

**CHICAGO**  
**Electric<sup>®</sup>Power Tools**

# PRESSURE WASHER

**1800 PSI**

**Model 02433**

## ASSEMBLY AND OPERATING INSTRUCTIONS



Distributed Exclusively by



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**TO PREVENT SERIOUS INJURY,  
READ AND UNDERSTAND ALL WARNINGS  
AND INSTRUCTIONS BEFORE USE.**

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**For technical questions or replacement parts, please call 1-800-444-3353.**

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## UNPACKING

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When unpacking, check to make sure all the parts shown on the **Parts Lists on pages 19-21** are included. If any parts are missing or broken, please call Harbor Freight Tools at the number shown on the cover of this manual as soon as possible.

Remove the foam packing block underneath the Top Shell (4A) before assembling or using the Washer.

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## SPECIFICATIONS

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Item	Description
Electrical Requirements	120 V / 60 Hz / 13 AMPs 3-Prong GFCI Power Plug 31 Ft. Long Power Cord
Water Pressure	1,800 PSI
Flow Rate	2.1 Gallons Per Minute
Water Supply Required	<b>3-4 GPM minimum</b>
Hose Length	19 Ft.
Lance Total Length	33-1/8" (Adjustable)
Turbo Nozzle Length	31-1/4"
Brush Length	27-5/8"
Gun Lance Length	13-3/8"
Additional Feature	Safety Lock Off Trigger
Weight	36 Lbs.



### SAVE THIS MANUAL

You will need this manual for the safety warnings and precautions, assembly, operating, inspection, maintenance and cleaning procedures, parts list and assembly diagram. Keep your invoice with this manual. Write the invoice number on the inside of the front cover. Keep this manual and invoice in a safe and dry place for future reference.

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## GENERAL SAFETY RULES

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### IMPORTANT SAFETY INSTRUCTIONS!



**WARNING!**  
**READ AND UNDERSTAND ALL INSTRUCTIONS**  
**Failure to follow all instructions listed below may result in**  
**electric shock, fire, and/or serious injury.**  
**SAVE THESE INSTRUCTIONS**

### WORK AREA

1. **Keep your work area clean and well lit.** Cluttered and dark work areas invite accidents.
2. **Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust.** Power tools create sparks which may ignite the dust or fumes.
3. **Keep bystanders, children, and visitors away while operating a power tool.** Distractions can cause you to lose control.

## ELECTRICAL SAFETY

1. **Grounded tools must be plugged into an outlet properly installed and grounded in accordance with all codes and ordinances. Never remove the grounding prong or modify the plug in any way. Do not use any adapter plugs. Check with a qualified electrician if you are in doubt as to whether the outlet is properly grounded.** If the tools should electrically malfunction or break down, grounding provides a low resistance path to carry electricity away from the user.
2. **Avoid body contact with grounded surfaces such as pipes, radiators, ranges, and refrigerators.** There is an increased risk of electric shock if your body is grounded.
3. **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
4. **Do not abuse the Power Cord. Never use the Power Cord to carry the tools or pull the Plug from an outlet. Keep the Power Cord away from heat, oil, sharp edges, or moving parts. Replace damaged Power Cords immediately.** Damaged Power Cords increase the risk of electric shock.
5. **When operating a power tool outside, use an outdoor extension cord marked “W-A” or “W”.** These extension cords are rated for outdoor use, and reduce the risk of electric shock.

## PERSONAL SAFETY

1. **Stay alert. Watch what you are doing, and use common sense when operating a power tool. Do not use a power tool while tired or under the influence of drugs, alcohol, or medication.** A moment of inattention while operating power tools may result in serious personal injury.
2. **Dress properly. Do not wear loose clothing or jewelry. Contain long hair. Keep your hair, clothing, and gloves away from moving parts.** Loose clothes, jewelry, or long hair can be caught in moving parts.
3. **Avoid accidental starting. Be sure the Power Switch is off before plugging in.** Carrying power tools with your finger on the Power Switch, or plugging in power tools with the Power Switch on, invites accidents.
4. **Remove adjusting keys or wrenches before turning the power tool on.** A wrench or a key that is left attached to a rotating part of the power tool may result in personal injury.
5. **Do not overreach. Keep proper footing and balance at all times.** Proper footing and balance enables better control of the power tool in unexpected situations.

6. **Use safety equipment. Always wear eye protection.** Nonskid safety shoes, hard hat, or hearing protection must be used for appropriate conditions. Always wear ANSI approved safety impact goggles and thick rubber boots during use and maintenance.

## TOOL USE AND CARE

1. **Use clamps (not included) or other practical ways to secure and support a smaller workpiece to a stable platform.** Holding the work by hand or against your body is unstable and may lead to loss of control.
2. **Do not force the tool. Use the correct tool for your application.** The correct tool will do the job better and safer at the rate for which it is designed.
3. **Do not use the power tool if the Power Switch does not turn it on or off.** Any tool that cannot be controlled with the Power Switch is dangerous and must be replaced.
4. **Disconnect the Power Cord Plug from the power source before making any adjustments, changing accessories, or storing the tool.** Such preventive safety measures reduce the risk of starting the tool accidentally.
5. **Store idle tools out of reach of children and other untrained persons.** Tools are dangerous in the hands of untrained users.
6. **Maintain tools with care. Keep tools clean.** Properly maintained tools are easier to control. Do not use a damaged tool. Tag damaged tools “Do not use” until repaired.
7. **Check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the tool’s operation. If damaged, have the tool serviced before using.** Many accidents are caused by poorly maintained tools.
8. **Use only accessories that are recommended by the manufacturer for your model.** Accessories that may be suitable for one tool may become hazardous when used on another tool.


## SERVICE



1. **Tool service must be performed only by qualified repair personnel.** Service or maintenance performed by unqualified personnel could result in a risk of injury.
2. **When servicing a tool, use only identical replacement parts. Follow instructions in the “*Inspection, Maintenance, And Cleaning*” section of this manual.** Use of unauthorized parts or failure to follow maintenance instructions may create a risk of electric shock or injury.

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## SPECIFIC SAFETY RULES

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1. **Maintain a safe working environment.** Keep the work area well lit. Make sure there is adequate surrounding workspace. Always keep the work area free of obstructions, grease, oil, trash, and other debris. Do not use the Pressure Washer in areas near flammable chemicals, dusts, and vapors.
2. **Maintain labels and nameplates on the Pressure Washer.** These carry important information. If unreadable or missing, contact Harbor Freight Tools for a replacement.
3.  **WARNING! Risk of injection or severe injury. Keep clear of Nozzle. Do not direct discharge stream at people or animals.** Keep the work area clear of all people and animals.
4. **Use the right product for the right job.** There are certain applications for which this product was designed. Do not use small equipment, tools, or attachments to do the work of larger industrial equipment, tools, or attachments. Do not use this product for a purpose for which it was not intended.
5. **This product must continuously run with cold water only. Never use hot water. Dry running will cause serious damage to the seals.** Make sure the water supply used for the Pressure Washer is not dirty, sandy, and does not contain any corrosive chemical products.
6. **To avoid electrical shock, never start and run the Pressure Washer in the rain.** Never allow water to leak inside the Body of the Pressure Washer. Do not direct discharge stream at the Pressure Washer itself or at other live electrical equipment.
7. **Do not allow the GFCI Plug (11A) to become wet. Always place the GFCI Plug in a dry location and as far away as possible from the object being sprayed.** Keep all electrical connections dry and off the ground.
8. **When using the Pressure Washer, always maintain a firm grip on the Wash Gun (5A) with both hands.** Squeezing the Trigger of the Wash Gun causes a kickback force.
9. **Do not pull or carry the Power Washer by its Power Cord (11A), or pull the Cord around sharp corners or edges.** Do not unplug the Power Washer by pulling on the Cord. Keep the Cord away from heated surfaces.
10. **Do not handle the GFCI Plug (11A) with wet hands.**
11. **Avoid unintentional starting.** Make sure you are prepared to begin work before turning on the Pressure Washer.
12. **The work area should have adequate drainage to reduce the possibility of a fall due to slippery surfaces.**
13. **This Pressure Washer is intended for outdoor residential use only.**

14. **Some chemicals or detergents may be harmful if inhaled or ingested.** Use an ANSI approved respirator or mask whenever there is a chance that vapors may be inhaled.
15. **Keep the High Pressure Hose connected to the Pressure Washer and Spray Gun while the system is pressurized.** Disconnecting the Pressure Hose while the unit is pressurized is dangerous, and may cause injury.
16. **Prior to starting the Pressure Washer in cold weather, check all of the parts of the unit to make sure ice has not formed.** Do not store the unit anywhere that the temperature will fall below 32° F (0° C). **(See “Inspection, Maintenance, and Cleaning” section for proper storage procedures.)**
17. **Do not feed already-pressurized water (such as that from another pressure washer) into this washer.**
18. **When dispensing detergent, apply the detergent to the cleaning area at low pressure only.** Then, spray the detergent off the cleaning area by using the adjustable Nozzle. **NOTICE:** Detergent dispensing only works when the spray wand is in the low-pressure position.
19. **The high pressure water flow can damage the work surface if not used properly.** Always test the spray in an open area first.
20. **Never move the Pressure Washer by pulling on the High Pressure Hose.** Use the Handle provided on the top of the unit.
21. **Never leave the Pressure Washer unattended when it is plugged into an electrical outlet.** Turn off the Pressure Washer, and unplug it from its electrical outlet before leaving.
22. **If water is leaking out of the Pressure Washer immediately shut off the unit.** Unplug the Pressure Washer, and discharge all pressure before tightening fittings or having repair work done by a qualified technician.
23.  **WARNING!** People with pacemakers should consult their physician(s) before using this product. Operation of electrical equipment in close proximity to a heart pacemaker could cause interference or failure of the pacemaker.
24.  **WARNING!** The warnings and precautions discussed in this manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

