



Mercury Diesel 6.7 L

**L6 Common Rail, EPA Tier 3/RCD 2 Engine
for Recreational Applications**





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L6 Common Rail, EPA Tier 3 / RCD 2 Engine for Recreational Applications 480 hp (353 kW) to 550 hp (404 kW) Available Models: Bobtail, Inboard or Zeus Pod package

The new Mercury Diesel 6.7 L midrange engine delivers exceptional performance and offers substantial improvements in acceleration and top speeds which is made possible via a new, matched turbocharger design. This matched system plus the state-of-the art engine control system provides low fuel consumption resulting in affordable operating costs and extended travel range.

The new Mercury Diesel 6.7 L midrange engine has proven durable by utilizing design features and materials specific for marine applications, and undergone validation to Mercury’s rigorous test standards. The new Mercury Diesel 6.7 L is assembled in a state of the art manufacturing facility that utilizes the latest in quality controls. This manufacturing facility has produced over 1 million engines.

The new Mercury Diesel 6.7 L engine is compatible with all of Mercury’s controls and SmartCraft® electronics and is serviceable through Mercury’s global service network. Mercury Diesel’s SmartCraft® compatibility also enables boaters to specify digital throttle and shift (DTS) control systems including optional Joystick Piloting for inboards and Joystick Piloting for Pods (Zeus).

FEATURES AND BENEFITS

Engine

- L6 Ladder frame design
- Gray Iron, high strength block and heads
- Fracture split connecting rods
- Rear gear train timing system
- Functional engine lay out
- Equipped with oil evacuation system

Lubrication System

- Self-draining oil filter for clean filter changes
- Pistons oil cooled by J-jets

Fuel System

- Custom, engine mounted Racor priming pump
- Bosch CP3.3 high pressure pump
- CRIN 2 fuel injectors
- 4 micron filter protecting the system

Engine Control

- Bosch EDC17 Controller
- Controller isolated mounted to ensure durability

Air Intake

- Walker filter /silencer included for noise reduction

Turbocharger

- Single turbo
- Waste gated
- Closed cooled

Cooling System

- Thermostatically controlled
- Closed cooled engine for corrosion protection
- Seawater cooled charge air cooler
- Standard cabin heater connections

Exhaust System

- Closed cooled manifold
- Closed cooled turbocharger
- Seawater cooled riser

Electrical System

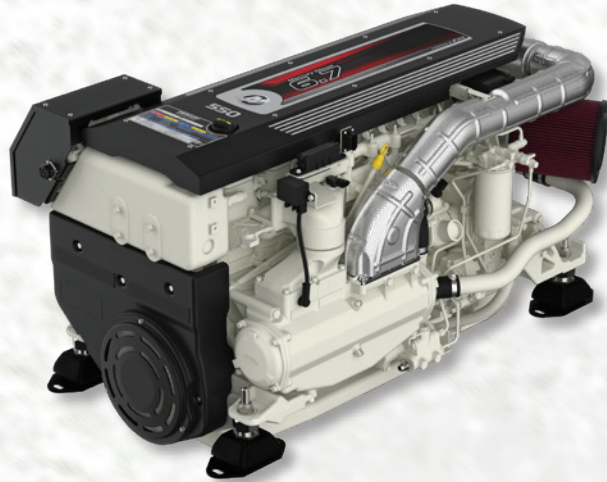
- Either 12V or 24V available
- High output alternator
 - 12V = 90 Amp
 - 24V = 70 Amp

Emissions

- EPA Tier 3
- RCD 2
- IMO Tier 2

General Specifications

Configuration	In-line 6 cylinder	[L6]	4 stroke diesel
Bore and Stroke	mm (inch)	104 x 132	[4.094 x 5.197]
Displacement	L (in³)	6.7	[411]
Air handling	Turbocharged and Aftercooled		
Fuel system	High pressure common rail		
Rotation	Counter Clock Wise facing flywheel		



