

ECHO

BEAR CAT®



ELECTRIC PRESSURE WASHER

OPERATOR'S MANUAL

PW2014E

WARNING: 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.

Introduction

4 Using the Operator's Manual

Product Identification

5 Pressure Washer

Safety

6 Safety Rules

Electric Washer Components

9 Component Chart

Specifications

10 Specifications of the unit

Assembly

11 Preparation

12 Assembly

Operation

16 How to Start your Pressure Washer

17 Use of detergent

Maintenance

- 19 Cleaning & Storage
- 20 GFCI plug
- 21 Pump saver

Troubleshooting

- 22 Troubleshooting Chart

Replacement parts

- 23 List of replacement parts

Warranty

- 24 Warranty coverage
- 25 Warranty process



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

Using the Operator's Manual

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

Reading the operator's manual thoroughly will help avoid any personal injury or damage to your machine. The information in this manual will offer you the most effective tools for cleaning as well as the safest. By knowing how best to operate this machine you will be better positioned to show others who may also operate the unit.

This manual contains information for the electric pressure washer, and is placed in order starting 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.

Record Identification Numbers

Pressure Washer

If you need to contact an Authorized Dealer or Customer Service 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.

Date of Purchase:

Dealer Name:

Dealer Phone:

Product Identification Numbers

Model Number:

Serial Number:

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.

This manual contains information that relates to **PROTECTING PERSONAL SAFETY** and **PREVENTING EQUIPMENT PROBLEMS**. It is very important to read this manual carefully and understand it thoroughly before using the product. The symbols listed below are used to indicate this information.

DANGER indicates a potential hazard that will result in serious injury or loss of life.

WARNING indicates a hazard that could result in serious injury or loss of life.

CAUTION indicates a potential hazard that may result in moderate injury or damage to equipment.

NOTE is used to inform the reader of something the operator needs to know about the tool.

WARNING

To reduce the risk of injury, the user must read and understand the instructions before using this product.

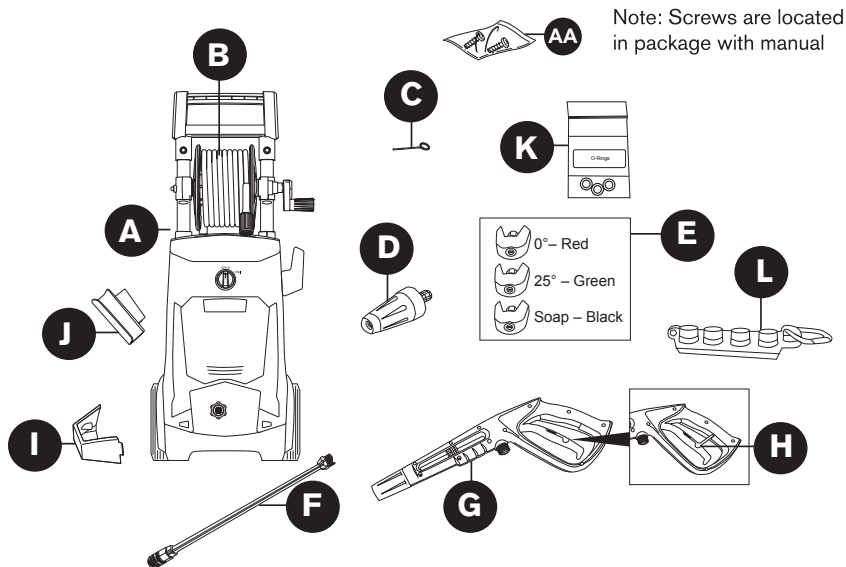
1. **Warning** – When using this product basic, precautions should always be followed, including the following:
2. Read all the instructions before using the product.
3. Know how to stop the product and bleed pressures quickly. Be thoroughly familiar with the controls.
4. Keep operating area clear of persons.
5. Do not overreach or stand on unstable support. Keep good footing and balance at all times.
6. Follow the maintenance instructions as specified in the manual.
7. To avoid personal injury and/or damage to property and to maximize your power washing experience, carefully follow all of the safety tips, instructions, warnings and safeguards and become familiar with all of the controls.

