



XHD 865/995 HOT

COMMERCIAL HIGH PRESSURE WASHER

Operating and Maintenance Manual



*Optional
Hose reel
KIT*

Hot water high-pressure cleaner

Congratulations, you have chosen a cleaner that is easy to handle and to use.

The **XHD865** hot water cleaner will assist you professionally for all washing, descaling, cleaning and wet sandblasting purposes.

X-TRA cleaners are recommended for use in all fields of industry, agriculture, building trade and tourism.

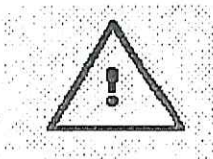
X-TRA can meet all your cleaning requirements, both hobby and professional, being light and handy, easy to use and to service.

The wide range of models perfectly fits each kind of use.

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WARNINGS



Carefully read the warnings given in these instructions since they provide important details concerning the safety, use and maintenance. Get acquainted with the appliance to be able to quickly switch it off and eliminate the pressure.

Make sure you refer to section “Prohibited operations - Safety rules”.

These instructions are an integral and essential part of the product that, as provided for by the directive 98/37 EC, must be delivered to the user in order to ensure fulfilment as regards training/informing the personnel assigned to use the machine.

The manufacturer shall not be held liable for any injury or damage, even to the appliance itself, if the machine is used incorrectly regardless of the instructions given. Keep these instructions with care for future reference.

Check the model of high-pressure cleaner you have purchased, reading the data on the appliance rating plate. Upon delivery, check that the machine has not suffered any damage during transport and that there are the required accessories. Any complaints may only be accepted in writing within 8 days of the date of delivery.

WARRANTY RULES

- 1) **X-TRA** high-pressure cleaners are covered with a 6 months warranty for trouble deriving from manufacturing defects. Warranty does not apply to normal wearing parts, in particular: pistons, seal rings, gaskets, and electrical components.
Repairs carried out by unauthorized personnel void the warranty.
- 2) **X-TRA** obligations are restricted to replacement of defective parts. Replacement or repair of defective parts depends on the unquestionable decision of
Transport costs and risks, removal and installation of the machines and any other cost directly or indirectly associated with the repair of this product are not covered by warranty.
- 3) All repairs under warranty must be carried out by **X-TRA** or by a Technical Support Service authorized by **X-TRA**. Repairs carried out by unauthorized technicians shall not be reimbursed. If said repairs cause damage to the machine, this is not covered by warranty.
- 4) Regular checks, maintenance and tampering are not covered by warranty.

DESCRIPTION

Cold and hot water high-pressure cleaner composed of a metal chassis with castors and a handle for moving; generator for the production of hot water; diesel burner; diesel tank; steam exhaust vent; motor-pump for inlet of pressurized water; mains plug-in power supply; power cable and switchboard; cover and washing spray gun (or other accessories).

ENVISAGED CONDITIONS OF USE

Use

The cleaner has been developed and manufactured for the use in car-washing, body-shops, workshops, factories, filling stations, farms, etc. If the machine is used in closed rooms, air shall be supplied and combustion gases evacuated by means of a good exhaust system to avoid poisoning. To correctly execute these instructions, please contact our authorised technical service centre.

The use of cleaning machines or other units with electric motors or other equipment, which can short-circuit because of water contact, IS FORBIDDEN.

Environment

The power supply with minimal IP 54 protection permits use:

- OUTDOORS ON FLAT SURFACES;
- IN DAMP CONDITIONS.

In any case, for safe and easy manual handling, it is necessary for the floor to be as flat and even as possible. The machine HAS NOT BEEN DESIGNED to be pushed or towed with mechanical facilities of any kind.

Standard Equipment

The standard equipment includes:

- High-pressure hose
- Washing lance with safety trigger gun

Optional Accessories

X-TRA high-pressure cleaners can be equipped with additional accessories according to your cleaning requirements: ask for them from your local point of sale.

- | | |
|--------------------------|--|
| - SANDBLASTING KIT | for sandblasting with the power of high pressure |
| - HOSE-CLEARING KIT | for effectively clearing clogged hoses |
| - ROTATING/FIXED BRUSHES | to remove persistent dirt |
| - FOAM LANCE | transforms detergent into a thick foam |
| - UNDERBODY LANCE | to clean the underbody of vehicles |
| - ROTATING NOZZLE | increases water jet and washing efficiency |

OPERATING FEATURES

- THREE-PHASE MODELS: supply from three-phase network with protection conductor (without neutral conductor): 400V+/- 10%; 50Hz
- SINGLE-PHASE MODELS: supply from single-phase network with protection conductor 230V 50Hz (+ - 10%)
- continuous duty;
- maximum ambient temperature: +40°C
- minimum ambient temperature: +5°C
- maximum humidity: 80%
- sound pressure level: 79.5 db

Meticulous compliance with the instructions provided with our materials is a primary condition for their use in complete safety.

We will therefore accept no liability for IMPROPER OR INCORRECT USE of our appliances. To provide a suitable guide for users here we give examples of risky behaviour.

