

## More Than Power

Built to the demanding specifications that have made Luggers by Northern Lights the industry's top quality diesel engine, the L944D provides an exceptional marine propulsion value.

The L944D produces 65 horse power at 2500 rpm. The L944D features an impressive power-to-weight ratio, highly advanced fuel efficiency, and is certified to meet current emission regulations.

The mechanically injected, naturally aspirated L944D is designed for simplicity in a technologically advanced package. The L944D is fresh water cooled for maximum efficiency. Its cast iron exhaust manifold features a two-pass cooling circuit for even cooling.

All the service features of the L944D are designed with the recreational boater in mind. The Bosch-type inline injection pump allows smooth fuel injection with a thoughtfully placed hand primer. Most service points are grouped on a single side, making routine maintenance a snap.

The two valve per cylinder design provides for maximum air flow in a compact space. The L944D is built for full-throttle usage. It features an impressive displacement of 203 cid to shoulder heavy loads. The DC Logic electrical system continually controls and monitors the vital engine functions.

Like all Luggers, the L944D is built to be customizable to end user demands. By combining the world renowned technology of Northern Lights' engineering, with an eye

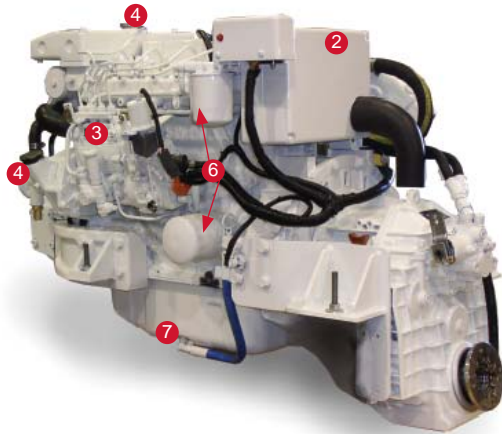
HORSEPOWER

65 HP /2500 rpm  
High Duty

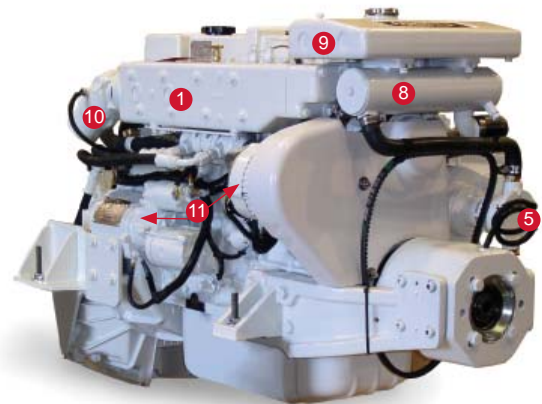
toward the simplicity and efficiency required by small vessel operators, the L944D produces quality marine propulsion engines in a small and economical package.

For five decades, Luggers engines by Northern Lights have been engineered and built to ensure optimal performance and cost efficiency. Recognized world wide as the most reliable and durable marine engines, Luggers delivers the highest quality engines on the water.

### Service Side



### Non-Service Side



1. Cast Iron two pass exhaust manifold.
2. Cast air intake silencer with washable air filter reduces air intake noise. Crankcase oil vapor trap for clean air.
3. Bosch type inline injection pump.
4. Top & side oil fills.

5. Gear driven, rubber impeller, seawater pump. Bronze and stainless steel. No belt. Mechanical seals.
6. Spin-on oil & fuel filters.
7. Oil drain for quick changes.
8. Removable heat exchanger end covers for easy core cleaning.

9. Jacket water cooled with one piece, cast iron expansion tank.
10. Cast iron wet exhaust elbow w/ temp switch.
11. 12 volt DC starter and battery charging alternator.

## L944D Features and Benefits

As a base engine in a small vessel, or a wing engine in a larger one, the L944D is built to be driven hard over the long haul.

### Cooling System

Northern Lights engineering has produced an engine with a minimal amount



of leak or breakage points. This leads to a cooling system that is uniquely designed for the rigors of the marine environment.

Reliable and efficient cooling is built in to the L944D, thanks to its single-piece cast iron exhaust manifold.

### Fuel System

The L944D combines the tradition of Northern Lights engineering excellence with the advances of modern technology. The fuel system is mechanically controlled, allowing for smooth, efficient horsepower in a package that won't cramp your engine room.

### Air System

The L944D is designed to meet Current USEPA Tier II emission standards. Its air and ventilation systems are built to run as efficiency and cleanly as possible. The closed circuit crankcase vent traps oil vapors to keep the engine room and environment clean. The cast-iron wet exhaust elbow is unique in the marketplace and comes standard.



### Lubrication System

The L944D uses a gear-type, high capacity oil pump with a lube oil cooler and a full flow filtration system. This technology filters particles large and small from the oil flow in a single unit.

### Electrical System

The standard L944D electrical system is a technological standard-bearer, with a 12 volt grounded system standard, and 24 volt available

as an option. The battery charging alternator and starter come standard, as does the control panel featuring tachometer, hourmeter, coolant temperature meter, DC voltage meter, oil pressure gauge and key switch.



