

- Operator's manual
- Parts manual



Hot water pressure washer  
Cold water pressure washer

---

# GEYSER G3040EA



Manual number: N120VW-0110-A  
REVISION 3

Real product may be different from picture.



# Table of contents

<b>Specifications</b> .....	4
<b>To the purchaser</b>	
Product registration .....	5
<b>Safety precautions</b>	
Description of warnings .....	6
Description of safety symbols and hazard warnings.....	6
Warning labels .....	7
Safety.....	8 to 12
<b>Installation instructions</b> .....	13
<b>Operation instructions</b>	
Preparation .....	14
Filling the fuel tank .....	14
Cold water pressure washing.....	15
Hot water pressure washing .....	15
Injecting soap .....	16
Stopping procedure.....	17
Winterization.....	17
<b>Maintenance</b>	
Pump oil change .....	18
Descaling the heating coil .....	19
Storage .....	19
<b>Periodic maintenance schedule table</b> .....	20
<b>Trouble shooting guide</b>	
Engine .....	21
Pump .....	22-23
Regulator .....	24
Soap injector.....	25
Oil burner .....	25-26
Automatic Start & Stop .....	27
<b>Limited warranty</b> .....	28

# Specifications

## General Features

<b>Use</b>	Industrial
<b>Engine</b>	8 HP, 240 V, 35 A, 1 phase, 60 Hz
Rotation speed	1750 rpm
Shaft	Solid shaft, 1-1/8"
Supply	240 V
Current	35 A
Power supply cord	7 m, 8/3 SOOW
Start & stop	Automatic, stop delay
<b>Pump</b>	Comet, CO-RWS4030E
Rotation speed	1750 rpm
Type	Ceramic plunger pump
Drive	Direct drive, hollow shaft pump
<b>Pump protection</b>	Metal screen filter 140°F thermal protector
<b>Pressure hose</b>	3/8 in x 50' x 6000 psi
<b>Spraying gun</b>	5000 psi x 12 gpm
<b>Wand</b>	Single, 36"
<b>Burner</b>	1/7 HP, 240 V, 1.2 A
Controls	24 V
Safety valve	3500 psi (241 bar)
Oil nozzle	DELAVAN 2.50 – 90°W
Oil pressure	130 psi (9.0 bar)
Air shutter	4
Air band	10
Maximum oil consumption	2.7 gph (10.2 l/h)
Btu/h, input	375 000
Btu/h, net	280 000
Tank capacity	9.7 US gal (37 l)
Flue collar diameter	8 in
<b>Overall dimensions (L x W x H)</b>	53" x 31" x 48" (135 cm x 79 cm x 122 cm)
<b>Weight (empty tanks and plumbing)</b>	590 lb (268 kg)
<b>Weight (full tanks and plumbing)</b>	668 lb (303 kg)
<b>Gun and wand weight</b>	2.75 lb (1.25 kg)

## Pressure washer mode specifications

<b>Maximum flow rate</b>	4.0 US gpm (15.1 l/min)
<b>Maximum pressure</b>	3000 psi (207 bar)
<b>Soap injection</b>	Low pressure type Adjustable rate Activation by soap nozzle
<b>Pressure nozzles</b>	15045, 25045, 40045
<b>Soap nozzle</b>	6540
<b>Burner exhaust temperature</b>	More or less - 713°F (378°C)
<b>Burner carbon monoxide emission</b>	More or less - 30 ppm
<b>Water temperature rise at full flow</b>	150°F (83°C)
<b>Nozzle weight</b>	0.6 oz (17 g)

## To the purchaser

All products are designed to give safe, dependable service if they are operated and maintained according to instructions. **Read and understand this manual before operation.**

This manual has been prepared to assist the owner and operators in the safe operation and suitable maintenance of the hot water pressure washer. The information is applicable to products at the time of manufacture and does not include modifications made afterwards.

Read and understand this operator's manual before attempting to put equipment into service. Familiarize yourself with the operating instructions and all the safety recommendations contained in this manual and those labeled on the equipment. Follow the safety recommendations and make sure that those with whom you work follow them.

### Illustrations

The illustrations may not necessarily reproduce the full detail and the exact shape of the parts or depict the actual models, but are intended for reference only.

**To assist your dealer in handling your needs, please record hereafter the model number and serial number of your machine. It is also advisable to supply them to your insurance company. It will be helpful in the event that the machine is lost or stolen.**

**Model :** \_\_\_\_\_

**Serial number :** \_\_\_\_\_

**Date of purchase :** \_\_\_\_\_

**Dealer name :**  
\_\_\_\_\_

**Dealer phone number :** \_\_\_\_\_

## Safety -Description of warnings



### DANGER

The «DANGER» symbol is used to outline a situation where danger is imminent and must be strictly avoided. Failure to comply could result in serious damage to equipment, personal injury or even death.



### WARNING

The «WARNING» symbol describes the potential for danger or improper set up and that should be avoided. Failure to comply could result in serious damage to equipment, personal injury or even death.



### CAUTION

The «CAUTION» symbol indicates the potential for a dangerous situation that can be avoided. Failure to take notice could result in potential equipment damage and/or minor to moderate personal injury.

Carefully read and follow the instructions or recommendations provided in each paragraph segment under the headings of «DANGER», «WARNING» and «CAUTION». In each case the paragraphs provide important information that should be to read.

It is recommended after reading this information manual, a copy is kept as a future reference or for other operators to read.

## Safety- Description of safety symbols



### PROHIBITED

The « Prohibited » symbol signifies something « that should not be done ». As a general indication, the following symbol will be used in this operator's manual to outline a prohibited action or procedure.



### MANDATORY

The « Mandatory » symbol signifies something « that must be done ». As a general indication the following symbol will be used in this operator's manual to outline a mandatory action or procedure.

### IMPORTANT

Indicates that machine or property damage could result if instructions are not followed.

## Safety -Description of hazard warnings



FIRE



EXPLOSION



TOXIC FUMES



ELECTRIC SHOCK



FLYING OBJECTS



HOT SURFACE



HIGH PRESSURE



SLIPPERY

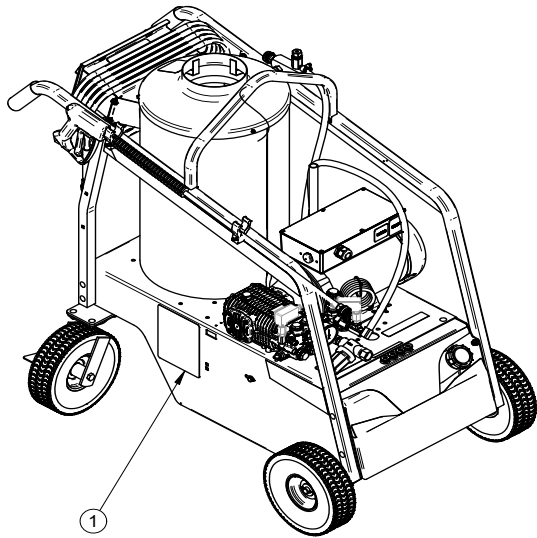


FALL



KICK BACK

# Safety- Product labels / Warning labels



Produit en Canada par / Manufactured in Canada by

**M.S. Gregson**  
230, route 680, Terrebonne, Québec, Canada, J2R 8Y4  
www.mgregson.com

MODEL / MODÈLE	IF / IFR	IF / IFR
CALIBRE / DIM.	INPT / IN	INPT / IN
VITES / VELOC.	AMP / AMP	AMP / AMP
POMPE / PUMP	PREL / PREL	PREL / PREL
MOTEUR / MOTOR	IF	IF

DATE D'ACHAT / CL. NOUVEAU	MANUFACTURER
PRESSION / PRESSURE, PSI	QUANTITÉ, GAL. (L) / QUANTITY, US GAL.
STY / N° DE SÉRIE	UTILISER DEL TABLE AU DRE PLUS LOUAIN / USE AT DR. (SEE LAST PAGE)

**AVERTISSEMENT**  
NE PAS FAIRE FONCTIONNER CETTE MACHINE SANS SURVEILLANCE. NE S'ADAPTE PAS À UN CONDUIT SPRAYEURS DE TYPE A.  
CETTE MACHINE DOIT ÊTRE UTILISÉE SUR UN PLANCHER INCOMBUSTIBLE ET À UNE DISTANCE MINIMUM DE 2 PIEDS DE TOUT MATÉRIEL COMBUSTIBLE.

