Operators Manual



7.8 Horsepower 3000 PSI 2.5 GPM HIGH PRESSURE WASHER CLEANING SYSTEM





HOURS: Mon. - Fri. 8 a.m. to 5 p.m. (CST)

CAUTION:

Before using this product, read this manual and follow all its Safety Rules and Operating Instructions.

Sears, Roebuck and Co., Hoffman Estates, IL 60179

Visit our Craftsman website: www.sears.com/craftsman

Part No. B3604 Draft 0 (2/2/99) Printed in the U.S.A.

- Safety
- Assembly
- Operation
- Maintenance
- Parts

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WARRANTY

LIMITED ONE YEAR WARRANTY ON CRAFTSMAN CLEANING SYSTEM

For one year from the date of purchase, when this Craftsman Cleaning System is maintained and operated according to the instructions in the owner's manual, Sears will repair, free of charge, any defect in material and workmanship.

If this washer is used for commercial purposes, this warranty applies for only 90 days from the date of purchase. If this cleaning system is used for rental purposes, this warranty applies for only 30 days after date of purchase.

LIMITED TWO YEAR WARRANTY ON CRAFTSMAN ENGINE

For two years from the date of purchase, when this Craftsman engine is maintained and operated according to the instructions on the owner's manual, Sears will repair, free of charge, any defect in material and workmanship.

If the Craftsman engine is used for commercial or rental purposes, this warranty applies for only one year from the date of purchase.

This warranty does not cover:

Expendable items such as spark plugs or air filters, which become worn during normal use.

A

 Repairs necessary because of operator abuse or negligence, including damage resulting from no water being supplied to pump or failure to maintain the equipment according to the instructions contained in the owner's manual.

WARRANTY SERVICE IS AVAILABLE BY RETURNING THE HIGH CLEANING SYSTEM TO THE NEAREST SEARS SERVICE CENTER OR DEALER IN THE UNITED STATES. This warranty gives you specific legal rights and you may also have other rights, which vary from state to state,

Sears, Roebuck and Co., Dept. 817WA, Hoffman Estates, IL 60179

SAFETY INSTRUCTIONS

WARNING:

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



A

CAUTION: Before using this product, read this manual and follow all Safety Rules and Operating Instructions.



DANGER: When transporting, setting up, adjusting or making repairs to your cleaning system, **always** disconnect the spark plug wire and place it where it cannot contact the spark plug to prevent accidental starting.

- Engine exhaust gases contain DEADLY carbon monoxide gas. This dangerous gas, if breathed in sufficient concentrations, can cause unconsciousness or even death. Operate this equipment only in the open air where adequate ventilation is available.
- 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.
- Locate this cleaning system in areas away from combustible materials, combustible fumes or dust.

- The high pressure equipment is designed to be used with Sears authorized parts only. If you use this equipment with parts that do not comply with minimum specifications, the user assumes all risks and liabilities.
- Some chemicals or detergents may be harmful if inhaled or ingested, causing severe nausea, fainting or poisoning. The harmful elements may cause property damage or severe injury.
- Do not allow CHILDREN to operate the cleaning system at any time.
- Operate engine only at governed speed. Running the engine at excessive speeds increases the hazard of personal injury. Do not tamper with parts which may increase or decrease the governed speed.
- Do not wear loose clothing, jewelry or anything that may be caught in the starter or other rotating parts.
- Before starting the cleaning system 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.
- The muffler and air cleaner must be installed and in good condition before operating the cleaning system. These components act as spark arrestors if the engine backfires.
- 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 cleaning system.
- 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 a leak in the high pressure hose.
- High pressure streams of fluid this equipment produces can pierce skin and its underlying tissues, leading to serious injury and possible amputation.
- Never aim the gun at people, animals or plants.
- High pressure spray can cause paint chips or other particles to become airborne and fly at high speeds.
- Always wear eye protection when you use this equipment or when you are in the vicinity where the equipment is in use.
- Operate the pressure at no more than the PSI fluid pressure rated for your cleaning system.

- Never move the machine by pulling on the high pressure hose. Use the handle provided on the top of the unit.
- Always be certain the spray gun, nozzles and accessories are correctly attached.
- Never use a spray gun which does not have a trigger lock or trigger guard in place and in working order.
- Use a respirator or mask whenever there is a chance that vapors may be inhaled. Read all instructions with the mask so you are certain the mask will provide the necessary protection against inhaling harmful vapors.
- High pressure spray may damage fragile items including glass. Do not point spray gun at glass when in the jet spray mode.
- 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.
- Hold the spray gun firmly in your hand before you start the unit. Failure to do so could result in an injury from a whipping spray gun. Do not leave the spray gun unattended while the machine is running.
- The cleaning area should have adequate slopes and drainage to reduce the possibility of a fall due to slippery surfaces.
- Keep water spray away from electric wiring or fatal electric shock may result.
- Do not secure trigger gun in the pull-back (open) position.
- Do not by-pass any safety device on this machine.
- The muffler and engine heat up during operation and remain hot immediately after shutting it down. Avoid contact with a hot muffler or engine or you could be severely burned.
- Operate and store this unit on a stable surface.
- Always store cleaning system with the Dial-a-Cleaner™ knob in the OFF position.
- High pressure hose can develop leaks from wear, kinking, abuse, etc. Water spraying from a leak is capable of injecting material into skin. Inspect hose each time before using it. Check all hoses for cuts, leaks, abrasions or bulging of cover, or damage or movement of couplings. If any of these conditions exist, replace hose immediately. Never repair high pressure hose. Replace it with another hose that meets minimum pressure rating of your cleaning system.



LOOK FOR THIS SYMBOL TO POINT OUT IMPORTANT SAFETY PRECAUTIONS. IT MEANS "ATTENTION!!! BECOME ALERT!!! YOUR SAFETY IS INVOLVED."

ASSEMBLY

CARTON CONTENTS

The following parts are shipped loose with your cleaning system:

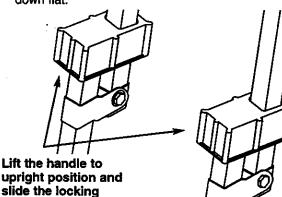
- Main Unit cleaning system with wheels, chemical tanks, guide handle.
- High Pressure Hose (already attached to pump)
- Parts Box (which includes items listed below)
 - Spray Gun
 - Dual Lance with quick connect nozzle fitting
 - Engine Oil
 - Three-pack of chemical concentrates
 - Four multi-colored nozzles
 - Manual Bag (which includes the items listed below)
 - **Owner's Manual** •
 - Nozzle Cleaner Kit
 - "O"--Ring Kit
 - **Tank Labels**

caps into place

Become familiar with each piece before assembling the cleaning system. Check all contents against the illustration on Page 5. If any parts are missing or damaged, call the Pressure Washer Helpline at 1-800-222-3136.

TO REMOVE CLEANING SYSTEM FROM CARTON

- Remove loose parts and parts box included with your cleaning system.
- Slice two corners at guide handle end of carton from top to bottom so the panel can be folded down flat.

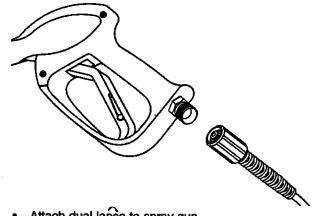


- Raise guide handle, secure in place.
- Roll the cleaning system out the open end of the carton.
- Check carton for additional loose parts.

HOW TO SET UP YOUR CLEANING SYSTEM

For the most part, your Craftsman High Pressure Cleaning System has been assembled at the factory. You must, however, assemble the spray gun, and attach the high pressure hose to the spray gun.

Cut the tie wraps on the high pressure hose and • connect high pressure hose to gun. Tighten by hand,



Attach dual lance to spray gun.

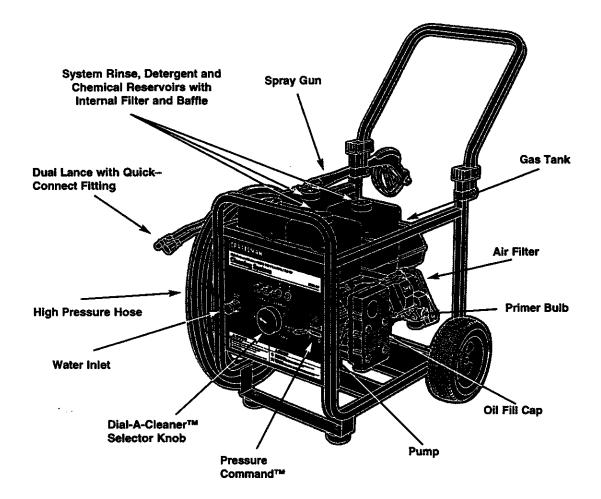


Place assembled spray gun on holder.

