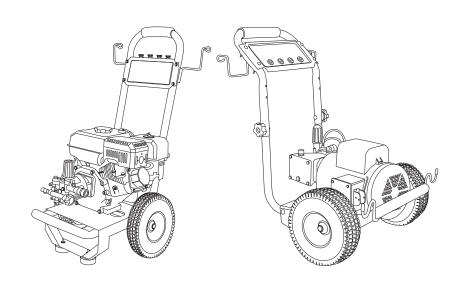


# GAS & ELECTRIC PRESSURE WASHER

**USER MANUAL** 



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# Attention: Read through the complete manual prior to the initial use of your pressure washer.

### **Using the Operator's manual**

The operating manual is an important part of your pressure washer. It should be read thoroughly before initial use, and referred to often to make sure adequate safety and service concerns are being addressed.

Reading the owner's manual thoroughly will help avoid any personal injury or damage to your machine. By knowing how best to operate this machine, you will be better positioned to show others who may also operate the unit.

This manual was written to take you from the safety requirements to the operating functions of your machine. You can refer back to the manual at any time to help troubleshoot any specific operating functions, so store it with the machine at all times.

### PRODUCT IDENTIFICATION

**Date of Purchase:** 



If you need to contact an Authorized Dealer or Customer Service line (1-866-850-6662) for information on servicing, always provide the product model and identification numbers.

You will need to locate the model and serial number for the machine and record the information in the places provided below.

For information on warranty and to register your product online, please visit **BEPOWEREQUIPMENT.COM** 

Dealer Name:	
Dealer Phone:	
Product Identification Numbers	
Model Number:	
Serial Number:	



### IMPORTANT SAFETY INSTRUCTIONS SAVE THESE INSTRUCTIONS

**WARNING** - When using this product, the following precautions should always be observed and adhered to.

- 1. Read all instructions before using the product.
- 2. To reduce the risk of injury, close supervision is necessary when a product is used near children.
- 3. Know how to stop the product and bleed pressures quickly. Be thoroughly familiar with the controls. See page 24.
- 4. Stay alert watch what you are doing.
- 5. Do not operate the product when fatigued or under the influence of alcohol or drugs.
- 6. Keep operating area clear of other people.
- Do not overreach or stand on unstable support. Keep solid footing and balance at all times.
- 8. Follow the maintenance instructions specified in the manual.

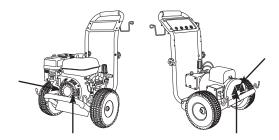
### **Important Warnings**

Failure to observe warnings will void warranty and/or cause injury.

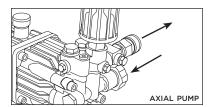
- Do not let the pressure washer overheat. Excess heat will cause severe damage (see below for details).
- 2. Never run the unit without water. Running the pump dry will cause it to quickly fail.
- 3. Do not let the unit freeze. Frozen water in the pump will cause serious damage.
- 4. Always wear eye protection when operating the unit.
- High pressure spray can cause serious bodily injury of damage soft material. Use with caution.
- 6. Never adjust unloader to exceed the preset pressure. Premature wear, equipment failure, or injury may occur.

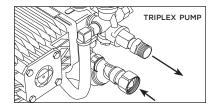


**Motors are air cooled.** It is important to ensure that machine is operated in a well-ventilated area where it can draw a steady supply of fresh air. The arrows below show an example of locations for air intake on an engine.

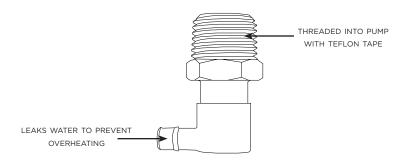


**Pumps are water cooled.** When the machine is running, ensure the trigger of the gun is pressed to allow a constant flow of fresh water into and out of the pump. **Do not let the machine run for more than 30 seconds without pressing down on the trigger.** 





Most pumps are protected by a **thermal valve.** The thermal valve releases water if a pump starts to run too hot. It will prevent catastrophic heat failure. However, the pump may have suffered damage and need maintenance, repair, or replacement. If it does not reset and continues to leak water, the thermal valve may need to be replaced.





### SAVE THESE INSTRUCTIONS

### **Safety Rules**



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

The safety alert symbol ( ) is used with a signal word (DANGER, CAUTION, WARNING), a pictorial and/or a safety message to alert you to hazards.

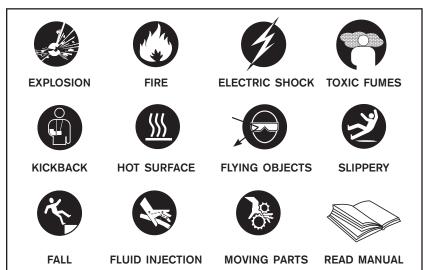
**DANGER** indicates a hazard which, if not avoided, will result in death or serious injury.

**WARNING** indicates a hazard which, if not avoided, could result in death or serious injury.

**CAUTION** indicates a hazard which, if not avoided, might result in minor or moderate injury.

**NOTICE** indicates a situation that could result in equipment or property damage.

### **Hazard Symbols and Meanings**





### **AWARNING**



Fuel and its vapors are extremely flammable and explosive.



Fire or explosion can cause severe burns or death.

### When Adding or Draining Fuel

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

### When Starting Equipment

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

### When Operating Equipment

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

### When Transporting or Repairing Equipment

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

### When Storing Fuel or Equipment with Fuel in Tank

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



This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, go to www.P65Warnings.ca.gov. Wash hands after handling.



