High Pressure Cleaner

MASTER

Instructions Manual

Instructions for installation and use

Manufactured by:
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ITALY

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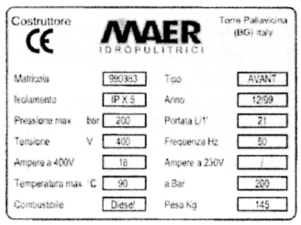
ATTENTION: do not use the high pressure cleaner without reading the manual

INSTRUCTIONS MANUAL
INSTRUCTIONS FOR INSTALLATION AND USE

Congratulations!
By purchasing a MAER high pressure cleaner, you have purchased a high technology machine that will allow you to realize, for a long time, washing operations with care, versatility and safety. The customer and buyer must verify that the operators have read and know the content of the manual and that, therefore, attentively and meticulously follow all the indications. The manufacturer doesn't respond of the damages caused to things, people or animals or those suffered by the high pressure cleaner itself, if the conditions here clarified are not respected. This manual is an integral part of the machine and therefore must be preserved with care for all the life of the high pressure cleaner, up to its demolition. The manufacturer reserves himself the right to the change, also without warning, of his/her own products, without varying, in the case in which the changes are marginal, the documents and the relative technical documentation.

1. Field of employment
1.1. The high pressure cleaner is exclusively destined to the washing, by a jet of high pressure hot water, of objects and surfaces available to sustain its mechanical and thermal action, and, eventually, the chemical action of the additive liquids, detergents and disinfectants, etc...; it allows therefore the cleaning, the disinfection, the sandblasting, the scaling, etc… using accessories, of objects and of surfaces.
1.2. The destination of employment of the high pressure cleaner must meticulously been respected, and every other employment must be considered improper.
1.3. The nameplate of identification (with the technical characteristics of the machine) is positioned on the machine and it is always present. Please make sure, when you Purchase the high pressure cleaner, that the machine has this nameplate of identification. Otherwise, advise immediately the supplier. Machines without nameplate of identification have to be considered anonymous and potentially dangerous; they mustn't be used, otherwise every responsibility of the manufacturer will decade.



2. Characteristics of the personnel employed to use the high pressure cleaner
2.1. All those people that deal with the operation of the machine must dispose of a specific education or of an experience matured on high pressure cleaners.
2.2. To prevent damages to things, people or animals, we recommend to the clients to inform all the operators about the possible consequential risks caused by the installation and the use of the high pressure cleaner.
2.3. The operator of the machine has to use always the described means of personal protection, according to the law of the country of destination and what is given to him/her by his/her employer (safety shoes, work overalls, protective glasses, etc...).
2.4. The personnel employed to the installation, to the use or to the maintenance of the high pressure cleaner must be adult, experienced, mature and aware of his/her own suitable assignments and must be able to correctly interpret what described in this manual, guaranteeing correctness, safety, as well as scrupulousness in the controls.
2.5. Possible consequential responsibilities from the employed, and authorized personnel, to the installation or to the use of the machine are delegated to the customer buyer.
2.6. Those people that deal with the maintenance must dispose of knowledge and specific (maintenance technician) competences that allow him to correctly interpret instructions and sketches.

3. Accidents prevention

3.1. The instructions furnished in this manual don't replace in any way the norms related to the safety, to the installation and the use, to the technical data or the norms in force in the nation of installation or use or the norms dictated of the common sense.

3.2. Technicians or maintenance technicians are obliged to notify any possible defects or deteriorations that are able, in any way, to compromise the original safety of the plant.

3.3. The serial high pressure cleaner is not equipped for working in environments characterized by particular conditions of inflammability or explosiveness; flameproof equipment is supplied only and exclusively on specific request. It is forbidden to install the high pressure cleaner in environments where inflammable materials are present or with particles it suspended in the air: acids, inks, varnishes, resins, solvents, plastic subjects, etc.; follow the norms imposed by the fire department.

3.4. During the filling of the fuel tank, the high pressure cleaner must be disconnected from the electric network. At the same time it is absolutely forbidden to smoke or approaching the machine with free flames during the filling of the fuel tank.

3.5. The hot water high pressure cleaners are projected for an economic combustion, clean and respectful towards the environment and deprived of the residual exhaust gases. Despite this, inhaling high quantity of gases, such CO, is harmful and lethal.

3.6. If the high pressure cleaner is installed or used in closed environments (like garages or establishments), it is necessary to predispose a device of evacuation of the gases together with a recycling of the air supply and for the restoration of the air in the place or in the closed environment.

3.7. Never obstruct the terminal of the chimney; with objects, lance or gun, in proximity of the outlet of the smokes. It is also considered highly dangerous, both for the smokes and also for the elevated temperatures reached. To avoid possible burns, inform technicians and operators about it.

3.8. The high pressure cleaner and its plant as the place and the environment, are forcedly exposed to the water and the damp that injure the natural conditions of isolation of the plant. Don't use therefore unsafe electric cables, thorns or plugs, and sockets; check the integrity and the insulation of the electric cable, together with the equipment of the operators. Don't absolutely touch the thorn or the plugs with wet hands or feet. To avoid accidental switching on, turn the interrupter on OFF before inserting or disconnecting the power supply. Don't pull the high pressure cleaner using the electrical cable or extract its thorn from the socket.

3.9. Use with extreme care the chemical detergents not to deteriorate the environment (degradability 90%), parts or components of the machine, according to the updating of the legislative decree. Besides, always check the degradability and the aggressiveness of the used detergents. Never use acids, inks, solvents, liquid oily, varnishes, resins, etc…

3.10. The "cold" starting of the high pressure cleaner can cause some serious damages to the pump and the circuits; the standstill prolonged at temperatures under 0°C could cause breakups and damages to the pump and the pipes; therefore the emptying of the machine is advisable.

