

GENERAC®
Portable Products

2400PSI

Pressure Washer Owner's Manual



**Problems?
Questions?**
Before taking your unit
back to the store,
call the pressure washer
helpline at
1-800-270-1408
M-F 8-5 CT

Model No. 1456-0 (2400 PSI High Pressure Washer) Manual No. 185780 Revision I (9/11/2000)

Visit our Generac website: www.generac-portables.com



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.



EQUIPMENT DESCRIPTION

CONGRATULATIONS on your purchase of a GENERAC high pressure washer. It has been designed, engineered and manufactured to give you the best possible dependability and performance.

This manual contains information for a high pressure washer that operates at 2,400 PSI at a flow rate of 2.5 gallons per minute. This high quality residential system features large 10" wheels, a pump equipped with an automatic cool down system, a chemical injection system, and an adjustable spray nozzle. The product is shipped with safety goggles, a heavy duty 25' hose, engine oil, and more.

Please read and retain this manual. The instructions will enable you to assemble your unit without tools, and maintain your high pressure washer properly.

Every effort has been made to ensure that the information in this manual is both accurate and current. However, Generac reserves the right to change, alter or otherwise improve the product and its documentation at any time without prior notice.

Should you experience any problem you cannot easily fix, call the pressure washer helpline at **1-800-270-1408**.

CUSTOMER RESPONSIBILITIES

- Read and observe the safety rules.
- Follow regular schedule in maintaining, caring for and using your high pressure washer.
- For off-season storage, review "Preparing The Unit For Storage" on page 14.

SAFETY RULES



CAUTION! When setting up, transporting, adjusting or making repairs to your high pressure washer, always disconnect the spark plug wire from the spark plug and place the wire where it cannot contact spark plug.



DANGER! Engine exhaust gases contain DEADLY carbon monoxide gas. This dangerous gas, if breathed in sufficient concentrations, can cause unconsciousness or even death. Operate this equipment only in the open air where adequate ventilation is available.



DANGER! Gasoline is highly FLAMMABLE and its vapors are EXPLOSIVE. **Do Not** permit smoking, open flames, sparks or heat in the vicinity while handling gasoline. Avoid spilling gasoline on a hot engine. Allow unit to cool for 2 minutes before refueling. Comply with all laws regulating storage and handling of gasoline.

Read this manual carefully and become familiar with your pressure washer. Know its applications, its limitations, and any hazards involved.



WARNING:



The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm.

- Locate this pressure washer in areas away from combustible materials, combustible fumes or dust.
- The high pressure equipment is designed to be used with Generac authorized parts **ONLY**. If you use this equipment with parts that **Do Not** comply with minimum specifications, the user assumes all risks and liabilities.
- Some chemicals or detergents may be harmful if inhaled or ingested, causing severe nausea, fainting or poisoning. The harmful elements may cause property damage or severe injury.
- **Do Not** allow CHILDREN to operate the pressure washer at any time.



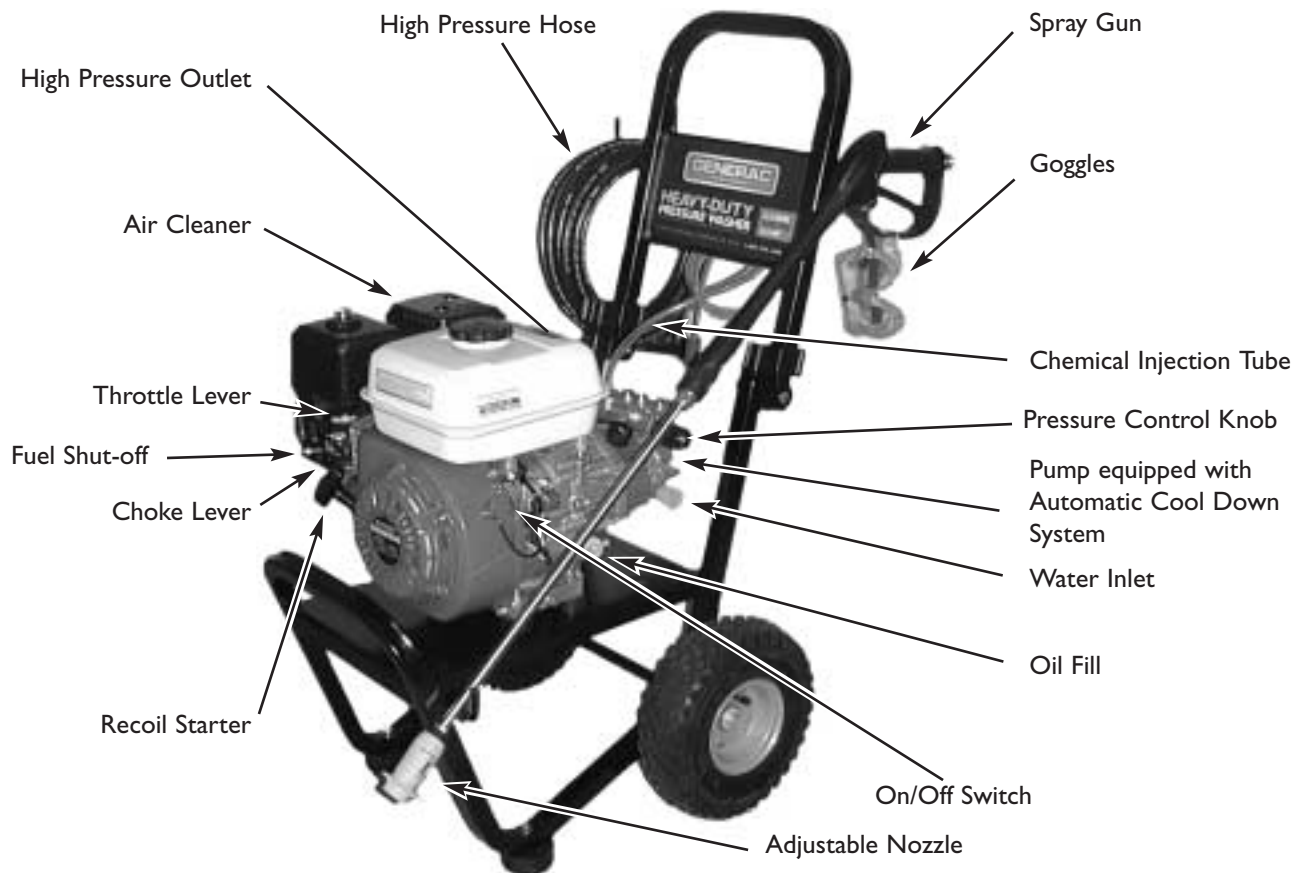
- Operate engine only at governed speed. Running the engine at excessive speeds increases the hazard of personal injury. **Do Not** tamper with parts which may increase or decrease the governed speed.
 - **Do Not** wear loose clothing, jewelry or anything that may be caught in the starter or other rotating parts.
 - Before starting the pressure washer in cold weather, check all parts of the equipment and be sure ice has not formed there.
 - **Never** use a spray gun which does not have a trigger lock or trigger guard in place and in working order.
 - Keep the hose connected to machine or the spray gun while the system is pressurized. Disconnecting the hose while the unit is pressurized is dangerous.
 - **Never** operate units with broken or missing parts, or without protective housing or covers.
 - Check the fuel system for leaks or signs of deterioration, such as chafed or spongy hose, loose or missing clamps, or damaged tank or cap. Correct all defects before operating the pressure washer.
 - **Do Not** spray flammable liquids.
 - Use a respirator or mask whenever there is a chance that vapors may be inhaled. Read all instructions with mask so you are certain the mask will provide the necessary protection against inhaling harmful vapors.
 - Operate and store this unit on a stable surface.
 - **Never** aim the gun at people, animals or plants. The high pressure stream of water that this equipment produces can pierce skin and its underlying tissues, leading to serious injury and possible amputation.
 - **Never** allow any part of the body to come in contact with the fluid stream. **Do Not** come in contact with a fluid stream created by a leak in the high pressure hose.
 - Always wear eye protection when you use this equipment or when you are in the vicinity where the equipment is in use.
 - High pressure spray can cause paint chips or other particles to become airborne.
 - **Do Not** operate the pressure washer above the rated pressure.
 - **Never** move the machine by pulling on the high pressure hose. Use the handle provided on the unit.
 - Always be certain the spray gun, nozzles and accessories are correctly attached.
 - **Do Not** secure the spray gun in the (open) position.
 - High pressure spray may damage fragile items including glass. **Do Not** point spray gun at glass when in the jet spray mode.
 - Hold the spray gun firmly in your hand before you start the unit. Failure to do so could result in an injury from a whipping spray gun. **Do Not** leave the spray gun unattended while the machine is running.
 - The cleaning area should have adequate slopes and drainage to reduce the possibility of a fall due to slippery surfaces.
 - Keep water spray away from electric wiring or fatal electric shock may result.
 - **Do Not** by-pass any safety device on this machine.
 - The muffler and engine heat up during operation and remain hot immediately after shutting it down. Avoid contact with a hot muffler or engine as you could be severely burned.
 - High pressure hose can develop leaks from wear, kinking, abuse, etc. Water spraying from a leak is capable of injecting material into skin. Inspect hose each time before using it. Check all hoses for cuts, leaks, abrasions or bulging of cover, or damage or movement of couplings. If any of these conditions exist, replace hose immediately. **Never** repair high pressure hose. Replace it with another hose that meets maximum pressure rating of your unit.
 - The muffler and air cleaner must be installed and in good condition before operating the pressure washer. These components act as spark arresters if the engine backfires.
- In the State of California a spark arrester is required by law (Section 4442 of the California Public Resources Code). Other states may have similar laws. Federal laws apply on federal lands.
- NOTE:** If you equip the muffler with a spark arrester, it must be maintained in effective working order. You can order a spark arrester through your authorized Honda service dealer.