OPERATION

KNOW YOUR HIGH CLEANING SYSTEM

Read this owner's manual and safety rules before operating your cleaning system. Compare the illustrations with your cleaning system to familiarize yourself with the locations of various controls and adjustments.



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

Dial-A-Cleaner[™] Selector Knob – Selects any one of three chemicals or the clean water system rinse.

Dual Lance with Quick–Connect Fitting– The dual lance attaches to the spray gun and allows you to switch from low pressure mode, for applying chemicals, to high pressure mode, for cleaning. The quick connect fitting lets you quickly exchange the four provided nozzles to adjust the spray pattern of the high pressure spray.

Gas Tank – Fill gas tank with regular unleaded gasoline here.

High Pressure Hose – Connect one end to the spray gun.

Oil Fill Cap - Fill engine with oil here. See page 8 for oil recommendations.

Pressure Command[™] – Sets output water pressure.

Primer Bulb - Used to start a cold engine.

Pump - Develops high water pressure.

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

System Rinse, Detergent and Chemical Reservoirs with Internal Filter and Baffle – Used to provide detergent or other chemicals to the low pressure water stream.

Water Inlet - Connection for garden hose.

HOW TO USE YOUR CLEANING SYSTEM

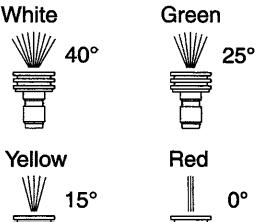
Read these instructions and learn how to use your cleaning system before you attempt to start your cleaning system. If you have any problems operating your cleaning system, please call the pressure washer helpline at 1-800-222-3136.

How To Use the Nozzles



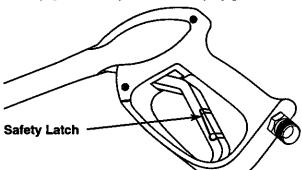
DANGER: Never exchange nozzles without locking the safety latch on the trigger.

The quick-connect on the dual lance allows you switch between four different nozzles. The nozzles vary the spray pattern of the high pressure stream as shown below.

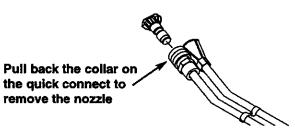


In order to change the nozzle being used, follow these instructions:

· 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 40° or 25° degree nozzle. To scour the surface, select the 15° or 0° nozzle.

 Pull back the collar, insert the new nozzle and release the collar, making sure it becomes flush with the end of the quick connect. Pull on the nozzle to make sure it is securely in place.

Note: The chemical nozzle is permanently affixed to your dual lance and has a spray pattern of 25 degrees. It must be used when applying chemical,

- For most effective cleaning, keep spray nozzle between 8 to 24 inches away from cleaning surface.
- Damage to the surface may occur if you get the spray nozzle too close to it.

Cleaning With The Nozzles and Applying Chemical

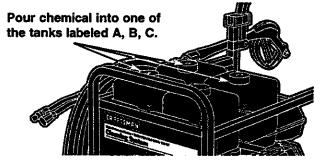


WARNING: You must attach all hoses before you start the engine. Starting the engine without all the hoses connected and without the water turned ON will damage the pump.

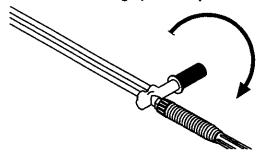
IMPORTANT: Use soaps designed specifically for pressure washer cleaning systems. Household detergents could damage the pump.

Up to three (3) different solutions can be carried on the cleaning system at one time. To apply detergent follow these steps:

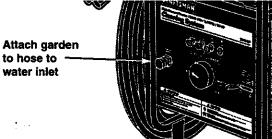
 Dilution is necessary when using the supplied chemical packets. Simply snip one corner of the plastic pouch, pour the chemical into the tank, then fill the tank with clean water. Label tanks with the provided tank labels.



- If using another chemical designed for use with pressure washers, prepare the chemical solution as required by the chemical manufacturer. Fill chemical reservoir(s) with the prepared solution as needed.
- Rotate the Dial-A-Cleaner[™] selector knob to the letter corresponding to the desired reservoir.
- Open the chemical valve handle fully on the dual lance by turning it counterclockwise to place the cleaning system in low pressure mode. Detergent cannot be applied with the chemical valve handle in the high pressure position.



 Connect garden hose to water inlet, check that high pressure hose is connected to spray gun and pump (see ASSEMBLY on page 4), and start engine.





CAUTION: Before starting your Cleaning System, make sure you have read and followed the instructions in the sections "Before Starting the Cleaning System" on page 8 and "To Start the Cleaning System" on page 8.



WARNING: Be extremely careful if you must use the cleaning system from a ladder, scaffolding or any other relatively unstable location. When you press the trigger, the recoil from the initial spray could force you to fall, or if you are too close to the cleaning surface, the high pressure spray could force you off a climbing apparatus.

- Start at lower portion of area to be washed and work upward, using long, even overlapping strokes.
- Allow detergent to 'soak in' (between 3-5 minutes) before washing and rinsing. Reapply as needed to prevent surface from drying.

Wash and Rinse Surface

This Craftsman Cleaning System permits regulation of output water pressure by varying the engine speed. The Pressure Command[™] found on the front panel may be set, as follows:

Pressure	Low to		High			
Duty	Light	Medium	Heavy			
Application	Auto	Concrete	Paint removal			
	Boat	Driveway	Degreasing			
	Furniture	Deck				

After you have applied detergent, scour the surface with the high pressure water stream and then rinse it clean, as follows:

- Close the chemical valve handle fully on the dual lance by turning it clockwise to place the cleaning system in high pressure mode. Chemical will not flow when in the high pressure mode.
- Select and install the desired nozzle following the instructions on"How to Use the Nozzles" on page 6.
- Adjust Pressure Command[™] control to obtain desired water pressure.
- Expand the spray pattern for a more gentle rinsing action. Start at top of area to be rinsed, working down with same action as for cleaning.



CAUTION: Test a small area of the surface to be cleaned. Make sure there is no damage caused by the high pressure spray.

RINSE SYSTEM AFTER EVERY USE

It is imperative that the chemical selector system be rinsed after each use to prevent clogging or leaks:

- · Fill the System Rinse reservoir with clean water.
- Before disconnecting the water supply, start your cleaning system.



CAUTION: Before starting your Cleaning System, make sure you have read and followed the instructions in the sections "Before Starting the Cleaning System" on page 8 and "To Start the Cleaning System" on page 8.

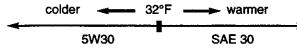
- Open the chemical valve handle fully on the dual lance by turning it counterclockwise to place the cleaning system in low pressure mode.
- Rotate the Dial-A-Cleaner[™] selector knob to the letter corresponding to the System Rinse tank. As clean rinse water is drawn through the system, continue the flow until no detergent foam is observed.
- Rotate the Dial-A-Cleaner™ selector knob to the OFF position.

BEFORE STARTING THE CLEANING SYSTEM

To operate the engine you will need to do the following:

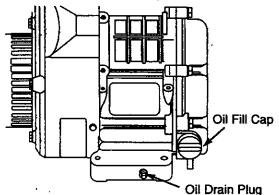
Add Engine Oil

Only use high quality detergent oil rated with API service classification SF or SG. Select the oil's SAE viscosity grade according to your expected operating temperature:



Although multi-viscosity oils (5W30, 10W30, etc.) improve starting in cold weather, these multi-viscosity oils will result in increased oil consumption when used above 32°F. Check your engine oil level more frequently to avoid possible damage from running low on oil.

- Place cleaning system on a level surface
- · Clean area around oil fill cap and remove.



- Pour oil from enclosed bottle into the oil fill opening until oil reaches the point of overflowing. Do not overfill.
- Install oil fill cap. Hand tighten securely.

Add Gasoline

 Use regular unleaded gasoline with the cleaning system engine. Fuel tank capacity is 1 gallon.



DANGER: Never fill fuel tank indoors. Never fill fuel tank when engine is running or hot. Do not smoke when filling fuel tank.