3.11. Always protect the high pressure cleaner from the atmospheric agents, from the cold and from the frost.

3.12. Never direct the jet of water towards people (not even to clean their clothes or their shoes) or animals, nor the machine itself or any objects under electrical tension.

3.13. Lance and gun, although equipped with proper hilts, have a modest counterblow (about 22N) to the departure of the jet; hold them with strength with both hands. Never touch the jet of water during the operation of the high pressure cleaner.

3.14. If some defects, damages or deteriorations on the machine are found, disconnect it immediately, and call an assistance authorized center or the supplier.

3.15. Don't leave never, without overseeing, the high pressure cleaner working in presence of children.

3.16. ATTENTION: If used in the correct way and it is in a good state, the high pressure cleaner sends forth a sonorous level of pressure (noisiness) of 101 dB.

3.17. **The high pressure cleaner has security devices for a safety use:**

-Thermostat
-Pressure switch
-Flow switch
-Photocell for combustion control
-Magnetothermic switch for motor protection
-By-pass valve

-Gasoil float
-Water float
-Electric controls 24V
-Timed total stop system DSS

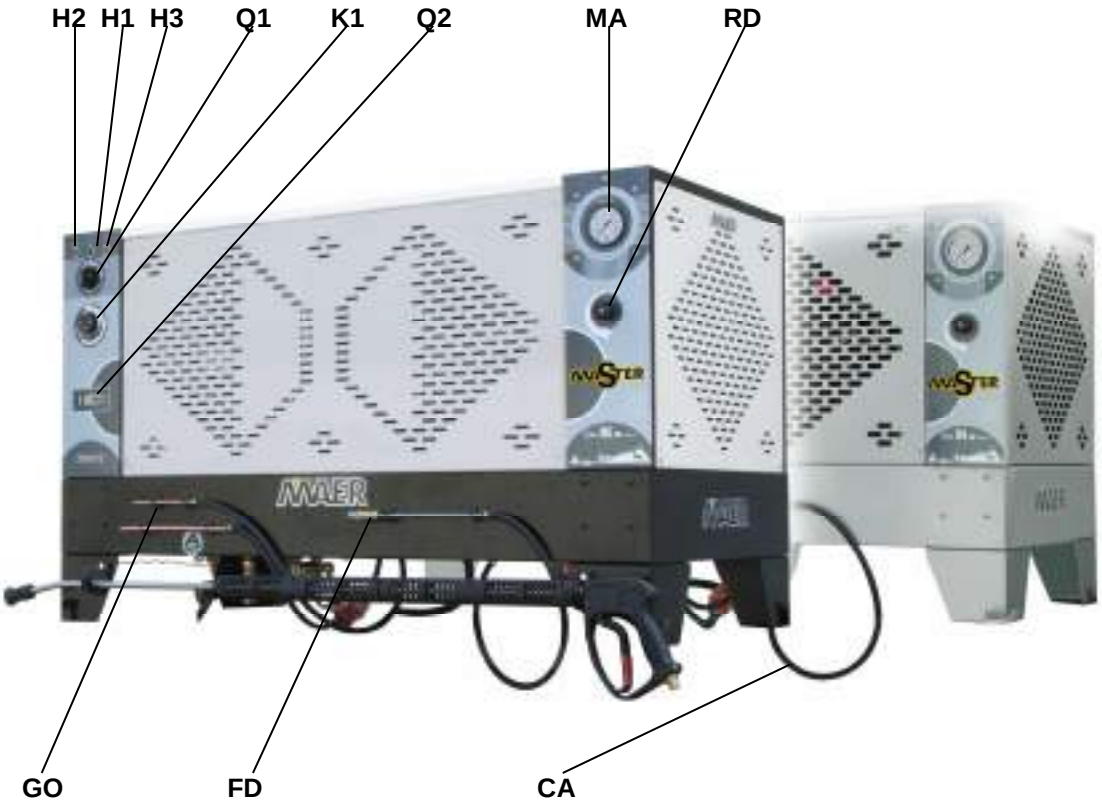
3.18. The high pressure cleaner MASTER is provided with a timed total stop system. If the pistol remains closed for more than 10 sec., the motor will stop. The motor will start again by opening the pistol. In addition the machine will stop after 10 false starts (due to micro-leaks) or after 60 minutes without use. In this case the red light will blink. To restart the machine, turn OFF the switch Q2 and then, turn it ON again.
3.19. ATTENTION: The by-pass security valve allows to regulate the flow and the pressure of the water. In addition it protects the pump from overpressure. The valve is set to the maximum allowed pressure and the nut on the knob is sealed with paint. Replacements, reparations and new regulations must be made by specific and authorized personnel.
3.20. ATTENTION: The magnetothermic switch protects the motor from overloads. In case of overload the magnetothermic switch stops the motor. To restart the motor, turn OFF the main switch and then turn it ON again. Replacements and reparations must be made by specific and authorized personnel with the machine unplugged from the electricity network.

4. Characteristics of the high pressure cleaners
The high pressure cleaners MASTER are divided in the following models

Model	Maximum pressure (bar - psi)	Maximum flow (l/min - gal/min)	Installed power (KW)	Voltage 50Hz (V)	Water temperature (°C - °F)	Weight (Kg - lb)
150/15	150/2175	15/3,6	4,3	400	30-100/85-212	200/515
200/15	200/2900	15/3,6	5,8	400	30-100/85-212	200/515
150/21	150/2175	21/4,7	5,8	400	30-100/85-212	200/515
200/21	200/2900	21/4,7	7,6	400	30-100/85-212	200/515
200/30	200/2900	30/7,9	11	400	30-100/85-212	200/515

5. Instruments of the high pressure cleaner

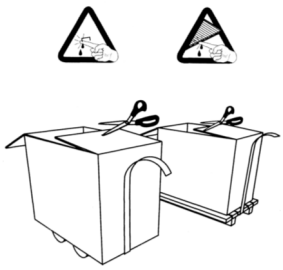
Q1: Two-way switch (pump and burner)
Q2: Magnetothermic switch (ON/OFF)
H1: Green light (power supply on)
H2: Red light (alarms)
H3:Orange light (burner)
K1: Thermostat
MA: Pressure gauge
RD: Detergent adjustment tap
FD: Detergent filter
CA: Electric connection cable
GO: Gasoil suction hose



6. Transport and unpacking

6.1. Submit lifting and transport to specialized personnel. Protect the machine, especially during the transports on road, from bumps, damps or from vibrations, etc…; to underline the dangerousness in the moving of the suspended loads, operators must be warned about risks of collisions.