Bobtail Dimensions and Weight

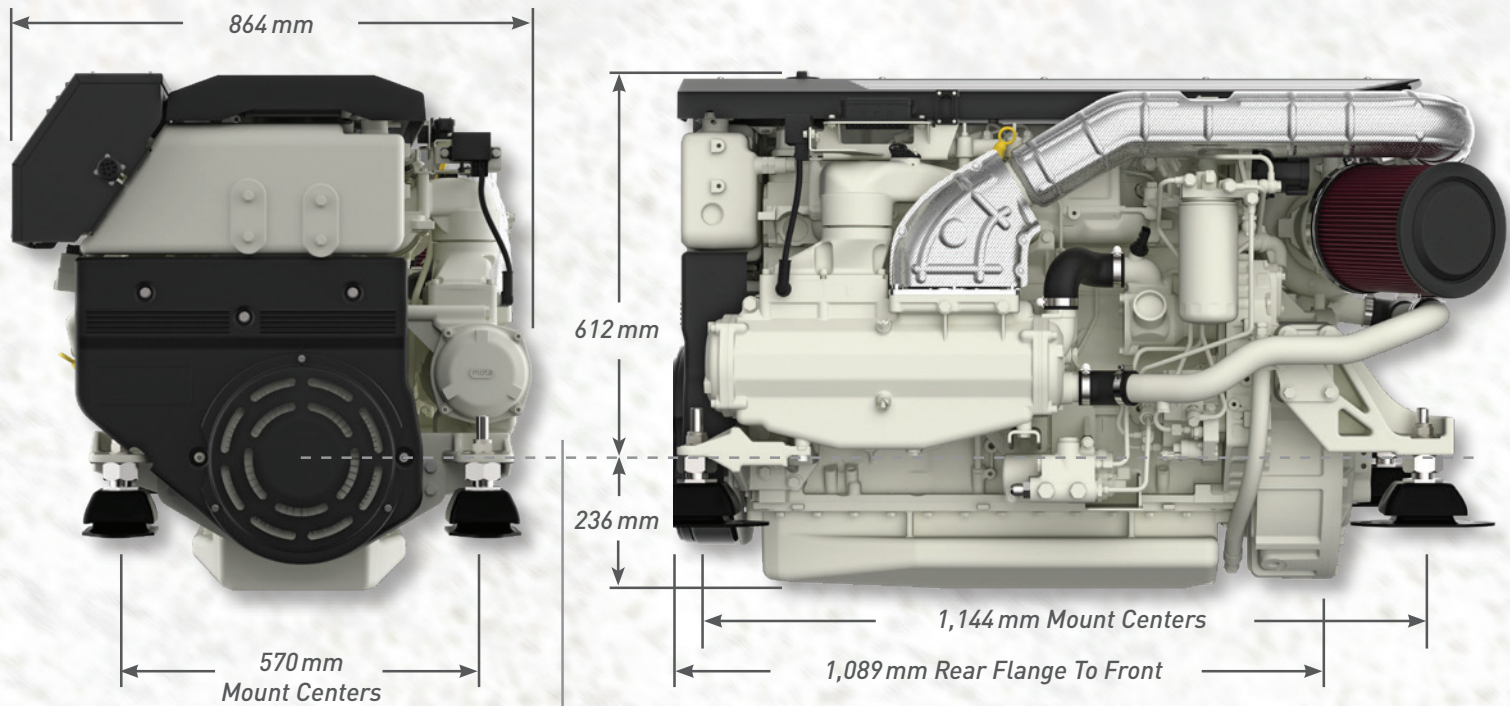
Overall length	mm (inch)	1,089	[42.87]
Overall width	mm (inch)	864	[34.02]
Overall height	mm (inch)	848	[33.39]
Dry weight	kg (lb)	721	[1,590]

Weight includes engine mount supports, alternator, and engine cover.

Models

Model	Driveline Options	Output Power		Fuel Use at Rated Speed L/ hr (gal/ hr)	Rated Use	Idle Speed (RPM)	Max Rated Engine Speed (RPM)	Emissions Ratings (no after treatment)		
		hp	kW					EPA	EU	IMO
480	Bobtail Inboard	480	353	97 [25.6]	Recreational	600	3,200	Tier 3	RCD 2	Tier 2
500	Bobtail Inboard, Pod	500	368	101 [26.6]						
550	Bobtail Inboard, Pod	550	404	113 [29.9]						

Engine Dimensions



Crankshaft Centerline

Detailed Specifications:

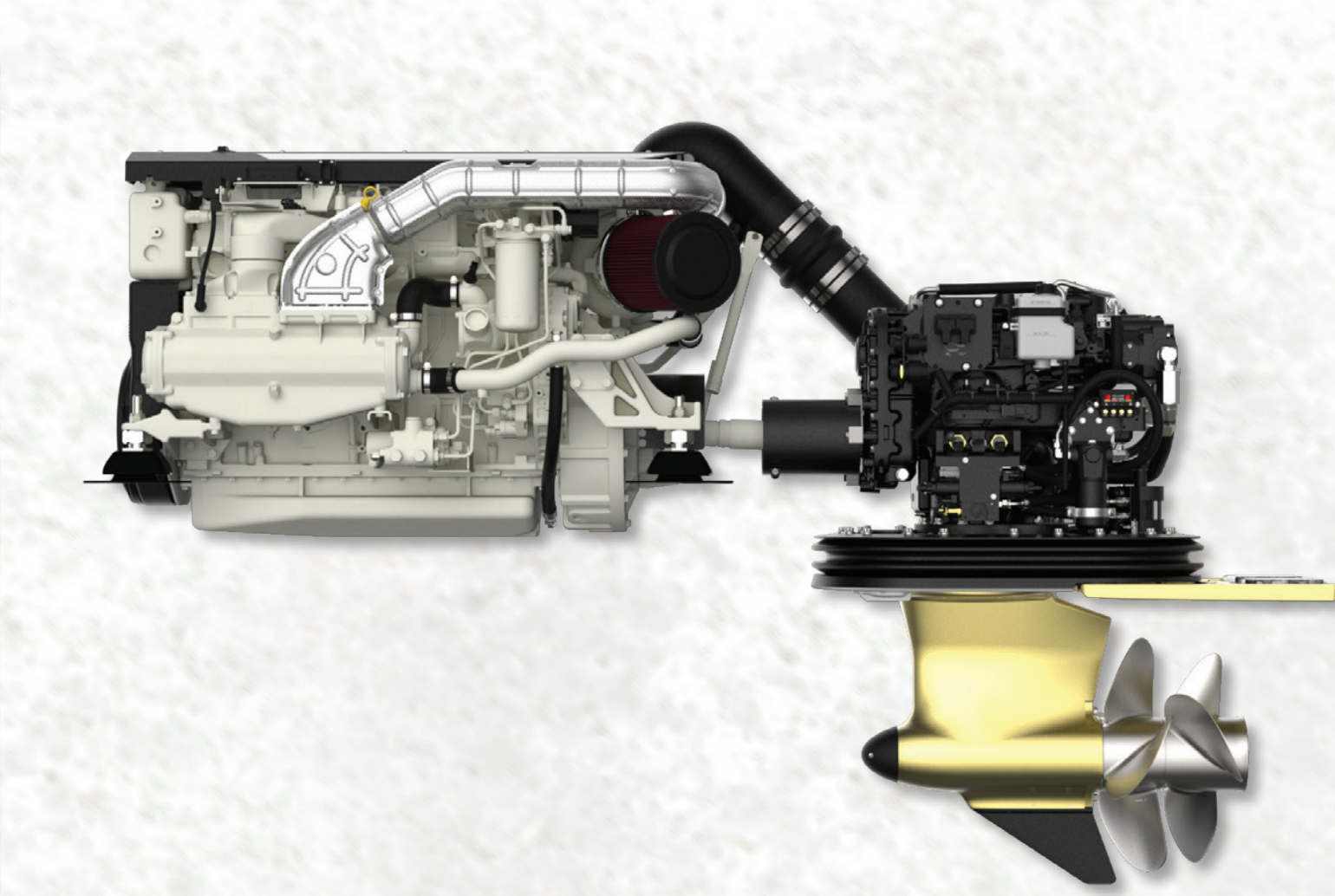
	480 hp	500 hp	550 hp
Compression ratio	15.8:1		
Fuel pre-filtration requirement	10 micron		
Fuel lift pump	On engine		
High pressure fuel pump	Bosch CP3.3		
Valves per cylinder	4		
Pistons	Oil jet cooled		
Fuel injectors	CRIN 2		
Air inlet (Port rear)	Filtered and silenced		
Turbocharger	Fixed geometry, waste gate		
Engine and turbocharger cooling	Closed cooled		
Coolers; Aftercooler, Oil and Engine	Tube and shell		
Seawater pump/inlet Ø mm (in)	Gear driven 51 (2)		
Peak torque at RPM N-m (ft-lb)	1,580 (1,165) at 1,900		
Oil sump volume L (qt)	14.5 (15.3)		
Dipstick range L (qt)	9.5 to 14.5 (10 to 15.3)		
Oil maintenance interval hr ¹	250		
Flywheel size mm (in)	292 (11.5)		
Flywheel housing	SAE 3		
Electrical system	12/24 V 90/70 A		
Engine stop	ECU Controlled		
Engine Control Unit (ECU)	Bosch EDC17		
Throttle and shift	Mercury DTS		
Helm and gauge compatibility	Mercury SmartCraft		
Mercury Joystick Piloting - Inboard	Compatible		
Engine oil evacuation system	Standard		
Engine and ECU covers	Texture coated Aluminum. Protects engine plus provides step capable platform.		
Mercury Zeus pod ²	Not offered	Straight with vertical cooler: 2.06:1 and 2.24:1 Drop box with XC cooler: 2.06:1 and 2.24:1	Straight with cold water cooler: 2.24:1 Drop box with cold water cooler: 1.79:1 and 1.95:1
Inboard: ZF 85 IV ³	1.64:1, 2.00:1 and 2.49:1	Not offered	Not offered
Inboard: ZF 280IV ⁴	1.25:1, 1.56:1, 1.77:1, 2.06:1, 2.28:1, 2.56:1 and 3.09:1		
Inboard: ZF 280-1 parallel offset ⁴	0.81:1, 1.00:1, 1.06:1, 1.14:1, 1.21:1, 1.30:1, 1.51:1, 1.72:1, 2.00:1, 2.48:1, 3.00:1		
Inboard: ZF 280-1 A down angle ⁴	1.12:1, 1.48:1, 1.77:1, 2.00:1, 2.23:1, and 2.48:1		
Sensors	Air pressure/temp, exhaust gas temperature, fuel pressure/temperature crank and cam position, oil pressure/temperature, coolant temperature, seawater pressure.		