**SAVE THESE INSTRUCTIONS.**

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## GROUNDING

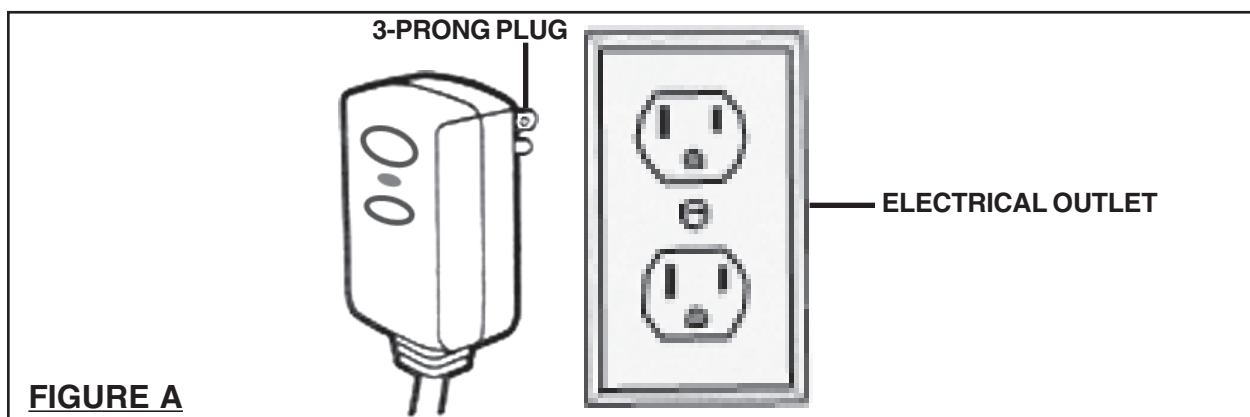
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### **WARNING!**

Improperly connecting the grounding wire can result in the risk of electric shock. Check with a qualified electrician if you are in doubt as to whether the outlet is properly grounded. Do not modify the power cord plug provided with the tool. Never remove the grounding prong from the plug. Do not use the tool if the power cord or plug is damaged. If damaged, have it repaired by a service facility before use. If the plug will not fit the outlet, have a proper outlet installed by a qualified electrician.

### GROUNDING TOOLS: TOOLS WITH THREE PRONG PLUGS

1. Tools marked with “Grounding Required” have a three wire cord and three prong grounding plug. The plug must be connected to a properly grounded outlet. If the tool should electrically malfunction or break down, grounding provides a low resistance path to carry electricity away from the user, reducing the risk of electric shock. **(See Figure A, next page.)**
2. The grounding prong in the plug is connected through the green wire inside the cord to the grounding system in the tool. The green wire in the cord must be the only wire connected to the tool’s grounding system and must never be attached to an electrically “live” terminal. **(See Figure A.)**
3. Your tool must be plugged into an appropriate outlet, properly installed and grounded in accordance with all codes and ordinances. The plug and outlet should look like that in the following illustration. **(See Figure A.)**



**FIGURE A**



## EXTENSION CORDS

1. **Grounded** tools require a three wire extension cord.
2. As the distance from the supply outlet increases, you must use a heavier gauge extension cord. Using extension cords with inadequately sized wire causes a serious drop in voltage, resulting in loss of power and possible tool damage. **(See Table A.)**
3. The smaller the gauge number of the wire, the greater the capacity of the cord. For example, a 14 gauge cord can carry a higher current than a 16 gauge cord.  
**WARNING! Do not use 16 or 18 AWG extension cords on this product.**
4. When using more than one extension cord to make up the total length, make sure each cord contains at least the minimum wire size required. **(See Table A.)**
5. If you are using one extension cord for more than one tool, add the nameplate amperes and use the sum to determine the required minimum cord size. **(See Table A.)**
6. If you are using an extension cord outdoors, make sure it is marked with the suffix “W-A” (“W” in Canada) to indicate it is acceptable for outdoor use.
7. Make sure your extension cord is properly wired and in good electrical condition. Always replace a damaged extension cord or have it repaired by a qualified electrician before using it. Protect your extension cords from sharp objects, excessive heat, and damp or wet areas.




Table A

RECOMMENDED MINIMUM WIRE GAUGE FOR POWER CORDS* (120 V)			
NAMEPLATE AMPERES (At Full Load)	POWER CORD LENGTH		
	25 Feet	50 Feet	OVER 50 FEET
12.1 - 16.0	14	12	<b>Extension Cords must NOT be used.</b>
16.1 - 20.0	12	10	

\* Based on limiting the line voltage drop to five volts at 150% of the rated amperes.

## SYMBOLOLOGY

Table B

	Double Insulated
	Canadian Standards Association
	Underwriters Laboratories, Inc.
<b>V</b> ~	Volts Alternating Current
<b>A</b>	Amperes
<sup>n</sup> o xxx/min.	No Load Revolutions per Minute (RPM)

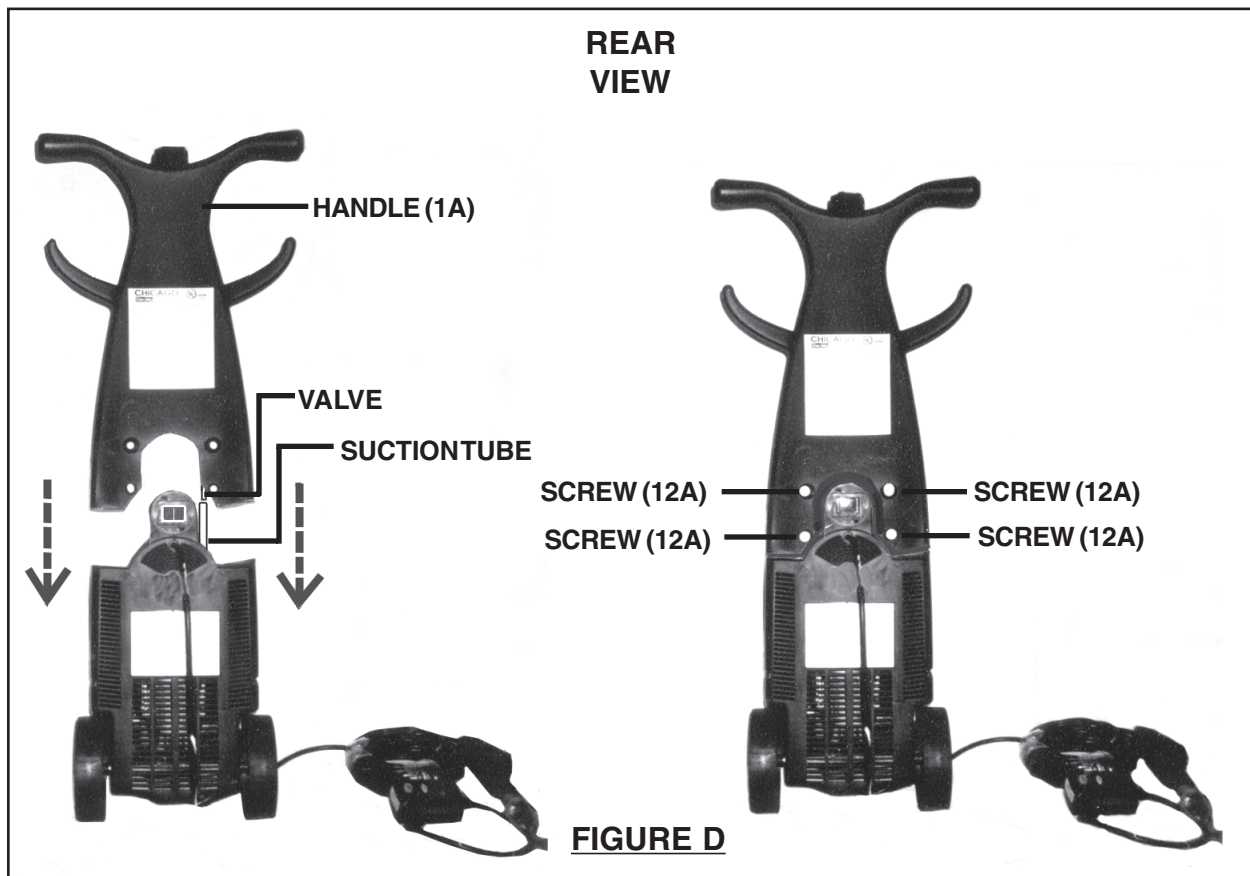
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## ASSEMBLY

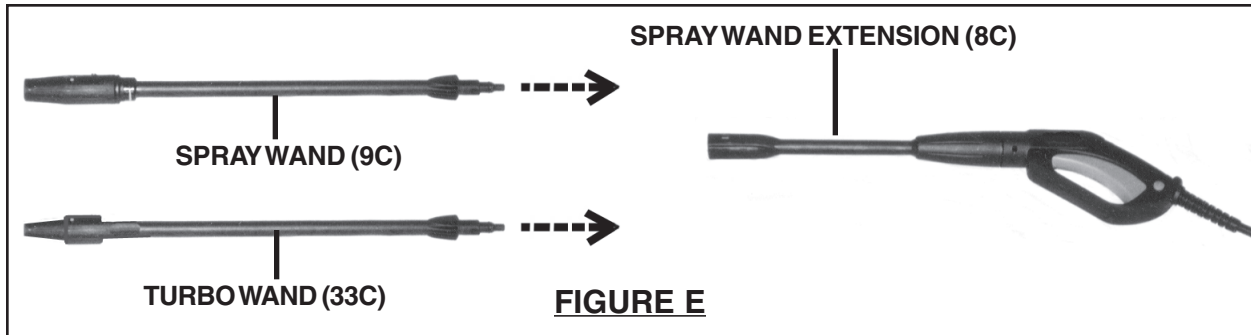
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**NOTE:** For additional information regarding the parts discussed in the following pages, refer to the **Assembly Diagrams on pages 19-21.**