IMPROPER USE

Improper use of our machines is understood to be using them in operations they were not made for. Improper uses therefore comprise:

- USE IN ROOMS WITH DANGER OF EXPLOSION OR FIRE HAZARD (e.g. paint warehouse, near petrol pumps, storage of combustible materials such as wood, straw, etc.)
- USE IN CLOSED ROOMS NOT PROPERLY VENTILATED
- USE IN CLOSED ROOMS WITHOUT A CONNECTION TO AN EXHAUST DEVICE
- USE IN THE RAIN OR THUNDERSTORMS
- USE TO CLEAN ANIMALS
- USE BY PEOPLE WHO ARE NOT ADULTS
- WASHING ANY ELECTRIC-POWERED OBJECT
- WASHING TYRES AT A SPRAYING DISTANCE OF UNDER 30 cm (tyres can get damaged, even internally, by a pressurized water jet, causing them to explode).
- USE WITH OTHER PEOPLE NEARBY WHO COULD GET HIT BY THE DIRT OR PARTS DETACHED FROM THE OBJECT WASHED

INCORRECT USE

Incorrect use of our machines is understood to be using them without complying with the operating and maintenance manual (see also section "Prohibited Operations"). Failure to comply with these instructions may cause injury to the operator and damage the machine. We shall now give some examples of incorrect use:

- WRONG CONNECTION/USE OF THE ACCESSORIES SUPPLIED
- WRONG SEQUENCE OF STEPS FOR COMMISSIONING
- FAILURE TO USE GENUINE SPARE PARTS
- USE OF FUEL DIFFERENT FROM DIESEL
- STARTING THE MACHINE WITH DIESEL TANK ON EMPTY
- MAINTENANCE WORK BY UNQUALIFIED PERSONNEL
- USES FOR WHICH THE MACHINE HAS NOT BEEN DESIGNED (see improper use)
- MAINTENANCE WORK NOT CARRIED OUT

PACKING - TRANSPORT

The machine is fixed to a wooden pallet and covered by a corrugated board packaging, which is fastened with a high resistance plastic ribbon. The machine packed in this way can be lifted also by a fork-lift truck. The packaging materials are particularly sensitive to atmospheric agents such as rain, fog, sun, etc. The packed machine can be lifted by a lift or pallet truck with the capacity of at least 250 Kg.



WARNING: check that the capacity of the lifting equipment is suitable

Should you transport the machine without its original packaging, make sure it is properly secured to prevent it from moving. Put the machine on even floors. During periods when it is not used, keep your high-pressure cleaner away from atmospheric agents.

COMMISSIONING

Commissioning must take place in clean and well-lit areas. For the machine parts, refer to page 4 "General view" of this manual.

1 - After removing the packaging, make sure the machine is not damaged. Should you have any doubt, do not use the machine and call your supplier's technical support service.

The packaging materials (cardboard, wood, etc.) must be put away in special containers and kept out of the reach of children as they are a potential source of hazard.

2 - Put the cleaner on a properly arranged place, in any case on an even surface, locking up the castors using the brake (Fig. 2).

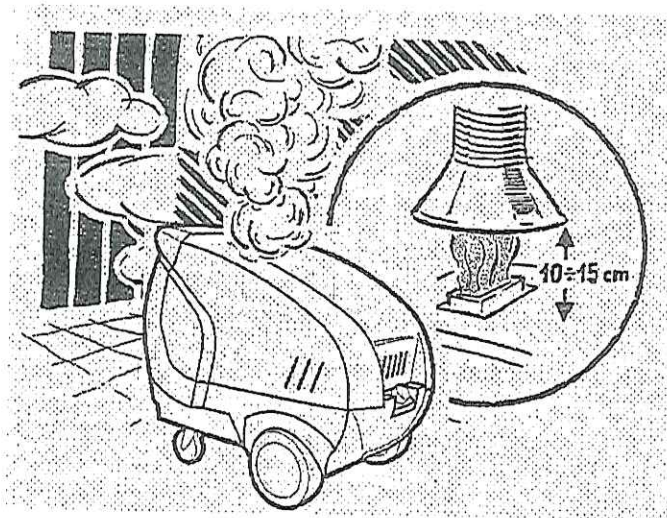
The work station must be equipped with:

- a mains plug 400V/16A 3+PH three-phase or 230V/16A single-phase 2PH+T according to the models (see technical features on the rating plate - see section "Marking and identification")
- a clean water inlet 1/2", pressure 0.3 Mpa, with a stop valve
- a connection to the drainage system for the treatment of the waste water.

Arrange for a good exhaust system to evacuate gases and for proper ventilation in closed rooms.

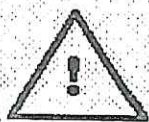
3 - Connect the machine water inlet to the mains water; this connection must be made with a suitable hose, which must be as short as possible to avoid tripping.

4 - After unscrewing the cap (Fig. 15), fill the tank with automotive diesel. It is necessary to use clean fuel; filter it if necessary.

