- Operator's manual
- Parts manual



# Hot water pressure washer Cold water pressure washer

# **GEYSER G3040EA240**



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#### **General Features**

Use	Industrial
Engine	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
Pump	Comet, CO-RWS4030E
Rotation speed	1750 rpm
Туре	Ceramic plunger pump
Drive	Direct drive, hollow shaft pump
Pump protection	Metal screen filter
	140°F thermal protector
Pressure hose	3/8" x 50' x 6000 psi
Spraying gun	5000 psi x 10.4 gpm
Lance	Dual, 38"
Burner	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 I)
Flue collar diameter	8"
Overall dimensions (L x W x H)	51" x 31" x 44"
	(130 cm x 79 cm x 112 cm)
Weight (empty tank and plumbing)	590 lb (268 kg)
Weight (full tank and plumbing)	684 lb (310 kg)
Gun and wand weight	4.2 lb (1.9 kg)

## Pressure washer mode specifications

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

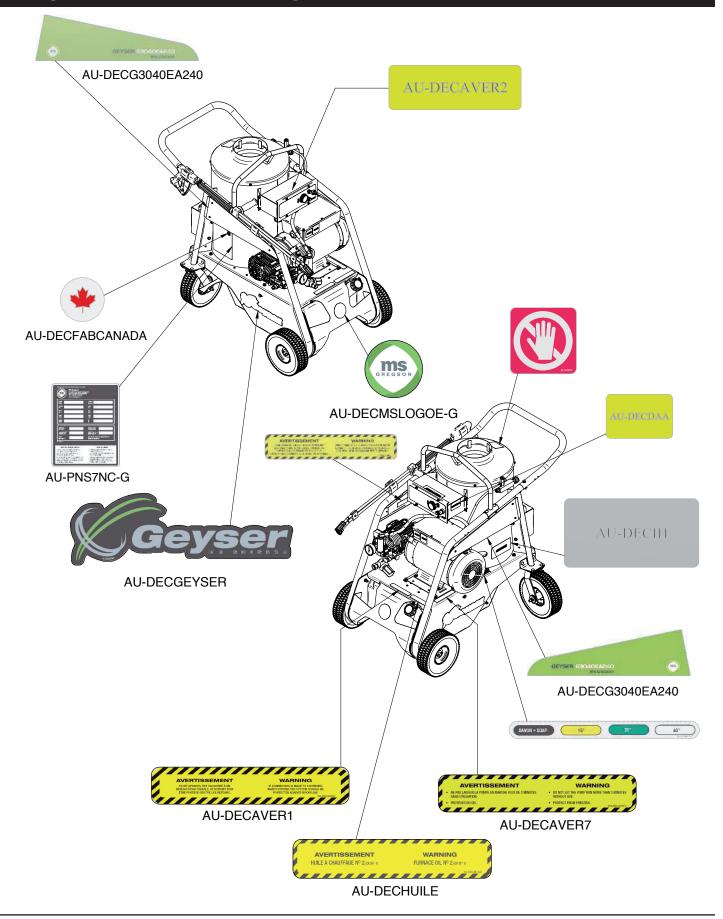


FALL



KICK BACK

## Safety- Product labels / Warning labels



#### Safety - Before you get started/Machine Precautions

#### **WARNING**

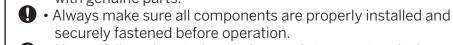


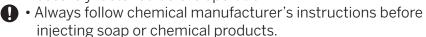
- Read and understand the pressure washer manual before using it. Know how to operate all controls and how to stop the unit. Lack of knowledge can lead to accidents.
- Use with CAUTION. High pressure spray can cause serious bodily injury.
- Always wear long-sleeve shirt, pants, closed-toed shoes and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

#### **!** WARNING



- O DO NOT run the pressure washer without the water source being connected and flowing into the pump.
- O DO NOT let the unit freeze
- ODO NOT modify or alter this product or any of its components.
- Check parts for excessive wear regularly. Replace worn parts with genuine parts.





#### **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 chance 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.



O 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

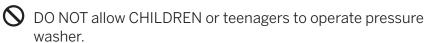
• DO NOT store unit near furnaces, stoves, water heaters, clothes dryers, or other appliances that have pilot light or other ignition source which can create a spark that can ignite fuel vapors.

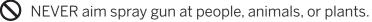
#### Safety - Precautions High Pressure Stream/Slippery Surfaces

## **!** WARNING



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.





- ALWAYS point spray gun in safe direction and squeeze spray gun trigger, to release high pressure, every time you stop the washer.
- NEVER repair high pressure hose. Replace it.
- NEVER repair leaking connections with sealant of any kind.
   Replace worn 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.
- DO NOT secure spray gun in open position.
- DO NOT 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



Using a pressure washer can create puddles and slippery surfaces.





- The thrust from water travelling through the hose and nozzle can be powerful enough to cause the operator to loose balance or footing.
- Avoid injury from potential kickback. Use both hands to firmly grasp spray gun/wand when using high pressure.
- Operate pressure washer from a stable surface.
- NEVER trigger the spray gun while on a ladder or roof.
- DO NOT overreach or stand on an unstable surface.
- 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.

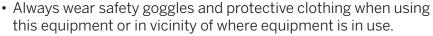
#### Safety - Precautions Protective Gear/Kick Back / Electrical Shock

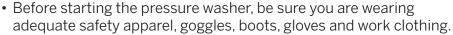
## **WARNING**



#### Risk of eye injury.

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





• 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.



#### Safety - Precautions Hot Surfaces/Important Notices

#### **!** 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 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**

#### **Handle installation**

1. Install the handlle (A on figure 1) with 5/16" NC x  $2\,1/4$ " bolts, 5/16" washers and 5/16" nylon locknuts (B, C and D on figure 1).

#### Storage compartment installation (optional)

1. Install the storage compartment (E on figure 2) with 5/16" NC x 1" bolts and 5/16" flat washers (F and G on figure 2).

#### **Hose reel installation (optional)**

- 1. Install the hydraulic straight fitting (H on figure 3) to the reel exit.
- 2. Install the hydraulic elbow fitting (I on figure 4) to the reel entry.
- 3. Install the reel to the reel support with 5/16" NC x 3/4" bolts, 5/16" lockwashers and 5/16" flat washers (J, K and L on figure 5).
- 4. Connect the short hose to the hydraulic elbow fitting at the reel entry (M on figure 4).
- 5. Remove the twist coupler from the machine outlet (N on figure 6 not visible)
- 6. Install the male-female elbow at the machine outlet (O on figure 6)
- 7. Install the swivelling male-female elbow at the outlet of the previous elbow (P on figure 6)
- 8. Connect the short hose to that last elbow (Q on figure 6)
- 9. Remove the brass twist coupler from the spray gun hose.
- 10. Connect the spray gun hose to the reel outlet. Roll the hose on the reel.

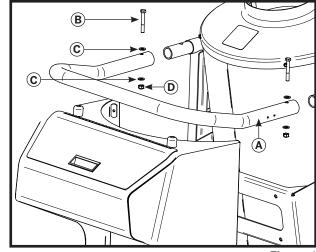


Figure 1

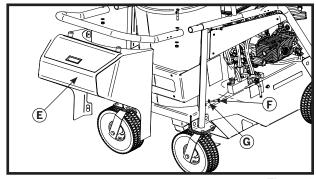


Figure 2

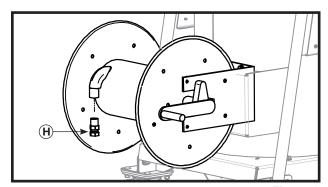


Figure 3

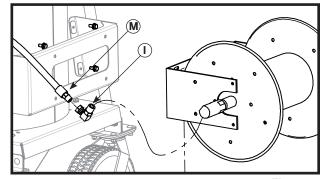


Figure 4

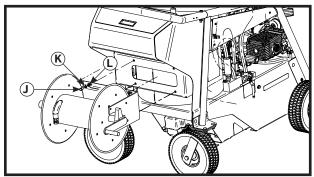


Figure 5

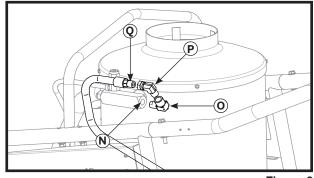
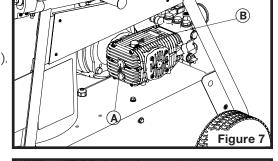
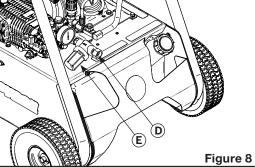


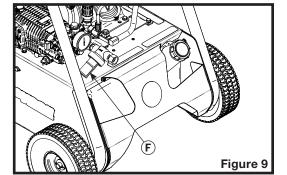
Figure 6

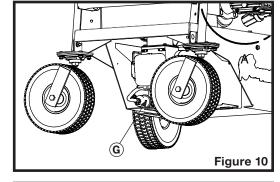
#### **Preparation**

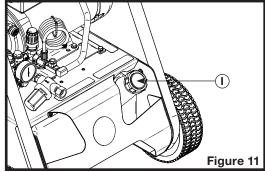
- 1. Make sure that all hoses are in good state, not cracked or crushed.
- 2. Check the oil level of the pump. Pump must be in a level position. Oil level must be halfway on the sight glass (A on figure 7) or visible on the dipstick (B on figure 7).
- 3. Check the presence and state of the water inlet gasket (D on figure 8).
- 4. Check the water inlet filter. Unscrew the bowl (E on figure 8) and rinse if needed. Remove and clean the filter screen (F on figure 9). Put back in place the screen and bowl.
- 5. Check the state of the fuel oil filter (G on figure 10). 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 (I on figure 11) 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.

