# GENERAC® Portable Products

# 2500PSI

Pressure Washer Owner's Manual



Model No. 1417-0 (2,500 PSI High Pressure Washer) Manual No. B5189 Revision I (4/3/2001)

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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 2,500 PSI at a flow rate of 3.0 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, quick connect nozzles, safety goggles, a heavy duty 50' 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 **I-800-270-1408**.

- · 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 13.

#### **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.



**WARNING!** 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.

#### **M** 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.
- Never operate units with broken or missing parts, or without protective housing or covers.
- 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.
- 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 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.
- 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.
- 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.
- 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:** 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.

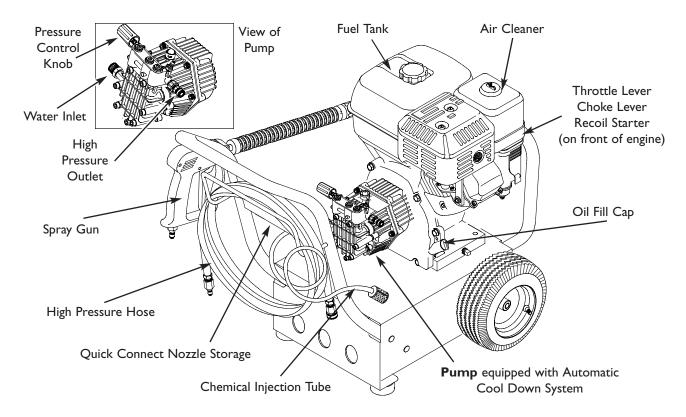




#### **KNOW YOUR PRESSURE WASHER**

#### 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.



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

**Automatic Cool Down System** — Cycles water out of pump when temperature reaches 140°-145°F.

**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 engine with regular unleaded gasoline here.

**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.

**Oil Fill Cap** —Fill engine with oil here. See engine owner's manual for oil requirements.

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

Pump — Develops high water pressure.

**Quick Connect Nozzle Storage** — Place all quick connect nozzles here for ready access.

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

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

**Throttle Lever**—Sets engine in starting mode for recoil starter and stops a running engine.

Water Inlet — Connection for garden hose.





**IMPORTANT:** 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
- Parts Box containing:
  - 20oz Oil Bottle
  - Goggles
  - Nozzle Cleaning Kit
  - Bag containing 5 multi-colored nozzles
  - O-Ring Maintenance Kit
  - Owner's Manual
  - Engine Manual
  - Warranty Card
  - Engine Warranty
  - Emissions Control Warranty
  - Spray Gun
  - Nozzle Extension with Quick-Connect Fitting
  - Parts Bag containing:
    - 4 Carriage Bolts
    - 4 Flange Nuts

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 **I-800-270-1408**.

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

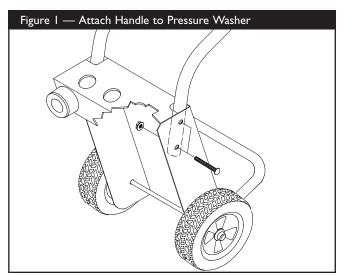
- Fill out and send in your registration card for a valid warranty.
- · Attach the handle to the main unit.
- · Add oil to the engine.
- · Add fuel to the fuel tank.
- Connect the high pressure hose to the spray gun and the pump.
- · Connect the water supply to the pump.
- Connect nozzle extension to gun.
- · 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 provided to hold the handle in place.
- Secure handle to the pressure washer using the four provided flange nuts.
- Slowly tip the pressure washer back in place and insert the multi-colored nozzles in the spaces provided in the handle.

#### **Add Engine Oil**

**IMPORTANT:** Any attempt to crank or start the engine before it has been properly serviced with the recommended oil may result in an engine failure.

- Place pressure washer on a level surface.
- Refer to the engine owners manual to add recommended oil to engine.

**NOTE:** Check oil often during engine break-in. Refer to engine owner's manual for recommendations.

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

#### Add Gasoline



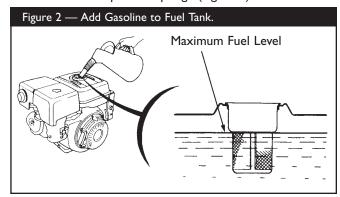
**WARNING!** Never fill fuel tank indoors. or when engine is running or hot. **Do Not** smoke when filling fuel tank.