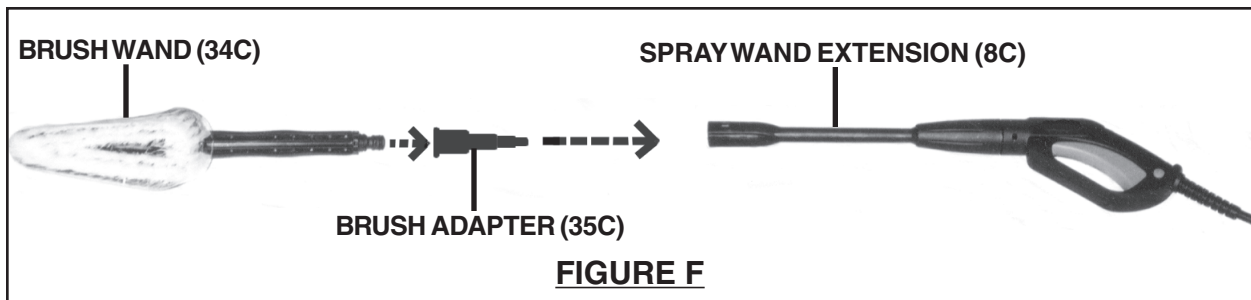
1. Check the Inlet Strainer for any blockage, including packaging debris. The Pressure Washer may be shipped with a plastic plug in the Inlet.
2. If you have not already done so, remove the foam packing block underneath the Top Shell (4A).
3. Position the rear of the Handle (1A) above the rear of the Pressure Washer body. Insert the Valve located at the bottom of the Handle into the Suction Tube located at the top of the Pressure Washer body. Make sure that the Suction tube does not bend or get pinched during assembly. Lower the Handle fully onto the Pressure Washer Body. Then secure the Handle to the Pressure Washer body, using the four Screws (12A) provided. **(See Figure D.)**



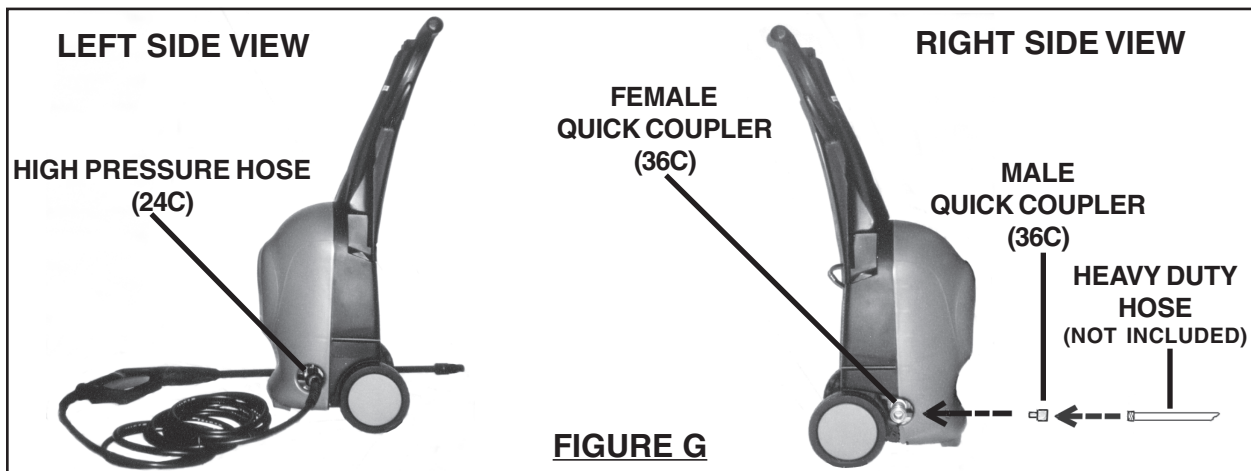
4. Insert the Spray Wand (9C) or Turbo Wand (33C) into the Spray Wand Extension (8C), and twist the Wand into the Extension until the Wand locks in place. Pull the Wand to make certain it is secure. **(See Figure E.)**



5. If using the Brush Wand (34C), insert the Brush Wand into the Brush Adapter (35C) and twist the Wand into the Adapter until the Wand locks in place. Then insert the Adapter into the Spray Wand Extension (8C), and twist the Adapter into the Extension until the Adapter locks in place. Pull the Wand to make certain it is secure. The Brush Wand is used to apply detergent at low pressure. **(See Figure F.)**



6. Attach the High Pressure Hose (24C) to the left/lower side of the Pressure Washer. Attach the *female* part of the Quick Connector Set (36C) to the right/ lower side of the Pressure Washer. Screw the *male* part of the Quick Connector Set onto a heavy duty garden hose (not included). Then, attach the *male* part of the Quick Connector Set to the *female* part of the Quick Connector Set. **(See Figure G.)**



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## CONTROLS AND SETUP

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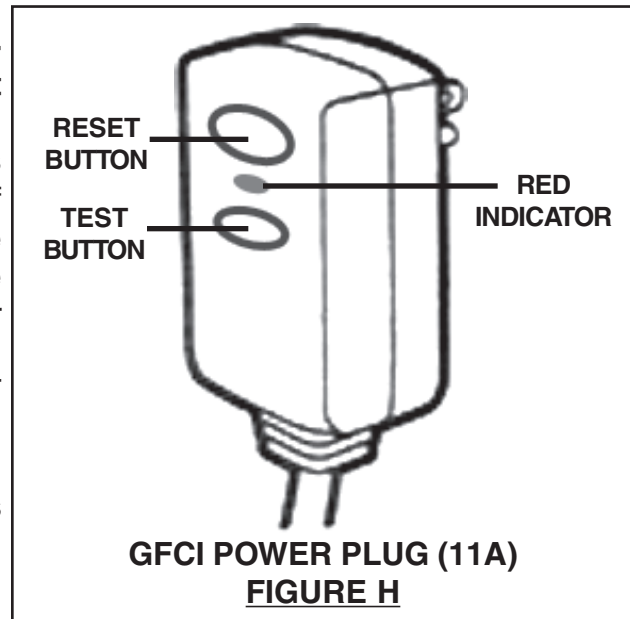
**Note:** Familiarize yourself with the location and function of all of the machines controls before proceeding to setup of the machine.

### CONTROLS AND FEATURES

1. **The Pressure Washer features an automatic On/Off Micro Switch (42B).** The Motor (3A) of the Pressure Washer does not run continuously, but only when the Trigger (21C) is squeezed. When spraying water through the unit stops, the Motor will automatically shut off.

2. **The Pressure Washer features a 3-Prong, Ground Fault Circuit Interrupter (GFCI) Power Plug (11A).**

The GFCI Power Plug provides additional protection from the risk of electrical shock. Make sure that the Trigger (21C) is released before plugging in. Plug the GFCI Power Plug into a grounded, 120 volt, electrical outlet. Press the TEST button and then the RESET button. The *indicator* on the Power Plug should appear red. If the indicator is not red, have the power plug inspected by a qualified electrician. Should replacement of the GFCI Power Plug

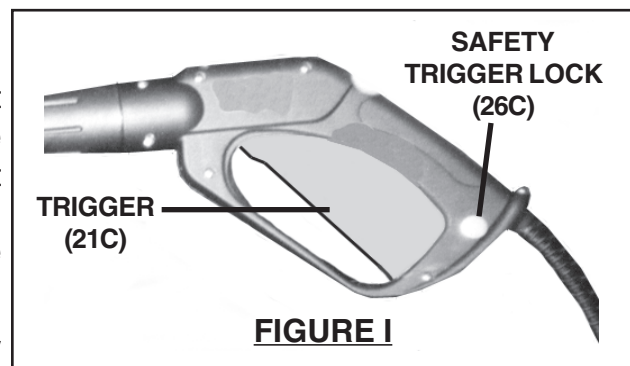


**GFCI POWER PLUG (11A)**  
**FIGURE H**

become necessary, *only* a qualified technician should perform the service. **Never attempt to alter or disable the GFCI Power Plug.** (See Figure H.)

