HONDA

Power

Equipment

Owner's Manual
WATER PUMP
WB15

Click here to save this manual to your computer.

Thank you for purchasing a Honda water pump. We want to help you get the best results from your new water pump and to operate it safely. This manual contains the information on how to do that; please read it carefully.
This manual covers the operation and maintenance of Honda water pump: WB15
All information in this publication is based on the latest product information available at the time of printing. Honda Motor Co., Ltd. reserves the right to make changes at any time without notice and without incurring any obligation. No part of this publication may be reproduced without written permission.
This manual should be considered a permanent part of the water pump and should remain with it if it is resold.
It is illegal in some areas to operate an engine without a U.S.D.A. qualified spark arrester: Check local laws and regulations. An optional spark arrester for this water pump is available from your authorized Honda water pump dealer.

Safety Messages
Your safety and the safety of others is very important. We have provided important safety messages in this manual and on the water pump. Please read these messages carefully.
A safety message alerts you to potential hazards that could hurt you or others. Each safety message is preceded by a safety alert symbol ⚠ and one of three words: DANGER, WARNING, or CAUTION.
These mean:

⚠DANGER You WILL be KILLED or SERIOUSLY HURT if you don't follow instructions.

⚠WARNING You CAN be KILLED or SERIOUSLY HURT if you don't follow instructions.

⚠CAUTION You CAN be HURT if you don't follow instructions.

Each message tells you what the hazard is, what can happen, and what you can do to avoid or reduce injury.

Damage Prevention Messages
You will also see other important messages that are preceded by the word NOTICE.

This word means:

NOTICE Your water pump or other property could be damaged if you don't follow instructions.

The purpose of these messages is to help prevent damage to your water pump, other property, or the environment.

CONTENTS

⚠WARNING

To ensure safe operation —

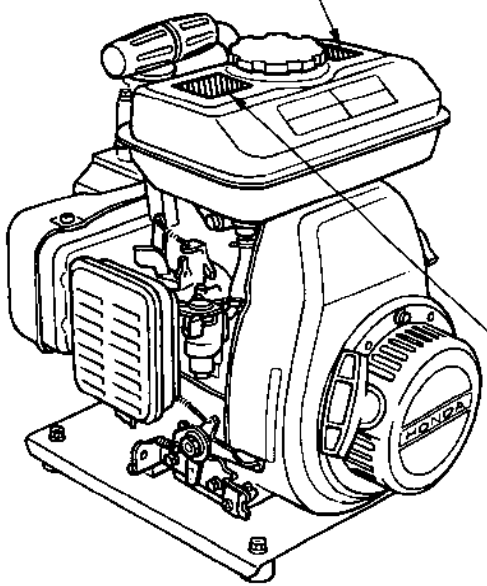
- **For safety, never pump flammable or corrosive liquids such as gasoline or acid. Also, to avoid pump corrosion, never pump sea water, muddy water, chemical solutions, or caustic liquids such as used oil, wine, or milk.**
- **Operate the pump on a level surface. If the engine is tilted, fuel spillage may result.**
- **To prevent fire hazards and to provide adequate ventilation, keep the pump at least 1 meter (3 feet) away from building walls and other equipment during operation. Do not place flammable objects close to the pump.**
- **Do not allow children to operate the pump. Keep children and pets away from the area of operation.**
- **Know how to stop the pump quickly, and understand the operation of all controls. Never permit anyone to operate the pump without proper instructions.**
- **Gasoline is extremely flammable and is explosive under certain conditions.**
  - **— Refuel in a well-ventilated area with the engine stopped. Do not smoke or allow flames or sparks in the area where the engine is refueled or where gasoline is stored.**
  - **— Do not overfill the fuel tank (there should be no fuel in the filler neck). After refueling, make sure the tank cap is closed properly and securely.**
- **Be careful not to spill fuel when refueling. Spilled fuel or fuel vapor may ignite. If any fuel is spilled, make sure the area is dry before starting the engine.**
- **Never run the engine in an enclosed or confined area. Exhaust gas contains poisonous carbon monoxide gas; exposure can cause loss of consciousness and may lead to death.**
- **The muffler becomes very hot during operation and remains hot for a while after stopping the engine. Be careful not to touch the muffler while it is hot. Let the engine cool before storing the pump indoors.**
- **A spark arrester is available as an optional part for this pump. It is illegal in some areas to operate an engine without a spark arrester. Check local laws and regulations before operating.**
- **Exhaust gas contains poisonous carbon monoxide. Avoid inhalation of exhaust gas. Never run the pump in a closed garage or confined area.**

SAFETY LABEL LOCATIONS

The labels shown here contain important safety information. Please read them carefully. These labels are considered permanent parts of your water pump, so if a label comes off or becomes hard to read, contact your authorized Honda water pump dealer for a replacement.

WARNING

DO NOT PUMP FLAMMABLE OR CORROSIVE MATERIALS. AN EXPLOSION OR FIRE COULD RESULT, CAUSING SEVERE PERSONAL INJURY.