¹ Typically there is no need to add oil during the 250 hr oil maintenance interval.

² The pod is connected to the engine via a driveshaft kit.

³ Only standard model available – no troll valve or transmission oil evacuation included.

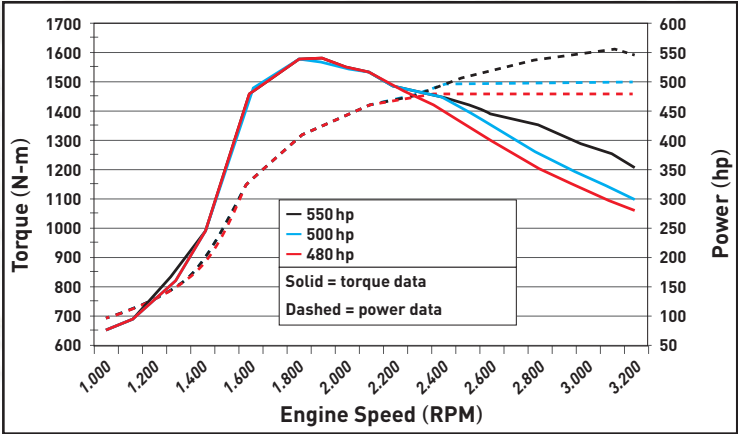
⁴ Both standard (no troll valve) and also premium models (with troll valve and transmission oil evacuation) are available.



