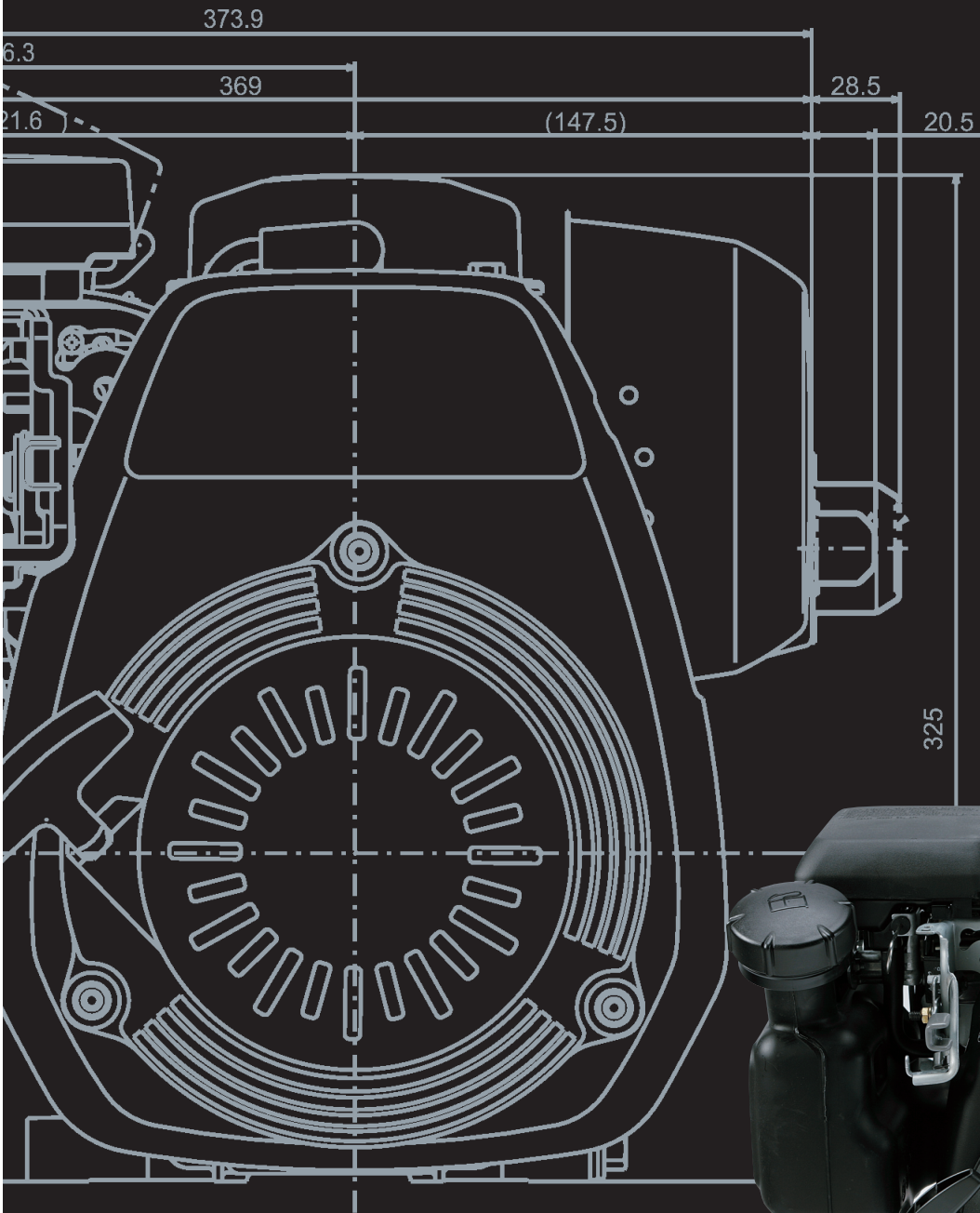


# HONDA

## GC Series Engines





# GENUINE HONDA



**T**here are many reasons to insist on genuine Honda engines. As the world's largest engine manufacturer, Honda offers more engine experience than anyone. Experience born on racetracks and roadways around the globe. Experience that keeps us on the cutting edge of engine performance technology and crosses our entire product line. From automobiles, race cars, motorcycles and all-terrain vehicles to marine engines, power equipment products and general-purpose engines, Honda is committed to designing products that meet or exceed the demands of our customers across the board. Based on the wide variety of products we offer with our Honda engines, we're experts at matching the right engine for the right job and producing engines that will "get the job done".



