

75, 80, 90hp Specifications

HP/kW @ Prop	75 / 55.2 80 / 60 90 / 66.2
Max RPM (WOT)	4500-5500 5000 - 6000
Cylinders / Configuration	4 (in-line) 8 Valve SOHC
Displacement (CID/cc)	126 / 2061
Bore X Stroke (in/mm)	3.5 x 3.2 / 90 x 81
Induction System	Performance-Tuned Scroll Intake Manifold
Ignition System	SmartCraft ECM Digital Inductive
Fuel System	Multi-Port Electronic Fuel Injection
Alternator Amp/Watt	35 amp / 750 watt Stator (w/Water-Cooled Voltage Regulator)
Cooling System	Water-Cooled w/ thermostat
Starting	SmartStart Electric (Turn-Key)
Gear Ratio	STD 2.07:1 CT 2.38:1
Gear Shift	Mechanical F-N-R
Steering	Mechanical Cable Conventional Hydraulic (Opt) Big Tiller Kit - Manual or P/S (opt)
Propeller	Consult Dealer Propeller Guide
Trim System	SmartCraft Programmable
Exhaust System	Through Prop
Recommended Oil	Mercury 4-Stroke Outboard Oil
Fuel/Ethanol Tolerance	91 RON / up to 10% Ethanol
Remote Fuel Tank	Optional
Operator Warning System	SmartCraft Engine Guardian
Instrumentation	Digital or Analog
Shaft Length (in/mm)	20 / 508 25 / 635
STD Dry Weight (lbs/kg)	20"- 359 / 163 25"- 380 / 172
CT Dry Weight (lbs/kg)	L=364 lbs (165kg) XL,CXL=384 lbs. (174kg)



MERCURY

Mercury's 75hp-80hp-90hp FourStrokes

Mercury's FourStrokes offer a class-leading **2.1 liter** displacement providing the best in mid-range fuel economy, quickest acceleration with smoothest overall operation & sound quality.

- ✓ **Stronger**
- ✓ **Lighter**
- ✓ **More Efficient**
- ✓ **Extremely Reliable**



75, 80, 90hp Key Attributes

Lightweight, Compact Design

Mercury's cutting-edge engineering has packed incredible power into a small, light package. A simple design with fewer parts than competitive engines.

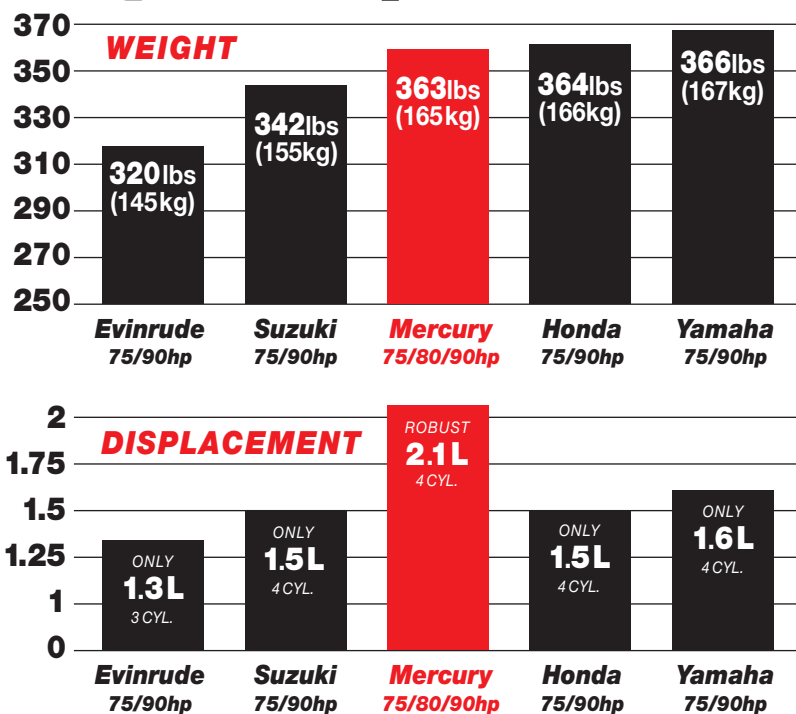
Durable, efficient power

75hp/80hp/90hp Weight

There's more displacement even though Mercury's new 2.1L is similar in weight. Mercury clearly has the advantage for engine displacement.

