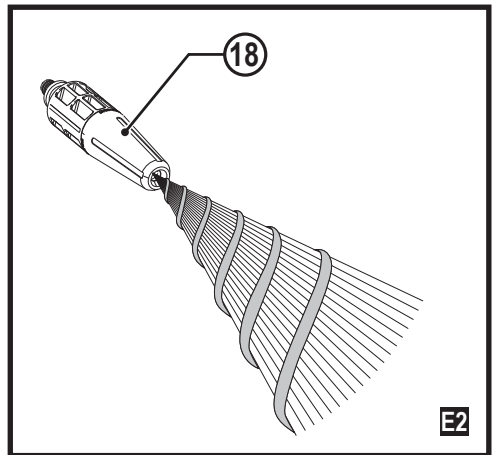
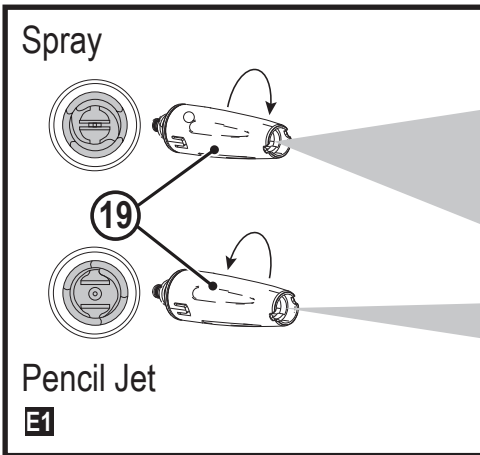
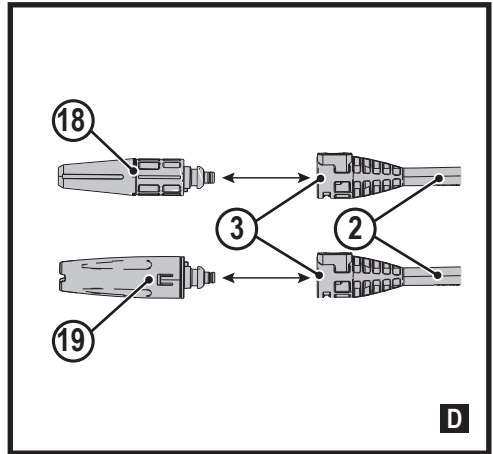
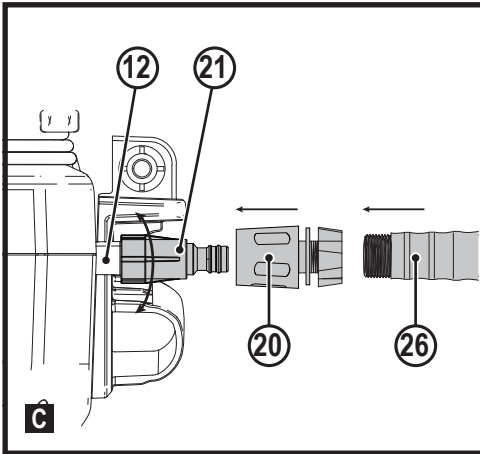
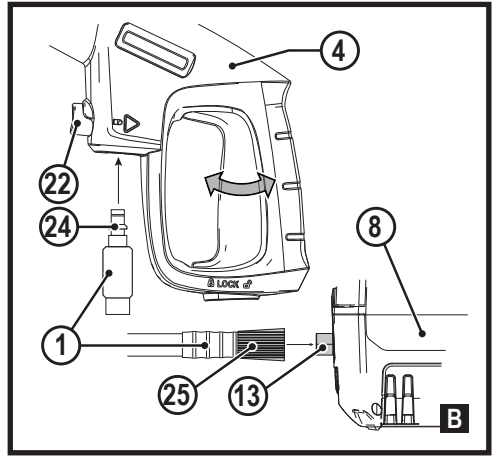
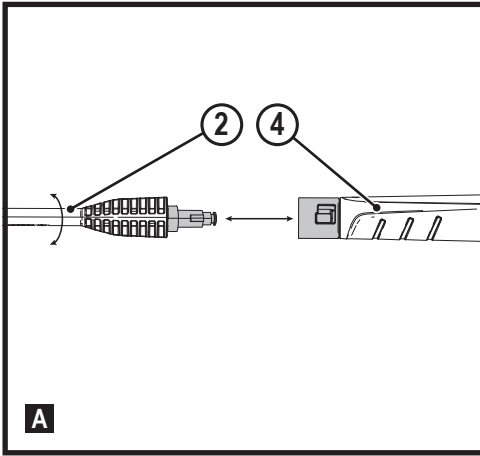
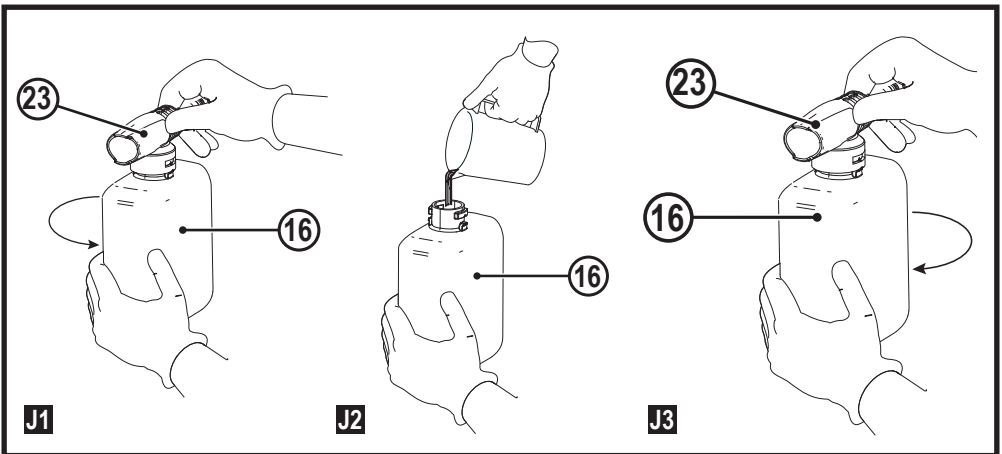
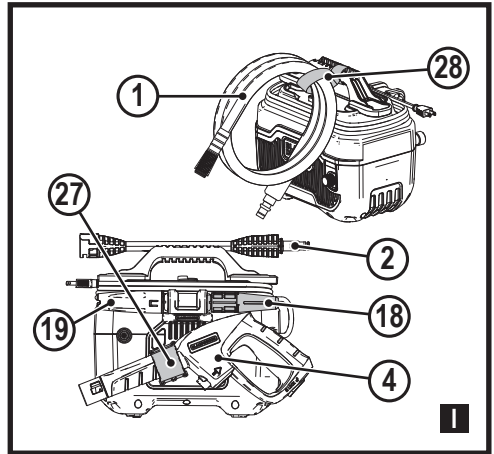
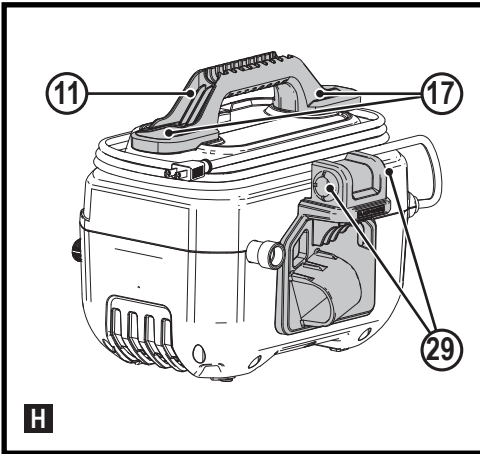
