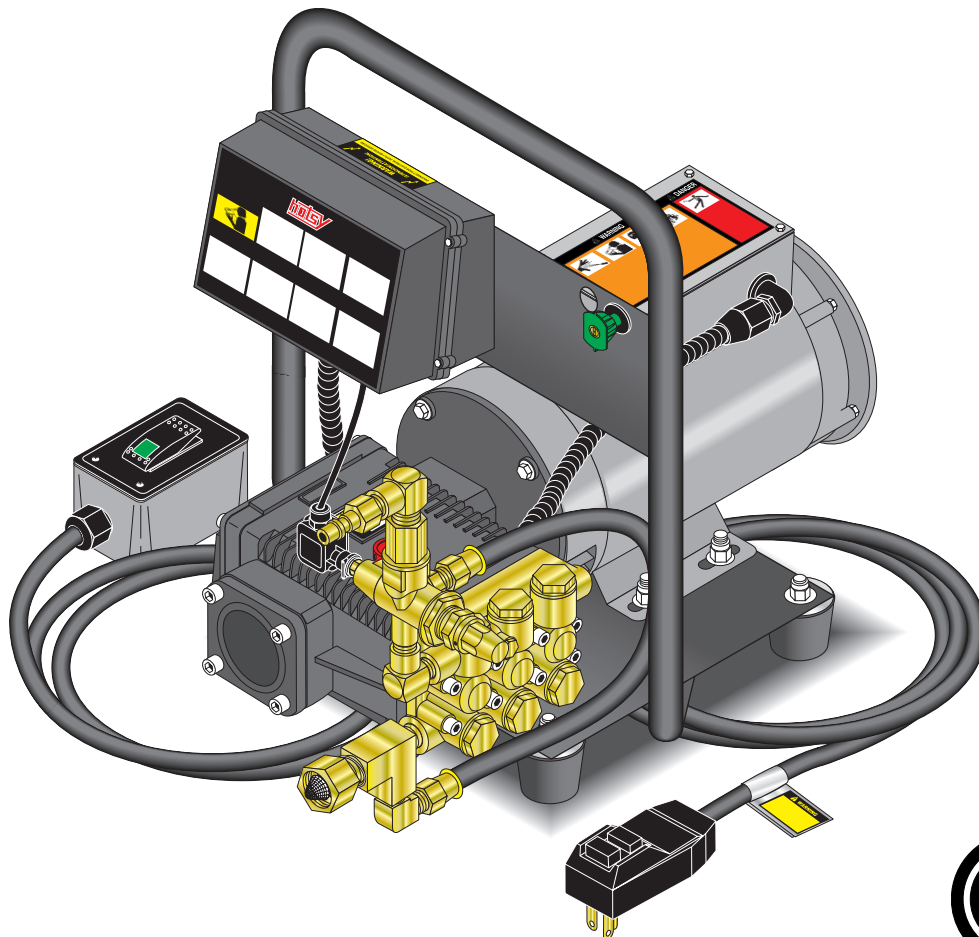




ET

OPERATOR'S MANUAL

■ ET-201006D (1.106-029.0) ■ ET-201409Dx2 (1.107-089.0)



For the dealer nearest you consult our web page at
www.hotsy.com

8.941-457.0

Important Safety Information	4-5
Component Identification	6
Assembly Instructions	7
Operating Instructions.....	8
Shutdown and Cleanup	9
Storage	9
Troubleshooting	10
Preventative Maintenance	11
Oil Change Record	11
Optional Wall Mount.....	12
Warranty	

Model Number _____

Serial Number _____

Date of Purchase _____

The model and serial numbers will be found on a decal attached to the pressure washer. You should record both serial number and date of purchase and keep in a safe place for future reference.

INTRODUCTION & IMPORTANT SAFETY INFORMATION

Thank you for purchasing this Pressure Washer.

We reserve the right to make changes at any time without incurring any obligation.

Owner/User Responsibility:

The owner and/or user must have an understanding of the manufacturer's operating instructions and warnings before using this pressure washer. Warning information should be emphasized and understood. If the operator is not fluent in English, the manufacturer's instructions and warnings shall be read to and discussed with the operator in the operator's native language by the purchaser/owner, making sure that the operator comprehends its contents.

Owner and/or user must study and maintain for future reference the manufacturers' instructions.

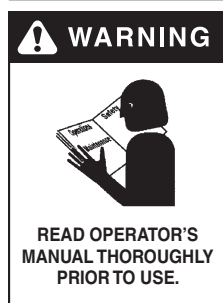
The operator must know how to stop the machine quickly and understand the operation of all controls. Never permit anyone to operate the engine without proper instructions.