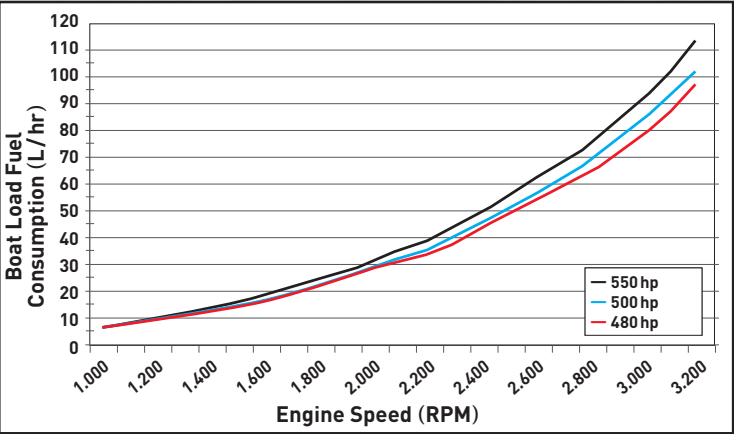
Test Boat Weight:
32,900 lbs
With 2.059:1 Zeus Pod
(drop box model)

Measure	Mercury Diesel 6.7 L 500
0-20 mph	8.4 sec
0-30 mph	16.8 sec
Top Speed	42.0 mph

