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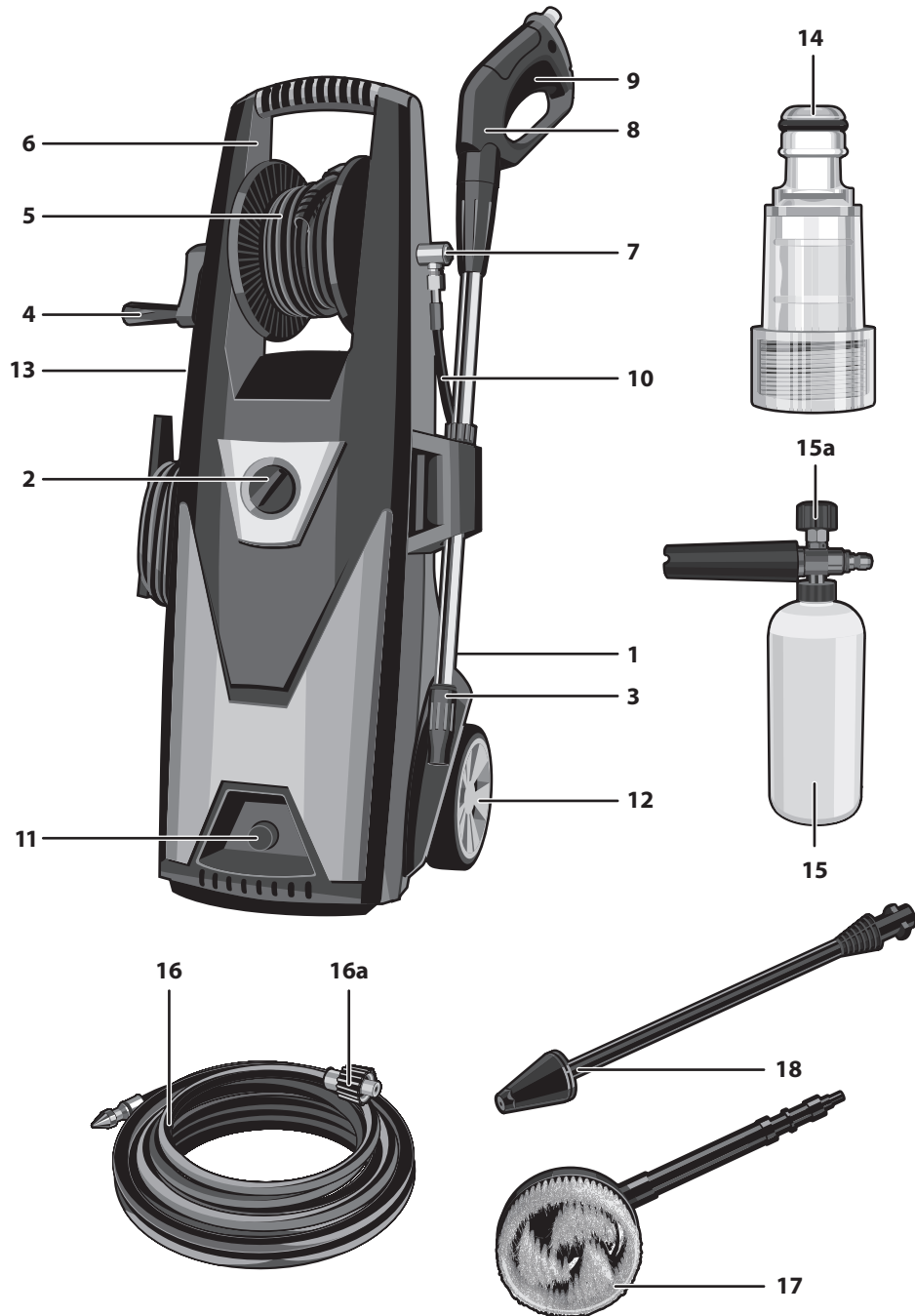


Instruction Manual

High Pressure washer

AVD-P130 | AVD-P140 | AVD-P165
AVD-P195 | AVD-P225

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Dear customer!