**WARNING!** Never fill fuel tank completely full. Fill tank to the bottom of the filler neck to 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.

Slowly add regular UNLEADED gasoline to fuel tank.
 Use a funnel to prevent spillage (Figure 2).

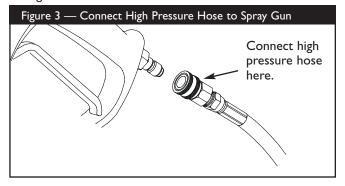


• Install the fuel cap and wipe up any spilled gasoline.

# 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.

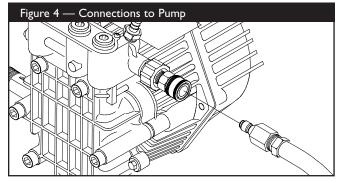
Uncoil high pressure hose and attach quick connect end
of hose to the base of the spray gun (Figure 3). Pull
down on the collar of the quick connect, slide onto the
gun and let go of collar. Tug on hose to be sure of a
tight connection.



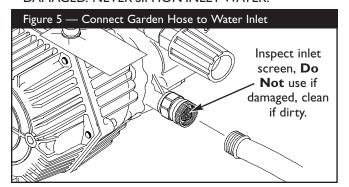




 Attach the other end of the high pressure hose to the high pressure outlet on the pump (Figure 4). Pull down on the collar of the quick connect, slide onto the pump and let go of collar. Pull on hose to be sure of a tight connection.



 Before you connect your garden hose to the water inlet, inspect the inlet screen (Figure 5). Clean the screen if it contains debris or have it replaced if damaged. DO NOT RUN THE PRESSURE WASHER IF THE SCREEN IS DAMAGED. NEVER SIPHON INLET WATER.



- 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 5).

**CAUTION!** 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.
- Squeeze the trigger on the gun until you have a steady stream of water to purge the pump system of air and impurities.



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

# CHECKLIST BEFORE STARTING ENGINE

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

- 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.
- · Add the proper gasoline to fuel tank.
- Provide a water supply of adequate flow (not to exceed 100°F).
- Be sure to read the "Safety Rules" and "Preparing Pressure Washer For Use" 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**.

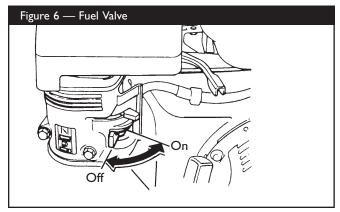
#### **How to Start Your Engine**

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.

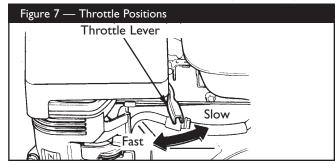
- Place the pressure washer in an area close enough to an outside water source that can flow at a rate of 3.3 gallons per minute or more.
- Make sure the unit is in a level position.
- Check that the high pressure hose is tightly connected to the spray gun and to the pump. See "Preparing Pressure Washer for Use" on page 5.
- Connect the garden hose to the water inlet on the pressure washer pump and turn on the water.

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

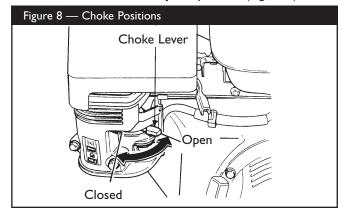
- Squeeze the trigger on the spray gun to relieve the air pressure caused by turning ON the water. Water will discharge from the gun in a thin stream. Hold the trigger until a steady stream of water appears. This will make it easier to pull start the engine.
- Move the fuel valve to the "On" position (Figure 6).



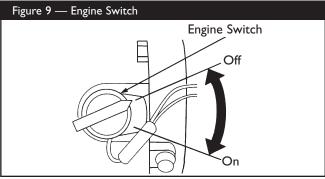
• Move the throttle lever to the "Fast" position (Figure 7).



• To start a cold engine, move the choke lever to the "Closed" position. To restart a warm engine, leave the choke lever in the "Open" position (Figure 8).



