

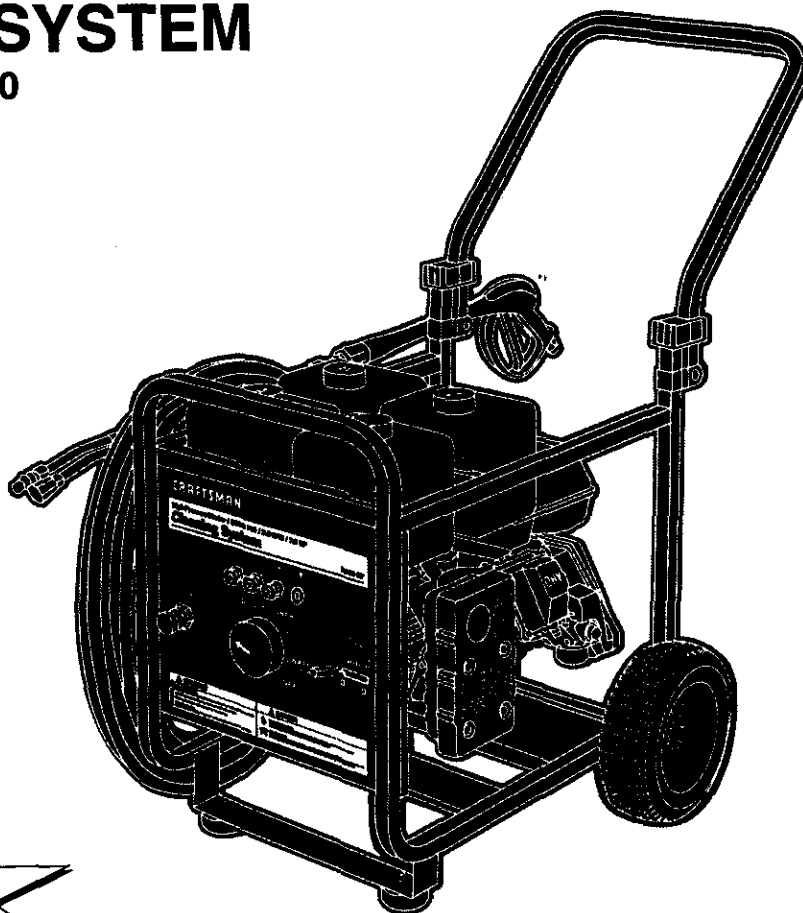
Operators Manual

CRAFTSMAN®

**7.8 Horsepower
3000 PSI
2.5 GPM**

HIGH PRESSURE WASHER CLEANING SYSTEM

Model No. 580.768050



**Pressure Washer
Customer Helpline
1-800-222-3136**

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

CAUTION:

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

- **Safety**
- **Assembly**
- **Operation**
- **Maintenance**
- **Parts**

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

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

Part No. B3604 Draft 2 (4/5/1999) Printed in the U.S.A.

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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.
- 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.



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

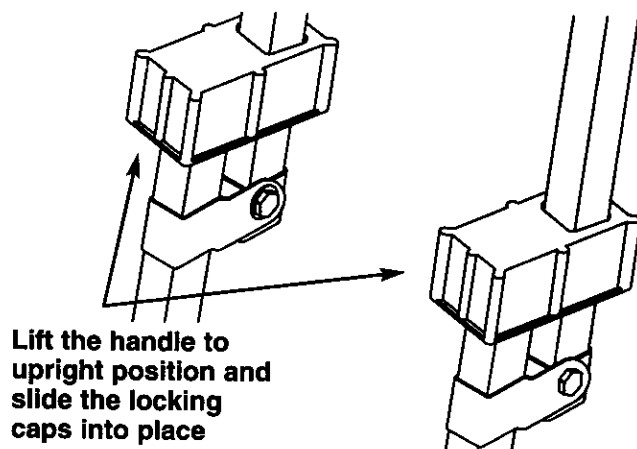
The following parts are shipped loose with your cleaning system:

- 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
 - Tank Labels
- Manual Bag (which includes the items listed below)
 - Owner's Manual
 - Nozzle Cleaner Kit
 - "O"-Ring Kit

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.

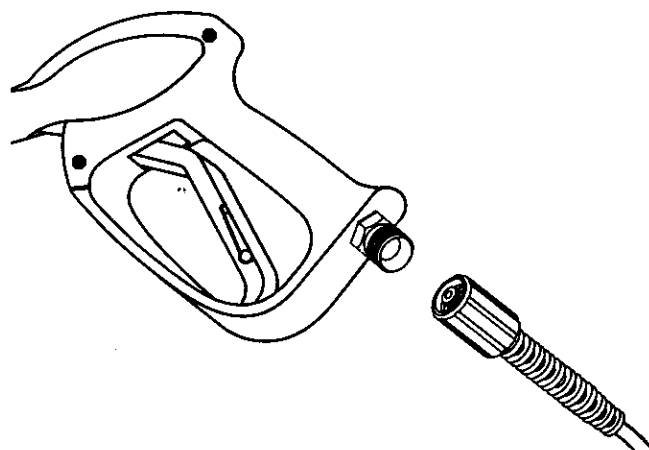


- Raise guide handle, secure in place.
- Roll the cleaning system out the open end of the carton.
- Check carton for additional loose parts.

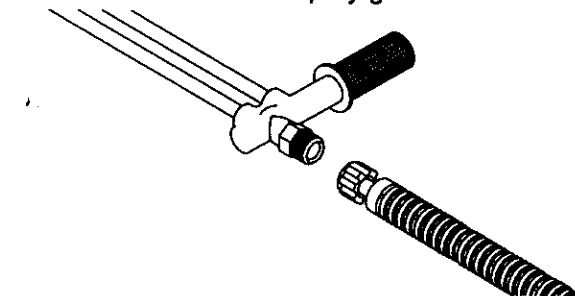
HOW TO SET UP YOUR CLEANING SYSTEM

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.