6.2. To unpack the high pressure cleaner, verify that is not damaged and has got all the parts and components. In the case in which the machine is damaged, please call the supplier and do not use the machine. We remember that the elements used in the packing of the machine could hurt the operator if not handled with care. These elements must be digested therefore and not left to the course of children or of irresponsible persons. The same is worth for the objects used in the removal of the pack (knives, scissors.). For tied up demands to packing and transport, some components are supplied not installed; proceed therefore to the installation according to the instructions of the manual.



7. Installation

7.1. Control carefully that the environment for the installation of the high pressure cleaner considering all the foreseen and unforeseen possibilities.

8. Connection to the electricity supply

8.1. The high pressure cleaner can be connected to alternating current single phase (230V) or three phase (400V) with frequency 50Hz. For the three phase models, the high pressure cleaner is normally supplied connected to 400 V, although can be in demand connected to 230V three phase.

8.2. For the maximum absorption of the electricity, compare the underlying chart.

8.3. Verify that the electric net, to which the machine is connected with the electric cable CA, has the appropriate characteristics.

8.4. The high pressure cleaner is endowed with a magnetothermic switch that interrupts the power supply in the case the absorption of the supply overcomes the value of the setting; for the location of the switch, take a look to the electric plan attached to the machine.

8.5. The client buyer is kept to subsequently protect the line of the power supply by installing a lifesaver with a load not exceeding 30A.

8.6. The cable is supplied without plug for the connection to the net: this must be installed by the buyer, which will verify that:

The plug is proper for the data of the voltage and the tension above described.

The plug is conforming to the norms in force in the nation of use and that in any event it is earthed.

The connection cable and plug connection is waterproof.

8.7. If a cable with extension is used, this must have a minimum section of 4 mm^2. The flying thorns and plugs are forbidden.

8.8. If the cable of connection is damaged, this must be immediately replaced with a proper cable: such operation must be performed by specific and authorized personnel.

Power	Motor absorption(A)	Thermic switch 230V (A)	Thermic switch 400V (A)
KW 4	10	16	11
KW 5,5	13	22	14
KW 7,5	15,6	28	20
KW 11	23	41	25

9. Connection to the water supply

9.1. The pressure of the water supply must be at least 2 bar.

9.2. The water supply must provide a flow of water of at least of the 10% of the course of the high pressure cleaner (compare the chart with technical characteristics).

9.3. First of all, connect the water supply tap to the machine input pipefitting **IN**, using a hose with proper diameter.

9.4. Than, connect the lance to the link of exit **OUT**.

9.5. For a long duration of the pump, avoid the use of water containing sand or other particles that jeopardize the efficiency of the valves, the plungers and the seals.

9.5. When the machine is equipped with a special tank, it is convenient to install a filter upstream of the tank: the pipe of water feeding must have a diameter not smaller than the link of the connection to the machine and must be prepared in such way to avoid that possible airlocks are formed.

9.6.The water supply can have a maximum temperature of 60°C and a maximum pressure of 8 bar.

The seals and other parts and components of the pump could be irremediably damaged when the machine is made to work without water, even for short periods. Verify that the tap of the water supply is completely open before the high pressure cleaner is switched on

OPERATION

10. Switching on
10.1. Turn the switch Q1 in position 1 and maintain the thermostat K1 switched off.
10.2. Pull the trigger of the pistol on the lance, holding it with strength to compensate its recoil and let the machine working for 2 or 3 minutes to eliminate possible residues that could clog the nozzle.
10.3. The trigger of the gun has a safety catch that prevents the accidental activation of the lance. Insert it on when the lance is not used.
10.4. If a detergent is used, put the detergent filter FD into it and rotate the detergent adjustment tap RD.
10.5. To operate with hot water turn the switch Q1 in position 2 and regulate the thermostat K1.

11. Switching off
11.1. By releasing the trigger of the gun, the jet of water interrupts and the machine stops (timed total stop system DDS), remaining however turned on and available to the use.
11.2. **To switch definitely off the machine**, turn off the switch Q1; if the machine has worked with hot water it is opportune, before switching off the switch Q1, to lower the temperature. Rotate on 0 (in sense counterclockwise) the thermostat K1, turn the switch Q1in position 1 and let work the high pressure cleaner with cold water for about 2 minutes, to cool the coil.
11.3. For prolonged stand-by, before turning off the machine unload completely the water from the circuit. This procedure is advisable especially in places with temperatures below 0°C.
11.4. As soon as the water flow stops, switch the machine off by acting on the switch Q1.
11.5. ATTENTION: the operation of the pump in absence of water could irreparably damage its seals.

12. Maintenance
12.1. It is absolutely forbidden to effect controls or operations of maintenance with the machine operating or under tension: always remove the electricity supply!!! Don't even effect reparations of fortune or precarious, and never use not-original spare parts.
12.2. The operations of extraordinary maintenance and the control of the combustion must regularly been made by specialized personnel

13. Pump
13.1. The pump is equipped with three plungers in ceramics with automatic recovery of possible leakages.
13.2. If a persistent dripping is noticed under the body of the pump, replace the plungers waterproofing seals. Nevertheless, in the first hours of exercise, a small loss could points out; this is only and exclusively an arrangement of the seals and not a breakdown.
13.3. If there are some losses of oil between the body of the pump and the head of the pump, it is necessary to remove the oil, to get off the head and to handle the substitution of the seals of the head. For this operation it is necessary to contact a specialized and authorized assistance center.
13.4. Restarting the pump after the maintenance to verify that this is supplied of oil. The oil must be replaced after the first 50 hours of operation and subsequently every 500 hours of operation; the ability of the reservoir of the oil is equal to 0,55 liters. Use only and exclusively oil with brand Esso Plus Motor Oil 20W30 or Shell Oil X100 20W40.