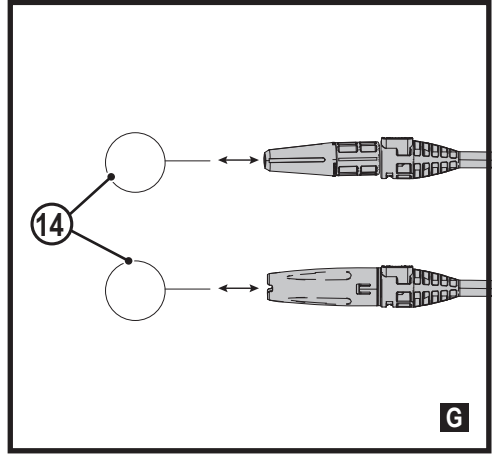
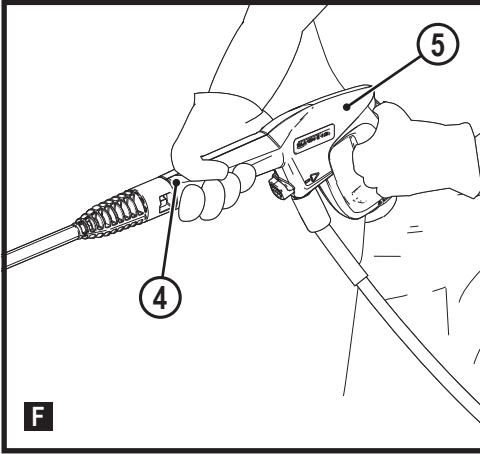
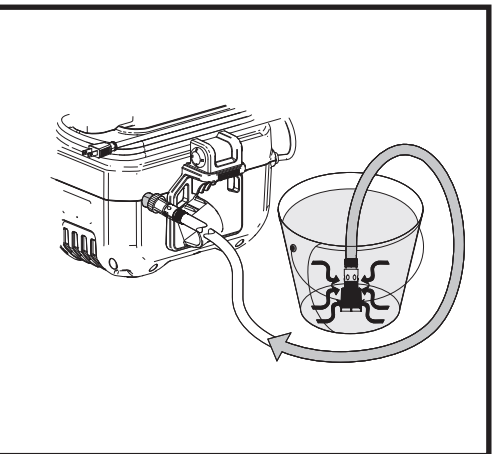
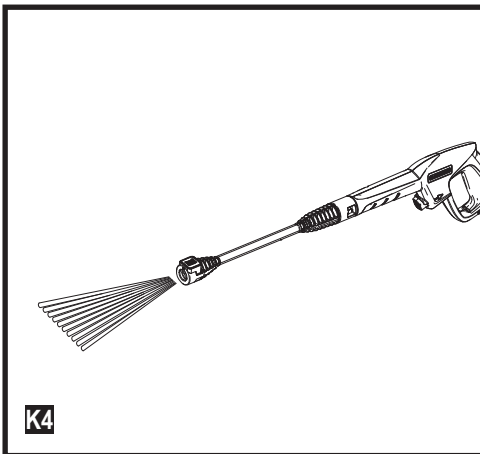
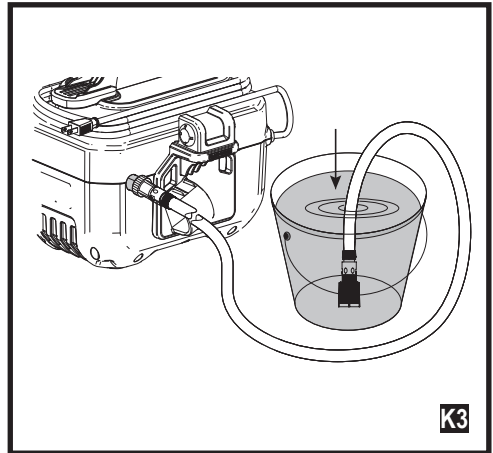
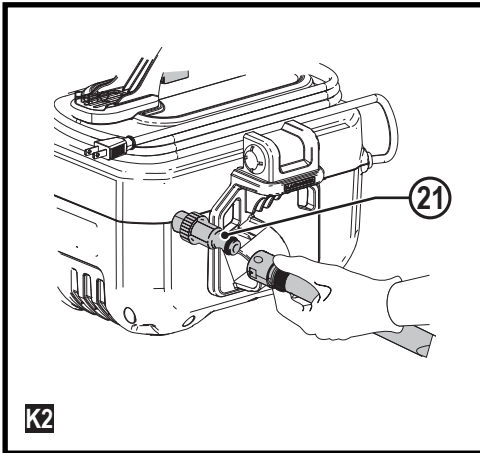
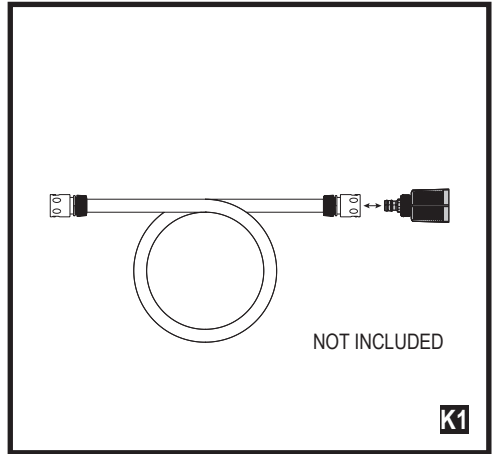
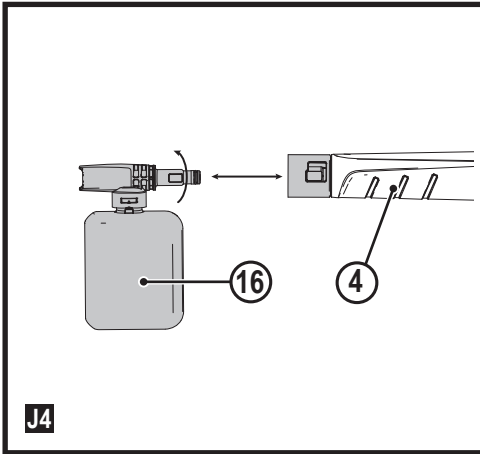