This manual should be considered a permanent part of the machine and should remain with it if machine is resold.

When ordering parts, please specify model and serial number. Use only identical replacement parts.

This machine is to be used only by trained operators.

IMPORTANT SAFETY INFORMATION



WARNING: To reduce the risk of injury, read operating instructions carefully before using.

1. Read the owner's manual thoroughly. Failure to follow instructions could cause malfunction of the machine and result in death, serious bodily injury and/or property damage.
2. Know how to stop the machine and bleed pressure quickly. Be thoroughly familiar with the controls.
3. Stay alert — watch what you are doing.
4. All installations must comply with local codes. Contact your electrician, plumber, utility company or the selling distributor for specific details. If your machine is rated 250 volts or less, single phase will be provided with a ground fault circuit interrupter (GFCI). If rated more than 250 volts, or more than single phase this product should only be connected to a power supply receptacle protected by a GFCI.

DANGER: Improper connection of the equipment-grounding conductor can result in a risk of electrocution. Check with a qualified electrician or service personnel if you are in doubt as to whether the outlet is properly grounded. Do not modify the plug provided with the product - if it will not fit the outlet, have a proper outlet installed by a qualified electrician. Do not use any type of adaptor with this product



WARNING: Keep wand, hose, and water spray away from electric wiring or fatal electric shock may result.

5. To protect the operator from electrical shock, the machine must be electrically grounded. It is the responsibility of the owner to connect this machine

to a UL grounded receptacle of proper voltage and amperage ratings. Do not spray water on or near electrical components. Do not touch machine with wet hands or while standing in water. Always disconnect power before servicing.



WARNING: Flammable liquids can create fumes which can ignite, causing property damage or severe injury.

WARNING: Risk of explosion — Do not spray flammable liquids.

6. Do not allow acids, caustic or abrasive fluids to pass through the pump.
7. Never run pump dry or leave spray gun closed longer than 1-2 minutes.
8. Keep operating area clear of all persons.



WARNING: High pressure spray can cause paint chips or other particles to become airborne and fly at high speeds. To avoid personal injury, eye, hand and foot safety devices must be worn.

9. Eye, hand, and foot protection must be worn when using this equipment.

IMPORTANT SAFETY INFORMATION



WARNING: Grip cleaning wand securely with both hands before starting. Failure to do this could result in injury from a whipping wand.



WARNING: High pressure developed by these machines will cause personal injury or equipment damage. Keep clear of nozzle. Use caution when operating. Do not direct discharge stream at people, or severe injury or death will result.

10. To reduce the risk of injury, close supervision is necessary when a machine is used near children. Do not allow children to operate the pressure washer. **This machine must be attended during operation.**
11. Never make adjustments on machine while in operation.
12. Be certain all quick coupler fittings are secured before using pressure washer.



WARNING: Protect machine from freezing.

13. To keep machine in best operating conditions, it is important you protect machine from freezing. Failure to protect machine from freezing could cause malfunction of the machine and result in death, serious bodily injury, and/or property damage. Follow storage instructions specified in this manual.

14. Inlet water must be clean fresh water and no hotter than 90°F.
15. Manufacturer will not be liable for any changes made to our standard machines or any components not purchased from us.
16. The best insurance against an accident is precaution and knowledge of the machine.

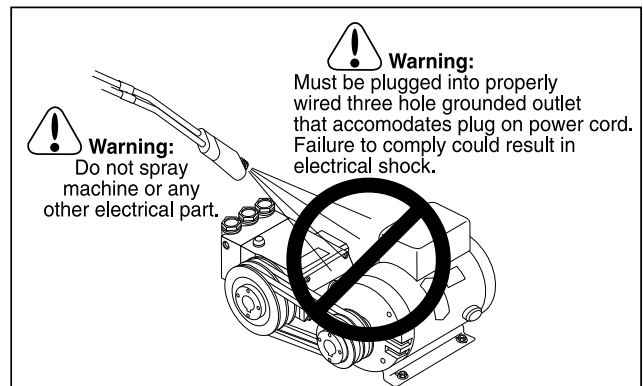


WARNING: Be extremely careful when using a ladder, scaffolding or any other relatively unstable location. The cleaning area should have adequate slopes and drainage to reduce the possibility of a fall due to slippery surfaces.