### **WARNING**

A running engine gives off carbon monoxide, an odorless, colorless, poison gas.



Breathing carbon monoxide can cause headache, fatigue, dizziness, vomiting, confusion, seizures, nausea, fainting or death.

Some chemicals or detergents may be harmful if inhaled or ingested, causing severe nausea, fainting, or poisoning.

- Operate pressure washer ONLY outdoors.
- Keep exhaust gas from entering a confined area through windows, doors, ventilation intakes, or other openings.
- DO NOT start or run engine indoors or in an enclosed area, even if windows and doors are open.
- Use a respirator or mask whenever there is a chance that vapors may be inhaled.
- Read all instructions with mask so you are certain the mask will provide the necessary protection against harmful vapors.

### **WARNING**



Starter cord kickback (rapid retraction) can result in bodily injury. Kickback will pull hand and arm toward engine faster than you can let go.

Broken bones, fractures, bruises, or sprains could result.

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

### **A**WARNING



Risk of electrocution.

Contact with power source can cause electric shock or burn.

NEVER spray near a power source.



### **A**WARNING



Use of pressure washer can create puddles and slippery surfaces.



Kickback from spray gun can cause you to fall.

- Operate pressure washer from a stable surface.
- The cleaning area should have adequate slopes and drainage to reduce the possibility of a fall due to slippery surfaces.
- Be extremely careful if you must use the pressure washer from a ladder, scaffolding, or any other similar location.
- Firmly grasp spray gun with both hands when using high pressure spray to avoid injury when spray gun kicks back.

### **WARNING**



Contact with muffler area can result in serious burns.



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

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

### **WARNING**



Risk of eye injury.

Spray can splash back or propel objects.

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



### **AWARNING**



The high pressure stream of water that this equipment produces can cut through skin and its underlying tissues, leading to serious injury and possible amputation.

Spray gun traps high water pressure, even when engine is stopped and water is disconnected, which can cause injury.

- DO NOT allow children to operate the pressure washer.
- NEVER repair the high pressure hose. Replace it.
- NEVER repair leaking connections with sealant of any kind. Replace o-ring or seal.
- NEVER connect high pressure hose to nozzle extension.
- Keep high pressure hose connected to pump and spray gun while system is pressurized.
- ALWAYS point spray gun in safe direction and squeeze spray gun trigger to release high pressure every time you stop engine.
- NEVER aim spray gun at people, animals, or plants.
- 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 before spraying water.

### **WARNING**



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

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



### WARNING



Unintentional sparking can result in fire or electric shock.



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

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

### When Testing for Engine Spark

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

### **NOTICE**

High pressure spray may damage fragile items including glass.

- DO NOT point spray gun at glass when using red 0° spray tip.
- NEVER aim spray gun at plants.

### **NOTICE**

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

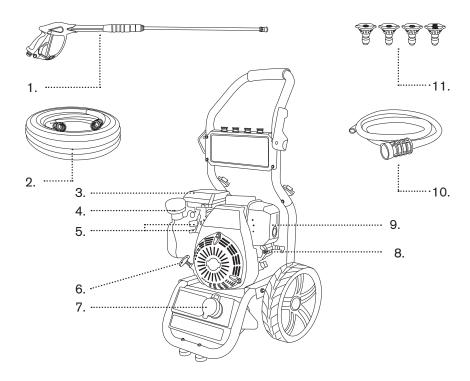
- If you have questions about intended use, contact your nearest authorized dealer, call our support line, or visit our website.
- NEVER operate units with broken or missing parts, or without protective housing or covers.
- DO NOT by-pass any safety device on this machine.
- DO NOT tamper with governed speed.
- DO NOT operate pressure washer above rated pressure.
- DO NOT modify pressure washer in any way.
- 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 provided on unit's frame.
- Check fuel system for leaks or signs of deterioration, such as chafed or spongy hose, loose or missing clamps, and damaged tank or cap.

Correct all defects before operating pressure washer.



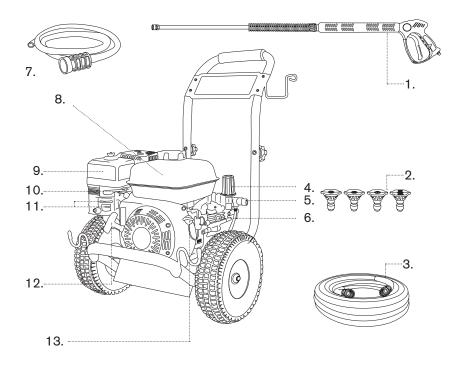
The following diagrams are intended for general reference.

Your pressure washer may differ from the models shown in the following pages. For specific model information, please visit www.bepowerequipment.com



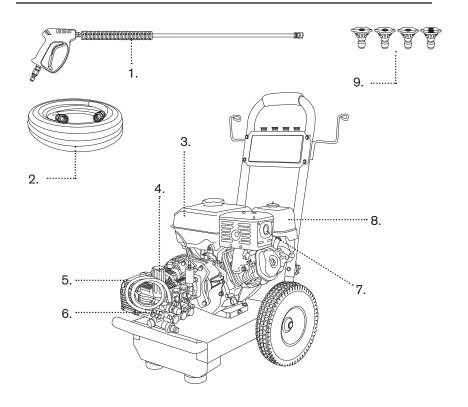
- Spray Gun Controls the application of water onto cleaning surface with trigger device. Includes trigger lock. Allows you to switch between various spray tips.
- 2. High Pressure Hose Designed to withstand the pressure created by the pump.
- 3. Air Filter Protects the engine by filtering dust and debris out of intake air.
- 4. Fuel Tank FIll tank with regular, unleaded fuel. Always leave room for fuel expansion.
- (Top) Choke Rod Prepares a cold engine for starting.
   (Bottom) Throttle Lever Sets engine in starting mode for recoil starter.
- 6. Recoil Starter Used for starting the engine manually.
- 7. Soap Tank (Not included on all models) Fill with pressure washer detergent only.
- **8. Pump -** Develops high pressure. Connect the garden hose to the inlet of the water pump, and connect the high-pressure hose to the outlet. Connections vary by model.
- 9. Muffler/Exhaust Reduces noise of the engine and expels heat.
- 10. Detergent Siphoning Hose Used to draw detergent into the low pressure stream.
- 11. Spray Tips Detergent, 0°, 15°, and 40°: for various cleaning applications.