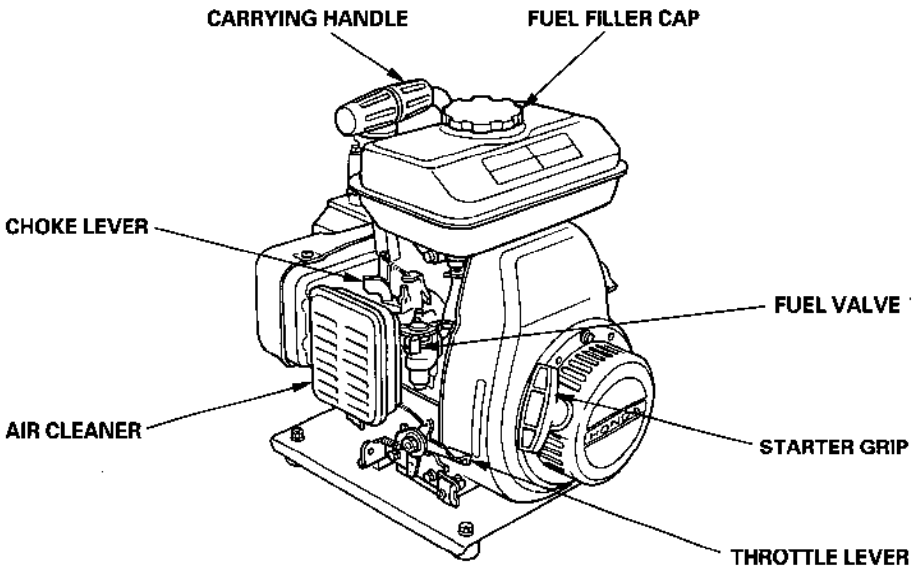


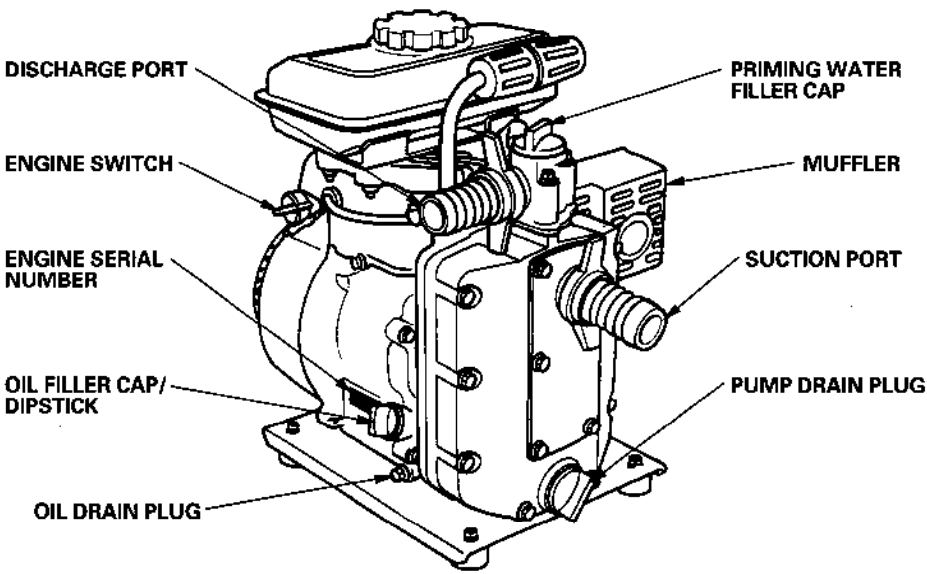
WARNING! DO NOT RUN WITHOUT PRIMING WATER. DRY OPERATION WILL BURN THE SEAL.

ACHTUNG! VOR DEM ANLAUFEN BEI TESTUND LEERLAUF GEHÄUSE MIT WASSER BEFÜLLEN. TROCKEN AUF ZERSTÖRT DIE DICHTUNGEN.

ATENCION! NO HAGA FANCIONAR SIN CEBADO FUNCIONAMIENTO SECO QUEMA EL SELLO.

ATTENSION! NE FAITE PAS FONCTIONNER SANS AMORSAGE. FANCTIONNEMENT AU SEC BRULE LE JOINT D'ETANCHEITE.





*Record the engine serial number for your future reference. Refer to this serial number when ordering parts, and when making technical or warranty inquiries (see page 27)
Engine serial number:_____

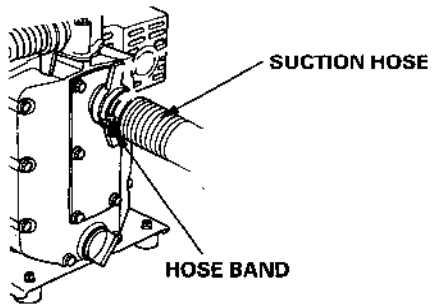
3. PREPARATION

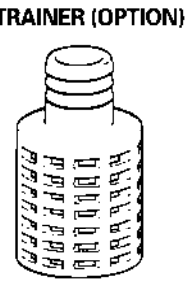
1. Suction hose

Use a commercially available hose, hose connector, and hose bands. The suction hose must be of reinforced, noncollapsible wall or wire braided hose to prevent suction collapse. The suction hose length should not be longer than necessary, as the pump performance is best when the pump is not far above the water level. Self-priming time is also proportional to the suction hose length. Using a longer suction hose will increase the self-priming time.
The strainer is provided with the pump and should be attached to the end of the suction hose with a band as shown.

NOTICE

Always install the strainer on the end of the suction hose before pumping. The strainer will prevent debris from entering the pump that can cause clogging or pump damage.

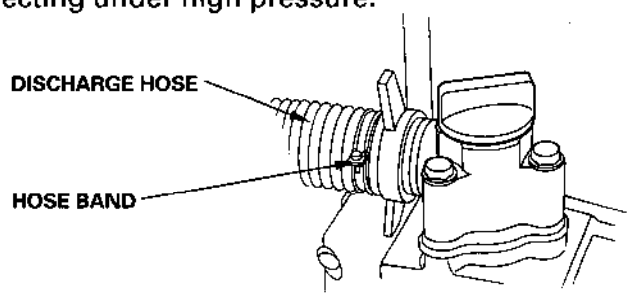




2. Discharge hose

Use a commercially available hose, hose connector, and hose band. A short, large-diameter hose is most efficient. A long or small-diameter hose increases fluid friction and reduces pump output.

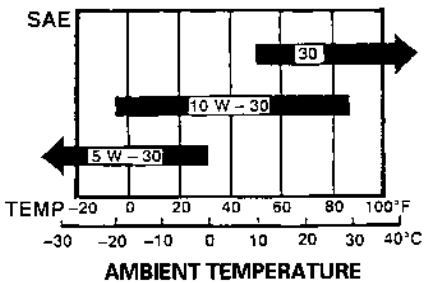
Tighten the hose band securely to prevent the hose from disconnecting under high pressure.



3. Engine oil

NOTICE

- **Engine oil is a major factor affecting engine performance and service life. Nondetergent oils and 2-stroke oils are not recommended because they have inadequate lubricating characteristics.**
- **Check the oil level with the pump on a level surface and the engine stopped.**



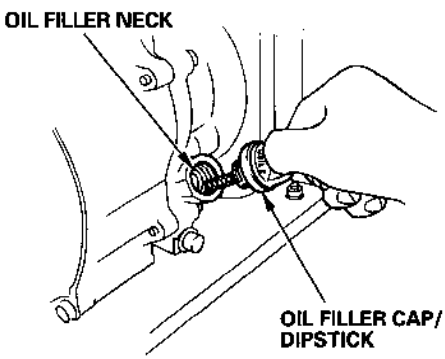
Use Honda 4-stroke oil, or an equivalent high detergent, premium quality motor oil certified to meet or exceed U. S. automobile manufacturer's requirements for Service Classification SG, SF. Motor oils classified SG, SF will show this designation on the container.