KNOW YOUR PRESSURE WASHER

Read this owner's manual and safety rules before operating your high pressure washer.

Compare the illustrations with your high pressure washer to familiarize yourself with the location of the controls. Save this manual for future reference.



Adjustable Nozzle — Attached to the spray gun to provide high pressure stream. Adjustable nozzle allows you to adjust force of spray and spray pattern.

Air Cleaner — Dry type filter element limits the amount of dirt and dust that gets in the engine.

Automatic Cool Down System — Cycles water through pump when water reaches 140°-145°F. **Warm water will discharge from pump onto ground.**

Chemical Injection Tube—Used to siphon chemical from the detergent container to the pump.

Choke Lever — Used to prepare a cold engine for starting.

Fuel Shut-off — Used to control the flow of fuel to the engine.

Goggles — Always use the enclosed goggles or other eye protection when running your pressure washer.

High Pressure Hose — Connect one end to water pump and the other end to spray gun.

High Pressure Outlet — Connection for high pressure hose.

Oil Fill — Oil input location.

On/Off Switch — Used to set engine in starting mode and stop a running engine.

Pressure Control Knob — Varies the pressure of the high pressure spray.

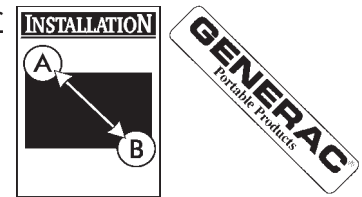
Pump — Develops high pressure.

Recoil Starter — Used for starting the engine manually.

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

Throttle Lever—Used to set engine in a slow or fast running mode.

Water Inlet — Connection for garden hose.



WARNING! Read entire owner's manual before you attempt to assemble or operate your new pressure washer.

REMOVE PRESSURE WASHER FROM CARTON

- Remove the high pressure hose and parts box included with pressure washer.
- Slice two corners at the end of carton from top to bottom so the panel can be folded down flat, then remove all packing material.
- Roll pressure washer out of carton.

CARTON CONTENTS

Items in the carton include:

- Main Unit
- Parts Box (includes the following):
 - Oil Bottle
 - Wire Form
 - Goggles
 - Nozzle Cleaning Kit
 - O-Ring Maintenance Kit
 - Owner's Manual
 - Engine Manual
 - Engine Warranty
 - Emissions Control Warranty
 - Warranty Card
 - Spray Gun
 - Adjustable Nozzle Extension
 - High Pressure Hose

PREPARING PRESSURE WASHER FOR USE

If you have any problems with the assembly of your pressure washer or if parts are missing or damaged, call the pressure washer helpline at **1-800-270-1408**.

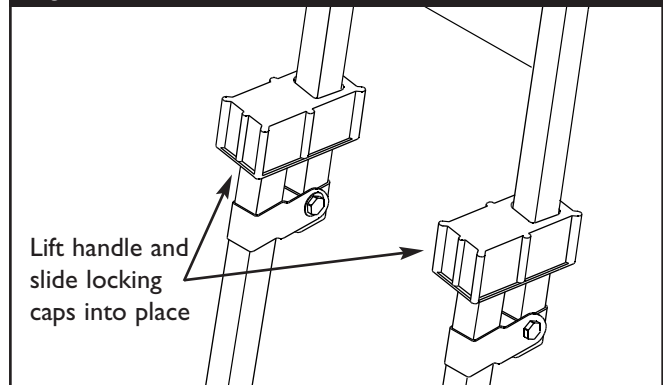
To prepare your pressure washer for operation you will need to perform these tasks:

- Lift and secure the handle and attach the wire form.
- Add oil to the engine.
- Add fuel to the fuel tank.
- Connect the high pressure hose to the spray gun and the pump.
- Connect the water supply to the pump.
- Connect nozzle extension to gun.

Secure Handle and Wire Form

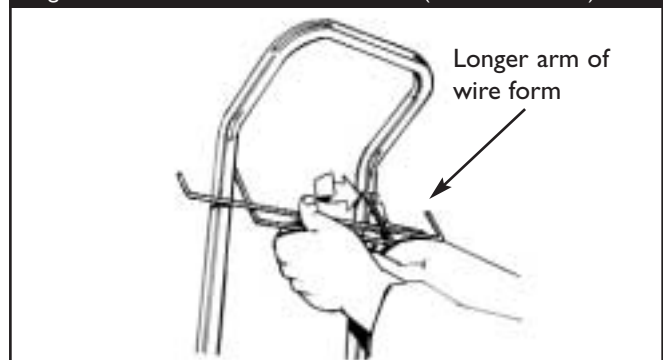
- Lift handle and slide locking caps over the mating handle posts (Figure 1).

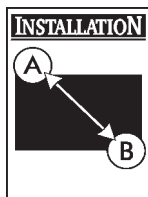
Figure 1 — Secure Handle



- From rear of unit, insert wire form into the handle with the longer arm positioned on the right. The hook should resemble a "J" (Figure 2).

Figure 2 — Attach Wire Form to Handle (viewed from rear)





Add Engine Oil



WARNING! Any attempt to crank or start the engine before it has been properly serviced with the recommended oil will result in an engine failure.

Use only the high quality oil recommended in the engine owner's manual.

- Place the pressure washer on a level surface.
- Fill engine with oil, as described in the engine owner's manual.

NOTE: Check oil often during engine break-in, as explained in the engine owner's manual.

Add Gasoline



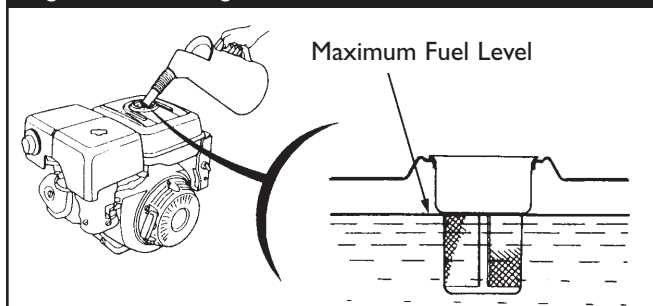
DANGER! Never fill fuel tank indoors, or when engine is running or hot. **Do Not smoke** when filling fuel tank.



WARNING! Never fill fuel tank completely full. Always provide space for fuel expansion. Wipe away any fuel spillage from engine and equipment before starting.

- Use clean fuel and store in approved, clean covered containers. Use clean fill funnels. **Never** use "stale" gasoline left over from last season or gasoline stored for long periods.
- Clean the area around the fuel fill cap, remove the cap (Figure 3).

Figure 3 — Add Regular Unleaded Gasoline to Fuel Tank.



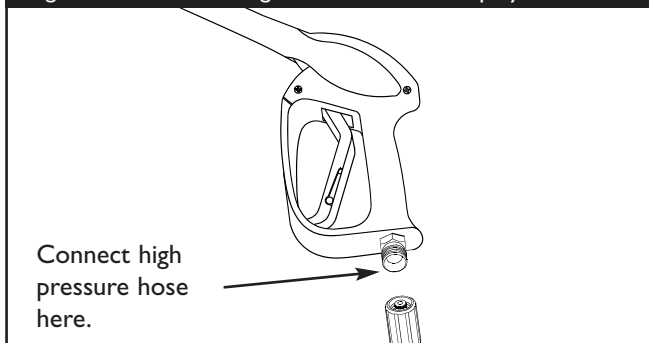
- Slowly add **regular UNLEADED gasoline** to fuel tank. Use a funnel to prevent spillage.
- Install the fuel cap and wipe up any spilled gasoline.

