

# GX ENGINES

## Honda GX SERIES ENGINES The Next Generation

In 1983, Honda Motor Company developed a revolutionary new 4-Stroke, overhead valve engine that defined the future of small engine technology. Now, over 27 years later, Honda introduces the next generation of GX engines by offering more power, less noise, better fuel efficiency and fewer emission than ever before.



## 3 Year Limited Warranty



Honda's GX engines come with a limited 3-year warranty. This warranty applies to GX series engines 100cc or larger purchased at retail or put into rental service after January 1st, 2009

3 Year warranty excludes the Honda GXV160 model. See full warranty details on page 63

## GX SERIES ENGINES

### EXCEPTIONALLY QUIET-

Honda's superior next generation GX design offers impressively quiet operation.

- The Honda GX series engines, when equipped with Honda mufflers, come with a large capacity, multi chamber exhaust system to reduce engine noise
- Reduced mechanical noise through application of light weight, noise-reducing materials
- Forged steel crankshaft and rigid crankcase further reduces engine noise
- In addition to improved piston design, the refreshed GX engines have an improved camshaft and muffler to reduce overall engine noise by up to 5 dB.



### CLEANER RUNNING WITH NO CATALYST-

Honda certifies to all current EPA emission requirements by offering 50-state compliant engines only. The development of one engine for use in all 50 states continues to reflect Honda's forward thinking with regard to emission regulations, air quality and the needs of our customers. Our advanced engine technology allows Honda to remain compliant for the foreseeable future without the use of a catalytic converter.

### SMOOTHER RUNNING-

The GX series engines are manufactured to precise dimensions and weight tolerances to assure the smoothest operation possible.

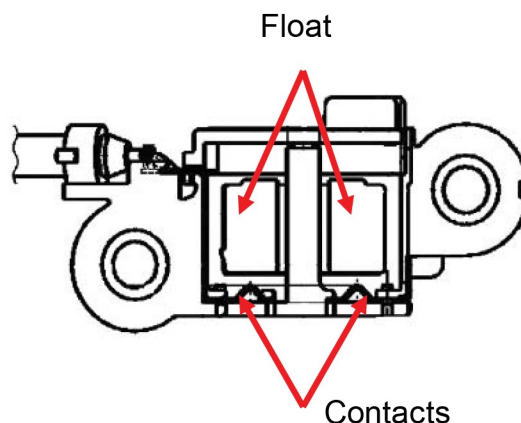
- Less vibration means greater longevity and less operator fatigue.
- Refreshed GX engines have less vibration than current GX engines.



### NO MORE ENGINE FAILURES DUE TO INSUFFICIENT OIL-

Honda GX series engines can be equipped with an Oil Alert unit, Honda's system that shuts the engine off when the oil level reaches an unsafe level.

The system consists of an oil level sensor inside the crankcase. When the oil reaches a level that is too low for safe operation, the engine warns you or stops automatically.



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## AUTOMATIC MECHANICAL DECOMPRESSION SYSTEM

Honda's automatic mechanical decompression system is designed to give you quicker, easier starts. This system, which is connected to the camshaft, reduces compression by opening the exhaust valve slightly when the engine is being started. This reduces the amount of force needed to start the engine and improves starting performance. The system disengages automatically after the engine starts to prevent any power loss during normal operation. Honda GX series engines feature an overhead valve design that smooths the flow of fuel into the combustion chamber for quick, reliable starts that require no special skills.

Starting is also enhanced on some models by the addition of the digital CDI with higher spark plug voltage at start up and variable ignition timing.



## OVERHEAD VALVE (OHV) ENGINES

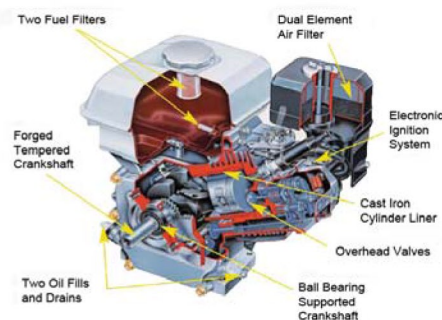
Overhead Valve engines (OHV) have the valves located above the combustion chamber, in the cylinder head.

The OHV layout permits

- Smoother fuel mixture intake
- Quicker and more complete combustion

The increased combustion efficiency enables a higher compression ratio to be used. This makes it possible to obtain a greater power output and to avoid the build-up of carbon. The OHV-design also gives an excellent thermal balance, which contributes to:

- Reduced cylinder distortion
- Improved emissions performance
- Decreased oil consumption and
- Increased engine service life



## CAST IRON CYLINDER SLEEVE

Piston and related components withstand wear while providing improved oil consumption for extended engine life. Because of their durability, cast iron cylinder sleeve engines are a good choice for professional or commercial applications.

## GEAR REDUCTION ENGINES

On most small engines, the crankshaft will make 3600 revolutions per minute (RPM). In some applications this speed would be too high, and a 2 to 1 or 6 to 1 gear reduction engine would be needed.

## Cleaner running with No Catalyst

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Our advanced engine technology allows Honda to remain compliant for the foreseeable future without the use of a catalytic converter.

Environmental responsibility has been an integral part of our product development philosophy years before emission levels were established. In fact, with minor modifications, the same GX Series engine design introduced in 1983 meets today's EPA emission level standards. Honda's advanced engine technology offers a number of distinct advantages including fuel savings and standardized replacement parts readily available through your local Honda Engine dealer.



BLUE SKIES FOR  
OUR CHILDREN