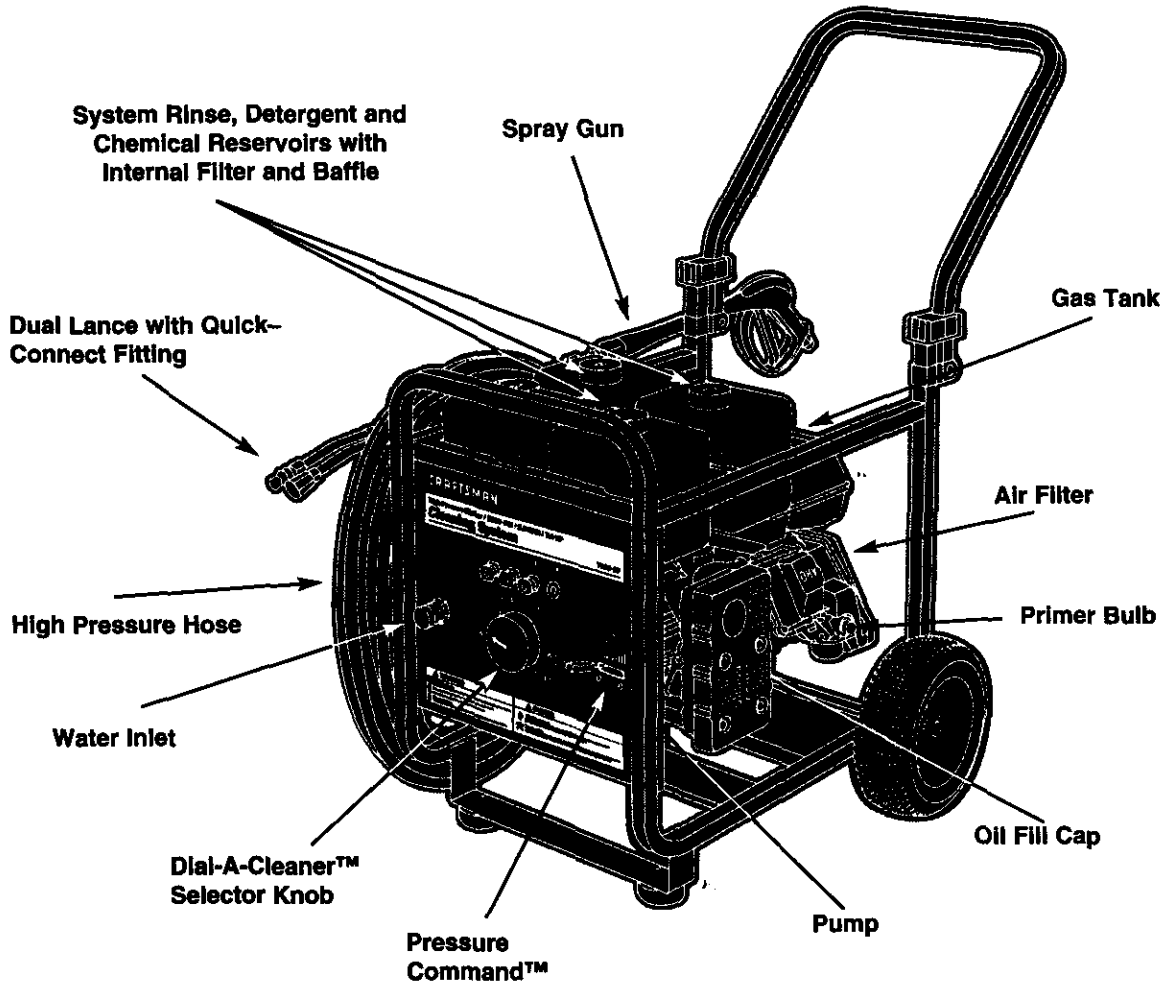


- Place assembled spray gun on holder.

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.

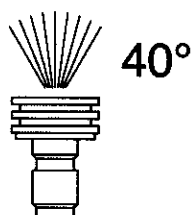
How To Use the Nozzles



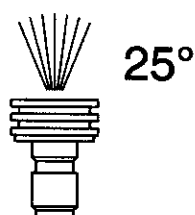
DANGER: Never exchange nozzles without locking the safety latch on the trigger.

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.

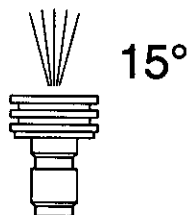
White



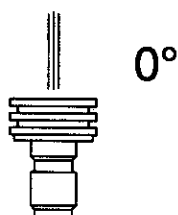
Green



Yellow

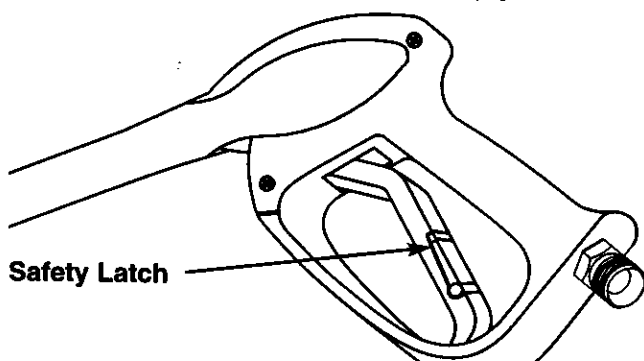


Red



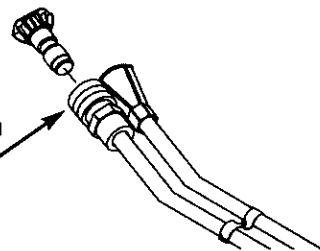
In order to change the nozzle being used, follow these instructions:

- 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.

Pull back the collar on the quick connect to remove the nozzle



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



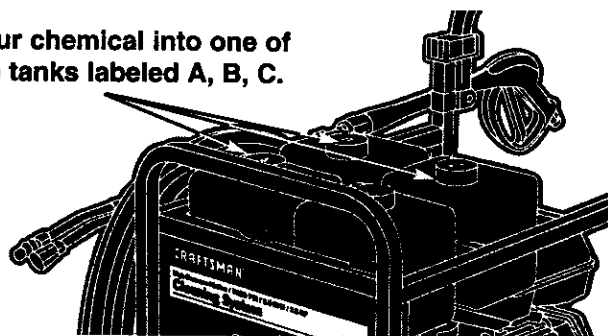
WARNING: You must attach all hoses before you start the engine. Starting the engine without all the hoses connected and without the water turned ON will damage the pump.

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.

Pour chemical into one of the tanks labeled A, B, C.



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

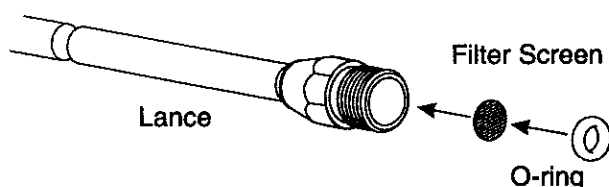
Tank covers should snap cleanly onto tank. Ensure chemical labels correctly identify tank contents. Ensure that the System Rinse tank is filled with clean water. Ensure that Dial-A-Cleaner™ selector knob rotates freely between each position. Examine the tanks and replace if the filter is clogged

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.

Check In-Line Filter

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



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

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

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:

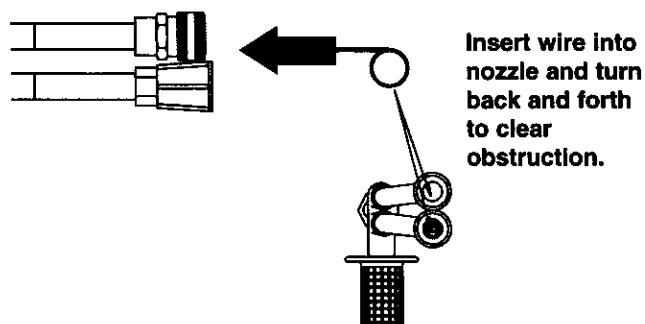
- Set up the cleaning system as described in the ASSEMBLY section, and connect the water supply.
- Remove the nozzle attachment from the gun.
- Start the engine according to instructions in OPERATION section.
- Pull the trigger on the gun and hold.
- When the water supply is steady and constant, engage 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 relieve 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.



