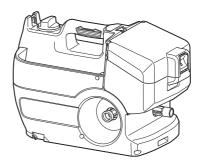
#### **INSTRUCTION MANUAL**



# Cordless High Pressure Washer DHW080



A Read before use.

#### **WARNING**

- Machines shall not be used by children. Children should be supervised to ensure that they do not play with the machine.
- This machine is not intended for use by persons (including children) with reduced physical, sensory, or mental capabilities, or lack of experience and knowledge.
- 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.
- During use of high pressure cleaners, aerosols may be formed.
   Inhalation of aerosols can be hazardous to health.
- 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.
- The employer shall perform a risk assessment in order to specify the necessary protective measures regarding aerosols, depending on the surface to be cleaned and its environment.
   Respiratory masks of class FFP 2, an equivalent or higher are suitable for the protection against hydrous aerosols.
- 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.
- Do not use the machine within range of persons unless they wear protective clothing.
- Do not direct the jet against yourself or others in order to clean clothes or foot-wear.
- Risk of explosion Do not spray flammable liquids.
- High pressure cleaners shall not be used by children or untrained personnel.
- High pressure hoses, fittings and couplings are important for the safety of the machine. Use only hoses, fittings and couplings recommended by the manufacturer.

- To ensure machine safety, use only original spare parts from the manufacturer or approved by the manufacturer.
- Always be sure that the tool is switched off and battery cartridges are removed before carrying out any work on the tool.
- Do not use the machine if important parts of the machine are damaged, e.g. safety devices, high pressure hoses, trigger gun.
- Always remove the battery cartridges when leaving the machine unattended.
- · Comply with the requirements of the local water supply company.
- For European countries:
   According to EN12729 (BA), the appliance can also be connected to the mains drinking water supply if a backflow preventer valve with drain facility is installed in the supply hose.

#### **SPECIFICATIONS**

Model:		DHW080	
Max. feed volume *1		6.3 L/min	
Water flow rate *2	High mode	5.5 L/min	
	Low mode	4.0 L/min	
Max. permissible pressure		8.0 MPa	
Working pressure *2	High mode	5.5 MPa	
	Low mode	3.0 MPa	
Max. feed pressure		1.0 MPa	
Max. feed temperature		40 °C	
Max. suction height		1 m	
Rated voltage		D.C. 36 V	
Dimensions (L x W x H)		438 mm x 218 mm x 269 mm	
Weight		7.1 - 7.7 kg	
Water protection		IPX5	

<sup>\*1:</sup> When using the washing brush.

#### Applicable battery cartridge and charger

Battery cartridge	BL1815N / BL1820B / BL1830B / BL1840B / BL1850B / BL1860B	
Charger	DC18RC / DC18RD / DC18RE / DC18SD / DC18SE / DC18SF / DC18SH / DC18WC	

Some of the battery cartridges and chargers listed above may not be available depending on your region of residence.

**AWARNING:** Only use the battery cartridges and chargers listed above. Use of any other battery cartridges and chargers may cause injury and/or fire.

**AWARNING:** Do not use a corded power supply such as battery adapter or portable power pack with this machine. The cable of such power supply may hinder the operation and result in personal injury.

<sup>\*2 :</sup> When using the spray lance.

Due to our continuing program of research and development, the specifications herein are subject to change without notice.

Specifications may differ from country to country.

The weight may differ depending on the attachment(s), including the battery cartridge. The lightest and heaviest combination, according to EPTA-Procedure 01/2014, are shown in the table.

#### **Symbols**

The followings show the symbols which may be used for the equipment. Be sure that you understand their meaning before use.



Read the instruction manual.



Take particular care and attention



Only for EU countries

Only to EU counties

Due to the presence of hazardous components in the equipment, waste electrical
and electronic equipment, accumulators
and batteries may have a negative impact
on the environment and human health.
Do not dispose of electrical and electronic
appliances or batteries with household
wastel

In accordance with the European Directive on waste electrical and electronic equipment and on accumulators and batteries and waste accumulators and batteries, as well as their adaptation to national law, waste electrical equipment, batteries and accumulators should be stored separately and delivered to a separate collection point for municipal waste, operating in accordance with the regulations on environmental protection.

This is indicated by the symbol of the crossed-out wheeled bin placed on the equipment.



Do not connect to a potable water faucet.



Do not direct the jet at people including yourself, animals, and live electrical equipments.



Guaranteed sound power level according to EU Outdoor Noise Directive.



Sound power level according to Australia NSW Noise Control Regulation.

#### Intended use

This tool is intended for cleaning stubborn dirt by using water jet. This tool is intended for household use.

#### Noise

The typical A-weighted noise level determined according to EN60335-2-79:

Sound pressure level ( $L_{pA}$ ): 70.9 dB (A) Uncertainty (K): 3.6 dB (A)

The noise level under working may exceed 80 dB (A).

**NOTE:** The declared noise emission value(s) has been measured in accordance with a standard test method and may be used for comparing one tool with another.

**NOTE:** The declared noise emission value(s) may also be used in a preliminary assessment of exposure.

**AWARNING:** Wear ear protection.

▲WARNING: The noise emission during actual use of the power tool can differ from the declared value(s) depending on the ways in which the tool is used especially what kind of workpiece is processed.

▲WARNING: Be sure to identify safety measures to protect the operator that are based on an estimation of exposure in the actual conditions of use (taking account of all parts of the operating cycle such as the times when the tool is switched off and when it is running idle in addition to the trigger time).

#### **Vibration**

The vibration total value (tri-axial vector sum) determined according to EN60335-2-79:

Vibration emission (a<sub>h</sub>): 2.5 m/s<sup>2</sup> or less Uncertainty (K): 1.5 m/s<sup>2</sup>

**NOTE:** The declared vibration total value(s) has been measured in accordance with a standard test method and may be used for comparing one tool with another.

**NOTE:** The declared vibration total value(s) may also be used in a preliminary assessment of exposure.

▲WARNING: The vibration emission during actual use of the power tool can differ from the declared value(s) depending on the ways in which the tool is used especially what kind of workpiece is processed.