#### **Cold water pressure washing**

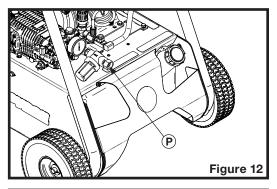
- 1. Connect a water supply hose to the pump inlet (P on figure 12) and open the hose valve. The supply hose flow rate must exceed the pump flow rate and the pressure must be at least 30 psi but must not exceed 80 psi.
- 2. Depress the gun trigger (R on figure 14) until water flows out limpid and regularly. Release the gun trigger.
- 3. Install a high pressure nozzle (S on figure 13) at the wand outlet (T on figure 14): 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 (W in figure 16) to cold water position.
- 5. Depress the gun trigger (R on figure 14) 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 (U on figure 15) up to 3000 psi. Pressure is read on the pressure gauge (V on figure 15).
- 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 in triggered and stop 30 seconds after the gun trigger has been released.

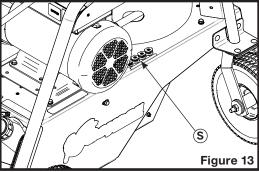
#### Hot water pressure washing

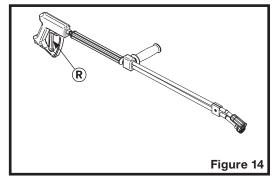
- 1. Fill the fuel tank (see "Filling the fuel tank" previous section).
- 2. Follow steps 1 to 8 from "Cold water pressure washing" previous section.
- 3. Turn the switch (W on figure 16) to hot water position.
- 4. Adjust the thermostat (W1 on figure 16) to desired temperature.
- 5. Do not let the burner run when the oil tank is empty. Oil pump would be damaged.
- 6. To stop, see section "Stopping procedure" further in this manual.

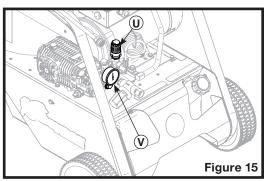
#### WARNING:

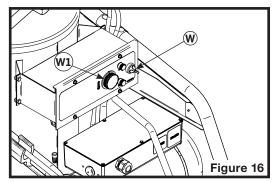
- The outlet plumbing, hose reel, hose, gun, wand and nozzles become very hot. Do not touch with bare hand.
- If any fuel is spilled, clean it up completely and allow vapors to dissipate before starting the machine.
- Do not refuel while smoking, near an open flame, sparks, or other heat source.











#### **Injecting soap**

- 1. To inject soap, unscrew the dual lance handle (X on figure 17).
- 2. Insert the soap filter and hose (Y on figure 18) in a liquid soap container.
- 3. Rate of injected soap can be adjusted using the soap valve (Z on figure 18).
- 4. Depress the gun trigger. Water and soap mix will take 30 seconds to reach the nozzle and flow out.
- 5. Once the soap application is finished. Screw the dual lance handle (X on figure 17). Soap will flow out for 30 seconds and the stop.

#### $\Lambda$

#### **IMPORTANT:**

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

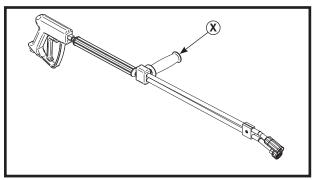


Figure 17

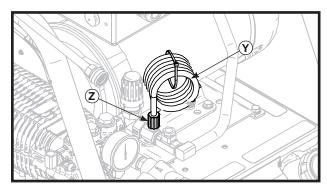


Figure 18

#### **Stopping procedure**

- 1. If the machine has been used for hot water pressure washing, turn off the burner switch (W on figure 19).
- 2. If the machine has been used for soap injecting, screw back the dual lance handle.
- 3. Depress the gun trigger until water flows out limpid and regularly, and at a temperature of less than 100°F (40°C).
- 4. Release the gun trigger.
- 5. Stop the pump motor (W in figure 19)
- 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.

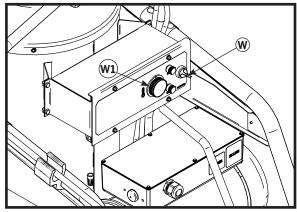


Figure 19

#### 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 on the motor switch.
- 5. Do not turn on the burner switch.
- 6. Depress the gun trigger.
- 7. When the pump is primed and pumping antifreeze, release the gun trigger to fill the pressure washing 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. Stop the emotor.
- 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**

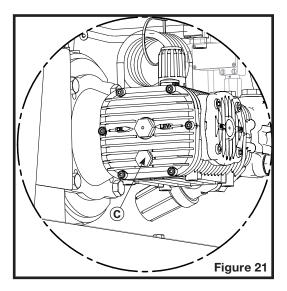
#### **Pump oil change**

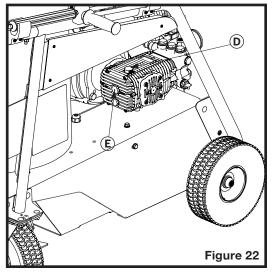
The first pump oil change must be done after 10 hours of use. The next oil changes must be done after every 200 hours of use.

- 1. Place a container under the pump to recover used oil.
- 2. Unscrew the oil drain plug (C on figure 21).
- 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 (D on figure 22).
- 6. Fill with NON DETERGENT SAE 30 oil to halfway on the sight glass (E on figure 22). 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" 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. Remove the nozzle at the wand outlet and put the wand in that same container.
- 3. Close the metering valve on the soap injector.
- 4. Start the motor. DO NOT TURN THE BURNER ON. Depress the gun trigger. 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:
  - Stop the motor.
  - Clean the pump inlet filter.
  - Connect a water supply hose to the machine inlet.
  - Start the motor and depress the gun trigger.
  - Run the machine until water flows out limpid and regularly.
  - Release the gun trigger and stop the motor.

#### 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 at the end of 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. Check the general condition of the machine. Perform a complete visual inspection.
- 6. 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 condtion of connections and electric components		•				
Change pump oil	Ini	tial 10 h	ours	<b>→•</b>		
Replace fuel oil filter				•		
Replace burner nozzle					•	
Replace fuel lines						•

FAULT	CAUSE	REMEDY
MOTOR		
The motor does not start, nothing happens.	The motor has no power supply.	Verify plug, power cord, connections, fuses, circuit breaker, switch, thermal protector (reset).
The motor makes noise but does not start.	The pump is frozen.	Let the pump heat.
dues not start.	The pump is jammed.	Turn the motor manually by the fan.
	Motor is defective	Check capacitors; have the motor repaired.
	The fan is rubbing against its cover.	Repair embossment of the cover.
The motor runs but is noisy.	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.

FAULT	CAUSE	REMEDY	
PUMP			
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	The nozzle is worn or has not the proper size.	Check for the recommended size or replace.	
pressure.	The reading of the gauge is wrong.	Replace the gauge.	
	Water flows out from the soap nozzle.	Screw or repair the dual lance handle.	
	Leaks in the high pressure line.	Stop the leaks.	
	The seat or the valve of the 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	Pump valves are dirty or worn.	Clean or replace.	
and gun.	Pump water seals are worn.	Replace.	
	A connecting rod is broken.	Replace.	

FAULT	CAUSE	REMEDY
PUMP		
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.