**WARNING**  
THIS MACHINE MUST BE ATTENDED DURING OPERATION. NOT SUITABLE FOR CONNECTION TO TYPE A GAS LINE.  
THIS MACHINE MUST BE USED ON AN INCOMBUSTIBLE FLOOR AND AT A MINIMUM DISTANCE OF 2 FEET FROM COMBUSTIBLE MATERIAL.

**AVERTISSEMENT**  
LA PULVÉRISATION D'UN LIQUIDE COMBUSTIBLE PEUT ENTRAÎNER UN RISQUE D'INCENDIE OU D'EXPLOSION, SURTOUT DANS DES ESPACES FERMÉS. LIRE LES INSTRUCTIONS DU FABRICANT AVANT DE METTRE EN MARCHÉ.

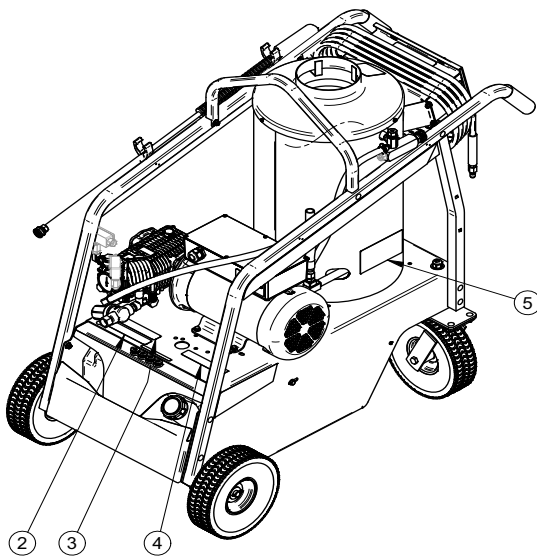
**WARNING**  
WHEN A COMBUSTIBLE LIQUID IS SPRAYED, THERE MAY BE DANGER OF FIRE OR EXPLOSION, ESPECIALLY IN A CLOSED AREA. READ INSTRUCTION MANUAL BEFORE OPERATING.

**AVERTISSEMENT**  
SI CET APPAREIL EST RACCORDÉ À UN RÉSEAU D'EAU POTABLE, CE DERNIER DOIT ÊTRE PROTÉGÉ CONTRE LES RETOURS.

**WARNING**  
IF CONNECTION IS MADE TO A DRINKING WATER SYSTEM, THE SYSTEM SHOULD BE PROTECTED AGAINST BACKFLOW.

**AVERTISSEMENT**  
HUILE À CHAUFFAGE N° 2 (OU N° 1)

**WARNING**  
FURNACE OIL N° 2 (OR N° 1)



**RÉSUMÉ DES INSTRUCTIONS**  
LIRE LE MANUEL DE L'UTILISATEUR AVANT DE METTRE CETTE MACHINE EN MARCHÉ

**SUMMARY OF INSTRUCTIONS**  
READ THE OPERATOR'S MANUAL BEFORE STARTING THIS MACHINE

**1. MISE EN MARCHÉ**  
a) Remplir le réservoir d'huile #2 (ou plus légère).  
b) S'assurer que la machine est alimentée en eau.  
c) Mettre en marche le moteur de la pompe.  
d) Mettre en marche le brûleur.  
e) Ajuster le thermostat à la température désirée.  
f) Enclencher le pistolet.

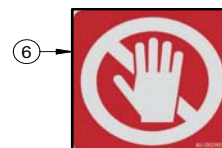
**2. INJECTION DE SAVON**  
Voir le manuel de l'utilisateur.

**3. MISE À L'ARRÊT**  
a) Tourner le thermostat à la position «OFF».  
b) Arrêter le brûleur.  
c) Tenir le pistolet enclenché jusqu'à ce que l'eau soit à moins de 100 °F (40 °C).  
d) Arrêter le moteur de la pompe.

**1. START UP**  
a) Fill the tank with #2 oil (or lighter).  
b) Make sure the machine is supplied with water.  
c) Start the pump motor (or engine).  
d) Start the burner.  
e) Adjust the thermostat to desired temperature.  
f) Engage the gun.

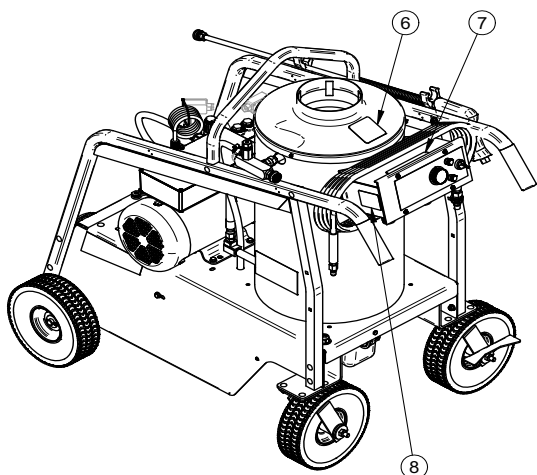
**2. SOAP INJECTION**  
See the operator's manual.

**3. STOPPING**  
a) Turn off the thermostat.  
b) Stop the burner.  
c) Keep the gun engaged until water is below 100°F (40°C).  
d) Stop the pump motor (or engine).



**AVERTISSEMENT**  
• LA MACHINE DOIT ÊTRE MISE À LA TERRE.  
• EST DANGEREUX PANNOSER LE MATÉRIEL, ET LES CÂBLES ÉLECTRIQUES.  
• ÉVITER LES ÉLECTRIQUES, NE PAS PLACER LE MOTEUR À MOINS DE 6 MÈTRES DE VAPEURS EXPLOSIVES.  
• HAUTE PRESSION, NE PAS S'APPROCHER DE LA BUSE.  
• NE PAS LASSER EN MARCHÉ PLUS DE 3 MINUTES SANS UTILISATEUR.  
• PROTÉGER DU GEL.

**WARNING**  
• THE MACHINE MUST BE ELECTRICALLY GROUNDED.  
• DO NOT SPRAY ELECTRICAL APPARATUS AND WIRING.  
• ELECTRIC SHOCKS, KEEP THE MOTOR AT LEAST 6 METERS AWAY FROM EXPLOSIVE VAPOURS.  
• HIGH PRESSURE, KEEP CLEAR OF NOZZLE.  
• DO NOT LET RUN MORE THAN 3 MINUTES WITHOUT USE.  
• PROTECT FROM FREEZING.



**ATTENTION**  
Départ et Arrêt Automatique Automatic Start & Stop Control

L'interrupteur principal DOIT TOUJOURS être en position "OFF" au période de non-utilisation.

The main switch SHOULD ALWAYS BE in "OFF" position when washer is not used.