- Spray Gun Controls the application of water onto cleaning surface with trigger device. Includes trigger lock. Allows you to switch between various spray tips.
- 2. Spray Tips Detergent, 0°, 15°, and 40°: for various high pressure cleaning applications.
- 3. High Pressure Hose Designed to withstand the pressure generated by the pump.
- 4. Unloader Pressure is preset at the factory.
- **5. Pump** Develops high pressure. Connect the garden hose to the inlet of the water pump, and connect the high-pressure hose to the outlet.
- 6. Oil Level Indicator Level should be at halfway (not included for all models).
- Detergent Siphoning Hose Use to siphon pressure washer safe detergent into the low pressure stream.
- 8. Fuel Tank Fill tank with regular unleaded fuel. Always leave room for fuel expansion.
- 9. Air Filter Protects engine by filtering dust and debris out of intake air.
- 10. Throttle Lever Sets engine in starting mode for recoil starter.
- (Top) Choke Lever Prepares a cold engine for starting.
   (Bottom) Fuel Valve Used to turn fuel supply on and off to engine.
- 12. Recoil Starter Used for starting the engine manually.
- **13.** Engine Switch Set switch to "On" for recoil starting. Set switch to "Off" to stop a running engine.

### **GAS WASHER COMPONENTS**



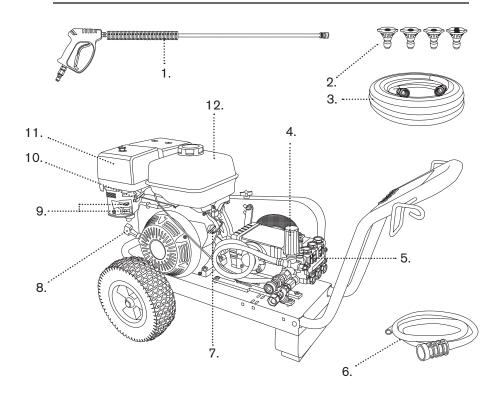
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- 6. Detergent Siphoning Hose Used to draw detergent into the low pressure stream.
- 7. Muffler/Exhaust Reduces noise of the engine and expels heat.
- 8. Air Filter Protects engine by filtering dust and debris out of intake air.
- 9. Spray Tips Detergent, 0°, 15°, and 40°: for various cleaning applications.

For the location of engine components such as the choke lever, throttle, and ON/OFF switch (if applicable), refer to the engine user manual included with your pressure washer.

For more reference material, (spec sheets, part breakdowns, product photos and more), please visit: www.bepowerequipment.com

### **GAS WASHER COMPONENTS**





- Spray Gun Controls the application of water onto cleaning surface with trigger device. Includes trigger lock. Allows you to switch between various spray tips.
- 2. Spray Tips Detergent, 0°, 15°, and 40°: for various high pressure cleaning applications.
- **3. High Pressure Hose** Designed to withstand the pressure generated by the pump.
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- 10. Throttle Lever Sets engine in starting mode for recoil starter.
- 11. Air Filter Protects engine by filtering dust and debris out of intake air.
- 12. Fuel Tank Fill tank with regular unleaded fuel. Always leave room for fuel expansion.



Your pressure washer requires some assembly and is ready for use after it has been properly serviced with the recommended oil and fuel. We recommend **SAE 10W30** Oil for engines.

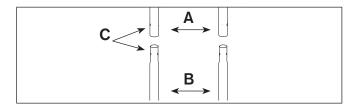
If you have any problems with the assembly of your pressure washer, please call our support line. If calling for assistance, please have the model and serial number from the data tag available.

### **Unpack the Pressure Washer**

- 1. Remove the parts bag, accessories, and inserts included with pressure washer.
- 2. Open box completely by cutting each corner from top to bottom.
- 3. Ensure all contents are present prior to assembly.

### **Attach Handle**

1. Place handle (A) onto handle supports (B) connected to main unit. Make sure holes (C) in handle align with holes on handle supports.



**NOTE:** These diagrams are intended for general reference. As a result, they may not fully reflect the appearance of your product.

2. Insert carriage bolts through holes from outside of unit and attach a plastic knob from inside of unit. Tighten by hand.



3. Insert multi-colored quick connect spray tips and other supplied accessories in spaces provided on handle.





### Follow the steps below prior to using the machine every time.

- Check to ensure the engine oil is at the proper level. Use SAE 10W30 Oil
- 2. Check the 2 handle knobs in the frame to ensure they are tight and will not vibrate loose.
- 3. Add fuel to the gas tank. Be careful not to spill while filling and do not overfill. We recommend using fuel with the lowest amount of ethanol possible. 84 octane and up is suitable.
- 4. Connect and tighten the garden hose to the GHA (garden hose inlet) connection.
- 5. Connect high pressure hose to the pump outlet. Connect the other end to the spray gun.
- \*\* Water must be turned on prior to starting the washer, pull the spray trigger to ensure water is moving the through the lines and out the nozzle without any leaks before starting the unit.\*\*
- Review the safety guidelines in the manual prior to starting the unit. If you have any issues operating the pressure washer, call our customer service line.