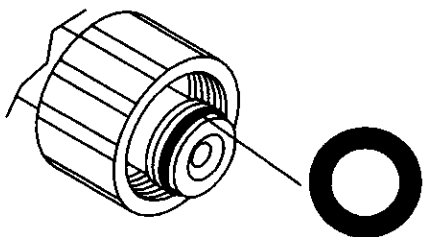
- Remove additional debris by back flushing water supply through dual lance. Back flush between 30 to 60 seconds. Back flush both lances by turning chemical valve handle.
- Ensure the in-line filter is in place, then reconnect the dual lance to the spray gun.
- Reconnect the water supply, turn on the water, and start the engine.
- Test the cleaning system by operating with the unit in high and the low pressure.

O-Ring Maintenance

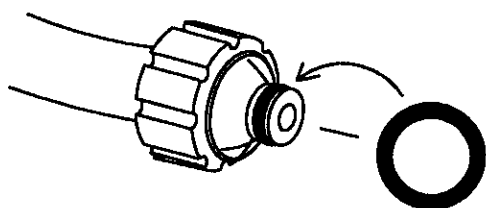
Through the normal operation of your cleaning system, the o-rings keep the connections of the hoses and gun tight and leak-free. They may become worn or damaged with use. Provided with your cleaning system is an o-ring Maintenance Kit containing replacement o-rings, a rubber washer and a garden hose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

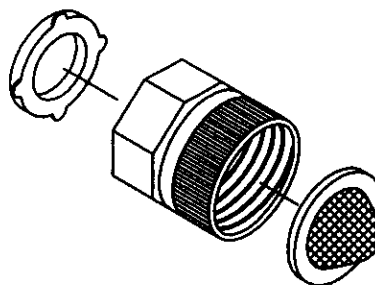


- 2 O-Rings, yellow, (p/n B2264) for the ends of the high pressure hose.



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

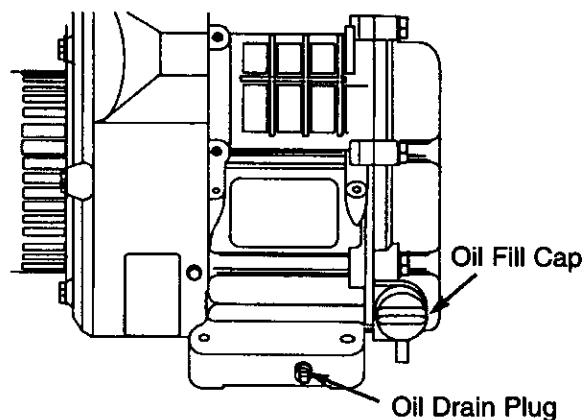
Oil level should be checked prior to each use or at least every eight (8) hours of operation. Keep oil level maintained.

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.



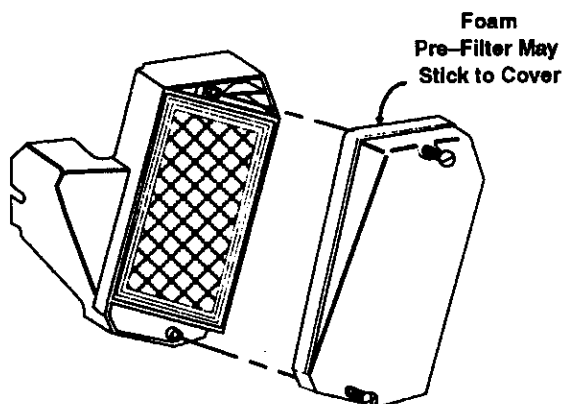
- When oil has completely drained, Install oil drain plug and tighten securely.
- Place a suitable container beneath the oil filter and turn filter counterclockwise to remove. Discard according to local regulations.
- Coat gasket of new filter with engine oil. turn filter clockwise until gasket contacts 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

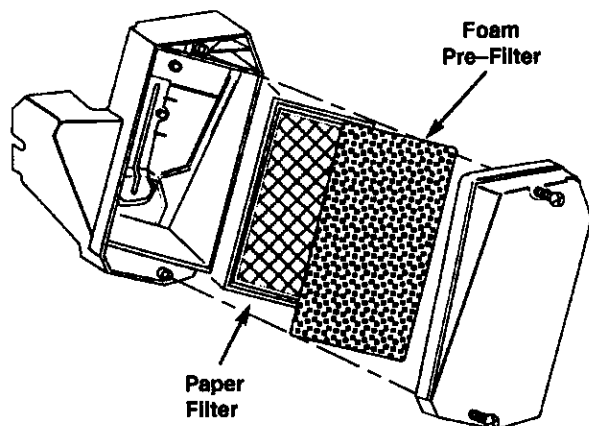
Your engine will not run properly and may be damaged if you run it using a dirty air cleaner. Clean or replace the air cleaner paper filter once every 50 hours of operation or once a year, whichever comes first. Clean or replace more often if operating under dusty or dirty conditions. Clean foam pre-filter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

1. Wash pre-filter in soapy water.
2. 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.

3. Apply enough engine oil to saturate the pre-filter.
4. 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:

1. 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.
2. Clean air cleaner cover.
3. Insert pre-filter into the cover, then the paper air filter.
4. 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.

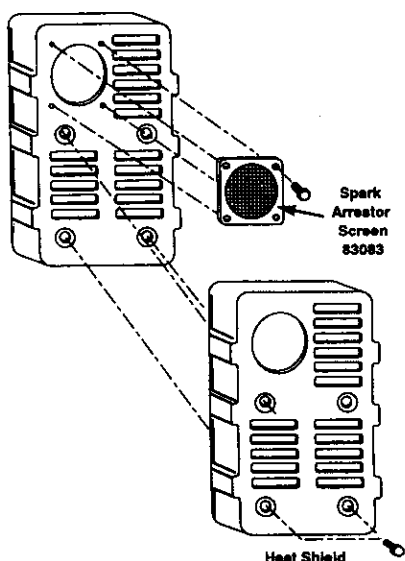
Note: If you use your cleaning system on any forest-covered, brush-covered or grass-covered unimproved land, it must have a spark arrestor. The spark arrestor must be maintained in good condition by the owner/operator.

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.

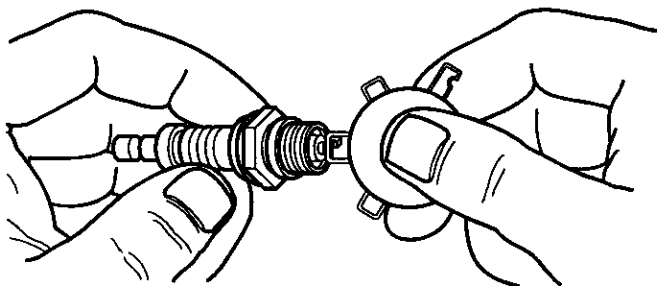
Clean / Replace Spark Plug

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 from 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.