## Safety - Before you get started/Machine Precautions







### **WARNING**



- Read and understand the pressure washer manual before using it. Know how to operate all controls and how to stop the unit. Lack of knowledge can lead to accidents.
- Use with CAUTION. High pressure spray can cause serious bodily injury.
- Always wear long-sleeve shirt, pants, closed-toed shoes and appropriate personal protective equipment (gloves, goggles, apron) when handling chemicals.

### **WARNING**



-  DO NOT run the pressure washer without the water source being connected and flowing into the pump.
-  DO NOT let the unit freeze.
-  DO NOT modify or alter this product or any of its components.
-  • Check parts for excessive wear regularly. Replace worn parts with genuine parts.
-  • Always make sure all components are properly installed and securely fastened before operation.
-  • Always follow chemical manufacturer's instructions before injecting soap or chemical products.



### WARNING



**This product is designed to be used outdoors.**

- ⊘ NEVER operate this unit in an enclosed area even if the windows are open.
- **Running the burner gives off carbon monoxide**, an odorless, colorless, poison gas. Breathing carbon monoxide can cause headache, fatigue, dizziness, vomiting, confusion, seizure, nausea, fainting or death.
- **Ensure that exhaust gas** cannot enter confined area through windows, doors, ventilation intakes, or other openings.
- **Certain chemicals or detergents may be harmful** if inhaled or ingested, causing severe nausea, fainting, or poisoning.
- Use a respirator or mask whenever there is a risk that vapor may be inhaled.
- When using a mask- READ manufacturer instructions to ensure the mask can provide optimal protection.

### WARNING








**Fuel and fuel vapors are extremely flammable and explosive.**

**Fire or explosion can cause severe burns or death.**

- ⊘ NEVER operate near sparks, open flames, pilot lights, heat, and other ignition sources.
  - ⊘ DO NOT light a cigarette or smoke.
    - Fill or drain fuel tank outdoors.
    - DO NOT overfill tank. Refuel slowly to avoid spilling fuel. Allow space for fuel expansion.
    - DO NOT operate if fuel spills, wait until it evaporates before starting the machine.
- Operating Equipment**
- DO NOT tip engine or equipment at angle that causes fuel to spill.
  - DO NOT spray flammable liquids.
- Transporting or Repairing Equipment**
- Transport/repair with fuel tank EMPTY or with fuel shutoff valve OFF.
- Storing Fuel or Equipment with Fuel in Tank**
- DO NOT store unit near furnaces, stoves, water heaters, clothes dryers, or other appliances that have pilot light or other ignition source which can create a spark that can ignite fuel vapors.

## Safety – Precautions High Pressure Stream/Slippery Surfaces

 <b>WARNING</b>	
	<p><b>High velocity spray fluids can penetrate skin, causing serious injury. In the event that an accident occurs and spray appears to have penetrated the skin, SEEK EMERGENCY MEDICAL ATTENTION. DO NOT treat water penetration into the skin as a simple cut. If cleaning and/or soaping agents are being used, advise the physician of the exact type.</b></p> <ul style="list-style-type: none"><li>⊘ DO NOT allow CHILDREN or teenagers to operate pressure washer.</li><li>⊘ NEVER aim spray gun at people, animals, or plants.<ul style="list-style-type: none"><li>• ALWAYS point spray gun in safe direction and squeeze spray gun trigger, to release high pressure, every time you stop the machine.</li><li>• NEVER repair high pressure hose. Replace it.</li><li>• NEVER repair leaking connections with sealant of any kind. Replace worn o-ring or seal.</li><li>• NEVER connect high pressure hose to nozzle extension.</li><li>• Keep high pressure hose connected to pump and spray gun while system is pressurized.</li><li>• DO NOT secure spray gun in open position.</li><li>• DO NOT leave spray gun unattended while machine is running.</li><li>• NEVER use a spray gun which does not have a trigger lock or trigger guard in place and in working order.</li><li>• ALWAYS be certain spray gun, nozzles and accessories are correctly attached.</li></ul></li></ul>

 <b>WARNING</b>	
 	<p><b>Using a pressure washer can create puddles and slippery surfaces.</b></p> <p><b>Kickback from spray gun can cause you to fall.</b></p> <ul style="list-style-type: none"><li>• The thrust from water travelling through the hose and nozzle can be powerful enough to cause the operator to loose balance or footing.</li><li>• Avoid injury from potential kickback. Use both hands to firmly grasp spray gun/wand when using high pressure .</li><li>• Operate pressure washer from a stable surface.</li><li>• NEVER trigger the spray gun while on a ladder or roof.</li><li>• DO NOT overreach or stand on an unstable surface.</li><li>• Ensure there is an adequate slope in the cleaning area to drain excess water and reduce the possibility of a fall due to slippery surfaces.</li></ul>

## Safety – Precautions Protective Gear/Electrical Shock



### WARNING



#### **Risk of eye injury.**

#### **High pressure spray can propel loose stones or objects at high velocity.**

- Always wear safety goggles and protective clothing when using this equipment or in vicinity of where equipment is in use.
- Before starting the pressure washer, be sure you are wearing adequate safety apparel, goggles, boots, gloves and work clothing.
- DO NOT substitute safety goggles for safety glasses.



### WARNING



#### **Unintentional sparking can result in fire or electric shock.**

- NEVER direct the jet toward the machine or toward any electrical power source (fuse box, transformer, electrical outlet) or appliance.
- NEVER use in the rain or during a thunderstorm.
- Always plug the washer to a grounded circuit.
- The electric power supply for the washer must be equipped with a circuit breaker or fuse.
- NEVER let the power supply cord soak in water.
- Always disconnect power supply before repairing or servicing.
- NEVER pull the power supply cord to unplug the washer.
- NEVER move the washer by pulling a hose or power supply cord

#### **When Adjusting or Making Repairs to Your Pressure Washer**

- Disconnect the power supply.



### WARNING



- DO NOT touch hot parts and AVOID hot exhaust gases.
- Allow equipment to cool before touching.
- Keep at least 5 feet (1.5 m) of clearance on all sides of pressure washer- including above the unit.



### IMPORTANT

- If you have questions about intended use, ask dealer or contact the nearest authorized servicing dealer.
- STAY ALERT when using a pressure washer.
- DO NOT operate when fatigued or under the influence of alcohol or drugs or medications that make restrictions about operating equipment.
- FAILURE to follow warnings below can cause hazardous operating conditions and will void all product warranties.
- DO NOT by-pass any safety device on this machine.
- DO NOT operate pressure washer above rated pressure.
- DO NOT alter or modify the equipment.
- NEVER operate units with broken or missing parts, or without protective housing or protective covers.
- Before starting pressure washer in cold weather, check all parts of the equipment to be sure ice has not formed.
- NEVER move machine by pulling on hoses. Use the handle.
- Use frame to securely tie down the unit while transporting in all types of vehicles.
- 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 pressure washer.

# Installation instructions

## Hose reel installation (optional)

Follow the instructions shown in figure 1 for the hose reel installation.

1. Install the coupler to the reel exit (items 10 and 11).
2. Install the twist coupler to the reel entry (item 10).
3. Install the reel to the reel support with carriage bolts 5/16" x 1 3/4" and serrated flange locknuts 5/16" (items 6 and 7).
4. Connect the short hose to twist coupler at the reel entry (item 2).
5. Install the quick coupler at the other end of the hose (item 1).
6. Connect the quick coupler of the hose at the machine outlet (detail A).
7. Connect the spray gun hose to the reel outlet.

