

# Instructions and user manual

# H1800



**KÄRCHER**®

**ANOVA** would like to congratulate you on having chosen one of our products and guarantees you the assistance and collaboration that has always distinguished our brand over time.

This machine is designed to last many years and to be of great use when used according to the instructions in the user manual. We therefore recommend that you read this instruction manual carefully and follow all our advice.

For further information or questions you can contact us through our web supports such as [www.Anovamaquinaria.com](http://www.Anovamaquinaria.com).

## **ABOUT THIS MANUAL**

Please pay attention to the information provided in this manual and on the machine for your safety and the safety of others.

- This manual contains instructions for use and maintenance.
- Take this manual with you when you go to work on the machine.
- The contents are correct at the time of printing.
- We reserve the right to make changes at any time without affecting our legal responsibilities.
- This manual is considered an integral part of the product and must accompany it in the event of loan or resale.
- Ask your dealer for a new manual if lost or damaged.

## **READ THIS MANUAL CAREFULLY BEFORE USING THE MACHINE**

To ensure that your machine provides the best results, carefully read the usage and safety regulations before using it.

## **OTHER WARNINGS:**

Incorrect use could cause damage to the machine or other objects.

Adapting the machine to new technical needs could cause differences between the contents of this manual and the product purchased.

Read and follow all instructions in this manual. Failure to follow these instructions could result in serious personal injury.

# CONTENT

1. SAFETY INSTRUCTIONS
2. USE OF THE MACHINE
3. PARTS DESCRIPTION AND IDENTIFICATION
4. TECHNICAL SPECIFICATIONS
5. ASSEMBLY
6. SWITCHED ON
7. WORK AND HANDLING OF THE MACHINE
8. TRANSPORT
9. STORAGE
10. CARE AND MAINTENANCE
11. TROUBLESHOOTING
12. WARRANTY
13. ENVIRONMENT
14. EXPLODED
15. EC DECLARATION

***ALNOVA***<sup>®</sup>

# 1. SAFETY INSTRUCTIONS

KEEP THESE INSTRUCTIONS WITH THE MACHINE FOR FUTURE REFERENCE.



Please read these instructions completely before using the machine for the first time and retain them for later use or for subsequent owners.

In addition to the notes contained in this document, the general safety provisions and the accident prevention rules established by current legislation must be followed.

The warnings and notes attached to the device provide important notes for safe use.

Danger levels



## DANGER

Immediate danger indicator which, if not avoided, will lead to serious injury or death.



## WARNING

Indicator of a potentially hazardous situation which, if not avoided, could result in death or serious injury.



## ATTENTION

Indicator of a potentially hazardous situation which, if not avoided, could result in minor injury.



Indicator of a potentially dangerous situation, which could cause damage to things or other objects.

## **Electrical components**



## DANGER

Risk of electric shock.

Never touch the plug and/or cord end with wet hands.

Check the power cord with plug for damage before each use. Do not use the machine if the power cord or important parts of the machine are damaged, such as safety devices, high pressure hoses, pressure gun or safety triggers.

All live parts must be protected and not exposed to the water jet from the machine in the work area.

The power plug and connection to an extension cord must be waterproof and should never be left in water. The plug, however, should never be grounded. We recommend using cable reels that ensure sockets are at least 60mm above ground level.

Make sure that the power cord or extension cord is not damaged by walking, pinching, dragging or the like during continued work. Protect power cords from heat, oil and sharp edges.

Always turn off the main switch when leaving the appliance unattended for a prolonged period of time.



## WARNING

The appliance may only be connected to an electrical network installed by an electrician in accordance with IEC 60364 and the connections are installed correctly using earthing and safety methods.

The device can only be connected to alternating current. The voltage must correspond to the machine's nameplate.

For safety reasons we recommend using the appliance only in connections with a differential switch (max. 30 mA).

An inadequate electrical extension cord can be dangerous. Only use an electrical extension approved and labelled for this purpose and with a cable section suitable for outdoors: 1 - 10 m: 1.5 mm<sup>2</sup>; 10 - 30 meters: 2.5 mm<sup>2</sup>

Always unwind the extension cord completely to avoid the risk of overheating and the effects of electrical resistance.

An inadequate electrical extension cord can be dangerous for users.

## **Safe driving**



### **DANGER**

The user must use the device as intended and for which it was designed. The person must consider the surrounding conditions and circumstances and pay attention to other people in the vicinity when working with the appliance.

