

\$24.95

# Product Knowledge Handbook

January 2012

**MERCURY**  
Outboards

**NEW 150hp**  
PAGE 156

**MERCURY**  
FOURSTROKE





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### QUALITY POLICY

WE, AT MERCURY, WILL STRIVE TO UNDERSTAND  
OUR CUSTOMERS' REQUIREMENTS.

THROUGH THE USE OF SYSTEMATIC PROCESSES  
WE WILL DRIVE CONTINUAL IMPROVEMENT  
IN THE DESIGN, MANUFACTURE, AND DELIVERY  
OF OUR PRODUCTS AND SERVICES SO THAT  
WE WILL CONSISTENTLY EXCEED OUR  
CUSTOMER'S EXPECTATIONS.



# ***Enhancing The Ownership Experience***

The Mercury Ownership Experience begins the moment the customer enters your dealership, and continues well beyond the warranty period or service maintenance schedule.

Today's boat owners are increasingly aware that higher technology engines deliver a superior overall boating experience. Because of that, there is an increased demand for more reliable, quiet, efficient and superior performing engines. ***Mercury Outboards fit that criteria perfectly.***

Good, value-priced , reliable products are not enough to satisfy today's buyers. It takes a commitment to improving your customer's ownership experience ***to keep your loyal customer coming back.***



# ***The Mercury Advantage***

**Today's consumers** have done their research via web-sites and catalogs and are loaded with more information and questions as they consider a product purchase.

One of our most powerful sales tools is **product knowledge**. The information in this handbook is designed to further enhance your knowledge about Mercury products. This guide provides an arsenal of in-depth specifications, key features, customer benefits and **Mercury's many strengths** to utilize when selling against the competition.

After qualifying your customers expectations, we recommend picking **5 Key Features/Benefits** that establish quality, add value, that meet the customer's wants and needs.

*We hope  
you find this  
Product  
Knowledge  
Handbook  
informative  
& helpful.*





## ***Model Description Key***

### ***EXAMPLE***

***25 E L H P T***

25 Horsepower

Electric Start

20" Shaft

Tiller Handle

Power Trim/Tilt

### ***DESCRIPTION KEY***

**M** - Manual Start

**E** - Electric Start

**H** - Tiller Handle

**O** - Oil Injection

**C** - Counter Rotation

**GA** - Gas Assist

**PT** - Power Trim/Tilt

**L** - Long Shaft (20")

**XL** - Extra Long Shaft (25")

**XXL** - Extra Extra Long  
Shaft (30")

# Warranty Information

## Outboards

4-Stroke (2.5 hp to 300 hp) **3-year** limited non-declining &  
**3-year** limited corrosion

OptiMax 75 to 250 hp **3-year** limited non-declining &  
And Pro XS Models **3-year** limited corrosion

Certified Pre-Owned **1-year** limited non-declining

Outboard Jet **3-year** limited non-declining &  
**3-year** limited corrosion

Sport Jet **1-year** limited non-declining &  
**3-year** limited corrosion

## Racing Outboards

Verado 350 SCi **2-year** limited non-declining &  
**3-year** limited corrosion

OptiMax 300 XS **2-year** limited non-declining &  
**3-year** limited corrosion

OptiMax 250 Sport XS **2-year** limited non-declining &  
**3-year** limited corrosion

OptiMax 225 Sport XS **2-year** limited non-declining &  
**3-year** limited corrosion

Non-Current Outboards = product newer than 6 years old qualifies for factory warranty.  
Product 6 years old or more is not eligible for factory warranty (refer to Service Bulletin 2002-5).

# **Product Protection**

## **Mercury Product Protection (MPP)**

### **Confidence is Priceless**

Mercury Product Protection coverage is completely administered and backed by Mercury Marine – no other independent provider or insurance company is involved. Mercury Marine has been the leader in marine propulsion for more than **70 years**, and no one knows your Mercury product better than the people who made it.

Mercury Product Protection provides comprehensive component coverage in two levels – **Platinum** and **Gold** for new eligible products to meet your customer's needs.

**MPP Gold** - covers a wide variety of mechanical parts & systems.

**MPP Platinum** - covers electrical failures and mechanical breakdown failures caused from a defect in material or workmanship, similar to the standard limited warranty.

**MPP** is flexible, with coverage available for an additional **1, 2, 3, 4, 5 or 6 years** to fit your customer's needs. The combination of factory warranty, promotional warranty, and Mercury Product Protection cannot exceed a total of **7 years**. These plans are non-renewable.

Customers can purchase **two** additional years of coverage on select Mercury Racing High Performance products.

Customers that purchase **MPP Gold** may upgrade to **MPP Platinum** during the standard factory warranty as long as the engine is still eligible.



# Product Protection

## Mercury Product Protection Advantages

- ✓ Factory-backed by Mercury Marine. No third party to work with.
- ✓ Factory-trained technicians at more than **4,300** authorized and factory-trained dealers throughout the United States and Canada.
- ✓ Coverage amount is not limited to the current ABOS Blue Book value but instead it is the **suggested list price** for your Mercury product at the time of the original sale.
- ✓ Coverage takes effect upon the expiration of the factory warranty. There is **no duplication** of coverage
- ✓ Only **\$25** deductible charge per claim
- ✓ Dealers can enter contracts and claims directly through **MercNet**. This reduces errors and speeds up processing and payment of claims.

## Consumer Benefits

**MPP** is factory backed by Mercury Marine, which means program integrity and exemplary customer service. It also means the program is preferred by lending institutions.

**MPP** offers similar coverage as a factory warranty, giving your customers peace of mind and financial protection for up to **7 years** on eligible products.

**MPP** uses only genuine Mercury Precision parts, and labor is included. (No “will fit” substitutes).

**MPP** can be transferred to subsequent owners, increases product value at resale or trade-in time.

**MPP** plan offers up to **\$200** toward hoist/haul out on boats 26 foot or longer that are powered by covered engines. It also covers up to **\$200** for on the water tow in fees for approved repairs on the covered product.

# Product Protection

**STANDARD**  
3 Year limited  
factory warranty.

**GOLD**  
Covers a wide  
variety of mechanical  
parts & systems.

**PLATINUM**  
Similar to standard  
warranty with the ability  
to extend the years of  
coverage.

For more information, contact Mercury Product  
Protection at **866-521-2024**  
E-mail: **mmp\_support@mercmarine.com**

Standard	Gold	Platinum
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ENGINE			
Major Components	✓	✓	✓
Camshaft and Camshaft Bearings	✓	✓	✓
Circulatory Water Pump	✓	✓	✓
Connecting Rods and Bolts	✓	✓	✓
Crankshaft	✓	✓	✓
Cylinder Block	✓	✓	✓
Cylinder Head	✓	✓	✓
Engine Heads	✓	✓	✓
Flywheel and Ring Gear	✓	✓	✓
Guides and Seats	✓	✓	✓
Harmonic Balancer	✓	✓	✓
Intake and Exhaust Manifolds	✓	✓	✓
Lifters	✓	✓	✓
Main Bearings	✓	✓	✓
Oil Pan	✓	✓	✓
Oil Pump	✓	✓	✓
Oil Pump Drive Gear	✓	✓	✓
Piston Rings	✓	✓	✓
Piston Wrist Pins	✓	✓	✓
Pistons	✓	✓	✓
Reeds and Reed Blocks	✓	✓	✓
Rocker Arm Covers	✓	✓	✓
Rocker Arms	✓	✓	✓
Supercharger	✓	✓	✓
Timing Chains, Belt, or Timing Gears	✓	✓	✓
Timing Gear Cover	✓	✓	✓
Valves and Valve Train	✓	✓	✓

LUBRICATING SYSTEM			
Drive Gear and Shaft	✓	✓	✓
Oil Injection Metering System	✓	✓	✓
Oil Injection Pump	✓	✓	✓
TRIM SYSTEM			
Trim Cylinder(s)	✓	✓	✓
Trim Motor	✓	✓	✓
Solenoid(s)	✓		✓
Trim Limit Switch	✓		✓
Trim Position Sender	✓		✓
Trim Pump	✓		✓
Wiring Harness	✓		✓
LOWER UNIT			
Bearing Carrier	✓	✓	✓
Bearings	✓	✓	✓
Drive Shaft	✓	✓	✓
Drive Shaft Housing	✓	✓	✓
Gears	✓	✓	✓
Propeller Shaft	✓	✓	✓
Shift Components	✓	✓	✓
Universal Joints	✓	✓	✓
LUBRICATING SYSTEM			
Drive Gear and Shaft	✓	✓	✓
Oil Injection Metering System	✓	✓	✓
Oil Injection Pump	✓	✓	✓
TRIM SYSTEM			
Trim Cylinder(s)	✓	✓	✓
Trim Motor	✓	✓	✓
Solenoid(s)	✓	✓	✓
Trim Limit Switch	✓	✓	✓
Trim Position Sender	✓	✓	✓
Trim Pump	✓		✓
Wiring Harness	✓		✓
LOWER UNIT			
Bearing Carrier	✓		✓
Bearings	✓		✓

# Product Protection

## JET DRIVE COMPONENTS

Nozzle	✓	✓	✓
Reverse Gate	✓	✓	✓
Rudder	✓	✓	✓
Stator	✓	✓	✓
Steering Lever	✓	✓	✓
Wear Ring	✓	✓	✓

## ELECTRICAL IGNITION

Alternator	✓		✓
Armature	✓		✓
CDM Module	✓		✓
Circuit Breaker(s)	✓		✓
Distributor Housing, Shaft and Gear	✓		✓
Electronic Control Unit (ECU)	✓		✓
Enricher Valve	✓		✓
Idle and Advance Modules	✓		✓
Ignition Stator / Coil(s)	✓		✓
Rectifier	✓		✓
RPM Limiter	✓		✓
Sensors	✓		✓
Solenoid(s)	✓		✓
Starter Motor	✓		✓
Switch Box(es)	✓		✓
Switches	✓		✓
Trigger(s)/amplifier	✓		✓
Voltage Regulator	✓		✓
Warning Horns and Modules	✓		✓
Wiring Harness	✓		✓

## GIMBAL HOUSING

Bell Housing	✓	✓	✓
Gimbal Bearing	✓	✓	✓
Gimbal Housing	✓	✓	✓
Gimbal Ring	✓	✓	✓
Shift Cable	✓	✓	✓
Transom Plate	✓	✓	✓

## MERCURY PRECISION QUICKSILVER STEERING

Rack and Yoke	✓	✓	✓
Steering Attaching Kit	✓	✓	✓
Steering Cable	✓	✓	✓
Steering Control Helm	✓	✓	✓
Swivel Bracket	✓	✓	✓
Swivel Pin and Arm	✓	✓	✓
Power Steering Pump	✓		✓

## MERCURY PRECISION/QUICKSILVER CONTROLS AND INSTRUMENTS

Axius	✓		✓
Battery Meter	✓		✓
Clock	✓		✓
Cruiselog	✓		✓
DTS	✓		✓
Emergency Stop Switch	✓		✓
Engine Synchronizer	✓		✓
Horns and Alarms	✓		✓
MerCathode	✓		✓
Oil Level Gauge	✓		✓
Oil Pressure	✓		✓
Power Shift	✓		✓
Power Steering	✓		✓
Rigging	✓		✓
Remote Control	✓		✓
SmartCraft	✓		✓
Shift Cable	✓		✓
Speedometer	✓		✓
Switches	✓		✓
Tachometer	✓		✓
Temperature Gauge	✓		✓
Throttle Cable	✓		✓
Tiller Handle	✓		✓
Trim Position Gauge	✓		✓
Vacuum Gauge	✓		✓
Water Pressure Gauge	✓		✓
Water Temperature Gauge	✓		✓
Wiring Harness	✓		✓

## ADDITIONAL BENEFITS

On-Water Towing - up to \$200 per claim occurrence		✓	✓
Hoist Haul Out - up to \$200 for boats 26' or larger			✓

## Program Guidelines

\$25 Deductible		✓	✓
Transfer Requirements - \$50 Transfer Fee. See the plan benefits and provisions for requirements		✓	✓



# C.A.R.B. Star Rating System

## What does the C.A.R.B. star rating mean and how does it relate to EPA regulations?

C.A.R.B. emission standards are similar to EPA in that they regulate certain aspects of engine emissions that affect air quality. C.A.R.B. standards, however, are stricter than Environmental Protection Agency (EPA) standards because they call for an accelerated emissions reduction schedule in California. For example, the 2001 C.A.R.B. one-star standard is equivalent to the 2006 EPA standard. Most outboard manufacturers choose to certify engines to the C.A.R.B. two-star and three-star levels because they are well below the EPA standards. EPA "credits" can be earned by manufacturers' engines that are certified below the EPA certification levels, and those credits can be used to offset negative credits imposed on engines that are certified above the EPA standards. The illustration below explains in further detail what each of the C.A.R.B. star ratings mean.



The **One Star** label identifies engines that meet the Air Resources Board's 2001 exhaust emissions standards. Engines meeting these standards have 75% lower emissions than conventional carbureted two-stroke engines. These engines are equivalent to the U.S. EPA's 2006 standards for marine engines.

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The **Two Star** label identifies engines that meet the Air Resources Board's Personal Watercraft and Outboard marine engine 2004 exhaust emissions standards. Engines meeting these standards have 20% lower emissions than One Star - Low Emission engines.

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The **Three Star** label identifies engines that meet the Air Resources Board's Personal Watercraft and Outboard marine engine 2008 exhaust emissions standards or the Sterndrive and Inboard marine engine 2003-2008 exhaust emission standards. Engines meeting these standards have 65% lower emissions than One Star - Low Emission engines.

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The **Four Star** label identifies engines that meet the Air Resources Board's Sterndrive and Inboard marine engine 2009 exhaust emission standards. Personal Watercraft and Outboard marine engines may also comply with these standards. Engines meeting these standards have 90% lower emissions than One Star - Low Emission engines.

## **Mercury outboard and sterndrive products should NOT have fuel added that exceeds 10% ethanol**

### **What is Ethanol?**

- ✓ Ethanol is an alcohol made from corn, sugar cane, wheat and many other organic materials
- ✓ Ethanol is often blended with gas (**E10**) and has been used in autos since the early 1980's
- ✓ More recently, Ethanol has been made available as **E85 (85% ethanol)** for flex fuel autos only

### **Why E10 Blends?**

- ✓ Ethanol can be used to meet **EPA** requirements for cleaner burning fuels
- ✓ Ethanol slightly improves Octane Rating
- ✓ Ethanol can help reduce our dependence on foreign oil
- ✓ The EPA does not permit more than **10% Ethanol** to be added in fuels labeled as gasoline.

### **E10 Blend - Properties**

- ✓ **E10** absorbs water readily and easily
- ✓ If sufficient water is absorbed, "phase separation" can occur – water and ethanol will settle to the bottom of the tank and gasoline will be on top
- ✓ Phase separation cannot be reversed with agitation or fuel additives
- ✓ Boundary layer can contain corrosive compounds which can cause corrosion in aluminum fuel tanks

### **E10 Blends - Compatibility**

- ✓ Fuel system components of Mercury and competitive outboard and stern drive engines can and will withstand up to **10% ethanol** content in gasoline
- ✓ Water contamination of fuel is the big issue and the big concern
- ✓ The best advice we have for customers is to empty the fuel tanks for long term storage
- ✓ Alternately, keeping the fuel tank full reduces the amount of exchange between the fuel and air that might bring in condensation

# Product Term Glossary

## A

**Advanced Mid-Section(AMS):** Home to the Power Trim System and parts of the Electro-Hydraulic Steering System. The mid-section is the main pivot point of the outboard. (Verado)

**Air Bypass Silencer:** Muffles compressor noise at idle on 1.5L OptiMax outboards (75, 90, 115).

**Air Compressor:** Found on all OptiMax (Direct Fuel Injection) models, this is a single cylinder, water-cooled assembly that is belt-driven off of the crankshaft. The air compressor generates the charges of air that are used to atomize and inject the fuel into the cylinders via direct injectors. It is important to note that the amount of air supplied by the direct injectors is not always sufficient for complete combustion (depending on the engine's speed, or RPM). During those periods, additional air from the intake plenum is routed through the crankcase and past the intake ports to aid in the combustion process.

**Air Rail:** Found on all OptiMax (Direct Fuel Injection) models. This is actually one part of a dual passageway rail that contains fuel in the second chamber. This passageway is common between all cylinders included in the rail, and it is pressurized to 80 psi (5.63kg/cm<sup>2</sup>). An attached air pressure regulator limits the amount of pressure within the rail to approximately 10 psi (0.7kg/cm<sup>2</sup>) below the pressure of the fuel inside the fuel passageway (fuel rail). Excess air is routed into the exhaust adapter and exits through the propeller. Fuel is discharged into a machined cavity inside the air passageway via the fuel injectors, mixing the air with the fuel. Instantaneously, the first injectors open, discharging the fuel/air mixture into the combustion chamber, further atomizing the charge for a more complete and even burn.

**Alternator:** An electrical production device that produces AC current for the use of marine accessories, ( lights, livewells, fishfinders, etc.), and battery charging.

**Anode:** A galvanically active piece of metal. Anodes are more active than the more expensive drive components, thus protecting them from corrosion. Anodes are generally made of zinc, aluminum alloys and magnesium alloys. Zinc and aluminum anodes are used in saltwater; magnesium anodes for fresh water applications.

**Anti-Cavitation Plate:** See Anti-Ventilation Plate.

Anti-Ventilation Plate: 1. A plate case into the lower unit, which helps prevent "propeller speed-up" and loss of boat speed by keeping the propeller better surrounded by water. 2. A part of the gear housing that prevents air from displacing water around the propeller blades and throwing water upward.

**Atomize:** To reduce or separate a liquid (fuel, oil, etc.); to fine particles or mist which can be easily ignited.

## B

**Balanced Carrying Handle:** Located on small outboards to enhance portability and transportation.

**Blowout:** High-speed condition when bubbles reach the back of the gear case bullet and cause the propeller to free-wheel and forward-thrust to decrease dramatically. (Sometimes causes a lack of control and speed loss).

**Bore/Stroke:** Bore refers to the inside diameter of a cylinder, while stroke refers to the distance of the movement of a piston from top dead center to bottom dead center.



# Product Term Glossary

## C

**Camshaft:** 1. A shaft turned by the crankshaft, with lobes which open and close the intake and exhaust valves at the proper time. 2. Shaft on which suitably phased cams are mounted, as for example to operate intake and exhaust valves of an engine. In four-stroke engines, the camshaft rotates at half-crankshaft speed.

**C.A.R.B.:** (California Air Resources Board), is the regulatory board for emissions in California.

**Carrying Handle (Built-In):** Found on small Mercury Marine outboards to enhance transportation.

**Cavitation:** When a propeller breaks loose and “free wheels” at low speed, due to a stream of bubbles interrupting the flow of water. The bubbles can actually erode the blade surface.

**CD Ignition:** Capacitor Discharge ignition stores primary energy in a capacitor, providing automatic spark advance for sure starts, and longer plug life.

**Clamp Bracket:** The assembly which secures an outboard motor to the boat.

**Combustion Chamber:** Upper area of the cylinder where fuel is ignited and burned.

**Connecting Rod:** Linkage that connects the crank to the piston in an engine or other reciprocating machine.

**Cool Fuel System:** Standard on all fuel-injected products, this advanced system greatly reduces the potential of vapor locking and the effects of seasonal fuel blends.

**Continuity:** The condition of completeness in an electrical circuit.

**3-Year Limited Corrosion Warranty:** A Mercury Marine exclusive corrosion warranty found standard on most outboard and MerCruiser engines.

**Counter-Rotation:** Installation of multiple engines allows the propellers to turn counter to one another, with the torque of the left-hand engine being balanced with the torque of the right-hand engine.

**Cowl:** The removable covering on an outboard engine.

**Cowl-Mounted Tilt Switch:** An auxiliary switch mounted in the lower cowl which can be used to activate the trim system from the rear of the boat. Standard equipment on all power trim and tilt pleasure models, and could be mounted on the hull of a MerCruiser power boat.

**Crankcase:** That part of the cylinder block, which encloses the crankshaft area.

**Crankshaft:** A shaft with offset throws that converts piston reciprocating motion to rotary motion.

**Cross-flow Induction:** Type of induction where fuel charge enters on the side, hits a deflector and rises to the center of the chamber, is ignited and flows out the exhaust port. Provides excellent idle quality, found on 2-stroke engines only.

**Cylinder:** A tubular component, with a closure at one end and a moveable piston inserted from the other end. The movement of the piston toward the closed end creates compression. Conversely, application of pressure through the closed end moves the piston. Used in internal combustion engines and in hydraulics.

**Cylinder Block:** Part of the engine which houses the cylinders. The cylinder block may also incorporate the water-cooling jackets and provision for the valve gear.

# Product Term Glossary

**Cylinder Head:** Part of a reciprocating engine that seats or closes the upper ends of the cylinder. Also contains most of the combustion chamber and may contain the valves.

**Cylinder Liner:** Thin walled, hard metal cylinder inserted or cast into a cylinder block of an engine; the cylinder liner houses the piston.

## D

**De-compression Relief Ports:** Exhaust outlet holes in the exhaust manifold near the cylinders that reduce back pressure for easier starting and improved idling.

**Desmodromic Shift:** Shift system that utilizes sliding shift clutch that is preloaded to the neutral shift position thereby improving ease of shifting. (Used in V-6 gearcases and four stroke.

**Detonation:** Commonly called spark knock or ping. In the combustion chamber, an uncontrolled second explosion of the remaining compressed air/fuel mixture, resulting in a pinging noise and possible loss of power and reduced engine life.

**DFI (Direct Fuel Injection):** A technology whereby a precisely shaped charge of fuel is injected directly into each cylinder through the top of the cylinder head rather than at the point of the air intake into the crankcase. Mercury OptiMax system utilizes a burst of compressed air to introduce the fuel into the combustion chamber and to provide complete atomization for a superior burn that is constant from cycle to cycle.

**Direct Injector:** A component of the OptiMax direct fuel injected engines. Situated directly at the top of the cylinder head, and connected to the air rail assembly, the director injectors introduce the fuel into the combustion chamber at 80psi (5.63kg/cm<sup>2</sup>) by using a compressed charge of air generated by an on-board compressor. As the direct injectors introduce the fuel into the combustion chamber, they use the compressed air to stratify or atomize the fuel charge into a mist-like plume for a better, more consistent burn.

**Displacement:** The capacity of an engine based on the volume of a cylinder with the piston at its lowest point, multiplied by the number of cylinders. Displacement is usually measured in the cubic inches, cubic centimeters or liters.

**DOHC (Double Overhead Cam):** An engine featuring one cam for intake valves and one cam for exhaust valves, thus providing more precise valve timing for increased power and top end speeds.

**Clutch Dog:** Clutch which transmits power by engaging metal teeth or dogs. It allows only direct mechanical engagement or disengagement, without slipping or progressive torque transmission.

**Drive Hub:** the central housing of the propeller, to which the blades are attached.

**Driveshaft:** The shaft, usually vertical, which transmits power from the engine or power-head, to the drive unit.

**Driveshaft Housing:** The component which houses the driveshaft. On outboards, a simple vertical housing. On a stern-drive unit, it includes an input shaft (horizontal) and a driveshaft (vertical) and gears and bearings.

**Drive Unit:** The system which receives power from the crankshaft and transmits it to the propeller. Involves shafts and gear to provide forward and reverse operation and to create correct position of propeller in water. Consists of the Gear Housing and the Driveshaft Housing.

# Product Term Glossary

**DTS (Digital Throttle & Shift):** The SmartCraft Digital Throttle & Shift System brings digital precision to engine throttle and shifting, for unprecedented smooth shifting; precise throttle control; and superior, reliable performance. Lightning fast throttle response is accomplished by a fully integrated digital system. "Look 'ma no cables"... no more cable kinks or adjustments for the life of your boat. Mercury offers the most extensive line-up of DTS engines and DTS is standard on all Verado product. New for 2006 is the addition of DTS on MerCruiser 5.0, 5.7 and 6.2L engines.

**Dual Clamp Screws:** Used on smaller outboards to secure the engine to the transom, superior in design than single clamp screw designs.

**Dual Water Pick-Ups:** The lower unit is equipped with a secondary water pick-up (located under the anti-cavitation plate) that becomes operational if the primary water pick-ups become obstructed. This allows the engine to continue to receive cooling water, thereby protecting it from an overheat condition until such time as the primary water pick-ups can be cleared.

## E

**ECM (Electronic Control Module):** Through its internal circuitry, the ECM electronically controls the engine by monitoring input sensors and electronically altering the engine's (i.e., fuel, timing, warning, etc.) operating systems. This provides instant starts, smooth running and superior fuel economy.

**EDP (Electro Deposition Painting/Priming):** A painting process using electrically charged paint and oppositely charged components to create a magnetic bond, which provides a uniform coverage to the surface and improves adhesion for long lasting corrosion protection for painted surfaces.

**EFI (Electronic fuel injection):** A system that injects fuel into an engine, using an Electronic Control Module (ECM) to time and meter fuel flow rather than by the use of carburetor's. Provides instant; turn-key starting.

**Electro-Hydraulic Power Steering:** Verado power steering system is fluid, effortless and seamless. Unlike conventional hydraulic systems, steering wheel torque is eliminated. This system consists of the hydraulic helm, hydraulic pump and hydraulic steering cylinder.

**Electrolysis:** The process of molecular transfer in certain electrochemical situations, such as dissimilar metals in salt water. This principle is used in electro-plating, and is also the basis of salt water corrosion.

**Electronic Multi-Point Oil Injection:** Found on all OptiMax models, this system utilizes an electric oil pump governed by the ECM (Electronic Control Module) to inject oil at seven specific points on the engine (one point for each of the six cylinders and one line to the air compressor). Because the system is entirely managed by the ECM, the ratio of fuel to oil can be fine-tuned much more precisely than that of a mechanically-driven system. Fuel oil ratios on an OptiMax engine range from 44:1 at W.O.T. (Wide Open Throttle) to 400:1 at idle. Consequently, an OptiMax will use significantly less oil than a comparably sized conventional 2-Stroke.

**Engine Guardian System:** SmartCraft engine guardian system monitors up to 40 engine sensors and actuators. Depending on the model it provides an early warning to the operator of any indication of problems. If a problem does occur, the system takes corrective action to prevent serious damage. Engine Guardian System is available for engine models equipped with Mercury's PCM/ECM Motorola control module.

# Product Term Glossary

**Engine-Mounted Sea Water Pump:** Used on MerCruiser engines. Since large boats are often left in the water, the sea water pickup pump is located on the engine, rather than the drive, to allow the pump to be serviced from inside the boat.

**EPA (Environmental Protection Agency):** Starting with the 2006 model year outboard engines manufactured will have to have their emissions reduced by 75%.

**Ethanol:** Ethyl-alcohol fuel or fuel additive.

**Exhaust Bellows:** A rubber tube used between the upper and lower exhaust pipe, to compensate for any misalignment in a stern-drive or inboard engine.

**3" Exhaust Elbow:** 3" diameter exhaust elbow that uses a rather sharp bend inside the elbow to expel the spent gases (exhausts) of the engine.

**4" Exhaust Elbow:** 4" diameter elbow that uses a much more gradual bend inside the elbow (compared to 3" exhaust elbow) to expel the spent gases (exhausts) of the engine. This much more gradual bend helps to minimize the natural back pressure created by an engine.

**Exhaust Elbow "Lost Foam" (Cast Iron):** Elbow that is produced by lost foam casting, rather than conventional methods.

**Exhaust Ports:** 1. Holes in the cylinder wall of a two-cycle engine that discharge exhaust gases into the exhaust system. 2. Passages in a four-cycle engine from the exhaust valve to the exhaust manifold.

**External Tilt Switch:** Could be mounted on the hull of a MerCruiser powered boat. Also see Cowl-Mounted Tilt Switch.

## F

**Filament-Wound Water Pump Impeller Hub:** (Glass-Impregnated Water Pump Hub) Resists unbonding when frozen or exposed to salt water.

**Fish-line Cutter:** A special seal to chop stray fish-line to keep it from the prop-shaft oil seal area. If seal were left unprotected, line could work its way into the bearing carrier seals causing the lower unit lubricant to leak out.

**Flame Arrestor:** A device mounted to the carburetor or throttle body inlet, allowing air to enter, but containing any flame which might occur due to backfire or malfunction.

**Flame Arrestor Cover:** Non-corrosive cover over flame arrestor, designed to direct water away from the flame arrestor.

**Flo Torq:** A rubber insert in the propeller hub which protects the propeller and lower unit components from damage by slipping when the propeller strikes an underwater object.

**Flo Forq II:** Mercury's patented universal hub system. Mercury Marine props can be easily adapted to competitor's gear-cases by installing the appropriate Flo-Torq II hub kit.

**Floppy-Vane Water Pump:** High-volume, low pressure water pump impeller with long, soft vanes that are long lasting and resistant to salt and silt laden water

**Flywheel:** A heavy wheel attached to a crankshaft to provide momentum and reduce vibration when running.

**Flywheel Magnets:** Permanent magnets cast into the flywheel to energize various types of coils.



# Product Term Glossary

**Forged:** To shape (metal) by beating and pressing or hammering.

**Fouled (Spark Plug):** A spark plug having electrodes grounded by carbon, metal, oil or fuel.

**Four-Bolt Main Bearing Engine Block:** A four-cycle engine block, in which each crankshaft main bearing cap is secured by four bolts, rather than the standard two, for improved durability.

**Four-stroke Engine:** Four-stroke engines operate with one power stroke for every four strokes of the engine. In addition to the regular combustion and ignition, the piston has to make four movements to complete a combustion cycle. This is a process that normally provides smoother operation and fewer overall emissions. Mercury's four-stroke outboards are carbureted, electronic fuel injection, or supercharged (Verado).

**Four Cycle (Four-Stroke):** 1. The type of internal combustion engine delivering one power stroke for every four strokes of the piston or every two crankshaft revolutions. The four cycles or strokes are; intake, compression, power and exhaust. 2. Thermodynamic cycle of engine operation which requires four strokes of the piston, the strokes usually being designated: (a) induction (inlet or intake), (b) compression, (c) ignition (also called working, power or expansion stroke), (d) exhaust.

**Fresh Water Flush Port:** On selected engine models, the port is either front or rear mounted for convenient attachment to garden type hose. The engine can be effectively flushed without running it. Recommended for engines used in sand or silt laden water

**Fuel Injection:** Injection of fuel under pressure, into the intake-tract, directly into the cylinder or indirectly into a cylinder pre-chamber.

**Fuel Injector:** The device within the fuel management system that meters and atomizes the fuel before it enters the cylinder.

**Fuel Rail:** An assembly that receives fuel from and is pressurized by a powerful electric fuel pump (from the vapor separator assembly). The fuel rail stores the fuel until the fuel injectors (attached to the rail) open. EFI (Electronic Fuel Injected) engines are pressurized at approximately 34-39psi (2.039 – 2.74kg/cm<sup>2</sup>), depending on the model. OptiMax (Direct Fuel Injected) engines are pressurized at 90psi (6.33kg/cm<sup>2</sup>). To maintain steady fuel pressure levels, excess fuel is bled back to the vapor separator via the fuel pressure regulator.

**Full Gear Shift (F-N-R):** A motor equipped with a gear-case that has Forward, and Reverse gear.

**Full Throttle:** The condition whereby the throttle valve of the carburetor or throttle body is fully open.

**Full Throttle:** The manufacturer's specified Revolution per Minute (RPM) at which maximum performance for a specific engine can safely be obtained.

**Fully Regulated Alternator:** Alternator that has a regulator to prevent overcharge.

## G

**Galvanized:** A chemical process involving electrolysis or molten metal dip process to coat or plate a metal which protects from rust and corrosion.

# Product Term Glossary

**Galvanic Corrosion:** Galvanic corrosion of the more chemically active metal can occur whenever two or more dissimilar metals that are “grounded” (connected either by actually touching each other, or through a wire or metal part) are immersed in a conductive solution (any liquid that can transfer electricity). Anything but pure water is conductive. Saltwater, freshwater with high mineral content, or polluted freshwater are very conductive. Conductivity goes up with water temperature; one reason why boats in Florida experience more corrosion than boats in Maine.

**Gear Housing:** The lower housing of a drive unit which converts thrust from a vertical shaft to the horizontal propeller shaft. In most cases, the gear housing houses forward/reverse shafting mechanism.

**Gear Lube Monitor:** A remote chamber that acts as an expansion chamber for the drive unit to check oil level and oil condition.

**Gear Ratio:** The relative number of turns between a drive gear and a driven gear.

**Gimbal Housing:** An assembly consisting of two rings mounted on axes at right angles used to allow up/down and right/left movement of the drive unit.

**Ground:** The position or portion of an electric circuit that is at zero potential with respect to the earth.

## H

**Half-Keystone Piston Rings:** Piston rings that are tapered or cut at an angle rather than square cut.

**Harness:** A group of wires bundled together into a single assembly.

**Heat Exchanger Baffles:** The cooling fins located in a heat exchanger.

**Helical:** Rotary and lateral motion usually in a spiral pattern.

**High-Capacity Seawater Pump:** A belt driven pump found on some MerCruiser engines.

**High Pressure Lost Foam Casting:** Mercury’s propriety casting process where casting starts out as a highly accurate styrofoam model. This model is then coated and sent to the casting process where molten metal takes the place of the foam model as it is poured under high pressure, leaving behind an exact replica of the initial foam model. This process provides a finished product that is more rigid, more durable and requires far fewer parts than when using conventional type casting processes such as sand or die casting.

**High-Rise Flame Arrestor Cover:** High rise flame arrestor, allows more air/fuel intake.

**High-Speed Gearcase:** A gearcase designed to be hydro-dynamically efficient at high speed. Bravo One Performance gearcase would be an example.

**High-Volume Fuel Pump:** Fuel pump with higher lift and higher volume capability.

**Horsepower:** A measure of mechanical power or the rate at which work is done. One horsepower equals 33,000 pound-feet of work per minute; it is the power necessary to raise 33,000 pounds a distance of 1 foot in 1 minute.

**Hour Meter:** An instrument which records and displays the amount of time an engine has actually run.

# Product Term Glossary

## I

**Idle Relief Ports:** Openings in the upper rear portion of the mid-section that allow exhaust to exit during low speed operation and idling. Corrects engine exhaust tuning at low speeds, when the amount of exhaust back pressure is insufficient to push cooling water down the mid section and through the propeller.

**Ignition Coil:** A transformer using primary (low voltage) windings to induce current in secondary (high voltage) windings. This secondary voltage is then directed to the spark plugs.

**Ignition System:** In the engine, the system that furnishes high voltage sparks to the cylinders to fire the compressed air/fuel mixture.

**Induction System:** That part of a spark ignition engine in which the fuel and air are mixed and brought into the combustion chamber including, for example, air filter/cleaner, carburetor or fuel injection system, intake manifold, pressure charger, intake port and valves. In a diesel engine, the fuel system would not normally be considered part of the induction system.

**In-Line Engine:** Engine with all cylinders in one plane of the crankshaft axis.

**In-Line Fuel Filter:** Fuel line mounted in the fuel line "in series".

**Intake Port:** 1. Holes in the cylinder wall of a two-cycle engine that allow fuel/air mixture to enter the combustion chamber. 2. Passage in a four-stroke engine between the mounting flange of the intake manifold and the intake valve.

**Integral Fuel Tank:** Fuel tank is mounted under the cowl.

**Integral Speedometer Pickup:** Speedo pick is built in the gearcase.

**Integral Oil Tank w/Sight Gauge:** Built-in oil tank with an external sight gauge. Found on most Mercury Marine 2 stroke engines 40hp through 115hp.

**Intercooler:** Heat exchanger that removes heat from pressure charged air. The process of the intercooler is to take the heat compressed air from the supercharger and cool it down. By cooling air down before it enters the cylinder, more horsepower can be created. For Verado this translates to more thrust which is unmistakable when behind the wheel. (Verado)

**Iridite:** A corrosion fighting coating (applied through the use of electrical charges) used at Mercury Marine to offer extended engine life especially in saltwater environments.

**ISO 9001:2008:** An international standard that defines the requirements of an effective quality management system. The ISO 9001:2008 disciplines are internationally recognized as an approach to quality management that can lead to improved constancy, quality, and customer satisfaction. Mercury Marine is the only marine engine manufacturer in the world to have achieved and maintained ISO 9001:2008 certification at all production facilities worldwide.

**Isolator:** 1. An electrical device used to keep battery-charging circuits separate from one another. 2. A flexible mount used to reduce a components exposure to vibration.

## J

**Jet Outboard:** Power jet pump generates thrust by drawing water past a heavy duty impeller and forcing it through a narrow nozzle at high velocity.

## K

# Product Term Glossary

**Knock Sensor:** Electrical device that “hears” Ignition knock and sends a signal to the ECU.

## L

**Lanyard Stop Switch:** Stop switch with a cord designed to be attached to the driver, which stops the engine if the operator leaves the helm.

**Lean Mixture:** An air/fuel mixture that has a relatively low proportion of fuel and a relatively high proportion of air.

**Lean-Out:** To reduce the fuel-to-air ratio.

**Long Bolt Block Assembly Process:** The engine block, crankcase and cylinder head are assembled (sandwiched) using long bolts, hence long bolt block assembly. (Verado)

**Long-Tuned Runner Intake/Exhaust Manifold:** Found on MerCruiser in-line four cylinder engine to improve engine breathing and increase power output.

**Loop Charged Induction:** Fuel/air charges enter the combustion chamber from opposite directions through holes in the pistons and the intake ports; exhaust exits through exhaust ports. This technology provides a more complete combustion which boosts power and fuel efficiency. Used only on 2-stroke engines.

**Lost Foam Casting Processes:** A metal casting process where the casting starts out as a highly accurate piece of Styrofoam. This Styrofoam model is then coated and sent to the casting process where molten metal takes the place of the foam model as it is poured (hence the name “lost foam”) leaving behind an exact replica of the initial foam model. This process leaves you with a finished product that is much more rigid, more durable and requires far lower parts than when using conventional type casting processes, such as sand or die casting.

**Lost Foam Cylinder Head:** A V-6 outboard cylinder head that is manufactured using the “lost foam” casting process.

**Low-Copper Content:** An aluminum alloy (XK360) utilized by Mercury Marine that is extremely resistant to corrosion. The lower the copper content of an alloy, the higher the resistance to corrosion will be.

**Low-Oil Alarm:** A sensing device that alerts the driver when the oil level is low and is in need of service.

**Low-Oil Warning Horn:** A horn that is energized when a low oil condition is detected.

## M

**Magnetic Drain Plug:** A lubrication drain plug that is magnetized to retain small metal filings from normal gear wear prolonging drive unit life.

**Manifold:** A metal casting with openings which direct fuel and air from the carburetor to the cylinder head (intake manifold) or which carry exhaust gases away from the engine (exhaust manifold). Intake and exhaust manifolds may be combined into one part.

**Manual Start:** Operator must vigorously pull on a rope handle to manually crank the outboard engine to get it running.

**Manual Trim:** A mechanical system which allows the outboard engine to be tilted to 5 or 3 respectively different angles with respect to the transom.

**Mechanical Oil Pump:** An oil pump that is shaft or gear-driven. A pump driven by a mechanical means not electrical.

**Mercathode II:** A Quicksilver accessory (standard on all MerCruiser Bravo Drives),



# Product Term Glossary

substantially reducing the need to periodically put the boat from the water to inspect and replace sacrificial anodes. The system provides protection by impressing a reverse blocking current (voltage) that stops the destructive flow of galvanic currents. It automatically adjusts output to compensate for changes in water temperature, velocity, conductivity, even changes in the condition of the paint on the drive unit. Current draw on the battery is virtually undetectable. The system automatically shuts off when the boat is removed from the water.

**Mercosil:** A highly corrosion and wear resistant aluminum/silicon alloy that is exclusive to Mercury Marine. Used to cast engine block for 20 and 25hp Mercury, Mariner, and Force outboards in addition to numerous other components. Engine blocks cast from this allow conduct heat out of the combustion chamber more effectively than their cast liner counterparts. As a result, the pistons in the Mercosil blocks run cooler and exhibit less carbon deposits. Engine life and durability can be 100% longer than the conventional cast iron liner engine because ring jacketing due to carbon deposits is virtually eliminated.

**Motorola Propulsion Control Module (PCM or ECM):** Designed and built by Motorola exclusively for Mercury, this system manages ignition and fuel injection timing, fuel injector volume, controls idle air, maintains optimal air/fuel ratio for the most responsive and reliable computer managed engine ever built. Mercury's PCM monitors a myriad of engine sensors and actuators providing valuable operator information through our exclusive SmartCraft system and will alert the operator to any potential problems through our Engine Guardian System, which is the industry's most powerful operator warning system.

**Multi-Step Painting Process:** See article on "The Truth on Corrosion Resistance", in the corrosion section of this publication.

## N

**"Near Net" Forged Gears:** A process which produces forgings that are extremely close to final dimensions, so that minimal machining is required. This produces a stronger gear because extensive machining cuts the "grain" of the forging, weakening it. Found on some Mercury Marine outboards and all current model MerCruiser Alpha One drives.

**Neutral Safety Switch:** A switch which allows the starter to operate only when the shift control is in the neutral position.

**NVH:** Noise Vibration Harmonics; a process that determines the relative noisiness, vibration and smoothness of the engine to conclude how comfortable a driver and passengers will be.

## O

**Octane Rating:** A measure of the anti-knock properties of a fuel. The higher the octane rating, the more resistant the fuel is to detonation.

**Oil Circulation System:** A system in the drive unit that uses exiting pressures within the drive to circulate oil, rather than an electrical or mechanical type oil pump. By circulating the oil, it reduces the oil temperature by up to 40 degrees to extend bearing and seal life.

**Oil Injection:** - (Multi Point Electronic) PCM control module electronically driven system precisely delivers oil to each cylinder for proper lubrication at a variable rate. Operator does not need to mix gas and oil. Oil reservoir is conveniently located under engine cowl and/or remotely in separate tank with reserve tank under cowl. On the OptiMax engine family.

**Oil Pan:** The reservoir at the bottom of a four-cycle engine which houses the oil pump and holds the oil supply.

# Product Term Glossary

**One-Piece “Lost Foam” Cylinder Block:** An outboard cylinder block that is manufactured using the “lost foam” casting process.

**OptiMax:** Mercury Marine’s line of direct fuel injected (DFI) 2-Stroke outboards. Emissions-compliant with the EPA’s ( Environmental Protection Agency) standards, these engines are highly economical, using significantly less fuel than conventional 2-Stroke. OptiMax models are also noted for their extremely smooth, smoke-free operation and superb throttle response due to their ultra sophisticated computerized engine management system.

**Overheat Warning Horn:** An electrical sensor that activates a warning horn when the engine reaches a predetermined temperature ( overheat threshold).

## P

**Piston:** 1. The round component which moves in a cylinder to create, or to react to, pressure in the cylinder. 2. Reciprocating component, usually in the form of a cylinder closed at one end, it operates under fluid pressure within a smooth walled cylinder. In a reciprocating engine, gas pressure on the piston crown provides the prime force that is converted into rotating mechanical by the crankshaft.

**Piston Head:** The top of the piston.

**Piston Pin:** A steel pin that connects the piston to the connecting rod. Also called wrist pin.

**Piston Rings:** A split ring installed around the piston to seat the space between the cylinder wall and piston.

**Piston Slap:** Noise made by contact between an excessively loose or worn piston and the cylinder wall of an engine.

**Power Tilt:** A mechanism which hydraulically adjusts the angle of the outboard or drive until while underway, thereby changing the angle of thrust from the propeller for better handling and performance.

**Power Trim:** A mechanism which hydraulically adjusts the angle of the outboard or drive unit while underway, thereby changing the angle of thrust from the propeller for better handling and performance.

**Power Trim-In Range (Degrees):** Often called Tuck-under Range, defines the downward angle of the propshaft when mounted on a 14” transom when the engine/drive is trimmed to the full down position.

**Power Trim XD:** Large diameter trim cylinders found on MerCruiser stern drives for fast trim response, improved impact resistance with its built in memory system, and their corrosion resistance ability.

**Precision-Forged Gears:** A forging process used on some MerCruiser models that significantly improves a gear’s ability to withstand the heavy torque and thrust load demands of higher horsepower engines.

**Primer Bulb:** A hand pump in the fuel tank hose used to fill the engine’s fuel system.

**Primer System:** Mechanical or electrical, used to introduce extra fuel into an engine, for quicker cold starts.

**Progressive Rate Cradle Mount System:** Strategically placed around the engine’s center of gravity, these mounts isolate that reduce vibration transmitted into the boat by as much as 50%. This advancement in cradle and mount design also virtually eliminates visual engine vibration.

# Product Term Glossary

**Propeller Diameter:** Distance across the imaginary circle that is made when the propeller rotates.

**Propeller Pitch:** The theoretical distance, in inches, that a propeller travels forward during one revolution.

**Propeller Rake:** The backward slant of a propeller blade. Higher rake props hold the water better.

**Propshaft Horsepower:** Horsepower measured at the propeller shaft rather than at the crankshaft.

**Propshaft Horsepower:** Horsepower measured at the propeller shaft rather than at the crankshaft. (This gives an indication of the power loss in the drive train.)

## R

**Raw Water Cooling System:** A cooling system that obtains its water to cool the powerhead from the body of water it is operating in. This type of system is NOT a closed system.

**Remote Fuel Tank:** A fuel tank that is separate from the engine; no integral.

**Remote-Mounted Oil Filter:** An oil filter on some MerCruiser's that is mounted high on the engine (vs. down low) for easy access and convenient servicing.

**Remote Steering:** An engine equipped with a steering wheel rather than a tiller handle.

**Remote Tank W/Integral Reserve:** Style of oil tank that stores a small amount of oil that the outboard can utilize when the remote tank is run dry.

**Reverse Lock:** A lock which prevents the engine from tilting out of the water when operating in reverse.

**Reverse Lock Hooks:** Series of hooks that grab the tilt lock pin when the engine is shifted into reverse to prevent it from "kick-up".

**Rich Mixture:** Fuel/air mixture in which the proportion of fuel exceeds that necessary for combustion. Is more than is necessary, hence, "rich" or "excessive".

**Rocker Arm:** A lever which transmits upward motion of the pushrod to downward motion on the intake or exhaust valve, thus opening the valve.

**Rubber Hub:** This refers to the rubber shock absorbing device between the splined hub that slides into the propshaft and the propeller hub.

## S

**Saltwater (SW):** OptiMax and Verado engines are built for saltwater. These engines have added stainless components such as the tilt tube, swivel tube and steering arm. This means that major pieces that are the most vulnerable to corrosion including the driveshaft, shift shaft, propshaft, water pump housings and powerhead fasteners are stainless steel for added strength, corrosion resistance and extended engine life. With this change, there are no longer "blue" decaled engines that are designated as saltwater models.

**Sequential Multi-Port Fuel Injection:** A term used to describe the method of delivering fuel to each cylinder. (i. e. Fuel is delivered in sequence as needed at the proper time for each cylinder, to the specific intake port.)

**Shallow-Water Drive:** System that can be engaged to tilt an outboard's drive unit so it can be operated in very shallow water.

**Shear Pin:** A safety device used to fasten a propeller to its shaft, it breaks when the propeller hits a solid object, thus preventing further damage.

# Product Term Glossary

**Shift-In Tiller Handle:** Style of tiller handle which mechanically controls the shift as well as the throttle.

**Single Overhead Cam:** A four cycle engine design whereby a single camshaft to actuate the intake and exhaust valves is located above the cylinder heads. This camshaft is bell-driven by the crankshaft, and it provides more efficient operation by eliminating friction-robbing components associated with conventional camshaft designs (i.e. push rods, etc) thereby allowing for maximum horsepower or output. Found on all Mercury Marine 4-stroke outboards.

**Single-Point Injection:** An oil injection system that uses only one discharge port as opposed to up to six ports.

**60 AMP (846 Watt) Belt-Driven Alternator:** Found on all Mercury Marine 3.0L V-6 and 2.5L OptiMax V-6 models, this is the most powerful outboard charging system in the industry. Fully regulated, this system provides 35 amps (493.5 watts) on conventional 3.0L V-6s and 40 amps (564 watts) on OptiMax models at only 1000 RPM, while most competitors are providing that much only at W.O.T. (Wide Open Throttle). This is a marinized version of an automotive-style alternator and belt-driven off of the crankshaft. This field-wound configuration, meaning there are no magnets passing by the stator, allows the system to put out current only as required by the battery. This eliminates the heat build-up problems associated with high-output stator-driven designs and maximizes horsepower by supplying current only on demand.

**Skeg:** A fin at the bottom of the gear housing, shaped in such a way that hydrodynamic efficiency is increased.

**SmartCraft:** SmartCraft is an information, management system that integrates your boat's power with other onboard systems to provide up-to-the-second information at a glance. Mercury's exclusive PCM engine management system monitors over 40 sensors, sending decision making information to the operator. SmartCraft delivers information regarding 23 different functions – everything from fuel management and boat speed to engine temperature and diagnostics.

**Solid Hub:** Splined hub prop with no rubber shock-absorbing device.

**Sound Attenuator:** A silencing device found on outboards. It works by utilizing unique materials with high-sound dampening characteristics, reducing natural intake frequencies and moving them out of the engine's operating range.

**Spark Advance:** The amount of time the spark occurs in a cylinder before the piston reaches Top Dead Center. Expressed in degrees of crankshaft rotation, it allows for the relative speeds of combustion compared to engine rotation.

**Stainless Steel Drive/Propeller Shaft:** Shafts that are made from a high grade of stainless steel, to extend reliability and durability to these critical components and moving parts susceptible to corrosion.

**Stainless Steel Exhaust Elbows:** Found on some MerCruiser Bravos, Mags and Blue Water Inboards, built using a vacuum lift casting process and offer as close to a lifetime exhaust elbow as is available today.

**Stainless Steel Grounding System:** Continuity circuit that bonds all the outdrive and engine components together to help prevent corrosion between dissimilar metals.

**Stainless Steel Water Pump Housing:** A steel, rather than plastic, housing for a varied water pump impeller.

# Product Term Glossary

**Steering (360 Degree):** Defines the allowable rotation of the engine around a vertical axis. 360° rotation is used for providing reverse on engines with direct drive or a forward gear only.

**Steering Co-Pilot:** A device which restrains the engine from rotating freely about its vertical steering axis.

**Steering Friction:** The amount of resistance in rotation of the engine about its steering axis.

**Steering Torque:** 1. The pulling to one side (usually the propeller rotation direction), while steering a boat. 2. The tendency for a drive unit to pull to one side while the boat is powered.

**Strontium Chromate:** A chemical having excellent resistance to saltwater exposure and heat, used mainly for its corrosion inhibiting properties in primers for ferrous and non-ferrous metals.

**Supercharger:** Mechanical pump or compressor for increasing the pressure of induction air or gasses. Dramatically improves low end torque and acceleration. (Verado)

**Swivel Bracket:** A housing mounted between the clamp brackets that allows the engine to pivot and tilt.

## T

**Thermoform Cowl:** Reduces weight by 50% over conventional cowlings allowing for easier removal and replacement. Color impregnated material means that scratches are less noticeable and are more easily removed. Standard on all OptiMax family engines.

**Thermostat:** A temperature-sensitive switch that controls the circulation of water in the powerhead.

**Thermostat Bypass Water (4" Exhaust Elbow):** A separate channel on MerCruiser 4" exhaust elbows for the thermostat water to pass through, ensuring longer elbow and engine life.

**Thermostatically Controlled Cooling System:** A powerhead that has its water temperature controlled by a thermostat.

**Throttle Friction:** A device that allows the user to set and hold a desired boat speed.

**Thru-prop Exhaust:** A system whereby the exhaust gases exiting the engine are routed down through the drive unit and allowed to exit through the propeller for efficiency and noise reduction.

**Thrust Hub:** A metal, washer-like part between a propeller and gear housing which absorbs the thrust of the propeller and protects the internal parts of the gear housing.

**Tiller Handle:** A device used to grip an outboard in order to steer. (Some models propel, stop, etc).

**Tilt Lock:** 1. A lever that releases the reverse lock allowing motor to be tilted using tilt gap. 2. A device which supports the engine in its full-tilt up position for secure trailoring.

**Tilt Pin:** An adjustable assembly on the clamp bracket for setting the angle between the propeller, boat and water.

**Tilt Tube:** A tubular shaft that connects the clamp brackets to the swivel brackets. It permits the engine to be tilted.

**Torque:** A force that produces or tends to produce rotations or torsion. A characteristic of an engine with good torque levels is a strong holeshot and strong acceleration when pressure is applied to the throttle.

# Product Term Glossary

**Torsional Damper:** Significantly reduces engine vibration, resulting in a smooth running engine that lasts longer with outstanding reliability.

**Transmission:** A mechanism attached to the engine which uses engine rotation to provide forward, reverse or neutral rotation at the propeller.

**Transom:** The stern of the boat that the motor or outdrive is connected to.

**Trim:** To adjust the position of a boat moving in the water by altering the angle of the drive unit (or motor) to the boat.

**Trim Cylinder:** Hydraulic cylinder used to raise or lower motor to obtain correct planing of boat.

**Trim Limit Feature:** A feature which prevents the engine from operating at wide-open throttle with the engine tilted beyond the normal trim range.

**Trim Limit Switch:** An electrical device used to provide the trim limit feature. Also used to limit full tilt-up on outboard engine.

**Trim Tab:** An adjustable fin or rudder attached to the gear housing which serves to equalize steering torque and acts as a sacrificial anode.

**Tuned Exhaust:** Utilization of positive and negative pressure pulses in the exhaust system to enhance performance of the engine.

**Turn-Key Starting:** Refers to engines that start without the need of priming, usually associated with Electronic Fuel Injection (EFI) and Direct Fuel Injection (DFI).

**Twin-Screw Supercharger:** A positive displacement air mover, in that it moves fixed amounts of air per revolution. The counter-rotation lobes and chambers of the twin screw are designed for a screw-like tapering effect which runs its intake air into a smaller space for output, thus compressing it. Roots type superchargers simply blows air without compressing. (Verado)

**Twist Grip:** A throttle control on the end of a steering handle whereby twisting the grip changes engine speed.

**2-Stroke:** An engine which delivers one power pulse for every 2-strokes of the piston, during one revolution of the crankshaft. The cycles are intake/compression and power/exhaust.

## U

**Universal Joint:** A coupling that allows two parts of a machine limited freedom of movement in any direction while transmitting rotary motion.

## V

**Vapor Lock:** An undesirable condition that occurs when the temperature of the fuel inside an engine's fuel system reaches the point where the fuel gravitates from a liquid to a gaseous state. During the transition period, the fuel takes on the consistency of soap bubbles, compressing lighter and lighter to the point where fresh liquid fuel coming from the fuel tank can no longer move past the compressed gaseous fuel. This situation starves the engine of fuel and eventually prevents it from running until such time as the engine temperature lowers enough for the gaseous fuel to return to a liquid state.



# Product Term Glossary

**Vapor Separator:** A component of the fuel delivery system found on all EFI (Electronic Fuel Injected) and OptiMax (Direct Fuel Injected) outboards. Assembly consists of a small holding tank for fuel, a fuel pressure regulator (EFI model only; OptiMax models have the fuel pressure regulator mounted on one of the fuel rails) a fuel vapor pressure regulator, and a powerful electric fuel pump for pressurizing the fuel system. OptiMax models also feature an additional smaller electric fuel pump pressure the vapor separator unit to approximately 10 psi (0.7 kg/cm<sup>2</sup>). Minimizes potential for vapor lock by bleeding fuel vapors back into air intake plenum.

**Vengeance:** A MMPC 3-blade stainless steel propeller providing better acceleration and handling than a 3-blade aluminum propeller. This propeller sports a patented Duratec gloss finish, and is available in right hand rotation in pitch ranges from 9" – 25" (some left hand rotation pitches are also available).

**Verado:** Mercury's name for a proprietary range of supercharged four-stroke outboards ranging in horsepower from 135 to 300.

**Voltage:** A difference in electrical potential between two ends of a circuit which causes current to flow. Unit of measurement is the volt.

**Voltage Regulator:** A component of the ignition system which controls the current flow.

## W

**Water Jacket:** Chamber between inner and outer walls of the cylinders and cylinder head through which water is circulated for cooling the engine. Also found in other applications, such as driveshaft housings, for cooling as well as sound insulation.