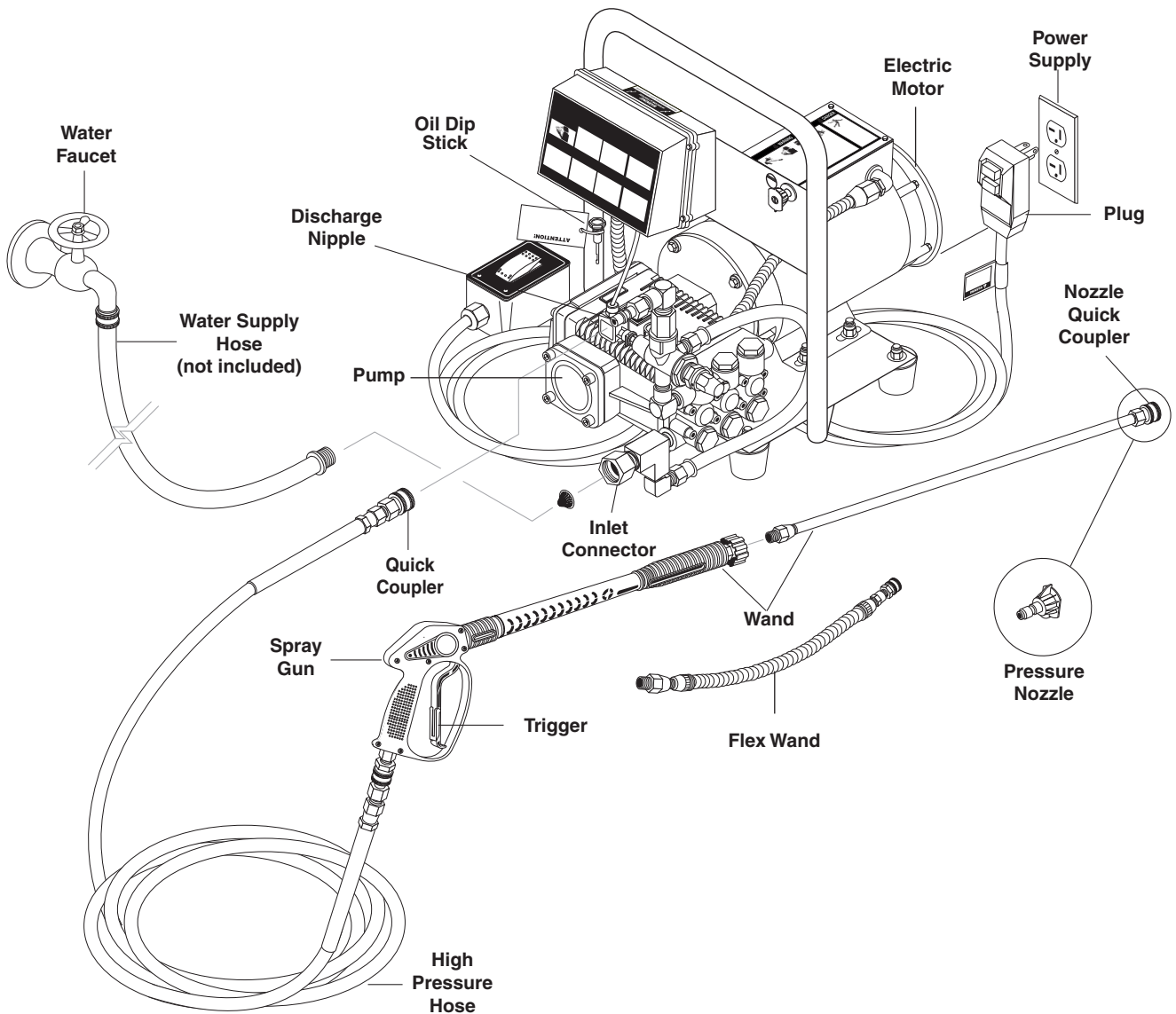
17. Do not overreach or stand on unstable support. Keep good footing and balance at all times.
18. Do not operate this machine when fatigued or under the influence of alcohol, prescription medications, or drugs.



Follow the maintenance instructions specified in the manual.



COMPONENT IDENTIFICATION



High Pressure Hose - Connect one end to water pump discharge nipple and the other end to spray gun.

Nozzle Quick Coupler - Allows quick change of nozzles.

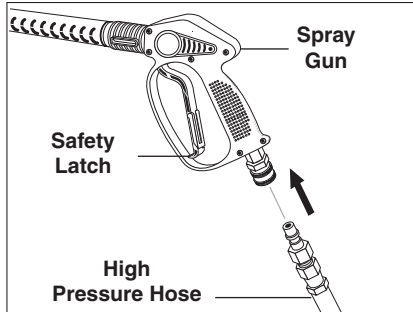
Pump - Develops high pressure.

Spray Gun - Controls the application of water and detergent onto cleaning surface with trigger device. Includes safety latch.