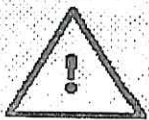


5 - Connect the spray gun to the high-pressure hose (Fig. 11) using a 17mm-spanner. Connect the latter to the fitting (Fig. 3).

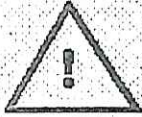
6 - Connect the mains water hose to the quick coupling (Fig. 4) fixing it with a hose clamp. The mains water hose must be perfectly clean inside; use a filter upstream if necessary.



7 - **CAUTION!** - Before wiring, turn the main switch (Fig. A) to 0/OFF and make sure the rating plate data (Fig. 8) correspond to those of the mains power supply. Wiring must be carried out by qualified personnel in compliance with current national and local regulations.

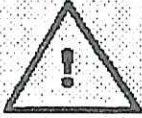


8 - **CAUTION!** - Verify that the cross-section of the system cables, their condition and their current carrying capacity are suitable for the power absorbed by the machine, indicated on the rating plate. Protect the supply line by using thermomagnetic releases coordinated with the machine protection device. The data can be seen on the device itself.



9 - **CAUTION!** - Connection to the mains power supply must be made with plugs complying with IEC 309 standards and preferably without any extensions. The machine type of protection against electric shock is Class 1. The mains supply must be connected to the machine by a single-pole switch with minimum 3 mm-gap between contacts and suitable rating.

10 - The electrical safety of this machine is only achieved when it is correctly connected to an efficient earthing system and there is an automatic power supply cut-off device with such features as to ensure contact voltage no greater than 25V. Use a differential switch with sensitivity ≤ 30 mA of class A.



CAUTION! When there is no power the machine stops. If it is not disconnected, it switches back on automatically when the power supply is restored.

11 - Indicate all the forbidden operations contained in this section using the right warnings

The execution of these operations is fundamental for the regular working of the machine.

USE

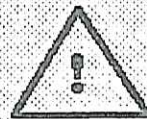
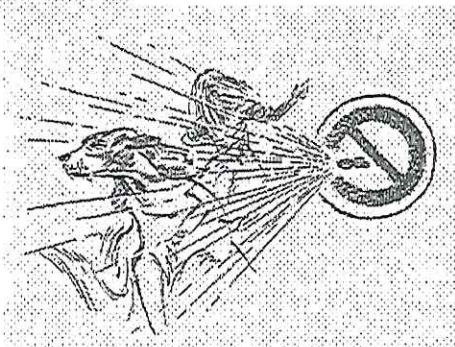
At the beginning of each working shift

- Verify that the supply cable, the plug and the water hose are in good condition. If they are damaged, do not plug the machine into the mains and contact an after-sales service centre for the replacement.
- Check that the machine does not have visible damage
- Verify the efficiency of the main switch
- Verify the fuel level inside the tank (to avoid damage to the diesel pump, never use the machine on empty)

If the wiring features correspond to those of the rating label of the machine, you can plug in.











Caution: Your new machine needs a short running-in period for the motor/pump unit. Running-in consists of using the machine for no longer than 1 hour and waiting for 1 hour for it to cool; this should be done for 4 or 5 times.



CAUTION !

High-pressure water jet.
Always hold the gun with both hands.
Never direct the jet towards people or animals.

Controls and indicators

	(Knob A) Pump and burner ignition Turn the knob to position 1 to start the pump and to use the high-pressure cleaner with cold water. Turn the knob to position 2 to ignite the burner for use with hot water.
	(Knob B) Thermostat control When knob A is in position 2, turn the thermostat control knob to adjust temperature of the jet delivered from the washing spray gun.
	(Knob C) Detergent regulation This knob adjusts the amount of detergent to be mixed with the water jet. Fill the special tank with liquid detergents only (Fig. 1 page 4)
	Power supply warning light When this is lit, it indicates that the power plug is connected to the mains and that the machine is electrified, even if it's not running.
	Burner warning light This light is continuously on when the burner is operating normally. The light flashes (available with optional device only) in the event of burner malfunction.
	Fuel warning light (available with optional device only) Lights up when the diesel fuel level is low. Stop the machine and fill the tank with automotive diesel fuel (Fig. 15 page 4)
	Water warning light (available with optional device only) Indicates insufficient water level in the water circuit. Stop the machine and check that the high-pressure cleaner is correctly connected to its water supply.
	Anti-scaling warning light (available with optional device only) Indicates low anti-scaling agent level.
	All lights flashing simultaneously: All the warning lights flash simultaneously in the event of a leak (the system also detects micro-leaks) in the water circuit. Turn the machine off immediately and contact the technical support service.
	Important: Always contact the technical support service in the event of any malfunction indicated by the above warning lights.

To operate the machine, proceed as follows:

1) START:

A) Turn on the water feeding tap (Fig. 7).

B) Turn the ON switch to ON/I position (Fig. A).



CAUTION: Grip the lance and the gun firmly with both hands.

