HONDA POWERED
HOT PRESSURE WASHER

DPHPW 4000-HD

INSTRUCTION MANUAL
Congratulations Owner

Congratulations on your purchase of this high quality Hot Water Pressure Washer. This machine is designed to give you many years of service, however, reasonable care and routine maintenance is mandatory. Proper operator’s use is required.

As you proceed through the owner’s manual it is imperative that you follow and adhere to the following safety messages.
Important Safety Instructions

For your own safety

This appliance must,

- Only be used by persons who have been instructed in its correct usage and is explicitly commissioned with the task of operating it
- Only be operated under supervision
- NOT be used by children
SAFETY INSTRUCTIONS

Your safety and the safety of others are very important. We have provided important safety messages in this manual and on the machine. 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 these three words: DANGER, WARNING, or CAUTION.

These words mean:

**DANGER!** You may be SERIOUSLY HURT or KILLED if you don’t follow instructions.

**Warning!** You COULD be SERIOUSLY HURT or KILLED if you don’t follow instructions.

**CAUTION!** You CAN be HURT if you don’t follow instructions.

**Damage Prevention Messages**

You will see other important messages that are preceded by the word NOTICE.

This word means:

NOTICE your machine or other property could be damaged if you don’t follow instructions.

The purpose of these messages is ensure your safety and to help prevent damage to your machine, other property or the environment.

1.1 Operator safety instructions

**DANGER!**

Do not attempt to install or operate this machine until you have read this manual completely. If you or your operator can not read English have this manual explained fully before attempting to operate this equipment.

**WARNING!**

This machine is designed to produce very high pressure and temperature at the gun tip. To prevent injury or damage, hold cleaning gun securely at all times when pump is in operation and fluid is being sprayed.

**CAUTION!**

Check cleaning equipment, remote hose, gun, wand and fittings prior to operation. Do not operate this machine with a damaged worn hose, electrical device or connections.
**WARNING!**

- For your safety, if you smell gas:
- Open windows to ensure ventilation if this product is used indoor.
- Do not touch or spray electrical switches.
- Turn off breaker switch supplying power to unit. Close gas supply valve to unit.
- Extinguish any open flame.
- Immediately evacuate premises and call your gas supplier and fire department immediately.

**DANGER!**

Do not operate the unit when there is an odor of gas present. If you operate the unit when there is an odor of gas, it could result in injury to you or other personnel.

Tampering with the machine’s factory preset unloaded valve settings and/or the pressure relief valve setting could result in a machine explosion. Do not attempt to change the settings. Discontinue use if a malfunction occurs and contact your local authorized distributor.

Do not operate unit with a malfunctioning burner or burner controls. Inspect burner and burner control operation before each use. Failure to do so may result in an explosion. If you suspect a problem with the burner, discontinue use immediately and contact your local authorized distributor.

Machines can cause an explosion when operated near flammable materials and vapors. Do not use this machine with or near fuels, grain dust, solvents, thinners, or other flammable materials.

This unit must be installed in compliance with all applicable gas codes. Failure to do so could result in injury to you or other personnel.

Do not point the gun at people or animals! Results could be fatal!

Do not refuel either fuel while machine is running; allow the machines to cool off before fuel is refilled.

2. **Description**

2.1 **Purpose**

This durable LPG hot water high pressure Cleaner has been designed for professional use in:

- Agriculture
- Industry
- Transport industry
- Automotive cleaning
- Municipal facilities
- Cleaning trade
- Construction industry
• Food industry
• Etc.

Always use the cleaner as described in this operating instruction manual. Any other use may
damage the cleaner or the surface to be cleaned or may result in severe injury of persons.

2.2 Operating elements

Spray gun and lance
Pressure hose
LPG heater
Temperature adjustment
Pressure adjustment
Chemical injection
Triplex plunger pump

Handle
Water inlet
Foot plate for LPG tank
3. Before starting your LPG Hot Water Pressure Washer

3.1 Installation requirements

GENERAL INFORMATION insures that all codes are followed in the installation of your hot water pressure washer. Installation is easy but good plumbing must be followed. If uncertain, a qualified electrician and plumber should be consulted.

LOCATION

Place the Pressure Washer in a clean, well ventilated, dry location; allowing access for normal maintenance. Do not install washer where overspray will be directed toward or around the unit. Do not install unit in an area where combustible materials are used or stored.

FREEZE PREVENTION

The pump, plumbing and wash hose may burst by freezing water within them. To avoid costly repair:

Install and store washer in a heated area where temperature exceeds 32 degrees °F. (≥0°C)

Install all lines leading to the washer that are exposed to freezing temperatures.

