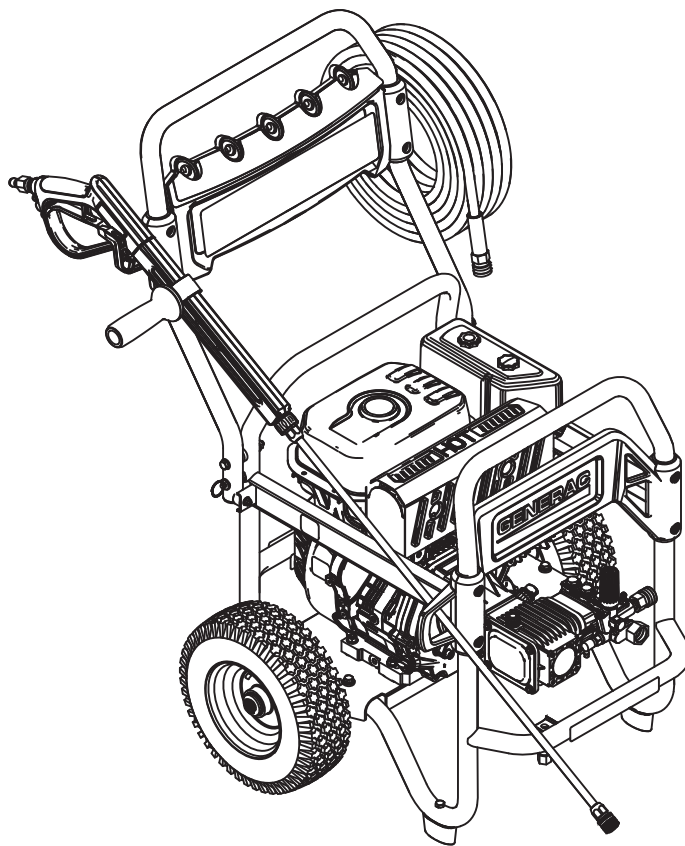




# Operator's Manual

## Power Washer



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## WARNING!

### California Proposition 65

Engine exhaust and some of its constituents are known to the state of California to cause cancer, birth defects, and other reproductive harm.

## WARNING!

### California Proposition 65

This product contains or emits chemicals known to the state of California to cause cancer, birth defects, and other reproductive harm.

## INTRODUCTION

Thank you for purchasing this power washer manufactured by Generac Power Systems, Inc. This model is a high performance, air-cooled, engine-driven power washer that operates between 3000 and 4000 psi depending on which model you purchased. These units feature powerful Generac engines, a triplex pump with ceramic coated pistons, a pressure control valve, an automatic thermal relief system, a professional grade spray gun with vibration isolation for reduced fatigue, a stainless steel lance, quick connect nozzles, steel reinforced high pressure rubber hose for long life and maximum flexibility and a detergent siphoning hose.

**Common sense and strict compliance with the special instructions are essential to preventing accidents.** The operator must read this manual and thoroughly understand all of the instructions and warnings before using the equipment. If any portion of the manual is not understood, contact the nearest Authorized Dealer for starting, operating and servicing procedures. The owner is responsible for proper and safe use of the equipment.

The power washer can operate safely, efficiently and reliably only if it is properly located, operated and maintained. Before operating, servicing or storing:

- Study all warnings in this manual and on the product carefully.
- Become familiar with this manual and the unit before use.
- Refer to the Assembly section of the manual for instructions on final assembly procedures. Follow the instructions completely.

The manufacturer cannot anticipate every possible circumstance that might involve a hazard. The warnings in this manual, and on tags and decals affixed to the unit are, therefore, not all inclusive. If using a procedure, work method or operating technique that the manufacturer does not specifically recommend, ensure that it is safe for others. Also make sure the procedure, work method or operating technique utilized does not render the power washer unsafe.

THE INFORMATION CONTAINED HEREIN WAS BASED ON MACHINES IN PRODUCTION AT THE TIME OF PUBLICATION. GENERAC RESERVES THE RIGHT TO MODIFY THIS MANUAL AT ANY TIME.

**Save these instructions for future reference. If you loan this device to someone, ALWAYS loan ALL instructional materials to the individual as well.**

### WHERE TO FIND US

You can contact Generac Customer Service by phone at 1-888-436-3722, or on the internet at [www.generac.com](http://www.generac.com). Record the important information of the unit in the following chart for future reference and/or service inquiries.

<b>Model Number</b>	
<b>Serial Number</b>	
<b>Date Purchased</b>	

## SAFETY RULES

Throughout this publication, and on tags and decals affixed to the power washer, DANGER, WARNING, CAUTION and NOTE blocks are used to alert personnel to special instructions about a particular operation that may be hazardous if performed incorrectly or carelessly. Observe them carefully. Their definitions are as follows:

### **▲ DANGER!**

Indicates a hazardous situation or action which, if not avoided, will result in death or serious injury.

### **▲ WARNING!**

Indicates a hazardous situation or action which, if not avoided, could result in death or serious injury.

### **▲ CAUTION!**

Indicates a hazardous situation or action which, if not avoided, could result in minor or moderate injury.

#### NOTE:

**Notes contain additional information important to a procedure and will be found within the regular text body of this manual.**

These safety warnings cannot eliminate the hazards that they indicate. Common sense and strict compliance with the special instructions while performing the action or service are essential to preventing accidents.

## SAFETY SYMBOLS AND MEANINGS



Hearing Protection



Toxic Fumes



Kickback



Electrical Shock



Slippery Surface



Fall



Fluid Injection



Fire



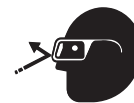
Explosion



Operator's Manual



Moving Parts



Flying Objects




Hot Surface

# Safety Rules

 **WARNING: Hearing Protection Recommended.**



 **DANGER: NEVER aim spray gun at people, animals, or electrical devices. Serious injury or death will result. ALWAYS point spray gun in safe direction, squeeze spray gun trigger to release high pressure, every time you stop engine. Engage trigger lock when not in use.**



- The high pressure stream of water that this equipment produces can cut through skin and its underlying tissues, leading to serious injury, possible amputation or death. Spray gun traps high water pressure, EVEN WHEN engine is stopped and water is disconnected, which can cause injury.
- NEVER allow CHILDREN to operate power washer or play nearby. This is NOT a toy.
- NEVER repair high pressure hose. Replace it.
- NEVER repair leaking connections with sealant of any kind. Replace o-ring or seal.
- NEVER connect high pressure hose to nozzle extension.
- Keep high pressure hose connected to pump and spray gun while system is pressurized.
- NEVER secure spray gun in open position.
- NEVER leave spray gun unattended while machine is running.
- NEVER use a spray gun which does not have a trigger lock or trigger guard in place and in working order.
- ALWAYS be certain spray gun, nozzles and accessories are correctly attached.

 **WARNING: Risk of electrocution.**



**Contact with power source can cause electric shock or burn.**

- NEVER spray near power source.

 **WARNING: Contact with muffler area can result in serious burns. Exhaust heat/gases can ignite combustibles, structures or damage fuel tank causing a fire.**



- DO NOT touch hot parts and AVOID hot exhaust gases.
- Allow equipment to cool before touching.
- Keep at least five (5) feet (152 cm) of clearance on all sides of power washer including overhead.



- It is a violation of California Public Resource Code, Section 4442, to use or operate the engine on any forest-covered, brush-covered, or grass-covered land unless the exhaust system is equipped with a spark arrester, as defined in Section 4442, maintained in effective working order. Other states or federal jurisdictions may have similar laws.

Contact the original equipment manufacturer, retailer, or dealer to obtain a spark arrester designed for the exhaust system installed on this engine.

- Replacement parts must be the same and installed in the same position as the original parts.

 **WARNING: Fuel and its vapors are extremely flammable and explosive. Fire or explosion can cause severe burns or death.**



#### WHEN ADDING OR DRAINING FUEL

- Turn power washer OFF and let it cool at least two (2) minutes before removing fuel cap. Loosen cap slowly to relieve pressure in tank.
- Fill or drain fuel tank outdoors.
- DO NOT overfill tank. Allow space for fuel expansion.
- If fuel spills, wait until it evaporates before starting engine.
- Keep fuel away from sparks, open flames, pilot lights, heat, and other ignition sources.
- DO NOT light a cigarette or smoke.



#### WHEN STARTING EQUIPMENT

- Ensure spark plug, muffler, fuel cap, and air cleaner are in place.
- DO NOT crank engine with spark plug removed.

#### WHEN OPERATING EQUIPMENT

- DO NOT tip engine or equipment at angle which causes fuel to spill.
- DO NOT spray flammable liquids.


#### WHEN TRANSPORTING OR REPAIRING EQUIPMENT

- Transport/repair with fuel tank EMPTY or with fuel shutoff valve OFF.
- Disconnect spark plug wire.


#### WHEN STORING FUEL OR EQUIPMENT WITH FUEL IN TANK

- Store away from furnaces, stoves, water heaters, clothes dryers, or other appliances that have pilot light or other ignition source because they can ignite fuel vapors.

**WARNING: Use of power washer can create puddles and slippery surfaces. Kickback from spray gun can cause you to fall.**




- Use only on a level surface.
- The cleaning area should have adequate slopes and drainage to reduce the possibility of a fall due to slippery surfaces.




- Do not use on elevated surfaces where chance of kickback could result in a serious fall.
- Firmly grasp spray gun with both hands when using high pressure spray to avoid injury when spray gun kicks back.

**WARNING: Starter and other rotating parts can entangle hands, hair, clothing, or accessories.**




- NEVER operate power washer without protective housing or covers.
- DO NOT wear loose clothing, jewelry or anything that may be caught in the starter or other rotating parts.
- Tie up long hair and remove jewelry.

**WARNING: Starter cord kickback (rapid retraction) can result in bodily injury. Kickback will pull hand and arm toward engine faster than you can let go. Broken bones, fractures, bruises, or sprains could result.**




- NEVER pull starter cord without first relieving spray gun pressure.
- To relieve trapped pressure, point gun in safe direction and release pressure by pulling/actuating trigger on spray gun.
- When starting engine, pull cord slowly until resistance is felt and then pull rapidly to avoid kickback.
- After each starting attempt, where engine fails to run, always point spray gun in safe direction, and squeeze spray gun trigger to release high pressure.
- Firmly grasp spray gun with both hands when using high pressure spray to avoid injury when spray gun kicks back.