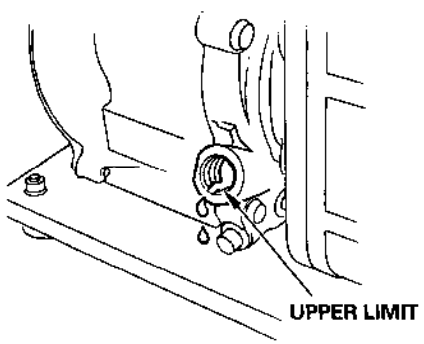
SAE 10W/30 is recommended for general, all-temperature use.
Other viscosities shown in the chart may be used when the average temperature in your area is within the indicated range.

1. Remove the oil filler cap/dipstick and wipe it clean.
2. Insert the filler cap/dipstick into the oil filler neck, but do not screw it in.
3. If the level is low, fill to the top of the oil filler neck with the recommended oil.

NOTICE

Running the engine with insufficient oil can cause serious engine damage.





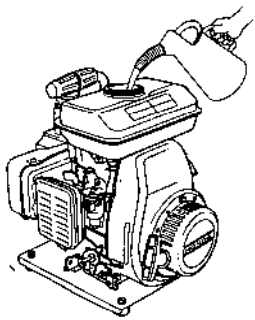
Fuel Recommendation

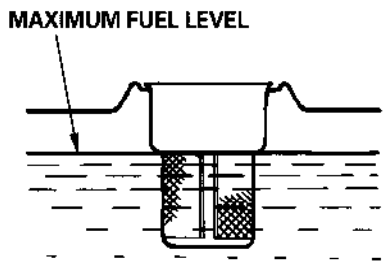
1. Remove the filler cap check fuel level.
2. Refill the tank if the fuel level is low. Do not fill above the shoulder of the fuel strainer.

⚠WARNING

- **Gasoline is extremely flammable and is explosive under certain conditions.**
- **Refuel in a well-ventilated area with the engine stopped. Do not smoke or allow flames or sparks in the area where the engine is refueled or where gasoline is stored.**
- **Do not overfill the fuel tank (there should be no fuel in the filler neck). After refueling, make sure the tank cap is closed properly and securely.**
- **Be careful not to spill fuel when refueling. Spilled fuel or fuel vapor may ignite. If any fuel is spilled, make sure the area is dry before starting the engine.**
- **Avoid repeated or prolonged contact with skin or breathing of vapor.**
  KEEP OUT OF REACH OF CHILDREN.

Fuel tank capacity: 1.4 ℓ (0.37 US gal , 0.31 Imp gal)





Use unleaded gasoline with a pump octane rating of 86 or higher.
This engine is designed to operate on unleaded gasoline.
Unleaded gasoline produces fewer engine and spark plug deposits and extends exhaust system life.

NOTICE

Fuel can damage paint and some types of plastic. Be careful not to spill fuel when filling your fuel tank. Damage caused by spilling fuel is not covered under warranty.

Never use stale or contaminated gasoline or oil/gasoline mixture. Avoid getting dirt or water in the fuel tank.

Occasionally you may hear light "spark knock" or "pinging" (metallic rapping noise) while operating under heavy loads. This is no cause for concern.
If spark knock or pinging occurs at a steady engine speed, under normal load, change brands of gasoline. If spark knock or pinging persists, see an authorized Honda water pump dealer.

NOTICE

Running the engine with persistent spark knock or pinging can cause engine damage.

Running the engine with persistent spark knock or pinging is misuse, and the Distributor's Limited Warranty does not cover parts damaged by misuse.

Oxygenated Fuels
Some conventional gasolines are being blended with alcohol or an ether compound. These gasolines are collectively referred to as oxygenated fuels. To meet clean air standards, some areas of the United States and Canada use oxygenated fuels to help reduce emissions.
If you use an oxygenated fuel, be sure it is unleaded and meets the minimum octane rating requirement.
Before using an oxygenated fuel, try to confirm the fuel's contents. Some states/provinces require this information to be posted on the pump.
The following are the EPA approved percentages of oxygenates:

ETHANOL – (ethyl or grain alcohol) 10% by volume
You may use gasoline containing up to 10% ethanol by volume. Gasoline containing ethanol may be marketed under the name "Gasohol".

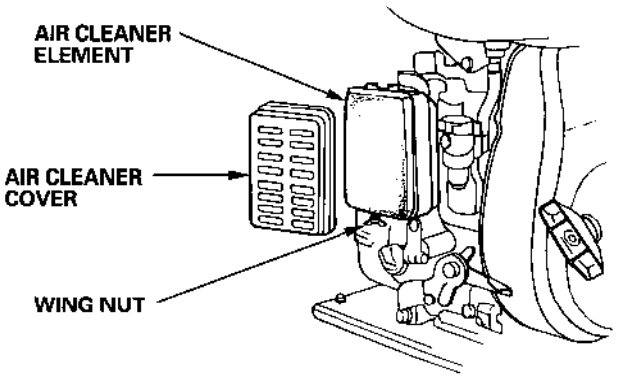
MTBE – (methyl tertiary butyl ether) 15% by volume
You may use gasoline containing up to 15% MTBE by volume.

METHANOL – (methyl or wood alcohol) 5% by volume
You may use gasoline containing up to 5% methanol by volume as long as it also contains cosolvents and corrosion inhibitors to protect the fuel system. Gasoline containing more than 5% methanol by volume may cause starting and/or performance problems. It may also damage metal, rubber, and plastic parts of your fuel system.

If you notice any undesirable operating symptoms, try another service station or switch to another brand of gasoline.
Fuel system damage or performance problems resulting from the use of an oxygenated fuel containing more than the percentages of oxygenates mentioned above are not covered under warranty.

4. Air cleaner

Loosen the wing nut and remove the air cleaner cover.
Check the air cleaner element to be sure it is clean and in good condition. Clean or replace the element if necessary (p. 18).