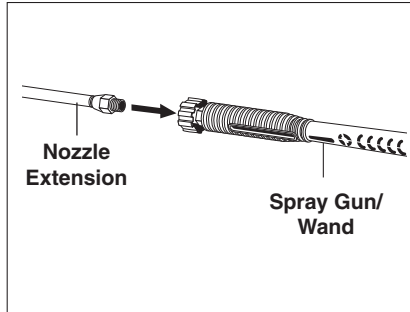
Wand - Must be connected to the spray gun.

Flex Wand - Allows operator flexibility in spray angle. (Standard on PLUS models only).

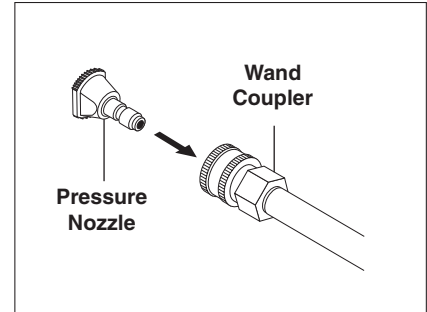
ASSEMBLY INSTRUCTIONS



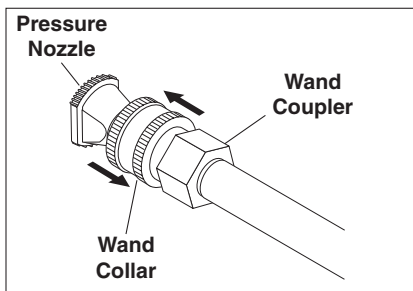
STEP 1: Attach the high pressure hose to the spray gun with quick coupler.



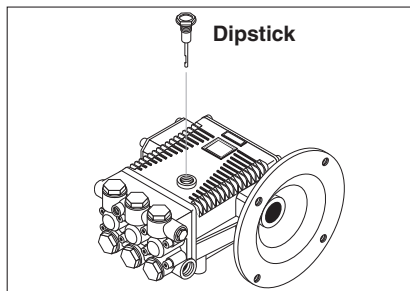
STEP 2: Attach nozzle extension to spray gun/wand. Tighten both by hand.



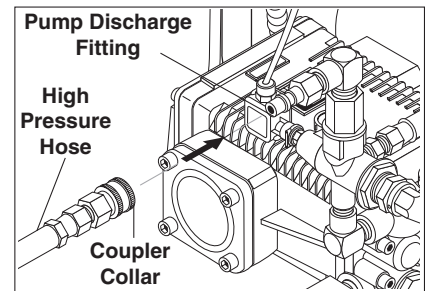
STEP 3: Pull the spring-loaded collar of the wand coupler back to insert your choice of pressure nozzle.



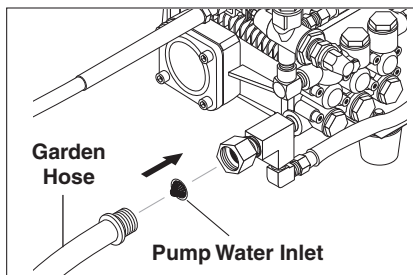
STEP 4: Release the coupler collar and push the nozzle until the collar clicks. Pull the nozzle to make sure it is seated properly.



STEP 5: Remove shipping cap and install oil dipstick. Check pump oil level by using dipstick. Use 40 wt. non detergent oil.



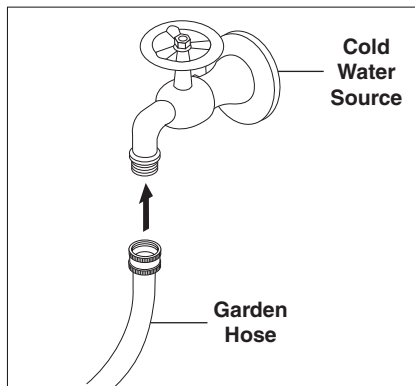
STEP 6: Connect the high pressure hose to the pump discharge fitting. Push coupler collar forward until secure.



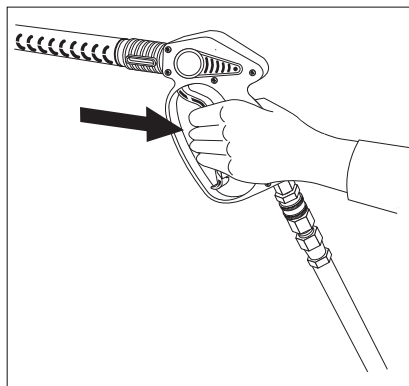
STEP 7: Connect the garden hose to pump inlet. Inspect inlets.

CAUTION: Do not run the pump without water or pump damage will result.

