

INSTRUCTION MANUAL

1,595 PSI Electric Pressure Washer

Item#3686-05 Model # QL-3100B





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IMPORTANT SAFETY INSTRUCTIONS

PLEASE READ AND SAVE THESE INSTRUCTIONS. Read carefully before attempting to assemble, install, operate or maintain this product. Protect yourself and others by observing all safety information. Failure to comply with instructions could result in personal injury and/or property damage! Retain instructions for future reference. Follow the safety warnings.

- 1. Read this manual carefully, know your equipment. Consider the applications, limitations, and the potential hazards specific to your unit.
- 2. Outlets with a third prong ground are required. Do not use without a grounded prong.
- 3. Do not touch plug or outlet with wet hands.
- 4. Avoid accidental starts. Move switch on unit to "OFF" position before connecting or disconnecting cord to electrical outlets.
- 5. Water spray must never be directed towards any electrical wiring or directly towards the pressure washer itself or fatal electric shock may occur.
- 6. Never carry your pressure washer by the cord. Do not pull on the cord to disconnect from the outlet.
- 7. To prevent damage, the cord should not be crushed, placed next to sharp objects or near a heat source.
- 8. Stay alert, watch what you are doing.
- 9. Follow maintenance instruction specified in this manual.
- 10. Check power cords before using. Damaged cords can reduce performance of pressure washer or cause a fatal electric shock.
- 11. The narrow pin point stream is very powerful, it is not recommended for use on painted surfaces, wood surfaces or items attached with adhesive backing.
- 12. Keep operating area clear of all persons.
- 13. To reduce the risk of injury, close supervision is necessary when this product is used near children.
- 14. Always use both hands when operating pressure washer to maintain complete control of wand.
- 15. Do not touch nozzle or water spray while operating.
- 16. Wear safety goggles while operating.
- 17. Always wear anti-slip shoes to prevent slipping.

SAVE THESE INSTRUCTIONS!

- 18. Disconnect power plug from the outlet when not in use and prior to the detaching of the pressure hose.
- 19. Never tie knots or kinks the pressure hose as damage can result.
- 20. Prior to starting the pressure washer in cold weather, be sure ice has not formed in any part of the appliance.
- 21. The pressure washer should not be used in areas where gas vapors may be present. An electric spark can cause an explosion or fire.
- 22. To minimize the amount of water getting into the pressure washer, the motor housing should be placed as far as possible from the cleaning site during operating.
- 23. To prevent accidental discharge, the spray gun should be secured by locking trigger when not in use.
- 24. Do not operate this product when fatigued or under the influence of alcohol or drugs.
- 25. To allow free air circulation, the pressure washer should NOT be covered during operation.
- 26. Know how to stop the product and bleed pressure quickly. Be thoroughly familiar with the controls.
- 27. Do not over reach or stand on unstable support. Keep good footing and balance at all times.
- 28. WARNING Risk of injection or injury- Do not direct discharge stream at persons.
- 29. This product is provided with a ground fault circuit interrupter built into the power cord plug. If replacement of the cord or plug is needed use only identical replacement parts. Tool service must be performed only by qualified repair personnel. Service or maintenance performed by unqualified personnel could result in a risk of injury.

GROUNDING INSTRUCTION

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 having an equipment-grounding conductor and a grounding plug. The plug must be plugged into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.

DANGER

Improper connection of the equipment grounding conductor can result in risk of electrocution. Check with a qualified electrician or service personnel if you are in doubt whether the outlet is properly grounded. Do not modify the plug provided with the product. If it will not fit the outlet have a proper outlet installed by a qualified electrician. Do not use any type of adapter with this product.

GROUND FAULT CIRCUIT INTERRUPTER PROTECTION

This pressure washer is provided with a ground fault circuit interrupter (GFCI) built into the plug of the power supply cord. This device provides additional protection from the risk of electrical shock. Should replacement of the plug or cord become necessary use only identical replacement parts that include GFCI protection.

GENERAL SAFETY RULES

WARNING! Read, understand and save all instructions. Failure to follow all instructions listed below may result in electric shock, fire or serious personal injury. The warnings, cautions, and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are a factor which cannot be built into this product, but must be supplied by the operator.