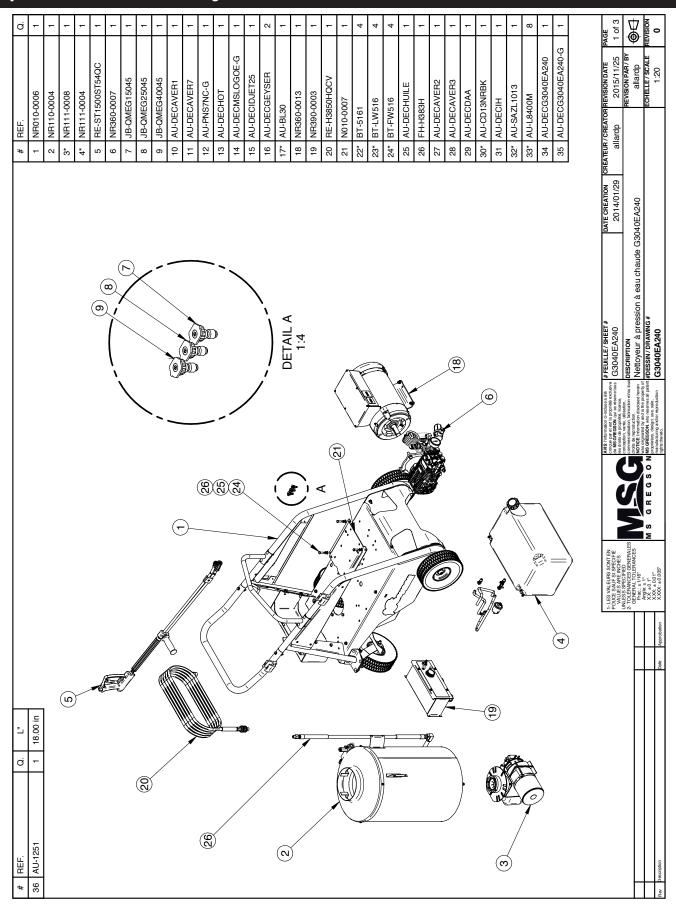
FAULT	CAUSE	REMEDY		
PRESSURE REGULATOR				
The regulator engages and releases when the gun trigger is released.	The gun does not properly close.	Adjust, repair or replace the gun.		
the guit trigger is released.	Leaks on the high pressure line.	Stop the leaks.		
	The regulator check valve does not properly 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 into the soap jar.	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.		
151010350.	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.		

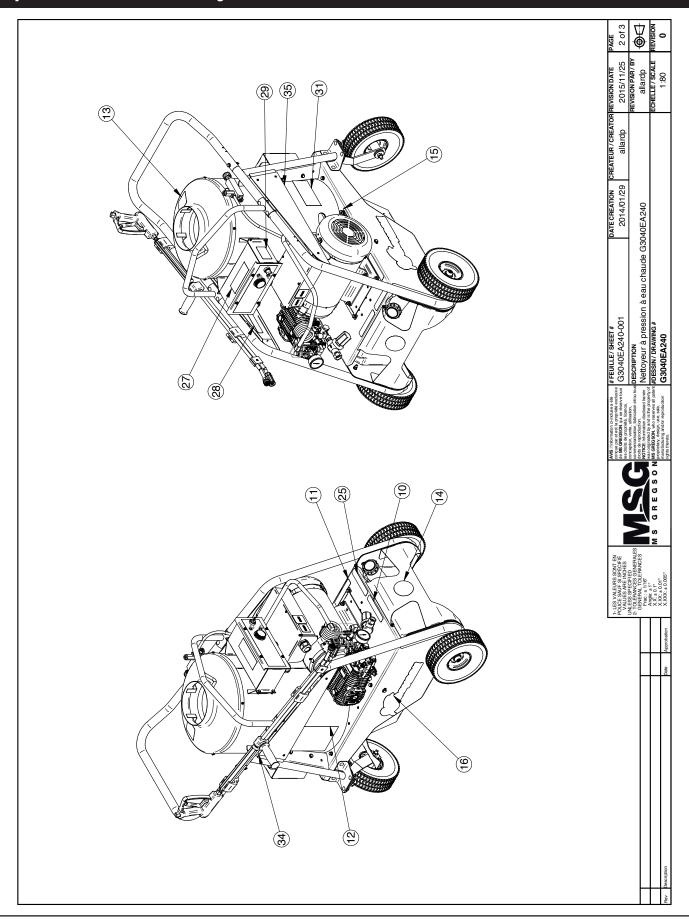
FAULT	CAUSE	REMEDY
SOAP INJECTOR		
Soap does not inject.	The soap hose or the soap filter is dirty.	Check and clean.
	The lance is not in low pressure mode.	Put the lance in low pressure mode.
	The injector is dirty or jammed.	Check and clean.
	The injector restrictor is worn.	Replace.
	The pressure 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 flows out from the soap filter.	The injector check valve is dirty or worn.	Clean or replace.

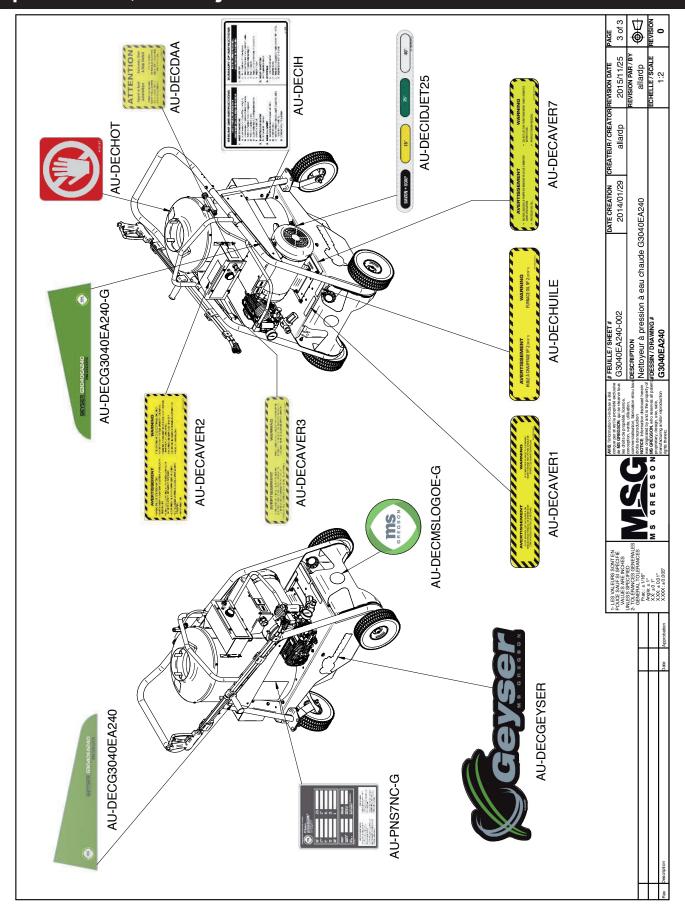
FAULT	CAUSE	REMEDY
OIL BURNER		
The burner produces white smoke.	Presence of water into the oil tank.	Empty and clean the tank. Fill with clean oil.
	The tank is almost empty.	Fill the tank.
	The electrovalve is defective.	Repair or replace.
The burner produces black smoke.	Oil pressure is incorrect.	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.
	The oil filter is dirty.	Replace.
	The electrovalve is defective.	Repair or replace.

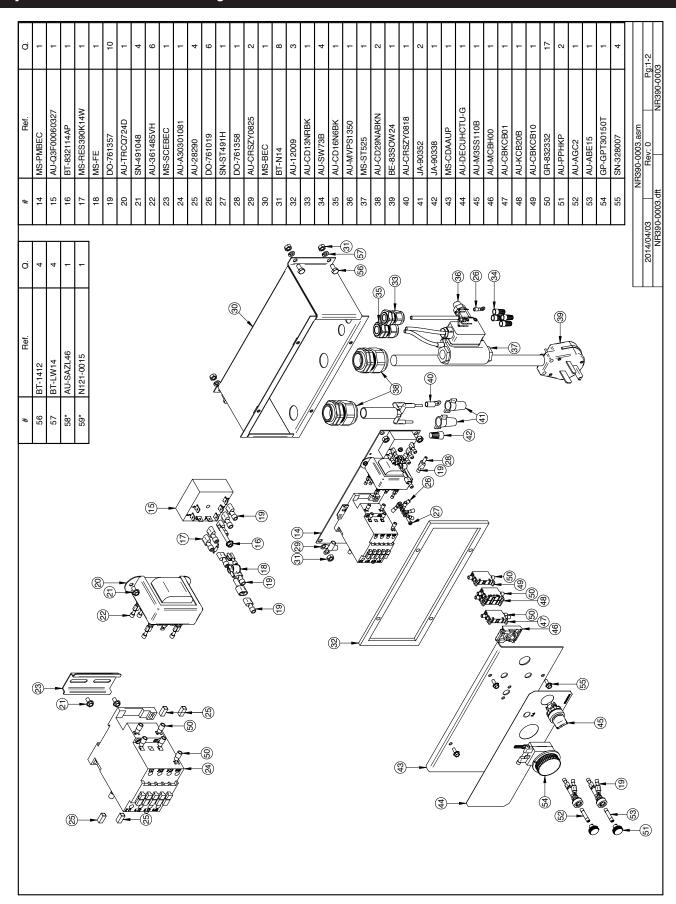
FAULT	CAUSE	REMEDY
OIL BURNER		
The water temperature is not sufficient.	The thermostat is set too low.	Set to desired temperature.
	Lime has built up inside the heating coil.	Scale the coil (see maintenance section).
	Thermostat is defective.	Replace.
Several times, the burner runs for a few minutes, 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.