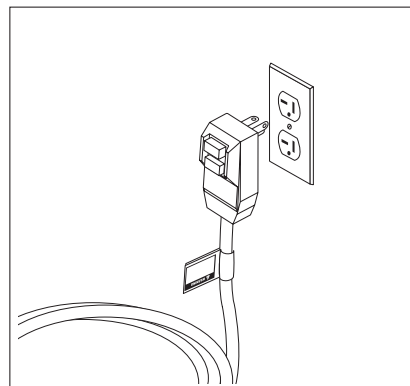
OPERATING INSTRUCTIONS



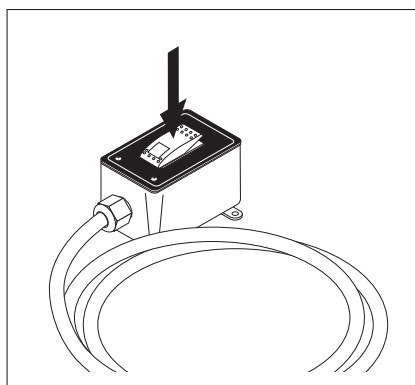
STEP 1: Connect garden hose to the cold water source and turn water on completely. Never use hot water.



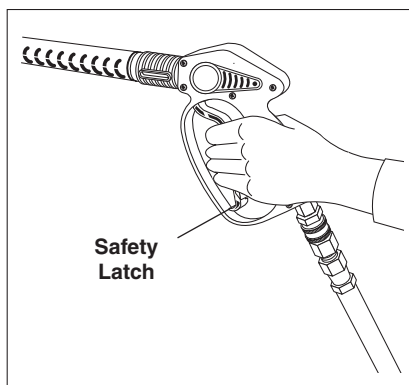
STEP 2: Trigger the spray gun to eliminate trapped air then wait for a steady flow of water to emerge from the spray nozzle.



STEP 3: Connect to appropriate power supply.

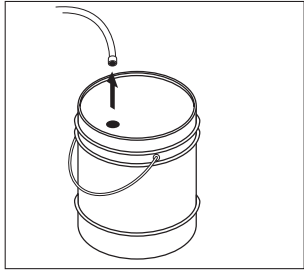


STEP 4: Turn machine on by pressing remote control box (if equipped) or by flipping the switch at the rear of the motor and by triggering the spray gun.

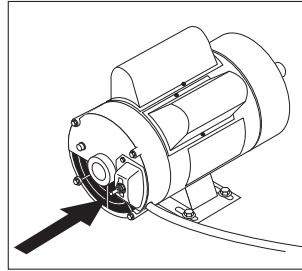


⚠ WARNING! Never replace nozzles without engaging the safety latch on the spray gun trigger.

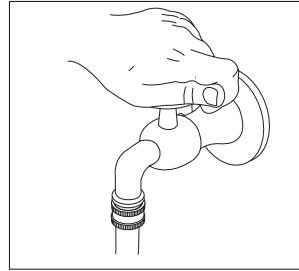
SHUTTING DOWN AND CLEAN-UP



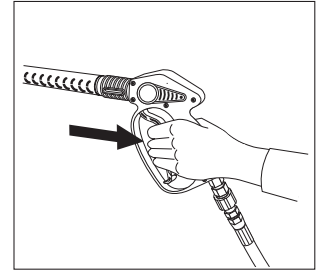
STEP 1: Remove detergent suction tube from container and insert into one gallon of fresh water. Slide nozzle forward for low pressure or to connect black detergent nozzle. Pull trigger on spray gun and siphon water for one minute.



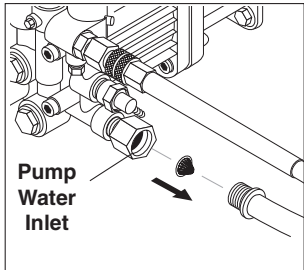
STEP 2: Turn off machine by flipping switch on rear of motor or by pressing the switch on the remote control box (if equipped).



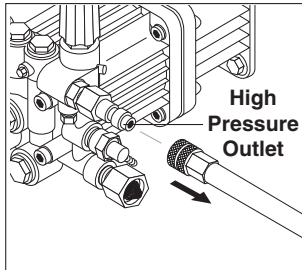
STEP 3: Turn off water supply.



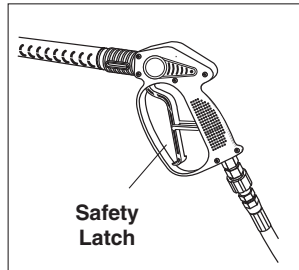
STEP 4: Press trigger to release water pressure.



