

GENERAL SERVICE INFORMATION

General Engine Specifications

Engine Model		L48V		L70V	L100V		
Type		4-stroke, Vertical Cylinder, Air-Cooled Diesel Engine					
Combustion System		Direct Injection					
No. of Cylinders		1					
Bore x Stroke		2.76 x 2.24 in. (70 x 57 mm)		3.07 x 2.64 in. (78 x 67 mm)	3.39 x 2.95 in. (86 x 75 mm)		
Displacement		13.4 cu in (0.219 L)		19.5 cu in. (0.320 L)	26.5 cu in. (0.435 L)		
Compression Ratio		20.6		21.1	21.2		
Continuous Rated Output	RPM (min ⁻¹)	3600	3450	3600	3600	3200	2500
	hp SAE	4.0	3.8	5.8	8.3	7.8	6.7
	kW	3.0	2.8	4.3	6.2	5.8	5.0
	PS	4.1	3.8	5.9	8.4	7.9	6.8
Maximum Rated Output (Net)	RPM (min ⁻¹)	3600	3450	3600	3600	3200	2500
	hp SAE	4.4	4.2	6.4	9.1	8.7	7.4
	kW	3.3	3.1	4.8	6.8	6.5	5.5
	PS	4.5	4.2	6.5	9.3	8.8	7.5
High Idling	RPM (min ⁻¹)	3800 ± 30	3650 ± 30	3800 ± 30	3800 ± 30	3450 ± 30	2700 ± 30
Low Idling	RPM (min ⁻¹)	1250 ± 30 (Where applicable, as some engines and generators do not operate at idle and/or have no idle speed adjustment)					
Fuel Injection Timing	BTDC by FIC (A)	17.5°		16°	15.5°	16.5°	13.5°
Valve Clearance		0.006 ± 0.002 in. (0.15 ± 0.05 mm)					
PTO Position		Crankshaft					
Direction of Rotation		Counterclockwise viewed from PTO Side					
Fuel Injection Pump		BOSCH-type, with upper lead plunger					
Fuel Injection Nozzle		P-size, VCO					
Valve Opening Pressure		19.6 MPa (200 kgf/cm ²)					
Fuel Selection		See Diesel Fuel on page 4-11.					
Fuel Filter		Paper Element, Fuel Tank Built-in Type					
Governor		All Speed Type, Mechanical					
Balancer Shaft		Single Shaft					
Engine Weight (Dry)	Electric Start	70.5 lb (32.0 kg)		90.4 lb (41.0 kg)	118 lb (53.5 kg)		
	Manual Start	59.5 lb (27.0 kg)		79.4 lb (36.0 kg)	107 lb (48.5 kg)		
Cooling System		Forced Air by Flywheel Fan					
Lubricating System		Forced Lubrication with Trochoid Pump Splash Lubrication for Valve Rocker Arm Chamber					