Throughout our history, Honda has been dedicated to technological and environmental innovation, and today is no different. After all, we have a legendary reputation to live up to. A reputation for unsurpassed quality, performance and reliability. A reputation worth considering the next time you're in the market for an engine.



## Net Power - SAE J1349

The SAE J1349 standard measures net horsepower with the manufacturer's production muffler and air cleaner in place and therefore more closely correlates with the power the operator will experience when using a Honda engine powered product. The power ratings of the engines indicated in this document are the net power output tested on a production engine for the engine model and measured in accordance with SAE J1349 at the specified rpm. Mass production engines may vary from this value. Actual power output for the engine installed in the final machine will vary depending on numerous factors, including the operation speed of the engine in the application, environmental conditions, maintenance and other variables.

*Pictured counter-clockwise from above: Honda FCX Hydrogen Fuel Cell Vehicle, Honda CBR, Honda Advanced Robotics - Asimo, MCHP (Micro-sized Combined Heat and Power System), Honda Aquatrax, Honda BF50 outboard, Honda Jet*

# With a GC Series engine at the heart of your home-use power equipment, you'll be in business.

**T**he Honda GC Series offers powerful, versatile functionality that will add great competitive value to any engine-powered product. These compact, lightweight 4-Stroke engines were specifically designed for home-use power equipment applications. Featured innovations include the world's first internal timing belt, the superior efficiency and performance of an overhead cam layout and the durability and light weight of uniblock construction. Not to mention the same legendary reliability you've come to expect from the leader in 4-Stroke engine technology. Put a Honda GC Series engine to work for you and you'll quickly see why – when it comes to power, we mean business.

## The lightest engines in their class

A revolutionary combination of the world's first internal timing belt, a tough nylon overhead cam and uniblock construction has made the GC Series lighter and more compact than any engine in its class. Plus, simple construction has minimized the number of parts, making the engine reliable and easier to operate.



## Dramatically improved sound quality

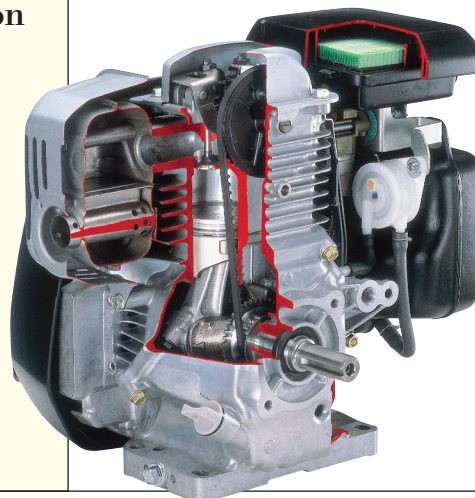
Power equipment users and their neighbors will prefer the quiet operation offered by the GC Series' built-in timing belt. Valvetrain and gear noise have also been minimized for a better quality engine sound that is distinctly easier on the ears – a feature sure to be appreciated by users and bystanders alike.

## Consistent, dependable power

The wide, flat, powerful torque offered by Honda's GC Series engines helps reduce engine speed drop associated with sudden load increases for smoother, less-troublesome, all-around performance.

## Fast, easy, reliable starting

GC Series engines feature a horizontal cross-flow intake port that smoothes the flow of fuel into the combustion chamber for quick, reliable starts that require no special skills. Automatic mechanical decompression further ensures easy starting.



## Honda Auto Choke System

This system has been developed for use on GVC160 and GVC190 engines in fixed-throttle lawnmower applications. This user-friendly system is truly automatic, eliminating levers and cables. The engine starts easily whether cold or hot and is ready to use immediately. Once the engine is up and running, the Auto Choke automatically returns to an optimal operating position.