During extended shutdown periods, thoroughly drain the water system, chemical system and wash hose. Fill with anti-freeze solution.

If your pressure washer is storage in cold surroundings during winter you must release the freezing prevention screw on the LPG heater shown on below photo.
WATER SUPPLY- Test the water source to determine water hardness. If the hardness exceeds seven (7) grains, a suitable water softener should be installed. Installing a water softener greatly improves chemical action and prevents “spotting” on glass, chrome and other washed surfaces. If local water pressure exceeds 60 PSI, a water pressure reducing valve must be installed.

If the water source is not adequate (capable of supplying a minimum of 3GPM or more than the volume of the pump at a pressure of a minimum 20 PSI) a tank or other suitable water source must be provided. (Running a pump without sufficient volume will damage the seals and or shorten pump life dramatically).

CARE OF High Pressure hose

Following these suggestions will increase the life of your high pressure hose:

1. Do not drag hose over sharp objects that could damage its cover.
2. Do not allow hose to become a “trip hazard”.
3. Do not tug the hose if it is caught around tires. Dislodge without pulling stretching or jerking the hose.
4. Do not drag hose “down the line” behind mobile wash units.
5. Do not leave hose out in freezing weather. If accidentally frozen, allow to thaw, remove tip and flush before using.
6. Do not allow the hose to be run over. The wire braid will flatten causing a weak spot in the hose leading to hose failure, and the hose will have to be replaced.

3.2 Setting up your cleaner

Every fuel burning appliance, including this pressure washer, depends on a proper mix of fuel and air (by weight) for proper combustion. Therefore some adjustment of the air regulation to the LPG burner may be necessary to take account of altitude and the resulting air pressure. This is true whether your fuel is LPG, diesel or gasoline. Your Multi-Power hot pressure washer was thoroughly tested and adjusted for optimum performance before it left our factory. The factory is located approximately 200ft above sea level, and combustion settings are optional for that elevation and below.

1. Before using the cleaner for the first time, check carefully to detect any fault or damage.
2. Run this machine only when it is in perfect condition.
3. Set the brake before use of the machine.

3.3 Assembling your new pressure washer

Accessories included and needed for assembly of your new hot water pressure washer
Assembly of handle

Mount nuts on screws and tighten all carefully.

Assembly of the wheels and axles

Place U bolt at wheel Axle. Screw wheel axle on the frame.

Place disk and Pin on axle, bend the pin to secure disk and tires, mount nut and tighten it carefully.

Assembly of the hook for the gun and high pressure hose for storage
Mounting of batteries in your LPG heater

Open the battery box above the LPG heater and follow instructions on how to place the “D” batteries in the box.

Connect your LPG gas tank

Place tank on the frame next to engine and LPG heater. Place belt behind vertical bar at frame and cross the belt like shown above. Tighten belt so the tank is placed solid on the frame.

How to use detergent
Connect black nozzle to the lance, place detergent hose and filter in the detergent bottle.

**Connection of the high pressure hose to the gun and the pump**

Pull back movable part on the quick connector and press in the hose

**Connection of the lance and the gun**

Press the lance on gun screw part until the lance is thoroughly fixed to the gun. (Right tight & left Loose)

**IMPORTANT!** Fill oil on your pressure pump before starting
Unscrew oil plug, and fill in oil (use only oil prepared for use in oil bath drive plunger & piston high pressure pumps) until visible in the glass sight.

Connect water supply

Connect your water hose at the threaded swivel coupling located either at the LPG heater or at the right side of your high pressure pump as shown on the pictures.

Adjustment of water temperature on LPG heater

Connection of your drain tube cleaner to the gun
3.4 Before starting up engine the following must be checked

**PRE-OPERATION CHECK and SET-UP PROCEDURES**

- Pump oil (use only oil prepared for use in oil bath drive plunger & piston high pressure pumps)
- Cold water supply
- Hose, wand and nozzle
- Water filter (intact, non-restrictive)
- Engine fuel (unleaded 86 octane or higher)
- Engine oil (SAE 10W30)
- Burner fuel; authorized LPG tank

3.5 Set up procedures

1. Attach water hose to inlet connector. Minimum flow should be based upon the specs of the machine.
2. Attach high pressure hose using quick coupler. Lock coupler securely into place by pulling back coupler collar and inserting it onto discharge nipple and then pushing collar forward to lock in place.
3. Check oil level on sight glass on the side of the pump. Oil should be visible one-half way up sight glass. The oil level can also be checked by using the dipstick on the top of the pump.
4. Fill gasoline tank and check engine oil.
5. Fill LPG tank. Do not confuse gasoline and LPG tank. Keep proper fuel in propane tank.
6. Properly install the “D” batteries making sure that the batteries are mounted as shown on the cap for the battery box.