8. This power washer conforms to CSA and other safety and consumer standards. **DO NOT** modify or rebuild any part of your power washer.
9. **DO NOT** use your power washer when you are under the influence of alcohol or drugs. Use this power tool carefully and only when you are alert.
10. Watch your balance and footing while using your power washer. Surfaces become slippery when wet and are extra slippery when using a detergent or cleaner.
11. **NEVER** operate the power washer in bare feet, sandals, or open-toed shoes.
12. When using the power washer near children, make sure they are closely supervised by an adult to avoid injury. **NEVER** let a child use the power washer.
13. Keep fingers, hands, feet and any part of your body clear of the stream of high pressure water. The powerful spray can cause blindness or injuries. It can break a window if you are too close when you pull the trigger on the spray gun.
14. **ALWAYS** wear eye protection to prevent injury to eyes when operating the power washer.
15. To avoid mishaps or injury, **ALWAYS** use the trigger safety lock when not using the power washer even if the spraying stops for a moment.
16. The power washer is equipped with a Ground Fault Circuit Interrupter (GFCI) which greatly reduces the chance of electric shock while the unit is in use. If replacement of the plug or cord is needed, use only identical replacement parts.
17. Point the spray gun in a safe direction when using the power washer.
18. **NEVER** spray directly at a person, animal, electrical device or the unit itself.
19. When first using the spray gun, hold the spray gun and lance with two hands when pulling the trigger (one hand to pull the trigger and the other to stabilize the gun assembly) until you get used to the “kickback” from the spray gun.
20. When you press the power switch to turn off the power washer, water pressure may remain in the system. To discharge the pressure, point the spray gun in a safe direction and pull the trigger.
21. **NEVER** spray flammable liquids.
22. **NEVER** use the power washer in areas that contain combustible dust, liquids or vapors.
23. Avoid contact of the pressure hose with sharp objects and examine the hose regularly. Replace if damaged. Due to the high pressure involved, it cannot be repaired if cut or damaged.

24. Only use detergent specifically formulated for power washers and follow instructions on the detergent's label. Dish or laundry soap is too thick and will clog the nozzle of your detergent bottle.
25. Protect eyes, lungs, and skin from exposure to detergent.

IMPORTANT: Store the power washer indoors to prevent the water in the unit from expanding under freezing conditions. When the water freezes and expands, your power washer will be damaged and become inoperable. Or, if storing outdoors, it is recommended you use pump saver (not included) to protect pumps.

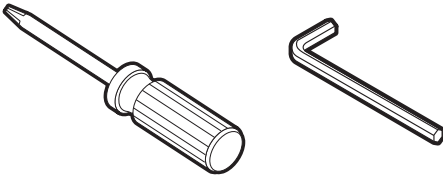
26. NEVER use hot water with your power washer. It will overheat and damage the high pressure pump.
27. NEVER leave the power washer unattended while it is powered "ON".
28. ALWAYS turn the water supply "ON " before turning the power washer power to "ON". Running the pump dry will cause damage to the internal components.
29. NEVER use a water supply to your power washer that exceeds 150 PSI maximum.
30. NEVER disconnect the high pressure hose from the power washer while the system is pressurized.
31. NEVER permanently engage the trigger mechanisms on the spray gun.
32. NEVER operate the power washer unless all components are properly and securely connected.
33. NEVER allow the power washer pump to run for more than one minute after you have turned off the water supply. This can cause the motor and pump to overheat and fail.
34. NEVER use lances or other parts that are not compatible for this specific ECHO Bear Cat unit.
35. NEVER use an extension power cord since it defeats the effectiveness of the GFCI and increases the chance of electrocuting the operator.
36. NEVER spray any electrical outlet with your power washer.
37. Inspect the power cord before using. DO NOT use it if it is damaged.