**Water Pickups (Built-In):** Holes or passages through which cooling water enters the water pump on the lower unit of an outboard or stern drive.

**Water-Separating Fuel Filter:** A filter that helps keep water out of the engine for smoother running and increased engine reliability.

**WOT:** Abbreviation for Wide Open Throttle.

## X

**XK 360 Aluminum Alloy:** A Mercury exclusive containing a very low copper content (roughly .25%), for excellent corrosion resistance, especially in saltwater applications.

# **Mercury Corrosion Protection**

## **Corrosion Fundamentals**

**Aluminum Alloys** —

**Mercx Fusion Paint System** —

**Hardcoat Anodizing** —

**Salt Shield Protection** —

**Paint & Coating Processes** —

**Stainless Steel** —

**Sacrificial Anodes** —

**Connectivity Devices** —

**Additional Protection** —

*Mercury is setting the standard with a whole new level of Corrosion Protection. The most notable refinement is the **MercFusion Paint** process which includes the **“Mercury’s Powder Paint Top Coat”**.*

*All exposed components will feature this new durable finish, to extend the life of the Outboard and MerCruiser components in today’s saltwater environment.*

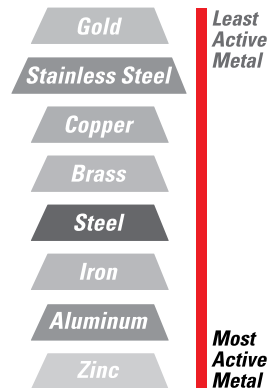
# Mercury Corrosion Protection

## How does corrosion occur?

Corrosion occurs when metals are connected or grounded through water. When this occurs, electrons flow between the metals and the reaction causes the weaker metal to be eaten away or corrode.

These **5** things must be present for corrosion to occur:

1. Metal #1
2. Metal #2
3. Connection between metals #1 & #2
4. Ion Solution
5. Potential difference between metals

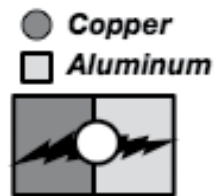


## Why is low copper alloy important?

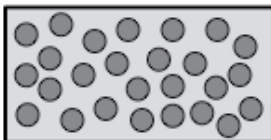
Alloys are a combination of aluminum, copper and other rare earth elements.

When immersed in water, electrons begin to flow between each other.

Copper being the weaker metal sacrifices itself to protect the aluminum.

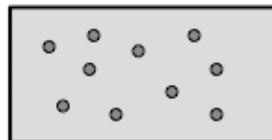


### Competitor's Aluminum Alloy



**High Copper Content**

### Mercury's Aluminum Alloy



**Low Copper Content**

The more copper in the aluminum alloy, the more the alloy will begin to corrode due to the copper erosion.

# Mercury Corrosion Protection

## **True Corrosion Protection starts with the alloys.**

Mercury manufactures its own aluminum-silicon alloy and custom designs it to ensure the lowest effective copper content.

## **Aluminum Alloys**

### **XK360 - <0.20% Copper Content**

The most corrosive resistant alloy on the market today and it is a Mercury Exclusive.

Used only on Die Cast components like: engine blocks, cylinder heads, gear cases, drive shaft housings and stern drive units

### **A356 - <0.15% Copper Content**

Used in Lost Foam components or permanent mold castings

Used on blocks, heads, clamp & swivel brackets

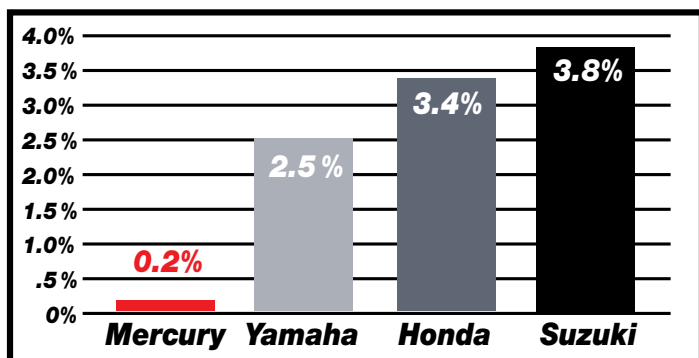
### **MercAlloy - <0.20% Copper**

Very costly – but provides superior impact protection

Used only on Die Cast components: on large outboard Drive Shaft Housings and most of Mercury's Aluminum Props

**Most competitors use alloy with 2 to 4% copper content which will corrode much easier than **XK360** or **A356** Alloys**

## **% Copper Content in Aluminum Alloy**



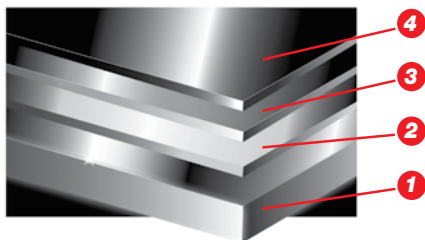
**Most Durable & Corrosion-resistant Alloy**

# Mercury Corrosion Protection

## New MercFusion Paint System

### 4 Mercury's Powder Paint

**Top Coat.** This powder paint is electrostatically charged and contains plasticizers for paint flexibility to ensure better long-term adhesion. After it's sprayed on and thermo-cured, this **finish is harder, thicker and tougher** than conventional paint.



3 **EDP**, or **Electro-Deposition Priming**. A painting process using electrically charged paint and oppositely charged components to create a uniform coverage that seals out the environment.

2 **Irridite (Metal Prep & Sealing)** Irridite provide a **highly resistant barrier** and a superior foundation for the rest of the painting process

1 **XK360, A356 & MercAlloy** Low copper content aluminum-silicon alloys are our most corrosion resistant to date.

## Hardcoat Anodizing (Sealing Treatment)

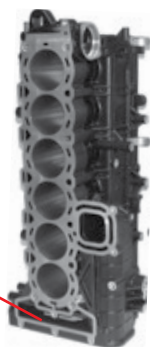
**Components : SuperCharger, Charge-Air Cooler & Trim Cylinders & more.** This process deeply penetrates the aluminum alloy and changes it's molecular structure. Anodizing increases corrosion resistance, wear resistance, and provides better adhesion for paint.

## SS38 Salt Shield (Mercury Exclusive)

Flushed into the powerhead and water passages this chemical provides excellent resistance to saltwater exposure and heat.

**Mercury's Extensive Cleaning and Painting Process Ensures Long-term Protection of Aluminum Castings.**

L6 Engine Block



# Mercury Corrosion Protection

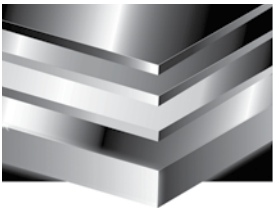
## Paint & Coating Processes (60hp and Below)

- Acrylic Melamine Paint
- Marine Grade Epoxy Primer Paint
- EDP (Electro-Deposition Paint)
- Irridite (Metal prep & sealing process)



## Top Coat Powder Paint (75hp and Above)

- SS38 Salt Shield (Internal Passages)
- EDP (Electro-Deposition Paint)
- Irridite (Metal prep & sealing process)
- Hardcoat Anodizing (Sealing Treatment)



## Stainless Steel



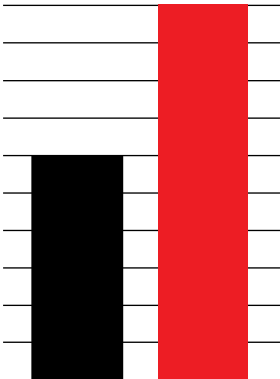
All Mercury Outboards



All 135hp+ Mercury Outboards

Mercury Outboards contain more stainless steel than competitors.

- Steering Arm
- Swivel Tube
- Tilt Tube
- Bottom Yoke
- Drive Shaft
- Shift Shaft
- Prop Shaft
- Trim Rods and Rams
- Water Pump Housing
- Numerous Fasteners



On a recent test of Mercury, Suzuki, Yamaha and Honda outboards it was determined:

- Mercury uses 39 lbs. of stainless steel on an L4 Verado FourStroke
- Suzuki uses 11 lbs. of stainless steel on a 150 HP FourStroke
- Yamaha uses 18 lbs. of stainless steel on a 150 HP FourStroke
- Honda uses 10 lbs. of stainless steel on a 150 HP FourStroke



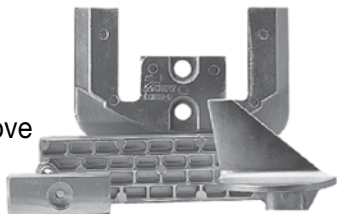
# Mercury Corrosion Protection

## Sacrificial Anodes

Strategically placed on the **Transom Brackets** and **Lower Unit**, they sacrifice themselves to protect the aluminum alloy.

**Aluminum Alloy** – used on **40hp** & above

**Zinc Alloy** – used on **30hp** & below



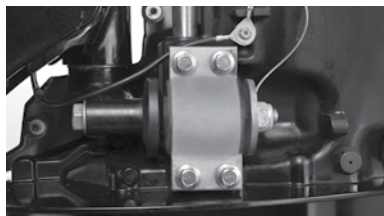
## Maintenance Tips:

- ✓ When the size of the anode is reduced by **50%** it should be replaced.
- ✓ **NEVER** paint an anode – When painted they can't do their job.
- ✓ **NEVER** wire brush an anode – It makes it deteriorate.

## Continuity Devices

### Braided Bonding Straps

- ✓ Stainless Steel
- ✓ Completes continuity circuit on all isolated components to ensure a good ground



**Stainless Steel or special plated nuts & bolts.**



### Sealed Electrical Connections

- ✓ Validated to **180°F** Temperature

## Additional Protection **Mercury Exclusive!**

### 3-year Limited Corrosion Warranty

- ✓ Built-in fresh water flushing devices (standard on all **40hp+** outboards)
- ✓ Corrosion protection applies to all service parts







# **Mercury SmartCraft**

**SmartCraft Overview** —

**SmartCraft DTS** —

**SmartCraft Technology** —

**SC1000 Tach & Speed** —

**Vessel View®** —

**MercMonitor** —

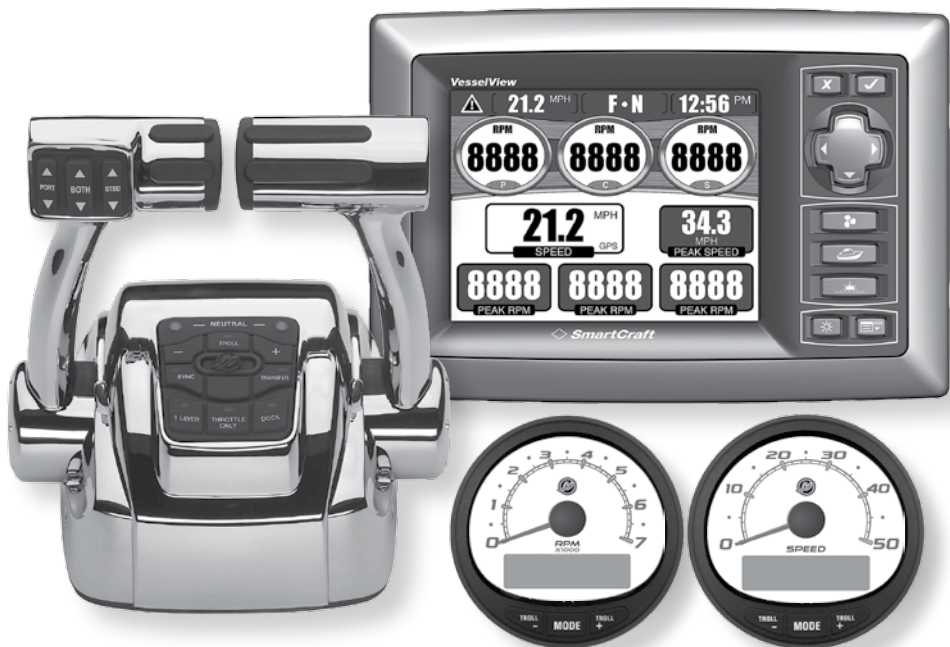
**SC Feature Charts** —

**Outboards** —

**MerCruiser** —

**Racing** —

# Mercury SmartCraft



## **SmartCraft Technology enhances your customer's fun by making boating:**

- ✓ Easier, by simplifying craft control with **DTS System**.
- ✓ Displaying, more engine & craft monitoring information. **SC1000, VesselView & MercMonitor**.
- ✓ Safer, by enhancing craft control and operational back-up systems. **SmartCraft Hull Integration**.
- ✓ More reliable, through a highly engineered, closed system of components. **Mercury Precision Rigging**.

**SmartCraft technology handles the thinking.  
All that's left for your customers is having fun.**



# Mercury SmartCraft

## **Digital Control**

### **The SmartCraft Digital Throttle & Shift (DTS) System**

*Digitally precise, the **DTS** system provides:*

- ✓ Effortless control.
- ✓ Offers unmatched, smooth shifting.
- ✓ Lightning-fast throttle response.
- ✓ Proven and reliable performance every time.



## **Product Attributes**

### **Better Control**

*All **DTS** system components are integrated to give you effortless control and coordination over engine and transmission functions.*

- ✓ Precise Shifting – no grinding between gears.
- ✓ Immediate throttle response.
- ✓ Adjustable hand friction to meet users needs.

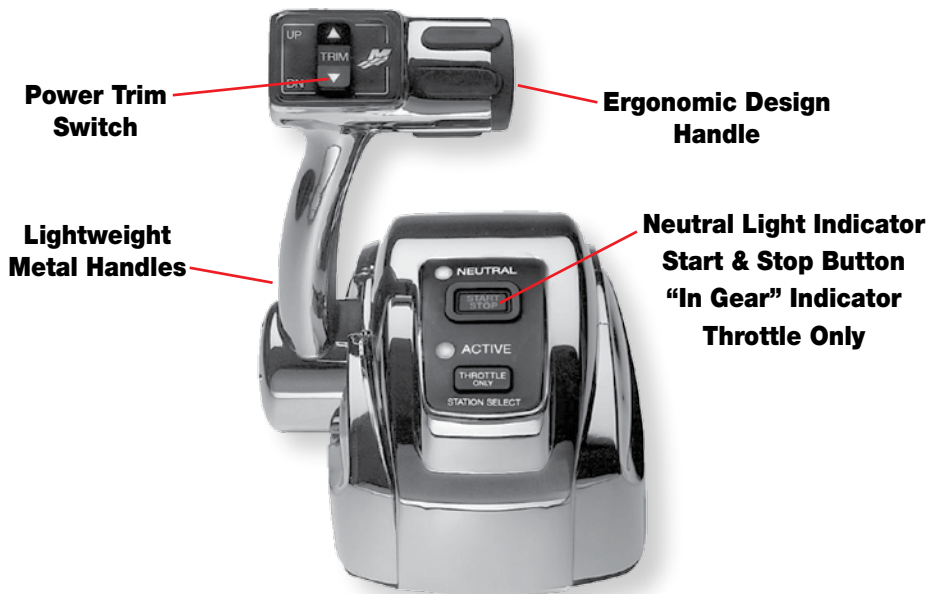
### **Easy to Operate**

- ✓ 1 Lever can operate multi-engines.
- ✓ Push Button starting.
- ✓ Automatic engine synchronizer.
- ✓ Helm station transfer at the touch of a button.

### **Peace of Mind**

- ✓ Maintenance free helm (drive by wire technology).
- ✓ Shift protection – engine will only shift at safe RPM's.
- ✓ Engine Guardian – If a fault is detected and may cause concern, Engine guardian limits RPM's.

## Single **DTS** Binnacle Control



## Dual **DTS** Binnacle Control



### Track Pad Features

- **Troll Control** – Set and adjust trolling speed for simple slow speed maneuvering.
- **Shadow Technology**  
Allows you to control the throttle & shift of 3 or 4 engines with 2 levers.
- **Sync on/off** – Engines automatically synchronize.
- **Helm Transfer** – Transfers control between different helm stations.
- **1 Lever** – Allows the throttle & shift function of all engines to be controlled by the port side control handle.
- **Throttle only** – Engine warm up.
- **Docking Mode** – Reduces engine power by 1/2 while using the entire throw of the handle.





# SmartCraft Technology

## Mercury's SmartCraft Integrated Marine Technology

- ✓ Most complete & powerful boat information system ever created.
- ✓ SmartCraft provides up-to-the-second information on dozens of engine diagnostics, including RPM, fuel flow and management, critical temperature readings, speed, and engine trim.
- ✓ By taking the guesswork out of boating, SmartCraft makes your time on the water more enjoyable for you and your passengers.

## Product Attributes

### ECO-Screen on the MercMonitor

- ✓ The ECO-Screen tells you what you need to do as a boater to achieve the best fuel economy for your application.
- ✓ The ECO-Screen constantly monitors engine RPM, boat speed, fuel consumption and engine trim to automatically calculate and guide you to your best fuel economy settings.

### NMEA 2000 Compatibility

- ✓ MercMonitor converts SmartCraft data into NMEA 2000 and transmits that data so it can be viewed on all NMEA 2000 compatible displays (*chart plotters, fishfinders, etc*). Allows communication with other engines from other manufacturers.

### SmartTow

- ✓ The latest SmartCraft advancement in tow sport technology. No need of calculating the weight of the boat and the weight of your guests. You can also forget about the daunting challenge of maintaining speed manually.
- ✓ Smart Tow combines an RPM-based cruise control for consistent speed with our exclusive Launch Control that determines the intensity you want out of the water.
- ✓ Simply select from five Launch Control profiles for the pull intensity your rider wants out of the water, enter your rpm end point and Smart Tow handles the rest!

# SmartCraft Technology



## SC1000 Tach & Speed

Accurate digital information in a clean, easy-to-read gauge. Mercury SmartCraft gauges provide you instant, reliable information at a glance.



### Troll Control®

Fuel to Waypoint

Engine Synchronizer

Trim Synchronizer

GPS Speed

GPS Course and Speed

Speed Sensor Fault

Low-Fuel Warning

Low-Oil-Level Warning (OB)

Water in Fuel Fault

Auto Speed Sensor Transition

Air/Water Temp

Digital Speed

Oil Level

Fuel Level

Time of Day

Boat Speed

Low Depth Warning

Horn Fault

Ignition Fault

Injector Fault

Oil System Fault

Reserve Oil (OB)

Descriptive Fault Text

RPM

Engine Alarms

Oil Temp

Oil Pressure

Battery Voltage

Depth

Water Pressure

Coolant Temp

Coolant Pressure

Engine Hours

Trim Pop-Up

Engine Trim

Fuel Used

Fuel Flow/Level/Range

System Link Gauge Connection

Speed Based SmartTow

RPM Based SmartTow

## SC100 System Link Gauges

SC100 Link gauges complement the SC1000 gauges with dedicated information displays.



# SmartCraft Technology

## VesselView®

VesselView is the foremost engine information display that brings together all functions on the vessel through a clear, direct sunlight viewable full color display.



- Peak RPM/Speed**
- Steering Angle**
- Distance to Waypoint**
- Water Tank Level**
- Waste Tank Level**
- Temp History Graph**
- Depth History Graph**
- Trip History**
- Time to Waypoint**
- Descriptive Fault Text**
- Favorites Information Feature**
- Troll Control®**
- Fuel to Waypoint**
- Engine Synchronizer**
- Trim Synchronizer**
- GPS Course and Speed**
- Speed Sensor Fault**
- Low-Fuel Warning**
- Low-Oil-Level Warning (OB)**
- Water in Fuel Fault**
- Auto Speed Sensor Transition**
- Air/Water Temp**
- Digital Speed**
- Oil Level**

- Fuel Level**
- Time of Day**
- Boat Speed**
- Low Depth Warning**
- Horn Fault**
- Ignition Fault**
- Injector Fault**
- Oil System Fault**
- Reserve Oil (OB)**
- RPM**
- Oil Temp**
- Oil Pressure**
- Battery Voltage**
- Depth**
- Water Pressure**
- Coolant Temp**
- Coolant Pressure**
- Engine Hours**
- Trim Pop-Up**
- Engine Trim**
- Fuel Used**
- Fuel Flow/Level/Range**
- System Link Gauge Connection**



## MercMonitor

The MercMonitor digital vessel monitoring system allows you to select three pieces of data to be displayed at once.

### ECO-Screen

- NMEA 2000 Gateway
- Analog Needles
- Bi-/Tri-Data Screens
- Min/Max Indication
- Multi-Color Backlight
- Speed and Sea Temp
- Dot Matrix LCD Display
- Peak RPM/Speed
- Steering Angle
- Distance to Waypoint
- Water Tank Level
- Waste Tank Level
- Temp History Graph
- Depth History Graph
- Trip History
- Time to Waypoint
- Descriptive Fault Text
- Favorites Information Feature
- Troll Control®
- Fuel to Waypoint
- Engine Synchronizer
- Trim Synchronizer
- GPS Course and Speed
- Speed Sensor Fault
- Low-Fuel Warning
- Low-Oil-Level Warning (OB)
- Water in Fuel Fault

### Auto Speed Sensor Transition

- Air/Water Temp
- Digital Speed
- Oil Level Fuel Level
- Time of Day
- Boat Speed
- Low Depth Warning
- Horn Fault
- Ignition Fault
- Injector Fault
- Oil System Fault
- Reserve Oil (OB)
- RPM
- Oil Temp
- Oil Pressure
- Battery Voltage
- Depth
- Water Pressure
- Coolant Temp
- Coolant Pressure
- Engine Hours
- Trim Pop-Up
- Engine Trim
- Fuel Used
- Fuel Flow/Level/Range
- System Link Gauge Connection
- Speed Based SmartTow
- RPM Based SmartTow

**Multi-Color Backlight** Allows you to choose which color is right for you.

**8** choices available: *Blue, Ice Blue, Red, Green, White, Yellow, Purple & Wave.*

**Analog Dials** Option to select digital representation of an analog gauge



# SmartCraft Technology

## Standard Features Per Engine Family

## Mercury Outboards

STANDARD ENGINE OUTPUTS					
Boost					
Oil Temperature					
Oil Pressure (FourStroke)					
Digital Throttle & Shift					
Engine Trim					
Boat Speed					
Water Pressure (2 stroke)					
Engine Alarm Values					
Water in Fuel					
Engine Temperature					
Engine Diagnostics					
Battery Voltage					
Troll Control®					
Fuel Flow/Level/Range					
Engine Hour Meter					
Engine Guardian®					
Favorites/Screen On-Off					
RPM					

40-60 hp

75-150 hp

75-125 hp

135-250 hp

115-250 hp Pro XS

150-300 hp

FourStroke

FourStroke

OptiMax

OptiMax

OptiMax

VERADO



Standard Features  
Per Engine Family

Mercury MerCruiser

S T A N D A R D   E N G I N E   O U T P U T S									
Exhaust Manifold Temp									
Transmission Guardian									
Digital Throttle & Shift									
Water Pressure	MerCruiser® 3.0 MPI	MerCruiser® 4.3 MPI	MerCruiser® 5.0 MPI	MerCruiser® 350 MAG MPI / 377 MAG	MerCruiser® 8.2 L / 8.2 L H.O.	Inboards 5.7L, 6.2L, 8.2L & 8.2L HO	Tow Sports 5.7M <sup>2</sup> L, Scorpion 350 DTS	OptiMax® 200 Jet Drive	
Troll Control®									
Oil Pressure									
Engine Trim									
Engine Temperature	MerCruiser® 3.0 MPI	MerCruiser® 4.3 MPI	MerCruiser® 5.0 MPI	MerCruiser® 350 MAG MPI / 377 MAG	MerCruiser® 8.2 L / 8.2 L H.O.	Inboards 5.7L, 6.2L, 8.2L & 8.2L HO	Tow Sports 5.7M <sup>2</sup> L, Scorpion 350 DTS	OptiMax® 200 Jet Drive	
Battery Voltage									
Engine Alarm Values									
Fuel Flow/Level/Range									
Engine Diagnostics	MerCruiser® 3.0 MPI	MerCruiser® 4.3 MPI	MerCruiser® 5.0 MPI	MerCruiser® 350 MAG MPI / 377 MAG	MerCruiser® 8.2 L / 8.2 L H.O.	Inboards 5.7L, 6.2L, 8.2L & 8.2L HO	Tow Sports 5.7M <sup>2</sup> L, Scorpion 350 DTS	OptiMax® 200 Jet Drive	
Engine Hour Meter									
Engine Guardian®									
RPM									





# Mercury SmartCraft

## Standard Features Per Engine Family

## Mercury Racing

STANDARD ENGINE OUTPUTS									
Transmission Guardian									
Fuel PSI									
Oil Temp									
Water Pressure									
Water in Fuel									
Troll Control®									
Oil Pressure									
Engine Trim									
Engine Temperature									
Battery Voltage									
Engine Alarm Values									
Fuel Flow/Level/Range									
Engine Diagnostics									
Engine Hour Meter									
Engine Guardian®									
RPM									



# PROPELLERS

## BY MERCURY

*Spitfire* —

*Fury* —

*Enertia* —

*Mirage Plus* —

*Revolution 4* —

*Vengeance* —

*Laser II* —

*Vensura* —

*HighFive* —

*Trophy Sport* —

*Tempest Plus* —

*Trophy Plus* —

*Maximums* —

*Bravo I* —

*Black Max* —

*Alpha 4* —

*Bravo Two* —

*Bravo Three* —

Please refer to the Dealer Propeller Guide or the Mercury Precision Parts Accessory Guide for more details and application usage.

# The Mercury Advantage

## Best Propeller Offerings in the World

When it comes to propeller technology, only Mercury Marine knows what it takes to make the best prop.

✓ *Mercury is the world's largest manufacturer of propellers, turning out thousands of world-class products for more than 70 years.*

✓ *Mercury has over 500 unique propellers to fine tune the performance of your engine for Top Speed, Towing Power or Optimal Fuel Economy at Cruise.*

### X7 Alloy

A revolutionary new alloy from Mercury that shatters the rules of propeller design.



- ✓ 30-percent stronger than conventional stainless steel
- ✓ Four times more durable than conventional stainless steel
- ✓ Allows prop designs that are impossible with conventional stainless steel



### Performance Vent System (PVS)

The Performance Vent System is an EXCLUSIVE Mercury innovation that allows you to “custom tune” the venting of your propeller blades - giving you the power to adjust your propeller to the way you boat.

### Flo-Torq II Hub System

The Flo-Torq II Hub System is more flexible than competitive hub systems and thus minimizes stress on the engine, engine drive and propeller when the engine is shifted into gear.

### Flo-Torq® II HUB SYSTEM

When large underwater obstruction are encountered, the Delrin sleeve of the Flo-Torq II System is designed to “break away” following impact, ensuring that damage to the engine, engine drive and propeller is kept to a minimum. Competing hub systems take longer to break away after impact, increasing the risk of major damage to both the engine and the drive.

# Mercury Propellers

## Application Chart

### Outboards

### Sterndrives

	Inflatable	Aluminum	Ski Boat	Bass Boat	Flats Boat	Bay Boat	Walleye Boat	Offshore Single	Offshore Dual	Sportboat Single	Sportboat Dual	Deck	Pontoon	Ski Boat	Sportboat Single	Sportboat Dual	Family Cruiser	Runabouts	Deck	Pontoon	Houseboat	Workboat
<b>Fury</b>																						
<b>Spitfire</b>																						
<b>Enertia</b>																						
<b>Maximus</b>																						
<b>Black Max</b>																						
<b>Vengeance</b>																						
<b>Laser II</b>																						
<b>Trophy Plus</b>																						
<b>Trophy Sport</b>																						
<b>Tempest Plus</b>																						
<b>Mirage Plus</b>																						
<b>Alpha 4</b>																						
<b>Vensura</b>																						
<b>Revolution 4</b>																						
<b>Bravo I</b>																						
<b>Bravo Two</b>																						
<b>Bravo Three</b>																						

# Mercury Propellers



## **SPITFIRE** By MERCURY MARINE

***The world's first performance aluminum propeller***

SpitFire's breakthrough design features the most aggressive geometry available in an aluminum propeller:

- 5-10% faster acceleration\*
- Superior holding in turns\*
- Faster top speed\*

***For 25-30 HP, 40-60 HP BigFoot & Standard models and 75-125 HP outboards***

*\*Compared to Mercury's Black Max*



• The Fury is a revolutionary propeller that measurably improves acceleration and top speed on bass boats powered by 200 horsepower and higher outboards.

• ***Mercury's testing revealed an increase of 1.4 MPH and 12 percent faster holeshot.***



- Better acceleration and top speed
- Thin blades and higher rake angles for increased efficiency
- Perfect for high-horsepower outboard-powered offshore boats
- Stays hooked up; fewer blowouts while cornering
- Built with exclusive X7 Alloy for ultimate strength and durability

# Mercury Propellers



## MERCURY MARINE **MIRAGE** *plus*



- Improves acceleration and top speed on larger high-horsepower boats
- For outboards 150 hp and higher, especially for offshore fishing, bay and sport boats
- For V-8 single, center-console Bravo One single, or dual and TRS sterndrives



## MERCURY MARINE **Revolution** *4*



- The Rev. 4 is the four-blade cousin of the legendary three-blade Tempest Plus.
- Brings power, top speed and lift with incredible traction and acceleration
- For V-6 outboards and Bravo One and TRS sterndrives, especially sport and offshore boats



## MERCURY MARINE **VENGEANCE**



- Stainless steel performance and value with increased efficiency, strength and durability over aluminum
- Precision handling and acceleration - better than most three-blade aluminum propellers
- For outboards 25–250 hp and Alpha sterndrives



# Mercury Propellers



MERCURY MARINE  
**Laser II**



- High-rake design for greater lift on 15–18 foot outboard- and 18–22 foot Alpha sterndrive-powered boats
- Thinner blades reduce drag and increase top speed while improving handling
- For outboards 75 hp and up and sterndrive sport boats 22 feet and under



**Vensura**  
MERCURY MARINE



- Provides better acceleration, aggressive holding and tremendous bow lift
- For V-6 outboard and 3.0L–5.7L Alpha sterndrive water ski, wakeboard and tubing boats
- For single or twin 135–175 hp outboard-powered 18–24 foot center-consoles



MERCURY MARINE  
**High Five**



- Ultimate in hole shot for effortlessly pulling skiers or hauling to your favorite fishing hole
- Pulls strong and smooth and offers great bow lift and handling, even in rough water
- For outboards over 75 hp and Alpha, Bravo One and TRS sterndrives

# Mercury Propellers



MERCURY MARINE

**TROPHY**  
*Sport*

- Smaller four-blade stainless steel design
- All the advantages of the Trophy Plus
- Fast planing, top speeds and improved handling with reduced steering loads
- Ideal for small flats, walleye or bass boats
- For 30–60 hp outboards running 30–60 mph



MERCURY MARINE  
**Tempest**  
**PLUS**



- Ventilated for increased acceleration and unparalleled speed for large and heavy loads
- Higher rake and bigger cup for better efficiency handling and lift
- Large 14-5/8" diameter for high engine height installations
- For big, V-6 outboard-powered bass, walleye, bay and sport boats

MERCURY MARINE

**TROPHY**  
**PLUS**



- Unbelievable bow lift and quick planing on outboard-powered bass, flats or sport boats
- Delivers superior handling and better control in tight turns with reduced torque and steering loads
- For outboards 75 hp and up



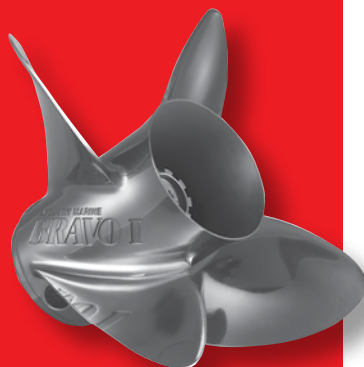
# Mercury Propellers



## **MAXIMUS** MERCURY MARINE



- Excellent planing and top speeds for heavy, vee-bottom hulls
- Standard with 1 1/4" hub kit for Sport Master and Bravo One XZ/XR sterndrives
- For high-horsepower, high-drive-height outboards and sterndrives



## **MERCURY MARINE** **BRAVO I**

- Delivers increased speed, better acceleration and unparalleled top-end performance
- Excellent speed and handling, especially for stepped and cat hulls
- For high-horsepower, high-drive-height outboards and Bravo One sterndrives



## **MERCURY** **BLACKMAX**

- Performs well on outboards, Alpha sterndrives, inflatables and pontoons\*
- For all outboards and Alpha and Bravo One sterndrives with up to 250 hp and top speed of less than 50 mph
- Silver color props feature special hub s for use on pontoons with the 40~60hp BigFoot

# Mercury Propellers



## **ALPHA**<sup>4</sup> MERCURY MARINE

- Delivers high-quality performance and acceleration in an affordable price range
- Perfect for runabouts, ski boats and day cruisers
- Delivers improved handling and better holding than a three-blade design
- For V-6 outboards and Alpha sterndrives up to 250 hp



## **Bravo Two** MERCURY MARINE

- Delivers enhanced mid- to top-range performance
- Large blade area for maximum thrust – designed for better maneuverability and holding in turns
- Perfect complement for Bravo Two sterndrive



## **Bravo Three** MERCURY MARINE

- This amazing twin-propeller, counter-rotating system is standard equipment on Bravo Three drives.
- A large diameter four-blade front propeller coupled with a smaller diameter, three-blade rear propeller provide unbelievable acceleration, straight tracking, fuel economy and precise handling around the dock.



# ***SMALL HP***

## ***FOURSTROKE OUTBOARD***

***2.5 HP*** —

***3.5 HP*** —

***4 HP*** —

***5 HP*** —

***6 HP*** —

***8 HP*** —

***9.9 HP*** —

***9.9 HP BigFoot*** —

***9.9 HP Pro Kicker*** —

***15 HP*** —

***15 HP ProKicker*** —

***20 HP*** —

***25 HP EFI*** —

***30 HP EFI*** —

***Mercury & Tohatsu Difference*** —

# 2.5hp

## FourStroke



Standard three-year limited factory backed, nondeclining warranty.



Backed by the industry's only three year limited corrosion failure warranty.



3-Star C.A.R.B. rating on 87 octane fuel, for ultra low engine emissions.

### SPECIFICATIONS

HP/kW @ Prop	2.5 / 1.9
Max RPM (WOT)	4500 - 5500
Cylinders	1
Displacement (CID/cc)	5.2 / 85
Bore X Stroke (in/mm)	2.16 x 1.42 / 55 x 36
Induction System	2-valve Push Rod (OHV)
Ignition System	CDI w/ electronic spark advance
Fuel System	Carbureted
Alternator Amp/Watt	NA
Cooling System	Water-Cooled w/ thermostat
Starting	Manual
Gear Ratio	2.15:1
Gear Shift	F-N
Propeller	7.375" x 6"
Steering	Tiller w/360 degree turning
Trim Positions	4
Shallow Water Drive	N/A
Exhaust System	Above Prop
Recommended Oil	Mercury 4-Stroke Outboard Oil
Fuel/Ethanol Tolerance	87 octane/up to 10% Ethanol
Integral Fuel Tank (gal/L)	0.3 / 0.95
Operator Warning System	Over-rev
SmartCraft Technology	No
Shaft Length (in/mm)	15/381
Dry Weight (lbs/kg)*	38/17 *Lightest model available



**FourStroke**

**2.5hp**

**KEY ATTRIBUTES**

✓ **Large Displacement**

Overhead valve design for optimum power.

**More Torque and Power.**



✓ **Forward / Neutral Shifting with 180° Steering & 360° Turning Radius**

Full thrust in reverse. **Better Maneuverability.**

✓ **Long Tiller Handle with Twist Throttle**

Steering friction easily adjusted. **Customer Comfort - Less Vibration.**



✓ **1 Liter Integral Fuel Tank**

External fuel shutoff valve. Can be laid on three sides. **Safe Portability and Storage.**

✓ **Compact and Lightweight**

**Easy to Carry and Transport.**

**ADDITIONAL FEATURES / BENEFITS**

**CD Ignition**

Maintenance free and insures easy starting.

**Freshwater Flushing Port**

User friendly - Flushes saltwater and debris out of the engine extending the life of the outboard.

**Easy Rope Starting**

Convenient for all family members to be able to start with an easy pull.

# 2.5hp

## FourStroke

### ADDITIONAL FEATURES / BENEFITS

<b>Oil site gauge</b>	Customer convenience
<b>Over-rev Protection</b>	Consumer confidence
<b>Thermostatically Controlled Water Cooling</b>	Consistent operating temperature
<b>Fuel Shut Off Valve</b>	Portability and safe transport
<b>Manual choke with automatic fast idle</b>	Easy starting in all conditions
<b>Automatic Decompression</b>	Easy pull starts
<b>Easy drain oil system</b>	Quick and easy maintenance
<b>4 Manual Trim Positions</b>	Maximizes hull performance
<b>Throttle Friction Adjustment</b>	Set and maintain speed
<b>Steering Friction Adjustment</b>	Set and maintain direction
<b>Auto reverse lock</b>	User Friendly design
<b>Ability to store on either side</b>	Worry free, convenient storage
<b>Tilt Lock System</b>	Convenience when removing boat from water or portaging
<b>Ergonomic Carrying Handle</b>	Convenient transporting
<b>Composite 3 blade propeller</b>	Lightweight performance
<b>Stainless steel shear pin</b>	User friendly maintenance

**FourStroke**

**2.5hp**

<b>FOUR STROKE</b>	<b>MERCURY 2.5/3.5 hp</b>	<b>YAMAHA 2.5 hp</b>	<b>SUZUKI 2.5 hp</b>	<b>TOHATSU 2.5/3.5 hp</b>	<b>HONDA 2 hp</b>
<b>Engine Type</b>	1 Cylinder	1 Cylinder	1 Cylinder	1 Cylinder	1 Cylinder
<b>Displacement</b>	5.2 ci (85cc)	4.4 ci (72cc)	4.2 ci (68cc)	5.2 ci (85cc)	3.4ci (57cc)
<b>Dry Weight*</b>	38 lbs (17kg)	38 lbs (17kg)	31 lbs (14kg)	41 lbs (18.4kg)	27 lbs (12.2kg)

\* Weight based on owner's manual

***Largest displacement in 2.5hp class***

***18% More displacement than competitor***

***More torque at same weight***

---

***Long Tiller Handle with Twist Grip Throttle***

***Durable design providing easy access for operator***

***32% Less vibration than Honda 2hp***

***10% Less vibration than Yamaha 2.5hp***

***Customer comfort and less vibration.***

---

***3.5hp offers more power with the same  
weight of competitive 2.5hp***

***Better Performance at same weight***

---

***One piece block design & underwater exhaust.***

***82% Quieter than Suzuki 2.5hp***

***Quiet engine operation***

# 3.5hp

## FourStroke



Standard three-year limited factory backed, nondeclining warranty.



Backed by the industry's only three year limited corrosion failure warranty.



3-Star C.A.R.B. rating on 87 octane fuel, for ultra low engine emissions.

### SPECIFICATIONS

HP/kW @ Prop	3.5 / 2.6
Max RPM (WOT)	5000 - 6000
Cylinders	1
Displacement (CID/cc)	5.2 / 85
Bore X Stroke (in/mm)	2.16 x 1.42 / 55 x 36
Induction System	2-valve Push Rod (OHV)
Ignition System	CDI w/ electronic spark advance
Fuel System	Carbureted
Alternator Amp/Watt	NA
Cooling System	Water-Cooled w/ thermostat
Starting	Manual
Gear Ratio	2.15:1
Gear Shift	F-N
Propeller	7.375" x 6"
Steering	Tiller w/360 degree turning
Trim Positions	4
Shallow Water Drive	N/A
Exhaust System	Above Prop
Recommended Oil	Mercury 4-Stroke Outboard Oil
Fuel/Ethanol Tolerance	87 octane/up to 10% Ethanol
Integral Fuel Tank (gal/L)	0.3 / 0.95
Operator Warning System	Over-rev
SmartCraft Technology	No
Shaft Length (in/mm)	15/381 20/508
Dry Weight (lbs/kg)*	38/17 *Lightest model available

**FourStroke**

**3.5hp**

**KEY ATTRIBUTES**

✓ **Large Displacement**

Overhead valve design for optimum power.

**More Torque and Power.**



✓ **Forward / Neutral Shifting with 180° Steering & 360° Turning Radius**

Full thrust in reverse. **Better Maneuverability.**

✓ **Long Tiller Handle with Twist Throttle**

Steering friction easily adjusted. **Customer Comfort - Less Vibration.**



✓ **1 Liter Integral Fuel Tank**

External fuel shutoff valve. Can be laid on three sides. **Safe Portability and Storage.**

✓ **Compact and Lightweight**

**Easy to Carry and Transport.**

**ADDITIONAL FEATURES / BENEFITS**

**CD Ignition**

Maintenance free and insures easy starting.

**Freshwater Flushing Port**

User friendly - Flushes saltwater and debris out of the engine extending the life of the outboard.

**Easy Rope Starting**

Convenient for all family members to be able to start with an easy pull.

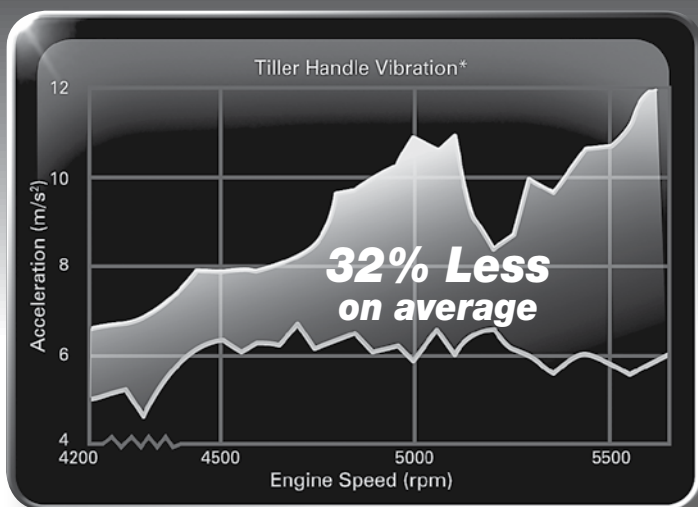
# 3.5hp

## FourStroke

### ADDITIONAL FEATURES / BENEFITS

<b>Oil site gauge</b>	Customer convenience
<b>Over-rev Protection</b>	Consumer confidence
<b>Thermostatically Controlled Water Cooling</b>	Consistent operating temperature
<b>Fuel Shut Off Valve</b>	Portability and safe transport
<b>Manual choke with automatic fast idle</b>	Easy starting in all conditions
<b>Automatic Decompression</b>	Easy pull starts
<b>Easy drain oil system</b>	Quick and easy maintenance
<b>4 Manual Trim Positions</b>	Maximizes hull performance
<b>Throttle Friction Adjustment</b>	Set and maintain speed
<b>Steering Friction Adjustment</b>	Set and maintain direction
<b>Auto reverse lock</b>	User Friendly design
<b>Ability to store on either side</b>	Worry free, convenient storage
<b>Tilt Lock System</b>	Convenience when removing boat from water or portaging
<b>Ergonomic Carrying Handle</b>	Convenient transporting
<b>Composite 3 blade propeller</b>	Lightweight performance
<b>Stainless steel shear pin</b>	User friendly maintenance

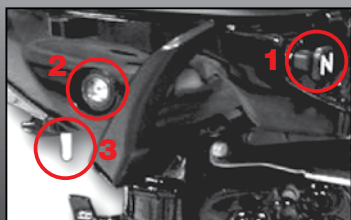
## Tiller Handle Vibration Comparisons



**Mercury is “Best in Class”**

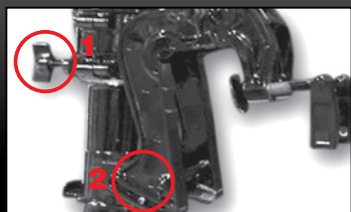
## Benefits Are In The Details...

### Convenience



1. Fast idle choke system provides fast, easy starting and warm-up
2. Oil level sight window allows the operator to quickly check the oil level
3. External fuel shutoff valve allows safe portability and storage

### Maximum Control

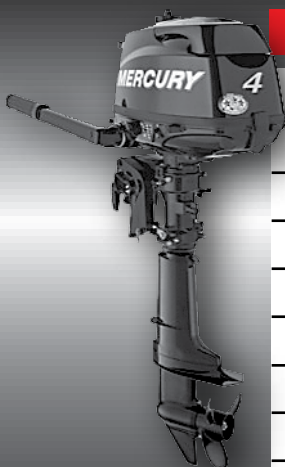


1. Easy to use co-pilot controls steering friction and easily adjusted by hand manual trim
2. Four trim position and full tilt provide maximum performance



# 4hp

## FourStroke



Standard three-year limited factory backed, nondeclining warranty.



Backed by the industry's only three year limited corrosion failure warranty.



3-Star C.A.R.B. rating on 87 octane fuel, for ultra low engine emissions.

### SPECIFICATIONS

HP/kW @ Prop	4 / 2.9
Max RPM (WOT)	4500 - 5500
Cylinders	1
Displacement (CID/cc)	7.5 / 123
Bore X Stroke (in/mm)	2.32 x 1.77 / 59 x 45
Induction System	2-valve Push Rod (OHV)
Ignition System	CDI w/ electronic spark advance
Fuel System	Carbureted
Alternator Amp/Watt	4/50 amp on select models
Cooling System	Water-Cooled w/ thermostat
Starting	Manual
Gear Ratio	2.15:1
Gear Shift	F-N-R
Propeller	8.375" x 7"
Steering	Tiller
Trim Positions	6
Shallow Water Drive	Standard
Exhaust System	Through Prop
Recommended Oil	Mercury 4-Stroke Outboard Oil
Fuel/Ethanol Tolerance	87 octane/up to 10% Ethanol
Integral Fuel Tank (gal/L)	0.30 / 1.0 (Optional 3.3/12 Remote)
Operator Warning System	Low Oil Pressure, Over-rev
SmartCraft Technology	No
Shaft Length (in/mm)	15/381 20/508
Dry Weight (lbs/kg)*	57/26 *Lightest model available

## KEY ATTRIBUTES

✓ **Lightweight Design**

At only 57 lbs. this engine is easy for customers to transport with its ergonomic handle. **Convenience and Ease of Use.**

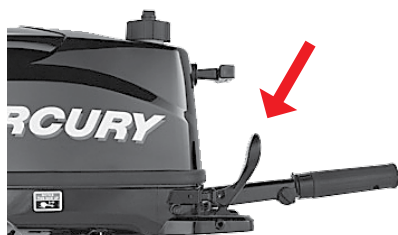
✓ **Integral Fuel Tank**

External fuel shutoff valve and remote tank connection. Can be layed on three sides. **Safe Portability and Storage.**

✓ **Forward Mounted F-N-R Shift Lever**

Allows for easy to reach shift operation, along with the longer tiller handle, for precise throttle control.

**Better Maneuverability and Control.**

✓ **Shallow Drive and 6 Trim Positions**

Allows customer to get maximum versatility in a variety of boating situations. **Maximum Performance and Convenience**

✓ **Exclusive Through Prop Exhaust**

No other 4hp offers this feature so no other is as quiet or efficient. **Performance, Noise Reduction and Durability.**

## ADDITIONAL FEATURES / BENEFITS

**CD Ignition**

Maintenance Free and insures easy starting.

**Automatic Decompression Release**

Convenient for all family members to be able to start with an easy pull.

**Automatic Reverse Lock**

For added safety and improved control.

# 4hp

## FourStroke

### ADDITIONAL FEATURES / BENEFITS

<b>Low Oil Pressure Warning System</b>	Alerts operator for peace of mind
<b>Over-rev Protection</b>	Consumer confidence
<b>Thermostatically Controlled Water Cooling</b>	Consistent operating temperature
<b>Fuel Shut Off Valve</b>	Portability and safe transport
<b>Manual choke with automatic fast idle</b>	Easy starting in all conditions
<b>4 Amp Alternator</b>	Provides battery charging on demand and allows use of electronics and lights
<b>Integral Fuel Tank</b>	Portability
<b>Twist Grip Throttle</b>	Comfortable and easy to use
<b>Throttle Friction Adjustment</b>	Set and maintain speed
<b>Steering Friction Adjustment</b>	Set and maintain direction
<b>Robust Tiller Handle</b>	Durable convenient operation
<b>Through Prop Exhaust</b>	Quiet, smoke free operation
<b>Ergonomic Carrying Handle</b>	Convenient transporting
<b>Aluminum Propeller</b>	Standard - Added value
<b>Freshwater Flush System</b>	User Friendly - Easy maintenance

<b>FOUR STROKE</b>	<b>MERCURY 4 hp</b>	<b>YAMAHA 4 hp</b>	<b>SUZUKI 4 hp</b>	<b>TOHATSU 4 hp</b>
<b>Engine Type</b>	1 Cylinder	1 Cylinder	1 Cylinder	1 Cylinder
<b>Displacement</b>	7.5 ci (123cc)	8.5 ci (139cc)	8.4 ci (138cc)	7.5 ci (123cc)
<b>Dry Weight*</b>	57 lbs (26kg)	60 lbs (27kg)	57 lbs (26kg)	57 lbs (26kg)
<b>Integral Tank</b>	1.0L (.30 gal)	1.1L (.33 gal)	1.5L (.40 gal)	1.1L (.33 gal)

\* Weight based on owner's manual

## One of the Lightest in its Class at **57 lbs.**

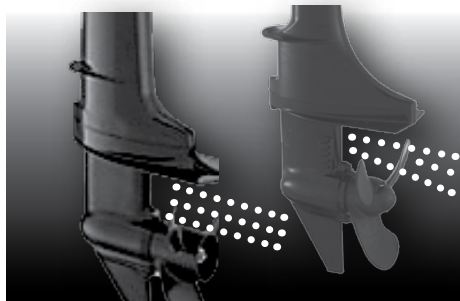
Ergonomic handle keeps the engine weight balanced for easier carrying

**Portability for convenient transporting**

## Exclusive Through-Prop Exhaust

Yamaha and Suzuki use  
"over the prop" exhaust  
which increases slippage

**Customer comfort  
and less vibration.**



## 6 Position Shallow Water Drive

Allows extended tilt angles in shallow water at low speed operation

(**Suzuki** and **Yamaha** only have **5** positions)

**Improves Hull Maneuverability**

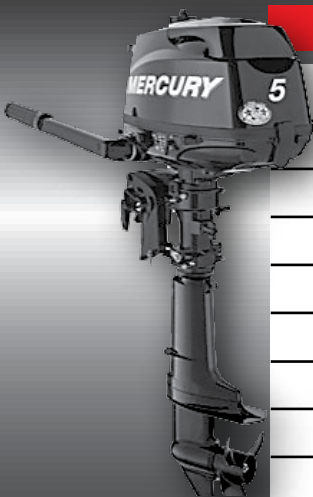
## Low Oil PSI Warning

Alerts operator of possible problem before engine damage occurs

**Peace of Mind**

# 5hp

## FourStroke



Standard three-year limited factory backed, nondeclining warranty.



Backed by the industry's only three year limited corrosion failure warranty.



3-Star C.A.R.B. rating on 87 octane fuel, for ultra low engine emissions.

### SPECIFICATIONS

HP/kW @ Prop	5 / 3.7
Max RPM (WOT)	4500 - 5500
Cylinders	1
Displacement (CID/cc)	7.5 / 123
Bore X Stroke (in/mm)	2.32 x 1.77 / 59 x 45
Induction System	2-valve Push Rod (OHV)
Ignition System	CDI w/ electronic spark advance
Fuel System	Carbureted
Alternator Amp/Watt	4/50 amp on select models
Cooling System	Water-Cooled w/ thermostat
Starting	Manual
Gear Ratio	2.15:1
Gear Shift	F-N-R
Propeller	8.375" x 8"
Steering	Tiller
Trim Positions	6
Shallow Water Drive	Standard
Exhaust System	Through Prop
Recommended Oil	Mercury 4-Stroke Outboard Oil
Fuel/Ethanol Tolerance	87 octane/up to 10% Ethanol
Integral Fuel Tank (gal/L)	0.30 / 1.0 (Optional 3.3 /12 Remote)
Operator Warning System	Low Oil Pressure, Over-rev
SmartCraft Technology	No
Shaft Length (in/mm)	15/381 20/508 25/635
Dry Weight (lbs/kg)*	57/26 *Lightest model available

**KEY ATTRIBUTES**

✓ **Lightweight Design**

At only 57 lbs. this engine is easy for customers to transport with its ergonomic handle. **Convenience and Ease of Use.**

✓ **Integral Fuel Tank**

External fuel shutoff valve and remote tank connection. Can be layed on three sides. **Safe Portability and Storage.**

✓ **Forward Mounted F-N-R Shift Lever**

Allows for easy to reach shift operation, along with the longer tiller handle, for precise throttle control.

**Better Maneuverability and Control.**



✓ **Shallow Drive and 6 Trim Positions**

Allows customer to get maximum versatility in a variety of boating situations. **Maximum Performance and Convenience**

✓ **Exclusive Through Prop Exhaust**

No other 5hp offers this feature so no other is as quiet or efficient. **Performance, Noise Reduction and Durability.**

**ADDITIONAL FEATURES / BENEFITS**

**CD Ignition**

Maintenance Free and insures easy starting.

**Manual Choke with Automatic Fast Idle**

Easy starting in all conditions

**Automatic Reverse Lock**

For added safety and improved control.

# 5hp

## FourStroke

### ADDITIONAL FEATURES / BENEFITS

<b>Low Oil Pressure Warning System</b>	Alerts operator for peace of mind
<b>Over-rev Protection</b>	Consumer confidence
<b>Thermostatically Controlled Water Cooling</b>	Consistent operating temperature
<b>Fuel Shut Off Valve</b>	Portability and safe transport
<b>4 Amp Alternator</b>	Provides battery charging on demand and allows use of electronics and lights
<b>Twist Grip Throttle</b>	Comfortable and easy to use
<b>Throttle Friction Adjustment</b>	Set and maintain speed
<b>Steering Friction Adjustment</b>	Set and maintain direction
<b>Robust Tiller Handle</b>	Durable convenient operation
<b>Ergonomic Carrying Handle</b>	Convenient transporting
<b>Aluminum Propeller</b>	Standard - Added value
<b>Freshwater Flush System</b>	User Friendly - Easy maintenance



<b>FOUR STROKE</b>	<b>MERCURY 5 hp</b>	<b>TOHATSU 5 hp</b>	<b>HONDA 5 hp</b>
<b>Engine Type</b>	1 Cylinder	1 Cylinder	1 Cylinder
<b>Displacement</b>	7.5 ci (123cc)	7.5 ci (123cc)	7.8 ci (127cc)
<b>Dry Weight*</b>	57 lbs (26kg)	57 lbs (26kg)	60 lbs (27.2kg)
<b>Integral Tank</b>	1.0L (.30 gal)	1.0L (.30 gal)	NA

\* Weight based on owner's manual

## **One of the Lightest in its Class at 57 lbs.**

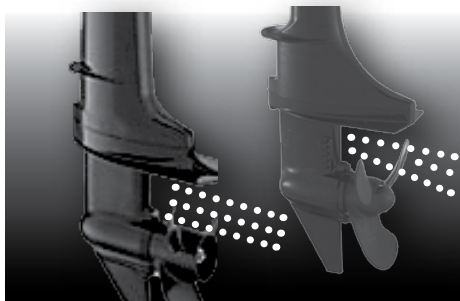
*Ergonomic handle keeps the engine weight balanced for easier carrying*

**Portability for convenient transporting**

## **Exclusive Through-Prop Exhaust**

*Aluminum with rubber hub prop instead of plastic with shear pin for drive protection. Underwater exhaust is quieter*

**Noise Reduction and  
Durability**



## **Easy Pull Starting**

*Recoil starter has larger reel along with an automatic decompression device making manual starting fast and easy*

**Comfort and Reliability**

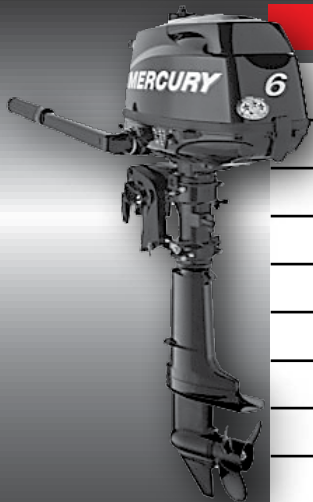
## **Low Oil PSI Warning**

*Alerts operator of possible problem before engine damage occurs*

**Peace of Mind**

# 6hp

## FourStroke



Standard three-year limited factory backed, nondeclining warranty.