CAUTION: Do not overfill the fuel tank. Always leave room for expansion.



CAUTION: Experience indicates that alcohol blended fuels (called gasohol or using ethanol or methanol) can attract moisture which leads to separation and formation of acids during storage. Acidic gas can damage the fuel system of an engine while in storage.

To add fuel to engine:

- Clean area around fuel cap, remove cap.
- Add regular unleaded gasoline, slowly, to the fuel tank.

Important: Never mix oil with gasoline.

Install fuel cap and wipe up any spilled gasoline.

TO START THE CLEANING SYSTEM

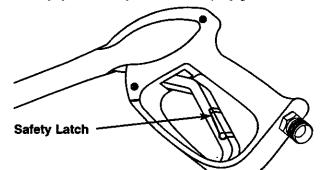
The best way to start your cleaning system engine for the first time is to follow these instructions step-bystep. This starting information also applies whenever you start the engine after you have let the cleaning system sit idle for at least a day.

- Place the cleaning system in an area close enough to an outside water source that can flow at a rate of at least 3 gallons per minute. Connect a garden hose to the water spout.
- Check that the high pressure hose is tightly connected to the spray gun and to the pump. See ASSEMBLY section on page 4.
- Check inlet screen on the water inlet. If the screen is dirty, clean before attaching a garden hose. If the screen is damaged, do not connect to the garden hose. Replace with screen provided in maintenance kit or call 1-800-366-PART to order a replacement inlet screen.
- Attach the the garden hose to the water inlet.
- Turn on the water.



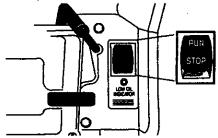
CAUTION: Do not run pump without the water supply connected and turned on. You must follow this caution or the pump will be damaged.

- Remove the dual lance from the spray gun.
- Pull the trigger on the spray gun and hold until a steady stream of water appears.
- · Engage the safety latch on the spray gun.

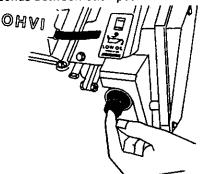


Attach dual lance onto spray gun.

• Move Run/Stop switch to the "Run" position.



Press the primer bulb three (3) times, waiting two
 (2) seconds between each push.



 Grasp starter handle and pull slowly until you feel some resistance. Then pull cord rapidly to overcome compression, prevent kickback and start the engine. Let rope return to starter slowly.

Note: The Pressure CommandTM may be placed in any position during starting or operation. However, for cold starts, it is recommended that the Pressure CommandTM be placed in the "high" position. Note: If the engine fails to start after 3 pulls, prime the engine three (3) times and pull starter rope again.

 Once the engine has started, disengage the spray gun safety latch.

HOW TO STOP YOUR CLEANING SYSTEM

- Move the 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.

• Rotate the Dial-A-Cleaner™ selector knob to the OFF position to prevent chemical leakage.

SIPHONING

DO NOT siphon standing water for your water supply. Contaminated, brackish or dirty water can damage the pump. Connect only to household water supply.

TIPS

- Never use the garden hose inlet to siphon detergent or wax.
- If you hold the spray nozzle too far away from the object being cleaned, washing will not be as effective.
- Always store the cleaning system with the Dial-A-Cleaner™ selector knob to the OFF position.

MAINTENANCE

CUSTOMER RESPONSIBILITIES

MAINTENANCE TASK	HOUR	HOURLY OPERATING INTERVAL					ATES
	Before Each Use	Every 25 Hours or Yearly	Every 50 Hours or Yearly	Every 100 Hours or Yearly			
Cleaning System Check/clean water inlet screen on quick-connect.	X†						
Check high pressure hose.	X						
Check detergent hose.	X						
Check spray gun and assembly for leaks.	X						
Purge pump of air and contaminants.	X					1	
ENGINE Check oil level.	x						
Service foam pre-cleaner.		X**					
Service paper air filter.			Х			1	
Change engine oil.	1		X*				
Clean/replace spark plug.				X			
Clean spark arrestor screen				X			
Prepare for storage.	Prep	Prepare unit for storage if it is to remain idle for longer than 30 days.					

† Clean if clogged. Replace if perforated or tom.

Change oil after the first (8) operating hours and every 50 hours thereafter. Change sooner when operating under dirty or dusty conditions.

** Replace more often under dirty or dusty conditions.

PRODUCT SPECIFICATIONS

Cleaning System Specifications

PRESSURE	3000 psi
FLOW RATE	2.5 GPM
CHEMICAL MIX	Use as directed
WATER SUPPLY TEMPERATURE	Not to Exceed 140°F

Engine Specifications

ENGINE MODEL	GN-220
RATED HORSEPOWER	7.8
SPARK PLUG: Type:	Champion RC12YC or equivalent. Set Gap to: 0.030 inch (0.76mm)
GASOLINE CAPACITY	1 Gallon
OIL	SAE 30 weight
SOLID STATE IGNITION AIR GAP	0.0125 inch

In the State of California a spark arrestor 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 engine of your cleaning system with a spark arrestor muffler, the spark arrestor must be maintained in effective working order by the owner/operator.

GENERAL RECOMMENDATIONS

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

Some adjustments will need to be made periodically to properly maintain your cleaning system.

All adjustments in the Service and Adjustments section of this manual should be made at least once each season.

 Once a year you should clean or replace the spark plug and replace the air filter and check the gun and wand assembly for wear. A clean spark plug and new air filter assure proper fuel-air mixture and help your engine run better and last longer.

BEFORE EACH USE

- Check water inlet screen for damage.
- Check high pressure hose for leaks.
- Check chemical tanks and filters for damage.
- Check gun and wand assembly for leaks.
- Purge pump of air and contaminants.
- Check engine oil level.

CLEANING SYSTEM MAINTENANCE

Check and Clean Inlet Screen

Examine garden hose inlet screen. Clean if it is clogged or replace if it is torn.

Check High Pressure Hose

High pressure hoses can develop leaks from wear, kinking, or abuse. Inspect hose before each use. Check for cuts, leaks, abrasions, bulging of cover, or damage or movement of couplings. If any of these conditions exist, replace hose immediately.

DANGER: Never repair a high pressure hose. **Replace** with hose that meets the minimum pressure rating of your cleaning system

Check Chemical Reservoirs

Tank covers should snap cleanly onto tank. Ensure chemical labels correctly identify tank contents. Ensure that the System Rinse tank is filled with clean water. Ensure that Dial-A-Cleaner™ selector knob rotates freely between each position. Examine the tanks and replace if the filter is clogged

Check Gun and Wand

Examine hose connection to gun and make sure it is secure. Test trigger by pressing it and making sure it springs back into place when you release it. Put safety latch in UP position and test trigger. You should not be able to press trigger. Replace gun immediately if it fails any of these tests.

Purge Pump of Air and Contaminants

To remove the air from the pump, follow these steps:

- Set up the cleaning system as described in the ASSEMBLY section and connect the water supply.
- Remove the wand extension from the gun.
- Pull the trigger on the gun and hold until a steady stream of water appears.

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

- Set up the cleaning system as described in the ASSEMBLY section, and connect the water supply.
- Remove the nozzle attachment from the gun.
- Start the engine according to instructions in OPERATION section.

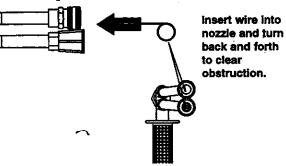
- Pull the trigger on the gun and hold.
- When the water supply is steady and constant, engage the safety latch and refasten the nozzle attachment.

Nozzle Maintenance

If the nozzle becomes restricted or clogged with foreign materials, such as dirt, excessive pump pressure may develop. A partially clogged nozzle can cause a pulsing condition during use. This generally is not a pump related problem, but rather a clogged or partially restricted nozzle.

If the nozzle becomes clogged or partially restricted, immediately clean the nozzle with the kit included with your cleaning system by following these instructions:

- Shut off the engine and turn off the water supply.
- Press trigger to relive water pressure.
- Separate the dual lance from the gun.
- Use the wire included in the kit or a small paper clip to free the foreign materials clogging or restricting the nozzle.



 Remove additional debris by back flushing water supply through dual lance (Figure 2). Back flush between 30 to 60 seconds. Back flush both lances by turning chemical valve handle.