### **A**WARNING



Always check the level of the engine oil prior to starting the washer. Level should be at about halfway up the sight glass. If your unit does not have one, use the oil dipstick. The level should be about halfway up the dipstick.

 Failure to do so could cause the engine to seize if the oil is low or empty.

### **Connect Hose and Water Supply to Pump Before Starting**

### **A** WARNING



 $\ensuremath{\mathsf{DO}}$  NOT start your pressure washer without the water supply turned on.

 Failure to do so will result in damaging the pump from overheating and void the warranty.



### **How to Start Your Pressure Washer**

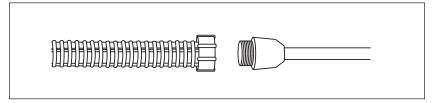
To start your pressure washer for the first time, follow these instructions step-by-step. This starting information also applies if you have let the pressure washer sit idle for at least a day.

- Place pressure washer near an outside water source capable of supplying water at a flow rate at least 1 GPM greater than the rated flow of your pressure washer. It should also be no less than 20 PSI at pressure washer end of garden hose. DO NOT siphon standing water.
- 2. Make sure unit is in a level position.
- 3. Connect garden hose to water inlet on pressure washer pump.

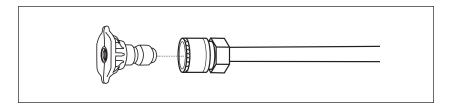
### NOTICE

DO NOT run the pump without the water supply connected and turned on.

- Damage to equipment resulting from failure to follow this instruction will void warranty.
- 4. Attach wand extension to spray gun. Tighten by hand.



 Choose desired spray tip, pull back nozzle extension collar, insert spray tip and release collar. Tug on spray tip to make sure it is securely in place. See *Spray Tips*.





6. If your gun uses a quick-connect, pull down on the collar of the quick connect coupler, slide onto the gun and let go of collar. Pull on hose to ensure the connection is tight. If your gun uses an M22 fitting, simply thread the connections together until secure.

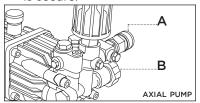


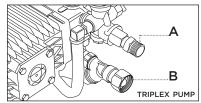
### **WARNING**



The high pressure stream of water that this equipment produces can cut through skin and its underlying tissues, leading to serious injury and possible amputation.

- NEVER connect high pressure hose directly to nozzle extension.
- Keep high pressure hose connected to pump and spray gun while system is pressurized.
- 7. Attach the other end of the high pressure hose to high pressure outlet (A) on pump. Pull down on collar of quick connect, slide onto pump and let go of collar. Note that some pumps require the hose to be threaded on. Tug on the hose to ensure connection is secure.





### \*Pump Uses SAE30 Non-Detergent Mineral Oil

- 8. Turn Water Supply on if you have not already done so. Point the gun in a safe direction and squeeze the trigger to purge the pump of air and debris. Do this until water flow is no longer erratic.
- Take a final look at all connections to make sure there are no leaks or loose connections. If there are any leaks in hoses, they must be replaced.

**IMPORTANT**: DO NOT siphon standing water for the water supply.

Use COLD WATER only (less than 100°F/38°C). Hot water will damage seals and compromise the integrity of your pump.



- 10. To start the machine, locate the engine switch on the side of the engine (if applicable), and switch it to the ON position. Units with a Honda GC engine have the power switch built into the throttle lever. Check to ensure fuel valve is in the ON position and if starting cold, apply the choke. Reference the component diagrams for the location of these parts.
- 11. Brace the unit with your foot and ensure that you are completely balanced on a flat surface. Pull recoil cord slowly until resistance is felt and then pull rapidly to avoid kickback. DO NOT place hand on engine muffler for balance as this will result in a severe burn. Once the engine is running, disengage the choke lever.

To see videos for various start-up procedures, visit our website.

### **A** WARNING



A running engine produces carbon monoxide, an odorless, colorless, poison gas.

Breathing carbon monoxide can cause headaches, fatigue, dizziness, vomiting, confusion, seizures, nausea, fainting, and death.

- Operate pressure washer outdoors, never indoors.
- Keep exhaust gas from entering a confined area through windows, doors, ventilation intakes, or other openings.
- DO NOT start or run engine indoors or in an enclosed area, even if windows and doors are open.

**IMPORTANT:** Before starting the pressure washer, ensure you are wearing adequate safety goggles.

### **A**WARNING



Risk of eye injury. Spray can splash back or propel objects such as rocks, dirt and other debris.

- Always wear safety goggles when using this equipment or while in vicinity of where equipment is in use.
- NEVER substitute normal glasses for safety goggles.



### **A** WARNING



The high pressure stream of water that this equipment produces can cut through skin and its underlying tissues, leading to serious injury and possible amputation.

Spray gun traps high water pressure, even when engine is stopped and water is disconnected, which can cause injury.