Check for damage to important components, such as the high-pressure hose, gun, and safety switches, before each operation. Replace damaged components immediately. **UNDER ANY CIRCUMSTANCES DO NOT** use the appliance with damaged components.

The appliance has been designed to be used with the detergent provided or recommended by the manufacturer. The use of other detergents or chemicals may compromise the safety of the appliance and its components.

High pressure jets can be dangerous if subjected to improper use. The jet must not be directed towards people, operating electrical equipment or the machine itself. Do not direct the jet at yourself or others to clean your clothing or shoes. Do not use the appliance within range of people unless they are wearing protective clothing.

Wear appropriate personal protective equipment (PPE) when using the appliance. Do not direct the jet at yourself or others to clean your clothing or shoes.



### **WARNING**

The appliance must **NEVER** be used by children or untrained personnel.

This appliance is not intended for use by people (including children) with reduced physical, sensory or mental capabilities or a lack of experience and knowledge. Children should not play with this device. Supervise children to prevent them from playing with the appliance.

Create a stable and safe space for the machine before any work on or with the machine to avoid damage due to accidents.

The jet of water emitted from the high-pressure nozzle causes a kickback force that acts on the manual gun. Make sure it has a solid, secure base and that it also securely supports the gun and spear.

Never leave the appliance unattended while it is in operation.



### **ATTENTION**

In the event of prolonged interruptions, switch the appliance off at the main switch or unplug it.

Do not use the appliance at temperatures below 0°C.

## **Other risks**



### **DANGER**

The device cannot operate in explosive/flammable atmospheres. If there is a risk of explosion, do not spray flammable liquids. Never introduce liquids containing solvents or undiluted acids and solvents into the additional tank! This includes gasoline, paint thinner and fuel oil. The spray mist created by these products is highly flammable, explosive and poisonous. Do not use acetone, acids or undiluted solvents as they will corrode the materials used in the manufacture of the machine. Do not use acetone, acids or undiluted solvents as they will corrode the materials used in the appliance. Never use the product with flammable or toxic liquids, or liquids with characteristics incompatible with its correct functioning.

Keep the packaging out of the reach of children, risk of suffocation.



### **WARNING**

In compliance with current regulations, the appliance must never be used in the drinking water network without a system separator. Make sure that the water connection in the building where the high-pressure machine is used is equipped with a system separator in accordance

with regulations.

Water that has passed through backflow preventers is considered non-potable.

Hoses, fittings and high-pressure couplings are important for the safety of the appliance. Use only hoses, fittings and high-pressure fittings recommended by the manufacturer.

To ensure safety, use only original manufacturer or manufacturer-approved replacement parts.

Turn off the product and disconnect it from the power source by removing the plug from the outlet before assembling, cleaning, adjusting, maintaining, storing and transporting the machine.



#### ATTENTION

Take the weight of the appliance into account when choosing a storage location and during transportation to avoid accidents or injuries.

In exceptional cases, continuous use of the appliance for several hours may cause numbness in the hands. To avoid these risks:

- Wear gloves.
- Keep your hands warm.
- Take breaks at regular intervals.



#### WARNING

Improper use of cleaners can cause serious injury to the user or rust and other damage to the machine. Keep the detergent out of the reach of children.

Release residual pressure before disconnecting the hose from the product. Press the trigger of the gun after turning off the machine to release this residual pressure and avoid damage to the pump.

Check before each use, and at regular intervals, that all handles and metal clips are tight and that the product components are in good condition; Inspect for any broken or worn parts.

Be careful of the recoil of the gun: hold it with both hands when working with the machine.

### **Residual risks**

Even if you use this product in accordance with all safety requirements, potential risks of injury and damage remain. The following hazards may occur in connection with the structure and design of this product:

Health defects resulting from the emission of vibrations if the product is used for long periods of time or is not handled and maintained correctly.

Risk of injury and property damage from flying objects.

Injuries and material damage due to broken accessories or sudden impact of hidden objects during use.



### **Safety devices**

#### **ATTENTION**

The machine's security features are for your protection and cannot be changed or deleted on the device.

#### **- Power switch**

The appliance switch prevents unintentional operation of the appliance.

#### **Pressure gun drive lock.**

This safety lock locks the trigger gun lever and prevents inadvertent starting of the device.

#### **- Pressure switch**

If the trigger gun lever is released, the pressure switch turns off the pump and the high-pressure flow stops. If you pull the lever the pump turns back on.

#### **-Engine protection switch (Autostop)**

Motor protection turns off the device if power consumption is high.

### **Personal protective equipment**



#### **ATTENTION**

Wear protective clothing and safety glasses to protect yourself from splashes containing water or dirt.