Connect Pressure Hose and Water to Pump

IMPORTANT: You must assemble the nozzle extension and attach all hoses before you start the engine. Starting engine without all hoses connected and water supplied will damage the pump.

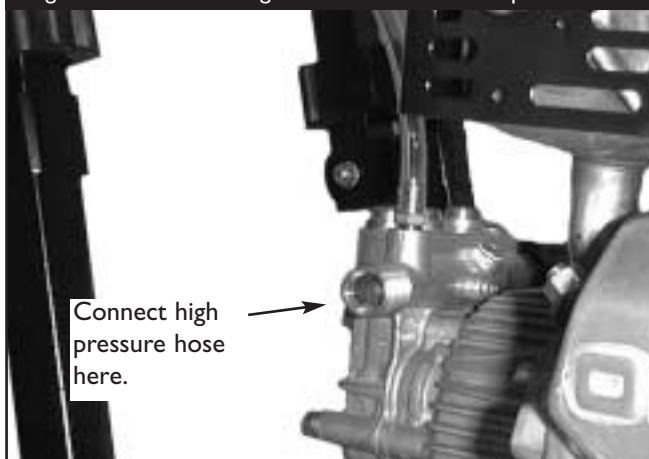
- Uncoil the high pressure hose and attach one end of the hose to the base of the spray gun (Figure 4). Tighten by hand.

Figure 4 — Connect High Pressure Hose to Spray Gun



- Attach the other end of the high pressure hose to the high pressure outlet on the pump (Figure 5). Tighten by hand.

Figure 5 — Connect High Pressure Hose to Pump



- Before you connect your garden hose to the water inlet, inspect the inlet screen (Figure 6). Clean the screen if it contains debris or have it replaced if damaged. **Do Not run the pressure washer if the screen is missing or damaged.**

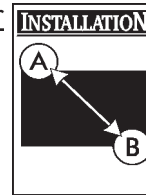
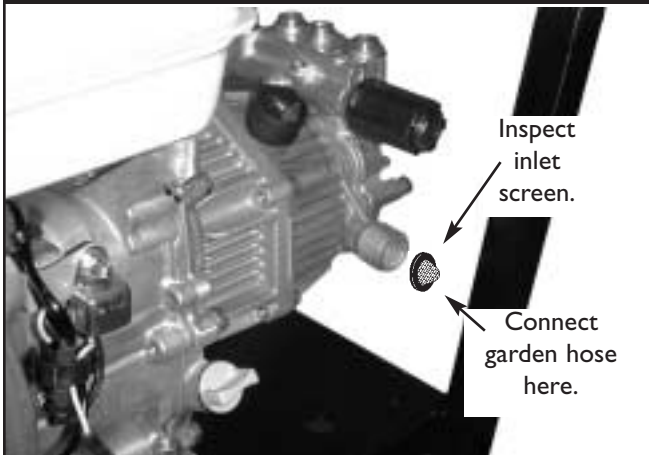


Figure 6 — Connect Water Supply Hose to Pump



- Run water through your garden hose for 30 seconds to clean out any debris .
- Connect the garden hose to the water inlet. Tighten by hand (Figure 6).



WARNING! There MUST be at least ten feet of unrestricted garden hose between the pressure washer inlet and any flow shut off device, such as a ‘Y’ shut-off connector or other convenience-type water shut-off valve. Damage to pressure washer resulting from disregarding this warning will not be covered by the warranty.

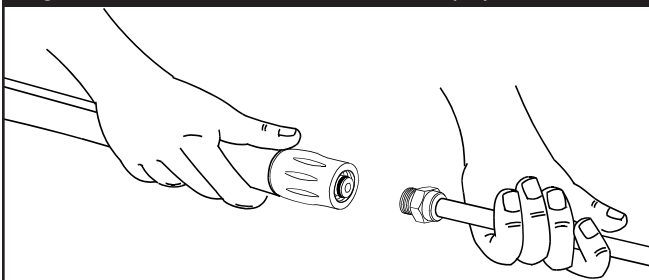
- Turn ON the water and squeeze the trigger on the gun to purge the pump system of air and impurities.



CAUTION! Before starting the pressure washer, be sure you are wearing adequate eye protection.

- Attach the adjustable nozzle extension to the spray gun. Tighten by hand (Figure 7).

Figure 7 — Connect Nozzle Extension to Spray Gun



CHECKLIST BEFORE STARTING ENGINE

Review the assembly to ensure you have performed all of the following.

- Make sure the handle and wireform are in place and secure.
- Check for properly tightened hose connections (high pressure and water supply).
- Check to make sure that there are no kinks, cuts, or damage to the high pressure hose.
- Check that oil has been added to the proper level in the engine crankcase before trying to start the pressure washer.
- Add the proper gasoline to fuel tank.
- Provide a proper water supply (not to exceed 140°F).
- Be sure to read the “Safety Rules” and “Operation” sections before using the pressure washer.

HOW TO USE YOUR PRESSURE WASHER

If you have any problems operating your pressure washer, please call the pressure washer helpline at **1-800-270-1408**.

How to Start Your Engine

The best way to start your pressure washer for the first time is to follow these instructions step-by-step. This starting information also applies whenever you start the engine after you have let the pressure washer sit idle for at least a day.

- Place the pressure washer in an area close enough to an outside water source that can flow at a rate of at least 2.5 gallons per minute.
- Make sure the unit is in a level position.

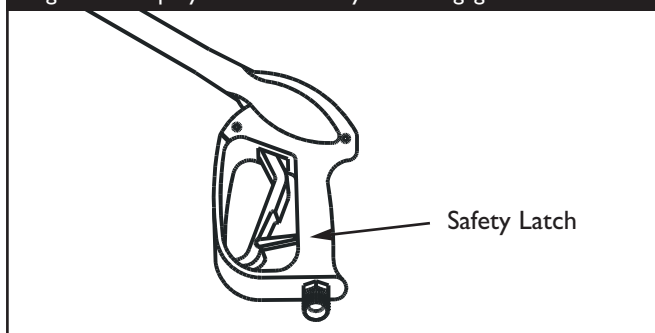


- Check that the high pressure hose is tightly connected to the spray gun and to the pump.
- Connect the garden hose to the water inlet on the pressure washer pump and **turn on the water**.

WARNING! Do **Not** run the pump without the water supply connected and turned on. You must follow this caution or the pump will be damaged.

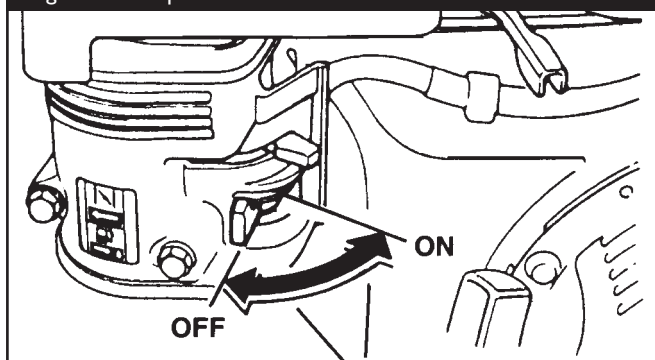
- Position the nozzle in the low pressure mode (nozzle slid forward) and squeeze the trigger on the spray gun to relieve the air pressure caused by turning **ON** the water. Water will flow out of the gun in a thin stream. Continue to hold trigger until you have a steady stream of water and no air remains in the system. This will make it easier to pull start the engine. Release the trigger.
- Engage the safety latch on the spray gun (Figure 8).

Figure 8 — Spray Gun with Safety Latch Engaged



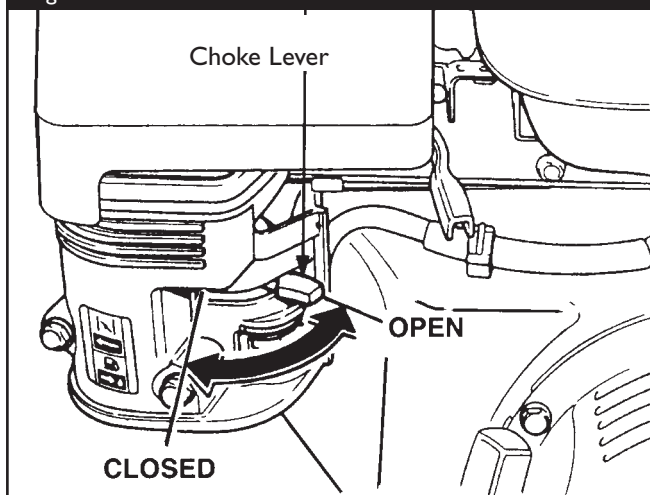
- Turn **ON** the fuel valve (Figure 9).

