Advanced Electronic Control Module

GM Powertrain revolutionized the boating industry when it introduced electronic controls.

Many boaters remember the years before GM Powertrain introduced electronic fuel injection to the marine market. They remember how difficult it sometimes was simply to start the engine, and they remember that boats would often stall during idle or docking maneuvers. They remember that going to full throttle often meant hesitation and that engine knock was common. GM Powertrain's marine electronic engine management system changed all that.

GM Powertrain has continued to innovate. A fourth-generation marine EFI electronic control module (ECM) has coil-near-plug and controller area network (CAN) capabilities. It was developed specifically for the marine industry and is an extremely rugged and durable module that can handle very high temperatures and severe vibrations.



This fourth-generation EFI electronic control module uses a thick-film, hybrid technology that literally prints the circuits onto the circuit <u>board</u>.

Vortec HP3 8100 V-8 Marine Engine

8.1L V-8

Specifications

Configuration: Displacement: Bore x Stroke: Valvetrain:

Valve Lifters: Compression Ratio: Firing Order: Fuel System: Recommended Fuel: Main Bearing Caps: Peak Horsepower:* Peak Torque:* Mass (as Shipped): Manufactured: 496 cid (8127 cc) 4.25 x 4.37 in (107.95 mm x 111 mm) Pushrod actuated, overhead canted valves (2 valves per cylinder) Hydraulic rollers 9.1:1 1-8-7-2-6-5-4-3 Port fuel injection Gasoline (unleaded) 4-bolt cast iron 525+ hp (392 kW) @ 5400 rpm 560+ lb-ft (685 Nm) @ 4000 rpm 740.75 lb (336 kg) Tonawanda. NY

* Horsepower and torque may vary with application.

MATERIALS:

Cylinder Block: Cast iron Cylinder Head: Cast iron (with exhaust valve seat inserts) Crankshaft: Cast nodular Iron Main Bearing Caps: Cast nodular iron Steel Camshaft: **Connecting Rods:** Forged steel 1141 SAE Pistons: Hypereutectic cast aluminum Intake Manifold: One-piece coated cast aluminum

COMPONENT DESCRIPTIONS:

Oil Pump:High-volume oil pump assemblyEngine Oil/Sump Capacity:7 qtThrottle Type:75-mm mechanical throttle bodyFuel Delivery System:Port fuel injectionIgnition Coils:Coil-near-plug ignition systemSpark Plugs:Platinum tipped (1.5-mm gap)

All specifications listed are based on the latest product information available at time of publication. The right is reserved to make changes at any time without notice.

<u>GM</u>

GM Powertrain www.gmpowertrain.com © 2002 General Motors Corporation

© 2002 General Motors Corporation PRINTED IN U.S.A. 12/02

<u>GM</u>

Vortec HP3 8100 V-8 Marine Engine

The marine industry receives the most powerful production engine ever offered by GM Powertrain



2002 Vortec HP3 8100 V-8 Marine Engine