

# Mercury 520 Racing Sterndrive

## POA



## Description

Mercury Racing 520 Sterndrive - Mercury Racing is proud to introduce the latest addition to its high-performance sterndrive family; the 520. The naturally aspirated engine provides recreational boaters a cost effective power option that fits nicely, in both value and performance, between MerCruiser® 8.2L MAG HO and Mercury Racing® 525 EFI. The low-cost sterndrive features Digital Throttle & Shift and is backed by an unprecedented two-year limited factory warranty.

The 520 shares the same CNC machined cylinder block used on its MAG HO cousin and Mercury Racing 502 cubic-inch-based sterndrive family. Mercury Racing® enhanced the 520's power and torque by increasing the cylinder bore size for an additional 21 cubic inches of displacement to 523-C.I.D. (8.6 L). The larger displacement, combined with Mercury Racing cylinder heads, multiport fuel injection and an electronic throttle body results in nearly 100 additional horsepower over the 430 h.p. MAG HO. All of this power comes from 87 posted octane (R+M)/2, (91 RON) global pump gas. The 520 complies with both EPA and CARB exhaust gas emissions limits. **WOLF IN SHEEP'S CLOTHING** Don't let the tame appearance fool you. The 520 isn't your father's MerCruiser®. The engine was developed to provide recreational boaters a low-cost option for gaining access to Mercury Racing® exclusive group of high-performance sterndrive propulsion systems. The engine package is destined to be a game changer for a variety of recreational boating segments including runabouts, sport boats and cruisers. **RACE-BRED DNA** The CNC machined cylinder block is packed with Mercury Racing® designed components including a balanced crankshaft, forged I-beam and shot-peened connecting rods and forged aluminum pistons. Mercury Racing® aluminum cylinder heads feature optimized valve angles for improved airflow. **PREMIUM VALVE TRAIN** Robust valve train components are what enable the 520 to put out such reliable power and is the key to the unprecedented two-year limited factory warranty. A carburized hardened camshaft is used for enhanced durability. Performance cam profiles, combined with larger valves, pack more air through the engine for greater power and torque. Greater displacement, combined with enhanced airflow, results in unprecedented mid-range punch and consistent pull through the engine rpm operating range. The 520 is closed cooled for more uniform temperature distribution, optimal running quality and longer life. It comes equipped with a 65 amp charging system, providing an ample supply of power for an array of marine electronics. **DIGITAL AGE** The 520 features the same **Propulsion Control Module (PCM 09)** microprocessor as found on the 565 and QC4v family. In addition to Digital Throttle & Shift control, the PCM optimizes fuel and spark timing independently for each cylinder for enhanced engine running quality, performance, fuel economy, and durability. The PCM computer also drives Mercury Racing® exclusive Engine Guardian System. The Engine Guardian System monitors engine functions and indicates when parameters go out of specified range, minimizing the risk of engine damage. This "smart" technology not only detects and alerts the boater of a problem, but it also processes the data and reduces power to a maximum,



safe level that allows the boater to continue operation. Engine Guardian also has the ability to proactively help prevent engine overheating by sensing not only engine temperature, but exhaust coolant temperature as well. By sensing engine coolant and exhaust coolant temperatures, the system can take action in advance by reducing engine power before temperature related engine damage occurs. The PCM enabled system also features one-touch Smart Start and automatic throttle synchronization. Furthermore, it enables shadow mode for multiple engine applications, where two throttle levers can operate up to four engines. **COLOR OPTIONS:** A total of 11 color options, including the standard Mercury Racing® Blue Metallic, are available to fit virtually any style or theme. **ZERO EFFORT CONTROL** Our ergonomic, high-style Zero Effort Digital controls provide an intuitive control experience - precisely signaling driver intent to the DTS equipped 520 engines. **POWER TO THE WATER:** The 520 is available with Bravo One XR, Bravo One XR Sport Master (standard and short) and Bravo Three XR drive options. The Mercury Racing® Integrated Transom System (ITS) is also available. A wide variety of Mercury Racing® propellers are available for enhanced performance in virtually any application. **MAINTENANCE BIRTHMARK** An interactive QR code, embedded within the engine specification decal, provides owners access to 520 updates and maintenance tips. The code, scanned via a smart phone or tablet, directs the user to the 520 section of the Mercury Racing® website. **TEAM ACCREDITED** The 520 is supported by the world's largest marine service network of dealers and Mercury Racing® **Total Engine Application Management (TEAM)** initiative. The standardized TEAM process ensures proper installation of the engine with factory specified components, providing maximum performance along with unmatched quality and durability. The engine will be available to OEM boat builders and dealers who agree to the terms of the TEAM accreditation process.