When buying the product:

- ▶ please demand checking its serviceability by a test run, as well as completeness according to the delivery contents;
- ▶ please make sure that the warranty card is duly issued and contains the serial number of the product, the date of sale, the stamp of the store and the signature of the seller.

Before running the tool for the first time, please carefully read this manual and strictly follow the requirements contained therein. This is the only way for you to learn how to properly handle the product and avoid mistakes and dangerous situations. Please keep this manual for the lifetime of your tool.

Remember! The product is a source of increased traumatic risk.

⚠ ATTENTION

High pressure water jet is a source of increased danger. DO NOT DIRECT it to body parts, other people, animals, plants, fragile or unstable objects, electrical sockets and appliances. DO NOT USE the device for cleaning clothes and shoes, indoors or on easily damaged surfaces.

The product is intended for use only outdoors, in the absence of frost and without conditions of condensate formation inside the product.

When connecting the product to the power supply, use only grounded sockets - it will help to avoid electrical shock.

The product was tested at the factory after assembly, a small amount of water or detergent is possibly left inside the product.

gardening tools, exterior walls and street surfaces. Carefully read this manual, including safety guide and general safety instructions. This is the only way to you to learn how to properly handle the product and avoid mistakes and dangerous situations.

The product is intended for work outdoors in areas with temperate climate with a relative temperature of +3C to +40C, relative humidity of not more than 80%, lack of direct exposure to precipitation and without excessive dustiness of the air.

The product meets the requirements of the Customs Union Technical Regulations:

- ▶ TPTC004/2011 «On the safety of low voltage equipment»;
- ▶ TP TC 020/2011 «On the electromagnetic hardware compatibility».

This manual contains the most complete information and requirements necessary and sufficient for reliable, effective and safe operation with the product.

In connection with the continuation of work on the improvement of the product, the manufacturer reserves the right to make minor changes in its design that are not reflected in this manual and do not affect the effective and safe operation of the product.

Purpose and scope

Pressure washer (the product) is intended to form a high-pressure water jet used for washing cars, bicycles and other wheeled vehicles,

Specification

Parameter	AVD-P130	AVD-P140	AVD-P165	AVD-P195	AVD-P225
Rated supply voltage, V	220				
Frequency, Hz	50				
Rated power consumption, W	1400	1400	1800	2500	3000
Maximum inlet water pressure, atm	130	140	165	195	225
Outlet working pressure, atm	90	90	110	130	150
Built-in detergent tank, l	0.8	0.8	0.9	0.9	0.9
Self-priming	yes	yes	yes	yes	yes
Performance, l/h	350	350	350	390	408
Full stop system	yes	yes	yes	yes	yes
Wheels	yes	yes	yes	yes	yes
Hose reel	no	no	no	yes	yes
Sound power level ($\kappa=3$), дБ	87.3	87.3	87.3	87.9	87.9
Sound pressure level ($\kappa=3$), дБ	69.4	69.4	69.4	70	70
Root mean square acceleration ($\kappa=1,5$), m/c2	1.157	1.157	1.157	1.16	1.16
Safety class according to GOST 12.2.007.0-75	I				
Product weight / pack, kg	13/15	15/17	16/18	22/25	24/28
Service life, years	5				

High pressure washer	1 pc.	1 pc.	1 pc.	1 pc.	1 pc.
High pressure hose (5 m)	1 pc.	1 pc.	1 pc.	1 pc.	1 pc.
Gun	1 pc.	1 pc.	1 pc.	1 pc.	1 pc.
Sprayer	1 pc.	1 pc.	1 pc.	1 pc.	1 pc.
Transition nipple	1 pc.	1 pc.	1 pc.	1 pc.	1 pc.
Cleaning needle	1 pc.	1 pc.	1 pc.	1 pc.	1 pc.
Safety instructions	1 copy.	1 copy.	1 copy.	1 copy.	1 copy.
Instruction Manual	1 copy.	1 copy.	1 copy.	1 copy.	1 copy.

ATTENTION

Ensure that the instrument and parts kit have no damage that may have occurred during shipment.