## Reduced maintenance and fuel consumption

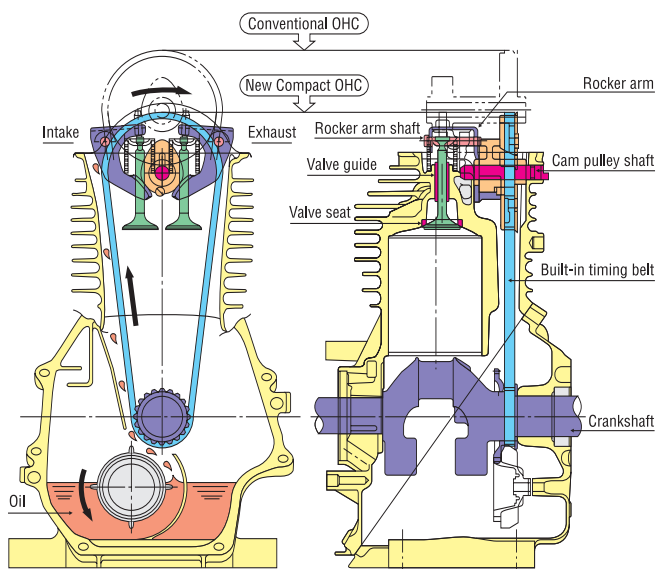
A truly innovative combination of a compact combustion chamber, overhead cam configuration and uniblock construction significantly reduces fuel and oil consumption as compared to conventional side-valve engines. Honda's DuaLube™ System achieves full engine lubrication by combining governor slinger paddles and an oil-delivering timing belt. Also, simple construction reduces many potential maintenance needs, making Honda's GC engine one of the most efficient and cost-effective engines available.

### Honda's Compact OHC Layout

## Superior efficiency and performance in a smaller package

As the name implies, overhead cam (OHC) engines have their camshafts positioned in the cylinder head above the combustion chamber. Valves are located in the roof of the combustion chamber (instead of at the side) to offer the same combustion-related advantages as OHV engines. The OHC layout builds on these advantages by reducing the number of valvetrain components and allowing them to be lighter and stronger, thereby making the engine more compact and lightweight overall.

## Overhead Cam, Internal Timing Belt



- Cam pulley
- Valves
- { Cam pulley shaft  
Valve guide  
Valve seat
- { Crankshaft  
Rocker arms
- { Cylinder block  
Crankcase cover
- Built-in timing belt
- Rocker arm shafts
- Conventional OHC construction



The high-efficiency combustion delivered by the OHC configuration helps Honda GC engines certify to all existing CARB and EPA emission standards.

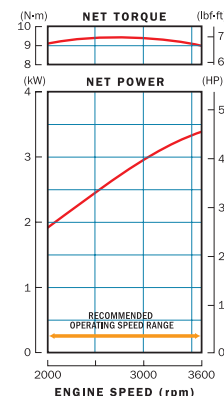
# Horizontal Shaft

Honda GC Engines provide an ideal source of reliable, lightweight power for a variety of consumer products including pressure washers, pumps, compressors and portable generators.

## GC160



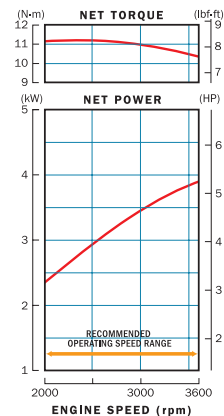
Engine Type	Air-cooled, 4-Stroke, OHC, single cylinder
Bore x Stroke	2.5" x 2.0" (64 x 50 mm)
Displacement	9.8 cu in (160 cm <sup>3</sup> )
Compression Ratio	8.5 : 1
Net Horsepower*	4.6HP (3.4kW) at 3,600 rpm
Net Torque*	6.9 lbs ft (9.4 Nm) at 2,500 rpm
PTO Shaft Rotation	Counterclockwise (from PTO shaft side)
Ignition System	Transistorized Magneto
Starting System	Recoil or Electric Starter
Carburetor	Horizontal type butterfly valve
Lubrication System	Forced Splash
Governor System	Centrifugal Mechanical
Air Cleaner	Dry (paper) type
Oil Capacity	0.61 US qt (0.58 l)
Fuel Tank Capacity (liter)	1.9 US qt (1.8l)
Dimensions (L x W x H)	13.3" (337mm) x 14.5" (369mm) x 13.0" (331mm)
Dry Weight	25.4 lbs (11.5 kg)