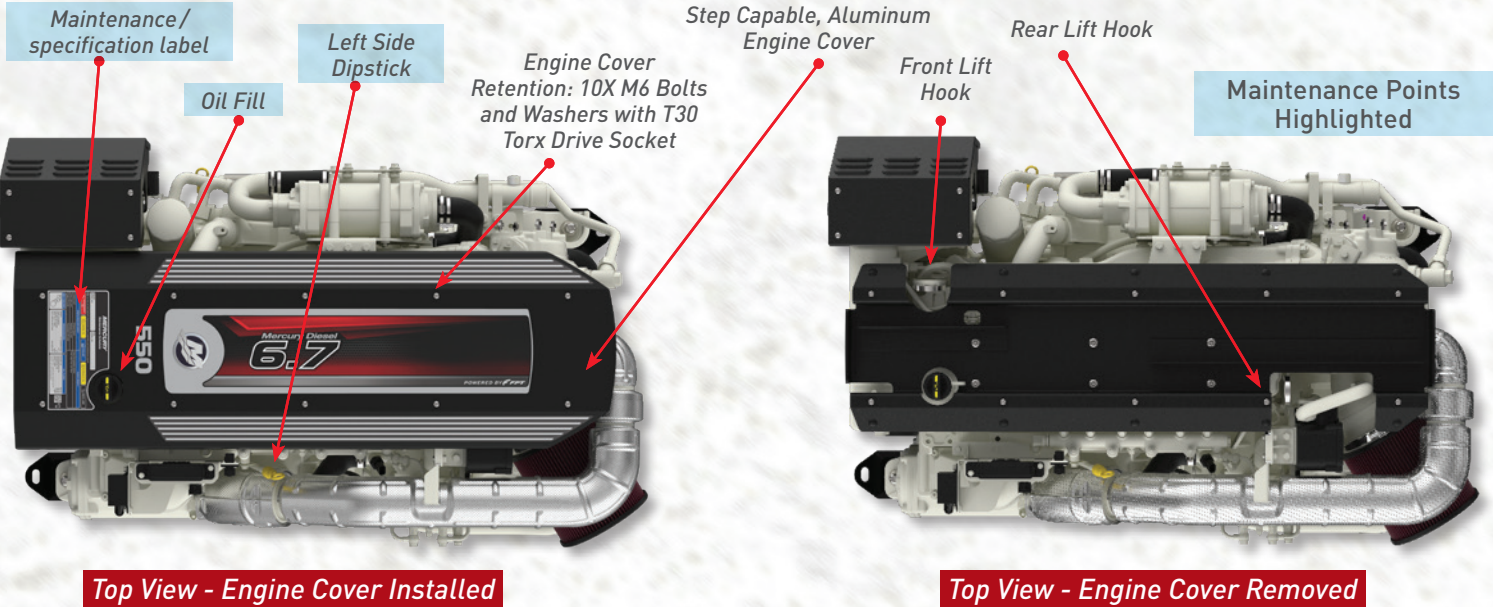
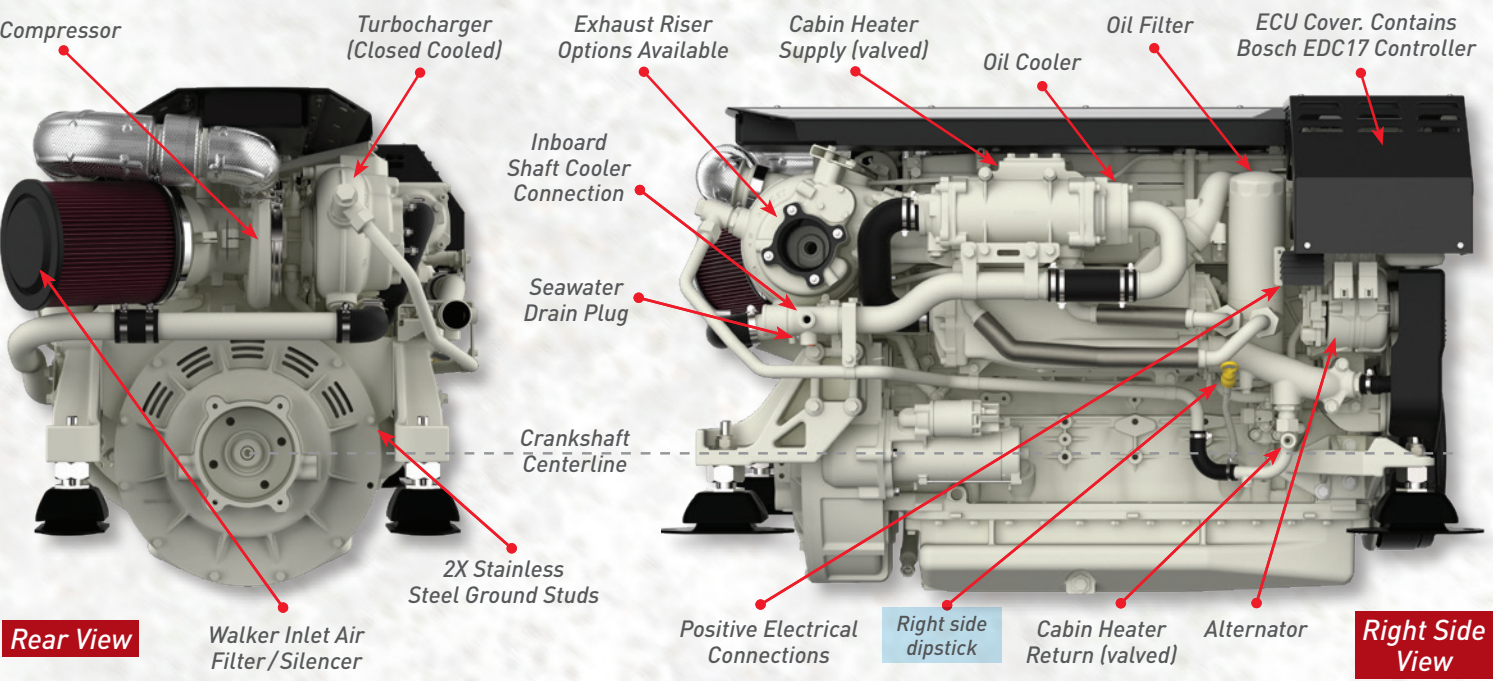