Operation Instructions

Configuration

- 1 High pressure fitting (water outlet)
- 2 Switch
- 3 Gun sprayer
- 4 Drum handle (for AVD-P195 and AVD-P225)
- 5 High pressure hose (outlet)
- 6 Grip
- 7 Drum fitting (for AVD-P195 and AVD-P225)
- 8 Gun handle
- 9 Trigger gun lock
- 10 Connecting hose
- 11 Water inlet fitting
- 12 Wheel
- 13 Detergent tank lid (at the back for AVD-P195, AVD-P225; at the front for AVD-P130, AVD-P140, AVD-P165)
- 14 Water filter (art. 70402) (not included)
- 15 Foam generator (art. 70401-375) (not included)
- 15a Foam outlet regulator
- 16 Pipe cleaning kit (art. 70414-375-8 or 70414-375-15) (not included)
- 16a Cleaning nozzle
- 17 Rotary brush (art. 70403) (not included)
- 18 Turbo lance (art. 70404) (not included)

Preparation of the product to work

To prepare the product to work you need to:

- ▶ remove the cap from the fitting **1**, connect to it a high pressure hose (except AVD-P195, AVD-P225) or connecting hose **10** (for AVD-P195, AVD-P225);
- ▶ connect the hose **10** to a drum fitting **7** (only for AVD-P195, AVD-P225);

- ▶ put (for AVD-P195, AVD-P225 only) handle **4** of the drum into the working position, tilting it down to the horizontal position. Unwind the entire hose by turning the handle;

ATTENTION

During operation, the high pressure hose must be completely unwind. The drum is intended only for storing the hose. Do not allow any hose bending.

- ▶ connect the assembled gun to the high pressure hose;
- ▶ remove the plug from the inlet fitting **11**, make sure that a filtering mesh has no pollution and locked at the fitting entrance;
- ▶ Install a thin filter **11** (purchased separately) on the inlet fitting **8** and connect the water supply hose (with an adapter to the fast-disconnect fitting);

Note! In order to avoid damage to the product from water contaminations be sure to install filter **11**. Damage, caused by ignoring this demand is not covered by the warranty.

- ▶ Turn on the water supply to the product. Make sure that there are no leaks at the hose connection points or on hose itself.

Note! The product is able to take water on its own (by self-suction).

- ▶ press the gun trigger and wait for the air to escape from the product. Release and lock the gun trigger with button **9**.

Get ready for work:

- ▶ prepare the workpiece (bicycle, garden tools, etc.);
- ▶ when processing the engine compartment of the car, securely cover the electronic components with waterproof material, as well as electrical devices and connections;
- ▶ when treating walls or street surfaces, remove plants from the treatment area, as well as fragile and unstable objects (posters, flowerpots, etc.).

Operating procedure

Connect the product to the mains.

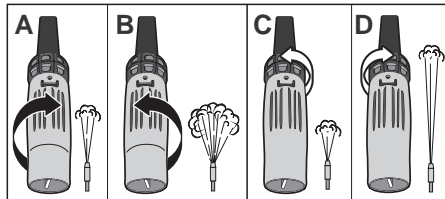
Note! Before connecting the product to the mains ALWAYS make sure that switch **2 is in the OFF position and the gun trigger is unpressed and locked.**

Turn on the product using the switch **2**. Unlock the gun trigger with the **9** button and get to work. Lock the gun trigger protects against involuntary launching of the product.

Note! Thanks to the full stop system, the engine and the pump do not start up until you press the gun trigger. This saves energy and also prolongs the life of the engine and pump.

Depending on the work being done, you can adjust the output jet pressure. Shut off the water supply by unpressing the spray button. Further:

- 1) To obtain a narrow jet, turn the front part of the spray nozzle **8** clockwise (fig. A).
- 2) To obtain a wide jet, turn the front part of the spray nozzle **8** counterclockwise (fig. B).
- 3) To obtain a low-pressure jet, turn (holding the tube) the rear part of the spray nozzle **8** counterclockwise (fig. C).
- 4) To obtain a high-pressure jet, turn (holding the tube) the rear part of the spray nozzle **8** clockwise (fig. D).