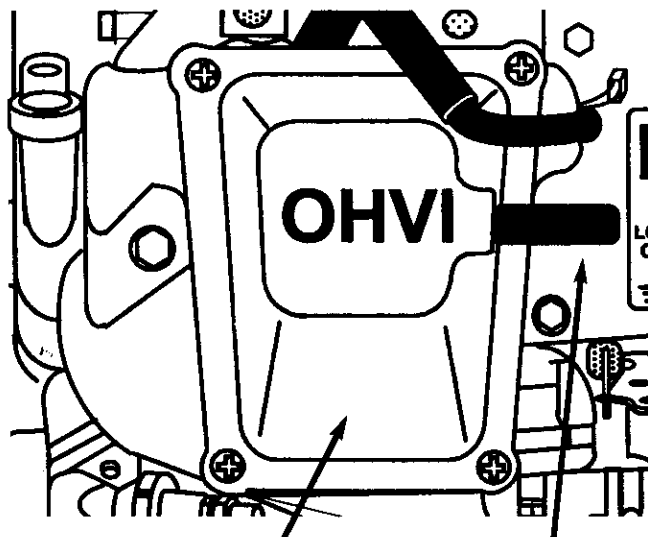
Adjusting Valve Clearance

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:

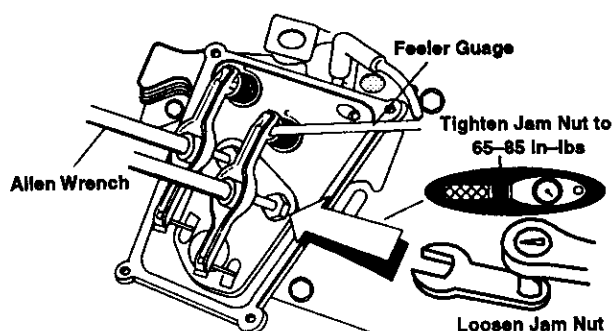
- Make sure the engine is at room temperature.
- Make sure that the spark plug wire is removed from the spark plug and out of the way.
- Remove the breather tube from the valve cover.
- Remove the four screws attaching the valve cover with a #2 or 3 phillips screwdriver.



Valve Cover

Breather Tube

- 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 through 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.

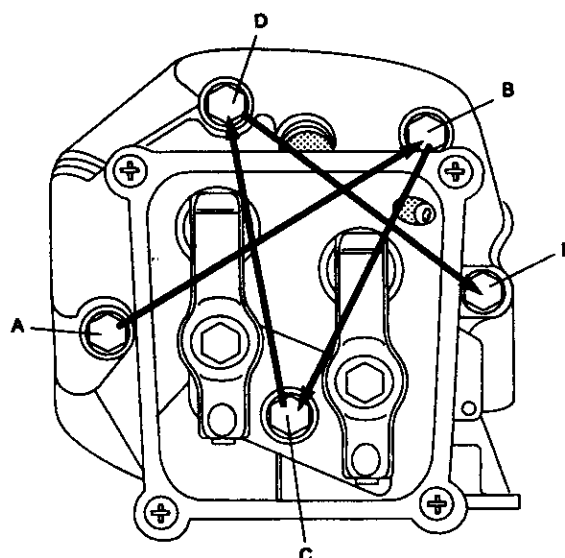
Retorque Head Bolts

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:
 - a. 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.