Part	Description	Quantity
A	Power Washer Unit	1
B	High Pressure Hose	1
C	Nozzle Cleaning Wire	1
D	Rotary Nozzle	1
E	Quick Connect Nozzles	3
F	Zinc Steel Lance	1
G	Spray Gun	1
H	Spray Gun Trigger Lock Button	1
I	Nozzle Tray	1
J	Spray Gun Holster	1
K	O-Ring Kit	1
L	Nozzle Holder (does not include nozzles)	1
AA	Screws	2

Specifications	
Model	PW2014E
Rated PSI (lbs/sq.)	2000
Max GPM (gal/per min)	1.4
Cold Water	Yes
Volts	120
Amps	14
Weight (lb)	30.2

Before beginning assembly of product, make sure all parts are present. Compare parts with package contents list and hardware contents list. If any part is missing or damaged, DO NOT attempt to assemble the product.



Estimated Assembly Time: 5 minutes

Tools Required for Assembly (not included): Phillips screwdriver and 5/16" (8 mm) hex key.

Power Unit Assembly

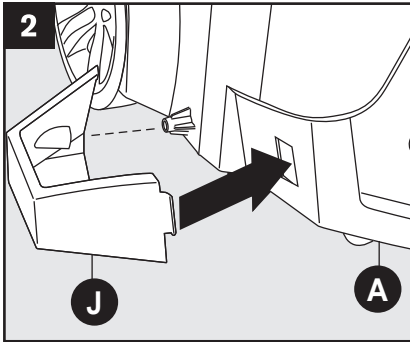
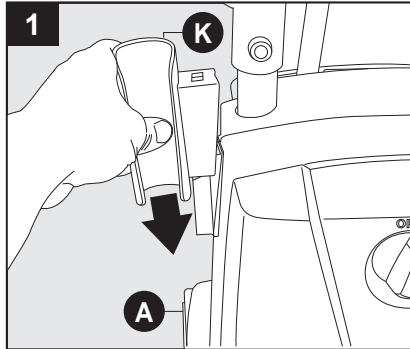
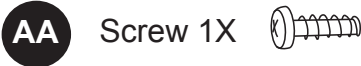
Slide the spray gun holster (K) onto left side, when facing the unit of power washer unit (A).

Note: When placing the gun with the lance attached, the nozzle will rest in this tray.

Slip tab into slot and screw the nozzle tray (J) on bottom left, when facing the unit, of power washer unit (A). Secure with screw (AA).

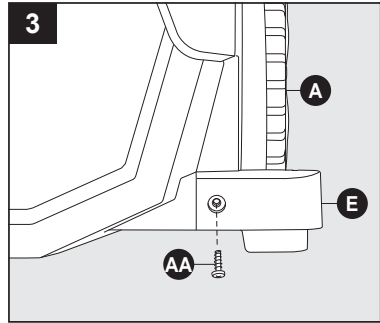
Note: DO NOT use a power screwdriver. When the screw is completely tight, give a small final clockwise twist of the screwdriver.
DO NOT overtighten.

Hardware Used:



Slip tab of stabilizer foot (E) into slot on bottom right, when facing the unit, of power washer unit (A). Secure with screw (AA).

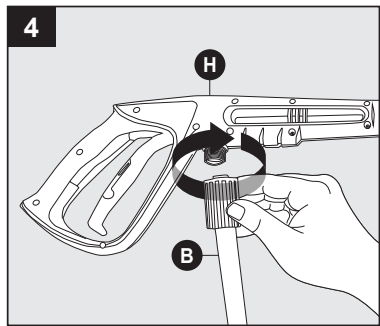
Hardware Used:



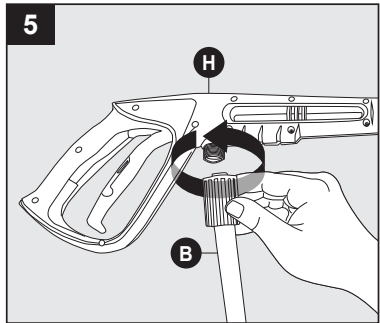
High Pressure Hose Assembly

Connect the other end of high pressure hose (B) to spray gun (H) by screwing collar over gun inlet. Hand tighten (turning clockwise) until tight. Hose is now securely attached to the spray gun.