3. **The Pressure Washer is equipped with a Trigger Safety Lock (26C).**

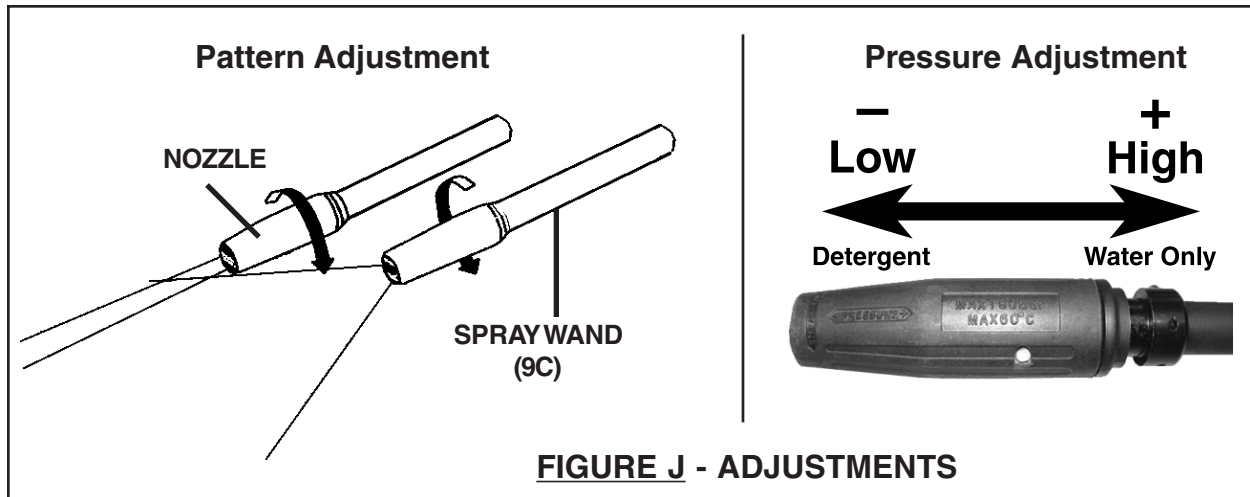
When the Trigger (21C) is not squeezed, the Safety Lock should be pressed all the way in to help prevent children from using the tool. To disengage the Safety Lock, press the opposite side. (See Figure I.)



**FIGURE I**

4. **The adjustable Nozzle on the Spray Wand (9C) can be rotated for a range of spray patterns, from a full fan spray to a direct stream spray. (See Figure J, next page.)**

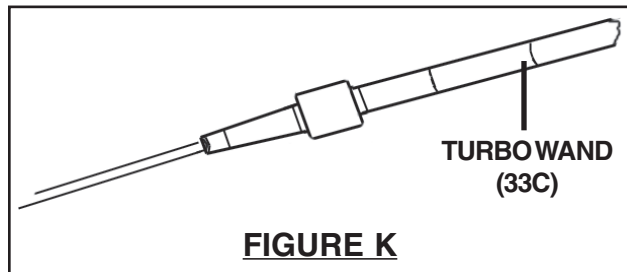
Also, the adjustable nozzle can be slid out for low-pressure spray and detergent application, or pulled in for normal high-pressure spray. (See Figure J.)



**FIGURE J - ADJUSTMENTS**

5. The Turbo Wand (33C) features a *fixed* Nozzle which increases the Pressure Washer’s effectiveness and decreases its cleaning area, and is recommended for heavy duty cleaning of small areas. The spray pattern on the Turbo Wand is *not* adjustable, but provides a circular water pattern as it sprays the high pressure water. The Turbo wand must only be used on areas that cannot be cleaned with the normal nozzle and are resilient enough to withstand the increased pressure involved. (See Figure K.)

6. The built-in Detergent Dispenser located in the Handle (1A) allows the application (USING THE BRUSH WAND OR SPRAY WAND LOW PRESSURE SETTING ONLY) of *pressure washing detergent* (not included) onto the work surface.



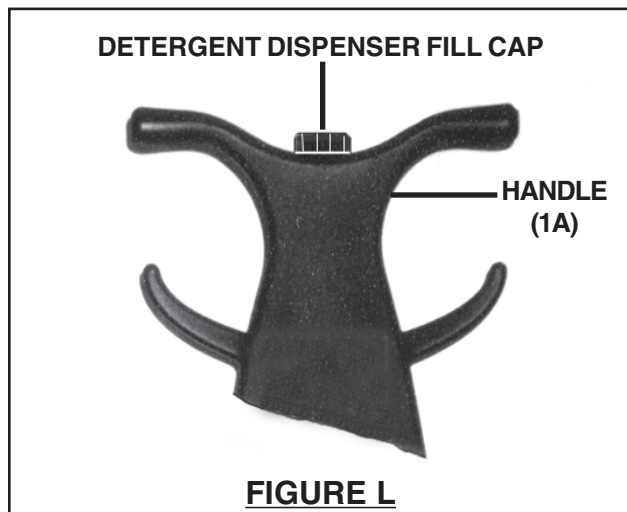
**FIGURE K**

When filling the Detergent Dispenser with *pressure washing detergent*, do not exceed 3 quarts of detergent. The Pressure Washer will automatically mix the detergent and water. Note: Detergent is dispensed in a 6% solution. Do not add water to the Detergent Dispenser.

**CAUTION!** NEVER use any products not designed for pressure washer use, nor any products with bleach, chlorine, or any other corrosive materials, including liquids containing solvents, trisodium phosphate products, ammonia, or acid-based cleaners.

Fill the Detergent Dispenser *only* when the unit is *not* running or plugged in.

(See Figure L.)



**FIGURE L**

## SETUP

- CHECK THE WATER SUPPLY.** Prior to using the Pressure Washer for the first time, it is ESSENTIAL to verify that the water supply is adequate. The Pressure Washer needs **TWICE** the water supply (or volume) than the stated water output (2.1 GPM). This Pressure Washer will need about 3-4 GPM to operate correctly and efficiently. If the water is being supplied by a well/pump, make certain that the well/pump produces enough water to keep up with the Pressure Washer's water demands. Water supply hoses should be heavy duty to withstand the forces involved. Water hoses up to 25' long must be  $\frac{5}{8}$ " ID. Water hoses up to 50' long must be  $\frac{3}{4}$ " ID. Do not use hoses longer than 50'. The more minerals in the water (the harder the water) you use, the more often mineral buildup will need to be cleaned out from the nozzles.

**Flow rate of the water supply must never be allowed to fall below 3 GPM.**

**To determine the water supply's flow rate:** Run the water at full for one minute into a 5 gallon container, and measure the amount of water in the container.

**CAUTION!** If the Pressure Washer is run with an inadequate water supply, the pump will cavitate. Cavitation causes the pump to operate loudly and will damage it.
- ARRANGE FOR A PROPER ELECTRICAL SUPPLY.** This unit uses a large amount of current, especially during start-up. Connect this unit only to a dedicated household circuit capable of providing ample current to it. A dedicated circuit has no additional loads (running devices) connected to it; shut off any appliances or lights that dim or slow down while the washer is running. For best results, connect the plug to that circuit's outlet that is nearest to the circuit breaker panel.
- MAKE SURE THE WASHER IS CLEAN AND READY FOR USE.** Ensure the inlet water strainer, nozzle, and the rest of the Washer are totally free of buildup or debris.
- PLAN OUT THE JOB: Plan out what areas will be cleaned, how many sessions will be necessary, and how long the individual sessions of work will need to be.** Plan to clean the higher portions first, because the higher portions will typically remain cleaner while the other areas are cleaned. Plan a safe direction for runoff to flow while the job is being performed, and plan on working your way in that direction. You will have a clearer idea of the time involved to clean the area after doing a test run, as explained on page 16, #3.
- PREPARE THE CLEANING AREA.** Clear the cleaning area of all objects that are not being cleaned. If any water prone or delicate items cannot be moved, protect or move them. If detergent is to be used, cover or remove any plants or animals that may be damaged by the chemicals in the cleaner.
- PLACE THE PRESSURE WASHER IN AN APPROPRIATE LOCATION.** The location should be protected from any water from the cleaning area; if possible, select a location higher than the cleaning area. The pressure washer's location should be close enough so that the hose will reach every portion of the job to be done with some slack for movement. Also, select an area with proper access to a dedicated circuit that can be reached with as short an extension cord as possible.

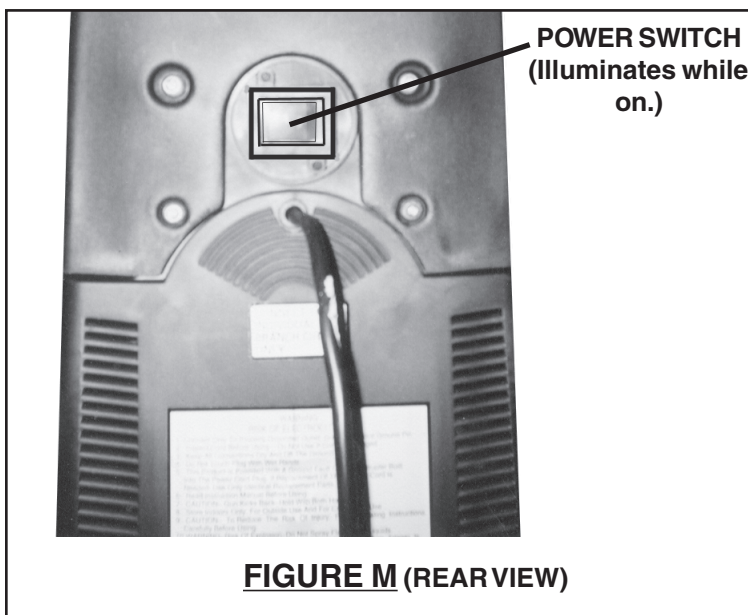
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## OPERATION

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1. **Make sure the Power Switch is in the “OFF” position. (See Figure M.)**
2. Attach the heavy duty hose to the Pressure Washer, using the Quick Connector Set (36C). **(See Figure G.)**
3. Attach the Spray Wand (9C), Turbo Wand (33C), or Brush Wand and Adapter (34C, 35C) into the Spray Wand Extension (8C), and press and twist the Wand into the Extension until the Wand locks in place. **(See Figures E and F.)**  
**NOTE:** The Pressure Washer will not pressurize if the Nozzle is not completely assembled. It will not work properly with only part of the Wand installed.
4. Connect the High Pressure Hose (24C) to the Pressure Washer. **(See Figure G.)** Make sure all connections are tight. Then, open the water supply valve **fully**. If leaks occur, shut off water and retighten connections.

