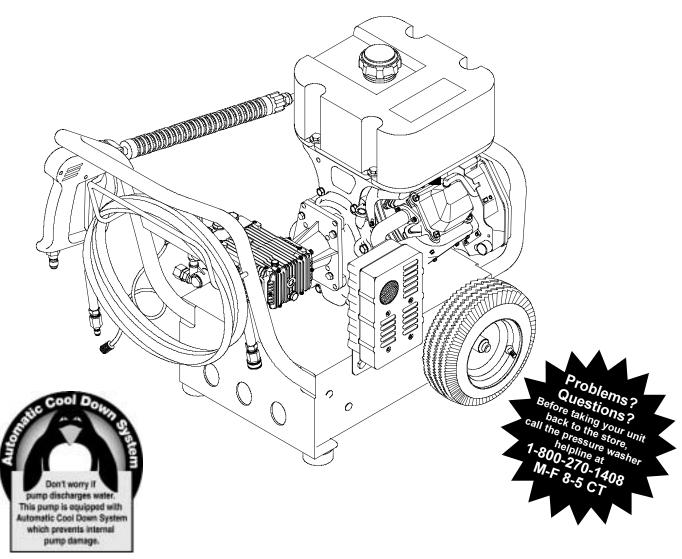
GENERAC®
Portable Products

# 4.000PSI

Pressure Washer Owner's Manual



Model No. 1421-0 (4,000 PSI High Pressure Washer) Manual No. B5226 Revision 0 (6/12/2000) 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 an high pressure washer that operates at 4,000 PSI at a flow rate of 4.0 gallons per minute. This powerful professional system features large 10" wheels, a heavy-duty pump equipped with an automatic cool down system, a chemical injection system, five quick connect nozzles, safety goggles, a heavy duty 50' scuff-resistant hose, and more.

Please read and retain this manual. The instructions will enable you to assemble your unit 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 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.

#### A

#### 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.
- Do Not allow CHILDREN to operate the pressure washer at any time.
- Always be certain the spray gun, nozzles and accessories are correctly attached.
- 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.
- Units with broken or missing parts, or without protective housing or covers, should **Never** be operated.
- 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.
- Always wear eye protection when you use this equipment or when you are in the vicinity where the equipment is in use.
- The cleaning area should have adequate slopes and drainage to reduce the possibility of a fall due to slippery surfaces.
- Do Not by-pass any safety device on this machine.
- · Operate and store this unit on a stable surface.
- 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.
- 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.
- 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 leaks in high pressure hose.
- High pressure spray can cause paint chips or other particles to become airborne.
- **Do Not** operate the pressure washer above the rated pressure.
- High pressure spray may damage fragile items including glass. Do Not point spray gun at glass when in the jet spray mode.
- Keep water spray away from electric wiring or fatal electric shock may result.
- Never use a spray gun which does not have a trigger lock or trigger guard in place and in working order.

- Never aim the spray 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.
- 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.
- Do Not secure the spray gun in the (open) position.
- 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 move the machine by pulling on the high pressure hose. Use the handle provided on the unit.
- 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 exceeds maximum pressure rating of your unit.
- 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 change the governed speed.
- 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.
- 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**: Your muffler is equipped with a spark arrester. It must be maintained in effective working order. You can order a replacement spark arrester through your authorized Generac service dealer.

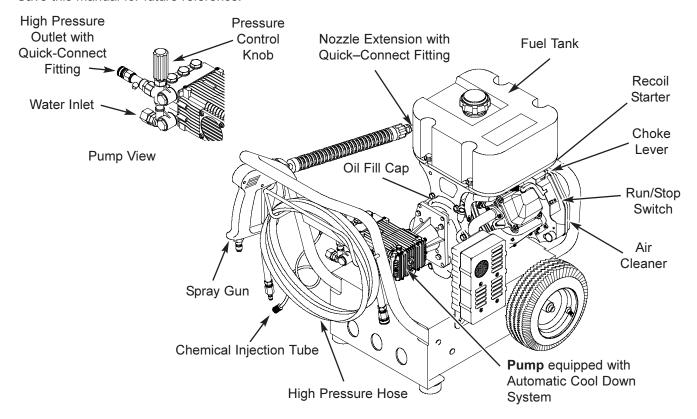




#### **KNOW YOUR PRESSURE WASHER**

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.