Figure 9 — Open Fuel Valve



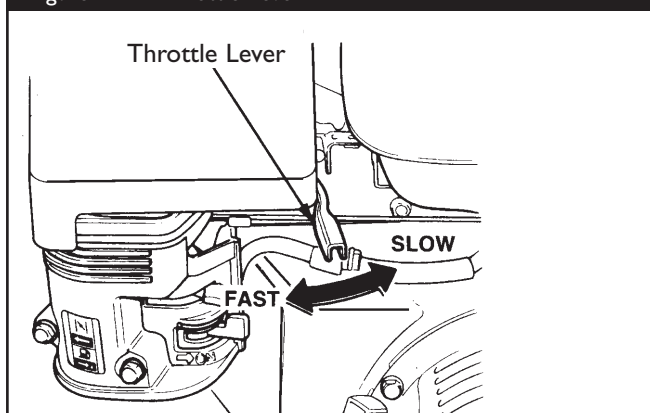
- Position the choke lever (Figure 10) as follows:

Figure 10 — Choke Lever



- Cold engine ~ ~ ~ ~ ~ (Choke-CLOSED)
- Restarted warm engine ~ ~ ~ ~ ~ (Choke-OPEN)
- Move the throttle lever to the **“Fast”** position (Figure 11).

Figure 11 — Throttle Lever

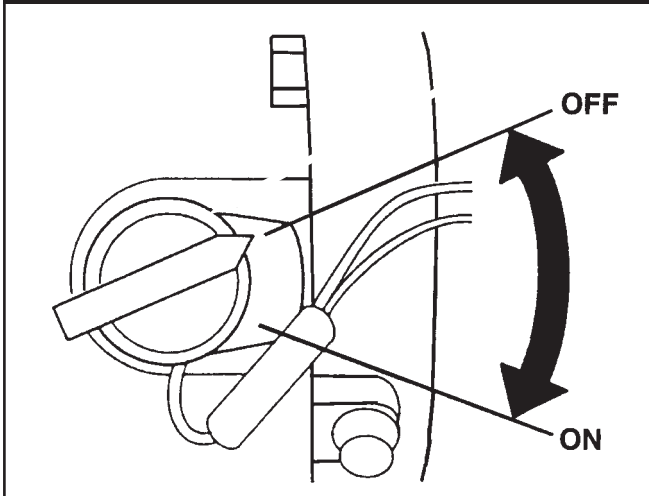


IMPORTANT: When using the pressure washer, always keep the throttle in the **“Fast”** position.



- Turn ON the engine switch (Figure 12).

Figure 12 — Engine Switch



- Grasp the starter grip handle and pull slowly until you feel some resistance. Then pull cord out with rapid full arm stroke. Let rope return slowly. **Do Not** let rope “snap back” against starter.
- If the choke lever has been moved to the “**CLOSED**” position to start the engine, gradually move it to the “**OPEN**” position as the engine warms up.

How to Stop Your Pressure Washer

- Move the throttle lever to the “**Slow**” position (Figure 11).
- Turn the engine switch to the “**Off**” position (Figure 12).
- Turn the fuel valve to the “**Off**” position (Figure 9).
- **Squeeze trigger on the spray gun to relieve pressure in the hose.**

NOTE: A small amount of water will squirt out from the spray gun when you release the pressure.

How to Use the Adjustable Nozzle

You now should know how to **START** your pressure washer and how to **STOP** it. The information in this section will tell you how to adjust the spray pattern and apply detergent or any other cleaning chemicals.

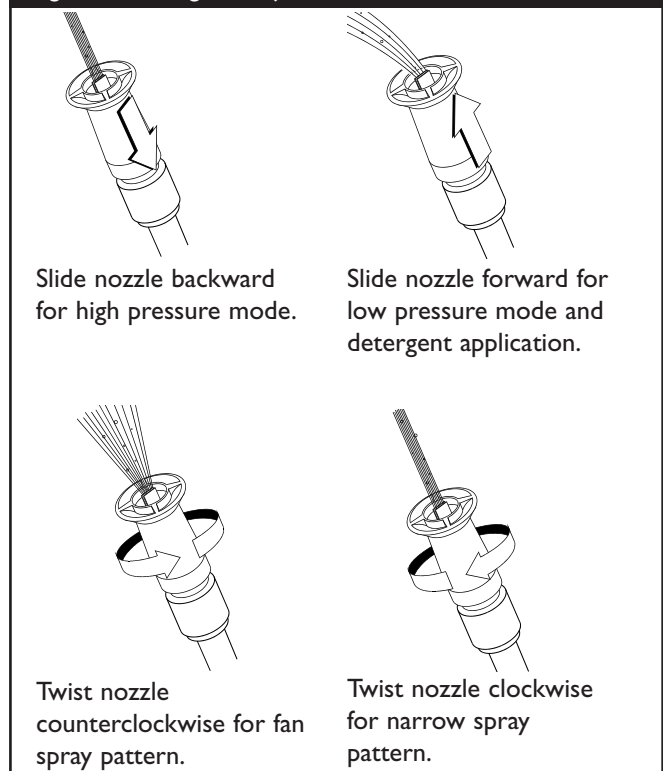


DANGER! Never adjust spray pattern when spraying. **Never** put hands in front of nozzle to adjust spray pattern.

On the end of your spray gun is a nozzle that you can slide forward and backward and that you can also twist from side to side. With the adjustable nozzle you can adjust the spray pattern to be either high pressure or low pressure. You can also adjust the spray so it is concentrated in a stream pattern or expanded into a fan pattern.

- Slide the nozzle forward when you wish to adjust the spray to low pressure mode (Figure 13). Slide the nozzle backward to achieve high pressure.

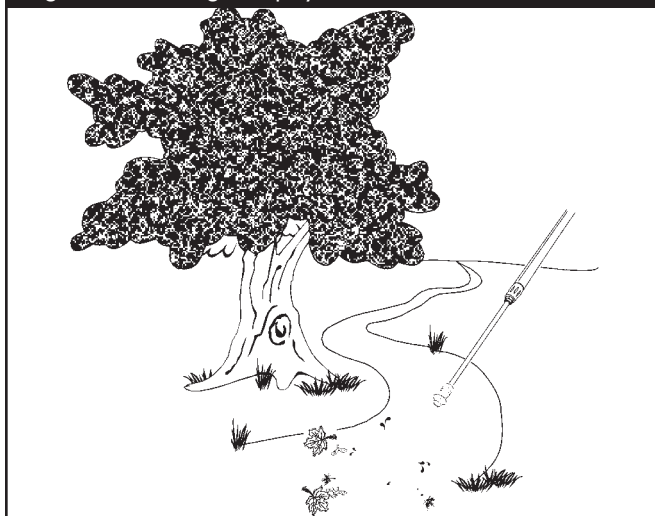
Figure 13 - Using the Adjustable Nozzle.





- Point the nozzle toward the ground and press the trigger to test the pattern (Figure 14).

Figure 14— Testing the Spray Pattern



- Twisting the nozzle adjusts the spray pattern from a narrow pattern to a fan pattern.
- For most effective cleaning, keep spray nozzle between 8 to 24 inches away from cleaning surface.
- If you get the spray nozzle too close, especially using high pressure mode, you may damage the cleaning surface.
- **Do Not** get closer than 6 inches when cleaning automobile tires.

Applying Detergent with the Adjustable Nozzle

IMPORTANT: Use soaps designed specifically for pressure washers. Household detergents could damage the pump.

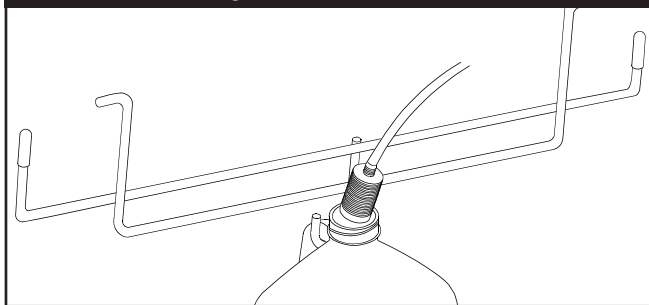
IMPORTANT: You must **attach all hoses** before you start the engine. Starting the engine without all the hoses connected and without the water turned ON will damage the pump.