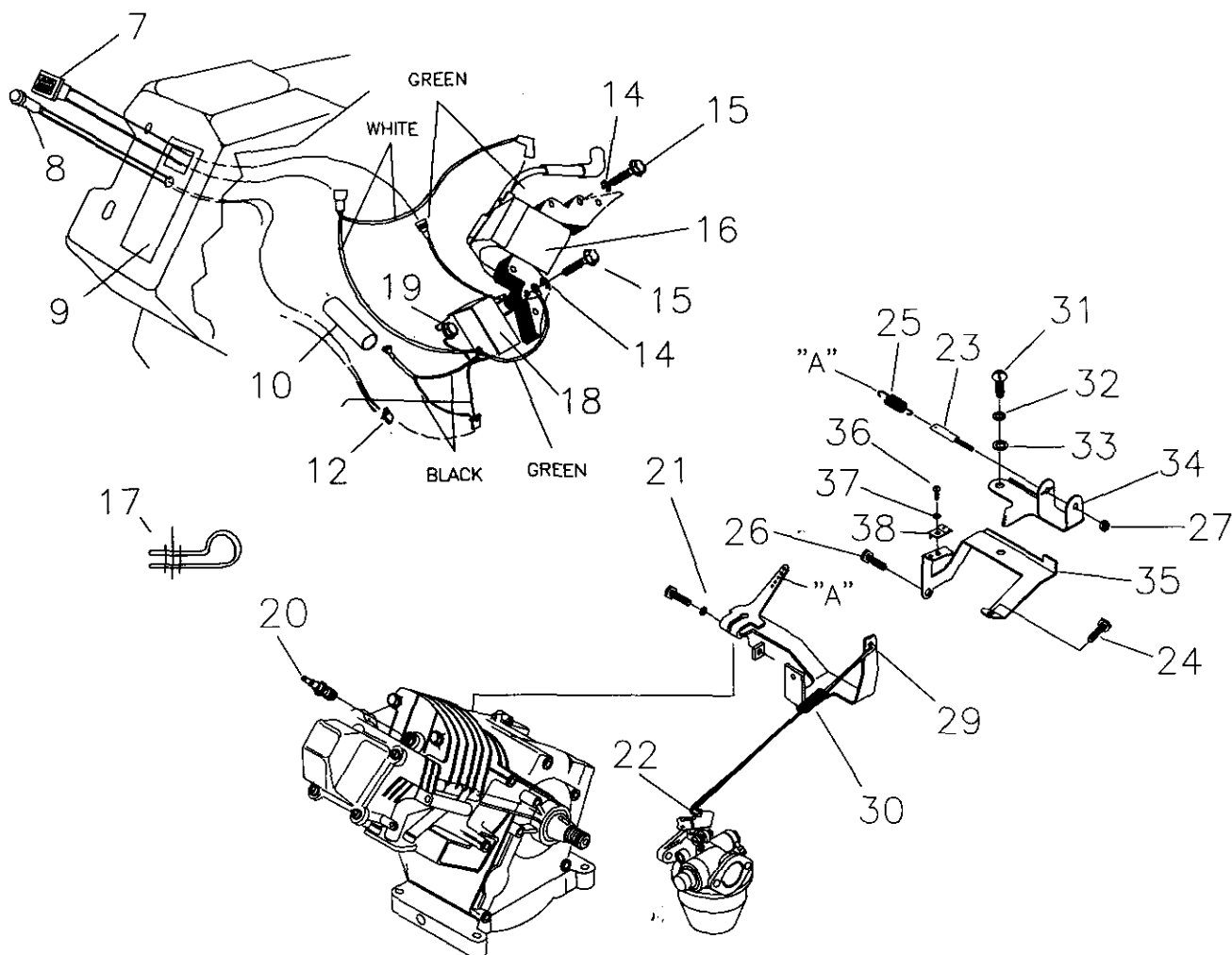
TROUBLESHOOTING

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

NOTES

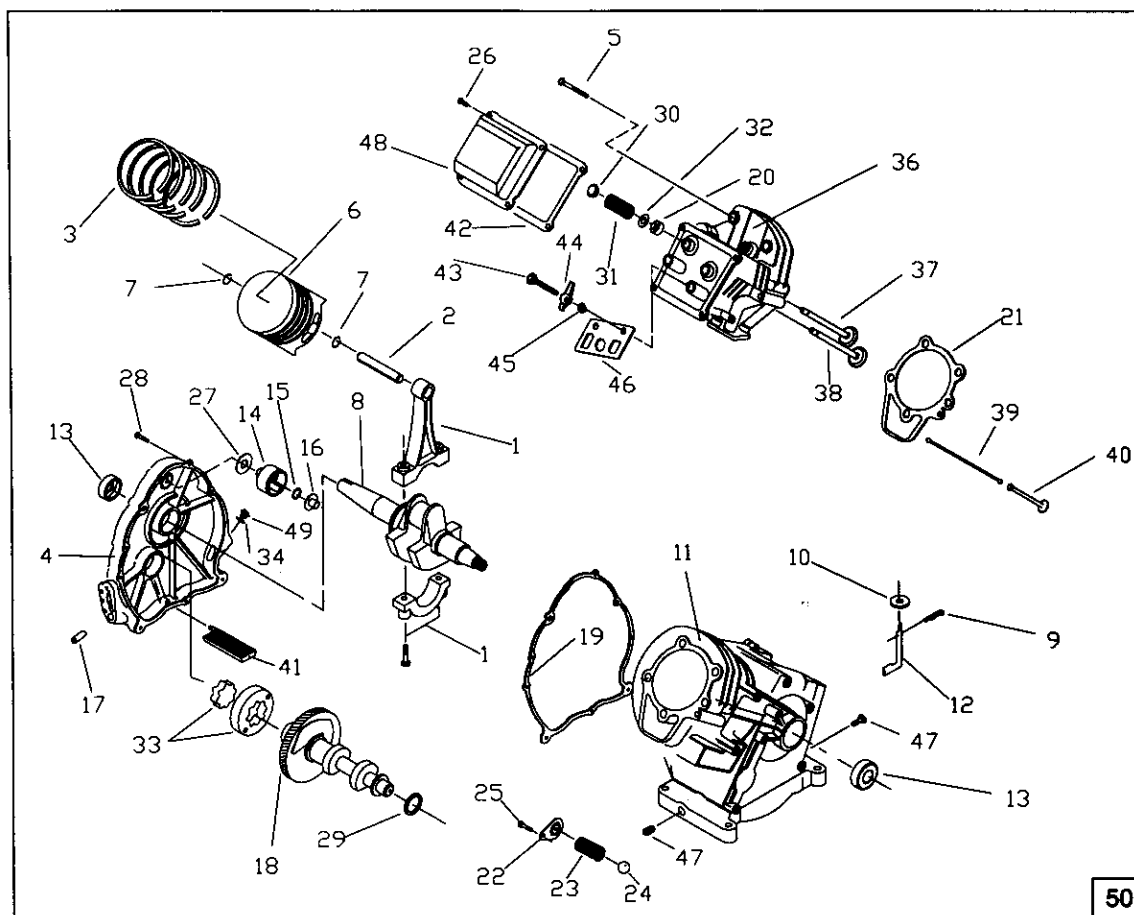
PARTS

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



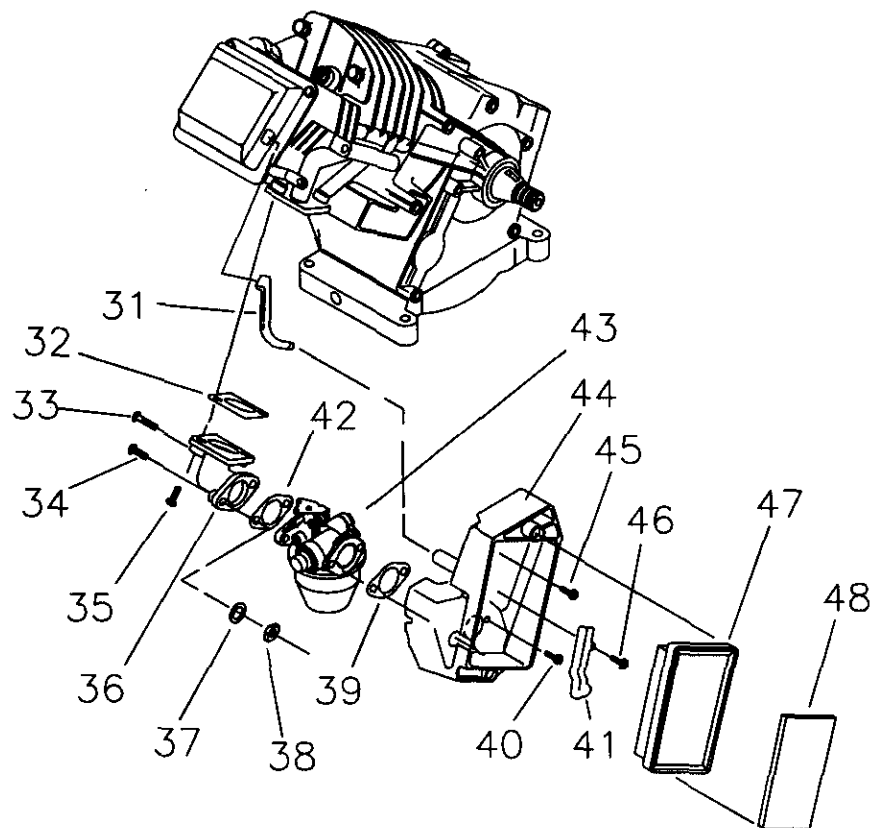
Item	Part #	Qty	Description	Item	Part #	Qty	Description
7	78653	1	Run/Stop Switch	23	A9311	1	Adjust Screw
8	85272	1	L.E.D. Assembly	24	83512	1	M8 x 15mm Taptite Screw
9	84195	1	Low Oil Shutdown Decal	25	78604	1	60 Hz. Governor Spring
10	85620	1	Black Sleeve	26	89230	1	M8-1.25 x 35mm Capscrew
11	00285271	1	Black Wire Assembly	27	83503	1	M5 Lock Nut
12	84329	1	3-pin Male Connector Housing	29	86384	1	Governor Rod
13	00185271	1	White Wire Assembly	30	86037	1	Anti-lash Spring
14	22097	2	M6 Lock Washer	31	36701	1	PHMS 10-32 x 1/2"
15	82981	2	M6 x 30mm Screw	32	22152	1	Lockwasher, #10
16	81675	1	Ignition Coil	33	23897	1	Flatwasher, #10
17	84274	1	Tinnerman Clamp	34	A9567	1	Bracket, Pivot / Adjustment
18	87221A	1	Low Oil Shutdown Module	35	A9568	1	Bracket, Governor Weldment
19	45756	1	M6 x 10mm Screw	36	36919	1	PHMS 8-32 x 5/8"
20	72347	1	Spark Plug	37	22264	1	Lockwasher #8
21	86962	1	Governor Lever	38	A9943	1	Clamp, Bowden
22	85953	1	Wear Washer				