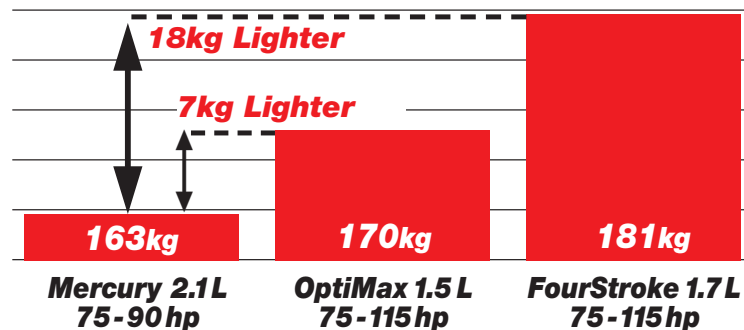
More power, better performance

Weight vs Displacement



75, 80, 90hp Key Attributes

Previous Model Weight Comparison



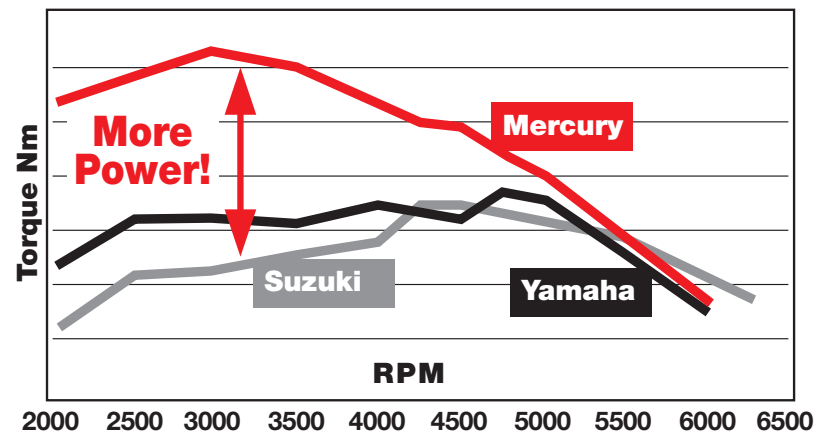
Class Leading Displacement

At **2.1 liters** or **126 cubic inches** this 4-cylinder SOHC design works less to produce more torque and horsepower! The large displacement design delivers the **best in performance, reliability and efficiency**.

Optimal Torque Curve

Mercury's 75, 80, 90 **strong low-end torque** is what helps get the boat on plane instantly while delivering quicker acceleration. Also, as load increases torque plays a big roll in maintaining performance.

90hp Power Curve Comparison

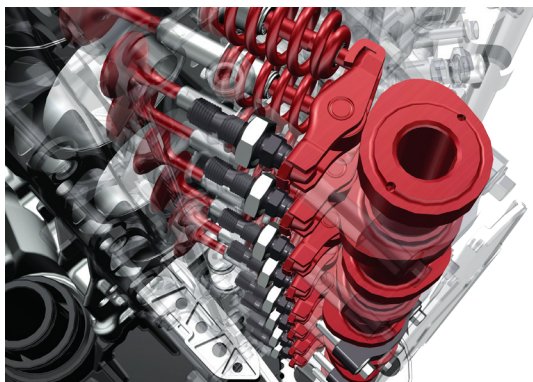


75,80,90hp Key Attributes

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

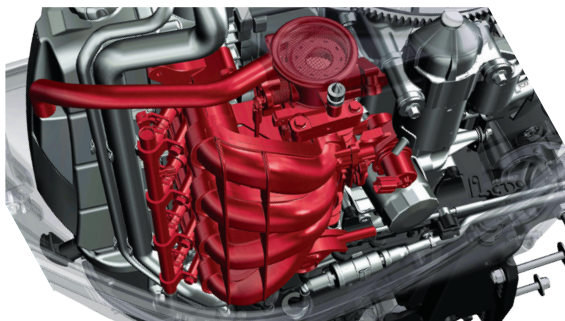


Friction Reduction System

To reduce windage-based friction, specialized crankshaft oil scrapers & bearings minimize the amount of oil allowed to remain in the crankcase.

Delivers more torque while achieving best in class cruising speed and WOT fuel efficiency

Performance-Tuned Scroll Intake



Compact and simple in design, uses a single throttle body and long intake runners to pack in more air to build torque. Top mounted for a more pleasing sound.

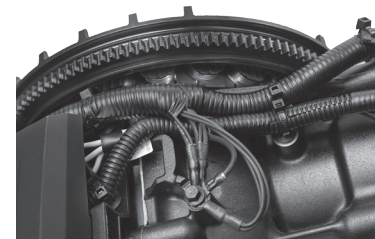
Performance

75,80,90hp Key Attributes

35 Amp Heavy Duty Stator

A three-phase system with flywheel, dedicated stator and water-cooled voltage rectifier/regulator. Compact and lightweight it maintains the battery charge especially at lower rpm speeds.

Dependability



Tuned Idle Exhaust Relief

Based on the successful **150hp FourStroke** architecture, an acoustic filter weakens high frequency exhaust noise at idle speed.