Backed by the industry's only three year limited corrosion failure warranty.



3-Star C.A.R.B. rating on 87 octane fuel, for ultra low engine emissions.

### SPECIFICATIONS

HP/kW @ Prop	6 / 4.4
Max RPM (WOT)	5000 - 6000
Cylinders	1
Displacement (CID/cc)	7.5 / 123
Bore X Stroke (in/mm)	2.32 x 1.77 / 59 x 45
Induction System	2-valve Push Rod (OHV)
Ignition System	CDI w/ electronic spark advance
Fuel System	Carbureted
Alternator Amp/Watt	4/50 amp on select models
Cooling System	Water-Cooled w/ thermostat
Starting	Manual
Gear Ratio	2.15:1
Gear Shift	F-N-R
Propeller	8.375" x 8"
Steering	Tiller
Trim Positions	6
Shallow Water Drive	Standard
Exhaust System	Through Prop
Recommended Oil	Mercury 4-Stroke Outboard Oil
Fuel/Ethanol Tolerance	87 octane/up to 10% Ethanol
Integral Fuel Tank (gal/L)	0.30 / 1.0 (Optional 3.3 /12 Remote)
Operator Warning System	Low Oil Pressure, Over-rev
SmartCraft Technology	No
Shaft Length (in/mm)	15/381 20/508
Dry Weight (lbs/kg)*	57/26 *Lightest model available

**KEY ATTRIBUTES**

✓ **Lightweight Design**

At only 57 lbs. this engine is easy for customers to transport with its ergonomic handle. **Convenience and Ease of Use.**

✓ **Integral Fuel Tank**

External fuel shutoff valve and remote tank connection. Can be layed on three sides. **Safe Portability and Storage.**

✓ **Forward Mounted F-N-R Shift Lever**

Allows for easy to reach shift operation, along with the longer tiller handle, for precise throttle control.

**Better Maneuverability and Control.**



✓ **Shallow Drive and 6 Trim Positions**

Allows customer to get maximum versatility in a variety of boating situations. **Maximum Performance and Convenience**

✓ **Exclusive Through Prop Exhaust**

No other 6hp offers this feature so no other is as quiet or efficient. **Performance, Noise Reduction and Durability.**

**ADDITIONAL FEATURES / BENEFITS**

<b>CD Ignition</b>	Maintenance Free and insures easy starting.
<b>Manual Choke with Automatic Fast Idle</b>	Easy starting in all conditions
<b>Automatic Reverse Lock</b>	For added safety and improved control.

# 6hp

## FourStroke

### ADDITIONAL FEATURES / BENEFITS

<b>Low Oil Pressure Warning System</b>	Alerts operator for peace of mind
<b>Over-rev Protection</b>	Consumer confidence
<b>Thermostatically Controlled Water Cooling</b>	Consistent operating temperature
<b>Fuel Shut Off Valve</b>	Portability and safe transport
<b>4 Amp Alternator</b>	Provides battery charging on demand and allows use of electronics and lights
<b>Twist Grip Throttle</b>	Comfortable and easy to use
<b>Throttle Friction Adjustment</b>	Set and maintain speed
<b>Steering Friction Adjustment</b>	Set and maintain direction
<b>Robust Tiller Handle</b>	Durable convenient operation
<b>Ergonomic Carrying Handle</b>	Convenient transporting
<b>Aluminum Propeller</b>	Standard - Added value
<b>Freshwater Flush System</b>	User Friendly - Easy maintenance

<b>FOUR STROKE</b>	<b>MERCURY 6 hp</b>	<b>YAMAHA 6 hp</b>	<b>SUZUKI 6 hp</b>	<b>TOHATSU 5 hp</b>
<b>Engine Type</b>	1 Cylinder	1 Cylinder	1 Cylinder	1 Cylinder
<b>Displacement</b>	7.5 ci (123cc)	8.5 ci (139cc)	8.4 ci (138cc)	7.5 ci (123cc)
<b>Dry Weight*</b>	57 lbs (26kg)	60 lbs (27kg)	57 lbs (26kg)	57 lbs (26kg)
<b>Integral Tank</b>	1.0L (.30 gal)	1.1L (.33 gal)	1.5L (.40 gal)	1.1L (.33 gal)

\* Weight based on owner's manual

## **One of the Lightest in its Class at 57 lbs.**

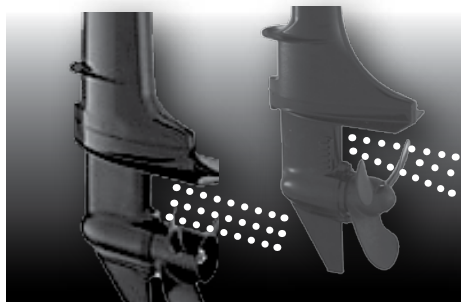
*Ergonomic handle keeps the engine weight balanced for easier carrying*

**Portability for convenient transporting**

## **Exclusive Through-Prop Exhaust**

*Aluminum with rubber hub prop instead of plastic with shear pin for drive protection. Underwater exhaust is quieter*

**Noise Reduction and  
Durability**



## **Easy Pull Starting**

*Recoil starter has larger reel along with an automatic decompression device making manual starting fast and easy*

**Comfort and Reliability**

## **Low Oil PSI Warning**

*Alerts operator of possible problem before engine damage occurs*

**Peace of Mind**

# 8hp

## FourStroke



Standard three-year limited factory backed, nondeclining warranty.



Backed by the industry's only three year limited corrosion failure warranty.



3-Star C.A.R.B. rating on 87 octane fuel, for ultra low engine emissions.

### SPECIFICATIONS

HP/kW @ Prop	8 / 5.9
Max RPM (WOT)	5000 - 6000
Cylinders	2 (in-line)
Displacement (CID/cc)	12.8 / 208
Bore X Stroke (in/mm)	2.16 x 1.73 / 55 x 44
Induction System	2-valves per cylinder Single Overhead Cam (SOHC)
Ignition System	CDI w/ electronic spark advance
Fuel System	Carbureted
Alternator Amp/Watt	6 / 76 (electric)
Cooling System	Water-Cooled w/ thermostat
Starting	Manual or Electric
Gear Ratio	2.08:1
Gear Shift	F-N-R
Propeller	8.875" x 7.5"
Steering	Tiller
Trim Positions	5 w/auto ratchet
Shallow Water Drive	Standard
Exhaust System	Through Prop
Recommended Oil	Mercury 4-Stroke Outboard Oil
Fuel/Ethanol Tolerance	87 octane/up to 10% Ethanol
Remote Fuel Tank (gal/L)	Standard 3.2 / 12
Operator Warning System	Low Oil Pressure, Over-rev
SmartCraft Technology	No
Shaft Length (in/mm)	15/381 20/508
Dry Weight (lbs/kg)*	83/37.6 *Lightest model available

## KEY ATTRIBUTES

### ✓ **Lightweight & Compact Design**

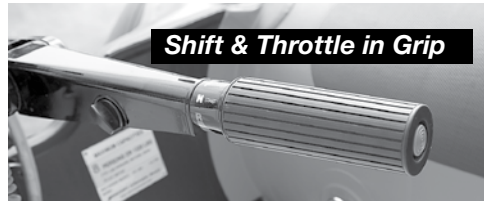
At only 83 lbs. this engine is perfect for a wide range of small boats.

**Versatility in Applications.**

### ✓ **Multi-Function Tiller Handle**

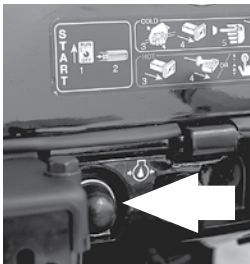
Offers one-hand operation and total control over shifting, throttle, steering, engine stop, throttle friction and tilting.

**Better Maneuverability and Ease of Use.**



### ✓ **Exclusive Ratcheting Trim**

Push down on the tiller handle to manually reset the 3-position memory tilt pin. **Convenience.**



### ✓ **Fuel Primer & Fast Idle System**

Better than competitive auto-choke systems that prove too lean for today's changing fuels.

**Provides Fast, Easy Starting & Simple Fast Idle Control. Reliability.**

## ADDITIONAL FEATURES / BENEFITS

### **Tilt Lock**

Handy when removing boat from water.

### **Water Cooled Fuel Cooler**

Thermostatically controlled - Minimizes vapor lock and hot fuel issues for long term reliability.

### **Manual Recoil Starter**

Standard on all electric start models ensuring engine can be started if battery loses its charge.



### ADDITIONAL FEATURES / BENEFITS

<b>CD Ignition</b>	No maintenance - quick reliable starts
<b>Over-rev Protection</b>	Consumer confidence
<b>Low Oil Pressure Warning System</b>	Alerts operator for peace of mind
<b>Manual or Electric Start</b>	Consumer confidence in low battery cases
<b>6 amp Alternator (Electric Models)</b>	Provides battery charging on demand and allows use of electronics and lights
<b>Twist Grip Throttle</b>	Comfortable and easy to use
<b>Throttle Friction Adjustment</b>	Set and maintain speed
<b>Steering Friction Adjustment</b>	Set and maintain direction
<b>Robust Tiller Handle</b>	Durable convenient operation
<b>Ergonomic Carrying Handle</b>	Convenient transporting
<b>Aluminum Propeller</b>	Standard - Added value
<b>Freshwater Flush System</b>	User Friendly - Easy maintenance
<b>Automatic Reverse Lock</b>	User friendly design
<b>F-N-R Shift</b>	Easy maneuverability
<b>5 Tilt Positions &amp; Shallow Water Drive</b>	Maximizes hull performance
<b>Easy Access Oil Drain Plug</b>	Easy Maintenance
<b>Throttle Only Button</b>	Tiller models only - Easy starting in the rare case of a flooded engine

# FourStroke

# 8 hp

FOUR STROKE	MERCURY 8/9.9 hp	YAMAHA 8/9.9 hp	SUZUKI 8/9.9 hp	TOHATSU 8/9.9 hp	HONDA 8/9.9 hp
Engine Type	2 Cylinder	2 Cylinder	2 Cylinder	2 Cylinder	2 Cylinder
Displacement	12.8 ci (208cc)	12.07 ci (197cc)	12.7 ci (197cc)	12.8 ci (208cc)	13.5 ci (222cc)
Dry Weight*	83 lbs (37.6kg)	86 lbs (39.5kg)	95 lbs (43kg)	83 lbs (37.2kg)	98 lbs (44.5kg)

\* Weight based on owner's manual

**8/9.9hp is the Lightest in its Class at 83 lbs.**

Ergonomic handle keeps the engine weight balanced for easier carrying

**Portability for convenient transporting**

## Exclusive Fuel Primer & Fast Idle System

Better than competitive auto-choke systems that prove too lean for today's changing fuels.

**Provides Fast Easy Starting and Simple Fast Idle Control.**



**Yamaha Prime Start  
Honda Auto Start  
Tohatsu Fast Idle Choke**

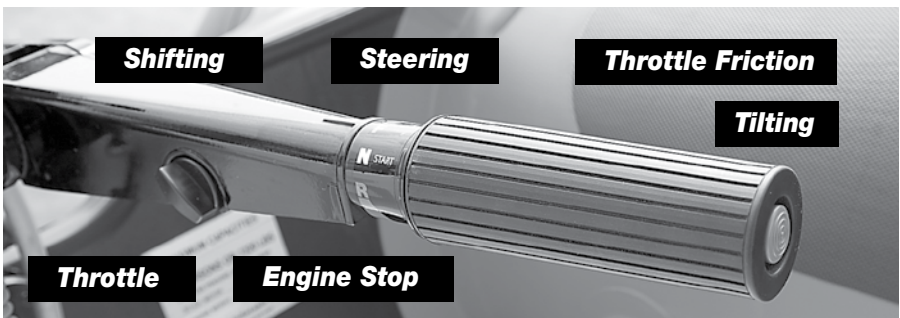
**VS.**

**Mercury's  
Primer System**

## Multi-Function Tiller Handle

Offers one-hand operation and total control

**Better Maneuverability and Ease of Use.**



# 9.9hp

## FourStroke



Standard three-year  
limited factory backed,  
nondeclining warranty.



Backed by the industry's  
only three year limited  
corrosion failure warranty.



3-Star C.A.R.B. rating on  
87 octane fuel, for ultra low  
engine emissions.

### SPECIFICATIONS

HP/kW @ Prop	9.9 / 7.3
Max RPM (WOT)	5000 - 6000
Cylinders	2 (in-line)
Displacement (CID/cc)	12.8 / 208
Bore X Stroke (in/mm)	2.16 x 1.73 / 55 x 44
Induction System	2 valves per cylinder Single Overhead Cam (SOHC)
Ignition System	CDI w/ electronic spark advance
Fuel System	Carbureted
Alternator Amp/Watt	6 / 76 (electric)
Cooling System	Water-Cooled w/ thermostat
Starting	Manual or Electric
Gear Ratio	2.08:1
Gear Shift	F-N-R
Propeller	8.875" x 8.5"
Steering	Tiller
Trim Positions	5 w/auto ratchet
Shallow Water Drive	Standard
Exhaust System	Through Prop
Recommended Oil	Mercury 4-Stroke Outboard Oil
Fuel/Ethanol Tolerance	87 octane/up to 10% Ethanol
Remote Fuel Tank (gal/L)	Standard 3.2 / 12
Operator Warning System	Low Oil Pressure, Over-rev
SmartCraft Technology	No
Shaft Length (in/mm)	15/381 20/508 25/635
Dry Weight (lbs/kg)*	83/37.6 *Lightest model available

**FourStroke**

**9.9hp**

**KEY ATTRIBUTES**

✓ **Lightweight & Compact Design**

At only 83 lbs. this engine is perfect for a wide range of small boats.

**Versatility in Applications.**

✓ **Multi-Function  
Tiller Handle**

Offers one-hand operation and total control over shifting, throttle, steering, engine stop, throttle friction and tilting.

**Better Maneuverability and Ease of Use.**



✓ **Exclusive Ratcheting Trim**

Push down on the tiller handle to manually reset the 3-position memory tilt pin. **Convenience.**



✓ **Fuel Primer  
& Fast Idle System**

Better than competitive auto-choke systems that prove too lean for today's changing fuels.

**Provides Fast, Easy Starting & Simple Fast Idle Control. Reliability.**

**ADDITIONAL FEATURES / BENEFITS**

**Tilt Lock**

Handy when removing boat from water.

**Water Cooled  
Fuel Cooler**

Thermostatically controlled - Minimizes vapor lock and hot fuel issues for long term reliability.

**Manual  
Recoil Starter**

Standard on all electric start models ensuring engine can be started if battery loses its charge.

# 9.9hp

## FourStroke

### ADDITIONAL FEATURES / BENEFITS

<b>CD Ignition</b>	No maintenance - quick reliable starts
<b>Over-rev Protection</b>	Consumer confidence
<b>Low Oil Pressure Warning System</b>	Alerts operator for peace of mind
<b>Manual or Electric Start</b>	Consumer confidence in low battery cases
<b>6 amp Alternator (Electric Models)</b>	Provides battery charging on demand and allows use of electronics and lights
<b>Twist Grip Throttle</b>	Comfortable and easy to use
<b>Throttle Friction Adjustment</b>	Set and maintain speed
<b>Steering Friction Adjustment</b>	Set and maintain direction
<b>Robust Tiller Handle</b>	Durable convenient operation
<b>Ergonomic Carrying Handle</b>	Convenient transporting
<b>Aluminum Propeller</b>	Standard - Added value
<b>Freshwater Flush System</b>	User Friendly - Easy maintenance
<b>Automatic Reverse Lock</b>	User friendly design
<b>F-N-R Shift</b>	Easy maneuverability
<b>5 Tilt Positions &amp; Shallow Water Drive</b>	Maximizes hull performance
<b>Easy Access Oil Drain Plug</b>	Easy Maintenance
<b>Throttle Only Button</b>	Tiller models only - Easy starting in the rare case of a flooded engine

**FourStroke**

**9.9hp**

<b>FOUR STROKE</b>	<b>MERCURY 8/9.9 hp</b>	<b>YAMAHA 8/9.9 hp</b>	<b>SUZUKI 8/9.9 hp</b>	<b>TOHATSU 8/9.9 hp</b>	<b>HONDA 8/9.9 hp</b>
<b>Engine Type</b>	2 Cylinder	2 Cylinder	2 Cylinder	2 Cylinder	2 Cylinder
<b>Displacement</b>	12.8 ci (208cc)	12.07 ci (197cc)	12.7 ci (197cc)	12.8 ci (208cc)	13.5 ci (222cc)
<b>Dry Weight*</b>	83 lbs (37.6kg)	86 lbs (39.5kg)	96 lbs (43.5kg)	83 lbs (37.2kg)	98 lbs (44.5kg)

\* Weight based on owner's manual

**8/9.9hp is the Lightest in its Class at 83 lbs.**

Ergonomic handle keeps the engine weight balanced for easier carrying

**Portability for convenient transporting**

### **Exclusive Fuel Primer & Fast Idle System**

Better than competitive auto-choke systems that prove too lean for today's changing fuels.

**Provides Fast Easy Starting  
and Simple Fast Idle Control.**



**Yamaha Prime Start  
Honda Auto Start  
Tohatsu Fast Idle Choke**

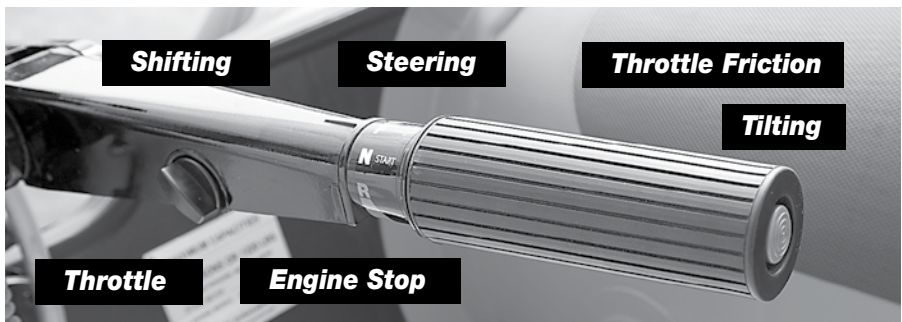
**VS.**

**Mercury's  
Primer System**

### **Multi-Function Tiller Handle**

Offers one-hand operation and total control

**Better Maneuverability and Ease of Use.**



# 9.9hp BigFoot FourStroke



Standard three-year limited factory backed, nondeclining warranty.



Backed by the industry's only three year limited corrosion failure warranty.



3-Star C.A.R.B. rating on 87 octane fuel, for ultra low engine emissions.

## SPECIFICATIONS

HP/kW @ Prop	9.9 / 7.3
Max RPM (WOT)	5000 - 6000
Cylinders	2 (in-line)
Displacement (CID/cc)	12.8 / 208
Bore X Stroke (in/mm)	2.16 x 1.73 / 55 x 44
Induction System	2 valves per cylinder Single Overhead Cam (SOHC)
Ignition System	CDI w/ electronic spark advance
Fuel System	Carbureted
Alternator Amp/Watt	6/76 Electric
Cooling System	Water-Cooled w/ thermostat
Starting	Manual or Electric
Gear Ratio	2.42:1
Gear Shift	F-N-R
Propeller	10" x 7" 4-Blade
Steering	Remote or Tiller
Trim Positions	5 w/auto ratchet
Shallow Water Drive	Standard
Exhaust System	Through Prop
Recommended Oil	Mercury 4-Stroke Outboard Oil
Fuel/Ethanol Tolerance	87 octane/up to 10% Ethanol
Remote Fuel Tank (gal/L)	3.2 / 12
Operator Warning System	Low Oil Pressure, Over-rev
SmartCraft Technology	No
Shaft Length (in/mm)	20/508 25/635
Dry Weight (lbs/kg)*	96/44 *Lightest model available

**FourStroke**

**BigFoot 9.9hp**

**KEY ATTRIBUTES**

✓ **Lightweight Compact Design**

At only 96 lbs. this engine is perfect for a wide range of small boats.

*Versatility in Applications.*

✓ **Multi-Function  
Tiller Handle**

Offers one-hand operation and total control over shifting, throttle, steering, engine stop, throttle friction and tilting.

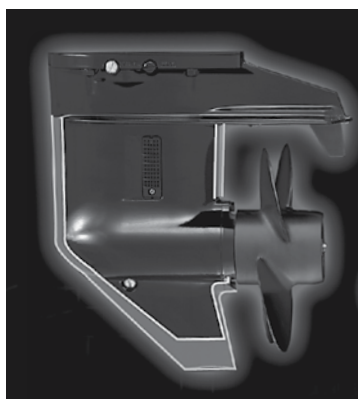
*Better Maneuverability and Ease of Use.*



✓ **BigFoot's Gearcase**

Locates propeller deeper in the water. The lower position keeps the prop below turbulent water, allowing it to operate in cleaner, less aerated water.

*Better performance and efficiency.*



**BigFoot's Propellers**

Designed with 20% more surface area than competitive props for greater performance.

*More power and acceleration.*

**BigFoot's Low Gear Ratio**

The 2.42:1 ratio improves overall thrust and overall efficiency.

*Superior maneuverability.*



# 9.9hp *BigFoot* **FourStroke**

## **ADDITIONAL FEATURES / BENEFITS**

<b>CD Ignition</b>	No maintenance - quick reliable starts
<b>Over-rev Protection</b>	Consumer confidence
<b>Low Oil Pressure Warning System</b>	Alerts operator for peace of mind
<b>Manual or Electric Start</b>	Consumer confidence in low battery cases
<b>6 amp Alternator (Electric Models)</b>	Provides battery charging on demand and allows use of electronics and lights
<b>Ergonomic Carrying Handle</b>	Convenient transporting
<b>4 Blade High Thrust Prop</b>	High thrust and low speed handling
<b>Through Prop Exhaust</b>	Quiet smoke free operation
<b>Automatic Reverse Lock</b>	User friendly design
<b>F-N-R Shift</b>	Easy maneuverability
<b>5 Tilt Positions &amp; Shallow Water Drive</b>	Maximizes hull performance
<b>Dual Water Pickups</b>	Supply of cooling water at all times
<b>Throttle Only Button</b>	Tiller models only - Easy starting in the rare case of a flooded engine
<b>Larger Gears, Bearings and Prop Shaft</b>	Superior durability
<b>Thermostatically Controlled Water Cooling</b>	Consistent operating temperatures
<b>Manual Choke with Automatic Fast Idle</b>	Easy starting in all conditions
<b>Manual Primer</b>	Easy starting in cold conditions

**FourStroke**

**BigFoot 9.9hp**

<b>FOUR STROKE</b>	<b>MERCURY 9.9 hp BigFoot</b>	<b>YAMAHA 9.9 hp High Thrust</b>	<b>HONDA 9.9 hp Power Thrust</b>
<b>Engine Type</b>	2 Cylinder	2 Cylinder	2 Cylinder
<b>Displacement</b>	12.8 ci (208cc)	12.9 ci (212cc)	13.5 ci (222cc)
<b>Gear Ratio</b>	2.42:1	2.92:1	2.33:1
<b>Dry Weight*</b>	96 lbs (44kg)	104 lbs (47kg)	98 lbs (44.5kg)

\* Weight based on owner's manual

**9.9hp is the Lightest "Kicker" in its Class at 96 lbs.**

### **Fuel Primer & Fast Idle System**

Better than competitive auto-choke systems that prove too lean for today's changing fuels.

**Provides Fast Easy Starting  
and Simple Fast Idle Control.**



**Yamaha Prime Start  
Honda Auto Start**

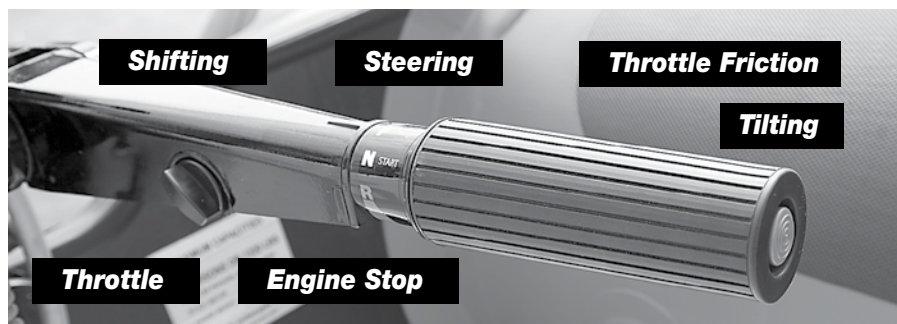
**vs.**

**Mercury's  
Primer System**

### **Multi-Function Tiller Handle**

Offers one-hand operation and total control of 6 driving functions

**Better Maneuverability and Ease of Use.**



# 9.9hp ProKicker FourStroke



Standard three-year limited factory backed, nondeclining warranty.



Backed by the industry's only three year limited corrosion failure warranty.



3-Star C.A.R.B. rating on 87 octane fuel, for ultra low engine emissions.

## SPECIFICATIONS

HP/kW @ Prop	9.9 / 7.3
Max RPM (WOT)	5000 - 6000
Cylinders	2 (in-line)
Displacement (CID/cc)	12.8 / 208
Bore X Stroke (in/mm)	2.16 x 1.73 / 55 x 44
Induction System	2 valves per cylinder Single Overhead Cam (SOHC)
Ignition System	CDI w/ electronic spark advance
Fuel System	Carbureted
Alternator Amp/Watt	6/76 (electric)
Cooling System	Water-Cooled w/ thermostat
Starting	Manual or Electric
Gear Ratio	2.42:1
Gear Shift	F-N-R
Propeller	10" x 7" 4-Blade
Steering	Remote or Tiller
Tilt System	Power Tilt
Shallow Water Drive	16° Trim Range
Exhaust System	Through Prop
Recommended Oil	Mercury 4-Stroke Outboard Oil
Fuel/Ethanol Tolerance	87 octane/up to 10% Ethanol
Integral Fuel Tank (gal/L)	3.2 / 12
Operator Warning System	Low Oil Pressure, Over-rev
SmartCraft Technology	No
Shaft Length (in/mm)	20/508 25/635
Dry Weight (lbs/kg)*	108/49 *Lightest model available

**FourStroke**

**ProKicker 9.9hp**

**KEY ATTRIBUTES**

✓ **Lightweight Compact Design**

At only 108 lbs. this engine is perfect for a wide range of small boats.

*Versatility in Applications.*

✓ **Multi-Function  
Tiller Handle**

Offers one-hand operation and total control over shifting, throttle, steering, engine stop, throttle friction and tilting.

*Better Maneuverability and Ease of Use.*

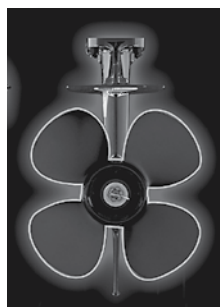
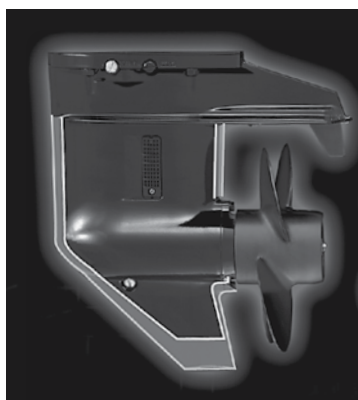


✓ **ProKicker's Gearcase**

Locates propeller deeper in the water.

The lower position keeps the prop below turbulent water, allowing it to operate in cleaner, less aerated water.

*Better performance and efficiency.*



**ProKicker's Propellers**

Designed with 20% more surface area than competitive props for greater performance.

*More power and acceleration.*

**ProKicker's Low Gear Ratio**

The 2.42:1 ratio improves overall thrust and overall efficiency.

*Superior maneuverability.*

# 9.9hp ProKicker **FourStroke**

## ADDITIONAL FEATURES / BENEFITS

<b>CD Ignition</b>	No maintenance - quick reliable starts
<b>Over-rev Protection</b>	Consumer confidence
<b>Low Oil Pressure Warning System</b>	Alerts operator for peace of mind
<b>Manual or Electric Start</b>	Consumer confidence in low battery cases
<b>6 amp Alternator (Electric Models)</b>	Provides battery charging on demand and allows use of electronics and lights
<b>Ergonomic Carrying Handle</b>	Convenient transporting
<b>4 Blade High Thrust Prop</b>	High thrust and low speed handling
<b>Through Prop Exhaust</b>	Quiet smoke free operation
<b>Automatic Reverse Lock</b>	User friendly design
<b>F-N-R Shift</b>	Easy maneuverability
<b>Standard Integral Power Tilt</b>	For fast and quiet deployment
<b>Dual Water Pickups</b>	Supply of cooling water at all times
<b>Throttle Only Button</b>	Tiller models only - Easy starting in the rare case of a flooded engine
<b>Larger Gears, Bearings and Prop Shaft</b>	Superior durability
<b>Thermostatically Controlled Water Cooling</b>	Consistent operating temperatures
<b>Manual Choke with Automatic Fast Idle</b>	Easy starting in all conditions
<b>Manual Primer</b>	Easy starting in cold conditions

# FourStroke ProKicker 9.9hp

FOUR STROKE	MERCURY 9.9 hp ProKicker	YAMAHA 9.9 hp High Thrust	SUZUKI 9.9 hp High Thrust	HONDA 9.9 hp Power Thrust
Engine Type	2 Cylinder	2 Cylinder	2 Cylinder	2 Cylinder
Displacement	12.8 ci (208cc)	12.9 ci (212cc)	18.2 ci (302cc)	13.5 ci (222cc)
Gear Ratio	2.42:1	2.92:1	2.08:1	2.33:1
Dry Weight*	108 lbs (48kg)	114 lbs (52kg)	118 lbs (44kg)	124 lbs (56kg)

\* Weight based on owner's manual Standard with Power Tilt

**9.9hp is the Lightest "Kicker" in its Class at 108 lbs.**

## Patented Centering Straps

Holds the engine straight without additional hold-downs when running in rough conditions or tailering (Standard On Tiller Pro Kickers)

**Prevents Engine Component Damage**

## Compact Power Tilt & Heavy Duty Transom Brackets

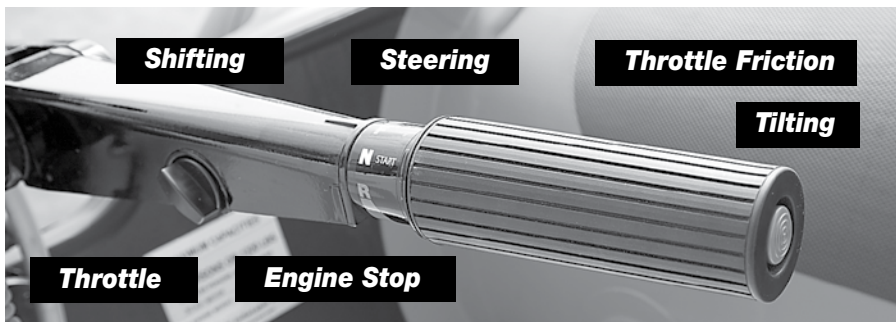
Prokicker models feature heavy duty transom brackets - integrated power tilt is very quiet and travels the full range in under 5 seconds

**Improved Durability with the Fastest Tilt in it's Class**

## Multi-Function Tiller Handle

Offers one-hand operation and total control of 6 driving functions

**Better Maneuverability and Ease of Use.**



# 15hp

## FourStroke



Standard three-year limited factory backed, nondeclining warranty.



Backed by the industry's only three year limited corrosion failure warranty.



3-Star C.A.R.B. rating on 87 octane fuel, for ultra low engine emissions.

### SPECIFICATIONS

HP/kW @ Prop	15 / 11.1
Max RPM (WOT)	5000 - 6000
Cylinders	2 (in-line)
Displacement (CID/cc)	21.4 / 351
Bore X Stroke (in/mm)	2.40 x 2.36 / 61 x 60
Induction System	2 valves per cylinder Single Overhead Cam (SOHC)
Ignition System	CDI w/ electronic spark advance
Fuel System	Carbureted
Alternator Amp/Watt	12/138 (electric)
Cooling System	Water-Cooled w/ thermostat
Starting	Manual or Electric
Gear Ratio	2.15:1
Gear Shift	F-N-R
Propeller	9.25" x 9"
Steering	Remote or Tiller
Trim Positions	6 Position Trim Pin
Shallow Water Drive	Standard
Exhaust System	Through Prop
Recommended Oil	Mercury 4-Stroke Outboard Oil
Fuel/Ethanol Tolerance	87 octane/up to 10% Ethanol
Remote Fuel Tank (gal/L)	Standard, 6.6 / 25
Operator Warning System	Low Oil Pressure, Over-rev
SmartCraft Technology	No
Shaft Length (in/mm)	15/381 20/508
Dry Weight (lbs/kg)*	111/52 *Lightest model available

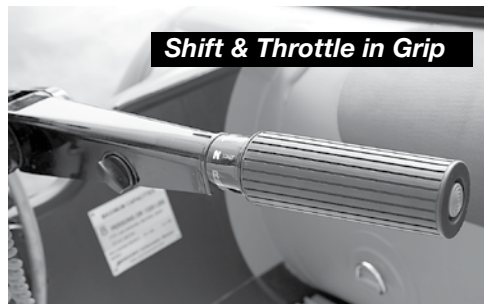
**KEY ATTRIBUTES****✓ Large Displacement Design**

At 21.4 cubic inches, this engine delivers strong low end torque needed to get the hull up on plane, with quicker throttle response and acceleration. **Maximum overall performance and efficiency.**

**✓ Multi-Function Tiller Handle**

Offers one-hand operation and total control over shifting, throttle, steering, engine stop, throttle friction and tilting.

**Better maneuverability and ease of use.**

**✓ Exclusive Engine Mount**

Mercury's "wishbone" style motor mount system cradles the powerhead, absorbing the torsional rotation of the crankshaft and isolating any vibration transmission to the hull.

**Provides smooth overall operation.**

**✓ Exclusive Fuel Primer & Fast Idle System**

Better than competitive auto-choke systems that prove too lean for today's changing fuels.

**Provides fast, easy starting & simple fast idle control. Reliability.**



# 15hp

## FourStroke

### ADDITIONAL FEATURES / BENEFITS

<b>12 Amp Alternator</b>	Provides battery charging on demand and allows use of electronics and lights
<b>CD Ignition</b>	No maintenance - quick reliable starts
<b>Over-rev Protection</b>	Consumer confidence
<b>Low Oil Pressure Warning System</b>	Alerts operator for peace of mind
<b>Backup Rope Start On Electric Models</b>	Consumer confidence in low battery cases
<b>Ergonomic Carrying Handle</b>	Convenient, balanced transporting
<b>Thermostatically Controlled Water Cooling</b>	Consistent operating temperatures
<b>Through Prop Exhaust</b>	Quiet smoke free operation
<b>Automatic Reverse Lock</b>	User friendly design
<b>F-N-R Shift</b>	Easy maneuverability
<b>Dual Water Pickups</b>	Supply of cooling water at all times
<b>6 Trim Positions and Shallow Water Drive</b>	Maximizes hull performance

**FourStroke****15 hp**

<b>FOUR STROKE</b>	<b>MERCURY 15/20 hp</b>	<b>YAMAHA 15/20 hp</b>	<b>SUZUKI 15 hp</b>	<b>TOHATSU 15/20 hp</b>	<b>HONDA 15/20 hp</b>
<b>Engine Type</b>	2 Cylinder	2 Cylinder	2 Cylinder	2 Cylinder	2 Cylinder
<b>Displacement</b>	21.4 ci (351cc)	22.1 ci (362cc)	18.2 ci (302cc)	21.4 ci (351cc)	21.3 ci (350cc)
<b>Dry Weight*</b>	111 lbs (52kg)	114 lbs (52.6kg)	97 lbs (44kg)	114 lbs (52.6kg)	103 lbs (46.7kg)

\* Weight based on owner's manual

## **Automatic Reverse Lock**

*Hooks automatically engage when shifting to reverse.  
This prevents the engine from popping up out of the water.  
No need to remember to operate a separate lock down lever.*

## **Portability for convenient transporting**

## **Exclusive Fuel Primer & Fast Idle System**

*Better than competitive auto-choke systems  
that prove too lean for today's changing fuels.*

***Provides Fast Easy Starting  
and Simple Fast Idle Control.***



***Yamaha Prime Start  
Honda Auto Start  
Tohatsu Fast Idle Choke***

**VS.**

***Mercury's  
Primer System***

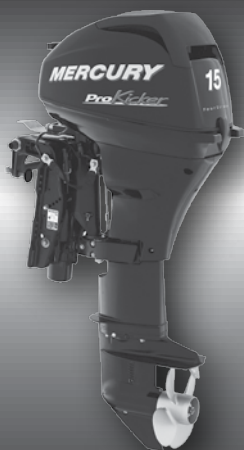


## **Manual Recoil Starter**

*With the manual recoil standard on  
electric start models you always have  
the capability of starting the engine even  
if the battery charge is low.*

***Reliability with Peace of Mind***

# 15hp ProKicker FourStroke



Standard three-year limited factory backed, nondeclining warranty.



Backed by the industry's only three year limited corrosion failure warranty.



3-Star C.A.R.B. rating on 87 octane fuel, for ultra low engine emissions.

## SPECIFICATIONS

HP/kW @ Prop	15 / 11.1
Max RPM (WOT)	5000 - 6000
Cylinders	2 (in-line)
Displacement (CID/cc)	21.4 / 351
Bore X Stroke (in/mm)	2.40 x 2.36 / 61 x 60
Induction System	2 valves per cylinder Single Overhead Cam (SOHC)
Ignition System	CDI w/ electronic spark advance
Fuel System	Carbureted
Alternator Amp/Watt	12/138 (electric)
Cooling System	Water-Cooled w/ thermostat
Starting	Manual or Electric
Gear Ratio	2.15:1
Gear Shift	F-N-R
Propeller	10" x 7" 4-Blade
Steering	Remote or Tiller
Tilt Positions	Power Tilt
Shallow Water Drive	Standard
Exhaust System	Through Prop
Recommended Oil	Mercury 4-Stroke Outboard Oil
Fuel/Ethanol Tolerance	87 octane/up to 10% Ethanol
Remote Fuel Tank (gal/L)	Standard, 6.6 / 25
Operator Warning System	Low Oil Pressure, Over-rev
SmartCraft Technology	No
Shaft Length (in/mm)	20/508 25/635
Dry Weight (lbs/kg)*	132/62 *Lightest model available

**KEY ATTRIBUTES****✓ Large Displacement Design**

At 21.4 cubic inches, delivers strong low end torque needed to get the hull up on plane, with quicker throttle response and acceleration.

**Maximum overall performance and efficiency.**

**✓ Multi-Function Tiller Handle**

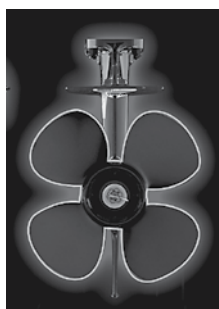
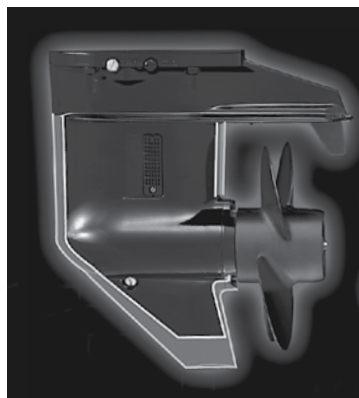
Offers one-hand operation and total control over shifting, throttle, steering, engine stop, throttle friction and tilting.

**Better Maneuverability and Ease of Use.**

**✓ ProKicker's Gearcase**

Locates propeller deeper in the water. The lower position keeps the prop below turbulent water, allowing it to operate in cleaner, less aerated water.

**Better performance and efficiency.**

**ProKicker's Propellers**

Designed with 20% more surface area than competitive props for greater performance.

**More power and acceleration.**

**ProKicker's Low Gear Ratio**

The 2.15:1 ratio improves overall thrust and overall efficiency.

**Superior maneuverability.**

# 15hp ProKicker

## FourStroke

### ADDITIONAL FEATURES / BENEFITS

<b>Twin Cylinder</b>	Lightweight compact design
<b>CD Ignition</b>	No maintenance - quick reliable starts
<b>Over-rev Protection</b>	Consumer confidence
<b>Low Oil Pressure Warning System</b>	Alerts operator for peace of mind
<b>Manual or Electric Start</b>	Consumer confidence in low battery cases
<b>12 amp Alternator</b>	Provides battery charging on demand and allows use of electronics and lights
<b>Ergonomic Carrying Handle</b>	Convenient, balanced transporting
<b>Thermostatically Controlled Water Cooling</b>	Consistent operating temperatures
<b>Through Prop Exhaust</b>	Quiet smoke free operation
<b>Automatic Reverse Lock</b>	User friendly design
<b>F-N-R Shift</b>	Easy maneuverability
<b>Dual Water Pickups</b>	Supply of cooling water at all times
<b>Tiller or Remote Models</b>	Fits many applications
<b>6 Trim Positions and Shallow Water Drive</b>	Maximizes hull performance
<b>4 Blade 7" Propeller</b>	Better performance
<b>Multi Function Tiller Handle</b>	On hand - full range of operations

**FourStroke**

**ProKicker 15hp**

<b>FOUR STROKE</b>	<b>MERCURY 15hp Pro Kicker</b>	<b>HONDA 15hp Power Thrust</b>	<b>BRP E-TEC 15hp High Output</b>
<b>Engine Type</b>	2 Cylinder	2 Cylinder	2 Cylinder
<b>Displacement</b>	21.4 ci (351cc)	21.3 ci (350 cc)	35.3 ci (578 cc)
<b>Gear Ratio</b>	2.15:1	2.33:1	2.15:1
<b>Dry Weight*</b>	132 lbs (62kg)	129lbs (58.5kg)	183 lbs (83kg)

\* Weight based on owner's manual

## **Integrated Power Tilt & Heavy Duty Transom Brackets**

*Prokicker models feature heavy duty transom brackets - integrated power tilt is very quiet and travels the full range in under 5 seconds*

**Improved Durability with the Fastest Tilt in it's Class**

## **Exclusive Fuel Primer & Fast Idle System**

*Better than competitive auto-choke systems that prove too lean for today's changing fuels.*

**Provides Fast Easy Starting  
and Simple Fast Idle Control.**



**Yamaha Prime Start  
Honda Auto Start  
Tohatsu Fast Idle Choke**

**VS.**

**Mercury's  
Primer System**

## **Patented Centering Straps**

*Holds the engine straight without additional hold-downs when running in rough conditions or tailoring (Standard On Tiller Pro Kickers)*

**Prevents Engine Component Damage**

# 20hp

## FourStroke



Standard three-year  
limited factory backed,  
nondeclining warranty.



Backed by the industry's  
only three year limited  
corrosion failure warranty.



3-Star C.A.R.B. rating on  
87 octane fuel, for ultra low  
engine emissions.

### SPECIFICATIONS

HP/kW @ Prop	20 / 14.7
Max RPM (WOT)	5400 - 6100
Cylinders	2 (in-line)
Displacement (CID/cc)	21.4 / 351
Bore X Stroke (in/mm)	2.40 x 2.36 / 61 x 60
Induction System	2 valves per cylinder Single Overhead Cam (SOHC)
Ignition System	CDI w/ electronic spark advance
Fuel System	Carbureted
Alternator Amp/Watt	12/138 (electric)
Cooling System	Water-Cooled w/ thermostat
Starting	Manual or Electric
Gear Ratio	2.15:1
Gear Shift	F-N-R
Propeller	9.25" x 10"
Steering	Remote or Tiller
Trim Positions	6 position Trim Pin
Shallow Water Drive	Standard
Exhaust System	Through Prop
Recommended Oil	Mercury 4-Stroke Outboard Oil
Fuel/Ethanol Tolerance	87 octane/up to 10% Ethanol
Remote Fuel Tank (gal/L)	Standard, 6.6 / 25
Operator Warning System	Low Oil Pressure, Over-rev
SmartCraft Technology	No
Shaft Length (in/mm)	15/381 20/508
Dry Weight (lbs/kg)*	115/52 *Lightest model available

## KEY ATTRIBUTES

**✓ Large Displacement Design**

At 21.4 cubic inches, this engine delivers strong low end torque needed to get the hull up on plane, with quicker throttle response and acceleration. **Maximum overall performance and efficiency.**

**✓ Multi-Function Tiller Handle**

Offers one-hand operation and total control over shifting, throttle, steering, engine stop, throttle friction and tilting.

**Better maneuverability and ease of use.**

**✓ Exclusive Engine Mount**

Mercury's "wishbone" style motor mount system cradles the powerhead, absorbing the torsional rotation of the crankshaft and isolating any vibration transmission to the hull.

**Provides smooth overall operation.**

**✓ Exclusive Fuel Primer & Fast Idle System**

Better than competitive auto-choke systems that prove too lean for today's changing fuels.

**Provides fast, easy starting & simple fast idle control. Reliability.**



# 20hp

## FourStroke

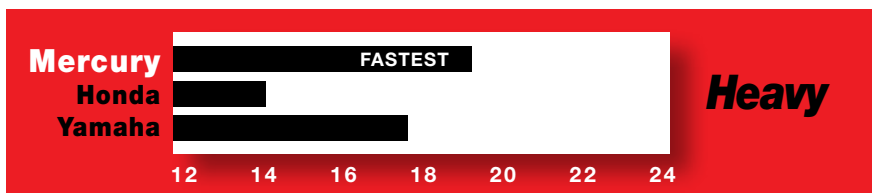
### ADDITIONAL FEATURES / BENEFITS

<b>12 Amp Alternator</b>	Provides battery charging on demand and allows use of electronics and lights
<b>CD Ignition</b>	No maintenance - quick reliable starts
<b>Over-rev Protection</b>	Consumer confidence
<b>Low Oil Pressure Warning System</b>	Alerts operator for peace of mind
<b>Backup Rope Start On Electric Models</b>	Consumer confidence in low battery cases
<b>Ergonomic Carrying Handle</b>	Convenient, balanced transporting
<b>Thermostatically Controlled Water Cooling</b>	Consistent operating temperatures
<b>Through Prop Exhaust</b>	Quiet smoke free operation
<b>Automatic Reverse Lock</b>	User friendly design
<b>F-N-R Shift</b>	Easy maneuverability
<b>Dual Water Pickups</b>	Supply of cooling water at all times
<b>6 Trim Positions and Shallow Water Drive</b>	Maximizes hull performance

**Acceleration in Seconds** (16 Foot Aluminum Deep Vee)



**Top Speed in MPH** (16 Foot Aluminum Deep Vee)



**Fuel Usage in MPG** (16 Foot Aluminum Deep Vee)



# 25hp EFI FourStroke



Standard three-year limited factory backed, nondeclining warranty.



Backed by the industry's only three year limited corrosion failure warranty.



3-Star C.A.R.B. rating on 87 octane fuel, for ultra low engine emissions.

## SPECIFICATIONS

HP/kW @ Prop	25 / 18.6
Max RPM (WOT)	5000 - 6000
Cylinders	3 (in-line)
Displacement (CID/cc)	32.1 / 526
Bore X Stroke (in/mm)	2.40 x 2.36 / 61 x 60
Induction System	2 valves per cylinder Single Overhead Cam (SOHC)
Ignition System	CDI w/ electronic spark advance
Fuel System	Electronic Fuel Injection (EFI)
Alternator Amp/Watt	15 / 186
Cooling System	Water-Cooled w/ thermostat
Starting	Manual or Electric
Gear Ratio	1.92:1
Gear Shift	F-N-R
Propeller	Consult Dealer Propeller Guide
Steering	Remote or Tiller
Trim System	Manual or Power Trim
Shallow Water Drive	Standard (M,ML,EH,E,EL,ELH)
Exhaust System	Through Prop
Recommended Oil	Mercury 4-Stroke Outboard Oil
Fuel/Ethanol Tolerance	87 octane/up to 10% Ethanol
Remote Fuel Tank (gal/L)	Standard, 6.6 / 25
Operator Warning System	Low Oil Pressure, Over-rev Overheat, Sensor Failure
SmartCraft Technology	No
Shaft Length (in/mm)	15/381 20/508
Dry Weight (lbs/kg)*	157/71 *Lightest model available

## KEY ATTRIBUTES

**✓ Powerful 3 Cylinder Design**

Provides better inherent balance for smoother overall operation than a twin cylinder requiring a counter balancer.

*Performance with smooth quiet overall operation.*

**✓ Multi-Function Tiller Handle**

Offers one-hand operation and total control over shifting, throttle, steering, engine stop, throttle friction and tilting.

*Better Maneuverability and Ease of Use.*

**✓ Industry-Leading Battery Free EFI**

Turn-key starting and a quicker throttle response with no carburetors to gum up. Also available on rope start models.

*Dependability with Efficiency.*

**✓ High Output Alternator**

15 Amps provides superior battery charging capability.

## ADDITIONAL FEATURES / BENEFITS

**Lightweight**

At 157 lbs. it's one of the lightest in its class.

**Dual Water Inlets**

Insures proper cooling for all key powerhead & gearcase components.

**Water Cooled Fuel Cooler**

Minimizes vapor lock and hot fuel issues. Offers long term reliability.

# 25hp EFI

## FourStroke

### ADDITIONAL FEATURES / BENEFITS

<b>CD Ignition</b>	No maintenance - quick reliable starts
<b>Over-rev Protection</b>	Consumer confidence
<b>Low Oil Pressure Warning System</b>	Alerts operator for peace of mind
<b>Manual or Electric Start</b>	Consumer confidence in low battery cases
<b>15 amp Alternator</b>	Provides battery charging on demand and allows use of electronics and lights
<b>Ergonomic Carrying Handle</b>	Convenient, balanced transporting
<b>Thermostatically Controlled Water Cooling</b>	Consistent operating temperatures
<b>Through Prop Exhaust</b>	Quiet smoke free operation
<b>Automatic Reverse Lock</b>	User friendly design
<b>F-N-R Shift</b>	Easy maneuverability
<b>Multi Function Tiller Handle</b>	Controls steering, shift, throttle, tilting and stop functions
<b>Tiller or Remote Models</b>	Fits many applications
<b>5 Trim Positions and Shallow Water Drive</b>	Maximizes hull performance
<b>Tuned Cowl Induction</b>	Best in class quiet operations

**FourStroke**

**25hp EFI**

<b>FOUR STROKE</b>	<b>MERCURY 25/30 hp</b>	<b>YAMAHA 25 hp</b>	<b>SUZUKI 25 hp</b>	<b>TOHATSU 25/30 hp</b>	<b>HONDA 25/30 hp</b>	<b>EVINRUDE 25/30 hp</b>
<b>Engine Type</b>	3 Cylinder	2 Cylinder	2 Cylinder	3 Cylinder	3 Cylinder	2 Cyl. 2-Stroke
<b>Displacement</b>	32.1 ci (526cc)	30.4 ci (498cc)	32.8 ci (538cc)	32.1ci (526cc)	33.7ci (552cc)	35.8ci (578cc)
<b>Dry Weight*</b>	157lbs (71kg)	170lbs (77kg)	159lbs (72.2kg)	179 lbs (81kg)	160lbs (72.5kg)	159lbs (72.2kg)

\* Weight based on owner's manual

**25hp is the Lightest in it's Class at 157lbs.**

### **All-in-One Multi-Tiller Handle**

Offers one-hand operation and total control over shifting, throttle, steering, engine stop, throttle friction and tilting.

**Comfort and Convenience**

**Industry Leading  
Battery Free EFI**

**vs.**

**Competitor's  
Carburetors**

Turn-Key starting with quicker throttle response  
Available on rope start models and no carburetors to gum up

**Dependability with Efficiency**

### **15 Amp High Output Alternator**

**33% more** charging power than Honda (**10 amps**)

**13% more** charging power than Yamaha (**13 amps**)

**Mercury's  
3-Cyl. Design**

**vs.**

**Yamaha 2-Cyl.with  
Balancer Piston**

The 3-cyl. provides better inherent balance for smoother overall operation than a twin cylinder requiring a counter balance

**Less Vibration**

### **Exclusive Dual Water Inlets**

Ensures proper cooling for all key powerhead & gearcase components

# 30hp EFI FourStroke



Standard three-year limited factory backed, nondeclining warranty.



Backed by the industry's only three year limited corrosion failure warranty.



3-Star C.A.R.B. rating on 87 octane fuel, for ultra low engine emissions.

## SPECIFICATIONS

HP/kW @ Prop	30 / 22.4
Max RPM (WOT)	5250 - 6250
Cylinders	3 (in-line)
Displacement (CID/cc)	32.1 / 526
Bore X Stroke (in/mm)	2.40 x 2.36 / 61 x 60
Induction System	2 valves per cylinder Single Overhead Cam (SOHC)
Ignition System	CDI w/ electronic spark advance
Fuel System	Electronic Fuel Injection (EFI)
Alternator Amp/Watt	15 / 186
Cooling System	Water-Cooled w/ thermostat
Starting	Manual or Electric
Gear Ratio	1.92:1
Gear Shift	F-N-R
Propeller	Consult Dealer Propeller Guide
Steering	Remote or Tiller
Trim Positions	Gas Assist or Power Trim & Tilt
Shallow Water Drive	NA
Exhaust System	Through Prop
Recommended Oil	Mercury 4-Stroke Outboard Oil
Fuel/Ethanol Tolerance	87 octane/up to 10% Ethanol
Remote Fuel Tank (gal/L)	Standard, 6.6 / 25
Operator Warning System	Low Oil Pressure, Over-rev Overheat, Sensor Failure
SmartCraft Technology	No
Shaft Length (in/mm)	15/381 20/508
Dry Weight (lbs/kg)*	172/78 *Lightest model available

## KEY ATTRIBUTES

**✓ Powerful 3 Cylinder Design**

Provides better inherent balance for smoother overall operation than a twin cylinder requiring a counter balancer.

*Performance with smooth quiet overall operation.*

**✓ Multi-Function Tiller Handle**

Offers one-hand operation and total control over shifting, throttle, steering, engine stop, throttle friction and tilting.

*Better Maneuverability and Ease of Use.*

**✓ Industry-Leading Battery Free EFI**

Turn-key starting and a quicker throttle response with no carburetors to gum up. Also available on rope start models.

*Dependability with Efficiency.*

**✓ High Output Alternator**

15 Amps provides superior battery charging capability.

## ADDITIONAL FEATURES / BENEFITS

**CD Ignition**

Maintenance free and turn-key starting

**Dual Water Inlets**

Insures proper cooling for all key powerhead & gearcase components.

**Water Cooled Fuel Cooler**

Minimizes vapor lock and hot fuel issues. Offers long term reliability.



# 30hp *EFI*

## **FourStroke**

### **ADDITIONAL FEATURES / BENEFITS**

<b>CD Ignition</b>	No maintenance - quick reliable starts
<b>Over-rev Protection</b>	Consumer confidence
<b>Low Oil Pressure Warning System</b>	Alerts operator for peace of mind
<b>Manual or Electric Start</b>	Consumer confidence in low battery cases
<b>15 amp Alternator</b>	Provides battery charging on demand and allows use of electronics and lights
<b>Ergonomic Carrying Handle</b>	Convenient, balanced transporting
<b>Thermostatically Controlled Water Cooling</b>	Consistent operating temperatures
<b>Through Prop Exhaust</b>	Quiet smoke free operation
<b>Automatic Reverse Lock</b>	User friendly design
<b>F-N-R Shift</b>	Easy maneuverability
<b>Multi Function Tiller Handle</b>	Controls steering, shift, throttle, tilting and stop functions
<b>Tiller or Remote Models</b>	Fits many applications
<b>5 Trim Positions and Shallow Water Drive</b>	Maximizes hull performance
<b>Tuned Cowl Induction</b>	Best in class quiet operations

# FourStroke

# 30hp EFI

FOUR STROKE	MERCURY 30hp EFI	HONDA 30hp	TOHATSU 30 hp EFI	E-TEC 30 hp 2S
Engine Type	3 Cylinder	3 Cylinder	3 Cylinder	2 Cylinder
Displacement	32.1 ci (526cc)	33.7ci (552cc)	32.1ci (526cc)	35.8ci (578cc)
Dry Weight*	172 lbs (78kg)	176 lbs (80kg)	179 lbs (81kg)	177 lbs (83kg)

\* Weight based on owner's manual     All 4S models have Gas Assist technology, E-TEC has Power Tilt

## All-in-One Multi-Tiller Handle

Offers one-hand operation and total control over shifting, throttle, steering, engine stop, throttle friction and tilting.