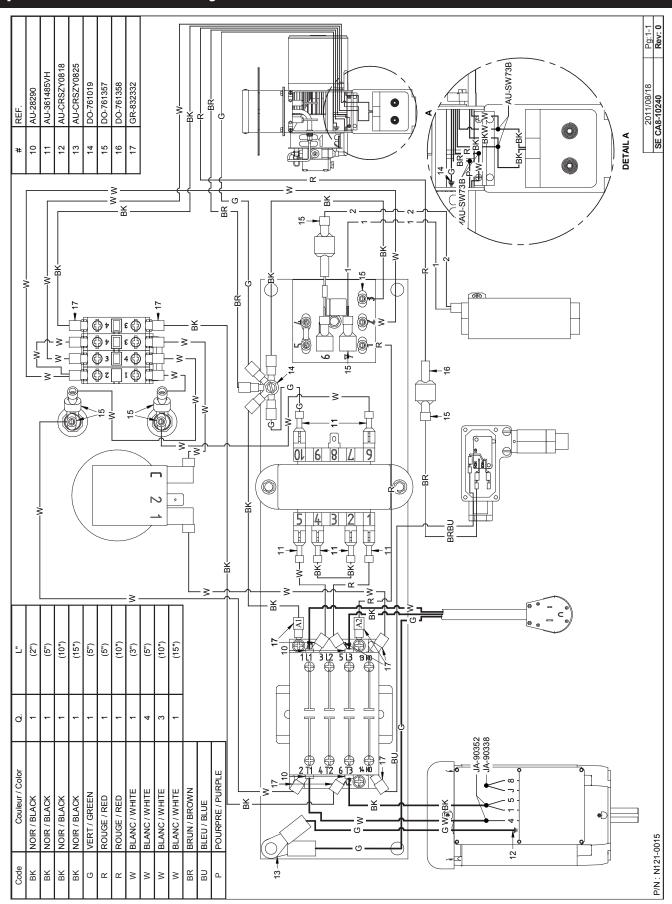
FAULT	CAUSE	REMEDY	
AUTOMATIC START & STOP			
The motor does not start, nothing happens	The washer is not commected.	Connect the washer.	
	The switch is in «OFF» position.	Turn «ON» the switch.	
	The washer has no power supply.	Verify: circuit breaker, fuse, cord, connections, etc.	
	The control fuse has blown.	Replace.	
	The flow switch is defective.	Repair or replace.	
	The timer is defective.	Replace.	
	The 24 V tranformer 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.	Reset.	
The motor hums but does not start.	See MOTOR section.	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.	