When using pressure washers with chemicals, harmful aerosols can be generated. Inhalation of aerosols can cause damage to health.

Depending on the application, fully shielded nozzles (e.g. surface cleaners) can be used which significantly reduce the emission of aqueous aerosols in high-pressure cleaning. —Use of such shielding is not possible in all applications.

### **Symbols on the machine**



The high-pressure jet must not be directed at people, animals, operating electrical appliances or the appliance itself.



The appliance must not be connected directly to the public drinking water network.



To protect yourself from injury, wear hearing protectors and safety glasses.



Wear safety gloves when using to protect your hands.



Wear non-slip shoes that protect your feet and improve your balance on slippery surfaces.



The sound power level is 89 dB (A)

## 2. USE OF THE MACHINE

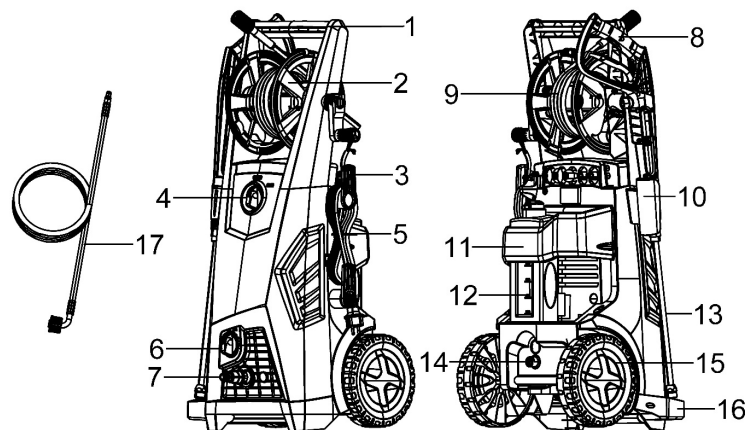
Use this pressure washer only for private homes and for private use: If connection is made to a drinking water system, the system must be protected against backflow by suitable valves.

This pressure washer has a rated input current. The intended use of this product concerns the cleaning of vehicles, buildings, terraces, facades and gardening equipment with clean water and biodegradable chemical detergents. Likewise, the product can be used to clean paving slabs or gutters.

This product cannot be used to clean clothing, shoes and other fabrics. The water jet must not be directed towards people, animals, electrical equipment or the product itself. Do not wash objects that contain materials that are dangerous to your health. The product must not work with flammable, explosive and toxic liquids.

For safety reasons, it is essential that you read the entire instruction manual before first use and follow all instructions in this manual.

## 3. DESCRIPTION AND IDENTIFICATION OF THE PARTS



- 1. Carrying handle
- 2. Hose reel
- 3. Power cord hook
- 4. Set the OFF/ON switch
- 5. Power cord
- 6. Detergent switch adjustment
- 7. Water inlet
- 8. Pressure gun
- 9. High pressure hose.

- 10. Gun support hook
- 11. Detergent tank support
- 12. Detergent tank
- 13. Spray lance
- 14. Water outlet
- 15. Rotate
- 16. Lance support
- 17. High pressure hose.



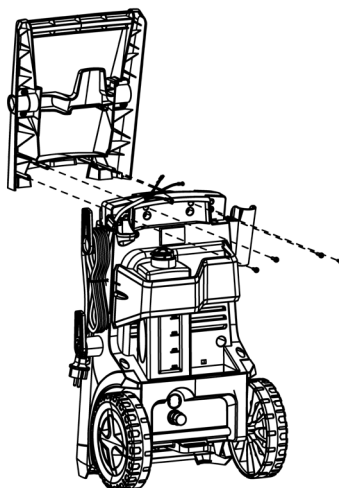
## 4. TECHNICAL SPECIFICATIONS

Model	H1800
Voltage	220-240V
Frequency	50Hz
Watt	3000W
Protection class	IPX5
Average pressure	14MPa
Max pressure	18MPa
Medium range	8.7 l/min
Maximum flow	9.2 l/min
Maximum inlet pressure	0.7 MP
Sound pressure	LpA= 78 dB(A)
Degree of uncertainty	KPA=3 dB
Audio level	LwA= 89Db (A)
Degree of uncertainty	
Vibrations	$a_h = 1.8 \text{ m/s}^2$ $K_{ah} = 0.05 \text{ m/s}^2$
Weight kg)	28

