



MODEL 558

OPERATING INSTRUCTIONS AND PARTS MANUAL

Read instructions carefully before attempting to assemble, install, operate or service this pressure washer. Failure to comply with instructions could result in personal injury and/or property damage!

**NOTE: THIS MANUAL IS INTENDED FOR USE WITH
THE FOLLOWING MODEL RELEASE ONLY: 558-A**

SPECIFICATIONS



- Pump Volume At Pump Head: 2.2 GPM/132 GPH
- Pump Pressure At Pump Head: 1300 PSI
- Burner Type: LP Gas Fired, 202,253 BTU
- Machine Voltage: 115VAC/60Hz/1Ph
- Total Machine Amperage: 18 Amps
- Machine Weight: 275 Lbs.
- Shipping Weight: 310 Lbs.
- Exhaust Stack Size: 10"
- Machine Dimensions: Length = 28.5" , Width = 20" , Height = 31"



SERIAL NUMBER:

DATE PURCHASED:

FOR SALES AND SERVICE, PLEASE CONTACT:

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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



READ OPERATOR'S MANUAL THOROUGHLY PRIOR TO USE.

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. Do not replace LP tank while machine is running.
5. All installations must comply with local codes. Contact your electrician, plumber, utility company or the selling distributor for specific details.

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 WATER SPRAY AWAY FROM ELECTRICAL WIRING.

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

6. 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



RISK OF EXPLOSION: IF GAS SMELL PRESENT TURN OFF SUPPLY

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

WARNING: Risk of explosion — Operate only where open flame or torch is permitted.

WARNING



RISK OF FIRE. DO NOT ADD FUEL WHEN OPERATING MACHINE.

WARNING: Risk of fire — Do not change tanks when the product is operating or still hot.

WARNING: Use vapor fuel only.

7. Gas appliances shall be installed only in locations where combustible dusts and flammable gases or vapors are not present. Do not store or use gasoline near this machine.

8. Keep operating area clear of all persons.

WARNING



USE PROTECTIVE EYE WEAR AND CLOTHING WHEN OPERATING THIS EQUIPMENT.

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



EAR PROTECTION MUST BE WORN

WARNING: This machine exceeds 85 db appropriate ear protection must be worn.

CAUTION



HOT DISCHARGE FLUID: DO NOT TOUCH OR DIRECT DISCHARGE STREAM AT PERSONS.

CAUTION: Hot discharge fluid. Do not touch or direct discharge stream at persons.

WARNING: This machine produces hot water and must have insulated components attached to protect the operator.

WARNING



RISK OF INJURY. HOT SURFACES CAN CAUSE BURNS

WARNING: Risk of injury. Hot surfaces can cause burns. Use only designated gripping areas of spray gun and wand. Do not place hands or feet on non-insulated areas of the pressure washer.

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.**

WARNING



TRIGGER GUN KICKS BACK - HOLD WITH BOTH HANDS

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

11. Never make adjustments on machine while in operation.
12. Be certain all quick coupler fittings are secured before using pressure washer.

WARNING



RISK OF INJECTION OR SEVERE INJURY TO PERSONS. KEEP CLEAR OF NOZZLE.

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.

WARNING



PROTECT FROM FREEZING

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.

WARNING



RISK OF ASPHYXIATION. USE THIS PRODUCT ONLY IN A WELL VENTILATED AREA.

WARNING: Risk of asphyxiation. Use this product only in a well ventilated area.

15. Avoid installing machines in small areas or near exhaust fans. Adequate oxygen is needed for combustion or dangerous carbon monoxide will result.

16. Manufacturer will not be liable for any changes made to our standard machines or any components not purchased from us.

17. The best insurance against an accident is precaution and knowledge of the machine.

WARNING



RISK OF INJURY FROM FALLS WHEN USING LADDER.

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.

18. Do not overreach or stand on unstable support. Keep good footing and balance at all times.

19. Do not operate this machine when fatigued or under the influence of alcohol, prescription medications, or drugs.

20. Follow the maintenance instructions specified in the manual.

21. Do not replace LP tank while machine is running. Serious injury could result.

WARNING: Use vapor fuel only.

22. The LP models are designed to run on vapor propane fuel. Do not use liquid fuel. Have a qualified serviceman install and service your equipment.

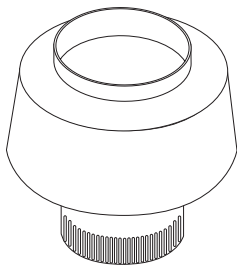
IMPORTANT SAFETY INFORMATION

23. Never expose a spark or flame where there may be unburned gas present.
24. Install this machine about 2 feet from wall to provide adequate ventilation and servicing space. This equipment incorporates parts such as snap switches or similar parts that tend to produce arcs or sparks. Therefore, when located in a garage, it should be in a room or enclosure provided for the purpose or should be installed 18" (457mm) or more above the floor.
25. When making repairs disconnect from electrical source and shut off gas valve.
26. Install this machine on non combustible flooring.
27. Do not allow acids, caustic or abrasive fluids to pass through the pump.
28. Never run pump dry or leave spray gun closed longer than 3 minutes.