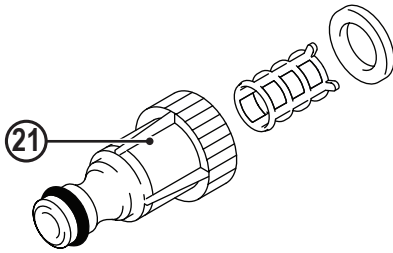
 CAUTION Read the instructions before using the machine.

BEPW1600H









**L**

BEPW1600H

PRESSURE WASHER

## Technical data

| BEPW1600H  |          |                  |
|--|----------|------------------|
| Power  | W        | 1300             |
| Rated Flow Rate                                    | L/min    | 5.2              |
| Max Water Flow Rate                                | L/min    | 6.6              |
| Rated Pressure                                     | Bar /PSI | 74/ 1074         |
| Maximum Pressure                                   | Bar/PSI  | 110/1600         |
| Maximum Inlet Temperature                          | °C       | 50               |
| Maximum Input Pressure                             | Bar      | 10               |
| Repulsive Force of the Gun to the Maximum Pressure | N        | 21               |
| Motor Protection                                   |          | IPX5             |
| Inlet Water  |          | Cold clear Water |

## Intended use

This pressure washer is intended for household use for cleaning boats, cars, decks, driveways, grills, house siding, motorcycles, patios, and outdoor furniture.

**Do not** let children come into contact with the tool.

Supervision is required when inexperienced operators use this tool.