If it is necessary to treat the product or surface with detergent, remove the cover of the tank lid **13** and, observing the concentration recommended by the manufacturer, fill the tank with detergent solution. Set a low pressure jet, apply detergent to the surface to be treated and leave it for 1-2 minutes, preventing it from drying out. Adjust the amount of detergent supplied by rotating the front part of the nozzle (fig. A and fig. B) adjust the amount of detergent supplied.

Note! The detergent is taken from the tank automatically. Detergent is supplied only with a minimum jet pressure and starts to flow with some delay. When the supply of detergent is turned off, clean water appears with a delay. This is not a malfunction.

⚠ ATTENTION

The application of detergent does not mean the formation of abundant foam on the surface being cleaned. For the formation of foam, it is necessary to use a foam generator.

To flush detergent and final wash, use a high pressure jet.

Also, to improve foaming, install a foam generator **15** instead of the sprayer **3** on the gun **8** (sold separately). With the **15a** controller, set the desired foam output.

Note! To work with the foam generator 15, it is necessary to completely empty the built-in tank from the detergent.

For better washing, use additional brush nozzles - a rotary brush **17** or a turbo lance **18** (sold separately).

If it is necessary to clean the pipes, replace the sprayer **3** on the gun **8** with the nozzle set 16 (sold separately). The minimum pipe diameter for cleaning is 100 mm. Fill the nozzle 16a into the pipe to be cleaned, straighten the hose. When the product is turned on, the water jets coming out of the nozzle will push it forward and at the same time clean the pipe walls.

⚠ ATTENTION

To avoid damage from a high-pressure jet, **DO NOT** turn on the product without a nozzle **16a** installed in the pipe.

A complete list of optional accessories for **3Y6P** washers can be found by the link <http://kraftool.hk/shop/folder/high-pressure-washers>.

At the end of the work and before long-term storage, turn off the product in the following order:

- ▶ turn off the product with the switch **2**. Remove the plug from the outlet;
 - ▶ turn off the water supply;
 - ▶ Lower the gun to the ground and press the trigger to relieve the water pressure in the product. Let the water drain completely.
- Attention!** Not complying this demand may cause damage to the product's shutdown valve. This damage is not supported by the warranty
- ▶ disconnect the hoses (high pressure first, then water supply) from the product.

⚠ ATTENTION

To avoid injury and damage to the product, always turn off the product BEFORE turning off the water supply. DO NOT disconnect the high pressure hose without first relieving the pressure in the product.

Periodic maintenance

Periodically (at least once a week, and before each use), perform the following actions:

- ▶ clean the nozzle of the gun's sprayer with the supplied needle;
- ▶ Check the cleanliness of the inlet filter. If necessary, clean it. Replace it if damaged.

⚠ ATTENTION

Operation of the product without a filter is forbidden.

Recommended practices

The product is intended for connection only to pure cold water with a supply pressure of at least 0.5 atm. **DO NOT** use the product with polluted water or a source of insufficient pressure or flow (less than 6 litres/min), as well as at an inlet water temperature of more than 50°C. **DO NOT** add detergent directly to the input water. All this can lead to damage to the product and its failure.

Before the first use, or after a long break in work, prepare the product according to the Preparation for work (except for installing the gun sprayer **3**, turn it on and let it work 10-20 seconds without a load.

⚠ ATTENTION

When working, always take care that the high-pressure water jet does not harm you or objects around you.

If at this time you hear extraneous noise, feel a strong vibration or smell of burning, turn off the product, unplug the power cord from the outlet and determine the cause of this malfunction. Do not turn on the product before the cause of the malfunction will be found and corrected.

For electrical safety, the product complies with Class I protection against electric shock, that is, it must be grounded (for this, grounding contacts are provided in the plug). Do not alter the plug if it does not fit your outlet. Instead, a qualified electrician should install the appropriate outlet.

In order to avoid electric shock, as well as for the safety of the product, a circuit breaker with a rated operating current of 16 A must be installed in the power supply of the product.

The product should be on a horizontal and stable surface in a vertical position - this is a guarantee of its proper operation and good lubrication of all its parts.

Turn the product on only when you are ready to work with it.

Each time before switching on the product on, you **MUST** be sure that the gun trigger is not pressed and locked.