**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.** This system prevents internal pump damage.

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

Choke Lever — Prepares a cold engine for starting. Fuel Tank — Fill with regular UNLEADED gasoline. High Pressure Hose — Connect one end to water pump and the other end to spray gun. Store hose on hook on the rear of the unit

**High Pressure Outlet** — Connection for high pressure hose; equipped with quick connect fitting.

#### Nozzle Extension with Quick-Connect Fitting —

Must be attached to the spray gun to use the nozzles. The quick–connect fitting lets you quickly exchange the five provided nozzles to adjust the spray pattern of the high pressure spray or to apply chemical.

Oil Fill Cap —Fill engine with oil here.

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

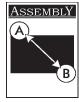
Pump — Develops high pressure.

**Recoil Starter** — Used for starting the engine manually.

**Run/Stop Switch**—Sets engine in starting mode for recoil starter and stops a running engine.

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

**Water Inlet** — Connection for garden hose.







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

# REMOVE PRESSURE WASHER FROM CARTON

- Remove the handle 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
- · High Pressure Hose
- Handle Assembly
- Pump Oil Dipstick (hanging on pump)
- Accessory Box (includes the following):
  - · O-Ring maintenance kit
  - Nozzle cleaning kit
  - Bag containing 5 multi-colored quick connect nozzles
  - Handle hardware, including 4 carriage bolts and 4 flange nuts
  - · (2) Bottles of engine oil
  - Spray Gun with quick connect fitting
  - Safety Goggles
  - Nozzle extension with quick connect fitting
  - Owner's manual
  - Engine manual

If any of the above parts are missing or damaged, call the pressure washer helpline at **1–800–270–1408**.

# 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:

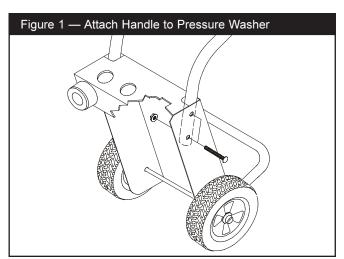
- · Attach the handle to the main unit.
- Remove shipping cap from the pump and install oil dipstick.
- · Add oil to the engine.
- · Add fuel to the fuel tank.
- Connect the high pressure hose to the spray gun and the pump.
- · Connect the water supply to the pump.
- · Connect nozzle extension to spray gun.
- · Select and install desired nozzle.

# Attach Handle to the Pressure Washer

Use either a 13mm wrench or adjustable wrench to attach the handle to the pressure washer.

#### To attach handle to the pressure washer:

 Slowly tip the pressure washer forward and let it gently rest on the front bumper (Figure 1).







- Align the holes on the handle with the holes on the base.
- · Insert the carriage bolts through the holes provided.
- · Secure handle with the four flange nuts.
- Slowly tip the pressure washer back to level position and insert the multi-colored nozzles in the spaces provided in the handle.

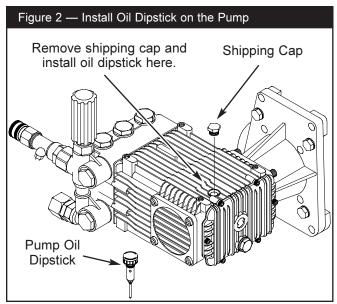
#### **Install Oil Dipstick on Pump**



**WARNING!** You **MUST** remove the pump's shipping cap and install the oil dipstick. Failure to do so will void the warranty and damage the pump.

#### To install the oil dipstick:

- Make sure your unit is on a level surface.
- Remove and discard the shipping cap located on the pump (see Figure 2, typical pump shown).



· Install the oil dipstick.

#### 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.

- · Place the pressure washer on a level surface.
- Refer to the engine owner's manual to add the provided oil to the engine crankcase.

NOTE: Check oil often during engine break-in.

**NOTE**: The pump is pre-lubricated and requires no additional lubrication for the life of the pump.

#### Add Gasoline

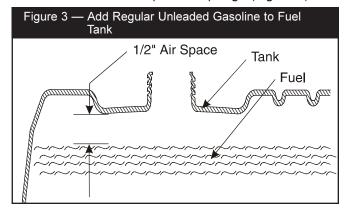


**DANGER!** Never fill fuel tank indoors. or when engine is running or hot. **Do Not** smoke when filling fuel tank.



**WARNING!** Never fill fuel tank completely full. Fill tank to provide space for fuel expansion.

- 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.
- Slowly add regular UNLEADED gasoline to fuel tank. Use a funnel to prevent spillage (Figure 3).



· Install the fuel cap and wipe up any spilled gasoline.