STEP 5: Disconnect the garden hose from the water inlet on the machine.



STEP 6: Disconnect the high pressure hose from high pressure outlet.



STEP 7: Engage the spray gun safety lock.

STORAGE

Pump Storage



CAUTION: Always store your pressure washer in a location where the temperature will not fall below 32° F (0° C). The pump in this machine is susceptible to permanent damage if frozen.

FREEZE DAMAGE IS NOT COVERED BY WARRANTY.

If you must store your pressure washer in a location where the temperature is below 32° F, you can minimize the chance of damage to your machine by draining your machine as follows:

1. Stop the pressure washer and detach supply hose and high pressure hose. Squeeze the trigger of the spray gun to drain all water from the wand and hose.
2. Restart pressure washer and let it run briefly (about 5 seconds) until water no longer discharges from the high pressure outlet.

TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	SOLUTION
PUMP RUNNING NORMALLY BUT PRESSURE LOW ON INSTALLATION	Pump sucking air	Check water supply and possibility of air seepage.
	Check valves sticking	Check and clean or replace if necessary.
	Unloader valve seat faulty	Check and replace if necessary.
	Nozzle incorrectly sized	Check and replace if necessary.
	Worn piston packing	Check and replace if necessary.
FLUCTUATING PRESSURE	Valves worn	Check and replace if necessary.
	Blockage in valve	Check and replace if necessary.
	Pump sucking air	Check water supply connections.
	Worn piston packing	Check and replace if necessary.
	Insufficient water	Check filter and hose for breakage/clogging
PRESSURE LOW AFTER PERIOD OF NORMAL USE	Nozzle worn	Check and replace if necessary.
	Suction or delivery valves worn	Check and replace if necessary.
	Suction or delivery lines blocked	Check and clean if necessary.
	Unloader valve seat worn	Check and replace if necessary.
	Worn piston package	Check and replace if necessary.
	Water temperature excessive	Reduce to below 140° F.
PUMP NOISY	Air in suction line	Check water supply and connections on suction line.
	Broken or weak suction or delivery valve spring.	Check and replace if necessary.
	Foreign matter in valves	Check and clean if necessary.
	Worn bearings	Check and replace if necessary.
	Water temperature excessive	Reduce to below 160° F.
PRESENCE OF WATER IN PUMP OIL	Oil seal worn	Check and replace if necessary.
	High humidity in air	Check and replace if necessary.
	Piston packing worn	Check and replace if necessary.
WATER DRIPPING FROM UNDER PUMP	Piston packing worn	Check and replace if necessary.
	O-ring plunger retainer worn	Check and replace if necessary.
WATER DRIPPING FROM PUMP PROTECTOR	Water supply pressure too high (over 90 psi)	Lower water supply pressure using regulator.
	Spray gun is in the off position for over 1-2 minutes	Turn machine off if not in use for over 1-2 minutes.
OIL DRIPPING	Oil seal worn	Check and replace if necessary.
EXCESSIVE VIBRATION IN HIGH PRESSURE HOSE	Irregular functioning of the pump valves	Check and replace if necessary.
MOTOR DOES NOT START WHEN SWITCHED ON	Plug not well connected or lack of power supply	Check plug, cable and switch.
WHEN SWITCHING ON THE MACHINE, MOTOR HUMS BUT DOES NOT RUN	Main voltage is insufficient, lower than the minimum required.	Check to make sure main power supply is adequate.
	The pump is stuck or frozen	Check by turning the motor manually.
MOTOR STOPS	Tripped thermal overload due to overheating	Check that main voltage corresponds to specifications for the machine. Wait a few minutes before turning on the machine again by resetting the GFCI on the cord.

PREVENTATIVE MAINTENANCE

This pressure washer was produced with the best available materials and quality craftsmanship. However, you as the owner have certain responsibilities for the correct care of the equipment. Attention to regular preventative maintenance procedures will assist in preserving the performance of your equipment. Contact your dealer for maintenance. Regular preventative maintenance will add many hours to the life of your pressure washer. Perform maintenance more often under severe conditions.

Pump Oil	Inspect	Daily, Inspect the oil level
	Change	After first 50 hours, then every 500 hours or annually
Replace High Pressure Nozzle		Every 6 months
Replace Quick Connects		Annually
Replace Clean Water Screen/Filter		Weekly
Replace HP Hose		Annually if there is any sign of wear
Grease Motor		Every 10,000 hours or annually

General Inspection

Inspect the motor at regular intervals, approximately every 500 hours of operation, or every 3 months, whichever occurs first. Keep the motor clean and the ventilation openings clear. The following steps should be performed at each inspection:

WARNING: Do not touch electrical connections before you first ensure that power has been disconnected. Electrical shock can cause serious or fatal injury. Only qualified personnel should attempt the installation, operation and maintenance of this equipment.