AWARNING: Be sure to identify safety measures to protect the operator that are based on an estimation of exposure in the actual conditions of use (taking account of all parts of the operating cycle such as the times when the tool is switched off and when it is running idle in addition to the trigger time).

#### **EC Declaration of Conformity**

For European countries only

The EC declaration of conformity is included as Annex A to this instruction manual.

# IMPORTANT SAFETY WARNINGS

**AWARNING:** Read all safety warnings and all instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

#### Save all warnings and instructions for future reference.

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

#### Work area safety

- 1. Keep operating area clear of all persons.
- Do not overreach or stand on unstable supports.
   Keep good footing and balance at all times.
- Always place the high pressure washer body on a level and stable surface. Avoid areas where the ejected water will run or pool.
- Before cleaning, check the surroundings and objects to be cleaned. High pressure jets can scrape away paint or other surface treatments including toxic chemicals. Take the preventive measures if necessary.
- 5. Be careful not to trip over by the hose of the high pressure washer. Always be aware of the configuration of the hose during operation.
- During use, a small amount of water will come out from the bottom of the high pressure washer. Avoid locating the high pressure washer in the areas where you don't want to wet.

#### Personal safety

- To protect against the jet and objects by the jet, operators should wear appropriate clothing such as safety boots, safety gloves, safety helmets with visors, hearing protection, etc.
- Do not use the high pressure washer within range of persons unless they wear protective clothing.
- To reduce the risk of injury, close supervision is necessary when the product is used near children.
- If connection is made to a potable water system, the system shall be protected against backflow.
- Water that has flowed through backflow preventer is considered to be non-potable.

#### **Electrical safety**

- 1. Never touch battery cartridges with wet hands.
- Do not use the machine if the important parts of the machine are damaged, e.g. safety devices, high pressure hoses, or the trigger gun.

#### Power tool use and care

- Read all the instructions before using the product.
- Know how to stop the high pressure washer and bleed pressures quickly. Be thoroughly familiar with the controls.
- High pressure jets can be dangerous if misused. The jet must not be directed at people, live electrical equipment, or the machine itself.
- This machine is not intended for use by persons (including children) with reduced physical, sensory, or mental capabilities, or lack of experience and knowledge.
- 5. Children should be supervised to ensure that they do not play with the appliance.
- Do not spray flammable and/or toxic liquids.
   This may cause an explosion, intoxication, or damage to the machine.
- 7. Do not direct the jet against yourself or others in order to clean clothes or foot-wear.
- High pressure hoses, fittings and couplings are important for the safety of the machine.
   Use only hoses, fittings and couplings recommended by the manufacturer.

- Follow the instructions when changing accessories.
- Keep handles dry, clean, and free of oil or grease.
- 11. Stay alert watch what you are doing.
- Do not operate the product when fatigued or under the influence of alcohol or drugs.
- Do not run the high pressure washer without water for longer than one minute. It will damage the motor, resulting in malfunction.
- Always turn off the power and shut off the water mains when leaving the high pressure washer unattended.
- 15. Be wary of the kickback. The trigger gun recoils when the high pressure jet is ejected from the nozzle. Hold the trigger gun firmly to prevent accidental injuries.
- 16. Check for damaged or worn parts before use. Also make sure that the hose is properly connected and there is no leakage during operation. Operating the machine with functional defects may cause an accident.
- 17. 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.
- Do not pull the hose to move the high pressure washer body. This will damage the hose and connecting parts and result in a short circuit or functional defects.
- Do not put heavy objects on the hose or let vehicles drive over it.
- Always discharge the residual pressure in the trigger gun before disconnecting the hose.
- When connecting the hose to the water mains, observe the instructions of your local waterworks department or company.
- 22. If the high pressure washer is dropped or hits against an hard object, be sure to check for damage and crack. Using the high pressure washer damaged may generate smoke, fire, or cause electric shock, which result in personal injury
- During use of high pressure cleaners, aerosols may be formed. Inhalation of aerosols can be hazardous to health.
- 24. 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.
- 25. The employer shall perform a risk assessment in order to specify the necessary protective measures regarding aerosols, depending on the surface to be cleaned and its environment. Respiratory masks of class FFP 2, an equivalent or higher are suitable for the protection against hydrous aerosols.

- 26. Prevent unintentional starting. Ensure the switch is in the off-position before connecting to battery pack, picking up or carrying the appliance. Carrying the appliance with your finger on the switch or energizing appliance that have the switch on invites accidents.
- 27. Disconnect the battery pack from the appliance before making any adjustments, changing accessories, or storing appliance. Such preventive safety measures reduce the risk of starting the appliance accidentally.
- Do not modify or attempt to repair the appliance or the battery pack except as indicated in the instructions for use and care.
- WARNING Risk of Injection or Injury Do Not Direct Discharge Stream At Persons.

#### Battery tool use and care

- Recharge only with the charger specified by the manufacturer. A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.
- Use power tools only with specifically designated battery packs. Use of any other battery packs may create a risk of injury and fire.
- 3. When battery pack is not in use, keep it away from other metal objects, like paper clips, coins, keys, nails, screws or other small metal objects, that can make a connection from one terminal to another. Shorting the battery terminals together may cause burns or a fire.
- Under abusive conditions, liquid may be ejected from the battery; avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help. Liquid ejected from the battery may cause irritation or burns.
- Do not use a battery pack or tool that is damaged or modified. Damaged or modified batteries
  may exhibit unpredictable behaviour resulting in
  fire, explosion or risk of injury.
- Do not expose a battery pack or tool to fire or excessive temperature. Exposure to fire or temperature above 130 °C may cause explosion.
- 7. Follow all charging instructions and do not charge the battery pack or tool outside the temperature range specified in the instructions. Charging improperly or at temperatures outside the specified range may damage the battery and increase the risk of fire.

#### Service

- Follow the maintenance instructions specified in the manual.
- To ensure machine safety, use only original spare parts from the manufacturer or approved by the manufacturer.
- Have your high pressure washer serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the high pressure washer is maintained.
- In case of breakdown or malfunction of the high pressure washer, immediately switch it off and remove the battery cartridge(s).
   Contact your local dealer or service center.

