RECURY CICING

R-SERIES

OUTBOARDS



IN A WORLD OF LIMITS, CHOOSE FREEDOM

Mercury Racing® is committed to the pursuit of Wide Open™.

More than a function of throttle position,

Wide Open is an expression of our core philosophy.

We recognize no boundaries and accept no compromise.

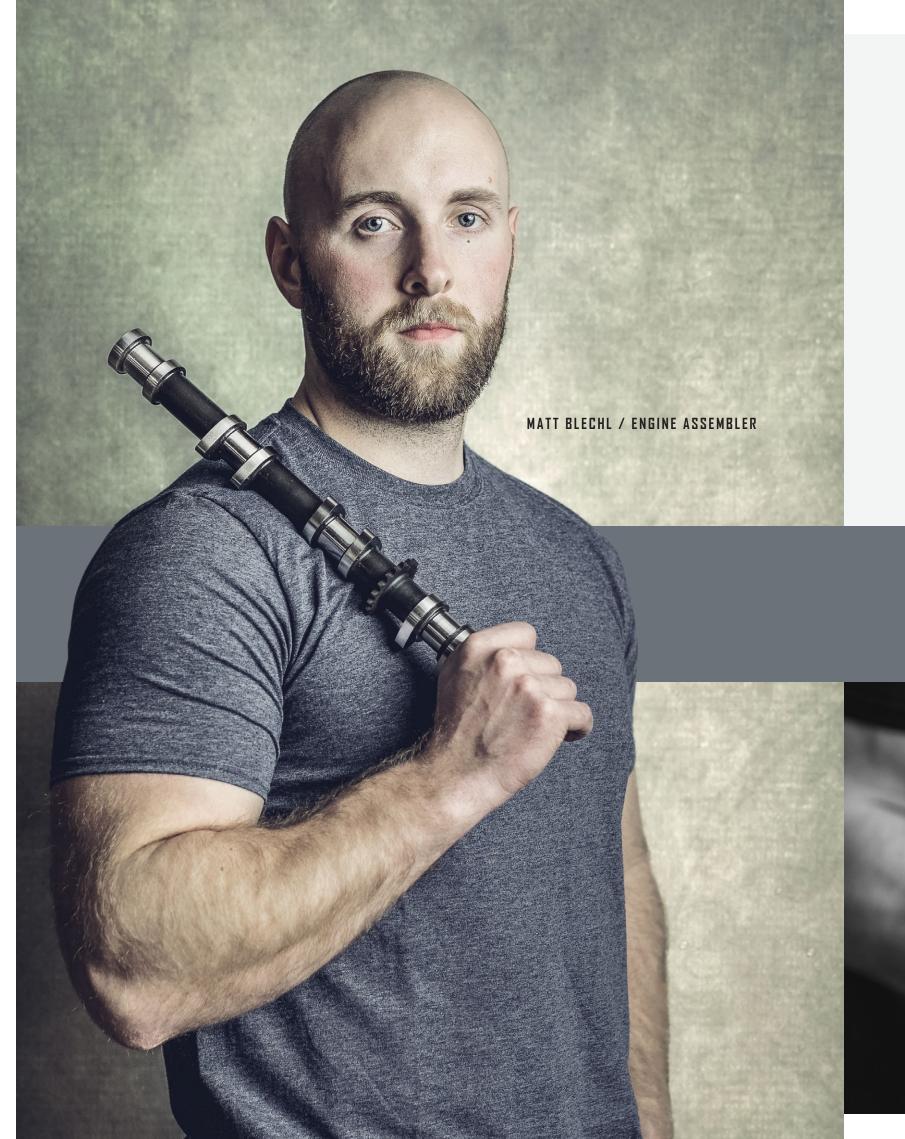
Where others perceive a barrier, we see an opportunity.

We create premium marine power to take you faster and farther.

We give you control to shatter expectations.

The world offers limits. Mercury Racing offers freedom.





WE NEVER SETTLE

The world too often rewards sensibility and moderation. At Mercury Racing we choose to think bigger and go faster. We are obsessed with the determined pursuit of the next innovation, the discovery of a new solution, with shattering the next record. We are a select team. We are racers. We think hard and get our hands dirty. Because we respect your passion, we build our products with precision and handcrafted care. Because power is useless if it's not reliable, we test relentlessly.