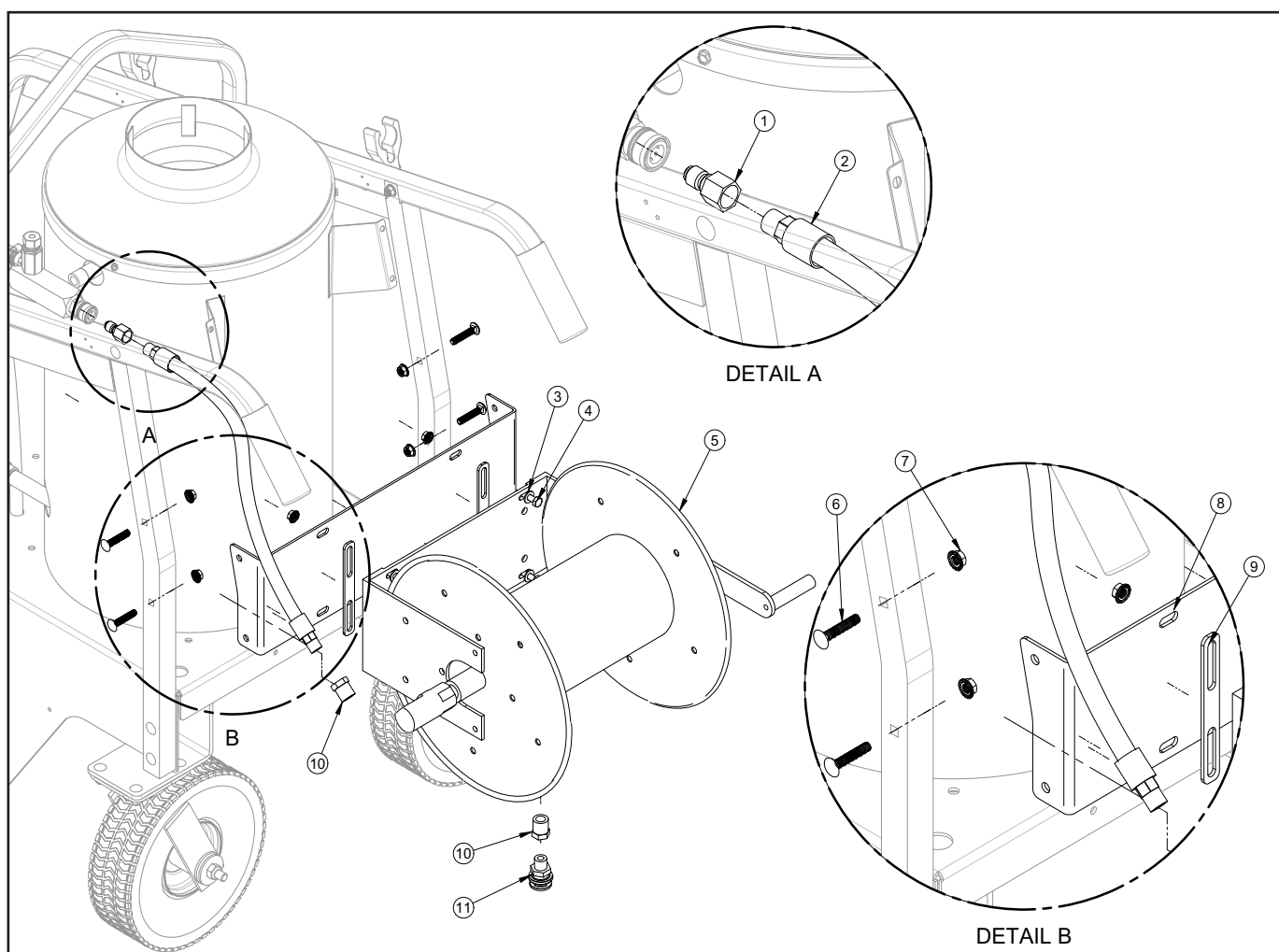


Figure 1

# Operation instructions

## Preparation

1. Make sure that all hoses are in good state, not cracked or crushed.
2. Check the oil level of the pump. Pump must be in a level position. Oil level must be halfway on the sight glass (A on figure 2) or visible on the dipstick (B on figure 2).
3. Check the presence and state of the water inlet gasket (D on figure 3).
4. Check the water inlet filter. Unscrew the bowl (C on figure 3) and rinse if needed. Remove and clean the filter screen (E on figure 4). Put back in place the screen and bowl.
5. Check the state of the fuel oil filter (F on figure 5). Replace the filter if it is damaged or dirty.

**⚠ WARNING:** to avoid injuries :

- Before inspecting, cleaning, or repairing, make sure the machine is parked on a flat level surface, with wheel brake on.
- Risk of injection; always put the safety-catch on the gun as soon as the gun is not used, and especially for replacement of nozzles.
- Always wear long clothes, gloves and safety glasses when inspecting, cleaning, repairing and operating this machine.

## Filling the fuel tank

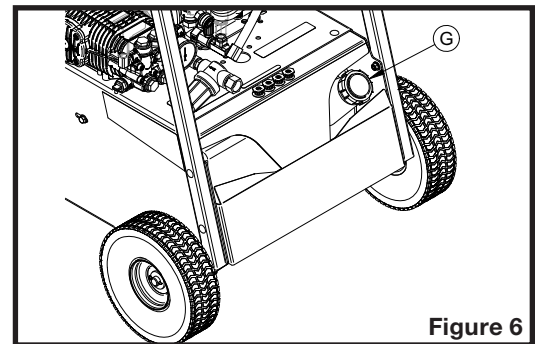
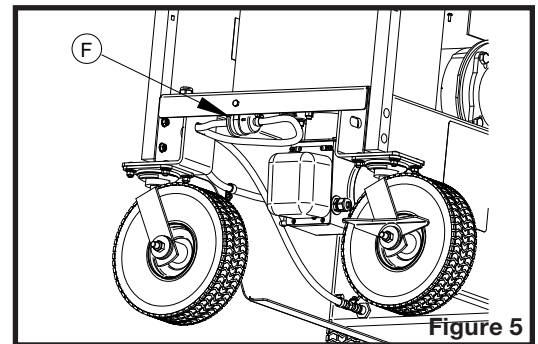
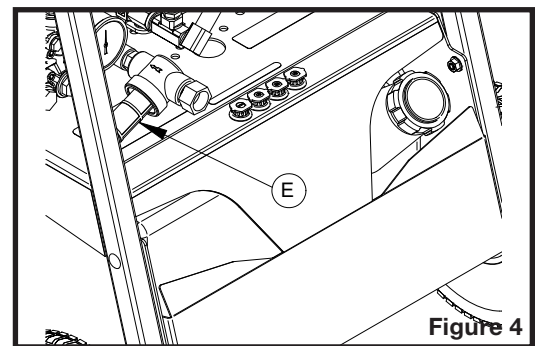
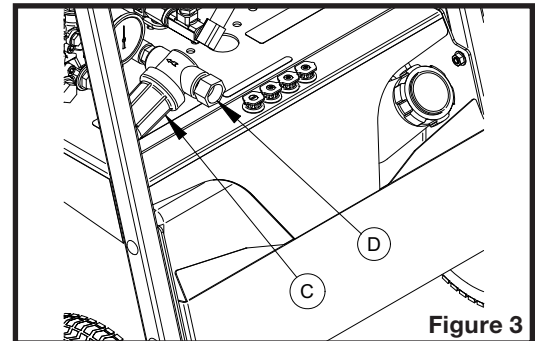
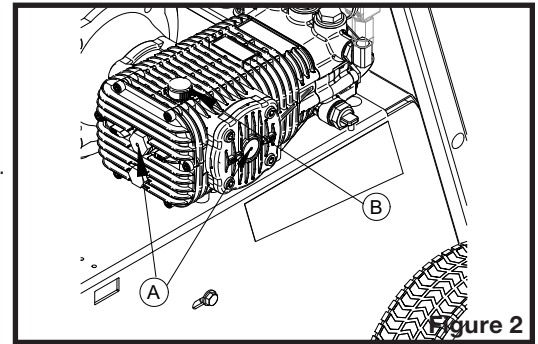
1. Remove the cap (G on figure 6) from the oil tank.
2. Fill with #2 furnace oil (or lighter) or diesel. Do not overfill. Do not fill the collar of the tank. Do not use gasoline, crankcase draining or oil containing gasoline or solvents.
3. Screw back the oil tank cap.