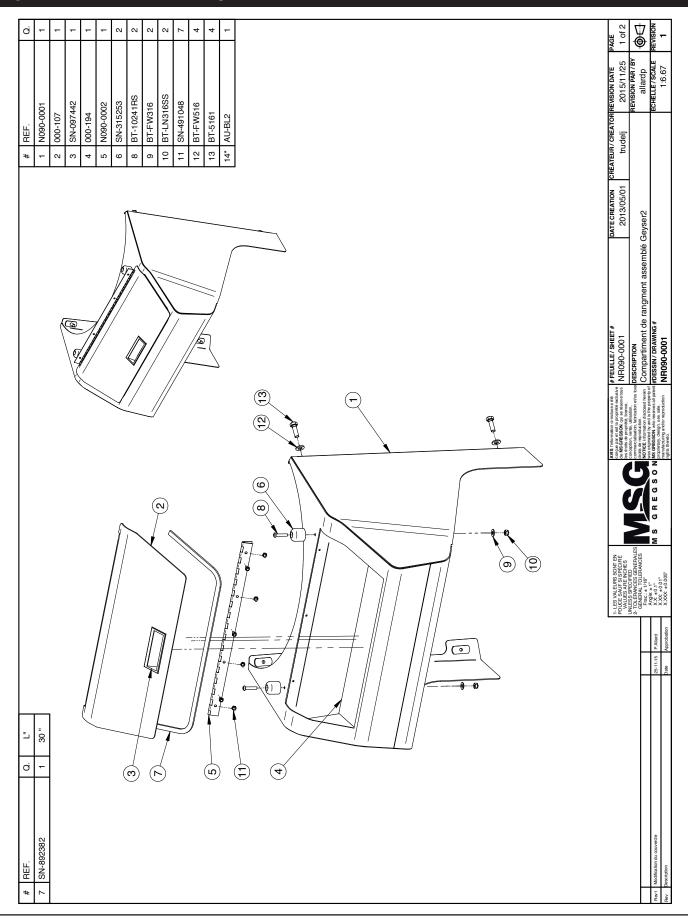


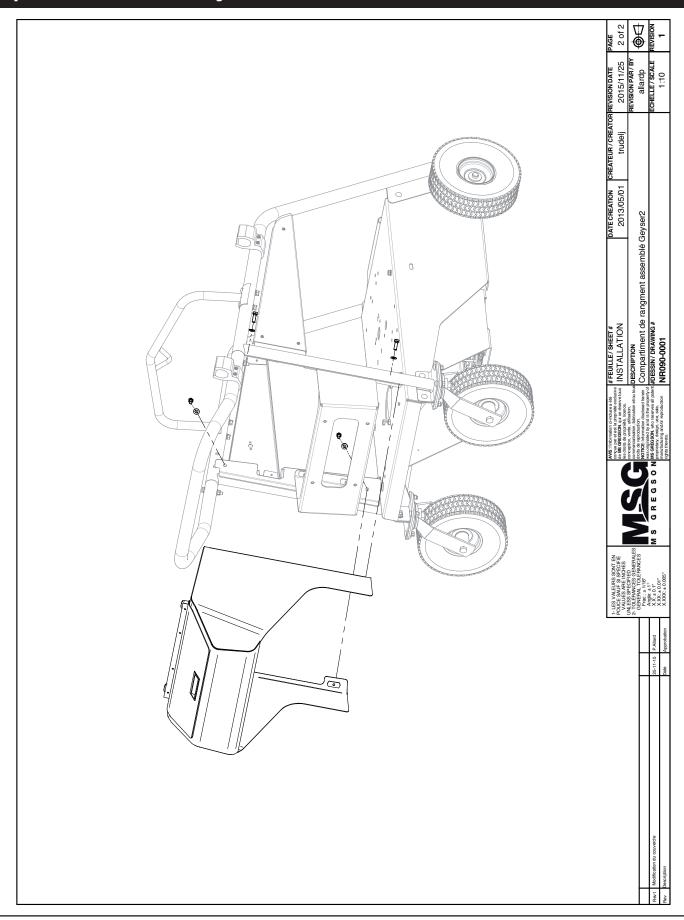


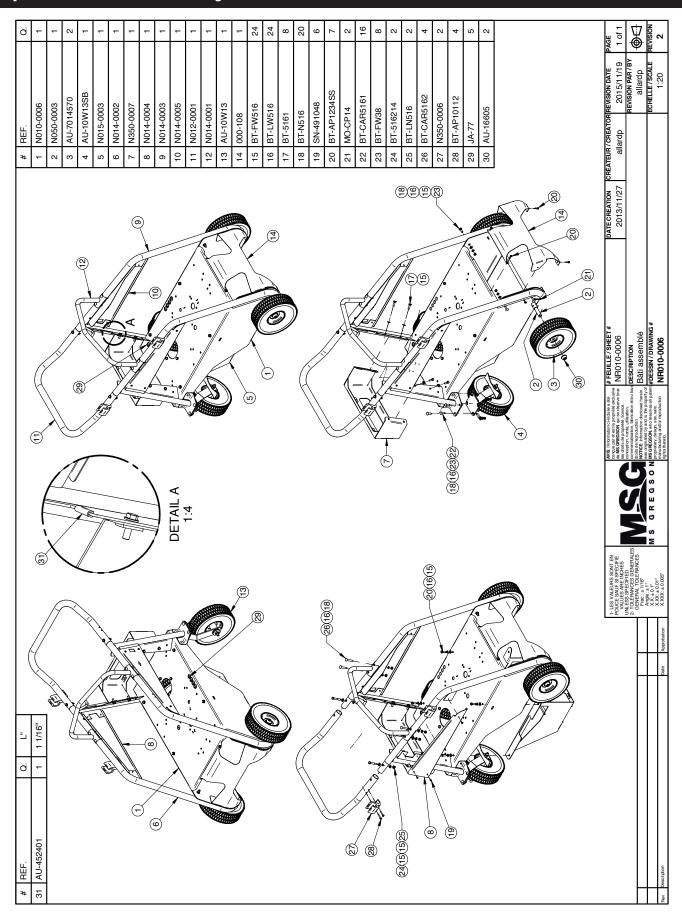


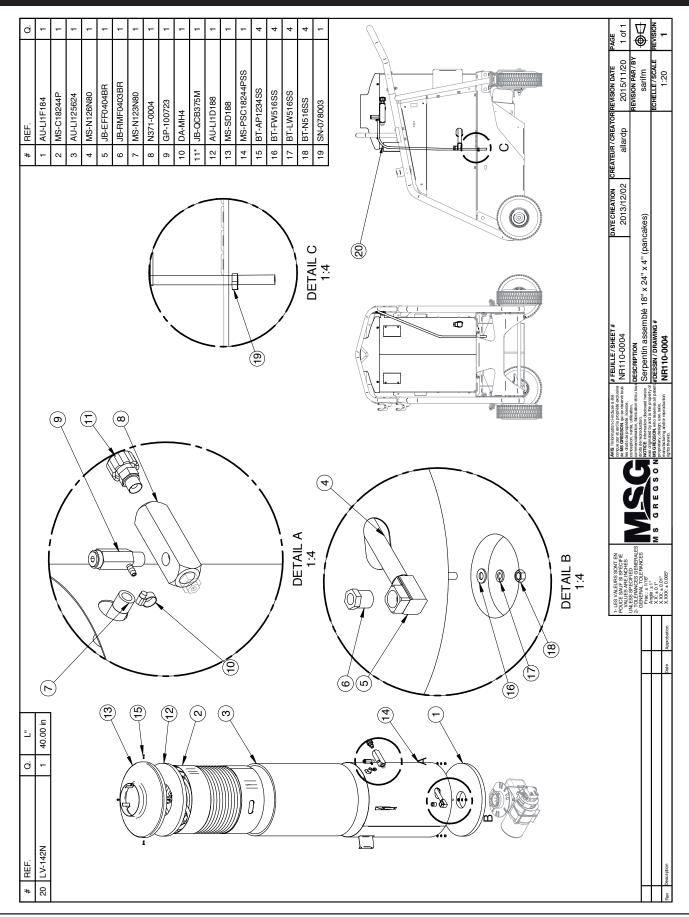


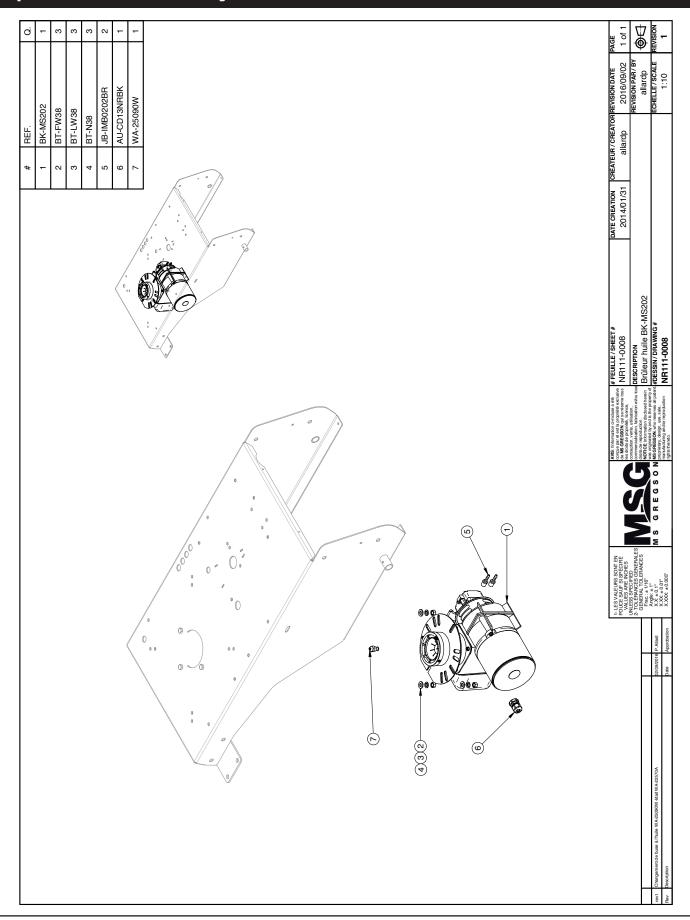


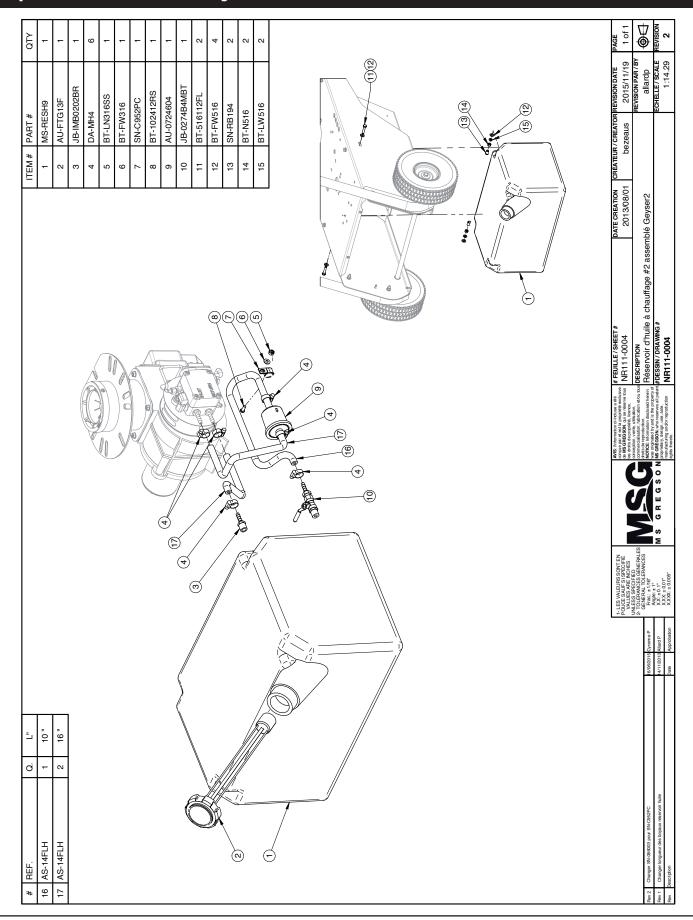


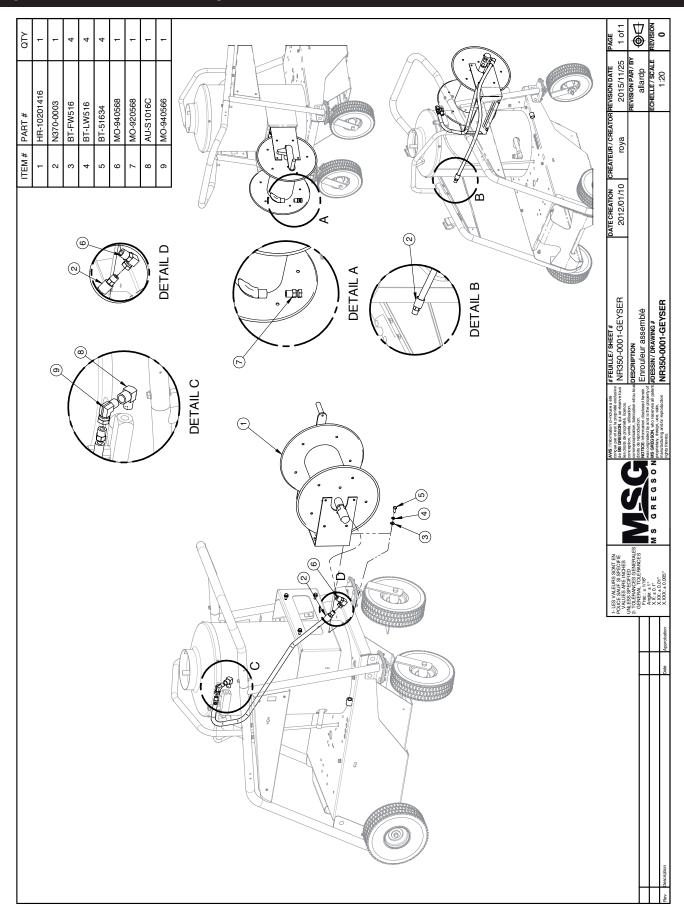


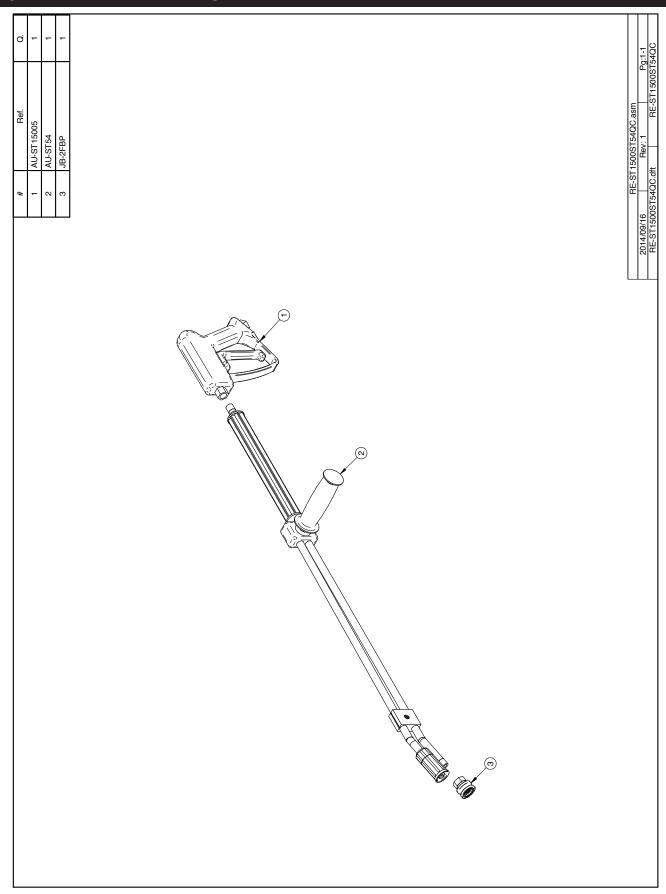


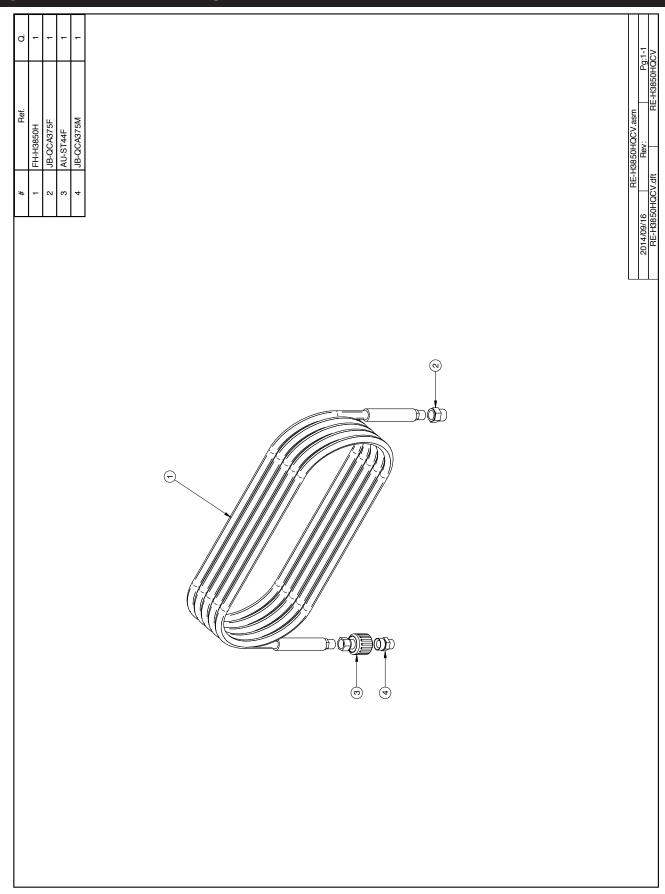


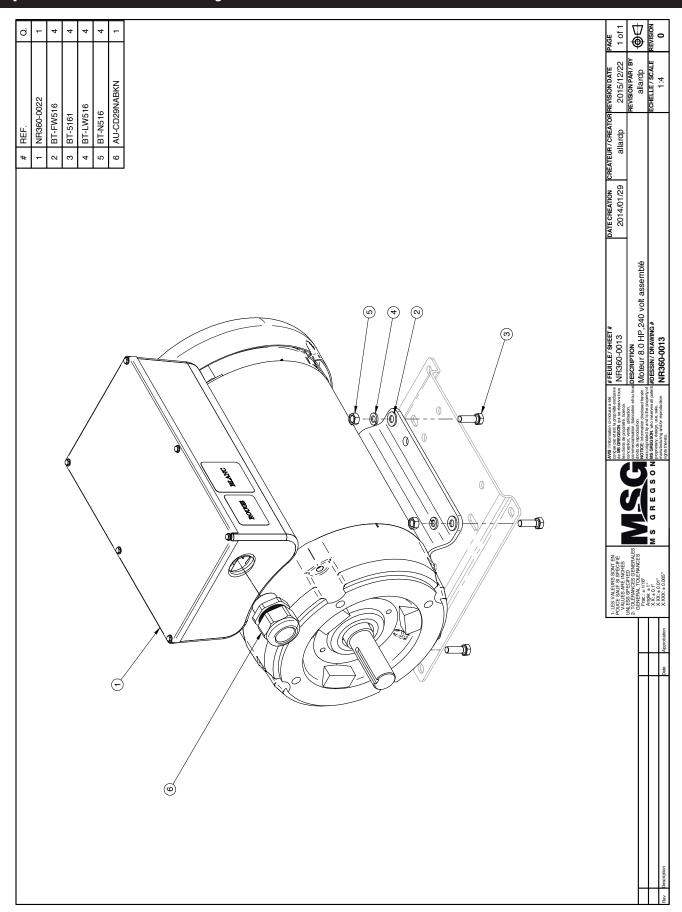


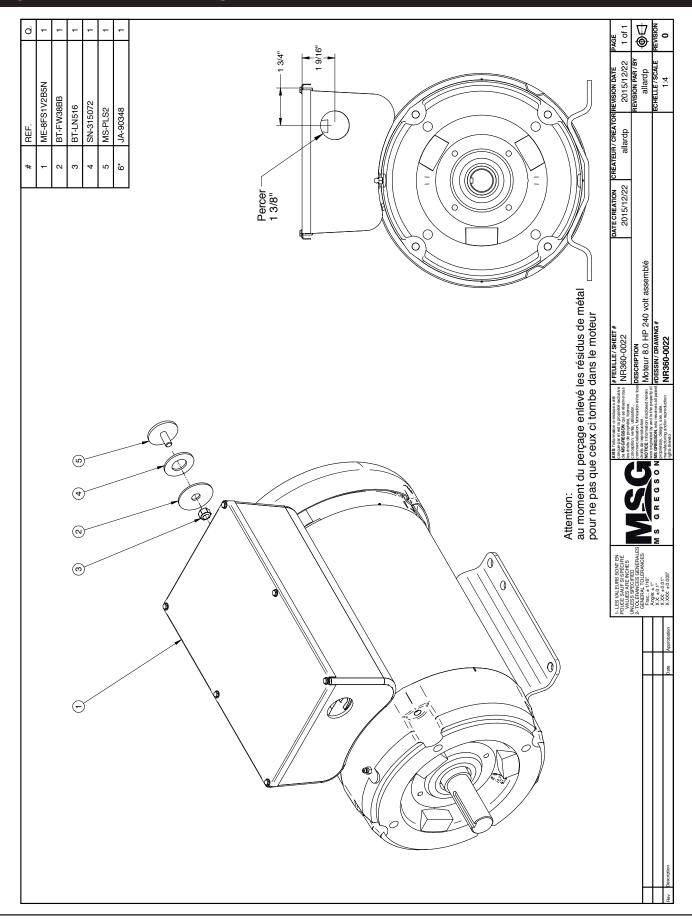


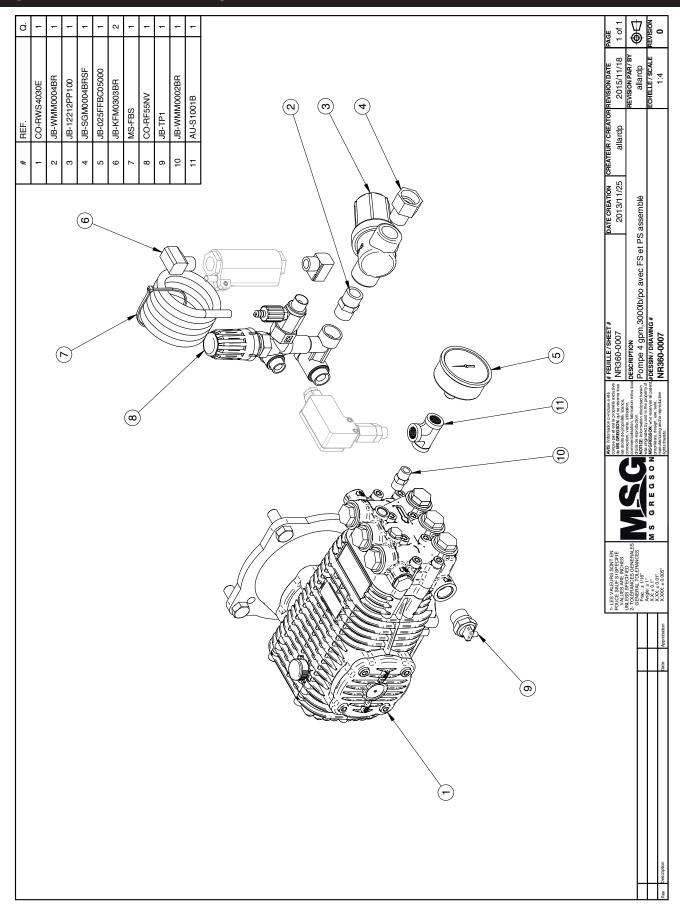






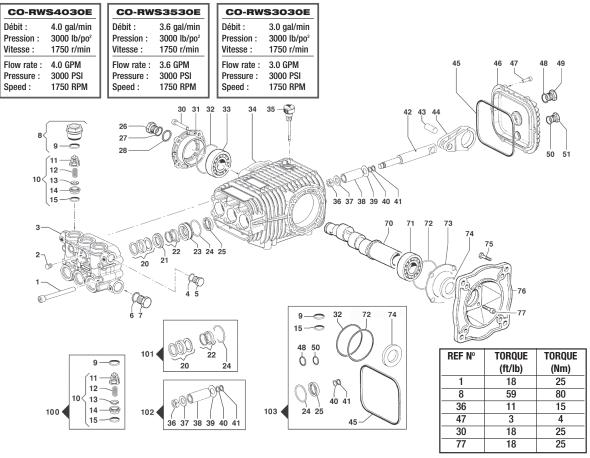






### Pompe • Pump

### CO-RWS4030E, CO-RWS3530E, CO-RWS3030E



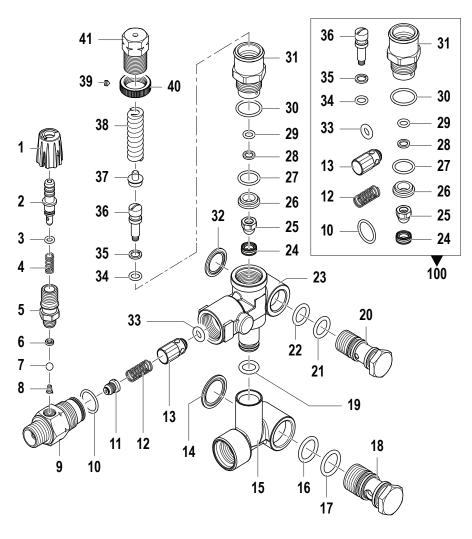
REF	Nº	DESCRIPTION	Q	REF	Nº	DESCRIPTION	Q
1	CO-3609/39	Screw	8	39	CO-2812/94	Washer	3
2	CO-3202/112	Plug	2	40	CO-1210/39	0-Ring	3
3	CO-3218/373	Pump Manifold	1	41	CO-9/170	Anti-Extr. Ring	3
4	CO-2811/84	Washer	1	42	CO-2409/139	Piston	3
5	CO-3200/7	Plug	1	43	CO-3011/16	Gudgeon Pin	3
6	CO-2811/86	Washer	1	44	CO-205/44	Connecting Rod	3
7	CO-3202/15	Plug	1	45	CO-1210/605	0-Ring	1
8	CO-3202/315	O-ring Valve Plug Kit + O-ring	6	46	CO-402/307	Cover	1
9	CO-1210/48	0-Ring	6	47	CO-3609/30	Screw	6
10	CO-1220/30	Suction/Delivery Valve	6	48	CO-1210/48	0-Ring	1
11	CO-1205/25	Suction/Delivery Valve Cage	6	49	CO-3201/27	Oil Level Plug	1
12	CO-1802/177	Suct/Del. Valve Spring	6	50	CO-1210/441	0-Ring	1
13	CO-3604/17	Suction/Delivery Valve	6	51	CO-3200/7	Plug	1
14	CO-3009/87	Suct/Delivery Valve Seat	6	70	CO-1/609	Crankshaft / CO-RWS3030E, 1 1/83	" 1
15	CO-1210/46	0-Ring	6		CO-1/610	Crankshaft / CO-RWS3530E, 1 1/83	" 1
20	CO-1241/79	Packing, 20 mm	3		CO-1/611	Crankshaft / CO-RWS4030E, 1 1/83	" 1
21	CO-9/352	Packing Retainer	3	71	CO-440/11	Roller Bearing	1
22	CO-1241/80	Packing, 20 mm	3	72	CO-1210/617	0-Ring	1