**WARNING: Unintentional sparking can result in fire or electric shock.**



**WHEN ADJUSTING OR MAKING REPAIRS TO YOUR POWER WASHER.**


- Disconnect the spark plug wire from the spark plug and place the wire where it cannot contact spark plug.



**WHEN TESTING FOR ENGINE SPARK**

- Use approved spark plug tester.
- DO NOT check for spark with spark plug removed.

**WARNING: Risk of eye injury. Spray can splash back or propel objects.**



- Always wear safety goggles when using this equipment or in vicinity of where equipment is in use.
- Before starting the power washer, be sure you are wearing adequate safety goggles.
- NEVER substitute safety glasses for safety goggles.

**NOTE:**

**High pressure spray may damage fragile items including glass.**

- DO NOT point spray gun at glass when using red (0°) MAX nozzle.
- NEVER aim spray gun at people, animals, electrical devices or plants.

**NOTE:**

**Improper treatment of power washer can damage it and shorten its life.**

- If you have questions about intended use, ask dealer or contact qualified service center.
- NEVER operate units with broken or missing parts, or without protective housing or covers.
- DO NOT by-pass any safety device on this machine.
- DO NOT operate power washer above rated pressure.
- DO NOT modify power washer in any way.
- Before starting power washer in cold weather, check all parts of the equipment to be sure ice has not formed there.
- NEVER move machine by pulling on hoses. Use handle provided on unit.
- Check 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 power washer.
- This equipment is designed to be used with Generac authorized parts ONLY. If equipment is used with parts that DO NOT comply with minimum specifications, user assumes all risks and liabilities.



## General Information

### KNOW YOUR POWER WASHER

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

If you loan this device to someone, ALWAYS loan ALL instructional documentation to the individual as well. Compare the illustrations with your high power washer to familiarize yourself with the locations of various controls (Figure 1). Save this manual for future reference. Replacement owner's manuals can be printed from the Generac Web site.

- A - Spray Gun** – Controls the application of water onto the cleaning surface with trigger device. Includes a trigger lock.
- B - Lance with Quick Connect** – Allows you to switch between four different nozzles.
- C - High Pressure Hose** – Connect one end to water pump and the other to the spray gun.
- D - Recoil Starter** – Use for starting the engine.
- E - Oil Fill** – Check and add engine oil here.
- F - Air Filter** – Protects engine by filtering dust, and debris out of the intake air.
- G - Pump** – Develops high pressure.
- H - Thermal Relief Valve** – Cycle's water through the pump when water reaches 125°F. Warm water will discharge from pump onto ground. This prevents internal pump damage.
- I - Engine On/Off Switch** – Run this switch to "ON" before using the recoil starter. Turn the switch to "OFF" to stop the engine.
- J - Pressure Control/Unloader Valve** – Controls the high pressure output.

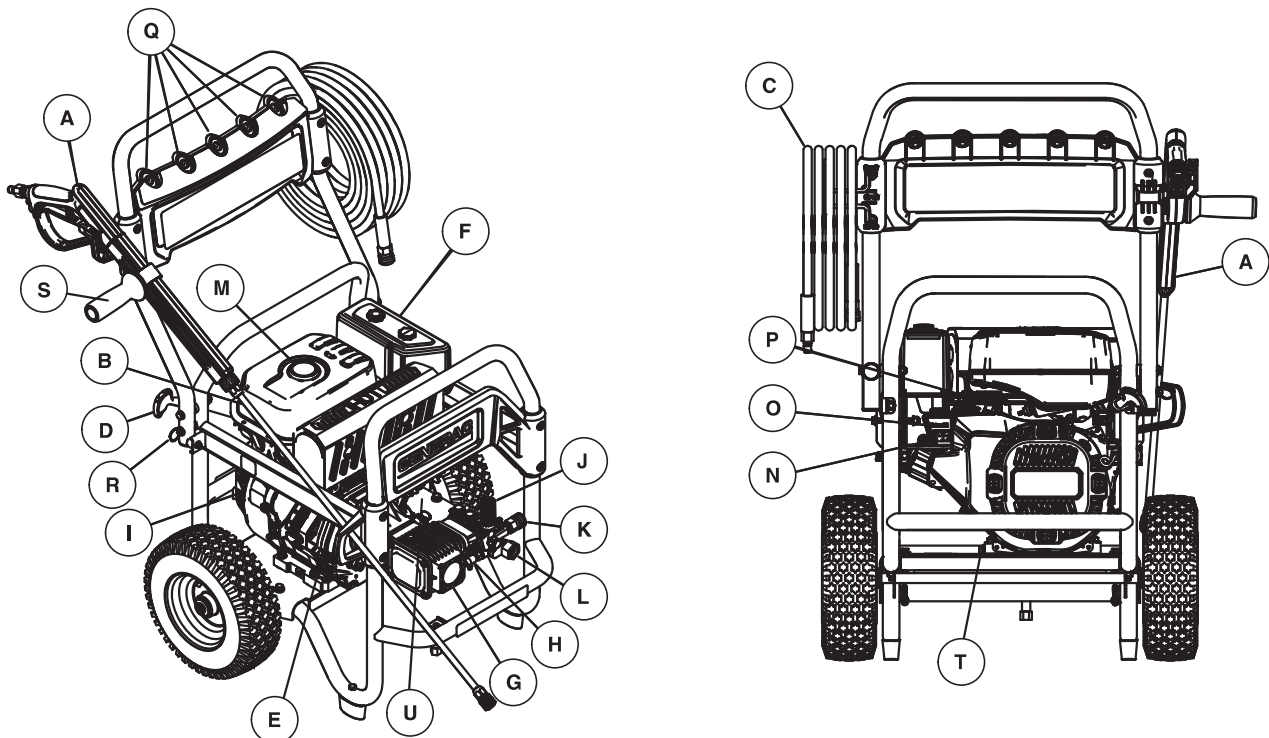
- K - High Pressure Outlet** – Connection for high pressure hose.
- L - Water Inlet** – Connection for Garden Hose.
- M - Fuel Tank** – Fill tank with regular unleaded fuel. Always leave room for fuel expansion.
- N - Fuel On/Off Switch** – Turns fuel supply to the engine on and off.
- O - Choke** – Prepares a cold engine for starting.
- P - Throttle Lever** – Increases or decreases engine speed. Throttle should be at maximum travel when the pressure washer is in use.
- Q - Nozzles** – Chemical injection, 0°, 15°, 25°, 40° (white, yellow, red and black) for various high pressure cleaning applications.
- R - Pull Pin** – Pull the ring to unlock the handle. This allows the handle to be collapsed for storage.
- S - Adjustable Side Handle** – Adjustable by turning counter clockwise to loosen, adjust to comfortable position and tighten clockwise. This allows for a firm operating grip of the spray gun.
- T - Oil Drain** – Drain engine oil here.
- U - Serial Number Location**

### ITEMS NOT SHOWN

**Identification Label (near rear of base plate)** – Provides model and serial number of pressure washer. Please have these readily available if calling for assistance.

**Detergent Siphoning Tube/Filter** – Use to siphon pressure washer safe detergents into the low pressure stream.

Figure 1 – Features & Controls



## PRODUCT SPECIFICATIONS

Pressure - (PSI / BAR)	3100 / 213	3800 / 262	4200 / 290
Flow Rate - (GPM / LPM)	2.8 / 10.6	3.6 / 13.6	4.0 / 15.1
Water Supply Temperature - (°F / C°)	100 / 38 Max		
Hose Length - (Feet / Meters)	35 / 10.7		50 / 15.2
Nozzles - Number per Unit	5		
Lance Length (Inches / cm)	20 / 51	33 / 84	33 / 84
Gun	Professional		
Engine Displacement - (Cubic Inch / cc)	12.9 / 212	18.4 / 302	25.6 / 420
Spark Plug Type	F7TC or equivalent		
Spark Plug Gap - (Inches / mm)	0.028-0.031 / 0.70-0.80		
Fuel Capacity - (Quarts / Liters)	3.7 / 3.5	6.9 / 6.5	9.1 / 8.6
Engine Oil Capacity - (Oz / Liters)	20 / 0.6	37 / 1.1	37 / 1.1
Low Oil Shut Down System	Yes		
On / Off Switch	Yes		

## EMISSIONS INFORMATION

The U.S. Environmental Protection Agency (and California Air Resource Board for equipment certified to CA standards) requires that this engine comply with exhaust and evaporative emission standards. Locate the emissions compliance decal on the engine to determine what standards the engine meets, and to determine which emissions warranty applies. The engine is certified to meet the applicable emission standards on gasoline. It is important to follow the maintenance specifications in the Maintenance section to ensure that the engine complies with the applicable emission standards for the duration of the product's life. This engine utilizes lean carburetion settings and other systems to reduce emissions. Tampering with or altering the emission control system may increase emissions and may be a violation of Federal or California Law. Acts that constitute tampering include but are not limited to:

- Removal or alteration of any part of the intake, fuel, or exhaust systems
- Altering or defeating the governor linkage or speed-adjusting mechanism to cause the engine to operate outside its design parameters

If you are aware of any of the following symptoms, have your engine inspected and repaired by your servicing dealer:

- Hard starting or stalling after starting
- Rough idle
- Misfiring or backfiring under load
- Afterburning (backfiring)
- Black exhaust smoke or high fuel consumption

## HIGH ALTITUDE OPERATION

The fuel system on this engine may be influenced by operation at higher altitudes. Proper operation can be ensured by installing an altitude kit when required. See the table below to determine when an altitude kit is required. Operating this engine without the proper altitude kit installed may increase the engine's emissions and decrease fuel economy and performance. Kits may be obtained from any Dealer, and should be installed by a qualified individual.

Altitude Range*	Kit Number	PSI
0 - 5000 Feet	Not Required	3100/3800/4200
5000 - 7000 Feet	0K2016	3100
5000 - 7000 Feet	0K2017	3800
5000 - 7000 Feet	0K2018	4200
*Elevation above sea level.		