WARNING: If connection is made to portable water supply, a back flow device must be provided.

29. Exhaust gases should not be vented into a wall, a ceiling or a concealed space of a building. A draft diverter must be installed to prevent down draft and to allow cooling of exhaust temperatures.

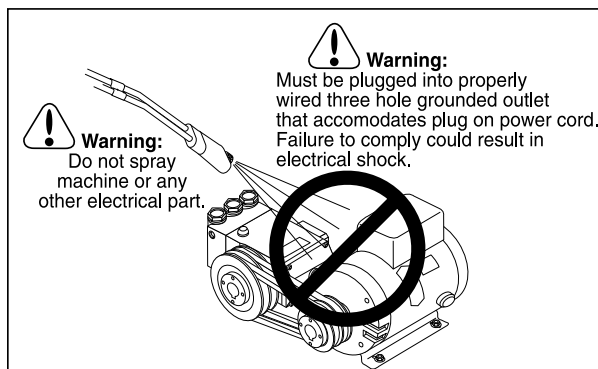
Exhaust gases that exceed 470°F (243°C) are not suitable for connection to Type B gas vents. Do not install this machine on a combustible floor.



**Example of Down Draft
Diverter for Gas Fired
Machines**

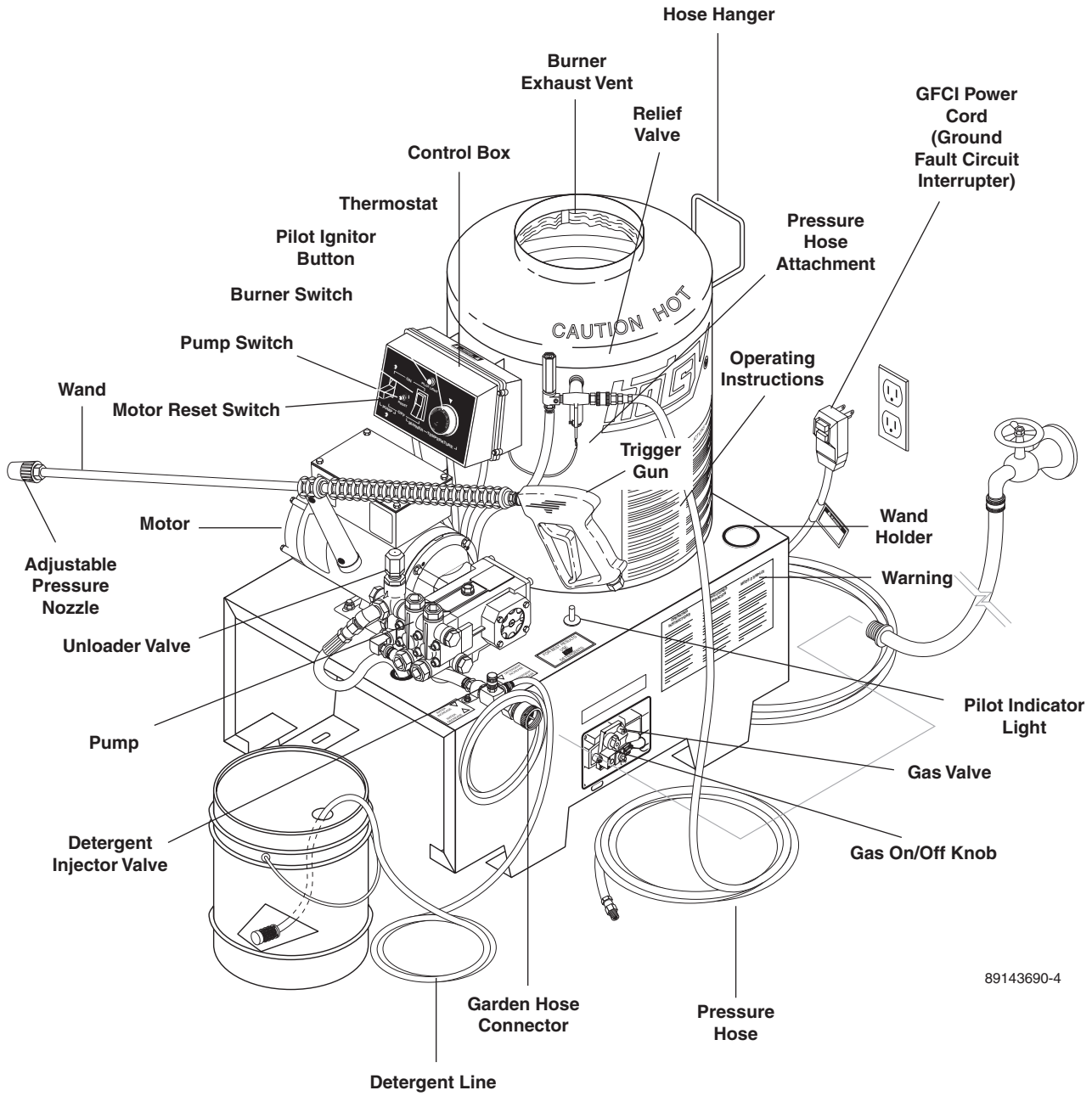


Follow the maintenance instructions specified in the manual.