- DO NOT allow CHILDREN to operate pressure washer.
- NEVER repair high pressure hose. Replace it.
- NEVER repair leaking connections with sealant of any kind. Replace the o-ring or seal.
- NEVER connect high pressure hose directly to the spray nozzle.
- Keep high pressure hose connected to pump and spray gun while system is pressurized.
- ALWAYS point spray gun in safe direction and squeeze spray gun trigger, to release high pressure, every time you stop engine.
- NEVER aim spray gun at people, animals, or plants.
- 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. Failure to do so can result in damage to the unit or bodily harm.

### SHUTTING DOWN YOUR WASHER

### **WARNING**



Contact with muffler area can result in serious burns.



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

- DO NOT touch hot parts and avoid hot exhaust gases.
- Allow equipment to cool for at least 15 minutes before touching.
- Keep at least 5 feet (1.5 m) of clearance on all sides of pressure washer (including overhead) while in operation.

### **How to Shut Your Pressure Washer Down**

- 1. Release spray gun trigger and let engine idle down.
- 2. Turn the engine switch to the OFF position.
- 3. ALWAYS point spray gun in a safe direction, squeeze spray gun trigger to release retained high water pressure.

**IMPORTANT:** Spray gun traps high water pressure, even when engine is stopped and water is disconnected. Couplers will not release if under pressure.

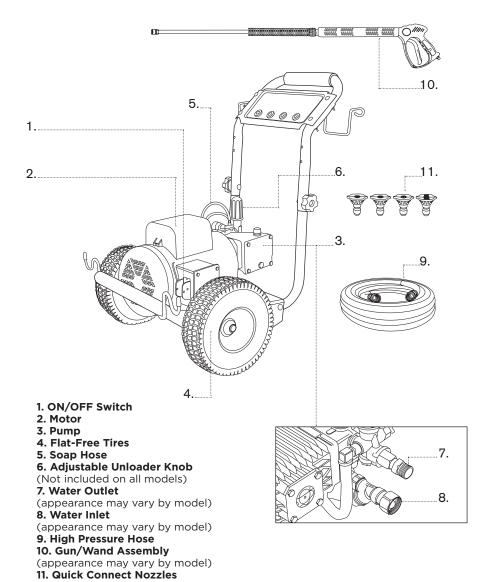
### **ELECTRIC WASHER COMPONENTS**



The following diagram is intended for general reference.

Your pressure washer may differ from the model shown below.

For specific model information, please visit our website www.bepowerequipment.com



## BE

### POWER CORD CONNECTION

### **Important Safety Instructions**

**WARNING** - When using this product basic precautions should always be followed, including the following:

- 1. Read all instructions before using product.
- 2. To reduce the risk of injury, close supervision is necessary when product is used near children.
- 3. Know how to stop the product and bleed pressures quickly. Be thoroughly familiar with the controls.
- 4. Stay alert watch what you are doing.
- 5. Do not operate the product when fatigued or under the influence of alcohol or drugs.
- 6. Keep operating area clear of other people.
- 7. Do not overreach or stand on unstable support. Maintain solid footing and balance at all times
- 8. Follow the maintenance instructions specified in the manual.
- For a grounded or double-insulated product rated 250 volts or less, single phase:

This product is equipped with a Ground Fault Circuit Interrupter (GFCI) built into the power cord plug. If a replacement plug or cord is needed, use only identical replacement parts.

### **A** WARNING



Risk of Injection or Injury to people and animals.

Do not direct discharge stream at people or animals.

### **A** WARNING



Risk of electrocution.

This unit must be connected to a properly grounded outlet.

- DO NOT use an adapter or remove the third grounding prong.
- To reduce the risk of electrocution, keep all connections dry and off the ground.
- · DO NOT touch plug with wet hands.

### POWER CORD CONNECTION



- 1. Ensure the motor switch is in the "OFF" position.
- 2. Confirm that the electrical supply is identical to the specifications listed on the pressure washer data plate.
- **3. GROUNDING INSTRUCTIONS:** This product must be grounded. If it should malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This product is equipped with a cord that has an equipment-grounding conductor. The plug must be plugged into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.
- **4. DANGER:** Improper connection of the equipment-grounding conductor can result in a risk of electrocution. Check with a qualified electrician or service personnel if you are unsure if the outlet is properly grounded. Do not modify the plug if it will not fit the outlet, have a proper outlet installed by a qualified electrician. Do not use any type of adaptor with this product.
- **5. GROUND FAULT CIRCUIT INTERRUPTER PROTECTION:** This pressure washer may be provided with a Ground Fault Circuit Interrupter (GFCI) built into the plug or the power supply cord. Test the GFCI each time it is plugged into an outlet according to instructions on the GFCI. DO NOT use the pressure washer if the test fails. The GFCI provides additional protection from the risk of electric shock. Should replacement of the plug or cord become necessary, use only identical replacement parts that include GFCI protection.
- 6. WE DO NOT RECOMMEND THE USE OF EXTENSION CORDS. If use of an extension cord is unavoidable, it must be plugged into a GFCI found in circuit boxes or protected receptacles. Use only 3-wire extension cords that have 3-prong grounding-type plugs and 3-pole cord connectors that accept the plug from the product. Use only extension cords that are intended for outdoor use. These extension cords are identified by a marking that states "Acceptable for use with outdoor appliances; store indoors while not in use." Only use extension cords that have an electrical rating greater than the rating of the product. Do not use damaged extension cords. Examine extension cords before use and replace if damaged. Do not abuse extension cord and do not pull on any cord to disconnect. Keep cord away from heat and sharp edges. Always connect or disconnect the extension cord from the receptacle before connecting or disconnecting the product from the extension cord.
- 7. Ensure the area between the pressure washer cord and outlet is kept dry.
- 8. Insert the male plug into a grounded AC outlet. DO NOT use an adapter OR remove the grounding plug.