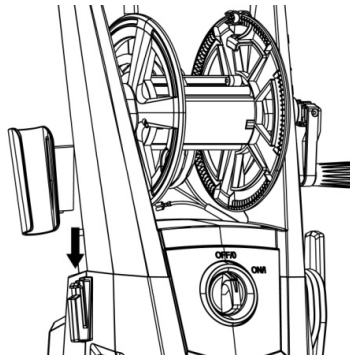
## 5. ASSEMBLY

Assemble the loose parts delivered with the machine before putting it into operation. You will need the 2 included screws and a PH 2 screwdriver

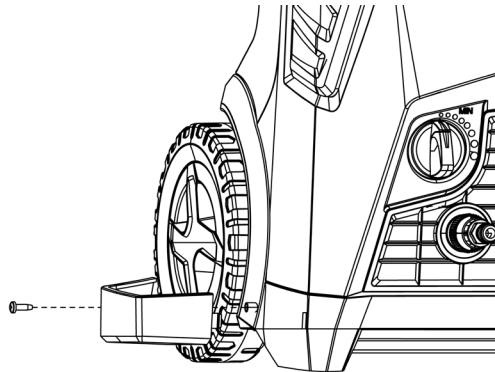
1. Installing the handle Slide the handlebar frame into place and attach it to the unit. Press the two screws to lock the handlebar lock.



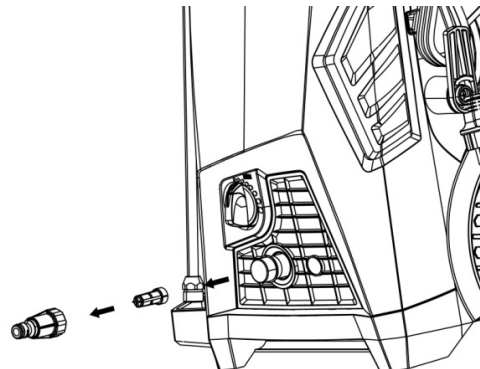
2. Slide the gun holder into place



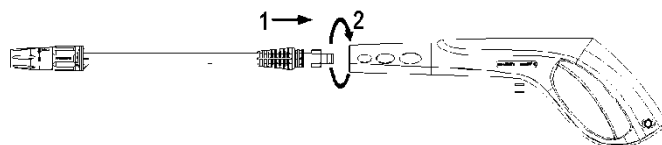
3. To fit the spear tip guard, first insert the tab into the slot located on the lower left side of the unit and then secure it with the small screw provided.



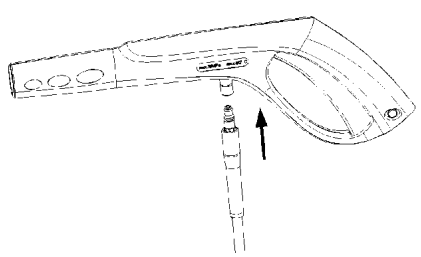
4. Screw the water inlet nut into the location of the water inlet connector



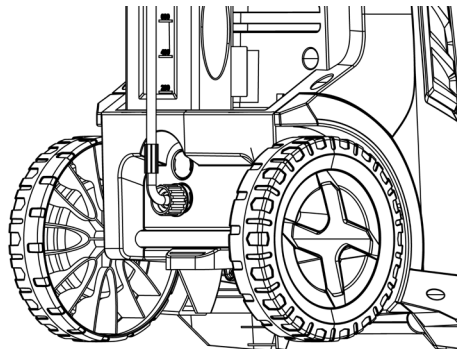
5. Installation of the lance Place the lance on the gun and rotate it until the two parts are completely locked.



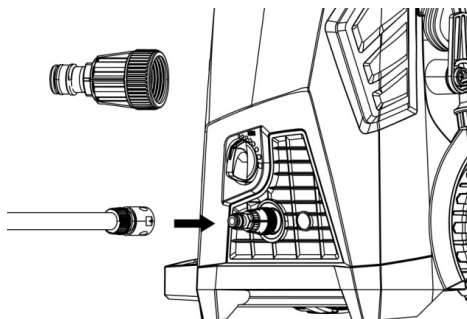
6. Connect the high-pressure hose to the gun. Connect the end of the high-pressure hose to the gun and rotate the nut as indicated to secure the connection.



7. Connect the high pressure hose to the water outlet. Connect the other end of the high-pressure hose to the water outlet of the washing machine and rotate the black swivel as shown to secure the connection.



8. Connect the inlet hose to the water inlet connection. Connect the garden hose adapter (female fitting) to the water inlet of the pressure washer, then thread the garden hose (male end) into the adapter of the garden hose.



