



*GM's marine 4-cycle fuel-injected V6 engine is known for its torque, durability and fuel efficiency*

# Vortec 4300

## Marine Engine

### Features & Benefits

- Lead-free main bearings and balance shaft rear bearing
- Integral Air Fuel Module (IAFM) inlet manifold with port fuel injection
- Cracked powder metal connecting rod to more accurately position the cap to the rod during engine assembly. A high-flow cylinder head with straighter intake ports and a higher compression ratio delivers impressive horsepower
- High-silicon cast aluminum pistons offer excellent durability
- Roller valve lifters, roller rocker arms and true roller timing chain for reduced friction and improved performance
- Composite rocker arm covers for reduced noise and resistance to corrosion
- Cylinder case has brass water jacket core support plugs for resistance to corrosion
- Water pump is effective rotating in either a clockwise or counterclockwise direction
- Nodular iron crankshaft has rolled fillets for increased strength
- Water pump casting eliminates internal bypass
- Investment cast rocker arms
- 58X crankshaft position encoder with digital sensor to ensure accurate ignition timing throughout the operating range
- Cylinder block incorporates the following new features:
  - Dual flat response knock sensor bosses
  - Revised bolt pattern for new front cover
  - Threaded block heater/drain hole - left side
- Cast aluminum front cover epoxy painted for corrosion protection
- Aluminum oil pan is now painted for corrosion protection



*The Vortec 4300 V6 gasoline engine features overall size and weight advantages with superior power-to-weight ratios and proven durability.*

### Available Options

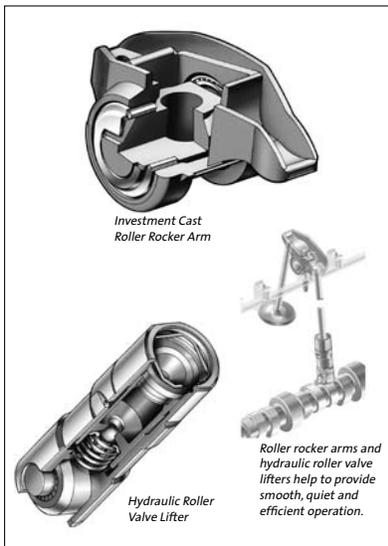
- An electronic control module (ECM) and related hardware are available in kit form. The ECM uses state-of-the-art technology to optimize fuel and spark requirements.
- Electronic throttle control is available (broadcast code 8LM)
- A 2V inlet manifold is available.
- EST distributors and coils are available in kit form.

### Vortec 4300 Feature Focus

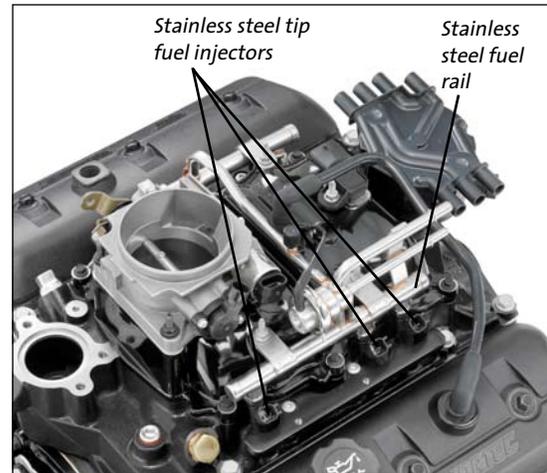
GM Powertrain takes its expertise in designing outstanding Vortec truck and SUV engines and leverages it to make sophisticated yet extremely durable marine engines. In addition, the well-recognized Vortec brand name by itself has become a valuable selling tool for OEMs.



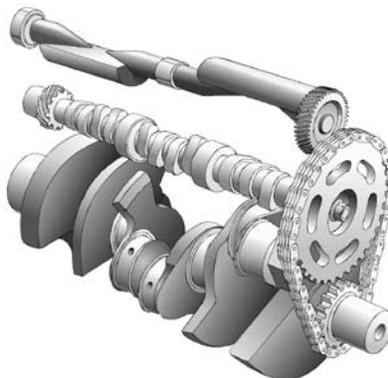
Many of GM marine engines are Vortec engines. Vortec means uncompromised power — outstanding power with no sacrifice in fuel efficiency or durability and very little required maintenance.



Hydraulic roller valve lifters and roller rocker arms help provide smooth, quiet and efficient operation.



The Integral Air Fuel Module (IAFM) incorporates several features into one integral assembly. The bottom of the inlet manifold is made of iron and the top is made of aluminum. Integrated into the module are a stainless steel fuel rail, stainless steel tip fuel injectors, and a throttle body that includes a Throttle Position Sensor (TPS) and an Idle Air Control (IAC) motor.