COMPONENT IDENTIFICATION

Figure 1



89143690-4

ASSEMBLY

Unpacking

Unpack carefully. Wear safety glasses or goggles while unpacking, assembling or operating pressure washer. If there are missing components or hidden damage immediately contact distributor or carrier concerning discrepancies.

1. Cut strapping band from pressure washer and pallet.
2. Remove pressure washer from pallet.

Parts Included

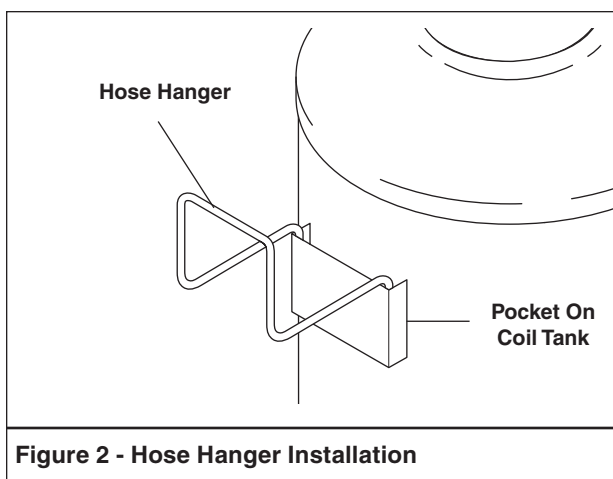
- Pressure Washer
- Pressure Hose
- Hose Hanger
- Wand
- Parts Bag Containing:
 - Adjustable Pressure Nozzle
 - Garden Hose Connector
 - Quick Disconnect
 - Trigger Gun
 - Garden Hose Connector Spring
 - Quick Disconnect Plug
- Operating Instructions and Parts Manual

Tools Required

- 10" Adjustable Crescent Wrench (2 ea.)
- 1/2" Allen Wrench
- Small Flat Head Screwdriver

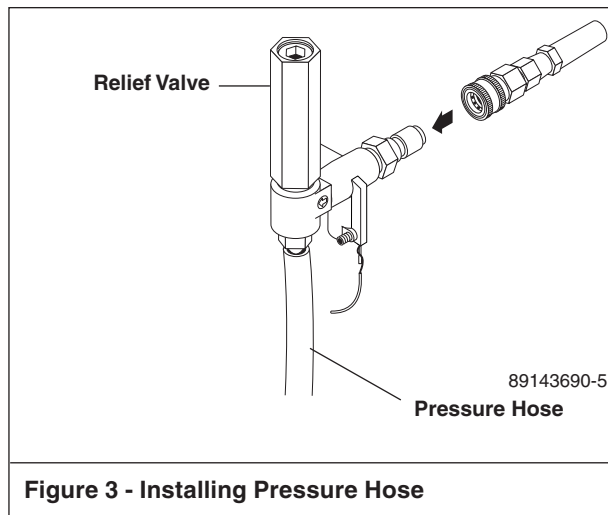
Hose Hanger

1. Install the hose hanger as shown in **Figure 2**.

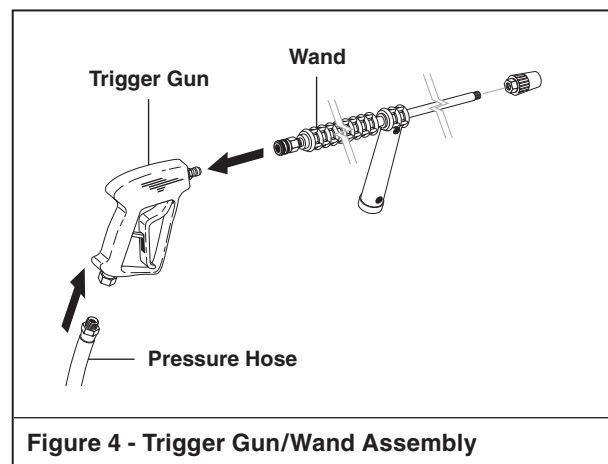


Pressure Hose, Trigger Gun and Wand

1. When assembling, use Teflon tape on all plumbing connections to prevent leakage.
2. Install the pressure hose on the pressure washer as shown in **Figure 3**.



3. Assemble wand components as shown in **Figure 4**. Connect pressure hose to trigger gun.



NOTE: The pressure nozzle is not to be installed at this time.

