

1800 RPM reliability, a bigger engine and it takes less space than a 3600 rpm competitor.

Compare the 1800 rpm M673 against the 3600 rpm competition.

Even in a sound shield it takes up 21% less space. It give you a 40% bigger displacement diesel. And it weighs only 23 lbs more, (the same as a case of pop).

You save more than just space. Over 2000 hours of operation the M673 will turn over 216 million less revolutions. A M673 piston will travel 38,522 fewer miles. Its cylinders will withstand 108 million less detonations. Now which engine do you think will last longer? So do we.

Plus instead of a rough, two cylinder diesel, the M673 has a balanced, quiet Luger three.

The unitized freshwater cooling system and gear driven water pump reduce troublesome

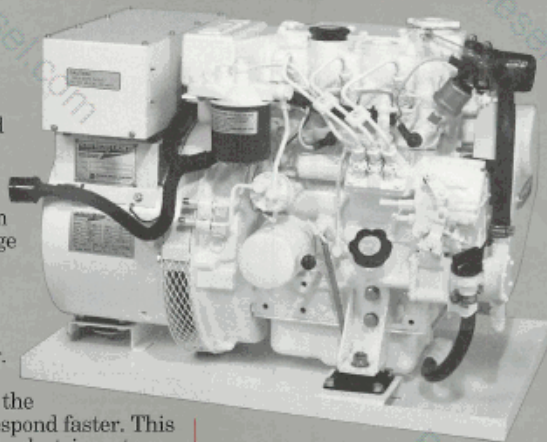
belts, hoses and gaskets. And to resist corrosion, the manifold is cast iron instead of aluminum.

Strong but gentle. The AC generator has an automatic voltage regulator that protects your electronics with "clean" closely regulated power.

Special AC windings power the AVR so it can respond faster. This helps start larger electric motors and air conditioners.

To all this add single side service, LOP-HWT safety shut-downs, a control panel with a 20-foot harness, a fuel system that vents itself, and a coat of sparkling white polyurethane paint.

Now that's a quality set. That's a Northern Lights M673.



The M673 features single side service. All maintenance points are within easy reach. View shows: oil drain, spin-on oil and fuel filters, gear driven raw water pump, mechanical fuel lift pump, dipstick, control panel plug-in, two oil fills, self venting fuel system, injection pump and steel fuel lines.

- Freshwater cooling features cast iron heat exchanger, expansion tank and exhaust manifold.
- Removable end covers for easy access to heat exchanger.
- Battery charging alternator.
- Beltguard.
- Polyurethane paint for tough, sparkling white finish.
- Platform vibration mounts for smooth operation.
- Large cooling fan for operation in hot engine rooms.
- Cast intake manifold with washable air filter/silencer.
- Junction box with voltage regulator, DC relays, DC circuit breaker and AC leads.
- Iron, wet exhaust elbow for safety.
- Direct coupled generator with automatic voltage regulation.
- Welded steel base with integral drip pan. Acts as base for sound enclosure.

M673 SPECIFICATIONS

AC Ouput

6 kW	60 Hz, 1800 RPM, 1 Ph, 1.0 PF, 120-240 V/25 A, 120 V/50 A
4.8 kW	50 Hz, 1500 RPM, 1 Ph, 1.0 PF, 110-220 V/21.8 A, 110 V/43.6 A
Voltage regulation	+5%

Lugger Diesel Engine

Cylinders	Vertical inline 3
Displacement	41.1 in ³ (.676 ltr)
Bore/Stroke	2.64/2.52 in (67/64mm)
HP @ 1800 RPM	8.7
Apx.fuel use full load ...	0.6 gph (2.4 lph)
half load ...	0.4 gph (1.4 lph)