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



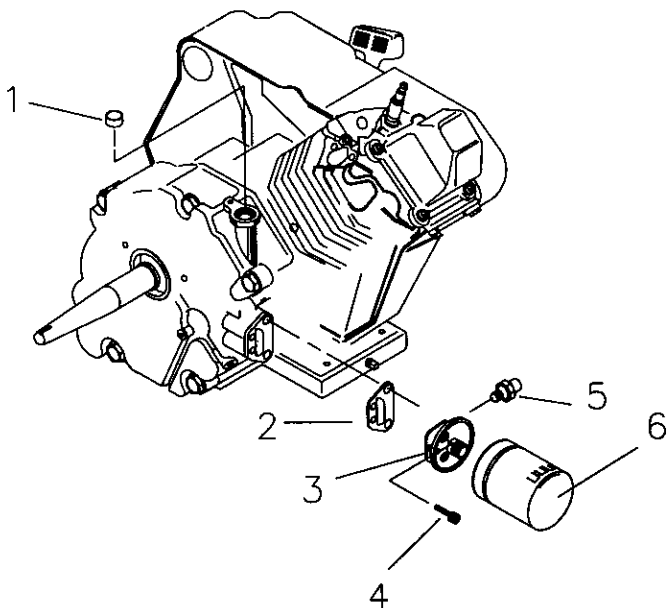
Item	Part #	Qty	Description	Item	Part #	Qty	Description
1	78621	1	Control Rod Assembly	26	78606	4	M6-1.0 x 12mm Screw
2	76389	1	Piston Pin	27	76361	1	Governor Gear Thrust Washer
3	88411	1	Piston Ring Set	28	89230	6	M8-1.25 x 35mm Screw
4	A8897A	1	Gear Cover Assembly	29	99922	1	Spring Washer
5	77168	5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

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

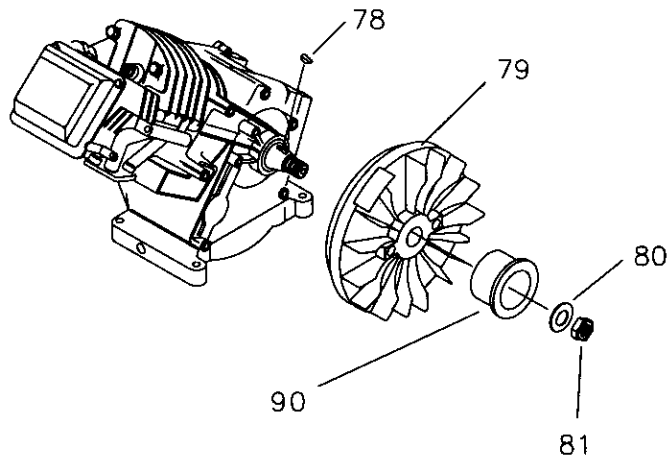


Item	Part #	Qty	Description
31	90947	1	Breather Hose
32	90051	1	Manifold Head Gasket
33	57058	1	M6 x 55mm Capscrew
34	80318	1	M6 x 25mm Capscrew
35	80316	2	M6 x 30mm Screw
36	20136	1	Intake Manifold
37	22097	2	M6 Lock Washer
38	49813	2	M6 Hex Nut
39	21202	1	Carburetor/Air Box Gasket
40	36935	2	#10-32 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

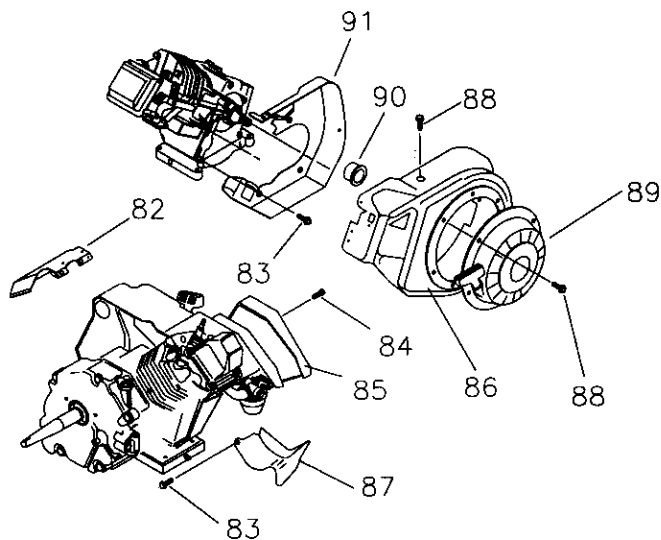
Generac Power Systems GN 220, 7.8HP, Model # EHC 04048-0



Item	Part #	Qty	Description
1	94820	1	Expansion Plug
2	91848	1	Oil Filter Gasket
3	84982	1	Oil Filter Adapter
4	92978	2	M6 x 20mm Screw
5	99236	1	Oil Pressure Switch
6	70185	1	Oil Filter

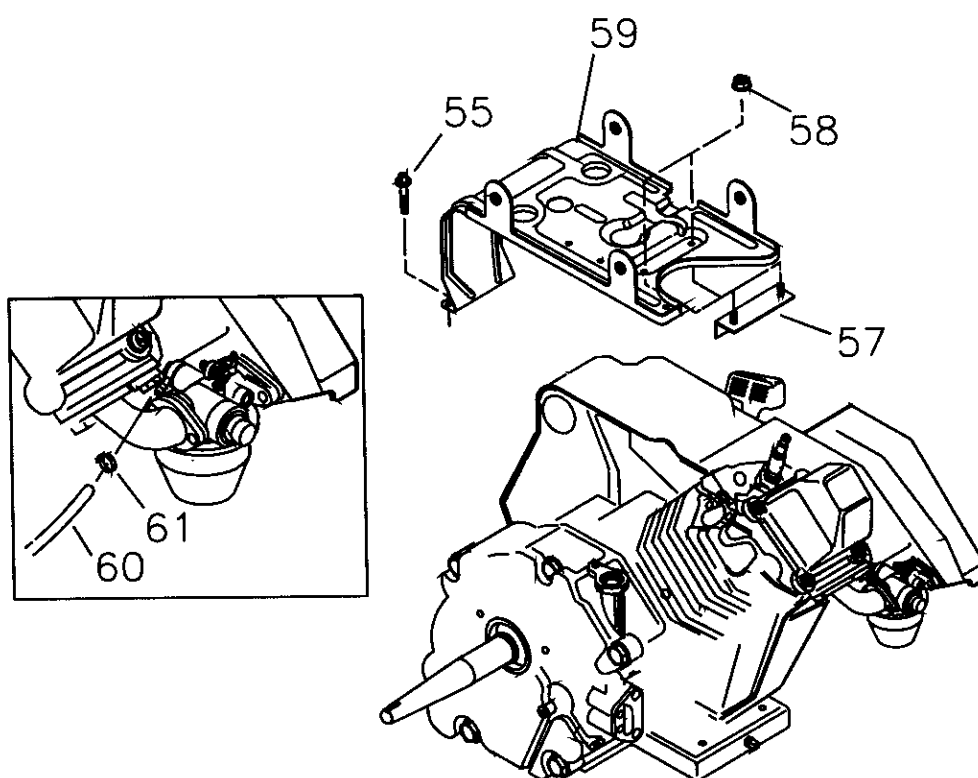


Item	Part #	Qty	Description
78	82774	1	Woodruff Key
79	SRV77182E	1	Flywheel (220cc)
80	83312	1	Conical Washer
81	81810	1	M16 Hex Nut
90	A2842	1	Recoil Cup