## Comfort and Convenience

**Industry Leading  
Battery Free EFI**

**VS.**

**Competitor's  
Carburetors**

Turn-Key starting with quicker throttle response  
Available on rope start models and no carburetors to gum up

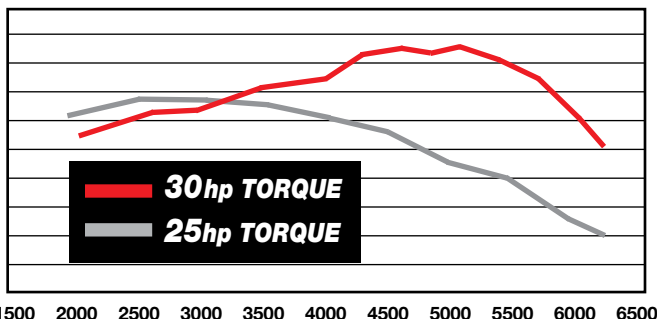
## Dependability with Efficiency

## 15 Amp High Output Alternator

**33% more** charging power than Honda (10 amps)

**13% more** charging power than Yamaha (13 amps)

## Mercury 25/30hp Torque Curves



**The 30hp Delivers Up To 18% More Torque**

# The Mercury Advantage

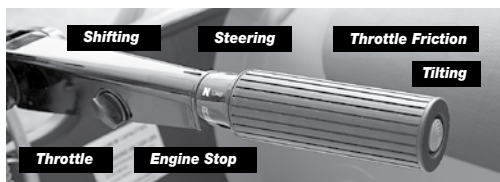
**Mercury & Tohatsu** have partnered to jointly engineer & manufacture small **2.5~30hp** outboards. These outboards are not all the same. The following information shows the differences in features and how Mercury provides additional value in **Performance, Convenience, Comfort and Efficiency.**

## Mercury Key Attributes vs. Tohatsu

**HP Group 8, 9.9, 15, 20, 25 & 30HP**

### Multi-Function Tiller Handle

Offers one-hand operation and total control of 6 driving functions  
**Better Maneuverability and Ease of Use.**



**Tohatsu uses side or front mount shift lever and only throttle operation in the tiller handle grip.**

**HP Group 8, 9.9, 15, 20HP**

### Exclusive Tiller Handle Design

- ✓ Longer tiller handle
- ✓ 3 Position Lock for easy trailer or storage
- ✓ Stronger for shallow water operation



**Operator ease for comfort and improved boat handling and control.**

### Automatic Reverse Lock

Hooks automatically engage when shifting to reverse. This prevents the engine from popping up out of the water. No need to remember to operate a separate lock down lever. **Operator ease for Comfort and Safety.**

# The Mercury Advantage

**HP Group 8, 9.9, 15, & 20HP**

## Exclusive Fuel Primer & Fast Idle System

Better than competitive auto-choke systems that prove too lean for today's changing fuels.

**Provides Fast Easy Starting  
and Simple Fast Idle Control.**



**Tohatsu Fast  
Idle Choke**

**VS.**

**Mercury's  
Primer System**

**Tohatsu** does not offer any **BigFoot or ProKicker models.**

For auxiliary power or slow trolling (Kicker) applications, Mercury key attributes delivers improved thrust for optimal hull control, performance and long-term durability.

## ✓ **ProKicker's Gearcase**

Locates propeller deeper in the water. The lower position keeps the prop below turbulent water, allowing it to operate in cleaner, less aerated water.

**Better performance and efficiency.**



## **ProKicker's Propellers**

Designed with 20% more surface area than competitive props for greater performance. **More power & acceleration.**

## **ProKicker's Low Gear Ratio**

The 2.15:1 ratio improves overall thrust and overall efficiency.

**Superior maneuverability.**

## **Patented Centering Straps**

Holds the engine straight without additional hold-downs when running in rough conditions or tailering (Standard On Tiller Pro Kickers)

**Prevents Engine Component Damage.**



# ***MIDRANGE HP***

## ***FOURSTROKE OUTBOARD***

***40 HP*** —

***40 HP EFI*** —

***40 HP EFI BigFoot*** —

***50 HP EFI*** —

***50 HP EFI BigFoot*** —

***60 HP EFI*** —

***60 HP EFI BigFoot*** —

***75 HP EFI*** —

***90 HP EFI*** —

***115 HP EFI*** —

***150 HP EFI*** —

# 40hp (Manual) FourStroke



Standard three-year limited factory backed, nondeclining warranty.



Backed by the industry's only three year limited corrosion failure warranty.



3-Star C.A.R.B. rating on 87 octane fuel, for ultra low engine emissions.

## SPECIFICATIONS

HP/kW @ Prop	40 / 30
Max RPM (WOT)	5500 - 6000
Cylinders	3 (in-line)
Displacement (CID/cc)	45.6 / 747
Bore X Stroke (in/mm)	2.56 x 2.95 / 65 x 75
Induction System	2-valves per cylinder Single Overhead Cam (SOHC)
Ignition System	CDI w/ electronic spark advance
Fuel System	Carbureted
Alternator Amp/Watt	6 amp / 76 watt
Cooling System	Water-Cooled w/ thermostat
Starting	Manual
Gear Ratio	2.00:1
Gear Shift	F-N-R
Propeller	Consult Dealer Propeller Guide
Steering	Tiller
Trim System	Gas Assist
Shallow Water Drive	N/A
Exhaust System	Through Prop
Recommended Oil	Mercury 4-Stroke Outboard Oil
Fuel/Ethanol Tolerance	87 octane/up to 10% Ethanol
Remote Fuel Tank (gal/L)	Optional
Operator Warning System	Overheat, Over-rev, low oil pressure
Shaft Length (in/mm)	15/381, 20/508
Dry Weight (lbs/kg)*	204/93* Lightest model available

# FourStroke 40hp (Manual)

## KEY ATTRIBUTES

### ✓ **Powerful 3 Cylinder Design**

A SOHC and long intake stroke design increases torque output for better acceleration.

*Performance with smooth quiet overall operation.*

### ✓ **Compact 3 Cylinder 40hp**

Compact lightweight design available with Manual Start and Gas Assist Tilt *Versatile and Efficient.*

### ✓ **Easy Shift Operation**

New Precision Engineered Shift System delivers smooth shifting for an improved driving experience. *Comfort and Reliability.*

### ✓ **Automatic Decompression System**

Greatly Reduces the effort to pull start the engine by hand.

*Easy Starting.*

### ✓ **High Output Alternator**

6 Amps provides superior battery charging capability.

## ADDITIONAL FEATURES / BENEFITS

<b>Gas Assist Trim</b>	Ease in tilting engine.
<b>CD Ignition</b>	Maintenance Free and insures easy starting.
<b>Freshwater Flushing Port</b>	Rear Mounted - Flushes saltwater and debris out of the engine extending the life of the outboard.
<b>Easy Maintenance</b>	Convenient oil drain and fill location, along with an automotive style spin-on filter.



# 40hp *EFI* **FourStroke**



Standard three-year  
limited factory backed,  
nondeclining warranty.



Backed by the industry's  
only three year limited  
corrosion failure warranty.



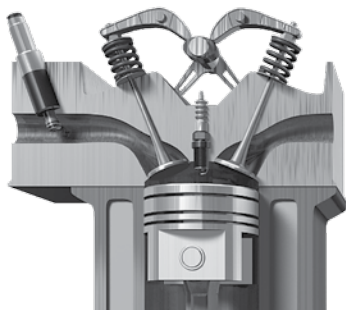
3-Star C.A.R.B. rating on  
87 octane fuel, for ultra low  
engine emissions.

## SPECIFICATIONS

HP/kW @ Prop	40 / 30
Max RPM (WOT)	5500 - 6000
Cylinders	3 (in-line)
Displacement (CID/cc)	45.6 / 747
Bore X Stroke (in/mm)	2.56 x 2.95 / 65 x 75
Induction System	2-valves per cylinder Single Overhead Cam (SOHC)
Ignition System	ECM Digital Inductive
Fuel System	Electronic Fuel Injection (EFI)
Alternator Amp/Watt	18 amp / 226 watt
Cooling System	Water-Cooled w/ thermostat
Starting	Electric (turn-key)
Gear Ratio	2.00:1
Gear Shift	F-N-R
Propeller	Consult Dealer Propeller Guide
Steering	Remote or Tiller Kit
Trim System	Gas Assist or Power Trim & Tilt
Shallow Water Drive	N/A
Exhaust System	Through Prop
Recommended Oil	Mercury 4-Stroke Outboard Oil
Fuel/Ethanol Tolerance	87 octane/up to 10% Ethanol
Remote Fuel Tank (gal/L)	Optional
Operator Warning System	Overheat, Over-rev, Low oil pressure
SmartCraft Technology	Yes
Shaft Length (in/mm)	15/381, 20/508
Dry Weight (lbs/kg)*	214/97* Lightest model available

**KEY ATTRIBUTES****✓ Powerful 3 Cylinder Design**

A SOHC and long intake stroke design increases torque output for better acceleration. *Performance with smooth quiet overall operation.*

**✓ Compact Design**

Compact lightweight design available with manual or electric start and Gas Assist or Power Trim. *Versatile and Efficient.*

**✓ Electronic Fuel Injection EFI**

Provides turn-key reliable starting, instant throttle response, spectacular fuel economy and lower fuel system maintenance. *More Dependable, more Efficient with more Power and Lower Cost of Operation.*

**✓ High Output Alternator**

**18 Amps** provides superior battery charging capability for on-board electronics, lights, pumps, or the stereo. *Never worry of having a dead battery.*

**✓ Easy Shift Operation**

New Precision Engineered Shift System delivers smooth shifting for an improved driving experience. *Comfort and Reliability.*

**✓ Take It Slow**

Smart Craft's TROLL CONTROL feature allows you to set your rpm as low as **700** for trolling.

# 40hp *EFI* **FourStroke**

## **ADDITIONAL FEATURES / BENEFITS**

<b>SmartCraft</b>	Delivers information regarding 23 key engine functions from fuel usage, rpm & engine guardian to slow trolling rpm control and even hull information.
<b>Power Trim/Tilt</b>	Allows user to trim the unit for maximum performance / handling & shallow water operation.
<b>Freshwater Flushing Port</b>	Rear Mounted - Flushes saltwater and debris out of the engine extending the life of the outboard.
<b>Easy Maintenance</b>	Convenient oil drain and fill location, along with an automotive style spin-on filter.

## **Why Choose FourStroke Over TwoStroke?**

### **Cost Savings**

At cruise, EFI Fourstroke is **39% more fuel efficient.**

Fourstrokes **cost less to maintain** thanks to the proven EFI system, longer spark life and none of the gumming, decarbonization or ring-and-cylinder issues of carbureted two-strokes

### **Cleaner**

40-60hp Fourstrokes tout an environmentally friendly CARB 3 star ultra-low emissions rating.

### **FourStroke Performance**

Experience better fuel efficiency, reduced emissions and a smoother ride, without sacrificing power or performance.

At top speed, Mercury 50hp FourStroke was nearly 1.5 mph faster than its sister TwoStroke.

Through-prop exhaust is smoke free and up to 30% quieter than a conventional TwoStroke.

**FourStroke**

**40hp EFI**

<b>FOUR STROKE</b>	<b>MERCURY 40HP</b>	<b>YAMAHA 40HP</b>	<b>SUZUKI 40HP</b>	<b>HONDA 40HP</b>
<b>Engine Type</b>	3 Cylinder	3 Cylinder	3 Cylinder	3 Cylinder
<b>Displacement</b>	45.6ci (747cc)	45.6ci (747cc)	57.4ci (941cc)	49.3ci (808cc)
<b>Dry Weight*</b>	214 lbs (97kg)	216lbs (98kg)	229 lbs (104kg)	214lbs (97kg)

\* Based on owner's manual

## **MERCURY ADVANTAGE**

### **Over Suzuki**

Long Stroke design vs. Short Stroke. **More Torque ( Power)**

**15 lbs. Lighter** than Suzuki. **Improves Hull Maneuverability**

Compact SOHC vs. Complex DOHC. **Reduced maintenance costs**

SmartCraft (Troll Control) vs. None **Enhanced Precise trolling**

### **Over Yamaha**

**20% More Charging** 18 Amp Alternator vs. 15 Amp. **Convenience**

Troll Control (**10rpm steps**) vs. Variable Trolling (**50rpm steps**) **More Precise**

SmartCraft vs. Command Link®

## **Big Tiller**

**Available on  
40-60hp**

- ✓ Center-mounted tiller offers optimum control
- ✓ Two-position lock for trailering and operating positions
- ✓ Throttle and steering friction allows fine-tuning
- ✓ Convenient power trim switch allows easy access
- ✓ Longer tiller grip with 110° rotation / range of motion
- ✓ Up-front shift lever permits smooth shifting



**Troll Control  
(OPTIONAL)**

# 40hp EFI BigFoot FourStroke



Standard three-year  
limited factory backed,  
nondeclining warranty.



Backed by the industry's  
only three year limited  
corrosion failure warranty.



3-Star C.A.R.B. rating on  
87 octane fuel, for ultra low  
engine emissions.

## SPECIFICATIONS

HP/kW @ Prop	40 / 30
Max RPM (WOT)	5500 - 6000
Cylinders	4 (in-line)
Displacement (CID/cc)	60.8 / 995
Bore X Stroke (in/mm)	2.56 x 2.95 / 65 x 75
Induction System	2-valves per cylinder Single Overhead Cam (SOHC)
Ignition System	ECM Digital Inductive
Fuel System	Electronic Fuel Injection (EFI)
Alternator Amp/Watt	18 amp / 226 watt
Cooling System	Water-Cooled w/ thermostat
Starting	Electric (turn-key)
Gear Ratio	2.33:1
Gear Shift	F-N-R
Propeller	Consult Dealer Propeller Guide
Steering	Remote or Tiller Kit
Trim System	Power Trim & Tilt
Shallow Water Drive	20° of Trim Range
Exhaust System	Through Prop
Recommended Oil	Mercury 4-Stroke Outboard Oil
Fuel/Ethanol Tolerance	87 octane/up to 10% Ethanol
Remote Fuel Tank (gal/L)	Optional
Operator Warning System	SmartCraft Engine Guardian
SmartCraft Technology	Yes
Shaft Length (in/mm)	20/508
Dry Weight (lbs/kg)*	260/118* Lightest model available

# **FourStroke** **BigFoot** **40hp EFI**

## **KEY ATTRIBUTES**

### **Large Displacement 4-Cylinder Engine**

A SOHC and long intake stroke design increases torque output for better acceleration. **Performance with smooth quiet overall operation.**

### **Electronic Fuel Injection EFI**

Provides turn-key reliable starting, instant throttle response, spectacular fuel economy and lower fuel system maintenance. **More dependable, more efficient with more power and lower cost of operation.**

### **BigFoot's Gearcase**

Locates propeller deeper in the water. The lower position keeps the prop below turbulent water, allowing it to operate in cleaner, less aerated water.

**Better performance and efficiency.**



### **BigFoot's Propellers**

Designed with 20% more surface area than competitive props for greater performance.

**More power and acceleration.**

### **BigFoot's Low Gear Ratio**

The 2.33:1 ratio improves overall thrust and overall efficiency.

**Superior maneuverability.**

# 40hp *EFI* BigFoot

**Four Stroke**

## ADDITIONAL FEATURES / BENEFITS

<b>Bigfoot's Anti-Ventilation Plate</b>	A specially oversized design prevents surface air from being drawn into the prop. Results in less slippage, increasing overall efficiency.
<b>18 Amp (226 watts) Alternator</b>	Maintains battery charge to run electronics, lights and other accessories.
<b>SmartCraft</b>	Delivers information regarding 23 key engine functions from fuel usage, RPM & engine guardian to slow trolling RPM control, and even hull information.
<b>Precision Shift System</b>	Delivers smooth, quiet, effortless shifting.
<b>Power Trim / Tilt</b>	Allows user to trim the unit for maximum performance, handling and shallow water operation.
<b>Freshwater Flushing Port</b>	Rear mounted - flushes saltwater & debris out of the engine, extending the life of the outboard.
<b>Easy Maintenance</b>	Convenient oil drain and fill location, along with an automotive style spin-on filter.
<b>Tiller or Remote Steering</b>	Standard models along with Big Tiller Kit option allows rigging for all type of boating applications.

## The BigFoot Advantage

The BigFoot's **Gearcase is the same as a 115hp**, thus can turn a larger diameter propeller. The standard gearcase uses a smaller diameter propeller. Both work well depending on the hull application.

On a **22 foot pontoon** with the 60hp standard & 60hp BigFoot models both were tested with identical (**Light & Heavy**) payloads.

### The Results:

- ✓ With a light load the Standard model is **1.1** mph faster than Bigfoot.
- ✓ With a heavy load the Bigfoot is **1.0** mph faster than the Standard model.

**BigFoot is better for heavy loads!**

# Four Stroke **BigFoot 40hp EFI**

FOUR STROKE	Mercury 40/50/60HP BigFoot	Yamaha 40HP High Thrust	Honda 40HP PowerThrust
Engine Type	4 Cylinder	NO MODEL AVAILABLE	NO MODEL AVAILABLE
Displacement	60.8ci (996cc)		
Dry Weight*	260lbs (118kg)		

\* Based on owner's manual

**Mercury's BigFoot Heritage** began in **1989** when a special gearcase design was introduced to help pontoons run more efficiently. Our competitors have tried unsuccessfully to imitate by bolting on larger horsepower lower units.

**The BigFoot is more than that - it's a Total System.**

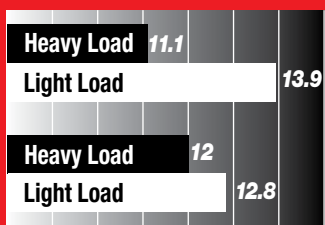
## Smooth 4-Cylinder Design

On aluminum hulls & pontoons, 4-Stroke engines have been known to vibrate or create a resonance. On a 4 cylinder engine, two pistons fire together while the other two are on the down-stroke creating a better balance. 3 cylinder engines fire every 120° and are prone to inflict some vibration.

**4 Cylinders offer Better inherent balance & less vibration**

## How many Pontoons are used with light loads?

**Standard**  
1.83:1 Ratio



**BIGFOOT**  
2.33:1 Ratio

MPH 8 9 10 11 12 13 14 15

**Top Speed is important, but the real BigFoot benefits are:**

- ✓ More **forward and reverse thrust** for maneuvering (docking or limited space waterways), heavy winds or strong currents.
- ✓ Better **fuel efficiency** because of less propeller slippage.
- ✓ The lower gear ratio and larger diameter prop insures the power is there for the **water tow toys**.



# 50hp *EFI* **FourStroke**



Standard three-year  
limited factory backed,  
nondeclining warranty.



Backed by the industry's  
only three year limited  
corrosion failure warranty.



3-Star C.A.R.B. rating on  
87 octane fuel, for ultra low  
engine emissions.

## SPECIFICATIONS

HP/kW @ Prop	50 / 37
Max RPM (WOT)	5500 - 6000
Cylinders	4 (in-line)
Displacement (CID/cc)	60.8 / 995
Bore X Stroke (in/mm)	2.56 x 2.95 / 65 x 75
Induction System	2-valves per cylinder Single Overhead Cam (SOHC)
Ignition System	ECM Digital Inductive
Fuel System	Electronic Fuel Injection (EFI)
Alternator Amp/Watt	18 amp / 226 watt
Cooling System	Water-Cooled w/ thermostat
Starting	Electric (turn-key)
Gear Ratio	1.83:1
Gear Shift	F-N-R
Propeller	Consult Dealer Propeller Guide
Steering	Remote or Tiller Kit
Trim System	Power Trim & Tilt
Shallow Water Drive	20° of Trim Range
Exhaust System	Through Prop
Recommended Oil	Mercury 4-Stroke Outboard Oil
Fuel/Ethanol Tolerance	87 octane/up to 10% Ethanol
Remote Fuel Tank (gal/L)	Optional
Operator Warning System	SmartCraft Engine Guardian
SmartCraft Technology	Yes
Shaft Length (in/mm)	20/508
Dry Weight (lbs/kg)*	247/112* Lightest model available

# FourStroke 50hp EFI

## KEY ATTRIBUTES

### ✓ Large Displacement

A SOHC and long intake stroke design increases torque output for better acceleration. **Performance with smooth quiet overall operation.**



### ✓ Electronic Fuel Injection EFI

Provides turn-key reliable starting, instant throttle response, spectacular fuel economy and lower fuel system maintenance. **More dependable, more efficient with more power and lower cost of operation.**

### ✓ High Output Alternator

18 Amps provides superior battery charging capability. **Dependability.**

### ✓ Easy Shift Operation

New Precision Engineered Shift System delivers smooth shifting for an improved driving experience. **Comfort and Reliability.**

### ✓ Take It Slow

Smart Craft's TROLL CONTROL feature allows you to set your rpm as low as 700 for trolling. **Comfort.**

## Big Tiller

**Available on  
40-60hp**



- ✓ Center-mounted tiller offers optimum control
- ✓ Two-position lock for trailering and operating positions
- ✓ Throttle and steering friction allows fine-tuning
- ✓ Convenient power trim switch allows easy access
- ✓ Longer tiller grip with 110° rotation / range of motion
- ✓ Up-front shift lever permits smooth shifting



**Troll Control  
(OPTIONAL)**

# 50hp *EFI* **FourStroke**

## ADDITIONAL FEATURES / BENEFITS

<b>SmartCraft</b>	Delivers information regarding 23 key engine functions from fuel usage, rpm & engine guardian to slow trolling rpm control and even hull information.
<b>Power Trim/Tilt</b>	Allows user to trim the unit for maximum performance / handling & shallow water operation.
<b>Freshwater Flushing Port</b>	Rear Mounted - Flushes saltwater and debris out of the engine extending the life of the outboard.
<b>Easy Maintenance</b>	Convenient oil drain and fill location, along with an automotive style spin-on filter.
<b>Tiller or Remote Steering</b>	Standard models along with Big Tiller kit option allows rigging for all type of boating applications.

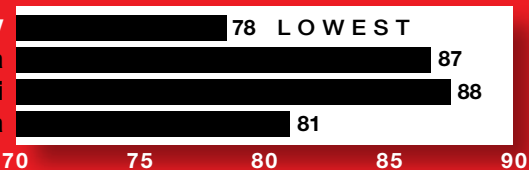


## **Bass & Walleye Boats 50hp Shootout**

January 2009

Bass & Walleye Boats tested the industry's 50 hp engines on 8 identical "pike" type hulls.

**Mercury**  
**Honda**  
**Suzuki**  
**Yamaha**



**Sound Levels**  
(dBa)

# FourStroke 50hp EFI

FOUR STROKE	MERCURY 50HP	YAMAHA 50HP	SUZUKI 50HP	HONDA 50HP
<b>Engine Type</b>	4 Cylinder	4 Cylinder	3 Cylinder	3 Cylinder
<b>Displacement</b>	60.8ci (996cc)	60.8ci (996cc)	57.4ci (941cc)	49.3ci (808cc)
<b>Dry Weight*</b>	247lbs (112kg)	247lbs (112kg)	229lbs (104kg)	214lbs (98kg)

\* Based on owner's manual

## MERCURY ADVANTAGE

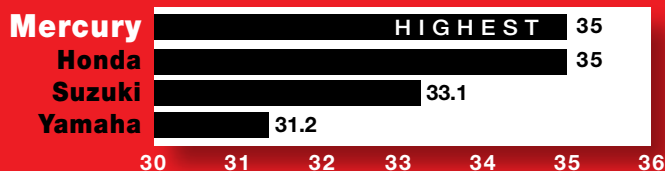
### Over Suzuki

Long Stroke design vs. Short Stroke. **More Torque (Power)**  
 Compact SOHC vs. Complex DOHC. **Reduced maintenance costs**  
 SmartCraft (Troll Control) vs. None **Offers Precise trolling**

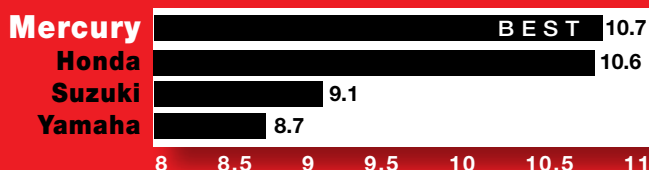
### Over Yamaha

Troll Control (**10rpm steps**) vs. Variable Trolling (**50rpm steps**) **More Precise**  
 SmartCraft vs. Command Link® **Similar**

## Test Hull: 16' 5" Alumacraft



**Top  
Speed  
(mph)**



**Fuel  
Economy  
(mpg)**

# 50hp EFI BigFoot FourStroke



Standard three-year  
limited factory backed,  
nondeclining warranty.



Backed by the industry's  
only three year limited  
corrosion failure warranty.



3-Star C.A.R.B. rating on  
87 octane fuel, for ultra low  
engine emissions.

## SPECIFICATIONS

HP/kW @ Prop	50 / 37
Max RPM (WOT)	5500 - 6000
Cylinders	4 (in-line)
Displacement (CID/cc)	60.8 / 995
Bore X Stroke (in/mm)	2.56 x 2.95 / 65 x 75
Induction System	2-valves per cylinder Single Overhead Cam (SOHC)
Ignition System	ECM Digital Inductive
Fuel System	Electronic Fuel Injection (EFI)
Alternator Amp/Watt	18 amp / 226 watt
Cooling System	Water-Cooled w/ thermostat
Starting	Electric (turn-key)
Gear Ratio	2.33:1
Gear Shift	F-N-R
Propeller	Consult Dealer Propeller Guide
Steering	Remote or Tiller Kit
Trim System	Power Trim & Tilt
Shallow Water Drive	20° of Trim Range
Exhaust System	Through Prop
Recommended Oil	Mercury 4-Stroke Outboard Oil
Fuel/Ethanol Tolerance	87 octane/up to 10% Ethanol
Remote Fuel Tank (gal/L)	Optional
Operator Warning System	SmartCraft Engine Guardian
SmartCraft Technology	Yes
Shaft Length (in/mm)	20/508
Dry Weight (lbs/kg)*	260/118* Lightest model available

**FourStroke**

**BigFoot 50hp EFI**

**KEY ATTRIBUTES**

### **Large Displacement 4-Cylinder Engine**

A SOHC and long intake stroke design increases torque output for better acceleration. *Performance with smooth quiet overall operation.*

### **Electronic Fuel Injection EFI**

Provides turn-key reliable starting, instant throttle response, spectacular fuel economy and lower fuel system maintenance. *More dependable, more efficient with more power and lower cost of operation.*

### **BigFoot's Gearcase**

Locates propeller deeper in the water. The lower position keeps the prop below turbulent water, allowing it to operate in cleaner, less aerated water.

*Better performance and efficiency.*



### **BigFoot's Propellers**

Designed with 20% more surface area than competitive props for greater performance.

*More power and acceleration.*

### **BigFoot's Low Gear Ratio**

The 2.33:1 ratio improves overall thrust and overall efficiency.

*Superior maneuverability.*

# 50hp EFI BigFoot FourStroke

## ADDITIONAL FEATURES / BENEFITS

<b>Bigfoot's Anti-Ventilation Plate</b>	A specially oversized design prevents surface air from being drawn into the prop. Results in less slippage, increasing overall efficiency.
<b>18 Amp (226watts) Alternator</b>	Maintains battery charge to run electronics, lights and other accessories.
<b>SmartCraft</b>	Delivers information regarding 23 key engine functions from fuel usage, RPM & engine guardian to slow trolling RPM control, and even hull information.
<b>Precision Shift System</b>	Delivers smooth, quiet, effortless shifting.
<b>Power Trim / Tilt</b>	Allows user to trim the unit for maximum performance, handling and shallow water operation.
<b>Freshwater Flushing Port</b>	Rear mounted - flushes saltwater & debris out of the engine, extending the life of the outboard.
<b>Easy Maintenance</b>	Convenient oil drain and fill location, along with an automotive style spin-on filter.
<b>Tiller or Remote Steering</b>	Standard models along with Big Tiller Kit option allows rigging for all type of boating applications.

## The BigFoot Advantage

The BigFoot's **Gearcase is the same as a 115hp**, thus can turn a larger diameter propeller. The standard gearcase uses a smaller diameter propeller. Both work well depending on the hull application.

On a **22 foot pontoon** with the 60hp standard & 60hp BigFoot models both were tested with identical (**Light & Heavy**) payloads.

### The Results:

- ✓ With a light load the Standard model is **1.1**mph faster than Bigfoot.
- ✓ With a heavy load the Bigfoot is **1.0** mph faster than the Standard model.

**BigFoot is better for heavy loads!**

**FourStroke**

**BigFoot 50hp EFI**

FOUR STROKE	Mercury 50HP BigFoot	Yamaha 50HP High Thrust	Honda 50HP PowerThrust
Engine Type	4 Cylinder	4 Cylinder	NO MODEL AVAILABLE
Displacement	60.8ci (996cc)	60.8ci (996cc)	
Dry Weight*	260lbs (118kg)	267lbs (121kg)	

\* Based on owner's manual

**Mercury's BigFoot Heritage** began in **1989** when a special gearcase design was introduced to help pontoons run more efficiently. Our competitors have tried unsuccessfully to imitate by bolting on larger horsepower lower units.

**The BigFoot is more than that - it's a Total System.**

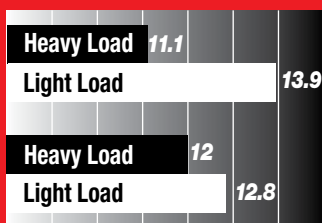
### **Smooth 4-Cylinder Design**

On aluminum hulls & pontoons, 4-Stroke engines have been known to vibrate or create a resonance on certain types of hulls. On a 4 cylinder engine, two pistons fire together while the other two are on the down-stroke creating a better balance. 3 cylinder engines fire every 120° and are prone to inflict some vibration.

**4 Cylinders offer Better inherent balance & less vibration**

### **How many Pontoons are used with light loads?**

**Standard**  
**1.83:1 Ratio**



MPH 8 9 10 11 12 13 14 15

**Top Speed is important, but the real BigFoot benefits are:**

✓ More **forward and reverse thrust** for maneuvering (docking or limited space waterways), heavy winds or strong currents.

✓ Better **fuel efficiency** because of less propeller slippage.

✓ The lower gear ratio and larger diameter prop insures the power is there for the **water tow toys**.



# 60hp *EFI* **FourStroke**



Standard three-year  
limited factory backed,  
nondeclining warranty.



Backed by the industry's  
only three year limited  
corrosion failure warranty.



3-Star C.A.R.B. rating on  
87 octane fuel, for ultra low  
engine emissions.

## SPECIFICATIONS

HP/kW @ Prop	60 / 45
Max RPM (WOT)	5500 - 6000
Cylinders	4 (in-line)
Displacement (CID/cc)	60.8 / 995
Bore X Stroke (in/mm)	2.56 x 2.95 / 65 x 75
Induction System	2-valves per cylinder Single Overhead Cam (SOHC)
Ignition System	ECM Digital Inductive
Fuel System	Electronic Fuel Injection (EFI)
Alternator Amp/Watt	18 amp / 226 watt
Cooling System	Water-Cooled w/ thermostat
Starting	Electric (turn-key)
Gear Ratio	1.83:1
Gear Shift	F-N-R
Propeller	Consult Dealer Propeller Guide
Steering	Remote or Tiller Kit
Trim System	Power Trim & Tilt
Shallow Water Drive	20° of Trim Range
Exhaust System	Through Prop
Recommended Oil	Mercury 4-Stroke Outboard Oil
Fuel/Ethanol Tolerance	87 octane/up to 10% Ethanol
Remote Fuel Tank (gal/L)	Optional
Operator Warning System	SmartCraft Engine Guardian
SmartCraft Technology	Yes
Shaft Length (in/mm)	20/508
Dry Weight (lbs/kg)*	247/112* Lightest model available

## KEY ATTRIBUTES

✓ **Large Displacement**

A SOHC and long intake stroke design increases torque output for better acceleration. *Performance with smooth quiet overall operation.*

✓ **Electronic Fuel Injection EFI**

Provides turn-key reliable starting, instant throttle response, spectacular fuel economy and lower fuel system maintenance. *More Dependable, more Efficient with more Power and Lower Cost of Operation.*

✓ **High Output Alternator**

18 Amps provides superior battery charging capability. *Dependability.*

✓ **Easy Shift Operation**

New Precision Engineered Shift System delivers smooth shifting for an improved driving experience. *Comfort and Reliability.*

✓ **Take It Slow**

Smart Craft's TROLL CONTROL feature allows you to set your rpm as low as 700 for trolling. *Comfort.*

## ADDITIONAL FEATURES / BENEFITS

<b>SmartCraft</b>	Delivers information regarding 23 key engine functions from fuel usage, rpm & engine guardian to slow trolling rpm control and even hull information.
<b>Power Trim/Tilt</b>	Allows user to trim the unit for maximum performance / handling & shallow water operation.
<b>Freshwater Flushing Port</b>	Rear Mounted - Flushes saltwater and debris out of the engine extending the life of the outboard.
<b>Easy Maintenance</b>	Convenient oil drain and fill location, along with an automotive style spin-on filter.

# 60hp *EFI* **FourStroke**

<b>FOUR STROKE</b>	<b>MERCURY 60HP</b>	<b>YAMAHA 60HP</b>	<b>SUZUKI 60HP</b>	<b>HONDA 60HP</b>
<b>Engine Type</b>	4 Cylinder	4 Cylinder	3 Cylinder	3 Cylinder
<b>Displacement</b>	60.8ci (996cc)	60.8ci (996cc)	57.4ci (941cc)	60.9ci (998cc)
<b>Dry Weight*</b>	247lbs (112kg)	247lbs (112kg)	229lbs (104kg)	243lbs (110kg)

\* Based on owner's manual

## **MERCURY ADVANTAGE**

### **Over Suzuki**

4-Cyl. vs. 3-Cyl. Design. **Better inherent balance, less vibration**  
Compact SOHC vs. Complex DOHC. **Reduced maintenance costs**

### **Over Yamaha**

18 Amp Alternator vs. 17 Amp. **Convenience**  
Troll Control (**10rpm steps**) vs. Variable Trolling (**50rpm steps**) **More Precise**  
SmartCraft vs. Command Link®

## **H2H\* Performance Comparison**

### **Mercury Vs Yamaha**

**7% Better** Mid-Range fuel Economy. **More Efficient**

**.5 mph faster** with same load. **Same or Quicker.**

**10% Lower** Trolling (MPH) Speed. **Meets users Wants**

\* Boat: Alum. 16' Source Mercury Marine R & D

Source: Competitive Information based on 2009-2010 printed and web based advertising materials

# 40/50/60hp Comparative Analysis

# 60hp EFI

FourStroke vs. TwoStroke DFI	MERCURY 40/50/60 hp	EVINRUDE E-TEC 40/50/60 hp
Engine Type	4 Cylinder 4-Stroke	2 Cylinder 2-Stroke
Displacement	60.8ci (996cc)	52.7ci (863cc)
Bore & Stroke (MM)	65 x 75	91 x 66
Dry Weight*	247 lbs (112 kg)	240 lbs (109 kg)

\* Based on owner's manual

## FourStroke Advantage

**Positive Lubrication** internal engine components are bathed in oil to reduce wear for longer life **Durability**

**Cylinders** have no exhaust or intake ports which cause piston & ring wear due to thermal expansion. **Long-Term Durability**

**No Oil** in combustion to shorten spark plug life. **Reliability**

### Larger Displacement @ 60.8 ci

Mercury has **16% more** displacement. **More power & torque**

### Smooth Powerful 4 Cylinder Design

**4-Cyl. Vs 2-Cyl. Inherent better balance for smoother operation.**

**Long Stroke X Small Bore** Vs. Big Bore X Short Stroke

**More power & torque with reduced vibration on Aluminum hulls**



**Top Speed**  
(mph)



**Fuel Economy**  
(mpg)



**Sound Levels**  
(dBA)

# 60hp EFI BigFoot FourStroke



Standard three-year  
limited factory backed,  
nondeclining warranty.



Backed by the industry's  
only three year limited  
corrosion failure warranty.



3-Star C.A.R.B. rating on  
87 octane fuel, for ultra low  
engine emissions.

## SPECIFICATIONS

HP/kW @ Prop	60 / 45
Max RPM (WOT)	5500 - 6000
Cylinders	4 (in-line)
Displacement (CID/cc)	60.8 / 995
Bore X Stroke (in/mm)	2.56 x 2.95 / 65 x 75
Induction System	2-valves per cylinder Single Overhead Cam (SOHC)
Ignition System	ECM Digital Inductive
Fuel System	Electronic Fuel Injection (EFI)
Alternator Amp/Watt	18 amp / 226 watt
Cooling System	Water-Cooled w/ thermostat
Starting	Electric (turn-key)
Gear Ratio	2.33:1
Gear Shift	F-N-R
Propeller	Consult Dealer Propeller Guide
Steering	Remote or Tiller Kit
Trim System	Power Trim & Tilt
Shallow Water Drive	20° of Trim Range
Exhaust System	Through Prop
Recommended Oil	Mercury 4-Stroke Outboard Oil
Fuel/Ethanol Tolerance	87 octane/up to 10% Ethanol
Remote Fuel Tank (gal/L)	Optional
Operator Warning System	SmartCraft Engine Guardian
SmartCraft Technology	Yes
Shaft Length (in/mm)	20/508, 25/635
Dry Weight (lbs/kg)*	260/118* Lightest model available

**FourStroke**

**BigFoot 60hp EFI**

**KEY ATTRIBUTES**

**Large Displacement 4-Cylinder Engine**

A SOHC and long intake stroke design increases torque output for better acceleration. *Performance with smooth quiet overall operation.*

**Electronic Fuel Injection EFI**

Provides turn-key reliable starting, instant throttle response, spectacular fuel economy and lower fuel system maintenance. *More dependable, more efficient with more power and lower cost of operation.*

**BigFoot's Gearcase**

Locates propeller deeper in the water. The lower position keeps the prop below turbulent water, allowing it to operate in cleaner, less aerated water.

*Better performance and efficiency.*



**BigFoot's Propellers**

Designed with 20% more surface area than competitive props for greater performance. *More power and acceleration.*

**BigFoot's Low Gear Ratio**

The 2.33:1 ratio improves overall thrust and overall efficiency. *Superior maneuverability.*

# 60hp *EFI* **BigFoot** *FourStroke*

## ADDITIONAL FEATURES / BENEFITS

<b>Bigfoot's Anti-Ventilation Plate</b>	A specially oversized design prevents surface air from being drawn into the prop. Results in less slippage, increasing overall efficiency.
<b>18 Amp (226watts) Alternator</b>	Maintains battery charge to run electronics, lights and other accessories.
<b>SmartCraft</b>	Delivers information regarding 23 key engine functions from fuel usage, RPM & engine guardian to slow trolling RPM control, and even hull information.
<b>Precision Shift System</b>	Delivers smooth, quiet, effortless shifting.
<b>Power Trim / Tilt</b>	Allows user to trim the unit for maximum performance, handling and shallow water operation.
<b>Freshwater Flushing Port</b>	Rear mounted - flushes saltwater & debris out of the engine, extending the life of the outboard.
<b>Easy Maintenance</b>	Convenient oil drain and fill location, along with an automotive style spin-on filter.
<b>Tiller or Remote Steering</b>	Standard models along with Big Tiller Kit option allows rigging for all type of boating applications.

## The BigFoot Advantage

The BigFoot's **Gearcase is the same as a 115hp**, thus can turn a larger diameter propeller. The standard gearcase uses a smaller diameter propeller. Both work well depending on the hull application.

On a **22 foot pontoon** with the 60hp standard & 60hp BigFoot models both were tested with identical (**Light & Heavy**) payloads.

### The Results:

- ✓ With a light load the Standard model is **1.1 mph** faster than Bigfoot.
- ✓ With a heavy load the Bigfoot is **1.0 mph** faster than the Standard model.

**BigFoot is better for heavy loads!**

**FourStroke**

**BigFoot 60hp EFI**

<b>FOUR STROKE</b>	<b>MERCURY 40/50/60HP BigFoot</b>	<b>YAMAHA 50/60HP High Thrust</b>	<b>HONDA 60HP Power Thrust</b>
<b>Engine Type</b>	4 Cylinder	4 Cylinder	3 Cylinder
<b>Displacement</b>	60.8ci (996cc)	60.8ci (996cc)	60.9ci (998cc)
<b>Dry Weight*</b>	260 lbs (118kg)	267 lbs (121kg)	263 lbs (119kg)

\* Based on owner's manual

### **Over Honda**

4-Cyl. vs. 3-Cyl. Design. **Better inherent balance, less vibration**

### **Over Yamaha**

18 Amp Alternator vs. 17 Amp. **Convenience**

Troll Control (**10rpm steps**) vs. Variable Trolling (**50rpm steps**) **More Precise**

SmartCraft vs. Command Link®

## **H2H\* Performance Comparison Mercury Vs Yamaha**

**7% Better** Mid-Range fuel Economy. **More Efficient**

**.5 mph faster** with same load. **Same or Quicker.**

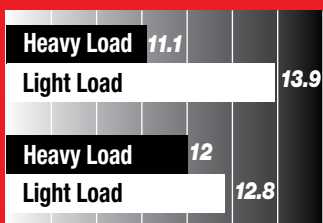
**10% Lower** Trolling (MPH) Speed. **Meets users Wants**

\* Boat: Alum. 16' Source Mercury Marine R & D

Source: Competitive Information based on 2009-2010 printed and web based advertising materials

### **How many Pontoons are used with light loads?**

**Standard**  
**1.83:1 Ratio**



**BIGFOOT**  
**2.33:1 Ratio**

**MPH** 8 9 10 11 12 13 14 15

**Top Speed is important, but  
the real BigFoot benefits are:**

✓ More **forward and reverse thrust** for maneuvering (docking or limited space waterways), heavy winds or strong currents.

✓ Better **fuel efficiency** because of less propeller slippage.

✓ The lower gear ratio and larger diameter prop insures the power is there for the **water tow toys**.



# 75hp *EFI* **FourStroke**



Standard three-year  
limited factory backed,  
nondeclining warranty.



Backed by the industry's  
only three year limited  
corrosion failure warranty.



3-Star C.A.R.B. rating on  
87 octane fuel, for ultra low  
engine emissions.

## SPECIFICATIONS

HP/kW @ Prop	75 / 56
Max RPM (WOT)	5000 - 6000
Cylinders	4 (in-line)
Displacement (CID/cc)	105.7 / 1732
Bore X Stroke (in/mm)	3.23 x 3.23 / 82 x 82
Induction System	4-valves per cylinder Dual Overhead Cam (DOHC)
Ignition System	ECM Digital Inductive
Fuel System	Electronic Fuel Injection (EFI)
Alternator Amp/Watt	50 amp / 630 watt belt driven
Cooling System	Water-Cooled w/ thermostat
Starting	Electric (turn-key)
Gear Ratio	2.33:1
Gear Shift	F-N-R
Propeller	Consult Dealer Propeller Guide
Steering	Remote or Tiller Kit
Trim System	Power Trim & Tilt
Shallow Water Drive	20° of Trim Range
Exhaust System	Through Prop
Recommended Oil	Mercury 4-Stroke Outboard Oil
Fuel/Ethanol Tolerance	87 octane/up to 10% Ethanol
Remote Fuel Tank (gal/L)	Optional
Operator Warning System	SmartCraft Engine Guardian
SmartCraft Technology	Yes
Shaft Length (in/mm)	20/508
Dry Weight (lbs/kg)*	399/181 * Lightest model available

## KEY ATTRIBUTES

### ✓ **Large Displacement**

At 105.7ci the 16 valve DOHC design increases torque output for best in performance and efficiency. *Performance with smooth quiet power.*

### ✓ **Built-In Durability**

Every 75-115hp is based on the shared Verado architecture ensuring mechanical toughness and reliability.

*Dependability with staying power.*

### ✓ **Electronic Fuel Injection EFI**

Provides turn-key reliable starting, instant throttle response, spectacular fuel economy and lower fuel system maintenance.

*More reliable, more efficient with more power and lower cost of operation.*

### ✓ **Maintenance-Free Valve Train**

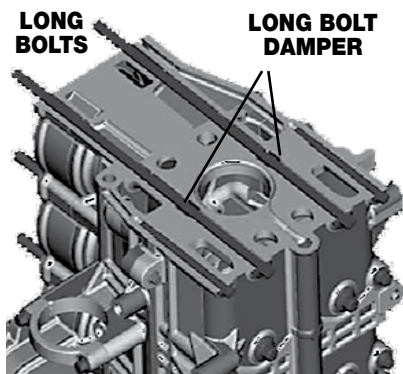
An Exclusive DOHC Valve Train - a robust design that is incredibly durable and requires no multiple shims or trial and error adjustments.

*Maintenance free for life - reduces your cost of operation.*

### ✓ **Long Bolt Design**

Brings together bedplate, block and cylinder head which keeps the powerhead in a state of constant compression.

*Reduced vibration adds to the life of the components, increases durability and results in a maintenance free drive train.*



**CYLINDER BLOCK**

# 75hp *EFI* **FourStroke**

## ✓ **Low Maintenance Design**

Easy access automotive spin-on type oil filter, oil fill and side mounted oil drain makes for easy maintenance.

*Less work, more fun.*

## ✓ **SmartCraft Management System**

Provides up to the minute information on everything from fuel management and boat speed to engine temperature and diagnostics.

*Improved efficiency based on more accurate information.*

## ✓ **Engine Guardian System**

Engine Function	Audible Alarm	Visual Alert	Feeling Alert
Low Battery Voltage	Intermittent		
Overheating	Continuous	Lamp	RPM Reduction
Low Oil PSI	Continuous	Lamp	RPM Reduction
Over-Rev	Continuous		

### **ADDITIONAL FEATURES / BENEFITS**

<b>Low Sound Levels</b>	An integrated Idle Relief Attenuator reduces sound levels for quiet operation - industry leading levels.
<b>High Output Charging</b>	Belt driven 50 amp alternator maintains battery(s) charge for electronics, stereos and live wells.
<b>Take It Slow</b>	SmartCraft's Troll Control feature allows you to set your RPM as low as 650 for trolling.
<b>16 Valve DOHC Design</b>	Intake and exhaust flow have been optimized for maximum torque and power. There are no belts to replace in this maintenance free design.
<b>2.33:1 Gear Ratio</b>	Provides strong acceleration maximizing boat performance.

# FourStroke 75hp EFI

FOUR STROKE	MERCURY 75HP	YAMAHA 75HP	SUZUKI 70HP	HONDA 75HP
Engine Type	In-Line 4	In-Line 4	In-Line 4	In-Line 4
Displacement	105.7ci (1732cc)	97ci (1596cc)	91.7ci (1502cc)	91.4ci (1496cc)
Dry Weight*	399lbs (181kg)	370lbs (168kg)	341lbs (155kg)	364lbs (165kg)
Alternator	50 Amp	25 Amp	27 Amp	44 Amp

\* Based on owner's manual

## ✓ Largest Displacement In Class

At 105.7ci the Mercury 75hp supplies plenty of torque output for optimal performance. *Plenty of power.*

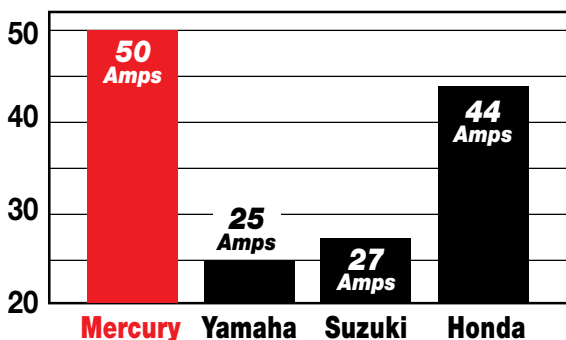
## ✓ Robust Powerhead

Based on pressure charging block design for long term endurance and reliability. *Tough design easily handles the power.*

## ✓ Exclusive Maintenance-Free Valve Train

Maintenance free for the lifetime of the engine with no belt to replace. *Reduces cost of operation.*

## ✓ 50 Amp Alternator Tops Its Class



✓ Belt Driven (Reduces Heat)

✓ Easy to Maintain

✓ Most Powerful in its Class

# 90hp *EFI* **FourStroke**



Standard three-year  
limited factory backed,  
nondeclining warranty.



Backed by the industry's  
only three year limited  
corrosion failure warranty.



3-Star C.A.R.B. rating on  
87 octane fuel, for ultra low  
engine emissions.

## SPECIFICATIONS

HP/kW @ Prop	90 / 67
Max RPM (WOT)	5000 - 6000
Cylinders	4 (in-line)
Displacement (CID/cc)	105.7 / 1732
Bore X Stroke (in/mm)	3.23 x 3.23 / 82 x 82
Induction System	4-valves per cylinder Dual Overhead Cam (DOHC)
Ignition System	ECM Digital Inductive
Fuel System	Electronic Fuel Injection (EFI)
Alternator Amp/Watt	50 amp / 630 watt belt driven
Cooling System	Water-Cooled w/ thermostat
Starting	Electric (turn-key)
Gear Ratio	2.33:1
Gear Shift	F-N-R
Propeller	Consult Dealer Propeller Guide
Steering	Remote or Tiller Kit
Trim System	Power Trim & Tilt
Shallow Water Drive	20° of Trim Range
Exhaust System	Through Prop
Recommended Oil	Mercury 4-Stroke Outboard Oil
Fuel/Ethanol Tolerance	87 octane/up to 10% Ethanol
Remote Fuel Tank (gal/L)	Optional
Operator Warning System	SmartCraft Engine Guardian
SmartCraft Technology	Yes
Shaft Length (in/mm)	20/508 25/635
Dry Weight (lbs/kg)*	399/181 *Lightest model available

## KEY ATTRIBUTES

✓ **Large Displacement**

At 105.7ci the 16 valve DOHC design increases torque output for best in performance and efficiency. **Performance with smooth quiet power.**

✓ **Built-In Durability**

Every 75-115hp is based on the shared Verado architecture ensuring mechanical toughness and reliability.

**Dependability with staying power.**

✓ **Electronic Fuel Injection EFI**

Provides turn-key reliable starting, instant throttle response, spectacular fuel economy and lower fuel system maintenance.

**More reliable, more efficient with more power and lower cost of operation.**

✓ **Low Maintenance Design**

Easy access automotive spin-on type oil filter, oil fill and side mounted oil drain makes for easy Maintenance.

✓ **Maintenance-Free Valve Train**

An Exclusive DOHC Valve Train - a robust design that is incredibly durable and requires no multiple shims or trial and error adjustments.

**Maintenance free for life - reduces your cost of operation.**

## ADDITIONAL FEATURES / BENEFITS

**Low Sound Levels**

An integrated Idle Relief Attenuator reduces sound levels for quiet operation - industry leading levels.

**High Output Charging**

Belt driven 50 Amp alternator maintains battery(s) charge for electronics, stereos and live wells.

**Take It Slow**

SmartCraft's Troll Control feature allows you to set your RPM as low as 650 for trolling.

# 90hp *EFI* **FourStroke**

## ✓ **Low Maintenance Design**

Easy access automotive spin-on type oil filter, oil fill and side mounted oil drain makes for easy maintenance.

*Less work, more fun.*

## ✓ **SmartCraft Management System**

Provides up to the minute information on everything from fuel management and boat speed to engine temperature and diagnostics.

*Improved efficiency based on more accurate information.*

## ✓ **Engine Guardian System**

Engine Function	Audible Alarm	Visual Alert	Feeling Alert
Low Battery Voltage	Intermittent		
Overheating	Continuous	Lamp	RPM Reduction
Low Oil PSI	Continuous	Lamp	RPM Reduction
Over-Rev	Continuous		

### **ADDITIONAL FEATURES / BENEFITS**

<b>Low Sound Levels</b>	An integrated Idle Relief Attenuator reduces sound levels for quiet operation - industry leading levels.
<b>High Output Charging</b>	Belt driven 50 amp alternator maintains battery(s) charge for electronics, stereos and live wells.
<b>Take It Slow</b>	SmartCraft's Troll Control feature allows you to set your RPM as low as 650 for trolling.
<b>16 Valve DOHC Design</b>	Intake and exhaust flow have been optimized for maximum torque and power. There are no belts to replace in this maintenance free design.
<b>2.33:1 Gear Ratio</b>	Provides strong acceleration maximizing boat performance.

<b>FOUR STROKE</b>	<b>MERCURY 90HP</b>	<b>YAMAHA 90HP</b>	<b>SUZUKI 90HP</b>	<b>HONDA 90HP</b>
<b>Engine Type</b>	In-Line 4	In-Line 4	In-Line 4	In-Line 4
<b>Displacement</b>	105.7ci (1732cc)	97ci (1596cc)	91.7ci (1502cc)	91.4ci (1496cc)
<b>Dry Weight*</b>	399lbs (181kg)	370lbs (168kg)	341lbs (155kg)	364lbs (165kg)
<b>Alternator</b>	50 Amp	25 Amp	27 Amp	44 Amp

\* Based on owner's manual

### ✓ **Largest Displacement In Class**

At 105.7ci the Mercury 90hp supplies plenty of torque output for optimal performance. **Plenty of power.**

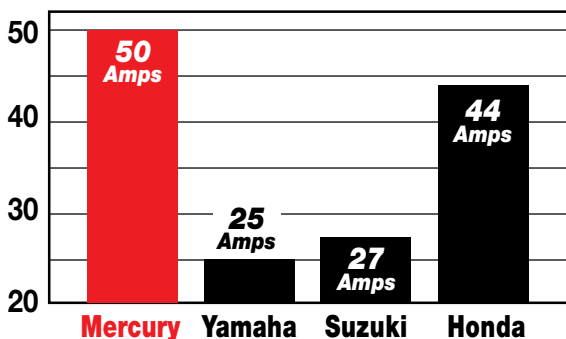
### ✓ **Robust Powerhead**

Based on pressure charging block design for long term endurance and reliability. **Tough design easily handles the power.**

### ✓ **Exclusive Maintenance-Free Valve Train**

Maintenance free for the lifetime of the engine with no belt to replace. **Reduces cost of operation.**

### ✓ **50 Amp Alternator Tops Its Class**



✓ **Belt Driven (Reduces Heat)**

✓ **Easy to Maintain**

✓ **Most Powerful in its Class**



# 115hp *EFI* **FourStroke**



Standard three-year limited factory backed, nondeclining warranty.



Backed by the industry's only three year limited corrosion failure warranty.



3-Star C.A.R.B. rating on 87 octane fuel, for ultra low engine emissions.

## **SPECIFICATIONS**

<b>HP/kW @ Prop</b>	115 / 86
<b>Max RPM (WOT)</b>	5800 - 6400
<b>Cylinders</b>	4 (in-line)
<b>Displacement (CID/cc)</b>	105.7 / 1732
<b>Bore X Stroke (in/mm)</b>	3.23 x 3.23 / 82 x 82
<b>Induction System</b>	4-valves per cylinder Dual Overhead Cam (DOHC)
<b>Ignition System</b>	ECM Digital Inductive
<b>Fuel System</b>	Electronic Fuel Injection (EFI)
<b>Alternator Amp/Watt</b>	50 amp / 630 watt belt driven
<b>Cooling System</b>	Water-Cooled w/ thermostat
<b>Starting</b>	Electric (turn-key)
<b>Gear Ratio</b>	2.33:1
<b>Gear Shift</b>	F-N-R
<b>Propeller</b>	Consult Dealer Propeller Guide
<b>Steering</b>	Remote or Tiller Kit
<b>Trim System</b>	Power Trim & Tilt
<b>Shallow Water Drive</b>	20° of Trim Range
<b>Exhaust System</b>	Through Prop
<b>Recommended Oil</b>	Mercury 4-Stroke Outboard Oil
<b>Fuel/Ethanol Tolerance</b>	87 octane/up to 10% Ethanol
<b>Remote Fuel Tank (gal/L)</b>	Optional
<b>Operator Warning System</b>	SmartCraft Engine Guardian
<b>SmartCraft Technology</b>	Yes
<b>Shaft Length (in/mm)</b>	20/508 25/635
<b>Dry Weight (lbs/kg)*</b>	399/181 * Lightest model available

# FourStroke **115hp** EFI

## KEY ATTRIBUTES

### ✓ **Large Displacement**

At 105.7ci the 16 valve DOHC design increases torque output for best in performance and efficiency. **Performance with smooth quiet power.**

### ✓ **Built-In Durability**

Every 75-115hp is based on the shared Verado architecture ensuring mechanical toughness and reliability.