Note: High pressure hose (B) is fitted to the hose reel and ready to use. It only needs to be attached to the spray gun (H).



To release the hose (B) from spray gun (H), turn black collar counter-clockwise. Remove gun.



Locking Spray Gun (before Lance installation)

To lock the trigger of the spray gun (I), aim the gun away from you and push the lock button from right to left. After doing so, squeeze or pull the trigger to make sure it is locked and will not move. Always leave lock button in locked position when not in use. This ensures the gun is in “safe” mode until it is ready for use.

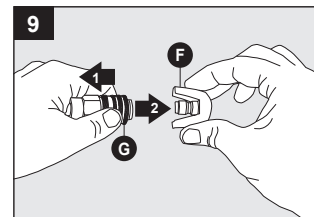
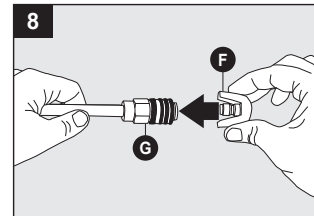
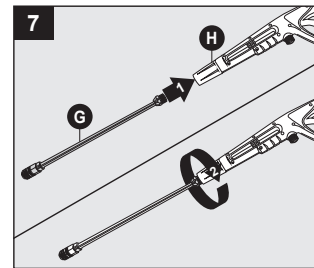
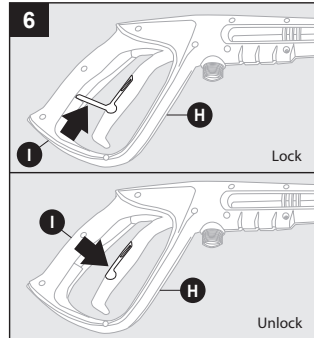
Lance Installation

While spray gun (H) is in the locked position, insert lance (G) into the end of spray gun by inserting and turning clockwise until fully in place. To remove turn counterclockwise.

Attach nozzles (F) into end of lance (G) by pressing selected nozzle into place. It will make a “click” sound when firmly in place.

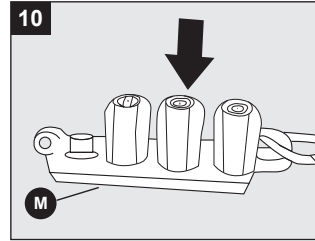
Note: Always push safety lock button to lock trigger when changing lances and nozzles to ensure that they do not accidentally eject with force during removal.

To remove nozzle (F), pull back on collar of lance (G) and pull out nozzle.



Return the nozzle back to the nozzle holder (M) for storage.

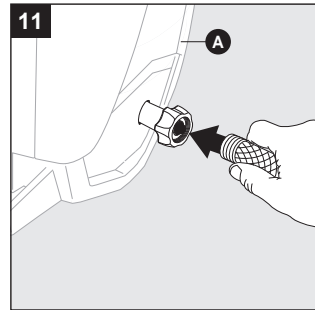
Note: The nozzle holder can be attached on the machine using the carabiner.



Attach garden hose to the collar of garden hose adapter.

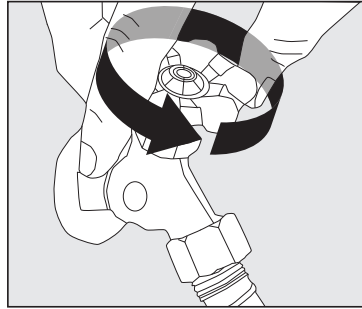
Note: Flush out garden hose before connecting to garden hose adapter.

You have now completed assembly and are ready to begin using your electric power washer. Read and observe all safety instructions.