5. **IMPORTANT! Prior to turning on the Pressure Washer, connect the unit to the water supply. Turn on the water, disengage the safety, and squeeze the Trigger (21C) until water flows out of the Wash Gun (5A). This removes air from the system and allows the unit to properly perform. Failure to follow this step can damage the Pump.**



**FIGURE M (REAR VIEW)**

6. Test the cleaning capabilities and the run before starting your cleaning project, as explained on page 17, #1. Turn the Power Switch to the “ON” position, it should illuminate. **The motor will briefly run when the switch is first turned on to build up pressure** and then go to standby until the trigger is squeezed.  
**NOTE:** The Motor (3A) does not run continuously, but only when the Trigger is squeezed. **If a humming noise persists while the motor is on standby, briefly discharge the nozzle in a safe direction.**
7. Point the Nozzle in a safe direction. Then, disengage the Safety and squeeze the Trigger (21C). Switch the unit’s switch to the OFF position whenever the gun is not in use. **(See Figures I and M.)** Clean the area, following the tips contained in the Operating Tips section.
8. When finished spraying, fully engage the Trigger Safety Lock (26C), turn the Power Switch to its “OFF” position, and turn off the water supply. **(See Figure M.)**

**WARNING: Do not disconnect the high-pressure hose or water inlet hose until all pressure is discharged safely.**

9. **IMPORTANT!** When turning off the unit after use, high pressure will remain inside the unit its High Pressure Hose (24C), and the water inlet hose. Point the Wash Gun (5A) in a safe direction and discharge all remaining pressure. The high-pressure hose and water inlet hose can be disconnected after the pressure is released.
10. Store the pressure washer and all accessories in accord with the directions under *Storage* on page 18.

**IF ANY UNEXPECTED PROBLEMS ARISE, PLEASE REFER TO THE TROUBLESHOOTING SECTION AT THE END OF THIS MANUAL.**

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## **OPERATING TIPS**

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### **BECOME FAMILIAR WITH YOUR MACHINE:**

1. Before beginning work, set aside enough time to familiarize yourself with this machine's cleaning rate and capacity along with all instructions and precautions contained in this section, along with the Operating Instruction and Operating Controls sections.
2. This unit is intended for various light to moderate cleaning applications. If deeper cleaning is desired, it can be attained at times, however this is done at the expense of speed. This unit is not intended for paint stripping or deep concrete cleaning applications.
3. Clean a test area to satisfaction before proceeding with the entire area, as stated in Cleaning Recommendations on the next page. Use this area to approximate the amount of time required for the project. Be certain to factor in time for touch-ups and cleanup after the general cleaning is finished.
4. This unit has several settings and adjustments that effect the speed of cleaning and the water force applied to cleaning. Good guidelines to keep in mind are:

<b>WIDE STREAM = QUICKER COVERAGE BUT LIGHTER CLEANING.</b>
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<b>NARROW STREAM = DEEPER CLEANING BUT SLOWER COVERAGE.</b>
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### **USE PROPER PRESSURE WASHER OPERATION TECHNIQUES:**

**The machine may suddenly stop and require a rest period from time to time; *this is normal and does not indicate a problem* (see Troubleshooting, page 22).** However, certain use techniques may help reduce or even prevent the need for such rest periods, increasing efficiency: (Techniques continued on following page.)



- a. **Do not release the trigger between sweeps.** Release the trigger as few times as possible during use. Interrupted or sporadic spraying will cause the unit to heat up quickly and will increase the need for rest periods.
- b. Make sure that all obstacles have been moved and the entire area is ready before starting.
- c. For small jobs, try to finish an entire portion of the job before taking a break.

## CLEANING RECOMMENDATIONS

1. Clean an inconspicuous test area to help avoid damaging the surface: Always begin with the fan spray at a distance of about 3-5 feet from the surface being cleaned to avoid damaging the surface of the object. Make sure that the test area is clear of people and water prone/delicate objects. If a pressure washing detergent is to be used, apply the detergent to this area as well. After cleaning this area, switch off the pressure washer and inspect the area carefully for any damage or discoloration. If any damage is noted from the pressure setting, use a lighter setting when cleaning the rest of the area. If damage or discoloration is noted from the detergent, do not use it when cleaning.
2. First, pass over the area with a light cleaning, and then more thoroughly clean it.
- 3a. **For a *vertical or sloped* surface:**
  - a. Wash from the top down.
  - b. If possible, direct the stream in the same direction as the slope towards a draining area. This will enable better drainage and therefore better cleaning.
- 3b. **For a *flat* surface:**
  - a. If a thin layer of water accumulates on the surface, periodically use the stream to direct this water towards the drainage.
  - b. After the major cleaning is done, sweep the surface with the stream to help direct loose debris toward the drainage.
4. If detergent is to be applied: Only use pressure washing detergent; other detergents will clog or damage the pressure washer. Apply the detergent at low pressure, by either using the Brush Wand (34C) or the low pressure setting of the Spray Wand (9C). Allow the detergent several minutes to sit and soak into the work surface; this will improve cleaning efficiency. If the Spray Wand is used, briefly shut off the unit and pull the adjustable nozzle in to switch to high pressure mode and automatically shut off the soap dispenser for rinsing. Make certain to rinse off all detergent completely.
5. Hold the Wash Gun at about a 45° angle and steadily sweep the stream back and forth; if a severe, head-on angle is used, dirt may imbed in the surface being cleaned. Follow a steady, consistent pace during cleaning; this will help prevent stripes or discoloration afterwards. If streaking or uneven cleaning is noted at the end of a project, go over the edges of the streaks with a wide fan pattern to help blend these lighter areas in.
6. If several different surfaces are to be cleaned, be careful not to damage any of the


less solid surfaces while trying to clean the harder ones. This is especially a concern when cleaning tile and grout, bricks and mortar, or stones and mortar.

7. If wood is being cleaned, be careful not to damage it. Wood will usually require resurfacing (sanding) and re-coat with a surface protectant (wood, stain, varnish) after it has dried again. Try to avoid leaving water on a wooden surface; doing so can harm the surface.

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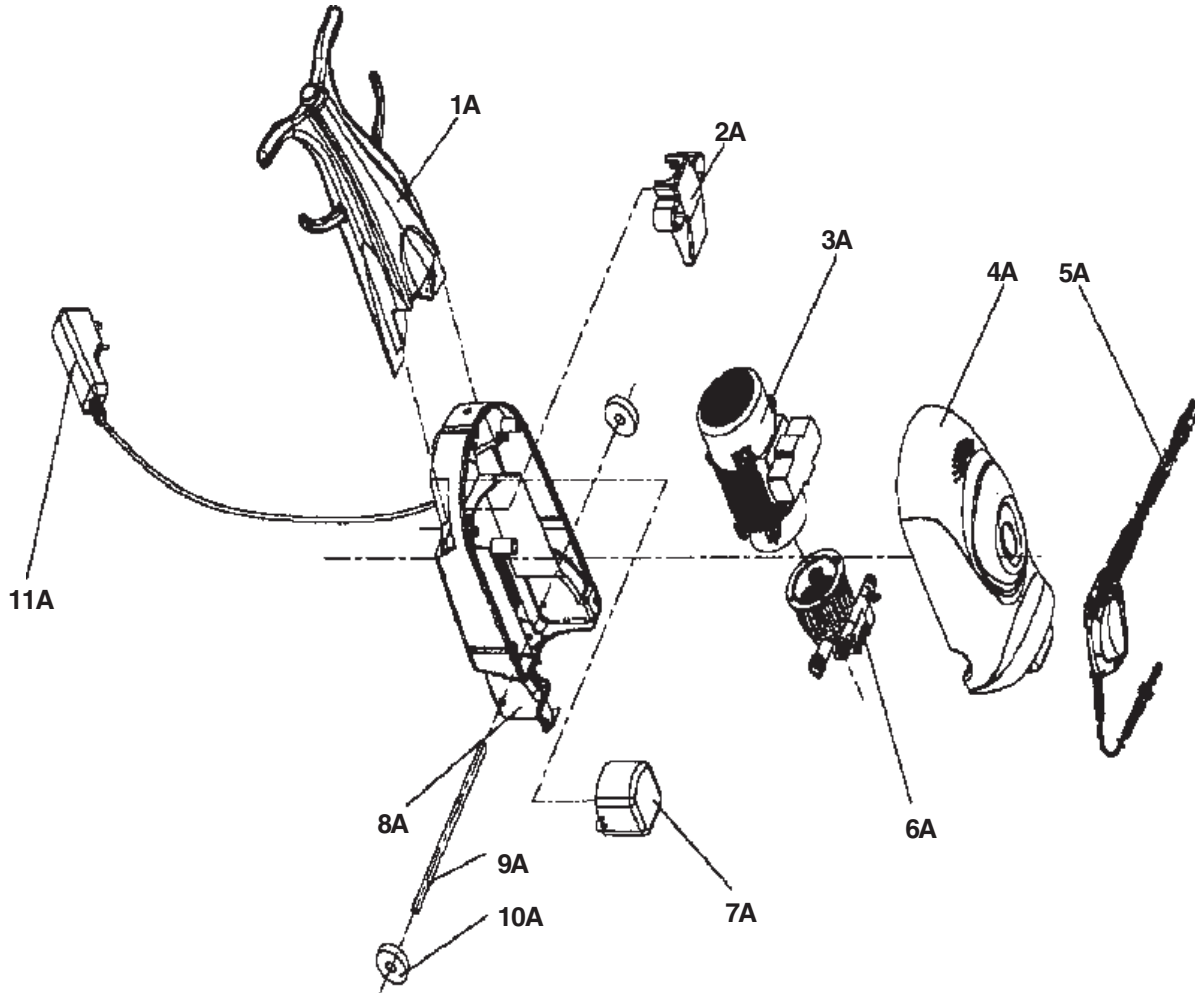
## INSPECTION, MAINTENANCE, AND CLEANING