PUMP MAINTENANCE TABLE

INSPECTION	DAILY	WEEKLY	50Hrs	EVERY 500Hrs	EVERY 800Hrs
FILTERS	**X**				
OIL		**X**			
OIL/WATER LEAK	**X**				
HYDRAULIC SYSTEM		**X**			
FIRST OIL SUBSTITUTION			**X**		
OIL SUBSTITUTION				**X**	
SEAL SUBSTITUTION					**X**

14. Boiler

14.1. To improve the power of the boiler, is absolutely necessary to clean the coil. Do this operation in the following way:

14.1.1. Get off the group boiler-burner from the machine and separate the boiler from the burner.

14.1.2. Remove the cover of the boiler.

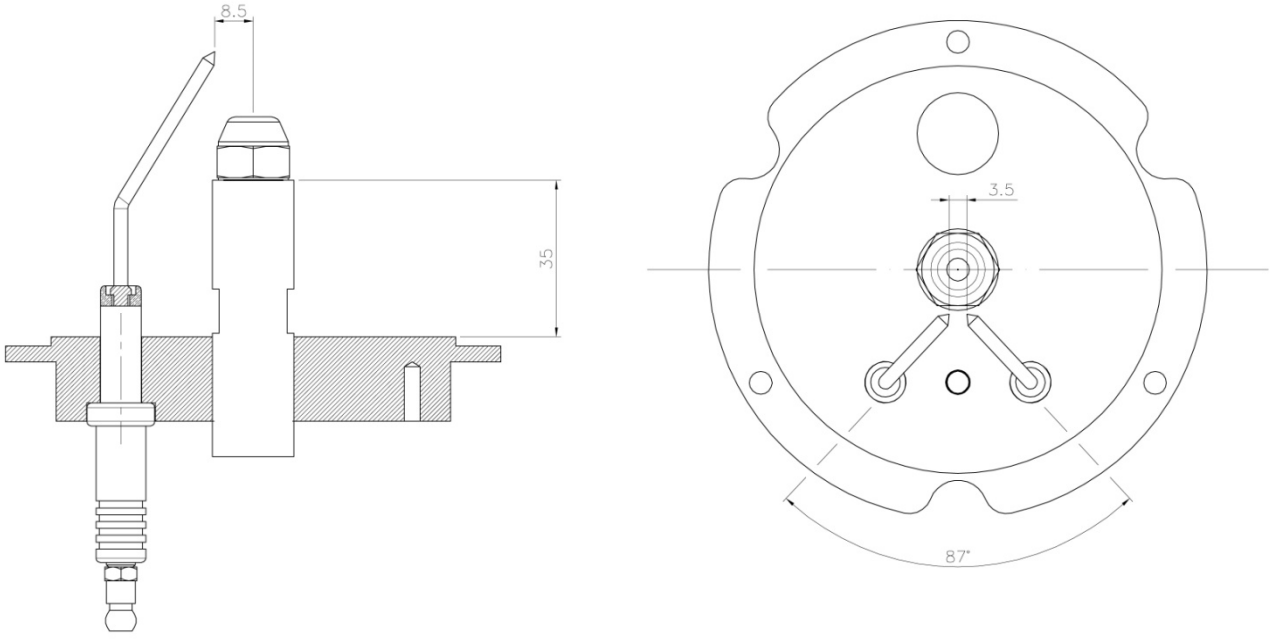
14.1.3. Remove the band of the boiler, freeing the coil.

14.1.4. Use a rigid brush to eliminate the soot from the coil and a vacuum cleaner for the dust.

14.1.5. Reassemble the band, the cover and the burner again, installing the group boiler-burner on the machine.

15. Electrodes

15.1. Periodically check the position of the electrodes to guarantee the best combustion and to avoid the formation of the soot.



16. Fuel filter

16.1. To avoid the seizure or the breakdown of the pump, because of the impurities in the fuel, the circuit of the fuel is equipped with a filter, that must periodically be taken off, and cleaned with a jet of compressed air. The substitution of the filter is advisable when an effective cleaning becomes impossible.

17. Demolition

17.1. To allow the recycling of the raw materials, it is to separate well: pack (if supplied), the exhausted oils and the lubricants, the electric motors, metallic pieces, parts and components in plastics.

17.2. It is compulsory to respect the norms in force related to the production, detention, harvest and disposal of the refusals, according to what established by the legislative decree 22/97. The exhausted oils must be delivered to the National Consortium Obligatory, while possible packing must be digested according to what established by the title II of the legislative decree 22/97.