TODAY WE BUILD THE WORLD'S BEST MARINE ENGINES, TOMORROW WE'LL MAKE THEM EVEN BETTER.









R-SERIES V8 FOURSTROKES

THE PINNACLE OF PERFORMANCE

This new generation of Mercury Racing V8
FourStroke outboards is deep-breathing,
high-winding, rugged and reliable. Each
model is loaded with advanced design
elements and Mercury Racing technology
to go quicker, faster and farther than
previously imagined.









COMPACT BY DESIGN

64-DEGREE V8 / 26-INCH CENTERS

Mercury Racing V8 outboards are compact by design.

The 64-degree V8 cylinder configuration is the foundation for a narrow powerhead. Electronics and other engine components were designed and positioned to create the tightest package possible while maintaining good service access. A slim-line cowl is shaped to accommodate 26-inch center-to-center mounting on multi-engine transoms for seamless original-equipment and



GEARCASES



SPORT MASTER

A race-proven surface-piercing design for boats capable of speeds greater than 85 mph features low water pick-ups and a crescent leading edge to maximize efficiency and speed. The available cambered skeg counteracts prop torque on single-engine installations for improved performance and handling.



TORQUE MASTER

Designed to run partially surfaced to carry heavier tournament bass and multispecies fishing boats with maximal speed and control.



5.44 HD

Equipped with a robust gear set designed to push heavy bay boats and multi-engine performance center console boats that require a moresubmerged gearcase.







RELIABLE DURABILITY

RUGGED MIDSECTION CORROSION PROTECTION 3-YEAR WARRANTY

Mercury Racing V8 outboards are engineered to be reliable and durable. Rugged midsections are designed to handle all the high-performance abuse the water can dish out. Superior protection against corrosion begins with the industry's lowest-copper aluminum alloy and exclusive, comprehensive finish treatments. These high-performance outboards are tested, tested and tested again – in the lab and on the water – in a never-ending quest to exceed the highest expectations. Run wide open with confidence backed by a three-year limited factory warranty. Extend that coverage for up to five more years with a Mercury Product ProtectionSM (MPP) factory-backed extended service plan.







LEAD THE CHARGE

Handcrafted by Mercury Racing for the high-performance disciple craving unrelenting power, the Mercury Racing 450R makes the paramount performance statement. Boosted by an exclusive Mercury Racing supercharger, the 4.6-liter V-8 FourStroke powerhead delivers 450 peak horsepower - 40 percent more torque than the powerful 400R while staying 300 pounds lighter than the nearest competitor. Run wide open, without compromise.



SUPERCHARGER CHARGE-AIR COOLERS BOOST BYPASS

Mercury Racing applies its supercharging expertise to extract incredible power from the 4.6-liter V8. A 2.4-liter belt-driven twin-screw supercharger delivers pressurized ambient air to the intake tract with no lag for instant throttle response. The supercharger is water-cooled to reduce the temperature of the intake charge and increase power. Twin charge-air coolers engineered by Mercury Racing reduce the temperature of the compressed intake charge with minimal airflow restriction. A boost bypass valve automatically adjusts maximum boost pressure to maintain peak performance in response to changing ambient conditions. A custom-designed attenuator is tuned to cancel the harshest high-frequency supercharger noise while retaining a stirring high-performance sound.

To better manage engine heat the Mercury Racing 450R is fitted with a special high-capacity oil cooler and an exclusive poppet valve in the midsection to provide a higher volume of cooling-water flow on-demand. The valve train features a high-performance intake camshaft and race-spec Inconel exhaust valves. The wide-open throttle (WOT) operating range is extended to 5800-6400 rpm to expand propping options and maximize performance. The result is 450 peak horsepower delivered reliably on 89 octane (95 RON) pump fuel.





ADVANCED MIDSECTION INTEGRATED TIE BAR POWER STEERING

Mercury Racing engineers addressed every aspect of performance in designing the 450R outboard, and each ounce was scrutinized to achieve maximal power with minimal weight. The Mercury Racing Advanced MidSection (AMS) features heavy-duty guide plates and stiffened engine mounts to stabilize the outboard for enhanced high-speed handling. The AMS also isolates the powerhead from the transom to ensure run quality is smooth and quiet at all speeds. An optional rear tie-bar bracket integral to the AMS provides a strong, ultra-light mounting point and uncluttered installation for catamaran and other high-speed applications. The 450R is offered with a choice of the 5.44-inch HD gearcase for traditional, submerged applications or, for boats capable of speeds over 85 mph, the surface-piercing Sport Master gearcase with a new one-piece stainless steel propshaft.