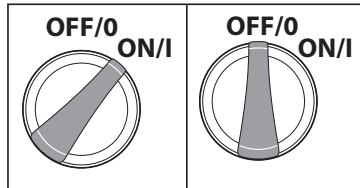


Operating Instructions

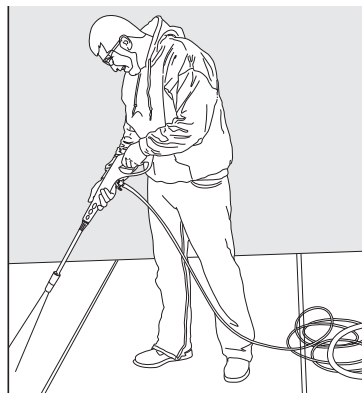
- Turn on water supply at the faucet to completely open.
- Make sure the “ON/OFF” switch is in the “OFF” position. The power switch has international symbols for ‘on’ and ‘off’: On (I) Off (O).
- Unwind the power cord completely and plug the GFCI into a grounded 120 volt outlet.
- Release safety push trigger lock up and back into trigger. While pointing the spray gun in a safe direction, squeeze the trigger on the spray gun until there is a steady stream of water, letting the water and air out of the hose. Push trigger lock back down to lock back into place.



- Turn the power switch to the “ON” (I) position. The unit will turn on for 1 - 2 seconds and shut off. This is a normal function of the auto start feature. Squeeze the spray gun trigger to begin pressure washing.
- Begin power washing by squeezing the trigger on the spray gun all the way into the handle.
- Release the spray gun trigger to stop the power washer
- Allow the motor to come to a complete stop before squeezing the trigger again.
- Squeezing rapidly will cause the auto start feature to miss an on/off cycle that may prevent it from turning on while squeezing trigger after rapid squeezing. Use slow deliberate trigger pulls to avoid such symptoms.

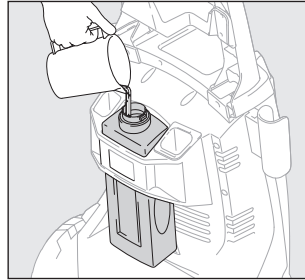


Always test a small area to avoid chance of damaging the surface.



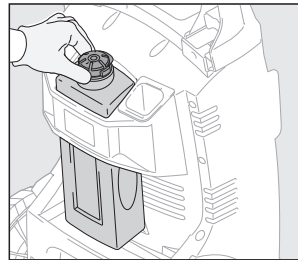
When using the detergent, fill it with a properly formulated detergent or cleaner with water ratio according to instructions on the container.

DO NOT use thick gel-like detergents, as they will clog the power washer and can cause damage.



The power washer will pull a ratio of water to detergent of 10:1 or 10 parts water to 1 part detergent.

- When removing the detergent tank, remove lid and place finger on both sides of the bottle and squeeze to get past the knobs on each side and pull out. Press down firmly when putting it back in place.



Operating Tips

- If you hear the motor run intermittently when the trigger is not being squeezed, that is normal. The pump is priming itself so it is ready to operate when the trigger is squeezed. Turn off the power washer if not being used after five minutes.
- Keep the nozzle cleaning wire for use in unclogging the lance nozzle. If you lose the cleaning wire, a straightened paper clip also works.

How to Avoid Damaging Surfaces

Damage to surfaces being cleaned occurs because the impact force of the water pressure exceeds the durability of the surface. Bare wood can be penetrated; paint can be peeled off, etc. You can vary the force of your power washer by controlling:

1. The angle of the surface being cleaned
2. The distance of the nozzle from the surface being cleaned

NEVER use a narrow high pressure stream of water on soft surfaces susceptible to damage.

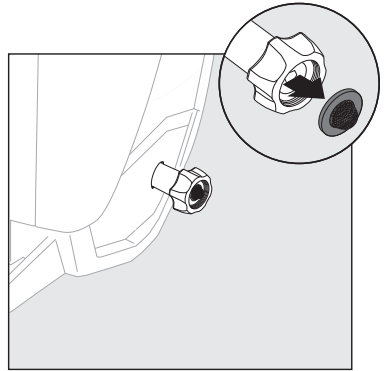
Use the 25° angle quick connect nozzle when cleaning windows. Be sure to place the nozzle approximately four to five feet away from the window with the nozzle at forty five degree angle. Squeeze the trigger and vary the spray pattern and angle until optimum cleaning efficiency is achieved.