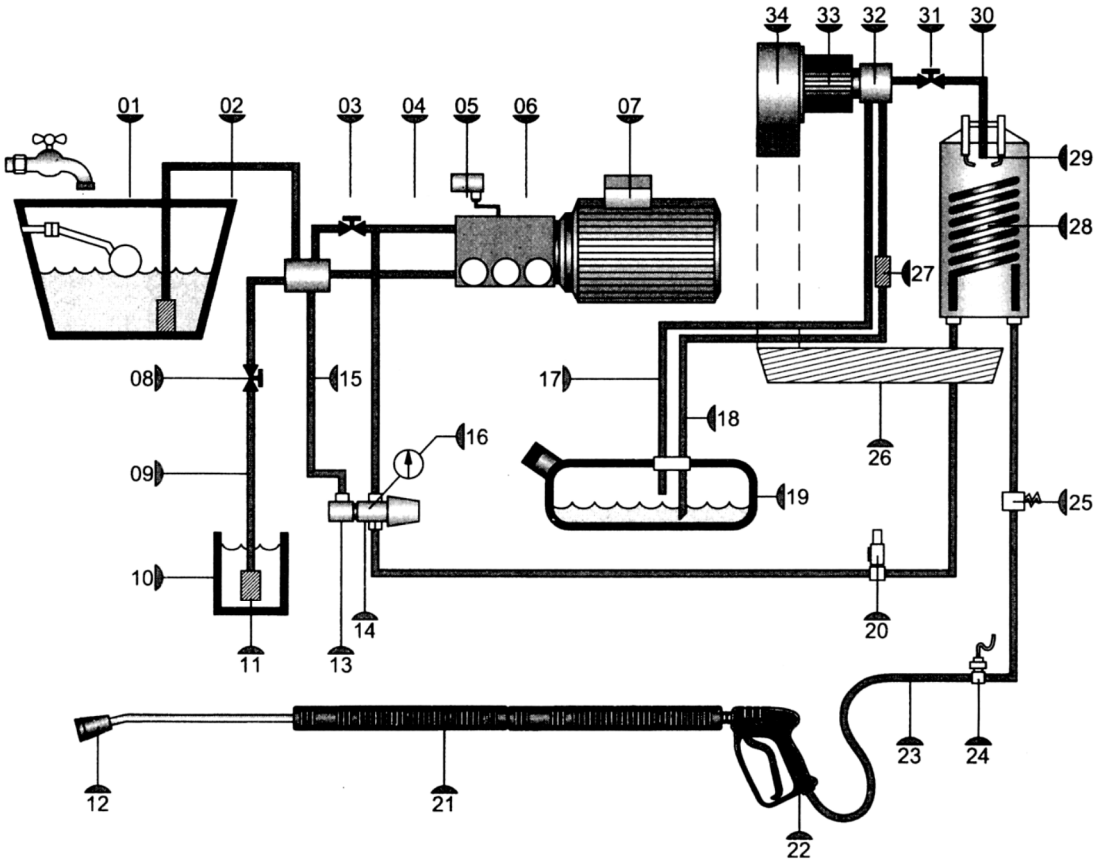
17.3. ATTENTION: MAER IDROPULITRICI society does not assume any responsibility for damages to things, personal or animals, consequential and consequent to the re-use of the single parts or the single components of the machine for function or situation of the assemblage different from the original for which the high pressure cleaner has been conceived. Finally, when demolished, it is to destroy well the nameplate of identification together to every other document related to the same machine.

18. Problems during the operation

Problem	**Cause**	**Solution**
The inlet hoses vibrate	Foreign piece in a valve	Disassemble the valve and remove the foreign piece
	Air suction.	Identify the source of the air suction and eliminate it
The burner does not switch on	The thermostat is not engaged or too low regulated	Insert or adjust the thermostat.
	The fuel is missing.	Put fuel in the tank.
	The electrodes are dirty of badly positioned	Clean the electrodes or regulate them.
	The electrodes supply cables are earthed or burned.	Replace the electrodes supply cables.
	The fuel filter is blocked.	Clean the fuel filter
The burner gives excessive smoke	The air suction is not sufficiently open.	Regulate the air flow by using the airlock.
	The fuel has got excessive pressure.	Regulate the fuel pressure by using the regulation screw.
	The boiler is too dirty	Clean the coil of the boiler.
The water does not reach the lance although the pump is working.	Missing water in the net.	Verify the connection with the water supply and let the water come in.
	Air inside the water circuit.	Bleed the circuit.
	The lance nozzle is blocked.	Remove and clean the nozzle.
	The pump intake valve is blocked.	Unscrew the valve and unblock it.
	The detergent intake tap is open with empty detergent tank.	Close the tap and fill the detergent tank.
	The detergent feeder hose is faulty.	Replace the detergent feeder hose.
The pressure at the lance is weak although the pump is under high pressure.	The coil of the boiler is blocked.	Clean the coil by washing it with a scaling fluid.
	The lance nozzle is blocked.	Remove and clean the nozzle.
	The pressure valve is dirty.	Remove and clean the valve.
	There is lime scale encrusted inside the pressure adjustment valve.	Remove the valve, clean it and scale it carefully.
The motor does not switch on.	The fuses have burnt	Change the fuses.
	The switch is disconnected.	Rearm the switch.
	The by-pass valve does not gives electric signal to the electronic board.	Check the microswitch on the valve.