SAVE ALL INSTRUCTIONS!

WORK AREA

- 1. Keep your work area clean and well organized. Cluttered benches and dark 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

Do not abuse the cord. Never use the cord to carry the tool. Keep cord away from heat, oil, sharp edges or moving parts. Replace damaged cords immediately. Damaged cords may create a risk of fire.

PERSONAL SAFETY

- Stay alert, watch what you are doing and use common sense when operating a
 power tool. Do not use 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. Wear protective goggles when operating the machine. It is recommended to wear protective goggles, gloves, sturdy non-slipping shoes and an apron.
- 3. Avoid accidental starting. Be sure switch is in OFF position before connecting to a power outlet. Carrying tools with your finger on the switch when the switch is ON invites accidents. Disconnect tool from power outlet before carrying out any work on the machine.
- 4. Do not overreach. Keep proper footing and balance at all times. Proper footing and balance enables better control of the tool in unexpected situations.
- 5. Use safety equipment. Always wear eye protection. Dust mask, non-skid safety shoes, hard hat, or hearing protection must be used for appropriate conditions.

TOOL USE AND CARE

- 1. Do not force 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.
- 2. Do not use tool if switch does not turn ON or OFF. Any tool that cannot be controlled with a switch is dangerous and must be repaired.
- 3. Place the switch in locked or OFF position before making any adjustments, changing accessories or storing the tool. Such preventive safety measures reduce the risk of starting the tool accidentally.







- 4. Store idle tools out of reach of children and other untrained persons. Tools are dangerous in the hands of untrained users. They should be kept away from work area.
- 5. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the tools operation. If damaged, have the tool serviced before using. Many accidents are caused by poorly maintained tools.
- 6. 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 maintenance section of this manual. Use of unauthorized parts or failure to follow Maintenance Instructions may create a risk of electric shock or injury.

ELECTRICAL REQUIREMENTS

General Electrical Connections

DANGER: To reduce the risk of electrocution:

- 1. Use only identical replacement parts when servicing. Servicing should be performed by a qualified service technician.
- 2. Do not use in rain or where floor is wet.

 This tool is intended for indoor residential use only.

WARNING: Do not permit fingers to touch the terminals of plug when installing or removing the plug to or from the outlet.

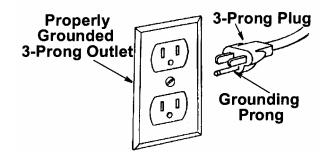
110-120 Volt, 60Hz. Tool Information

NOTE: The plug supplied on your tool may not fit into the outlet you are planning to use. Your local electrical code may require slightly different power cord plug connections. If these differences exist refer to and make the proper adjustments per your local code before your tool is plugged in and turned on.

In the event of a malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This tool is equipped with an electric cord having an equipment grounding conductor and a grounding plug, as shown. The plug must be plugged into a matching outlet that is properly installed and grounded in accordance with all local codes and ordinances.

Do not modify the plug provided. If it will not fit the outlet, have the proper outlet installed by a qualified electrician.

A temporary adapter may not be used with this item.



WIRE SIZES

Make sure the proper extension cord is used and is in good condition. The use of any extension cord will cause some loss of power. To keep this to a minimum and to prevent overheating and motor burnout, use the table below to determine the minimum wire size (A.W.G.) extension cord.

EXTENSION CORD

- Use only 3-wire extension cords which have 3-prong grounding type plugs and 3-pole receptacles which accept the tools plug.
- Use only extension cords intended for outside use. These extension cords are identified by a marking "acceptable for use with outdoor appliances, store indoors while not in use."
- Use only extension cords having an electrical rating not less than the rating of the product.
- Do not use damaged extension cords. Examine extension cords before using and replace if damaged.
- Do not abuse extension cord and do not yank on any cord to disconnect.
- Keep cord away from heat and sharp edges.
- Always disconnect the extension cord from the receptacles before disconnecting the product from the extension cord.

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

Extension Cord Length	Gauge (A.W.G.)
0-25 ft.	12
25-50 ft.	10

SAVE THESE INSTRUCTIONS!