**⚠ DANGER:**

- Do not remove fuel cap nor add fuel when the machine is running.

**⚠ WARNING:**

- Refuel outdoors only and in a well-ventilated area with the equipment stopped.
- If any fuel is spilled, clean it up completely and allow vapors to dissipate before starting the machine.
- Do not refuel while smoking, near an open flame, sparks, or other heat source.



## Operation instructions

### Cold water pressure washing

1. Connect a water supply hose to the pump inlet (H on figure 7) and open the hose valve. The supply hose flow rate must exceed the pump flow rate and the pressure must be at least 30 psi but must not exceed 80 psi.
2. Depress the gun trigger (J on figure 9) until water flows out limp and regularly. Release the gun trigger.
3. Install a high pressure nozzle (I on figure 8) at the wand outlet (K on figure 9):  
Yellow = 15° angle, heavy dirt  
Green = 25° angle, medium dirt  
White = 40° angle, light dirt or rinse.
4. Connect the attachment plug to a proper electrical source. Circuit breaker for this source should match with the washer nominal current. If an extension cord is used, it should be the same size as the washer power cord or larger if washer cord and extension cord total length exceeds 35 ft. Turn pump switch (N in figure 11) to cold water position.
5. Depress the gun trigger (J on figure 9) to start the pump motor.
6. Set the lance to «rinse» position (see soap injection part below)
7. Press the gun trigger and wash. Operate the gun continuously. Do not press and release the trigger in cycles of less than 5 seconds.
8. Pressure can be adjusted by means of the high pressure regulator (L on figure 10) up to 3000 psi. Pressure is read on the pressure gauge (M on figure 10).
9. To stop, see section “Stopping procedure” further in this manual.
10. The washer is equipped with an automatic start/stop control, it should start once the gun is triggered and stop 30 seconds after the gun trigger has been released.

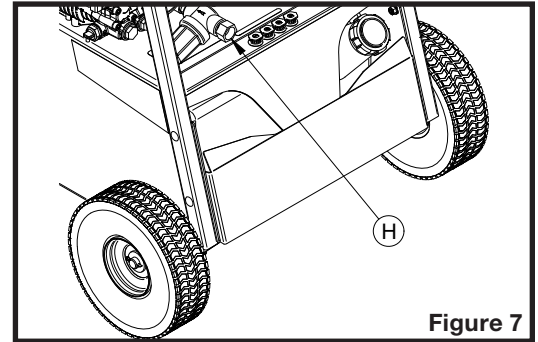


Figure 7

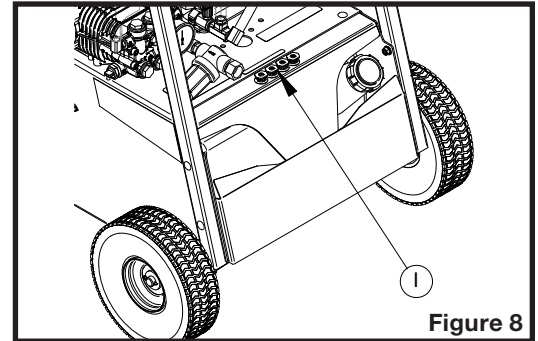


Figure 8

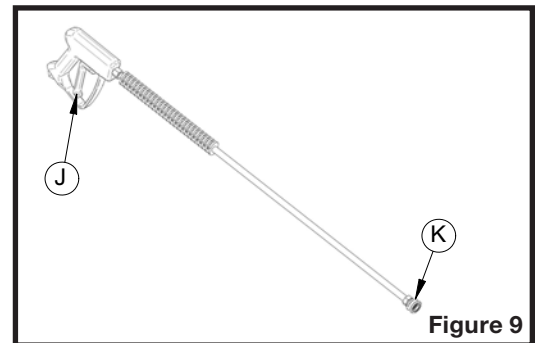


Figure 9

### Hot water pressure washing

1. Fill the fuel tank (see “Filling the fuel tank” previous section).
2. Follow steps 1 to 8 from “Cold water pressure washing” previous section.
3. Turn the switch (N on figure 11) to hot water position.
4. Adjust the thermostat (O on figure 11) to desired temperature.
5. Do not let the burner run when the oil tank is empty. Oil pump would be damaged.
6. To stop, see section “Stopping procedure” further in this manual.

#### WARNING:

- The outlet plumbing, hose reel, hose, gun, wand and nozzles become very hot. Do not touch with bare hand.
- If any fuel is spilled, clean it up completely and allow vapors to dissipate before starting the machine.
- Do not refuel while smoking, near an open flame, sparks, or other heat source.

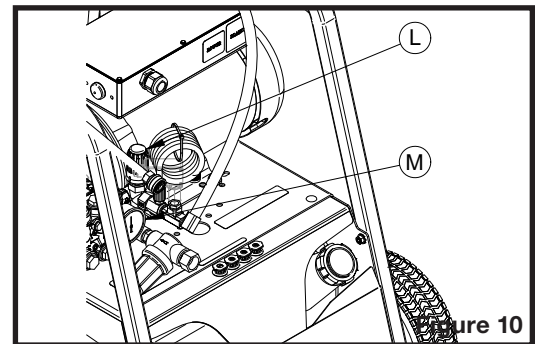


Figure 10

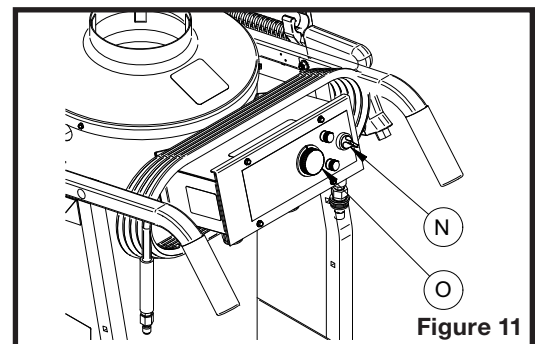


Figure 11

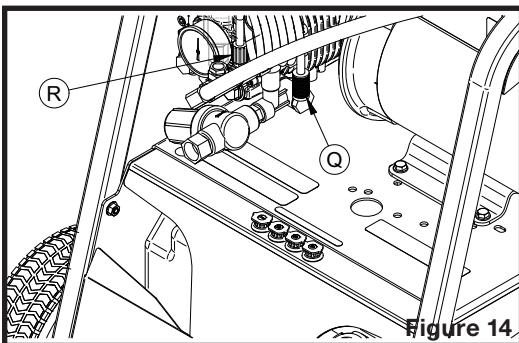
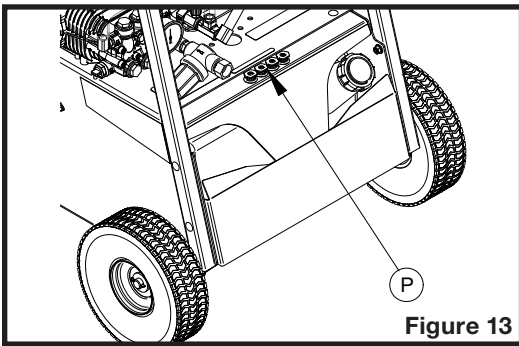
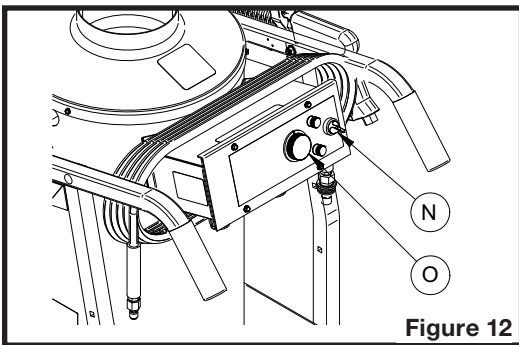
## Operation instructions