## GC190



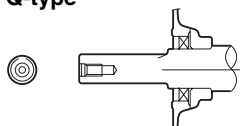
Engine Type	Air-cooled, 4-Stroke, OHC, single cylinder
Bore x Stroke	2.7 x 2.0 in (69 x 50 mm)
Displacement	11.4 cu in (187 cm <sup>3</sup> )
Compression Ratio	8.5 : 1
Net Horsepower*	5.2HP (3.9kW) at 3,600 rpm
Net Torque*	8.3 lbs ft (11.2 Nm) at 2,500 rpm
PTO Shaft Rotation	Counterclockwise (from PTO shaft side)
Ignition System	Transistorized Magneto
Starting System	Recoil or Electric Starter
Carburetor	Horizontal type butterfly valve
Lubrication System	Forced Splash
Governor System	Centrifugal Mechanical
Air Cleaner	Dry (paper) type
Oil Capacity	0.61 US qt (0.58 l)
Fuel Tank Capacity (liter)	1.9 US qt (1.8l)
Dimensions (L x W x H)	13.6" (345mm) x 14.5" (369mm) x 13.0" (331mm)
Dry Weight	29.1 lbs (13.2 kg)



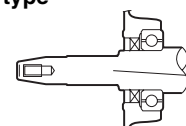
## Shaft Types

\* The power rating of the engine indicated in this document is the net power output tested on a production engine for the engine model and measured in accordance with SAE J1349 at 3600 rpm (7000 rpm for model GHX50, GXV50, GX25 and GX35). Mass production engines may vary from this value. Actual power output for the engine installed in the final machine will vary depending on numerous factors, including the operating speed of the engine in application, environmental conditions, maintenance and other variables.

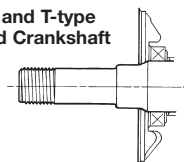
Q-type



V-type



P-type and T-type  
Threaded Crankshaft



D-type  
Stepped & Keyed



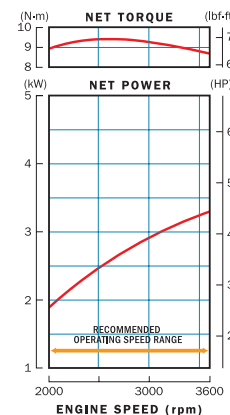
# Vertical Shaft

Honda GCV Engines offer lawnmower users (and their neighbors!) a quiet, yet powerful and lightweight combination for a variety of demanding mowing applications. The GCV is also an excellent choice for residential-use pressure washers.

## GCV160



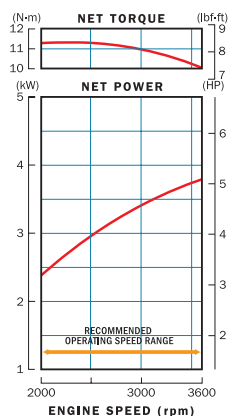
Engine Type	Air-cooled, 4-Stroke, OHC, single cylinder
Bore x Stroke	2.5" x 2.0" (64 x 50 mm)
Displacement	9.8 cu in (160 cm <sup>3</sup> )
Compression Ratio	8.5 : 1
Net Horsepower*	4.4HP (3.3kW) at 3,600 rpm
Net Torque*	6.9 lbs ft (9.4 Nm) at 2,500 rpm
PTO Shaft Rotation	Counterclockwise (from PTO shaft side)
Ignition System	Transistorized Magneto
Starting System	Recoil or Electric Starter
Carburetor	Horizontal type butterfly valve
Lubrication System	Forced Splash
Governor System	Centrifugal Mechanical
Air Cleaner	Dry (paper) type
Oil Capacity	0.58 US qt (0.55 l)
Fuel Tank Capacity (liter)	0.98 US qt (0.93l)
Dimensions (L x W x H)	14.4" (367mm) x 13.0" (331mm) x 13.7" (347mm)
Dry Weight	21.6 lbs (9.8 kg)