4. Make sure that all plumbing connections are tight.

Garden Hose Connector

1. When assembling, use Teflon tape on all plumbing connections to prevent leakage.
2. Locate the garden hose connector and garden hose connector spring from the parts bag.
3. Assemble the spring and connector to the detergent injector as shown in **Figure 11**.
4. Make sure that all plumbing connections are tight.

INSTALLATION

Getting Started

IMPORTANT: *Proper initial installation of equipment will assure more satisfactory performance, longer service life and lower maintenance cost.*

IMPORTANT: *The use of a backflow preventer on the water supply hose is recommended and may be required by local codes.*

The pressure washer should be run on a level surface where it is not readily influenced by outside sources such as strong winds, freezing temperatures, rain, etc. The pressure washer should be located to assure easy access for filling of fluids, adjustments and maintenance.

Normal precautions should be taken by the operator to prevent moisture from reaching the pressure washer. It is recommended that a partition be made between the wash area and the pressure washer to prevent direct spray from the wand coming in contact with the pressure washer. Moisture reaching the equipment will reduce the pressure washer's service life. All installations should comply with the local codes covering such installations.

Venting

CAUTION: *Some gases are heavier than air and will spill out on the floor in the 2 to 3 minutes required for the safety pilot valve to close off gas supply. Therefore, always provide adequate space and ventilation around these units.*

CAUTION: *All venting must be in accordance with applicable federal and state laws, and local ordinances. Consult local heating contractors.*

IMPORTANT: *This machine is not to be connected to a type B gas vent. NE PAS RACCORDER CET APPAREIL À UN TUYAU D'ÉVACUATION DE GAZ DU TYPE B.*

IMPORTANT: *A draft diverter shall be installed. INSTALLER UNE HOTTE DE TIRAGE.*

If the pressure washer is to be used in an enclosed area, a flue must be installed to vent burner exhaust to the outside atmosphere. Exhaust gases should not be vented into a wall, a ceiling, or a concealed space of a building. Be sure the flue is the same size as the burner exhaust vent on the pressure washer. Poor draft will cause the pressure washer to soot and not operate properly. When selecting the location for installation, beware of poorly ventilated locations or areas where exhaust fans may cause an insufficient supply of oxygen. Proper combustion can only be obtained when there is a sufficient supply of oxygen available for the amount of fuel being burned. If it is necessary to install the machine in a poorly ventilated area, outside fresh air may have to be piped to the burner and a fan installed to bring sufficient air into the machine. Locate the pressure

washer so that the flue will be as straight as possible and protrude through the roof at a proper height and location to provide adequate draft. This gas fired pressure washer must have a draft diverter installed in the flue (available from most heating contractors). A draft diverter will permit proper upward flow of exhaust flue gases.

Water Supply

Connect water supply hose to the garden hose connector. See **Figure 1** for location. The water faucet and supply hose must be capable of providing a minimum of 2.2 gallons per minute (GPM).

Fuel Supply

CAUTION: *Have a qualified gas serviceman install and service your equipment.*

WARNING: *Gas line supply pressure must not exceed 14 water column inches (w.c.i.) (.50 PSI).*

IMPORTANT: *Gas line must be provided with a shut off valve.*

IMPORTANT: *The gas supply must be able to supply a minimum of 245,000 BTU/HR at the machines rated manifold pressure.*

Consult building codes for installation requirements. For proper and safe machine operation, we recommend that a licensed contractor be consulted for machine installation.

LP Vapor Fuel

The model 558 has been factory built to use LP vapor fuel. **DO NOT USE LIQUID FUEL.**

Have a qualified gas serviceman install the LP vapor fuel supply line to the machine. See **Figure 5** for location of gas inlet.

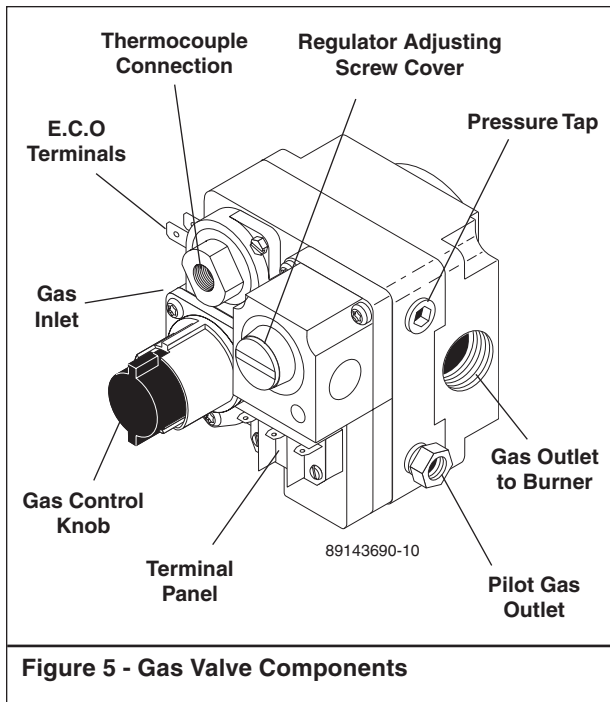


Figure 5 - Gas Valve Components

Gas Regulator

It is very important that the incoming gas pressure be between 12.0-14.0 water column inches (.43-.50 PSI). If your fuel supply does not produce the correct pressure range contact your local Hotsy Service Representative.