### NOTE:

**If the altitude kit has been installed and the engine will be operated at an altitude where the kit is not required, the engine should be returned to the original factory configuration. Operating the engine at lower altitudes with the kit installed may cause the engine to overheat and result in serious engine damage, and may result in decreased performance and increased emissions.**

# Set-up

## UNPACKING

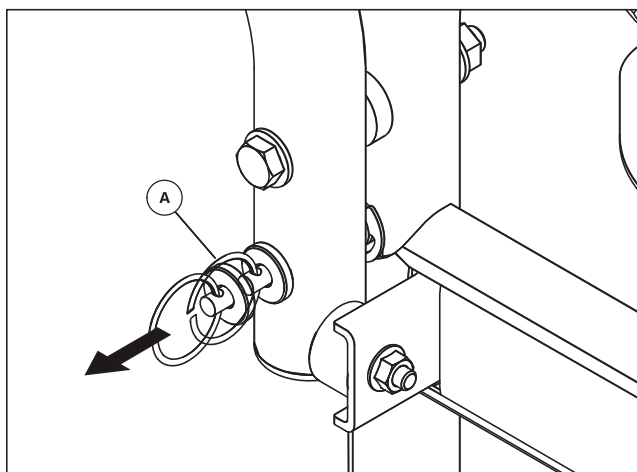
1. Remove the parts bag, accessories, and inserts included with power washer.
2. Open carton completely by cutting each corner from top to bottom.
3. Ensure you have all included items prior to assembly.
  - Main Unit
  - High Pressure Hose
  - Siphon Hose & Filter
  - Spray Gun
  - Lance with Quick Connect Fitting
  - Oil Bottle
  - Parts Bag (which includes the following):
    - Hose Hook Wireform with Screws and Allen Wrench
    - Operator's Manual
    - Owner's Registration Card
    - Bag containing Color-coded Nozzles
    - Filter Screen
4. If you are missing any items from your carton, please call Generac Customer Service at 1-888-436-3722. When calling for assistance, please have the model and serial number from the data tag available.
5. Fill out and send in registration card. Write Model number, Serial number & date of purchase in the table located in the "Where to Find Us" section.

## ASSEMBLY

Read the entire operator's manual before you attempt to assemble, or if you have any problems with the assembly of your power washer, please call Generac Customer Service at 1-888-436-3722. When calling for assistance, please have the model and serial number from the data tag available.

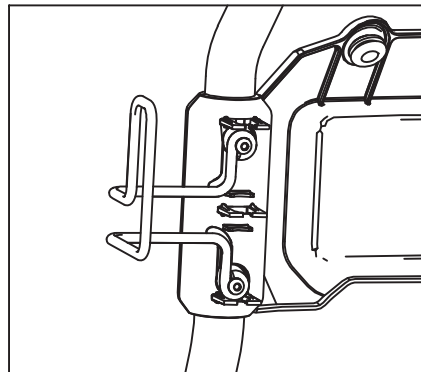
1. The handle may be folded down or locked into position using the integrated pull pin.

**Figure 2 – Attach Handle**



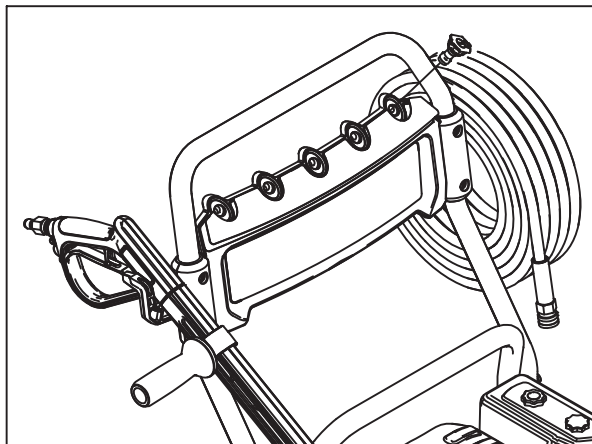
2. Install hose hook using provided screws and allen wrench (Figure 3).

**Figure 3 – Install Hose Hook**



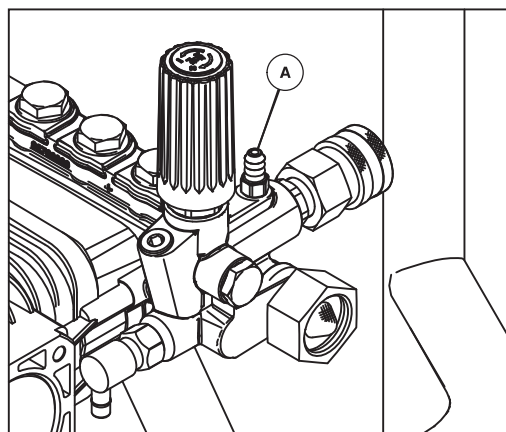
3. Insert color-coded nozzles in spaces provided in handle (Figure 4).
4. Place spray gun and nozzle extension into spray gun holder as shown (Figure 4).

**Figure 4 – Insert Nozzles**



5. Coil high pressure hose and hang on hook.
6. Attach siphon tube to location A (Figure 5).

**Figure 5 – Siphon Tube Location**





## ADD ENGINE OIL

1. Place power washer on a flat, level surface.
2. Clean area around oil fill and remove orange oil fill cap/dipstick (Figure 6).

**Figure 6 – Fill Engine Oil**



3. Using oil funnel (optional), slowly pour oil into oil fill opening. See Maintenance section for oil type recommendation.

**NOTE:**

**On some units there is more than one oil fill location. In these instances it is only necessary to use one of the oil fill points.**

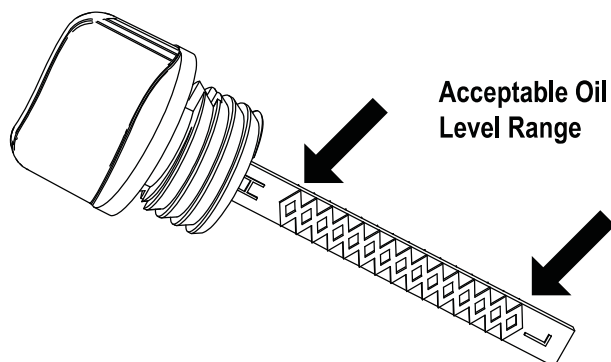
4. Check periodically until the oil level is between "L" and "H" on the dipstick (Figure 7). **DO NOT OVERFILL.**

**NOTE:**

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

5. Replace oil fill cap/dipstick and fully tighten.

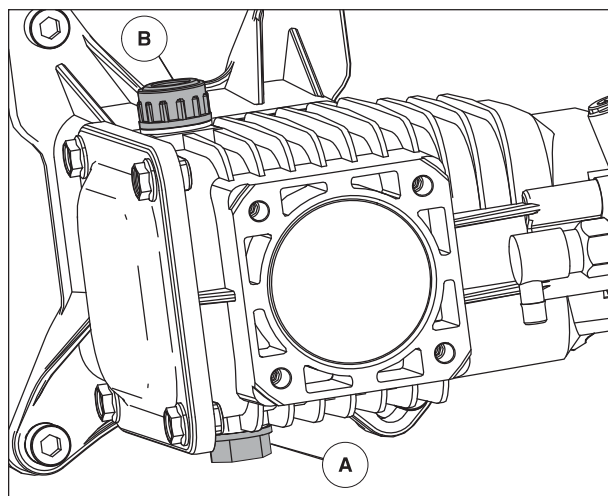
**Figure 7 – Dipstick**



## CHECK PUMP OIL

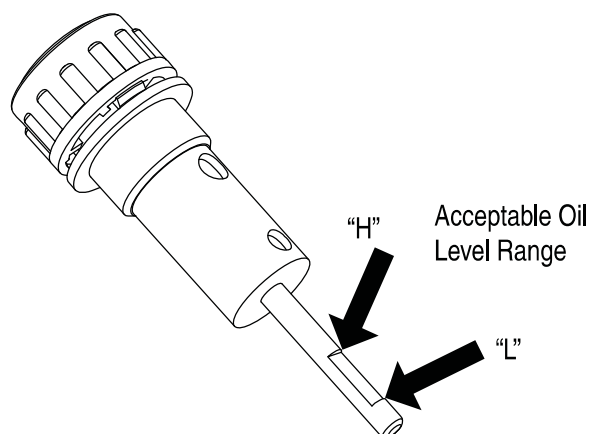
1. Place power washer on a flat, level surface.
2. Clean area around oil fill and remove vented cap/dipstick (B) (Figure 8).

**Figure 8 – Check Pump Oil**



3. Check to confirm oil level is between the "L" and "H" on the dipstick (Figure 9). If oil is required, see Maintenance section. **DO NOT OVERFILL.**
4. See the Maintenance section for additional information on pump oil maintenance.
5. Install oil dipstick until finger tight.
6. Clean up any spilled oil.

**Figure 9 – Pump Oil Dipstick**



## ADD FUEL

Fuel must meet these requirements:

- Clean, fresh, unleaded gasoline.
- A minimum of 87 octane/87 AKI (91 RON).
- Gasoline with up to 10% ethanol (gasohol) is acceptable.

### NOTE:

**Avoid power washer damage. Failure to follow Operator's Manual for fuel recommendations voids warranty.**

- DO NOT use unapproved gasoline such as E85.
- DO NOT mix oil in gasoline.
- DO NOT modify engine to run on alternate fuels.

To protect the fuel system from gelling, mix in a fuel stabilizer when adding fuel. See Storage. All fuel is not the same. If you experience starting or performance problems after using fuel, switch to a different fuel provider or change brands.

### **▲ WARNING!**

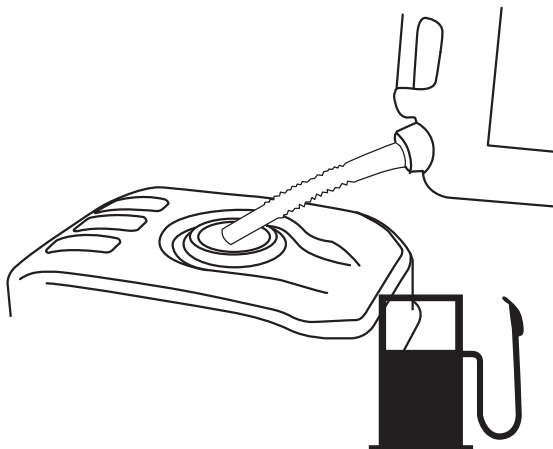


**Fuel and its vapors are extremely flammable and explosive. Fire or explosion can cause severe burns or death.**

### WHEN ADDING FUEL

- Turn power washer OFF and let it cool at least two (2) minutes before removing fuel cap. Loosen cap slowly to relieve pressure in tank.
  - Fill fuel tank outdoors.
  - DO NOT overfill tank. Allow space for fuel expansion.
  - If fuel spills, wait until it evaporates before starting engine.
  - Keep fuel away from sparks, open flames, pilot lights, heat, and other ignition sources.
  - DO NOT light a cigarette or smoke.
1. Clean area around fuel fill cap, remove cap.
  2. Slowly add regular unleaded fuel to fuel tank. Be careful not to overfill. Fill to bottom of filter screen, this will allow for fuel expansion (Figure 10).
  3. Install fuel cap and let any spilled fuel evaporate before starting engine.