Mercury Racing power steering offers confident ease of control at all speeds. The 115 amp alternator is a match for extreme audio systems and power-hungry electronics. Idle charge battery-management automatically increases engine idle rpm to boost alternator output, ensuring batteries are always charged to the proper level. The supercharged powerhead fits under the standard slim-line 4.6-liter V8 cowl for seamless original-equipment and repower-ready installations on multiengine transoms.

DTS / JOYSTICK PILOTING / ADVANCED SOUND CONTROL

The 450R model is compatible with Mercury Racing Zero Effort Digital controls or any Mercury digital control system. Digital throttle and shift technology enhances the high-performance boating experience by providing smooth shifting and instant response while eliminating cable maintenance. Joystick Piloting for Outboards (JPO) is available for boats rigged with two to six outboards and provides intuitive, fingertip 360-degree boat control for docking and maneuvering in tight quarters plus the convenience of Skyhook® sea-holding features and integrated auto piloting.

An available Mercury VesselView offers more systems information and engine data than with any other display system in the boating industry. VesselView can simultaneously monitor the RPM, speed, fuel flow and efficiency, temperature, trim and more on up to six outboards on an intuitive seven or nine-inch touchscreen display. VesselView also enables Advanced Sound Control, a dual muffler system that can be toggled between an ultra-quiet mode and a deep sport tone with a stirring growl on start-up.



COLOR OPTIONS

The Mercury Racing 450R is available in Cold Fusion White and the legendary Mercury Phantom Black. Cold Fusion White models are finished with Devil Red Eye cowl accent panels and white Advanced MidSection (AMS) and gearcase. Black models are finished with Graphite Gray cowl accent panels and matching Graphite Gray AMS and gearcase. Devil Red Eye, Graphite Gray and Carbon Fiber accent panel kits are available to custom-match a 450R outboard to a boat color scheme.



V8 4.6L 45OR FOURSTROKE

336
-6400
64 Degree) 32-Valve Overhead (DOHC)
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²Lightest Model Available

27



FLEX SOME MUSCLE

Tuned up with Mercury Racing components to deliver blistering speed, the V8 4.6L 300R outboard delivers crisp throttle response, thrilling top-end power and confident control, the perfect match for a wide variety of high-performance boats. The 300R midsection and gearcase options, tie-bar and steering choices allow the creation of a near-custom configuration to provide optimal performance and ease of installation for most applications, including re-power upgrades.



CAMSHAFT / INTAKE / DIL COOLER

Years of Mercury Racing engine-tuning experience have been applied to the 300R outboard model. A short-runner intake manifold and high-lift intake camshaft designed specifically for the 300R combine to produce quick acceleration. The 300R is equipped with stainless steel valves and an oil cooler to better manage engine heat. To maximize top speed and propping options the wide-open throttle (WOT) operating range is extended to 5800-6400 rpm.



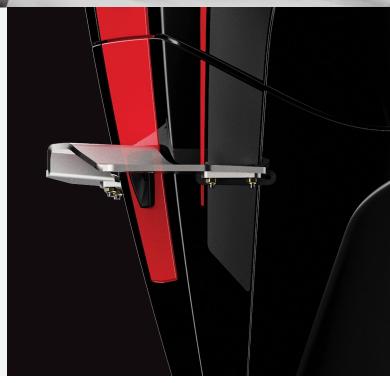
designed to enhance performance, reliability and economy. Electronically actuated throttle and shifting is compatible with mechanical controls or Mercury Digital Throttle and Shift (DTS) controls that offer smooth shifting and instant response while eliminating cable maintenance. Mercury electro-mechanical power steering is also available for the Racing 300R. Mercury Racing engineers programmed the Engine Control Unit (ECU) to maximize performance and extend the rpm range while operating safely on readily available 87-octane fuel.