NOTICE

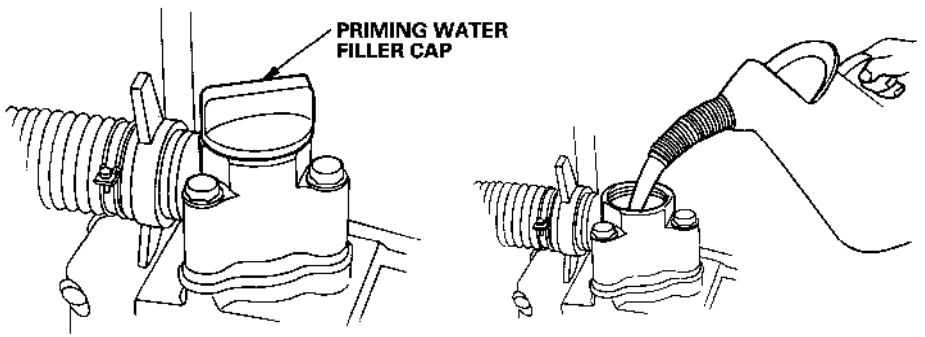
Never run the engine without the air cleaner. Rapid engine wear will result from contaminants, such as dust and dirt being drawn into the engine.

5. Priming water

The pump chamber should be completely filled before operating.

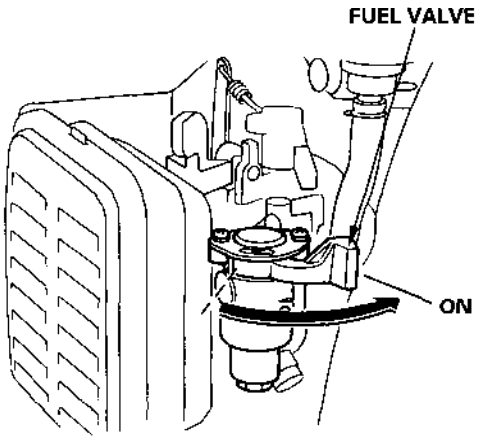
NOTICE

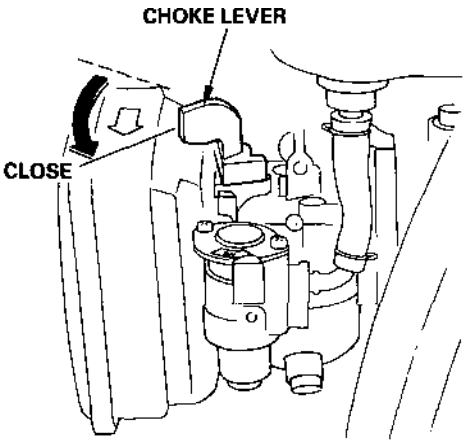
Do not operate the pump without priming water or the pump will overheat. Operating the pump dry will destroy the pump seal. If the unit has been operated dry, stop the engine immediately and allow the pump to cool before adding priming water.



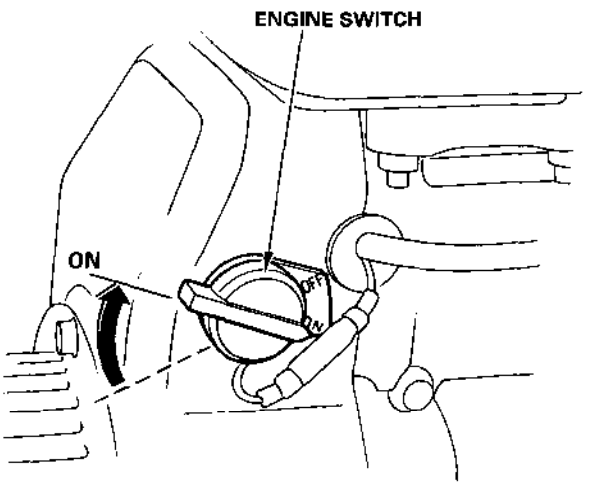
1. Turn the fuel valve ON.
2. Close the choke lever.

Do not use the choke if the engine is warm or the ambient temperature is high.

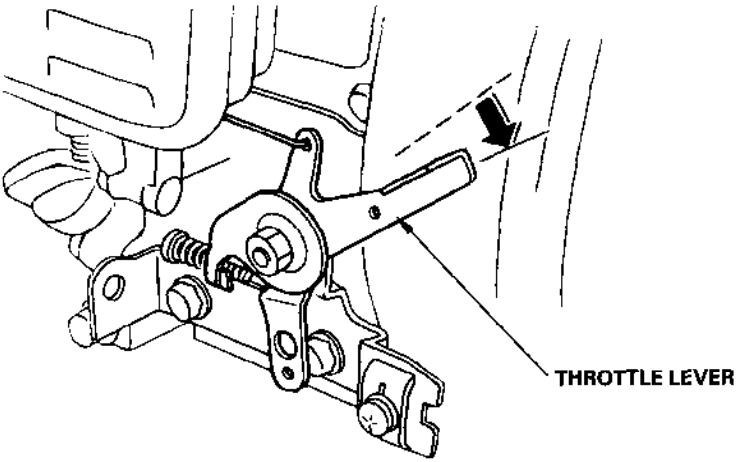




3. Turn the engine switch to the ON position.



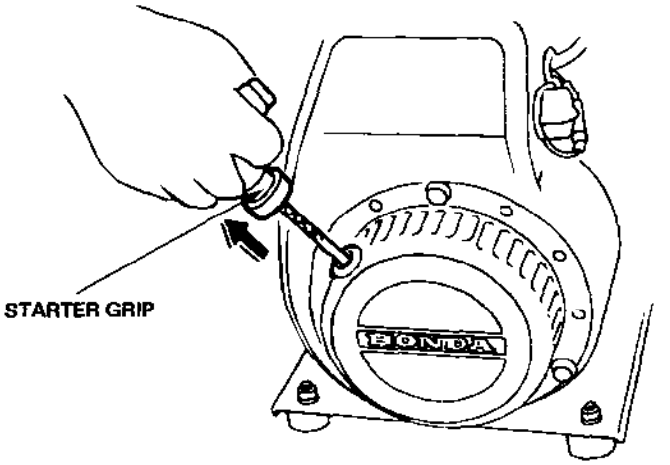
4. Move the throttle lever downward slightly, just past the idle position.



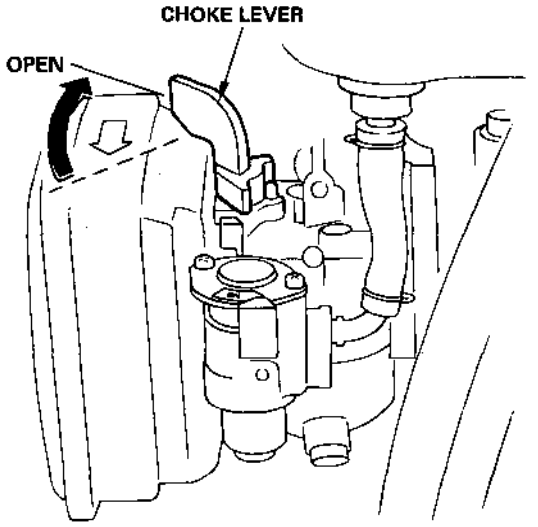
5. Pull the starter grip lightly until resistance is felt, then pull it briskly.