**Figure 10 – Adding Fuel**



## CONNECT HOSE AND WATER SUPPLY TO PUMP

### NOTE:

**DO NOT run the pump without the water supply connected and turned on. Damage to equipment resulting from failure to follow this instruction will void warranty.**

### NOTE:

**Remove and discard the shipping cap from the pump's water inlet before attaching hose.**

1. Run water through your garden hose for 30 seconds to clean out any debris.
2. Before connecting garden hose to water inlet, inspect inlet screen before installing (A) (Figure 11). The cone should face outward. Clean screen if it contains debris or have it replaced if damaged. DO NOT run power washer if inlet screen is damaged.

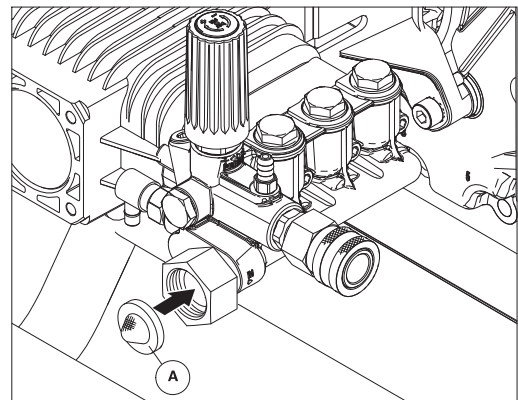
**IMPORTANT:** DO NOT siphon standing water for the water supply. Use ONLY cold water (less than 100°F). Water supply must be adequate to handle greater than 3.8 gallons per minute and no less than 30 psi.

### NOTE:

**Using a One Way Valve (vacuum breaker or check valve) at pump inlet can cause pump or inlet connector damage.**

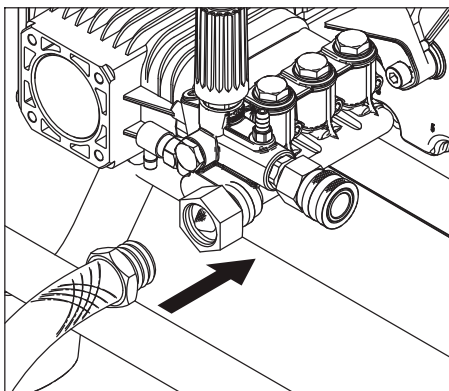
- There MUST be at least ten feet of unrestricted garden hose between the power washer inlet and any device, such as a vacuum breaker or check valve.
- Damage to equipment resulting from failure to follow this instruction will void warranty.

**Figure 11 – Inspect Inlet Screen**



3. Connect the garden hose (not to exceed 50 feet in length) to the water inlet (Figure 12). Tighten by hand.

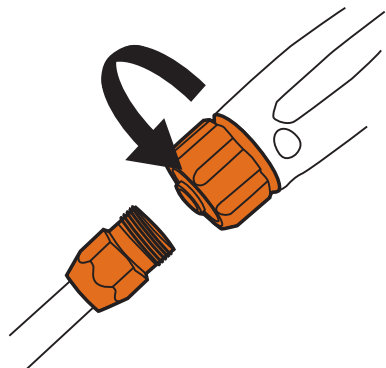
Figure 12 – Connect Garden Hose

**⚠ WARNING!**

 Risk of eye injury. Spray can splash back or propel objects.


- Always wear safety goggles when using this equipment or in vicinity of equipment in use.
  - Before starting the power washer, be sure you are wearing adequate safety goggles.
  - NEVER substitute safety glasses for safety goggles.
4. Connect lance to spray gun (Figure 13). Tighten by hand.

Figure 13 – Attach Lance



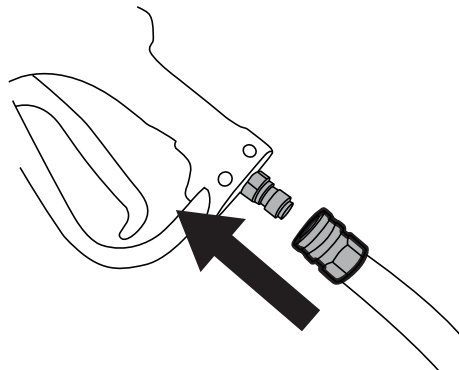
5. Attach end of high pressure hose to base of spray gun (Figure 14).

**⚠ DANGER!**

 The high pressure stream of water that this equipment produces can cut through skin and its underlying tissues, leading to serious injury, possible amputation or death. Spray gun traps high water pressure, even when engine is stopped and water is disconnected, which can cause injury.

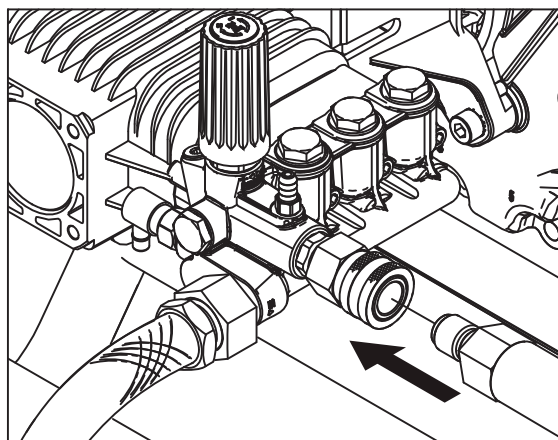
- NEVER connect high pressure hose to lance.
- Keep high pressure hose connected to pump and spray gun while system is pressurized.
- Always be certain spray gun, nozzles and accessories are correctly attached.

Figure 14 – Connect Hose to Spray Gun



6. Connect high pressure hose to pump (uncoil hose before connecting to pump or spray gun) (Figure 15).

Figure 15 – Connect High Pressure Hose to Pump

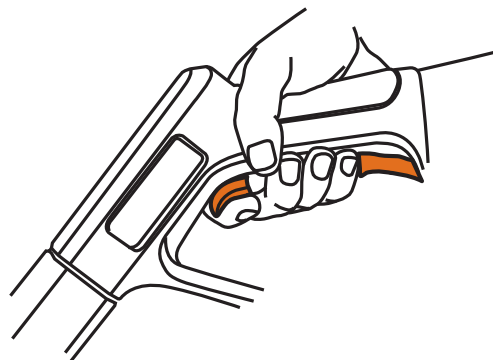


7. Turn ON the water, squeeze the trigger to purge the pump system of air (Figure 16).

**⚠ CAUTION!**

 The hose can be damaged if it comes in contact with a hot engine or muffler.

Figure 16 – Squeeze Trigger




## HOW TO USE NOZZLES

The quick-connect on the nozzle lance allows you to switch between different nozzles. Nozzles can be changed while the power washer is running, once the spray gun trigger is locked in the safety position. The nozzles vary the pressure and spray pattern as shown.

- For the most effective cleaning, keep the nozzle from 8 to 24 inches (20 to 61 cm) away from the surface being cleaned.
- If you get the nozzle too close, especially using a high pressure nozzle, you may damage the surface being cleaned.

### **⚠ DANGER!**

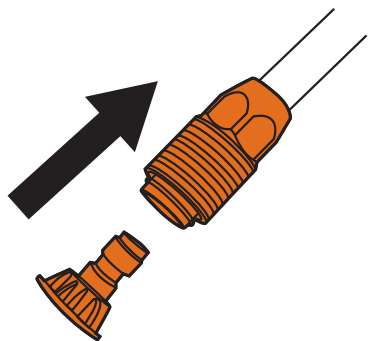
 **The high pressure stream of water that this equipment produces can cut through skin and its underlying tissues, leading to serious injury, possible amputation or death. Spray gun traps high water pressure, even when engine is stopped and water is disconnected, which can cause injury.**

- NEVER exchange nozzles without the trigger lock being engaged on the spray gun.
- DO NOT twist nozzles while spraying.

Follow these instructions to change nozzles:

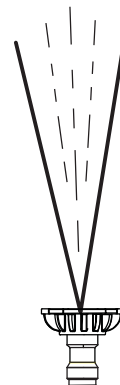
1. Pull back the collar on the quick-connect and pull the current nozzle off. Store nozzles in the accessory storage holder (Figure 17).

**Figure 17 – Nozzles**



2. Select desired nozzle:
  3. Pull back on the collar, insert the new nozzle and release the collar. Tug on the nozzle to make sure it is securely in place.
- The WHITE NOZZLE is used for delicate rinse (lower pressure and higher flow), for gentle cleaning of cars/trucks, boats, RV's, patio furniture, lawn equipment, etc. (Figure 18).

**Figure 18 – Wash Pressure Nozzle (White)**



- The GREEN NOZZLE is for general rinsing (medium pressure and medium flow), ideal for most all purpose cleaning such as home siding, brick patios, wood decks, driveways and sidewalks, garage floors, etc. (Figure 19).

**Figure 19 – Clean Pressure Nozzle (Green)**



- The yellow nozzle is for medium rinsing (higher pressure and medium flow), ideal for removing stains on hard porous surfaces such as concrete driveways, garage floors and brick patios, select yellow nozzle (Figure 20).

**Figure 20 – Strip Pressure Nozzle (Yellow)**



- The RED NOZZLE is for maximum rinsing (higher pressure and lower flow); for stubborn or hard to reach surface such as second story surfaces, paint removal, oil stains, rust removal or other stubborn substances (tar, gum, grease, wax, etc.) (Figure 21).

### ⚠ CAUTION!

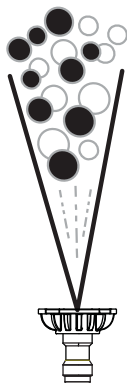
⚠ This tip (Red Nozzle) can damage work surfaces if it is too close, or held in one position for an extended time.

**Figure 21 – Blast Pressure Nozzle (Red)**



- Use the BLACK NOZZLE when applying detergent (Figure 22). Only use power washer safe detergents/soaps to help break down stubborn dirt and grime on a variety of surfaces.

**Figure 22 – Detergent Nozzle (Black)**



## CLEANING AND APPLYING DETERGENT

### ⚠ CAUTION!

⚠ Chemicals can cause bodily injury, and/or property damage.