**Dependability with staying power.**

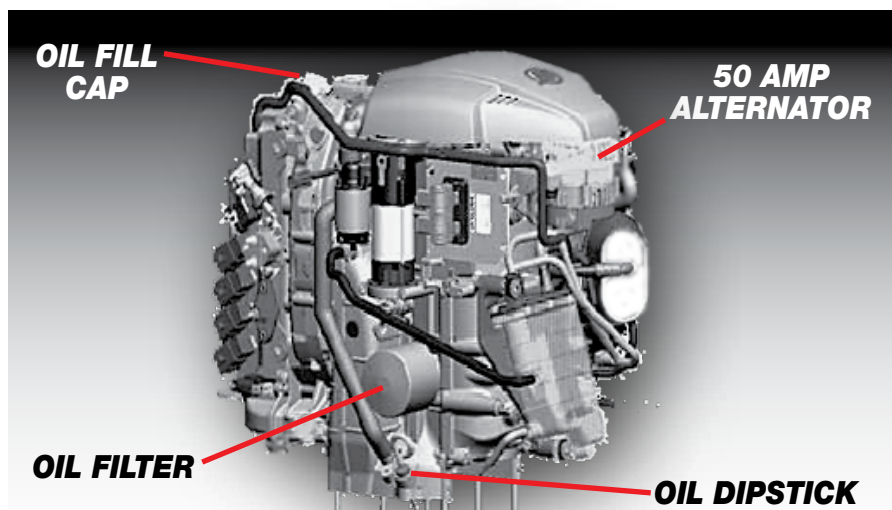
### ✓ **Electronic Fuel Injection EFI**

Provides turn-key reliable starting, instant throttle response, spectacular fuel economy and lower fuel system maintenance.

**More reliable, more efficient with more power and lower cost of operation.**

### ✓ **Low Maintenance Design**

Easy access automotive spin-on type oil filter, oil fill and side mounted oil drain makes for easy maintenance.



### ✓ **Maintenance Free Valve Train**

An Exclusive DOHC Valve Train - a robust design that is incredibly durable and requires no multiple shims or trial and error adjustments.

***Maintenance free for life - reduces your cost of operation.***

### ✓ **SmartCraft Management System**

Provides up to the minute information on everything from fuel management and boat speed to engine temperature and diagnostics.

***Improved efficiency based on more accurate information.***

### ✓ **Engine Guardian System**

Engine Function	Audible Alarm	Visual Alert	Feeling Alert
Low Battery Voltage	Intermittent		
Overheating	Continuous	Lamp	RPM Reduction
Low Oil PSI	Continuous	Lamp	RPM Reduction
Over-Rev	Continuous		

#### **ADDITIONAL FEATURES / BENEFITS**

<b>Low Sound Levels</b>	An integrated Idle Relief Attenuator reduces sound levels for quiet operation - industry leading levels.
<b>High Output Charging</b>	Belt driven 50 amp alternator maintains battery(s) charge for electronics, stereos and live wells.
<b>Take It Slow</b>	SmartCraft's Troll Control feature allows you to set your RPM as low as 650 for trolling.
<b>16 Valve DOHC Design</b>	Intake and exhaust flow have been optimized for maximum torque and power. There are no belts to replace in this maintenance free design.

# FourStroke **115hp** EFI

FOUR STROKE	MERCURY 115 HP	YAMAHA 115 HP	SUZUKI 115 HP	HONDA 115HP
<b>Engine Type</b>	In-Line 4	In-Line 4	In-Line 4	In-Line 4
<b>Displacement</b>	105.7ci (1732cc)	106.2ci (1741cc)	118.9ci (1950cc)	144ci (2354cc)
<b>Dry Weight*</b>	399lbs (181kg)	404lbs (183.3kg)	416lbs (189kg)	478lbs (217kg)
<b>Alternator</b>	50 Amp	25 Amp	40 Amp	50 Amp

\* Based on owner's manual

✓ **Lightest In Class** *Improves hull performance.*

✓ **Robust Powerhead**

Based on pressure charging block design for long term endurance and reliability. *Tough design easily handles the power.*

✓ **Exclusive Maintenance-Free Valve Train**

Maintenance free for the lifetime of the engine with no belt to replace. *Reduces cost of operation.*

✓ **Exclusive Low 2.33:1 Gear Ratio**

Provides plenty of low end power and throughout the RPM range. *Increased performance.*



## Big Tiller

- ✓ Optional **Power Steering** moves with a light touch
- ✓ Center-mounted tiller offers optimum control
- ✓ Two-position lock for trailering and operating positions
- ✓ Throttle and steering friction allows fine-tuning
- ✓ Convenient power trim switch allows easy access
- ✓ Longer tiller grip with 110° rotation / range of motion
- ✓ Up-front shift lever permits smooth shifting

**Troll Control**

# 150hp *FourStroke*



Standard three-year limited factory backed, nondeclining warranty.



Backed by the industry's only three year limited corrosion failure warranty.



3-Star C.A.R.B. rating on 87 octane fuel, for ultra low engine emissions.

## SPECIFICATIONS

HP/kW @ Prop	150 / 110
Max RPM (WOT)	5000 - 5800
Cylinders	4 (in-line) 8 Valve SOHC
Displacement (CID/cc)	183 / 3000
Bore X Stroke (in/mm)	4.0 x 3.6 / 102 x 92
Induction System	Performance - Tuned Scroll Intake Manifold
Ignition	SmartCraft ECM digital inductive
Fuel System	Multi-Port Electronic Fuel Injection (EFI)
Alternator Amp/Watt	60 amp / 756 watt belt-driven
Cooling System	Water-Cooled w/ thermostat
Starting	SmartStart Electric (turn-key)
Gear Ratio	1.92:1
Gear Shift	Mechanical F-N-R
Propeller	Consult Dealer Propeller Guide
Steering	Mechanical Cable Conventional Hydraulic (Opt) Mercury Power Steering Dual (Opt) Big Tiller P/S Handle Kit (Opt)
Trim System	SmartCraft Programmable
Exhaust System	Through Prop
Recommended Oil	Mercury 4-Stroke Outboard Oil
Fuel/Ethanol Tolerance	87 octane/up to 10% Ethanol
Operator Warning System	SmartCraft Engine Guardian
SmartCraft Technology	Yes
Shaft Length (in/mm)	20/508 25/636
Dry Weight (lbs/kg)*	455/206 *Lightest model available

## KEY ATTRIBUTES

✓ **Lightest & Smallest 150hp available**

Mercury's cutting-edge engineering has packed incredible power into a small, light package. A simple design with 18% fewer parts than competitive engines. **Durable, compact power.**

✓ **Highest Displacement in the 150hp Class!**

At 3.0 liters or 183 cubic inch this 4-cylinder SOHC design works less to produce more torque and horsepower! The large displacement delivers the best in performance and efficiency.

**Smooth, quiet power.**

**150hp  
Industry  
Comparison**

Mercury	Honda	Yamaha	Suzuki	Evinrude
183ci 3000cc	144ci 2354cc	162.2ci 2670cc	174.5ci 2867cc	158.2ci 2594cc

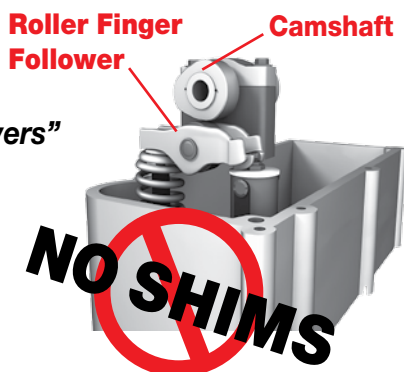
✓ **Class Leading Corrosion Resistance**

XK 360 low copper alloy and MercFusion paint combine with extensive use of stainless steel for maximum protection. **Durable.**

✓ **Low Friction  
Valve Train SOHC**

Race proven "Roller Finger Followers" and oversized valves offer a less complex design. More reliability, more efficiency and more power with lower cost of operation.

**Maintenance-Free Valve Train.**

✓ **Performance-Tuned Scroll Intake Manifold**

Long intake runner design insures maximum efficiency, resulting in top performance. **Responsive Power.**

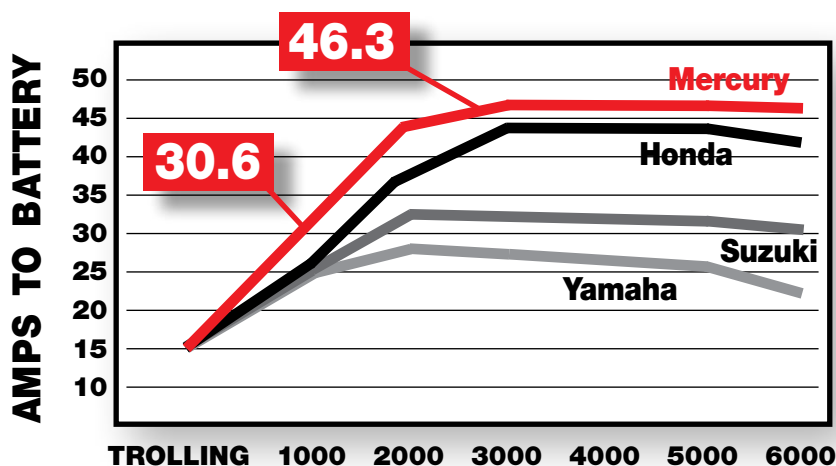
# 150hp **FourStroke**

## KEY ATTRIBUTES

### ✓ **Best in Class Battery Charging system!**

Mercury's **belt driven, "on-demand" alternator** produces less heat over *competitive magneto systems* and only provides power when needed. The **60 amp** alternator produces a net charge of **30 amps** at low speeds and **46 amps** above 3000 rpm.

**Dependability.**



### ✓ **Exclusive Oil Cooler & Sump**

Maintains proper oil temperature, enhances performance and extends the life of the engine.

**Long Life Dependability.**

### ✓ **Focused Mount System**

Optimum mount design reduces overall vibration and improves durability thanks to the **45°** top angled and the lower oversized mounts.

**Total Control & Comfort.**



**ADDITIONAL FEATURES / BENEFITS**

<b>Multi-port EFI</b>	Reliable starts and dependable performance.
<b>Vibration Management System</b>	Balancer Shafts ensure low transmitted vibration and the focused mounts mean smooth overall operation.
<b>11° Rotated Powerhead</b>	Advanced engineering provides a narrow profile design, delivering smooth performance.
<b>Power Flow Exhaust</b>	Efficient engine performance.
<b>Idle Exhaust Relief (sound)</b>	Quiet operation makes it easy to converse.
<b>World-Class Hydrodynamic Gearcase</b>	A durable 4.9 inch torpedo and low 1.92:1 gear ratio means less drag for improved performance.
<b>Top Cowl “Water-Separating Baffle” System</b>	Inner liners redirect any water entering through the rear air intakes down to exit through a pair of drain holes in the rear side area. Powerhead stays dry.
<b>Fresh Water Flush</b>	Flush with engine running at idle speed or turned off.
<b>SmartCraft (Digital) or Analog Compatible Instrumentation</b>	Operator kept conveniently updated on critical engine functions with this engine management system.
<b>Optional Mercury Power Steering (For Dual Engines)</b>	Automotive-like ease of steering, precise, responsive boat control & handling with no undesirable steering torque.
<b>Optional Big Tiller Handle Kit</b>	Power steering, convenient up-front shift & power trim switch - all for precise comfortable control.



# 150hp *FourStroke*

**BEST IN CLASS FOR EASY MAINTENANCE**

## ✓ **Maintenance Reference Decal**

**Maintenance Schedule**

**EVERY 100 HOURS OF USE OR ONCE YEARLY\***

INSPECT			
Anode	Low Pressure Fuel Filter	**Spark Plug	Thermostat

REPLACE	
Engine Oil and Filter	Gearcase Lubricant


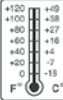
\*At Storage Preparation: see Owner's Manual

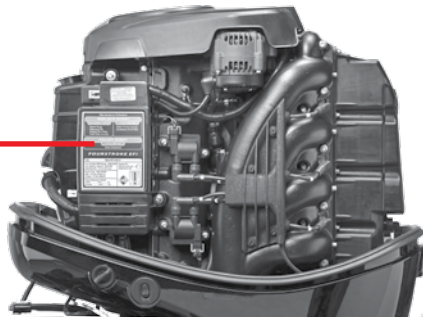
**EVERY 300 HOURS OF USE OR THREE YEARS**

REPLACE		
Accessory Drive Belt	Spark Plugs	Water Pump Impeller

For more information on maintaining your 150 FourStroke please scan this QR code with your smartphone

**Specifications**

Full Throttle RPM Range: 5000-6000 Idle Speed RPM in Neutral: 650 RPM	Engine Oil: 25W-40 FC-W 10W-30 FC-W 6.0 L (6.3 U.S. qt.)
Spark Plug: NGK ZFR5F Gap: 0.8 mm (0.032 in.) Torque: 27 Nm (20 lb - ft)	
**In Saltwater: Apply Anti-Seize Compound to Thread	



Go to  
**[www.i-nigma.mobi](http://www.i-nigma.mobi)**  
on your Smartphone.

**I-nigma** will  
automatically  
identify your handset  
type, download and  
install the correct **App**.

## **Low Maintenance Advantages**

- ✓ **Engine design & layout provides ease in routine maintenance.**
- ✓ **Maintenance-free valve train.**
- ✓ **No-mess oil change system.**
- ✓ **No tools needed fuel filter service.**
- ✓ **Color-coded maintenance locations.**
- ✓ **Up-front freshwater flush system.**
- ✓ **Single latch, lightweight guided cowl (easy off & on).**

**Easiest 150hp to Maintain!**



**FourStroke**

**150 hp**

**CLASS LEADING CORROSION RESISTANCE**

**New MercFusion  
Paint System**

- ✓ **Irridite** (Metal prep & sealing).
- ✓ **EDP**, or Electro-Deposition Priming.
- ✓ **Mercury's Powder Paint** Top Coat.

**XK 360  
Aluminum-Silicon  
Alloy**

- ✓ **Block, driveshaft housing & gearcase.**
- ✓ **Alternator housing** (hard anodizing process).
- ✓ **Die cast** (Less than 0.20% copper content).

**Stainless Steel  
Components**

- ✓ Prop, shift & drive shafts, trim/tilt rams, tilt tubes, steering swivel tubes, lower yokes and water pump housings.
- ✓ Steering swivel tubes, lower yokes are also **EDP'd** and top coated.

**Sacrificial Anodes**

- ✓ Indium-aluminum combination.
- ✓ Strategically placed.

**A-356  
Aluminum-Silicon  
Alloy**

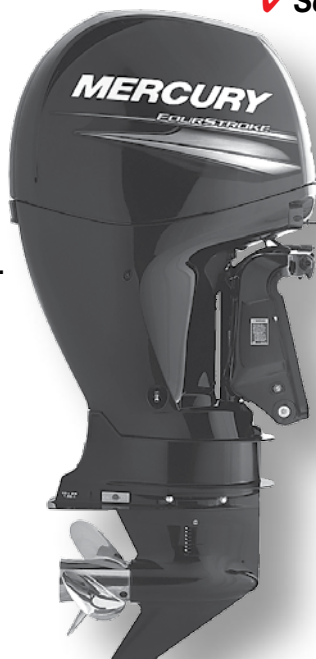
- ✓ **Cylinder Head.**
- ✓ **Less than 0.15% copper content.**
- ✓ **Semi-permanent mold casting.**

**Painted  
Starter  
Motor**

- ✓ Marine grade acrylic-melamine top coat.

**Braided  
Bonding  
Straps**

- ✓ Grounding for corrosion endurance.



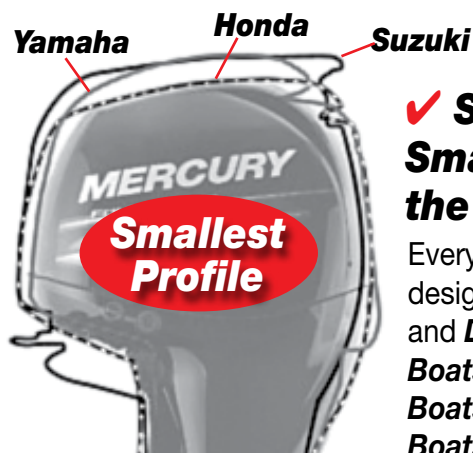
**Water Tight Cowl**

- ✓ Water separating baffle system.

**Sealed Electrical  
Connections**

- ✓ Waterproof connections for reliable running.

# 150hp **FourStroke**

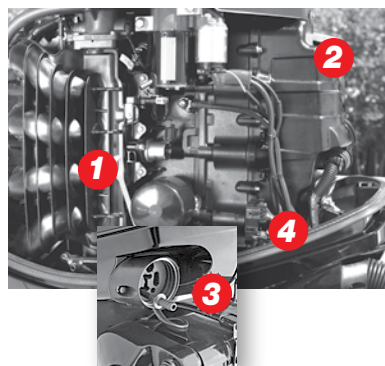
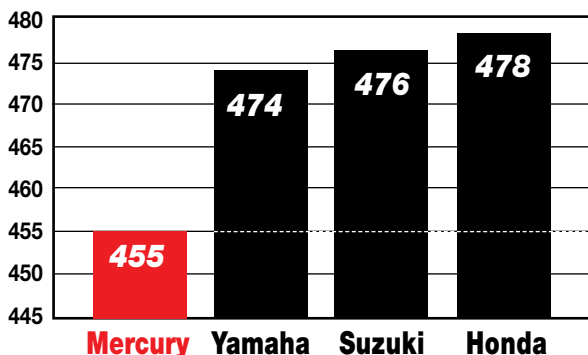


## ✓ **Shallowest Depth and Smallest Tilt-Arc with the Least Well Intrusion**

Every boat will benefit from the compact design of the 150hp, from **Pontoons** and **Deckboats**, **Inshore Bay** and **Flat Boats**, **Offshore**, **Runabouts** and **Bass Boats**, **Multi-Species** and **Fish/Ski Boats**. **Widest Possible Versatility.**

## ✓ **Nearly 20 lbs. Lighter Than the Nearest Competitor**

Weighing in at only **455 pounds**, the 150hp beats it's nearest competitor by nearly **20 pounds!** **Improves Boat Hull Performance & Efficiency.**



## **Simplified Rigging**

✓ Engine configuration allows easy access to all areas of rigging.

- (1) Attach **T & S cables** (no wrenches)
- (2) Connect **14-pin Harness** (upfront)
- (3) Attach **fuel hose** to outside barb
- (4) Attach **Speedo tube**
- (5) **Battery cables** ready to attach to battery

Four Stroke	Mercury	Yamaha	Suzuki	Honda
Engine Type	In-Line 4	In-Line 4	In-Line 4	In-Line 4
Displacement	183ci 3000cc	162.2ci 2670cc	174.5ci 2867cc	144ci 2354cc
Dry Weight*	455lbs (206kg)	474lbs (215kg)	476lbs (216kg)	478lbs (217kg)

## MERCURY ADVANTAGE

### Over Yamaha

**19 lbs. Lighter** than Yamaha. **Improves Hull Maneuverability**  
**Larger displacement** than Yamaha. **Performance**  
**71% More Charging** 60 Amp Alternator vs. 35 Amp. **Convenience**  
**Maintenance Free Valve Train** vs. DOHC **More Time on the Water**  
**Exclusive Oil Cooler** vs. None **Longer Engine Life**  
**Focused Mount System** vs. Conventional Mount **Smoother Running**  
**18% Fewer Parts** than Yamaha **Durability**

### Over Suzuki

**21 lbs. Lighter** than Suzuki. **Improves Hull Maneuverability**  
**Larger displacement** than Suzuki. **Performance**  
**36% More Charging** 60 Amp Alternator vs. 44 Amp. **Convenience**  
**Maintenance Free Valve Train** vs. DOHC **More Time on the Water**  
**Exclusive Oil Cooler** vs. None **Longer Engine Life**  
**Focused Mount System** vs. Conventional Mount **Smoother Running**  
**15% Fewer Parts** than Suzuki **Durability**

### Over Honda

**23 lbs. Lighter** than Honda. **Improves Hull Maneuverability**  
**27% more displacement** than Honda. **Power**  
**18% More Charging** 60 Amp Alternator vs. 51 Amp. **Convenience**  
**Maintenance Free Valve Train** vs. SOHC **More Time on the Water**  
**Focused Mount System** vs. Non-Linear Mounts **Smoother Running**







## **FOURSTROKE OUTBOARD**

***The Verado Experience*** —

***150 HP L4*** —

***175 HP L4*** —

***200 HP L4*** —

***225 HP L6*** —

***250 HP L6*** —

***250 HP Pro FourStroke*** —

***300 HP L6*** —

***300 HP Pro FourStroke*** —

***300 HP HD*** —

***225-300hp Competitive Overview*** —

***Mercury Advantage over Yamaha*** —

***5.44" Gearcase Story*** —

# ***The Verado Experience***

## ***A Total Driving Experience***

Verado delivers an amazing driving experience, with superior reliability and robust torque for remarkable acceleration and power. With the added comfort and responsiveness of “luxury-auto-like” control for easier steering, smoother shift and throttle control operation, all at a major reduction in operating noise.

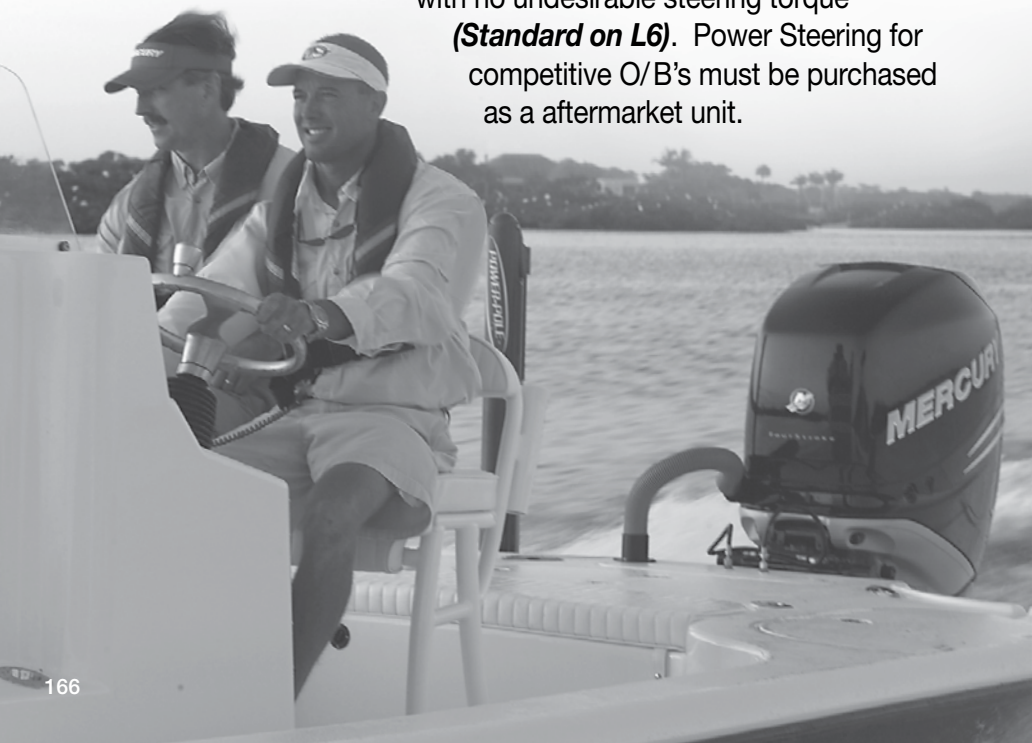
## ***Ultimate Control***

### ***SmartCraft® Digital Throttle & Shift (DTS) System***

- ✓ Digitally precise, providing effortless control
- ✓ Offers unmatched, smooth shifting and quicker throttle response,
- ✓ Single lever operation can accommodate up to 4 engines
- ✓ Maintenance-free with proven & reliable performance every time.

## ***Easier Steering***

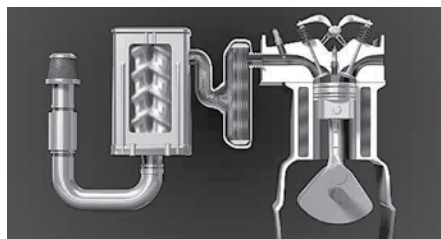
Verado's exclusive Mercury Power Steering system delivers automotive-like ease of steering, precise responsive boat control and handling with no undesirable steering torque  
(Standard on L6). Power Steering for competitive O/B's must be purchased as a aftermarket unit.



# The Verado Experience

## Verado Supercharger

A Mercury exclusive, this is a supercharger that delivers the torque big boats need for immediate planing, superior mid-range acceleration and strong top speed.



## Electronic Boost-Bypass Valve

A self-compensating system, electronically monitors boost pressure levels within the intake system and automatically feeds excess air back through the intake.

✓ Naturally aspirated outboards lose power as outside temperature & humidity increase. A drop of 20°F can decrease the power output as much as 6%.

✓ With Verado you get steady consistent power and performance regardless of the outside conditions.

## Advanced Mid-Section AMS

✓ Perimeter-style mounts surround the powerhead, reducing noise and eliminating vibration. The result a very smooth ride.

✓ Unique placement of the mounts eliminates “crabbing effect” (*An effect felt in large displacement competitive four-strokes*) that greatly hinders handling and performance.



## Information & Management System

**SmartCraft® Instrumentation** provides up-to-the second information on everything from fuel management and boat speed to engine temperature and diagnostics.

*Accurate and dependable decision making information to the operator for improved efficiency.*



## A Prop For Every Purpose

Mercury Marine is the world's largest manufacturer of propellers and knows what it takes to make the best prop. *Mercury has over 500 unique propellers to fine tune the performance of our engines for Top Speed, Acceleration, Towing Power and Optimal Fuel Economy at Cruise.*



### Intake System

**Feature:**

Intake Resonator works as an intake muffler

**Consumer Benefit:**

Reduced sound levels

**Feature:**

Bypass Valve controls the boost pressure developed by the supercharger

**Consumer Benefit:**

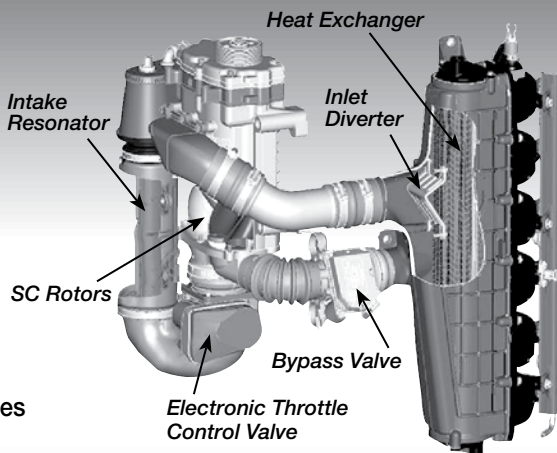
Power on demand and increased durability

**Feature:**

Charge Air Cooler decreases air intake temperature

**Consumer Benefit:**

More HP

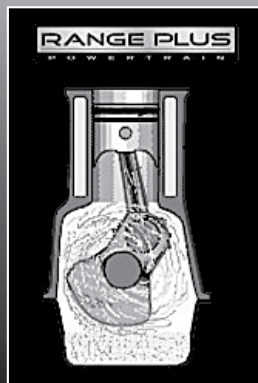


### Range Plus Power Train

Delivers significant **windage-based** friction reduction improvements inside the powerhead.

**Windage-based friction** occurs when the crankshaft rotates through oil suspended in the crankcase.

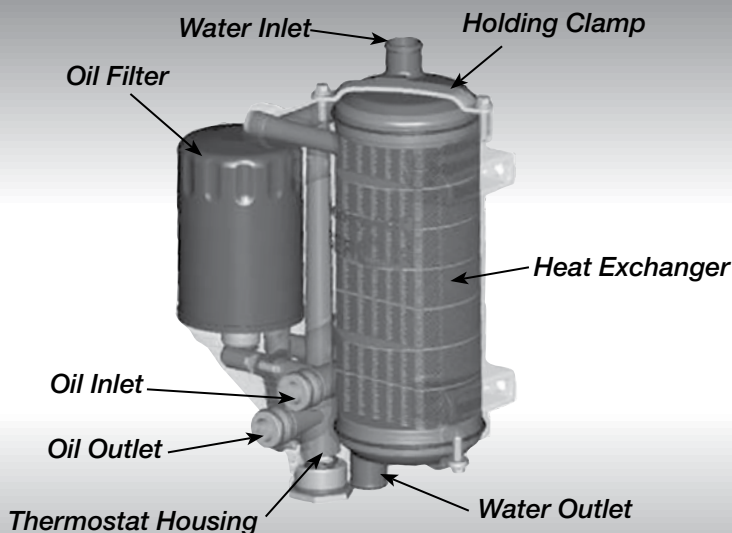
- ✓ Oil is a much heavier medium than air.
- ✓ The engine must work harder to rotate the crankshaft.
- ✓ Friction consumes horsepower and reduces overall efficiency.



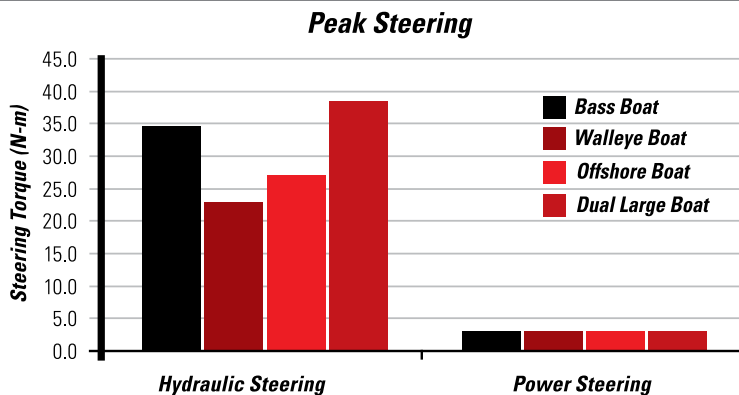
**Mercury's refined technology allows the engine to produce more power while working less, optimizing fuel economy and increasing efficiency.**

## Water-to-Oil Heat Exchanger

**Consumer Benefit: Consistent oil temperatures  
resulting in reduced oil dilution**



## Mercury Power Steering



# 150hp L4 VERADO



Standard three-year limited factory backed, nondeclining warranty.



Backed by the industry's only three year limited corrosion failure warranty.



2-Star C.A.R.B. rating on 87 octane fuel, for very low engine emissions.

## SPECIFICATIONS

HP/kW @ Prop	150 / 112
Max RPM (WOT)	5800 - 6400
Cylinders	4 (in-line)
Displacement (CID/cc)	105.7 / 1732
Bore X Stroke (in/mm)	3.23 x 3.23 / 82 x 82
Induction System	Supercharged w/Charge Air Cooling & Electronic Boost Pressure Control
Ignition	SmartCraft PCM digital inductive
Fuel System	Electronic Fuel Injection (EFI)
Alternator Amp/Watt	70 amp / 882 watt belt-driven
Cooling System	Water-Cooled w/ thermostat
Starting	SmartCraft Electric (turn-key)
Gear Ratio	2.08:1
Gear Shift	SmartCraft DTS F-N-R
Propeller	Consult Dealer Propeller Guide
Steering*	Hydraulic (Optional) Power Steering Kit (Optional) Big Tiller Handle Kit (Optional)
* Mechanical Steering not recommended	
Trim System	SmartCraft Programmable
Exhaust System	Through Prop
Recommended Oil	Mercury 4-Stroke Outboard Oil
Fuel/Ethanol Tolerance	87 octane/up to 10% Ethanol
Operator Warning System	SmartCraft Engine Guardian
SmartCraft Technology	Yes
Shaft Length (in/mm)	20/508 25/635
Dry Weight (lbs/kg)*	510/231* Lightest model available

# VERADO 150hp L4

## KEY ATTRIBUTES

### ✓ **Verado's Supercharged System**

Delivers the torque big boats need for immediate planing, superior mid-range acceleration and strong top speed.

*Performance with smooth quiet overall operation.*

### ✓ **Charge Air Cooler**

Works with supercharger by cooling air before it enters the combustion chamber. *Delivers optimal engine performance.*

### ✓ **SmartCraft DTS**

Digital Throttle & Shift delivers ultra smooth, quiet and responsive shifting/throttle operation requiring virtually no maintenance.

*Comfort with Durability.*

### ✓ **SmartCraft Management System**

Provides up to the minute information on everything from fuel management and boat speed to engine temperature and diagnostics.

*Improved efficiency based on more accurate information.*

### ✓ **Maintenance Free Valve Train**

Maintenance free and maximum durability by optimized valve design and maximum combustion stability.

*Worry Free Durability.*

## ADDITIONAL FEATURES / BENEFITS

#### **Water-to-Oil Heat Exchanger**

Exclusive to Verado provides consistent oil temperatures prevents condensation and oil dilution for reliability and endurance.

#### **Optimized Valve Design**

Ultimate level of durability and performance with a maintenance free valve train for the life of the engine.

# 150hp L4 VERADO

## ADDITIONAL FEATURES / BENEFITS

<b><i>Electronic Boost Bypass Valve</i></b>	Controls the boost pressure from the supercharger to ensure consistent performance regardless of temperature or pressure.
<b><i>Long Bolt Powerhead Design</i></b>	Eliminates the effects of expansion and contraction to provide long term powerhead structure and durability
<b><i>70 Amp Alternator</i></b>	Provides battery charging on demand and allows use of electronics and lights.
<b><i>Idle Exhaust Relief System</i></b>	Virtually no sound when engine runs at idle.
<b><i>Fresh Water Flush</i></b>	Protects engine and allows for easy maintenance.
<b><i>Sequential Multiport Fuel Injection</i></b>	Ensures the perfect ratio of fuel and air to achieve optimal combustion efficiency providing consistent running quality and engine performance.
<b><i>4 Valve / Cylinder Double Overhead Cam</i></b>	Delivering class leading torque and horsepower throughout the power band to provide boat planing and acceleration.
<b><i>SmartCraft Programmable Tilt</i></b>	Prevents engine from impacting with the short transom wells found on some boats. Feature lets you adjust the tilt limit to a point prior to maximum tilt.
<b><i>External Mounted Trim Switch</i></b>	Customer convenience when trailering.
<b><i>Front Low Water Pickups</i></b>	Consistent water pressure and engine cooling.

# VERADO 150hp L4

FOUR STROKE	MERCURY 150HP	YAMAHA 150HP	SUZUKI 150HP	HONDA 150HP
Engine Type	In-Line 4	In-Line 4	In-Line 4	In-Line 4
Displacement	105.7ci (1733cc)	162.2ci (2670cc)	174.5ci (2867cc)	144ci (2354cc)
Dry Weight*	510lbs (231kg)	476lbs (213kg)	474lbs (215kg)	478lbs (217kg)
Alternator	70 Amp	35 Amp	44 Amp	51 Amp
Battery Charging	60 Amp	24 Amp	35 Amp	44 Amp
Gear Ratio	2.08:1	2.00:1	2.50:1	2.14:1

\* Based on owner's manual

## MERCURY ADVANTAGE

### Over Yamaha

**Supercharged Technology vs.** Naturally Aspirated Design. **Efficient power.**  
**4-Valve DOHC vs.** 4-Valve DOHC. **Lower maintenance, operational costs.**  
**DTS vs.** Conventional controls. **Precise throttle response, smooth shifting.**  
**70 Amp vs.** 35 Amp. Alternator. **50% More charging power.**  
**Belt Driven Alternator vs.** Magneto Type. **Less heat / Better durability.**  
**SmartCraft Troll control vs.** None. **Enhanced, precise trolling.**

### Over Suzuki

**Supercharged Technology vs.** Naturally Aspirated Design. **More efficient power.**  
**4-Valve DOHC vs.** 4-Valve DOHC. **Lower maintenance, operational costs.**  
**DTS vs.** Conventional controls. **Precise throttle response, smooth shifting.**  
**70 Amp vs.** 44 Amp. Alternator. **38% More charging power.**  
**Belt Driven Alternator vs.** Magneto Type. **Less heat / Better durability.**  
**SmartCraft Troll control vs.** None. **Enhanced, precise trolling.**

### Over Honda

**Supercharged Technology vs.** Naturally Aspirated Design. **More efficient power.**  
**4-Valve DOHC vs.** 4-Valve DOHC. **Lower maintenance, operational costs.**  
**DTS vs.** Conventional controls. **Precise throttle response, smooth shifting.**  
**70 Amp vs.** 51 Amp. Alternator. **28% More charging power.**  
**SmartCraft Troll control vs.** None. **Enhanced, precise trolling.**

# 175hp L4 VERADO



Standard three-year limited factory backed, nondeclining warranty.



Backed by the industry's only three year limited corrosion failure warranty.



2-Star C.A.R.B. rating on 87 octane fuel, for very low engine emissions.

## SPECIFICATIONS

HP/kW @ Prop	175 / 130
Max RPM (WOT)	5800 - 6400
Cylinders	4 (in-line)
Displacement (CID/cc)	105.7 / 1732
Bore X Stroke (in/mm)	3.23 x 3.23 / 82 x 82
Induction System	Supercharged w/Charge Air Cooling & Electronic Boost Pressure Control
Ignition	SmartCraft PCM digital inductive
Fuel System	Electronic Fuel Injection (EFI)
Alternator Amp/Watt	70 amp / 882 watt belt-driven
Cooling System	Water-Cooled w/ thermostat
Starting	SmartCraft Electric (turn-key)
Gear Ratio	2.08:1
Gear Shift	SmartCraft DTS F-N-R
Propeller	Consult Dealer Propeller Guide
Steering* * Mechanical Steering not recommended	Hydraulic (Optional) Power Steering Kit (Optional) Big Tiller Handle Kit (Optional)
Trim System	SmartCraft Programmable
Exhaust System	Through Prop
Recommended Oil	Mercury 4-Stroke Outboard Oil
Fuel/Ethanol Tolerance	87 octane/up to 10% Ethanol
Operator Warning System	SmartCraft Engine Guardian
SmartCraft Technology	Yes
Shaft Length (in/mm)	20/508 25/635
Dry Weight (lbs/kg)*	510/231* Lightest model available

# VERADO 175hp L4

## KEY ATTRIBUTES

### ✓ **Verado's Supercharged System**

Delivers the torque big boats need for immediate planing, superior mid-range acceleration and strong top speed.

*Performance with smooth quiet overall operation.*

### ✓ **Charge Air Cooler**

Works with supercharger by cooling air before it enters the combustion chamber. *Delivers optimal engine performance.*

### ✓ **SmartCraft DTS**

Digital Throttle & Shift delivers ultra smooth, quiet and responsive shifting/throttle operation requiring virtually no maintenance.

*Comfort with Durability.*

### ✓ **SmartCraft Management System**

Provides up to the minute information on everything from fuel management and boat speed to engine temperature and diagnostics.

*Improved efficiency based on more accurate information.*

### ✓ **Maintenance Free Valve Train**

Maintenance free and maximum durability by optimized valve design and maximum combustion stability.

*Worry Free Durability.*

## ADDITIONAL FEATURES / BENEFITS

#### **Water-to-Oil Heat Exchanger**

Exclusive to Verado provides consistent oil temperatures prevents condensation and oil dilution for reliability and endurance.

#### **Optimized Valve Design**

Ultimate level of durability and performance with a maintenance free valve train for the life of the engine.



# 175hp L4

# VERADO

## ADDITIONAL FEATURES / BENEFITS

<b><i>Electronic Boost Bypass Valve</i></b>	Controls the boost pressure from the supercharger to ensure consistent performance regardless of temperature or pressure.
<b><i>Long Bolt Powerhead Design</i></b>	Eliminates the effects of expansion and contraction to provide long term powerhead structure and durability
<b><i>70 Amp Alternator</i></b>	Provides battery charging on demand and allows use of electronics and lights.
<b><i>Idle Exhaust Relief System</i></b>	Virtually no sound when engine runs at idle.
<b><i>Fresh Water Flush</i></b>	Protects engine and allows for easy maintenance.
<b><i>Sequential Multiport Fuel Injection</i></b>	Ensures the perfect ratio of fuel and air to achieve optimal combustion efficiency providing consistent running quality and engine performance.
<b><i>4 Valve / Cylinder Double Overhead Cam</i></b>	Delivering class leading torque and horsepower throughout the power band to provide boat planing and acceleration.
<b><i>SmartCraft Programmable Tilt</i></b>	Prevents engine from impacting with the short transom wells found on some boats. Feature lets you adjust the tilt limit to a point prior to maximum tilt.
<b><i>External Mounted Trim Switch</i></b>	Customer convenience when trailering.
<b><i>Front Low Water Pickups</i></b>	Consistent water pressure and engine cooling.

# VERADO 175hp L4

FOUR STROKE	MERCURY 175 HP	SUZUKI 175 HP
<b>Engine Type</b>	In-Line 4	In-Line 4
<b>Displacement</b>	105.7 ci (1733 cc)	174.5ci (2867 cc)
<b>Dry Weight*</b>	510 lbs (231kg)	474 lbs (215 kg)
<b>Alternator</b>	70 Amp	44 Amp
<b>Battery Charging</b>	60 Amp	35 Amp

\* Based on owner's manual

## MERCURY ADVANTAGE

### Over Suzuki

**Supercharged Technology vs.** Naturally Aspirated Design. **Efficient power.**  
**4-Valve DOHC vs.** 4-Valve DOHC. **Lower maintenance, operational costs.**  
**DTS vs.** Conventional controls. **Precise throttle response, smooth shifting.**  
**70 Amp vs.** 44 Amp. Alternator. **38% More charging power.**  
**Belt Driven Alternator vs.** Magneto Type. **Less heat / Better durability.**  
**SmartCraft Troll control vs.** None. **Enhanced, precise trolling.**

## Big Tiller

- ✓ Digital Throttle & Shift for operational ease.
- ✓ Power Steering moves with a light touch.
- ✓ Center-mounted tiller offers optimum control
- ✓ Two-position lock for trailering and operating positions
- ✓ Throttle and steering friction allows fine-tuning
- ✓ Convenient power trim switch allows easy access
- ✓ Longer tiller grip with 110° rotation / range of motion
- ✓ Up-front shift lever permits smooth shifting

### Troll Control



# 200hp L4 VERADO



Standard three-year limited factory backed, nondeclining warranty.



Backed by the industry's only three year limited corrosion failure warranty.



2-Star C.A.R.B. rating on 87 octane fuel, for very low engine emissions.

## SPECIFICATIONS

HP/kW @ Prop	200 / 149
Max RPM (WOT)	5800 - 6400
Cylinders	4 (in-line)
Displacement (CID/cc)	105.7 / 1732
Bore X Stroke (in/mm)	3.23 x 3.23 / 82 x 82
Induction System	Supercharged w/Charge Air Cooling & Electronic Boost Pressure Control
Ignition	SmartCraft PCM digital inductive
Fuel System	Electronic Fuel Injection (EFI)
Alternator Amp/Watt	70 amp / 882 watt belt-driven
Cooling System	Water-Cooled w/ thermostat
Starting	SmartCraft Electric (turn-key)
Gear Ratio	2.08:1
Gear Shift	SmartCraft DTS F-N-R
Propeller	Consult Dealer Propeller Guide
Steering* * Mechanical Steering not recommended	Hydraulic (Optional) Power Steering Kit (Optional) Big Tiller Handle Kit (Optional)
Trim System	SmartCraft Programmable
Exhaust System	Through Prop
Recommended Oil	Mercury 4-Stroke Outboard Oil
Fuel/Ethanol Tolerance	87 octane/up to 10% Ethanol
Operator Warning System	SmartCraft Engine Guardian
SmartCraft Technology	Yes
Shaft Length (in/mm)	20/508 25/635
Dry Weight (lbs/kg)*	510/231 * Lightest model available

# VERADO 200hp L4

## KEY ATTRIBUTES

### ✓ **Verado's Supercharged System**

Delivers the torque big boats need for immediate planing, superior mid-range acceleration and strong top speed.

*Performance with smooth quiet overall operation.*

### ✓ **Charge Air Cooler**

Works with supercharger by cooling air before it enters the combustion chamber. *Delivers optimal engine performance.*

### ✓ **SmartCraft DTS**

Digital Throttle & Shift delivers ultra smooth, quiet and responsive shifting/throttle operation requiring virtually no maintenance.

*Comfort with Durability.*

### ✓ **SmartCraft Management System**

Provides up to the minute information on everything from fuel management and boat speed to engine temperature and diagnostics.

*Improved efficiency based on more accurate information.*

### ✓ **Maintenance Free Valve Train**

Maintenance free and maximum durability by optimized valve design and maximum combustion stability.

*Worry Free Durability.*

## ADDITIONAL FEATURES / BENEFITS

#### **Water-to-Oil Heat Exchanger**

Exclusive to Verado provides consistent oil temperatures prevents condensation and oil dilution for reliability and endurance.

#### **Optimized Valve Design**

Ultimate level of durability and performance with a maintenance free valve train for the life of the engine.

# 200hp L4 VERADO

## ADDITIONAL FEATURES / BENEFITS

<b>Electronic Boost Bypass Valve</b>	Controls the boost pressure from the supercharger to ensure consistent performance regardless of temperature or pressure.
<b>Long Bolt Powerhead Design</b>	Eliminates the effects of expansion and contraction to provide long term powerhead structure and durability
<b>70 Amp Alternator</b>	Provides battery charging on demand and allows use of electronics and lights.
<b>Idle Exhaust Relief System</b>	Virtually no sound when engine runs at idle.
<b>Fresh Water Flush</b>	Protects engine and allows for easy maintenance.
<b>Sequential Multiport Fuel Injection</b>	Ensures the perfect ratio of fuel and air to achieve optimal combustion efficiency providing consistent running quality and engine performance.
<b>4 Valve / Cylinder Double Overhead Cam</b>	Delivering class leading torque and horsepower throughout the power band to provide boat planing and acceleration.
<b>SmartCraft Programmable Tilt</b>	Prevents engine from impacting with the short transom wells found on some boats. Feature lets you adjust the tilt limit to a point prior to maximum tilt.
<b>External Mounted Trim Switch</b>	Customer convenience when trailering.
<b>Front Low Water Pickups</b>	Consistent water pressure and engine cooling.

# VERADO 200hp L4

FOUR STROKE	MERCURY 200HP	YAMAHA 200HP	SUZUKI 200HP	HONDA 200HP
<b>Engine Type</b>	In-Line 4	60°V6	55°V6	60°V6
<b>Displacement</b>	105.7ci (1733cc)	204.6ci (3352cc)	220ci (3614cc)	212ci (3471cc)
<b>Dry Weight*</b> (25 inch shaft)	524lbs (238kg)	608lbs (276kg)	580lbs (263kg)	599lbs (272kg)
<b>Alternator</b>	70 Amp	45 Amp	54 Amp	90 Amp
<b>Battery Charging</b>	60 Amp	NA	NA	60 Amp
<b>Gear Ratio</b>	2.08:1	2.00:1	2.50:1	2.14:1

**Note:** Yamaha's other 4-Stroke 200hp is the 4.2L V6 SHO and is only available as a 20" shaft model at 505 Lbs.(229Kg). \* Based on owner's manual

## MERCURY ADVANTAGE

### Over Yamaha

**Supercharged Technology vs.** Naturally Aspirated Design. **Efficient power.**

**524 lbs. vs.** 608 lbs. **Almost 84 lbs. lighter.**

**4-Valve DOHC vs.** 4-Valve DOHC. **Lower maintenance, operational costs.**

**DTS vs.** Conventional controls. **Precise throttle response, smooth shifting.**

**70 Amp vs.** 45 Amp. Alternator. **35% More charging power.**

**Belt Driven Alternator vs.** Magneto Type. **Less heat / Better durability.**

**SmartCraft Troll control vs.** None. **Enhanced, precise trolling.**

### Over Suzuki

**Supercharged Technology vs.** Naturally Aspirated Design. **More efficient power.**

**524 lbs. vs.** 593 lbs. **Almost 70 lbs. lighter.**

**4-Valve DOHC vs.** 4-Valve DOHC. **Lower maintenance, operational costs.**

**DTS vs.** Conventional controls. **Precise throttle response, smooth shifting.**

**70 Amp vs.** 54 Amp. Alternator. **23% More charging power.**

**Belt Driven Alternator vs.** Magneto Type. **Less heat / Better durability.**

**SmartCraft Troll control vs.** None. **Enhanced, precise trolling.**

### Over Honda

**Supercharged Technology vs.** Naturally Aspirated Design. **More efficient power.**

**524 lbs. vs.** 599 lbs. **Almost 70 lbs. lighter.**

**4-Valve DOHC vs.** 4-Valve DOHC. **Lower maintenance, operational costs.**

**DTS vs.** Conventional controls. **Precise throttle response, smooth shifting.**

**SmartCraft Troll control vs.** None. **Enhanced, precise trolling.**

# 225hp L6 VERADO



Standard three-year  
limited factory backed,  
nondeclining warranty.



Backed by the industry's  
only three year limited  
corrosion failure warranty.



2-Star C.A.R.B. rating on  
87 octane fuel, for very low  
engine emissions.

## SPECIFICATIONS

HP/kW @ Prop	225 / 168
Max RPM (WOT)	5800 - 6400
Cylinders	6 (in-line)
Displacement (CID/cc)	158.5 / 2598
Bore X Stroke (in/mm)	3.23 x 3.23 / 82 x 82
Induction System	Supercharged w/Charge Air Cooling & Electronic Boost Pressure Control 4-valves per cylinder (DOHC)
Ignition System	SmartCraft PCM digital inductive
Fuel System	Electronic Fuel Injection (EFI)
Alternator Amp/Watt	70 amp / 882 watt belt-driven
Cooling System	Water-Cooled w/ thermostat
Starting	SmartCraft Electric (turn-key)
Gear Ratio	4.8" 1.85:1 5.44" 1.85:1
Gear Shift	SmartCraft DTS F-N-R
Propeller	Consult Dealer Propeller Guide
Steering	Mercury Power Steering
Trim System	SmartCraft Programmable
Exhaust System	Through Prop
Recommended Oil	Mercury 4-Stroke Outboard Oil
Fuel/Ethanol Tolerance	87 octane/up to 10% Ethanol
Operator Warning System	SmartCraft Engine Guardian
SmartCraft Technology	Yes
Shaft Length (in/mm)	20/508 25/635 30/762
Dry Weight (lbs/kg)*	635/288* Lightest model available

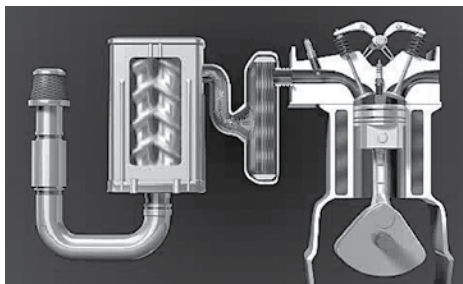
# VERADO 225hp L6

## KEY ATTRIBUTES

### ✓ Verado's Supercharged System

Delivers the torque big boats need for immediate planing, superior mid-range acceleration and strong top speed.

*Performance with smooth quiet overall operation.*

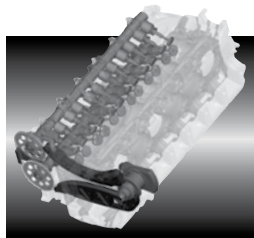


### ✓ Charge Air Cooler

Teams with supercharger to deliver optimal performance by cooling the compressed air before it enters the engine's combustion chambers. *Delivers optimal engine performance.*

### ✓ Mercury Power Steering

This exclusive system eliminates steering torque while delivering a precise steering feel. *Comfort with tight control.*



### ✓ Maintenance Free Valve Train

A unique, robust overhead cam design that's incredibly durable and unlike many competitors' four-strokes, maintenance free for life.

*Worry Free Durability.*

## ADDITIONAL FEATURES / BENEFITS

#### **Advanced Mid-Section AMS**

Innovative positioning around the powerhead virtually eliminates engine related boat vibration.

#### **Long Bolt PowerheadDesign**

Eliminates the effects of expansion and contraction to provide long term powerhead structure and durability.

#### **Digital Throttle & Shift System**

SmartCraft DTS delivers automotive-like control, instant throttle response and smooth shifting.



# 225hp L6 VERADO

## ADDITIONAL FEATURES / BENEFITS

<b>Inline 6-Cylinder</b>	Smoothest running quality, maximizing torque and less noise.
<b>Electronic Boost Bypass Valve</b>	Controls the boost pressure from the supercharger to ensure consistent performance regardless of temperature or pressure.
<b>Water-to-Oil Heat Exchanger</b>	Consistent oil temperatures prevents condensation and oil dilution.
<b>70 Amp Alternator</b>	Provides battery charging on demand and allows use of electronics and lights.
<b>Idle Exhaust Relief System</b>	Virtually no sound when engine runs at idle.
<b>Fresh Water Flush</b>	Protects engine and allows for easy maintenance.
<b>Sequential Multiport Fuel Injection</b>	Ensures the perfect ratio of fuel and air to achieve optimal combustion efficiency providing consistent running quality and engine performance.
<b>4 Valve / Cylinder Double Overhead Cam</b>	Delivering class leading torque and horsepower throughout the power band to provide boat planing and acceleration.
<b>SmartCraft Programmable Tilt</b>	Prevents engine from impacting with the short transom wells found on some boats. Feature lets you adjust the tilt limit to a point prior to maximum tilt.
<b>External Mounted Trim Switch</b>	Customer convenience when trailering.
<b>Front Low Water Pickups</b>	Consistent water pressure and engine cooling.

# VERADO 225hp L6

## How to make More Power?

The fuel / air ratio is fixed, so you need **more air & more fuel** to achieve more power!

## There are 2 Industry Design Methods:

Increasing displacement on Naturally Aspirated

OR

Pressurer Charging

**Mercury chose to pressure-charge a unique in-line 6-cylinder, delivering the ultimate boating experience!**

## MERCURY ADVANTAGE

### Over Yamaha

**Supercharged Technology vs.** Naturally Aspirated Design. **Efficient power.**

**Advanced Mid-Section vs.** Conventional Mounting. **Low vibration.**

**4-Valve DOHC vs.** 4-Valve DOHC. **Lower maintenance, operational costs.**

**Mercury Power Steering vs.** Hydraulic. **Comfort with precise control.**

### Over Suzuki

**Supercharged Technology vs.** Naturally Aspirated Design. **More efficient power.**

**Advanced Mid-Section vs.** Conventional Mounting. **Low vibration.**

**4-Valve DOHC vs.** 4-Valve DOHC. **Lower maintenance, operational costs.**

**70 Amp vs.** 54 Amp. Magneto. **24% More charging power. Durability.**

**Mercury Power Steering vs.** Hydraulic. **Comfort with precise control.**

### Over Honda

**Supercharged Technology vs.** Naturally Aspirated Design. **More efficient power.**

**Advanced Mid-Section vs.** Conventional Mounting. **Low vibration.**

**4-Valve DOHC vs.** 4-Valve SOHC. **Lower maintenance, operational costs.**

**Mercury Power Steering vs.** Hydraulic. **Comfort with precise control.**

For more information please refer to the Verado 225-300hp In-Depth Analysis on pages 206 & 207.

## Supercharged, Intercooled & Electronic boost-bypass valve

- ✓ Less moving mass. **Better Throttle Response!**
- ✓ Broader Power Band. **Strong torque through-out RPM range.**
- ✓ Maintains HP as air temperature raises. **Consistence Performance.**
- ✓ Ensures optimal combustion efficiency. **Great Fuel Economy.**
- ✓ Long bolt crankcase design. **Durability.**

FOUR STROKE	MERCURY 225 HP	YAMAHA 225 HP**	SUZUKI 225 HP	HONDA 225 HP
<b>Engine Type</b>	In-Line 6	60°V6	55°V6	60°V6
<b>Displacement</b>	158.5ci (2598cc)	254ci (4162cc)	220ci (3614cc)	212ci (3471cc)
<b>Dry Weight*</b> (25 inch shaft)	647lbs (293kg)	558lbs (253kg)	580lbs (263kg)	599lbs (272kg)
<b>Alternator</b>	70 Amp	70 Amp	54 Amp	90 Amp
<b>Battery Charging</b>	60 Amp	NA	NA	60 Amp
<b>Gear Ratio</b>	4.8" 1.85:1	1.75:1	2.29:1	1.86:1

\*Based on owner's manual \*\*Offshore

# 250hp L6 VERADO



Standard three-year limited factory backed, nondeclining warranty.