To apply detergent follow these steps:

- Review the use of adjustable nozzles on page 9.
- Prepare the detergent solution as required by the job.

- Hang the detergent solution on hook of the wireform on the handle (Figure 15).

Figure 15 — Insert the Small Filter Into Container of Cleaning Solution



- Place small filter of the clear, detergent siphoning tube into the detergent container.



CAUTION! Keep the plastic injector tube from coming in contact with the hot muffler. This will damage the plastic tube. When inserting the filter into a cleaning agent bottle, route the tube so as to keep it from inadvertently contacting the hot muffler.

- Slide the adjustable nozzle forward to low pressure mode. Detergent cannot be applied with nozzle in high pressure position.

IMPORTANT: Detergent cannot be applied without the water source turned on.

- Make sure garden hose is connected to water inlet. Check that high pressure hose is connected to spray gun and pump. Start engine.
- Apply detergent to a dry surface, starting from the bottom and working up.
- Allow the detergent to soak in between 3-5 minutes before washing and rinsing. Reapply as needed to prevent surface from drying.
- For washing, start at lower portion of area to be washed and work upward, using long, even overlapping strokes.



Pressure Washer Rinsing



WARNING! Be extremely careful if you must use the pressure washer from a ladder, scaffolding or any other relatively unstable location. Pressure in a running washer builds as you climb. When you press the trigger, the recoil from the initial spray could force you to fall. The high pressure spray could also force you to fall if you are too close to the cleaning surface.

For Rinsing:

- Slide nozzle backward to high pressure and wait for detergent to clear.
- Keep the spray gun a safe distance from the area you plan to spray.
- Apply a high pressure spray to an small area and then check the surface for damage. If no damage is found, you can assume it is okay to continue cleaning.

- Start at top of area to be rinsed, working down with same overlapping strokes as you used for cleaning.

NOTE: You can also stop detergent from flowing by simply removing siphon from bottle.

Automatic Cool Down System (also known as Thermal Relief)

If you run the engine on your pressure washer for 3-5 minutes without pressing the trigger on the spray gun, circulating water in the pump can reach a temperature between 140–145°F. When the water reaches this temperature, the automatic cool down system engages and cools the pump by **discharging the warm water onto the ground**. This system prevents internal damage to the pump.



SPECIFICATIONS

Outlet Pressure 2,400 psi

Flow Rate 2.5 gallons per minute (gpm)

Water Supply Not to Exceed 140°F
Temperature

Automatic Cool Will cycle when water
Down System reaches 140°-145°F

GENERAL MAINTENANCE RECOMMENDATIONS

The warranty of the high pressure washer does not cover items that have been subjected to operator abuse or negligence. To receive the full value from the warranty, the operator must maintain the high pressure washer as instructed in this manual.

- Some adjustments will need to be made periodically to properly maintain your high pressure washer.
- All procedures in the “Pressure Washer Maintenance” section of this manual should be made at least once each season.
- Once a year you should check the gun and nozzle extension assembly for wear. Also clean or replace the spark plug and clean or replace the air filter. A new spark plug and clean air filter assure proper fuel–air mixture and help your engine run better and last longer.

Before Each Use

- Check engine oil level.
- Check water inlet screen for damage.
- Check high pressure hose for leaks.
- Check chemical injection tube and filter for damage.
- Check gun and adjustable nozzle extension assembly for leaks.
- Rinse out garden hose to flush out debris.

PRESSURE WASHER MAINTENANCE

Check and Clean Inlet Screen

Examine the screen on the water inlet. Clean it if the screen is clogged or replace it if screen is damaged.

Check High Pressure Hose

The high pressure hose can develop leaks from wear, kinking, or abuse. Inspect the hose each time before using it. Check for cuts, leaks, abrasions or bulging of cover, damage or movement of couplings. If any of these conditions exist, replace the hose immediately.



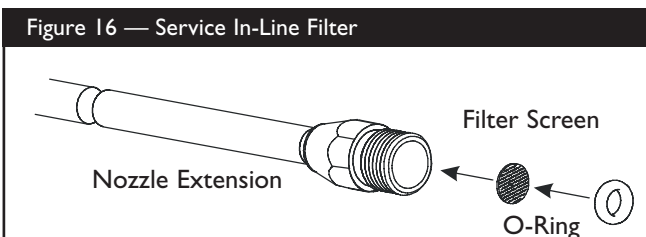
DANGER! Water spraying from a leak is capable of injecting material into skin. Inspect hose each time before using it. **Never** repair a high pressure hose. Replace it with another hose that meets the maximum pressure rating of your pressure washer.

Check Gun and Adjustable Nozzle Extension

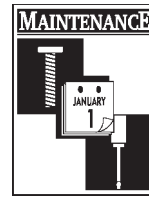
Examine the hose connection to the gun and make sure it is secure. Test the trigger by pressing it and making sure it springs back into place when you release it. Put the safety latch in the ON position and test the trigger. You should not be able to press the trigger.

Check In-Line Filter

Refer to Figure 16 and service the in-line filter if it becomes clogged, as follows:



1. Detach gun from high pressure hose. Detach nozzle extension from gun and remove o-ring and screen from nozzle extension. Flush the screen, gun, and nozzle extension with clean water to clear debris.



2. If the screen is damaged, the o-ring kit contains a replacement in-line filter screen and an o-ring. If undamaged, reuse screen.
3. Place the in-line filter screen into the threaded end of the nozzle extension. Direction does not matter. Push the screen in with the eraser end of a pencil until it rests flat at the bottom of the opening. Take care to not bend the screen.
4. Place the o-ring into the recess. Push the o-ring snugly against the in-line filter screen.
5. Assemble the nozzle extension to the spray gun, as described earlier in this manual.

Check Chemical Injection Tube

Examine the filter on the detergent hose and clean if clogged. The tube should fit tightly on the barbed fitting. Examine the tube for leaks or tears. Replace the filter or tube if either is damaged.

Purge Pump of Air and Contaminants

To remove air from the pump, follow these steps:

- Set up the pressure washer as described in “Preparing the Pressure Washer for Use” on page 5, and connect the water supply.
- Remove the nozzle extension from the gun.
- Pull the trigger on the gun and hold.

To remove contaminants from the pump, follow these steps:

- Set up the pressure washer as described in “How to Use Your Pressure Washer” on page 7, and connect the water supply.
- Remove the nozzle extension from the gun.
- Start the engine according to instructions given on page 7.
- Squeeze the trigger on the gun and hold.
- When the water supply is steady and constant, engage the safety latch and refasten the nozzle extension.

Cleaning Chemical Injection Tube

If you have used the chemical injection tube you must flush it with clean water before stopping the engine.

- Place the chemical injection tube in a bucket full of clean water.
- Flush for 1–2 minutes.
- Shut off the engine.

IMPORTANT: Simply shutting OFF engine will not release pressure in the system. **When the engine has shut down, squeeze the trigger on the gun to relieve the pressure in the hose.**

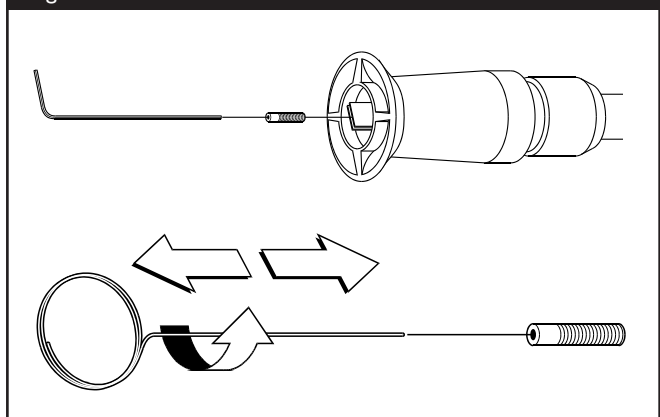
Nozzle Maintenance

If a nozzle becomes restricted or clogged with dirt or foreign materials, a pulsing sensation caused by excessive pump pressure may occur during use.

Immediately clean a clogged or partially restricted nozzle with the kit included with your pressure washer by following these instructions:

- Shut off the engine and turn off the water supply.
- Disengage the safety latch and pull the trigger on the spray gun. Hold until all water is purged from the unit. Engage the safety latch on the spray gun.
- Separate the nozzle extension from the spray gun.
- Twist nozzle to stream setting.
- Remove nozzle from the end of the nozzle extension using a 2 mm or 5/64 allen wrench (included in Nozzle Cleaning Kit) (Figure 17).

Figure 17 — Remove and clean nozzle.