- NEVER use caustic liquid with the power washer.
- Use ONLY power washer safe detergents/soaps. Follow all manufacturer's instructions.

To apply detergent, follow these steps:

1. Review proper use of nozzles.
2. Prepare detergent solution as required by the job into a container located within the proximity of the siphon tube.
3. Make sure the siphoning tube remains fully submerged into the detergent.

### NOTE:

**Make sure the filter remains fully submerged in detergent while applying detergent.**

### NOTE:

**Contact with the hot muffler can damage the detergent siphoning tube.**

4. When inserting the siphon into a detergent solution bottle, route the tube so as to keep it from inadvertently contacting the hot muffler.
5. Make sure the black detergent nozzle is installed.

### NOTE:

**Detergent cannot be applied with the high pressure nozzles (Yellow, White, Green or Red). Only use the Black nozzle with detergent.**

6. Confirm that all set-up instructions have been followed.

### NOTE:

**You must attach all the hoses before you start the engine.**

- Starting the engine without all the hoses connected, and without the water turned ON, will damage the pump.
  - Damage to the equipment resulting from failure to follow these instructions will void the warranty.
7. Start engine following instructions How to Start Your Power Washer.
  8. Apply detergent to a dry surface, starting at the lower portion of the area to be washed and work upward using long, even, overlapping strokes.
  9. Allow the detergent to "soak in" for 3-5 minutes before washing and rinsing. Reapply as needed to prevent the surface from drying. DO NOT allow the detergent to dry on the surface being cleaned (prevents streaking).

**IMPORTANT:** You must flush the detergent siphoning system after each use by placing the filter into a bucket of clean water, then run the power washer in low pressure for 1-2 minutes.

## POWER WASHER RINSING

1. Remove the black detergent nozzle from the lance.
2. Select and install the desired high pressure nozzle following the instructions How to Use Nozzles.
3. Point the spray gun in a safe direction and away from people, animals and plants. Squeeze the trigger to flush any remaining chemicals from the system.
4. Keep the spray gun a safe distance from the area you plan to spray.

### ⚠ WARNING!



**Kickback from the spray gun can cause you to fall.**

- Use only on a level surface.
- Do not use on an elevated surface to prevent the risk of a serious fall.
- Firmly grasp the spray gun with both hands when using the high pressure spray to avoid injury when the spray gun kicks back.



## Operation

5. Apply a high pressure spray to a small area and then check surface for damage. If no damage is found, you can assume it is okay to continue rinsing.
6. Start at the top of the area to be rinsed, working down with the same overlapping strokes used for cleaning.

### **CLEANING DETERGENT SIPHONING TUBE**

If you used the detergent siphoning tube, you must flush it with clean water before stopping the engine.

1. Place the detergent siphoning tube/filter in a bucket full of clean water.
2. Remove the high pressure nozzle from the nozzle extension.
3. Select and install the black detergent nozzle following the instructions How to Use Nozzles.
4. Flush for 1-2 minutes.
5. Shut the engine off following the instructions How to Stop Power Washer, and turn off water supply.
6. ALWAYS point the spray gun in a safe direction, squeeze the spray gun trigger to release retained high water pressure. Engage the trigger lock when not in use.

**IMPORTANT:** Spray gun traps high water pressure, even when the engine is stopped and water is disconnected.

### **⚠ DANGER!**



The high pressure stream of water that this equipment produces can cut through skin and its underlying tissues, leading to serious injury, possible amputation or death. Spray gun traps high water pressure, even when engine is stopped and water is disconnected, which can cause injury.

- Keep the high pressure hose connected to the pump and spray gun while the system is pressurized.
- ALWAYS point the spray gun in a safe direction, and squeeze the spray gun trigger to release high pressure every time you stop the engine. Engage the trigger lock when not in use.

## OPERATION

If you have any problems operating your power washer, please call Generac customer service at 1-888-436-3722.

## POWER WASHER LOCATION

### Clearances and Air Movement

### **⚠ DANGER!**



**DANGER: Carbon monoxide produced during use CAN KILL in minutes. NEVER use indoors or in other sheltered areas, EVEN IF doors and windows are open. Only use OUTSIDE and far away from windows, doors and vents.**

### NOTE:

For more information, reference the Carbon Monoxide warnings in the Safety Rules section.

Place the power washer outdoors, in an area that will not accumulate deadly exhaust gas. NEVER place the power washer where exhaust gas could accumulate and enter inside, or be drawn into a potentially occupied building. Ensure the exhaust gas is kept away from any windows, doors, ventilation intakes, or other openings that can allow the exhaust gas to collect in a confined area. Prevailing winds and air currents should be taken into consideration when positioning the power washer (Figure 23).

- Operate the power washer outdoors ONLY.
- Keep the exhaust gas from entering a confined area through windows, doors, ventilation intakes, or other openings.
- NEVER start or run engine indoors, in a vehicle, or in an enclosed area, EVEN IF windows and doors are open.

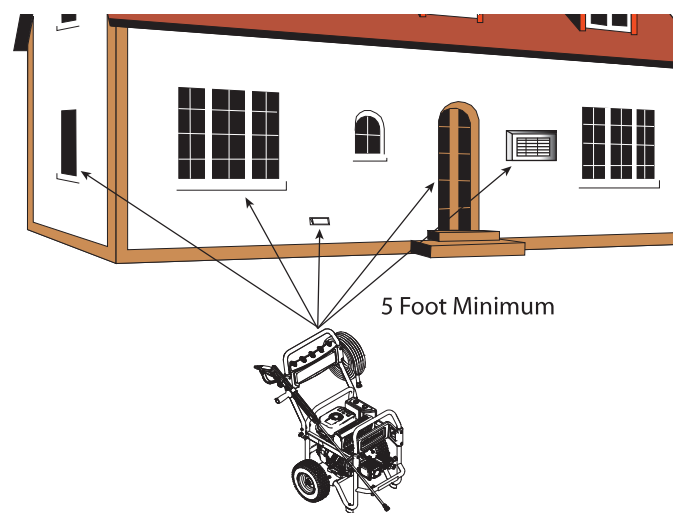
### **⚠ WARNING!**



Exhaust heat/gases can ignite combustibles, structures or damage the fuel tank causing a fire.

- Keep at least 5 ft. (152 cm) clearance on all sides of the power washer including overhead.

Figure 23 – Building Clearances



## CHECKLIST BEFORE STARTING ENGINE

1. Be sure to read and understand the Operator Safety section and the Operation section before using the power washer.
2. Check that oil is at the proper level in the engine crankcase and that fuel has been added to the fuel tank.
3. Review the unit's assembly and ensure the fittings are properly secured. Also make sure there are no kinks, cuts, or damage to high pressure hose.
4. Provide a proper water supply at an adequate flow, clear screens of debris, and confirm that the system is purged of air.
5. Confirm that the unit is on secure, level ground and the surrounding work area is clear.

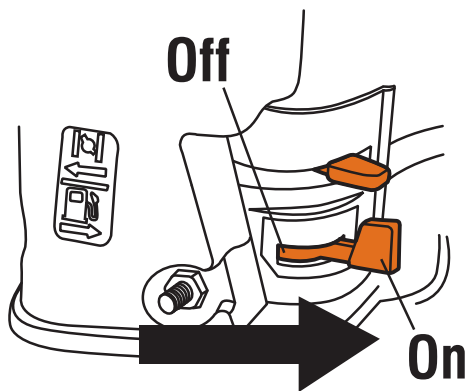
## HOW TO START YOUR POWER WASHER

**NOTE:**

**DO NOT** run the pump without the water supply connected and turned on. Damage to the equipment resulting from failure to follow these instructions will void warranty.

1. Move the fuel valve lever to the ON position (Figure 24).

**Figure 24 – Fuel Valve**

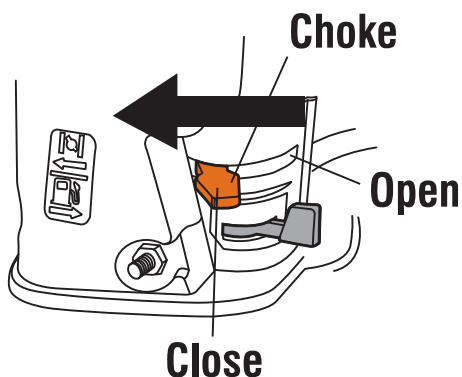


2. Move the choke lever to the “CLOSE” position (Figure 25).

**NOTE:**

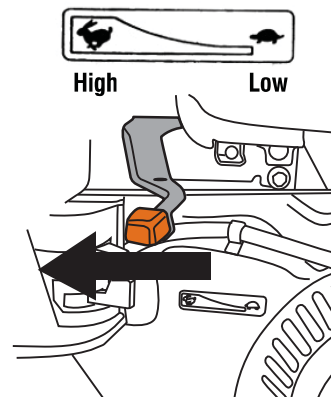
For a warm engine, be sure the choke lever is in the “OPEN” position.

**Figure 25 – Choke Lever**



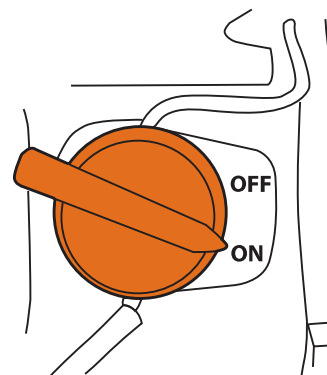
3. Move the throttle control lever to the “HIGH” position, shown on the engine as a rabbit (Figure 26).

**Figure 26 – Throttle Control**



4. Turn the engine switch to the “ON” position (Figure 27).

**Figure 27 – The ON Position**




**IMPORTANT:** Before starting the power washer, be sure you are wearing adequate safety goggles.

**⚠ WARNING!**

**Risk of eye injury. Spray can splash back or propel objects.**

- Always wear safety goggles when using this equipment or in the vicinity of equipment in use.
  - Before starting the power washer, be sure you are wearing adequate safety goggles.
  - NEVER substitute safety glasses for safety goggles.
5. Place foot on footpad or otherwise secure the unit from movement when pulling the recoil.
  6. When starting the engine, grasp the starter grip handle (Figure 28) and pull slowly until you feel some resistance. Then pull rapidly to start engine.

## ⚠ WARNING!

 Starter cord kickback (rapid retraction) can result in bodily injury. Kickback will pull hand and arm toward engine faster than you can let go. Broken bones, fractures, bruises, or sprains could result.