19. Hydraulic plan

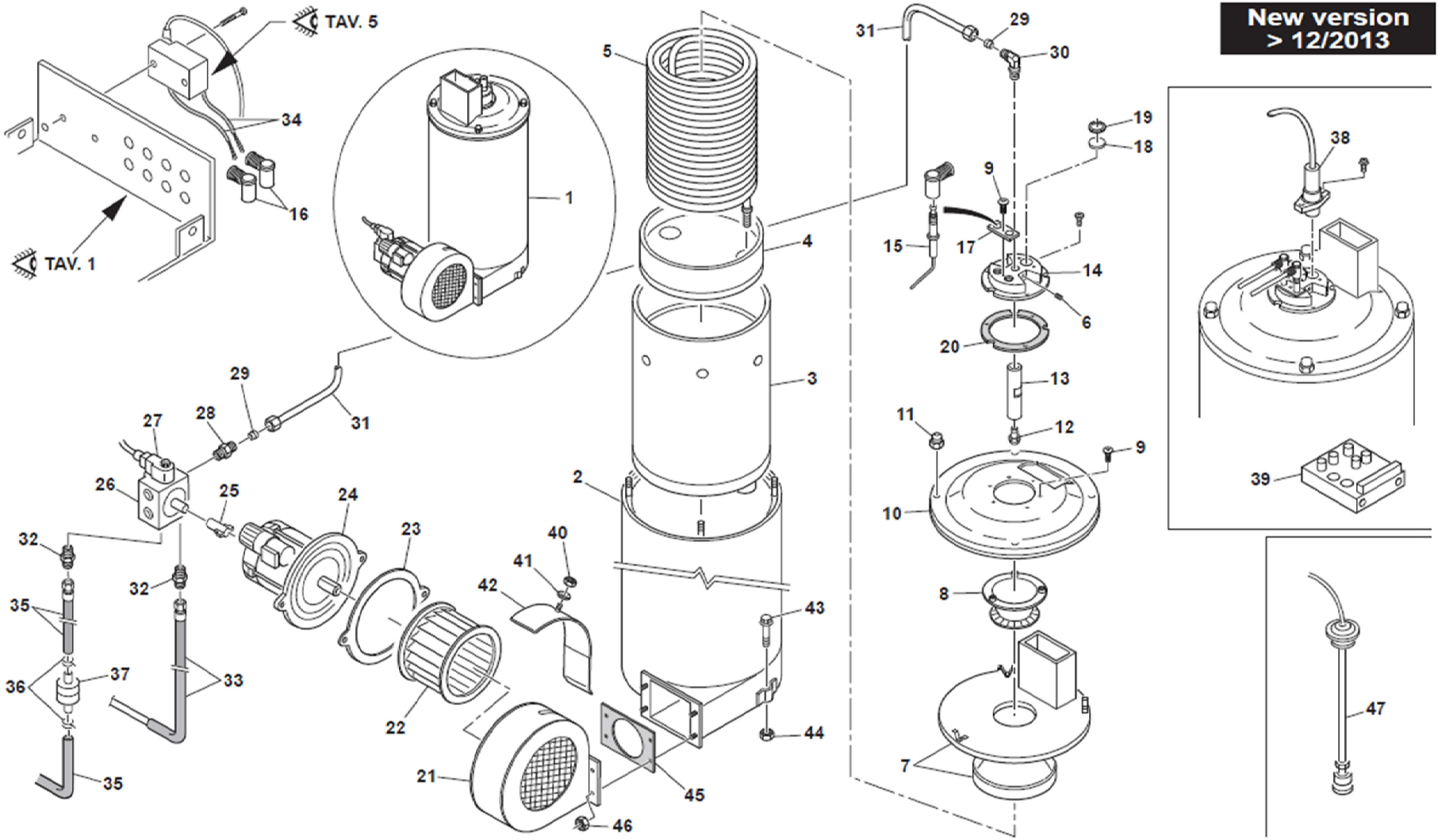
1) Water tank with float
2) Water inlet hose
3) Flow adjustment tap
4) Delivery hose
5) Burner pressure switch
6) Pump
7) Motor
8) Detergent tap
9) Detergent inlet hose
10) Tank
11) Filter
12) Nozzle
13) Microswitch
14) By-pass valve
15) By pass hose
16) Pressure gauge
17) Fuel return hose
18) Fuel inlet hose
19) Fuel tank
20) Safety valve
21) Lance
22) Pistol
23) 10 m high pressure hose
24) Thermostatic probe holder well
25) Flow switch
26) Boiler bottom
27) Fuel filter
28) Coil
29) Fuel nozzle
30) Fuel delivery hose
31) Pipe fitting
32) Fuel pump
33) fan
34) Air conveyor