LIST OF MAIN PARTS

PARTS DESCRIPTION

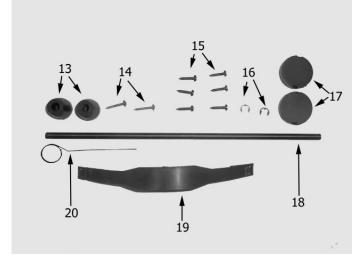
- 1. Motor Housing
- 2. Black Plastic Hooks
- 3. Handle
- 4. High Pressure Hose
- 5. Handle Frame
- 6. Gun Lance
- 7. Back Wheel
- 8. Soap Spray Bottle
- 9. Turbo Nozzle
- 10. Spray Nozzle
- 11. GFCI Power Plug
- 12. Power Cord



- 14. Rubber Foot Screws
- 15. 7/8" Black Screws
- 16. Wheel Clips

13. Rubber Feet

- 17. Wheel Covers
- 18. Wheel Axle
- 19. Plastic Strap
- 20. Tip Cleaner



- 21. Male high pressure connector
- 22. Trigger Lock
- 23. Trigger
- 24. Female Screw Connector

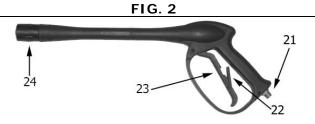
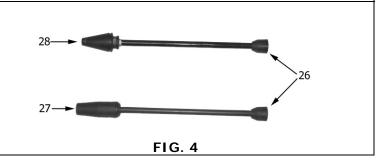
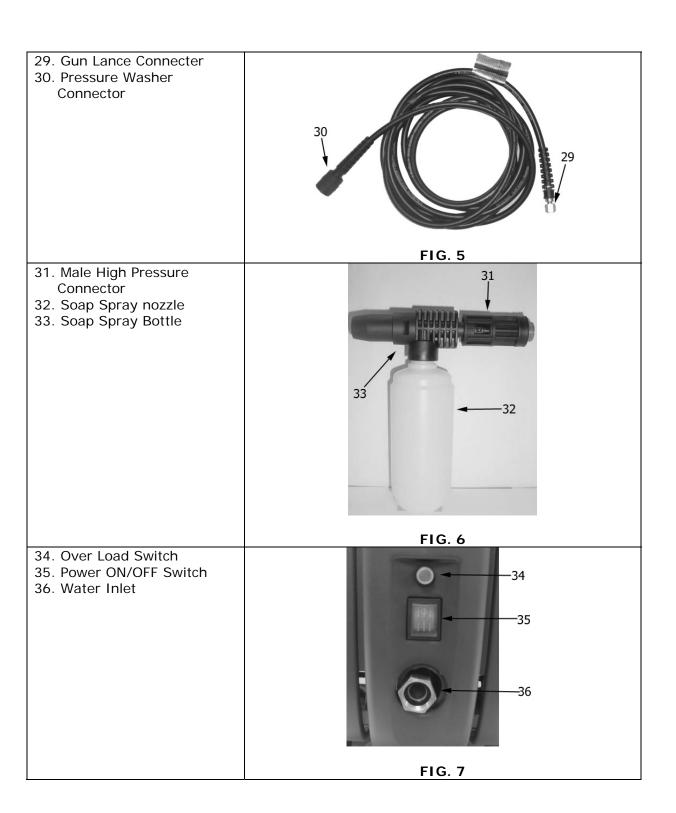


FIG. 3

- 26. Male Screw Connector
- 27. Spray Nozzle
- 28. Turbo Nozzle





TECHNICAL SPECIFICATIONS:

Model Number	QL-3100B
Rating Voltage	100-120v
Frequency	60Hz
Power	1500w
Protection category	IPX5
Working Pressure	1500 PSI
Max. flow	1.58 gal./min
Max. Water temp.	140°F
Max. Pressure	1595 PSI
Weight	40 Lbs

