



DIESEL 6.7L

L6 COMMON RAIL, EPA TIER 3 / RCD 2 ENGINE



MERCURY[®] DIESEL 6.7L

L6 Common Rail, EPA Tier 3/RCD 2 Engine
480 mHP (353 kW) to 550 mHP (405 kW) Available Models:
Bobtail, Inboard or Zeus[®] Pod package

The Mercury[®] Diesel 6.7L midrange engine, with its matched turbocharger design, delivers exceptional performance, acceleration and top speeds, and is the perfect match for recreational sport yachts. This powerful engine features an advanced engine control system that delivers low fuel consumption for affordable operating costs and extended travel range.

Available in pod, inboard and bobtail configurations, the Mercury Diesel 6.7L engine is compatible with all Mercury controls and SmartCraft[®] electronics and is serviceable through the Mercury global service network. Its SmartCraft compatibility also enables boaters to specify Digital Throttle & Shift (DTS) control systems including Mercury Zeus pods, Mercury Joystick Piloting for Inboards, and Mercury VesselView[®] displays.



General Specifications

Configuration	6 Cylinder (L6), FourStroke 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	Counterclockwise-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		745kg	(1,642lbs)

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

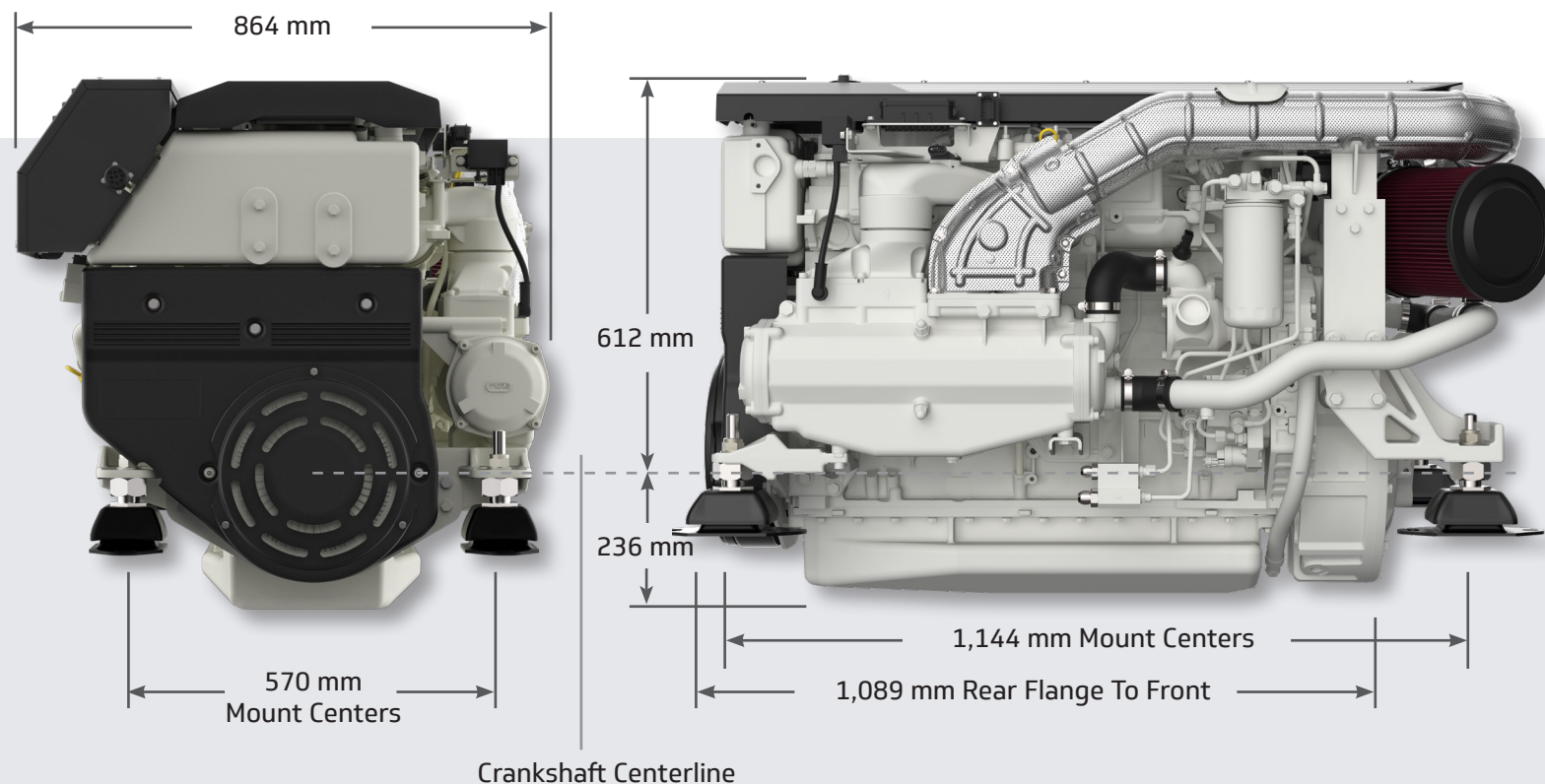