Hold the gun firmly for it will tend to kick backwards due to the machine pressure. You therefore need to grip it firmly, to have a safe and balance position and to avoid climbing on unsteady supports when using the cleaner.

C) Open the spray gun for a few seconds to release the air from the hoses.

D) After releasing the air, the cleaner operates normally: choose the working pressure by turning the pressure adjustment knob of the gun (if provided).

E) To use hot water, turn the burner ignition knob to position 2 (Fig. A) and select the required temperature with the thermostat control (Fig. B).

Note:

- In position 1, the burner is off and only cold water is delivered.
- In position 2, the burner is on and hot water is delivered at the temperature set by the thermostat control knob (Fig. B page 4).

2) USE:

The machine can intake and mix detergents or other liquid chemicals (not corrosive) thanks to an automatic device. Adjust amount of detergent to be mixed with the water delivered from the spray gun by turning the detergent regulation knob (Fig. C).

We suggest using the detergent in the following way:

- apply the detergent on the surface to be cleaned
- stop spraying and wait 3-4 minutes
- start the hot jet of water

To avoid chemical deposits building up, we suggest cleaning the machine by sucking up clean water for a few seconds.

Always clean small areas at a time because if the detergent gets dry, it could damage the painted surfaces.

3) STOP:

When you have finished using the machine, act as follows:

- A) Shut off the gun.
- B) Turn the knob (Fig. A) to 1 (burner OFF)
- C) Open the gun and spray the water out for about one minute (until the temperature comes down and cold water comes out).



CAUTION: make sure that water is cold before stopping the machine.

D) Turn the knob (Fig. A) to OFF/0 position.

E) Turn off the water tap.

F) Open the spray gun for a few seconds to release water and pressure trapped in the hoses

G) When you have finished using the machine, disconnect the power supply and water mains and keep the machine in a closed room.

PROHIBITED OPERATIONS - SAFETY RULES

Do not impede water coming out of the high-pressure hose. This may cause the hose to burst, which is dangerous for the operator.

Do not remove the protective cover of the internal equipment while operating the cleaner.

The cleaner generates heat when operating, so touch it only when it cools down. Do not touch the steam exhaust vent until it is completely cool.

Do not use the supply cable or the connecting hoses to move the machine.

Do not use the power plug for switching on and off.

Do not use the machine on sloping surfaces.

Do not use the machine when barefoot.

Always wear rubber boots and protective goggles when using the machine

To protect yourself against any parts that may get detached, it is necessary to wear protective clothing (for example, when descaling or hydro-sandblasting, etc.).

Never drink the water coming out from the machine; it has not to be used as drinkable water.

Use the machine where and when you have sufficient lighting.

The machine must never be left unattended while operating. When you have finished with the cleaner or doesn't use it for a long period of time, you must switch it off.

When using the machine in dangerous areas (eg. fuel service pumps) keep to the relevant safety regulations.

The machine equipped with "Total Stop" (or Stop'n Go) device, automatically stops if it is inactive for more than one minute, thanks to a safety device, in order to avoid damaging the seals. To use it again it is enough to open the spray gun. If your machine has not the Total Stop, after 4-5 minutes of inactivity, you have to switch it off manually.

Do not cover or store the machine in insufficiently ventilated areas.

Do not repair the pump when operating or powered up.

Do not carry out makeshift repairs on the power cable and prevent it from getting damaged. In the case of damage, the entire cable must be replaced by the technical support service.

Do not direct the water jet against the machine or any live components (cable, plugs, etc.). This can cause electrical damage and danger for the operator.

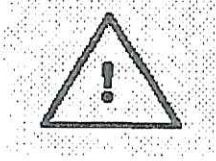
Avoid using the pump under the rain or in thunderstorms and whenever water or other liquids may come into contact with the cleaner. Every electrical component must be protected against water splashes to avoid short-circuiting.

Do not place heavy objects on the machine cover.

Do not put anything on the exhaust vent to allow steam coming out.

Avoid dry running the pump as it could damage its internal parts.

PRECAUTIONS FOR THE USE OF THE HIGH-PRESSURE HOSE



The high-pressure hose supplied has undergone strict safety testing. Damage to the hose can easily be avoided by observing the following precautions:

- Lay out the hose before starting work.
- Do not pull on knots that may form, lay the hose out.
- Do not crush or bend the hose with any means.
- Do not move the appliance by pulling the hose.

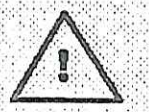
In addition, avoid using the hose in the case of the outer covering swelling or getting damaged. Never try to repair the hose and replace it with a new one in case of trouble.

ACCESSORIES

Should you use accessories other than those provided by us, carefully follow their instructions. Always check that the accessories are suitable to the high-pressure cleaner they are to be applied to.

The manufacturer accepts no liability for the use of non-genuine spare parts that could damage the machine or cause physical damage to the operator.