### **MAINTENANCE INSTRUCTIONS**



**Caution:** Only a certified electrician can service the motor. Contact an authorized dealer for service or additional information.

### **User Maintenance Instructions**

**General Inspection:** Inspect the motor at regular intervals, approximately every 500 hours of operation or every 3 months, whichever occurs first. Keep the motor clean and the ventilation openings clear. Check that the interior and exterior of the motor is free of dirt, oil, grease, water, etc. Oily vapor, paper pulp, textile lint, etc. can accumulate and block motor ventilation. If the motor is not properly ventilated, overheating can occur and cause damage to the motor over time.

**Lubrication & Bearings:** Lubrication from bearing grease will degrade over time. The lubricating ability of grease depends primarily on the type of grease, the size of the bearing, the speed at which the bearing operates, and the severity of the operation conditions. Optimal results can be obtained if the following recommendations are utilized in your maintenance routine.

**Type of Grease:** A high-grade ball or roller bearing grease should be used. Recommended grease for standard service conditions is Polyrex EM (Mobil). Equivalent and compatible grease include:

Texaco Polystar, Rykon Premium #2, Pennzoil Pen 2 Lube and Chevron SRI-2.

- Maximum operating temperature for standard motors = 110°C.
- Shut-down temperature in case of a malfunction = 115°C.

**Lubrication Intervals:** Recommended lubrication intervals are every 2200 hours. For more information contact an authorized service center.



### **A** WARNING



To reduce the risk of electrocution, keep all connections dry and off the ground. Do not touch plug with wet hands

### How to Start Your Electric Pressure Washer

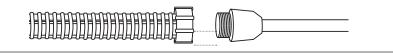
To start your pressure washer for the first time, follow these instructions stepby-step. This starting information also applies if you have let the pressure washer sit idle for at least a day.

- Place pressure washer near an outdoor water source capable of supplying water at a flow rate greater than 3.8 gallons per minute and no less than 20 PSI at the end of the garden hose. DO NOT siphon supply water.
- 2. Ensure unit is level and placed on a flat, even surface.
- 3. Connect garden hose to water inlet on pressure washer pump.

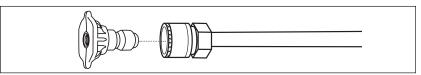
### **NOTICE**

DO NOT run the pump without the water supply connected and turned on.

- Damage to equipment resulting from failure to follow this instruction will void warranty.
- 4. Attach wand extension to spray gun. Tighten by hand. Please note that wand appearance may differ based on pressure washer model.

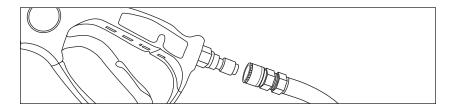


5. Choose desired spray tip, pull back nozzle extension collar, insert spray tip and release collar. Tug on spray tip to make sure it is securely in place. See *Spray Tips* for information on each type.

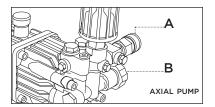


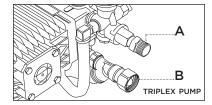
6. Uncoil high pressure hose and attach quick connect end of hose to the base of the spray gun. Pull down on collar of quick connect, slide onto spray gun and let go of collar. Tug on hose to ensure the connection is tight and secure. If the connection is even slightly loose, disconnect and try again.

### STARTING YOUR ELECTRIC WASHER



7. From here, attach the other end of the high pressure hose to the outlet (A) on the pump. If your gun uses a quick-connect, pull down on the collar of the quick connect coupler, slide onto the pump and let go of collar. Pull on hose to ensure the connection is tight. If your gun uses an M22 fitting, simply thread the connections together until tight. Pull on the hose to ensure fit is secure.





- 8. Turn the water supply on, point gun in a safe direction and squeeze the trigger to purge the pump of air and debris. Do this for at least 30 seconds to ensure everything has been cleared out.
- 9. Take a look at all connections to make sure there are no leaks or loose connections. If the high pressure hose is leaking, it must be replaced.

**IMPORTANT:** DO NOT siphon standing water for the water supply. Use **cold water** (less than 100°F/38°C). Use of hot water can damage seals and compromise the integrity of the pump over time. Only use hot water if your pump has hot water seals and is graded to use it.

10. To start the machine, plug it in and locate the ON/OFF switch on the side of the motor and switch it to the ON position (see component chart on page 22 to locate the switch). If the unit does not turn on, ensure that the outlet is capable of supplying enough power for the unit.

### STARTING YOUR ELECTRIC WASHER



**IMPORTANT:** Before starting the pressure washer, ensure that you are wearing adequate safety goggles.

- ALWAYS point spray gun in a safe direction and squeeze spray gun trigger to release high pressure every time you stop engine.
- **NEVER** aim spray gun at people, animals, or plants.
- 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. Failure to do so can cause bodily harm or damage to the unit.

### **A**WARNING



Risk of eye injury.

Spray can splash back or propel debris such as dirt/rocks.

- Always wear safety goggles 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 goggles.
- NEVER substitute safety glasses for safety goggles.

### SHUTTING YOUR ELECTRIC WASHER DOWN

### How to Shut Down Your Pressure Washer

- 1. Release spray gun trigger.
- 2. Turn the motor switch to the OFF position.
- 3. ALWAYS point spray gun in a safe direction, squeeze spray gun trigger to release retained high water pressure.

**IMPORTANT:** The spray gun traps high water pressure, even when the motor is stopped and water is disconnected. Couplers will not release if under pressure.