TRI-RAM MIDSECTION / HD MIDSECTION

The Mercury Racing 300R is designed to withstand the harshest conditions. The durable Mercury Racing tri-ram midsection for 20-inch models features solid lower engine mounts and a high-durometer upper mount for enhanced stability and handling at high speeds. The 300R HD model, designed for high-performance offshore and multi-engine applications, is equipped with a heavy-duty midsection with solid mounts, forged transom brackets, and a robust singleram trim system with a remote trim pump. An integrated rear tie-bar mounting plate and optional side-steering kits are available for select 300R HD models fitted with the Sport Master gearcase.







The standard Devil Red Eye cowl accent panel can be replaced with an optional Graphite Gray panel.



V8 4.6L 300R FOURSTROKE

HORSEPOWER (HP/KW)	300/224
MAX WOT RPM	5800-6400
ENGINE TYPE	V8 (64-Degree) with 32-Valve Dual Overhead Cam (DOHC)
DISP. (LITER/CID)	4.6/279
INDUCTION SYSTEM	Naturally Aspirated
FUEL REQUIREMENTS	Unleaded Regular 87 Octane Minimum (R+M/2) or 90 RON
CHARGING (AMP/WATT)	85/1071
THROTTLE & SHIFT	Digital Throttle & Shift or Mechanical
MIDSECTION	Tri-Ram or HD CMS
GEARCASE	Torque Master, Sport Master or 5.44" HD
GEAR RATIO ¹	1.75:1 or 1.60:1
DRY WEIGHT ² (LB/KG)	512/232
WARRANTY ³	3-Year Limited

11.60:1 Gear Ratio Available on Select Sport Master Models



REVER LOCK BACK

Engineered to produce a broad powerband and class-leading top-end horsepower, the 250R outboard has the muscle to lift a heavy tournament boat out of the hole plus the deep-breathing power and high-performance components required to reach unprecedented speeds with confidence.



QC4 / LONG-RUNNER INTAKE

Mercury Racing has tuned the 250R outboard model to produce the perfect combination of low-end grunt and high-winding horsepower. A performance-tuned intake runner helps pack more air through the deep-breathing 32-valve dual overhead cam valve train to squeeze more power from the V8 4.6-liter engine. Mercury Transient Spark Technology optimizes torque output for stronger hole-shot performance.



POWER STEERING / 87 OCTANE

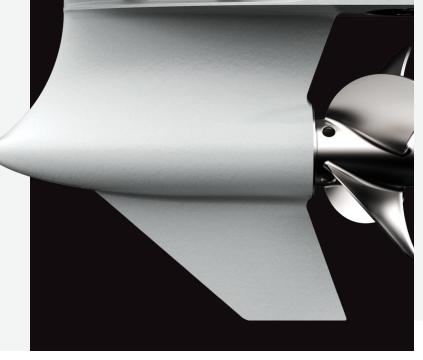
The Mercury Racing 250R delivers a reliable, powerful performance punch on readily available 87-octane fuel. Enhance high-speed control and all-around comfort with optional Mercury electro-hydraulic power steering. Smooth and precise electronically actuated throttle and shifting matched to manual controls eases re-power installations and enables easier installation of a foot throttle.





TRI-RAM MIDSECTION / SPORT MASTER

Strong and rock-steady, the Mercury Racing tri-ram midsection features solid lower engine mounts and a high-durometer upper mount for enhanced stability and handling at high speeds, critical for confident control in the fastest, single-engine applications. The race-proven Sport Master surface-piercing gearcase is designed specifically for speeds greater than 85 mph and features low water pick-ups and a crescent leading edge to maximize efficiency and velocity. Use a selection of Mercury Racing propellers to dial-in performance.