23	CO-9/353	Packing Retainer	3	73	CO-601/340	Spacer sp. 0,05	1
24	CO-1210/156	0-Ring	3		CO-601/341	Spacer sp. 0,1	1
25	CO-19/126	Oil Seal	3		CO-601/342	Spacer sp. 0,19	1
26	CO-3201/26	Oil Level Plug	1		CO-601/343	Spacer sp. 0,25	1
27	CO-1210/333	0-Ring	1	74	CO-19/52	Oil Seal	1
28	CO-3019/33	Seeger	1	75	CO-3607/201	Screw	4
30	CO-3609/157	Screw	4	76	CO-3016/51	Flange	1
31	CO-1009/242	Flange	1	77	CO-3609/58	Screw	4
32	CO-1210/448	0-Ring	1				
33	CO-440/31	Roller Bearing	1		RE PARTS KIT		
34	CO-403/175	Crankcase	1	REF	N°	DESCRIPTION	Q
35	CO-3200/51	Oil Dipstick	1	100	CO-5025001100	Complete Valve Kit	1
36	CO-600/54	Special Bolt	3	101	CO-5019/672	Water Seal Kit, 20 mm	1
37	CO-2811/82	Washer	3	102	CO-2409/145	Piston Kit, 20 mm	1
38	CO-202/24	Ceramic Bushing, 20 mm	3	103	CO-5019/679	Oil Seal Kit	1

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### Régulateur • Regulator

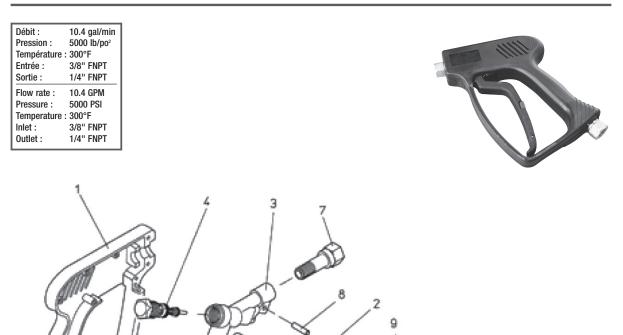
### CO-RF55NV

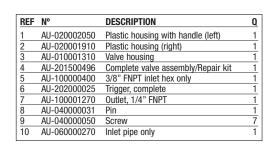


N°	DESCRIPTION	Q
CO-1817/95	Knob	1
CO-2803/645	Hose adaptor	1
CO-1210/564	O-ring	1
CO-1802/344	Spring	1
CO-2803/644	Valve adaptor	1
CO-2812/67	Valve seat	1
CO-3003/26	Ball	1
CO-1802/180	Spring	1
CO-424/433	Injector body	1
CO-1210/708	O-ring	1
CO-3410/365		1
CO-1802/290	Spring	1
CO-3600/115	Check valve	1
CO-1209/141	Washer	1
CO-424/504	Lower body	1
CO-1210/410		1
		1
		1
		1
		1
		1
CO-1210/411	0-ring	1
		1
	Valve seat	1
CO-3002/654	Valve	1
CO-9/233	Ring	1
CO-1210/718	O-ring	1
CO-9/734	Ring	1
CO-1210/711	O-ring	1
CO-1210/615	O-ring	1
CO-204/102	Piston guide	1
CO-1209/142		1
CO-1210/570	O-ring	1
CO-1210/430	O-ring	1
CO-9/735		1
CO-2409/88	Rod	1
CO-9/207	Spring support	1
CO-1802/340	Spring	1
CO-3622/30	Screw	1
CO-1227/22	Stop ring	1
CO-204/99	Pusher	1
CO-5015/49	Repair kit	1
CO-1817/97	Plastic handle	1