- NEVER pull the starter cord without first relieving the spray gun pressure.
  - When starting the engine, pull the cord slowly until resistance is felt, then pull rapidly to avoid kickback.
  - After each starting attempt, where engine fails to run, always point the spray gun in a safe direction and squeeze the spray gun trigger to release high pressure.
  - Firmly grasp the spray gun with both hands when using high pressure spray to avoid injury when the spray gun kicks back.
7. Return the starter grip handle slowly. DO NOT let the rope “snap back” against the starter.

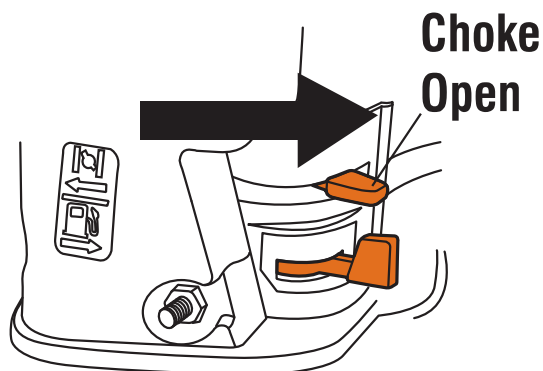
Figure 28 – Starting the Engine

## Starter Handle




8. When the engine starts, slowly move the choke lever to the “OPEN” position as the engine warms. If the engine falters, move the choke lever to the “CLOSE” position, then to the “OPEN” position (Figure 29).

Figure 29 – Choke Lever




9. After each starting attempt, where the engine fails to run, always point the gun in a safe direction, and squeeze the spray gun trigger to release high pressure.
10. If the engine fails to start after six pulls, move the choke lever to the “OPEN” position, and repeat steps 6 through 10.

## ⚠ DANGER!

 The high pressure stream of water that this equipment produces can cut through skin and its underlying tissues, leading to serious injury, possible amputation or death. Spray gun traps high water pressure, even when engine is stopped and water is disconnected, which can cause injury.

- DO NOT allow CHILDREN to operate the power washer or play nearby.
- Keep the high pressure hose connected to the pump and spray gun while the system is pressurized.
- NEVER aim the spray gun at people, animals or electrical devices. Serious injury will result.
- DO NOT secure the spray gun in the open position.
- DO NOT leave the spray gun unattended while the machine is running.
- NEVER use a spray gun which does not have a trigger lock or trigger guard in place and in working order.
- Always be certain the spray gun, nozzles and accessories are correctly attached.

## ⚠ WARNING!

 Contact with the muffler area can result in serious burns. Exhaust heat/gases can ignite combustibles, structures or damage the fuel tank causing a fire.

- DO NOT touch hot parts and AVOID hot exhaust gases.
- Allow the equipment to cool before touching.
- Keep at least five (5) feet (152 cm) of clearance on all sides of the power washer including overhead.
- It is a violation of California Public Resource Code, Section 4442, to use or operate the engine on any forest-covered, brush-covered, or grass-covered land unless the exhaust system is equipped with a spark arrester, as defined in Section 4442, maintained in effective working order. Other states or federal jurisdictions may have similar laws.
- Replacement parts must be the same and installed in the same position as the original parts.

## AUTOMATIC COOL DOWN SYSTEM (THERMAL RELIEF)

If you run the engine on your power washer for 3-5 minutes without pressing the trigger on the spray gun, circulating water in the pump can reach temperatures above 125°F. The system engages to cool the pump by **discharging the warm water onto the ground.**

## ADJUSTABLE PRESSURE SETTING

Your pressure washer pump is equipped with a feature that allows you to adjust the pressure setting. The pump is preset at the factory to achieve the highest possible pressure. To decrease the pressure, turn the pressure control knob counterclockwise to the desired pressure. Turning the pressure control knob clockwise until it stops will set the pressure back to the factory setting.

## HOW TO STOP YOUR POWER WASHER

1. Release the spray gun trigger.
2. Move the throttle control lever on the engine to the "LOW" (turtle) position (Figure 30).

Figure 30 – Throttle Position



3. Turn the engine ON/OFF switch to the "OFF" position.
4. ALWAYS point the spray gun in a safe direction, and the squeeze spray gun trigger to release retained high water pressure. Engage the trigger lock when not in use.
5. Turn OFF the water supply.

**IMPORTANT:** The spray gun traps high water pressure, even when the engine is stopped and the water is disconnected.

### **▲ DANGER!**



The high pressure stream of water that this equipment produces can cut through skin and its underlying tissues, leading to serious injury, possible amputation or death. Spray gun traps high water pressure, even when engine is stopped and water is disconnected, which can cause injury.

- Keep the high pressure hose connected to the pump and spray gun while the system is pressurized.
- ALWAYS point the spray gun in a safe direction, squeeze the spray gun trigger to release high pressure every time you stop the engine. Engage the trigger lock when not in use.

## MAINTENANCE RECOMMENDATIONS

Regular maintenance will improve the performance and extend the life of the power washer. See any qualified dealer for service.

The power washer's warranty does not cover items that have been subjected to operator abuse or negligence. To receive full value from the warranty, the operator must maintain the power washer as instructed in this manual, including proper storage as detailed in Winter Storage and Long Term Storage.

### NOTE:

Should you have questions about replacing components on your power washer, please call 1-888-436-3722 for assistance.

Some adjustments will need to be made periodically to properly maintain your power washer.

All service and adjustments should be made at least once each season. Follow the requirements in the Maintenance Schedule chart.

### NOTE:

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

## MAINTENANCE SCHEDULE

Follow the hourly or calendar intervals, whichever occurs first. More frequent service is required when operating in adverse conditions.

First 5 Hours
Change engine oil
Every 8 Hours or Daily
Check/clean water inlet screen*
Check high pressure hose
Check detergent siphoning hose/filter
Check spray gun and assembly for leaks
Clean debris
Check engine oil level
Check pump oil level
Every 50 Hours or Every Season
Check/clean air cleaner filter**
Change pump oil**
Change engine oil**
Inspect muffler and spark arrester*
Every 100 Hours or Every Season
Service spark plug
* Clean if clogged. Replace if perforated or torn.
** Service more often under dirty or dusty conditions.

## EMISSIONS CONTROL

Maintenance, replacement, or repair of the emissions control devices and systems may be performed by any non-road engine repair establishment or individual. However, to obtain "no charge" emissions control service, the work must be performed by a factory authorized dealer. See the Emissions Warranty.

## POWER WASHER MAINTENANCE

### Clean Debris

Daily or before use, clean accumulated debris from the cleaning system. Keep the linkage, spring and controls clean. Keep the area around and behind the muffler free from any combustible debris. Inspect the cooling air slots and openings on the power washer. These openings must be kept clean and unobstructed.

Power washer parts should be kept clean to reduce the risk of overheating and ignition of accumulated debris.

- Use a damp cloth to wipe exterior surfaces clean.

#### NOTE:

**Improper treatment of the power washer can damage it and shorten its life.**

- DO NOT insert any objects through the cooling slots.
- Use a soft bristle brush to loosen caked on dirt, oil, etc.
- Use a vacuum cleaner to pick up loose dirt and debris.

## CHECK AND CLEAN INLET SCREEN

Examine the screen on the pump's water inlet. Clean the screen if it is clogged, or replace the screen if damaged.

## CHECK HIGH PRESSURE HOSES

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

#### ⚠ DANGER!



**The high pressure stream of water that this equipment produces can cut through skin and its underlying tissues, leading to serious injury, possible amputation or death. Spray gun traps high water pressure, even when engine is stopped and water is disconnected, which can cause injury.**

- NEVER repair high pressure hose. Replace it.
- Replacement hose rating MUST meet or exceed maximum pressure rating of unit.

## CHECK DETERGENT SIPHONING TUBE

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

## CHECK SPRAY GUN

Examine the hose connection to the spray gun and make sure it is secure. Test the trigger by pressing the trigger, it "springs back" into place when you release it. Replace the spray gun immediately if it fails to "spring back".

## NOZZLE MAINTENANCE

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

1. Shut off the engine and turn off the water supply.
2. ALWAYS point the spray gun in a safe direction, squeeze the spray gun trigger to release retained high water pressure.

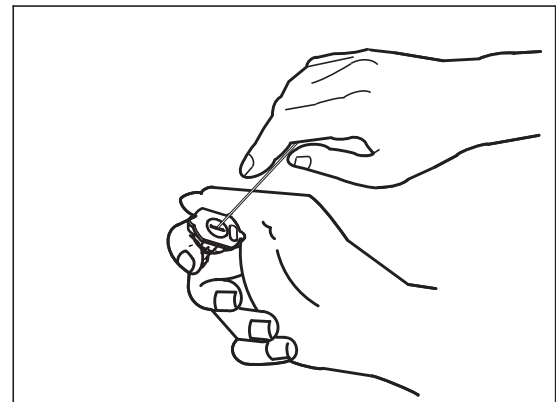
#### ⚠ DANGER!



**The high pressure stream of water that this equipment produces can cut through skin and its underlying tissues, leading to serious injury, possible amputation or death. Spray gun traps high water pressure, even when engine is stopped and water is disconnected, which can cause injury.**

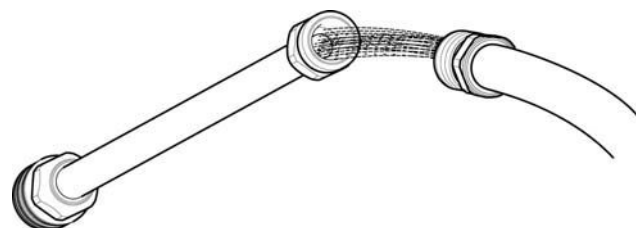
- Keep the high pressure hose connected to the pump and spray gun while the system is pressurized.
  - ALWAYS point the spray gun in a safe direction, and squeeze the spray gun trigger to release high pressure every time you stop the engine. Engage the trigger lock when not in use.
3. Remove the nozzle from the end of nozzle extension.
  4. Use a small paper clip to free any foreign material clogging or restricting the nozzle (Figure 31).
  5. Remove the lance from the spray gun.

**Figure 31 – Free Foreign Material**



6. Using a garden hose, remove additional debris by back flushing water through the lance (Figure 32) for 30 to 60 seconds.