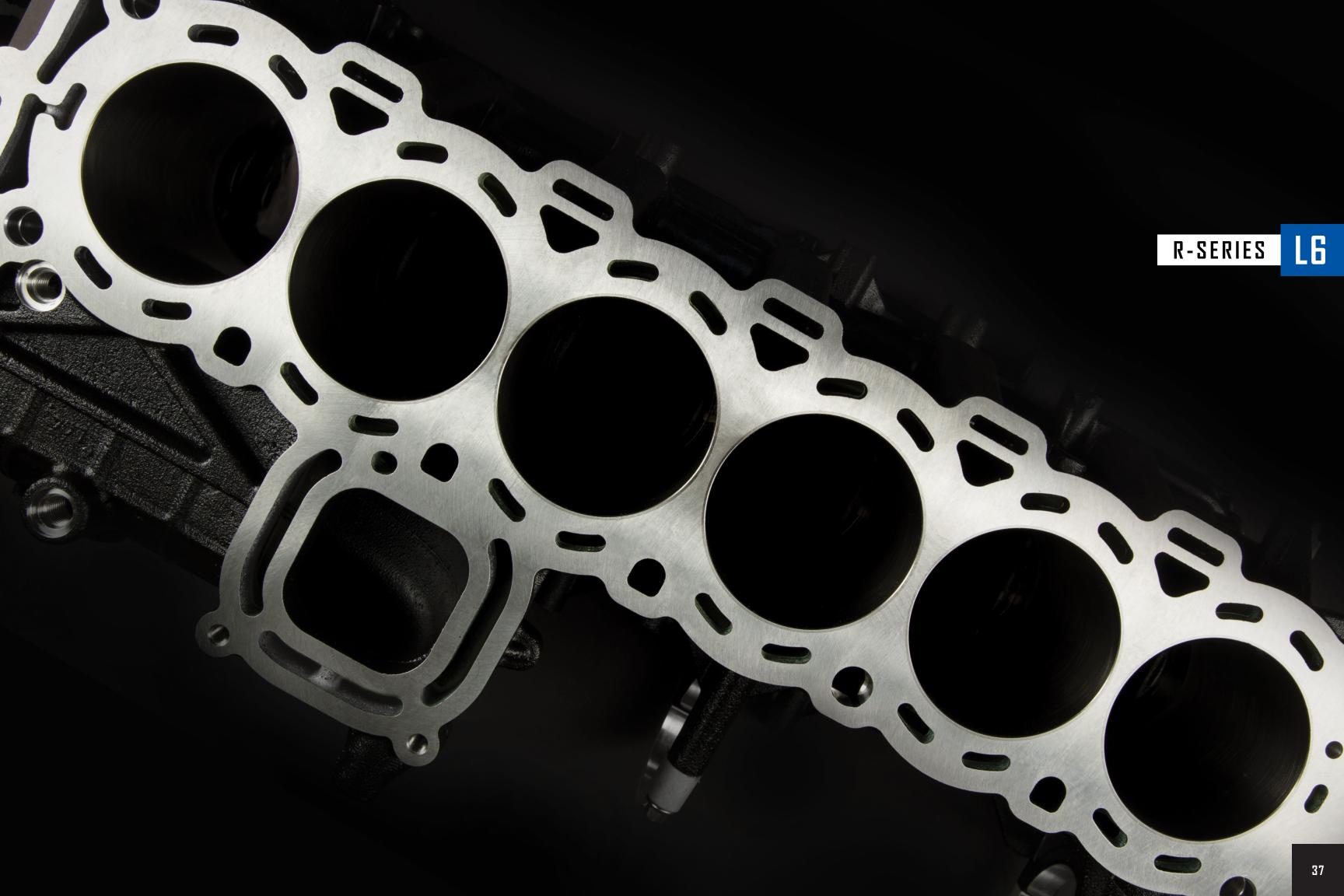
The standard Devil Red Eye cowl accent panel can be replaced with an optional Graphite Gray panel.



V8 4.6L 25OR FOURSTROKE

HORSEPOWER (HP/KW)	250/186
MAX WOT RPM	5600-6200
ENGINE TYPE	V8 (64-Degree) with 32-Valve Dual Overhead Cam (DOHC)
DISP. (LITER/CID)	4.6/279
INDUCTION SYSTEM	Naturally Aspirated
FUEL REQUIREMENTS	Unleaded Regular 87 Octane Minimum (R+M/2) or 90 RON
CHARGING (AMP/WATT)	85/1071
THROTTLE & SHIFT	Mechanical
MIDSECTION	Tri-Ram CMS
GEARCASE	Sport Master
GEAR RATIO	1.75:1
DRY WEIGHT¹ (LB/KG)	520/236
WARRANTY ²	3-Year Limited

ightest Model Available



R-SERIES L6 FOURSTROKES

ASTONISHING POWER

This brilliant Verado ® design launched an outboard performance revolution. The perfect primary balance of six cylinders arranged in-line offers smooth operation and a slim profile on the transom. Supercharged induction delivers immediate response and astonishing power. It's thoroughly refined for rock-solid reliability and effortless efficiency.