# Safety instructions

## IMPORTANT SAFETY INSTRUCTIONS



**WARNING:** When using this pressure washer, basic safety precautions should always be followed including the following:

- ◆ If the supply cord is damaged, it must be replaced by the manufacturer or an authorised BLACK+DECKER Service Centre in order to avoid a hazard.
- ◆ This machine is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge.
- ◆ Children should be supervised to ensure that they do not play with the appliance.
- ◆ Read all the instructions before using the product.
- ◆ To reduce the risk of injury, close supervision is necessary when a product is used near children.
- ◆ Know how to stop the product and bleed pressures quickly. Be thoroughly familiar with the controls.
- ◆ Stay alert – watch what you are doing.
- ◆ Do not operate the product when fatigued or under the influence of alcohol or drugs.
- ◆ Keep operating area clear of all persons and animals.

- ◆ Do not overreach or stand on unstable support. Keep good footing and balance at all times.
- ◆ Follow the maintenance instructions specified in the manual.
- ◆ The electric supply connection shall be made by a qualified electrician and comply with IEC 60364-1. It is recommended that the electric supply to this machine should include either a residual current device that will interrupt the supply if the leakage current to earth exceeds 30 mA for 30 ms or a device that will prove the earth circuit.



**WARNING:** Risk of injection or injury – do not direct discharge stream at persons or animals.



**WARNING:** Read this entire manual before attempting to assemble, operate or install the product.





**WARNING:** This unit was designed for specific applications. It should not be modified and/or used for any application other than that which it was designed.


**NOTICE:** Always store your pressure washer in a location where the temperature will not fall below 40 °F (4 °C). freeze damage is not covered by the warranty.

1. Do not touch plug or outlet with wet hands.
2. **Avoid accidental starts.** Move switch on unit to OFF position before connecting or disconnecting cord to electrical outlets.
3. Water spray must never be directed towards any electric wiring or directly towards the pressure washer machine itself or fatal electric shock may occur.
4. **Never carry your pressure washer by the cord.** Do not pull on the cord to disconnect from the outlet.
5. To prevent damage, the cord should not be crushed, placed next to sharp objects or near a heat source.
6. **Check power cords before using.** Damaged cords can reduce performance of pressure washer or cause a fatal electrical shock
7. **The narrow pin point stream is very powerful.** It is not recommended for use on painted surfaces, wood surfaces or items attached with an adhesive backing.
8. Keep operating area clear of all persons and animals.
9. Always use both hands when operating pressure washer to maintain complete control of the wand.
10. **Do not touch nozzle or water spray while operating.** Never place hands in front of nozzle.
11. **Wear safety goggles while operating.** Wear protective clothing and footwear to protect against accidental spraying.

12. Disconnect power plug from the outlet when not in use and prior to the detaching of the high pressure hose.
13. *Never tie knots or kink the high pressure hose as damage could result. Inspect the high-pressure hose regularly. Replace the hose immediately if it is damaged, worn or shows any signs of cracks, bubbles, pinholes, or other leakage.* Never grasp a high-pressure hose that is leaking or damaged.
14. *Do not operate or store this product in temperatures below 40 °F (4 °C).* Freeze damage is not covered by the warranty.
15. *Carefully observe all chemical instructions and warnings before using. Use only approved pressure washer cleaners. Do not use bleach, chlorine, or any cleaners containing acids. Always follow manufacturer's label recommendations for proper use of cleaners.* Always protect eyes, skin and respiratory system from cleaners.
16. *The pressure washer should not be used in areas where gas vapors may be present.* An electric spark could cause an explosion or fire.
17. To minimize the amount of water getting into the pressure washer, the unit should be placed as far as possible from the cleaning site during operation.
18. To prevent accidental discharge, the spray gun should be secured by locking the trigger when not in use.
19. To allow free air circulation, the pressure washer should NOT be covered during operation.
20. *Never touch, grasp or attempt to cover a pinhole or similar water leak on the high-pressure hose.* The stream of water IS under high pressure and WILL penetrate skin.
21. *Use only hoses and accessories rated for pressure higher than your pressure washer's PSI / Bar.* Never use with any other manufacturer's accessories or components.
22. Never defeat the safety features of this product.
23. Do not operate machine with missing, broken or unauthorized parts.
24. Never spray flammable liquids or use pressure washer in areas containing combustible dust, liquid, or vapors.

 **WARNING** :This machine has been designed for use with the cleaning agent supplied or recommended by the manufacturer. The use of other cleaning agents or chemicals may adversely affect the safety of the machine.

 **WARNING**: During use of high pressure cleaners, aerosols may be formed. Inhalation of aerosols can be hazardous to health.