### **AWARNING**

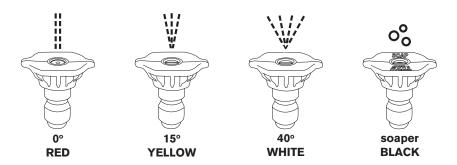


The high pressure stream of water that this equipment produces can cut through skin and its underlying tissues, leading to serious injury and possible amputation.

Spray gun traps high water pressure, even when engine is stopped and water is disconnected, which can cause injury.

- Keep high pressure hose connected to pump and spray gun while system is pressurized.
- ALWAYS point spray gun in safe direction and squeeze spray gun trigger, to release high pressure, every time you stop engine.





### **How to Use Spray Tips**

The quick-connect on the nozzle extension allows you to switch between four different quick connect spray tips. Spray tips can be changed while the pressure washer is running once the spray gun trigger safety lock is engaged. The spray tips vary the spray pattern as shown above.

### Follow these instructions to change spray tips:

- Pull back collar on quick-connect coupler and pull the current spray tip off.
   Store the spray tips in the holder provided on the handle. Storing nozzles in the designated holder will help prevent any debris from clogging the tip.
- 2. Select the desired spray tip:
  - For a gentle rinse, select the white 40° spray tip.
  - For high pressure cleaning, select the yellow 15° spray tip.
  - To scour the surface, select the red 0° spray tip.
  - To apply detergent, select the black spray tip.
- 3. Pull back on collar, insert new spray tip and release collar. Tug on spray tip to make sure it is securely in place.

### **Usage Tips**

- For most effective cleaning, keep spray tip 8 to 24 inches away from cleaning surface.
- If you get spray tip too close, especially using a high pressure spray tip (red or yellow), you may damage the surface being cleaned. Do not use the red spray tip on glass.

### USING THE BLACK SOAP NOZZLE

### To apply detergent, follow these steps:

- 1. Review the use of spray tips.
- Prepare detergent solution as required by the job. Use only BE-certified detergent.
- 3. Place the small filter end of detergent siphoning tube into detergent container or on-board soap tank (if applicable).
- 4. Connect the other end of the soap hose to the pressure washer pump.

**NOTE:** Make sure the filter is fully submerged in detergent during use.

### Please note that only the BLACK NOZZLE will draw soap.

- 5. Ensure that the black spray tip is installed.
- Make sure the garden hose is connected to the water inlet. Check that the high pressure hose is connected to spray gun and pump. Turn water on.

### **NOTICE**

You must attach all hoses before you start the engine.

- Starting the engine without all the hoses connected and without the water turned ON will damage the pump.
- Damage to equipment resulting from failure to follow this instruction is not covered by warranty.
- 7. Start the engine following instructions in Starting Your Washer.
- 8. Apply the detergent to the surface using long, even, overlapping strokes.
- 9. Allow the detergent to "soak in" for 5 minutes before washing and rinsing.

Reapply as needed to prevent surface from drying. **DO NOT allow detergent to dry on.** This will damage paint clear coat, and other types of finish.

**IMPORTANT:** You must flush the detergent siphoning system after each use by placing the filter into a bucket of clean water and running the pressure washer at low pressure for 1-2 minutes.

### A CAUTION

Chemicals can cause bodily harm and/or property damage.

- NEVER use caustic liquid with pressure washer.
- Use ONLY pressure washer safe detergent/soaps. Follow all manufacturer instructions and do not mix detergents with other types.



### **Troubleshooting Chart**

If you are experiencing an issue that is not listed in this chart, or have checked all the possible causes listed and are still experiencing the problem, see your authorized dealer or call our support line.

### **GASOLINE ENGINES**

Problem	Cause	Correction
Unit has following	1. Low pressure spray tip installed.	1. Replace with high pressure spray tip.
problems: failure to	2. Water inlet is blocked.	2. Clear inlet.
produce pressure, erratic pressure, chattering, loss	3. Inadequate water supply.	3. Provide adequate water flow.
of pressure, low water	4. Inlet hose is kinked or leaking.	4. Straighten inlet hose. Replace if leaking.
volume.	5. Clogged inlet hose screen.	5. Check and clean inlet hose screen.
	6. Water supply is over 100°F (38°C).	6. Provide cooler water supply.
	7. High pressure hose is blocked or leaks.	7. Clear blocks in outlet hose.
	8. Spray gun leaks.	8. Replace spray gun.
	9. Spray tip is obstructed.	9. Clean spray tip.
	10. Pump is faulty.	10. Contact local service facility.
Detergent fails to mix	1. Detergent siphoning tube is not submerged.	1. Fully submerge detergent siphoning tube
with spray.	2. Detergent siphoning tube/filter is clogged	into detergent.
	or cracked.	2. Clean or replace filter/ siphoning tube.
	3. High pressure spray tip installed.	3. Replace with low pressure spray tip.
Engine lacks power.	1. Dirty air filter.	1. Replace air filter.
Engine will not start	1. Throttle lever or on/off switch in OFF	1. Turn throttle lever to ON position
	position.	2. Fill fuel tank or turn on fuel supply
	2. No fuel in engine	3. Replace with factory recommended spark
	3. Worn, fouled, or dirty spark plug	plug
	4. Pressure build up in pump	4. Squeeze trigger on spray wand (refer to
		operating instructions in owner's manual)
Oil Alert (for units with	Engine isn't level or the oil level is too low	Place engine on level surface or perform an oil
this feature)		change using SAE 10W30 oil (refer to engine
		user manual for instructions)
Engine runs well at no	1. Engine speed is too slow	1. Adjust Throttle Lever back to full throttle.
load but "bogs" down		
under full load		