### Injecting soap

1. If the machine is running in hot water pressure washing mode, turn the switch (N on figure 12) to cold water position and keep water flowing until its temperature is less than 100°F (40°C). Release the trigger.
2. Remove the high pressure nozzle at the wand outlet and replace it by the black soap nozzle (P on figure 13).
3. Insert the soap filter and hose (Q on figure 14) in a liquid soap container.
4. Rate of injected soap can be adjusted using the soap valve (R on figure 14).
5. Depress the gun trigger. Water and soap mix will take 30 seconds to reach the nozzle and flow out.
6. Once soap application is finished, remove the soap nozzle and install a high pressure nozzle to rinse (yellow, green or white). Soap will flow out for 30 seconds and then stop.

### IMPORTANT:

- If corrosive products have been injected, rinse injector by injecting water for a couple of minutes.





# Operation instructions

## Stopping procedure

1. If the machine has been used for hot water pressure washing, turn off the burner (N on figure 12).
2. If the machine has been used for soap injecting, install a high pressure yellow, green or white nozzle (S on figure 15) at wand outlet (T on figure 15)
3. Depress the gun trigger until water flows out limp and regularly, and at a temperature of less than 100°F (40°C).
4. Release the gun trigger.
5. Turn off the switch ( N on figure 12)
6. Close the water supply valve.
7. Depress the gun trigger to release pressure from the system.
8. Disconnect the water supply hose.
9. Make sure that all nozzles, gun and wand are stored in their proper place.
10. Make sure that all safety equipment is stored in its proper place.

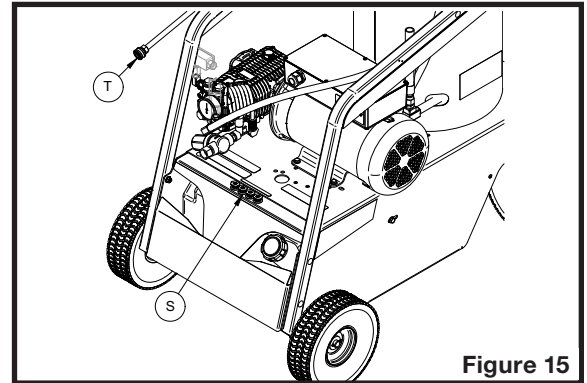


Figure 15

## Winterization

**During winter and cold periods, if there is a freezing risk for the machine, it is recommended to take the following precautions immediately after stopping the machine:**

1. Disconnect the water supply hose from the machine inlet and replace it with a 5 feet (1.5 m) hose.
2. Place the free end of the hose into a container filled with a 50% antifreeze and 50% water solution. Use automotive antifreeze. **NEVER use plumbing antifreeze, alcohol or windshield washer fluid.**
3. Remove the nozzle from the wand outlet.
4. Turn the switch to cold water position.
5. Do not turn on the burner.
6. Depress the gun trigger.
7. When the pump is primed and pumping antifreeze, release the gun trigger to fill the by-pass line with antifreeze.
8. Depress the gun trigger again until antifreeze begins to flow out from the wand outlet, and then release the trigger.
9. Turn off the switch.
10. Depress the gun trigger to release pressure from the system.

Antifreeze can be recovered at the next use and be used again on condition that you measure the concentration and add antifreeze to the solution if needed. To recover antifreeze, connect a water supply hose to the machine inlet and open the supply hose valve. Do not start the motor. The water supply pressure will be sufficient to slowly push solution to the outlet.

Dispose of used antifreeze according to environmental laws. Keep it in a closed container, then bring to the nearest deposit. Do not throw to garbage or pour in the soil or in a sewer.

### **IMPORTANT:**

- Do not forget that at 32°F (0°C), the machine can freeze.

## Maintenance

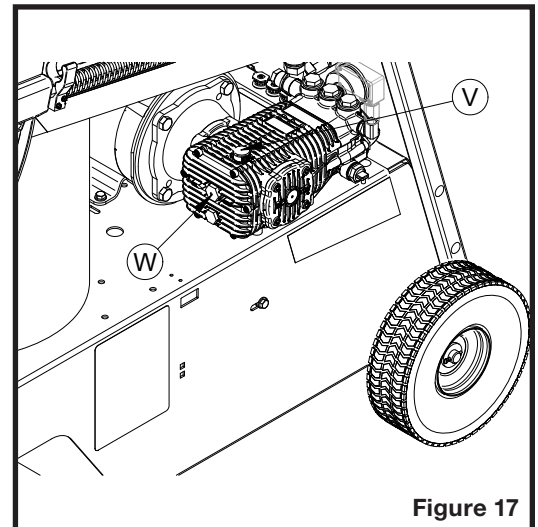
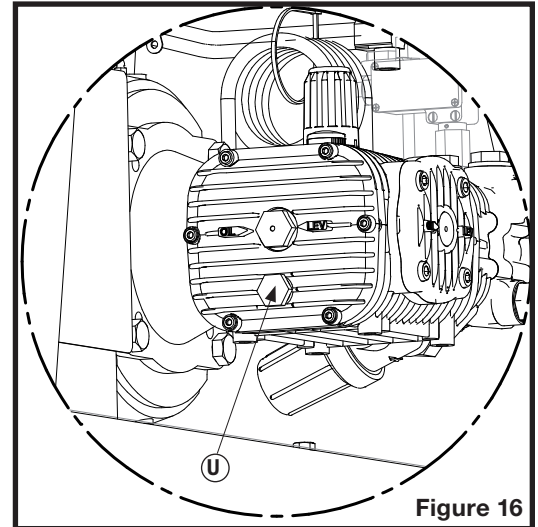
### Pump oil change

The first pump oil change must be done after 10 hours of use. The next oil changes must be done after every 200 hours of use.

1. Place a container under the pump to recover used oil.
2. Unscrew the oil drain plug (U on figure 16).
3. Let oil flow slowly to avoid splash.
4. When pump crankcase is empty, screw back the drain plug.
5. Unscrew the oil filler cap/dipstick (V on figure 17).
6. Fill with NON DETERGENT SAE 30 oil to halfway on the sight glass (W on figure 17). Pump crankcase capacity is 27 ounces (0.8 l).
7. Screw the oil filler cap/dipstick back in place.

#### IMPORTANT:

Dispose of used oil according to environmental laws. Keep it in a closed container, and then bring to the nearest deposit. Do not throw to garbage or pour in the soil or in a sewer.