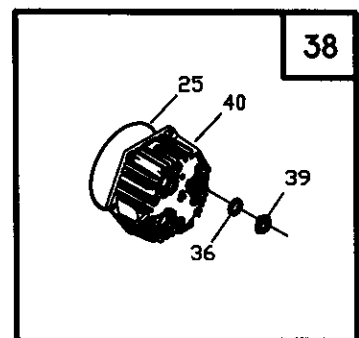
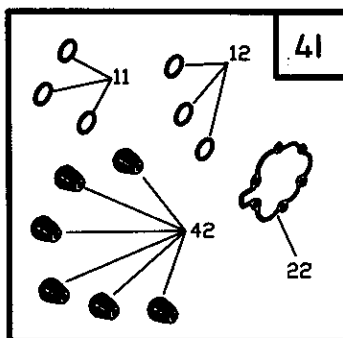
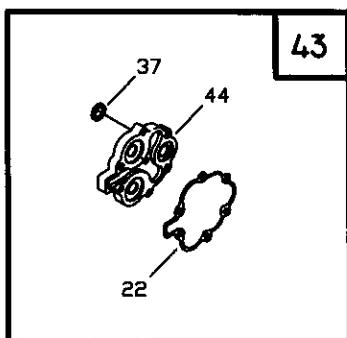
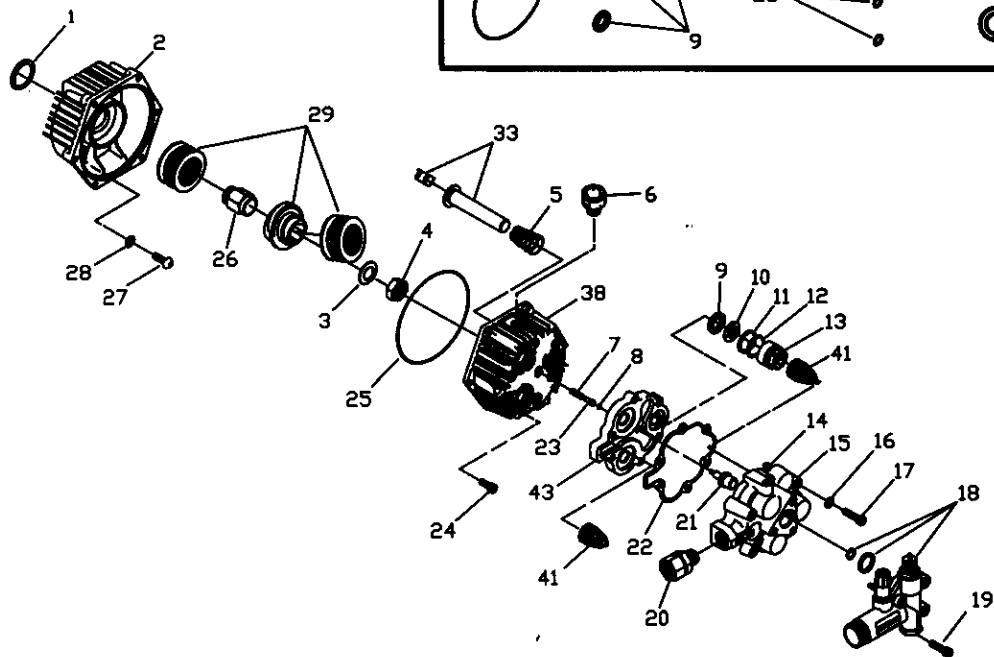
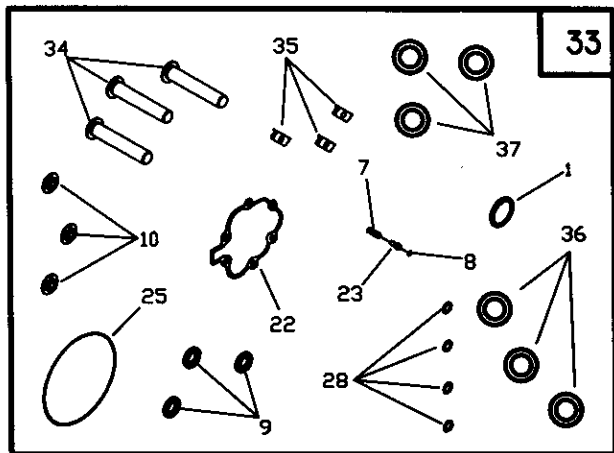
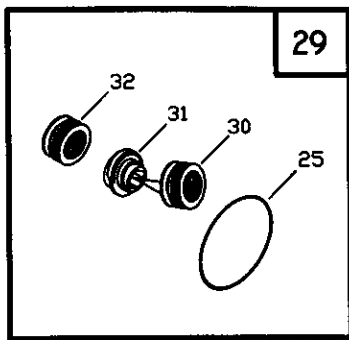
Item	Part #	Qty	Description
82	92984	1	Top Wrapper
83	45756	4	M6 x 10mm Screw
84	78609	2	Cover Bolt
85	78608A	1	Air Box Cover
86	90695A	1	Blower Housing
87	89739	1	Lower Wrapper
88	66476	9	M6 x 12mm Capscrew
89	A2799	1	Recoil Assembly
90	A2842	1	Recoil Cup
91	78651C	1	Backplate