• Set the engine switch to the "On" position (Figure 9).



- 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 has been moved to the "Closed" position to start the engine, gradually move it to the "Open" position as the engine warms up.

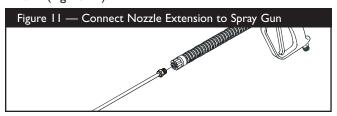




• With the engine running, engage the safety latch to the spray gun trigger (Figure 10).



 Attach the nozzle extension to the spray gun. Tighten by hand (Figure 11).



#### How to Stop Your Pressure Washer

- Move the throttle lever to the "Slow" position.
- Wait for the engine to idle down.
- Move the engine switch to the "Off" 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 squeeze the trigger.

#### 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**.



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

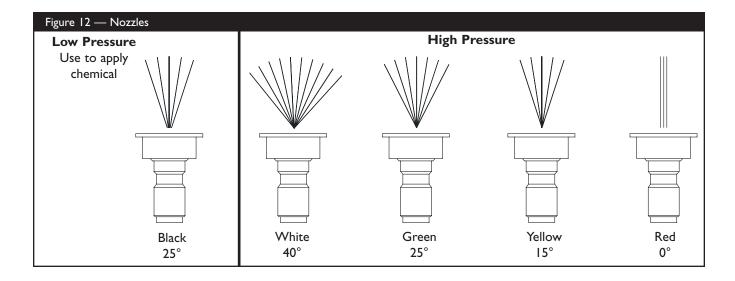
The quick–connect on the nozzle extension allows you to switch between five different nozzles. The nozzles vary the spray pattern as shown below (Figure 12).

#### 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 control panel.

**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. Tug 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**

**CAUTION!** 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.

· Make sure the black nozzle is installed.

**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.

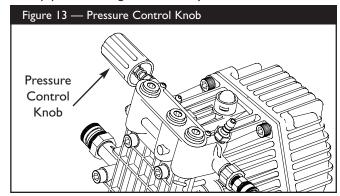
#### Pressure Washer Rinsing



**WARNING!** Be extremely careful if you must use the pressure washer from a ladder, scaffolding or any other relatively unstable location. Hose water pressure builds as you climb. When you press the trigger, the recoil from the initial spray can be very strong. The high pressure spray could 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 chemical nozzle from the nozzle extension
- Select and install the desired high pressure nozzle following the instructions "How to Use the Nozzles" on page 9.
- Keep the spray gun a safe distance from the area you plan to spray.
- Increase or decrease spray pressure by turning the pressure control knob counterclockwise or clockwise respectively (Figure 13). 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**

Rated Pressure ..... 2,500 PSI

Flow Rate ...... 3.0 gallons per minute (gpm)

Detergent ...... Use detergent approved for

pressure washers

**Water Supply** 

**Temperature** ...... Not to Exceed 100°F **Automatic Cool** .... Will cycle when water **Down System** reaches 140°-145°F

**Pump Oil . . . . . . . . . . SAE 80W90, 9.6 oz (285mL)** 

# GENERAL MAINTENANCE RECOMMENDATIONS

The high 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 high 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 gun and nozzle extension assembly 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 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.



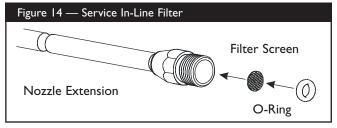
**CAUTION!** Water spraying from a leak is capable of injecting material into skin. Inspect hose each time before using it. **Never** repair a high pressure hose. Replace it with another hose that exceeds the maximum pressure rating of your pressure washer.

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

Examine the hose connection to the 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 14 and service the in-line filter if it becomes clogged, as follows:



 Detach spray gun and nozzle extension 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 adjustable nozzle extension with clean water to clear debris.





- 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.
- 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 Pressure Washer For Use". Connect the water supply and turn water on.
- · Pull the trigger on the spray gun and hold.
- When the water supply is steady and constant, engage the safety latch.

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

- Set up the pressure washer as described in "Preparing Pressure Washer For Use". Connect the water supply and turn water on.
- Start the engine according to instructions in "To Start Your Pressure Washer".
- · Remove nozzle extension from spray gun.
- Squeeze the trigger on the spray gun and hold.
- When the water supply is steady and constant, engage the safety latch and reattach 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.