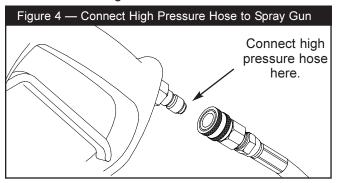




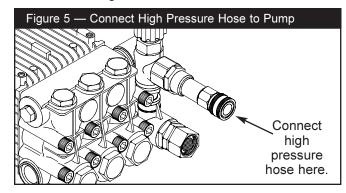
#### Connect Hose and Water Supply to Pump

**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 high pressure hose and attach quick connect end of hose to the base of the spray gun (Figure 4).
 Pull down on the collar of the quick connect, slide onto the spray gun and let go of collar. Tug on hose to be sure of a tight connection.

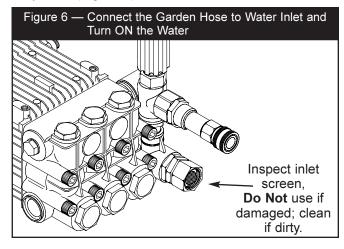


 Attach the other end of the high pressure hose to the high pressure outlet on the pump (see Figure 5, typical pump shown, your unit may differ slightly).
 Pull down on the collar of the quick connect, slide onto the pump and let go of collar. Pull on hose to be sure of a tight connection.



 Before you connect your garden hose to the water inlet, inspect the inlet screen (see Figure 6, typical pump shown). Clean the screen if it contains debris or have it replaced if damaged. **DO NOT** RUN THE PRESSURE WASHER IF THE SCREEN IS DAMAGED.

- 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).





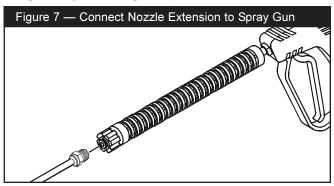
**WARNING!** There MUST be at least ten feet of unrestricted garden hose between the pressure washer inlet and any flow shut off device, such as a 'Y' shut-off connector or other convenience-type water shut-off valve. Damage to pressure washer resulting from disregarding this warning will not be covered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

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

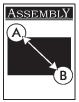


**CAUTION:** Before starting the pressure washer, be sure you are wearing adequate eye protection.

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









### CHECKLIST BEFORE STARTING ENGINE

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

- · Replace pump shipping cap with oil dipstick.
- Check for properly attached hose connections (high pressure and water supply). Also, 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) able to supply a flow rate of at least 4.2 gallons per minute.
- 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 engine—powered 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 provide a flow of at least of 4.2 gallons per minute.
- · Make sure the unit is in a level position.
- Check that the high pressure hose is properly attached to the spray gun and to the pump. See "Preparing Pressure Washer for Use".



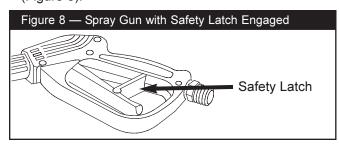


• Connect the garden hose to the water inlet on the pressure washer pump and turn on the water.

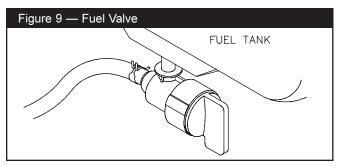


**WARNING!** Do Not run the pump without the water supply connected and turned on. You must follow this caution or the pump will be damaged.

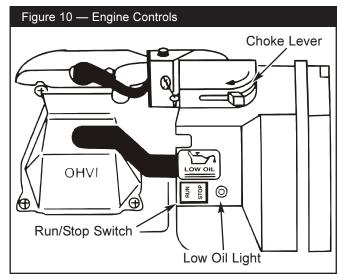
- Squeeze the trigger on the spray gun (make sure the nozzle is in low pressure mode) to relieve the air pressure caused by turning ON the water. Water will discharge from the spray gun in a thin stream. Hold the trigger until a steady stream of water appears. This will make it easier to pull start the engine. Release the trigger.
- Apply the safety latch to the spray gun trigger (Figure 8).



Move the fuel valve to the "ON" position (Figure 9).
 The valve is found directly above the recoil starter.



 To start a cold engine, move the choke lever to the "FULL" position (all the way to the left). To restart a warm engine, leave the choke lever all the way to the right. Figure 10 shows the engine controls. Also refer to engine owner's manual for detailed starting instructions.



- Set the engine Run/Stop switch to the "RUN" position (Figure 10).
- Grasp starter grip 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 was moved to the "Full" choke position to start the engine, gradually move it to the "No" choke position as the engine warms up.

#### **How to Stop Your Pressure Washer**

- Move the engine Run/Stop switch to the "STOP" position.
- Simply shutting off the engine will not release pressure in the system. Squeeze trigger on the spray gun to relieve pressure in the hose.

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





#### How to Use the Nozzles

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



**DANGER!** Never exchange nozzles without locking the safety latch on the trigger.

The quick—connect on the nozzle extension allows you to switch between five different nozzles. The nozzles vary the spray pattern, as shown below in Figure 11.