MASTER

HIGH EFFICIENCY
BOILER 15 LT

AVANT
AVANT X

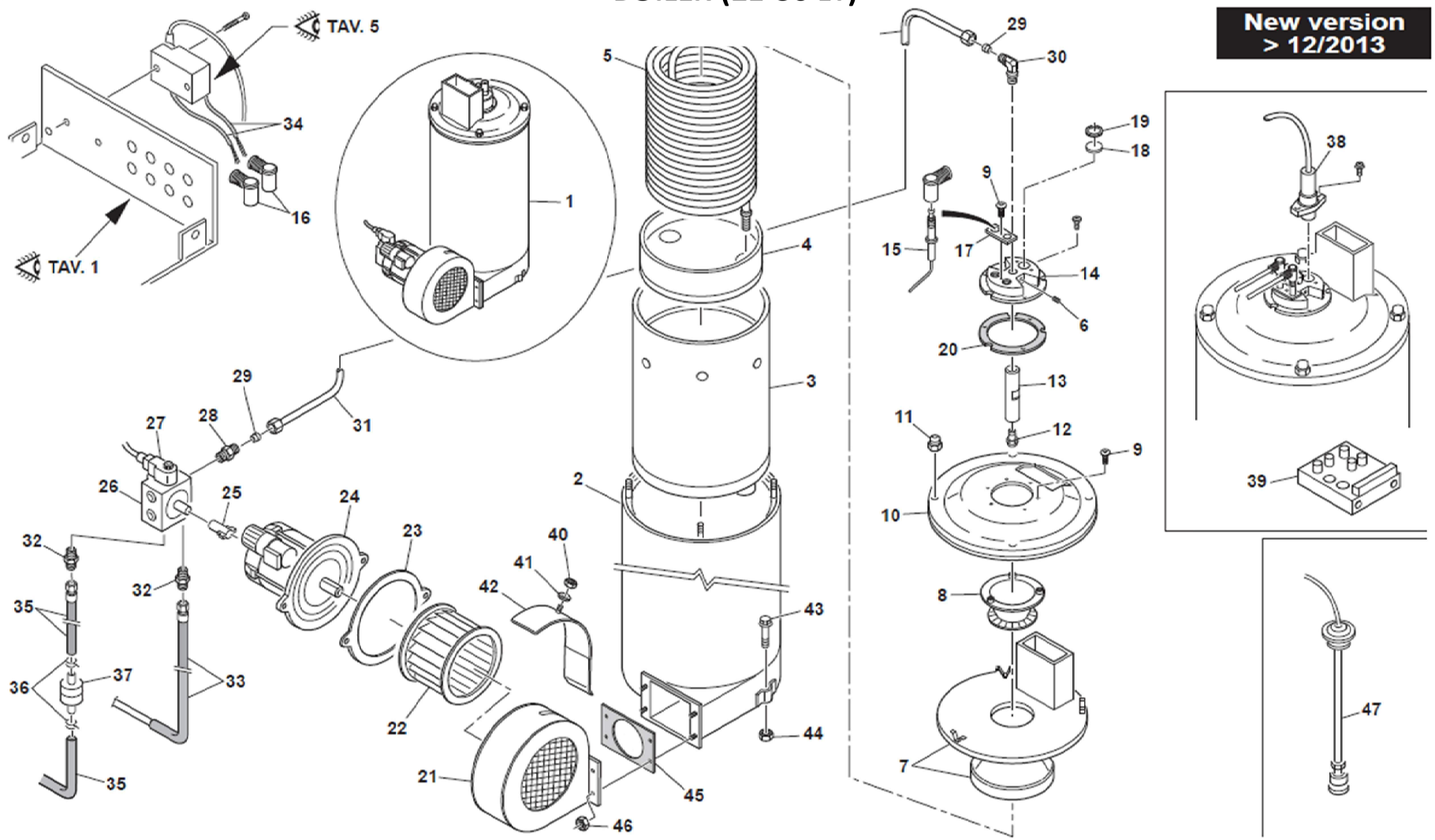


20. HIGH EFFICIENCY BOILER (15 LT)

POS.	PART NUMBER	Q.TY	DECRIPTION
1	50.001.002	1	Complete boiler
2	50.000.002	1	Boiler body w/ s.s. fan housing
3	50.000.003	1	Boiler liner
4	50.000.118	1	S.S. bottom w/ cement
5	50.000.006.1	1	Coil
6		1	Dowel
7	50.000.032.1	1	Complete head w/ chimney
8	50.000.069.1	1	Deflector
9		6	Screw
10	50.000.012.1	1	S.S. shaped cover
11	20.000.025	4	Nut
12	50.000.013	1	Fuel nozzle
13	50.000.115	1	Fuel nozzle holder
14	50.000.016.1	1	Electrode holder alum. disc
15	50.000.211	2	Electrode
16	50.000.116	2	Connector
17	10.001.007	1	Electrode fixing plate
18	50.000.017	1	Glass
19	50.000.018	1	Seeger
20	50.000.015	1	Gasket
21	50.000.251	1	S.S. ventilation
22	50.000.109	1	Fan
23	50.000.172	1	Gasket
24	50.000.021	1	Burner motor N2
25	50.000.022	1	Fuel pump joint
26	50.000.029	1	Fuel pump
27	50.000.024	1	24V fuel solenoid valve
28	20.000.019	1	1/8 Coupling
29		1	Ogive
30		1	90° fitting
31		1	Inlet fuel pipe
32	20.000.014	2	Nipple
33	90.000.047	1	Outlet fuel pipe
34	70.000.018.1	2	HT cables
35	90.000.046	1	Fuel suction pipe
36	90.000.011	2	Clamp
37	50.000.019	1	Fuel filter
38	70.000.015	1	Photocell
39	70.000.114	1	Electronic board (for photoc.)

MASTER

HIGH EFFICIENCY BOILER (21-30 LT)



21. HIGH EFFICIENCY BOILER (21-30 LT)

POS.	PART NUMBER	Q.TY	DECRIPTION
1	50.001.002	1	Complete boiler
2	50.000.080	1	Boiler body w/ s.s. fan housing
3	50.000.082	1	Boiler liner
4	50.000.118	1	S.S. bottom w/ cement
5	50.000.006.2	1	Coil
6		1	Dowel
7	50.000.032.1	1	Complete head w/ chimney
8	50.000.069.1	1	Deflector
9		6	Screw
10	50.000.012.1	1	S.S. shaped cover
11	20.000.025	4	Nut
12	50.000.013	1	Fuel nozzle
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26	50.000.029	1	Fuel pump
27	50.000.024	1	24V fuel solenoid valve
28		1	1/8 Coupling
29		1	Ogive
30	20.000.019	1	90° fitting
31		1	Inlet fuel pipe
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33	90.000.047	1	Outlet fuel pipe
34	70.000.018.1	2	HT cables
35	90.000.046	1	Fuel suction pipe
36	90.000.011	2	Clamp
37	50.000.019	1	Fuel filter
38	70.000.015	1	Photocell
39	70.000.114	1	Electronic board (for photoc.)
40		1	Nut
41		1	Washer
42		1	-
43		3	Screw
44		3	Nut
45	50.000.072	1	Gasket
46		4	Nut
47	70.000.322	1	Fuel floater

22. Warranty

22.1 The High pressure cleaner has a **twelve-month** warranty from the date of delivery.
Defects and vices connected or consequent to not compliance with the indications contained in this manual ARE EXCLUDED FROM THE WARRANTY.

22.2 MAER Guarantees the mechanical parts of the machine, under normal conditions of use and service; this warranty does not include accessories and usage materials.
The warranty is intended for substitution of the faulty part.
Transport and installation of the new part are at customer's charge.

22.3 In case of return of the high pressure cleaner, please enclose a sheet with the reasons of returning and the type of malfunction.

22.4 No modifications can be made to the high pressure cleaner.
In case of modifications made by the customer, the warranty lapses.

22.5 The MAER company disclaims all responsibility for damages to persons and/or things deriving from use of single parts of the machine, if they have been run or assembled differently from the original condition.

23. Additional instructions

23.1 Instructions of emergency conditions :

1 Switch off the machine
2 Disconnect the electricity supply
3 Call the public assistance

23.2 ACCESSORIES :
The high pressure cleaner can be provided with proper accessories which allow to use the machine to scale, sandblast disinfect and unblock.