Model	Driveline Options	Output Power		Fuel Use at Rated Speed L/hr (gal/hr)	Rated Use	Idle Speed (RPM)	Max Rated Engine Speed (RPM)	Emissions Ratings (no after treatment)		
		mHP	kW					EPA	EU	IMO
480	Bobtail Inboard	480	353	97 [25.6]	Light Duty Commercial Recreational	600	3,200	Tier 3	RCD 2	Tier 2
500	Bobtail Inboard, Pod	500	368	101 [26.6]						
550	Bobtail Inboard, Pod	550	405	113 [29.9]						

PACK A PUNCH

DIESEL

Mercury Diesel engines offer an exhilarating yet refined diesel-engine experience. Advanced turbocharging and injection technologies produce a powerband that's precisely calibrated for marine performance and outstanding economy. Lightweight designs boost performance further, while clean and quiet operation enhance your day on the water.



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

- 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

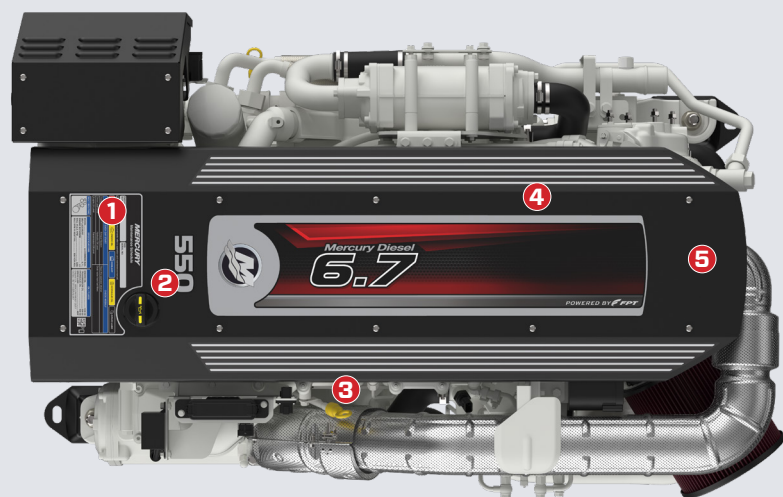
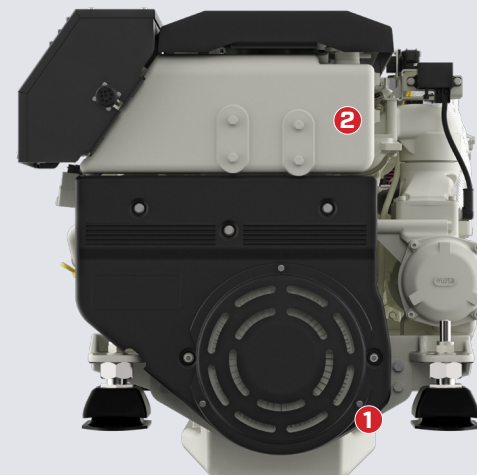
Emissions

- EPA Tier 3
- RCD 2
- IMO Tier 2

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FRONT VIEW FEATURES

1. Belt and Damper Cover
2. Coolant Tank (Pressurized)

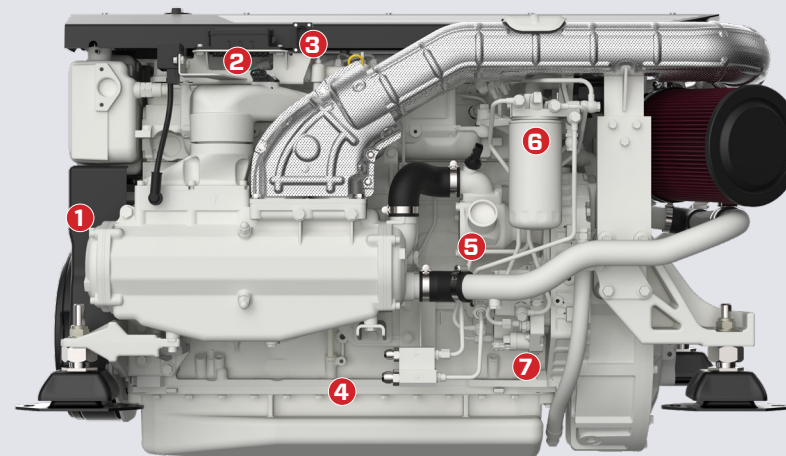


PORT SIDE VIEW FEATURES

1. Aftercooler
2. Fuses
3. Engine To VIP Harness Connection (Deutsch 12 pin)
4. Fuel supply and fuel return connections
5. Φ 51 mm (2.00 in) Seawater in
6. Fuel Filter (4 micron)
7. Bosch CP3.3 Fuel Pump