4. Installation / Operation

4.1 Start up engine and the machine
• **STOP!** Read operator’s manual before operating this machine. Failure to read operation and warning instructions may result in personal injury or property damage or death.
• Read engine manual, turn on gas valve and choke. Turn the engine switch to the ON position.
• With spray nozzle pointed away from you and anyone else, press the trigger the on spray gun to obtain pressurized cold water spray.
• For hot water, turn the propane gas valve ON. When a steady stream of water flows out of the spray gun the burner will light automatically.
• Avoid installing in small areas or near exhaust fans. Exhaust contains poisonous carbon monoxide gas; exposure may cause loss of consciousness and may lead to death. It also contains chemicals known, in certain quantities, to cause cancer, birth defects or other reproductive harm.

4.2 Warning during operation

**WARNING!**

RISK OF ASPHYXIATION. USE THIS PRODUCT ONLY IN WELL VENTILATED AREAS.

• Never run pump dry or leave gun closed longer than 3 minutes.
• The best insurance against an accident is precaution and knowledge of the machine.
• The manufacturer is not liable for any changes made to our standard units, or any components not purchased from the manufacturer.
• Read engine safety instructions provided.
• Do not allow children to operate the pressure washer at any time.

**WARNING!**

RISK OF FIRE OR EXPLOSION: USE VAPOR FUEL ONLY. *(Standard authorized LPG gas tank only)*

• Be certain all quick coupler fittings are secured before using the pressure washer.
• Do not allow acids, caustic or abrasive fluids to pass through the pump.
• Inlet water must be cold below 25°C or 80°F equivalent.
• Protect high pressure hose from vehicle traffic and sharp objects.
• Before disconnecting high pressure hose from water outlet, turn off LPG and pull the trigger on the spray gun allowing water to cool to below 40°C / 100°F equivalent before stopping the machine. Then open the gun to relieve pressure. Failure to properly cool down or maintain the heating coil may result in a steam explosion
• Do not over reach or stand on unstable support. Keep good footing and balance at all times.
• This machine must be attended during operation at all times.
• Do not operate this equipment under the influence of drugs or alcohol.
• Keep area clear of other people and animals.

4.3 Independent use of hot water and pressure washer
The gas hot water pressure washer is designed and built as 2 independent systems (heating and pressurizing)

If you need hot water only. Inlet connection for pump can be disassembled in the screw connection and you can easily connect your garden hose to the water outlet of the heater and thereby use your hot water heater.

5. Applications and methods

5.1 Techniques

- Efficient high pressure cleaning is achieved by following a few guidelines, combined with your own personal experience of specific cleaning tasks. Accessories and detergents, when correctly chosen, can increase the efficiency of your pressure washer. Here is some basic information about cleaning.

5.1.2 Vehicles

<table>
<thead>
<tr>
<th>Task</th>
<th>Accessory</th>
<th>Method</th>
</tr>
</thead>
</table>
| Vehicle bodywork      | • Standard lance                          | 1. Apply detergent to vehicle or equipment surface in order to soften up dirt and grime. Apply from bottom to top. In case of particularly dirty vehicles, pre-spray with a product such as Allosil in order to remove traces and insects etc. the rinse at low pressure and apply normal car cleaning detergent. Let the detergent settle for 5 minutes before cleaning off. Metallic surfaces can be cleaning using Rim Top.  
2. Proceed with cleaning using the high pressure lance. Clean again from bottom to top. Use brushes in order to add mechanical cleaning effect. Curved lances or undercarriage washers can be valuable for the cleaning of the car under chassis.  
3. Clean fragile areas such as motors, rubber at lower pressure and temperature to avoid damage.  
4. Apply liquid wax using your pressure washer in order to protect the body work from pollution. |
|                       | • Detergent for vehicles                   |                                                                                                                                          |
|                       | • Curved brushes and under chassis washes  |                                                                                                                                          |
| General surfaces      | • Foam nozzle                             | Apply foam on the surface to be cleaned. Apply on dry surfaces. Apply from top to bottom on vertical surfaces. Let the foam act for up to 30 minutes for optimal effect. Proceed with cleaning using the high pressure lance. Use applicable accessories. Use high pressure to dislodge large amounts of incrustated dirt or grime. Use lower pressure and high water volume in order to rapidly flush away loose dirt and rinse surfaces. Areas covered by amounts of loose dirt, such as animal remains in slaughter houses, can be removed by using high water flow to flush away the dirt to evacuation pits or drains tank. |
| metallic equipment    | • Standard lance                          |                                                                                                                                          |
|                       | • Curved lance                            |                                                                                                                                          |
Water sand blasting equipment

| Water sand blasting equipment | Connect the sandblasting lance to the pressure washer gun and place the suction tube on the sand. Always wear protection equipment during sandblasting. Spray the surface to be treated with a mix of sand and water. Rust, paint etc. will be stripped off. |

These are merely several examples of cleaning tasks that can be solved by a pressure washer in association with accessory and detergents. Each cleaning task is different. Please consult your local dealer in order to discuss the best solution for your own cleaning task.