	C0-1817/95 C0-2803/645 C0-1210/564 C0-1802/344 C0-2803/644 C0-2812/67 C0-3003/26 C0-1802/180 C0-424/433 C0-1210/708 C0-3410/365 C0-1802/290 C0-3600/115 C0-1209/141 C0-424/504 C0-1210/410 C0-2803/634 C0-1210/57 C0-2803/635 C0-1210/411 C0-424/498 C0-3036/22 C0-3002/654 C0-9/233 C0-1210/718 C0-1210/718 C0-1210/711 C0-1210/615 C0-204/102 C0-1209/142 C0-1210/57 C0-204/102 C0-1210/57 C0-204/102 C0-1210/57 C0-204/102 C0-1210/57 C0-204/102 C0-1210/57 C0-1210/57 C0-1210/57 C0-1210/570	CO-1817/95         Knob           CO-2803/645         Hose adaptor           CO-1210/564         O-ring           CO-1802/344         Spring           CO-2803/644         Valve adaptor           CO-2812/67         Valve seat           CO-3003/26         Ball           CO-1802/180         Spring           CO-424/433         Injector body           CO-1210/708         O-ring           CO-3410/365         Injector nozzle           CO-1802/290         Spring           CO-3600/115         Check valve           CO-1209/141         Washer           CO-1209/141         Washer           CO-1210/410         O-ring           CO-1210/410         O-ring           CO-1210/57         O-ring           CO-2803/634         Lower bolt           CO-1210/411         O-ring           CO-1210/411         O-ring           CO-2803/635         Upper bolt           CO-1210/411         O-ring           CO-3036/22         Valve seat           CO-9/233         Ring           CO-1210/718         O-ring           CO-1210/719         O-ring           CO-1210/570         O-ring

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### Pistolet • Gun AU-ST15005

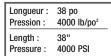


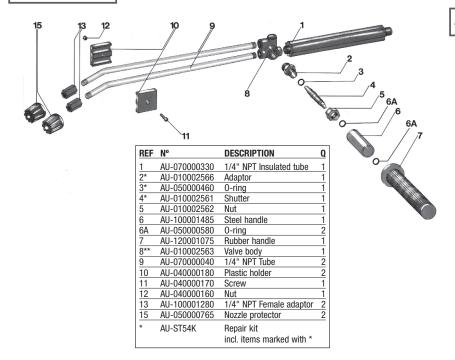


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### Lance double • Dual lance

