

ROTATING RIGHT

## GM 8.1L VORTEC ENGINE

GM

### POWERTRAIN Industrial Engines



GM Powertrain takes its expertise in designing outstanding Vortec truck and SUV engines and leverages it to make sophisticated yet extremely durable industrial engines.

#### Applications

Industrial, Agriculture  
Construction & Oilfield

- Pumps –Irrigation, Industrial, Hydraulic Sludge and Trash
- Compressors – Natural Gas and Air
- Generators –Prime Power, Standbyand Co-Gen
- Industrial Drives – Forklifts, Manlifts, Street Sweepers, Wood Chippers, Chillers and Fans
- Oil and Gas Production - Gas Compressors, Pump Jacks, Vapor Recovery
- Wind Machines
- Numerous Re-Power & Custom Applications

#### Available Factory Installed Options

- Natural Gas and LPG Fuel Systems
- Ignition Systems
- Belt and Pulley Accessory Drives
- Starters and Alternators
- Spark Protected Ignition
- Exhaust Headers & Manifolds
- Mufflers
- SAE 3 Flywheel Housing and Direct Drives
- PTOs: Side Load and In-Line
- Instrument Panel w/Gauges and Safety Shutdowns
- Governor Electronic & Mechanical
- Radiator and Heat Exchanger Cooling Systems
- Engine Mounting Frames and Enclosures
- Three Way Catalyst

## Vortec™ 8.1L 8 Cylinder – 496 Cubic Inches



#### Features & Benefits:

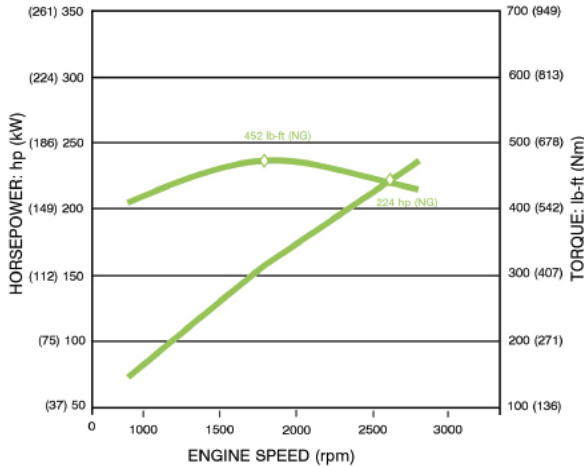
- Designed for gasoline, propane and natural gas fuel.
- World-class engine sealing system for superior leak protection
- High-torque camshaft with hydraulic roller lifters, optimized for low speed operations on gaseous fuel to achieve increased torque and power for industrial applications
- Industrial torsional damper with integral three-rib pulley to accommodate serpentine accessory drive hardware
- Nodular iron crankshaft for increased strength and durability.
- Cast aluminum intake manifold is standard on the engine
- Induction-hardened inlet valve seats and sintered powder metal exhaust valve seat inserts for maximum durability
- Electronic Control Module (ECM) with coil-near-plug ignition includes crankshaft sensor, camshaft sensor, ESC sensors and eight ignition coils for precise state of the art ignition timing and spark control
- Common GM Powertrain industrial engines rearface for easy housing installation



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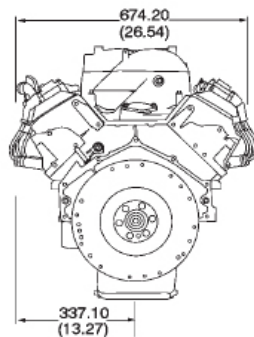
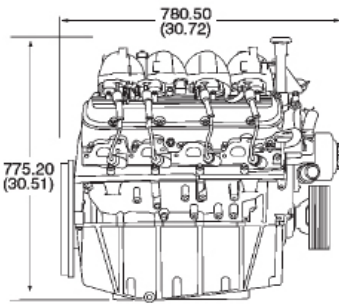
Power and torque figures provided by GM Powertrain per SAE J1995. Actual power levels may vary depending on fuel selection and quality, calibration, application, altitude and ambient air temperatures.

### CONTINUOUS BRAKE HORSEPOWER

FOR HIGH PLAINS IRRIGATION APPLICATION

GEARHEAD	1x1	6x5	5x4	4x3	3x2
ENGINE RPM	1760	2112	2200	2346	2640
BHP	120	150	155	164	172

RATED @ 3200 FT ELEVATION WITH NATURAL GAS FUEL



### Horsepower:

224 hp @ 2650 rpm (Natural Gas)

### Torque:

452 lb-ft @ 1800 rpm (Natural Gas)

### Specifications and Materials

- Type: 8.1L V8
- Displacement: 496 cld (8128 cc)
- Compression Ratio: 9.1:1
- Valve Configuration: Overhead /Pushrod Actuated
- Valve Lifters: Hydraulic Roller
- Bore x Stroke: 4.25 x 4.37 in (107.95 x 111.00 mm)
- Main Bearing Caps: 4-Bolt
- Balance Method: Internal
- Firing Order: 1-8-7-2-6-5-4-3
- Oil Pan Capacity: 8 qt
- Fuel Type: Propane or Natural Gas
- Engine Rotation: Clockwise (from the front)
- Spark Plugs: Platinum Tip (1.5 mm gap)
- Paint Protection: Component Painted
- Shipping Weight: 727 lb (330 kg)
- Block: Cast Iron
- Cylinder Head: Cast Iron
- Intake Manifold: Cast Aluminum
- Final Assembly: Lubbock, TX USA

Manufactured with US, North American and Global Sourced Content

Information may vary by model and application. All specifications, options and product availability based upon the latest information available at time of publication. To ensure our customers have access to the highest quality products available we reserve the right to make product improvements and changes anytime without prior notice. Vortec™ trademarks are property of General Motors Corporation. ©2005 1/05



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