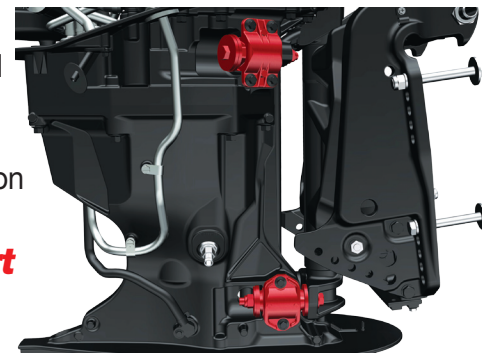
Whisper quiet operation at low speeds



Focused Engine Mounting System

From the 150hp evolution Mercury's 30° top angled and the lower oversized mounts minimizes crankshaft rotation inertia reduces overall vibration and improves durability.

Total control & comfort



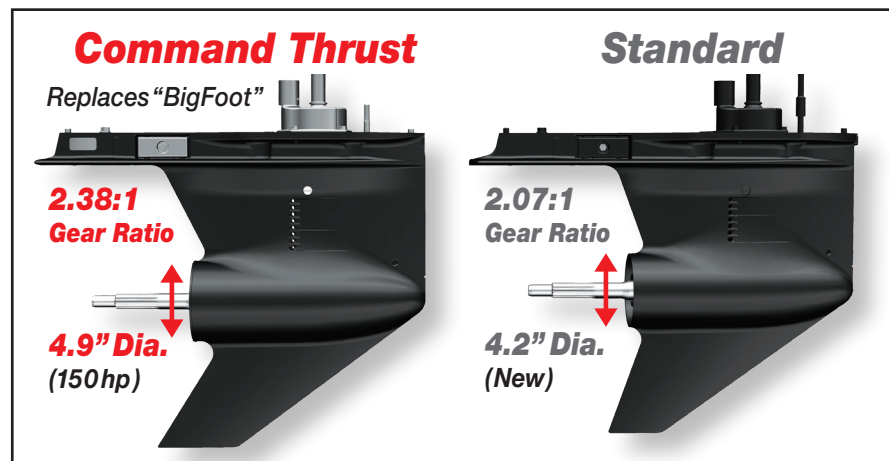
75,80,90hp Key Attributes

World-Class Hydrodynamic Gearcase Designs

"Command Thrust" an industry first, takes the concept of using a larger gearcase on a smaller base powerhead to the **75-90hp** class.

This larger gearcase footprint robust **2.38** ratio and Mercury's superior offering of large diameter propellers is the perfect combination for pontoons, larger/heavier fiberglass or aluminum fishing/pleasure boats or heavy duty commercial applications.

- ✓ Provides leverage creating more lift for quick acceleration, helps to hold heavier boats on plane at slower speeds
- ✓ The **2.38** gear ratio allows the engine to spin up more quickly, developing its torque and horsepower faster



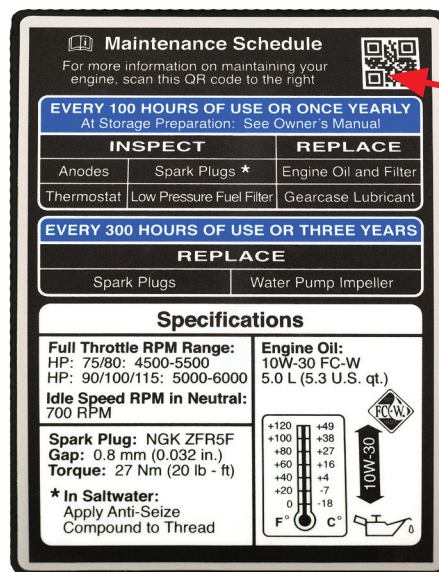
"All-New Standard" gearcase possesses significantly higher hydrodynamic efficiency (*less drag*) vs. its predecessor.

This gearcase delivers the best performance on lighter, performance-oriented hulls such as aluminum or fiberglass bass hulls, flats boats, technical skiffs, and small to average weight deep-vees or runabouts.

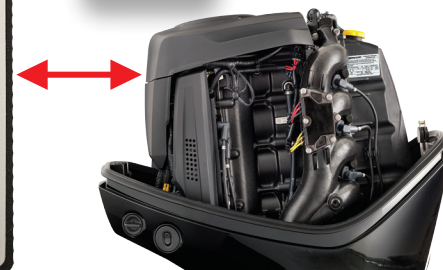
- ✓ Less hydrodynamic drag as it moves through the water means the engine works less hard and transmits its power to the water more efficiently. Fuel economy is boosted in the process.

75,80,90hp Key Attributes

Maintenance Reference Decal



QR Code on the engine gets you to Mercury's helpful website



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 to maintain



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Ultimate Corrosion Protection

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.