NOTICE

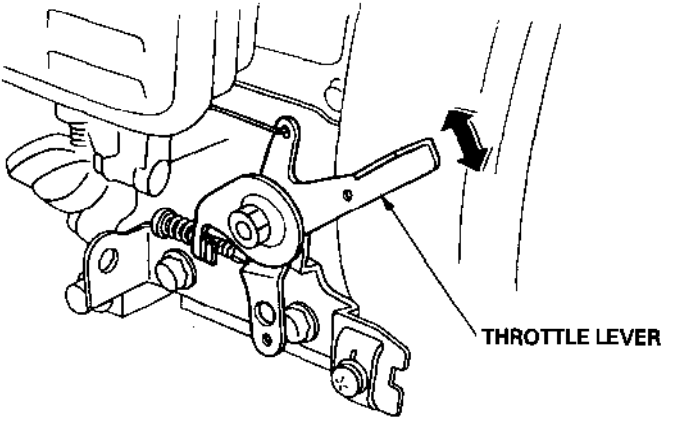
Do not allow the starter grip to snap back against the engine. Return it slowly to prevent damage to the starter.



1. As the engine warms up, gradually open the choke.



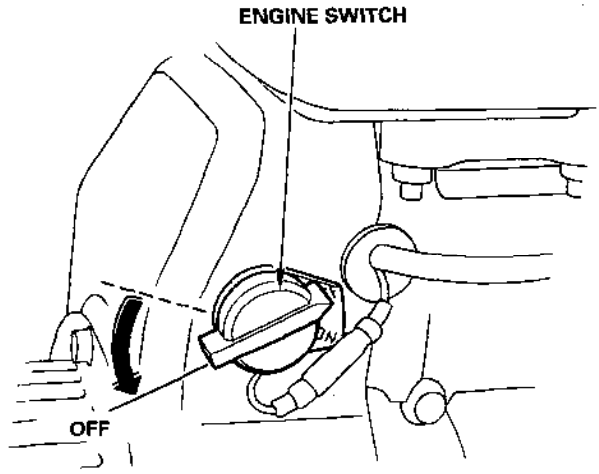
2. Set the throttle at the desired speed.



6. STOPPING THE ENGINE

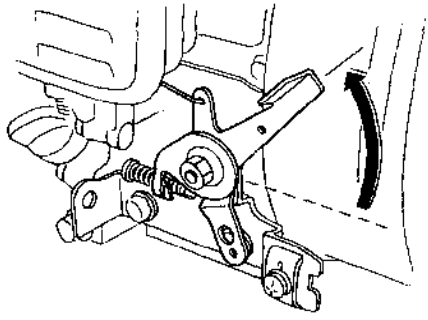
In an emergency:

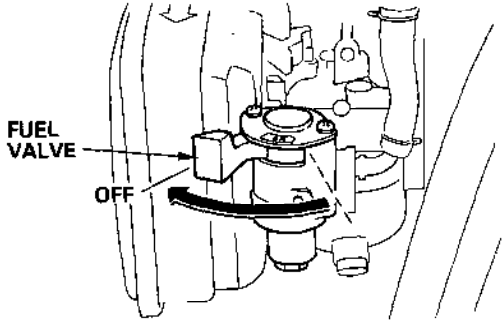
1. To stop the engine in an emergency, turn the engine switch to the OFF position.



In normal use:

1. Move the throttle lever all the way up.
2. Turn the engine switch to the OFF position.
3. Turn the fuel valve OFF.





High altitude operation
At high altitude, the standard carburetor air-fuel mixture will be too rich. Performance will decrease, and fuel consumption will increase. A very rich mixture will also foul the spark plug and cause hard starting.

High altitude performance can be improved by specific modifications to the carburetor. If you always operate your pump at altitudes above 6,000 feet (1,800 meters) have an authorized Honda water pump dealer perform this carburetor modification.

If any case, engine horsepower will decrease about 3.5% for each 1,000 foot (300 meter) increase in altitude.

NOTICE

When the carburetor has been modified for high altitude operation, the air-fuel mixture will be too lean for low altitude use. Operation at altitudes below 6,000 feet (1,800 meters) with a modified carburetor may cause the engine to overheat and result in serious engine damage. For use at low altitudes, have an authorized Honda water pump dealer return the carburetor to original factory specifications.

7. MAINTENANCE

The purpose of the Maintenance Schedule is to keep the pump in the best operating condition. Inspect and service as indicated in the Maintenance Schedule below.

⚠WARNING

Shut off the engine before performing any maintenance. If the engine must be operated, make sure the area is well-ventilated. The exhaust contains poisonous carbon monoxide gas; exposure can cause loss of consciousness and may lead to death.

NOTICE

Use only genuine HONDA parts or their equivalent for maintenance or repair. Replacement parts which are not of equivalent quality may damage the pump.

Maintenance Schedule

ITEM / REGULAR SERVICE PERIOD — Perform at every indicated month or operating hour interval, whichever comes first.		Dairy	First month or 20 Hrs.	Every 3 months or 50 Hrs.	Every 6 months or 100 Hrs.	Every year or 300 Hrs.
Engine oil	Inspection	○				
	Change		○		○	
Air cleaner element	Inspection	○				
	Cleaning			○(1)		
Spark plug maintenance					○	
Tappet clearance adjustment						○(2)
Combustion chamber cleaning						○(2)
Fuel tank cleaning						○(2)
Fuel line		every 2 years (Replace if necessary)				
Impeller inspection						○(2)
Casing cover inspection						○(2)
Inlet valve inspection						○(2)

NOTE: (1) Service more frequently when used in dusty areas.