Detergents

- Use detergents designed for power washers. Contact your local ECHO Bear Cat dealer to purchase an appropriate detergent. Hardware stores or home centers also have power washer detergents for different cleaning projects. The cleaning solution should be the consistency of water in order to prevent clogging your detergent bottle and nozzle.
- This system applies detergent under low pressure. The cleaning power of the detergents is enhanced when applied with low pressure and enough time is given to break down dirt and grime. The combination of low pressure and chemical action is very effective and can be better than scrubbing if applied properly. **ALWAYS** spray detergent on a dry surface. **DO NOT** pre-soak area. Wetting the surface first dilutes the detergent and reduces its cleaning ability. **DO NOT** allow detergent to dry on surface. On vertical surfaces being cleaned, apply detergent to lower surfaces and work your way up to prevent detergent from causing streaks in the dirt and grime. Rinse detergent by pressure washing from bottom up for same reason.
- If a stain is particularly tough, it may be necessary to reapply the detergent and use a bristled brush to scrub the stain. Subsequent power washing after brushing should successfully complete your cleaning job.

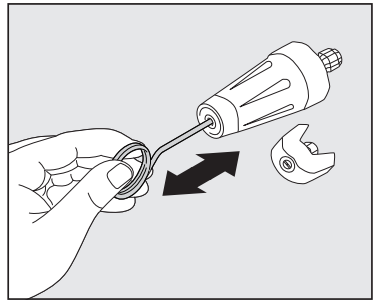
Cleaning Garden Hose Adapter

- The screens inside the garden hose adapter should be cleaned periodically. Rinse it with clean water, and then place it back in the adapter.



Cleaning Nozzles

- A clogged or partially clogged nozzle can cause significant reduction of water pressure coming out of the nozzle and/or cause the unit to pulsate while spraying.
- Turn off the unit.
- Turn off the water supply to the unit.
- Relieve any pressure trapped in the hose by squeezing the trigger 2-3 times, and then lock the spray gun.
- Using the nozzle tip cleaner provided (or an unfolded paper clip), insert the wire into the nozzle hole and move back and forth until debris is dislodged.
- Back flush water through the nozzles using garden hose and highest pressure available.



Storage

- When your pressure washing session has been completed, turn off the power switch located on the front of the power washer. Unplug the power cord from the outlet. Turn off the water supply. Pull the trigger on the spray gun 2-3 times to drain out the excess water and to release any remaining water pressure. Disconnect the garden hose adapter from the water inlet. **DO NOT** allow the power washer to run with no water flowing through it.
- Remove detergent bottle and clean completely. Residual chemical will stick to the container and can cause the detergent injector to clog and not function properly.
- Remove high pressure hose from spray gun.
- Remove lance from the gun. Place the gun in the holder on the side. Lances are placed into any of the slots in the back of the unit. Make sure to discard any remaining detergent from the bottle. Flush the bottle and nozzle head with fresh water to prevent clogging.
- Hook the power cord around the L-shaped tab on the right side of the machine when facing it.

Servicing of a Double-Insulated Appliance

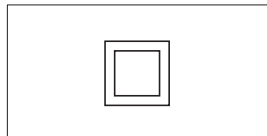
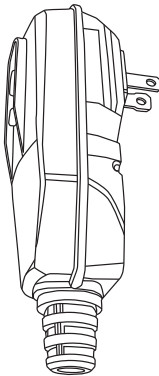
Ground Fault Circuit Interrupter Protection:

This pressure washer is provided with a ground-fault circuit-interrupter (GFCI) built into the plugs of the power-supply cord. This device 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.

In a double-insulated product, two systems of insulation are provided instead of grounding. Grounding means are not provided for a double insulated product, nor should grounding means be added to the product. Servicing a double-insulated product requires extreme care and knowledge of the system, and should only be done by qualified service personnel.

Replacement parts for a double-insulated product must be identical to the original parts.

A double-insulated product is marked with the words "Double Insulation" or "Double Insulated". Product may also be marked with symbol shown here.