## 6. STARTING THE MACHINE

Place the machine on a flat, safe surface. Insert the mains plug into the socket.

Water supply

To check the pressure values at the connection, consult the data plate.



**ATTENTION** Impurities present in the water can damage the high-pressure pump and accessories.

Public water supply. Supply the machine with water from a suitable connection and never from the drinking water connection. This high-pressure machine is suitable for working with a suction hose with a return flow system to extract water from the surface, for example from wells or ponds. Fill and prime the vacuum hose with water. Screw the suction hose to the water connection of the device and insert it into a water source (e.g. a water pond). Bleed the device as follows before use:

- Turn the device off/on.
- Unlock the gun lever.
- Push the trigger gun lever, the device will turn on.
- Let the device run (max. 2 minutes) until the water comes out of the gun without bubbles.
- Release the trigger gun lever.
- Lock the trigger gun lever.

## 7. WORK AND HANDLING OF THE MACHINE



**CAUTION** Running dry for more than 2 minutes causes damage to the high pressure pump. If the device does not generate the necessary pressure within 2 minutes, turn it off and follow the instructions in the "Troubleshooting" chapter.

### High pressure operation



**CAUTION** Maintain a distance of at least 30cm when using the jet to clean painted surfaces to avoid damage.



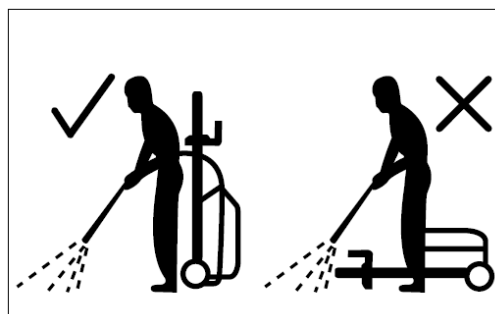
**ATTENTION**

Make sure the on/off switch is set to "OFF/ON" and insert the plug into a properly installed outlet.



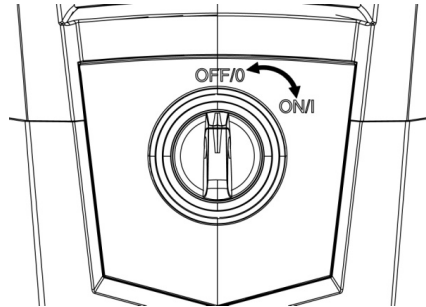
**ATTENTION**

The washing machine must be used on a safe and stable surface in an upright position.

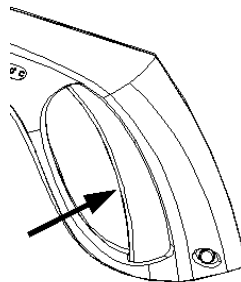


Connect the machine to the electricity and water mains as described.

- Open the water supply.
- Hold the spray gun with both hands.
- Point the nozzle of the attachment away from you, towards the surface to be cleaned.
- Unlock the trigger and press until a steady amount of water flows through the nozzle. allow air trapped in the tube to escape.
- Release the trigger.
- Turn the "OFF / ON" switch.



- Hold the spray gun with both hands. Direct the water jet at the object to be cleaned and press the trigger.



Release the gun trigger; The device will turn off again and stop the water flow. High pressure remains in the system.



**WARNING** Be careful of recoil when pulling the trigger!

### **Cleaning operation**

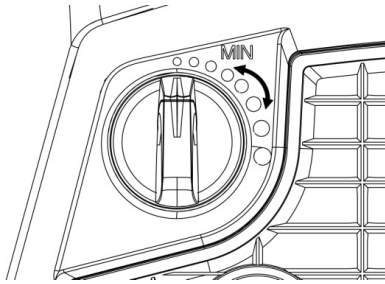
Detergent can only be added and used when the device is operating in low pressure mode.



**DANGER** When using detergents, you should check the safety data sheet issued by the detergent manufacturer, in particular the instructions on personal protective equipment and other considerations regarding the user's health. Remove the cap from the detergent bottle. . Gently pull the detergent tank on the machine to remove it from its storage position. Fill the tank with the specific detergent for use with pressure washers. Push the detergent bottle with the opening facing downwards into the detergent connection.

### Recommended cleaning method

- Spray the cleaner sparingly onto the dry surface and let it react, but DO NOT dry
- Spray loose dirt with the high-pressure gun
- The cleaner flow can be adjusted from minimum to maximum power.



After use with detergent.

- Remove the detergent bottle and close the lid.
- For storage, place the detergent bottle in the holder with the lid facing up.