ROUTINE MAINTENANCE



Warning: If the machine is out of order or malfunctions, such as oil or water leak, immediately switch it off using the main switch, and inform the qualified personnel. Switch off the machine and disconnect the water and power supply and do not carry out any repair. Immediately contact qualified personnel. The repairs must be carried out by an authorised technical support service, always using genuine spare parts.

The following operations should be carried out in order to avoid damage to the highly stressed mechanical parts and to preserve the performance of your high-pressure cleaner. For all maintenance work on the boiler, the high-pressure pump and the machine in general, it is necessary to call specialized personnel or one of our authorized technical support services.

Before any maintenance work on the machine:

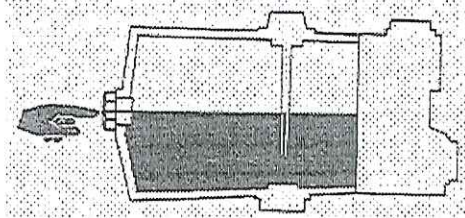
- 1 - Switch off the cleaner (turn to OFF/0 position).
- 2 - Disconnect the machine (unplug it).
- 3 - Shut off the water tap.
- 4 - Discharge the residual pressure (pull the lever of the gun).



WARNING: The cleaner CANNOT BE OPENED without prior approval of the technical support service.
SAFETY HAZARD - LOSS OF WARRANTY

1) The pump oil level should be regularly checked; it must always be above the marker. Change the oil after 50 working hours, and successively every 500 hours; use oil type SAE 20/30. To check the oil level, unscrew the grips and lift the cover vertically upwards.

Now check that the oil level inside the high-pressure pump is at least half of the oil inspection hole of the pump (or unscrew the oil cap and check that the oil level is above the minimum marker). If the quantity of oil is not enough, do not start the machine.



2) Do not leave the pump exposed to very low temperatures as it may freeze. Stopping the machine at temperatures below 0°C can cause damage or breakage to the pump and hoses; it is therefore advisable to drain them completely and intake a small quantity of antifreeze for the winter period. Conversely, very high temperatures can cause the motor to overheat when the machine is operating.

DAMAGE CAUSED BY FREEZE ARE NOT COVERED BY WARRANTY



3) When the pump is not used for a long period of time, scale may form and make instant start of the electric motor difficult. In this case, to avoid anomalous current absorption with consequent voltage drop, we advise moving the driving shaft by using a screwdriver before starting the motor (**Important:** this must be done when the machine is not connected to the power supply). This will let you check why the motor jammed (if caused by frost, scale, or anything else) and take appropriate measures.

4) Never intake corrosive liquids (paints, acids, solvents, oily or very thick liquids), which could permanently damage the pump. To avoid chemical deposits building up, we suggest intaking clean water.

5) The cleaning of the boiler must be done each 200 working hours as follows:

- disassemble the nozzle and the electrode-holder flange (burner head)
- clean the nozzle filter using compressed air and check the position of the electrodes
- take away the boiler cover and clean the baffle
- remove the inside cover
- unscrew the locking nuts of the coil and take it off from boiler
- clean the coil using a wire brush
- suck the residue from the boiler
- reassemble the cleaner proceeding in the reverse order
- the total check and the combustion regulation must be regularly carried out by specialized personnel as provided for by current regulations

6) Descaling must be regularly done by using specific products according to the water hardness. In a water can of about 15 litres, pour one litre of scale preventer type "TM KAL" or "TM COILS" following the instructions provided on the package.

Use a can with tap, connect the tap to the water supply of the cleaner (Fig. 4).

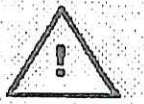
Keep the can in such a way so that the scale preventer flows out.

Take the gun off from the high-pressure hose, put the other end of the hose inside the can to create a closed circuit and let the cleaner intake the scale preventer for at least 10 minutes.

We advise the delivery hose discharge inside a small cloth bag to avoid intaking the scale taken away. Restore the normal connection and rinse with cold water.

This operation should be carried out by our technical support because the scale preventer could damage the components.

For the disposal of the scale preventer, observe the current regulations.



CAUTION: the scale preventer/scaler contains acid substances, which could damage the objects to be cleaned. Make sure you have correctly rinsed the cleaner.

- 7) Regularly check the state of wear of the electrodes; electrode tips should be 3 mm apart.
- 8) Replace the high-pressure water hose after every 2 years of activity.
The new hose must be clearly marked, i.e. with the maximum allowed pressure and the manufacturer's name or a suitable symbol. Before use, check the pressure values of the new hose as they must correspond to those of the cleaner.
- 9) Should the water filter get dirty or clogged, the water quantity is reduced, thus damaging the pump. A slightly damaged filter doesn't work properly, thus causing damage to the pump, and may let foreign matter in. Regularly (at least each 500 working hours) take the filter away and clean it to remove dirt. In case of doubt replace the filter to avoid foreign matter coming into the pump.
- 10) The clogging of the nozzle, caused by either limescale or anything else, increases the pump pressure, and damages it. It is necessary to regularly clean the nozzle.
- 11) Regularly check the diesel filter and replace it if it is too dirty or damaged.
- 12) Should the power cable get damaged, replace it by a special cable H07RNF, according to the wiring. The replacement must be done by a specialized electrician.