Double Insulated Product

Pump Saver is a product that protects and prolongs the life of the pump. This will keep the internal parts of the pump lubricated and protected from freezing while being stored in ALL climates. It also assists with protection from internal corrosion. Only use ECHO Bear Cat certified detergent.

Pump Saver Instructions

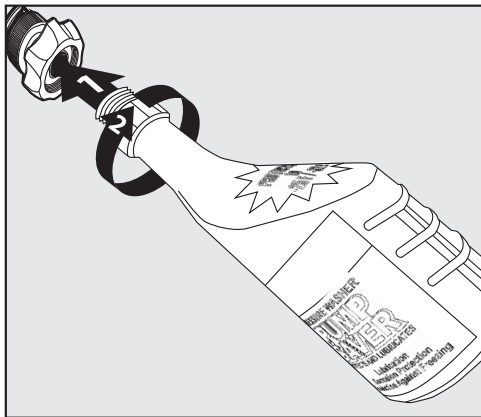
Follow the previous storage instructions for your power washer. To prevent staining, protect the surface under the power washer from any excess fluid. Wear eye protection when using this product.

Turn unit off and disconnect the gun before adding pump protector. Unscrew threaded top from bottle to remove seal and reattach threaded top to bottle.

Remove black cap from bottle.

1. Place top of pump saver bottle onto the garden hose adapter previously installed to pressure washer inlet.
2. Secure pump saver bottle by turning in a clockwise direction.
3. Turn power on. Turn the power washer off as soon as the Pump Saver begins to exit the HP hose.

Note: Instructions on Pump Saver Bottle are generic and not model specific.

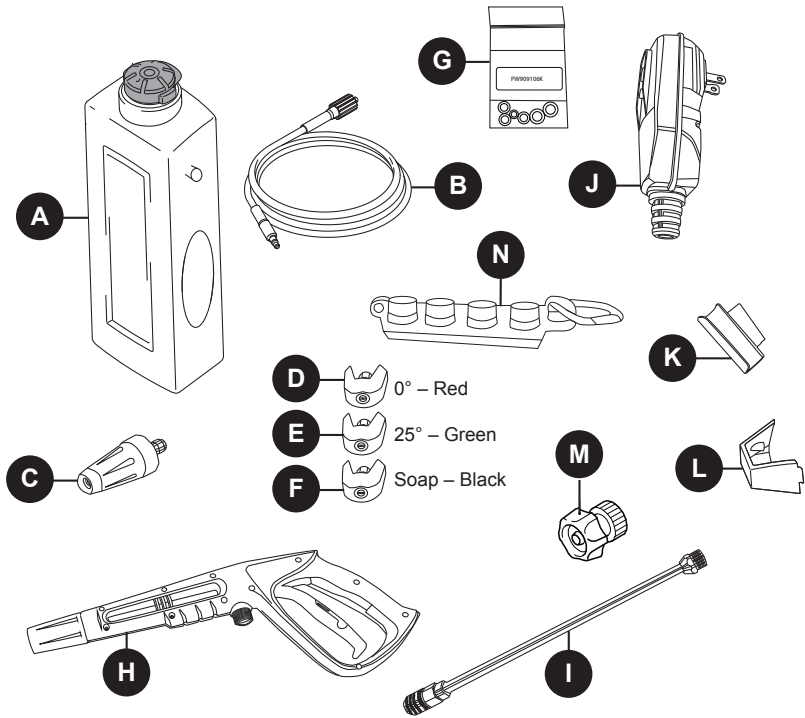


Troubleshooting Chart

If you are experiencing a problem that is not listed in this chart, or have checked all the possible causes listed and you are still experiencing the problem, see your authorized dealer.