A counter-rotating balance shaft cancels the primary engine vibrations found in 90° V6 engines. The result is smooth performance and low noise.



The Vortec 4300 marine engine uses advanced technology to maximize the simple pleasure of boating.

### Additional Features

- Cylinder head gaskets have stainless steel core for corrosion resistance
- Cast aluminum oil pan provides increased strength and noise reduction and is epoxy painted for corrosion protection
- Nodular grey iron bearing caps
- Metric fasteners on engine mounts, starter bosses and bell housing
- Eccentric main bearings for increased engine life

### Specifications

**Type:** 4.3L V6 Gen 1e

**Displacement:** 262 cid (4300 cc)

**Engine Orientation:** Longitudinal

**Compression Ratio:** 9.4:1

**Valve Configuration:** Overhead Valves  
(2 valves per cylinder)

**Assembly Site:** Romulus, Michigan

**Valve Lifters:** Hydraulic Roller

**Firing Order:** 1-6-5-4-3-2

**Bore x Stroke:** 101.60 x 88.39 mm

**Bore Center:** 111.76 mm

**Bore Area:** 486.44 cm<sup>2</sup>

**Fuel System:** N/A

**Fuel Type:** Regular Unleaded

**Horsepower:** 226 hp (169 kW) @ 4800 rpm

**Torque:** 268 lb-ft (363 Nm) @ 4000 rpm

Actual power levels may vary depending on OEM calibration and application.

**Fuel Shutoff:** OEM Defined

**Shipping Weight:** 449 lb (203 kg)

**Emissions Controls:** N/A

#### Materials:

Block: Cast Iron GM232-M

Cylinder Head: Cast Iron

Intake Manifold: Cast Iron

Exhaust Manifold: None

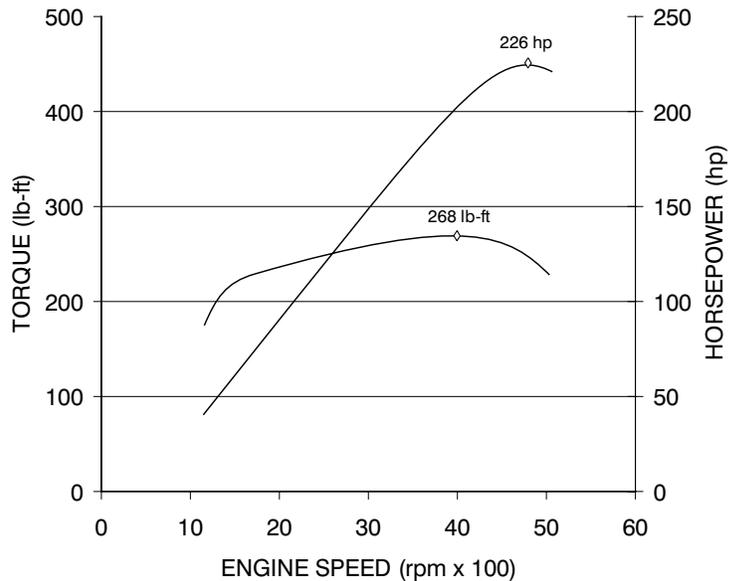
Main Bearing Caps: Cast Iron GM232-M

Crankshaft: Nodular Iron

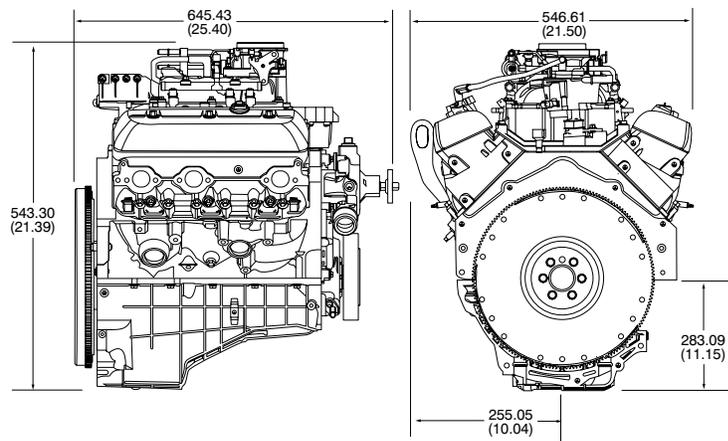
Camshaft: 5150 Steel Billet

Connecting Rods: Powdered Metal

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



Actual power levels may vary depending on OEM calibration and application.



GM Powertrain

www.gmpowertrain.com