-  **WARNING**: High pressure jets can be dangerous if subject to misuse. The jet must not be directed at persons, live electrical equipment or the machine itself.
-  **WARNING**: Do not use the machine within range of persons unless they wear protective clothing.
-  **WARNING**: Do not direct the jet against yourself or others in order to clean clothes or foot-wear.
-  **WARNING**: Risk of explosion – Do not spray flammable liquids.
-  **WARNING**: High pressure cleaners shall not be used by children or untrained personnel.
-  **WARNING**: High pressure hoses, fittings and couplings are important for the safety of the machine. Use only hoses, fittings and couplings recommended by the manufacturer.
-  **WARNING**: To ensure machine safety, use only original spare parts from the manufacturer or approved by the manufacturer.
-  **WARNING**: Water that has flowed through backflow preventers is considered to be nonpotable.
-  **WARNING**: the machine shall be disconnected from its power source during cleaning or maintenance and when replacing parts.
-  **WARNING**: Do not use the machine if a supply cord or important parts of the machine are damaged, e.g. safety devices, high pressure hoses, trigger gun.
-  **WARNING**: Inadequate extension cords can be dangerous. If an extension cord is used, it shall be suitable for outdoor use, and the connection has to be kept dry and off the ground. It is recommended that this is accomplished by means of a cord reel which keeps the socket at least 60 mm above the ground.
-  **WARNING** :Always switch off the mains disconnecting switch when leaving the machine unattended.
-  **WARNING**: Depending on the application, shielded nozzles can be used for high pressure cleaning, which will reduce the emission of hydrous aerosols dramatically. However, not all applications allow the use of such a device. If shielded nozzles are not applicable for the protection against aerosols, a respiratory mask of class FFP 2 or equivalent may be needed, depending on the cleaning environment.

### Safety of others

- ◆ This tool is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the tool by a person responsible for their safety.

- ◆ Children should be supervised to ensure that they do not play with the appliance.

### Labels on tool

The following symbols are shown on the tool along with the date code:



**Warning!** To reduce the risk of injury, the user must read the instruction manual.



Wear eye protection



Wear ear protection.



Machine not suitable for connection to the potable water mains.



Never direct the water jet at people, animals, the machine or electric components

### Electrical safety



This tool is double insulated; therefore no earth wire is required. Always check that the power supply corresponds to the voltage on the rating plate.

### Features

This appliance includes some or all of the following features.

1. High pressure hose
2. Spray wand
3. Nozzle button
4. Spray handle
5. Spray handle grip
6. Trigger lock-off
7. Trigger
8. Pressure washer unit
9. ON button
10. OFF button
11. Handle
12. Garden hose water intake
13. High pressure water outlet
14. Nozzle cleaning tool
15. Power cord

16. Soap bottle
17. Cord retaining hook
18. Turbo nozzle
19. Spray fan to pencil jet nozzle
20. Hose connector
21. Filter
22. Hose connect button
23. Soap bottle applicator

### Assembly

**Warning!** To reduce the risk of serious personal injury, turn unit off and disconnect it from power source before making any adjustments or removing/installing attachments or accessories. An accidental start-up can cause injury.

#### Attaching Spray Handle (Fig. A)

- ◆ To connect the spray handle ( 4 ) to the spray wand ( 2 ), insert the end of the spray handle onto the end of the spray wand.
- ◆ Press in and turn the spray handle counterclockwise to lock it into position.

#### Attaching High Pressure Hose (Fig. B)

**Notice:** Never pull high pressure hose or water supply hose to move pressure washer. This could damage hose and/or pump inlet and/or pump outlet.

- ◆ To connect the high pressure hose ( 1 ) to the spray handle ( 4 ), depress the hose connect button ( 22 ) while clicking the hose end ( 24 ) into the spray handle. Release the hose connect button when the hose end has clicked into position.
- ◆ To connect the high pressure hose to the pressure washer unit ( 8 ), screw the hose collar ( 25 ) onto the high pressure water outlet ( 13 ).

**Note:** Uncoil the high pressure hose before installation to prevent kinks.

**Note:** Avoid cross threading when installing the hose. Cross threading will cause leaks.

#### Attaching Garden Hose (Fig. C)

**Note:** Before connecting the garden hose to the pressure washer unit, run water through the garden hose for thirty seconds to clear any debris from inside the garden hose.

- ◆ To connect the garden hose to the pressure washer unit ( 8 ), screw the filter ( 21 ) to the water intake ( 12 ).
- ◆ Connect the garden hose to the hose connector ( 20 ) by loosening the screw of the garden connector and attaching the hose onto the connector.
- ◆ Attach the garden hose ( 26 ) mounted onto the garden connector to the filter ( 21 ) until it "clicks".

**Note:** Always disconnect the garden hose after usage.

#### Attaching Nozzles (Fig. D)

**Danger!** Risk of fluid injection. Do not direct discharge stream toward persons, unprotected skin, eyes or any pets or animals. Serious injury will occur.

**Warning!** Flying objects could cause risk of serious injury. DO



NOT attempt to change nozzles while pressure washer is running. Turn pressure washer unit OFF before changing nozzles.

- ◆ To connect a nozzle to the spray wand ( 2 ) , depress the nozzle button ( 3 ) on the spray wand and insert the appropriate nozzle.
- ◆ Release the button to lock the nozzle in place.
- ◆ Give the nozzle a firm tug to ensure the nozzle is locked into place.

## Spray Fan to Pencil Jet Nozzle

### Adjusting Fan Pattern (Fig. E1)

The angle of spray coming out of the spray wand may be adjusted by rotating the nozzle. This will vary the spray pattern from approximately a 0 ° narrow high impact stream to a 60 ° wide fan spray.