#### Additional safety warnings

- Comply with the requirements of the local water supply company.
- Do not use the tool when there is a risk of lightning.
- When you use the tool on muddy ground, wet slope, or slippery place, pay attention to your footing.
- Avoid working in poor environment where increased user fatigue is expected.
- 5. Do not replace the battery in the rain.
- 6. Do not submerge the tool into a puddle.
- 7. Do not leave the tool unattended outdoors in the rain.
- When wet leaves or dirt adhere to the suction mouth (ventilation window) due to rain, remove them.
- 9. Do not wash the tool with high pressure water.
- When washing the tool, do not let water enter the electrical mechanism such as battery, motor, and terminals.
- When storing the tool, avoid direct sunlight and rain, and store it in a place where it does not get hot or humid.
- Perform inspection or maintenance in a place where rain can be avoided.
- After using the tool, remove the adhered dirt and dry the tool completely before storing.
   Depending on the season or the area, there is a risk of malfunction due to freezing.
- 14. Do not wet the terminal of battery with liquid such as water, or submerge the battery. Do not leave the battery in the rain, nor charge, use, or store the battery in a damp or wet place. If the terminal gets wet or liquid enters inside of battery, the battery may be short circuited and there is a risk of overheat, fire, or explosion.
- 15. After removing the battery from the tool or charger, be sure to attach the battery cover to the battery and store it in a dry place.
- 16. Do not replace the battery with wet hands. Additional safety warnings
- Comply with the requirements of the local water supply company.
- Do not use a corded power supply such as battery adapter or portable power pack with this appliance. The cable of such power supply may hinder the operation and result in personal injury.

#### SAVE THESE INSTRUCTIONS.

▲WARNING: DO NOT let comfort or familiarity with product (gained from repeated use) replace strict adherence to safety rules for the subject product.

MISUSE or failure to follow the safety rules stated in this instruction manual may cause serious personal injury.

### Important safety instructions for battery cartridge

- Before using battery cartridge, read all instructions and cautionary markings on (1) battery charger, (2) battery, and (3) product using battery.
- Do not disassemble or tamper with the battery cartridge. It may result in a fire, excessive heat, or explosion.
- If operating time has become excessively shorter, stop operating immediately. It may result in a risk of overheating, possible burns and even an explosion.
- If electrolyte gets into your eyes, rinse them out with clear water and seek medical attention right away. It may result in loss of your evesight.
- Do not short the battery cartridge:
  - Do not touch the terminals with any conductive material.
  - Avoid storing battery cartridge in a container with other metal objects such as nails, coins, etc.
  - (3) Do not expose battery cartridge to water or rain.

A battery short can cause a large current flow, overheating, possible burns and even a breakdown.

- Do not store and use the tool and battery cartridge in locations where the temperature may reach or exceed 50 °C (122 °F).
- Do not incinerate the battery cartridge even if it is severely damaged or is completely worn out. The battery cartridge can explode in a fire.
- Do not nail, cut, crush, throw, drop the battery cartridge, or hit against a hard object to the battery cartridge. Such conduct may result in a fire, excessive heat, or explosion.
- 9. Do not use a damaged battery.
- The contained lithium-ion batteries are subject to the Dangerous Goods Legislation requirements.

For commercial transports e.g. by third parties, forwarding agents, special requirement on packaging and labeling must be observed.

For preparation of the item being shipped, consulting an expert for hazardous material is required. Please also observe possibly more detailed national regulations.

Tape or mask off open contacts and pack up the battery in such a manner that it cannot move around in the packaging.

- When disposing the battery cartridge, remove it from the tool and dispose of it in a safe place. Follow your local regulations relating to disposal of battery.
- Use the batteries only with the products specified by Makita. Installing the batteries to non-compliant products may result in a fire, excessive heat, explosion, or leak of electrolyte.

- If the tool is not used for a long period of time, the battery must be removed from the tool.
- During and after use, the battery cartridge may take on heat which can cause burns or low temperature burns. Pay attention to the handling of hot battery cartridges.
- Do not touch the terminal of the tool immediately after use as it may get hot enough to cause burns.
- 16. Do not allow chips, dust, or soil stuck into the terminals, holes, and grooves of the battery cartridge. It may cause heating, catching fire, burst and malfunction of the tool or battery cartridge, resulting in burns or personal injury.
- 17. Unless the tool supports the use near high-voltage electrical power lines, do not use the battery cartridge near high-voltage electrical power lines. It may result in a malfunction or breakdown of the tool or battery cartridge.
- 18. Keep the battery away from children.

#### SAVE THESE INSTRUCTIONS.

♠ CAUTION: Only use genuine Makita batteries. Use of non-genuine Makita batteries, or batteries that have been altered, may result in the battery bursting causing fires, personal injury and damage. It will also void the Makita warranty for the Makita tool and charger.

### Tips for maintaining maximum battery life

- Charge the battery cartridge before completely discharged. Always stop tool operation and charge the battery cartridge when you notice less tool power.
- Never recharge a fully charged battery cartridge. Overcharging shortens the battery service life.
- Charge the battery cartridge with room temperature at 10 °C 40 °C (50 °F 104 °F). Let
  a hot battery cartridge cool down before
  charging it.
- 4. When not using the battery cartridge, remove it from the tool or the charger.
- Charge the battery cartridge if you do not use it for a long period (more than six months).

#### **FUNCTIONAL DESCRIPTION**

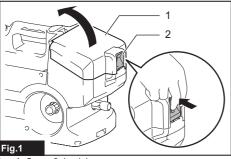
ACAUTION: Always be sure that the tool is switched off and the battery cartridge is removed before adjusting or checking function on the tool.

#### Installing or removing battery cartridge

ACAUTION: Always switch off the tool before installing or removing of the battery cartridge.

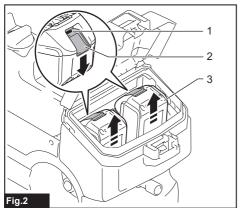
**ACAUTION:** Hold the tool and the battery cartridge firmly when installing or removing battery cartridge. Failure to hold the tool and the battery cartridge firmly may cause them to slip off your hands and result in damage to the tool and battery cartridge and a personal injury.