## GCV190

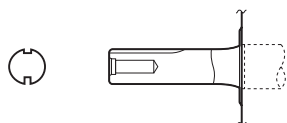


Engine Type	Air-cooled, 4-Stroke, OHC, single cylinder
Bore x Stroke	2.7" x 2.0" (69 x 50 mm)
Displacement	11.4 cu in (187 cm <sup>3</sup> )
Compression Ratio	8.5 : 1
Net Horsepower*	5.1HP (3.8kW) at 3,600 rpm
Net Torque*	8.3 lbs ft (11.3 Nm) at 2,500 rpm
PTO Shaft Rotation	Counterclockwise (from PTO shaft side)
Ignition System	Transistorized Magneto
Starting System	Recoil or Electric Starter
Carburetor	Horizontal type butterfly valve
Lubrication System	Forced Splash
Governor System	Centrifugal Mechanical
Air Cleaner	Dry (paper filter)
Oil Capacity	0.58 US qt (0.55 l)
Fuel Tank Capacity (liter)	0.98 US qt (0.93l)
Dimensions (L x W x H)	14.4" (367mm) x 13.0" (331mm) x 13.8" (349mm)
Dry Weight	27.6 lbs (12.5 kg)

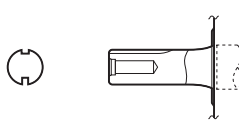


## Shaft Types

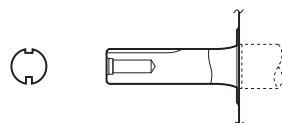
N1-type



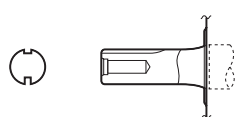
N2-type



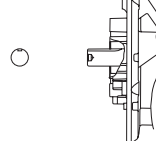
N3-type



N4-type

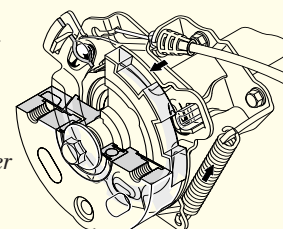


N5-type



\* The power rating of the engine indicated in this document is the net power output tested on a production engine for the engine model and measured in accordance with SAE J1349 at 3600 rpm (7000 rpm for model GHX50, GXV50, GX25 and GX35). Mass production engines may vary from this value. Actual power output for the engine installed in the final machine will vary depending on numerous factors, including the operating speed of the engine in application, environmental conditions, maintenance and other variables.

*Unique Honda blade brake clutch assembly is available as an option for use only on Honda GCV Series engines for lawnmower applications.*



# HONDA ENGINE DISTRIBUTORS

## ALABAMA

R.W. DISTRIBUTORS, INC.  
SEE MISSISSIPPI

## ALASKA

SCOTSCO, INC.  
SEE OREGON

## ARIZONA

TRU-POWER, INC.  
SEE SOUTHERN CALIFORNIA

## ARKANSAS

R.W. DISTRIBUTORS, INC.  
SEE MISSISSIPPI

## CALIFORNIA

*Northern California*  
PACE WEST, INC.  
www.pacelink.com  
101 Commerce Circle  
Sacramento, CA 95815  
(916) 925-6936  
FAX (916) 925-5018  
pacewest@pacelink.com

*Southern California*  
TRU-POWER, INC.  
www.trupower.com  
22520-A Temescal Canyon Rd.  
Corona, CA 92883  
(951) 277-3180  
FAX (951) 277-3190  
sales@trupower.com

## COLORADO

E. C. POWER SYSTEMS  
www.ecpower.com  
3233 Oakland Street  
Aurora, CO 80010  
(303) 360-7110  
FAX (303) 360-7519  
rickri@e-c-co.com

## CONNECTICUT

EASTERN EQUIPMENT, INC.  
SEE NEW HAMPSHIRE

## DELAWARE

R.C.S. DISTRIBUTING, INC.  
SEE MARYLAND

## DISTRICT OF COLUMBIA

R.C.S. DISTRIBUTING, INC.  
SEE MARYLAND

## FLORIDA

ROBERTS SUPPLY, INC.  
www.robertssupply.com  
4203 Metric Drive  
Winter Park, FL 32792  
(407) 657-5555  
FAX (407) 657-4007  
info@robertssupply.com

## GEORGIA

M.T.A. DISTRIBUTORS  
SEE TENNESSEE

## HAWAII

SCOTSCO, INC.  
SEE OREGON

## IDAHO

E. C. POWER SYSTEMS  
www.ecpower.com  
4499 Market Street  
Boise, ID 83705  
(208) 342-6541  
FAX (208) 345-4308  
wsanders@e-c-co.com