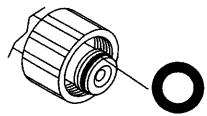
- Reconnect the dual lance to the spray gun.
- Reconnect the water supply, turn on the water, and start the engine.
- Test the cleaning system by operating with the unit in high and the low pressure.

O-Ring Maintenance

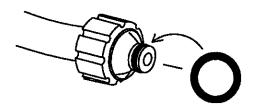
Through the normal operation of your cleaning system, the o-rings keep the connections of the hoses and gun tight and leak-free. They may become worn or damaged with use. Provided with your cleaning system is an o-ring Maintenance Kit containing replacement o-rings, a rubber washer and a garden hose inlet screen.

Parts in the O-Ring Kit Include:

 1 O-Ring, red, (p/n B2726) for the end of the spray gun connection between gun and high/low spray wand.

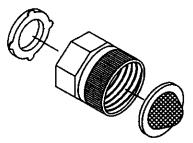


 2 O–Rings, yellow, (p/n B2264) for the ends of the high pressure hose.



Note: The above two o-rings are close in size. Please match carefully to assure proper o-ring usage.

- 1 rubber washer (p/n B2385) for the inside of the garden hose connector.
- 1 water inlet screen (p/n B2384) for the garden hose connector.



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

Maintenance, replacement or repair of the emission control devices and systems may be performed by any non-road engine repair establishment or individual.

Checking Oil Level

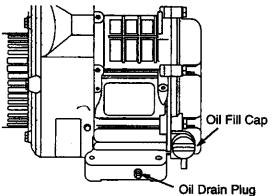
Oil level should be checked prior to each use or at least every eight (8) hours of operation. Keep oil level maintained.

Changing Engine Oil and Oil Filter

Change oil after first eight (8) hours of operation. Change oil & oil filter every fifty (50) hours thereafter. If you are using your cleaning system under extremely dirty or dusty conditions, or in extremely hot weather, change oil more often.

Change oil while engine is still warm from running, as follows:

- Clean area around oil drain plug.
- Remove oil drain plug and oil fill plug and drain oil completely into a suitable container.



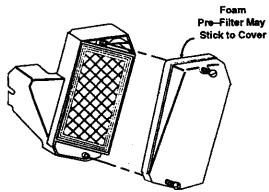
- When oil has completely drained, Install oil drain plug and tighten securely.
- Place a suitable container beneath the oil filter and turn filter counterclockwise to remove. Discard according to local regulations.
- Coat gasket of new filter with engine oil. turn filter clockwise until gasket contacts tightly with filter adapter. Then tighten an additional 3/4 turn.
- Fill oil sump with recommended oil. (See "Before Starting the Engine" on page 8 for oil recommendations)
- Install the oil fill plug and tighten securely.
- · Wipe up any spilled oil.

Service Air Cleaner

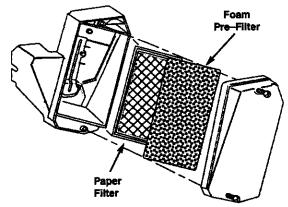
Your engine will not run properly and may be damaged if you run it using a dirty air cleaner. Clean or replace the air cleaner paper filter once every 50 hours of operation or once a year, whichever comes first. Clean or replace more often if operating under dusty or dirty conditions. Clean foam pre-filter every 25 hours of operation or sooner under dusty conditions.

To clean or replace the air cleaner components:

• Loosen the two screws on the air cleaner cover. Remove the air cleaner cover.



 Remove the paper air filter and the foam pre-filter from the air cleaner cover.



- To clean or replace foam pre-filter:
 - A. Wash pre-filter in soapy water.
 - B. Squeeze pre-filter dry in clean cloth. Do not twist. If the pre-filter is still dirty after washing and drying it, replace it with a new one.

Note: If you need to order a new air filter, please call 1-800-366-PART.

- C. Apply enough engine oil to saturate the pre-filter.
- D. Wrap the pre-filter in a clean dry cloth and squeeze out the excess oil. Do not twist. Set the pre-filter aside.

- To clean or replace paper air filter:
 - A. Clean paper filter by tapping it gently on a solid surface. If the filter is too dirty, replace it with a new one. Dispose of the old filter properly.
- Clean air cleaner cover.
- Insert pre-filter into the cover, then the paper air filter.
- Reinstall the air cleaner cover and tighten the two (2) screws.

Clean Spark Arrestor Screen

The engine exhaust muffler has a spark arrestor screen. Inspect and clean the screen every 100 hours of operation or once each year, whichever comes first.

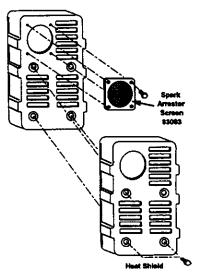
Note: If you use your cleaning system on any forestcovered, brush-covered or grass-covered unimproved land, it must have a spark arrestor. The spark arrestor must be maintained in good condition by the owner/operator.

Clean and inspect the spark arrestor as follows:

Inspect the screen and replace it if it is torn, perforated or otherwise damaged. **Do not use** a defective screen. If the screen is not damaged, clean it with a chemical solvent.

If the spark arrestor is damaged, replace it as follows:

- Remove the four (4) screws that connect the heat shield to the muffler.
- Remove four-(4) screws that attach the spark arrestor screen.



- Replace damaged screen with new screen (p/n 83083).
- Reattach the spark arrestor screen and the heat shield.

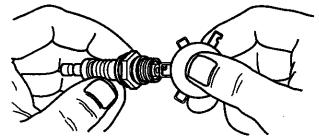
Clean / Replace Spark Plug

Replace the spark plug yearly or every 100 hours of operation, whichever comes first.



CAUTION: Disconnect spark plug wire from spark plug and keep wire away from spark plug.

- Clean area around spark plug.
- Remove spark plug form the cylinder head.
- Replace spark plug if the electrodes are pitted, burned or porcelain is cracked. For replacement use Champion RC12YC or equivalent.
- Check electrode gap with wire feeler gauge and set gap to 0.76mm (.030 inches), if necessary.
- Install a correctly gapped spark plug into the cylinder head, tighten securely.



Carburetor

If you think your carburetor needs adjusting, see your nearest Sears Service Center. Engine performance may be affected at altitudes above 5000 feet. For operation at higher elevations, contact your nearest Sears Service Center.

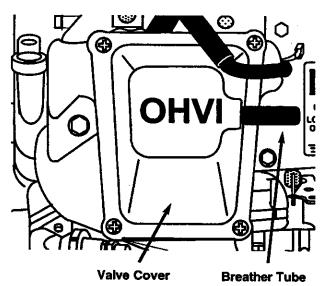
Adjusting Valve Clearance

After the first fifty (50) hours of operation, you should adjust the valve clearance in the engine.

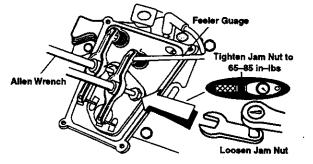
Important: If you feel uncomfortable about doing this procedure or you don't have the proper tools, please take your cleaning system in to the nearest service center to have the valve clearance adjusted. This is a very important step to insure the longest life for your engine.

To adjust valve clearance:

- Make sure the engine is at room temperature.
- Make sure that the spark plug wire is removed from the spark plug and out of the way.
- Remove the breather tube from the valve cover.
- Remove the four screws attaching the valve cover with a #2 or 3 phillips screwdriver.



 Make sure the piston is at Top Dead Center (TDC) of its compression stroke (both valves closed). To get the piston at top dead center, pull on the recoil handle slowly watching the piston trough the spark plug hole. As you pull on the recoil handle the piston should move up and down. The piston is put Top Dead Center when it is up as high as it can go.



- Using a 10mm wrench, loosen the rocker arm jam nut. Use an 8mm allen wrench to turn the pivot ball stud while checking clearance between the rocker arm and the valve stem with a feeler gauge. Correct clearance is 0.002-0.004 inch (0.05-0.1mm). Note: You must hold the rocker arm jam nut in place as you turn the pivot ball stud.
- When valve clearance is correct, hold the pivot ball stud in place with the allen wrench and tighten the rocker arm jam nut. Tighten the jam nut to 65-85 inch-pounds torque. After tightening the jam nut, recheck valve clearance to make sure it did not change.

- Reattach the valve cover making sure the gasket between the valve cover and cylinder head is in place. Start all four screws before tightening or you will not be able to get all the screws in place.
- Reattach the breather tube.
- Reattach the spark plug wire to the spark plug.