Backed by the industry's only three year limited corrosion failure warranty.



2-Star C.A.R.B. rating on 87 octane fuel, for very low engine emissions.

## SPECIFICATIONS

HP/kW @ Prop	250 / 186
Max RPM (WOT)	5800 - 6400
Cylinders	6 (in-line)
Displacement (CID/cc)	158.5 / 2598
Bore X Stroke (in/mm)	3.23 x 3.23 / 82 x 82
Induction System	Supercharged w/Charge Air Cooling & Electronic Boost Pressure Control 4-valves per cylinder DOHC
Ignition System	SmartCraft PCM digital inductive
Fuel System	Electronic Fuel Injection (EFI)
Alternator Amp/Watt	70 amp / 882 watt belt-driven
Cooling System	Water-Cooled w/ thermostat
Starting	SmartCraft Electric (turn-key)
Gear Ratio	5.44" 1.85:1
Gear Shift	SmartCraft DTS F-N-R
Propeller	Consult Dealer Propeller Guide
Steering	Mercury Power Steering
Trim System	SmartCraft Programmable
Exhaust System	Through Prop
Recommended Oil	Mercury 4-Stroke Outboard Oil
Fuel/Ethanol Tolerance	87 octane/up to 10% Ethanol
Operator Warning System	SmartCraft Engine Guardian
SmartCraft Technology	Yes
Shaft Length (in/mm)	20/508 25/635 30/762
Dry Weight (lbs/kg)*	647/293 Lightest model available

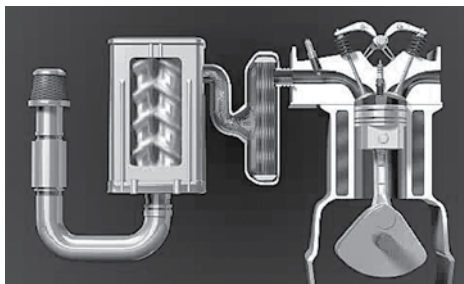
# VERADO **250hp L6**

## KEY ATTRIBUTES

### ✓ **Verado's Supercharged System**

Delivers the torque big boats need for immediate planing, superior mid-range acceleration and strong top speed.

**Performance with smooth quiet overall operation.**

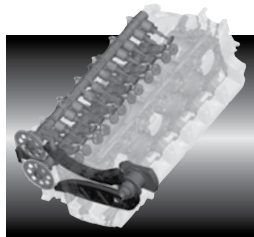


### ✓ **Charge Air Cooler**

Teams with supercharger to deliver optimal performance by cooling the compressed air before it enters the engine's combustion chambers. **Delivers optimal engine performance.**

### ✓ **Mercury Power Steering**

This exclusive system eliminates steering torque while delivering a precise steering feel. **Comfort with tight control.**



### ✓ **Maintenance Free Valve Train**

A unique, robust overhead cam design that's incredibly durable and unlike many competitors' four-strokes, maintenance free for life.

**Worry Free Durability.**

## ADDITIONAL FEATURES / BENEFITS

#### **Advanced Mid-Section AMS**

Innovative positioning around the powerhead virtually eliminates engine related boat vibration.

#### **Long Bolt Powerhead Design**

Eliminates the effects of expansion and contraction to provide long term powerhead structure and durability.

#### **Digital Throttle & Shift System**

SmartCraft DTS delivers automotive-like control, instant throttle response and smooth shifting.

# 250hp L6 VERADO

## ADDITIONAL FEATURES / BENEFITS

<b>Inline 6-Cylinder</b>	Smoothest running quality, maximizing torque and less noise.
<b>Electronic Boost Bypass Valve</b>	Controls the boost pressure from the supercharger to ensure consistent performance regardless of temperature or pressure.
<b>Water-to-Oil Heat Exchanger</b>	Consistent oil temperatures prevents condensation and oil dilution.
<b>70 Amp Alternator</b>	Provides battery charging on demand and allows use of electronics and lights.
<b>Idle Exhaust Relief System</b>	Virtually no sound when engine runs at idle.
<b>Fresh Water Flush</b>	Protects engine and allows for easy maintenance.
<b>Sequential Multiport Fuel Injection</b>	Ensures the perfect ratio of fuel and air to achieve optimal combustion efficiency providing consistent running quality and engine performance.
<b>4 Valve / Cylinder Double Overhead Cam</b>	Delivering class leading torque and horsepower throughout the power band to provide boat planing and acceleration.
<b>SmartCraft Programmable Tilt</b>	Prevents engine from impacting with the short transom wells found on some boats. Feature lets you adjust the tilt limit to a point prior to maximum tilt.
<b>External Mounted Trim Switch</b>	Customer convenience when trailering.
<b>Front Low Water Pickups</b>	Consistent water pressure and engine cooling.

# VERADO 250hp L6

## How to make More Power?

The fuel / air ratio is fixed, so you need more air & more fuel to achieve more power!

## Supercharged, Intercooled & Electronic boost-bypass valve

- ✓ Less moving mass means. **Better Throttle Response!**
- ✓ Broader Power Band. **Strong torque through-out RPM range.**
- ✓ Maintains HP as air temperature raises. **Consistence Performance.**
- ✓ Ensures optimal combustion efficiency. **Great Fuel Economy.**
- ✓ Long bolt crankcase design. **Durability.**

FOUR STROKE	MERCURY 250HP	YAMAHA 250HP**	SUZUKI 250HP	HONDA 250HP
Engine Type	In-Line 6	60°V6	55°V6	60°V6
Displacement	158.5 ci (2598 cc)	254 ci (4162 cc)	220 ci (3583 cc)	220 ci (3583 cc)
Dry Weight* (25 inch shaft)	660lbs (299 kg)	558 lbs (253kg)	580lbs (263 kg)	622lbs (282 kg)
Alternator	70 Amp	70 Amp	54 Amp	90Amp
Gear Ratio	5.44" 1.85:1	1.75:1	2.29:1	2.00:1

\* Based on owner's manual \*\*Offshore

## MERCURY ADVANTAGE

### Over Yamaha

**Supercharged Technology vs.** Naturally Aspirated Design. **Efficient power.**

**Advanced Mid-Section vs.** Conventional Mounting. **Low vibration.**

**4-Valve DOHC vs.** 4-Valve DOHC. **Lower maintenance, operational costs.**

**Mercury Power Steering vs.** Hydraulic. **Comfort with precise control.**

### Over Suzuki

**Supercharged Technology vs.** Naturally Aspirated Design. **More efficient power.**

**Advanced Mid-Section vs.** Conventional Mounting. **Low vibration.**

**4-Valve DOHC vs.** 4-Valve DOHC. **Lower maintenance, operational costs.**

**70 Amp vs.** 54 Amp. Magneto. **24% More charging power. Durability.**

**Mercury Power Steering vs.** Hydraulic. **Comfort with precise control.**

For more information please refer to the Verado 225~300hp In-Depth Analysis on pages 180 & 181.

### Over Honda

**Supercharged Technology vs.** Naturally Aspirated Design. **More efficient power.**

**Advanced Mid-Section vs.** Conventional Mounting. **Low vibration.**

**4-Valve DOHC vs.** 4-Valve SOHC. **Lower maintenance, operational costs.**

**Mercury Power Steering vs.** Hydraulic. **Comfort with precise control.**

For more information please refer to the Verado 225~300hp In-Depth Analysis on pages 206 & 207.

# 250hp Pro FourStroke



Standard three-year limited factory backed, nondeclining warranty.



Backed by the industry's only three year limited corrosion failure warranty.



2-Star C.A.R.B. rating on 87 octane fuel, for very low engine emissions.

## SPECIFICATIONS

HP/kW @ Prop	250 / 186
Max RPM (WOT)	5800 - 6400
Cylinders	6 (in-line)
Displacement (CID/cc)	158.5 / 2598
Bore X Stroke (in/mm)	3.23 x 3.23 / 82 x 82
Induction System	Supercharged w/Charge Air Cooling & Electronic Boost Pressure Control 4-valves per cylinder DOHC
Ignition System	SmartCraft PCM digital inductive
Fuel System	Electronic Fuel Injection (EFI)
Alternator Amp/Watt	70 amp / 882 watt belt-driven
Cooling System	Water-Cooled w/ thermostat
Starting	SmartCraft Electric (turn-key)
Gear Ratio	4.8" 1.85:1
Gear Shift	SmartCraft DTS F-N-R
Propeller	Consult Dealer Propeller Guide
Steering	Mercury Power Steering
Trim System	SmartCraft Programmable
Exhaust System	Through Prop
Recommended Oil	Mercury 4-Stroke Outboard Oil
Fuel/Ethanol Tolerance	87 octane/up to 10% Ethanol
Operator Warning System	SmartCraft Engine Guardian
SmartCraft Technology	Yes
Shaft Length (in/mm)	20/508 25/635
Dry Weight (lbs/kg)*	647/293 Lightest model available

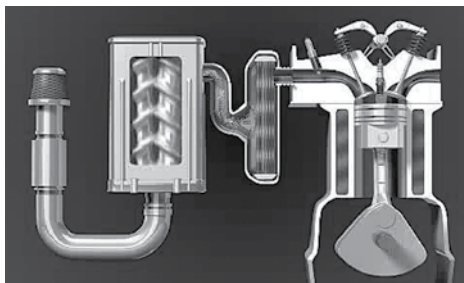
# 250hp Pro FourStroke

## KEY ATTRIBUTES

### ✓ **Verado's Supercharged System**

Delivers the torque big boats need for immediate planing, superior mid-range acceleration and strong top speed.

**Performance with smooth quiet overall operation.**

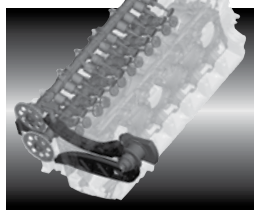


### ✓ **Charge Air Cooler**

Teams with supercharger to deliver optimal performance by cooling the compressed air before it enters the engine's combustion chambers. **Delivers optimal engine performance.**

### ✓ **Mercury Power Steering**

This exclusive system eliminates steering torque while delivering a precise steering feel. **Comfort with tight control.**



### ✓ **Maintenance Free Valve Train**

A unique, robust overhead cam design that's incredibly durable and unlike many competitors' four-strokes, maintenance free for life.

**Worry Free Durability.**

## ADDITIONAL FEATURES / BENEFITS

### **Advanced Mid-Section AMS**

Innovative positioning around the powerhead virtually eliminates engine related boat vibration.

### **Long Bolt PowerheadDesign**

Eliminates the effects of expansion and contraction to provide long term powerhead structure and durability.

### **Digital Throttle & Shift System**

SmartCraft DTS delivers automotive-like control, instant throttle response and smooth shifting.



# 250hp Pro FourStroke

## ADDITIONAL FEATURES / BENEFITS

<b>Inline 6-Cylinder</b>	Smoothest running quality, maximizing torque and less noise.
<b>Electronic Boost Bypass Valve</b>	Controls the boost pressure from the supercharger to ensure consistent performance regardless of temperature or pressure.
<b>Water-to-Oil Heat Exchanger</b>	Consistent oil temperatures prevents condensation and oil dilution.
<b>70 Amp Alternator</b>	Provides battery charging on demand and allows use of electronics and lights.
<b>Idle Exhaust Relief System</b>	Virtually no sound when engine runs at idle.
<b>Fresh Water Flush</b>	Protects engine and allows for easy maintenance.
<b>Sequential Multiport Fuel Injection</b>	Ensures the perfect ratio of fuel and air to achieve optimal combustion efficiency providing consistent running quality and engine performance.
<b>4 Valve / Cylinder Double Overhead Cam</b>	Delivering class leading torque and horsepower throughout the power band to provide boat planing and acceleration.
<b>SmartCraft Programmable Tilt</b>	Prevents engine from impacting with the short transom wells found on some boats. Feature lets you adjust the tilt limit to a point prior to maximum tilt.
<b>External Mounted Trim Switch</b>	Customer convenience when trailering.
<b>Front Low Water Pickups</b>	Consistent water pressure and engine cooling.

# 250hp Pro FourStroke

## How to make More Power?

The fuel / air ratio is fixed, so you need **more air & more fuel** to achieve more power!

## There are 2 Industry Design Methods:

Increasing displacement on Naturally Aspirated

**OR**

Pressurer Charging

*Mercury chose to pressure-charge a unique in-line 6-cylinder, delivering the ultimate boating experience!*

## Supercharged, Intercooled & Electronic boost-bypass valve

- ✓ Less moving mass means. **Better Throttle Response!**
- ✓ Broader Power Band. **Strong torque through-out RPM range.**
- ✓ Maintains HP as air temperature raises. **Consistence Performance.**
- ✓ Ensures optimal combustion efficiency. **Great Fuel Economy.**
- ✓ Long bolt crankcase design. **Durability.**

FOUR STROKES	MERCURY 250 Pro FourStroke	YAMAHA 250 Vmax SHO*	SUZUKI 250 SS
<b>Engine Type</b>	In-Line 6	60°V6	55°V6
<b>Displacement</b>	158.5 ci (2598 cc)	254 ci (4162 cc)	245 ci (4028 cc)
<b>Dry Weight*</b> (20 inch shaft)	635lbs (288 kg)	505 lbs (229kg)	580lbs (263 kg)
<b>Alternator</b>	70 Amp	70 Amp	54 Amp
<b>Gear Ratio</b>	1.85:1	1.75:1	2.29:1

\* Based on owner's manual

## MERCURY ADVANTAGE

### Over Yamaha

**Supercharged Technology vs.** Naturally Aspirated Design. **Efficient power.**

**Advanced Mid-Section vs.** Conventional Mounting. **Low vibration.**

**4-Valve DOHC vs.** 4-Valve DOHC. **Lower maintenance, operational costs.**

**Mercury Power Steering vs.** Hydraulic. **Comfort with precise control.**

### Over Suzuki

**Supercharged Technology vs.** Naturally Aspirated Design. **More efficient power.**

**Advanced Mid-Section vs.** Conventional Mounting. **Low vibration.**

**4-Valve DOHC vs.** 4-Valve DOHC. **Lower maintenance, operational costs.**

**70 Amp vs.** 54 Amp. Magneto. **24% More charging power. Durability.**

**Mercury Power Steering vs.** Hydraulic. **Comfort with precise control.**

For more information please refer to the Verado 225~300hp In-Depth Analysis on pages 206 & 207.

# 300hp L6 VERADO



Standard three-year limited factory backed, nondeclining warranty.



Backed by the industry's only three year limited corrosion failure warranty.



2-Star C.A.R.B. rating on 87 octane fuel, for very low engine emissions.

## SPECIFICATIONS

HP/kW @ Prop	300 / 224
Max RPM (WOT)	5800 - 6400
Cylinders	6 (in-line)
Displacement (CID/cc)	158.5 / 2598
Bore X Stroke (in/mm)	3.23 x 3.23 / 82 x 82
Induction System	Supercharged w/ Charge Air Cooling & Electronic Boost Pressure Control 4-valves per cylinder (DOHC)
Ignition System	SmartCraft PCM digital inductive
Fuel System	Electronic Fuel Injection (EFI)
Alternator Amp/Watt	70 amp / 882 watt belt-driven
Cooling System	Water-Cooled w/ thermostat
Starting	SmartCraft Electric (turn-key)
Gear Ratio	4.8" 1.75:1 5.44" 1.85:1
Gear Shift	SmartCraft DTS F-N-R
Propeller	Consult Dealer Propeller Guide
Steering	Mercury Power Steering
Trim System	SmartCraft Programmable
Exhaust System	Through Prop
Recommended Oil	Mercury 4-Stroke Outboard Oil
Fuel/Ethanol Tolerance	87 octane/up to 10% Ethanol
Operator Warning System	SmartCraft Engine Guardian
SmartCraft Technology	Yes
Shaft Length (in/mm)	20/508 25/635 30/762
Dry Weight (lbs/kg)*	647/293 Lightest model available

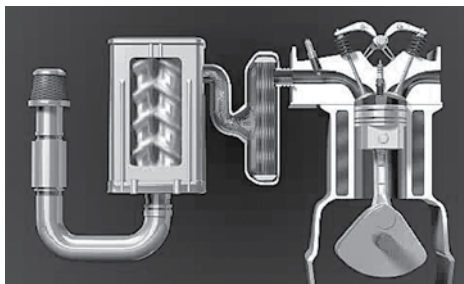
# VERADO 300hp L6

## KEY ATTRIBUTES

### ✓ **Verado's Supercharged System**

Delivers the torque big boats need for immediate planing, superior mid-range acceleration and strong top speed.

**Performance with smooth quiet overall operation.**

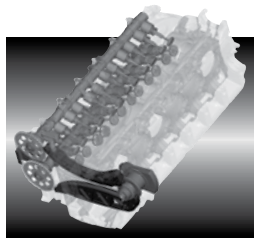


### ✓ **Charge Air Cooler**

Teams with supercharger to deliver optimal performance by cooling the compressed air before it enters the engine's combustion chambers. **Delivers optimal engine performance.**

### ✓ **Mercury Power Steering**

This exclusive system eliminates steering torque while delivering a precise steering feel. **Comfort with tight control.**



### ✓ **Maintenance Free Valve Train**

A unique, robust overhead cam design that's incredibly durable and unlike many competitors' four-strokes, maintenance free for life.

**Worry Free Durability.**

## ADDITIONAL FEATURES / BENEFITS

#### **Advanced Mid-Section AMS**

Innovative positioning around the powerhead virtually eliminates engine related boat vibration.

#### **Long Bolt Powerhead Design**

Eliminates the effects of expansion and contraction to provide long term powerhead structure and durability.

#### **Digital Throttle & Shift System**

SmartCraft DTS delivers automotive-like control, instant throttle response and smooth shifting.

# 300hp L6 VERADO

## ADDITIONAL FEATURES / BENEFITS

<b>Inline 6-Cylinder</b>	Smoothest running quality, maximizing torque and less noise.
<b>Electronic Boost Bypass Valve</b>	Controls the boost pressure from the supercharger to ensure consistent performance regardless of temperature or pressure.
<b>Water-to-Oil Heat Exchanger</b>	Consistent oil temperatures prevents condensation and oil dilution.
<b>70 Amp Alternator</b>	Provides battery charging on demand and allows use of electronics and lights.
<b>Idle Exhaust Relief System</b>	Virtually no sound when engine runs at idle.
<b>Fresh Water Flush</b>	Protects engine and allows for easy maintenance.
<b>Sequential Multiport Fuel Injection</b>	Ensures the perfect ratio of fuel and air to achieve optimal combustion efficiency providing consistent running quality and engine performance.
<b>4 Valve / Cylinder Double Overhead Cam</b>	Delivering class leading torque and horsepower throughout the power band to provide boat planing and acceleration.
<b>SmartCraft Programmable Tilt</b>	Prevents engine from impacting with the short transom wells found on some boats. Feature lets you adjust the tilt limit to a point prior to maximum tilt.
<b>External Mounted Trim Switch</b>	Customer convenience when trailering.
<b>Front Low Water Pickups</b>	Consistent water pressure and engine cooling.

# VERADO 300hp L6

## How to make More Power?

The fuel / air ratio is fixed, so you need **more air & more fuel** to achieve more power!

## There are 2 Industry Design Methods:

Increasing displacement on Naturally Aspirated

OR

Pressurer Charging

**Mercury chose to pressure-charge a unique in-line 6-cylinder, delivering the ultimate boating experience!**

## Supercharged, Intercooled & Electronic boost-bypass valve

- ✓ Less moving mass. **Better Throttle Response!**
- ✓ Broader Power Band. **Strong torque through-out RPM range.**
- ✓ Maintains HP as air temperature raises. **Consistence Performance.**
- ✓ Ensures optimal combustion efficiency. **Great Fuel Economy.**
- ✓ Long bolt crankcase design. **Durability.**

FOUR STROKE	MERCURY 300HP	YAMAHA 300HP**	SUZUKI 300HP
<b>Engine Type</b>	In-Line 6	60°V6	55°V6
<b>Displacement</b>	158.5 ci (2598 cc)	254 ci (4162 cc)	220 ci (3614 cc)
<b>Dry Weight**</b> (25 inch shaft)	660lbs (299 kg)	558 lbs (253kg)	610 lbs (276 kg)
<b>Alternator</b>	70 Amp	70 Amp	54 Amp
<b>Gear Ratio</b>	4.8" 1.75:1 5.44" 1.85:1	1.75:1	2.29:1

\* Available Fall 2010 \*\* Based on owner's manual

## MERCURY ADVANTAGE

### Over Yamaha

**Supercharged Technology vs.** Naturally Aspirated Design. **Efficient power.**

**Advanced Mid-Section vs.** Conventional Mounting. **Low vibration.**

**4-Valve DOHC vs.** 4-Valve DOHC. **Lower maintenance, operational costs.**

**Mercury Power Steering vs.** Hydraulic. **Comfort with precise control.**

### Over Suzuki

**Supercharged Technology vs.** Naturally Aspirated Design. **More efficient power.**

**Advanced Mid-Section vs.** Conventional Mounting. **Low vibration.**

**4-Valve DOHC vs.** 4-Valve DOHC. **Lower maintenance, operational costs.**

**70 Amp vs.** 54 Amp. Magneto. **24% More charging power. Durability.**

**Mercury Power Steering vs.** Hydraulic. **Comfort with precise control.**

For more information please refer to the Verado 225~300hp In-Depth Analysis on pages 206 & 207.

# 300hp Pro FourStroke



Standard three-year limited factory backed, nondeclining warranty.



Backed by the industry's only three year limited corrosion failure warranty.



2-Star C.A.R.B. rating on 87 octane fuel, for very low engine emissions.

## SPECIFICATIONS

HP/kW @ Prop	300 / 224
Max RPM (WOT)	5800 - 6400
Cylinders	6 (in-line)
Displacement (CID/cc)	158.5 / 2598
Bore X Stroke (in/mm)	3.23 x 3.23 / 82 x 82
Induction System	Supercharged w/ Charge Air Cooling & Electronic Boost Pressure Control 4-valves per cylinder (DOHC)
Ignition System	SmartCraft PCM digital inductive
Fuel System	Electronic Fuel Injection (EFI)
Alternator Amp/Watt	70 amp / 882 watt belt-driven
Cooling System	Water-Cooled w/ thermostat
Starting	SmartCraft Electric (turn-key)
Gear Ratio	4.8" 1.75:1
Gear Shift	SmartCraft DTS F-N-R
Propeller	Consult Dealer Propeller Guide
Steering	Mercury Power Steering
Trim System	SmartCraft Programmable
Exhaust System	Through Prop
Recommended Oil	Mercury 4-Stroke Outboard Oil
Fuel/Ethanol Tolerance	87 octane/up to 10% Ethanol
Operator Warning System	SmartCraft Engine Guardian
SmartCraft Technology	Yes
Shaft Length (in/mm)	20/508 25/635
Dry Weight (lbs/kg)*	647/293 Lightest model available

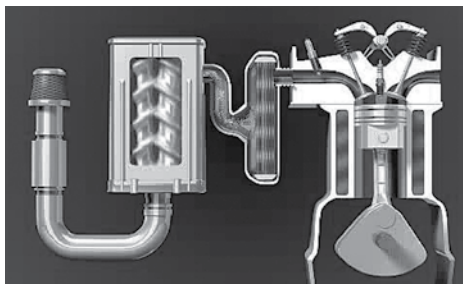
# 300 hp Pro FourStroke

## KEY ATTRIBUTES

### ✓ **Verado's Supercharged System**

Delivers the torque big boats need for immediate planing, superior mid-range acceleration and strong top speed.

**Performance with smooth quiet overall operation.**

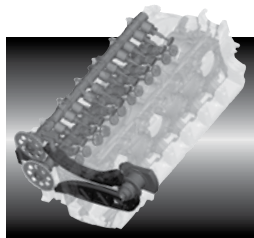


### ✓ **Charge Air Cooler**

Teams with supercharger to deliver optimal performance by cooling the compressed air before it enters the engine's combustion chambers. **Delivers optimal engine performance.**

### ✓ **Mercury Power Steering**

This exclusive system eliminates steering torque while delivering a precise steering feel. **Comfort with tight control.**



### ✓ **Maintenance Free Valve Train**

A unique, robust overhead cam design that's incredibly durable and unlike many competitors' four-strokes, maintenance free for life.

**Worry Free Durability.**

## ADDITIONAL FEATURES / BENEFITS

#### **Advanced Mid-Section AMS**

Innovative positioning around the powerhead virtually eliminates engine related boat vibration.

#### **Long Bolt Powerhead Design**

Eliminates the effects of expansion and contraction to provide long term powerhead structure and durability.

#### **Digital Throttle & Shift System**

SmartCraft DTS delivers automotive-like control, instant throttle response and smooth shifting.



# 300hp Pro FourStroke

## ADDITIONAL FEATURES / BENEFITS

<b>Inline 6-Cylinder</b>	Smoothest running quality, maximizing torque and less noise.
<b>Electronic Boost Bypass Valve</b>	Controls the boost pressure from the supercharger to ensure consistent performance regardless of temperature or pressure.
<b>Water-to-Oil Heat Exchanger</b>	Consistent oil temperatures prevents condensation and oil dilution.
<b>70 Amp Alternator</b>	Provides battery charging on demand and allows use of electronics and lights.
<b>Idle Exhaust Relief System</b>	Virtually no sound when engine runs at idle.
<b>Fresh Water Flush</b>	Protects engine and allows for easy maintenance.
<b>Sequential Multiport Fuel Injection</b>	Ensures the perfect ratio of fuel and air to achieve optimal combustion efficiency providing consistent running quality and engine performance.
<b>4 Valve / Cylinder Double Overhead Cam</b>	Delivering class leading torque and horsepower throughout the power band to provide boat planing and acceleration.
<b>SmartCraft Programmable Tilt</b>	Prevents engine from impacting with the short transom wells found on some boats. Feature lets you adjust the tilt limit to a point prior to maximum tilt.
<b>External Mounted Trim Switch</b>	Customer convenience when trailering.
<b>Front Low Water Pickups</b>	Consistent water pressure and engine cooling.

# 300hp Pro FourStroke

## How to make More Power?

The fuel/air ratio is fixed, so you need **more air & more fuel** to achieve more power!

## There are 2 Industry Design Methods:

Increasing displacement on Naturally Aspirated

**OR**

Pressurer Charging

*Mercury chose to pressure-charge a unique in-line 6-cylinder, delivering the ultimate boating experience!*

## Supercharged, Intercooled & Electronic boost-bypass valve

- ✓ Less moving mass. **Better Throttle Response!**
- ✓ Broader Power Band. **Strong torque through-out RPM range.**
- ✓ Maintains HP as air temperature raises. **Consistence Performance.**
- ✓ Ensures optimal combustion efficiency. **Great Fuel Economy.**
- ✓ Long bolt crankcase design. **Durability.**

FOUR STROKES	MERCURY 300 Pro FourStroke	YAMAHA 300Vmax SHO®
Engine Type	In-Line 6	No Model Available
Displacement	158.5 ci (2598 cc)	
Dry Weight* (25 inch shaft)	635lbs (288 kg)	
Alternator	70 Amp	
Gear Ratio	1.85:1	

\* Based on owner's manual

## MERCURY ADVANTAGE

### Over Yamaha

**Supercharged Technology vs.** Naturally Aspirated Design.  
**Efficient power.**

**Advanced Mid-Section vs.** Conventional Mounting.  
**Low vibration.**

**4-Valve DOHC vs.** 4-Valve DOHC.  
**Lower maintenance, operational costs.**

**70 Amp vs.** 50 Amp. Alternator.  
**30% More charging power. Durability.**

**Mercury Power Steering vs.** Hydraulic.  
**Comfort with precise control.**

# 300hp HD VERADO



Standard three-year limited factory backed, nondeclining warranty.



Backed by the industry's only three year limited corrosion failure warranty.



2-Star C.A.R.B. rating on 87 octane fuel, for very low engine emissions.

## SPECIFICATIONS

HP/kW @ Prop	300 / 224
Max RPM (WOT)	5800 - 6400
Cylinders	6 (in-line)
Displacement (CID/cc)	158.5 / 2598
Bore X Stroke (in/mm)	3.23 x 3.23 / 82 x 82
Induction System	Supercharged w/ Charge Air Cooling & Electronic Boost Pressure Control 4-valves per cylinder (DOHC)
Ignition System	SmartCraft PCM digital inductive
Fuel System	Electronic Fuel Injection (EFI)
Alternator Amp/Watt	70 amp / 882 watt belt-driven
Cooling System	Water-Cooled w/ thermostat
Starting	SmartCraft Electric (turn-key)
Gear Ratio	5.44" 1.75:1 With Solid Hub Propeller
Gear Shift	SmartCraft DTS F-N-R
Propeller	Consult Dealer Propeller Guide
Steering	Mercury Power Steering
Trim System	SmartCraft Programmable
Exhaust System	Through Prop
Recommended Oil	Mercury 4-Stroke Outboard Oil
Fuel/Ethanol Tolerance	87 octane/up to 10% Ethanol
Operator Warning System	SmartCraft Engine Guardian
SmartCraft Technology	Yes
Shaft Length (in/mm)	20/508 25/635 30/762
Dry Weight (lbs/kg)*	647/293 Lightest model available

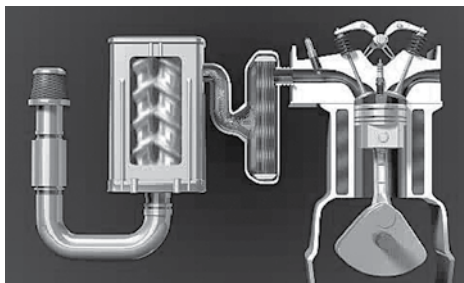
# VERADO 300hp HD

## KEY ATTRIBUTES

### ✓ **Verado's Supercharged System**

Delivers the torque big boats need for immediate planing, superior mid-range acceleration and strong top speed.

*Performance with smooth quiet overall operation.*

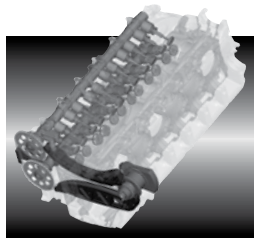


### ✓ **Charge Air Cooler**

Teams with supercharger to deliver optimal performance by cooling the compressed air before it enters the engine's combustion chambers. *Delivers optimal engine performance.*

### ✓ **Mercury Power Steering**

This exclusive system eliminates steering torque while delivering a precise steering feel. *Comfort with tight control.*



### ✓ **Maintenance Free Valve Train**

A unique, robust overhead cam design that's incredibly durable and unlike many competitors' four-strokes, maintenance free for life.

*Worry Free Durability.*

## ADDITIONAL FEATURES / BENEFITS

### **Advanced Mid-Section AMS**

Innovative positioning around the powerhead virtually eliminates engine related boat vibration.

### **Long Bolt Powerhead Design**

Eliminates the effects of expansion and contraction to provide long term powerhead structure and durability.

### **Digital Throttle & Shift System**

SmartCraft DTS delivers automotive-like control, instant throttle response and smooth shifting.

# 300hp HD VERADO

## ADDITIONAL FEATURES / BENEFITS

<b>Inline 6-Cylinder</b>	Smoothest running quality, maximizing torque and less noise.
<b>Electronic Boost Bypass Valve</b>	Controls the boost pressure from the supercharger to ensure consistent performance regardless of temperature or pressure.
<b>Water-to-Oil Heat Exchanger</b>	Consistent oil temperatures prevents condensation and oil dilution.
<b>70 Amp Alternator</b>	Provides battery charging on demand and allows use of electronics and lights.
<b>Idle Exhaust Relief System</b>	Virtually no sound when engine runs at idle.
<b>Fresh Water Flush</b>	Protects engine and allows for easy maintenance.
<b>Sequential Multiport Fuel Injection</b>	Ensures the perfect ratio of fuel and air to achieve optimal combustion efficiency providing consistent running quality and engine performance.
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# VERADO 300hp HD

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The fuel / air ratio is fixed, so you need **more air & more fuel** to achieve more power!

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Increasing displacement on Naturally Aspirated

OR

Pressurer Charging

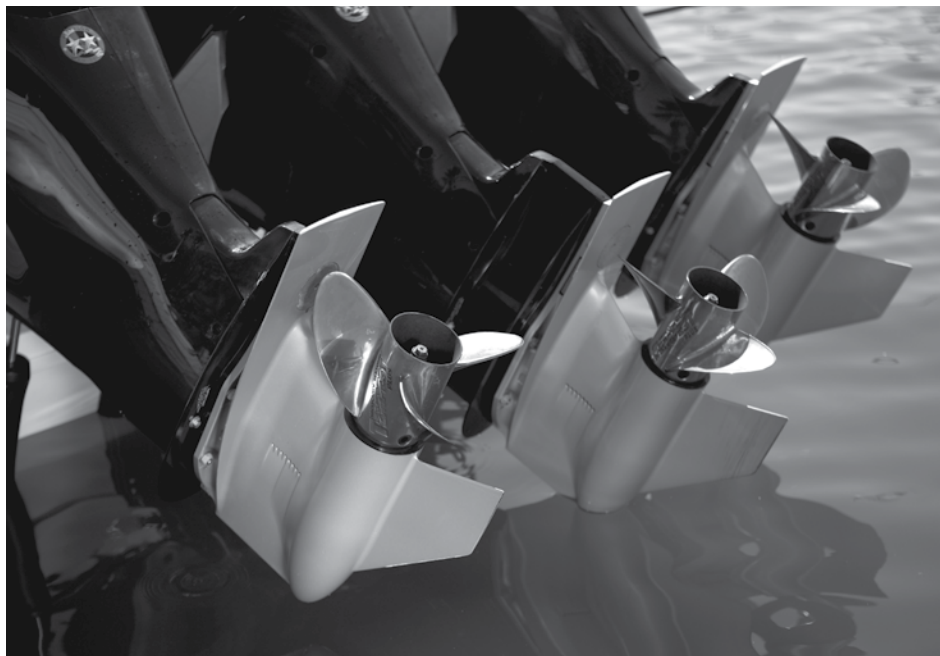
**Mercury chose to pressure-charge a unique in-line 6-cylinder, delivering the ultimate boating experience!**

## Supercharged, Intercooled & Electronic boost-bypass valve

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- ✓ Broader Power Band. **Strong torque through-out RPM range.**
- ✓ Maintains HP as air temperature raises. **Consistence Performance.**
- ✓ Ensures optimal combustion efficiency. **Great Fuel Economy.**
- ✓ Long bolt crankcase design. **Durability.**

## 5.44 inch HD Gearcase

- ✓ Heavy duty gearcase components **for improved durability.**
- ✓ Painted silver gearcase with **1.75:1** gear ratio.
- ✓ Larger **1.25"** propshaft using Racing's solid hub kit **for endurance.**



### Competitive Engine Features.

<b>MERCURY</b> 225-300 HP	<b>YAMAHA</b> 200-300 HP	<b>SUZUKI</b> 250/300 HP	<b>HONDA</b> 250 HP
<b>2.6 L Inline 6 cyl</b>	<b>4.2 L 60° V6</b>	<b>4.0 L 55° V6</b>	<b>3.6 L 60° V6</b>
<ul style="list-style-type: none"> <li>✓ Pressure Charged</li> <li>✓ Supercharger</li> <li>✓ Charge Air Cooling</li> <li>✓ Electronic Boost PSI Control</li> </ul>	<ul style="list-style-type: none"> <li>✓ Naturally Aspirated</li> <li>✓ Variable Camshaft Timing (VCT)</li> <li>✓ Long Intake Runners</li> <li>✓ Dual In-Bank™</li> </ul>	<ul style="list-style-type: none"> <li>✓ Naturally Aspirated</li> <li>✓ Multi Stage Air Induction</li> <li>✓ Variable Valve Timing</li> <li>✓ Long Track Intake</li> </ul>	<ul style="list-style-type: none"> <li>✓ Naturally Aspirated</li> <li>✓ Dual Stage Induction</li> <li>✓ VTEC®</li> <li>✓ BLAST™</li> <li>✓ Tuned Dual Exhaust</li> </ul>
<b>DOHC</b> 4 Valves per Cylinder	<b>DOHC</b> 4 Valves per Cylinder	<b>DOHC</b> 4 Valves per Cylinder	<b>SOHC</b> 4 Valves per Cylinder
<b>Exclusive Mercury Power Steering</b>	<b>Conventional Steering</b> Uses Boat Hydraulic Steering System	<b>Conventional Steering</b> Uses Boat Hydraulic Steering System	<b>Conventional Steering</b> Uses Boat Hydraulic Steering System
<b>Advanced Mid-Section AMS</b>	<b>Forged Motor Mounts</b> With Oversized Mounting Bracket	<b>Conventional Motor Mounts</b> & Transom Mounting Brackets	<b>Conventional Motor Mounts</b> & Transom Mounting Brackets
<b>Integrated Oil Module</b> 8.5 Quarts	<b>Large Oil Pan</b> 7.1 Quarts	<b>Oil Pan Capacity</b> 8.7 Quarts	<b>Oil Pan Capacity</b> 8.2 Quarts

## **Why Mercury Is Better.**

### **MERCURY 225-300 HP ADVANTAGE**

✓ Verado's supercharger is self-compensating to always maintain power while competitor's aspirated design loses power as the outside temperature and humidity increase.

*(20°F rise in temperature equates to 21 hp loss)*

✓ Pressure charging and smaller displacement means less moving mass, resulting in better throttle response.

***More Power, more efficient & better performance.***

✓ Verado is the only OB with a maintenance-free valve train requiring no costly periodic valve lash adjustments. ***Lower cost.***

✓ Mercury's integrated system offers finger touch precision steering with no torque or free play on the steering wheel. Easily manages multi-engines in single or dual stations.

***Comfort with control and no added cost of an after-market power assist steering system.***

✓ Verado's unique placement of the perimeter-style mounts surround the powerhead reducing noise and eliminating vibration that greatly hinders handling and performance.

***Better performance, maneuverability, less vibration.***

✓ Verado's exclusive water to oil heat exchanger cools and maintains a consistent oil temperature.

***Added durability.***





## **Competitive Selling**

One of our most powerful sales tools is **product knowledge**. The following information is designed to further enhance your knowledge about Mercury's many strengths when selling against the competition.

This info provides a comparative look at the common key customer features, along with the delivered benefits.

## **Yamaha & Mercury**

Use this information to overcome sales objections and to answer the question:

**"Why Should I buy a Mercury over a Yamaha?"**

### **Yamaha Offshore**

225, 250, 300HP



### **Verado L6**

225, 250, 300HP



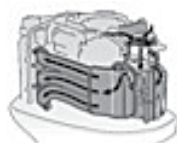
Refer to:

**Mercury Product Knowledge Handbook for all the Verado product information and Yamaha's website or print material for more product information.**

## **Verado Has More Power Throughout the RPM Range**

### **Yamaha**

*Naturally Aspirated 4.2 Liter V6*



- ✓ Variable Camshaft Timing  
**Controls Valve Opening**
- ✓ Long Intake Runners
- ✓ Naturally Aspirated Design  
loses HP as temperature & humidity increase!

**As temperature rises  
20°, a naturally aspirated  
engine loses 7% power**

### **Yamaha 300hp**

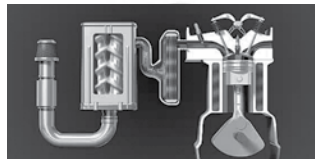
*Labeled HP ... 300 hp*

*Real HP ... 287 hp*

*HP @ 20° Temp Rise ... 268 hp*

### **Verado L6**

*Pressure Charged Unique 2.6 Liter*



- ✓ Supercharged & Intercooled  
**Delivers Performance**
- ✓ Less moving mass means  
**Better Throttle Response**
- ✓ Broader Power Band for  
**Increased Efficiency**
- ✓ Long Bolt Design enhances  
**DURABILITY**

**Maintains HP as air  
temperature rises**

### **Verado 300hp**

*Labeled HP ... 300 hp*

*Real HP ... 300 hp*

*HP @ 20° Temp Rise ... 298 hp*

**More Efficient Power, & Better Overall Performance**

## **Verado Offers Low Maintenance Design**

### **Yamaha**

**DOHC 4 Valve per Cylinder**

Valve lash has to be Checked  
or Adjusted every 500 hours  
Cost \$1000 ~ \$1200 dollars

### **Verado**

**DOHC 4 Valve per Cylinder**

NO Valve Lash adjustments  
for life of engine, thanks to the  
"Long Bolt design"

**Lower Cost of Operation with More Time on the Water**

## **Verado Virtually Eliminates Engine-Related Boat Vibration**

### **Yamaha**

#### **Vibration Reduction Mounting System**

- ✓ Conventional Soft Motor Mounts



### **Verado**

#### **Advanced Mid-Section AMS**

##### **Exclusive**

- ✓ Isolates Vibration
- ✓ Better Performance
- ✓ Improves Hull maneuverability
- ✓ Durability



**Results in a very Smooth, Quiet Ride**

## **Verado's Automotive-Like Ease Of Steering & Precise Control**

### **Yamaha**

#### **Conventional Steering**

- ✓ NO Power Steering
- ✓ Uses Boat Standard Hydraulic system
- ✓ Option is **SeaStar Hydraulic** Power Assisted Steering
- ✓ Customer add-on cost **\$3000**



### **Verado**

#### **Electro-Hydraulic Power Steering (Standard)**

##### **Exclusive Integrated System**

- ✓ Offers finger touch control
- ✓ Precise positive steering
- ✓ No torque on steering wheel
- ✓ Easily manages up to 4 engines with single or dual stations

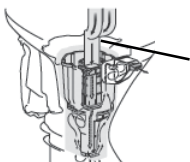


**Added Durability While Providing Comfort, Quieter Operation & Improved Boat Control**

## **Oil is the Life Blood of a FourStroke Engine**

### **Yamaha**

#### **6.5 Quart Oil Sump**



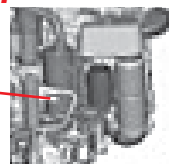
In-Bank Exhaust  
Heats the Oil Supply

### **Verado**

#### **Integrated Oil Cooler**

##### **Exclusive System**

- ✓ Water cooled oil heat exchanger
- ✓ Total capacity **8.5 qt**



**Maintains Proper Oil Temperature, Reduces Oil Dilution Concerns & Provides Long-Term Durability**

**Verado's delivers effortless and precise control!**

## **Yamaha**

### **Command Link® Plus Digital Electronic control**



- ✓ NO Single Lever Operation
- ✓ NO Docking Mode
- ✓ NO Troll Control

## **Verado**

### **Digital Throttle & Shift**



#### **Exclusive**

- ✓ 1 Lever Operation for Multi-Engines
- ✓ Docking Mode
- ✓ Troll Control



**Delivers Ultra Smooth, Responsive Throttle / Shift Operation While Improving Hull Control**

### **Variable Trolling™**



**50 RPM Increments**

### **SmartCraft™ Troll Control**



**10 RPM Increments**

**Precisely Fine Tune Trolling Speeds up to 1000 RPM  
For more RPM, set with cruise mode button on VesselView**

## **Protection From the Elements**

## **Yamaha**

### **Ultimate Corrosion Protection System**

- ✓ Non-YAMAHA Foundry
- ✓ YDC 30 Aluminum Alloy  
**2.5% HIGH Copper Content**  
Quicker to Corrode
- ✓ ACP-221 paint process  
**NO Treatment on Internal passages**
- ✓ Stainless Steel Hardware  
**400 Series with Coating**

## **Verado**

### **Mercury Corrosion Protection System**

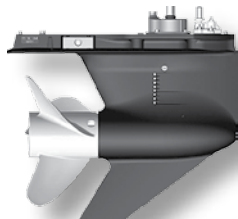


- ✓ Mercury Owned Foundry assures quality control
- ✓ XK 360 & A356 Aluminum Alloy  
**0.20% LOW Copper Content**  
More Corrosion Resistant
- ✓ Mercury Paint System  
**Salt Shield on Internal Passages**
- ✓ Stainless Steel Components  
**300 Series (Best Grade)**  
55% More Stainless Than YAMAHA

**Only Mercury Has An Exclusive 3 Year Limited Corrosion Warranty**

# VERADO Gen 2 Gearcase Attributes

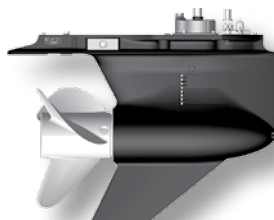
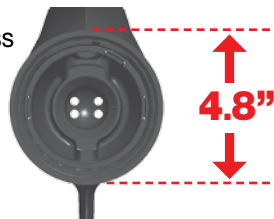
**Designed for durability and performance, VERADO has 3 different gearcase offerings to meet the customers expectations.**



## **Verado 4.8 inch**

**Target Hulls:** Aluminum or fiberglass multi-species, bass, saltwater inshore, flats / bay, pontoon / tritoon.

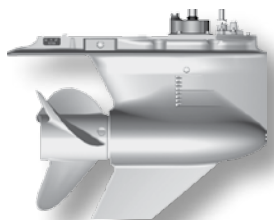
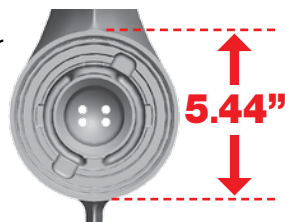
**Models:** 225-250-300 L and XL & Verado Pro FourStroke models.



## **Verado 5.44 inch**

**Target Hulls:** Mainstream saltwater offshore hulls, single-quad applications (single engine hulls are generally 23 +' & larger).

**Models:** 225-250-300, L, CL, XL, CXL, XXL, CXXL.  
(L & CL only available in 300 hp models).



## **Verado 5.44 inch HD**

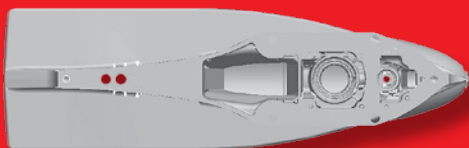
**Target Hulls:** Tournament, Government, heavy duty commercial saltwater offshore hulls, twin-quad applications.

**Gear Ratio:** 1.75:1

**Models:** 300-350 L, CL, XL, CXL, XXL, CXXL

## **Housing**

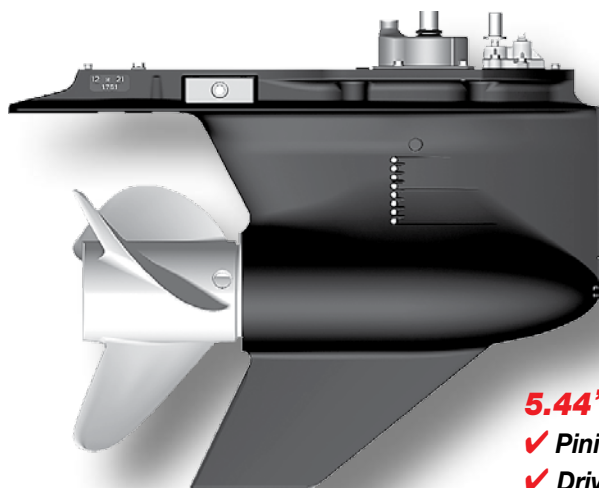
**Longer anti-ventilation to assist planing time on larger hulls.**



# 5.44 inch Gearcase Strengths

**HOUSING:** **14%** larger torpedo diameter, EDP for world-class corrosion resistance.

**DRIVESHAFT:** Larger driveshaft end diameter with longer taper for improved **durability** and added pinion gear support.



**BEARINGS:** Heavy duty rear bearing pack with higher load capacity for longer bearing life.

**5.44" CLUTCH DOG:** **30%** longer with **5X** higher impact resistance

## **5.44" GEARS:**

- ✓ Pinion: **24%** larger diameter
  - ✓ Driven: **14%** larger diameter
- Stronger for long term endurance!

## **BEARING CARRIER:**

**17%** larger with SeaCore anodization for added strength and corrosion resistance.

## **BACKFITABILITY:**

The 5.44" gearcase will back fit to existing L6 Verado products.

## **5.44" & 4.8" Gearcase Propshaft**

Standard **1.00" dia.**  
**15 spline** uses the  
**FLO TORQ** hub kit

## **5.44" HD Gearcase Propshaft**

Larger **1.25" dia.**  
**19 spline** uses  
Racing's **SOLID** hub kit







## **TWO STROKE DIRECT FUEL INJECTION**

### ***DFI Competitive Analysis*** —

***75 HP DFI*** —

***90 HP DFI*** —

***115 HP DFI*** —

***125 HP DFI*** —

***135 HP DFI*** —

***150 HP DFI*** —

***200 HP DFI*** —

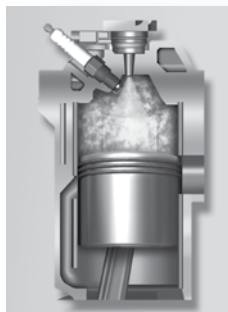
***225 HP DFI*** —

***250 HP DFI*** —

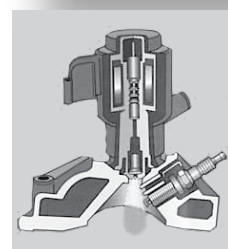


## Why Air Makes the Difference:

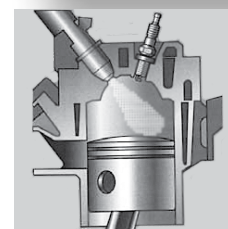
With **Mercury's unique 2-stage system**, fuel is first discharged into a holding cavity before a burst of **pressurized air** shoots it into the cylinder. This process creates the best atomization possible for a more consistent and complete burn.



**E-TEC's** hammer style plunger forces **only fuel** into the cylinder at 500 PSI. But the droplets are still much larger because they haven't been atomized with air. Plus the intense pounding puts additional stress on the engine.



**Yamaha's HPDI** system injects **fuel only** into the cylinder at 700 PSI. But it still produces large droplets which don't burn as completely. And, again, engine components are subjected to intense, constant stress of 700 pounds of pressure.



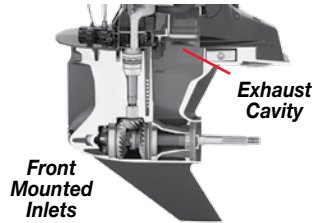
## The OptiMax Advantage

The E-TEC and Yamaha run in a homogeneous mode unlike the OptiMax which likes **stratified combustion**. This means the Opti's provide smoother RPM transition from low to mid range throttle speeds. **The bottom line:**

- ✓ **Opti's offer a more complete burn, producing lower emissions**
- ✓ **Opti's run smoother with more consistent running quality**
- ✓ **Opti's provide better fuel economy and efficiency**
- ✓ **Opti's deliver more power and superior performance**
- ✓ **Opti's are more reliable with proven technology**

### Leading Gearcase Technology

No other marine engine company has more knowledge about hydrodynamics and gear case design. Mercury has the right gear case configuration and technology to match every boating application.



- ✓ **Merc's Less drag = better boat handling & performance!**
- ✓ **Competitors pointed gearcase often doesn't allow weeds to clear the gearcase and restricts critical cooling water to inlets.**
- ✓ **Patented "Front Mounted Dual Water Intakes" ensures proper cooling.**
- ✓ **Merc controls exhaust temperatures to ensure longevity of the prop hub.**

### Best Propeller Offerings in the World

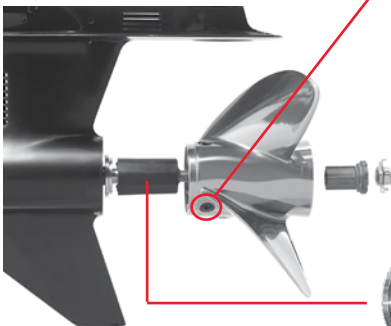
Mercury Marine is the **world's largest** manufacturer of propellers and knows what it takes to make the best prop.

*Mercury has over 500 unique propellers to fine tune the performance of our engines for top Speed, acceleration, towing power and optimal fuel economy at cruise.*

### Performance Vent System®

This exclusive feature allows you to custom tune prop blade venting.

**Maximum acceleration & cruising performance.**



### FLO-TORQ® II Hub System

Provides lower unit protection in case of impact with an underwater object.

**Reduces slippage, protects gearcase components and provides unmatched corrosion durability.**



# 75hp

# OptiMax



Standard three-year  
limited factory backed,  
nondeclining warranty.



Backed by the industry's  
only three year limited  
corrosion failure warranty.



3-Star C.A.R.B. rating on  
87 octane fuel, for ultra low  
engine emissions.

## SPECIFICATIONS

HP/kW @ Prop	75 / 55.1
Max RPM (WOT)	5000 - 5750
Cylinders	3 (in-line)
Displacement (CID/cc)	93 / 1526
Bore X Stroke (in/mm)	3.63 x 3.00 / 92 x 76
Induction System	Naturally Aspirated
Ignition System	SmartCraft PCM Digital Inductive
Fuel System	2-stage Direct Fuel Injection (DFI)
Alternator Amp/Watt	60 amp / 756 watt belt-driven
Cooling System	Water-Cooled w/ thermostat
Starting	Electric
Gear Ratio	2.33:1
Gear Shift	F-N-R
Propeller	Consult Dealer Propeller Guide
Steering	Remote & Big Tiller Compatible
Trim System	Power Trim & Tilt
Shallow Water Drive	20° of Trim Range
Exhaust System	Through Prop
Recommended Oil	Mercury OptiMax DFI Oil
Fuel/Ethanol Tolerance	87 octane/up to 10% Ethanol
Remote Fuel Tank (gal/L)	Optional
Operator Warning System	Engine Guardian
SmartCraft Technology	Yes
Shaft Length (in/mm)	20/508
Dry Weight (lbs/kg)*	375/170* Lightest model available

**For DFI Competitive Analysis, see pages 216-217!**

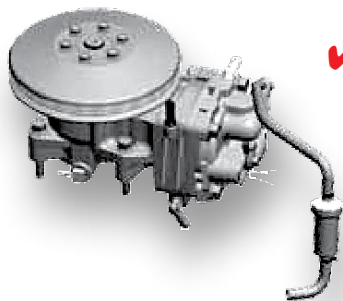
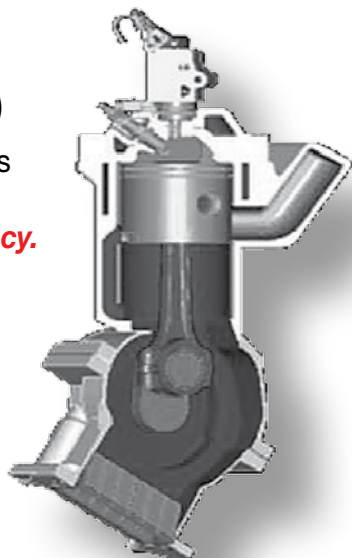
**KEY ATTRIBUTES**

### ✓ **OptiMax 2-Stage Direct Fuel Injection (95psi)**

The OptiMax 2-stage injection system uses air to shoot fuel directly into the top of the cylinder. **Maximizes combustion efficiency.**

### ✓ **OptiMax DI Advantage**

- Lower Emissions
- Best in Class Fuel Economy
- Unmatched Performance
- Reliable durability.