CONTENTS OF PACKAGING

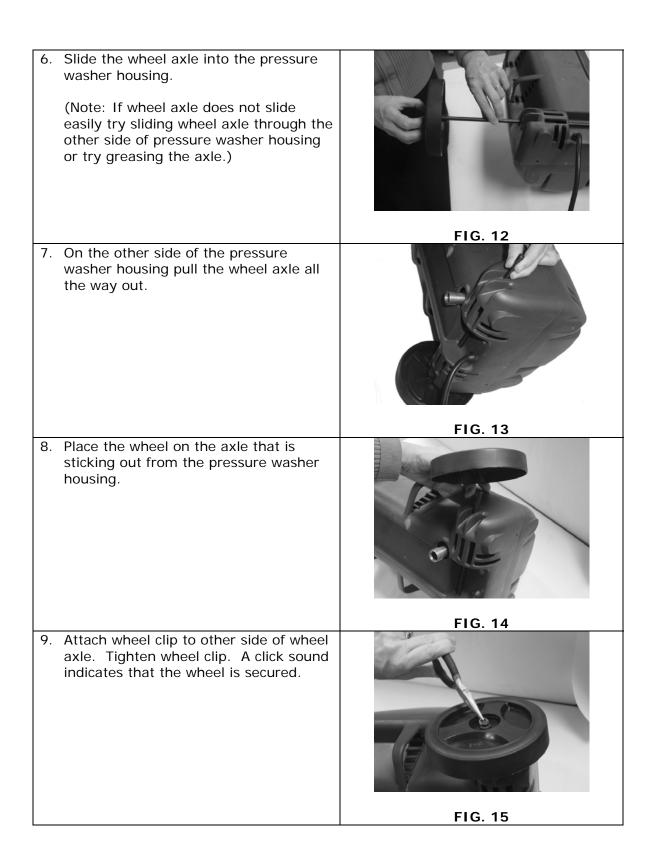
- a) Motor Housing with attached Pump
- b) 2 Black Plastic Hooks
- c) 1 Handle
- d) 1 High Pressure Hose
- e) 1 Handle Frame
- f) 1 Gun Lance
- g) 2 Back Wheels
- h) 1 Soap Spray Bottle
- i) 1 Turbo Nozzle
- j) 1 Spray Nozzle
- k) 2 Rubber Feet
- I) 2 Rubber Feet Screws
- m) 6 x 7/8" Black Screws
- n) 2 Wheel Clips
- o) 2 Wheel Covers
- p) 1 Wheel Axle
- q) 1 Plastic Strap
- r) 1 Tip Cleaner
- s) Instruction Manual

NOTE: Please refer to Page 7 FIG. 1 and FIG. 2 for photos of contents of packaging.

If any of the above items are missing, please contact our service department at 1-888-367-7373 (http://wwwk.wk-usa.com) for replacement.

ASSEMBLY

Using a set of small pliers, attach a wheel clip to one side of the wheel axle.	
	FIG. 8
Tighten the wheel clip until you hear a snap. The click sound indicates that the wheel clip is secured.	
	FIG. 9
3. From the opposite side of the wheel clip slide one of the back wheels onto the wheel axle.4. Slide the wheel all the way to the end of the wheel axle and stop at wheel clip.	
5. Place a wheel cover on the end of wheel and push down to secure.	FIG. 10
	FIG. 11



10. Place wheel cover over wheel cap and push down to secure.	
11. Insert rubber foot screw into rubber	FIG. 16
foot.	
	FIG. 17
12. Screw rubber foot into pressure washer housing. Note: Only tighten until it feels snug. If over tightened the screw will cut through rubber.	
13. Wiggle rubber foot to be sure that it is	FIG. 18
tightly secured.	
	FIG. 19
	110: 17

14. Place handle on top of motor housing.	FIG. 20
15. Insert handle frame on the opposite side of handle.	FIG. 21
16. Screw 2 x 7/8" black screws into lower pair of handle screw holes and secure.	FIG. 22
17. Insert black plastic hook into slot on handle.	FIG. 23

18. Screw 2 x 7/8" black screws into holes on the black plastic hook and secure onto handle.	FIG. 24
19. At the back of the motor housing attach the second black plastic hook to housing. Screw 2 x 7/8" black screws into holes on the black plastic hook and secure to motor housing.	FIG. 25
20. Insert plastic strap into handle frame until it ridges into the frame. No screws are necessary.	FIG. 26
21. Pull on plastic strap to check if strap is secured.	FIG. 27

OPERATION

HIGH PRESSURE PIPE CONNECTION

Connect the nozzle to the gun lance by screwing it together. FIG. 28 Screw the gun lance connector into the gun lance. FIG. 29 Screw the pressure hose with connector into the high pressure outlet on the back of the pressure washer. FIG. 30

CONNECTION OF THE WATER SUPPLY TO THE PRESSURE WASHER

- Connect the water supply to the water inlet on the front of the pressure inlet.
- Turn on water supply.