#### Follow these instructions to change nozzles:

- · Engage the safety latch on the spray gun.
- Pull back the collar on the quick—connect and pull the current nozzle off. Store the nozzle in the space provided on the handle.

**NOTE:** For a more gentle rinse, select the white 40° or green 25° nozzle. To scour the surface, select the yellow 15° or red 0° nozzle. To apply chemical, select the black nozzle.

- Pull back on the collar, insert the new nozzle and release the collar. Pull on the nozzle to make sure it is securely in place.
- For most effective cleaning, keep the spray nozzle between 8 to 24 inches away from the cleaning surface. If you get the spray nozzle too close, you may damage the cleaning surface.

#### **Cleaning and Applying Chemical**



**WARNING!** 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.

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

#### To apply detergent follow these steps:

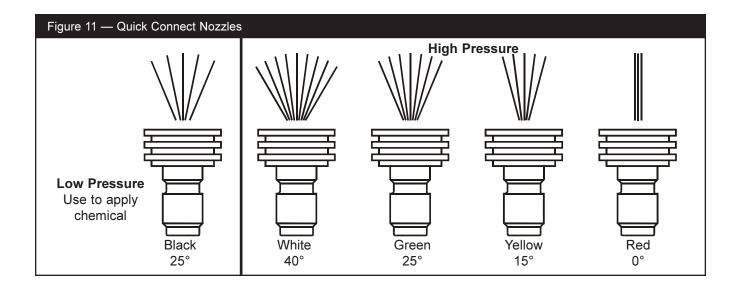
- · Review the use of the nozzles.
- Prepare the detergent solution as required by the manufacturer.
- Place the small filter of the chemical injection tube tube into the detergent container.



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

 Make sure the black nozzle is installed on the nozzle extension.

**NOTE:** Detergent cannot be applied with the high pressure nozzles (White, Green, Yellow, or Red).







- Make sure the garden hose is connected to the water inlet. Check that the high pressure hose is connected to the spray gun and the pump and start the engine.
- Apply the detergent to a dry surface, starting at lower portion of area to be washed and work upward, using long, even, overlapping strokes. Do Not allow the detergent to dry on. This will prevent streaking.
- Allow the detergent to soak in between 3–5 minutes before washing and rinsing. Reapply as needed to prevent surface from drying.

#### **Pressure Washer Rinsing**

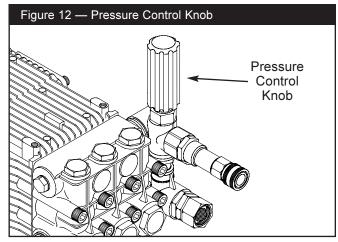


**WARNING!** Be extremely careful if you must use the pressure washer from a ladder, scaffolding or any other relatively unstable location. Pressure in a running washer builds as you climb. When you press the trigger, the recoil from the initial spray could cause you to fall. The high pressure spray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

# After you have applied detergent, scour the surface and rinse it clean as follows:

- · Apply safety latch to spray gun.
- Remove the black nozzle from the nozzle extension.
- Select and install the desired high pressure nozzle following the instructions given in "How to Use the Nozzles" on page 10.
- Keep the spray gun a safe distance from the area you plan to spray.

 Increase or decrease the pressure of the spray by turning the pressure control knob counterclockwise or clockwise respectively (see Figure 12, typical pump shown, your unit may differ). Use lower pressure to wash items such a as a car or boat. Use higher pressure to strip paint and degrease driveways.



- Apply a high pressure spray to a 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 the top of the area to be rinsed, working down with same overlapping strokes as you used for cleaning.

#### **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 base and ground.** This system prevents internal damage to the pump.







#### **SPECIFICATIONS**

Outlet Pressure . . . . 4,000 PSI

Flow Rate . . . . . . . . 4.0 gallons per minute (gpm)

**Detergent** . . . . . . . . Use detergent approved for

pressure washers

Water Supply ..... Not to exceed 140°F

**Temperature** 

Water Supply . . . . . Minimum of 4.2 gpm

Flow Rate

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

Pump Oil . . . . . . . SAE 20-30W, non-detergent

# GENERAL MAINTENANCE RECOMMENDATIONS

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

- Some adjustments will need to be made periodically to properly maintain your high pressure washer.
- All adjustments in the Maintenance section of this manual should be made at least once each season.
- Once a year you should clean or replace the spark plug and clean or replace the air filter and check the spray gun and nozzle extension for wear. 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 spray gun and 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.