### ✓ **OptiMax Air Compressor**

Provides pressurized air for the injection process, which is key to the Optimax DFI operation. Compressor is water cooled to lower the temperature of the air charge and is lubricated by the oil pump. **Unmatched performance.**

### ✓ **Multi-Point Oil Pump**

Distributes oil to all the key locations in the engine helping to extend engine performance and life. **Durability and Reliability.**

### ✓ **60 Amp Alternator**

Belt driven to reduce heat build-up. Fully regulated for supplying on demand current to maintain the battery's charge. **Convenience.**

# 75hp

# OptiMax

## ADDITIONAL FEATURES / BENEFITS

<b>1.5L In-line 3 cylinder</b>	Light weight, compact, properly balanced.
<b>5 Quart Integral Oil Reserve</b>	Integral piece of engine, frees up space in the boat and reduces engine noise.
<b>SmartCraft</b>	Delivers information regarding 23 key engine functions from fuel usage, RPM & engine guardian to slow trolling RPM control, and even hull information.
<b>Air Bypass Silencer</b>	Smooth, quiet operation.
<b>Water Cooled</b>	<b>With Thermostat and Pressure Control</b> Durability, Reliability and peace of mind.
<b>Freshwater Flush</b>	Easy maintenance, with corrosion protection.
<b>Lost Foam Block</b>	Best in Class durability and reliability.
<b>Vapor Separator Tank VST</b>	Quick easy starts and consistent performance.
<b>Air Fuel Rails</b>	Improves combustion, running quality and provides best in class fuel economy.
<b>Power Trim &amp; Tilt</b>	Allows customer to maximize boat performance.
<b>Tiller or Remote</b>	More choices to consumer.
<b>Through Prop Exhaust</b>	Quiet, smoke free operation.
<b>Stainless Steel</b>	On Driveshaft, Shift Shaft and Prop Shaft for long term durability.

**For DFI Competitive Analysis, see pages 216-217 !**

DFI	MERCURY 75HP	E-TEC 75HP
Engine Type	In-Line 3	In-Line 3
Displacement	93ci (1526cc)	79.2ci (1296cc)
Dry Weight*	375lbs (170kg)	320lbs (146kg)
Alternator	60 Amp	81 Amp
Battery Charging	40 Amp	25 Amp
Gear Ratio	2.33:1	2.00:1

\* Weight based on owner's manual

## Why Air Makes the Difference

With Mercury's unique **2-stage system**, fuel is discharged into a holding cavity before a burst of pressurized air shoots it into the cylinder. This process creates the best atomization possible.

**E-TEC's** hammer style plunger forces the fuel into the cylinder at 500 PSI. But the droplets are still much larger because they haven't been atomized with air.

**OPTi's** runs smoother. You get more consistent running quality with better fuel economy and power.

## Over E-TEC

**Long Stroke 3 Cyl. Design vs** Short Stroke Design delivers **18%** more displacement for more torque. **Resulting in superior overall performance!**

**2.33:1 Low Gear Ratio vs** 2.00:1

**For strong low end power through-out the entire RPM range.**

**40 Amp vs** 25 Amp. **38% More Battery Charging Power.**

**Belt Driven Alternator vs** Magneto Type.

**Less heat build-up with better long-term durability.**

**Engine Mounted Oil Tank vs** None

**Convenient, frees up space in the boat.**

**SmartCraft (Troll Control) vs** None

**Enhanced Precise trolling.**

**Big Tiller with Power Steering Feature vs** Standard tiller handle.

**Comfort with more precision hull control.**

# 90hp

# OptiMax



Standard three-year limited factory backed, nondeclining warranty.



Backed by the industry's only three year limited corrosion failure warranty.



3-Star C.A.R.B. rating on 87 octane fuel, for ultra low engine emissions.

## SPECIFICATIONS

HP/kW @ Prop	90 / 66.2
Max RPM (WOT)	5000 - 5750
Cylinders	3 (in-line)
Displacement (CID/cc)	93 / 1526
Bore X Stroke (in/mm)	3.63 x 3.00 / 92 x 76
Induction System	Naturally Aspirated
Ignition System	SmartCraft PCM Digital Inductive
Fuel System	2-stage Direct Fuel Injection (DFI)
Alternator Amp/Watt	60 amp / 756 watt belt-driven
Cooling System	Water-Cooled w/ thermostat
Starting	Electric
Gear Ratio	2.33:1
Gear Shift	F-N-R
Propeller	Consult Dealer Propeller Guide
Steering	Remote & Big Tiller Compatible
Trim System	Power Trim & Tilt
Shallow Water Drive	20° of Trim Range
Exhaust System	Through Prop
Recommended Oil	Mercury OptiMax DFI Oil
Fuel/Ethanol Tolerance	87 octane/up to 10% Ethanol
Remote Fuel Tank (gal/L)	Optional
Operator Warning System	Engine Guardian
SmartCraft Technology	Yes
Shaft Length (in/mm)	20/508 25/635
Dry Weight (lbs/kg)*	375/170* Lightest model available

**For DFI Competitive Analysis, see pages 216-217 !**



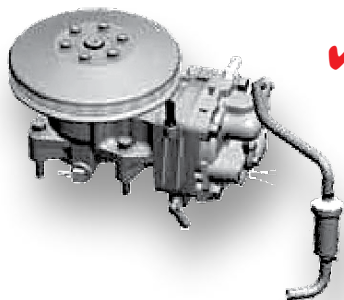
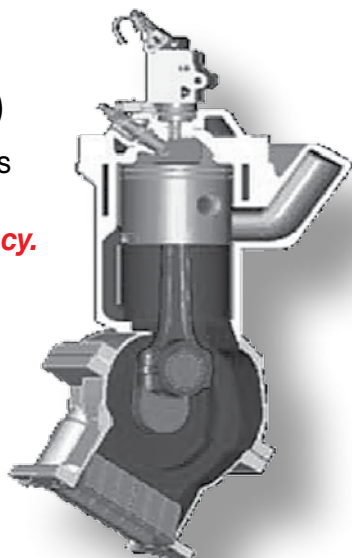
**KEY ATTRIBUTES**

### ✓ **OptiMax 2-Stage Direct Fuel Injection (95psi)**

The OptiMax 2-stage injection system uses air to shoot fuel directly into the top of the cylinder. **Maximizes combustion efficiency.**

### ✓ **OptiMax DI Advantage**

- Lower Emissions
- Best in Class Fuel Economy
- Unmatched Performance
- Reliable durability.



### ✓ **OptiMax Air Compressor**

Provides pressurized air for the injection process, which is key to the Optimax DFI operation. Compressor is water cooled to lower the temperature of the air charge and is lubricated by the oil pump. **Unmatched performance.**

### ✓ **Multi-Point Oil Pump**

Distributes oil to all the key locations in the engine helping to extend engine performance and life. **Durability and Reliability.**

### ✓ **60 Amp Alternator**

Belt driven to reduce heat build-up. Fully regulated for supplying on demand current to maintain the battery's charge. **Convenience.**



# 90hp

# OptiMax

## ADDITIONAL FEATURES / BENEFITS

<b>1.5L In-line 3 cylinder</b>	Light weight, compact, properly balanced.
<b>5 Quart Integral Oil Reserve</b>	Integral piece of engine, frees up space in the boat and reduces engine noise.
<b>SmartCraft</b>	Delivers information regarding 23 key engine functions from fuel usage, RPM & engine guardian to slow trolling RPM control, and even hull information.
<b>Air Bypass Si- lencer</b>	Smooth, quiet operation.
<b>Water Cooled</b>	<b>With Thermostat and Pressure Control</b> Durability, Reliability and peace of mind.
<b>Freshwater Flush</b>	Easy maintenance, with corrosion protection.
<b>Lost Foam Block</b>	Best in Class durability and reliability.
<b>Vapor Separator Tank VST</b>	Quick easy starts and consistent performance.
<b>Air Fuel Rails</b>	Improves combustion, running quality and provides best in class fuel economy.
<b>Power Trim &amp; Tilt</b>	Allows customer to maximize boat performance.
<b>Tiller or Remote</b>	More choices to consumer.
<b>Through Prop Exhaust</b>	Quiet, smoke free operation.
<b>Stainless Steel</b>	On Driveshaft, Shift Shaft and Prop Shaft for long term durability.

**For DFI Competitive Analysis, see pages 216-217 !**

DFI	MERCURY 90HP	E-TEC 90HP
Engine Type	In-Line 3	In-Line 3
Displacement	93ci (1526cc)	79.2ci (1296cc)
Dry Weight*	375lbs (170 kg)	320lbs (146 kg)
Alternator	60 Amp	81 Amp
Battery Charging	40 Amp	25 Amp
Gear Ratio	2.33:1	2.00:1

\* Weight based on owner's manual

## Why Air Makes the Difference

With Mercury's unique **2-stage system**, fuel is discharged into a holding cavity before a burst of pressurized air shoots it into the cylinder. This process creates the best atomization possible.

**E-TEC's** hammer style plunger forces the fuel into the cylinder at 500 PSI. But the droplets are still much larger because they haven't been atomized with air.

**OPTI's** runs smoother. You get more consistent running quality with better fuel economy and power.

## Over E-TEC

**Long Stroke 3 Cyl. Design** **vs** Short Stroke Design delivers **18%** more displacement for more torque. **Resulting in superior overall performance!**

**2.33:1 Low Gear Ratio** **vs** 2.00:1

**For strong low end power through-out the entire RPM range.**

**40 Amp** **vs** 25 Amp. **38% More Battery Charging Power.**

**Belt Driven Alternator** **vs** Magneto Type.

**Less heat build-up with better long-term durability.**

**Engine Mounted Oil Tank** **vs** None

**Convenient, frees up space in the boat.**

**SmartCraft (Troll Control)** **vs** None

**Enhanced Precise trolling.**

**Big Tiller with Power Steering Feature** **vs** Standard tiller handle.

**Comfort with more precision hull control.**

# 115hp

# OptiMax



Standard three-year limited factory backed, nondeclining warranty.



Backed by the industry's only three year limited corrosion failure warranty.



3-Star C.A.R.B. rating on 87 octane fuel, for ultra low engine emissions.

## SPECIFICATIONS

HP/kW @ Prop	115 / 84.5
Max RPM (WOT)	5000 - 5750
Cylinders	3 (in-line)
Displacement (CID/cc)	93 / 1526
Bore X Stroke (in/mm)	3.63 x 3.00 / 92 x 76
Induction System	Naturally Aspirated
Ignition System	SmartCraft PCM Digital Inductive
Fuel System	2-stage Direct Fuel Injection (DFI)
Alternator Amp/Watt	60 amp / 756 watt belt-driven
Cooling System	Water-Cooled w/ thermostat
Starting	Electric
Gear Ratio	2.07:1
Gear Shift	F-N-R
Propeller	Consult Dealer Propeller Guide
Steering	Remote & Big Tiller Compatible
Trim System	Power Trim & Tilt
Shallow Water Drive	20° Trim Range
Exhaust System	Through Prop
Recommended Oil	Mercury OptiMax DFI Oil
Fuel/Ethanol Tolerance	87 octane/up to 10% Ethanol
Remote Fuel Tank (gal/L)	Optional
Operator Warning System	Engine Guardian
SmartCraft Technology	Yes
Shaft Length (in/mm)	20/508 25/635
Dry Weight (lbs/kg)*	375/170* Lightest model available

**For DFI Competitive Analysis, see pages 216-217 !**

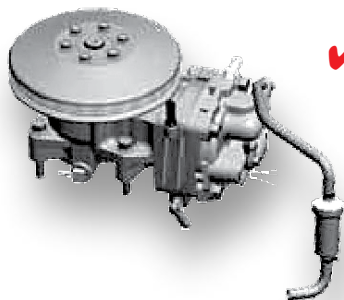
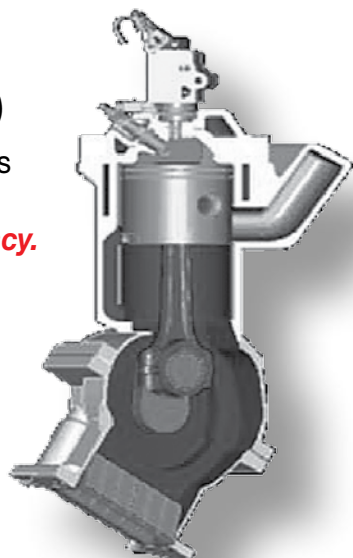
**KEY ATTRIBUTES**

### ✓ **OptiMax 2-Stage Direct Fuel Injection (95psi)**

The OptiMax 2-stage injection system uses air to shoot fuel directly into the top of the cylinder. **Maximizes combustion efficiency.**

### ✓ **OptiMax DI Advantage**

- **Lower Emissions**
- **Best in Class Fuel Economy**
- **Unmatched Performance**
- **Reliable durability.**



### ✓ **OptiMax Air Compressor**

Provides pressurized air for the injection process, which is key to the OptiMax DFI operation. Compressor is water cooled to lower the temperature of the air charge and is lubricated by the oil pump. **Unmatched performance.**

### ✓ **Multi-Point Oil Pump**

Distributes oil to all the key locations in the engine helping to extend engine performance and life. **Durability and Reliability.**

### ✓ **60 Amp Alternator**

Belt driven to reduce heat build-up. Fully regulated for supplying on demand current to maintain the battery's charge. **Convenience.**

# 115 hp *OptiMax*

## ADDITIONAL FEATURES / BENEFITS

<b>1.5L In-line 3 cylinder</b>	Light weight, compact, properly balanced.
<b>5 Quart Integral Oil Reserve</b>	Integral piece of engine, frees up space in the boat and reduces engine noise.
<b>SmartCraft</b>	Delivers information regarding 23 key engine functions from fuel usage, RPM & engine guardian to slow trolling RPM control, and even hull information.
<b>Air Bypass Silencer</b>	Smooth, quiet operation.
<b>Water Cooled</b>	<b>With Thermostat and Pressure Control</b> Durability, Reliability and peace of mind.
<b>Freshwater Flush</b>	Easy maintenance, with corrosion protection.
<b>Lost Foam Block</b>	Best in Class durability and reliability.
<b>Vapor Separator Tank VST</b>	Quick easy starts and consistent performance.
<b>Air Fuel Rails</b>	Improves combustion, running quality and provides best in class fuel economy.
<b>Power Trim &amp; Tilt</b>	Allows customer to maximize boat performance.
<b>Tiller or Remote</b>	More choices to consumer.
<b>Through Prop Exhaust</b>	Quiet, smoke free operation.
<b>Stainless Steel</b>	On Driveshaft, Shift Shaft and Prop Shaft for long term durability.

**For DFI Competitive Analysis, see pages 216-217 !**

# OptiMax

# 115 hp

DFI	MERCURY 115 HP	E-TEC 115 HP
Engine Type	In-Line 3	60° V4
Displacement	93ci (1526cc)	105.4ci (1726cc)
Dry Weight*	375lbs (170kg)	390lbs (177kg)
Alternator	60 Amp	133 Amp
Battery Charging	40 Amp	50 Amp

\* Weight based on owner's manual

## Why Air Makes the Difference

With Mercury's unique **2-stage system**, fuel is discharged into a holding cavity before a burst of pressurized air shoots it into the cylinder. This process creates the best atomization possible.

**E-TEC's** hammer style plunger forces the fuel into the cylinder at 500 PSI. But the droplets are still much larger because they haven't been atomized with air.

**OPTI's 2-Stage System runs smoother. You get more consistent running quality with better fuel economy and power.**

## Over E-TEC

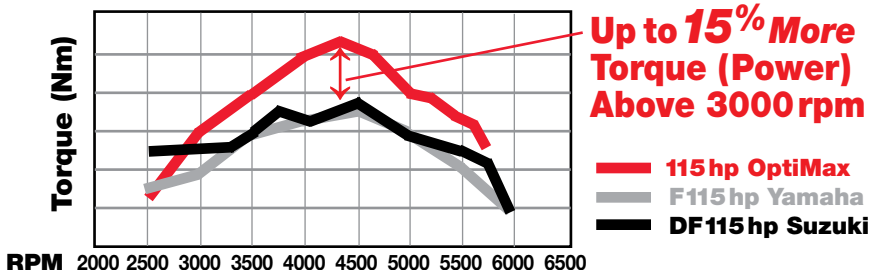
**In-Line 3 Cylinder Design** *vs* 60°V4 **Compact design layout**

**15 Lbs. Lighter** Than E-TEC **Improves hull maneuverability.**

**Engine Mounted Oil Tank** *vs* None **Convenient & Frees up space.**

**SmartCraft Troll Control** *vs* None **Enhanced, precise trolling.**

## Torque Curve Comparison



# 125 hp *OptiMax*



Standard three-year  
limited factory backed,  
nondeclining warranty.



Backed by the industry's  
only three year limited  
corrosion failure warranty.

## SPECIFICATIONS

HP/kW @ Prop	125 / 93.2
Max RPM (WOT)	5000 - 5750
Cylinders	3 (in-line)
Displacement (CID/cc)	93 / 1526
Bore X Stroke (in/mm)	3.63 x 3.00 / 92 x 76
Induction System	Naturally Aspirated
Ignition System	SmartCraft PCM Digital Inductive
Fuel System	2-stage Direct Fuel Injection (DFI)
Alternator Amp/Watt	60 amp / 756 watt belt-driven
Cooling System	Water-Cooled w/ thermostat
Starting	Electric
Gear Ratio	2.07:1
Gear Shift	F-N-R
Propeller	Consult Dealer Propeller Guide
Steering	Remote & Big Tiller Compatible
Trim System	Power Trim & Tilt
Shallow Water Drive	20° (Trim Range)
Exhaust System	Through Prop
Recommended Oil	Mercury OptiMax DFI Oil
Fuel/Ethanol Tolerance	87 octane/up to 10% Ethanol
Remote Fuel Tank (gal/L)	Optional
Operator Warning System	Engine Guardian
SmartCraft Technology	Yes
Shaft Length (in/mm)	20/508 25/635
Dry Weight (lbs/kg)*	375/170* Lightest model available

**For DFI Competitive Analysis, see pages 216-217!**

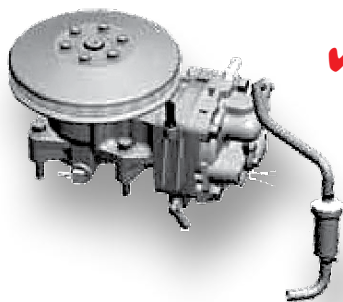
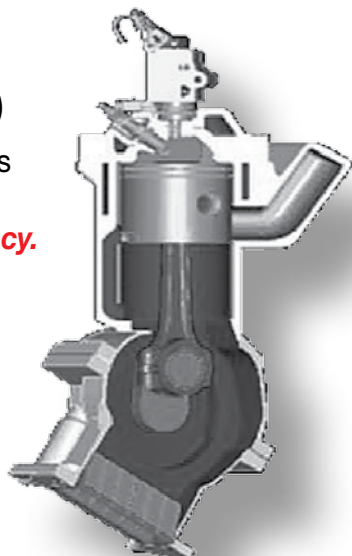
**KEY ATTRIBUTES**

### ✓ **OptiMax 2-Stage Direct Fuel Injection (95psi)**

The OptiMax 2-stage injection system uses air to shoot fuel directly into the top of the cylinder. **Maximizes combustion efficiency.**

### ✓ **OptiMax DI Advantage**

- Lower Emissions
- Best in Class Fuel Economy
- Unmatched Performance
- Reliable durability.



### ✓ **OptiMax Air Compressor**

Provides pressurized air for the injection process, which is key to the Optimax DFI operation. Compressor is water cooled to lower the temperature of the air charge and is lubricated by the oil pump. **Unmatched performance.**

### ✓ **Carbon Fiber Reeds**

More durable and responsive than stainless steel. **Improves performance and efficiency.**

### ✓ **60 Amp Alternator**

Belt driven to reduce heat build-up. Fully regulated for supplying on demand current to maintain the battery's charge. **Convenience.**



# 125 hp *OptiMax*

## ADDITIONAL FEATURES / BENEFITS

<b>1.5L In-line 3 cylinder</b>	Light weight, compact, properly balanced.
<b>5 Quart Integral Oil Reserve</b>	Integral piece of engine, frees up space in the boat and reduces engine noise.
<b>SmartCraft</b>	Delivers information regarding 23 key engine functions from fuel usage, RPM & engine guardian to slow trolling RPM control, and even hull information.
<b>Air Bypass Si- lencer</b>	Smooth, quiet operation.
<b>Water Cooled</b>	<b>With Thermostat and Pressure Control</b> Durability, Reliability and peace of mind.
<b>Freshwater Flush</b>	Easy maintenance, with corrosion protection.
<b>Lost Foam Block</b>	Best in Class durability and reliability.
<b>Vapor Separator Tank VST</b>	Quick easy starts and consistent performance.
<b>Air Fuel Rails</b>	Improves combustion, running quality and provides best in class fuel economy.
<b>Power Trim &amp; Tilt</b>	Allows customer to maximize boat performance.
<b>Tiller or Remote</b>	More choices to consumer.
<b>Through Prop Exhaust</b>	Quiet, smoke free operation.
<b>Stainless Steel</b>	On Driveshaft, Shift Shaft and Prop Shaft for long term durability.

**For DFI Competitive Analysis, see pages 216-217 !**

# *OptiMax*

# 125hp

## ***In A Class All By Itself!***

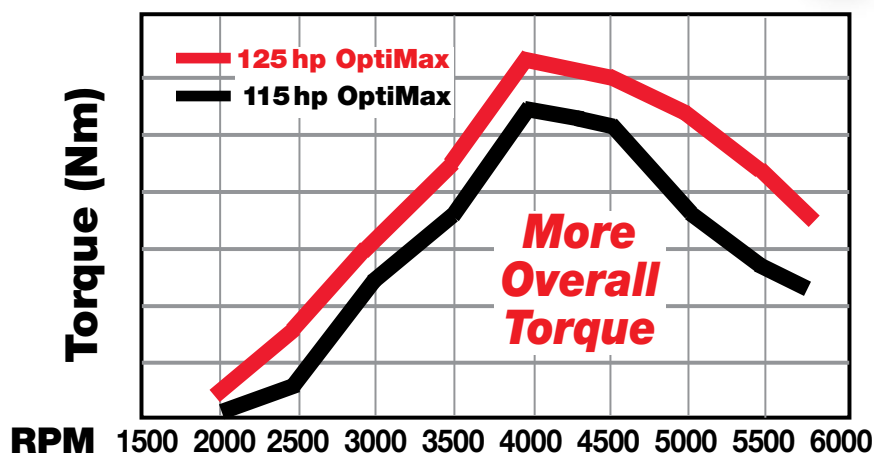
**The 125hp OptiMax** is a perfect power option for the deep V “**multi-species**” type hulls, pontoons and the many hull configurations that have a maximum horsepower rating of **125hp**.

It's strong mid-range torque helps the boat up on plane where the 115hp engines struggle.

The **125hp** is an ideal engine for re-powering the older two-stroke technology outboards that are ready to retire.



## ***Torque Curve Comparison***



- ✓ ***Improved “Hole Shot” & Acceleration***
- ✓ ***Better Cruising Speed With Heavier Loads***
- ✓ ***Increased Top End Speed***

# 135hp

# OptiMax



Standard three-year  
limited factory backed,  
nondeclining warranty.



Backed by the industry's  
only three year limited  
corrosion failure warranty.



3-Star C.A.R.B. rating on  
87 octane fuel, for ultra low  
engine emissions.

## SPECIFICATIONS

HP/kW @ Prop	135 / 99.2
Max RPM (WOT)	5250 - 5750
Cylinders	V-6 (60 degree vee)
Displacement (CID/cc)	153 / 2507
Bore X Stroke (in/mm)	3.50 x 2.65 / 89 x 67
Induction System	Naturally Aspirated
Ignition System	SmartCraft PCM Digital Inductive
Fuel System	2-stage Direct Fuel Injection (DFI)
Alternator Amp/Watt	60 amp / 756 watt belt-driven
Cooling System	Water-Cooled w/ thermostat
Starting	Electric
Gear Ratio	2.00:1
Gear Shift	F-N-R
Propeller	Consult Dealer Propeller Guide
Steering	Remote & Big Tiller Compatible
Trim System	Power Trim & Tilt
Shallow Water Drive	20° Trim Range
Exhaust System	Through Prop
Recommended Oil	Mercury OptiMax DFI Oil
Fuel/Ethanol Tolerance	87 octane/up to 10% Ethanol
Remote Fuel Tank (gal/L)	Optional
Operator Warning System	Engine Guardian
SmartCraft Technology	Yes
Shaft Length (in/mm)	20/508 25/635
Dry Weight (lbs/kg)*	431/195* Lightest model available

**For DFI Competitive Analysis, see pages 216-217 !**

# OptiMax 135hp

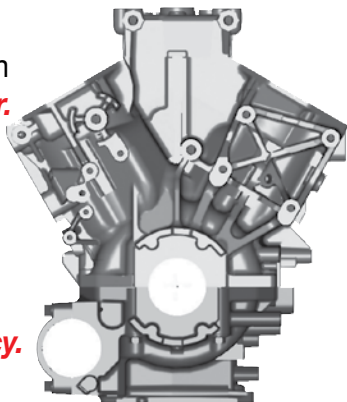
## KEY ATTRIBUTES

### ✓ **60 Degree V-6 (2.5 L)**

Even firing and smooth running for optimum performance. **Smooth Dependable Power.**

### ✓ **OptiMax 2-Stage Direct Fuel Injection (80psi)**

The OptiMax 2-stage injection system uses air to shoot fuel directly into the top of the cylinder. **Maximizes combustion efficiency.**



### ✓ **OptiMax Air Compressor**

Provides pressurized air for the injection process, which is key to the Optimax DFI operation. **Unmatched performance.**

### ✓ **Multi-Point Oil Pump**

Distributes oil to all the key locations in the engine helping to extend engine performance and life. **Durability and Reliability.**

### ✓ **60 Amp Alternator**

Belt driven to reduce heat build-up. Fully regulated for supplying on demand current to maintain the battery's charge. **Convenience.**

## ADDITIONAL FEATURES / BENEFITS

### **Stainless Steel**

On Driveshaft, Shift Shaft and Prop Shaft for long term durability.

### **SmartCraft**

Delivers information regarding 23 key engine functions from fuel usage, RPM & engine guardian to slow trolling RPM control, and even hull information.

### **Freshwater Flush**

Easy maintenance.

# 150hp

# OptiMax



Standard three-year limited factory backed, nondeclining warranty.



Backed by the industry's only three year limited corrosion failure warranty.



2-Star C.A.R.B. rating on 87 octane fuel, for very low engine emissions.

## SPECIFICATIONS

HP/kW @ Prop	150 / 110
Max RPM (WOT)	5250 - 5750
Cylinders	V-6 (60 degree vee)
Displacement (CID/cc)	153 / 2507
Bore X Stroke (in/mm)	3.50 x 2.65 / 89 x 67
Induction System	Naturally Aspirated
Ignition System	SmartCraft PCM Digital Inductive
Fuel System	2-stage Direct Fuel Injection (DFI)
Alternator Amp/Watt	60 amp / 756 watt belt-driven
Cooling System	Water-Cooled w/ thermostat
Starting	Electric
Gear Ratio	1.87:1
Gear Shift	F-N-R
Propeller	Consult Dealer Propeller Guide
Steering	Remote & Big Tiller Compatible
Trim System	Power Trim & Tilt
Shallow Water Drive	20° Trim Range
Exhaust System	Through Prop
Recommended Oil	Mercury OptiMax DFI Oil
Fuel/Ethanol Tolerance	87 octane/up to 10% Ethanol
Remote Fuel Tank (gal/L)	Optional
Operator Warning System	Engine Guardian
SmartCraft Technology	Yes
Shaft Length (in/mm)	20/508 25/635
Dry Weight (lbs/kg)*	431/195* Lightest model available

**For DFI Competitive Analysis, see pages 216-217 !**

## KEY ATTRIBUTES

### ✓ **60 Degree V-6 (2.5 L)**

Even firing and smooth running for optimum performance. **Smooth Dependable Power.**

### ✓ **OptiMax 2-Stage Direct Fuel Injection (80psi)**

The OptiMax 2-stage injection system uses air to shoot fuel directly into the top of the cylinder. **Maximizes combustion efficiency.**

### ✓ **OptiMax Air Compressor**

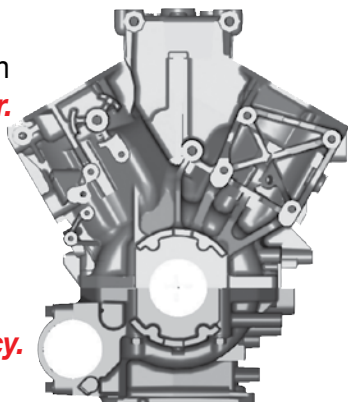
Provides pressurized air for the injection process, which is key to the Optimax DFI operation. **Unmatched performance.**

### ✓ **Multi-Point Oil Pump**

Distributes oil to all the key locations in the engine helping to extend engine performance and life. **Durability and Reliability.**

### ✓ **60 Amp Alternator**

Belt driven to reduce heat build-up. Fully regulated for supplying on demand current to maintain the battery's charge. **Convenience.**



## ADDITIONAL FEATURES / BENEFITS

### **Stainless Steel**

On Driveshaft, Shift Shaft and Prop Shaft for long term durability.

### **SmartCraft**

Delivers information regarding 23 key engine functions from fuel usage, RPM & engine guardian to slow trolling RPM control, and even hull information.

### **Freshwater Flush**

Easy maintenance.

# 200hp *OptiMax*



Standard three-year limited factory backed, nondeclining warranty.



Backed by the industry's only three year limited corrosion failure warranty.



3-Star C.A.R.B. rating on 87 octane fuel, for ultra low engine emissions.

## SPECIFICATIONS

HP/kW @ Prop	200 / 147
Max RPM (WOT)	5000 - 5750
Cylinders	V-6 (60 degree vee)
Displacement (CID/cc)	185.9 / 3032
Bore X Stroke (in/mm)	3.63 x 3.00 / 92 x 76
Induction System	Naturally Aspirated
Ignition System	SmartCraft PCM Digital Inductive
Fuel System	2-stage Direct Fuel Injection (DFI)
Alternator Amp/Watt	60 amp / 756 watt belt-driven
Cooling System	Water-Cooled w/ thermostat
Starting	Electric
Gear Ratio	1.75:1
Gear Shift	F-N-R
Propeller	Consult Dealer Propeller Guide
Steering	Remote & Big Tiller Compatible
Trim System	Power Trim & Tilt
Shallow Water Drive	20° Trim Range
Exhaust System	Through Prop
Recommended Oil	Mercury OptiMax DFI Oil
Fuel/Ethanol Tolerance	87 octane/up to 10% Ethanol
Remote Fuel Tank (gal/L)	Optional
Operator Warning System	Engine Guardian
SmartCraft Technology	Yes
Shaft Length (in/mm)	20/508 25/635
Dry Weight (lbs/kg)*	497/225* Lightest model available

**For DFI Competitive Analysis, see pages 216-217!**

# *OptiMax* 200hp

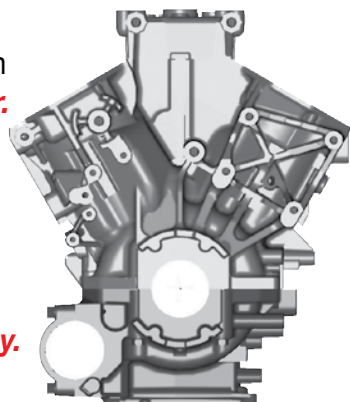
## KEY ATTRIBUTES

### ✓ **60 Degree V-6 (3.0L)**

Even firing and smooth running for optimum performance. **Smooth Dependable Power.**

### ✓ **OptiMax 2-Stage Direct Fuel Injection (80psi)**

The OptiMax 2-stage injection system uses air to shoot fuel directly into the top of the cylinder. **Maximizes combustion efficiency.**



### ✓ **OptiMax Air Compressor**

Provides pressurized air for the injection process, which is key to the Optimax DFI operation. **Unmatched performance.**

### ✓ **Multi-Point Oil Pump**

Distributes oil to all the key locations in the engine helping to extend engine performance and life. **Durability and Reliability.**

### ✓ **60 Amp Alternator**

Belt driven to reduce heat build-up. Fully regulated for supplying on demand current to maintain the battery's charge. **Convenience.**

## ADDITIONAL FEATURES / BENEFITS

### **Stainless Steel**

On Driveshaft, Shift Shaft and Prop Shaft for long term durability.

### **SmartCraft**

Delivers information regarding 23 key engine functions from fuel usage, RPM & engine guardian to slow trolling RPM control, and even hull information.

### **Front Mounted Water Inlets**

Provides a steady supply of cooling water at all times.

**Available as Standard or Counter Rotation.**



# 225hp *OptiMax*



Standard three-year limited factory backed, nondeclining warranty.



Backed by the industry's only three year limited corrosion failure warranty.



2-Star C.A.R.B. rating on 87 octane fuel, for very low engine emissions.

## SPECIFICATIONS

HP/kW @ Prop	225 / 166
Max RPM (WOT)	5000 - 5750
Cylinders	V-6 (60 degree vee)
Displacement (CID/cc)	185.9 / 3032
Bore X Stroke (in/mm)	3.63 x 3.00 / 92 x 76
Induction System	Naturally Aspirated
Ignition System	SmartCraft PCM Digital Inductive
Fuel System	2-stage Direct Fuel Injection (DFI)
Alternator Amp/Watt	60 amp / 756 watt belt-driven
Cooling System	Water-Cooled w/ thermostat
Starting	Electric
Gear Ratio	1.75:1
Gear Shift	F-N-R
Propeller	Consult Dealer Propeller Guide
Steering	Remote & Big Tiller Compatible
Trim System	Power Trim & Tilt
Shallow Water Drive	20° Trim Range
Exhaust System	Through Prop
Recommended Oil	Mercury OptiMax DFI Oil
Fuel/Ethanol Tolerance	87 octane/up to 10% Ethanol
Remote Fuel Tank (gal/L)	Optional
Operator Warning System	Engine Guardian
SmartCraft Technology	Yes
Shaft Length (in/mm)	20/508 25/635
Dry Weight (lbs/kg)*	497/225* Lightest model available

**For DFI Competitive Analysis, see pages 216-217!**

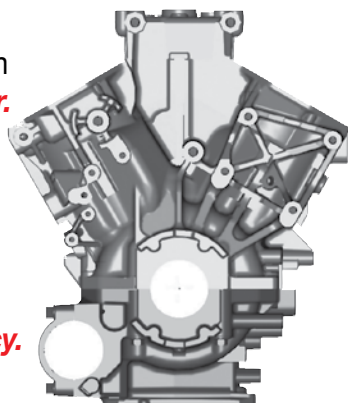
## KEY ATTRIBUTES

### ✓ **60 Degree V-6 (3.0 L)**

Even firing and smooth running for optimum performance. **Smooth Dependable Power.**

### ✓ **OptiMax 2-Stage Direct Fuel Injection (80psi)**

The OptiMax 2-stage injection system uses air to shoot fuel directly into the top of the cylinder. **Maximizes combustion efficiency.**



### ✓ **OptiMax Air Compressor**

Provides pressurized air for the injection process, which is key to the Optimax DFI operation. **Unmatched performance.**

### ✓ **Multi-Point Oil Pump**

Distributes oil to all the key locations in the engine helping to extend engine performance and life. **Durability and Reliability.**

### ✓ **60 Amp Alternator**

Belt driven to reduce heat build-up. Fully regulated for supplying on demand current to maintain the battery's charge. **Convenience.**

## ADDITIONAL FEATURES / BENEFITS

### **Stainless Steel**

On Driveshaft, Shift Shaft and Prop Shaft for long term durability.

### **SmartCraft**

Delivers information regarding 23 key engine functions from fuel usage, RPM & engine guardian to slow trolling RPM control, and even hull information.

### **Front Mounted Water Inlets**

Provides a steady supply of cooling water at all times.

**Available as Standard or Counter Rotation.**

# 250hp

# OptiMax



Standard three-year  
limited factory backed,  
nondeclining warranty.



Backed by the industry's  
only three year limited  
corrosion failure warranty.



3-Star C.A.R.B. rating on  
87 octane fuel, for ultra low  
engine emissions.

## SPECIFICATIONS

HP/kW @ Prop	250 / 184
Max RPM (WOT)	5250 - 5750
Cylinders	V-6 (60 degree vee)
Displacement (CID/cc)	185.9 / 3032
Bore X Stroke (in/mm)	3.63 x 3.00 / 92 x 76
Induction System	Naturally Aspirated
Ignition System	SmartCraft PCM Digital Inductive
Fuel System	2-stage Direct Fuel Injection (DFI)
Alternator Amp/Watt	60 amp / 756 watt belt-driven
Cooling System	Water-Cooled w/ thermostat
Starting	Electric
Gear Ratio	1.75:1
Gear Shift	F-N-R
Propeller	Consult Dealer Propeller Guide
Steering	Remote & Big Tiller Compatible
Trim System	Power Trim & Tilt
Shallow Water Drive	20° Trim Range
Exhaust System	Through Prop
Recommended Oil	Mercury OptiMax DFI Oil
Fuel/Ethanol Tolerance	87 octane/up to 10% Ethanol
Remote Fuel Tank (gal/L)	Optional
Operator Warning System	Engine Guardian
SmartCraft Technology	Yes
Shaft Length (in/mm)	20/508 25/635 30/762
Dry Weight (lbs/kg)*	505/229* Lightest model available

**For DFI Competitive Analysis, see pages 216-217!**

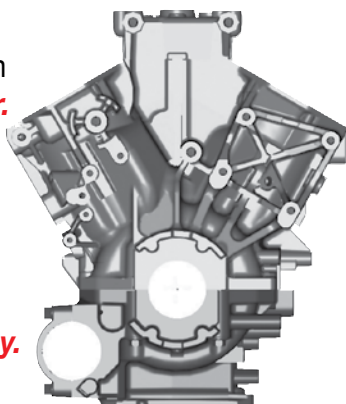
## KEY ATTRIBUTES

### ✓ **60 Degree V-6 (3.0 L)**

Even firing and smooth running for optimum performance. **Smooth Dependable Power.**

### ✓ **OptiMax 2-Stage Direct Fuel Injection (95psi)**

The OptiMax 2-stage injection system uses air to shoot fuel directly into the top of the cylinder. **Maximizes combustion efficiency.**



### ✓ **OptiMax Air Compressor**

Provides pressurized air for the injection process, which is key to the Optimax DFI operation. **Unmatched performance.**

### ✓ **Multi-Point Oil Pump**

Distributes oil to all the key locations in the engine helping to extend engine performance and life. **Durability and Reliability.**

### ✓ **60 Amp Alternator**

Belt driven to reduce heat build-up. Fully regulated for supplying on demand current to maintain the battery's charge. **Convenience.**

## ADDITIONAL FEATURES / BENEFITS

### **Stainless Steel**

On Driveshaft, Shift Shaft and Prop Shaft for long term durability.

### **SmartCraft**

Delivers information regarding 23 key engine functions from fuel usage, RPM & engine guardian to slow trolling RPM control, and even hull information.

### **Front Mounted Water Inlets**

Provides a steady supply of cooling water at all times.

**Available as Standard or Counter Rotation.**





## **TWO STROKE DIRECT FUEL INJECTION**

**115 HP DFI** —

**150 HP DFI** —

**175 HP DFI** —

**200 HP DFI** —

**225 HP DFI** —

**225 HP DFI Torque Master** —

**250 HP DFI** —

**250 HP DFI Torque Master** —

# 115hp

## OptiMax ProXS



Standard three-year  
limited factory backed,  
nondeclining warranty.



Backed by the industry's  
only three year limited  
corrosion failure warranty.

### SPECIFICATIONS

HP/kW @ Prop	115 / 84.5
Max RPM (WOT)	5000 - 5750
Cylinders	3 (in-line)
Displacement (CID/cc)	92.9 / 1526
Bore X Stroke (in/mm)	3.63 x 3.00 / 92 x 76
Induction System	Naturally Aspirated
Ignition System	SmartCraft PCM Digital Inductive
Fuel System	2-stage Direct Fuel Injection (DFI)
Alternator Amp/Watt	60 amp / 756 watt belt-driven
Cooling System	Water-Cooled w/ thermostat
Starting	Electric
Gear Ratio	2.07:1
Gear Shift	F-N-R
Propeller	Consult Dealer Propeller Guide
Steering	Remote & Big Tiller Compatible
Trim System	Power Trim & Tilt
Shallow Water Drive	20° Trim Range
Exhaust System	Through Prop
Recommended Oil	Mercury OptiMax DFI Oil
Fuel/Ethanol Tolerance	87 octane/up to 10% Ethanol
Remote Fuel Tank (gal/L)	Optional
Operator Warning System	Overheat, Over-rev, low oil level
SmartCraft Technology	Yes
Shaft Length (in/mm)	20/508
Dry Weight (lbs/kg)*	375/170* Lightest model available

**For DFI Competitive Analysis, see pages 216-217!**



**KEY ATTRIBUTES****✓ OptiMax Pro XS 2-Stage Direct Fuel Injection (95psi)**

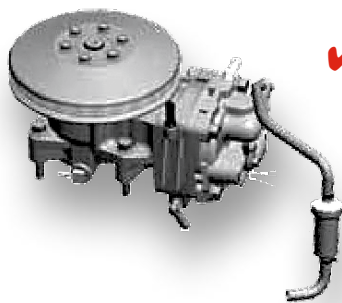
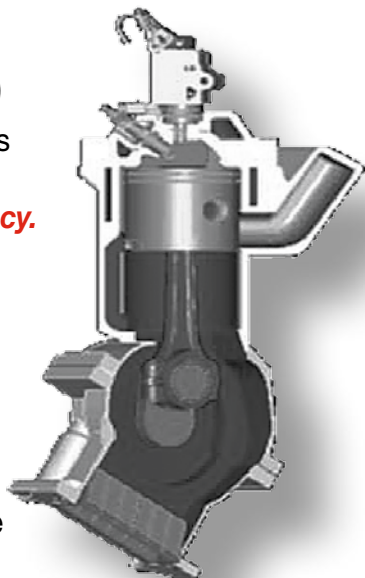
The OptiMax 2-stage injection system uses air to shoot fuel directly into the top of the cylinder. *Maximizes combustion efficiency.*

**✓ Carbon Fiber Reeds**

More durable and responsive than stainless steel. *Improves Performance and Efficiency.*

**✓ Unique Attenuator**

The intake silencer allows more air in while at the same time reduces overall noise. *Quiet Efficiency.*

**✓ OptiMax Air Compressor**

Provides pressurized air for the injection process, which is key to the Optimax DFI operation. Compressor is water cooled to lower the temperature of the air charge and is lubricated by the oil pump. *Unmatched performance.*

**✓ Exhaust Port Tuning**

Cylinder ports are designed to let exhaust out efficiently, thus allowing the engine to build more torque and horsepower. *More Power.*

**✓ ECM Tuning**

Fuel flow and spark advance are set for maximum power output and efficiency. *Convenience.*



# 115hp

## *OptiMax* *ProXS*

### **ADDITIONAL FEATURES / BENEFITS**

<b>1.5L In-line 3 cylinder</b>	Light weight, compact, properly balanced.
<b>Multi-Point Oil Pump</b>	Distributes oil to all key locations in the engine helping to extend engine performance and life.
<b>5 Quart Integral Oil Reserve</b>	Integral piece of engine, frees up space in the boat and reduces engine noise.
<b>60 Amp Alternator</b>	Belt driven to reduce heat build-up. Fully regulated for supplying on demand current to maintain the battery's charge.
<b>SmartCraft</b>	Delivers information regarding 23 key engine functions from fuel usage, RPM & engine guardian to slow trolling RPM control, and even hull information.
<b>Water Cooled</b>	<b>With Thermostat and Pressure Control</b> Durability, Reliability and peace of mind.
<b>Freshwater Flush</b>	Easy maintenance.
<b>Lost Foam Block</b>	Best in Class durability and reliability.
<b>Vapor Separator Tank VST</b>	Quick easy starts and consistent performance.
<b>Air Fuel Rails</b>	Improves combustion, running quality and provides best in class fuel economy.
<b>Power Trim &amp; Tilt</b>	Allows customer to maximize boat performance.
<b>Stainless Steel</b>	On Driveshaft, Shift Shaft and Prop Shaft for long term durability.

***For DFI Competitive Analysis, see pages 216-217 !***

## The OptiMax Legacy

The tradition to over deliver continues with the performance driven **OptiMax 115 Pro XS!**

Based on the **OptiMax 125hp**, it's strong mid-range torque improves hole-shot, acceleration and top speed efficiently.

The **115 hp Pro XS** (20 inch shaft) is an ideal engine for re-powering the older two-stroke technology outboards that are ready to retire.



DFI	MERCURY 115HP PRO XS	E-TEC 115HP HO
Engine Type	In-Line 3	60° V4
Displacement	93ci (1526cc)	105.4ci (1726cc)
Dry Weight*	375lbs (170 kg)	390lbs (177kg)
Alternator	60 Amp	133 Amp
Battery Charging	40 Amp	50 Amp

\* Weight based on owner's manual

## Why Air Makes the Difference

With Mercury's unique **2-stage system**, fuel is discharged into a holding cavity before a burst of pressurized air shoots it into the cylinder. This process creates the best atomization possible.

**E-TEC's** hammer style plunger forces the fuel into the cylinder at 500 PSI. But the droplets are still much larger because they haven't been atomized with air.

**OPTI's 2-Stage System runs smoother. You get more consistent running quality with better fuel economy and power.**

## Over E-TEC

**In-Line 3 Cylinder Design** vs 60°V4 **Compact design layout**

**15 Lbs. Lighter** Than E-TEC **Improves hull maneuverability.**

**Engine Mounted Oil Tank** vs None **Convenient & Frees up space.**

**SmartCraft Troll Control** vs None **Enhanced, precise trolling.**

# 150hp

## OptiMax ProXS



Standard three-year limited factory backed, nondeclining warranty.



Backed by the industry's only three year limited corrosion failure warranty.



3-Star C.A.R.B. rating on 87 octane fuel, for ultra low engine emissions.

### SPECIFICATIONS

HP/kW @ Prop	150 / 110
Max RPM (WOT)	5250 - 5750
Cylinders	V-6 (60 degree vee)
Displacement (CID/cc)	153 / 2507
Bore X Stroke (in/mm)	3.50 x 2.65 / 89 x 67
Induction System	Naturally Aspirated
Ignition System	SmartCraft PCM Digital Inductive
Fuel System	2-stage Direct Fuel Injection (DFI)
Alternator Amp/Watt	60 amp / 756 watt belt-driven
Cooling System	Water-Cooled w/ thermostat
Starting	Electric
Gear Ratio	1.87:1
Gear Shift	F-N-R
Propeller	Consult Dealer Propeller Guide
Steering	Remote & Big Tiller Compatible
Trim System	Power Trim & Tilt
Shallow Water Drive	20° Trim Range
Exhaust System	Through Prop
Recommended Oil	Mercury OptiMax DFI Oil
Fuel/Ethanol Tolerance	87 octane/up to 10% Ethanol
Remote Fuel Tank (gal/L)	Optional
Operator Warning System	Engine Guardian
SmartCraft Technology	Yes
Shaft Length (in/mm)	20/508 25/635
Dry Weight (lbs/kg)*	431/195* Lightest model available

**For DFI Competitive Analysis, see pages 216 -217 !**

**KEY ATTRIBUTES****✓ OptiMax Pro XS 2-Stage Direct Fuel Injection (95psi)**

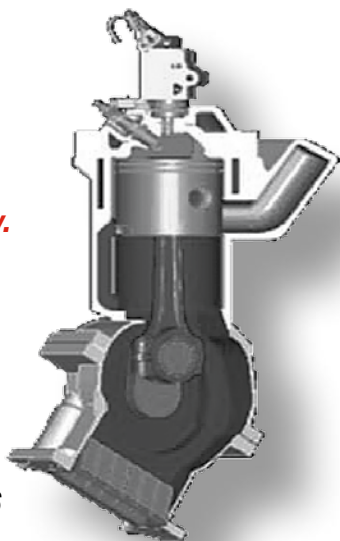
The OptiMax 2-stage injection system uses air to shoot fuel directly into the top of the cylinder. *Maximizes combustion efficiency.*

**✓ Carbon Fiber Reeds**

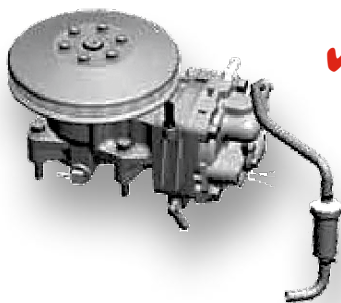
More durable and responsive than stainless steel. *Improves Performance and Efficiency.*

**✓ 175 Pro XS Cylinder Heads**

Added horsepower for strong performance and durability. *Built tough.*

**✓ OptiMax Air Compressor**

Provides pressurized air for the injection process, which is key to the Optimax DFI operation. Compressor is water cooled to lower the temperature of the air charge and is lubricated by the oil pump. *Unmatched performance.*

**✓ Exhaust Port Tuning**

Cylinder ports are designed to let exhaust out efficiently, thus allowing the engine to build more torque and horsepower. *More Power.*

**✓ ECM Tuning**

Fuel flow and spark advance are set for maximum power output and efficiency. *Convenience.*

# 150 hp *OptiMax ProXS*

## ADDITIONAL FEATURES / BENEFITS

<b>60 Degree V-6 2.5 L</b>	Provides smooth overall operation.
<b>Multi-Point Oil Pump</b>	Distributes oil to all key locations in the engine helping to extend engine performance and life.
<b>60 Amp Alternator</b>	Belt driven to reduce heat build-up. Fully regulated for supplying on demand current to maintain the battery's charge.
<b>SmartCraft</b>	Delivers information regarding 23 key engine functions from fuel usage, RPM & engine guardian to slow trolling RPM control, and even hull information.
<b>Water Cooled</b>	<b>With Thermostat and Pressure Control</b> Durability, Reliability and peace of mind.
<b>Freshwater Flush</b>	Easy maintenance.
<b>Lost Foam Block</b>	Best in Class durability and reliability.
<b>Vapor Separator Tank VST</b>	Quick easy starts and consistent performance.
<b>Air Fuel Rails</b>	Improves combustion, running quality and provides best in class fuel economy.
<b>Power Trim &amp; Tilt</b>	Allows customer to maximize boat performance.
<b>Stainless Steel</b>	On Driveshaft, Shift Shaft and Prop Shaft for long term durability.

**For DFI Competitive Analysis, see pages 216-217!**



# 150 hp

DFI	MERCURY 150HP PRO XS	E-TEC 150HP HO	YAMAHA 150HP VMAX
Engine Type	60° V6	60° V6	76° V6
Displacement	153ci (2507cc)	158.2ci (2592cc)	158.4ci (2596cc)
Dry Weight*	431lbs (195kg)	418 lbs (190kg)	470lbs (213kg)
Alternator	60 Amp	133 Amp	45 Amp
Battery Charging	35 Amp	50 Amp	25 Amp

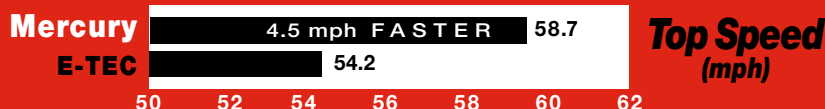
\* Weight based on owner's manual

## Performance Attributes

Mercury's **OptiMax Pro XS 150 hp** comes out way ahead in a test conducted with an **18' Fiberglass Bass Boat** with a heavy tournament payload by Mercury R&D January 2010.

The Pro XS had a 23" prop (5568 RPM) and the E-TEC HO had a 21" prop (5409 RPM).

### Mercury is Faster!



### Mercury has more torque!



### Mercury has best fuel economy!



# 175hp

## OptiMax ProXS



Standard three-year  
limited factory backed,  
nondeclining warranty.



Backed by the industry's  
only three year limited  
corrosion failure warranty.



3-Star C.A.R.B. rating on  
87 octane fuel, for ultra low  
engine emissions.

### SPECIFICATIONS

HP/kW @ Prop	175 / 129
Max RPM (WOT)	5500 - 6000
Cylinders	V-6 (60 degree vee)
Displacement (CID/cc)	153 / 2507
Bore X Stroke (in/mm)	3.50 x 2.65 / 89 x 67
Induction System	Naturally Aspirated
Ignition System	SmartCraft PCM Digital Inductive
Fuel System	2-stage Direct Fuel Injection (DFI)
Alternator Amp/Watt	60 amp / 756 watt belt-driven
Cooling System	Water-Cooled w/ thermostat
Starting	Electric
Gear Ratio	1.87:1
Gear Shift	F-N-R
Propeller	Consult Dealer Propeller Guide
Steering	Remote & Big Tiller Compatible
Trim System	Power Trim & Tilt
Shallow Water Drive	20° Trim Range
Exhaust System	Through Prop
Recommended Oil	Mercury OptiMax DFI Oil
Fuel/Ethanol Tolerance	87 octane/up to 10% Ethanol
Remote Fuel Tank (gal/L)	Optional
Operator Warning System	Engine Guardian
SmartCraft Technology	Yes
Shaft Length (in/mm)	20/508 25/635
Dry Weight (lbs/kg)*	431/195* Lightest model available

**For DFI Competitive Analysis, see pages 216-217 !**

**KEY ATTRIBUTES****✓ OptiMax Pro XS 2-Stage Direct Fuel Injection (95psi)**

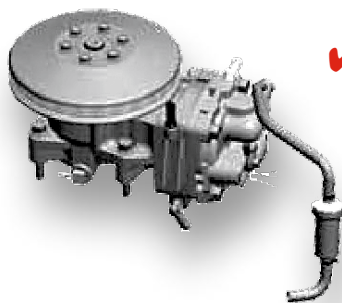
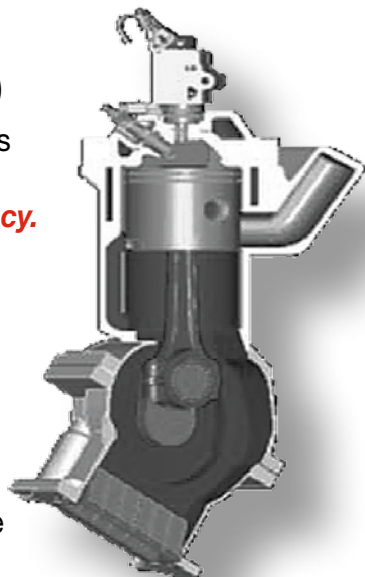
The OptiMax 2-stage injection system uses air to shoot fuel directly into the top of the cylinder. *Maximizes combustion efficiency.*

**✓ Carbon Fiber Reeds**

More durable and responsive than stainless steel. *Improves Performance and Efficiency.*

**✓ Unique Attenuator**

The intake silencer allows more air in while at the same time reduces overall noise. *Quiet Efficiency.*

**✓ OptiMax Air Compressor**

Provides pressurized air for the injection process, which is key to the Optimax DFI operation. Compressor is water cooled to lower the temperature of the air charge and is lubricated by the oil pump. *Unmatched performance.*

**✓ Exhaust Port Tuning**

Cylinder ports are designed to let exhaust out efficiently, thus allowing the engine to build more torque and horsepower. *More Power.*

**✓ ECM Tuning**

Fuel flow and spark advance are set for maximum power output and efficiency. *Convenience.*



# 175hp *OptiMax ProXS*

## ADDITIONAL FEATURES / BENEFITS

<b>60 Degree V-6 2.5 L</b>	Provides smooth overall operation.
<b>Multi-Point Oil Pump</b>	Distributes oil to all key locations in the engine helping to extend engine performance and life.
<b>60 Amp Alternator</b>	Belt driven to reduce heat build-up. Fully regulated for supplying on demand current to maintain the battery's charge.
<b>SmartCraft</b>	Delivers information regarding 23 key engine functions from fuel usage, RPM & engine guardian to slow trolling RPM control, and even hull information.
<b>Water Cooled</b>	<b>With Thermostat and Pressure Control</b> Durability, Reliability and peace of mind.
<b>Freshwater Flush</b>	Easy maintenance.
<b>Lost Foam Block</b>	Best in Class durability and reliability.
<b>Vapor Separator Tank VST</b>	Quick easy starts and consistent performance.
<b>Air Fuel Rails</b>	Improves combustion, running quality and provides best in class fuel economy.
<b>Power Trim &amp; Tilt</b>	Allows customer to maximize boat performance.
<b>Stainless Steel</b>	On Driveshaft, Shift Shaft and Prop Shaft for long term durability.

**For DFI Competitive Analysis, see pages 216-217 !**

## The OptiMax Legacy

The tradition to over deliver continues with the performance driven **OptiMax 175 Pro XS!**

Based on **OptiMax R&D** it's strong mid-range torque improves hole-shot, acceleration and top speed efficiently.



