For Your Convenience: This Northern Lights File Is Shared By Diesel Parts Direct

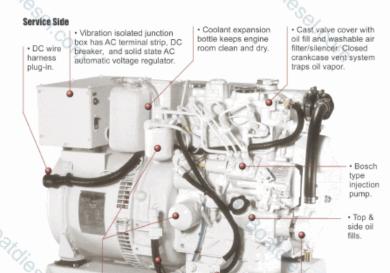


YOUR ONE STOP SUPERSTORE FOR DIESEL ENGINE PARTS



NORTHERN LIGHTS

M773LW



Oil drain

for quick

changes.

· Freshwater cooled with one

Fuel

manifold.

· Spin-on oil

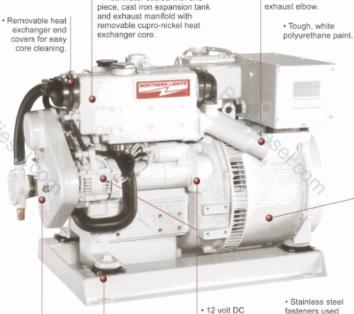
& fuel filters.

Non-Service Side

Welded

steel hase

& drip pan.



Plateform vibration

mounts for smooth

operation.

Beltguard

for safety.

starter and

alternator.

battery charging

Cast iron wet

 Gear driven, seawater pump

of bronze and

stainless steel.

seals. No belt.

Mechanical

extensively for

of service

long life and ease

8 kW not quite enough? Then this 9 is for you. The M773LW incorporates the best

Northern Lights features into one compact and versatile package. It meets growing onboard power demands without asking for a lot of engine room space.

The M773LW was engineered to deliver its power at a quiet, long lasting 1800 rpm. Driven by a high-torque, 69 cubic inch. Lugger diesel and fitted with a powerful W-Series generator end, the M773LW has the power to start electric motors with ease.

Like all Northern Lights, simplicity and longevity are the focal points. Hoses and belts have been eliminated wherever possible. The closed crankcase vent system traps oil vapor emissions keeping the engine room, and environment, cleaner.

The M773L features single-side service. which means it can be mounted with the non-service side facing a bulkhead without compromising routine service access.

Other proven systems are utilized throughout. The DC system has simple relays, instead of a printed circuit board, for quick, inexpensive field repairs. Low oil pressure, high coolant temperature and high exhaust temperature safety shutdowns are standard. An automatic voltage regulator keeps voltage to within ±1%. Vibration isolating plateform mounts, gleaming white polyurethane paint and a plug-in wire harness complete the package.

Northern Lights accessories can make this extraordinary genset into the perfect power source for your vessel. Choose from the long list of optional equipment that includes control panels, super attenuated sound enclosures and much more.

Featuring new W-Series generator

The new W-Series generator end is a major step in our constant quest to give you the best generator set on the market. It features an auxiliary stator winding that supplies separate and stable power to the Automatic Voltage Regulator (AVR). The results are impressive:

- · Classification society compliance.
- Real 300% short circuit capability.
- Improved AC circuit breaker performance. See your dealer for more information.



M773LW Specifications and Dimensions

AC Ountut

9	kW	<u></u>	60 Hz	1800	RPM, 1	l Ph,	1.0 PF,	
			120-24	40 V/3	7.5A, 1	20 V/	75A	
7	kW		50 Hz	1500	RPM, 1	Ph,	1.0 PF,	
			220 V	/31.8/	4			

Optional Three Phase with 0.8 PF Voltage regulation±1%

Lugger L773L Engine

Type Vertical inline 3 cylinder di	esel
Displacement 69 in3 (1.13	3 Itr)
Bore/Stroke 3.03/3.19 in (77/81	mm)
HP @ RPM 15/1800 12/1	500

Approx. fuel use

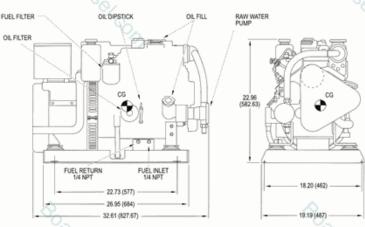
1800 RPM @ full load2 . 0.93 gph (3.52 lph) 1800 RPM @ half load2 0.51 gph (1.93 lph) 1500 RPM @ full load2. 0.72 gph (2.72 lph) 1500 RPM @ half load2 0.37 gph (1.40 lph)

Installation Data & Weight

Wet exhaust elbow 2 inch (51 mm) OD
Raw water inlet 3/4 inch (19 mm) OD
Fuel inlet and return 1/4 inch NPT
Approximate dry weight 519 lbs (235 kg)

1, Based on SAE J1995 and ISO 3046. 2, Actual fuel consumption will vary depending on operating conditions.

