



*A new, 4-cylinder engine that gives industrial OEMs another choice in selecting an engine that exactly meets their requirements.*

## Vortec 2400

### Industrial Engine

#### Features & Benefits

- Designed to use gasoline, propane, and natural gas
- Aluminum heads with premium valve seat inserts and hard faced exhaust valves for extended life on gaseous fuels
- 58X crank-triggered, waste spark ignition system utilizes the coil pack, crankshaft position sensor and available ECM for accurate OEM-defined spark timing which cannot be altered by end user
- Aluminum PFI-style intake manifold can be used for gaseous fuels (LPG or Natural Gas ) or can be up-fitted with the optional gasoline fuel system (shipped without throttle body unit )
- Dual takedown cast iron exhaust manifold with heat shield reduces radiated heat to nearby components
- Engine has a badge area on top where OEMs can place their own identifying badge
- 1.4kW starter for faster starts at any temperature
- Thermostat with internal bleed for improved cooling system performance



*The Vortec 2400 industrial engine is a larger, more powerful version of the proven Vortec 1.6L industrial engine (shown with optional fuel rail and torsional damper).*

#### Available Options

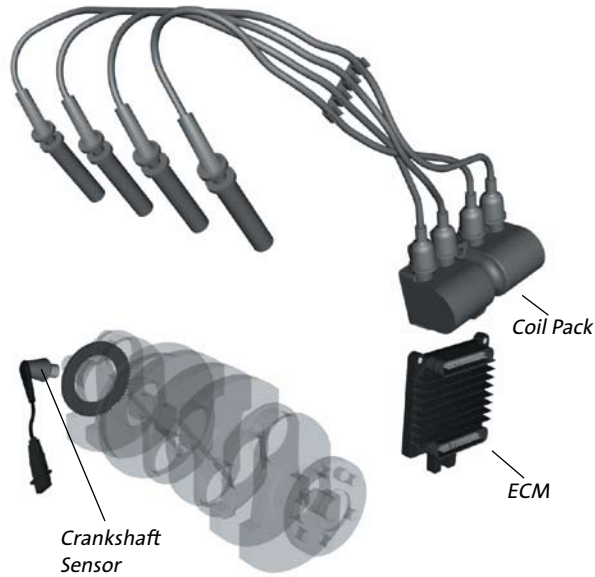
- An electronic control module (ECM) for optimizing fuel and spark requirements is available in kit form (gasoline only).
- Gasoline fuel rail for port fuel injection that precisely meters fuel
- Intake manifold pressure/temperature sensor (intake or remote mount)
- Flat response knock sensor
- Harmonic balancer and pulley – available in 138 and 147 mm diameters

**Vortec 2400 Feature Focus**

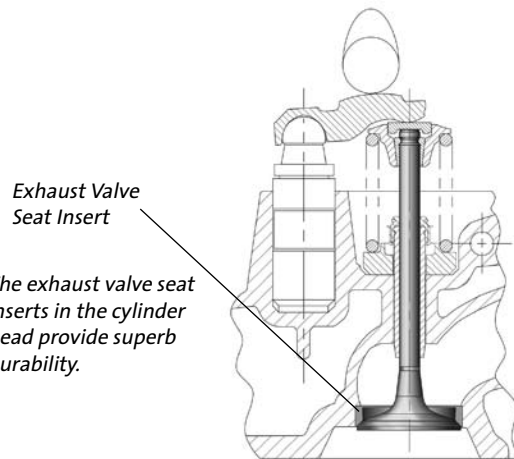
The Vortec 2400 is a global engine used in a multitude of applications. It has a reputation around the world for delivering the uncompromised power and rugged durability you've come to expect from GM Vortec engines.