To scale	Rotating nozzle
To sandblast	Sandblasting head
To disinfect	Foaming nozzle
To unblock	Unblocking nozzle

The machine you purchased is a technologically advanced product which uses a high pressure pump. The machine must be used by people with a specific education and competences on high pressure cleaners.

To obtain more safety, read this booklet carefully and follow the instructions each time you use the machine.

24 SAFETY RULES / RESIDUAL RISKS

1.1 SAFETY "MUST NOTS"

1.1.1. DO NOT use the machine with inflammable or toxic liquids, or any products which are not compatible with the correct operation of the machine. EXPLOSION or POISONING HAZARD.

1.1.2. DO NOT direct the water jet towards people or animals. INJURY HAZARD.

1.1.3. DO NOT direct the water towards the unit itself, electrical parts or towards other electrical equipment. ELECTRIC SHOCK HAZARD.

1.1.4. DO NOT use the machine outdoors in case of rain. SHORT CIRCUIT HAZARD.

1.1.5. DO NOT allow children or incompetent people to use the machine. INJURY HAZARD.

1.1.6. DO NOT touch the plug and/or socket with wet hands. ELECTRIC SHOCK HAZARD.

1.1.7. DO NOT use the machine if the electrical cable is damaged. ELECTRIC SHOCK AND SHORT CIRCUIT HAZARD.

1.1.8. DO NOT use the machine if the high pressure hose is damaged. EXPLOSION HAZARD.

1.1.9. DO NOT jam the trigger in the operating position. ACCIDENT HAZARD.

1.1.10. Check that the data plates are affixed to the machine, if not, inform your dealer. Units without plates must NOT be used as they are unidentificable and potentially dangerous. ACCIDENT HAZARD.

1.1.11. DO NOT tamper with or adjust the setting of the safety valve or the safety devices. EXPLOSION HAZARD.

1.1.12. DO NOT alter the original diameter of the spray head nozzle. HAZARDOUS ALTERATION OF OPERATING PERFORMANCE.

1.1.13. DO NOT leave the appliance unattended. ACCIDENT HAZARD.

1.1.14. DO NOT move the machine by pulling on the **ELECTRICAL CABLE**.SHORT CIRCUIT HAZARD.

1.1.15. Make sure that cars do not drive over the high pressure hose.

1.1.16. DO NOT move the machine by pulling on the high pressure hose. EXPLOSION HAZARD.

1.1.17. When direct towards tyres, tyre valves or other pressurized components, the high pressure jet is potentially dangerous. Do not use the rotating nozzle kit. And always keep the jet at a distance of at least 30 cm during cleaning. EXPLOSION HAZARD.

1.2 SAFETY "MUSTS"

1.2.1. All electrical conductors MUST BE PROTECTED against the water jet. SHORT CIRCUIT HAZARD.

1.2.2. The machine MUST ONLY BE CONNECTED to an adequate power supply in compliance with all applicable regulations (IEC 60364-1).

The machine may cause network noise during startup.
Use of a safety residual current circuit-breaker (R.C.C.B.) will provide additional protection for the operator (30 mA).
Models supplied without a plug must be installed by qualified staff. Use only authorized electrical extension leads with suitable conductor gauge.

1.2.3.
High pressure may cause parts to rebound: wear all the protective clothing and equipment needed to ensure the operator's safety. INJURY HAZARD.

1.2.4. Before doing work on the machine, REMOVE the plug. ACCIDENTAL START-UP HAZARD.

1.2.5. Before pressing the trigger, GRIP firmly the gun to counteract the recoil. INJURY HAZARD.

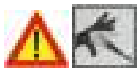
1.2.6. COMPLY WITH the requirements of the local water supply company. CONTAMINATION HAZARD.

1.2.7. Maintenance and/or repair of electrical components MUST be carried out by qualified staff. ACCIDENT HAZARD.

1.2.8. DISCHARGE residual pressure before disconnetting the unit hose. INJURY HAZARD.

1.2.9. Before using the machine, CHECK every time that the screws are fully tightened and that there are no broken or worn parts. ACCIDENT HAZARD.

1.2.10. ONLY USE detergents which will not corrode the coating materials of the high pressure hose/electrical cable. EXPLOSION AND ELECTRIC SHOCK HAZARD.

1.2.11.  ENSURE that all people or animals keep a minimum distance of 16 yd. (15 m) away. INJURY HAZARD.

1.2.12. In case of sudden lack of electricity, ALWAYS MOVE THE PUMP START SWITCH on the OFF position (ZERO).

1.2.13. When the job is finished, ALWAYS DISCONNECT the high pressure washer from the ELECTRICAL and WATER supply.

DECLARATION OF CONFORMITY

CE

Manufacturer:
MAER IDROPULITRICI SRL
Via Torre 65/2
24050 Torre Pallavicina (BG)
ITALIA

Responsible for the technical dossier:
BOTTI GIUSEPPE
Via Inferiore 1
24050 Torre Pallavicina (BG)

Description of the machine: HIGH PRESSURE CLEANER
Model: MASTER
Serial number:
Year of construction:
Net power installed:
Pressure:
Flow:
Measured acoustic power level: Lw = 101 dBa
Guaranteed acoustic power level: Lw = 101 dBa

Herewith we declare that the above mentioned machine conforms to the instructions of the 2006/42/CE machine directive and to the other following CE directives:
- Directive 92/42/CE
- Directive 2000/14/CE Acoustic inputs
- Directive 2002/44/CE Vibrations
- Directive 2004/108/CE ex 89/336/CE Electromagnetic compatibility
- Directive 2014/35/UE ex Directive 2006/95/CE ex 73/23/CE Low tension.

For the verification of the conformity, the following norms have been consulted:
- EN 292-1 / EN 292-2 / EN 60204-1 / EN 60335-2-79 / EN 60335-10
as described in the technical dossier, in the instructions manual for the use and the maintenance.

The technical dossier is filed at MAER IDROPULITRICI SRL company.

Torre Pallavicina,

The legal representative
Agnese Maria Valcarenghi