CLOGGED NOZZLE - BY-PASS VALVE

IMPORTANT! Should the nozzle get clogged, the cleaner is equipped with a by-pass valve to automatically control the excess of pressure.

The by-pass valve immediately reduces the pressure, to protect the mechanical parts of the pump and the motor.

IN CASE THE BY-PASS VALVE IS TAMPERED WITH, THE MOTOR AND THE PUMP COULD BE PERMANENTLY DAMAGED!

THE BY-PASS VALVE CAN BE REGULATED, CLEANED, REPAIRED OR REPLACED ONLY BY THE TECHNICAL SUPPORT SERVICE.

TROUBLESHOOTING

Should the cleaner malfunction, refer to the following table. Should troubles persist, refer to an authorized expert technician.



CAUTION: Before any repair, disconnect the machine from the network.

PROBLEM	REASON	REMEDY
Pump normally runs but doesn't reach the required pressure	Pump sucks air in	Operate the pump with spray gun open
	Inlet/outlet valves worn or dirty	Clean or replace
	Nozzle unsuitable or worn	Check and/or replace
	Seals worn	Check and/or replace
	Suction filter clogged	Clean or replace
Fluctuating pressure	Pin of control valve	Clean or replace
	Inlet/outlet valves worn, dirty or clogged	Check/clean or replace
	Air intake	Check that hoses and fittings are air tight
Pressure drop	Seals worn	Check and/or replace
	Nozzle worn	Replace nozzle
	Inlet/outlet valves dirty	Check/clean or replace
	Pin of control valve worn or clogged	Check and/or replace
Noise	Seals worn	Check and/or replace
	Air intake	Check that hose and fittings are air-tight
	Inlet/outlet valves dirty, worn or clogged	Check, clean and/or replace
Water in oil	Bearings worn	Check and/or replace
Water dripping from pump head	Water-oil seal rings worn	Check and/or replace
	Seals worn	Replace
Oil leaks	O-ring worn	Replace
	Oil seal ring worn	Replace
The motor doesn't start	Not correctly plugged in	Check cable plug and switch
	No power supply	Check cable plug and switch
The motor hums but doesn't start	The mains voltage is insufficient, lower than the minimum required	Check that the mains power supply is adequate
	The pump is stuck or frozen	Check by manually turning the motor (see MAINTENANCE)
	Incorrect extension cable	Replace extension cable
The motor suddenly stops	Tripped thermal overload due to overheating	Check that the mains voltage matches the specifications. Switch off the motor and let it cool for a few minutes
The burner doesn't start	Lack of diesel	Check the diesel level and/or the float
	Electrodes worn	Adjust (see MAINTENANCE)
	Electrodes damaged	Replace
	Diesel filter clogged	Replace
	Diesel nozzle clogged	Clean the burner nozzle
	Fuse of the burner and transformer motor blown	Replace
The operations marked with the black square must be done only by qualified personnel		

DISPOSAL OF THE MACHINE

When you decide to scrap the cleaner, please take the following steps:

- drain the various tanks;
- disconnect the machine from the mains;
- cut the external supply cable;
- cut the motor supply cable;
- remove the castors;

ECOLOGICAL INFORMATION

You must observe the current local regulations regarding water supply. Pursuant to the pollution standards, the cleaner cannot be connected directly to the public drinking water supply network in order to prevent chemicals from entering the water mains. The Water and Gas Board does however allow connection to the public water supply for a short time only if a check valve is fitted in the piping. This must be fitted directly on the water tap.

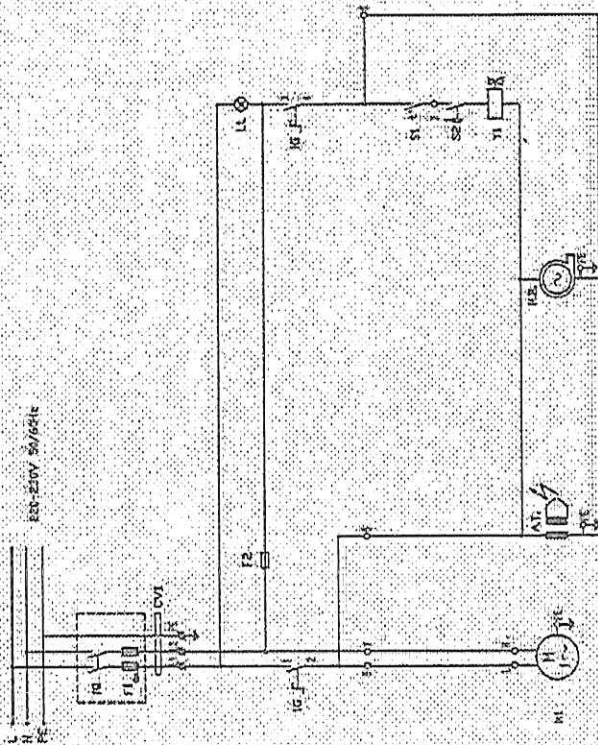
Disposal of the machine's packaging, extracted dust, parts replaced, the machine altogether, and the various liquids must be done in an environmentally-friendly manner, without polluting earth, air and water, and in any case complying with the relevant regulations in force.