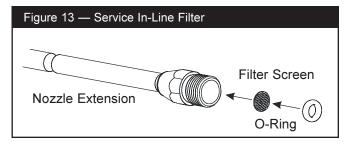
**DANGER!** Water spraying from a leak is capable of injecting material into skin. Inspect hose each time before using it. Never repair a high pressure hose. Replace it with another hose that exceeds the maximum pressure rating of your pressure washer.

#### **Check Gun and Nozzle Extension**

Examine the hose connection to the spray 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 13 and service the in-line filter if it becomes clogged, as follows:







- Detach spray gun from high pressure hose.
   Detach nozzle extension from spray gun and remove o-ring and screen from nozzle extension.
   Flush the screen, spray 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.
- 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.

# 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.
- · Connect and turn ON the water supply.
- Pull the trigger on the spray gun and hold.

# To remove contaminants from the pump, follow these steps:

- Set up the pressure washer as described in "Preparing the Pressure Washer for Use" on page 5.
- Remove the nozzle extension from the spray gun.
- · Connect and turn ON the water supply.
- Start the engine according to instructions given in "How to Start Your Engine" on page 8.
- Squeeze the trigger on the spray gun and hold.
- When the water supply is steady and constant, engage the safety latch and refasten the nozzle extension.

#### **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.

#### **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.

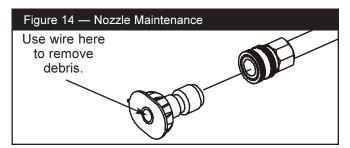
**IMPORTANT**: Simply shutting OFF engine will not release pressure in the system. When the engine has shut down, squeeze the trigger on the spray gun to relieve the pressure in the hose.

#### **Nozzle Maintenance**

If a nozzle becomes restricted or clogged with foreign materials, such as dirt, excessive pump pressure may develop. This condition is indicated by a "pulsing" sensation during use.

If the nozzles become clogged or partially restricted, immediately clean the nozzles with the kit included with your pressure washer by following these instructions:

- · Shut off the engine and turn off the water supply.
- Remove the nozzle from the end of the nozzle extension.
- Use the wire included in the kit (or a small paper clip) to free the foreign materials clogging or restricting the nozzle (Figure 14).







- Remove additional debris by rinsing out the nozzle.
   Rinse between 30 to 60 seconds.
- Reinstall the nozzle into the nozzle extension.
- Reconnect the water supply, turn on the water, and start the engine.
- · Test the pressure washer.

#### **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.

#### **PUMP MAINTENANCE**

Monitoring the pump oil level is the only pump maintenance item performed by the owner. If the pump oil level drops below the "Add" mark on the oil dipstick, slowly add the recommended oil to the "Full" mark.

#### **ENGINE MAINTENANCE**

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

#### **ENGINE SERVICE**

See the engine owner's manual for instructions on how to properly service and adjust 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:

- Flush chemical injection tube by placing the filter into a pail of clean water while running pressure washer with the black chemical nozzle. Flush for one to two minutes.
- 2. Shut off the engine and let it cool, then remove all hoses.
- 3. Move the throttle lever to the "SLOW" position.
- 4. Set engine switch to the "OFF" position.



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

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. This process is also recommended to avoid lime/calcium build-up in the pump during longer-term storage.