DFI	MERCURY 175 HP PRO XS	YAMAHA 175 HP VMAXII
Engine Type	60° V6	76° V6
Displacement	153ci (2507cc)	158.4ci (2596cc)
Dry Weight*	431 lbs (195kg)	470 lbs (213kg)
Alternator	60 Amp	45 Amp

\* Weight based on owner's manual

## Why Air Makes the Difference

With Mercury's unique **2-stage system**, fuel is discharged into a holding cavity before a burst of pressurized air shoots it into the cylinder.

**Yamaha's HPDI** system injects fuel only into the cylinder at 700 PSI. But the fuel droplets are still much larger because they haven't been atomized with air.

**OPTI's 2-Stage System creates the best atomization possible. You get more consistent smooth running with better fuel economy and power.**

## Over Yamaha

**60°V6 vs 76° V6.** *Compact design layout*

**39 Lbs. Lighter** Than Yamaha. *Improves hull maneuverability.*

**60 Amp vs 45 Amp.** *25% More charging power*

**Belt Driven Alternator vs** Magneto Type. *Less heat/ Better durability*

**SmartCraft Troll Control vs** None . *Enhanced, precise trolling.*

# 200hp

# OptiMax ProXS



Standard three-year  
limited factory backed,  
nondeclining warranty.



Backed by the industry's  
only three year limited  
corrosion failure warranty.



3-Star C.A.R.B. rating on  
87 octane fuel, for ultra low  
engine emissions.

## SPECIFICATIONS

HP/kW @ Prop	200 / 147
Max RPM (WOT)	5000 - 5750
Cylinders	V-6 (60 degree vee)
Displacement (CID/cc)	185.9 / 3032
Bore X Stroke (in/mm)	3.63 x 3.00 / 92 x 76
Induction System	Naturally Aspirated
Ignition System	SmartCraft PCM Digital Inductive
Fuel System	2-stage Direct Fuel Injection (DFI)
Alternator Amp/Watt	60 amp / 756 watt belt-driven
Cooling System	Water-Cooled w/ thermostat
Starting	Electric
Gear Ratio	1.75:1
Gear Shift	F-N-R
Propeller	Consult Dealer Propeller Guide
Steering	Remote & Big Tiller Compatible
Trim System	Power Trim & Tilt
Shallow Water Drive	20° Trim Range
Exhaust System	Through Prop
Recommended Oil	Mercury OptiMax DFI Oil
Fuel/Ethanol Tolerance	87 octane/up to 10% Ethanol
Remote Fuel Tank (gal/L)	Optional
Operator Warning System	SmartCraft Engine Guardian
SmartCraft Technology	Yes
Shaft Length (in/mm)	20/508
Dry Weight (lbs/kg)*	505/229* Lightest model available

**For DFI Competitive Analysis, see pages 216 -217 !**

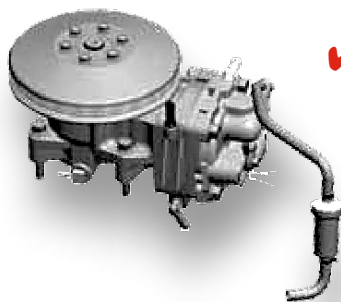
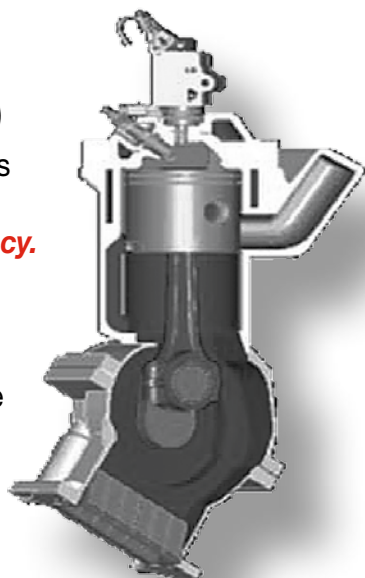
**KEY ATTRIBUTES****✓ OptiMax Pro XS 2-Stage Direct Fuel Injection (95psi)**

The OptiMax 2-stage injection system uses air to shoot fuel directly into the top of the cylinder. **Maximizes combustion efficiency.**

**✓ Unique Attenuator**

The intake silencer allows more air in while at the same time reducing overall noise.

**Quiet efficiency.**

**✓ OptiMax Air Compressor**

Provides pressurized air for the injection process, which is key to the Optimax DFI operation. Compressor is water cooled to lower the temperature of the air charge and is lubricated by the oil pump. **Unmatched performance.**

**✓ Exhaust Port Tuning**

Cylinder ports are designed to let exhaust out efficiently, thus allowing the engine to build more torque and horsepower.

**More power.**

**✓ ECM Tuning**

Fuel flow and spark advance are set for maximum power output and efficiency. **Convenience.**

# 200 hp *OptiMax* *ProXS*

## ADDITIONAL FEATURES / BENEFITS

<b>60 Degree V-6 3.0 L</b>	Even firing and smooth running for optimum performance.
<b>Multi-Point Oil Pump</b>	Distributes oil to all key locations in the engine helping to extend engine performance and life.
<b>60 Amp Alternator</b>	Belt driven to reduce heat build-up. Fully regulated for supplying on demand current to maintain the battery's charge.
<b>SmartCraft</b>	Delivers information regarding 23 key engine functions from fuel usage, RPM & engine guardian to slow trolling RPM control, and even hull information.
<b>Water Cooled</b>	<b>With Thermostat and Pressure Control</b> Durability, Reliability and peace of mind.
<b>Freshwater Flush</b>	Easy maintenance.
<b>Lost Foam Block</b>	Best in Class durability and reliability.
<b>Vapor Separator Tank VST</b>	Quick easy starts and consistent performance.
<b>Air Fuel Rails</b>	Improves combustion, running quality and provides best in class fuel economy.
<b>Power Trim &amp; Tilt</b>	Allows customer to maximize boat performance.
<b>Stainless Steel</b>	On Driveshaft, Shift Shaft and Prop Shaft for long term durability.

**For DFI Competitive Analysis, see pages 216-217 !**



# 200hp

SPEC	MERCURY DFI 200HP Pro XS	E-TEC DFI 200HP High Output	YAMAHA 4-stroke 200HP VMAX SHO
Engine Type	60° V6	90° V6	60° V6
Displacement	185.9 ci (3032cc)	200.1 ci (3279cc)	254 ci (4162cc)
Dry Weight*	505lbs (229 kg)	518 lbs (235 kg)	505lbs (229 kg)
Alternator	60 Amp	133 Amp	50 Amp
Battery Charging	35 Amp	50 Amp	NA

\* Weight based on owner's manual

## Bass & Walleye Magazine

This popular publication tested an array of **200 & 225hp** competitive engines, including the **Pro XS OptiMax** on 20 to 21 foot Bass Boats. Here's how Pro XS measured up to E-TEC:

### Similar Top Speed!



### Mercury is quicker!



### Mercury has 32% better fuel economy!



# 225hp

# OptiMax ProXS



Standard three-year  
limited factory backed,  
nondeclining warranty.



Backed by the industry's  
only three year limited  
corrosion failure warranty.



3-Star C.A.R.B. rating on  
87 octane fuel, for ultra low  
engine emissions.

## SPECIFICATIONS

HP/kW @ Prop	225 / 165
Max RPM (WOT)	5500 - 6000
Cylinders	V-6 (60 degree vee)
Displacement (CID/cc)	185.9 / 3032
Bore X Stroke (in/mm)	3.63 x 3.00 / 92 x 76
Induction System	Naturally Aspirated
Ignition System	SmartCraft PCM Digital Inductive
Fuel System	2-stage Direct Fuel Injection (DFI)
Alternator Amp/Watt	60 amp / 756 watt belt-driven
Cooling System	Water-Cooled w/ thermostat
Starting	Electric
Gear Ratio	1.75:1
Gear Shift	F-N-R
Propeller	Consult Dealer Propeller Guide
Steering	Remote & Big Tiller Compatible
Trim System	Power Trim & Tilt
Shallow Water Drive	20° Trim Range
Exhaust System	Through Prop
Recommended Oil	Mercury OptiMax DFI Oil
Fuel/Ethanol Tolerance	87 octane/up to 10% Ethanol
Remote Fuel Tank (gal/L)	Optional
Operator Warning System	SmartCraft Engine Guardian
SmartCraft Technology	Yes
Shaft Length (in/mm)	20/508 25/635
Dry Weight (lbs/kg)*	505/229* Lightest model available

**For DFI Competitive Analysis, see pages 216 -217 !**

**KEY ATTRIBUTES****✓ OptiMax Pro XS 2-Stage Direct Fuel Injection (95psi)**

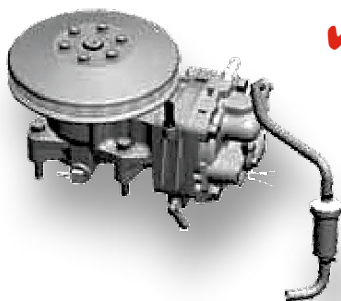
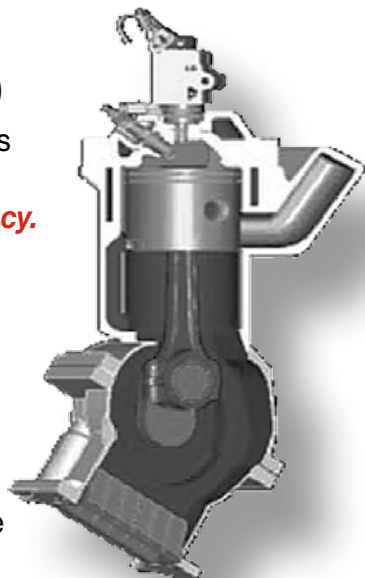
The OptiMax 2-stage injection system uses air to shoot fuel directly into the top of the cylinder. *Maximizes combustion efficiency.*

**✓ Carbon Fiber Reeds**

More durable and responsive than stainless steel. *Improves Performance and Efficiency.*

**✓ Unique Attenuator**

The intake silencer allows more air in while at the same time reduces overall noise. *Quiet Efficiency.*

**✓ OptiMax Air Compressor**

Provides pressurized air for the injection process, which is key to the Optimax DFI operation. Compressor is water cooled to lower the temperature of the air charge and is lubricated by the oil pump. *Unmatched performance.*

**✓ Exhaust Port Tuning**

Cylinder ports are designed to let exhaust out efficiently, thus allowing the engine to build more torque and horsepower. *More Power.*

**✓ ECM Tuning**

Fuel flow and spark advance are set for maximum power output and efficiency. *Convenience.*



# 225hp

# OptiMax ProXS

## ADDITIONAL FEATURES / BENEFITS

<b>60 Degree V-6 3.0 L</b>	Even firing and smooth running for optimum performance.
<b>Multi-Point Oil Pump</b>	Distributes oil to all key locations in the engine helping to extend engine performance and life.
<b>60 Amp Alternator</b>	Belt driven to reduce heat build-up. Fully regulated for supplying on demand current to maintain the battery's charge.
<b>SmartCraft</b>	Delivers information regarding 23 key engine functions from fuel usage, RPM & engine guardian to slow trolling RPM control, and even hull information.
<b>Water Cooled</b>	<b>With Thermostat and Pressure Control</b> Durability, Reliability and peace of mind.
<b>Freshwater Flush</b>	Easy maintenance.
<b>Lost Foam Block</b>	Best in Class durability and reliability.
<b>Vapor Separator Tank VST</b>	Quick easy starts and consistent performance.
<b>Air Fuel Rails</b>	Improves combustion, running quality and provides best in class fuel economy.
<b>Power Trim &amp; Tilt</b>	Allows customer to maximize boat performance.
<b>Stainless Steel</b>	On Driveshaft, Shift Shaft and Prop Shaft for long term durability.

**For DFI Competitive Analysis, see pages 216-217!**



# 225hp

SPEC	MERCURY DFI 225HP Pro XS	E-TEC DFI 225HP High Output	YAMAHA 4-stroke 225HP VMAX SHO
Engine Type	60° V6	90° V6	60° V6
Displacement	185.9 ci (3032cc)	200.1 ci (3279cc)	254 ci (4162cc)
Dry Weight*	505lbs (229 kg)	518 lbs (235 kg)	505lbs (229 kg)
Alternator	60 Amp	133 Amp	50 Amp
Battery Charging	35 Amp	50 Amp	NA

\* Weight based on owner's manual

## Bass & Walleye Magazine

This popular publication tested an array of **200 & 225hp** competitive engines, including the **Pro XS OptiMax** on 20 to 21 foot Bass Boats. Here's how Pro XS measured up to E-TEC:

### Mercury is 5.8mph faster!



### Similar Results!



### Mercury has 24% better fuel economy!



# 225hp PRO XS Torque Master



Backed by the industry's only three year limited corrosion failure warranty.



3-Star C.A.R.B. rating on 87 octane fuel, for ultra low engine emissions.

## SPECIFICATIONS

HP/kW @ Prop	225 / 166
Max RPM (WOT)	5500 - 6000
Cylinders	V-6 (60 Degree Vee)
Displacement (CID/cc)	185 / 3032
Bore X Stroke (in/mm)	3.63 x 3.00 / 92 x 76
Induction System	Naturally Aspirated
Ignition System	PCM digital inductive
Fuel System	2-stage Direct Fuel Injection (DFI)
Alternator Amp/Watt	60 / 756 Belt-Driven
Cooling System	Water-Cooled w/ thermostat
Starting	Electric (turn-key)
Gear Ratio	1.75:1 Torque Master Gearcase
Gear Shift	F-N-R
Propeller	Consult Dealer Propeller Guide
Steering	Remote
Trim System	Power Trim & Tilt
Shallow Water Drive	N/A
Exhaust System	Through Prop
Recommended Oil	Mercury OptiMax DFI Oil
Fuel/Ethanol Tolerance	87 octane (R&M) / 2 (92RON) Int'l
Remote Fuel Tank (gal/L)	Optional
Operator Warning System	N/A
SmartCraft Technology	Yes
Shaft Length (in/mm)	20/508
Dry Weight (lbs/kg)*	505/229 w/20" Center Section * Lightest model available

**For DFI Competitive Analysis, see pages 216-217 !**

# Torque Master **225hp PRO XS**

## KEY ATTRIBUTES

### ✓ **OptiMax Pro XS 2-Stage Direct Fuel Injection (95psi)**

The OptiMax 2-stage injection system uses air to shoot fuel directly into the top of the cylinder.

**Maximizes combustion efficiency.**

### ✓ **Carbon Fiber Reeds**

High-performance rubber-coated reed blocks cushion the 5-petal carbon fiber reeds for enhanced durability without sacrificing performance. **Improves Performance.**

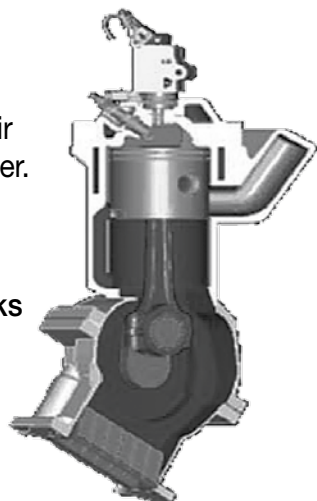
### ✓ **ECM Tuning**

Fuel flow and spark advance are set for maximum power output and efficiency. **Convenience.**

### ✓ **Torque Master Gearcase**

Boats with heavier loads and speeds up to 85 MPH can depend on superior performance and lasting durability.

1. **Painted black gearcase with 1.75:1 gear ratio**
2. **1.25" propshaft (vs. 1" propshaft on standard Pro XS models) for added durability when running at elevated engine heights**
3. **Cambered skeg for improved handling and driveability at higher speeds**
4. **Front water pickups along with standard side inlets to ensure optimal cooling when running at elevated engine heights**
5. **Requires 1.25" solid hub kit from Mercury Racing (#840389K06) Superior performance and lasting endurance.**



## ADDITIONAL FEATURES / BENEFITS

### **60 Amp Alternator**

Belt driven for reliability, batteries are always at peak charge for electronics and accessories.

### **Multi-point Oil Injection**

Distributes oil to all the key locations in the engine helping to extend performance and life.

# 250hp

## OptiMax ProXS



Standard three-year  
limited factory backed,  
nondeclining warranty.



Backed by the industry's  
only three year limited  
corrosion failure warranty.



3-Star C.A.R.B. rating on  
87 octane fuel, for ultra low  
engine emissions.

### SPECIFICATIONS

HP/kW @ Prop	250 / 184
Max RPM (WOT)	5500 - 6000
Cylinders	V-6 (60 degree vee)
Displacement (CID/cc)	185.9 / 3032
Bore X Stroke (in/mm)	3.63 x 3.00 / 92 x 76
Induction System	Naturally Aspirated
Ignition System	SmartCraft PCM Digital Inductive
Fuel System	2-stage Direct Fuel Injection (DFI)
Alternator Amp/Watt	60 amp / 756 watt belt-driven
Cooling System	Water-Cooled w/ thermostat
Starting	Electric
Gear Ratio	1.75:1
Gear Shift	F-N-R
Propeller	Consult Dealer Propeller Guide
Steering	Remote & Big Tiller Compatible
Trim System	Power Trim & Tilt
Shallow Water Drive	20° Trim Range
Exhaust System	Through Prop
Recommended Oil	Mercury OptiMax DFI Oil
Fuel/Ethanol Tolerance	87 octane/up to 10% Ethanol
Remote Fuel Tank (gal/L)	Optional
Operator Warning System	SmartCraft Engine Guardian
SmartCraft Technology	Yes
Shaft Length (in/mm)	20/508 25/635
Dry Weight (lbs/kg)*	505/229* Lightest model available

**For DFI Competitive Analysis, see pages 216 -217 !**

**KEY ATTRIBUTES****✓ OptiMax Pro XS 2-Stage Direct Fuel Injection (95psi)**

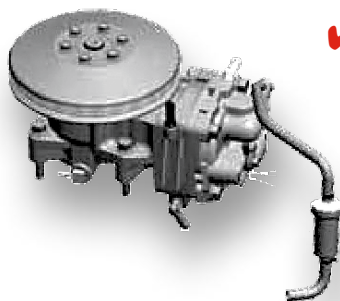
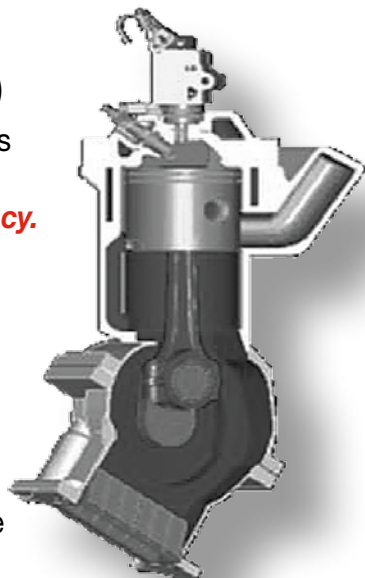
The OptiMax 2-stage injection system uses air to shoot fuel directly into the top of the cylinder. *Maximizes combustion efficiency.*

**✓ Carbon Fiber Reeds**

More durable and responsive than stainless steel. *Improves Performance and Efficiency.*

**✓ Unique Attenuator**

The intake silencer allows more air in while at the same time reduces overall noise. *Quiet Efficiency.*

**✓ OptiMax Air Compressor**

Provides pressurized air for the injection process, which is key to the Optimax DFI operation. Compressor is water cooled to lower the temperature of the air charge and is lubricated by the oil pump. *Unmatched performance.*

**✓ Exhaust Port Tuning**

Cylinder ports are designed to let exhaust out efficiently, thus allowing the engine to build more torque and horsepower. *More Power.*

**✓ ECM Tuning**

Fuel flow and spark advance are set for maximum power output and efficiency. *Convenience.*

# 250 hp



## ADDITIONAL FEATURES / BENEFITS

<b>60 Degree V-6 3.0 L</b>	Even firing and smooth running for optimum performance.
<b>Multi-Point Oil Pump</b>	Distributes oil to all key locations in the engine helping to extend engine performance and life.
<b>60 Amp Alternator</b>	Belt driven to reduce heat build-up. Fully regulated for supplying on demand current to maintain the battery's charge.
<b>SmartCraft</b>	Delivers information regarding 23 key engine functions from fuel usage, RPM & engine guardian to slow trolling RPM control, and even hull information.
<b>Water Cooled</b>	<b>With Thermostat and Pressure Control</b> Durability, Reliability and peace of mind.
<b>Freshwater Flush</b>	Easy maintenance.
<b>Lost Foam Block</b>	Best in Class durability and reliability.
<b>Vapor Separator Tank VST</b>	Quick easy starts and consistent performance.
<b>Air Fuel Rails</b>	Improves combustion, running quality and provides best in class fuel economy.
<b>Power Trim &amp; Tilt</b>	Allows customer to maximize boat performance.
<b>Stainless Steel</b>	On Driveshaft, Shift Shaft and Prop Shaft for long term durability.

***For DFI Competitive Analysis, see pages 216-217 !***



# 250hp

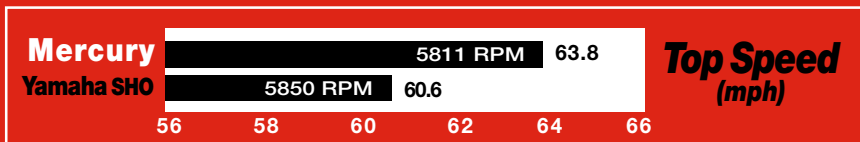
SPEC	MERCURY DFI 250HP Pro XS	E-TEC DFI 250HP High Output	YAMAHA 4-stroke 250HP VMAX SHO
Engine Type	60° V6	90° V6	60° V6
Displacement	185.9 ci (3032 cc)	210 ci (3441cc)	254 ci (4162 cc)
Dry Weight*	505 lbs (229 kg)	507 lbs (230 kg)	505 lbs (229 kg)
Alternator	60 Amp	133 Amp	50 Amp
Battery Charging	35 Amp	50 Amp	NA

\* Weight based on owner's manual

## Performance Attributes

Mercury's **OptiMax Pro XS 250hp** comes out way ahead in a test conducted with a **Ranger 522** with a heavy tournament payload by Mercury R&D.

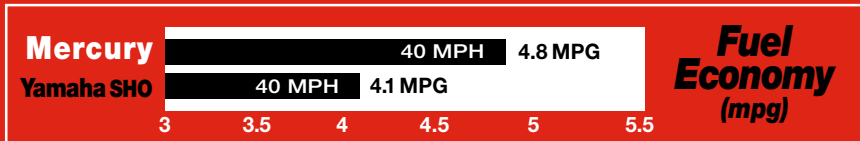
### Mercury is 3.2 mph faster!



### Both offer good acceleration to 20 MPH!



### Mercury has better fuel economy!





# 250hp PRO XS Torque Master



Backed by the industry's only three year limited corrosion failure warranty.



3-Star C.A.R.B. rating on 87 octane fuel, for ultra low engine emissions.

## SPECIFICATIONS

HP/kW @ Prop	225 / 184
Max RPM (WOT)	5500 - 6000
Cylinders	V-6 (60 Degree Vee)
Displacement (CID/cc)	185 / 3032
Bore X Stroke (in/mm)	3.63 x 3.00 / 92 x 76
Induction System	Naturally Aspirated
Ignition System	PCM digital inductive
Fuel System	2-stage Direct Fuel Injection (DFI)
Alternator Amp/Watt	60 / 756 Belt-Driven
Cooling System	Water-Cooled w/ thermostat
Starting	Electric (turn-key)
Gear Ratio	1.75:1 Torque Master Gearcase
Gear Shift	F-N-R
Propeller	Consult Dealer Propeller Guide
Steering	Remote
Trim System	Power Trim & Tilt
Shallow Water Drive	N/A
Exhaust System	Through Prop
Recommended Oil	Mercury OptiMax DFI Oil
Fuel/Ethanol Tolerance	87 octane (R&M) / 2 (92RON) Int'l
Remote Fuel Tank (gal/L)	Optional
Operator Warning System	N/A
SmartCraft Technology	Yes
Shaft Length (in/mm)	20/508
Dry Weight (lbs/kg)*	505/229 w/20" Center Section * Lightest model available

**For DFI Competitive Analysis, see pages 216-217 !**

# Torque Master **250hp PRO XS**

## KEY ATTRIBUTES

### ✓ **OptiMax Pro XS 2-Stage Direct Fuel Injection (95psi)**

The OptiMax 2-stage injection system uses air to shoot fuel directly into the top of the cylinder.

*Maximizes combustion efficiency.*

### ✓ **Carbon Fiber Reeds**

High-performance rubber-coated reed blocks cushion the 5-petal carbon fiber reeds for enhanced durability without sacrificing performance. *Improves Performance.*

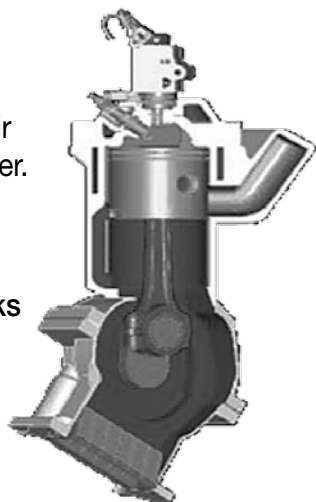
### ✓ **ECM Tuning**

Fuel flow and spark advance are set for maximum power output and efficiency. *Convenience.*

### ✓ **Torque Master Gearcase**

Boats with heavier loads and speeds up to 85 MPH can depend on superior performance and lasting durability.

1. *Painted black gearcase with 1.75:1 gear ratio.*
2. *1.25" propshaft (vs. 1" propshaft on standard Pro XS models) for added durability when running at elevated engine heights*
3. *Cambered skeg for improved handling and driveability at higher speeds*
4. *Front water pickups along with standard side inlets to ensure optimal cooling when running at elevated engine heights.*
5. *Requires 1.25" solid hub kit from Mercury Racing (#840389K06). Superior performance and lasting endurance.*



## ADDITIONAL FEATURES / BENEFITS

### **60 Amp Alternator**

Belt driven for reliability, batteries are always at peak charge for electronics and accessories.

### **Multi-point Oil Injection**

Distributes oil to all the key locations in the engine helping to extend performance and life.



# ***JET OUTBOARDS***

***25 HP Jet*** —

***40 HP Jet*** —

***80 HP Jet Ready*** —

***110 HP Jet Ready*** —

## ***SPORT JET***

***MERCURY***

***200 HP OptiMax*** —

# 25hp JET FourStroke



Standard three-year limited factory backed, nondeclining warranty.



Backed by the industry's only three year limited corrosion failure warranty.



3-Star C.A.R.B. rating on 87 octane fuel, for ultra low engine emissions.

## SPECIFICATIONS

Jet Power HP/kW	25 / 19
Max RPM (WOT)	5000 - 5500
Cylinders	3 (in-line)
Displacement (CID/cc)	32.1 / 526
Bore X Stroke (in/mm)	2.40 x 2.36 / 61 x 60
Induction System	2 Valves Per Cylinder Single Overhead Cam (SOHC)
Ignition System	CDI w/Electronic Spark Advance
Fuel System	Electronic Fuel Injection (EFI)
Alternator Amp/Watt	15 / 186
Cooling System	Water-Cooled w/ thermostat
Starting	Manual or Electric (Turn Key)
Gear Ratio	Direct Drive
Gear Shift	F-N-R
Propeller	Jet Pump
Steering	Remote or Tiller Kit
Trim Positions	Gas Assist or Power Trim & Tilt
Shallow Water Drive	NA
Exhaust System	Through Pump
Recommended Oil	Mercury 4-Stroke Outboard Oil
Fuel/Ethanol Tolerance	87 octane/up to 10% Ethanol
Remote Fuel Tank (gal/L)	Standard, 6.6/25
Operator Warning System	Overheat, Over-rev, Low oil
SmartCraft Technology	No
Shaft Length (in/mm)	20/508
Dry Weight (lbs/kg)*	186/84 *Lightest model available

## KEY ATTRIBUTES

✓ **Powerful 3 Cylinder Design**

Provides better inherent balance for smoother overall operation than a twin cylinder requiring a counter balancer.

*Performance with smooth, quiet overall operation.*

✓ **Skinny Water Operation**

Mercury's jet-drive outboards are specifically designed to pilot boats in shallow waters where propeller-driven hulls are unable to operate. *Enhanced shallow water Maneuverability.*

✓ **Industry-Leading Battery Free EFI**

Turn-key starting and a quicker throttle response with no carburetors to gum up. *Also available on rope start models.*

*Dependability with Efficiency.*

✓ **High Output Alternator**

**15** Amps provides superior battery charging capability.

## ADDITIONAL FEATURES / BENEFITS

**Stainless Steel  
Impeller**

Durability and performance.

**Over-Rev  
Protection**

Prevents engine damage, and instills consumer confidence.

**Water Cooled  
Fuel Cooler**

Minimizes vapor lock and hot fuel issues. Offers long term reliability.

# 40hp JET FourStroke



Standard three-year limited factory backed, nondeclining warranty.



Backed by the industry's only three year limited corrosion failure warranty.



3-Star C.A.R.B. rating on 87 octane fuel, for ultra low engine emissions.

## SPECIFICATIONS

Jet Power HP/kW	40 / 29.4
Max RPM (WOT)	5500 - 6000
Cylinders	4 (in-line)
Displacement (CID/cc)	60.8 / 995
Bore X Stroke (in/mm)	2.56 x 2.95 / 65 x 75
Induction System	2 Valves Per Cylinder Single Overhead Cam (SOHC)
Ignition System	ECM Digital Inductive
Fuel System	Electronic Fuel Injection (EFI)
Alternator Amp/Watt	18 / 226
Cooling System	Water-Cooled w/ thermostat
Starting	Electric (Turn Key)
Gear Ratio	Direct Drive
Gear Shift	F-N-R
Propeller	Jet Pump
Steering	Remote or Tiller Kit
Trim Positions	Power Trim & Tilt
Shallow Water Drive	20° Trim Range
Exhaust System	Through Pump
Recommended Oil	Mercury 4-Stroke Outboard Oil
Fuel/Ethanol Tolerance	87 octane/up to 10% Ethanol
Remote Fuel Tank (gal/L)	Optional
Operator Warning System	Overheat, Over-rev, Low oil
SmartCraft Technology	Yes
Shaft Length (in/mm)	20/508
Dry Weight (lbs/kg)*	267/121 *Lightest model available

**FourStroke**

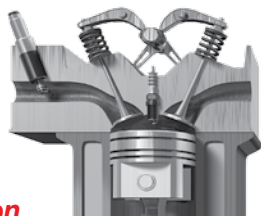
**40hp JET**

**KEY ATTRIBUTES**

✓ **Large Displacement**

Based on the powerful 60 hp FourStroke (60.8 Cu. In.) delivering 40hp at the jet pump. The SOHC and long intake stroke design increases torque output for better acceleration.

*Performance with smooth quiet overall operation.*



✓ **Electronic Fuel Injection EFI**

Provides turn-key reliable starting, instant throttle response, spectacular fuel economy and lower fuel system maintenance. *More dependable, more efficient with more power and lower cost of operation.*

✓ **High Output Alternator**

18 Amps provides superior battery charging capability. *Dependability.*

✓ **Stainless Steel Impeller**

Improves performance while adding to long term durability. *Built to last.*

✓ **SmartCraft Engine Guardian**

Prevents engine damage and instills customer confidence.

*Peace of mind.*

**Big Tiller**

- ✓ Center-mounted tiller offers optimum control
- ✓ Two-position lock for trailering and operating positions
- ✓ Throttle and steering friction allows fine-tuning
- ✓ Convenient power trim switch allows easy access
- ✓ Longer tiller grip with 110° rotation / range of motion
- ✓ Up-front shift lever permits smooth shifting



**Troll Control**  
(OPTIONAL)



# 80hp JET READY



Backed by the industry's only three year limited corrosion failure warranty.



3-Star C.A.R.B. rating on 87 octane fuel, for ultra low engine emissions.

## SPECIFICATIONS

Jet Power HP/kW	80 / 58.8
Max RPM (WOT)	5000 - 5750
Cylinders	3 (in-line)
Displacement (CID/cc)	92.96 / 1526
Bore X Stroke (in/mm)	3.63 x 3.00 / 92 x 76
Induction System	Naturally Aspirated
Ignition System	SmartCraft PCM Digital Inductive
Fuel System	2-stage Direct Fuel Injection (DFI)
Alternator Amp/Watt	60 amp / 756 watt belt-driven
Cooling System	Water-Cooled w/ thermostat
Starting	Electric
Gear Ratio	Direct Drive
Gear Shift	F-N-R
Propeller	Jet Pump
Steering	Remote
Trim System	Power Trim & Tilt
Shallow Water Drive	20° Trim Range
Exhaust System	Through Pump
Recommended Oil	Mercury OptiMax DFI Oil
Fuel/Ethanol Tolerance	87 octane/up to 10% Ethanol
Remote Fuel Tank (gal/L)	Optional
Operator Warning System	Overheat, Over-rev, low oil level
SmartCraft Technology	Yes
Shaft Length (in/mm)	27/686 With Jet Pump
Dry Weight (lbs/kg)	398/180 With Pump
Dry Weight (lbs/kg)	343/156 Without Pump

# 80hp JET READY

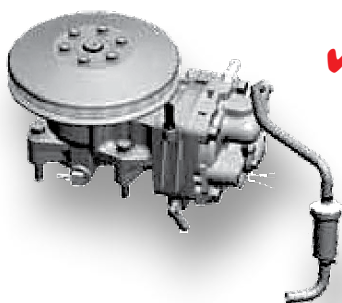
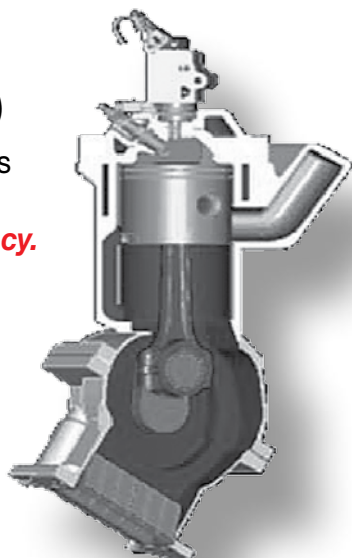
## KEY ATTRIBUTES

### ✓ **OptiMax 2-Stage Direct Fuel Injection (95psi)**

The OptiMax 2-stage injection system uses air to shoot fuel directly into the top of the cylinder. **Maximizes combustion efficiency.**

### ✓ **OptiMax DI Advantage**

- Lower Emissions
- Best in Class Fuel Economy
- Unmatched Performance
- Reliable durability.



### ✓ **OptiMax Air Compressor**

Provides pressurized air for the injection process, which is key to the Optimax DFI operation. Compressor is water cooled to lower the temperature of the air charge and is lubricated by the oil pump. **Unmatched performance.**

### ✓ **Multi-Point Oil Pump**

Distributes oil to all the key locations in the engine helping to extend engine performance and life. **Durability and Reliability.**

### ✓ **60 Amp Alternator**

Belt driven to reduce heat build-up. Fully regulated for supplying on demand current to maintain the battery's charge. **Convenience.**

# 110hp JET READY



Backed by the industry's  
only three year limited  
corrosion failure warranty.



2-Star C.A.R.B. rating on  
87 octane fuel, for very  
low engine emissions.

## SPECIFICATIONS

Jet Power HP/kW	110 / 81
Max RPM (WOT)	5000 - 5750
Cylinders	V-6 (60 Degree)
Displacement (CID/cc)	153 / 2507
Bore X Stroke (in/mm)	3.50 x 2.65 / 89 x 67
Induction System	Naturally Aspirated
Ignition System	SmartCraft PCM Digital Inductive
Fuel System	2-stage Direct Fuel Injection (DFI)
Alternator Amp/Watt	60 amp / 756 watt belt-driven
Cooling System	Water-Cooled w/ thermostat
Starting	Electric
Gear Ratio	Direct Drive
Gear Shift	F-N-R
Propeller	Jet Pump
Steering	Remote
Trim System	Power Trim & Tilt
Shallow Water Drive	20° Trim Range
Exhaust System	Through Pump
Recommended Oil	Mercury OptiMax DFI Oil
Fuel/Ethanol Tolerance	87 octane/up to 10% Ethanol
Remote Fuel Tank (gal/L)	Optional
Operator Warning System	Overheat, Over-rev, low oil level
SmartCraft Technology	Yes
Shaft Length (in/mm)	27/686 With Jet Pump
Dry Weight (lbs/kg)	447/202 With Pump
Dry Weight (lbs/kg)	391/177 Without Pump

# 110hp JET READY

## KEY ATTRIBUTES

### ✓ **60 Degree V-6 (2.5 L)**

Even firing and smooth running for optimum performance. **Smooth Dependable Power.**

### ✓ **OptiMax 2-Stage Direct Fuel Injection (80psi)**

The OptiMax 2-stage injection system uses air to shoot fuel directly into the top of the cylinder. **Maximizes combustion efficiency.**

### ✓ **OptiMax Air Compressor**

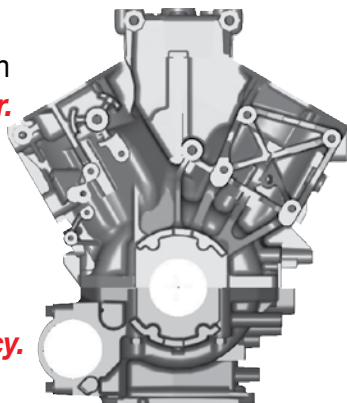
Provides pressurized air for the injection process, which is key to the Optimax DFI operation. **Unmatched performance.**

### ✓ **Multi-Point Oil Pump**

Distributes oil to all the key locations in the engine helping to extend engine performance and life. **Durability and Reliability.**

### ✓ **60 Amp Alternator**

Belt driven to reduce heat build-up. Fully regulated for supplying on demand current to maintain the battery's charge. **Convenience.**



## ADDITIONAL FEATURES / BENEFITS

### **Stainless Steel**

On Driveshaft, Shift Shaft and Prop Shaft for long term durability.

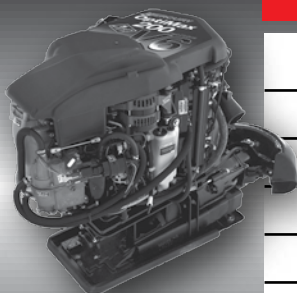
### **SmartCraft**

Delivers information regarding 23 key engine functions from fuel usage, RPM & engine guardian to slow trolling RPM control, and even hull information.

### **Freshwater Flush**

Easy maintenance as well as promoting corrosion protection.

# 200hp OptiMax Sport Jet



## SPECIFICATIONS

HP/kW @ Impeller	200 / 149
Max RPM (WOT)	5150 - 5650
Cylinders	V-6 (60 Degree)
Displacement (CID/cc)	153 / 2507
Bore X Stroke (in/mm)	3.50 x 2.65 / 88.9 x 67
Induction System	Naturally Aspirated
Ignition System	SmartCraft PCM Digital Inductive
Fuel System	2-stage Direct Fuel Injection (DFI)
Alternator Amp/Watt	60 amp / 756 watt belt-driven
Lubrication System	Electronic Multi-point Oil Injection
Cooling System	Water-Cooled w/ thermostat
Starting	Electric
Gear Ratio	1.25:1
Gear Shift	F-N-R
Impeller	4- Blade Stainless Steel
Steering	Remote
Trim System	Adjustable Plate
Exhaust System	Through Transom
Recommended Oil	Mercury OptiMax DFI Oil
Fuel/Ethanol Tolerance	87 octane/up to 10% Ethanol
Operator Warning System	Yes
SmartCraft Technology	Yes
Dry Weight (lbs/kg)*	367/166 Engine & Pump



Backed by the industry's only three year limited corrosion failure warranty.



SmartCraft Integrated Marine Technology maximizes performance and delivers a greater sense of security with innovative features.



3-Star C.A.R.B. rating on 87 octane fuel, for ultra low engine emissions.

KEY ATTRIBUTES

✓ **Environment Friendly Engine**

Meets lower emission standards for cleaner boating pleasure while not sacrificing power or efficiency.

*More power with reduced cost of operation.*

✓ **OptiMax 2-Stage**

**Direct Fuel Injection (95psi)**

The OptiMax 2-stage injection system uses air to shoot fuel directly into the top of the cylinder. *Maximizes combustion efficiency.*

✓ **Carbon Fiber Reeds**

More durable and responsive than stainless steel.

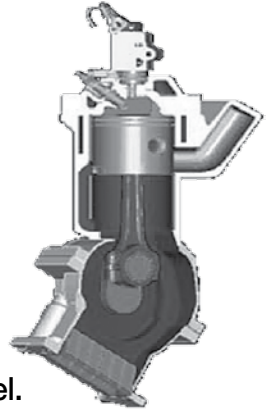
*Improves performance and efficiency.*

✓ **OptiMax Air Compressor**

Provides pressurized air for the injection process, which is key to the Optimax DFI operation. *Unmatched performance.*

✓ **Multi-Point Oil Pump**

Distributes oil to all the key locations in the engine helping to extend engine performance and life. *Durability and Reliability.*



ADDITIONAL FEATURES / BENEFITS

**4 Blade  
Stainless Steel  
Impeller**

The progressive pitch provides superior performance and long life durability.

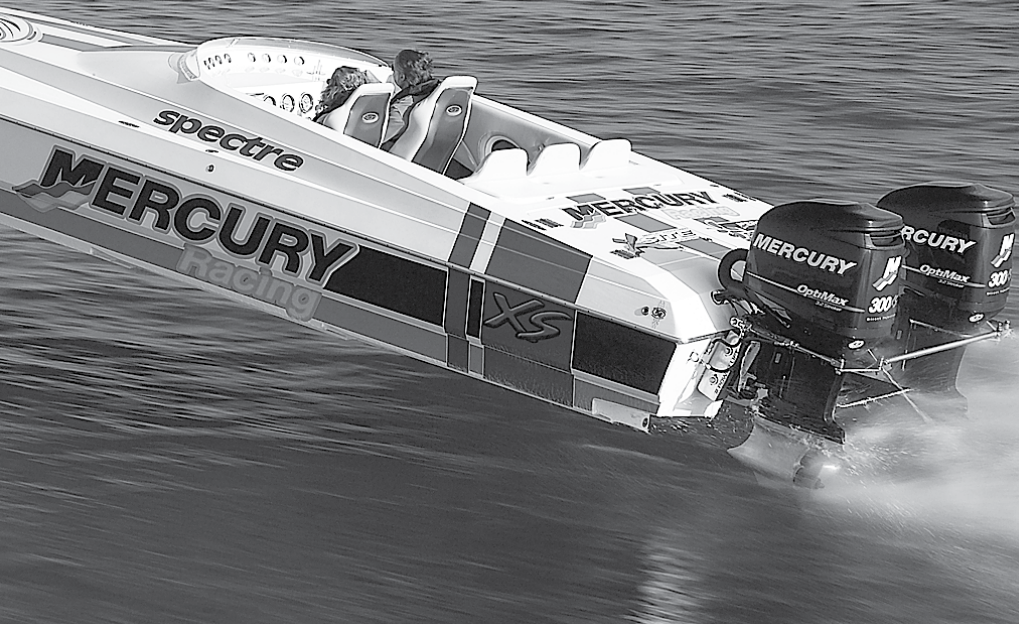
**7.25 Diameter  
Pump**

Large displacement for thrust and acceleration.

**Dual Outlet  
Reverse Gate**

Maximum thrust and maneuverability in reverse.





# **RACING**

## **OUTBOARDS**

***OptiMax 225 Sport XS*** —

***OptiMax 250 Sport XS*** —

***OptiMax 300 XS*** —

***Verado 350 SCi*** —



# 225hp SPORT XS *OptiMax*



Backed by the industry's only three year limited corrosion failure warranty.



3-Star C.A.R.B. rating on 87 octane fuel, for ultra low engine emissions.

## SPECIFICATIONS

HP/kW @ Prop	225 / 168
Max RPM (WOT)	5500 - 6000
Cylinders	V-6 (60 Degree Vee)
Displacement (CID/cc)	185 / 3032
Bore X Stroke (in/mm)	3.63 x 3.00 / 92 x 76
Induction System	Naturally Aspirated
Ignition System	PCM digital inductive
Fuel System	2-stage Direct Fuel Injection (DFI)
Alternator Amp/Watt	60 / 756 Belt-Driven
Cooling System	Water-Cooled w/ thermostat
Starting	Electric (turn-key)
Gear Ratio	1.62:1 Sport Master Gearcase
Gear Shift	F-N-R
Propeller	Consult Dealer Propeller Guide
Steering	Remote
Trim System	Power Trim & Tilt
Shallow Water Drive	N/A
Exhaust System	Through Prop
Recommended Oil	Mercury Premium Plus TC-W3
Fuel Requirements	87 octane (R+M) / 2 (91RON) Globally
Remote Fuel Tank (gal/L)	Optional
Operator Warning System	Engine Guardian®
SmartCraft Technology	Yes
Shaft Length (in/mm)	20/508
Dry Weight (lbs/kg)*	505/229 w/20" Center Section * Lightest model available

# **OptiMax** 225hp SPORT XS

## KEY ATTRIBUTES

### ✓ **OptiMax 2-Stage Direct Fuel Injection (95psi)**

The OptiMax 2-stage injection system uses air to shoot fuel directly into the top of the cylinder.

*Maximizes combustion efficiency.*

### ✓ **Carbon Fiber Reeds**

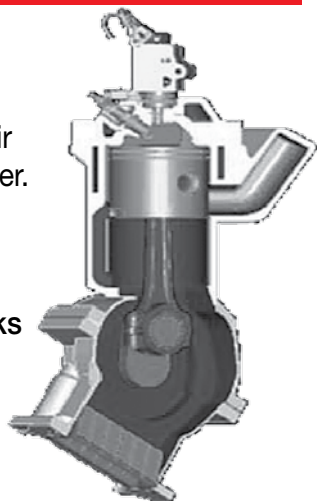
High-performance rubber-coated reed blocks cushion the 5-petal carbon fiber reeds for enhanced durability without sacrificing performance. *Improves Performance.*

### ✓ **ECM Tuning**

Fuel flow and spark advance are set for maximum power output and efficiency. *Convenience.*

### ✓ **Sport Master Gearcase**

Designed for boats with speeds in excess of 85 MPH, the crescent leading edge design reduces drag and features dual water pickups for improved cooling. It also has a heavy-duty stainless steel prop-shaft for improved reliability. *Superior high-end performance.*



## ADDITIONAL FEATURES / BENEFITS

### **Solid Engine Mounts**

Improves engine response and overall boat performance at higher speeds.

### **60 Amp Alternator**

Belt driven for reliability, batteries are always at peak charge for electronics and accessories.

### **Multi-point Oil Injection**

Distributes oil to all the key locations in the engine helping to extend performance and life.

# 250hp SPORT XS *OptiMax*



Backed by the industry's  
only three year limited  
corrosion failure warranty.



3-Star C.A.R.B. rating on  
87 octane fuel, for ultra low  
engine emissions.

## SPECIFICATIONS

HP/kW @ Prop	250 / 187
Max RPM (WOT)	5000 - 6000
Cylinders	V-6 (60 Degree Vee)
Displacement (CID/cc)	185 / 3032
Bore X Stroke (in/mm)	3.63 x 3.00 / 92 x 76
Induction System	Naturally Aspirated
Ignition System	PCM digital inductive
Fuel System	2-stage Direct Fuel Injection (DFI)
Alternator Amp/Watt	60 / 756 Belt-Driven
Cooling System	Water-Cooled w/ thermostat
Starting	Electric (turn-key)
Gear Ratio	1.62:1 Sport Master Gearcase
Gear Shift	F-N-R
Propeller	Consult Dealer Propeller Guide
Steering	Remote
Trim System	Power Trim & Tilt
Shallow Water Drive	N/A
Exhaust System	Through Prop
Recommended Oil	Mercury Premium Plus TC-W3
Fuel Requirements	87 octane (R+M) / 2 (91RON) Globally
Remote Fuel Tank (gal/L)	Optional
Operator Warning System	Engine Guardian®
SmartCraft Technology	Yes
Shaft Length (in/mm)	20/508
Dry Weight (lbs/kg)*	505/229 w/20" Center Section * Lightest model available

# **OptiMax** 250hp SPORT XS

## **KEY ATTRIBUTES**

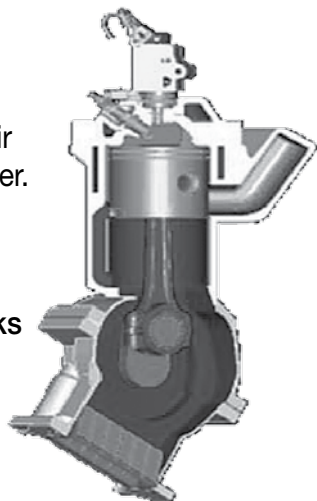
### ✓ **OptiMax 2-Stage Direct Fuel Injection (95psi)**

The OptiMax 2-stage injection system uses air to shoot fuel directly into the top of the cylinder.

**Maximizes combustion efficiency.**

### ✓ **Carbon Fiber Reeds**

High-performance rubber-coated reed blocks cushion the 5-petal carbon fiber reeds for enhanced durability without sacrificing performance. **Improves Performance.**



### ✓ **ECM Tuning**

Fuel flow and spark advance are set for maximum power output and efficiency. **Convenience.**

### ✓ **Sport Master Gearcase**

Designed for boats with speeds in excess of 85 MPH, the crescent leading edge design reduces drag and features dual water pickups for improved cooling. It also has a heavy-duty stainless steel prop-shaft for improved reliability. **Superior high-end performance.**

## **ADDITIONAL FEATURES / BENEFITS**

### **Solid Engine Mounts**

Improves engine response and overall boat performance at higher speeds.

### **60 Amp Alternator**

Belt driven for reliability, batteries are always at peak charge for electronics and accessories.

### **Multi-point Oil Injection**

Distributes oil to all the key locations in the engine helping to extend performance and life.

# 300hp xs *OptiMax*



Backed by the industry's  
only three year limited  
corrosion failure warranty.



2-Star C.A.R.B. rating on  
87 octane fuel, for very low  
engine emissions.

## SPECIFICATIONS

HP/kW @ Prop	300 / 224
Max RPM (WOT)	5400 - 6200 20" & 25" Walleye Only 5400 - 5800 25"/30" Offshore
Cylinders	V-6 (60 Degree Vee)
Displacement (CID/cc)	193 / 3160
Bore X Stroke (in/mm)	3.63 x 3.11 / 92 x 79
Induction System	Naturally Aspirated
Ignition System	PCM digital inductive
Fuel System	2-stage Direct Fuel Injection (DFI)
Alternator Amp/Watt	60 / 756 w/ Voltage Regulator
Cooling System	Water-Cooled w/ thermostat
Starting	Electric (turn-key)
Gear Ratio	1.62:1, 1.75:1 SM, TM, 1.75:1 FM
Gear Shift	F-N-R
Propeller	Consult Dealer Propeller Guide
Steering	Remote
Trim System	Power Trim & Tilt
Shallow Water Drive	N/A
Exhaust System	Through Prop
Recommended Oil	Mercury Premium Plus TC-W3
Fuel Requirements	91 octane (R+M) / 2 (98RON) Globally
Remote Fuel Tank (gal/L)	Optional
Operator Warning System	Engine Guardian®
SmartCraft Technology	Yes
Shaft Length (in/mm)	20/508 25/635 30/792
Dry Weight (lbs/kg)*	L505/229, XL517/235, XXL534/234 * Lightest model available

# **OptiMax** 300hp xs

## **KEY ATTRIBUTES**

### ✓ **Large Displacement 3.2 Liter**

Stroke for torque, a precision balanced crankshaft and an advanced exhaust system delivers more power and ultra smooth performance.

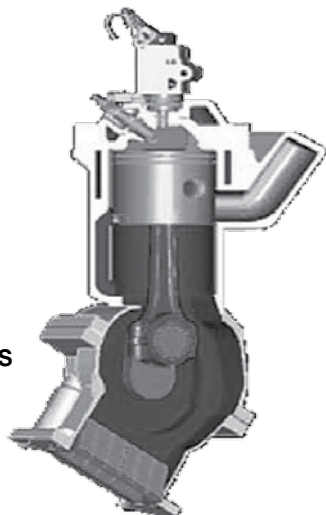
*For dominating the water.*

### ✓ **OptiMax 2-Stage Direct Fuel Injection (95psi)**

The OptiMax 2-stage injection system uses air to shoot fuel directly into the top of the cylinder. *Maximizes combustion efficiency.*

### ✓ **Carbon Fiber Reeds**

High-performance rubber-coated reed blocks cushion the 5-petal carbon fiber reeds for enhanced durability without sacrificing performance. *Improves Performance.*



### ✓ **Gearcase For Every Application**

Torque Master, Sport Master and our Heavy-Duty Fleet Master gearcases enhance the versatility of the worlds most powerful DFI Two Stroke engine. *Unsurpassed handling and performance.*

## **ADDITIONAL FEATURES / BENEFITS**

### **Unique Engine Mounts**

Through hull Noise Vibration Harshness (NVH) is further reduced on 25" and 30" models thanks to the used of softer upper and lower engine mounts.

### **60 Amp Alternator**

Belt driven for reliability, batteries are always at peak charge for electronics and accessories.

### **Multi-point Oil Injection**

Distributes oil to all the key locations in the engine helping to extend performance and life.

# 350hp sci

# VERADO



Backed by the industry's only three year limited corrosion failure warranty.



2-Star C.A.R.B. rating on 87 octane fuel, for very low engine emissions.

*Get more details on the Verado experience on pages 166-169.*

## SPECIFICATIONS

HP/kW @ Prop	350 / 263
Max RPM (WOT)	6200 - 6800
Cylinders	6 (in-line)
Displacement (CID/cc)	158.5 / 2598
Bore X Stroke (in/mm)	3.23 x 3.23 / 82 x 82
Induction System	Supercharged w/Charge Air Cooling & Electronic Boost PSI Control 4-valves per cylinder Double Overhead Cam (DOHC)
Ignition System	SmartCraft PCM digital inductive
Fuel System	Electronic Fuel Injection (EFI)
Alternator Amp/Watt	70 amp / 882 watt belt-driven
Cooling System	Water-Cooled w/ thermostat
Starting	SmartCraft Electric (turn-key)
Gear Ratio	5.44" 1.75:1 HD
Gear Shift	SmartCraft DTS F-N-R
Propeller	Consult Dealer Propeller Guide
Steering	Mercury Power Steering
Trim System	Power Trim & Tilt w/SmartCraft Programmable Tilt
Exhaust System	Through Prop
Recommended Oil	Mercury 4-Stroke Outboard Oil
Fuel Requirements	91 Octane Required (R+M/2)
Remote Fuel Tank (gal/L)	Optional
Operator Warning System	SmartCraft Engine Guardian
SmartCraft Technology	Yes
Shaft Length (in/mm)	20/508 25/635 30/762
Dry Weight (lbs/kg)*	679/308* Lightest model available



## KEY ATTRIBUTES

**Verado's Supercharged System**

Delivers the torque big boats need for immediate planing, superior mid-range acceleration and strong top speed.

*Performance that totally dominates the water.*

**Cool Air Intakes**

Enhances the supercharger efficiency for maximum engine power and performance, while regulating under the cowl temperatures.

*Maintains peak performance throughout the RPM range.*

**Powerhead Differences from 300hp Verado**

**Cylinder head :** custom exhaust valves to for enhanced performance and durability.

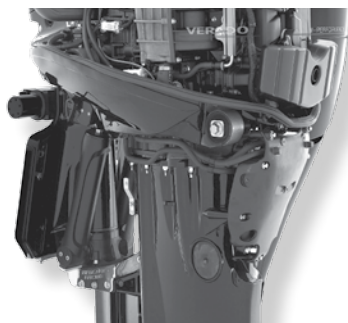
**Camshaft:** Custom lobe profile (*intake & exhaust*) cam timing for superior power and torque.

**Supercharger:** Custom rotor profile for increased efficiency.

**Advanced Mid-Section AMS**

✓ 4 Perimeter-style mounts surround the powerhead, reducing noise and eliminating vibration.

✓ Stainless Steel guide plates with fiber wear pads enhance engine stability at higher speeds and in rough seas.

**VesselView - Race Edition**

✓ Provides up-to-the second information on everything from fuel management and trim tabs position to engine temperature.

✓ Power Steering & DTS Mercury power steering and SmartCraft Digital Throttle & Shift provide for an exceptionally smooth and responsive driving experience.