# LUGGER

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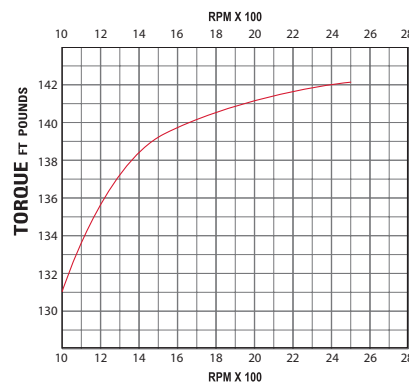
## L944D Specifications and Installation Data

<b>Output rating</b>	65 Hp @ 2500 RPM
Cylinders/Configuration/Cycle	4 Inline
Displacement CID (ltr)	203 (3.33)
Aspiration	Natural
Bore x Stroke in (mm)	3.70 x 4.72 (94 x 120)
<b>Cooling (General)</b>	
Coolant circ pump flow - US gpm (lpm)	16 (61)
Heat rejection to jacket water - BTU-min	2588
Freshwater system capacity - US gal (ltr)	3 (11)
<b>Cooling (Heat Exchanger)</b>	
Raw water intake discharge dia. - NPT in (mm)	3/4 (19)
Raw water pump flow - gpm (lpm)	16 (60)
Raw water pump max. suction head - in (m)	39 (1)
Max. raw water temp. at inlet -°F (°C)	86° (30°)
<b>Cooling (Keel Cooled)</b>	
Water hose inside diameter - in (mm)	1.5 (38)
Head diameter - in (NPT)	1.25 (31.75)
Turbo tube length - ft (m)	19 (0.48)
Skin cooler aluminum - sq ft (m <sup>2</sup> )	16 (1.49)
Skin cooler steel - sq ft (m <sup>2</sup> )	48 (4.46)
<b>Electrical</b>	
Voltage	12V standard ground
Min. battery capacity	200 amp hours -640 CCA
Battery cable size up to 10 ft run	"00"
Standard panel harness length - ft (m)	20 ft (6m) std
<b>Air and Exhaust</b>	
Engine air consumption - cfm (m <sup>3</sup> /min)	132 (3.74)
Min. engine room vent area - sq in (m <sup>2</sup> )	37 (0.94)
Exhaust gas flow at - cfm (m <sup>3</sup> /min)..	360 (10.19)
Max. exhaust back pressure - in (mm) H <sub>2</sub> O	27 (686)
Suggested dry exhaust I.D. - in (mm)	2 (51)
Suggested wet exhaust I.D. - in (mm)	3 (76)
<b>Mechanical Fuel System and Oil</b>	
Minimum fuel suction line - in (mm)	0.375 (10)
Minimum fuel return line - in (mm)	0.375 - 3/8 (10)
Maximum fuel pump head - in (m)	39 (1)
Crankcase oil capacity - US qts (ltr)	11 (10)
Engine rotation (facing flywheel)	Counter-Clockwise
Flywheel housing size	SAE 4, 10" Standard
Optional front PTO size SAE # - inch	SAE B - PAD
Maximum operating angle any direction	35° for less then 2 minutes
Maximum installed operating angle	10° rear down - 0° front down
<b>Weight (without gear)</b>	
Keel Cooled Weight - without gear	600 (272)
Heat Exchanger Weight - without gear	620 (281)

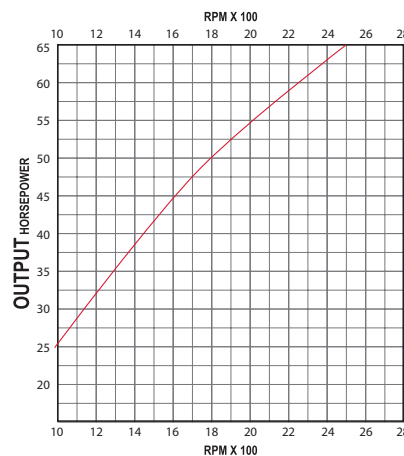
\* Based on 70° F seawater and minimum full boat speed of 8 knots.  
Return water from keel cooler 70-130°F

## L944D Performance Data

**High Output Rating<sup>1</sup>** FWHP / kW / @ rpm 65 / 48.5 / 2500



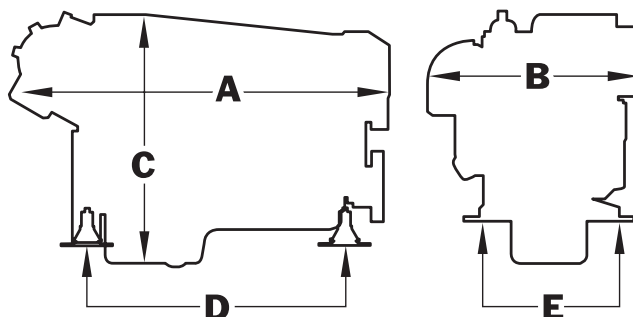
A



B

RATING	HIGH OUTPUT <sup>1</sup>	
Curve	A	B
RPM	ft/lbs	hp
1000	131	25
1100	134	28
1300	138	34
1500	139	39
1700	140	44
1900	141	51
2100	141	56
2300	142	60
2500	142	65

## Dimensions



**Overall Dimensions L x W x H: 40.1 (1018) x 24.9 (628) x 29.0 (737)**  
Dimensions given in inches (mm). Dimensions subject to change without notice.  
Contact dealer or visit [www.northern-lights.com](http://www.northern-lights.com) for current installation drawings.

\*Do NOT use for installation. Contact factory for current installation drawings.

## 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.  
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