# Maintenance

## Descaling the heating coil

Periodically check for possible lime formation into the water circuit. If necessary, proceed as follow:

1. Use a container that can contain at least 5 gallons (20 liters) and pour in water and a special scaling acid solution like the MS-DETAR6K, following the manufacturer recommended mixing.
2. Install a 5 ft x ½ in of inside diameter (1.5 m x 13 mm) hose at pump inlet; put the free end of the 5 ft hose into the container. Disconnect the high pressure hose from the gun inlet and put the hose end in that same container.
3. Close the metering valve on the soap injector.
4. Turn on the motor. **DO NOT TURN THE BURNER ON.** Let the solution circulate into the system for approximately one hour or until the layer of lime has dissolved. As hard water neutralizes acid, in extreme cases you may have to change the solution during the treatment.
5. When the operation is completed:
  - Turn off the motor
  - Clean the pump inlet filter
  - Connect a water supply hose to the machine inlet
  - Turn on the motor and depress the gun trigger
  - Run the machine until water flows out limp and regularly
  - Release the gun trigger and stop the machine.

### IMPORTANT:

To prevent possible damages, avoid splashing or spilling solution on the machine or its components during the scaling operation.



### WARNING: to avoid injuries:

- Always wear long clothes, gloves and safety glasses when descaling a heating coil.

## Storage

If the machine is to be stored for a long time, take the following precautions:

1. Winterize the machine. Follow instructions specified in Winterization section.
2. Using a siphon, empty the oil tank.
3. Change the pump oil. Follow instructions specified earlier in this section.
4. Store the machine in a cool dry place, sheltered against rain and well ventilated.

When the time comes to restart the machine, take the following precautions:

1. Make sure that all hoses are in good state, not cracked or crushed.
2. Check the state of the fuel oil filter. Replace the filter if it is damaged or dirty.
3. Check the presence and condition of the water inlet gasket.
4. Change the pump oil. Follow instructions specified earlier in this section.
5. Recover antifreeze from the machine. Follow instructions specified in Winterization section.
6. Check the general condition of the machine. Perform a complete visual inspection.
7. When everything seems to be perfect, fill the fuel tank and start the machine.



### WARNING:

- Refuel outdoors only and in a well-ventilated area with the equipment stopped.
- If any fuel is spilled, clean it up completely and allow vapors to dissipate before starting the machine.
- Do not refuel while smoking, near an open flame, sparks, or other heat source.
- Always wear long clothes, gloves and safety glasses when inspecting, cleaning, repairing and operating this machine.

## Periodic maintenance schedule table

Maintenance items	Daily	Every 50 hours	Every 100 hours	Every 200 hours	Every 500 hours	Every 1000 hours
Check general condition of the machine	•					
Check pump oil level	•					
Check hoses condition	•					
Check water inlet gasket and filter	•					
Check fuel oil filter condition	•					
Check bolts and nuts tightening		•				
Check the condition of connections and electric components		•				
Change pump oil				<b>Initial 10 hours</b> → •		
Replace fuel oil filter				•		
Replace burner nozzle					•	
Replace fuel lines						•

## Trouble shooting guide

FAULT	CAUSE	REMEDY
<b>MOTOR</b>		
The motor does not start, nothing happens.	The motor has no power supply.	Verify plugs, power cord, connections, fuses circuit breaker, switch, thermal protector (reset).
The motor make noise but does not start.	The pump is frozen.	Let the pump heat.
	The pump is jammed.	Turn the motor manually by the fan.
	Motor is defective	Check capacitors; have the motor repaired.
The motor runs but is noisy.	The fan is rubbing against its cover.	Repair embossment of the cover.
	The motor or pump bearings are worn.	Replace.
	The motor rotor is unbalanced.	Have the motor repaired.
	The centrifugal switch does not disengage.	Repair the switch.
	The key of the pump is worn.	Replace the key.
The motor stops.	The motor thermal protector has tripped.	Let the motor cool and reset the protector. Verify power supply.
	The attachment plug is unplugged.	Plug it back.

## Trouble shooting guide

FAULT	CAUSE	REMEDY
<b>PUMP</b>		
The motor runs but the pump does not work.	The pump valves are jammed by dirt.	Clean the valves. Check or add a filter at the pump inlet.
	The O' rings of the valves are damaged.	Replace.
	The pump key is broken.	Replace.
The pump runs, but does not give maximum pressure.	The nozzle is worn or has not the proper size.	Check for the recommended size or replace.
	The reading of the gauge is wrong.	Replace the gauge.
	The soap nozzle is installed.	Replace with a high pressure nozzle.
	Leaks in the high pressure line.	Stop the leaks.
	The seat or the valve of the pressure regulator are dirty or worn.	Check, clean or replace the defective parts.
	The pump valves are worn or dirty.	Clean or replace.
	Pump water seals are worn.	Replace.
	Pump is sucking air.	Check the supply piping.
	Water supply is insufficient.	Check if supply flow provides the pump's needs.
Fluctuating pressure.	Valves are worn or dirty.	Clean or replace.
	Water seals are worn.	Replace.
	Pump is sucking air.	Check the supply piping.
	Water supply is insufficient.	Check if supply flow provides the pump's needs.
Excessive vibration in delivery hose and gun.	Pump valves are dirty or worn.	Clean or replace.
	Pump water seals are worn.	Replace.
	A connecting rod is broken.	Replace.

## Trouble shooting guide

FAULT	CAUSE	REMEDY
<b>PUMP</b>		
Noisy pump.	Bearings are worn.	Replace.
	Pump is sucking air.	Check the supply piping.
	Water supply is insufficient.	Check the supply flow.
	Inlet water temperature is too high.	Lower the inlet water temperature.
	The pump key is worn.	Replace.
Presence of water in oil (white oil).	Pump water seals are worn.	Replace.
	High humidity in the air.	Increase the oil change frequency.
	Cleaning of the pump with the nozzle.	Never direct the jet toward the machine.
Oil dripping under the pump.	Crankshaft oil seal broken or worn.	Replace.
	Piston guide scratched or worn.	Replace.
	Piston guide oil seal broken or worn.	Replace.
	Air vent jammed.	Clean.
	Air vent replaced by a non-ventilated cap.	Put the origin parts back.
Water dripping between pump head and crankcase.	Pump water seals are worn.	Replace.

## Trouble shooting guide

FAULT	CAUSE	REMEDY
<b>PRESSURE REGULATOR</b>		
The regulator engages and releases when the gun trigger is released.	The gun does not properly close.	Adjust, repair or replace the gun.
	Leaks on the high pressure line.	Stop the leaks.
	The regulator check valve does not properly close.	Replace the defective parts.
	The regulator piston seal kit is worn.	Replace the defective parts.
	The regulator guide seal kit is worn.	Replace the defective parts.
	Water coming out by the soap filter.	Clean or repair the soap injector check valve.
The regulator engages and releases when the gun trigger is engaged.	There is not enough flow to maintain the regulator engaged (jammed nozzle).	Clean the nozzle (problem encountered with interchangeable nozzles).
Pump staying under pressure when the gun is released.	The gun does not properly close.	Repair the gun.
	The regulator check valve does not close.	Repair the check valve.
Water dripping from the regulator guide.	The regulator guide seal kit is worn.	Replace the defective parts.



