

SERVICE SPECIFICATIONS

Unit: mm (in.)

		Item	Standard value	Limit	
Ignition system	Ignition coil	Primary winding resistance, Ω	1.08 to 1.32		
		Secondary winding resistance, $k\Omega$	22.1 to 29.9		
	Resistive cord	Resistance, $k\Omega$	22 (max.)		
	Spark plug	Gap	0.7 to 0.8 (0.028 to 0.031)		
	Drive belt	Deflection	7.0 to 10.0 (0.3 to 0.4)		
Valve mechanism	Camshaft	Intake (primary)	38.78 (1.526 8)	38.28 (1.507 1)	
		Intake (secondary)	38.78 (1.526 8)	38.28 (1.507 1)	
		Exhaust	39.10 (1.539 4)	38.60 (1.519 7)	
	Valve clearance	Intake	0.09 (0.003 5)		
Exhaust		0.17 (0.006 7)			
Cylinder head and valve	Cylinder head	Warpage of gasket surface	0.05 (0.002 0), max.		
		Maximum permissible amount (thickness) of stock removed from cylinder head and block for refacing		0.2 (0.008)	
		Overall height	106.9 to 107.1 (4.209 to 4.217)		
	Cylinder head bolt	Shank length		103.2 (4.063)	
	Valve	Margin	Intake	1.0 (0.039)	0.5 (0.020)
			Exhaust	1.5 (0.059)	1.0 (0.039)
		Stem diameter	6.6 (0.260)		
		Clearance between stem and guide	Intake	0.020 to 0.050 (0.000 79 to 0.001 97)	0.10 (0.003 9)
			Exhaust	0.050 to 0.085 (0.001 97 to 0.003 35)	0.15 (0.005 9)
		Face angle	45° to 45.5°		
	Overall valve length	Intake	100.75 (3.9665)	100.25 (3.9468)	
		Exhaust	101.05 (3.9783)	100.55 (3.9587)	
	Valve stem projection	Intake	43.70 (1.7205)	44.20 (1.7402)	
		Exhaust	43.30 (1.7047)	43.80 (1.7244)	
	Valve spring	Free length	Intake	46.08 (1.814 2)	45.58 (1.794 5)
			Exhaust	46.80 (1.842 5)	46.30 (1.822 8)
		Test force, N (kgf) [lbf]/length under test force	Intake	226 (23.0) [51]/40.0 (1.575)	
			Exhaust	284 (29.0) [64]/39.6 (1.559)	
	Squareness	2°	4°		
	Valve seat	Width	0.9 to 1.3 (0.035 to 0.051)		
Valve guide	Inside diameter	6.6 (0.260)			
	Height to top of valve guide installed	17.0 (0.669)			

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Item		Standard value	Limit		
Oil pump	Clearance between outer and inner rotors	0.06 to 0.18 (0.002 4 to 0.007 1)			
	Clearance between rotors and pump case	0.04 to 0.10 (0.001 6 to 0.003 9)			
	Clearance between outer rotor and pump case	0.10 to 0.18 (0.003 9 to 0.007 1)	0.35 (0.013 8)		
Piston and connecting rod	Piston	Diameter	75.5 (2.972)		
	Piston ring	Clearance in groove	No. 1 ring	0.03 to 0.07 (0.001 2 to 0.002 8)	
			No. 2 ring	0.02 to 0.06 (0.000 8 to 0.002 4)	
		Gap	No. 1 ring	0.20 to 0.35 (0.007 9 to 0.013 8)	0.8 (0.031)
			No. 2 ring	0.20 to 0.35 (0.007 9 to 0.013 8)	0.8 (0.031)
			Oil ring	0.20 to 0.70 (0.007 9 to 0.027 6)	1.0 (0.039)
	Piston pin	Diameter	18.0 (0.709)		
		Force for fitting (at normal temperature), N (kgf) [lbf]	4 903 to 14 710 (500 to 1 500) [1 103 to 3 308]		
Crankshaft	Crankpin oil clearance	0.02 to 0.04 (0.000 8 to 0.001 6)	0.1 (0.004)		
Connecting rod	Big end thrust clearance	0.10 to 0.25 (0.003 9 to 0.009 8)	0.4 (0.016)		
Crankshaft and cylinder block	Crankshaft	End play	0.05 to 0.18 (0.002 0 to 0.007 1)	0.25 (0.009 8)	
		Journal diameter	48.0 (1.890)		
		Crankpin diameter	42.0 (1.654)		
		Journal oil clearance	0.02 to 0.04 (0.000 8 to 0.001 6)	0.1 (0.004)	
	Cylinder block	Warpage of gasket contact surface	0.05 (0.002 0), max.		
		Maximum permissible amount of stock removed for refacing (with cylinder head to be combined)		0.2 (0.008)	
		Overall height	256 (10.08)		
		Out-of-round	0.01 (0.000 4)		
		Cylinder inside diameter	75.5 (2.972)		
		Piston clearance	0.02 to 0.04 (0.000 8 to 0.001 6)		
Carburetor	Throttle bore diameter	28 (1.10)			
	Outer venturi diameter	21 (0.83)			
	Inner venturi diameter	9 to 12 (0.35 to 0.47)			
	Main jet	#98.8			
	Main air jet diameter	0.9 (0.035)			
	Pilot jet	#55			
	Pilot air jet diameter	1.6 (0.063)			
	Fast idle opening angle	18.5°			

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Item			Standard value	Limit	
Starter motor	Nominal output, kW		1.2		
	No-load characteristics	Voltage, V	Reduction gear drive type	11.5	
			Planetary gear drive type	11	
		Current, A	Reduction gear drive type	100, max.	
			Planetary gear drive type	90, max.	
	Speed, rpm		3 000		
	Commutator runout		0.05 (0.002 0), max.	0.1 (0.004)	
	Commutator diameter		32.0 (1.260)	31.0 (1.220)	
	Undercut		0.5 (0.020)	0.2 (0.008)	
Brush length			Wear limit line		
Alternator	Nominal output, A		50		
	Rotor resistance, Ω		3 to 5		
	Brush length			Wear limit line	
Distributor	Centrifugal advance, crank angle/engine speed, deg/rpm	Start	0°/2 000		
		End	14°/2 800		
	Vacuum advance, crank angle/vacuum, deg/mmHg	Start	0°/80		
		End	10°/200		
Air gap		0.35 to 0.45 (0.013 8 to 0.017 7)			

MACHINING SPECIFICATIONS

Unit: mm (in.)

Item			Standard value	Limit	
Cylinder head and valve	Cylinder head	Bores for oversize valve guides	0.05 (0.002 0) O.S.	12.050 to 12.068 (0.474 41 to 0.475 12)	
			0.25 (0.009 8) O.S.	12.250 to 12.268 (0.482 28 to 0.482 99)	
			0.50 (0.019 7) O.S.	12.500 to 12.518 (0.492 13 to 0.492 83)	
		Bores for oversize valve seat rings	Intake (primary)	0.3 (0.012) O.S.	27.300 to 27.325 (1.074 80 to 1.075 79)
				0.6 (0.024) O.S.	27.600 to 27.625 (1.086 61 to 1.087 60)
			Intake (secondary)	0.3 (0.012) O.S.	32.300 to 32.325 (1.271 65 to 1.272 64)
	0.6 (0.024) O.S.	32.600 to 32.625 (1.283 46 to 1.284 45)			
	Exhaust	0.3 (0.012) O.S.	35.300 to 35.325 (1.389 76 to 1.390 75)		
		0.6 (0.024) O.S.	35.600 to 35.625 (1.401 57 to 1.402 56)		