The gas pressure coming out of the regulator and going to the burner ring has been factory set. You should not readjust the burner ring gas pressure. If you replace your gas valve, you will need to adjust the new valve. Refer to your machine's **specification plate** for the correct pressure setting. Follow the installation and adjustment instructions provided with your replacement valve.

Electrical

WARNING: Make sure all switches and controls are in the OFF position prior to connecting electrical supply.

WARNING: DO NOT stand in water while connecting and disconnecting electrical supply.

WARNING: Always disconnect power before servicing your pressure washer.

IMPORTANT: Consult local building codes for exact electrical requirements. Licensed contractors may be required.

IMPORTANT: All wiring must be of proper voltage and amperage rating and conform to applicable codes.

IMPORTANT: This machine must be electrically grounded. LA MACHINE DOIT ÊTRE MISE À LA TERRE.

Grounding Instructions: Make sure all switches and controls are in the OFF position prior to connecting electrical supply. Do not stand in water while connecting and disconnecting electrical supply. If it should malfunction or break down, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. The product must be connected to an appropriate power source that is properly installed and grounded in accordance with all local codes and ordinances.

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: To reduce the risk of electrocution, keep all connections dry and off the ground. DO NOT touch plug with wet hands.

OPERATION

Before Starting

1. Read all manuals provided with this pressure washer. Become familiar with location and function of all operating and safety controls.

Grounding Instructions: This product must be electrically grounded. If it would malfunction or break down, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This machine must be wired into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.

DANGER: Improper wiring connections of equipment can result in a risk of electrocution. Check with a qualified electrician or service personnel if you are in doubt as to whether outlet is properly grounded.

WARNING: Make sure all switches and controls are in OFF position prior to plugging in electrical cord.

WARNING: DO NOT stand in water while plugging or unplugging electrical cord.

CAUTION: This pressure washer is equipped with a UL approved ground fault circuit interrupter (GFCI) power cord. Use UL grounded type receptacles of proper voltage and amperage ratings. Where a properly grounded receptacle is not available, it is the personal responsibility of the owner to have one installed. Always disconnect power before servicing your pressure washer.

CAUTION: This machine is equipped with a 35 foot long power cord protected by a ground fault circuit interrupter (GFCI). DO NOT use extension cords due to possible severe electrical shock and/or damage to the machine.

2. Connect electrical cord to an overload protected 115VAC/60Hz/1Ph grounded circuit, minimum 18 ampere rated. Test the GFCI using the reset and test procedure located on the GFCI device. Do not use machine if GFCI fails test. The GFCI must be reset and tested with every use.

WARNING: Check hoses, fittings, wand, trigger gun and fuel connections daily for signs of wear, cracks and looseness, and replace as required.

3. Connect water supply hose to the garden hose connector, see **Figure 1** for location. The water faucet and supply hose must be capable of providing a minimum of 2.2 gallons per minute (GPM).
4. This machine was factory built for either LP vapor fuel or Natural Gas. See instructions under **Fuel Supply**.
5. Check pump oil level.
6. If detergents are to be used, only use detergents intended for pressure washers. Follow instructions on the detergent container.

IMPORTANT: Before installing pressure nozzle on initial start-up, turn on water supply, start the pump by pressing the pump ON switch, and hold the trigger gun trigger open until water appears at the end of the wand. Allow water to run from the end of the wand until clear to prevent the nozzle from clogging.

IMPORTANT: If pressure washer has not been used for an extended period of time, remove pressure nozzle from the end of trigger gun and turn on water supply, and start pump by pressing pump ON switch. Hold trigger gun trigger open and allow water to run from end of the wand until clear.

7. Install the adjustable pressure nozzle on end of wand, refer to **Figure 6**.

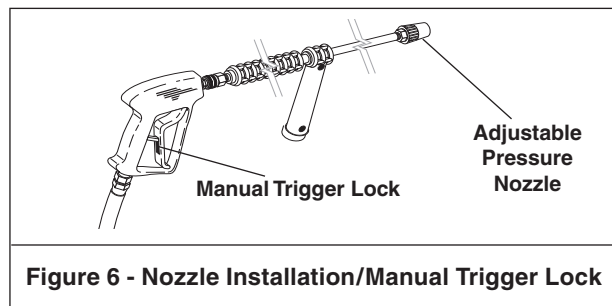


Figure 6 - Nozzle Installation/Manual Trigger Lock

NOTE: To prevent damage to the pressure nozzle, only place the wrench on hex area when tightening.