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1.  **WARNING!** Make sure that (1) the Trigger is locked in its off position, (2) the Power Switch of the Pressure Washer is in its “OFF” position, (3) the plug is unplugged from its electrical outlet, (4) that the water supply is shut off, and (5) all residual water pressure is safely expelled before performing any inspection, maintenance, or cleaning procedures. Point the Wash Gun (5A) in a safe direction and discharge all remaining pressure. Then, disconnect the garden hose from the unit.
2. **Before each use**, inspect the general condition of the Pressure Washer. Check for loose screws, misalignment or binding of moving parts, damaged electrical wiring, damaged High Pressure Hose, damaged accessories, and any other condition that may affect its safe operation. If abnormal noise or vibration occurs, have the problem corrected before further use. **Do not use damaged equipment.**
3. **To clean**, remove excess water from the Pump by tipping the unit on both sides to drain any remaining water from the inlet and outlet fittings. Drain the Detergent Dispenser and flush with running water. Use only a clean cloth and mild detergent to clean the body of the Pressure Washer. Do not use solvents. Remove the Inlet Filter and run water through it backwards to remove any debris. **Do not immerse any part of the tool in liquid.** Dry off any remaining water on all parts and fittings. Then engage the Trigger Safety Lock. Use the included Wire Tip Cleaner (37C) to help remove mineral deposits from the nozzles. The more minerals that are dissolved in the water (the harder the water) you use, the more often mineral buildup will need to be cleaned out from inside nozzles.
4. **STORAGE:** When storing, always completely empty the Pressure Washer of water. Frost will damage the Pressure Washer if the unit contains water. Store the Pressure Washer indoors in a dry, frost-free room. Minerals in the water can harden inside the workings. Flush the unit with automotive antifreeze prior to long-term storage. Always dispose of antifreeze in accord with local ordinances.

## PARTS LIST A / ASSEMBLY DIAGRAM A

Part #	Description	Qty.	Part #	Description	Qty.
1A	Handle	1	7A	Switch Cover	1
2A	Clip Box	1	8A	Bottom Shell	1
3A	Motor	1	9A	Axle	1
4A	Top Shell	1	10A	Wheel	2
5A	Wash Gun	1	11A	GFCI Plug/Cord	1
6A	Pump	1	12A	Screw (not shown)	4

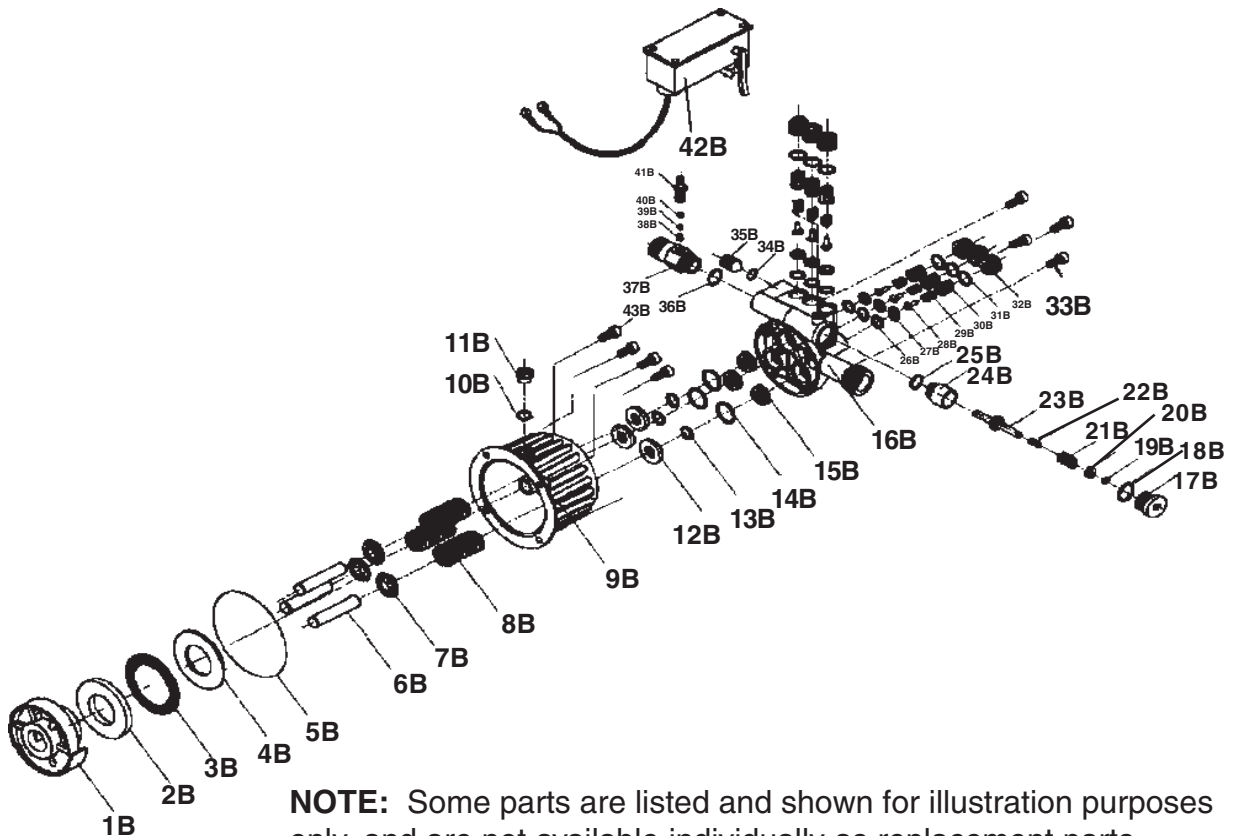


### PLEASE READ THE FOLLOWING CAREFULLY

THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS DIAGRAM IN THIS MANUAL AS A REFERENCE TOOL ONLY. NEITHER THE MANUFACTURER NOR DISTRIBUTOR MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND TO THE BUYER THAT HE OR SHE IS QUALIFIED TO MAKE ANY REPAIRS TO THE PRODUCT OR THAT HE OR SHE IS QUALIFIED TO REPLACE ANY PARTS OF THE PRODUCT. IN FACT, THE MANUFACTURER AND/OR DISTRIBUTOR EXPRESSLY STATES THAT ALL REPAIRS AND PARTS REPLACEMENTS SHOULD BE UNDERTAKEN BY CERTIFIED AND LICENSED TECHNICIANS AND NOT BY THE BUYER. THE BUYER ASSUMES ALL RISK AND LIABILITY ARISING OUT OF HIS OR HER REPAIRS TO THE ORIGINAL PRODUCT OR REPLACEMENT PARTS THERETO, OR ARISING OUT OF HIS OR HER INSTALLATION OF REPLACEMENT PARTS THERETO.

## PARTS LIST B / ASSEMBLY DIAGRAM B

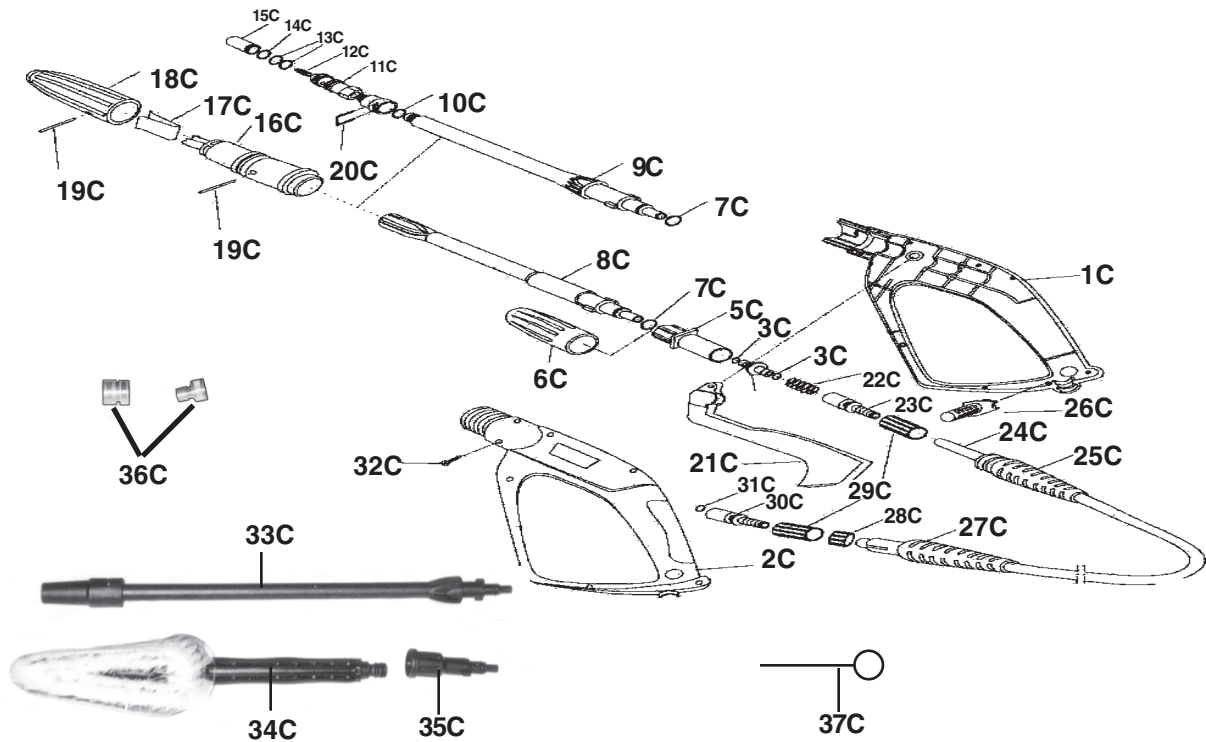
Part #	Description	Qty.	Part #	Description	Qty.
1B	Cam	1	23B	Valve Core	2
2B	Washer, Bearing	1	24B	Outer Piston	1
3B	Thrust Needle Bearing	1	25B	O-Ring	1
4B	Bearing Washer	1	26B	O-Ring	6
5B	Ring	1	27B	Valve Cover	6
6B	Piston	3	28B	Piston	6
7B	Piston Return Spring	3	29B	Spring	6
8B	Piston Return Spring	3	30B	Check Valve, Outlet	6
9B	Pump Seat	1	31B	O-Ring	6
10B	O-Ring	1	32B	Bolt	6
11B	Bolt	1	33B	Bolt	4
12B	O-Ring	3	34B	O-Ring	1
13B	O-Ring	3	35B	Bolt	1
14B	Cover Board	3	36B	O-Ring	1
15B	O-Ring	3	37B	Canal	1
16B	Pump Body	1	38B	Conical Spiral Spring	1
17B	Cap, Retainer	1	39B	Steel Ball	1
18B	O-Ring	1	40B	O-Ring	1
19B	O-Ring	1	41B	Suction Canal	1
20B	Block	1	42B	Micro Switch	1
21B	Large Spring	1	43B	Bolt	4
22B	Small Spring	1			