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



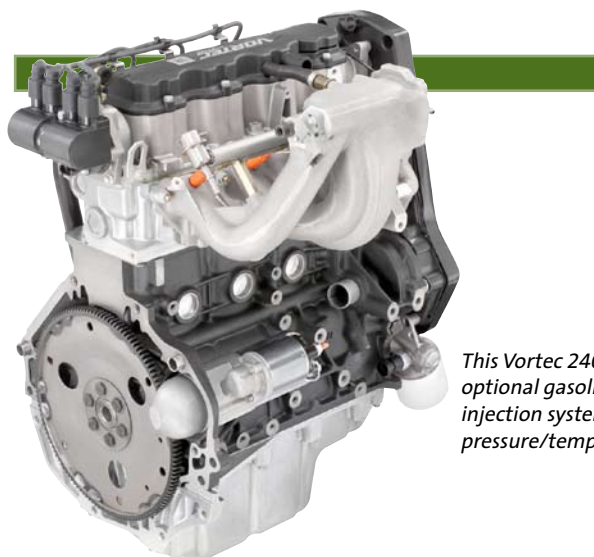
The crank-triggered, waste spark ignition system uses a crankshaft position sensor, coil pack, and available ECM to replace the distributor and coil used in conventional ignition systems, so servicing of distributor caps and rotors is eliminated. Crankshaft position is precisely determined directly from the crankshaft, resulting in improved spark accuracy. The OEM-established spark timing cannot be changed by the end user.



Exhaust Valve Seat Insert  
The exhaust valve seat inserts in the cylinder head provide superb durability.



OEM Badge Area  
The Vortec 2400 engine has a badge area on top where OEMs can place their own identifying badge.



This Vortec 2400 is shown with optional gasoline port fuel injection system and manifold pressure/temperature sensor.

### Specifications

**Type:** 2.4L I-4

**Displacement:** 147 cid (2,405 cc)

**Engine Orientation:** Longitudinal and Transverse

**Compression Ratio:** 9.6:1

**Valve Configuration:** SOHC

(2 valves per cylinder)

**Assembly Site:** Sao Jose, Brazil

**Valve Lifters:** End Pivot Finger Follower Rocker

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

**Bore x Stroke:** 3.44 x 3.94 in. (87.5 x 100 mm)

**Bore Center:** 93.0 mm

**Bore Area:** 240.53 cm<sup>2</sup>

**Fuel System:** None (PFI Rail available)

**Fuel Type:** Gasoline, Propane, Natural Gas

**Horsepower:**

129 hp (96 kW) @ 5000 rpm (Gasoline)

111 hp (83 kW) @ 4000 rpm (Propane)

99 hp (74 kW) @ 4000 rpm (Natural Gas)

**Torque:**

158 lb-ft (214 Nm) @ 3200 rpm (Gasoline)

148 lb-ft (201 Nm) @ 3800 rpm (Propane)

132 lb-ft (179 Nm) @ 3200 rpm (Natural Gas)

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

**Fuel Shutoff:** 6000

**Shipping Weight:** 247 lb (112 kg)

**Engine Redline:** 6000 rpm

**Emissions Controls:** N/A - Customer Responsibility

**Applications:** Industrial Applications

**Materials:**

Block: Cast Iron

Cylinder head: Aluminum with Valve Seat Inserts

Intake manifold: PFI style (Alum) w/o TB

Exhaust manifold: Cast Iron

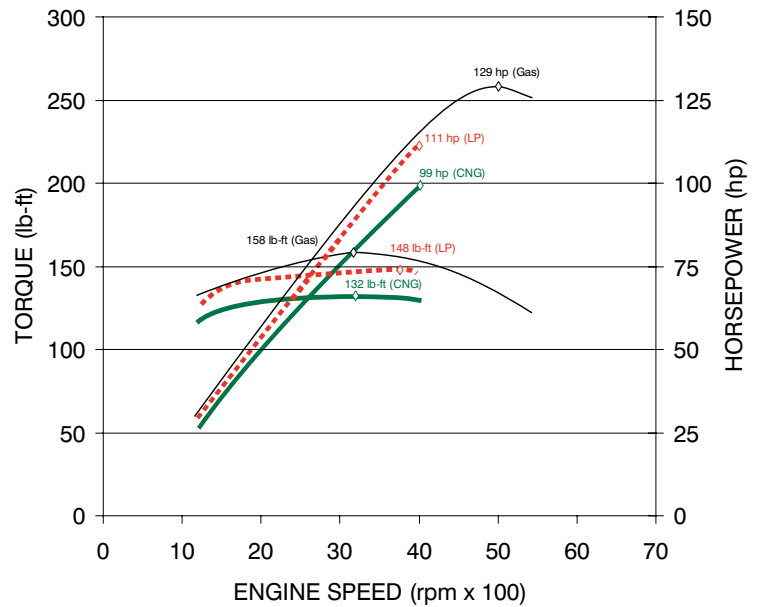
Main bearing caps: Cast Iron

Crankshaft: Nodular Iron

Camshaft: Truck

Connecting rods: Cast Iron

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.



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GM Powertrain

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