AMPLIFIED PERFORMANCE

2.6L / SUPERCHARGED / DOHC

Thrill to immediate throttle response and extraordinary power. The slim 2.6-liter six-cylinder in-line powerhead is amplified by a supercharger system that boosts performance across the rpm range. The high performance cylinder head features dual overhead camshafts for optimal combustion control and deepbreathing airflow all the way to 7000 rpm.



F TECHNOLOGY CONFIDENT CONTROL DTS / POWER STEERING Mercury Racing technology delivers confident, comfortable boat control in all situations. The standard electro-hydraulic power steering and an electronic helm offer smooth, assisted steering at all speeds. Mercury Digital Throttle and Shift (DTS) Zero Effort controls provide precise shifting action and instant response while eliminating cable rigging and maintenance. Exclusive Idle Charge battery management helps prevent battery drain on boats loaded with powerhungry electronics and audio systems. **JOYSTICK PILOTING** Joystick Piloting for Outboards (JPO) is available for boats rigged with two to six outboards and provides intuitive, fingertip 360-degree boat control for docking and maneuvering in tight quarters plus the convenience of Skyhook® sea-holding features and integrated auto piloting.

EXTENDED PERFORMANCE

ELECTRONIC FUEL INJECTION

Efficiency is an aspect of performance never overlooked by Mercury Racing. The Verado L6 outboard features advanced electronic engine management and sequential multi-port electronic fuel injection (EFI) programmed to squeeze the most performance – and mileage – from every drop of fuel, extending range and convenience. High-performance gearcase water inlets maintain cooling water flow in extreme applications and conditions to ensure engine performance and durability.





CORROSION PROTECTION 3-YEAR WARRANTY

An exclusive low-copper aluminum alloy and a comprehensive finish treatment provide a durable barrier against corrosion. Years of testing and continuous product development result in durability and reliability that are the envy of the industry. Run Wide Open with confidence backed by a three-year Mercury limited factory warranty. Extend that coverage for up to five more years with a Mercury Product Protection (MPP) factory-backed extended service plan.





DROP THE HAMMER

The Mercury Racing 400R is a thoroughbred. The motor that created the high-performance outboard category is assembled with premium, system-matched components; tuned with missionspecific calibrations; tested in the lab; and proven in the field to deliver bullet-proof reliability and incredible efficiency. Drop the throttles to experience immediate hole-shot muscle, blistering acceleration and blazing top speed that keeps on climbing all the way to 7000 rpm. Unleash your Wide Open.



INTAKE / SUPERCHARGER / AIR CHARGE COOLER

Each element of the 400R intake tract has been fine-tuned to function as a performance-boosting system. A short-run air snorkel feeds cool ambient air directly from the cowl intake port to the screw-type supercharger. The supercharger is water-cooled to reduce the temperature and increase the density of the exiting compressed air charge. A charge air cooler behind the supercharger further enhances air density before the charge enters the engine. Electronic boostpressure control monitors and maintains peak performance as ambient conditions change.



GEARCASES



SPORT MASTER

A race-proven surfacepiercing design for boats capable of speeds greater than 85 mph features low water pick-ups and a crescent leading edge to maximize efficiency and speed. The available cambered skeg counteracts prop torque on single-engine installations for improved performance and handling.



Designed to push heavy bay boats and multi-engine performance center console boats that require a more-submerged gearcase.



GUIDE PLATES / MOUNTS / PROPS

Precise control is a key element of performance boating. The Mercury Racing 400R is equipped with race-proven stainless-steel guide plates on the lower transom bracket that stabilize the engine for improved durability and steady handling at high speeds and in rough sea conditions. Specific 400R engine mounts within the Mercury Racing Advanced MidSection (AMS) were selected for the perfect combination of handling and running quality. A 6400-7000 rpm wide-open throttle operating range and a 1.75:1 gear ratio offer a wide window for propping options.



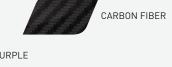
MAKE A STATEMENT

The 400R is available in Cold Fusion White or classic Phantom Black base colors and standard Mercury Racing graphics. Use the available custom graphics package offered in seven bold colors to reflect a personal style or match the color palette of the boat.