Engine will not start or	1. Low oil level	1. Fill crankcase to proper level
starts and runs poorly	2. Dirty air filter	2. Clean or replace air filter
	3. Out of gasoline	3. Fill fuel tank
	4. Stale gasoline	4. Drain gas tank and fill with fresh fuel
	5. Spark plug wire not connected to spark plug	5. Connect wire to the spark plug
	6. Bad spark plug	6. Replace the spark plug
	7. Water in gasoline	7. Drain gas tank, fill with fresh fuel
	8. Over choking	8. Open choke fully and crank engine
Engine shuts down	1. Out of gasoline	1. Fill fuel tank
during operation	2. Low oil level	2. Fill crankcase to proper oil level
Engine lacks power	1. Dirty air filter	1. Replace air filter
Engine "putts" or falters	1. Choke is opened too soon/too early	1. Move choke to halfway position until engine
		runs smoothly.
		* All engine servicing to be taken to
		manufacturer's authorized service outlet

### **ELECTRIC MOTOR**

Problem	Causes	Correction
Motor will not start and there is no humming	Not plugged in     RESET" button on GFCI not pushed	1. Plug in 2. Push "RESET" button
sound	3. Circuit breaker has tripped or fuse is blown	3. Reset breaker or replace fuse
Power source circuit continues to trip or blow	1. Too much load already on circuit	Reduce load on circuit and try another compatible amp circuit
fuses	Extension cord is too long or of improper gauge, causing voltage drop	2. See section on extension cords
	3. Pump is stuck due to dirt, mineral build up, or ice	Unplug unit. If temp. is below freezing do not use. Thaw in warm area.      Take unit to your closest Baldor dealer for servicing and repair
	4. Motor malfunction	* All motor servicing to be taken to manufacturer's authorized service outlets

### **PUMP**

Problem	Causes	Correction
No low pressure	1. Using wrong nozzle	1. Insert black soaper nozzle
detergent delivery	2. Siphon hose or filter is plugged	2. Clear siphon hose of debris
Unit does not reach required pressure	Restricted or insufficient water supply     Unsuitable or worn out nozzle	Check supply hose, faucet and inlet water filter. Must be connected to water source that provides at least 6 GPM
		2. Replace nozzle
	3. Regulator set too low (for units with an adjustable unloader)	3. Reset unloader by turning knob (clockwise increases pressure)



Thermal Relief Valve is open and discharging water from side of pump	Water temperature is too high     Pump has operated more than 3 mins     without pulling trigger	Use cool water only.     Pull trigger at least 30 seconds every 3 mins. Thermal valve must be replaced.
Leak in the fittings	1. Water leak in high pressure fittings, hose, or gun	Use teflon tape or pipe sealant to     tighten hose fitting, replace hose or gun     **If problem continues, take to your     pressure washer dealer
Pump oil is low	1. Normal use consumes oil over time	To gauge the oil level, look directly into the sight glass. Oil level should always be at the center dot. Do not overfill. Replace w/ SAE 30 non detergent mineral oil
Oil has a milky color	Seals have worn from use and water has leaked in	Bring Unit local service center to have seals replaced

### **Winter Storage**

### NOTICE

You must protect your unit from freezing temperatures.

- Failure to do so will permanently damage your pump and render your unit inoperable.
- 2. Freezing damage is not covered under warranty.

### To protect the unit from freezing temperatures:

- Use Pump Saver to treat the pump. This minimizes freezing damage and lubricates pistons and seals. Contact your local dealer for Pump Saver Solution.
- If pump saver is not available, connect a 3 ft. section of garden hose to the
  water inlet adapter. Pour RV-antifreeze (antifreeze without alcohol) into hose.
   Pull the recoil handle twice. Disconnect the 3 ft. hose.
- 3. Store the unit in a clean, dry area (heated area preferred).

### **Long Term Storage**

If you do not plan to use the pressure washer for more than 30 days, you must prepare the engine and pump for long term storage. See the engine user manual for specific instructions regarding this.

### **Protect Fuel System**

Fuel Stabilizer:

Fuel will become stale when stored over 30 days. Stale fuel causes acids and gum deposits to form in the fuel system or on essential carburetor parts. Prior to storage, if gasoline will not be treated with a fuel stabilizer, it must be drained from the engine into an approved container. After draining, run the engine until it stops from lack of fuel.



When fuel stabilizers are used according to their instructions, there is no need to drain the gasoline from the engine prior to storage. Run the engine for a short time to circulate stabilizer throughout the fuel system. Engine and fuel can then be stored for up to 24 months.

If gasoline is drained, the use of a fuel stabilizer in the storage container is still recommended to maintain freshness.

### Storing the Engine

See the engine operator's manual for instructions on how to properly prepare the engine for storage.

**NOTE:** Pump Saver is available as an optional accessory. It is not included with the pressure washer. Contact your closest authorized dealer to purchase BE Pump Saver.

To use Pump Saver, make sure the pressure washer is turned off and disconnected from supply water. Read and follow all instructions and warnings given on the Pump Saver container.

### **Other Storage Tips**

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

### **WARNING**



Storage covers can be flammable.

- DO NOT place a storage cover over a hot pressure washer.
- Let equipment cool for at least 30 minutes before placing the cover on the equipment.
- 4. Store unit in a clean and dry area.

# **MAINTENANCE NOTES**