHAUST 5.44 mm (0.214 in)
Guide internal diameter	INTAKE / EXHAUST 5.5 mm (0.2165 in)
Spring free length	34.0 mm (1.34 in)

Tightening Torque Specs	
Air cleaner case bolt	10 Nm; 1.0 kg·m; 7 ft·lb
Connecting rod bolt	12 Nm; 1.2 kg·m; 8.6 ft·lb
Valve adjusting lock nut	8 Nm; 0.8 kg·m; 5.8 ft·lb
Cylinder head cover bolt	12 Nm; 1.2 kg·m; 8.6 ft·lb
Oil drain plug bolt	24 Nm; 2.4 kg·m; 17 ft·lb
Flywheel nut	52 Nm; 5.3 kg·m; 38 ft·lb
Governor arm nut	10 Nm; 1.0 kg·m; 7 ft·lb
Muffler bolt	12 Nm; 1.2 kg·m; 8.6 ft·lb
Recoil starter nut	8.5 Nm; 0.85 kg·m; 6.1 ft·lb

Fan cover stud bolt	12 Nm; 1.2 kg·m; 8.6 ft·lb
Spark plug	20 Nm; 2.0 kg·m; 14 ft·lb
Others	
5 mm bolts, nuts	5.5 Nm; 0.55 kg·m; 4.0 ft·lb
6 mm bolts, nuts	10 Nm; 1.0 kg·m; 7 ft·lb
8 mm bolts, nuts	24 Nm; 2.4 kg·m; 17 ft·lb
10 mm bolts, nuts	37 Nm; 3.7 kg·m; 27 ft·lb
12 mm bolts, nuts	55 Nm; 5.5 kg·m; 39.5 ft·lb

Service Information	
Engine	
Maximum speed	3,000 ± 150 rpm
Idle speed	1,700 ± 150 rpm
Cylinder compression	5.0 kg/cm2 (71 psi) at 600 rpm
Valve clearance	Intake valve 0.15 ± 0.04 (0.006 ± 0.002) Exhaust valve 0.20 ± 0.04 (0.008 ± 0.002)
Oil system	
Oil type	Honda 4-stroke or an equivalent (SE or SF)
Recommended oil	SAE 10W-30
Oil capacity	0.55 l (0.58 US. qt, 0.48 Imp. qt.)

Ignition system	
Ignition timing	20° B.T.D.C.
Spark plug	NGK: BPR6ES
Spark plug gap	0.7-0.8 mm (0.028-0.031 in)
Spark plug tightening torque	20 Nm; 2.0 kg·m; 14 ft·lb
Primary ignition coil resistance	1.0-1.2 kΩ
Secondary ignition coil resistance	10.6-12.8 kΩ
Ignition coil air gap	0.2-0.6 mm (0.008-0.024 in)
Carburetor	
Main jet	#65
Float height	9.2 mm (0.36 in)
Pilot screw opening	1 turns out