M773LW Dimensional Drawing



Overall Dimensions L x W x H: 32.61 x 19.19 x 22.96 inch (827.67 x 487 x 582.63 mm)

Dimensions given in inches (mm). Dimensions subject to change without notice. Contact dealer or visit www.northern-lights.com for most current installation drawings.

M773LW Features and Benefits

Engine Block

- Four cycle, 3 cylinder, liquid cooled, naturally aspirated, overhead valve diesel.
- Swirl combustion chambers improve fuel efficiency and reduce smoke.
- Glow plugs for quick cold starting.

Cooling System

- Freshwater cooling system in heat exchanger or keel cooled configuration.
- One-piece heat exchanger, expansion tank and liquid cooled exhaust manifold. Fewer troublesome hoses and gaskets. Cast iron to resist corrosion and electrolysis.
- Heat exchanger cooling has tube-type, cupro-nickel heat exchanger with removable ends for easy cleaning. Gear driven, rubber impeller, seawater pump of bronze and stainless steel. No drive belt to worry about.

Fuel System

- · Fuel system is self-venting.
- Injection pump with 5% mechanical governor for close AC frequency control.
- Pintle injectors with replaceable tips.
- Mechanical lift pump with hand primer. No electric pump to fail.
- Large spin-on fuel filter.
- Flexible fuel lines routed to fuel manifold.
- Stop solenoid controls the fuel rack, not throttle, to eliminate speed variance and linkage problems.

Intake and Exhaust

- Meets US EPA emission requirements at date of manufacture.
- Washable air cleaner in cast intake manifold reduces noise. Closed crankcase vent.
- Cast iron, wet exhaust elbow for safety.

Lubrication System

- Full flow, spin-on oil filter with bypass.
- 4.2 gt. (4 ltr) oil capacity for better lubrication. 200 hr. oil change intervals.
- Oil drain for quick, clean oil changes.

DC Electrical System

- · DC system uses reliable relays instead of unrepairable printed circuit board.
- 12 volt starter motor and battery charging alternator with regulator and belt guard.
- Standard panel: Remote mount S-1B has hour meter, stopstart switch with run light and preheat switch.



- Expandable to six panels installed up to 110 feet from the set.
- 20 foot (6 m) plug-in panel harness lets you mount your panel anywhere onboard. Better than a inaccessible unit mount panel that is prone to vibration problems.
- Low oil pressure, high coolant temperature and high exhaust temperature safety shutdowns standard.

AC Generator

- · Northern Lights, direct coupled, brushless AC generator is maintenance free. 4 lead, 1 phase, 50 or 60 Hz output standard. 12 lead-3 phase optional. Conservative heat rise rating: 95°C/50°C ambient.
- Automatic Voltage Regulator is powered by dedicated AC winding for true 300% short circuit capability. Quick 11% RMS no load to full load voltage regulation. AVR has circuit breaker protection.

· Generator features high quality, Class "H" epoxy insulation, accessible diodes, oversized bearings and junction box for wiring.

Special Equipment

- Welded steel base frame with drip pan.
- Four plateform mounts isolate vibration.
- White, long-life polyurethane paint.
- Operator's and parts manuals standard.

Classification Standards

 Contact factory for details.





Optional Equipment

- Control panels with DC gauges.
- AC and DC control panels
- 24 volt isolated ground DC system
- Wire harness extensions and "Y" harness.
- 2 inch wet exhaust muffler.
- Exhaust / water separator.
- Dry exhaust elbow.
- Keel cooling configuration.
- Onboard parts kits.
- Fuel filter-water separators.
- Shorepower switches.
- Alarms/shutdowns for low water level, low oil level, raw water flow & overspeed
- Sound enclosure has powder coated aluminum panels lined with sound barrier foam to damnen noise. Trigger latches for easy access.



LxWxH: 39.3 x 25.7 x 25.3 in. (998.7 x 652 x 643 mm) Weight: 92.5 lbs (42 kg)

Dealer

4420 14th Ave. NW., Seattle WA 98107 Tel: (206) 789-3880 • 1-800-762-0165 Fax: (206) 782-5455

Information and dimensions subject to change without notice. © 2004 All rights reserved. Litho USA. L678 9/04