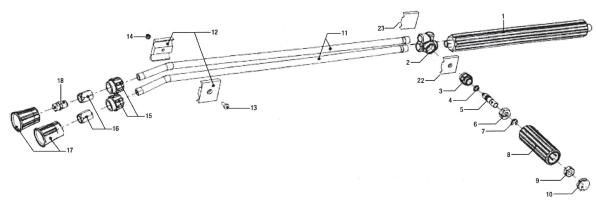
AU-ST54





Avant • Before 99-08

### Après • After 99-08

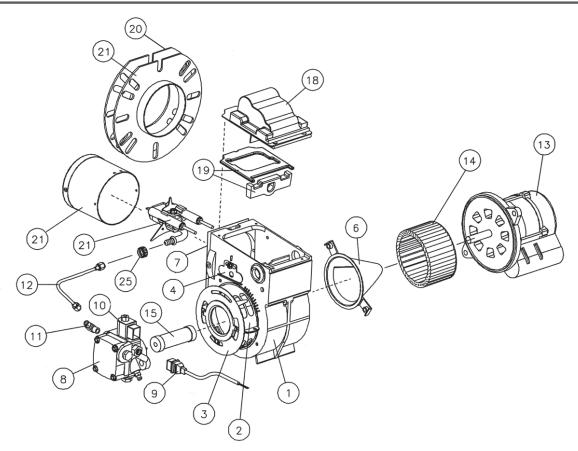


REF	Nº	DESCRIPTION	Q	REF	Nº	DESCRIPTION
1	AU-070000330	Insulated lance, 300 mm	1	9•	MS-ST54K kit	Nut
2	AU-010002563	Housing, brass	1	10•	MS-ST54K kit	Cap
3●	MS-ST54K kit	Nipple	1	11	AU-070000040	Lance, 600 mm
4●	MS-ST54K kit	0-ring	1	12	AU-040000180	Plastic clamp
5●	MS-ST54K kit	Adjusment rod	1	13	AU-040000170	Screw
6•	MS-ST54K kit	Stop nut	1	14	AU-040000160	Bushing
7●	MS-ST54K kit	Locking ring	1	15+	AU-020000275	Nut / cap, gray
8•	MS-ST54K kit	Handle	1	16	AU-100001100	Nozzle protection adaptor

REF	No	DESCRIPTION	Q
17+	AU-020000270	Nozzle protection, black	2
18	JB-1/4U6540	Low pressure nozzle	1
22	AU-020005050	Valve cover, upper part	1
23	AU-020005060	Valve cover, lower part	1
+	AU-200000003	Nozzle protection, complete	
•	MS-ST54K	Repair kit incl. items marked	1
		with •	

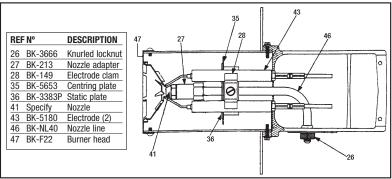
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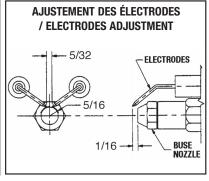
Brûleur • Burner BK-MS202



REF	Nº	DESCRIPTION	REF	Nº
1	BK-5874BK	Housing	11	BK-2256
2	BK-3492BKA	Air band		AU-X115A
3	BK-3709BK	Air shutter	12	BK-5394
4	BK-3493	Escutcheon plate	13	BK-21174
6	BK-21231U	Air guide	14	BK-2999
7	BK-3380	Square gasket	15	BK-2454
8	BK-2460	A2VA-7116 fuel pump	18	BK-21175U
	BK-21757	A2VA-2116 fuel pump, discontinued,	19	BK-51304
		replaced by BK-2184402U	20	BK-3616
	BK-2184402U	A2EA-6520 fuel pump with 24 V electrovalve	21	BK-AF40XPPV
	BK-8227	Pump shaft seal for all pumps	25	BK-3666
9	BK-21767	Cordset for A2VA-7116 and A2VA-2116 pumps		
	BK-21807	Cordset for A2EA-6520 pump		
10	BK-21441	Complete 24 V electrovalve for A2VA-7116 pump		
	BK-21877	Electrovalve stem only for A2VA-2116 pump		
	BK-21877U	Electrovalve stem only for A2EA-6520 pump		
	BK-21754	24 V coil for all pumps		

REF	Nº	DESCRIPTION
11	BK-2256	Male-male elbow for fuel tube
	AU-X115A	Male-female elbow for pressure gauge (2)
12	BK-5394	Connector tube assembly
13	BK-21174	240 V motor
14	BK-2999	Blower wheel
15	BK-2454	Coupling
18	BK-21175U	Ignition transformer
19	BK-51304	Igniter gasket kit
20	BK-3616	Mounting gasket
21	BK-AF40XPPW	Air tube combination
25	BK-3666	Splined nut





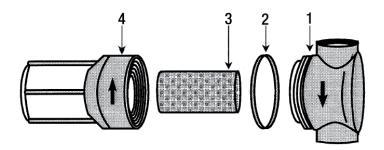
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Filtre • Filter JB-122...

 $\frac{\text{Pression max.}:}{\text{Max. pressure}:} \frac{150 \text{ lb/po}^2}{150 \text{ PSI}}$ 

STRAINER ASSEMBLY				
Nº	DESCRIPTION			
JB-12212PP50	1/2" x 50 mesh			
JB-12212PP100	1/2" x 100 mesh			
JB-12212NYC200	1/2" x 200 mesh			
JB-12234PP50	3/4" x 50 mesh			
JB-12234PP100	3/4" x 100 mesh			
JB-12234NYC200	3/4" x 200 mesh			

REF	Nº	DESCRIPTION	Q
1	JB-2317112PP	1/2" Strainer head	1
1	JB-2317134PP	3/4" Strainer head	1
2	JB-23173EPR	Rubber O-ring	1
2	JB-23173VI	Viton O-ring *	1
3	JB-CP231743304S	50 mesh filter	1
3	JB-CP231745304S	100 mesh filter	1
3	JB-CP231747304S	200 mesh filter	1
4	JB-23172PP	Filter bowl	1
4	JB-23172NYC	Filter bowl, clear	1
* = (	Optionnel / Optional		



### Pivot • Swivel AU-ST44, AU-ST44F

 Débit :
 26.4 gal/min

 Pression :
 5800 lb/po²

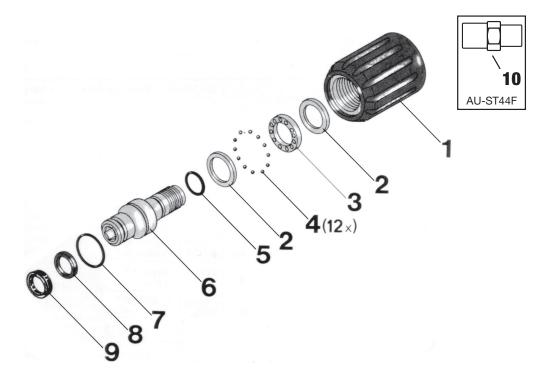
 Température :
 300°F

 Flow rate :
 26.4 GPM

 Pressure :
 5800 PSI

 Temperature :
 300°F

REF	Nº	DESCRIPTION	Q
1	AU-010004500	Hand wheel, complete	1
2	AU-040001720	Pressure washer	2
3	AU-020003370	Roller holder	1
4	AU-060000900	S. steel ball	12
5* 6 7*	AU-050001520	0-ring	1
6	AU-040001710	Connection nipple, s. steel	1
7*	AU-050000560	0-ring	1
8* 9*	AU-050001510	Back ring	1
9*	AU-110	0-ring	1
10	AU-S1003CB	Female adaptor 1/4" (AU-ST44F)	1
*	MS-ST44K	Repair kit (Incl. items marked with *)	



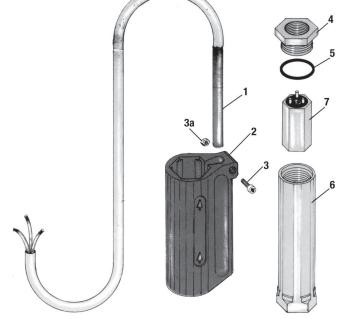
### Interrupteur à débit • Flow switch

MS-ST525

| Débit : 12 gal/min | Pression : 3500 lb/po² | Contact à : 0.25 gal/min | Flow rate : 12 GPM | Pressure : 3500 PSI | Contact at : 0.25 GPM



REF	Nº	DESCRIPTION
1	AU-200005511	Complete reed switch
2	AU-020001200	Plastic housing
3	AU-040000720	Screw
3a	AU-040000730	Nut
4	AU-100001470	Outlet screw
5	AU-050000115	0-ring
6	AU-010001455	Brass housing
7	MS-FSP1	Float w/magnet



MS-ST525 15/07/04 08:41

### **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, 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 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.

Notes



### MS Gregson Inc.

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