IMPORTANT: The trigger gun provided with this pressure washer is equipped with a manual trigger lock to prevent accidental operation of the trigger gun, refer to Figure 6. The trigger lock should be used whenever the trigger gun is not in use.

IMPORTANT: Pump may require priming the first time the pressure washer is run. See step 8.

8. If you are running the machine for the first time, or the machine has been sitting for a period of time, the pump may require priming. To prime the pump, run pressure washer with only the pump switch on.

IMPORTANT: On initial start-up or if maintenance has been performed on the burner assembly, it will be necessary to bleed the air from the gas line before the pilot will light.

9. If you are running the machine for the first time or have performed maintenance to the burner assembly, there will be air in the gas line. To bleed out the air from the gas line, run pressure washer with pump and burner switches ON and thermostat on highest setting. Squeeze the trigger of the trigger gun for 15 seconds. If the burner has not ignited, release the trigger for 5 seconds then squeeze for 15 seconds. If the burner has not ignited after 10 tries, see the **Troubleshooting Guide** in this manual.

CAUTION: Have a qualified gas service technician install and service your equipment. DANGER: Never expose a spark or flame where there may be unburned gas present.

To Start

WARNING: Risk of injection or severe injury - Keep clear of nozzle - DO NOT direct discharge stream at persons - This machine is to be used only by qualified operators.

AVERTISSEMENT: RISQUE D'INJECTION ET DE BLESSURES GRAVES. SE TENIR À L'ÉCART DU JET. NE PAS DIRIGER LE JET DE SORTIE VERS D'AUTRES PERSONNES. CONFIER L'UTILISATION DE CE MATÉRIEL À UN OPÉRATEUR QUALIFIÉ.

IMPORTANT: The water must be turned on before starting. Running the pump dry will cause damage and void warranty.

IMPORTANT: Do not allow the machine to run in bypass for more than 10 minutes at any one time or damage to pump may occur.

1. Connect electrical cord and test GFCI device.
2. Turn water on.

NOTE: The pilot indicator light on the control box will ONLY indicate the presence of the pilot while the machine is in operation. This light will be off when the machine is not running.

NOTE: The pilot may require repeated attempts to ignite following initial installation or replacement of the natural gas supply. The delay in ignition is due to trapped air in the gas supply/pilot line.

3. Open gas supply valve.
4. Turn the gas valve ON/OFF knob to pilot position.
5. Fully depress gas ON/OFF knob and hold in. Immediately push the ignitor button down and repeat until the pilot ignites. If the pilot fails to ignite within 30 seconds, release the gas control knob, depress slightly and turn to the OFF position. Wait 15 minutes and repeat steps 4 and 5.
6. Once pilot has ignited, continue to depress the gas control knob for an additional 60 seconds before releasing.
7. Turn gas control knob to the ON position.
8. Hold wand firmly, release trigger of trigger gun and turn pump switch ON. Squeeze trigger of trigger gun and allow air to purge from system.
9. If HOT water is desired, adjust the thermostat to the proper temperature and turn burner switch ON. Squeeze trigger of trigger gun. The pilot will automatically light, quickly followed by the firing of the burner ring. When the trigger of the trigger gun is released or when the thermostat temperature setting is reached, the burner will automatically turn off.

IMPORTANT: If ignition or flame failure is experienced, discontinue use of pressure washer at once. Turn off burner and shut off fuel supply. Have cause of failure corrected by an authorized service technician before use of pressure washer is continued.

To Clean

WARNING: Risk of injection or severe injury - Keep clear of nozzle - DO NOT direct discharge stream at persons - This machine is to be used only by qualified operators.

AVERTISSEMENT: RISQUE D'INJECTION ET DE BLESSURES GRAVES. SE TENIR À L'ÉCART DU JET. NE PAS DIRIGER LE JET DE SORTIE VERS D'AUTRES PERSONNES. CONFIER L'UTILISATION DE CE MATÉRIEL À UN OPÉRATEUR QUALIFIÉ.

The detergent injector valve (**Figure 11**) operates by reducing the volume of water, thus a vacuum is achieved and detergent is drawn into the system. **DO NOT** reduce the water inlet flow so much that the pump cavitates because of water starvation. Operating a pump with insufficient water will damage the pump seals.