A wide fan pattern distributes 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.

A narrow pencil jet stream distributes the impact of the water in a concentrated area, resulting in a high impact force on the cleaning surface. Use a narrow pencil jet stream for deep cleaning in a concentrated area. However, use it cautiously, as it may damage some surfaces

### Attaching Soap Bottle (Fig. J4)

To connect the soap bottle ( 16 ) to the spray handle ( 4 ) , insert the end of the soap bottle inside the spray handle and turn the soap bottle counterclockwise to lock it into position.

**Note:** The wand and soap bottle cannot be installed at the same time.

**Note:** The soap bottle should be positioned underneath the barrel of the spray handle. Do not position the soap bottle above the barrel of the plastic gun as this will lead to soap dripping on the barrel.

| Spray Tip                      | Application                    |
|--------------------------------|--------------------------------|
| Spray fan to pencil jet nozzle | For gentle wide area cleaning. |
| Turbo Nozzle                   | For abrasive cleaning.         |

## Operation

**Warning!** To reduce the risk of serious personal injury, turn unit off and disconnect it from power source before making any adjustments or removing/installing attachments or accessories. An accidental start-up can cause injury.

### Proper Hand Position (Fig. F)

**Warning!** To reduce the risk of serious personal injury, always use proper hand position as shown.

**Warning!** To reduce the risk of serious personal injury, always hold securely in anticipation of a sudden reaction.

Proper hand position requires one hand on the spray handle grip ( 5 ) and the other hand on the spray handle ( 4 ) .

## Pressure Washing

### Preparing Surface for Cleaning

- ◆ Remove objects from the area which could create a hazard such as children's toys or outdoor furniture.
- ◆ Insure that all doors and windows are closed tight.
- ◆ Protect all plants and trees in the adjacent area with a drop cloth ensuring that they will not be harmed by any overspray.
- ◆ Pre-rinse cleaning area with fresh water.
- ◆ Use only detergents formulated for pressure washers.
- ◆ Always test detergent in an inconspicuous area before use.

### Preparing Pressure Washer Unit for Use (K1, K2, K3, K4)

**Danger!** Risk of fluid injection and laceration. When using the high-pressure setting, DO NOT allow the high-pressure spray to come in contact with unprotected skin, eyes, or with any pets or animals. Serious injury will occur.

**Caution!** Before operation:

- ◆ Connect the garden hose to a water supply. Water can be drawn from a faucet or another water supply. Refer to **Self Priming** under **Preparing Pressure Washer Unit for Use**.
- ◆ Connect the high pressure hose to the pressure washer and the spray handle. For instructions on connecting the high pressure hose to the pressure washer and spray handle, please refer to **Attaching High Pressure Hose** under **Assembly**.
- ◆ Connect the garden hose to the pressure washer. For instructions on connecting the water supply to the pressure washer, please refer to **Attaching Garden Hose** under **Assembly**.
- ◆ Plug the power cord into an appropriate power source.

### Preparing Spray Handle

**Important!** Before turning on the pressure washer unit, disengage the trigger lock-off ( 6 ) and squeeze the trigger ( 7 ) .

- ◆ Disengage the trigger lock-off ( 6 ) .
- ◆ Squeeze the trigger ( 7 ) . Hold the trigger for 30 seconds to purge the system of air.
- ◆ If air is still found in the water stream, continue to run water through the spray handle.

## Water Connection



**Warning!** According to the applicable regulations, the appliance must never be used on the drinking water network without a system separator. Use a system separator as per IEC 61770 Type BA.

Water flowing through a system separator is not considered drinkable.

- ◆ Comply with the regulations of your water supply company.
- ◆ All connecting hoses must have properly sealed joints.
- ◆ Make sure the supply hose is at least 12.7 mm in diameter

and is reinforced.

- ◆ The appliance should never be used on the drinking water supply without a backflow valve. Water that has passed the backflow valve is considered undrinkable.

## Cleaning a Surface

- ◆ To start the pressure washer, press the ON button ( 9 ).
- ◆ Confirm that the water faucet is open or use any other water source so that water will be supplied to the pressure washer unit.
- ◆ The best angle for spraying water against a cleaning surface is 45° .
  - ◆ Spraying head on tends to cause dirt particles to imbed in the surface.
  - ◆ When working on vertical surfaces, it is best to apply detergent starting at the bottom and working upwards which will prevent the detergent from sliding down and causing streaks.
- ◆ To disengage the spray handle, release the trigger.
 

NOTE: Excessive pump pressure may be the result of a clogged nozzle. Always turn OFF the pressure washer unit and unplug the unit before attempting to unclog a nozzle.

## Detergents (J1, J2, J3, J4)

For steps on attaching the detergent/soap bottle, please refer to **Attaching Soap Bottle** under **Assembly**

The use of detergents can dramatically reduce cleaning time and assist in the removal of difficult stains. Some detergents have been customized for pressure washer use on specific cleaning tasks.

The cleaning power of detergents comes from applying them to a surface and giving the chemicals time to break down the dirt and grime. Detergents work best when applied at low pressure.