1. Check that the motor is clean. Check that the interior and exterior of the motor is free of dirt, oil, grease, water, etc. Oily vapor, paper pulp, textile lint, etc. can accumulate and block motor ventilation. If the motor is not properly ventilated overheating can occur and cause early motor failure.
2. Check all electrical connectors to be sure that they are tight.

Lubrication & Bearings

Bearing grease will lose its lubricating ability over time, not suddenly. The lubricating ability of a grease (over time) depends primarily on the type of grease, the size of the bearing, the speed at which the bearing operates and the severity of the operating conditions. Good results can be obtained if the following recommendations are used in your maintenance program.

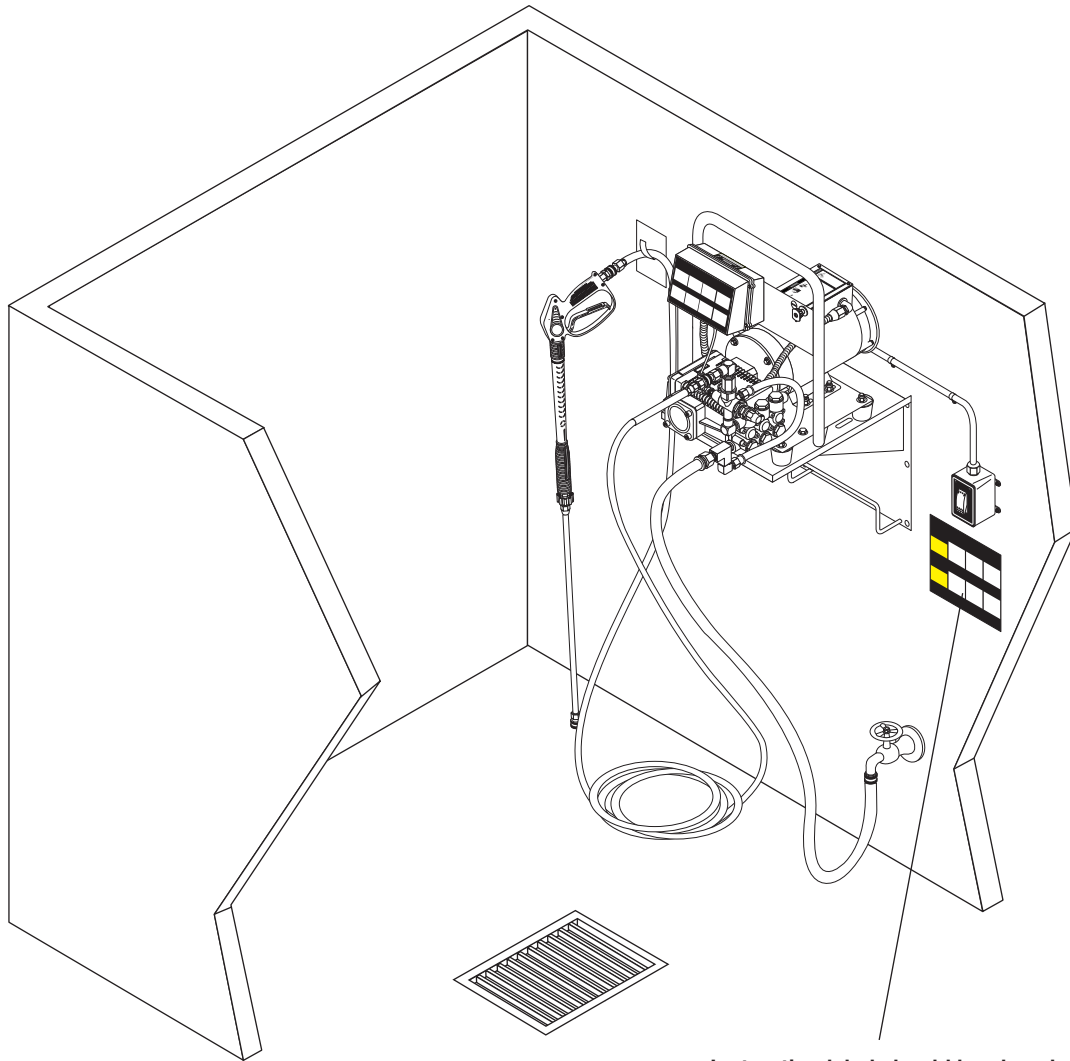
Type of Grease

A high grade ball or roller bearing grease should be used. Recommended greases standard service conditions are: Shell Dolium R (Factory installed) or Chevron SRI.