**NOTE:** Some parts are listed and shown for illustration purposes only, and are not available individually as replacement parts.

## PARTS LIST C / ASSEMBLY DIAGRAM C

Part #	Description	Qty.	Part #	Description	Qty.
1C	Casing	1	20C	U-Pin	1
2C	Casing	1	21C	Trigger	1
3C	O-Ring	2	22C	Spring	1
4C	Piston Valve	1	23C	Coupling	1
5C	Valve Body	1	24C	High Pressure Hose	1
6C	Turnbuckle	1	25C	Jacket	1
7C	O-Ring	2	26C	Safety Lock	1
8C	Spray Wand Extension	1	27C	Jacket	1
9C	Spray Wand	1	28C	Nut	1
10C	O-Ring	1	29C	Connector	1
11C	Piston Valve	1	30C	Coupling	1
12C	Nozzle	1	31C	O-Ring	1
13C	O-Ring	2	32C	Self Tapping Screw	7
14C	O-Ring	1	33C	Turbo Wand	1
15C	Valve Bottom	1	34C	Brush Wand	1
16C	Blade Compressor	1	35C	Brush Adapter	1
17C	Lamella	1	36C	Quick Connector Set	1
18C	Knob	1	37C	Wire Tip Cleaner	1
19C	Pin	2			



**NOTE:** Some parts are listed and shown for illustration purposes only, and are not available individually as replacement parts.

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## TROUBLESHOOTING

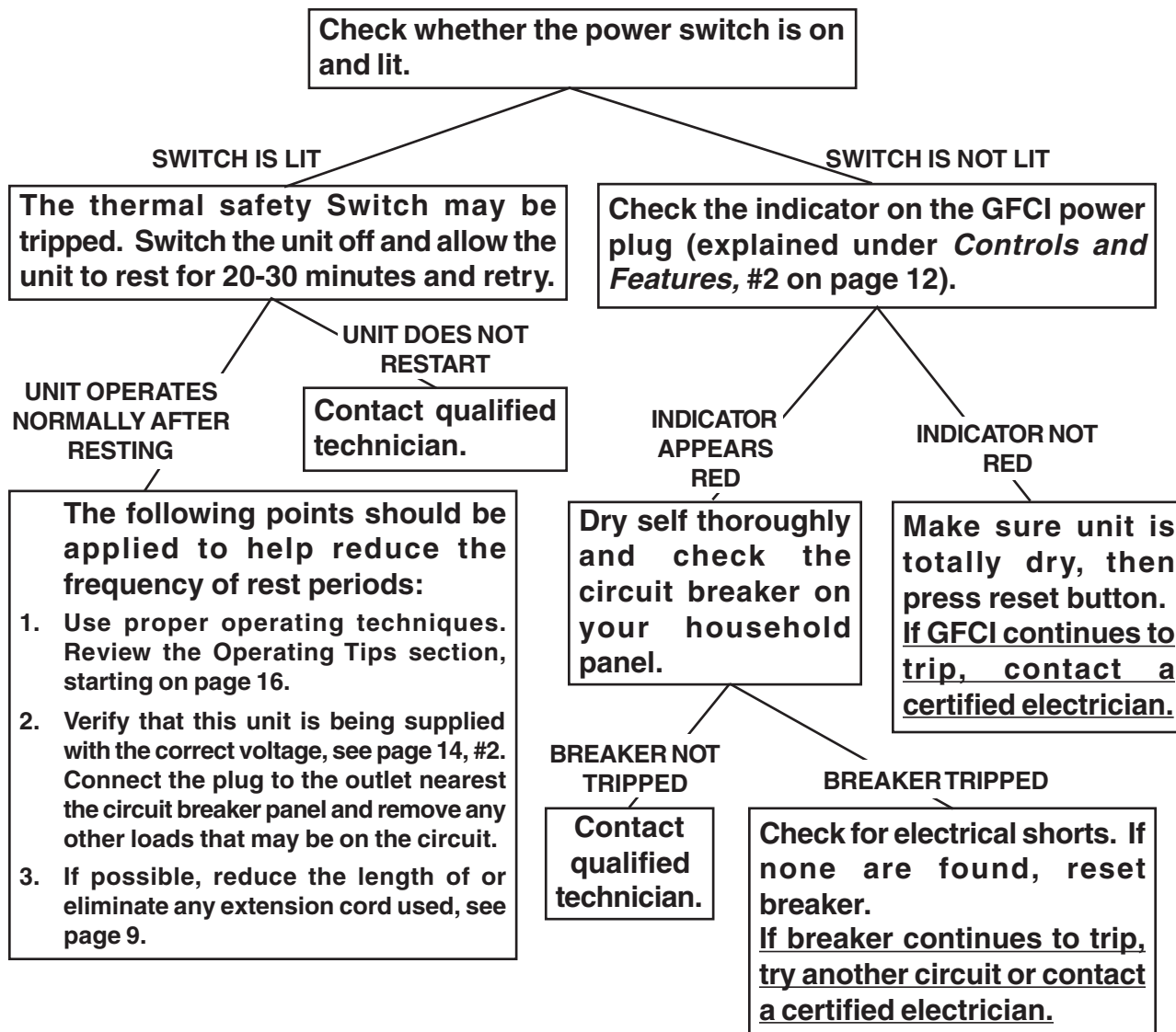
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### IMPORTANT!

Be **CERTAIN** to shut off the Pressure Washer, release all pressure in a safe manner, and disconnect it from power and water before adjusting, cleaning, or repairing the unit.

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### PRESSURE WASHER STOPS SUDDENLY



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### WATER LEAKING FROM WITHIN THE HOUSING

Seals or gaskets may be worn or damaged.

 Leaking water creates a shock hazard; **PROMPTLY** have the unit inspected and repaired by a qualified technician.

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If the steps above do not solve the problem or if the repairs involved are too complex, contact a qualified technician.

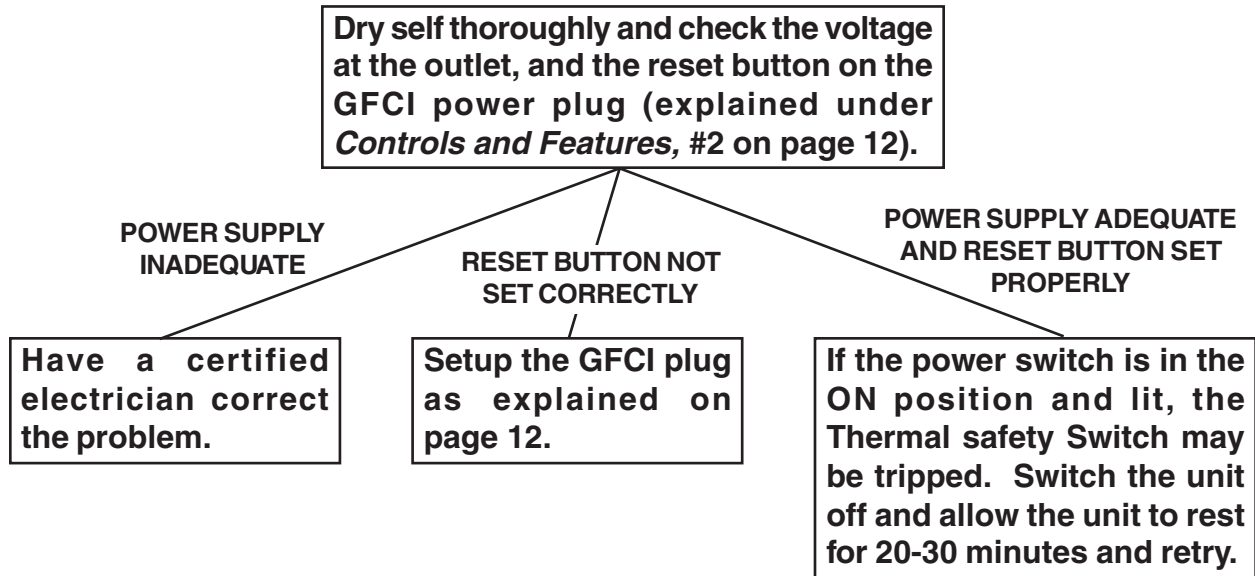
## TROUBLESHOOTING (CONTINUED)

### IMPORTANT!

Be CERTAIN to shut off the Pressure Washer, release all pressure in a safe manner, and disconnect it from power and water before adjusting, cleaning, or repairing the unit.