The combination of chemical action and high pressure rinsing is very effective.

On vertical surfaces, apply the detergent starting at the bottom and work your way upward. This will prevent the detergent from sliding down and causing streaks. High pressure rinsing should also progress from the bottom to top. On particularly tough stains, it may be necessary to use a brush in combination with detergents and high pressure rinsing.

## Moving the Pressure Washer

- ◆ Turn OFF the pressure washer unit ( 8 ) by pressing the OFF button ( 10 ) and then turn OFF the water supply.
- ◆ Point the spray wand ( 2 ) in a safe direction and pull the trigger ( 7 ) to release remaining water pressure.
- ◆ When the spray wand is completely empty, lift the pressure washer by the handle ( 11 ).

## Shutdown (Fig. C)

- ◆ Turn OFF the pressure washer unit ( 8 ) by pressing the OFF button ( 10 ) and unplug the cord from the outlet.
- ◆ Turn OFF water at the faucet or disconnect from any other water source.
- ◆ Discharge residual pressure by squeezing the trigger ( 7 ) until no more water comes out of the spray wand ( 2 ).

- ◆ Engage the spray trigger lock-off ( 6 ).
- ◆ Disconnect the garden hose ( 26 ) from the water intake ( 12 ).
- ◆ Disconnect the high pressure hose ( 1 ) from the high pressure water outlet ( 13 ) and drain hose.

## Self Priming (Fig. B, C, K1, K2, K3, K4)

- ◆ Connect the inlet hose to the pressure washer. Refer to **Attaching Garden Hose** under **Assembly**.
- ◆ Place the free end of the hose with filter attached into the alternative water source (e.g. bucket, etc.)
- ◆ Connect the high pressure hose to the spray handle. Please refer to **Attaching High Pressure Hose** under **Assembly**.
- ◆ Plug the pressure washer unit into a power source.
- ◆ Actuate the pressure washer by pressing the ON button ( 9 ).
- ◆ Turn OFF the pressure washer as soon as water is spraying out of the outlet tube of the unit.
- ◆ Unplug the pressure washer unit from the power source.
- ◆ Assemble the high pressure hose to the high pressure water outlet.
- ◆ Plug the pressure washer unit into a power source.
- ◆ Actuate the pressure washer by pressing the ON button 9 .
- ◆ Actuate the trigger of the spray handle to start cleaning work.

## Maintenance

**Warning!** To reduce the risk of serious personal injury, turn unit off and disconnect it from power source before making any adjustments or removing/installing attachments or accessories. An accidental start-up can cause injury.

Your Black+Decker power tool has been designed to operate over a long period of time with a minimum of maintenance. Continuous satisfactory operation depends upon proper tool care and regular cleaning.

## Cleaning

**Warning!** Blow dirt and dust out of all air vents with clean, dry air at least once a week.

To minimize the risk of eye injury, always wear approved eye protection when performing this procedure.

**Warning!** Never use solvents or other harsh chemicals for cleaning the non-metallic parts of the tool. These chemicals may weaken the plastic materials used in these parts. Use a cloth dampened only with water and mild soap. Never let any liquid get inside the tool; never immerse any part of the tool into a liquid.

## Nozzle Cleaning (Fig. G)

If the nozzle becomes clogged with foreign materials, such as dirt, excessive pressure may develop. If the nozzle becomes partially clogged or restricted, the pump pressure will pulsate. Clean the nozzle immediately using the nozzle cleaner.

- ◆ Turn OFF and unplug the pressure washer unit ( 8 ).
- ◆ Turn OFF the water supply.

- ◆ Pull trigger ( 7 ) on spray handle ( 4 ) to relieve any water pressure.
- ◆ Remove the nozzle from the spray wand ( 2 ) by depressing the button ( 3 ).
- ◆ Using the nozzle cleaning tool ( 14 ), unclog any debris from the nozzle.
- ◆ Run water from a faucet or garden hose through the nozzle.

## Filter Cleaning (Fig. L)

Inspect the filter ( 21 ) before each use and clean if necessary. Remove the filter element and run under clear water to remove any debris.

## Storage (Fig. H, I)

- ◆ Store in a dry, covered location above freezing temperature. STORE INDOORS.
- ◆ Always completely empty water from high pressure hose, pressure washer unit, nozzles, and spray wand.
- ◆ Nozzles can be stored in the nozzle storage ( 29 ) section of the bracket ( 27 ) as shown in Fig. I.
- ◆ Power cord can be stored coiled up around the pressure washer unit and secured with the cord retaining hooks ( 17 ) as shown in Fig. H.
- ◆ High pressure hose ( 1 ) can be stored coiled up and secured to the handle using the supplied hook and latch strap ( 28 ) as shown in Fig. I.
- ◆ The spray handle ( 4 ) can be stored onto the rear of the unit using the bracket ( 27 ) as shown in Fig. I.
- ◆ The spray wand ( 2 ) can be stored into the handle as shown in Fig. I.

## Accessories

**Warning!** Since accessories, other than those offered by BLACK+DECKER, have not been tested with this product, use of such accessories with this tool could be hazardous. To reduce risk of injury, use only BLACK+DECKER accessories recommended for this product.