**Figure 32 – Back Flush Lance**





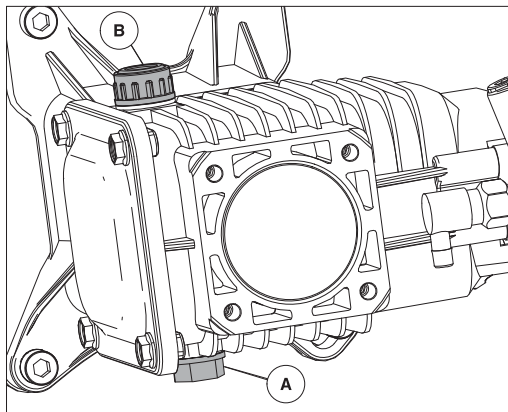
7. Reinstall the nozzle into the lance.
8. Reconnect the lance to the spray gun.
9. Make sure the garden hose is connected to the pump water inlet. Check that the high pressure hose is connected to the spray gun and pump. Turn on the water.
10. Start the engine following the instructions How to Start Your Power Washer.
11. Test the power washer by operating it with each quick connect nozzle.

## PUMP OIL MAINTENANCE

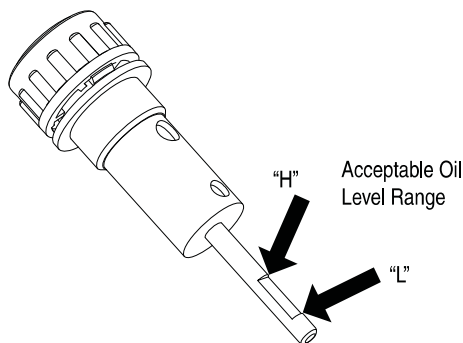
Change pump oil every 50 hours of operation.

1. Clean area around oil drain plug (A) (Figure 33).
2. Remove oil drain plug. Drain oil completely.
3. Install oil drain plug. Do not over tighten.
4. Clean Area around oil dipstick (B).
5. Fill pump with SAE 30 non-detergent oil. Oil level must be between the "L" and "H" mark on dipstick (Figure 34). **DO NOT OVERFILL.**
6. Install oil dipstick until finger tight.
7. Clean up any spilled oil.

**Figure 33 – Drain Pump Oil**



**Figure 34 – Dipstick**



## ENGINE MAINTENANCE

### ⚠ WARNING!



Unintentional sparking can result in fire or electric shock.

### WHEN ADJUSTING OR MAKING REPAIRS TO YOUR POWER WASHER:

- Disconnect the spark plug wire from the spark plug and place the wire where it cannot contact spark plug.

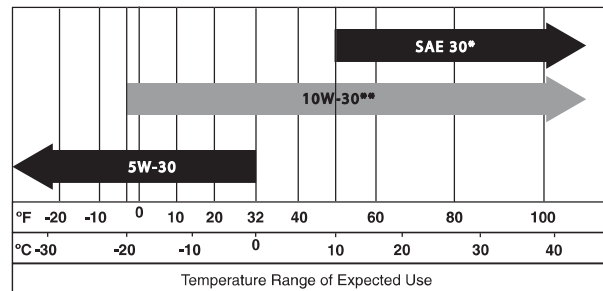
### WHEN TESTING FOR ENGINE SPARK:

- Use an approved spark plug tester.
- DO NOT check for spark with spark plug removed.

## ENGINE OIL RECOMMENDATIONS

We recommend the use of high-quality detergent oils acceptable if classified for service SF, SG, SH, SJ or higher. DO NOT use special additives.

Outdoor temperatures determine the proper oil viscosity for the engine. Use the chart to select the best viscosity for the outdoor temperature range expected.



\* Below 50°F (10°C) the use of SAE 30 will result in hard starting.

\*\* Above 80°F (27°C) the use of 10W30 may cause increased oil consumption. Check oil level more frequently.

### NOTE:

Synthetic oil meeting ILSAC GF-2, API certification mark and API service symbol with "SJ/CF ENERGY CONSERVING" or higher, is an acceptable oil at all temperatures. Use of synthetic oil does not alter required oil change intervals.

### NOTE:

The engine is equipped with an "Oil Alert System". This system will automatically stop the engine before the oil level falls below a safe limit. To avoid the inconvenience of an unexpected shutdown, always check the engine oil level before startup.

# Maintenance

## CHECKING OIL LEVEL

The oil level should be checked prior to each use or at least every 8 hours of operation. Keep the oil level maintained.

1. Make sure the power washer is on a level surface.
2. Clean area around oil fill cap (Figure 36).
3. Remove oil fill cap and wipe dipstick clean.
4. Insert dipstick into filler neck but do not screw it in.
5. Verify oil is at proper level on the dipstick (Figure 37).
6. Replace and tighten oil fill cap, finger tight.

## ADDING ENGINE OIL

1. Make sure the power washer is on a level surface.
2. Check the oil level as described in Checking Oil Level section.
3. If level is low, fill until the oil level is between "L" and "H" on the dipstick (Figure 37).
4. Verify oil level per the Checking Oil Level section.
5. Replace and tighten the oil fill cap, finger tight.

## CHANGING ENGINE OIL

If you are using your power washer under extremely dirty or dusty conditions, or in extremely hot weather, change the oil more often.

### ⚠ CAUTION!

#### ⚠ Avoid prolonged or repeated skin contact with used motor oil.

- Used motor oil has been shown to cause skin cancer in certain laboratory animals.
- Thoroughly wash exposed areas with soap and water.

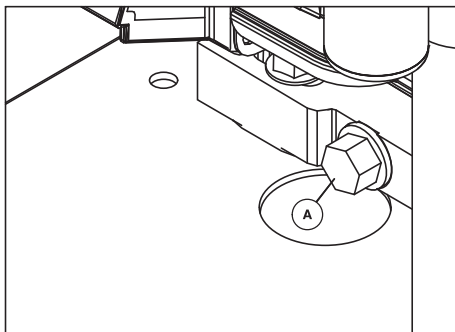
#### ⚠ KEEP OUT OF REACH OF CHILDREN.

- Don't pollute. Conserve resources. Return used oil to collection centers.

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

1. Make sure the unit is on a level surface.
2. Disconnect the spark plug wire from the spark plug and place the wire where it cannot contact spark plug.
3. Clean the area around the oil drain plug (A) (Figure 35). The oil drain plug is located at the base of the engine, opposite the carburetor.

Figure 35 – Oil Drain Plug



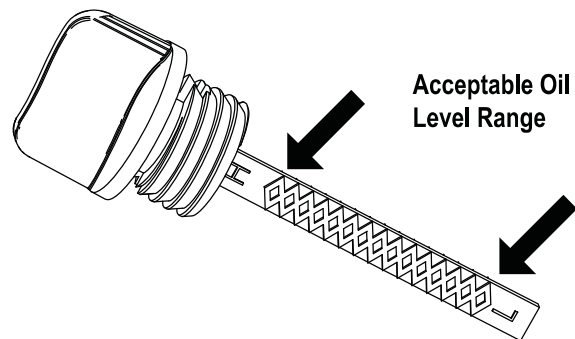
4. Remove the oil fill cap (Figure 36).
5. Remove the oil drain plug and drain oil completely into a suitable container.
6. Reinstall the oil drain plug and tighten securely.

Figure 36 – Fill Engine Oil



7. Slowly pour oil into the oil fill opening until the oil level is between "L" and "H" on the dipstick (Figure 37). **DO NOT overfill.**

Figure 37 – Dipstick



8. Install oil dipstick until finger tight.
9. Clean up any spilled oil.
10. Properly dispose of oil in accordance with all local regulations.

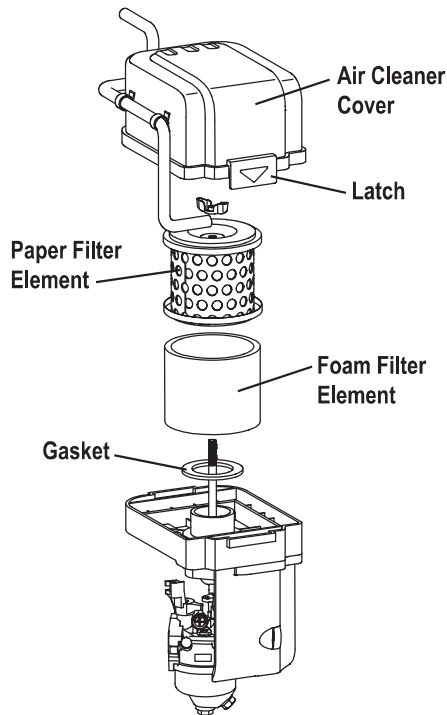
## SERVICE AIR CLEANER

Your engine will not run properly and may be damaged if you run it with a dirty air cleaner. Service more often if operating under dirty or dusty conditions.

To service the air cleaner, follow these steps:

1. Pull on air cleaner cover latch and remove cover (Figure 38).
2. Loosen wing nut.
3. Carefully remove filter assembly.
4. Remove foam filter.
5. To clean cartridge, gently tap on a flat surface.
6. Reinstall foam filter.
7. Reinstall clean or new cartridge assembly.
8. Reinstall wing nut and tighten.
9. Install cover by snapping latch closed.

**Figure 38 – Service the Air Cleaner**

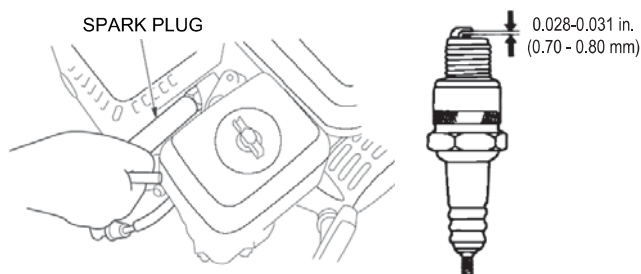


## SERVICE SPARK PLUG

Changing the spark plug will help the engine to start easier and run better.

1. Clean the area around the spark plug.
2. Remove and inspect the spark plug (Figure 39).
3. Check the electrode gap with a wire feeler gauge and reset the spark plug gap to the recommended gap, if necessary (see Specifications).
4. Replace the spark plug if the electrodes are pitted, burned or the porcelain is cracked. Use the recommended replacement plug. See Specifications.
5. Install the spark plug and tighten firmly.