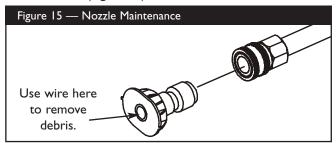
- Place the chemical injection tube in a bucket full of clean water.
- Flush for I-2 minutes.
- · Shut off the engine.

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

#### **Nozzle Maintenance**

A pulsing sensation felt while squeezing the spray gun trigger may be caused by excessive pump pressure. The principal cause of excessive pump pressure is a nozzle clogged or restricted with foreign materials, such as dirt, etc. To correct the problem, immediately clean the nozzle using the tools included with your pressure washer and follow these instructions:

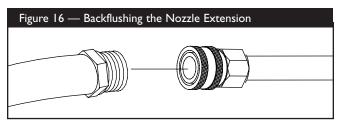
- 1. Shut off the engine and turn off the water supply.
- Remove the nozzle from the end of the nozzle extension (Figure 15).



- 3. Remove the in-line filter from the other end of the nozzle extension.
- 4. Use the wire included in the kit (or a small paper clip) to free any foreign material clogging or restricting the nozzle (Figure 15).
- Using a garden hose, remove additional debris by back flushing water through the nozzle extension (Figure 16). Back flush between 30 to 60 seconds.







- Reinstall the nozzle and in-line filter into the nozzle extension.
- 7. Reconnect the nozzle extension to the spray gun.
- 8. Reconnect the water supply, turn on the water, and start the engine.
- Test the pressure washer by operating with each of the Quick Connect nozzles.

#### **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.



**CAUTION!** Avoid prolonged or repeated skin contact with used motor oil. Used motor oil has been shown to cause skin cancer in certain laboratory animals. Thoroughly wash exposed areas with soap and water.

KEEP OUT OF REACH OF CHILDREN. DON'T POLLUTE. CONSERVE RESOURCES. RETURN USED OIL TO COLLECTION CENTERS.

# 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.
- Shut off the engine and let it cool, then remove all hoses.
- 3. Move the throttle lever to the "**\$LOW**" position.
- 4. Set engine switch to the "OFF" position.

**CAUTION!** 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.





### **TROUBLESHOOTING**

Problem	Cause	Correction
Pump has following problems: Failure to produce pressure, erratic pressure, chattering, loss of pressure, low water volume.	<ol> <li>Low pressure nozzle installed.</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>Replace with high pressure nozzle.</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>Dirty In-Line filter.</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>See "Check In-Line Filter" on page 11.</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 Honda service facility.</li> <li>Contact Honda service facility.</li> </ol>
Engine shuts down during operation.	Out of gasoline.     Low oil level.	<ol> <li>Fill fuel tank.</li> <li>Fill crankcase to proper level.</li> </ol>
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.