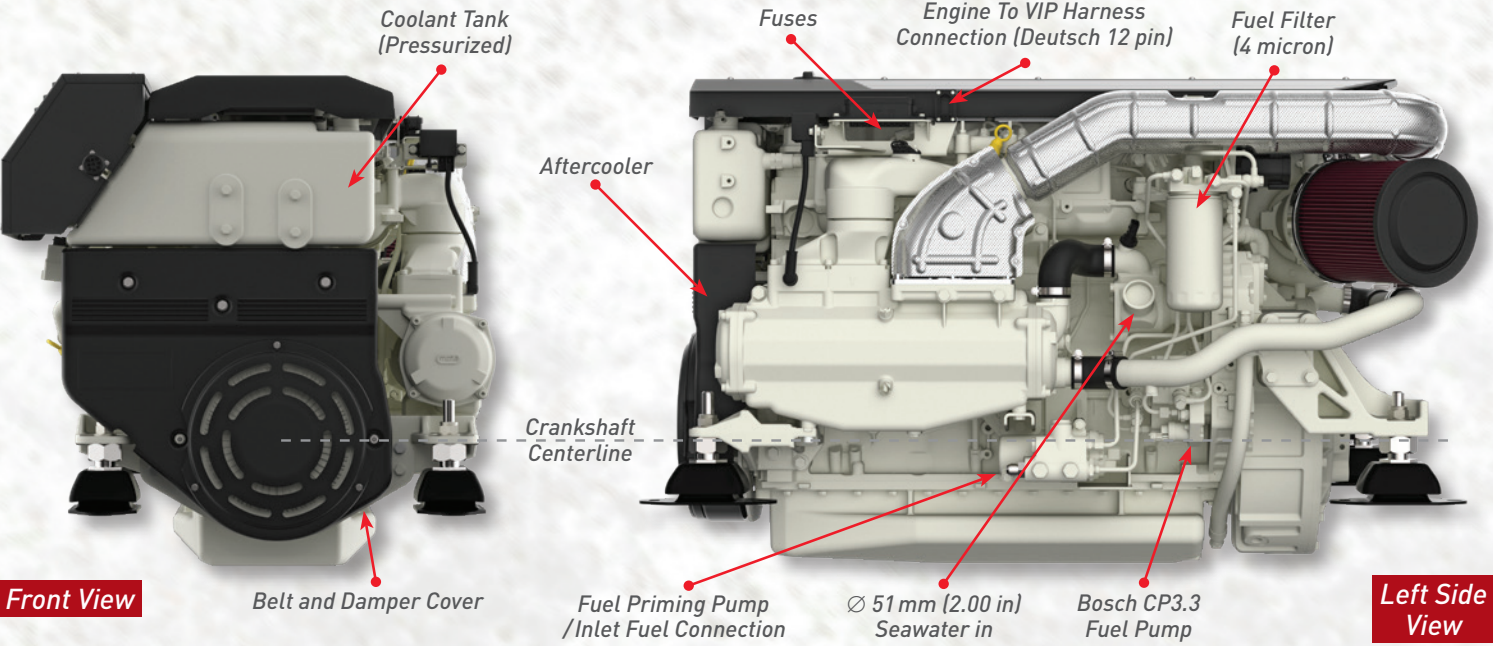
Torque and Power
(full load at crankshaft)