L6 2.6L 400R FOURSTROKE

HORSEPOWER (HP/KW)	400/336
MAX WOT RPM	6400-7000
ENGINE TYPE	Inline 6-Cylinder with 24-Valve Dual Overhead Cam (DOHC)
DISP. (LITER/CID)	2.6/158
INDUCTION SYSTEM	Supercharged with Charge Air Cooling and Electronic Boost Control
FUEL REQUIREMENTS	Recommended Unleaded 91 Octane (98 RON) Minimum Unleaded 89 Octane (95 RON)
CHARGING (AMP/WATT)	70/882
THROTTLE & SHIFT	Digital Throttle & Shift
MIDSECTION	Mercury Racing Advanced MidSection
GEARCASE	Sport Master or 5.44" HD
GEAR RATIO	1.75:1
DRY WEIGHT ¹ (LB/KG)	668/303
WARRANTY ²	3-Year Limited











PERFORMANCE ACTIVE TRIM

Performance Active Trim automatically adjusts outboard motor trim angle for optimal performance from hole shot to 50 mph. At speeds in excess of 50 mph, Performance Active Trim provides a seamless hand-off from auto to manual operation to give the operator full control at higher speeds. Five selectable trim profiles allow the operator to personalize Performance Active Trim to a specific driving style and to compensate for changes in boat load and weather conditions, while maintaining fully automatic operation. This patented GPS-based control system is designed specifically for use with Mercury Racing outboards equipped with SmartCraft® Digital Throttle & Shift (DTS) technology and running with gearcases partially surfaced.

K-PLANE TRIM TABS

Considered the gold standard of trim tab design, Mercury Racing K-Planes® are designed to endure the punishing rigors of offshore racing and the most-demanding performance-boat applications. K-Planes feature a heavy-duty, corrosion-resistant aluminum casting with large support ribs for unparalleled durability. Hydraulic trim cylinders maintain position and react immediately to fingertip control from the helm to plane boats faster and keep them level for a safer, smoother ride in a variety of conditions.

JOYSTICK PILOTING

Eliminate the stress of positioning or maneuvering a performance boat in tight spaces during less-thanideal situations. Focus instead on the total confidence of being effortlessly, intuitively, and completely in control of your boat. Mercury Joystick Piloting for Outboards combines throttle, shift and steering control in a single joystick designed for maximum maneuverability at lower speeds. It's part of the complete SmartCraft package, which includes Digital Throttle & Shift, Skyhook digital anchor, integrated AutoPilot and VesselView® displays.

DIGITAL ZERO EFFORT CONTROLS

Digital Zero Effort Controls replace the lag and hesitation of traditional throttle and shift cables with digital precision, resulting in smooth shifting and instant throttle response. Ergonomic design features short-throw levers for effortless shifting and ultra-fast throttle response, and the robust stainless-steel levers offer unmatched durability in the offshore environment. Digital Zero Effort Controls can provide automatic throttle synchronization and shadow mode for up to six engines (where two levers operate six engines) and go hand in hand with engines equipped with Mercury's exclusive Joystick Piloting for Outboards (JPO) technology.



VESSELVIEW MONITOR

A Mercury® VesselView display presents more boat system information and engine data than any other system in the boating industry: rpm, speed, fuel flow and efficiency, temperature, trim, and more. Monitor each engine simultaneously on an intuitive "at a glance" screen. Available in four sizes from 4-inch to 9-inch to fit most boat styles and helms, with a bright LCD or touchscreen display and an escalating range of features. All VesselView displays have Active Trim, Smart Tow® and Troll Control interfaces.



PROP SLIP CALCULATOR

The Mercury Racing Prop Slip Calculator App makes prop testing easier and more accurate. Prop slip is the difference between actual and theoretical travel resulting from a necessary propeller blade angle of attack. Measuring prop slip is the best way to match prop blade diameter and area to engine horsepower and rpm, the key to achieving peak propeller efficiency. The Mercury Racing Prop Slip Calculator App is a great tool that provides much more information than just slip. Download "PropSlipCalc" for iOS or Android free from Apple iTunes or Google Play Store.





MercuryRacing.com

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