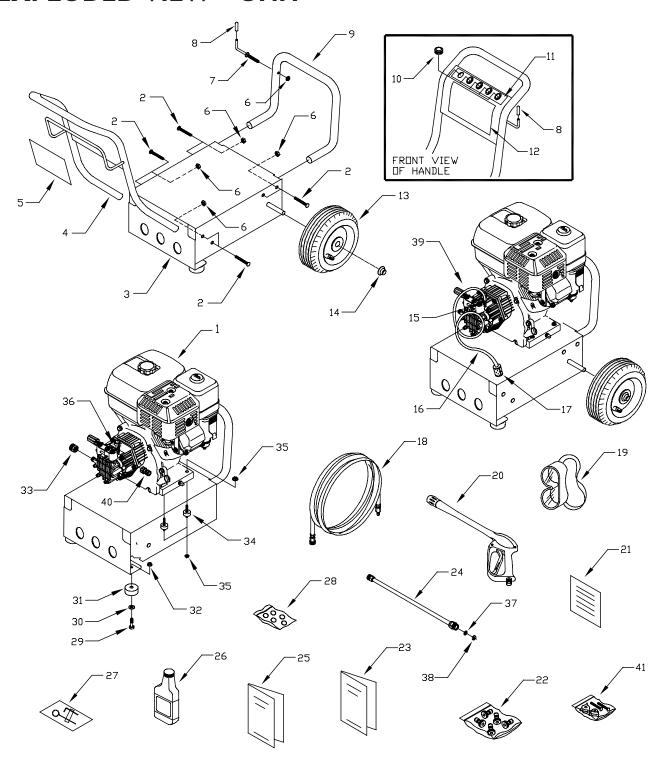


NOTES				





### **EXPLODED VIEW - UNIT**







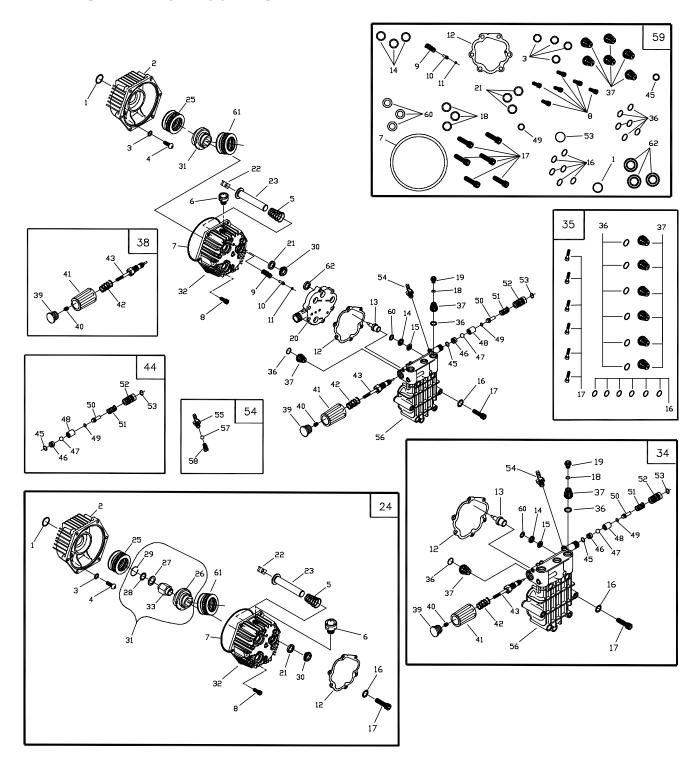
### **PART LIST - UNIT**

Item	Part #	Qty.	Description
I	NSP	I	ENGINE
2	B2043	8	BOLT, 5/16" - 18 x 1-3/4" Carriage
3	BB2226	I	BASE
4	CB3861C		HANDLE DECAL OF THE PROPERTY O
5 6	B4160	I	DECAL, Operating Instructions
6 7	99583	9	NUT, 5/16" - 18 Hex Flange
	B2150	I	HOOK, 5/16" Square Neck Gun
8	B2516	2	CAP, Black Vinyl .280"
9	CB3866	l	BUMPER
10	30809	5	GROMMET, 1/8" - 11/16"
11	B4159	I	DECAL, 5 QD Nozzles
12	B5188	I	DECAL, Unit 1417
13	88521	2	ASSEMBLY, Wheel 10" Dia. x 4"
14	75402	2	PUSHNUT, .50"
	48031G	I	CLAMP, Hose 7/16" Dia.
16	A1040A	ı.	HOSE, 54" Chemical Inject
17	A1041	l	FILTER, Chemical Hose
18	B4805	I	HOSE, 3/8" x 50'
19	87815	l	GOGGLES, Safety
20	B1436B	ļ	GUN, with Molded Grip
21	88681	ļ	CARD, Owners Registration
22	B4155	l	KIT, Nozzles QD
23	B5189	l	MANUAL, Owners 1417-0
24	B3858	l	ASSY., Wand Ext. with QD
25	B5214		MANUAL, Honda
26	BB3061B		OIL BOTTLE
27	188287	ļ	KIT, Nozzle Cleaning
28	B5830		KIT, O-Ring Maintenance
29	42909	2	HHCS, M8 - 1.25 x 30
30	50190	2	FLAT WASHER, 10GA34" x 1"
31	27007	2	VIB MOUNT, Donut Type
32	52858	2	NUT, Locking M8 - 1.25
33	21424	I	CONNECTOR, Garden Hose
34	21217	4	MOUNT, Rubber Shock
35	67989	8	NUT, M8 Flange Serrated
36	B1288	į.	TAG, Breather Cap
37	B4224	!	SCREEN, Gun Inlet
38	97837	l	O-RING, Hi Pressure Trans.
39	NSP	!	PUMP, 2600PSI @ 3GPM (see pages 18-19)
40	185923	I	QUICK CONNECTOR, M22
41	B4196	I	KIT, Handle Hardware