1. Insert detergent line and screen into container of detergent.
2. Completely open detergent control knob located on the side of the detergent injector valve.
3. Start the detergent suction by rotating the water adjustment knob of the detergent injector valve. Turning the knob counterclockwise will pull detergent into the system. The flow may be observed through the clear detergent line. Secure the knob position with the knurled nut.
4. The side control knob can now be adjusted to meter the desired amount of detergent.
5. Select the width of your nozzle spray pattern by turning the black knob on the nozzle. Pattern can be from 0° through 80° fan spray.
6. Wash from the bottom to the top, using side to side motions. This washes away heavy dirt and allows the detergent to soak as you work toward the top.
7. Do not wash at a 90° angle to the work (straight at it). This will allow water to splash back at you and reduces your cleaning power. Wash at a 30° to 60° angle to the work. This will allow the water to splash away from you and the water will wash the dirt away faster and easier.
8. Use the width of the spray pattern to wash in a wide path. Overlap spray paths for complete coverage. Wash from side to side, using slow, steady motions.
9. The nozzle should be 12" to 24" from work, closer for tough areas. Be careful on painted or delicate surfaces, the pressure may damage surface if nozzle is too close.
10. Small parts should be washed in a basket so the pressure does not push them away. Larger, light-weight parts should be clamped down so the pressure does not push them away.
11. Turn the side detergent control knob clockwise (CW) for detergent decrease. Wait for detergent to clear. Always rinse with cold water after using detergent. Rinse from the top to the bottom to prevent detergent from dripping onto a rinsed area. For the best results, contact your Hotsy dealer to help you select the best detergent for your application.

To Stop

NOTE: If the machine is unplugged, the GFCI must be reset prior to use. Always test GFCI before each use.

1. If detergents were used, draw clean water through the detergent inlet line to purge detergent. Failure to do so may clog detergent injector valve.
2. If burner was used, turn OFF burner switch and allow pump to run cold water through coil for several minutes.
3. Turn OFF pump switch.
4. Turn OFF water supply.
5. Squeeze trigger gun open to relieve system pressure.
6. Depress gas control knob slightly and turn to OFF position.
7. Turn off main shut-off valve on gas supply.

STORAGE

DANGER: Do not store flammable liquids (gasoline, diesel fuel, petroleum, solvents, etc.) near pressure washer or in non-ventilated areas.

1. Protect from freezing by storing in a heated area, or by flushing the system with antifreeze (use an automotive engine antifreeze or windshield washer solvent to antifreeze). To flush the system with antifreeze, attach a short length of hose to the garden hose connector, see **Figure 1** for location. Place the other end of the hose into a container of antifreeze. Start machine and allow to run until antifreeze flows from the end of the wand. Squeeze and release the trigger gun several times to antifreeze the unloader system. Also draw antifreeze through the detergent inlet line to antifreeze the detergent system. For added protection after antifreezing, disconnect the pressure hose from machine and remove the coil drain plug (refer to **Figure 1** for location). After coil has drained, replace pressure hose and coil drain plug. If the pressure washer is not to be used for an extended length of time, it is recommended that the system be flushed with antifreeze for rust protection.

MAINTENANCE

WARNING: Unauthorized machine modification or use of non-approved replacement parts may cause personal injury and/or property damage and will void the manufacturer warranty.

Pump

Lubrication: To lubricate pump, use 30W non-detergent oil for pump crankcase. Crankcase must be filled to center of sight glass window found on the side of the pump, refer to **Figure 7**. During the break-in-period, make sure the oil is changed after the first 25 hours of operation. After that, replace oil every 3 months or 300 hours of operation, whichever comes first.

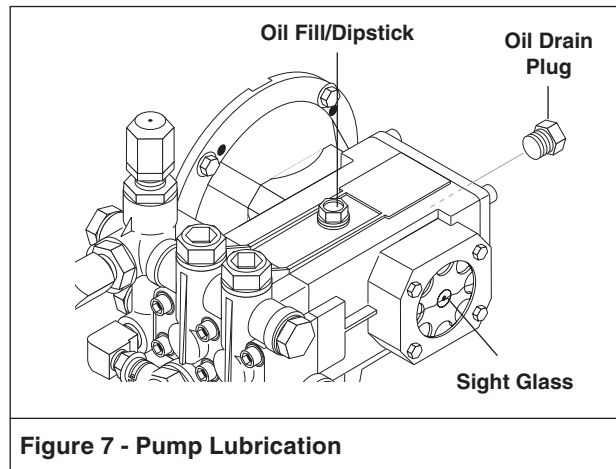


Figure 7 - Pump Lubrication

Proper Pump Care

- **DO NOT** pump acids.
- **DO NOT** allow pump to run dry.
- Winterize if storing in freezing temperatures, refer to **Storage** for details.
- Use a water softener on the water system if known to be high in mineral content.
- Use only high quality detergents and follow manufacturer's mix recommendations.
- Flush the system with clean water immediately after using detergent solutions.
- Clean filter screen on detergent inlet line periodically.
- Flush the pressure washer system with antifreeze if storing for an extended period of time, refer to **Storage** for details.

Pump Motor

On a yearly basis, oil pump motor per instructions on motor nameplate.

NOTE: *Some motors may be equipped with permanently lubricated bearings and will not require additional lubrication.*

Gas Burner

It is recommended that the gas burner be serviced yearly or as needed. Contact your local service center.