### **Stop operating the machine**

- Release the gun lever. • Lock the pressure gun lever.
- Place the trigger gun with the lance in the stopped position, in its support.
- During longer pauses (more than 5 minutes), also turn off the the appliance with the "OFF" /ON button".

### **Stop using the machine**

- Release the gun trigger.
- Turn the appliance off/on.
- Disconnect the plug from the socket.



#### **DANGER**

Detach the high-pressure hose from the gun or device only when there is no pressure in the system.

### **AFTER TURNING THE MACHINE OFF**

- Press the trigger gun lever to release any remaining pressure in the system.
- Release the trigger gun lever.
- Lock the trigger gun lever.



#### **CAUTION**

- When disconnecting the power supply or high-pressure hose, hot water may drip from the connection after operation.
- Disconnect the appliance from the water supply.

## 8. TRANSPORT



### CAUTION

Risk of personal injury or damage! Pay attention to the weight of the device during transportation when handling it during transport.

- Turn off the product and disconnect it from the water and electricity supply.
- Pull the transport lever until it engages and clicks into place. Attach all shipping protections, if applicable.
- Pull the appliance by the carrying handle and use the wheels with which the machine is equipped.

During transport on vehicles.

- Before horizontal transport: close the lid of the detergent bottle.
- Tilt the product towards you until it balances on the wheels. Then move it using the transport handle.
- Protect the product from any strong impacts or strong vibrations that could occur during transport in vehicles.
- Secure the appliance against movement and overturning.

## 9. STORAGE



### CAUTION

Risk of personal injury or damage! Take the weight of the device into account when storing.

- Place the machine on a flat surface.
- Remove the trigger lance.
- Press the trigger gun disconnect button and remove the high-pressure hose from the trigger gun.
- Place the gun on the trigger of the gun holder.
- Place both the spray lances in the lance storage.
- Place the nozzle of the lance downwards.
- Roll up the high-pressure hose and place it on the hose reel.
- Store the mains connection cable in the accessory compartment.
- Before a long storage, for example during the winter, also observe the instructions in the care section.
- Always store the pressure washer, parts and accessories in a place where children cannot reach them. The ideal storage temperature is between 10°C and 30°C. Store the pressure washer indoors to prevent the water contained in the unit from expanding in freezing conditions.
- It is recommended to use the original packaging for storage or to cover the product with a suitable cloth or film to protect it from dust.

### Frost protection



### WARNING

Appliances and accessories that are not completely emptied can be damaged in the event of frost. Empty the appliance and accessories completely and protect them from frost.

To avoid damage:

- Disconnect the appliance from the water supply.
- Remove the trigger lance.
- Turn the appliance on/off.
- Push the trigger gun lever until no more water comes out.
- Release the trigger lever. gun.
- Lock the trigger lever of the gun.
- Switch the appliance on/off.
- Store the appliance and all accessories in a place protected from frost.

## 10. CARE AND MAINTENANCE



### DANGER

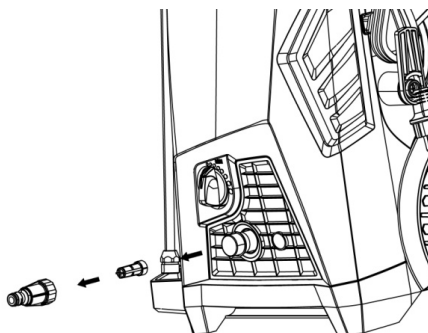
Risk of electrocution. Before starting to work on the appliance, switch it off and unplug it from the power outlet.

### High pressure hose

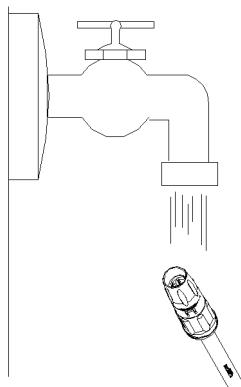
The high pressure hose is specially constructed with reinforced walls, it can be easily damaged and must be stored with care.

- Do not bend it.
- Do not drive vehicles that could step on the hose.
- Do not expose the hose to objects with sharp edges or corners. Improper use will result in premature inflation or failure and will void the warranty.

Clean the filter on the water connection. Clean the filter on the water connection regularly. Remove the fitting from the water connection and rinse with warm water to prevent foreign objects from clogging the pump.



Clean the nozzle with the provided needle cleaning tool. Remove the lance from the gun. Remove dirt from the nozzle hole and rinse.