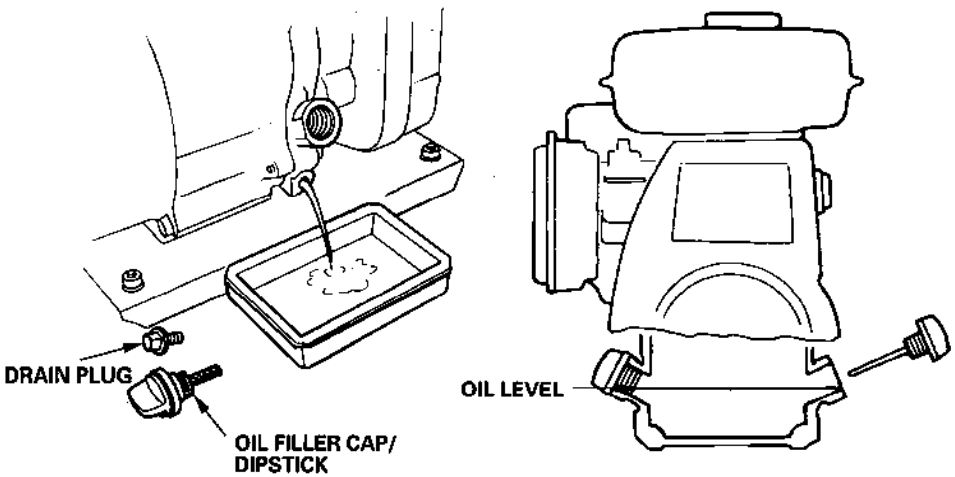
(2) These items should be serviced by an authorized Honda water pump dealer, unless the owner has the proper tools and is mechanically proficient. See the Honda Shop Manual.

1. Changing oil

Drain the oil while the engine is still warm to assure rapid and complete draining.

1. Remove the oil filler cap/dipstick and the drain plug to drain the oil.
2. Reinstall the drain plug and tighten securely.
3. Refill with the recommended oil (see page 7) to the specified level.

OIL CAPACITY: 0.45 ℓ (0.48 US qt , 0.40 Imp qt)



Please dispose of used motor oil in a manner that is compatible with the environment. We suggest you take it in a sealed container to your local recycling center or service station for reclamation. Do not throw it in the trash or pour it on the ground.

2. Air cleaner service

A dirty air cleaner will restrict air flow to the carburetor. To prevent carburetor malfunction, service the air cleaner regularly. Service more frequently when operating the pump in extremely dusty areas.

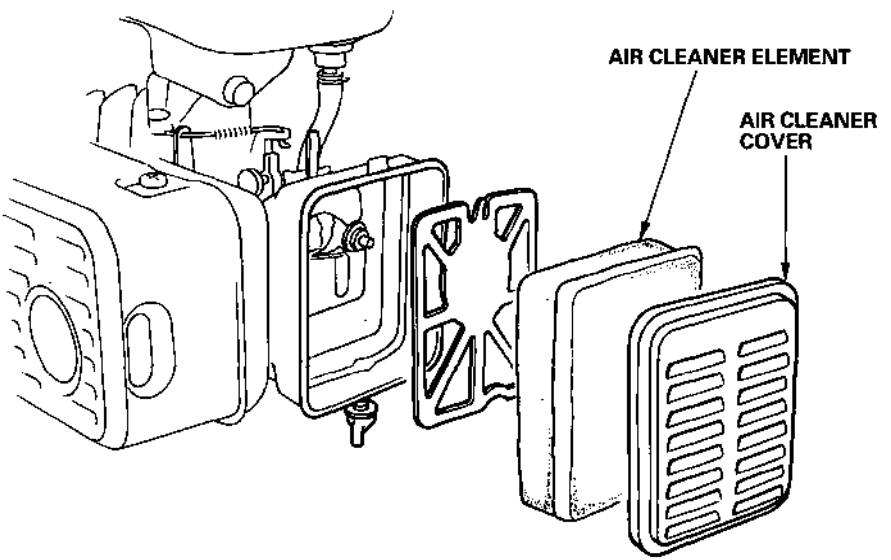
⚠WARNING

Never use gasoline or low flash point solvents for cleaning the air cleaner element. A fire or explosion could result.

NOTICE

Never run the engine without the air cleaner. Rapid engine wear will result from contaminants, such as dust and dirt being drawn into the engine.

1. Unscrew the wing nut, remove the air cleaner cover and remove the foam element.
2. Wash the element in a solution of household detergent and warm water, then rinse thoroughly, or wash in nonflammable or high flash point solvent. Allow the element to dry thoroughly.
3. Soak the element in clean engine oil and squeeze out the excess oil. The engine will smoke during initial start-up if too much oil is left in the element.
4. Reinstall the air cleaner element and the cover.



3. Spark plug service

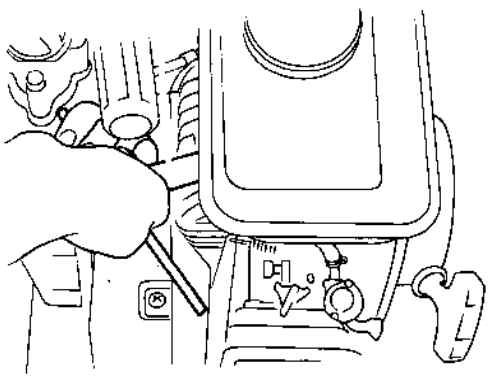
Recommended spark plug: BPM-4A, BPMR-4A (NGK)

To ensure proper engine operation, the spark plug must be properly gapped and free of deposits.

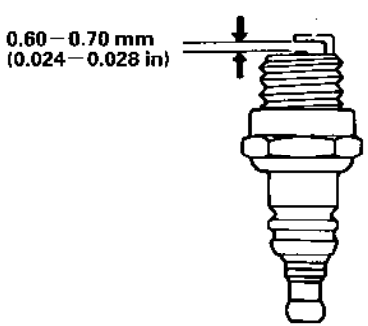
1. Remove the spark plug.

⚠WARNING

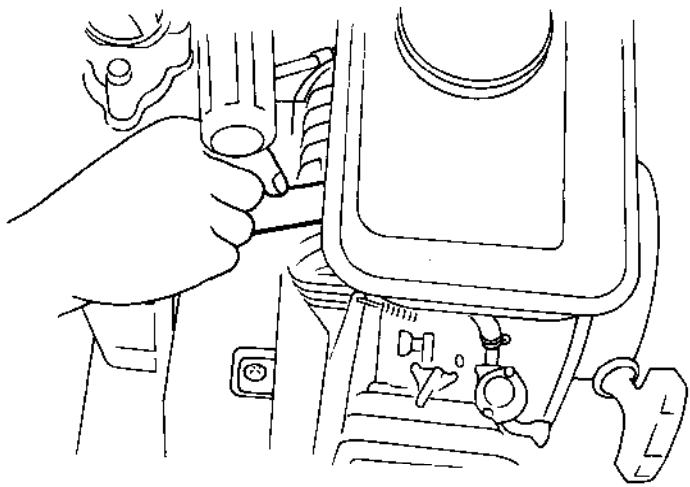
The muffler becomes very hot during operation and remains hot for a while after stopping the engine. Be careful not to touch the muffler while it is hot.