5.2 OPERATIONS; DON’T, DON’T & DON’T

1. DO NOT let the pump run (without water supply)
2. NEVER run the burner without water flowing through it (except for short periods for testing the burner).
3. DO NOT run acids or hard caustics through the pump and heating coil.
4. DO NOT SUBJECT YOUR PRESSURE WASHER TO FREEZING TEMPERATURES UNLESS IT HAS BEEN WINTERIZED. Consult preventative maintenance section for winterizing instructions.
5. NEVER allow children or untrained adults to operate the machine. Keep children at a safe distance when an adult is using the machine.
6. NEVER clean off machine using its own spray wand on electric machines. This could result in a serious electrical shock causing serious injury or death! The machine is water protected but not water proof. Damage could occur to components from high pressure spray.

6. Preventive maintenance

6.1 Routine Inspection

Regular routing inspection of the machine’s sub-system and critical components is the key to preventive maintenance. To prevent breakdowns and to prolong the life of your unit, follow these simple routines religiously.

Daily

1. Check WATER SUPPLY before starting.
2. Check FUEL SUPPLY.
3. Check CHEMICAL SUPPLY.
4. Check NOZZLE for clogging.
5. Check pump oil level (crankcase type pump)

Weekly

1. Check WATER SUPPLY before starting.
2. Check water inlet FILTER.
Fuel

- Butane or propane gas fired machines operate on 11” (6.36 oz) water column pressure. This propane (LP) gas machine is equipped with a gas regulator. Therefore, the gas regulator is of sufficient size and allows for pressure drop from the tank to the machine. It must be installed on the LP tank properly. USE only original spare parts for this machine.

Water filters

- In order to ensure the lifetime of pressure washer. The machine is equipped with two inlet filters which are placed in the screw connections on the inlet before the LPG heater and the inlet before the high pressure pump. The machine MUST NOT operate without these inlet filters which prevent large particles and dirt from entering into the heater and pump.

6.2 Operation winterizing procedure

FREEZE PREVENTION

The pump, plumbing and wash may burst by freezing water within them. To avoid costly repair:

1. Keep washer in a heated area where temperature exceeds 32 degrees F.
2. Keep all lines leading to the washer from being exposed to freezing temperatures.
3. During extended shutdown periods, thoroughly drain the water system, chemical system and wash hose. Fill with anti-freeze solution.
4. Disconnect water supply.
5. Operate pump to expel all water from system.
6. Shut off pump and remove hose from pump outlet.
7. Start engine on LOW IDLE SPEED and empty the pump completely.
8. Connect small water inlet hose directly on the pump water inlet.
9. Place hose in RV antifreeze as a pump saver until some comes out the HIGH PRESSURE outlet. A cut off garden hose and funnel may help.

7. After using your pressure washer

7.1 Switching OFF the LPG hot water machine

1. Move the thermostat to cold on LPG heater
2. Disconnect LPG gas regulator on the gas tank
3. Disconnect water inlet on the LPG heater
4. Disconnect nozzle tip
5. Open gun and run the machine for about 1 minute on LOW IDLE SPEED or until pump is empty of water
# TROUBLESHOOTING GUIDE

<table>
<thead>
<tr>
<th>PROBLEM</th>
<th>POSSIBLE CAUSES</th>
<th>REMEDY</th>
</tr>
</thead>
</table>
| Engine cannot start             | • No gasoline  
• Check spark  
• Check engine manual                                                           | • Fill gasoline  
• Clean or change spark plug                                                        |
| The water does not get hot      | • No LPG left in tank  
• No ignition sparks for LPG heater.  
• Adjust handle on LPG heater to max position (right) | • Change LPG tank  
• Change batteries                                                                    |
| Pump pressure is unstable       | • Nozzle is blocked with dirt flow towards LPG heater and pump isn’t sufficient | • Clean nozzle tip  
• Check your water tap for minimum flow open water tap fully.                      |
| PUMP will NOT pressure up       | • AIR in the hoses and pump                                                     | • Turn off the entire unit and leave the water flow on allowing all the air to be expelled (BLED) from the system |