When using the product, locate the product itself and the electrical cable outside the working area.

Protect the cable and hoses from heat and oil, from contact with sharp objects. Do not move the product by the cable and hoses, do not bend them. Do not remove the plug from the outlet by the cable.

If the electrical cable or hoses are damaged, they should be replaced immediately. The electrical cable should be replaced only in a specialized technical center.

Using the product for processing various objects and surfaces, make sure that they cannot be damaged by a high pressure water jet (falling, deformation, softening, peeling of the outer layer, etc.).

To prevent overheating of the electric motor, take breaks in the operation of the product. Intensive use reduces product life.

Turn off the product from the network immediately after work.

Turn off the product **ONLY** in the sequence indicated in the Operating Procedure. Do not Turn it off just by removing the cord from the mains.

Do not leave it for storage without draining the water completely.

When storing in the winter, protect the product from freezing. To do this, store it in a warm room or replace the water in the pump (not completely drained) with non-freezing liquid (for example, antifreeze).

Do not weld or mechanically repair damaged parts of the product. If corrosion or mechanical defects are found, contact a service center for replacement of damaged parts.

Regularly clean the body of the product, connecting hoses and gun. Work must be carried out with the cable disconnected from the network. The product does not require other special service.

All other types of maintenance and repair should be carried out only by service center specialists.

Keep the product in good condition. In the event of suspicious odors, smoke, fire, sparks, turn off the tool and contact a specialized service center.

If something seemed to you abnormal in the operation of the product, immediately stop its using.

Due to the technical complexity of the product, the criteria for limiting states cannot be determined by the user on their own. In case of an apparent or suspected malfunction, refer to the "Possible Malfunctions and Methods to Remedy" section. If there is no malfunction in the list or you could not solve it, contact a specialized service center. The service center issues a conclusion on the limiting condition of the product or its parts in the form of the relevant Act.

Safety Instructions

High-pressure water jet is a source of high energy and potentially dangerous. In order to avoid accidents you should:

- ▶ Do not direct the jet at people, animals or your own body;
- ▶ Do not direct the jet to electrical outlets, cables, any electrical devices and the product itself.

- ▶ Do not direct the jet at plants, fragile and unstable objects, loose items (sand, crushed stone, gravel) and easily damaged surfaces;
- ▶ do not use the product for cleaning clothes or shoes, especially dressed on someone;
- ▶ do not switch on the product if the gun is not connected to the high pressure fitting;
- ▶ Do not place your hands under the high-pressure fitting or sprayer to check the presence or pressure of the jet;
- ▶ Do not use damaged hoses (especially on the high pressure side) or a gun that allows water to leak;
- ▶ do not use the product in confined spaces or indoors;
- ▶ Do not perform any maintenance on the product or replace the failed parts without disconnecting it from the mains or relieving **FULLY** the pressure from it.

This product is designed to work only with water. Do not use it for injection of other liquids: detergents (except for the method described in the Operating Procedure), technical liquids, flammable compositions, aggressive solutions, etc.

Before starting work, visually inspect the product, tool, hoses and power cord for possible damage.

For electrical safety, the product complies with Class I protection against electric shock, that is, it must be grounded (for this, grounding contacts are provided in the plug). Do not alter the plug if it does not fit your outlet. Instead, a qualified electrician should install the appropriate outlet.

Always remove the plug from the outlet after use.

Turn off the product **ONLY** in the sequence indicated in the Operating Procedure. **DO NOT** disconnect the high pressure hose without first relieving the pressure in the product.

If the electrical cable or hoses are damaged, they should be **IMMEDIATELY** replaced. Operation of the product with the specified damage is **FORBIDDEN**.

Do not switch on or operate the product with the covers removed. Rotating and heated parts are located under the covers, contact with which can lead to injury. In addition, the casing is a guide for the air flow and its absence violates the cooling of the heating parts of the product.

Warranty

The warranty period is 6 months from the date of sale.