6. Store in a clean, dry area.

#### STORING THE ENGINE

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





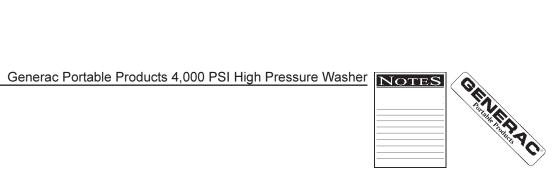
NOTES		





## **TROUBLESHOOTING**

Problem	Cause	Correction
Pump has following problems: Failure to produce pressure, erratic pressure, chattering, loss of pressure, low water volume.	<ol> <li>Nozzle in low pressure mode.</li> <li>Water inlet is blocked.</li> <li>Inadequate water supply.</li> <li>Inlet hose is kinked or leaking.</li> <li>Clogged inlet hose strainer.</li> <li>Water supply is over 140°F.</li> <li>Outlet hose is blocked or leaks.</li> <li>Gun leaks.</li> <li>Nozzle is obstructed.</li> <li>Pump is faulty.</li> </ol>	<ol> <li>Pull nozzle backward for high pressure mode.</li> <li>Clear inlet.</li> <li>Provide adequate water flow.</li> <li>Straighten inlet hose, patch leak.</li> <li>Check and clean inlet hose strainer.</li> <li>Provide cooler water supply.</li> <li>Clear blocks in outlet hose.</li> <li>Replace gun.</li> <li>Clean nozzle.</li> <li>Contact Generac service facility.</li> </ol>
Detergent fails to mix with spray.	<ol> <li>Chemical injection tube is not submerged.</li> <li>Chemical filter is clogged.</li> <li>High pressure nozzle attached.</li> </ol>	<ol> <li>Insert chemical injection tube into detergent.</li> <li>Clean or replace filter/detergent siphoning tube.</li> <li>Use low pressure, black chemical nozzle to apply detergent.</li> </ol>
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 Generac service facility.
Engine will not start; or starts and runs rough.	<ol> <li>Low oil level.</li> <li>Dirty air cleaner.</li> <li>Out of gasoline.</li> <li>Stale gasoline.</li> <li>Spark plug wire not connected to spark plug.</li> <li>Bad spark plug.</li> <li>Water in gasoline.</li> <li>Overchoking.</li> <li>Excessively rich fuel mixture.</li> <li>Intake valve stuck open or closed.</li> <li>Engine has lost compression.</li> </ol>	<ol> <li>Fill crankcase to proper level.</li> <li>Clean or replace air cleaner.</li> <li>Fill fuel tank.</li> <li>Drain gas tank; fill with fresh fuel.</li> <li>Connect wire to spark plug.</li> <li>Replace spark plug.</li> <li>Drain gas tank; fill with fresh fuel.</li> <li>Open choke fully and crank engine.</li> <li>Contact Generac service facility.</li> <li>Contact Generac service facility.</li> <li>Contact Generac service facility.</li> </ol>
Engine shuts down during operation.	Out of gasoline.     Low oil level.	Fill fuel tank.     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.

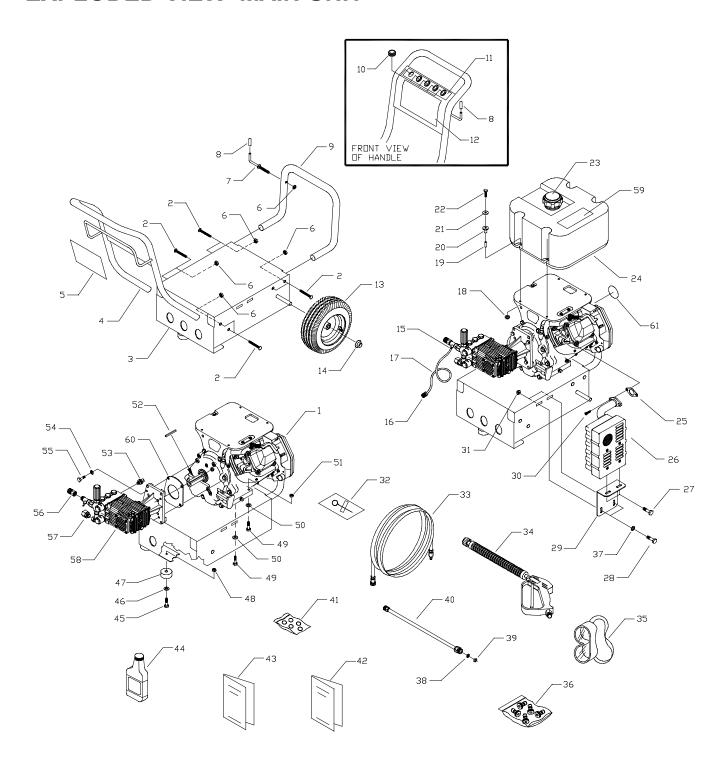


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## **EXPLODED VIEW-MAIN UNIT**