OIL CHANGE RECORD

Date Oil Changed Month/Day/Year	Estimated Operating Hours Since Last Oil Change	Date Oil Changed Month/Day/Year	Estimated Operating Hours Since Last Oil Change

OPTIONAL WALL MOUNT - 8.903-613.0



Instruction label should be placed next to the machine and within easy view of all users.



**HOTSY LIMITED NEW PRODUCT WARRANTY
PRESSURE WASHERS
WHAT THIS WARRANTY COVERS**

All Hotsy pressure washers are warranted by Hotsy to the original purchaser to be free from defects in materials and workmanship under normal use, for the periods specified below. This Limited Warranty is subject to the exclusions shown below, is calculated from the date of the original purchase, and applies to the original components only. Any parts replaced under this warranty will assume the remainder of the part's warranty period.

SEVEN YEAR PARTS AND ONE YEAR LABOR WARRANTY:

Components manufactured by Hotsy, such as frames, handles, top and bottom wraps, float tanks, fuel tanks, belt guards, and internal components on the oil-end of HOTSY manufactured pumps. General, AR, Liberty, Comet and swash and wobble plate pumps have a one year warranty. Heating coils have a five year warranty from date of original machine purchase.

ONE YEAR PARTS AND ONE YEAR LABOR WARRANTY:

All other components, excluding normal wear items as described below, will be warranted for one year on parts and labor. Parts and labor warranty on these parts will be for one year regardless of the duration of the original component manufacturer's part warranty.

WARRANTY PROVIDED BY OTHER MANUFACTURERS:

Motors, generators, and engines, which are warranted by their respective manufacturers, are serviced through these manufacturers' local authorized service centers. Hotsy is not authorized and has no responsibility to provide warranty service for such components.

WHAT THIS WARRANTY DOES NOT COVER

This warranty does not cover the following items:

1. Normal wear items, such as nozzles, spray guns, discharge hoses, wands, quick couplers, seals, filters, gaskets, O-rings, packings, pistons, pump valve assemblies, strainers, belts, brushes, relief valves, fuses, pump protectors.
2. Damage or malfunctions resulting from accidents, abuse, modifications, alterations, incorrect installation, improper servicing, failure to follow manufacturer's maintenance instructions, or use of the equipment beyond its stated usage specifications as contained in the operator's manual.
3. Damage due to freezing, chemical deterioration, scale build up, rust, corrosion, or thermal expansion.
4. Damage to components from fluctuations in electrical or water supply.
5. Normal maintenance service, including adjustments, fuel system cleaning, and clearing of obstructions.
6. Transportation to service center, field labor charges, or freight damage.

WHAT YOU MUST DO TO OBTAIN WARRANTY SERVICE

In order to obtain warranty service on items warranted by Hotsy, you must return the product to your Authorized Hotsy Distributor, freight prepaid, with proof of purchase, within the applicable warranty period. If the product is permanently installed, you must notify your Authorized Hotsy Distributor of the defect. Your Authorized Hotsy Distributor will file a claim with Hotsy, who must subsequently verify the defect. In most cases, the part must be returned to Hotsy freight prepaid with the claim. For warranty service on components warranted by other manufacturer's, your Authorized Hotsy Distributor can help you obtain warranty service through these manufacturers' local authorized service centers.

LIMITATION OF LIABILITY

Hotsy's liability for special, incidental, or consequential damages is expressly disclaimed. In no event shall Hotsy's liability exceed the purchase price of the product in question. Hotsy makes every effort to ensure that all illustrations and specifications are correct, however, these do not imply a warranty that the product is merchantable or fit for a particular purpose, or that the product will actually conform to the illustrations and specifications. Our obligation under this warranty is expressly limited at our option to the replacement or repair at a service facility or factory designated by us, of such part or parts as inspection shall disclose to have been defective. **THE WARRANTY CONTAINED HEREIN IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY LIMITED TO THE DURATION OF THIS WRITTEN WARRANTY.** Hotsy does not authorize any other party, including authorized Hotsy Distributors, to make any representation or promise on behalf of Hotsy, or to modify the terms, conditions, or limitations in any way. It is the buyer's responsibility to ensure that the installation and use of Hotsy products conforms to local codes. While Hotsy attempts to assure that its products meet national codes, it cannot be responsible for how the customer chooses to use or install the product. Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

HOTSY
www.hotsy.com

If you are looking for replacement parts for your Hotsy, please contact your local dealer. You can find a dealer by calling Hotsy at 800-525-1976 or by visiting www.hotsy.com.