Retorque Head Bolts

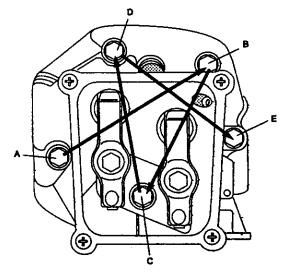
After the first 50 hours of operation, you must retorque the head bolts to 4.0 kg.-m. (22 ft.-lbs.)

Important: If you feel uncomfortable about doing this procedure or you don't have the proper tools, please take your cleaning system in to the nearest service center to have the valve clearance adjusted. This is a very important step to insure the longest life for your engine.

Note: Only perform this adjustment after first 50 hours of operation. The head bolts will need no further adjustment.

- · Remove the four (4) screws from the valve cover.
- · Remove the valve cover and gasket.

- Torque the bolts to 4.0 kg-m (22 ft-lb).
- Torque sequence is as follows: A, B, C, D, E (star pattern).



STORAGE

AFTER EACH USE

Water should not remain in the unit for long periods of time. Sediments of minerals can deposit on pump parts and "freeze" pump action. Follow these procedures after every use:

- Flush the chemical system by selecting the System Rinse tank and run the cleaning system with nozzle in low pressure mode. Flush for one minute or until the chemical is cleared from the system.
- Shut off the engine and let it cool, then remove all hoses.

CAUTION: Be sure the engine Run/Stop switch is in the "Stop" position before you continue.

- Empty the pump of all pumped liquids by pulling recoil handle about 6 times with the Run/Stop switch in the "Stop" position. This should remove most of the liquid in the pump.
- Rotate the Dial-A-Cleaner[™] selector knob to the OFF position.
- Coil the high pressure hose and inspect it for damage. Cuts in the hose or fraying could result in leaks and loss of pressure. Should any damage be found, replace the hose. DO NOT attempt to repair a damaged hose. Replace the hose with the genuine Craftsman part.
- Drain water from hose and properly hang it on the wire support provided.
- Store system in a clean, dry area.



DANGER: Never store the engine with fuel in the gas tank indoors or in enclosed, poorly ventilated areas where fumes may reach an open flame, a spark, or pilot light.

WINTER STORAGE



CAUTION: You must protect your unit from freezing temperatures. Failure to do so will permanently damage your pump and render your unit inoperable.

To protect the unit from freezing temperatures:

- Empty all chemical reservoirs as follows:
 - Disconnect hose connected to chemical inject fitting on the pump. Place end of hose into suitable container.
 - b. Move the selector knob to Tank A and open that tank's cover. Gravity should shortly empty the tank contents into the container.
 - c. When the tank is empty, repeat step (b) for tanks B and C.
 - d. Reconnect the hose to the chemical inject fitting on the pump. Add 0.5 liter of clean fresh water to each tank and close tank's covers.

- Flush the chemical system by selecting a tank and run the cleaning system with nozzle in low pressure mode. Flush until each tank is empty, then switch the selector knob to the next tank. The last tank to be emptied must be the System Rinse tank.
- Connect a 3-foot section of garden hose to the inlet adapter. Pour RV–Antifreeze (antifreeze without alcohol) into the hose. Pull the recoil handle twice.

LONG TERM STORAGE

If you do not plan to use the cleaning system for more than 30 days, you must prepare the engine for long term storage.

It is important to prevent gum deposits from forming in essential fuel system parts such as the carburetor, fuel filter, fuel hose or tank during storage. Also, experience indicates that alcohol-blended fuels (called gasohol, ethanol or methanol) can attract moisture which leads to separation and formation of acids during storage. Acidic gas can damage the fuel system of an engine while in storage.

Protect Fuel System



DANGER: Drain fuel into approved container outdoors, away from open flame. Be sure engine is cool. Do not smoke.

- Remove all gasoline from the fuel tank to prevent gum deposits from forming on these parts and causing possible malfunction of engine.
- Run engine until engine stops from lack of fuel. Make sure you have water supply to pump inlet connected and turned ON.

Change Oil

While engine is still warm, drain oil from crankcase. Refill with recommended grade. (See Changing Oil)

Oil Cylinder Bore

 Remove spark plug. Squirt about 1 ounce (30 ml) of engine oil into the cylinder. Cover spark plug hole with rag. Crank engine slowly to distribute oil.



CAUTION: Avoid spray from spark plug hole when cranking engine.

Install spark plug. Do not connect spark plug wire.

OTHER

- · Do not store gasoline from one season to another.
- If possible, store your unit indoors and cover it to give protection from dust and dirt. BE SURE TO EMPTY THE FUEL TANK.

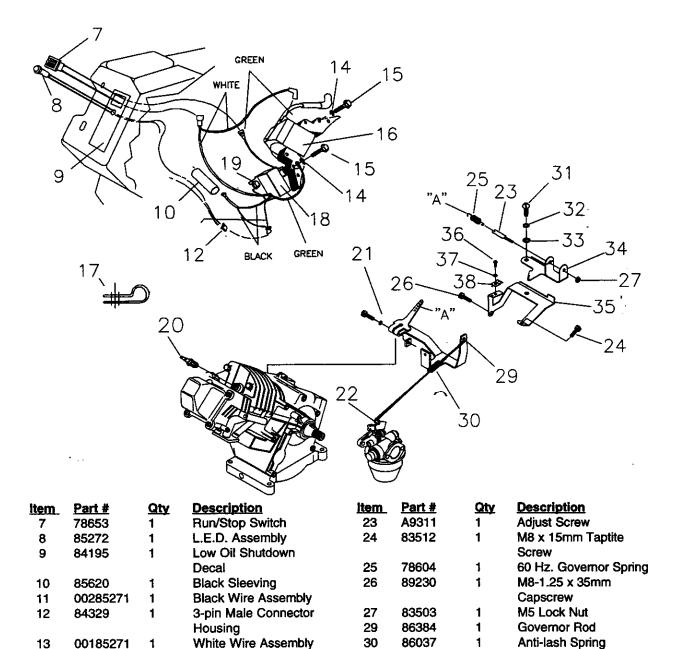
IMPORTANT: NEVER cover your cleaning system while engine and exhaust area are warm.

	TROUBLESHOOTING	
PROBLEM	CAUSE	CORRECTION
Pump has following problems:	1. Nozzle in low pressure mode.	1. Twist chemical valve handle
failure to produce pressure, or	0 Motor intet is blocked	to place in low pressure mode. 2. Clear inlet
erratic pressure, chattering, loss of	2. Water inlet is blocked.	2. Clear milet 3. Provide adequate water flow at
pressure, low water volume.	3. Inadequate water supply	least 3 gpm.
	4. Inlet hose is kinked or leaking	4. Straighten inlet hose, patch leak.
	5. Clogged water inlet screen.	 Replace / clean water inlet screen.
	6. Water supply is over 140°F.	6. Provide cooler water supply.
	7. Outlet hose is blocked.	7. Clear blocks in outlet hose.
	8. Outlet hose leaks.	8. Replace outlet hose if leaking.
	9. Gun leaks.	 Replace O-ring or gun if necessary.
	10. Nozzle is obstructed.	10. Clear nozzle.
	11. Pump is faulty.	11. Contact Sears Service
		Department.
Detergent fails to mix.	1. Detergent line is collapsed or	1. Repair or replace detergent
	kinked	line.
	2. Chemical tank filter is clogged.	2. Replace tank
	3. Nozzle is in high pressure mode.	3. Twist chemical valve handle
	4 Diel o Cleanar knob is in off position	to place in low pressure mode. 4. Rotate knob for desired chemical
	 Dial-a-Cleaner knob is in off position. 	
Engine runs good when not spraying but dies when you begin to spray.	Engine speed is too slow.	Contact Sears Service Department.
Engine will not start; or starts	1. Dirty air cleaner	1. Clean or replace air cleaner.
and runs rough	2. Out of gasoline.	2. Fill fuel tank.
	3. Stale gasoline.	3. Drain gas tank; fill with fresh fuel
	 Spark plug wire not connected to spark plug. 	4. Connect wire to spark plug.
	5. Bad spark plug.	5. Replace spark plug.
	6. Water in gasoline.	6. Drain gas tank; fill with fresh fuel
	7. Overchoking or flooded	7. Set engine throttle control lever t fast position, choke in run
	8. Excessively rich fuel mixture.	position. 8. Contact Sears Service
	9. Intake valve stuck open or closed.	Department. 9. Contact Sears Service
		Department.
	10. Engine has lost compression.	10. Contact Sears Service Department.
Engine shuts down during	1. Out of gasoline.	1. Fill fuel tank.
operation	2. Air filter dirty	2. Replace Air filter.
Engine lacks power.	Dirty air filter.	Replace air filter.