Problem	Correction
Unit will not turn on.	<ol style="list-style-type: none"> 1. Make sure the power washer is in the "OFF" position. Plug in the electrical cord to a grounded 120 volt outlet (no electrical extension cord should be used). If the electrical cord will not plug into your outlet, your electrical outlet is not properly grounded and should not be used. Use another electrical outlet. Turn the unit back "ON". 2. If this did not correct the problem, try plugging into another electrical outlet and repeat the above procedure. If it is still not working, call Customer Service.
The unit is running but there is no water flow.	<ol style="list-style-type: none"> 1. Check the water source. Unclog the nozzle on the lance. (See nozzle cleaning instructions under "Cleaning nozzles".) Or take off the nozzle and just spray out of the spray gun and lance. This will indicate if the problem is with the nozzle.
Why is water leaking where the high pressure hose connects to the spray gun?	<ol style="list-style-type: none"> 1. Make sure there is an o-ring at the end of the metal tip of the high pressure hose. If no o-ring is present, the connection between the hose and spray gun will leak.
The power washer turns on for 2 seconds, shuts off, and will not turn back on. Do I have a defective unit?	<ol style="list-style-type: none"> 1. When the water is connected, the accessories are assembled properly, and the power switch is turned on, the power washer may turn on for 1 - 2 seconds to prime the pump. It automatically shuts off and waits for the spray gun trigger to be pressed. When the trigger is pressed, water starts flowing through the pump. The water sensor in the pump "senses" the moving water and automatically turns the power washer on. 2. Turn the power switch to off, hold in the trigger on the spray gun, so that you have a steady stream of water. While you are holding the trigger open on the spray gun, at the same time, turn the power switch on.

REPLACEMENT PARTS LIST



Part	Description
A	Detergent Tank (48 oz.)
B	Hose
C	Rotary Nozzle
D	Quick Connect Nozzle 0° - Red
E	Quick Connect Nozzle 25° - Green
F	Quick Connect Nozzle Nozzle Soap - Black
G	O-Ring Kit
H	Spray Gun
I	Zinc Steel Lance
J	GFCI Assembly
K	Gun Holster
L	Nozzle Tray
M	Garden Hose Adapter
N	Nozzle Holder

Warranty

This product is under warranty to the original retail consumer against defects in material and workmanship for a period of 1 (one) year. Wearable parts and accessories are covered for a period of 90 (ninety) days which include but are not limited to, gun, wand, hose, fittings and nozzles. The warranty is not transferable or assignable. This warranty covers replacement parts.

This limited one year warranty applies only to products used in consumer applications and is void in rental or any commercial application. Reasonable care must be used in conformity with operation and maintenance instructions in the owner's manual and quick start guide. Failure to follow these instructions will void this warranty. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

Warranty Process

Keep your original receipt of purchase in case of warranty claim.

1. Contact the original selling dealer, or any local ECHO Bear Cat dealer to arrange for the machine to be serviced. Dealers can be located by using our dealer locator at www.bearcatproducts.com/dealer-locator/.
2. The dealer will evaluate the machine to determine the scope of the repair, and if it is a warrantable item. Failures due to improper use, abuse, or customer neglect may not be covered under the terms of the warranty. If the dealer has questions regarding warranty coverage, they should contact ECHO Bear Cat.
3. The dealer will perform necessary repairs and file a warranty claim (if the repair is a warrantable item).

If your local dealer is unable to help, or if you (the end user) or the dealer have questions regarding the repair or warranty coverage, please contact the customer service center for your region, below.

In Canada:

1. Email Info@echo.ca with your name, address, model and serial number of your machine. Please describe (in as much detail as possible) the issue. A customer service representative will reply by the end of the next business day.
2. Call 1-877-324-6665. Customer Service is open 8-6 (Eastern Daylight Time - EDT) Monday through Friday. Please have the model and serial numbers of your machine available

United States and all other locations:

1. Email Service@Bearcatproducts.com with your name, address, model and serial number of your machine. Please describe (in as much detail as possible) the issue. A customer service representative will reply by the end of the next business day.
2. Call 1-888-625-4520. Customer Service is open 8-5 (Central Time Zone) Monday through Friday. Please have the model and serial numbers of your machine available.



IF YOU NEED ASSISTANCE WITH THE
ASSEMBLY OR OPERATION OF THIS
PRESSURE WASHER PLEASE CALL

CANADA

1-877-324-6665

U.S.

1-888-625-4520