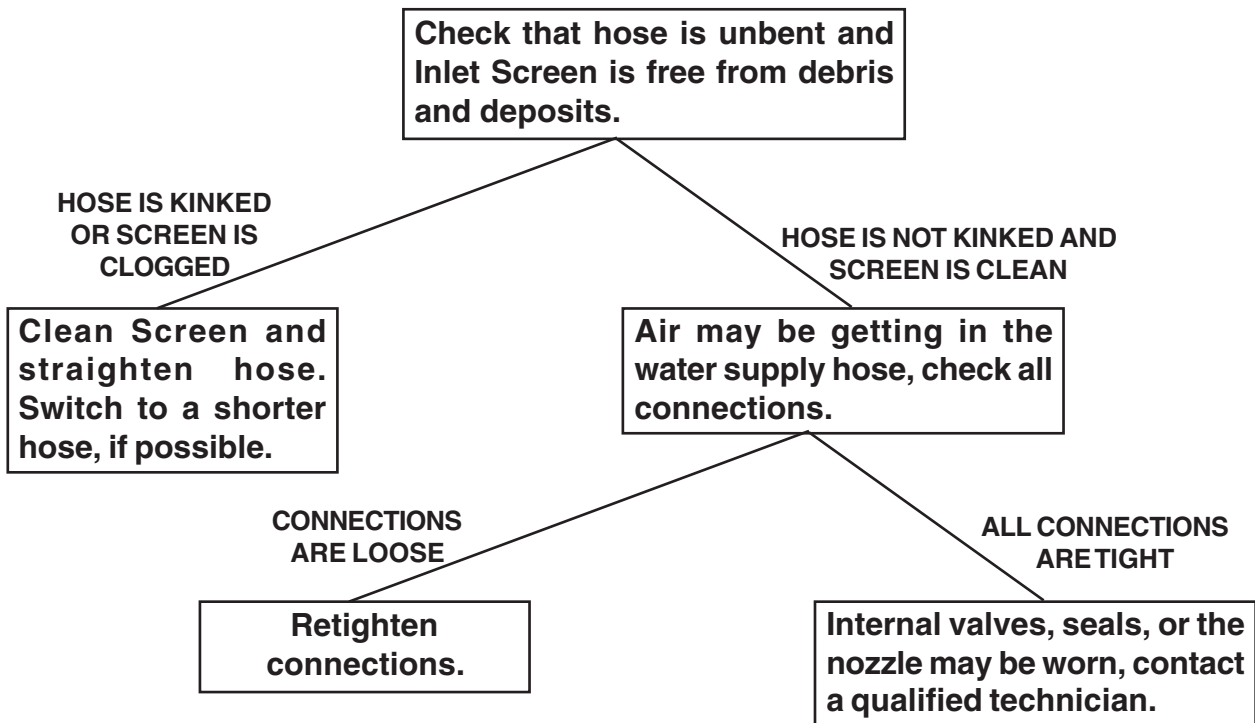
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### PRESSURE WASHER WILL NOT START



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### PRESSURE WASHER DOES NOT BUILD PRESSURE



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If the steps above do not solve the problem or if the repairs involved are too complex, contact a qualified technician.

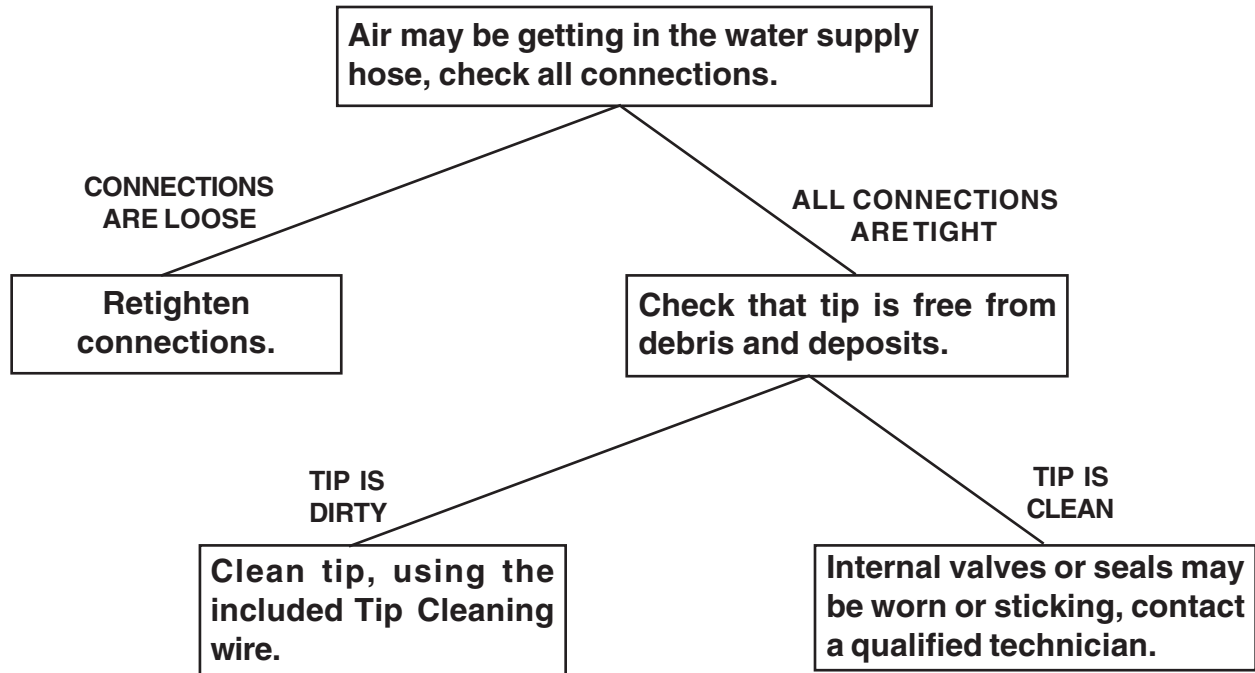
## TROUBLESHOOTING (CONTINUED)

### **IMPORTANT!**

Be **CERTAIN** to shut off the Pressure Washer, release all pressure in a safe manner, and disconnect it from power and water before adjusting, cleaning, or repairing the unit.

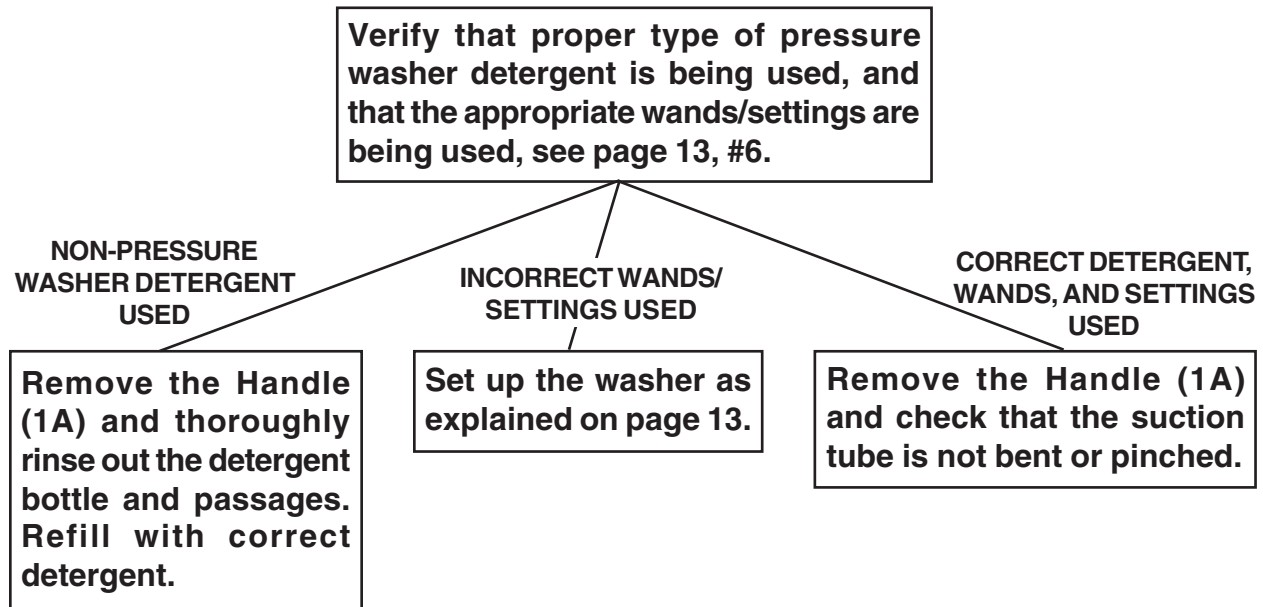
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### **PRESSURE CHANGES DURING USE**



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### **DETERGENT WILL NOT DISPENSE**



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If the steps above do not solve the problem or if the repairs involved are too complex, contact a qualified technician.