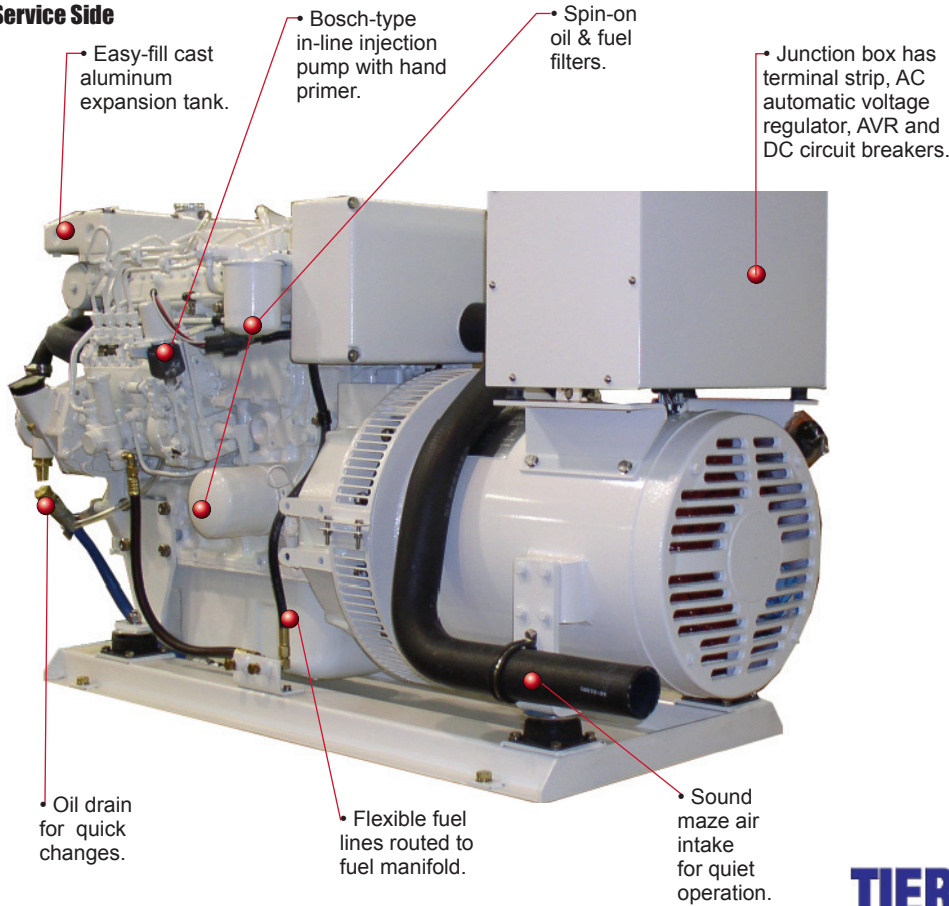
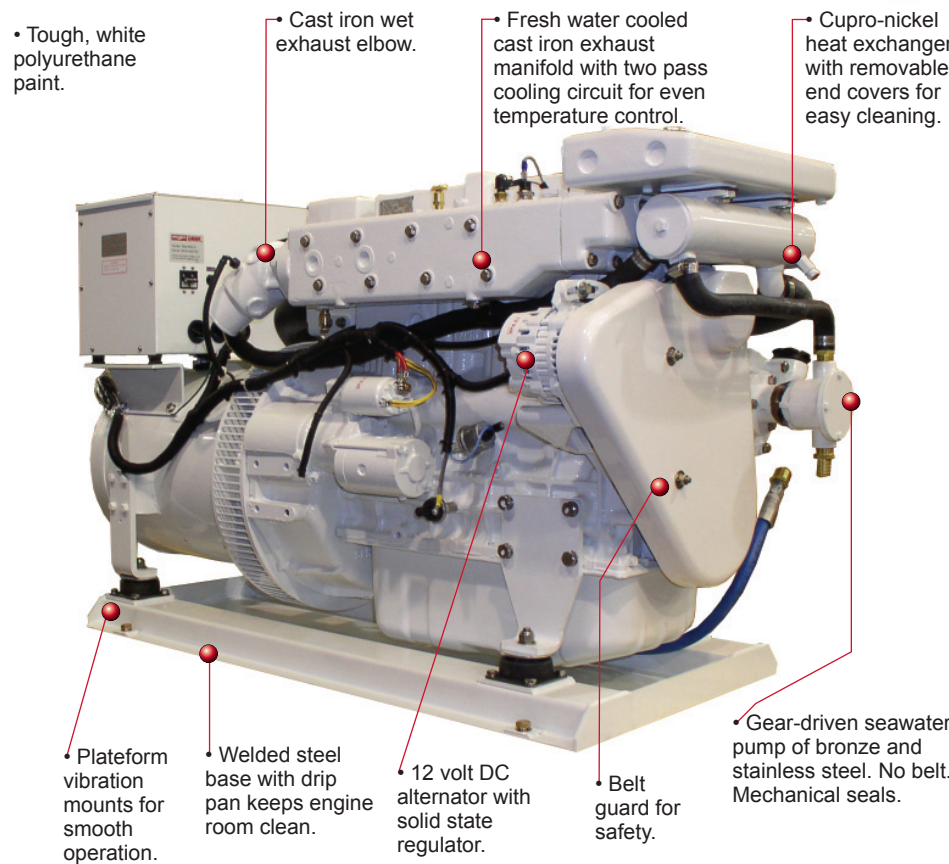