1) Warranty does not cover:

- a) The product, which has the full development of the resource, strong external or internal pollution, as well on product's polluted and worn details.
- b) The product malfunctions caused by non-observance of the Operating Instructions or occurring due to improper use of the tool, during use in environmental conditions beyond the specified operating conditions, inadequate working conditions, due to overloading or insufficient, inadequate maintenance or care. The unconditional signs of product overload include, among others, the appearance of colors of tinge, simultaneous failure of the rotor and stator, deformation or melting of parts and components of the product, darkening or charring of the electric motor wires under the action of high temperature.
- c) The product, used in conditions of high intensity work and super heavy loads.
- d) The product's preventive maintenance, such as: lubrication, flushing, etc.
- e) The product's malfunctions, caused by use of accessories and spare parts that are not original accessories/parts of the **3Y6P**
- f) The product's mechanical damage (cracks, chips, etc.) and damage, caused by exposure to aggressive environment, high humidity and high temperatures, ingressing of foreign objects into the product's ventilation ports, as well as damage, caused by improper storage and corrosion of metal parts.
- g) The product's accessories, wear parts and consumables that failed due to normal wear, such as: drive belts, battery packs, barrels, guide rolls,

protective covers, collets, chucks, soles, saw chains, saw tires, sprockets, tires, carbon brushes, knives, files, abrasives, drills, trimmer line, etc.

- h) The product, whose design has been modified or supplemented.
 - i) The product's insignificant deviation from the declared properties, not affecting its value and the ability of its intended use.
 - j) The product, that have been opened or repaired during the warranty period outside of authorised service centers.
- 2) Troubleshooting, recognized by us as a warranty case is carried out at the choice of **3Y6P** company through repairing or replacing the product with new one (possibly on next generation model). Replaced tools and its parts become the property of the company.
 - 3) Warranty claim are accepted in warranty period. For this present or send broken tool to the service center, specified in the documentation. Attach a completed warranty card confirming the date of the product purchase and its name. The product, transferred to a dealer or to service center in a partially or fully disassembled form will not be covered by the warranty. All risks of the product transferring and shipping to the dealer or service center is on the product owner.
 - 4) Other claims, except the said right to free repair of the instrument's defects are not covered by our guarantee.
 - 5) All power tools require regular maintenance. The maintenance interval is equal to the service life of the carbon brush set.
 - 6) Service life of the product is 5 years.

POSSIBLE MALFUNCTIONS AND METHODS OF THEIR ELIMINATION

Malfunction	Possibly reason	Corrective actions
The product does not turn on	No power	Check mains voltage
	Automatic turn system does not work	Contact service center for repair or replacement
	Switch is defective	Contact service center for repair or replacement
	Electronic motor is defective	Contact service center for repair or replacement
The product does turn on, but the water does not go	No water supply (tap is closed, no pressure, hose is pinched)	Provide water supply
	Sprayer outlet or inlet filter is clogged	Clear the filters
	Seals or plunger parts are worn out	Contact service center for repair or replacement
The product does not work at full capacity (controlled by jet strength)	Mains voltage is low	Check mains voltage
	Water head or inlet water flow is low (low pressure source, hose is torn or clamped, filter is clogged)	Take measures to increase head or flow
	Water leaks through seals on high pressure side	Eliminate the cause of water leak
	Seal or plunger pump parts are worn out	Contact service center for repair or replacement
	Winding is burned or have breakage	Contact service center for repair or replacement
The outlet water pressure changes or pulsates.	Pump draws air (at joints or through seals)	Eliminate the case of air leak
	Air in pump or inlet hose	Press gun trigger and let air go out
	Water head or inlet water flow are low	Take measures to increase head or flow
	Spray outlet or inlet filter is clogged	Clear the filters
	Hose is clamped	Straighten hose
The product overheats	Product load is too high	Change the work mode, reduce load
	Inlet water flow is low or water temperature is too high	Take measures to remedy the situation
	Oil level is low	Contact service center
	Winding is burned or have breakage	Contact service center for repair
	Ambient temperature is high, ventilation is poor, air vents are clogged	Take measures to reduce temperature, improve ventilation, clean the vents
The product vibration is too intensive	The product is installed unstable or on an uneven surface.	Install the product tightly
	Loosening of threaded connections	Tighten threaded connections
	Parts of the plunger mechanism are worn out.	Contact service center for repair