Relief Valve

WARNING: *The relief valve on this pressure washer has been factory set and sealed and is a field non-adjustable part. Tampering with the factory setting may cause personal injury and/or property damage, and will void the manufacturer warranty. For replacement parts refer to Figure 16.*

Unloader Valve

WARNING: *The unloader valve on this pressure washer has been factory set and sealed and is a field nonadjustable part. Tampering with the factory setting may cause personal injury and/or property damage, and will void the manufacturer warranty. For replacement parts refer to Figure 17.*

Heating Coil:

Coil Descaling: In hard water areas, scale buildup within the heating coil will occur. Scale deposits will decrease the water temperature rise and may eventually clog the heating coil. Contact your local service center when descaling is needed.

Coil Desooting: Poor grades of fuel or inadequate combustion air will cause heavy soot buildup on the outside surface of the heating coil. These deposits will insulate the coil. This will restrict the air flow through the coil, further aggravating the soot buildup. Contact your local service center when desooting is needed.

TROUBLESHOOTING

SYMPTOM	POSSIBLE CAUSES	CORRECTIVE ACTION
Pump motor will not run.	GFCI tripped.	Reset and test GFCI with every use. See symptom " GFCI tripped ".
	No voltage to machine.	Test power supply and correct.
	Pump motor reset button (thermal overload protector) tripped.	Push reset button on control box. If tripped, check for proper voltage or clogged pressure nozzle.
	Excessive pressure due to clogged relief valve.	Clean relief valve seat.
No water sprays from pressure nozzle.	Pressure nozzle completely clogged.	Clean pressure nozzle.
	Inlet water screen clogged.	Check screen and clean if necessary.
	Pump sucking air.	Fill the detergent container and check for loose hose clamps or fittings.
Low pressure from pressure nozzle.	Inlet water screen clogged.	Check screen and clean if necessary.
	Pressure nozzle worn or incorrect size.	Replace nozzle with proper size.
	Water supply low.	Correct water supply.
	Pump sucking air.	Fill the detergent container and check for loose hose clamps or fittings.
Poor or no detergent flow.	Low detergent level.	Fill the detergent container.
	Detergent screen clogged.	Clean if necessary.
	Detergent injector valve not opening.	Check that handle or knob is not slipping on shaft.
	Pressure nozzle clogged.	Clean pressure nozzle.
	Excessive inlet pressure (more than 80 PSI).	Adjust detergent injector valve. See instructions under To Clean .
Pressure relief valve leaking.	Excessive pressure due to unloader valve over adjusted.	Call qualified service technician to adjust or replace unloader valve.
	Defective relief valve.	Replace relief valve.
Burner will not ignite when trigger gun is open.	Defective pressure switch.	Replace pressure switch.
	No gas.	Check gas supply.
	No pilot.	Check that indicator light is on.
	Thermostat set too low or defective.	Raise thermostat setting. Replace if defective.
	Gas valve not open.	After pilot light is on, turn gas valve ON/OFF knob to ON position, then turn burner switch on.

TROUBLESHOOTING

SYMPTOM	POSSIBLE CAUSES	CORRECTIVE ACTION
Burner will not ignite when trigger gun is open.	Defective primary regulator.	Replace regulator.
	Defective gas valve.	Replace gas valve.
Burner smokes or has obnoxious odor.	Stack restriction.	See Venting under Installation .
Unloader cycles when trigger gun is open or closed.	Air in system.	Open and close trigger gun several times.
	Unloader out of adjustment or defective.	Call a qualified service technician to adjust or replace unloader valve.
	Water leak between unloader valve and trigger gun.	Check fittings, hose and trigger gun for leaks. Repair or replace.
Pilot does not light.	Gas valve closed.	Set gas valve ON/OFF knob to pilot.
	Gas leak in pilot.	Call qualified service technician.
Pilot ignites but will not stay on when ON/OFF knob is released.	Pilot too far away from thermocouple.	Adjust thermocouple closer to flame.
	Thermocouple loose at gas valve.	Tighten to firm fit.
Short thermocouple life.	Excessive heat from pilot flame.	Decrease pilot supply gas.
	Thermocouple too close to pilot.	Adjust thermocouple farther away.
GFCI tripped.	Device has not been reset.	Follow instructions on GFCI.
	Defective GFCI device.	Replace.
	Line to ground fault.	Contact qualified electrician to troubleshoot for ground fault.

IMPORTANT

If the pressure washer demonstrates other symptoms or the corrective actions listed do not correct the problem, contact the local authorized Hotsy Service Center. The Hotsy Service Center can be identified by visiting www.hotsy.com.

When ordering from your dealer, please provide the following:

Model Number: _____ **Release:** _____

Machine Serial Number: _____

Component Part Number: _____

Description: _____



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 HOTSYS 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, rupture disks, 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

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