## ILLINOIS

POWER EQUIPMENT CO.  
www.peco1948.com  
211 W Stephenie Drive  
Cortland, IL 60112  
(815) 754-4090  
FAX (815) 754-4280  
sales@peco1948.com

## INDIANA

POWER EQUIPMENT CO.  
SEE ILLINOIS

## IOWA

IOWA POWER PRODUCTS  
www.iowapower.com  
522 Brooks Road  
Iowa Falls, IA 50126  
(641) 648-2507  
FAX (641) 648-5013  
iowapower@iowapower.com

## KANSAS

KANSAS CITY POWER PROD.  
www.kcpp.com  
80 S. James Street  
Kansas City, KS 66118  
(913) 321-7040  
FAX (913) 321-7341  
info@kcpp.com

## KENTUCKY

M.T.A. DISTRIBUTORS  
SEE TENNESSEE

*Northern Kentucky-Cincinnati area*  
HAYWARD DISTRIBUTING  
SEE OHIO

## LOUISIANA

R.W. DISTRIBUTORS, INC.  
SEE MISSISSIPPI

## MAINE

EASTERN EQUIPMENT, INC.  
SEE NEW HAMPSHIRE

## MARYLAND

R.C.S. DISTRIBUTING, INC.  
www.rcsdist.com  
8019 Dorsey Run Road  
Jessup, MD 20794  
(410) 799-1850  
FAX (410) 799-1805  
sales@rcsdist.com

## MASSACHUSETTS

EASTERN EQUIPMENT, INC.  
SEE NEW HAMPSHIRE

## MICHIGAN

PACE, INC.  
www.pacelink.com  
739 South Mill Street  
Plymouth, MI 48170  
(734) 453-6258  
FAX (734) 453-5320  
pace@pacelink.com

*Northern Michigan*  
ENGINE POWER INC.  
SEE WISCONSIN

## MINNESOTA

GREAT NORTHERN EQUIP. DIST.  
www.gnedi.com  
20195 South Diamond Lake Road  
Rogers, MN 55374  
(763) 428-2237  
FAX (763) 428-4821  
chrisb@gnedi.com

## MISSISSIPPI

R.W. DISTRIBUTORS, INC.  
1046 Hwy 471  
Brandon, MS 39042  
(601) 939-0204  
FAX (800) 748-9965  
Mail Address  
P.O. Box 1409  
Brandon, MS 39043  
general@rwdist.net

## MISSOURI

KANSAS CITY POWER PRODUCTS  
SEE KANSAS

## MONTANA

E. C. POWER SYSTEMS  
SEE IDAHO

## NEBRASKA

Anderson Industrial Engines  
www.ai-engines.com  
5532 Center Street  
Omaha, NE 68106  
(402) 558-8700  
FAX (402) 558-8249  
info@ai-engines.com

## NEVADA

PACE WEST INC.  
SEE NORTHRN CALIFORNIA

TRU-POWER, INC.  
SEE SOUTHERN CALIFORNIA

E. C. POWER SYSTEMS  
SEE UTAH

## NEW HAMPSHIRE

EASTERN EQUIPMENT, INC.  
www.easternequipmentinc.com  
6 "B" Street  
Derry, NH 03038  
(603) 437-0407  
FAX (603) 437-0815  
gmiscoeaster@aol.com

## NEW JERSEY

R.C.S. DISTRIBUTING, INC.  
SEE MARYLAND

## NEW MEXICO

LIGHTBOURN EQUIPMENT  
SEE TEXAS (DALLAS)

## NEW YORK

EASTERN EQUIPMENT, INC.  
SEE NEW HAMPSHIRE

## NORTH CAROLINA

ENGINE DISTRIBUTION CENTER  
www.carolina-edc.com  
7206 Cessna Drive  
Greensboro, NC 27409  
(336) 664-0010  
FAX (336) 664-0506  
sales@carolina-edc.com

## NORTH DAKOTA

GREAT NORTHERN EQUIPMENT  
SEE MINNESOTA

## OHIO

HAYWARD DISTRIBUTING  
www.haydist.com  
4061 Perimeter Drive  
Columbus, OH 43228  
(614) 272-5953  
FAX (614) 272-5959  
rstruthers@haydist.com

*North Western Ohio*

PACE INC.  
SEE MICHAGAN

## OKLAHOMA

SMITH DISTRIBUTING CO.  
4110 N.W. 10th Street  
Oklahoma City, OK 73107  
(405) 947-6484  
FAX (405) 946-1251  
rlayman1@swbell.net