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



<u>Item</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

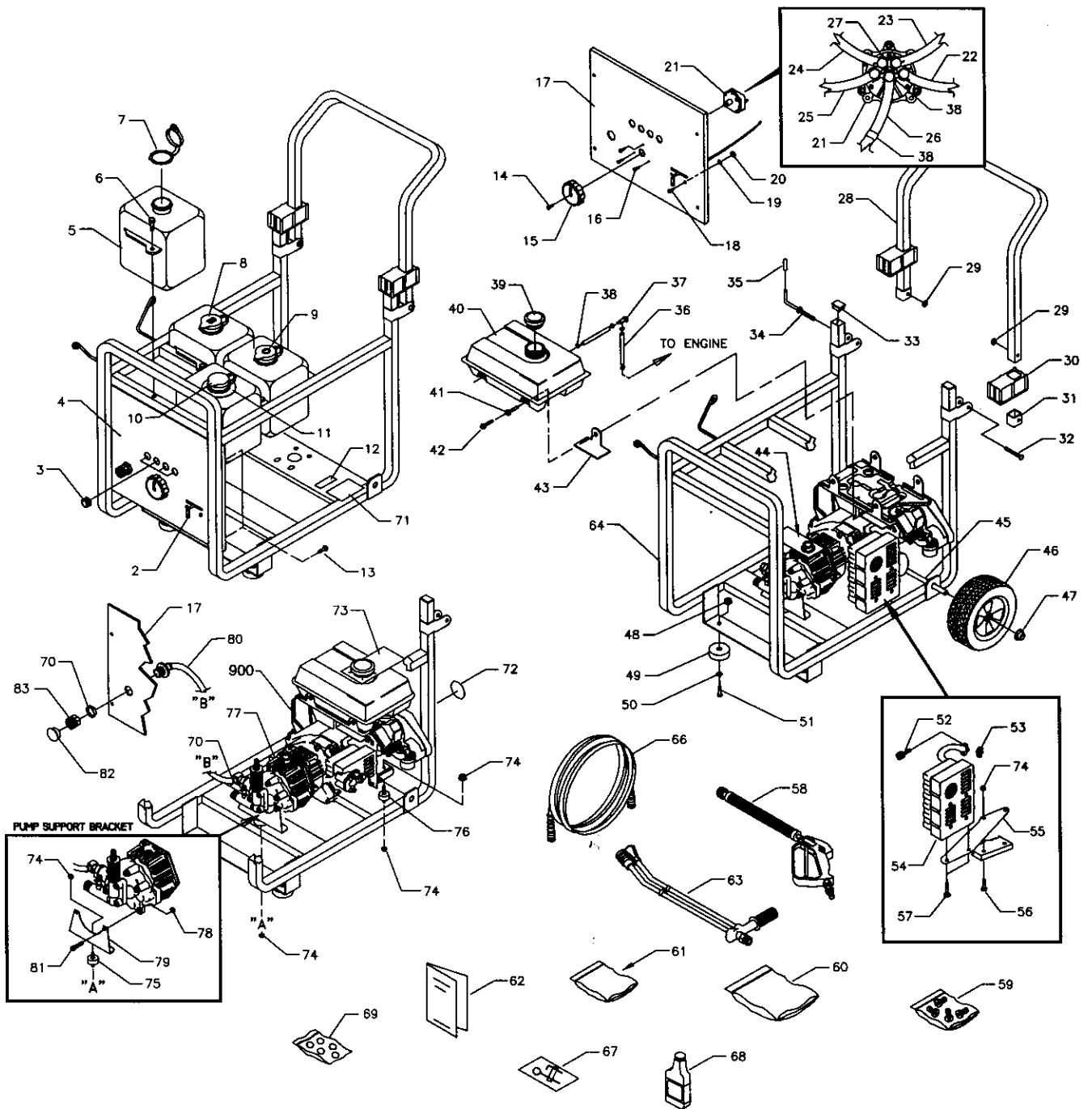
Craftsman 3000 PSI Cleaning System 580.768050 Pump



**Craftsman 3000 PSI Cleaning System 580.768050
Pump**

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

Craftsman 3000 PSI Cleaning System 580.768050
Main Unit



Craftsman 3000 PSI Cleaning System 580.768050

Main Unit

Item	Part #	Qty	Description	Item	Part #	Qty	Description
2	B3608A	1	LINK, Throttle Control	51	42909	2	HHCS, M8 x 1.25 x 30
3	30809	4	GROMMET, Rubber	52	40976	2	SHCS, M8 - 1.25 x 20
4	B3576	1	DECAL, Control Panel 1210	53	89476	1	GASKET, Exhaust
5	B3599	4	ASSY., Chemical Tank 1 Gal.	54	83071	1	MUFFLER
6	B3695	8	BOLT, 1/4" - 20 with Washer	55	83208	1	BRACKET, Muffler
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 "Water"	59	B4341	1	KIT, Nozzles
11	B3376B	1	TAG, System Flush Water	60	B3589	1	KIT, 3 Pak Concentrate
12	96307	1	DECAL, 1-800 Number	61	B3454	1	KIT, Chemical Tags
13	86292	4	SELF DRILL, 10 - 16 x 3/4"	62	B3604	1	MANUAL
14	B3311	1	SCREW, Plastite	63	B1748	1	ASSY., Dual Lance Ext.
15	B3721	1	HANDLE, 4-Way Valve	64	EB3618	1	CRADLE, Powder Ct Green
16	B3377	3	SCREW, Plastite #8 x .75"	66	B3636	1	HOSE, 3/8" x 50'
17	EB3115	1	PANEL, Control Powder Green	67	B2508	1	KIT, Cleaning Nozzle
18	91526	2	PPHMS, M5 - 0.8 x 12	68	AB3061	1	OIL BOTTLE
19	49226	2	LOCK WASHER, M5	69	B2730	1	KIT, Maintenance
20	51716	2	NUT, Hex M5 - 0.8	70	B3735	1	NUT, Water Inlet
21	B3306	1	ASSY., Sub 4-Way Valve	71	B4270	1	DECAL, Start Instruction
22	B3840A	1	HOSE, Chemical "A" - 10"	72	96207A	1	DECAL, Recoil
23	B3840B	1	HOSE, Chemical "B" - 14"	73	70453	1	TAG, Warning Oil
24	B3840C	1	HOSE, Chemical "C" - 14"	74	67989	6	NUT, Hex Locking Flange M8 - 1.25
25	B3840D	1	HOSE, Chemical "D" - 10"	75	21216	1	MOUNT, Rubber Shock
26	B3601C	1	HOSE, Chemical Pump 7.5"	76	21217	1	MOUNT, Rubber Shock
27	48031G	4	CLAMP, Hose 3/16"	77	B3680A	1	ASSY., Pump
28	EB3620	1	HANDLE, Powder Green	78	52857	2	NUT, M6 - 1.0 Locking
29	B2071	2	NUT, 1/4" - 20 Flange 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" Carriage	82	97098	1	CAP, Garden Hose Inlet
33	46476	2	CAPLUG, Tubing	83	21424	1	CONNECTOR, Garden Hose
34	B2759	1	HOOK, Square Neck Gun	900	NSP	1	ENGINE
35	B1460	1	CAP, Vinyl Black				
36	30340C	1	HOSE, .25" ID				
37	96193	1	VALVE, Fuel Shut-Off				
38	48031C	5	HOSE, Clamp Band 1/2"				
39	95549	1	CAP, Fuel				
40	94994	1	TANK, 1 Gal Fuel				
41	96002	4	BUSHING, Tank				
42	96001	4	BOLT, M6 - 1.0 x 21 Shoulder				
43	21545	1	SHIELD, Heat				
44	B1288	1	TAG, Breather Cap				
45	B4140	1	AXLE ROD, 1/2" x 24.65"				
46	88521	2	WHEEL				
47	75402	2	PUSHNUT, 1/2"				
48	52858	2	NUT, M8 - 1.25 Locking				
49	27007	2	MOUNT, Vibration Donut Type				
50	50190	2	FLAT WASHER, M8				

Optional Accessories Not Illustrated:

71-74300	House Wash Concentrate
71-74301	Deck Wash Concentrate
71-74302	Vehicle Wash Concentrate
71-74303	Degreaser Concentrate
71-74400	Heavy Duty Turbo Nozzle
71-74401	25' 3/8" Replacement Extension Hose
71-75116	O Ring Repair Kit
71-75187	Garden Hose Quick Connect
71-75197	Accessory Quick Connect Kit
71-75199	Rotating Brush
71-76430	Floor/Siding Brush
71-76431	Utility Brush

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
3. 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-HOMESM (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 – 1-800-665-4455
Au Canada pour tout le service ou les pièces

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 SearsSM