NOTES

PARTS

Generac Power Systems GN 220, 7.8HP, Model # EHC 04048-0



A9567

A9568

A9943

M6 Lock Washer

Ignition Coil Tinnerman Clamp

Spark Plug

Module

M6 x 30mm Screw

Low Oil Shutdown

M6 x 10mm Screw

Governor Lever

Wear Washer

87221A

PHMS 10-32 x 1/2"

Lockwasher, #10

Flatwasher, #10

Bracket, Pivot /

Bracket, Governor

PHMS 8-32 x 5/8"

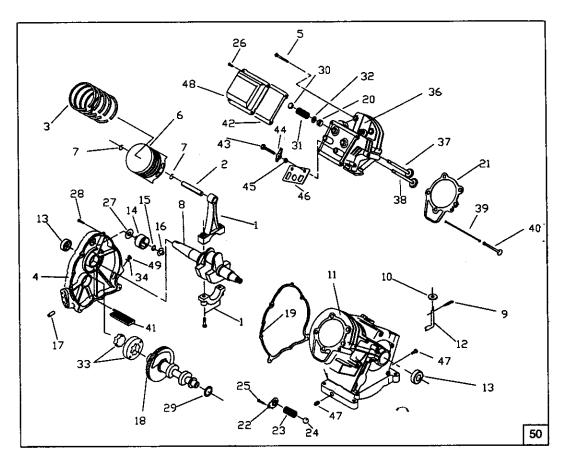
Lockwasher #8

Clamp, Bowden

Adjustment

Weldment

Generac Power Systems GN 220, 7.8HP, Model # EHC 04048-0

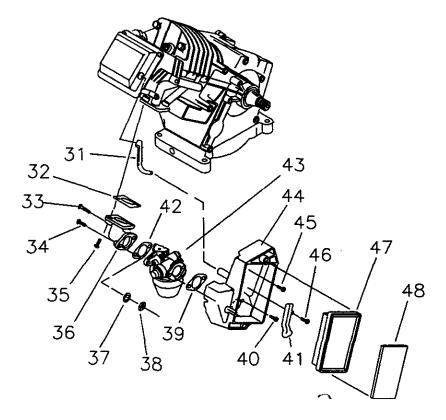


<u>item</u>	Part #	Qty	Description	<u>item</u>	Part #	Qty	
1	78621	1	Control Rod Assembly	26	78606	4	M6-1.0 x 12mm Screw
2	76389	1	Piston Pin	27	76361	1	Governor Gear Thrust
3	88411	1	Piston Ring Set				Washer
4	A8897A	1	Gear Cover Assembly	28	89230	6	M8-1.25 x 35mm Screw
5	77168	5	M8 x 52mm Head Bolt	29	99922	1	Spring Washer
6	88057	1	Piston	30	A1720	2	Valve Spring Retainer
7	76390	2	Pin Retainer Ring	31	88401	2	Valve Spring
8	83337A	1	Tapered Crankshaft Assm.	32	84186	2	Valve Spring Wear Washer
9	78658	1	Governor "R" Pin	33	83192	1	Geroter Set
10	78659	1	Governor Arm Thrust Washer	34	86254	1	"O" Ring
11	89213J	1	Crankcase Assm.	36	21705B	1	Cylinder Head Assembly
12	A7637	1	Governor Arm	37	90082	1	Exhaust Valve
13	81695	2	Oil Seal	38	90081	1	Intake Valve
14	A8929	1	Governor Gear Assembly	39	88396A	2	Push Rod
15	78645	1	Governor Gear C-Ring	40	83235	2	Tappet
16	A7811	1	Governor Spool	41	80336	1	Oil Pick-up Assembly
17	72683	1	1/8" NPT Pipe Plug	42	96362	1	Rocker Cover Gasket
18	98752	1	Camshaft Assembly	43	77161	2	Pivot Ball Stud
19	89096	1	Crankcase Gasket	44	77160	2	GN-190/220 Rocker Arm
20	88156	1	Valve Stem Seal	45	76307	2	Rocker Arm Jam Nut
21	A8822	1	Cylinder Head Gasket	46	88403	1	Push Rod Guide Plate
22	78691	1	Oil Pressure Relief Cover	47	72657	2	1/4" NPT Pipe Plug
23	A5772	1	Oil Pressure Spring	48	88412	1	Rocker Cover Assembly
24	A5776	1	11/32" Ball	49	76329	1	Plastic Oil Fill Plug
25	74908	1	M5 Form Screw	50	21944E		Complete Long Block

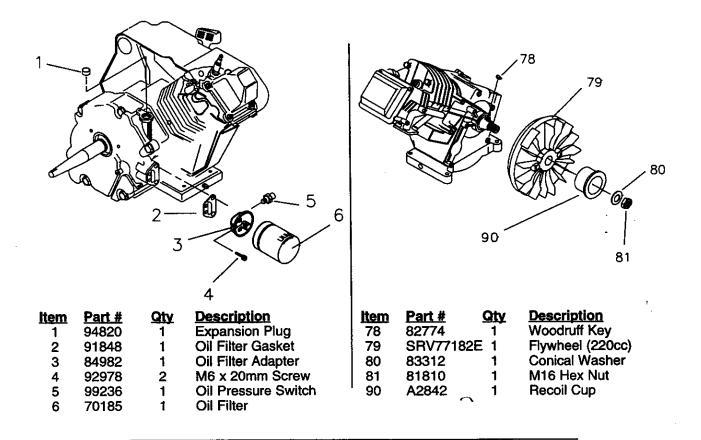
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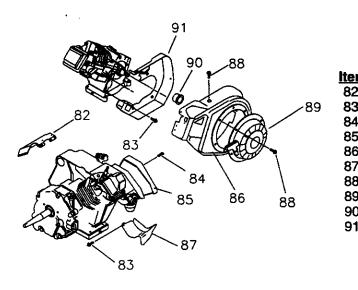
Generac Power Systems GN 220, 7.8HP, Model # EHC 04048-0

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<u>ltem</u>	<u> Part #</u>	<u>Qty</u>	Description
31	90947	1	Breather Hose
32	90051	1	Manifold Head Gasket
33	57058	1	M6 x 55mm Capscrew
34	80318	1	M6 x 25mm Capscrew
35	80316	2	M6 x 30mm Screw
36	20136	1	Intake Manifold
37	22097	2	M6 Lock Washer
38	49813	2	M6 Hex Nut
39	21202	1	Carburetor/Air Box
			Gasket
40	36935	2	#10-32 x 3/4" Screw
41	80303	1	Canal Cover
42	21201	1	Carburetor/Manifold
			Gasket
43	21203	1	Carburetor
44	21200	1	Air Cleaner Base
45	66476	1	M6 x 12mm Capscrew
46	59635	1	#8 x 3/8" Plastite Screw
47	78601	1	Air Filter
48	78602	1	Precleaner

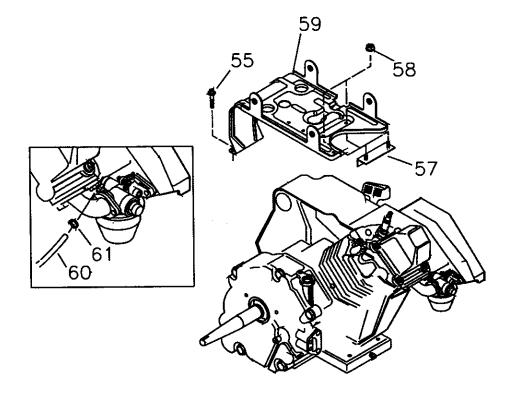




<u>ltem</u>	<u>Part #</u>	<u>Qty</u>	Description
82	92984	1	Top Wrapper
83	45756	4	M6 x 10mm Screw
84	78609	2	Cover Bolt
85	78608A	1	Air Box Cover
86	90695A	1	Blower Housing
87	89739	1	Lower Wrapper
88	6 6 476	9	M6 x 12mm Capscrew
8 9	A2799	1	Recoil Assembly
90	A2842	1	Recoil Cup
91	78651C	1	Backplate