FIG. 31

LOCKING AND UNLOCKING THE TRIGGER ON THE GUN LANCE

The trigger lock is meant to prevent the unintentional discharge of the spray gun.

How to lock the trigger:

- Pull the handle forward
- Slide the lock latch down to the arrow marked on the gun handle
- Release the trigger

How to unlock the trigger:

- Pull trigger forward
- Slide the locking latch so that the latch is flush next to the trigger
- Release trigger

BLEEDING THE GUN

It is very important to bleed the gun before using the pressure washer. Squeeze the trigger to allow any air that is trapped inside of the unit and hose to escape. Continue to squeeze trigger until a steady stream of water comes from the nozzle. This process may take up to 2 minutes.

ELECTRICAL CONNECTION OF THE APPLIANCE

The main voltage and the working voltage must correspond (see identification plate on machine).

 Insert the GFI power plug into a power outlet (see GROUNDING INSTRUCTION, page 3).





FIG. 32

How to turn on pressure washer:

- Operate the pressure washer in vertical position only after connecting the water supply to the water inlet and water supply has been turned on.
- Switch power switch to ON.
- Position the spray gun on the object to be cleaned.
- NEVER SPRAY TOWARDS A PERSON!
- Direct the nozzle downwards.
- Fully press down the trigger and proceed with cleaning.



FIG. 33

ON OFF

Automatic ON/OFF:

The motor of this pressure washer does not run continuously. It only runs when the trigger of the spray gun is squeezed. This feature will extend the lifetime of the motor and prevent from overheating.

How to turn off the pressure washer:

- Switch power switch to OFF.
- Turn off water supply.
- Press the trigger to depressurize system.

How to use the accessories:

- **1. SPRAY NOZZLE-** Adjustable Spray Nozzle can be adjusted to a pencil stream or fan spray.
 - Pencil Spray A narrow stream has a high impact on cleaning surface resulting in maximum deep cleaning in a concentrated area. However, this narrow high impact spray must be used cautiously, as it may damage some surfaces.
 - Fan Spray A wide fan pattern spray will distribute the impact of the water over a larger area, resulting in excellent cleaning action with a reduced risk of surface damage. Large surface areas can be cleaned more quickly using a wide fan pattern.

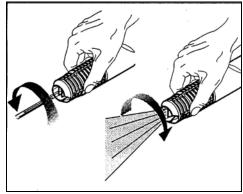
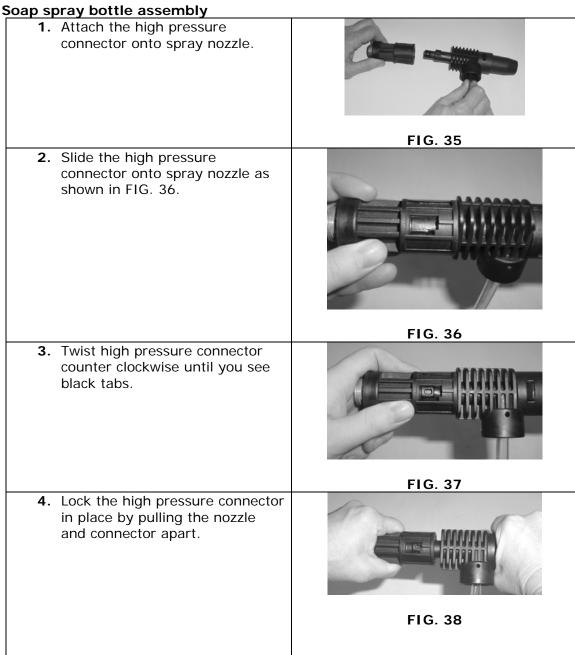


FIG. 34

2. TURBO NOZZLE- Sometimes referred to as a rotary nozzle, is a very effective tool that can significantly reduce cleaning time. The turbo nozzle combines the power of a narrow high impact stream and the efficiency of a 25 degree fan pattern. The turbo nozzle converts the narrow high impact stream into a cone shaped pattern that cleans a larger area.