To install the battery cartridge, open the cover while pushing the lock lever. Align the tongue on the battery cartridge with the groove in the housing and slip it into place. Insert it all the way until it locks in place with a little click. If you can see the red indicator on the upper side of the button, it is not locked completely. After installing or removing the battery cartridges, be sure to close the cover.



1. Cover 2. Lock lever

To remove the battery cartridges, lift the battery cartridge while pushing the button on the front of the cartridge.



1. Red indicator 2. Button 3. Battery cartridge

ACAUTION: Always install the battery cartridge fully until the red indicator cannot be seen. If not, it may accidentally fall out of the tool, causing injury to vou or someone around vou.

ACAUTION: Do not install the battery cartridge forcibly. If the cartridge does not slide in easily, it is not being inserted correctly.

ACAUTION: Be sure to lock the cover before operating.

#### Tool / battery protection system

The tool is equipped with a tool/battery protection system. This system automatically cuts off power to the motor to extend tool and battery life. The tool will automatically stop during operation if the tool or battery is placed under one of the following conditions:

#### Overload protection

When the battery is operated in a manner that causes it to draw an abnormally high current, the tool automatically stops without any indication. In this situation, turn the tool off and stop the application that caused the tool to become overloaded. Then turn the tool on to restart.

#### Overheat protection

When the tool is overheated, the tool stops automatically and the battery indicator blinks. In this situation, let the tool cool down before turning the tool on again.

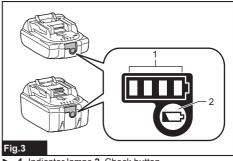


#### Overdischarge protection

When the battery capacity is not enough, the tool stops automatically. In this case, remove the battery from the tool and charge the battery.

#### Indicating the remaining battery capacity

Only for battery cartridges with the indicator



1. Indicator lamps 2. Check button

Press the check button on the battery cartridge to indicate the remaining battery capacity. The indicator lamps light up for a few seconds.

Indicator lamps		Remaining	
Lighted	Off	Blinking	capacity
			75% to 100%
			50% to 75%
			25% to 50%
			0% to 25%
			Charge the battery.
			The battery may have malfunctioned.

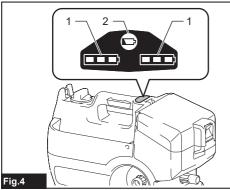
**NOTE:** Depending on the conditions of use and the ambient temperature, the indication may differ slightly from the actual capacity.

**NOTE:** The first (far left) indicator lamp will blink when the battery protection system works.

### Indicating the remaining battery capacity

**NOTICE:** The battery indicator does not light when the power switch is in OFF position. To check the remaining battery capacity, turn the power switch to high or low pressure mode.

Press the check button to indicate the remaining battery capacities. The battery indicators correspond to each battery.



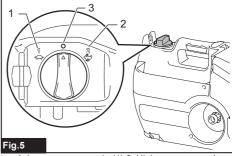
▶ 1. Battery indicator 2. Check button

Battery indicator status			Remaining
On	Off	Blinking	battery capacity
5			50% to 100%
			20% to 50%
			0% to 20%
			Charge the battery

#### **Power switch**

**NOTICE:** Do not turn the power switch forcibly. This may cause the switch to malfunction.

Turn the power switch clockwise or counterclockwise depending on the pressure level. Turn the power switch clockwise for high pressure mode (2), counterclockwise for low pressure mode (1). To turn off the machine, turn the power switch back to the OFF position (0).



 1. Low pressure mode (1) 2. High pressure mode (2) 3. OFF position (0)

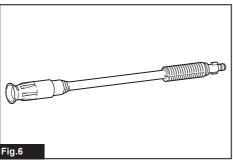
**NOTE:** The battery indicators will light up for a few seconds when turning the power switch to high or low pressure mode.

#### **Nozzle functions**

**NOTE:** The standard nozzles vary depending on the country. Also refer to the OPTIONAL ACCESSORIES section for other nozzles.

#### Spray lance

#### Country specific

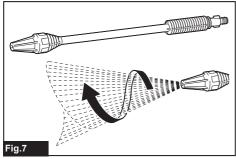


Jet width can be adjusted from 0° to 25° by rotating the front end of the nozzle.

ACAUTION: When adjusting the jet width, do not rotate the nozzle while pulling it toward the trigger gun. The nozzle may come off from the trigger gun and cause a personal injury.

#### Dirt blaster

#### Country specific



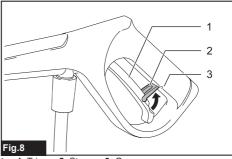
A spiral jet is ejected. Suitable for removing stubborn dirt.

**NOTICE:** Do not use the dirt blaster to clean fragile surfaces such as windows or car bodies.

#### **Trigger operations**

Pull the trigger to eject a water jet. The jet continues as long as the trigger is squeezed.

The trigger can be locked for safe handling of the trigger gun. To lock the trigger, pull out the stopper and hook it to the groove on the grip.



▶ 1. Trigger 2. Stopper 3. Groove

**NOTICE:** To avoid mechanical error in the pressure switch, always leave a two-second interval between trigger operations.

#### Safety valve

This appliance is equipped with a safety valve that prevents undue overpressure. When the trigger is released, the valve opens and the water recirculates through the pump inlet.

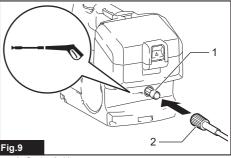
**ACAUTION:** Do not tamper with or adjust the safety valve setting.

#### **ASSEMBLY**

ACAUTION: Always be sure that the tool is switched off and the battery cartridge is removed before carrying out any work on the tool.

#### Connecting the high-pressure hose

Connect the high-pressure hose to the outlet (with the gun marking). Turn the nut on the high-pressure hose clockwise while screwing it onto the screw thread of the outlet.

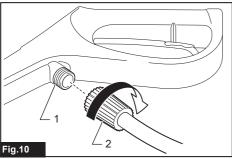


1. Outlet 2. Nut

ACAUTION: Make sure that the high-pressure hose is securely connected. A loose connection may blow the high-pressure hose off, resulting in a personal injury.