### **EXPLODED VIEW-PUMP**







### **PART LIST-PUMP**

Item	Part #	Qty.	Description	Item	Part #	Qty.	Description
I	B2218	Qty.	O-RING, Engine Adapter	42		Q	SPRING,Unloader
2	B2260	i	ADAPTER, Housing, Cam	43		i	ASSEMBLY, Spindle
3	B2217	4	O-RING, Engine Adapter Bolt	45		i	O-RING, Spindle
4	B2261B	4	SCREW, Button Hd 5/16 - 24 x 3/4"	46		i	SEAT, Ball Unloader
5	96400	3	SPRING, Piston Return	47		i	BALL, Stainless Steel 9/32 Dia.
			•				
6	99735	!	ASSEMBLY, Oil Breather	48		!	SEAT, Trapped Line Pressure
7	93790	ļ	O-RING, Crankcase	49		!	O-RING, Trapped Line Pressure
8	40945	6	SHCS, M6 x 1.0 x 20mm	50		!	VALVE, Shuttle Piston
9	93652	ļ.	SPRING, Thermal By-Pass	51		Į.	SPRING, Piston Trapped Pressure
10	95416	ı	PISTON, Thermal By-Pass	52		ı	VENTURI, Chemical
11	93876	ı	O-RING, Thermal By-Pass	53		ı	O-RING, Venturi
12	A2069	ı	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	Ŏ	KIT, Unloader Spindle
20		ĭ	· ·	39		i	- · · · · · · · · · · · · · · · · · · ·
	A1320		SPACER PLATE, Inlet				CAP, Plastic
21	93680	3	SEAL, Oil Piston	40		!	SET SCREW, M6 x 8
22	94944	3	SHOE, Piston Pivot	41		!	HANDLE, Unloader
23	99427	3	ASSEMBLY, Ceramic Piston & Cap	42		ı	SPRING,Unloader
24	185700	0	KIT, Crankcase	43		ı	ASSEMBLY, Spindle
I		- 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		i	SEAT, Trapped Line Pressure
6		Ĭ	ASSEMBLY, Oil Breather	49		i	O-RING, Trapped Line Pressure
7		i				i	
		-	O-RING, Crankcase	50		-	VALVE, Shuttle Piston
8		6	SHCS, M6 x 1.0 x 20mm	51		!	SPRING, Piston Trapped Pressure
12		I.	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	Ĩ		Ĭ	O-RING, Engine Adapter
31		Ĭ	ASSEMBLY, Cam	3		4	O-RING, Engine Adapter Bolt
26		i	CAM, Axial 7.5 Lift	7		ï	O-RING, Crankcase
27		i		8			
		- !	WASHER, Thrust			6	SHCS, M6 x 1.0 x 20mm
28		!	RETAINER, Push - On	9		!	SPRING, Thermal By-Pass
29		!	C-RING, Cam Retainer	10		!	PISTON, Thermal By-Pass
33		!	ADAPTER, Shaft Hex	11		!	O-RING, Thermal By-Pass
32		I	HOUSING, Piston	12		ı	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		i	O-RING, Spindle
17		3		49		i	
			O-RING, Cap				O-RING, Trapped Line Pressure
19		3	CAP, Outlet Port	53		I	O-RING, Venturi
36		6	O-RING, Check Valve	60		3	SPACER, High Pressure Seal
37		6	ASSEMBLY, Check Valve	62		3	SEAL, U-Cup
39		- 1	CAP, Plastic				4, 54, and 59 are service kits and include all
40		I	SET SCREW, M6 x 8	parts sho	own within the	box. Ce	ertain items may only be available as a part
41		I	HANDLE, Unloader	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 I 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: I 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 I-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

lefferson, Wisconsin U.S. A.