Service Side



- Easy-fill cast aluminum expansion tank.
- Bosch-type in-line injection pump with hand primer.
- Spin-on oil & fuel filters.
- Junction box has terminal strip, AC automatic voltage regulator, AVR and DC circuit breakers.
- Oil drain for quick changes.
- Flexible fuel lines routed to fuel manifold.
- Sound maze air intake for quiet operation.

Non-Service Side



- Tough, white polyurethane paint.
- Cast iron wet exhaust elbow.
- Fresh water cooled cast iron exhaust manifold with two pass cooling circuit for even temperature control.
- Cupro-nickel heat exchanger with removable end covers for easy cleaning.
- Plateform vibration mounts for smooth operation.
- Welded steel base with drip pan keeps engine room clean.
- 12 volt DC alternator with solid state regulator.
- Belt guard for safety.
- Gear-driven seawater pump of bronze and stainless steel. No belt. Mechanical seals.



30 kW
60 Hz / 1800 RPM

26 kW
50 Hz / 1500 RPM

A big power producer in a little package, the new Northern Lights M944W is ideal for the boater who expects unqualified excellence from his generator set without sacrificing valuable engine room space.

Cranking out 30 kW at 60 Hz (1800 rpm), the M944W3 is intended for long life at full load. At more than 3.33 liters, this four cylinder dynamo has the displacement (203 cid) to shoulder the large loads. The generator is driven by a reliable Luger engine, drawing its strength from an industrial block designed for 2500 max rpm; not the 3600 rpm automotive engine common in the industry. That is the reason that the M944W3 hits the top of its torque curve at 1800 rpm instead of sliding down the back of it.

The block is impressive, but what makes the M944W3 so well adapted for the rigors of at-sea use is Northern Lights' exclusive marinization package. From the cupro-nickel heat exchanger to the bronze/stainless gear driven seawater pump, no detail has been overlooked in engineering a superior marine product. The freshwater cooled exhaust manifold is sturdy cast iron with no dry risers.

The M944W3 features Northern Lights' revolutionary W-Series generator end for clean AC output and real short circuit protection. The air filter is cast aluminum for quiet operation.

Producing AC is hardly the M944W3's only trick. Add a 90 amp DC alternator and you'll never run out of battery power again. Add a front PTO with an electric clutch for hydraulic power and drive your winches, bow thrusters or deck gear at the touch of a button.



Front PTO

Reliable, durable, simple to use, and maintain. For nearly 50 years, this has been the hallmark of Northern Lights products. The tradition of excellence continues with the M944W3.

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.



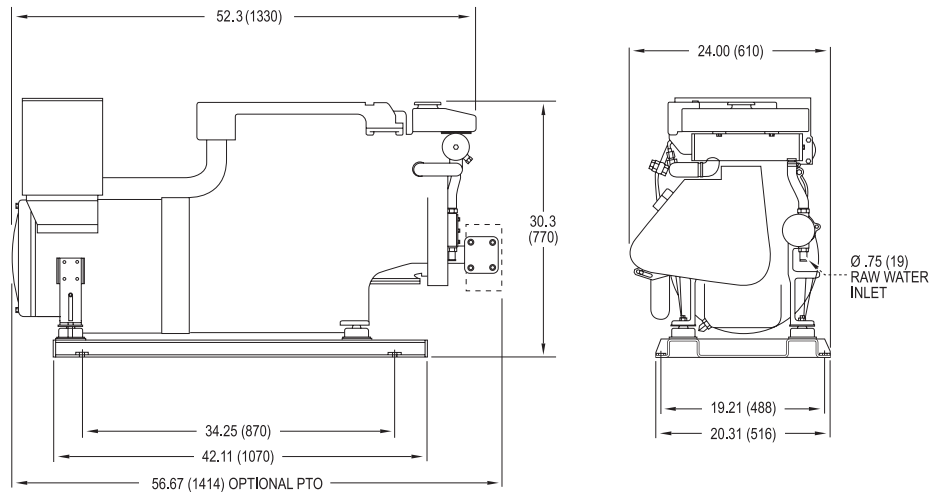
AC Output ¹	
30 kW	60 Hz, 1800 RPM, 1 Ph, 1.0 PF, 120-240 V/125 A, 120 V/250 A
26 kW	50 Hz, 1500 RPM, 1 Ph, 1.0 PF, 220 V/118 A,
Optional	Three Phase with 0.8 PF
Voltage regulation	±1%

