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| <b>Engine Specifications</b> |  |
| Model                        | GXV50 (vertical shaft)                         |
| Type                         | 4-stroke, OHV, single cylinder                 |
| Displacement                 | 49 cm <sup>3</sup> (2.99 cu-in)                |
| Max. horsepower              | 2.5 HP (1.8 kW) at 7,000 rpm                   |
| Max. torque (crank PTO)      | 3.04 N·m (0.31 kg·m, 2.25 ft·lb) at 4,500 rpm  |
| Carburetor                   | Horizontal type, butterfly valve               |
| Cooling system               | Forced-air                                     |
| Ignition system              | Transistorized magneto ignition                |
| Lubricating system           | Splash   |
| Starting system              | Recoil or electric starter                     |
| Stopping system              | Ignition primary circuit ground                |
| Fuel used                    | Unleaded gasoline (octane number 86 or higher) |
| Fuel tank capacity           | 0.5 l (0.53 US. Gal, 0.44 Imp. Gal.)           |
| Fuel consumption             | 250 g/HPH                                      |
| PTO shaft rotation           | Counterclockwise (from PTO shaft side)         |
| <b>DIMENSIONS AND WEIGHT</b> |  |
| Length, mm (in)              | 249 (9.8)                                      |
| Width, mm (in)               | 286 (11.3)                                     |

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| Height, mm (in)                | 225 (8.9) S, 198 (7.8) V                     |
| Dry weight, kg (lb)            | 5.2 (11.47)                                  |
| Operating weight, kg (lb)      | 5.7 (12.57)                                  |
| <b>CYLINDER BLOCK AND HEAD</b> |  |
| Compression ratio              | 8.0:1  |
| Bore x Stroke                  | 41.8 mm X 36 mm (1.65 x 1.42 in)             |
| Sleeve internal diameter       | 41.800-41.815 mm (1.6457-1.6463 in)          |
| Piston skirt outer diameter    | 41.770-41.790 mm (1.6445-1.6453 in)          |
| Ring side clearance            | Top/second 0.015-0.050 mm (0.0006-0.0020 in) |
| Ring end gap                   | Top/Second 0.15-0.30 mm (0.0059-0.0118 in)   |
| Ring width                     | Top 0.77-0.79 mm (0.030-0.031 in)            |
|                                | Second 0.97-0.99 mm (0.038-0.039 in)         |
| Connecting rod small end ID    | 10.006-10.007 mm (0.3939-0.3944 in)          |
| Connecting rod big end ID      | 15.000-15.011 mm (0.5906-0.5910 in)          |
| Crankpin outer diameter        | 14.973-14.984 mm (0.5895-0.5899 in)          |
| <b>Cylinder Head</b>           |  |
| Warpage (limit)                | 0.10 mm (0.004 in)                           |
| Valve Arrangement              | OHV  |
| Valves                         | 2  |

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| Stem outer diameter (standard) | INTAKE 3.970-3.985 mm (0.1563-0.1569 in)  |
|                                | EXHAUST 3.935-3.950 mm (0.1549-0.1555 in) |
| Spring free length             | 23.7 mm (0.93 in)                         |
| Cam height                     | 27.972 mm (1.1013 in)                     |
| <b>TIGHTENING TORQUE SPECS</b> |   |
| Spark plug                     | 12 Nm; 1.2 kg·m; 8.6 ft·lb                |
| Connecting rod bolt            | 6 Nm; 0.6 kg·m; 4.3 ft·lb                 |
| Crankcase cover bolt           | 7.5 Nm; 0.75 kg·m; 5.4 ft·lb              |
| Oil case bolt                  | 7.5 Nm; 0.75 kg·m; 5.4 ft·lb              |
| Valve cover bolt               | 6 Nm; 0.6 kg·m; 4.3 ft·lb                 |
| Oil drain bolt                 | 11 Nm; 1.1 kg·m; 8 ft·lb                  |
| Flywheel nut                   | 21 Nm; 2.1 kg·m; 15 ft·lb                 |
| Fuel tank bolt                 | 10 Nm; 1.0 kg·m; 7 ft·lb                  |
| Ignition coil bolt             | 6 Nm; 0.6 kg·m; 4.3 ft·lb                 |
| Fan caver stud bolt            | 6 Nm; 0.6 kg·m; 4.3 ft·lb                 |
| Governor arm nut               | 7 Nm; 0.7 kg·m; 5.1 ft·lb                 |
| Carburetor drain bolt          | 4.5 Nm; 0.45 kg·m; 3.3 ft·lb              |
| <b>Others</b>                  |   |
| 4 mm bolts, nuts               | 3.5 Nm; 0.35 kg·m; 2.5 ft·lb              |

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| 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                      |
| <b>SERVICE INFORMATION</b> |   |
| <b>Engine</b>              |   |
| Maximum speed              | 4,800 ± 150 rpm                               |
| Idle speed                 | 2,500 ± 200 rpm                               |
| Cylinder compression       | 4.3 kg/cm <sup>2</sup> (61.2 psi) at 1000 rpm |
| <b>Valve clearance</b>     |   |
| Intake valve               | 0.06-0.10 mm (0.0024-0.0039 in)               |
| Exhaust valve              | 0.09-0.13 mm (0.0035-0.0051 in)               |
| <b>Oil system</b>          |   |
| Oil type                   | Honda 4-stroke or an equivalent (SE or SF)    |
| Recommended oil            | SAE 10W-30                                    |
| Oil capacity               | 0.25 l (0.26 US.                              |

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| <b>Ignition system</b> |                             |
| Ignition timing        | 30° B.T.D.C.                |
| Spark plug             | NGK: CR5HSB                 |
|                        | DENSO: U16FSR-UB            |
| Spark plug gap         | 0.6-0.7 mm (0.024-0.028 in) |

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| Spark plug tightening torque       | 12 Nm; 1.2 kg-m; 8.6 ft-lb  |
| Primary ignition coil resistance   | 0.98-1.20 kΩ                |
| Secondary ignition coil resistance | 8-10 kΩ                     |
| Ignition coil air gap              | 0.3-0.5 mm (0.012-0.020 in) |
| <b>Carburetor</b>                  |                             |
| Main jet                           | #55                         |
| Float height                       | 12 mm (0.47 in)             |
| Pilot screw opening                | 1-1/8 turns out             |