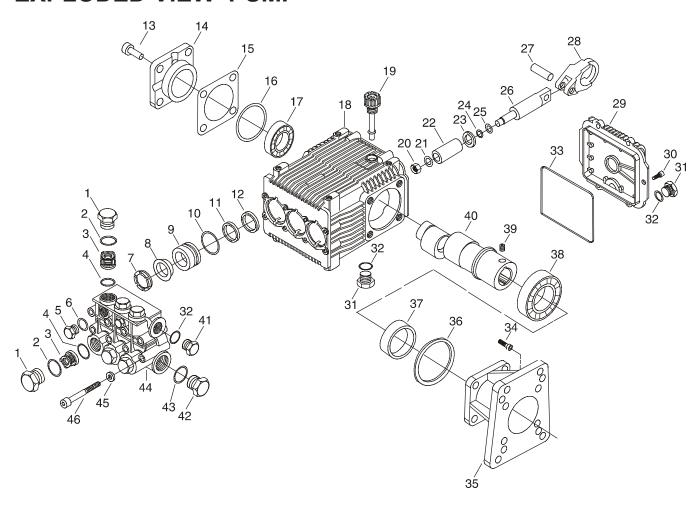
### PART LIST-MAIN UNIT

Item	Part #	Qty	Description	Item	Part #	Qty	Description
1	NSP	1	ENGINE	32	B2509	1	KIT, Nozzle Cleaning
2	B2043	8	BOLT, 5/16" - 18 x 1-3/4"	33	B4805	1	HOSE, 3/8" x 50'
_			Carriage	34	B1436B	1	GUN, with Molded Grip
3	BB5205	1	BASE	35	87815	1	GOGGLES, Safety
4	CB3861C		HANDLE	36	B4847	1	KIT, Nozzles QC
5	186490	1	DECAL, Instructions	37	22473	2	FLAT WASHER, 6mm Dia.
6	99583	9	NUT, 5/16"-18 Hex Flange,	38	B4224	1	SCREEN, Gun Inlet
			Lock	39	97837	1	O-RING, Hi Pressure Transfer
7	B2150	1	HOOK, 5/16" Square Neck	40	B3858	1	ASSY., Nozzle Ext. with QD
			Gun	41	B5830	1	KIT, O-Ring Maintenance
8	B2516	2	CAP, Black Vinyl .280"	42	B5226	1	MANUAL, Owners
9	CB4105	1	BUMPER	43	A8927	1	MANUAL, Engine
10	30809	5	GROMMET, 1/8" - 11/16"	44	BB3061	2	OIL BOTTLE, 28 oz
11	B4159	1	DECAL, 5 QD Nozzles	45	42909	1	HHCS, M8 - 1.25 x 30
12	B5218	1	DECAL, Unit	46	50190	1	FLAT WASHER, 10GA34"
13	88521	2	ASSEMBLY, Wheel 10" Dia. x				x 1"
			4"	47	27007	1	VIB MOUNT, Donut Type
14	75402	2	PUSHNUT, .50"	48	52858	2	NUT, M8 - 1.25, Locking
15	48031G	1	CLAMP, Hose 7/16" Dia.	49	57821	4	BOLT, M8 - 1.25 x 40 mm
16	A1041	1	FILTER, Chemical Hose	50	22145	4	FLAT WASHER, 8mm Dia.
17	A1040D	1	HOSE, 54" Chemical Inject	51	67989	4	NUT, Locking M8 - 1.25
18	77395	4	LOCKNUT, M6 Flange	52	63281	1	KEY, 1/4" sq. x 2"
19	B2513	4	SLEEVE, Grommet Space	53	B1554	1	VALVE, Thermal Relief
20	B2465	4	BUSHING, Tank Mount	54	22129	4	LCKWSHR, 5/16"
21	B2495	4	WASHER, 25.4 x 8.45 x 1.4	55	22147	4	HHCS, 5/16" - 24 x 1"
22	38750	4	HHCS, M6 - 1.0 x 30	56	95458	1	CONNECTOR, Quick Connect
23	90878	1	CAP, Fuel Tank	57	186839	1	CONNECTOR, Garden Hose
24	B2346	1	TANK, Fuel 2-Gal	58	185806	1	PUMP (See pages 20-23)
25	90239	1	GASKET, Muffler	59	21786	1	DECAL, Danger
26	A7433	1	MUFFLER	60	B186659	1	PLATE, Spacer
27	66476	2	HHCS, M6 - 1.0 x 12 w/	61	91682G	1	DECAL, Recoil - 15 HP
			Lckwshr				,
28	22287	2	HHCS, 1/4" - 20 x 3/4"	Parts I	Not Showr	1:	
29	186327	1	BRACKET, Muffler		B2384	1	INLET FILTER, Washer
30	40976	2	SHCS, M8 - 1.25 x 20		80270	1	VALVE, Plastic Fuel
31	B2071	2	NUT, 1/4" - 20 Flange Lock		78299	1	BUSHING, Tank Valve





### **EXPLODED VIEW-PUMP**



#### **Please Note:**

Although this exploded view shows a right-hand pump, your unit is supplied with a left-hand pump. All parts are are identical regardless of assembly.

For your unit, items 34, 35, 36, 37, 38, 39 and 40 are installed into the left side of the pump; items 13, 14, 15, 16 and 17 are installed into the opposite side of the pump. All other components are as shown.