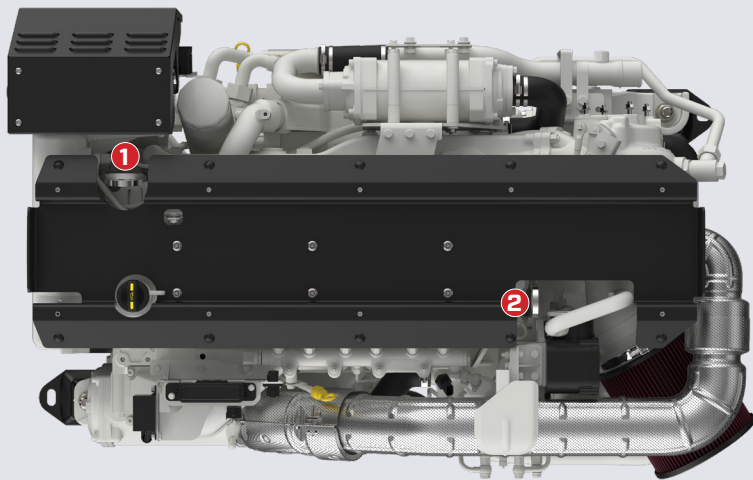
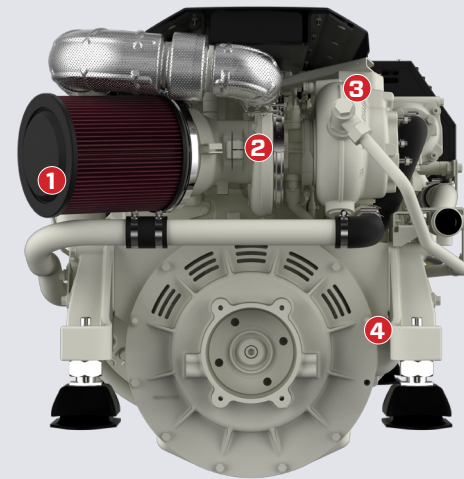
TOP VIEW FEATURES

1. Maintenance/Specification Label
2. Oil Fill
3. Left Side Dipstick
4. Engine Cover Retention: 10X M6 Bolts and Washers with T30 Torx Drive Socket
5. Step Capable, Aluminum Engine Cover



REAR VIEW FEATURES

1. Walker Inlet Air Filter / Silencer
2. Compressor
3. Turbocharger (Closed Cooled)
4. 2X Stainless Steel Ground Studs

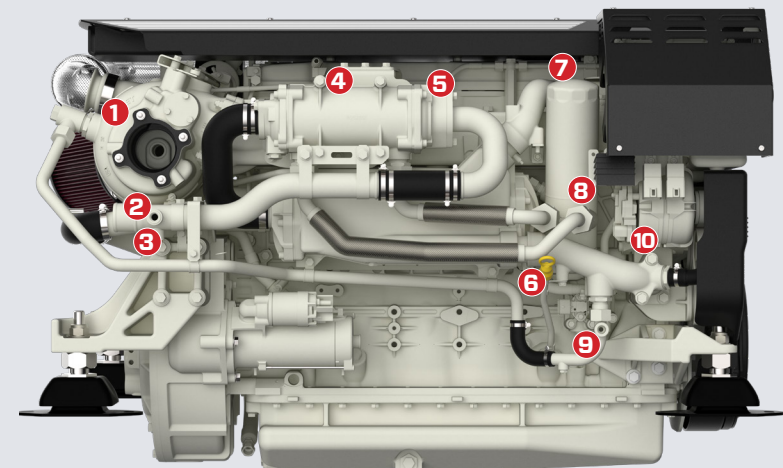


TOP VIEW (COVER REMOVED)