**Figure 39 – Change the Spark Plug**



## INSPECT MUFFLER AND SPARK ARRESTER

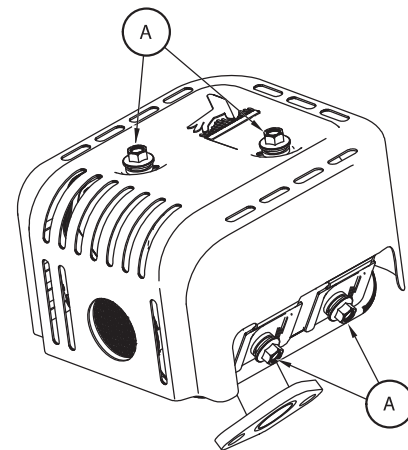
Inspect the muffler for cracks, corrosion, or other damage. Remove the spark arrester, if equipped, and inspect it for damage or carbon blockage. If replacement parts are required, make sure to use only original equipment replacement parts.

### REMOVE SPARK ARRESTER SCREEN

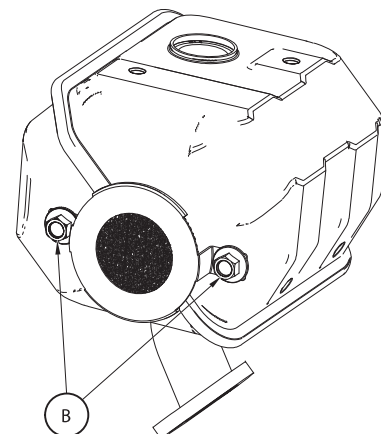
Tools Required: 8mm Box Wrench

1. Remove heat shield from the muffler by loosening the four (4) Bolts (A) (Figure 40).
2. Remove the spark arrester from the muffler by loosening the two (2) Bolts (B) (Figure 41).
3. Inspect the spark arrester, replace if torn, perforated or otherwise damaged (part number 0K1851). DO NOT USE A DEFECTIVE SCREEN.
4. If screen is not damaged, clean it with a commercial solvent and replace.

**Figure 40 – Remove Heat Shield**



**Figure 41 – Remove Spark Arrester**



## ⚠ WARNING!



Contact with muffler area can result in serious burns. Exhaust heat/gases can ignite combustibles, structures or damage fuel tank causing a fire.

- DO NOT touch hot parts and AVOID hot exhaust gases.
- Allow equipment to cool before touching.
- Keep at least 5 feet (152 cm) of clearance on all sides of the power washer including overhead.
- It is a violation of California Public Resource Code, Section 4442, to use or operate the engine on any forest-covered, brush-covered, or grass-covered land unless the exhaust system is equipped with a spark arrester, as defined in Section 4442, maintained in effective working order. Other states or federal jurisdictions may have similar laws.  
Contact the original equipment manufacturer, retailer, or dealer to obtain a spark arrester designed for the exhaust system installed on this engine.
- Replacement parts must be the same and installed in the same position as the original parts.

## AFTER EACH USE

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

1. Shut off the engine, turn off the water supply, point the gun in a safe direction, and squeeze the trigger to relieve trapped pressure, and let the engine cool.

## ⚠ DANGER!



The high pressure stream of water that this equipment produces can cut through skin and its underlying tissues, leading to serious injury, possible amputation or death. Spray gun traps high water pressure, even when engine is stopped and water is disconnected, which can cause injury.

- Keep the high pressure hose connected to the pump and spray gun while the system is pressurized.
  - ALWAYS point the spray gun in a safe direction, and squeeze the spray gun trigger to release high pressure every time you stop the engine. Engage the trigger lock when not in use.
2. Disconnect the hoses from the spray gun and high pressure outlet on the pump. Drain water from the hoses, spray gun, and lance. Use a rag to wipe off the hose.
  3. Empty the pump of all pumped liquids. Check that the engine ON/OFF switch and fuel valve are in the OFF position. Then pull the recoil handle about six times. This should remove most of the liquid in the pump.
  4. Store the unit in a clean, dry area.
  5. If storing for more than 30 days, see the Long Term Storage section.

## ⚠ WARNING!



Fuel and its vapors are extremely flammable and explosive. Fire or explosion can cause severe burns or death.

## WHEN STORING FUEL OR EQUIPMENT WITH FUEL IN TANK:

- Store away from furnaces, stoves, water heaters, clothes dryers, or other appliances that have a pilot light or other ignition source because they can ignite fuel vapors.

## WINTER STORAGE

### NOTE:

### You must protect the unit from freezing temperatures.

- Failure to do so will permanently damage the pump and render the unit inoperable.
- Freeze damage is not covered under the warranty.

To protect the unit from freezing temperatures:

1. Follow steps 1-3 in the previous section, After Each Use.
2. Use a pump saver to treat pump. This minimizes freeze damage and lubricates the pistons and seals.
3. If a pump saver is not available, connect a 3-foot section of garden hose to the water inlet adapter. Pour RV-antifreeze (antifreeze without alcohol) into the hose. Pull the recoil handle twice. Disconnect the 3-foot hose.
4. Store the unit in a clean, dry area.

## LONG TERM STORAGE

If you do not plan to use the power washer for more than 30 days, you must prepare the engine and pump for long term storage.

## PROTECT FUEL SYSTEM

Fuel can become stale when stored for over 30 days. Stale fuel causes acid and gum deposits to form in the fuel system or on essential carburetor parts. To keep the fuel fresh, use a fuel stabilizer, available as a liquid additive or a drip concentrate cartridge.

There is no need to drain the gasoline from the engine if a fuel stabilizer is added according to instructions. Run the engine for 2 minutes to circulate the stabilizer throughout the fuel system. The engine and fuel can then be stored up to 24 months (per fuel stabilizer manufacturer's specifications).

If the gasoline in the engine has not been treated with a fuel stabilizer, it must be drained into an approved container. Run the engine until it stops from lack of fuel. The use of a fuel stabilizer in the storage container is recommended to maintain freshness.

## CHANGE OIL

While the engine is still warm, drain the oil from crankcase. Refill with the recommended grade. See Changing Engine Oil in Engine Maintenance.

## ***PROTECTING THE PUMP***

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To protect the pump from damage caused by mineral deposits or freezing, use PumpSaver or RV-antifreeze to treat the pump. This prevents freeze damage and lubricates pistons and seals.

- Failure to do so will permanently damage the pump and render the unit inoperable.
- Freeze damage is not covered under warranty.

To protect the unit from freezing temperatures:

1. Follow steps 1-3 in the previous section After Each Use.
2. Use a pump saver to treat pump. This minimizes freeze damage and lubricates pistons and seals.
3. If a pump saver is not available, connect a 3-foot section of garden hose to the water inlet adapter. Pour RV-antifreeze (antifreeze without alcohol) into the hose. Pull the recoil handle twice. Disconnect the 3-foot hose.
4. Store unit in a clean, dry area.

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## **OTHER STORAGE INSTRUCTIONS**

1. DO NOT store fuel from one season to another unless it has been treated as described in Protect Fuel System.
2. Replace the fuel container if it starts to rust. Rust and/or dirt in fuel can cause problems if it's used with this unit.
3. Cover the unit with a suitable protective cover that does not retain moisture.

### **▲ WARNING!**

**Storage covers can be flammable.**



- DO NOT place a storage cover over a hot power washer.
- Let the equipment cool for a sufficient time before placing the cover on the equipment.

4. Store the unit in a clean, dry area.

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## **TRANSPORTING/TIPPING OF THE UNIT**

Do not operate, store or transport the unit at an angle greater than 15 degrees.



## TROUBLESHOOTING GUIDE

PROBLEM	CAUSE	CORRECTION
<b>Pump has following problems: failure to produce pressure, erratic pressure, chattering, loss of pressure, low water volume.</b>	<ol style="list-style-type: none"> <li>1. Low pressure nozzle installed.</li> <li>2. Water inlet is blocked.</li> <li>3. Inadequate water supply.</li> <li>4. Inlet hose is kinked or leaking.</li> <li>5. Clogged inlet hose screen.</li> <li>6. Water supply is over 100°F.</li> <li>7. High pressure hose is blocked or leaks.</li> <li>8. Spray gun leaks.</li> <li>9. Nozzle is obstructed.</li> <li>10. Pump is faulty.</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace with high pressure nozzle.</li> <li>2. Clear inlet.</li> <li>3. Provide adequate water flow.</li> <li>4. Straighten inlet hose, patch leak.</li> <li>5. Check and clean inlet hose screen.</li> <li>6. Provide cooler water supply.</li> <li>7. Clear blocks in outlet hose or replace hose.</li> <li>8. Replace spray gun.</li> <li>9. Clean nozzle.</li> <li>10. Contact local service facility.</li> </ol>
<b>Detergent fails to mix with spray.</b>	<ol style="list-style-type: none"> <li>1. Detergent siphoning tube is not submerged.</li> <li>2. Detergent siphoning tube/filter is clogged or cracked.</li> <li>3. High pressure nozzle installed.</li> </ol>	<ol style="list-style-type: none"> <li>1. Insert detergent siphoning tube into detergent.</li> <li>2. Clean or replace filter/detergent siphoning tube.</li> <li>3. Replace with low pressure nozzle.</li> </ol>
<b>Engine runs well at no-load but "bogs" when load is added.</b>	<ol style="list-style-type: none"> <li>1. Engine speed is too slow.</li> </ol>	<ol style="list-style-type: none"> <li>1. Move throttle control to FAST position. If engine still "bogs down", contact local service facility.</li> </ol>
<b>Engine will not start; or starts and runs rough.</b>	<ol style="list-style-type: none"> <li>1. Low oil level, "Oil Alert System".</li> <li>2. Dirty air cleaner.</li> <li>3. Out of fuel.</li> <li>4. Stale fuel.</li> <li>5. Spark plug wire not connected to spark plug.</li> <li>6. Bad spark plug.</li> <li>7. Water in fuel.</li> <li>8. Excessively rich fuel mixture.</li> </ol>	<ol style="list-style-type: none"> <li>1. Fill crankcase to proper level.</li> <li>2. Clean or replace air cleaner.</li> <li>3. Fill fuel tank.</li> <li>4. Drain fuel tank; fill with fresh fuel.</li> <li>5. Connect wire to spark plug.</li> <li>6. Replace spark plug.</li> <li>7. Drain fuel tank; fill with fresh fuel.</li> <li>8. Contact local service facility.</li> </ol>
<b>Engine shuts down during operation.</b>	<ol style="list-style-type: none"> <li>1. Out of fuel.</li> </ol>	<ol style="list-style-type: none"> <li>1. Fill fuel tank.</li> </ol>
<b>Engine lacks power.</b>	<ol style="list-style-type: none"> <li>1. Dirty air filter.</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace air filter.</li> </ol>