## Trouble shooting guide

<b>FAULT</b>	<b>CAUSE</b>	<b>REMEDY</b>
<b>SOAP INJECTOR</b>		
Soap does not inject.	The soap hose or the soap filter is dirty.	Check and clean.
	The soap nozzle is not installed.	Install the soap nozzle.
	The injector is dirty or jammed.	Check and clean.
	The injector restrictor is worn.	Replace.
	The pressure hose is damaged or has a too small inside diameter.	Replace with a new hose of the right size.
	The pressure hose is too long.	Try with the original hose.
	The gun does not open enough.	Adjust the gun piston.
	The soap nozzle is dirty or damaged.	Clean or replace.
Water goes out of the soap filter when in high pressure mode.	The injector check valve is dirty or worn.	Clean or replace.

<b>FAULT</b>	<b>CAUSE</b>	<b>REMEDY</b>
<b>OIL BURNER</b>		
The burner produces white smoke.	Presence of water into the oil tank.	Empty and clean the tank. Fill with clean oil.
	The tank is almost empty.	Fill the tank.
	The electrovalve is defective.	Repair or replace.
The burner produces black smoke.	Oil pressure is incorrect.	Adjust according to manufacturer recommendations.
	Air regulation is incorrect.	Adjust according to manufacturer recommendations.
	The oil nozzle is dirty or worn.	Replace.
	The oil pump is dirty.	Dismantle and clean, or replace.
	The oil filter is dirty.	Replace.
	The electrovalve is defective.	Repair or replace.

## Trouble shooting guide

<b>FAULT</b>	<b>CAUSE</b>	<b>REMEDY</b>
<b>OIL BURNER</b>		
The water temperature is not sufficient.	The thermostat is set too low.	Set to desired temperature.
	Lime has built up inside the heating coil.	Scale the coil (see maintenance section).
	Thermostat is defective.	Replace
Several times, the burner runs for a few minutes, then stops.	The oil filter is dirty.	Replace.
	The coupling between the motor and the oil pump is damaged.	Replace.
The burner continues to heat when the gun trigger is released.	The pressure switch is defective.	Repair or replace.
	The electrovalve is defective.	Replace.
The burner extinguishes or refuses to light.	The oil tank is empty.	Fill the tank.
	The oil filter is blocked.	Replace.
	The oil nozzle is blocked.	Replace.
	The oil pump is defective.	Repair or replace.
	The electrovalve is defective.	Replace.
	The coupling between the motor and the oil pump is broken.	Replace.
	The pressure switch is defective.	Repair or replace.
	The thermostat is defective.	Replace.
	The fuse has blown.	Replace.
	The ignition transformer is defective.	Replace.
	The electrodes are defective or have moved.	Adjust the electrodes according to manufacturer recommendations or replace.
	The burner motor is defective.	Repair or replace.
The burner motor protector has tripped.	Reset.	

## Trouble shooting guide

FAULT	CAUSE	REMEDY
<b>AUTOMATIC START &amp; STOP</b>		
The motor does not start, nothing happens	The washer is not connected.	Connect the washer.
	The switch is in «OFF» position.	Turn «ON» the switch.
	The washer has no power supply.	Verify: circuit breaker, fuse, cord, connections, etc..
	The control fuse has blown.	Replace.
	The flow switch is defective	Repair or replace.
	The timer is defective.	Replace.
	The 24 V transformer is defective.	Replace.
	The magnetic contactor is defective.	Replace.
The motor does not start, but a «click» is heard in the control box.	The motor thermal protector has tripped. (on 1 phase motor only).	Reset.
The motor hums but does not start.		See MOTOR section.
The motor does not stop.	The flow switch is defective.	Repair or replace.
	The timer is defective.	Replace.
	The magnetic contactor is defective.	Replace.

## Limited warranty

Pressure washers manufactured by **MS Gregson Inc.** are warranted, to the original purchaser, to be free from defects in materials and workmanship for the periods specified below. Normal use conditions, according to the instructions in this manual, apply. This limited warranty is subject to the exclusions listed below, is calculated from the date of delivery to the original purchaser, and applies to the original components only. Parts replaced under this warranty will assume the remainder of the corresponding part's warranty period.

### 5 YEAR\* PARTS, 1 YEAR LABOUR WARRANTY

Metallic components manufactured by **MS Gregson Inc.**, such as frames, handles, guards, protective gratings and plates, covers, and also heating coils\*\*, have a 5 year warranty.

\*Pumps are warranted for 2 years by the pumps manufacturer. Manufacturer's warranty does not apply to freight damage, to freezing damage, to damage caused by replacement parts others than the manufacturer's ones, to normal wear of moving parts or components affected by moving parts.

\*\*The heating coils are protected by a 5 year pro rated warranty to the original purchaser upon the following decreasing scale:

- Full replacement or repair during the first 2 years.
- Replacement or repair with customer bearing 40% of cost during the third year.
- Replacement or repair with customer bearing 60% of cost during the fourth year.
- Replacement or repair with customer bearing 80% of cost during the fifth year.

### 1 YEAR PARTS, 1 YEAR LABOUR WARRANTY

The other components, excluding accessories listed below and normal wear items listed below are warranted for 1 year on parts and labour.

### 30 DAY ACCESSORIES WARRANTY

Accessories such as discharge hoses, quick couplers, swivels, guns, lances, nozzles, pressure gauges, thermal protectors, and options are warranted for 30 days on parts.

### WARRANTY PROVIDED BY OTHER MANUFACTURERS

Engines motors, batteries or other items, which are warranted by their respective manufacturers, are serviced through these manufacturer's local authorized service centres. **MS Gregson Inc.** cannot provide warranty on these items.

### EXCLUSIONS OF THIS WARRANTY

This warranty does not cover the following items:

- Routine adjustments and normal wear items such as lubricants, spark plugs, filters, O-rings, fuses, pump valves and seals.
- Damage or malfunctions resulting from accidents, bumping, abuse, modifications made to the equipment without authorization, incorrect installation, improper servicing, failure to follow manufacturer's maintenance instructions, or use of the equipment beyond its stated usage specifications as contained in this manual or the common sense.
- Damage due to freezing, chemical deterioration, rust, corrosion, scale build up, or thermal expansion.
- Damage caused by replacement components others than those obtained from or approved by **MS Gregson Inc.**
- Damage to components from fluctuations in electrical supply.
- Damage caused by insufficient water supply or poor quality water.
- Damage due to improper fuel use, impurities or water in fuel, or lack of fuel.
- Transportation to dealer, travelling fees, or freight damage.

### -EXECUTION OF REPAIRS WITHIN THE WARRANTY PERIOD

In order to obtain warranty service on items warranted by **MS Gregson Inc.**, you must return the product to your authorized **MS Gregson** dealer, freight prepaid, with proof of purchase, within the applicable warranty period. For warranty service on components warranted by other manufacturers, your authorized **MS Gregson** dealer can help you obtain warranty service through these manufacturers' local authorized service centres.

### LIMITATION OF LIABILITY

**MS Gregson Inc.**'s liability for special, incidental, or consequential damages is expressly disclaimed. In no event shall **MS Gregson Inc.**'s liability exceed the purchase price of the product in question. **THE WARRANTY CONTAINED HEREIN IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE.** **MS Gregson Inc.** does not authorize any other party, including authorized **MS Gregson** dealers, to make any representation or promise on behalf of **MS Gregson Inc.** or to modify the terms, conditions, or limitations in any way. It is the buyer's responsibility to ensure that the installation and use of **MS Gregson** products conform to local codes. While **MS Gregson Inc.** attempts to assure that its products meet national codes, it cannot be responsible for how the customer chooses to use or install the product.





**MS Gregson Inc.**

4300, Vachon st.  
Drummondville (Qc)  
Canada J2B 6V4

Tel.: 819 474-1910  
Fax: 819 474-5317  
info@msgregson.com  
www.msgregson.com