#### Attaching the trigger gun

Connect the high-pressure hose to the inlet on the trigger gun. Turn the nut on the high-pressure hose clockwise while screwing it onto the screw thread on the inlet.



▶ 1. Inlet 2. Nut

ACAUTION: Make sure that the high-pressure hose is securely connected. A loose connection may blow the high-pressure hose off, resulting in a personal injury.

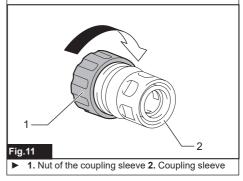
#### Connecting to a faucet

ACAUTION: Always use a pressure-resistant water hose with Ø 13 mm or larger diameter and connect to the faucet using a proper fittings. Otherwise, the water hose and/or the fitting may break and cause personal injury.

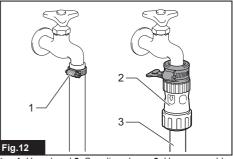
**NOTICE:** Use a pressure-resistant water hose as short as possible. The amount of intake water should be higher than the max feed volume of the pump.

**NOTICE:** If you connect to the mains for drinking water, use a backflow preventer valve which meets the regulations in your region.

**NOTE:** The hose assembly ships with coupling sleeves attached to both ends. Therefore, when connecting to a faucet without a coupling sleeve, remove the coupling sleeve at one end.



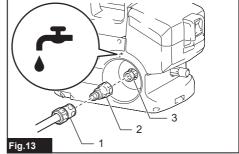
1. Connect the hose assembly to the faucet. Apply a suitable fitting such as hose band or water tap joint to secure the hose end with the faucet.



▶ 1. Hose band 2. Coupling sleeve 3. Hose assembly

**NOTE:** The fitting depends on the shape of the faucet to which you connect. Prepare a suitable commercially-bought fitting.

2. Attach the water hose connector to the inlet (with the faucet marking) and then insert the coupling sleeve.

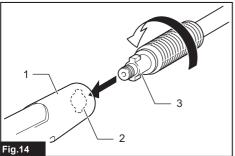


 1. Coupling sleeve 2. Water hose connector 3. Inlet on the high pressure washer

### Connecting/disconnecting the nozzle

**ACAUTION:** Always lock the trigger of the trigger gun when connecting/disconnecting the nozzle.

Insert the end of the nozzle into the slot on the trigger gun and turn it in the direction of the arrow as shown in the figure. To disconnect the nozzle, turn the nozzle in the reverse direction while pressing it toward the trigger gun.



▶ 1. Trigger gun 2. Slot 3. End of the nozzle

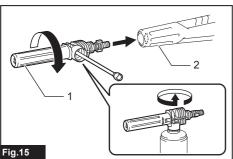
#### Connecting the foam nozzle

#### Optional accessory

**ACAUTION:** Always lock the trigger of the trigger gun when connecting/disconnecting the nozzle.

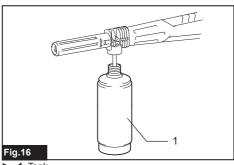
Prepare detergent before using the foam nozzle.

1. Remove the nozzle from the tank by rotating the nozzle counterclockwise. Attach the nozzle to the trigger gun.



▶ 1. Nozzle 2. Trigger gun

**2.** Pour the detergent into the tank and install it to the nozzle.



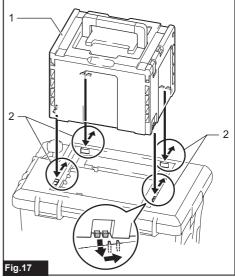
1. Tank

**NOTICE:** Always use neutral detergent. Acidic or alkaline detergent may damage the tank or nozzle.

### Placing plastic carrying case onto the container

#### Optional accessory

You can place Makita plastic carrying case on the top of the container. Put the plastic carrying case onto the container so that it is secured with the mounts on the lid of the container.

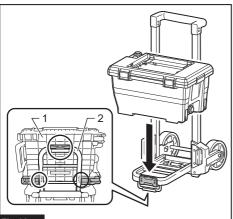


1. Plastic carrying case 2. Mount

### Placing the container onto the trolley

#### Optional accessory

When carrying the container with Makita trolley, place the container in position. Be sure that the bottom of the container fits into the platform of the trolley.



#### Fig.18

 1. Bottom surface of the container 2. Platform of the trolley

ACAUTION: When using the trolley, do not carry the container filled with water. Doing so may lose the balance and result in personal injury or cause deformation of the container which leads to water leakage.

#### **OPERATION**

**AWARNING:** Do not touch the water jet or direct it toward yourself or others. The water jet is dangerous and can hurt you or others.

**AWARNING:** When shooting the water jet, never hold the object that you are cleaning or place your hands and feet near the water jet.

**ACAUTION:** Stay alert to the rebound of the water jet and blown objects. Do not bring the nozzle to the object closer to 30 cm.

ACAUTION: Do not run the high pressure washer without water for longer than 1 minute.

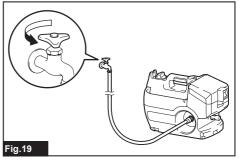
**ACAUTION:** Do not operate the high pressure washer for a extended period of time. This may cause overheating or fire. Also, long-term use may cause vibration disorder.

**ACAUTION:** Be aware of the direction of the wind. If the detergent gets into your eyes or mouth, rinse with fresh water immediately and seek medical attention if necessary.

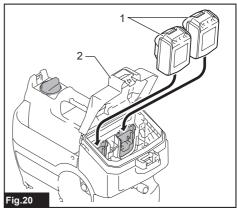
**NOTICE:** Avoid using the high pressure washer for longer than 1 hour. After using it for 1 hour, leave a same length of intermission.

NOTICE: To protect the mechanism of the high pressure washer, do not use water hotter than 40°C.

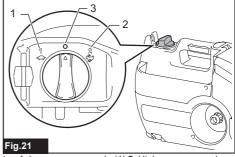
- 1. Connect one end of the high-pressure hose to the trigger gun and the other end to the high pressure washer.
- **2.** Connect the high pressure washer and the faucet using a water hose. After that, open the faucet.