Generac Power Systems GN 220, 7.8HP, Model # EHC 04048-0

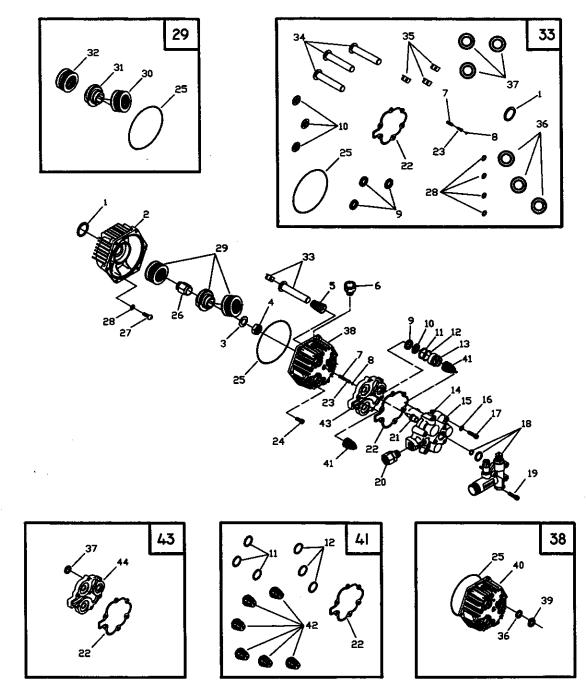
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<u>ltem</u>	<u>Part #</u>	<u>Qty</u>	<u>Description</u>
55	83512	2	M6 x 15 Taptite
57	95213	1	Tank Bracket
58	77395	2	M6 Flange Nut
59	95214	1	Tank Cradle
60	30340	12"	1/4" ID Hose
61	48031C	1	Hose Clamp

23

Craftsman 3000 PSI Cleaning System 580.768050 Pump

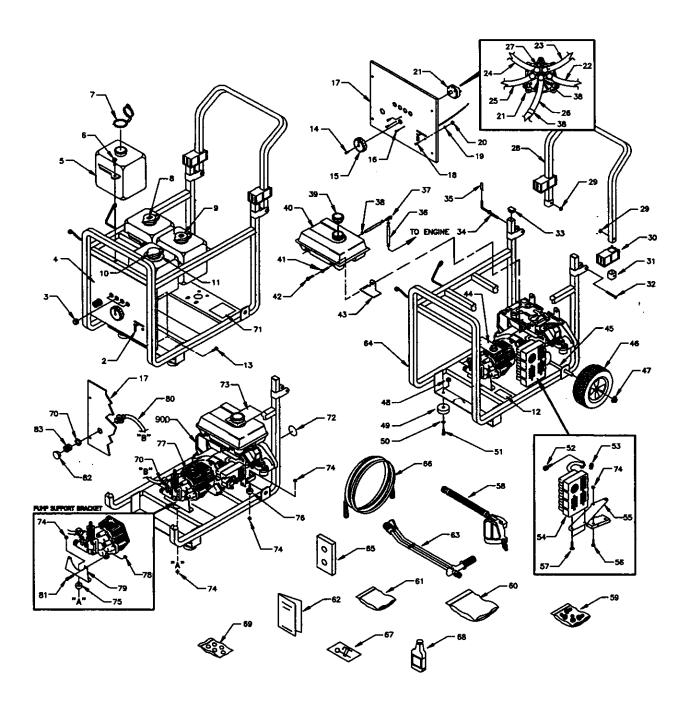


Craftsman 3000 PSI Cleaning System 580.768050 Pump

<u>Item</u>	<u>Part #</u>	Qty	Description	<u>Item</u>	Part #	Qty	Description
1	B2218	1	O-RING, 1.625 x .103	23	95416	1	PISTON, Thermal By-
2	B2260	1	ADAPTOR, Engine				Pass
3	94738	1	WASHER, Beelleville 16	24	40945	6	SHCS, M6 x 1 x 20
			x 2.7	25	93790	Ĩ	O-RING, 114 x 119 x
4	93887	1	NUT, Jam M16 x 1.5				2.6
5	96400	3	SPRING, Piston Return	26	95165	1	ADAPTOR, Tapered
6	99735	1	ASSY., Oil Breather/Fill				Engine Shaft
7	93652	1	SPRING, Thermal By-	27	B2261B	4	SCREW, 5/16 x 3/4
			Pass	28	B2217	4	O-RING, .239 x .070
8	93876	1	O-RING, 2.9 x 6.5 x	29	SRV97672V	0	KIT, AXIAL CAM
			1.78	30		1	ASSY., Bearing Roller
9	Order B2480	3	SEAL, High Pressure			-	Thrust 15.5
			PTFE	31		1	CAM, Axial 2.5G/5.5
10	Order B2480	3	RING, Bearing Seal				Race
11	Order B4123	3	RING, Hytrile Back-Up	32		1	BEARING, Roller Thrust
12	Order B4123	3	O-RING, 2.6 x 26.6 ID	33	B2480	0	KIT, PISTON REPAIR
13	97027	3	TOWER, High Pressure	34		3	ASSY., Ceramic Piston
			Port				& Cap
14	96137	1	PLUG, 1/8 x 28 NPT	35		1	SHOE, Piston Pivot
15	95138	1	HEAD, (Brass with Tap)	36		3	SEAL, Oil Piston 15
16	B2665	6	WASHER, Steel Special				TC4
17	93874	6	SHCS, M8 x 1.25 x 75	37		3	SEAL, Piston "U" Cup
18	B3769	1	ASSY., Unloader	38	B3508	0	KIT, CRANKCASE
19	46580	3	SHCS, M6 x 1 x 45	39		3	SPACER, Pilot
20	95320	1	CONNECTOR, Garden	40		1	ASSY., CRANKCASE
			Hose	41	B4123 📉	0	KIT, CHECK VALVE
21	93644	1	ACTUATOR, Thermal	42		6	ASSY., Check Valve
			By-Pass	43	B4124	0	KIT, SPACER PLATE
22	B2668	1	GASKET, Head	44		1	ASSY., Spacer Plate
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Craftsman 3000 PSI Cleaning System 580.768050 Main Unit