### ATTENTION

- The filter must not be damaged and must be intact so that it always performs its function.
- Remove the filter with flat tweezers.
- Clean the filter with running water.
- Reinsert the filter into the water connection.



# 11. TROUBLESHOOTING



**DANGER** Risk of electrocution and serious injury. Switch off the appliance and unplug it before carrying out any care and maintenance work. Repair and maintenance work on electrical components may only be carried out by an authorized service.

You can eliminate small errors with the help of the following table. If in doubt, consult authorized customer service.

Problem	Cause	Action required
The car does not start	Machine not connected	Connect the machine
	Defective plug	Try another grip.
	The fuse blew	Replace the fuse. Turn off other machines on the same network.
	Defective extension	Try without an extension cord.
The pressure fluctuates	The pump sucks air	Check that the hoses and connections are tight.
	Dirty, worn or blocked valves.	Clean and replace it or contact your local dealer
	Worn pump seals	Clean and replace it or contact your local dealer
The car stops	Incorrect mains voltage	Check that the mains voltage corresponds to the specifications on the model label.
	Thermal sensor activated	Allow the washing machine to cool for 5 minutes.
	Partially clogged nozzle	Clean the nozzle
The machine works intermittently	Air inlet hose	Let the machine run with the lever open until normal operating pressure is restored.
	Inadequate supply of running water.	Check that the water supply corresponds to the required specifications. ATTENTION! Avoid using long, thin tubes (min. 1/2").
	Partially clogged nozzle Water filter clogged	Clean nozzle / Clean filter
	Bent tube	Straighten the tube.
The machine starts but no water comes out	Frozen pumps/hoses or accessories	Wait for the pumps/hoses or accessories to thaw.
	There is no water supply	Connect the inlet water.
	Water Filter / Nozzle Clogged	Clean the filter/clean the nozzle

## 12.WARRANTY

This warranty covers all defects in material or production, it does not include defects in parts subject to normal wear and tear, such as bearings, brushes, cables, plugs or accessories for the machine, damage or defects resulting from abuse, accidents or alterations suffered; nor shipping costs.

We reserve the right to reject any claim where the purchase cannot be verified or where the product has not been properly maintained. (Cleaning of ventilation slots, lubrication, cleaning, storage, etc...)

The purchase invoice must be retained as proof of the purchase date.

The instrument must be returned to the retailer in acceptable, clean condition, in its original box, if applicable, accompanied by the corresponding proof of purchase.

### 13.1. WARRANTY PERIOD

- The warranty period (Law 1999/44 CE) according to the terms described below is 2 years from the date of purchase, on parts and labor, against manufacturing and material defects.

### 13.2. EXCLUSIONS

The warranty does not cover:

- Natural wear due to use.
- Improper use, negligence, imprudent use, or lack of maintenance.
- Defects caused by incorrect use, damage caused by manipulations carried out by personnel not authorized by Anova or using non-original spare parts.

### 13.4. IN CASE OF AN ACCIDENT

- The guarantee must be correctly filled in with all the required information and accompanied by the purchase invoice.

## 13.ENVIRONMENT

To protect the environment. Recycle the oil used by this machine by taking it to a recycling center. Do not pour used oil down drains, onto the ground, into rivers, lakes or seas.



Dispose of your machine in an environmentally friendly manner. We must not dispose of machines together with household waste. Its plastic and metal components can be classified according to their nature and recycled.