Recommended accessories for use with your tool are available at extra cost from your local dealer or authorized service center. If you need assistance in locating any accessory, please contact [www.blackanddecker.com](http://www.blackanddecker.com).

## Repairs

**Warning!** To assure product SAFETY and RELIABILITY, repairs, maintenance and adjustment (including brush inspection and replacement) should be performed by a Black+Decker factory service center or a Black+Decker authorized service center. Always use identical replacement parts

If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.

## Protecting the environment



Separate collection. Products and batteries marked with this symbol must not be disposed of with normal household waste.

Products and batteries contain materials that can be recovered or recycled reducing the demand for raw materials. Please recycle electrical products and batteries according to local provisions.

## Service information

BLACK+DECKER offers a full network of company-owned and authorized service locations throughout Asia. All BLACK+DECKER Service Centers are staffed with trained personnel to provide customers with efficient and reliable power tool service. Whether you need technical advice, repair, or genuine factory replacement parts, contact the BLACK+DECKER location nearest to you.

## Notes

- ◆ BLACK+DECKER's policy is one of continuous improvement to our products and, as such, we reserve the right to change product specifications without prior notice.
- ◆ Standard equipment and accessories may vary by country.
- ◆ Product specifications may differ by country.
- ◆ Complete product range may not be available in all countries.
- ◆ Contact your local BLACK+DECKER dealers for range availability.

Black & Decker (U.S.) Inc.  
701 East Joppa Rd, Towson, Maryland 21286 U.S.A

## Troubleshooting

**Warning!** Risk of Unsafe Operation. Before servicing unit unplug or disconnect electrical supply, turn water supply off, discharge residual pressure, and engage spray handle lock-off.

| PROBLEM                            | CAUSE                                 | CORRECTION  |
|------------------------------------|---------------------------------------|---|
| Motor does not start.              | Unit not plugged in.                  | Plug in power cord.   |
|                                    | ON/OFF switch is in the OFF position. | Turn switch to the "ON" position.   |
|                                    | Wand trigger not being squeezed.      | Squeeze trigger with switch in "ON" position.   |
| Unit does not reach high pressure. | Water faucet not fully turned on.     | Open water valve fully.   |
|                                    | Water inlet filter clogged.           | Remove filter and rinse to clean.   |
|                                    | Nozzle worn.                          | Replace with new nozzle.  |
|                                    | Pump is sucking air.                  | Check that hoses and fittings are air tight. Turn OFF machine and purge pump by squeezing trigger gun until a steady flow of water emerges from the nozzle. |
|                                    | Water supply restricted.              | Check water hose for kinks, leaks and blockage.   |
|                                    | Unit is not properly self primed      | Refer to <b>Self Priming</b> under <b>Assembly</b> .  |
| Output pressure varies high/low.   | Not enough inlet water supply.        | Turn water on full force - check hose for leaks and kinks.  |
|                                    | Pump is sucking air.                  | Check that hoses and fittings are air tight. Turn OFF machine and purge pump by squeezing trigger gun until a steady flow of water emerges from the nozzle. |
|                                    | Water inlet screen clogged.           | To unclog, rinse off with water.  |
|                                    | Discharge nozzle is obstructed.       | Blow out or remove debris.  |
| Garden hose connection leaks.      | Loose fittings.                       | Tighten fittings.   |
|                                    | Missing/worn rubber washer.           | Replace washer in hose adapter.   |
| Spray wand leaks.                  | Spray wand not properly attached.     | Insert the spray wand into the spray handle. Push in and turn to lock spray wand into place.  |
|                                    | Broken O-ring.                        | Contact your local dealer   |
| Pump is excessively noisy.         | Pump is sucking air.                  | Check that hoses and fittings are air tight. Turn OFF machine and purge pump by squeezing trigger gun until a steady flow of water emerges from the nozzle. |
| Water leaks from pump.             | Loose fittings.                       | Check that all fittings are tight.  |
|                                    | Water seals are damaged or worn.      | Contact your local dealer   |
| Oil leaks.                         | Oil seals are damaged or worn.        | Contact your local dealer   |
| Motor buzzes but fails to run.     | Supply voltage below minimum.         | Verify that only the pressure washer is running on this circuit.  |
|                                    | System has residual pressure.         | Turn unit off, squeeze trigger on spray wand to release pressure, then turn unit on.  |
|                                    | Voltage loss due to extension cord.   | Plug directly into outlet.  |
|                                    | Cleaner not used for long periods.    | Contact your local dealer   |

| PROBLEM       | CAUSE  | CORRECTION  |
|---------------|--|---|
| No detergent. | Detergent container is empty.                            | Add more detergent.   |
|               | Detergent bottle or suction tube not properly connected. | Check connections.  |
|               | Detergent is too thick.                                  | Use detergent recommended for use in pressure washers only. |
|               | Filter on detergent suction tube is clogged.             | Run warm water through filter to remove debris.             |
|               | Damaged or clogged detergent suction tube.               | Remove obstruction or replace detergent suction tube.       |
|               | Discharge nozzle is obstructed.                          | Blow out or remove debris.                                  |