Craftsman 3000 PSI Cleaning System 580.768050 Main Unit

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<u>item</u>	<u>Part #</u>	Qty	Description		Part #	<u>Qty</u>	Description HHCS, M8 x 1.25 x 30
2	B3608A	1	LINK, Throttle Control	51	42909	2	
3	30809	4	GROMMET, Rubber	52	40976	2	SHCS, M8 - 1.25 x 20 GASKET, Exhaust
4	B3576	1	DECAL, Control Panel 1210	53	89476	1	MUFFLER
5	B3599	4	ASSY., Chemical Tank 1 Gal.	54	83071	1	BRACKET, Muffler
6	B3695	8	BOLT, 1/4" - 20 with Washer	55	83208	1	
7	B3222A	1	CAP, Chem Container "A"	56	39414	1	HHCS, M8 - 1.25 x 35
8	B3222B	1	CAP, Chem Container "B"	57	66476	2	HHCS/LW, M6 - 1.0 x 12
9	B3222C	1	CAP, Chem Container "C"	58	B1436A	1	GUN, Molded Grip
10	B3222D	1	CAP, Chem Container	59	B4341	1	KIT, Nozzles
			"Water"	60	B3589	1	KIT, 3 Pak Concentrate
11	B3376B	1	TAG, System Flush Water	61	B3454	1	KIT, Chemical Tags
12	96307	1	DECAL, 1-800 Number	62	B3604	1	MANUAL
13	86292	4	SELF DRILL, 10 - 16 x 3/4"	63	B1748	1	ASSY., Dual Lance Ext.
14	B3311	1	SCREW, Plastite	64	EB3618	1	CRADLE, Powder Ct Green
15	B3721	1	HANDLE, 4-Way Valve	65	B3591	1	
16	B3377	3	SCREW, Plastite #8 x .75"	66	B3636	1	HOSE, 3/8" x 50'
17	EB3115	1	PANEL, Control Powder	67	B2508	1	KIT, Cleaning Nozzle
			Green	68	AB3061	1	OIL BOTTLE
18	91526	2	PPHMS, M5 - 0.8 x 12	69	B2730	1	KIT, Maintenance
19	49226	2	LOCK WASHER, M5	70	B3735	1	NUT, Water Inlet
20	51716	2	NUT, Hex M5 - 0.8	71	B4270	1	DECAL, Start Instruction
21	B3306	1	ASSY., Sub 4-Way Valve	72	96207A	1	DECAL, Recoil
22	B3840A	1	HOSE, Chemical "A" - 10"	73	70453	1	TAG, Warning Oil
23	B3840B	1	HOSE, Chemical "B" - 12"	74	679 89	6	NUT, Hex Locking Flange M8
24	B3840C	1	HOSE, Chemical "C" - 14"				- 1.25
25	B3840D	1	HOSE, Chemical "D" - 14"	75	21216	1	MOUNT, Rubber Shock
26	B3601C	1	HOSE, Chemical Pump 6.0"	76	21217	$\overline{1}$	MOUNT, Rubber Shock
27	48031G	4	CLAMP, Hose 3/16"	77	NSP	1.	ASSY., Pump (See Pump
28	EB3620	1	HANDLE, Powder Green			•	Exploded View)
29	B2071	2	NUT, 1/4" - 20 Flange	78	52857	2	NÚT, M6 - 1.0 Locking
			Locking	79	A1701	1	BRACKET, Pump Support
30	B1779	2	COVER, Hinge	80	B3706	1	HOSE, Water Inlet
31	B2347	2	END CAP, Tube	81	38750	2	HHCS, M6 1.0 x 30
32	31669	1	BOLT, 1/4"-20 x 1-3/4"	82	97098	1	CAP, Garden Hose Inlet
			Carriage	83	21424	1	CONNECTOR, Garden Hose
33	46476	2	CAPLUG, Tubing	900	NSP	1	ENGINE, Generac Power
34	B2759	1	HOOK, Square Neck Gun				Systems GN 220,
35	B1460	1	CAP, Vinyl Black				Model # EHC 04048
36	30340C	1	HOSE, .25" ID				
37	96193	1	VALVE, Fuel Shut-Off				s Not Illustrated:
38	48031C	5	HOSE, Clamp Band 1/2"		4400		vy Duty Turbo Nozzle
39	95549	1	CAP, Fuel	71-7	4401		3/8" Replacement Extension
40	94994	1	TANK, 1 Gal Fuel			Hos	
41	96002	4	BUSHING, Tank				ing Repair Kit
42	96001	4	BOLT, M6 - 1.0 x 21 Shoulder	71-75187			den Hose Quick Connect
43	21545	1	SHIELD, Heat				essory Quick Connect Kit
44	B1288	1	TAG, Breather Cap	71-75199			ating Brush
45	B4140	1	AXLE ROD, 1/2" x 24.65"		4301		k Wash
46	88521	2	WHEEL		71-74302		icle Wash
47		2	PUSHNUT, 1/2"	71-74303			reaser
48		2	NUT, M8 - 1.25 Locking		4300		ise Wash
49	27007	2	MOUNT, Vibration Donut		76430		pr/Siding Brush
			Туре	71-7	76431	Utili	ty Brush
50	50190	2	FLAT WASHER, M8				

EMISSION CONTROL SYSTEM WARRANTY

CALIFORNIA AND FEDERAL EMISSION CONTROL WARRANTY STATEMENT

Your Warranty Rights and Obligations

The California Air Resources Board (CARB), United States Environmental Protection Agency (EPA), and Sears Roebuck and Co. USA (Sears) are pleased to explain the emissions control system warranty on your 1997 and later utility and lawn and garden equipment engine. New Utility and Lawn and Garden Equipment (ULGE) engines must be designed, built, and equipped to meet both the State of California and Federal stringent anti-smog standards. Sears must warrant the emission control system on your ULGE engine for the periods of time listed below provided there has been no abuse, neglect, or improper maintenance of your ULGE engine.

The emissions control system may include parts such as the carburetor, ignition and exhaust systems. When a warrantable condition occurs, Sears will repair your lawn and garden equipment engine at no cost to you. Expenses covered under warranty include diagnosis, replacement parts and labor.

Manufacturer's Warranty Coverage

The 1997 and later ULGE engines are warranted for two years. If any emission related component or system on your engine (as listed below) is found to be defective, repairs or replacement will be performed by an authorized Sears service center.

Owner's Warranty Responsibilities

As the ULGE engine owner, you are responsible for the completion of all required maintenance as listed in your factory supplied Owner's Manual. For warranty purposes Sears recommends that you retain all receipts covering maintenance on your ULGE engine. However, Sears cannot deny warranty solely because of the lack of receipts or for your failure to ensure the completion of all scheduled maintenance. As the ULGE engine owner, you should be aware that Sears may deny any and/or all warranty coverage or responsibility if your ULGE engine or a part/component of it has failed due to abuse, neglect, improper maintenance, unapproved modifications, or the use of counterfeit and/or 'grey-market' parts not made, supplied or approved by the original equipment manufacturer.

You are responsible for presenting your ULGE engine to a Sears authorized service center as soon as a problem occurs. Warranty repairs should be completed in a reasonable amount of time, not to exceed 30 days.

If you have any questions regarding your warranty rights and responsibilities, you should contact your nearest authorized service center or call Sears at 1-800-473-7247.

Warranty Commencement Date

The warranty period begins on the date the ULGE engine is delivered to the original, end-use purchaser.

Length of Coverage

Sears warrants to the initial owner and each subsequent purchaser that the engine is free from defects in materials and workmanship which cause the failure of a warranted part for a period of two years.

What is Covered

Repair or Replacement of Parts

Repair or replacement of any warranted part will be performed at no charge to the owner at an approved Sears service center. If you have any questions regarding your warranty rights and responsibilities, you should contact your nearest authorized service center or call Sears at 1-800-473-7247.

Warranty Period

Any warranted part which is not scheduled for replacement as required maintenance shall be warranted for 2 years. Any warranted part which is scheduled only for regular inspection and/or has instructions to the effect of "repair or replace as necessary" shall also be warranted for 2 years. Any warranted part which is scheduled for replacement as required maintenance shall be warranted either for the period of time up to its first scheduled replacement, or for 2 years, whichever comes sooner.

Diagnosis

When the ULGE engine is inspected by an authorized Sears service center, the owner shall not be held responsible for diagnostic costs if the repair is deemed warrantable.

Consequential Damages

Sears may be liable for damages to other engine components caused by the failure of a warranted part if the failed part was still under warranty.

What is not covered

Owner Responsibilities

Any failures caused by abuse, neglect, or improper maintenance will not be covered.

Add-On or Modified Parts

• . .

The use of add-on, unauthorized or modified parts constitutes sufficient reason for denial of submitted warranty repairs. Sears will not be held liable for repairs of this type.

How to File a Claim

If you have any questions regarding your warranty rights and responsibilities, you should contact your nearest authorized service center or call Sears at 1-800-473-7247.

Where to get Warranty Service

Warranty services or repairs shall be provided at all Sears authorized service centers.

Maintenance, Replacement and Repair of Emission Related Parts

Any Sears approved replacement part used in the performance of any warranty maintenance or repair on emission related parts will be provided without charge to the owner if the part is under warranty.

Emission Control Warranty Parts List

- 1. Fuel Metering System:
- a. Carburetor assembly
- b. Fuel filter
- 2. Air Induction System:
- a. Intake manifold
- b. Air cleaner
- Catalytic Muffler Assembly (if so equipped), including:
- a. Muffler gasket
- b. Exhaust manifold
- 4. Ignition System
- a. Spark plug
- b. Ignition module
- 5. Crankcase Breather Tube

For in-home major brand repair service:

Call 24 hours a day, 7 days a week **1-800-4-MY-HOME[™]** (1-800-469-4663)

Para pedir servicio de reparación a domicilio – 1-800-676-5811

In Canada for all your service and parts needs call Au Canada pour tout le service ou les pièces -1-800-665-4455

For the repair or replacement parts you need:

Call 7 am – 7 pm, 7 days a week

1-800-366-PART (1-800-366-7278)

Para ordenar piezas con entrega a domicilio - 1-800-659-7084

For the location of a Sears Parts and Repair Center in your area:

Call 24 hours a day, 7 days a week

1-800-488-1222

For information on purchasing a Sears Maintenance Agreement or to inquire about an existing Agreement:

Call 9 am - 5 pm, Monday - Saturday

1-800-827-6655



The Service Side of Sears