**3.** Open the cover and install the battery cartridges into the high pressure washer and then lock the cover.

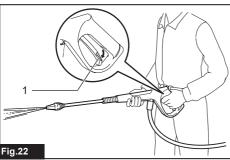


- ▶ 1. Battery cartridge 2. Cover
- 4. Turn the power switch to your desired mode.



1. Low pressure mode (1) 2. High pressure mode (2) 3. OFF position (0)

5. To eject a water jet, unlock the stopper and squeeze the trigger. The jet continues as long as the trigger is squeezed.



1. Stopper

**ACAUTION:** Hold the trigger gun firmly. The trigger gun recoils when you pull the trigger.

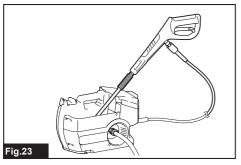
**ACAUTION:** Always hold the trigger gun by the grip and barrel when ejecting water jet.

**NOTICE:** Be careful not to pull the trigger gun forcibly during operation. It may cause the high pressure washer to fall over.

**NOTICE:** When suspending the operation for a long time, switch off the high pressure washer and squeeze the trigger to discharge the remaining water fully.

If the high pressure washer is left for a long time while maintaining high pressure, it may not restart. In this situation, switch off the high pressure washer, supply water from a faucet to the inlet and squeeze the trigger with keeping the water supply for a while. And then, switch on the high pressure washer.

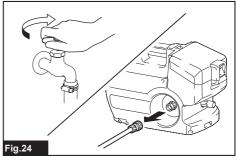
When you suspend the operation, you can temporarily place the trigger gun as shown in the figure.



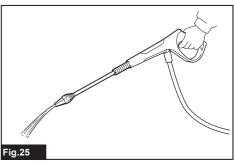
#### After use

**ACAUTION:** After operating the high pressure washer, always perform the procedure described in this manual. Residual pressure in the trigger gun or high pressure washer can cause personal injury or damage to the pump inside.

- 1. Switch off the high pressure washer.
- **2.** Close the faucet and disconnect the water hose from the high pressure washer.

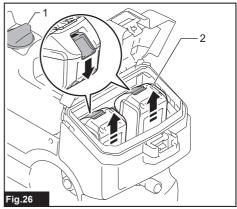


- 3. Switch on the high pressure washer again.
- **4.** Squeeze the trigger until the remaining water in the high pressure washer is discharged.



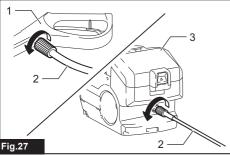
**NOTICE:** Do not run the motor for longer than 1 minute.

**5.** Switch off the high pressure washer and remove the battery cartridges.



1. Power switch 2. Battery cartridge

**6.** Disconnect the high-pressure hose from the trigger gun and the high pressure washer.



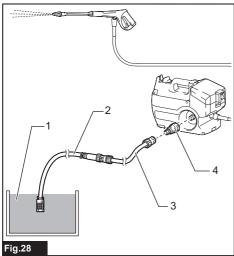
 1. Trigger gun 2. High-pressure hose 3. Highpressure washer

**NOTICE:** To prevent the high-pressure hose from being damaged, remove the remaining water in the hose before storing.

#### Supplying water from a tank/reservoir

You can supply water from a tank or reservoir instead of a faucet.

Connect the hose assembly and strainer assembly to the water hose connector.



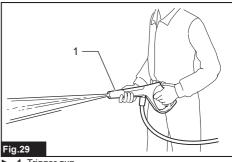
 1. Tank/reservoir 2. Strainer assembly 3. Hose assembly 4. Water hose connector

ACAUTION: When attaching the sleeve to the filter case, be careful not to hurt your hand by the hose band.

**NOTICE:** Always use Makita's hose assembly and strainer assembly.

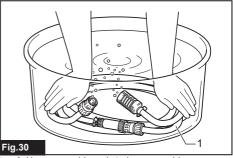
**NOTICE:** Always keep 1 m (3.28 ft) or less in height between the inlet of the high pressure washer and the water surface. Otherwise, the high pressure washer will be unable to take the water up into the pump.

To introduce water into the hose, remove the nozzle from the trigger gun and switch on the high pressure washer while the trigger is squeezed. Once water is ejected stably from the trigger gun, release the trigger and attach the nozzle for your purpose.



1. Trigger gun

**NOTE:** When water is not ejected, detach the hose assembly and strainer assembly and soak it in water. Then reconnect it to the high-pressure washer.

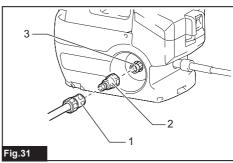


▶ 1. Hose assembly and strainer assembly

### When using the container as a water tank

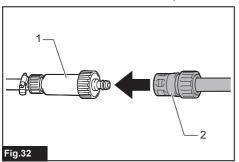
You can use the container supplied with the high pressure washer (country specific) as a water tank.

1. Connect the coupling sleeve of hose assembly to the water hose connector.



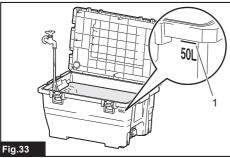
 1. Coupling sleeve 2. Water hose connector 3. Inlet of the high pressure washer

Connect the coupling sleeve of the hose assembly 2. and the filter case of the strainer assembly.



1. Strainer assembly 2. Hose assembly

3. Empty the container and feed water in it.

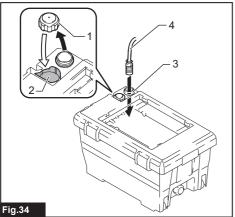


1. Full water level line

NOTICE: Do not feed water above the full water level line.

NOTICE: The lid of the container is not a tight seal type. Be careful not to spill the water in the container when carrying.

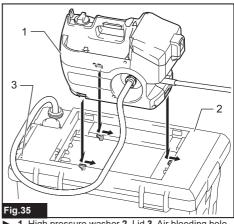
Remove the cap on the feed-water inlet and pass the strainer assembly through the inlet as illustrated.