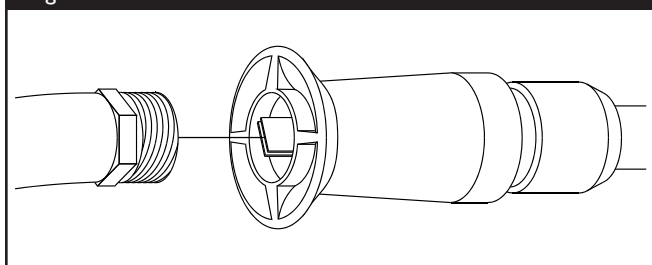


- Use the wire included in the kit or a small paper clip to free the foreign materials clogging or restricting the nozzle (Figure 17).



- Remove additional debris by back flushing water supply through nozzle extension. Back flush between 30 to 60 seconds. Twist nozzle extension to stream pattern and move nozzle from low to high pressure while flushing (Figure 18).

Figure 18 — Backflush the nozzle



- Reinstall nozzle into nozzle extension. **Do Not** overtighten.
- Reconnect the water supply, turn **ON** the water, and start the engine.
- Reconnect nozzle extension to spray gun.
- Test the pressure washer by operating with nozzle in the high and the low pressure positions.

O-Ring Maintenance

Your pressure washer uses o-rings to keep hose and spray gun connections tight and leak-free. Through the normal operation of your unit, these o-rings may become worn or damaged.

Provided with your pressure washer is an O-Ring Maintenance Kit which includes replacement o-rings, rubber washer and water inlet filter. Refer to the instruction sheet provided in the kit to service your unit's o-rings. Note that not all of the parts in the kit will be used on your unit.

To remove a worn or damaged o-ring:

- Use a small flathead screwdriver to get underneath the o-ring and pry it off.

ENGINE MAINTENANCE

See the engine owner's manual for instructions on how to properly maintain the engine.

PREPARING UNIT FOR STORAGE

Water should not remain in the unit for long periods of time. Sediments of minerals can deposit on pump parts and "freeze" pump action. If you do not plan to use the pressure washer for more than 30 days, follow this procedure:

1. Flush chemical injection tube by placing the filter into a pail of clean water while running pressure washer in low pressure (adjustable nozzle in forward position). Flush for one to two minutes.
2. Shut off the engine and let it cool, then remove all hoses.



WARNING! Be sure lever is in "STOP" position before you continue. If you start engine without proper water supply connected, you can damage pump.

3. Empty the pump of all pumped liquids by pulling the recoil handle about 6 times. This should remove most of the liquid in the pump.

NOTE: To protect the unit from freezing temperatures, draw RV antifreeze (no alcohol) into the pump by pouring the antifreeze into a 3-foot section of garden hose connected to inlet adapter and pulling recoil handle twice.

4. Store in a clean, dry area.

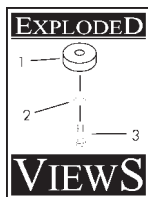
STORING THE ENGINE

See the engine owner's manual for instructions on how to properly store the engine.

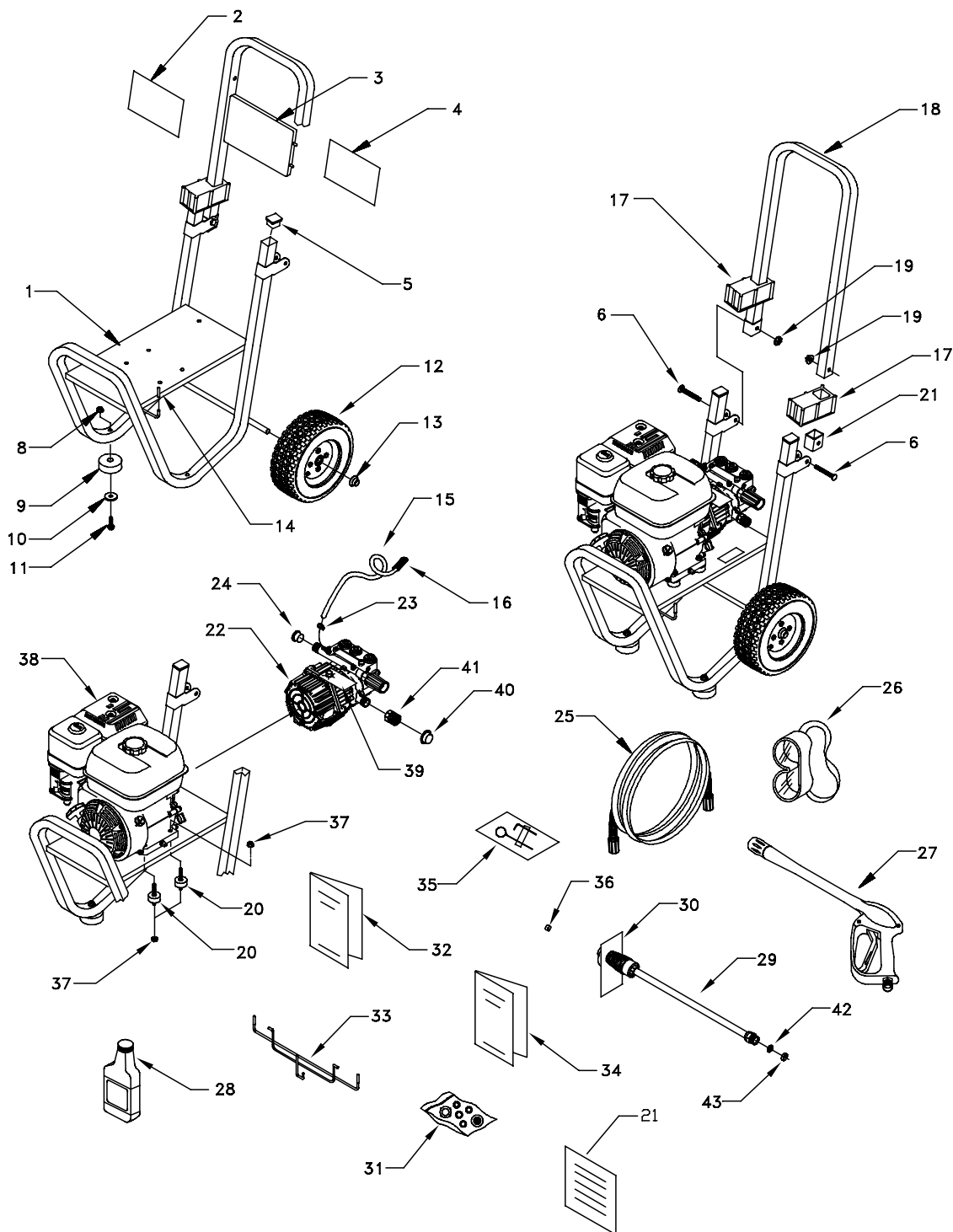


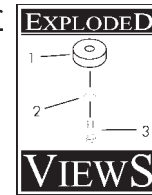
TROUBLESHOOTING

Problem	Cause	Correction
Pump has following problems: failure to produce pressure, erratic pressure, chattering, loss of pressure, low water volume.	1. Nozzle in low pressure mode. 2. Water inlet is blocked. 3. Inadequate water supply. 4. Inlet hose is kinked or leaking. 5. Clogged inlet hose strainer. 6. Water supply is over 140°F. 7. High pressure hose is blocked or leaks. 8. Gun leaks. 9. Nozzle is obstructed. 10. Pump is faulty.	1. Pull nozzle backward for high pressure mode. 2. Clear inlet. 3. Provide adequate water flow. 4. Straighten inlet hose, patch leak. 5. Check and clean inlet hose strainer. 6. Provide cooler water supply. 7. Clear blocks in outlet hose. 8. Replace gun. 9. Clean nozzle. 10. Contact Generac service facility.
Detergent fails to mix with spray.	1. Detergent siphoning tube is not submerged. 2. Chemical filter is clogged. 3. Nozzle is in high pressure mode.	1. Insert detergent siphoning tube into detergent. 2. Clean or replace filter/detergent siphoning tube. 3. Push nozzle forward for low pressure mode.
Engine runs good at no-load but “bogs” when load is added.	Engine speed is too slow.	Move throttle control to FAST position. If engine still “bogs down”, contact Honda service facility.
Engine will not start; or starts and runs rough.	1. Low oil level. 2. Dirty air cleaner. 3. Out of gasoline. 4. Stale gasoline. 5. Spark plug wire not connected to spark plug. 6. Bad spark plug. 7. Water in gasoline. 8. Overchoking. 9. Excessively rich fuel mixture. 10. Intake valve stuck open or closed. 11. Engine has lost compression.	1. Fill crankcase to proper level. 2. Clean or replace air cleaner. 3. Fill fuel tank. 4. Drain gas tank; fill with fresh fuel. 5. Connect wire to spark plug. 6. Replace spark plug. 7. Drain gas tank; fill with fresh fuel. 8. Open choke fully and crank engine. 9. Contact Honda service facility. 10. Contact Honda service facility. 11. Contact Honda service facility.
Engine shuts down during operation.	1. Out of gasoline. 2. Low oil level.	1. Fill fuel tank. 2. Fill crankcase to proper level.
Engine lacks power.	Dirty air filter.	Replace air filter.
Engine “hunts” or falters.	Choke is opened too soon.	Move choke to halfway position until engine runs smoothly.