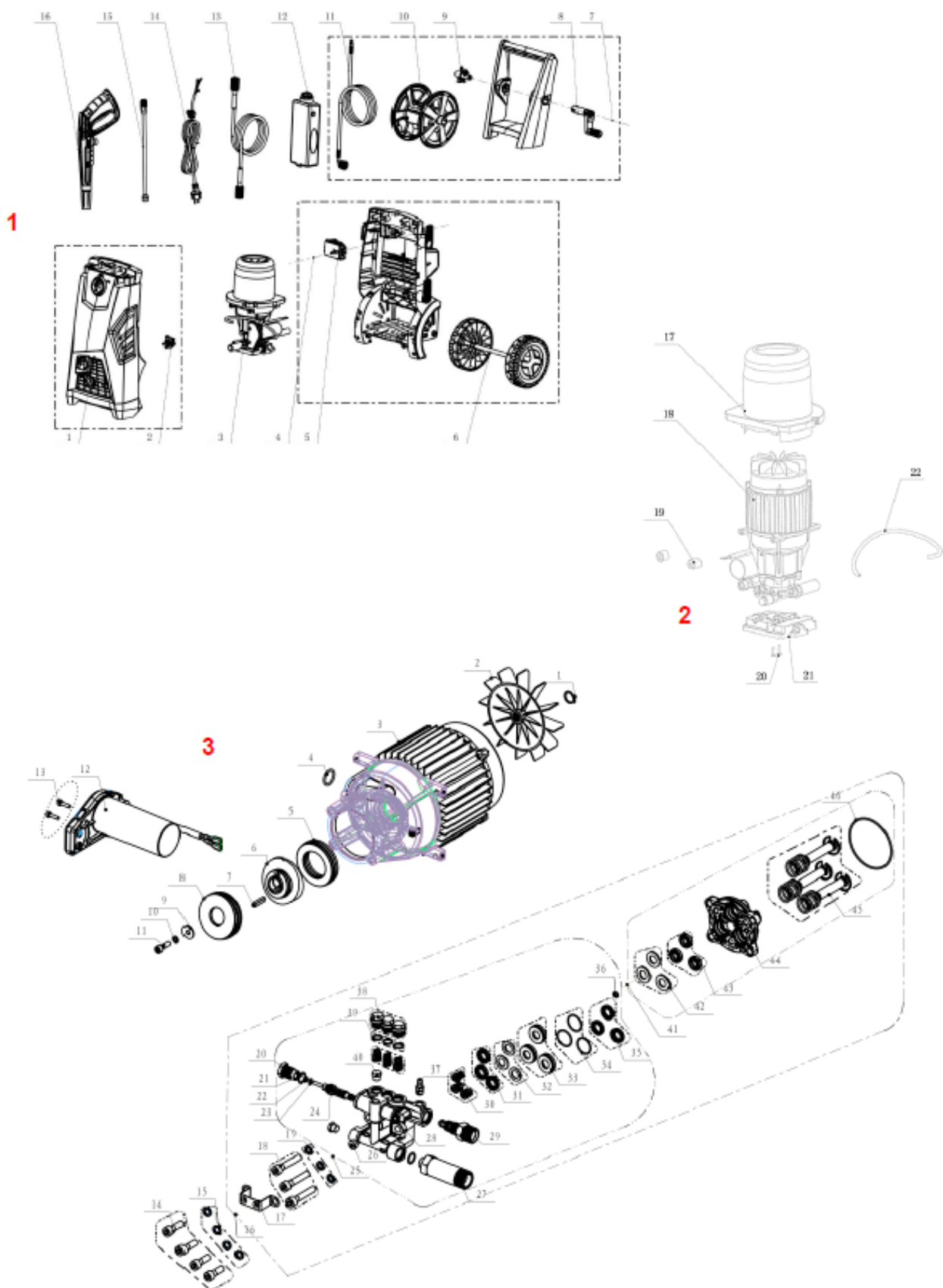
The materials used to package this machine are recyclable. Please do not throw the packaging in household waste. Please dispose of this packaging at an official waste collection point.

**ANOVA®**

# 14. EXPLODED VIEW

**anova**

**H1800**



## 15. CE DECLARATION OF CONFORMITY



### DISTRIBUTION COMPANY

MILLASUR, SL  
RUA EDUARDO PONDAL, Nº 23 PISIGÜEIRO  
15688 OROSO - IN CORUÑA  
SPAIN



## EC DECLARATION OF CONFORMITY

In compliance with the various CE directives, it is confirmed that, due to its design and construction, and according to the CE mark printed on it by the manufacturer, the machine identified in this document complies with the relevant and fundamental health and safety requirements of the aforementioned directives THERE IS. This declaration validates the product to display the CE symbol.

In the event that the machine is modified and this modification is not approved by the manufacturer and communicated to the distributor, this declaration will lose its value and validity.

Machine name: PRESSURE WASHER

Model: **H1800**

Recognized and approved standard to which it complies:

**Directive 2006/42/EC**  
**Directive 2000/14/EC**

**Directive 2014/30/EU**  
**Directive 2011/65/EU**

**Tested to standards:**

**EN 55014-1:2006+A1:2009+A2:2011**  
**EN 55014-2:2015 EN60335-1 EN60335-2-79**  
**EN 61000-3-2:2014 EN 61000-3-3:2013**  
**EN6233:2008**

Assessment according to 2000/14/EC:AppendixV

Sound level dB(A): measured 78Db(A) – guaranteed 89dB(A)

Company seal

**millasur**  
Rúa Eduardo Pondal, nº 23  
Pol. Ind. Sigüeiro - 15688 Oroso – A Coruña  
Tlf. 981 696465 / Fax. 981 690861



05/11/2018