1. Cap 2. Cap holder 3. Feed-water inlet 4. Strainer assembly

NOTE: The cap on the feed-water inlet can be rest on the cap holder.

Put the high pressure washer onto the container so that it is secured with the mounts on the lid of the container.



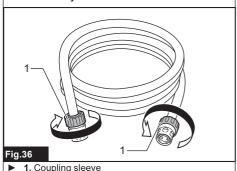
1. High pressure washer 2. Lid 3. Air bleeding hole

**NOTE:** If water suction does not work, it takes a long time, or the water pressure is not enough, check the following:

- Loosening of the hose assembly, strainer assembly, and water hose connector.
- Coupling sleeves of the hose assembly are firmly attached onto the water hose connector and filter case of the strainer assembly.

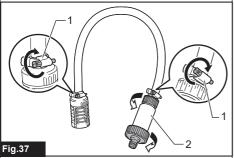
Tighten if they are loose.

#### Hose assembly



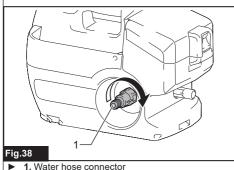
, ,

#### Strainer assembly



▶ 1. Hose band 2. Filter case

#### Water hose connector



**NOTICE:** Pay attention to the handling of the container when carrying. Carrying the container with high pressure washer and accessories or water inside may cause accident or personal injury due to its own weight.

**NOTICE:** When carrying the container, do not shake, turnover, or lean it excessively. Doing so may cause;

- the water inside spilled out;
- the high pressure washer on the lid dropped off from the container or:
- the rotation of the container's wheels hindered.

**NOTICE:** When carrying the container by the handle, water may spill out if there is plenty of water inside.

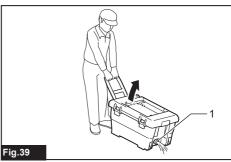
**NOTICE:** Water may come out from the air bleeding hole if the water inside reaches to the air bleeding hole by tilting the container.

**NOTICE:** Do not step on the container. The lid may be broken.

**NOTICE:** Do not leave the container filled with water for a long time. Doing so may cause the container damaged and result in water leakage.

After use, follow the procedure below:

1. Remove the cap on the drain outlet and discharge water.



▶ 1. Drain outlet

2. Wipe off the moisture inside of the container using a cloth and then dry the container completely.

NOTICE: Do not store the high pressure washer and the accessories while the inside of the container is wet. Remaining moisture may cause malfunction and rust.

# MAINTENANCE & STORAGE

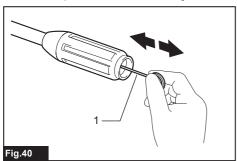
**ACAUTION:** Always be sure that the tool is switched off and battery cartridge is removed before attempting to perform inspection or maintenance.

**NOTICE:** Never use gasoline, benzine, thinner, alcohol or the like. Discoloration, deformation or cracks may result.

To maintain product SAFETY and RELIABILITY, repairs, any other maintenance or adjustment should be performed by Makita Authorized or Factory Service Centers, always using Makita replacement parts.

#### Cleaning the nozzle

Use the cleaner pin to remove dirt from or unclog the nozzle.



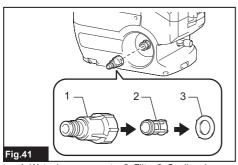
▶ 1. Cleaner pin

**NOTE:** To maintain the optimal performance, clean the nozzle periodically.

**NOTICE:** Do not remove dirt or debris forcibly. This may result in personal injury or damage to the ejection hole causing deviated jet angles or poor performance.

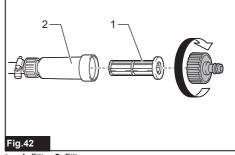
#### Cleaning the filter

Detach the water hose connector and remove dirt and debris from the inside of the filter.



1. Water hose connector 2. Filter 3. Sealing ring

When using the strainer assembly, take the filter out of the filter case and remove dirt and debris.



1. Filter 2. Filter case

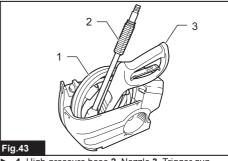
**NOTE:** To maintain the optimal performance, clean the filter periodically.

#### Storage

**ACAUTION:** Always store in an indoor location where the temperature does not go below freezing. If the high pressure washer freezes and malfunctions, contact your local service center for repairs.

Store the accessories in the side pocket of the high pressure washer.

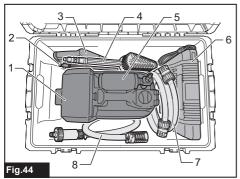
#### Storage example



▶ 1. High-pressure hose 2. Nozzle 3. Trigger gun

If your model is supplied with the container, store the high pressure washer and accessories in it.

#### Storage example



- High pressure washer 2. Nozzle 3. Trigger gun
   Washing brush 5. Foam nozzle 6. Charger

  - 7. Hose assembly 8. Strainer assembly

NOTE: Some accessories shown in the illustration are supplied as optional accessories in some countries.

#### **TROUBLESHOOTING**

Before asking for repairs, conduct your own inspection first. If you find a problem that is not explained in the manual, do not attempt to dismantle the tool. Instead, ask Makita Authorized Service Centers, always using Makita replacement parts for repairs.