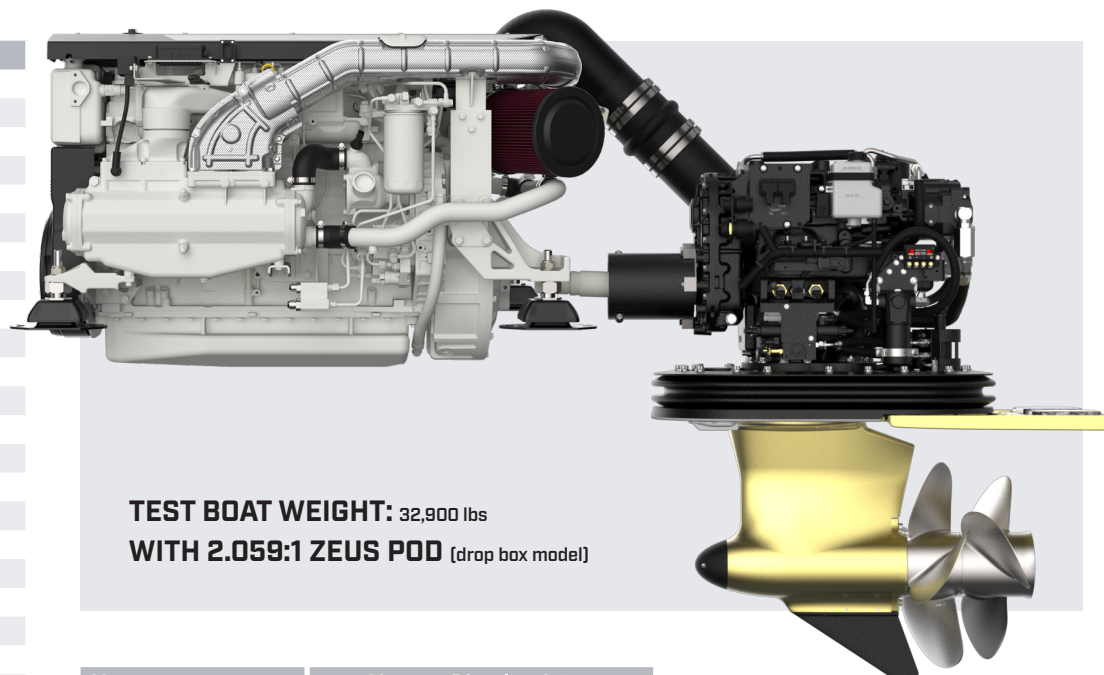
1. Front Lift Hook
2. Rear Lift Hook

STARBOARD SIDE VIEW FEATURES

1. Exhaust Riser Options Available
2. Inboard Shaft Cooler Connection
3. Seawater Drain Plug
4. Cabin Heater Supply (Valved)
5. Oil Cooler
6. Right side dipstick
7. Oil Filter
8. Positive Electrical Connections
9. Cabin Heater Return (Valved)
10. Alternator



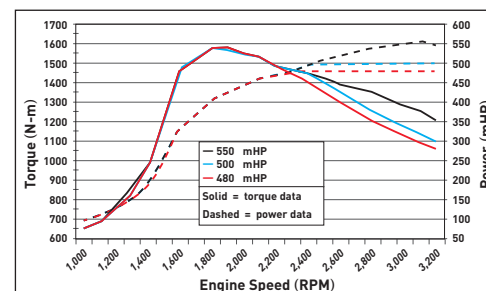
Specifications	480 mHP	500 mHP	550 mHP
Compression ratio		15.8:1	
Fuel pre-filtration requirement		10 micron	
Fuel lift pump		Part of fuel pre-filter	
High pressure fuel pump		Bosch CP3.3	
Valves per cylinder		4	
Pistons		Oil jet cooled	
Fuel injectors		CRIN 2	
Air Inlet (Port rear)		Filtered and silenced	
Turbocharger		Fixed geometry, waste gate	
Engine and turbocharger cooling		Closed cooled	
Coolers; CAC, Oil, Fuel and Engine		Tube and Shell	
Seawater pump/inlet 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)		19.0 (20)	
Dipstick range L (qt)		14 to 19 (14.8 to 20)	
Oil maintenance interval hr*		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 for Inboards		Compatible	
Engine oil evacuation system		Standard	
Engine and ECU covers	Texture coated aluminum. Protects engine plus provides step capable platform.		
Mercury Zeus pod **	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 vertical cooler: 2.06:1 and 2.24:1 Drop box with XC cooler: 2.06:1 and 2.24:1
Inboard: ZF 85 IV +	1.64:1, 2.00:1, and 2.49:1	Not offered	Not offered
Inboard: ZF 280 IV ++		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++		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 280-1A down angle++		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		



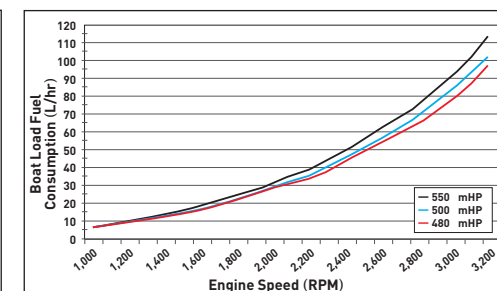
TEST BOAT WEIGHT: 32,900 lbs
WITH 2.059:1 ZEUS POD (drop box model)

Measure	Mercury Diesel 6.7L 500
0-20 mph	11.8 sec
0-30 mph	16.2 sec
Top Speed	40.8 mph

TORQUE & POWER (full load at crankshaft)



BOAT LOAD FUEL CONSUMPTION



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

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

** The pod is connected to the engine via a driveshaft kit

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