Installation Data

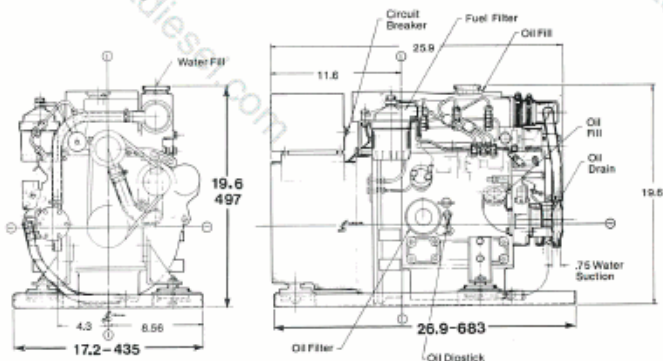
Wet exhaust elbow	1.5" (38mm) OD
Raw water inlets	0.75" (20mm) OD
Fuel inlet and return	5/16" ID Hose

Weight

Approx. dry weight 352 lbs (160 kg)

DIMENSIONAL DATA

Main dimensions given in inches (mm). Dimensions subject to change without notice.



M673 FEATURES AND BENEFITS

Engine Block

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

Cooling System

- Freshwater cooling system.
- One piece heat exchanger, expansion tank and exhaust manifold. Fewer hoses and gaskets. Cast iron construction resists corrosion, electrolysis and heat better than aluminum extrusions.
- Cast iron exhaust manifold is freshwater cooled for safety and long life.
- Zinc anode electrolysis protection.
- Heat exchanger cooling is standard. Tube-type heat exchanger has removable ends for easy cleaning. Jabsco-type raw water pump of brass and stainless steel is gear driven; no belts to break.
- Keel cooling configuration optional.

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.
- Steel fuel lines.
- Stop solenoid controls fuel rack, not throttle. Eliminates speed variance and linkage problems.

Intake and Exhaust

- Cleanable air cleaner in cast intake manifold reduces intake noise.

- 1-1/2 inch water lift muffler optional.
- Cast iron, wet exhaust elbow for safety. Dry exhaust elbow is optional.

Lubrication System

- Full flow, spin-on oil filter with bypass.
- 3 US quart oil capacity for superior lubrication and oil change intervals.
- Oil drain for quick, clean oil changes.
- Closed crankcase vent system keeps engine room clean.

DC Electrical System

- 12 volt starter motor and 14 amp battery charging alternator with integrated regulator and belt guard.
- Standard panel: Remote mount S-1B has hour meter, stop-start switch with run light and preheat switch.
- Optional: Remote mount S-3C panel has gauges for oil pressure, water temperature, hours and DC volts. S-4 panel has engine gauges and AC meters.
- 20 foot plug-in panel harness lets you mount your panel anywhere onboard. Better than inaccessible unit mount panels that are prone to vibration problems. Harness extensions and Ys for multi-panel systems are available.
- Low oil pressure and high water temperature safety shutdowns standard. Shutdowns and alarms for high exhaust temperature, low oil level, low water level and overspeed are optional.

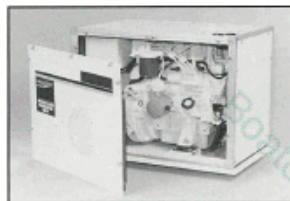


AC Generator

- Northern Lights direct coupled, 4 pole, revolving field, 4 lead reconnectable generator with Class F insulation and prelubricated bearing.
- External automatic voltage regulator gives you +5% voltage regulation. This "clean" power protects sensitive electronic equipment. AVR is powered by a dedicated AC winding for improved motor starting.
- AVR and mainline fuses protect generator from AC overloads and shorts.

Special Equipment

- Steel base frame with drip pan. Easy to mount. Keeps engine room clean.
- Plateform mounts isolate vibration.
- White polyurethane paint for long-life finish and service visibility.
- Operator's and parts manuals standard.



Northern Lights sound enclosures maximize your onboard comfort. Powder coated marine aluminum panels lined with foam deaden noise yet allow easy service access.

M673 enclosure weighs 42 lbs (17 kg) and is L 28.52 (725) x W 18.64 (474) x H 21.26 (540).

DEALER:



Mfg. by Alaska Diesel Electric, Inc., Box 70543, Seattle, WA 98107
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Materials and specifications subject to change without notice.
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