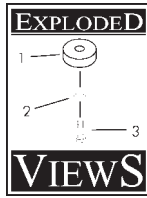
EXPLODED VIEW - UNIT



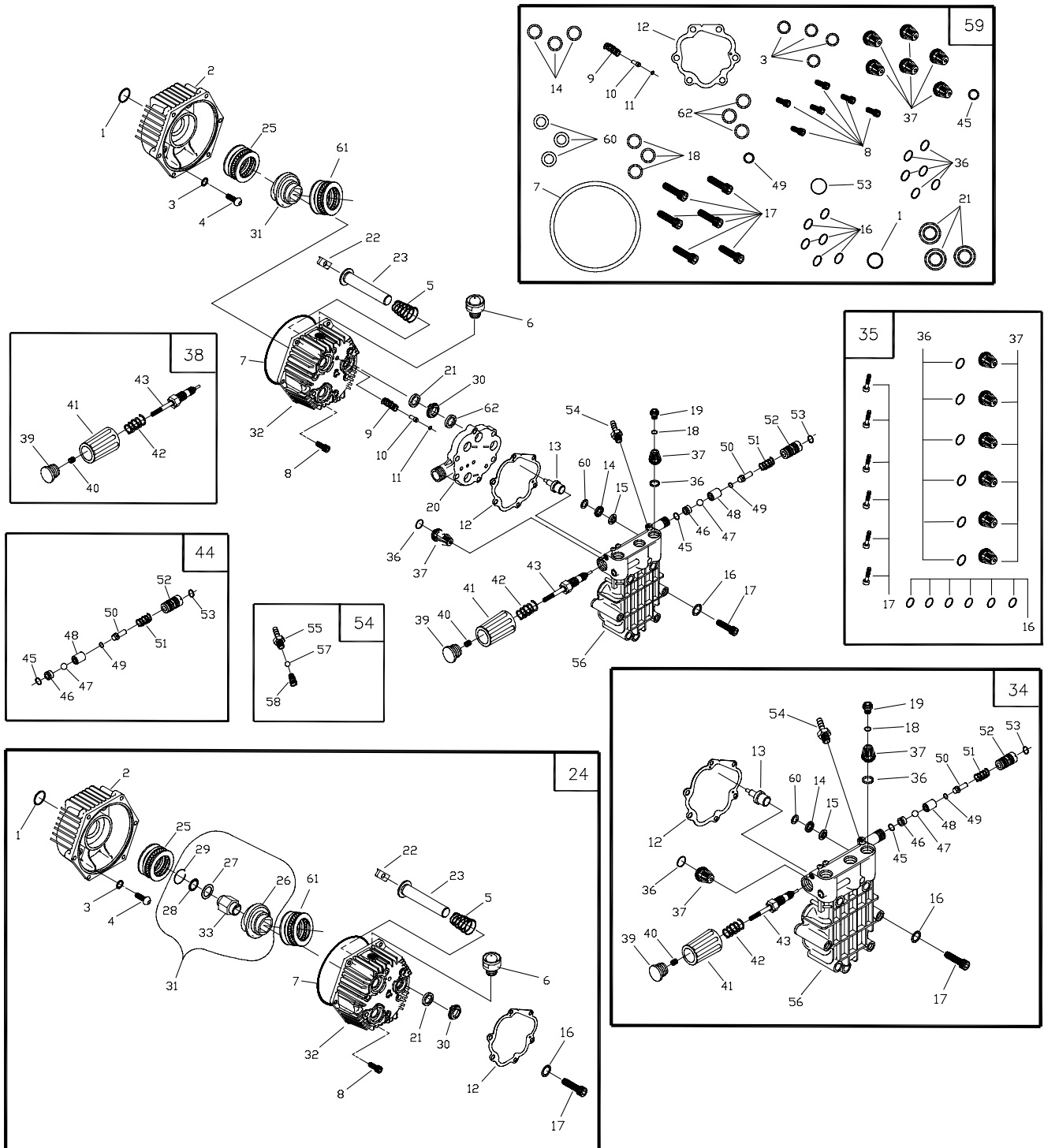


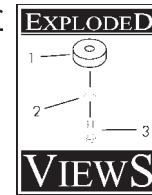
PART LIST – UNIT

Item	Part #	Qty	Description
1	BB5161	1	BASE, Black Powder Coat
2	185783	1	DECAL, Unit 1456-0
3	B1631A	1	BILLBOARD, Plastic
4	B1932	1	DECAL, Start Instructions
5	46476	2	CAPLUG, 1 Sq. x 16 GA
6	31669	2	CARRIAGE BOLT, 1/4" - 20 x 1-3/4"
8	52858	2	NUT, Locking M8 1.25"
9	27007	2	VIB MOUNT, Donut Type
10	50190	2	FLAT WASHER, 10 GA - .34" x 1"
11	39287	2	HHCS, M8 1.25 x 45
12	B4966	2	TIRE, Metal Hub 10"
13	75402C	2	PUSHNUT, 5/8 I.D.
14	B1460	1	CAP, Black Vinyl
15	A1040A	1	HOSE, Chemical 42" Clear
16	A1041	1	FILTER, Chemical Hose
17	B1779	2	COVER, Hinge
18	BB2534	1	HANDLE, Black Powder Coated
19	B2071	2	NUT, Locking Flange 1/4" - 20
20	21217	4	MOUNT, Rubber Shock
21	B2347	2	CAP, End of Tube
22	B4148D	1	ASSY., Med, 3/4", 6.0, HS, BR.
23	48031G	1	CLAMP, Hose
24	97100	1	CAP, High Pressure Adapter
25	185877	1	HOSE, 5/16" x 25'
26	87815	1	GOGGLES, Safety
27	B3263	1	GUN, High Pressure
28	BB3061B	1	OIL, Engine
29	B3335A	1	WAND, Adjustable Nozzle
30	97566	1	TAG, Nozzle Instruction
31	B5830	1	KIT, Maintenance
32	185780	1	MANUAL, Owners 1456-0
33	B2168A	1	WIREFORM
34	185779	1	MANUAL, Engine Honda Gx
35	B2163	1	KIT, Nozzle Cleaning
36	94804	1	NOZZLE, 1.10 White Replacement
37	67989	8	NUT, M8 Flange Serrated
38	NSP	1	ENGINE
39	B1288	1	TAG, Breather Cap
40	A1408	1	CAP, Garden Hose Connector
41	21424	1	CONNECTOR, Garden Hose
42	B4224	1	SCREEN, Gun Inlet
43	97837	1	O-RING, Hi Pressure Trans.
44	88681	1	CARD, Owners Registration