Please note: Since the turbo nozzle uses a narrow high impact stream, only use it in applications where the cleaning surface cannot be damaged. Additionally, the turbo nozzle is not adjustable and cannot be used to apply detergent. Keep the spray lace at min. 6-8" away from the cleaning surface at all times.

3. SOAP SPRAY BOTTLE- the following instructions are how to assemble and operate the soap spray bottle.



5. Screw soap spray bottle onto lance.



FIG. 39

Spray bottle operation- When cleaning with the pressure washer, some cleaning tasks can be solved with water alone, but for most tasks it is advantageous to use a detergent. A detergent ensures a quick soaking and allows high pressure water to penetrate and remove the dirt more effectively.

- The detergents must not dry on the object being sprayed with pressure washer.
- Use only detergents formulated for pressure washers. Pressure washer detergents can be obtained at your local hardware store or automotive store. Test detergent in an inconspicuous area before use.

How to clean surfaces and avoid damage ANGLE TO CLEANING SURFACE

When spraying water against a surface, maximum impact is generated when the water strikes the surface "head on". However, this type of impact tends to cause dirt particles to embed into the surface, thereby preventing the desired cleaning action.

The optimum angle for spraying water against a cleaning surface is 45 degrees.

DISTANCE FROM CLEANING SURFACES

Another factor that determines the impact force of the water is the distance between the spray nozzle and the cleaning surface. The impact force of the water is increased as the nozzle is moved closer to the surface.

HOW TO AVOID DAMAGING SURFACES

Damaging to the cleaning surfaces occurs because the impact force of the water exceeded the durability of the surface. Never use a narrow high impact stream or a turbo nozzle on a surface that is susceptible to damage. Avoid spraying windows with a narrow high impact stream or turbo nozzle as this my cause breakage. The surest way to avoid damage to the surface are the following steps:

- 1. Before triggering the gun, adjust the nozzle to a wide fan pattern.
- 2. Place the nozzle approximately 4-5 feet from and 45 degrees to cleaning surface, and trigger the gun.
- 3. Vary the fan pattern spray angle and the distance to the cleaning surface until optimum cleaning efficiency is achieved without damaging the surface

MAINTENANCE

CAUTION: Before undertaking any work on the appliance always turn power switch OFF and detach the plug from the power socket.

Undertake only the maintenance operations described in the user instructions.

CLEANING

A clogged and partially clogged nozzle can cause a significant reduction of water coming out of the nozzle and cause the unit to pulse while spraying.

To clean out nozzle:

- Turn OFF and unplug unit.
- Turn off water supply. Relieve any pressure trapped in the hose by squeezing trigger 2-3 times.
- Separate lance from gun.
- Rotate nozzle to the narrow stream setting. This opens up the fan blades.
- Use included tip cleaner, or an unfolded paper clip, insert wire into the nozzle hole and move back and forth until debris is dislodged.
- Remove additional debris by back-flushing water through the nozzle. To do this, place end of garden hose (with water running) to end of nozzle for 30-60 seconds.

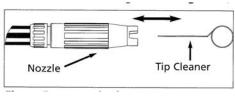


FIG. 40

STORAGE

Store the appliance in premises protected against freezing conditions.

TROUBLE SHOOTING

Trouble	Possible Cause	Solution
Pressure drops or oscillations	- Lack of water - Nozzle is dirty	Open the water tapClean the nozzle of possible debris with tip cleaner.
The motor hums when switched on and fails to start	- Main voltage too low - Gun not activated - Extension cord too small	 Check the electrical connection Switch machine ON and operate the gun Use an extension cord of sufficient size Check the electrical requirements in safety instructions (page 4)
The motor stops	Overload cut-out, disconnected due to motor overheating	- Check to see if power voltage is correct. Rest over load switch, wait 3 minutes and then switch the appliance on again.
The detergent fails to come out soap spray bottle	- Clogged injector	- Clean the soap injector by using the tip cleaner
Generates an irregular and non-precise jet	- Dirty high pressure nozzle in the spray gun	- Clean the high pressure nozzle with the tip cleaner

SERVICE CENTER

If you have any question in regards to the operation of this power tool or are in need of a spare part please contact our service center at:

Wachsmuth & Krogmann, Inc.