## OREGON

SCOTSCO, INC.  
www.scotsco.com  
16750 S.E. Kens Ct.  
Milwaukie, OR 97267  
(503) 653-7791  
FAX (503) 653-7838  
tfrandsen@scotsco.com

## PENNSYLVANIA

PAUL B. MOYER & SONS, INC.  
www.paulbmoyer.com  
190 S. Clinton Street  
Doylestown, PA 18901  
(215) 348-1270  
FAX (215) 348-7651  
information@paulbmoyer.com

## PUERTO RICO/VIRGIN ISLANDS

BELLA INTERNATIONAL  
www.bellainternational.com  
65 Infanteria, KM2.2  
Rio Piedras, PR 00923  
(787) 620-5838  
FAX (787) 620-5829

## RHODE ISLAND

EASTERN EQUIPMENT, INC.  
SEE NEW HAMPSHIRE

## SOUTH CAROLINA

ENGINE DISTRIBUTION CENTER  
SEE NORTH CAROLINA

## SOUTH DAKOTA

GREAT NORTHERN EQUIPMENT  
SEE MINNESOTA

## TENNESSEE

M.T.A. DISTRIBUTORS  
www.mtadistributors.com  
555 Hickory Hills Blvd.  
Whites Creek, TN 37189-9244  
(615) 299-8777  
FAX (615) 299-0464  
customerservice@mtadistributors.com

## TEXAS

LIGHTBOURN EQUIPMENT  
www.lightbourneequipment.com  
13649 Beta Road  
Dallas, TX 75244  
(972) 233-5151  
FAX (972) 661-0738  
dvb@lightbourneequipment.com

## LIGHTBOURN EQUIPMENT

8272 El Rio, Suite 110  
Houston, TX 77054  
(713) 741-2003  
FAX (713) 741-1909  
swk@lightbourneequipment.com

## UTAH

E. C. POWER SYSTEMS  
www.ecpower.com  
3738 West 2340 S. Suite E  
Salt Lake City, UT 84120  
(800) 886-1424 (800) 462-3370  
FAX (801) 886-1464  
ch eh@e-c-co.com

## VERMONT

EASTERN EQUIPMENT, INC.  
SEE NEW HAMPSHIRE

## VIRGINIA

TIDEWATER POWER EQUIP. CO.  
www.tpcco.com  
5795 Thurston Ave  
Virginia Beach, VA 23455  
(757) 464-1755  
FAX (800) 288-8953  
info@tpcco.com

## WASHINGTON

SCOTSCO, INC.  
SEE OREGON

## WEST VIRGINIA

HAYWARD DISTRIBUTING  
SEE OHIO

TIDEWATER POWER EQUIP. CO.  
SEE VIRGINIA

## WISCONSIN

ENGINE POWER, INC.  
www.enginepower.com  
1830 Executive Drive  
Oconomowoc, WI 53066-4831  
(262) 567-8575  
FAX (262) 567-2556  
postoff@enginepower.com

## WYOMING

E. C. POWER SYSTEMS  
SEE COLORADO

**Honda. The largest manufacturer of gasoline engines in the world.**



**GC SERIES**



**GS SERIES**



**GX SERIES**



**iGX SERIES**



**V-TWIN SERIES**



**MINI 4-STROKE SERIES**

**HONDA**  
**ENGINES**

Built like no other.

**For your nearest dealer call 1-800-426-7701 or visit us at [www.honda.com](http://www.honda.com).**

For optimum performance and safety we recommend you read the owner's manual before operating your Honda Power Equipment. Specifications subject to change without notice.

All images contained herein are either owned by American Honda Motor Co., Inc., or used under a valid license. It is a violation of federal law to reproduce these images without express written permission from American Honda Motor Co., Inc., or the individual copyright owner of such images. All rights reserved. HONDA, the HONDA ENGINES logo, Honda engine model names and their trade dress are trademarks of Honda Motor Co., Ltd. used under license from American Honda Motor Co., Inc. Many Honda engine and vehicle model names, and associated trade dress may be seen at [www.honda.com](http://www.honda.com). ©2009 American Honda Motor Co., Inc. C0314