EXPLODED VIEW-PUMP





PART LIST-PUMP

Item	Part #	Qty	Description	Item	Part #	Qty	Description
1	B2218	1	O-RING, Engine Adapter	42	.....	1	SPRING, Unloader
2	B2260	1	ADAPTER, Housing, Cam	43	.....	1	ASSEMBLY, Spindle
3	B2217	4	O-RING, Engine Adapter Bolt	45	.....	1	O-RING, Spindle
4	B2261B	4	SCREW, Button Hd 5/16 - 24 x 3/4"	46	.....	1	SEAT, Ball Unloader
5	96400	3	SPRING, Piston Return	47	.....	1	BALL, Stainless Steel 9/32 Dia.
6	99735	1	ASSEMBLY, Oil Breather	48	.....	1	SEAT, Trapped Line Pressure
7	93790	1	O-RING, Crankcase	49	.....	1	O-RING, Trapped Line Pressure
8	40945	6	SHCS, M6 x 1.0 x 20mm	50	.....	1	VALVE, Shuttle Piston
9	93652	1	SPRING, Thermal By-Pass	51	.....	1	SPRING, Piston Trapped Pressure
10	95416	1	PISTON, Thermal By-Pass	52	.....	1	VENTURI, Chemical
11	93876	1	O-RING, Thermal By-Pass	53	.....	1	O-RING, Venturi
12	A2069	1	GASKET, Head	56	.....	1	ASSEMBLY, Head, Brass
13	93644	1	ACTUATOR, Thermal By-Pass	60	.....	3	SPACER, High Pressure Seal
14	96053	3	SEAL, High Pressure	35	185933	0	KIT, Check Valve
15	96015	3	RING, Bearing	16	.....	6	WASHER, Steel Special
16	B2665	6	WASHER, Steel Special	17	.....	6	BOLT, Head M8 x 1.25 x 70mm
17	A2013	6	BOLT, Head M8 x 1.25 x 70mm	36	.....	6	O-RING, Check Valve
18	97840	3	O-RING, Cap	37	.....	6	ASSEMBLY, Check Valve
19	97841	3	CAP, Outlet Port	38	B3479	0	KIT, Unloader Spindle
20	A1320	1	SPACER PLATE, Inlet	39	.....	1	CAP, Plastic
21	93680	3	SEAL, Oil Piston	40	.....	1	SET SCREW, M6 x 8
22	94944	3	SHOE, Piston Pivot	41	.....	1	HANDLE, Unloader
23	99427	3	ASSEMBLY, Ceramic Piston & Cap	42	.....	1	SPRING, Unloader
24	185947	0	KIT, Crankcase	43	.....	1	ASSEMBLY, Spindle
1	.....	1	O-RING, Engine Adapter	44	B3510	0	KIT, High Pressure Outlet
2	.....	1	ADAPTER, Housing, Cam	45	.....	1	O-RING, Spindle
3	.....	4	O-RING, Engine Adapter Bolt	46	.....	1	SEAT, Ball Unloader
4	.....	4	SCREW, Button Hd 5/16 - 24 x 3/4"	47	.....	1	BALL, Stainless Steel 9/32 Dia.
5	.....	3	SPRING, Piston Return	48	.....	1	SEAT, Trapped Line Pressure
6	.....	1	ASSEMBLY, Oil Breather	49	.....	1	O-RING, Trapped Line Pressure
7	.....	1	O-RING, Crankcase	50	.....	1	VALVE, Shuttle Piston
8	.....	6	SHCS, M6 x 1.0 x 20mm	51	.....	1	SPRING, Piston Trapped Pressure
12	.....	1	GASKET, Head	52	.....	1	VENTURI, Chemical
16	.....	6	WASHER, Steel Special	53	.....	1	O-RING, Venturi
17	.....	6	BOLT, Head M8 x 1.25 x 70mm	54	185943	0	KIT, Chemical Injector
21	.....	3	SEAL, Oil Piston	55	.....	1	BARB HOSE, Brass with Nylon Insert
22	.....	3	SHOE, Piston Pivot	57	.....	1	BALL, 5.5 dia. Chemical Injector
23	.....	3	ASSEMBLY, Ceramic Piston & Cap	58	.....	1	SPRING, Chemical Injector
25	.....	1	BEARING SET, Thrust 15.5	59	185926	0	KIT, O-Ring Seals
30	.....	3	SPACER, Pilot	1	.....	1	O-RING, Engine Adapter
31	.....	1	ASSEMBLY, Cam	3	.....	4	O-RING, Engine Adapter Bolt
26	.....	1	CAM, Axial 6.75 Lift	7	.....	1	O-RING, Crankcase
27	.....	1	WASHER, Thrust	8	.....	6	SHCS, M6 x 1.0 x 20mm
28	.....	1	RETAINER, Push - On	9	.....	1	SPRING, Thermal By-Pass
29	.....	1	C-RING, Cam Retainer	10	.....	1	PISTON, Thermal By-Pass
33	.....	1	ADAPTER, Shaft Hex	11	.....	1	O-RING, Thermal By-Pass
32	.....	1	HOUSING, Piston	12	.....	1	GASKET, Head
61	.....	1	BEARING SET, Cam	14	.....	3	SEAL, High Pressure
34	185752	0	KIT, Complete Head	16	.....	6	WASHER, Steel Special
12	.....	1	GASKET, Head	17	.....	6	BOLT, Head M8 x 1.25 x 70mm
13	.....	1	ACTUATOR, Thermal By-Pass	18	.....	3	O-RING, Cap
14	.....	3	SEAL, High Pressure	21	.....	3	SEAL, Oil Piston
15	.....	3	RING, Bearing	36	.....	6	O-RING, Check Valve
16	.....	6	WASHER, Steel Special	37	.....	6	ASSEMBLY, Check Valve
17	.....	6	BOLT, Head M8 x 1.25 x 70mm	45	.....	1	O-RING, Spindle
18	.....	3	O-RING, Cap	49	.....	1	O-RING, Trapped Line Pressure
19	.....	3	CAP, Outlet Port	53	.....	1	O-RING, Venturi
36	.....	6	O-RING, Check Valve	60	.....	3	SPACER, High Pressure Seal
37	.....	6	ASSEMBLY, Check Valve	62	.....	3	SEAL, Piston, Oil
39	.....	1	CAP, Plastic				
40	.....	1	SET SCREW, M6 x 8				
41	.....	1	HANDLE, Unloader				

Item numbers 24, 34, 35, 38, 44, 54, and 59 are service kits and include all parts shown within the box. Certain parts are only available as a component of a kit.

LIMITED PRESSURE WASHER WARRANTY

GENERAC PORTABLE PRODUCTS (hereafter referred to as the COMPANY) warrants to the original retail purchaser the pressure washer manufactured by the COMPANY to be free from defects in material and workmanship for the period(s) set forth below from the date of original purchase. This warranty is not transferable. The term "original purchaser" means the person for whom the pressure washer is originally purchased.

Warranty Schedules

Electric Power Washer	1 year (does not apply to commercial or rental applications)		
		CONSUMER*	COMMERCIAL*
All Other Engine-driven	Engine:	Warranted solely by Engine Manufacturer	Warranted solely by Engine Manufacturer
	Pump:	1 year	90 days

*** NOTE: For the purpose of this warranty, "consumer" use means personal residential household use by original purchaser. "Commercial" use means all other uses, including rental, construction, commercial and income producing purposes. Once a pressure washer has experienced commercial use, it shall thereafter be considered a commercial use pressure washer for the purposes of this warranty.**

During said warranty period, the COMPANY will, at its option, repair or replace any part which, upon examination by the COMPANY or COMPANY-authorized dealers, is found to be defective under normal use and service**. All transportation costs under warranty, including return to the factory if necessary, are to be borne by the purchaser and prepaid by the purchaser.

**** NORMAL WEAR: As with all mechanical devices, pressure washers need periodic parts service and replacement to perform well. This warranty does not cover repair when normal use has exhausted the life of a part or pressure washer pump.**

This warranty does not include: Used products and demonstration equipment. Parts, such as GUNS, HOSES, WANDS, NOZZLES or other wear items such as quick couplers, oil, gauges, belts, o-rings, filters, pump packing, etc. Pumps which have been run without water supplied. Damage or malfunctions resulting from accidents, abuse, modifications, alterations, or improper servicing. Freezing or chemical deterioration. Normal maintenance such as adjustments, fuel system cleaning and obstruction (due to chemical, dirt, carbon or lime, etc.).

THIS WARRANTY IS IN PLACE OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, SPECIFICALLY, THE COMPANY MAKES NO OTHER WARRANTIES AS TO MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. THE DURATION OF ANY IMPLIED WARRANTIES WHICH CANNOT BE DISCLAIMED IS LIMITED TO THE TIME PERIOD AS SPECIFIED IN THE EXPRESS WARRANTY. LIABILITY FOR CONSEQUENTIAL, INCIDENTAL, OR SPECIAL DAMAGES UNDER ANY AND ALL WARRANTIES IS EXCLUDED, EVEN IF SUCH DAMAGES ARE A DIRECT RESULT OF THE COMPANY'S NEGLIGENCE. THE COMPANY ALSO DISCLAIMS ANY RESPONSIBILITY FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES, SUCH AS THE LOSS OF TIME OR THE USE OF THE POWER EQUIPMENT, OR ANY COMMERCIAL LOSS DUE TO THE FAILURE OF THE EQUIPMENT. ANY IMPLIED WARRANTIES ARE LIMITED TO THE DURATION OF THIS WRITTEN WARRANTY.

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 limitations or exclusions 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.

For service, see your nearest COMPANY-authorized warranty service facility or call 1-877-544-0982. Warranty service can be performed only by a COMPANY-authorized service facility. This warranty will not apply to service at any other facility. At the time of requesting warranty service, evidence of original purchase date must be presented.

Generac Portable Products

Jefferson, Wisconsin U.S. A.