2. Visually inspect the spark plug. Discard it if the insulator is cracked or chipped. Clean the spark plug with a wire brush if it is to be reused.
3. Measure the plug gap with a feeler gauge.
   Correct as necessary by bending the side electrode.
   The gap should be:
   0.60—0.70 mm (0.024—0.028 in)



4. Check that the spark plug washer is in good condition, and thread the spark plug in by hand to prevent cross-threading.



5. After the spark plug is seated, tighten with a spark plug wrench to compress the washer.

– If installing a new spark plug, tighten 1/2 turn after the spark plug seats to compress the washer.
– If reinstalling a used spark plug, tighten 1/8 – 1/4 turn after the spark plug seats to compress the washer.

NOTICE

- **The spark plug must be securely tightened. An improperly tightened spark plug can become very hot and may cause engine damage.**
- **Use only the recommended spark plug or equivalent. A spark plug which has an improper heat range may cause engine damage.**

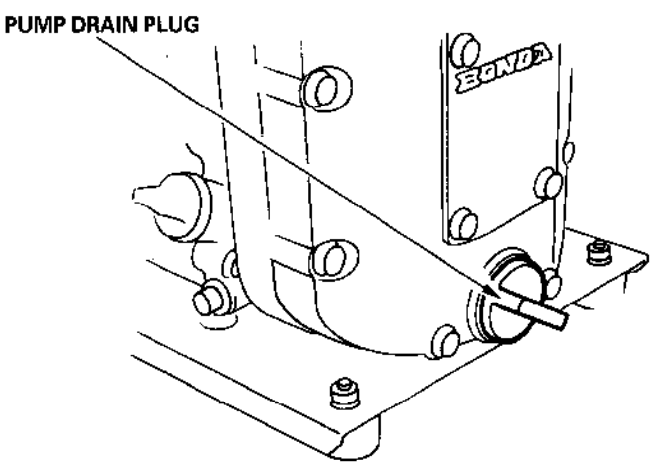
When transporting the water pump, turn the engine switch and the fuel valve OFF. Keep the water pump level to prevent fuel spillage. Fuel vapor or spilled fuel may ignite.

⚠WARNING

Contact with a hot engine or exhaust system can cause serious burns or fires. Let the engine cool before transporting or storing the water pump.

Before storing the pump for an extended period;

1. Be sure the storage area is free of excessive humidity and dust.
2. Clean the pump interior.....
   Sediment will settle in the pump if it has been used in muddy or sandy water, or water containing heavy debris. Pump clean water through the pump before shutting down or the impeller may be damaged when restarting. After flushing, remove the pump drain plug, and drain as much water as possible from the pump housing. After the pump is dry, spray HONDA MULTI PURPOSE LUBE AND RUST PENETRANT into the pump housing through the inlet port, outlet port, and drain hole, then install the drain plug.

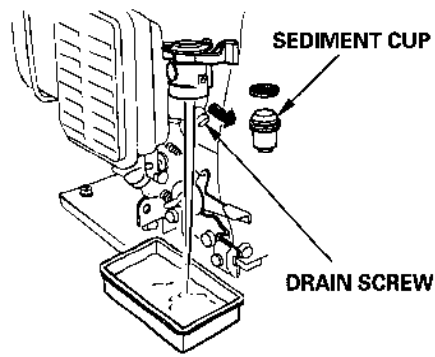


3. Service the fuel system according to the table below:

⚠WARNING

Gasoline is extremely flammable and is explosive under certain conditions. Perform this task in a well-ventilated area with the engine stopped. Do not smoke or allow flames or sparks in the area during this procedure.

a. With the fuel valve OFF, remove the carburetor drain screw.
b. Drain the gasoline from the carburetor into a suitable container.
c. If the tank is to be drained, turn the fuel valve ON and drain the fuel in the tank into a suitable container.
d. Reinstall the drain screw and turn the fuel valve OFF.



STORAGE TIME	RECOMMENDED SERVICE PROCEDURE TO PREVENT HARD STARTING
Less than 1 month	No preparation required
1 to 2 months	Fill with fresh gasoline and add gasoline conditioner *.
2 months to 1 year	Fill with fresh gasoline and add gasoline conditioner *. Drain the carburetor float bowl.
1 year or more	Fill with fresh gasoline and add gasoline conditioner *. Drain the carburetor float bowl. After removal from storage, drain the stored gasoline into a suitable container, and fill with fresh gasoline before starting.

*Use gasoline conditioners that are formulated to extend storage life. Contact your authorized Honda water pump dealer for recommendations of gasoline conditioners.

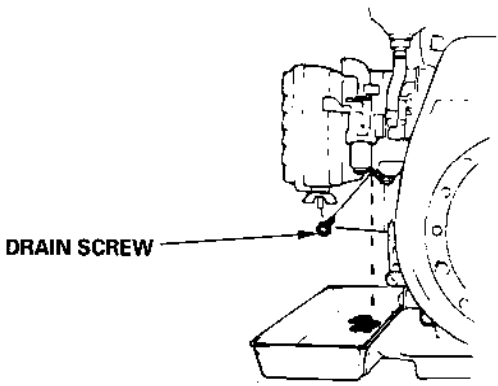
4. Remove the spark plug, and pour about a tablespoon of clean engine oil into the cylinder. Crank the engine several revolutions to distribute the oil, then reinstall the spark pulg.
5. Slowly pull the starter grip until resistance is felt. At this point, the piston is coming up on its compression stroke and both the intake and exhaust valves are closed.Storing the engine in this position will help to protect it from internal corrosion.
6. Change the engine oil (see page 17).
7. Check the air cleaner and clean as necessary (see page 18).
8. Cover the water pump to keep out dust.

9. TROUBLESHOOTING

When the engine will not start:
1. Is the engine switch ON?
2. Is there fuel in the fuel tank?
3. Is the fuel valve ON?
4. Is gasoline reaching the carburetor?
   To check, remove the float bowl drain screw and turn the fuel valve ON.
   Fuel should flow out freely.