INSTRUCTIONS FOR SUITABLE WASTE TREATMENT:

Instructions for suitable waste treatment:

- Ferrous materials, aluminium, copper: recyclable materials to be given to an authorized collection centre.
 - Plastic materials: materials to be taken to a landfill site, incinerator or a special recycling centre.
 - Used oils: give them to an authorized collection centre
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SCHALTPLAN-WIRING DIAGRAM-SCHEMA ELECTRIQUE-ESQUEMA ELECTRICO-SHEMA ELETTRICO

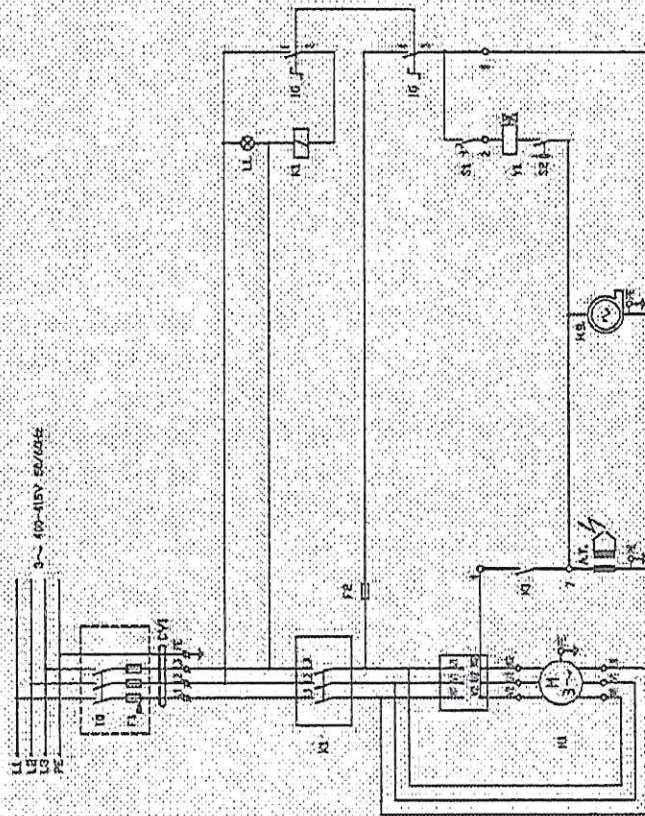


REF.	DENOMINAZIONE	DESCRIPTION	REF.	DENOMINAZIONE	DESCRIPTION	REF.	DENOMINAZIONE	DESCRIPTION
CV1	CAVO ELETTRICO	SUPPLY CABLE	S1	TERMOSTATO	THERMOSTAT CONTROL	F1	FUSIBILE 20A	FUSE 20A
AT	TRASFORM. A.T.	H.V. TRANSFORMER	S2	PRESS. BRUC.	PRES. BURNER	F2	FUSIBILE 4A	FUSE 4A
Y1	ELETTRIGASOL. ID	ELECT. FUEL	MB	BRUCIATORE	BURNER MOTOR			
INTRGEN.	INTRINSECO	MAIN SWITCH	M	MOTORE 1F	MOTOR 1F			