Lugger 1944 Engine	
Type	Vertical inline 4 cylinder diesel
Displacement	203 in ³ (3.33 ltr)
Bore/Stroke	3.70/4.72 in (94/120 mm)
HP @ RPM	49.0/1800 39.0/1500
Approx. fuel use	
1800 RPM @ full load ²	2.8 gph (9.8 lph)
1800 RPM @ half load ²	1.5 gph (5.3 lph)
1500 RPM @ full load ²	2.3 gph (7.41 lph)
1500 RPM @ half load ²	1.2 gph (4.16 lph)

Installation Data & Weight	
Wet exhaust elbow	3 inch (76 mm) OD
Raw water inlet	3/4 inch (19 mm) OD
Fuel inlet and return	1/4 inch NPT
Approximate dry weight	1213 lbs (550 kg)

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

M944W3 Dimensional Drawing



Overall Dimensions L x W x H: 52.3 x 24.0 x 30.3 inch (1330 x 610 x 770 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.

M944W3 Features and Benefits

Engine Block

- Lugger, four cycle, 4 cylinder, liquid cooled, naturally aspirated, overhead valve marine diesel based on an industrial engine block.
- Crankshaft is induction hardened, forged carbon steel; stronger than cast iron.
- Helical cut and ground, carbon steel timing gears reduce noise.
- Cross flow head for efficient breathing.

Cooling System

- Freshwater cooling system in heat exchanger or keel cooled configuration.
- Large, easy fill expansion tank.
- Cast iron exhaust manifold is freshwater cooled for safety. No hot, dry risers.
- Zinc anode electrolysis protection.
- Heat exchanger cooling includes: Easy to clean, tube-type, cupro-nickel heat exchanger. Impeller seawater pump of bronze and stainless steel is accessible. Gear driven pump has no belt to worry about.

Fuel System

- IDI with glow plugs.
- Bosch-type in-line injection pump with 5% mechanical governor for close AC output frequency control.
- Pintle type injectors.
- Mechanical fuel lift pump with hand primer.
- Large spin-on fuel filter.
- Flexible fuel lines routed to base.
- Stop solenoid controls fuel rack, not throttle, for fast engine shutdowns.

Lubrication System

- Full flow, spin-on oil filter with bypass.
- 10.5 qt (10 ltr) center well oil pan.
- Lube oil drain for quick oil changes.

Intake and Exhaust

- Tier III compliant and meets US EPA emission requirements.
- Washable air cleaner/silencer and cast intake manifold reduces intake noise.
- Cast iron, wet exhaust elbow for safety.

DC Electrical System

- DC system uses reliable relays instead of unrepairable printed circuit board.
- 12 volt starter and battery charging alternator with regulator.
- Standard panel: Remote mount S-3C has hour meter, oil pressure gauge, coolant temperature gauge, DC voltmeter, stop-start switch and preheat switch.
- 20 ft (6 m) plug-in panel harness lets you monitor your set from the bridge.
- Expandable to six panels, 110 ft from set.
- Low oil pressure, high coolant temp and high exhaust temp shutdowns are standard.



AC Generator

- Northern Lights, direct coupled, brushless AC generator is maintenance free.
- 4 lead/1 phase, 50 or 60hz output standard. 12 wire, 3 phase generator available. Conservative 95°C/50°C ambient heat rise.



- Generator features: high quality Class "H" insulation, accessible diodes, oversized bearing and junction box for AC wiring.
- Automatic Voltage Regulator is powered by dedicated AC winding for true 300% short circuit capability. AVR gives quick ±1% RMS no load to full load voltage regulation. AVR has circuit breaker protection.

Special Equipment

- Welded steel base frame with drip pan.
- Platform vibration isolation mounts for smooth, quiet operation.
- Belt guard protects operator.
- Tough, sparkling white polyurethane paint.
- Parts and operator's manuals.

Classification Standards

- Contact factory for details

Optional Equipment

- See accessory brochure for a complete list of customizing equipment.
- Front Power Take Off:** B-spline 2 or 4 bolt, front PTO with 12 or 24 volt electric clutch. Take up to 49 HP @ 1800 rpm (39 HP @ 1500 rpm) to run your bow thruster, sail handling, deck winches and other shipboard hydraulic equipment.
- Sound Enclosure** has powder coated marine aluminum panels lined with sound barrier foam to dampen noise. Trigger latches for easy service access.



LxWxH: 61 x 31.3 x 32.85 in
(1549.4 x 795 x 834.4 mm)
Weight: 170 lbs (77 kg)

Dealer

4420 14th Ave. NW., Seattle WA 98107
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Information and dimensions subject to change without notice.
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