Tel: 1-888-367-7373

(Business hours Mon-Fri 9:00am - 4:00pm CT)

Website: http://www.wk-usa.com



ENVIRONMENTAL PROTECTION

If the tool should no longer work at all, please make sure that it is disposed in an environmentally friendly way, by handing it into a public collection point. Please do not put it with your household waste.

LIMITED WARRANTY

Thank you for purchasing a top quality **KingCraft** product. This **Pressure Washer** item **#3686-05** was tested and meets our stringent quality standards. This product is warranted to be free from manufacturing defects in original materials, including original parts, and workmanship until **July 7**th, **2006** or 1 year with proof of purchase.

The warranty is void if the defect is due to accidental damage, misuse, abuse, neglect, improper repair or alteration by unauthorized persons or failure to follow operation instructions provided with the product. This warranty does not apply to commercial use.

The warranty is non-transferable and applies only to the original purchase and does not extend to subsequent owners of the product. Liability under this warranty is limited to repair, replacement or refund. In no event shall liability exceed the purchase price paid by the purchaser of the product. Under no circumstances shall there be liability for any loss, direct, indirect, incidental, special or consequential damage arising out of in connection with use of this product. This warranty is valid only in the United States of America. This Warranty gives you specific legal rights. However you may have other rights that vary from state to state. Some states do not allow limitation on implied warranties or exclusion of consequential damages therefore these restrictions may not apply to you.

In case you find the product to be defective please send it within the warranty period to our service center. To avoid transport damages please send the product in the original packaging. In return you will either receive your repaired item, a new product or a refund. Please fill out the Warranty Card and send it together with the product and purchase receipt

To arrange pick-up of the defective item please call our service center:

Wachsmuth & Krogmann Inc.

Tel: 1-888-367-7373 (Business hours Mon-Fri 9:00am-4:00 pm CT)

Website: http://www.wk-usa.com

123 Sivert Court, Bensenville, IL 60106,

USA

WARRANTY CARD



Electric Pressure Washer, item # 3686-05, model #QL-3100B

In case you find this product to be defective please send it within the warranty period to our service center. To avoid transport damages please send the product in the original packaging. In return you will receive your repaired item, a new product or a refund.

This product is warranted to be free from manufacturing defects in original materials, including original parts, and workmanship until **July 7th**, **2006** or 1 year with proof of purchase.

Please fill in your details below and send it together with the product and purchase receipt. Please read the Limited Warranty conditions mentioned in this instruction manual.

Customer Name		
Street		
City		
State		
ZIP Code		
Purchase Date		
Description of Defect :		

To arrange pick-up of the defective item please call our service center:

Wachsmuth & Krogmann Inc.

Tel: 1-888-367-7373 (Business hours Mon-Fri 9:00am-4:00 pm CT)

Website: http://www.wk-usa.com

123 Sivert Court, Bensenville, IL 60106,

USA

X

PLEASE DETACH THIS SECTION AND RETURN IT WITH YOUR PRODUCT

ORDER FORM

FOR REPLACEMENT GUN LANCE, PRESSURE HOSE, SPRAY NOZZLE, AND TURBO NOZZLE

Price per Gun Lance (includes shipping and handling \$ 17.00)
Price per Pressure Hose (includes shipping and handling \$ 14.00)
Price per Spray Nozzle (includes shipping and handling \$ 10.00)
Price per Turbo Nozzle (includes shipping and handling \$ 10.00)

Please send a MONEY ORDER only (no cash or personal checks), payable to Wachsmuth & Krogmann Inc. to the following address:

Wachsmuth & Krogmann Inc, 123 Sivert Court Bensenville, IL 60106

Kindly fill in your information below and send together with your Money Order

Name		
Street		
City		
State		
ZIP		
Date		
Quantity of Item	Gun Lance @	\$
Quantity of Item	Pressure Hose @	\$
Quantity of Item	Spray Nozzle @	\$
Quantity of Item	Turbo Nozzle @	\$
Total amount		\$