State of abnormality	Probable cause (malfunction)	Remedy	
The washer does not start.	No electricity	Install charged battery cartridges.	
	The switch is not turned on.	Turn on the switch.	
	Residual pressure in the pump	Pull the trigger.	
	Damaged battery or electric circuit	Contact an authorized service center for repairs.	
	The high pressure washer has been left for long time while maintaining high pressure.	Switch off the high pressure washer, supply water from a faucet to the inlet and squeeze the trigger with keeping the water supply for a while. And then, switch on the high pressure washer.	
No water jet / weak water jet	No water supply	Make sure that the faucet is open. If using the hose assembly and strainer assembly, introduce water into the hose.	
	Poor water supply	Turn on the faucet.	
	Poor water hose connection	Check the connection between the high pressure washer and the water faucet.	
	Clogged hose, filter, or nozzle	Unclog the hose, filter, or nozzle.	
	Air is blocking the flow of water.	Turn off the switch and then turn it on again while squeezing the trigger.	
	Damaged or worn nozzle	Replace the nozzle.	
	Pump or valve malfunction	Contact an authorized service center for repairs.	
	Insufficient connection of hoses (when using the strainer assembly)	Tighten the coupling sleeve if it is loose. Insert the coupling sleeve securely.	
Unstable water jet	Clogged nozzle	Unclog on the ejection hole of the nozzle using the cleaner pin.	
	Poor water suction	Check the water hose starting from the faucet for any leakage or clogs. Turn on the faucet.	
	The water is too hot.	Supply cooler water.	
	Valve malfunction	Contact an authorized service center for repairs.	
Abnormal sound	The water is too hot.	Supply cooler water.	
	Air is stuck in the pump.	Contact an authorized service center for repairs.	
Water leakage	Poor connection	Check the connection between the high pressure washer and trigger gun and as well as the water faucet.	
	Worn out sealings	Contact an authorized service center for repairs.	

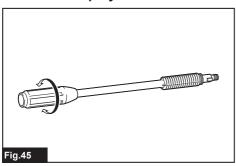
# OPTIONAL ACCESSORIES

ACAUTION: These accessories or attachments are recommended for use with your Makita tool specified in this manual. The use of any other accessories or attachments might present a risk of injury to persons. Only use accessory or attachment for its stated purpose.

If you need any assistance for more details regarding these accessories, ask your local Makita Service Center.

**NOTE:** Some items in the list may be included in the tool package as standard accessories. They may differ from country to country.

#### Vario-Power spray lance

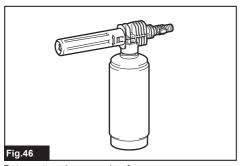


Jet pressure can be adjusted by rotating the nozzle.

**ACAUTION:** When adjusting the jet pressure, do not rotate the nozzle while pulling it toward the trigger gun. The nozzle may come off from the trigger gun and cause a personal injury.

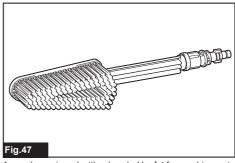
#### Foam nozzle

#### Country specific



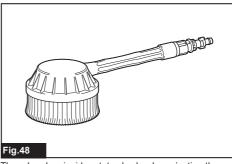
Detergent can be sprayed as foam.

#### Washing brush (long)



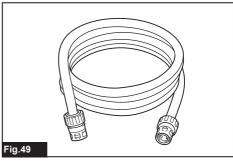
A nozzle equipped with a brush. Useful for washing out dirt while scrubbing with brush.

#### Rotating wash brush



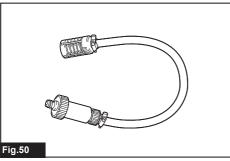
Three brushes inside rotate slowly when ejecting the jet. Suitable for cleaning light dirt on a exterior wall, car body, bath tub, etc.

#### Hose assembly



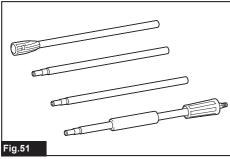
A hose assembly to connect a faucet to the product, or the strainer assembly to the product.

#### Strainer assembly



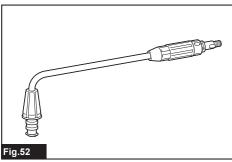
A strainer assembly to supply water from a tank or reservoir. Use the hose assembly to connect to the product.

#### Lance extension



Pipes to extend the length of the trigger gun. Three different lengths are available by changing the number of the pipes to be used.

#### Under body spray lance



An extra long spray lance with angled nozzle. Best for cleaning hard-to-reach areas such as car under body and roof gutter.

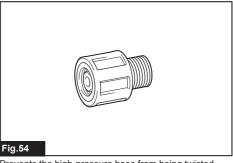
**ACAUTION:** Do not use the under body spray lance with the lance extension.

#### Splash guard



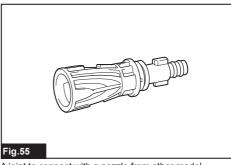
Reduces splash back when cleaning corners with the dirt blaster.

#### Swivel joint



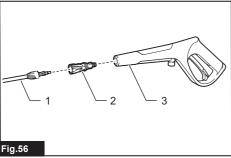
Prevents the high-pressure hose from being twisted.

#### Connecting joint



A joint to connect with a nozzle from other model.

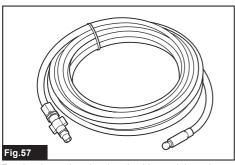
Some optional nozzles require the connecting joint (optional accessory) to attach to the trigger gun. Attach the connecting joint to the trigger gun in the same way as the nozzle.



▶ 1. Nozzle 2. Connecting joint 3. Trigger gun

**NOTE:** The connecting joint is needed when using the nozzles included with another model, HW112 or HW121.

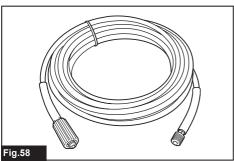
#### Pipe cleaning hose (10 m/15 m)



For cleaning and unclogging plumbing and downpipes.

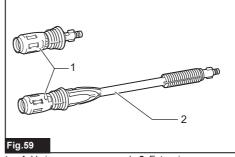
**ACAUTION:** Pay particular attention to the water jet when using the pipe cleaning hose. Highly intense water jet is ejected backward. Only trigger the water jet when the nozzle has been inserted into the pipe to be cleaned at least up to the red marking.

#### Extension high-pressure hose (5 m/8 m/10 m)



Extension hose to connect the high pressure washer body with the trigger gun.

### Vario-Power Spray Nozzle and Extension



▶ 1. Vario-power spray nozzle 2. Extension

Jet pressure can be adjusted by rotating the nozzle.

AWARNING: Install only the vario-power spray nozzle to the extension. Do not connect the other optional extensions to the original extension. Using any attachments other than those recommended by the manufacturer may cause a risk of damage or injury to persons.

ACAUTION: When adjusting the jet pressure, do not rotate the nozzle while pulling it toward the trigger gun. The nozzle may come off from the trigger gun and cause a personal injury.

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