



**UK
CA** 

This is the translation of the original Italian instructions

Installation maintenance and User Instructions

Machine:

Models:

HOT-WATER PRESSURE WASHER

MH-PH-W SERIES



MAZZONI S.R.L.

Via Prati Vecchi 5, 42025 Cavriago, REGGIO EMILIA (Italy)
<http://www.e-mazzoni.it> - email: info@e-mazzoni.it



I. INTRODUCTION

This manual contains copyrighted information and drawings which are the property of **MAZZONI S.R.L.**
Reproduction of this manual, or any part thereof, without the written authorisation of **MAZZONI S.R.L.** is prohibited.

This documentation is specifically written for technicians, and as such some information which can easily be inferred by reading the text and examining the drawings may not be further explicitly given.

The publisher is in no way responsible for:

- The information and data given in this manual: all information contained herein has been supplied, checked and approved by the manufacturer/client
- The consequences of any incorrect operations performed by the user.

All operating and maintenance instructions and any recommendations described in this manual must be complied with.

In order to achieve the best results and keep the machine in the best possible working order, **MAZZONI S.R.L.** recommends regularly performing the cleaning and maintenance operations.

Training of the personnel responsible for the machine is of particular importance, both those responsible for its use and those responsible for maintenance and checking that the operating procedures and all safety instructions given in this manual are complied with.

II. MANUFACTURER DATA

MANUFACTURER: **MAZZONI S.R.L.**

ADDRESS, Offices and Production:



Via Prati Vecchi 5, 42025 Cavriago, REGGIO EMILIA, Italy



(+39) 0522 575156 / 577793



(+39) 0522 575903



info@e-mazzoni.it



<http://www.e-mazzoni.it>

AUTHORISED SERVICE CENTRE: **MAZZONI S.R.L.**

ADDRESS, Offices and Production:



Via Prati Vecchi 5, 42025 Cavriago, REGGIO EMILIA, Italy



info@e-mazzoni.it



<http://www.e-mazzoni.it>



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0.0 Explanation of information on the product and in instructions

The UKCA (UK Conformity Assessed) marking is the new product marking which must be used to demonstrate that machineries are compliant with the new UK rules. This new product marking that demonstrates that goods are compliant with UK regulations and is used when these goods are placed on the market in Great Britain.

The UKCA marking cannot be used for goods placed on the Northern Ireland market. The UKNI mark may be used alongside the CE mark to demonstrate conformity.

Symbol	Meaning
	The UK CA Marking on the product is the manufacturer's declaration that the product complies with the with the regulatory requirements set out in UK law . The UKCA marking must be at least 5mm in height unless a different minimum dimension is specified in the relevant legislation. The rules for placing the UKCA marking are currently the same as for the CE marking.
UK SI No.	UK STATUTORY INSTRUMENTS No.
Manufacturer	The manufacturer is anyone manufactures a product or has a product designed or manufactured and markets that product under its name or trademark.
Authorised Representatives	Manufacturers can appoint Authorised Representatives to carry out tasks on their behalf.

0.1 Explanation of graphical symbols in the user manual

Symbol	Meaning
	DANGER: FOLLOW THE INSTRUCTIONS TO REDUCE RISKS
	DANGER OF ELECTRICAL NATURE, DUE TO THE PRESENCE OF DEVICES THAT ARE ELECTRICALLY DRIVEN
	DANGER OF BURN DUE TO THE PRESENCE OF HIGH TEMPERATURE/HOT SURFACE WARNING
	ATTENTION: THE OPERATION CAN DAMAGE THE DEVICE OR CAUSE IT MALFUNCTIONS
	READ AND UNDERSTAND THE MANUAL AND ITS SAFETY INSTRUCTIONS BEFORE USING THIS PRODUCT.