SERIE MX HP 3.5 230V 50H-60HZ

DATE 29/04/05

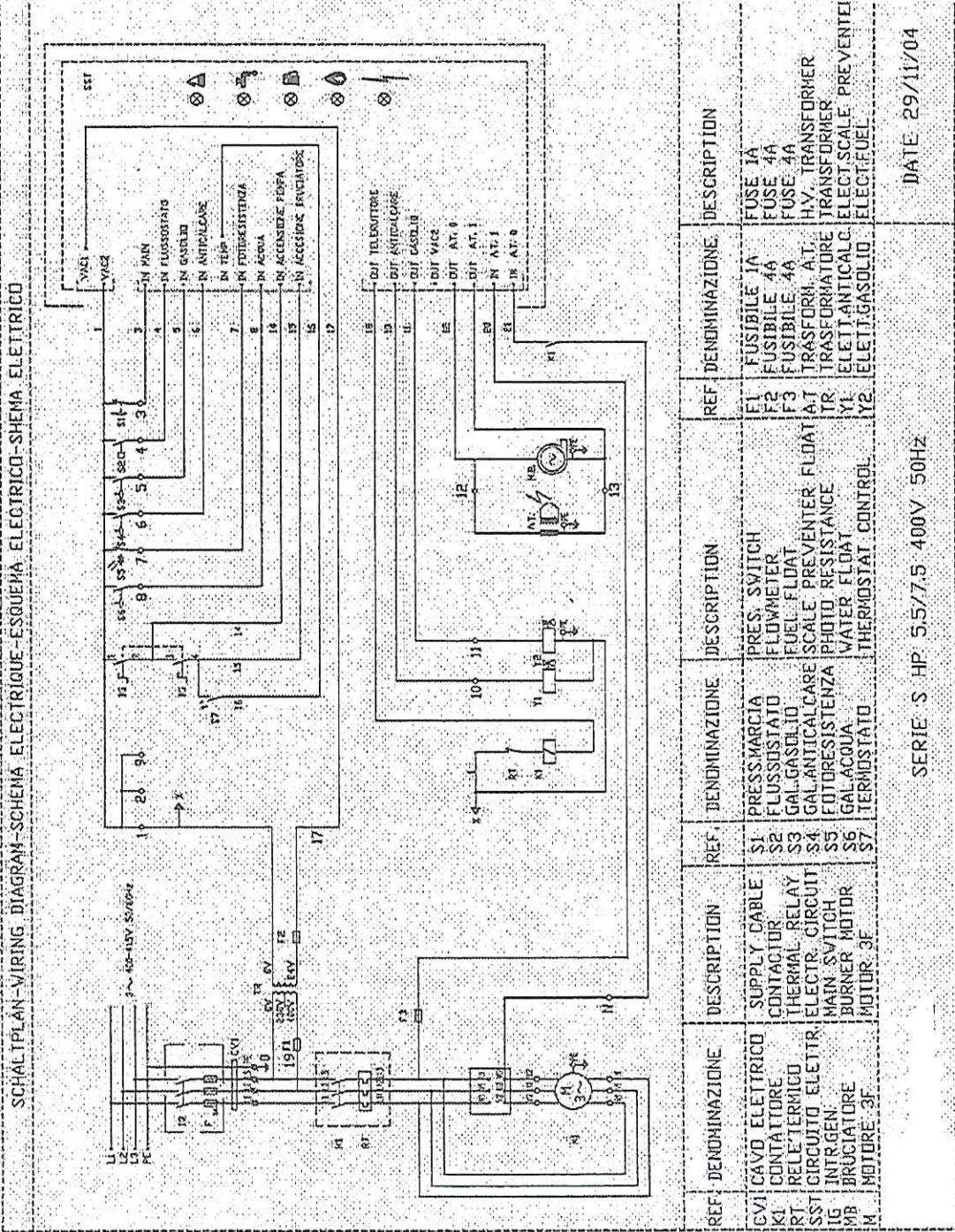
SCHALTPLAN-WIRING DIAGRAM-SCHEMA ELETTRICO-EESQUEMA ELECTRICO-SHEMA ELETRICO



REF.	DENOMINAZIONE	DESCRIPTION	REF.	DENOMINAZIONE	DESCRIPTION	REF.	DENOMINAZIONE	DESCRIPTION
CV1	CAVO ELETTRICO	SUPPLY CABLE	S1	TERMOSTATO	THERMOSTAT CONTROL	F1	FUSIBILE 20A	FUSE 20A
K1	CONTATTORE	CONTACTOR	S2	PRESS.BRUC.	PRES. BURNER	F2	FUSIBILE 4A	FUSE 4A
Y1	ELETTRIGASOLIO	ELECT. FUEL	MB	BRUCIATORE	BURNER MOTOR	AT	TRASFORM. A.T.	H.V. TRANSFORMER
IG	INTRIN.	MAIN SWITCH	N	MOTORE 3F	MOTORE 3F			

SERIE MX HP 5.5 400V 50HZ

DATE 06/04/05



REF	DENOMINAZIONE	DESCRIPTION	REF	DENOMINAZIONE	DESCRIPTION	REF	DENOMINAZIONE	DESCRIPTION
CV1	CAV0 ELETTRICO	SUPPLY CABLE	S1	PRESS.MARCIA	PRES. SWITCH	F1	FUSIBILE 1A	FUSE 1A
K1	CONTATTORE	CONTACTOR	S2	FLUSSOSTATO	FLOWMETER	F2	FUSIBILE 4A	FUSE 4A
RT	RELE TERMICO	THERMAL RELAY	S3	GAL.GASOLIO	FUEL FLOAT	F3	FUSIBILE 4A	FUSE 4A
RT	CIRCUITO ELETTR.	ELECTR. CIRCUIT	S4	GAL.ANTICALCARE	SCALE PREVENTER	AT	TRASFORM. AT.	H.V. TRANSFORMER
IG	INTRIGEN	BURNER SWITCH	S5	FIDORESISTENZA	PHOTO RESISTANCE	TR	TRASFORMATORE	TRANSFORMER
MB	BRUCIATORE	BURNER MOTOR	S6	GAL.ACQUA	WATER FLOAT	Y1	ELETT.ANTICALC.	ELECT SCALE PREVENTER
M	MOTORE 3F	MOTOR 3F	S7	TERMOSTATO	THERMOSTAT CONTROL	Y2	ELETT.GASOLIO	ELECT.FUEL