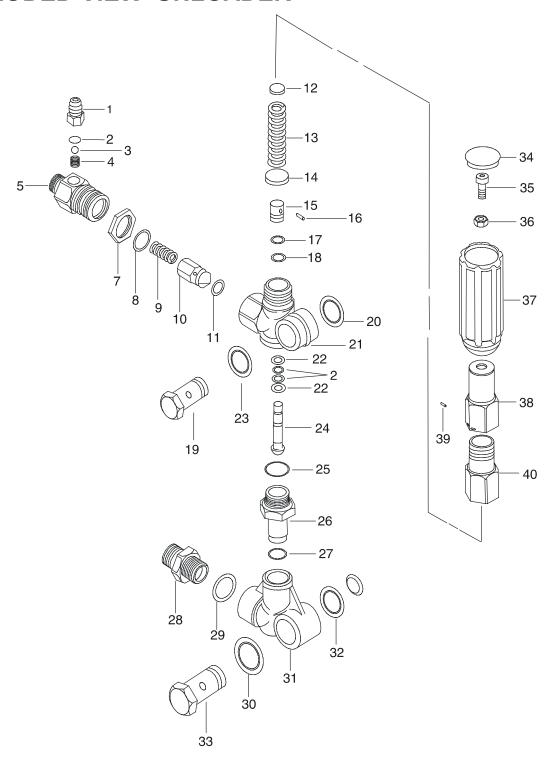
### PART LIST-PUMP

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 1	Part # 101B2327 100B2327 102B2327 103B2327 104B2327 105B2327 106B2327 107B2327 108B2327 109B2327 110B2327 110B2327 113B2327 113B2327 114B2327 114B2327 1186382 186383 117B2327 118B2327	Qty 6 6 6 6 2 2 3 3 3 3 4 1 3 1 1 1 1 3	Description Plug O-Ring Valve O-Ring Plug O-Ring Support Ring Gasket Piston Guide O-Ring Gasket Seal Screw Bearing Support Shim O-Ring Bearing Pump Housing Oil Cap Nut
5	104B2327		Plug
7	106B2327	3	Support Ring
9	108B2327	3	Piston Guide
11	110B2327	3	Gasket
14	113B2327	1	<b>Bearing Support</b>
16	114B2327	1	O-Ring
18	186383	1	Pump Housing
		3 3 3	
22 23	120B2327 121B2327	3	Piston Spacer
24 25	122B2327 161B2327	3 3 3	O-Ring Ring
26 27	123B2327 124B2327	3 3 3	Piston Guide Piston Pin
28 29	186384 118B2126	3 1 4	Con Rod Cover
30 31 32	1343501 186385 134B2327	2 3	Screw Plug O-Ring
33 34	116B2126 142B2126	1 4	O-Ring O-Ring Screw
35 36	150B2126 139B1410	1	Flange O-Ring
37 38	138B1410 137B1410	1 1	Seal Bearing
39 40	152B2126 186386	1	Grub Screw Shaft
41 42 43	136B2327 138B2327 137B2327	1 1 1	Plug Plug O-Ring
43 44 45	137B2327 139B2327 159B2327	1 1 8	Pump Head Washer
46	140B2327	8	Screw





## **EXPLODED VIEW-UNLOADER**







### PARTS LIST-UNLOADER

Item	Part #	Qty	Description
1	210B2327	1	Hose Tail
2	231B2327	3	O-Ring
3	211B2327	1	Stainless Ball
4	212B2327	1	Spring
5	213B2126	1	Injector Body
7	215B2327	1	Injector Nut
8	137B2327	1	O-Ring
9 10	216B2327	1 1	Spring
	217B2327		Plunger
11	218B2327	1 1	O-Ring
12 13	220B2327	1	Spacer Plate
14	221B2327 222B2327	1	Spring
15		1	Spring, Spacer Plate
16	219B2327 223B2327	1	Upper Piston Pin
17	223B2327 224B2327	1	
18	224B2327 225B2327	1	Ring O-Ring
19	226B2327	1	Inlet Bolt
20	227B2327	1	Washer
21	228B2327	1	Valve Housing
22	229B2327	2	Ring
23	230B2327	1	Washer
24	232B2327	i	Lower Piston
25	234B2327	1	O-Ring
26	233B2327	1	Piston Guide
27	235B2327	1	O-Ring
28	241B2327	1	Suction Fitting
29	240B2327	1	O-Ring
30	239B2327	1	Washer
31	238B2327	1	Bypass Fitting
32	237B2327	1	Washer
33	236B2327	1	Inlet Bolt
34	248B2327	1	Plug
35	155B2327	1	Screw
36	246B2327	1	Nut
37	245B2327	1	Knob
38	243B2327	1	Housing
39	244B2327	1	Pin
40	242B2327	1	Spring Guide
	153B2126	1	Complete Unloader

#### 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 Warranted solely by

Engine Manufacturer 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: AND 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.