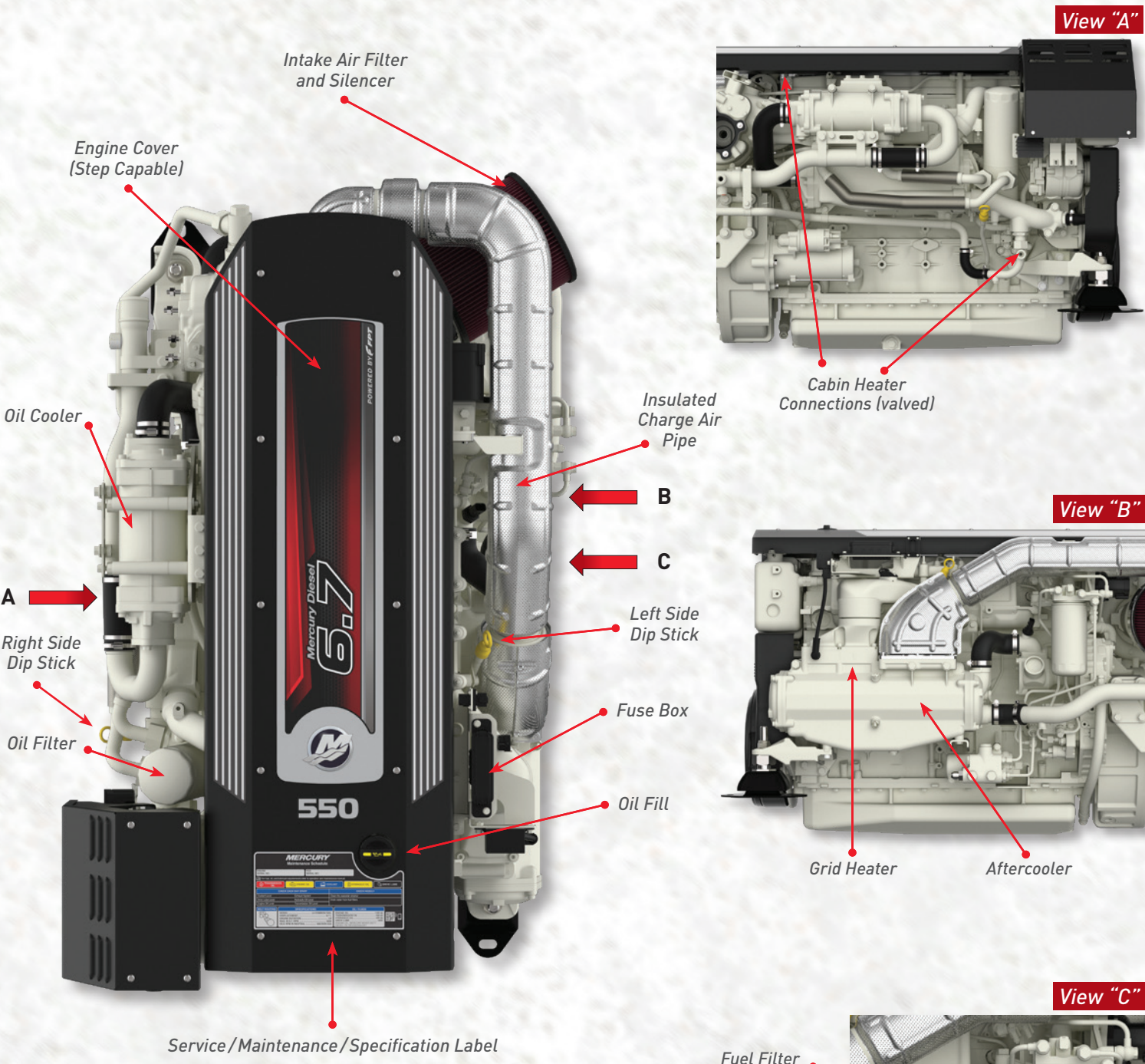
Boat Load Fuel Consumption



Engine Layout

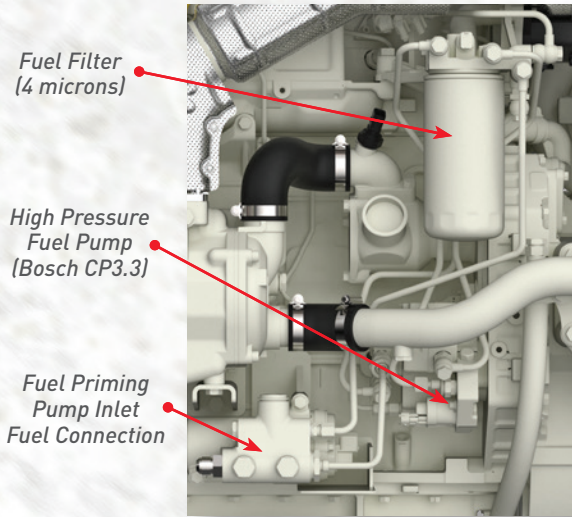


Features



QR Code Symbol

MERCURY Maintenance Schedule		
ENGINE SERIAL NO.	POD SERIAL NO.	
For fuel, oil, and lubricant requirements refer to operation and maintenance manual.		
TRANSMISSION OIL / FLUID	ENGINE OIL	RAW WATER DRAIN
CHECK EACH DAY START	CHECK EACH DAY END	CHECK WEEKLY
Engine Oil Level	If operating in saltwater, brackish water, or polluted water, flush the seawater section of the cooling system after each use.	Water inlets for debris or marine growth
Gearcase Lubricant		Clean the seawater strainer
Transmission Oil / Fluid Level		
Coolant Level		
Exhaust System		
BELT ROUTING	SPECIFICATIONS	OIL / FLUIDS
MODEL	TURBOCHARGED / AFTERCOOLED	ENGINE OIL
DISPLACEMENT	6.7 L	TRANSMISSION OIL
ENGINE ROTATION	LH	GEARCASE LUBRICANT
MAX. W.O.T. RPM	3200	ENGINE OR TRANSMISSION OIL
IDLE RPM IN NEUTRAL	650 NON ADJ.	MERCURY HEAVY DUTY DIESEL OIL OR EQUIVALENT





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