⚠WARNING

If any fuel is spilled, make sure the area is dry before testing the spark plug or starting the engine. Spilled fuel or fuel vapor may ignite.

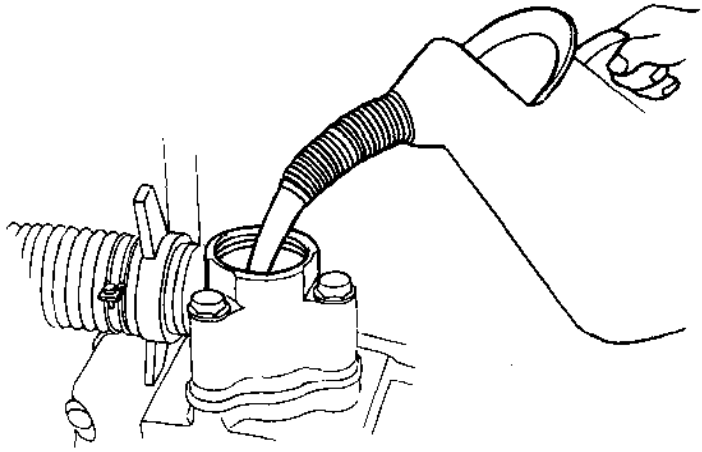


5. Is there a spark at the spark plug?

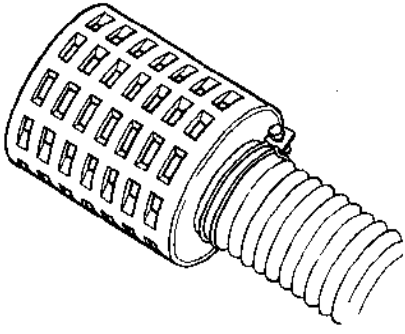
   a. Remove the spark plug cap. Clean any dirt from around the spark plug base, then remove the spark plug.
   b. Install the spark plug in the plug cap.
   c. Turn the engine switch ON.
   d. Ground the side electrode to any engine ground, pull the recoil starter to see if sparks jump across the gap.
   e. If there are no sparks, replace the plug.
      If OK, install the plug and try to start the engine.

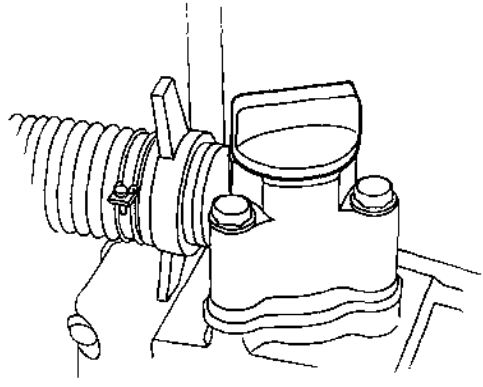
6. If the engine still does not start, take the pump to an authorized Honda water pump dealer.

When the pump does not pump water:
1. Is the pump fully primed?



2. Is the strainer clogged?
3. Are the suction hose bands installed securely?
4. Is the suction hose damaged?
5. Is the suction hose connector washer installed?
6. Is the suction head too high?
7. If the pump still does not pump the water, take the pump to an authorized Honda water pump dealer.





10. SPECIFICATIONS

Dimensions and Weight

Length	335 mm (13.2 in)
Width	270 mm (10.6 in)
Height	350 mm (13.8 in)
Dry weight	13.0 kg (28.7 lbs)

Engine

Model	G100 K2
Engine type	4-stroke, side valve, 1 cylinder
Displacement [Bore × Stroke]	97 cm^3 (5.9 cu-in) 52 x 46 mm (2.0 x 1.8 in)
Max. output	1.8 kW (2.5 PS, 2.5 bhp) at 4,200 rpm
Max. torque	4.5 N•m (0.45 kg-m, 3.3 ft-lb) at 3,000 rpm
Cooling system	Forced air
Ignition system	Transistorized magneto
PTO shaft rotation	Counterclockwise

Pump

Suction port diameter	38 mm (1.5 in)
Discharge port diameter	38 mm (1.5 in)
Rated revolutions	3,800 rpm
Total head	38 m (124.7 ft)
Suction head	7 m (23.0 ft)
Capacity	200 ℓ (52.8 US gal , 44.0 Imp gal)/min
Self-priming time	120 sec at 5 m (16.5 ft)

11. CUSTOMER SERVICE INFORMATION

Honda power equipment dealership personnel are trained professionals. They should be able to answer any question you may have. If you encounter a problem that your dealer does not solve to your satisfaction, please discuss it with the dealership's management. The Service Manager or General Manager can help. Almost all problems are solved in this way.
If you are dissatisfied with the decision made by the dealership's management, contact the Honda Power Equipment Customer Service Office. You can write to:

American Honda Motor Co., Inc.
Honda Power Equipment Division
Customer Service Office
4475 River Green Parkway
Duluth, Georgia 30136-2565

Or telephone: (404)497-6400

When you write or call, please give us this information:

- Model and serial number (see page 5)
- Name of dealer who sold the water pump to you
- Name and address of dealer who services your water pump
- Date of purchase
- Your name, address, and telephone number
- A detailed description of the problem

Current customer service contact information:

United States, Puerto Rico, and U.S. Virgin Islands:

Honda Power Equipment dealership personnel are trained professionals. They should be able to answer any question you may have. If you encounter a problem that your dealer does not solve to your satisfaction, please discuss it with the dealership's management. The Service Manager or General Manager can help. Almost all problems are solved in this way.

If you are dissatisfied with the decision made by the dealership's management, contact the Honda Power Equipment Customer Relations Office. You can write:

American Honda Motor Co., Inc.
Power Equipment Division
Customer Relations Office
4900 Marconi Drive
Alpharetta, GA 30005-8847

Or telephone: (770) 497-6400 M-F, 8:30 am - 7:00 pm EST

When you write or call, please provide the following information:

- Model and serial numbers
- Name of the dealer who sold the Honda power equipment to you
- Name and address of the dealer who services your equipment
- Date of purchase
- Your name, address, and telephone number
- A detailed description of the problem

12. INDEX

HONDA

HONDA MOTOR CO., LTD. TOKYO, JAPAN

31YB0606
00X31-YB0-6060

(AH)(英)(N) (HC) 10009406
PRINTED IN JAPAN K1