1.1 MACHINE MODEL IDENTIFICATION PROFESSIONAL HOT-WATER PRESSURE WASHER

MH SERIES



MODEL	Flow rate (l/min)	Bar	Psi	rpm	HP/kW	Volts	Hertz	Phases	°C Max
MH3001	10	150	2175	1450	3 / 2.2	230 V	50	1	150°
MH3061	13	160	2321	1450	5.5 / 4	400 V	50	3	150°

MH SERIES



MODEL	Flow rate (l/min)	Bar	Psi	rpm	HP/kW	Volts	Hertz	Phases	°C Max
MH4000	15	200	2901	1450	7.5 / 5.5	400 V	50	3	150°

PH SERIES



MODEL	Flow rate (l/min)	Bar	Psi	rpm	HP/kW	Volts	Hertz	Phases	°C Max
PH3025	11	120	1740	1450	3 / 2.2	230 V	50	1	150°
PH3040	13	140	2031	1450	4 / 3	230 V	50	1	150°
PH3060	15	150	2175	1450	5.5 / 4	400 V	50	3	150°
PH4000	15	200	2901	1450	7.5 / 5.5	400 V	50	3	150°

W SERIES



MODEL	Flow rate (l/min)	Bar	Psi	rpm	HP/kW	Volts	Hertz	Phases	°C Max
W4000	15	200	2901	1450	7.5 / 5.5	400 V	50	3	150°
W4050	21	150	2175	1450	7.5 / 5.5	400 V	50	3	150°
W5000	21	200	2901	1450	10 / 7.5	400 V	50	3	150°
W5025	21	250	3626	1450	15 / 11	400 V	50	3	150°
W5050	25	200	2901	1450	15 / 11	400 V	50	3	150°
W5090	18	300	4351	1450	15 / 11	400 V	50	3	150°
W16/400	16	400	5801	1450	15 / 11	400 V	50	3	150°

W SERIES



MODEL	Flow rate (l/min)	Bar	Psi	rpm	HP/kW	Volts	Hertz	Phases	°C Max
W6000	30	200	2901	1450	15 / 11	400 V	50	3	150°



1

Chapter Machine Model Identification



1.2 MACHINE IDENTIFICATION PLATE

The machines are fitted with identification plates, positioned as shown in the image below. Providing the manufacturer with the data they contain will allow precise identification of the machine in question.

MH 3001-3061



MH 4000



PH 3025-3040
3060-4000



W 4000-4050-5000-5025
5050-5090-16/400



W 6000



The following data are provided on the identification plate:

- 1..... Machine model
- 2..... Machine serial number
- 3..... Machine code
- 4..... Voltage (V)
- 5..... Frequency (Hz)
- 6..... Power (kW)
- 7..... Pressure (bar)
- 8..... Current (A)
- 9..... Flow rate (l/min)
- 10..... Measured sound power level (dB)
- 11..... Guaranteed sound power level (dB)
- 12..... Year of manufacture

Example data plate.

CE UK CA
LWA Detected
MAZZONI 89
Mazzoni srl
Via Prati Vecchi N 5 42025 Cavriago (Reggio Emilia) Italy
Tel. +390522575156 Fax. +390522575903

LWA
88 dB

MAZZONI
Via Prati Vecchi N 5 42025 Cavriago (Reggio Emilia) Italy Tel. +390522575156 Fax. +390522575903
SN: 16 17 1265

1	KC6000 30/200 TST		ID.: 3.023.14.391		3
4	V	Hz	Kw	A	K.cal.
	400 V3	50	11 kW	24	0
		BAR	Lit./min.	Year	CE
		200	30	2017	



MAZZONI S.R.L.
Via Prati Vecchi 5, 42025 Cavriago (RE), Italy
Tel. +39 0522 575156 / 577793 - Fax +39 0522 575903

PROFESSIONAL

We

Company Name: Mazzoni s.r.l.
 Post Address: Via Prati Vecchi 5,
 Postcode and City: 42025 Cavriago (Re), Italy
 Telephone number: +39 0522 575156 / 577793
 E-Mail address: info@e-mazzoni.it

Declare that the DECLARATION OF CONFORMITY is issued under our sole responsibility and belongs to the following machinery:

Denomination: HOT WATER PRESSURE WASHER

Model:

Serial Number:

Guaranteed sound power level L_{WA} : dB (A)

The object of the declaration described above is in conformity with the relevant legislation of United Kingdom:

UK SI 2008 No. 1597	The Supply of Machinery (Safety) Regulations 2008
UK SI 2016 No. 1101	The Electrical Equipment (Safety) Regulations 2016
UK SI 2016 No. 1091	Electromagnetic Compatibility Regulations 2016
UK SI 2001 No. 1701	The Noise Emission in the Environment by Equipment for use Outdoors Regulations 2001
UK SI 2015 No. 98	The Noise Emission in the Environment by Equipment for use Outdoors (Amendment)
UK SI 2010 No. 2617	The Ecodesign for Energy-Related Products Regulations 2010

The following BSI standards and technical specifications have been applied:

BS EN ISO 3744:2010	Acoustics. Determination of sound power levels and sound energy levels of noise sources using sound pressure. Engineering methods for an essentially free field over a reflecting plane
BS EN ISO 12100:2010	Safety of machinery. General principles for design. Risk assessment and risk reduction
BS EN 60335-1:2012+A15:2021	Household and similar electrical appliances. Safety - General requirements
BS EN 60335-2-79:2012	Household and similar electrical appliances. Safety - Particular requirements for high pressure cleaners and steam cleaners

UK Representative's authorised to compile the technical file

Name:

Function: Importer and Distributor

Address: United Kingdom

Signature:



Name: Barbara Mazzoni

Function: Authorised representative

Place issued: Via Prati Vecchi 5, 42025 CAVRIAGO (Reggio Emilia). Italv

Date issued:





1.3 MH3001 CE DECLARATION OF CONFORMITY

Declaration of Conformity
Directive 2006/42 EC Annex II A



MAZZONI SRL
Via Prati Vecchi 5
42025 CAVRIAGO (REGGIO EMILIA), ITALY

DECLARES UNDER ITS SOLE RESPONSIBILITY THAT
THE MACHINERY:

- Machine type: Pressure Washer - Class. no. 27 annex I part C 2000/14/EC Directive
- Model: MH3001
- Net installed power (kW): 2.2
- Flow rate (l/min): 11
- Voltage: 230 V
- Frequency: 50 Hz
- Measured sound power level LWA (dB): 97
- Guaranteed sound power level LWA (dB): 98

fulfils all the relevant provisions of 2006/42/EC Directive;
complies with those other Directives and/or relevant
provisions:

DIR 2014/30/EU.....Electromagnetic Compatibility Directive
 DIR 2000/14/EC.....Environmental Acoustic Emission Directive
 DIR 2014/35/EU.....Low Voltage Directive
 DIR 2009/125/EU.....Energy-related Products Directive
 Reg. EU 640-2009
 Reg. EU 4-2014

Reference standards:

- UNI EN ISO 3744: 2010 Determination of sound power levels
- UNI EN ISO 12100: 2010 Safety of machinery – Risk assessment
- UNI EN 60335-1:2012-01 Household And Similar Electrical Appliances - Safety
- CEI EN 60335 – 2-79:2013 Particular requirements for high-pressure cleaners and steam cleaners.

Person authorised to compile the technical file
Moreno Mazzoni
c/o Mazzoni S.R.L.

Official Representative MAZZONI S.R.L.
Barbara Mazzoni

Barbara Mazzoni

Date: 1st of June, 2021

1.4 MH3061 CE DECLARATION OF CONFORMITY

Declaration of Conformity
Directive 2006/42 EC Annex II A



MAZZONI SRL
Via Prati Vecchi 5
42025 CAVRIAGO (REGGIO EMILIA), ITALY

DECLARES UNDER ITS SOLE RESPONSIBILITY THAT
THE MACHINERY:

- Machine type: Pressure Washer - Class. no. 27 annex I part C 2000/14/EC Directive
- Model: MH3061
- Net installed power (kW): 5.5
- Flow rate (l/min): 15
- Voltage: 400 V
- Frequency: 50 Hz
- Measured sound power level LWA (dB): 83
- Guaranteed sound power level LWA (dB): 85

fulfils all the relevant provisions of 2006/42/EC Directive;
complies with those other Directives and/or relevant
provisions:

DIR 2014/30/EU.....Electromagnetic Compatibility Directive
 DIR 2000/14/EC.....Environmental Acoustic Emission Directive
 DIR 2014/35/EU.....Low Voltage Directive
 DIR 2009/125/EU.....Energy-related Products Directive
 Reg. EU 640-2009
 Reg. EU 4-2014

Reference standards:

- UNI EN ISO 3744: 2010 Determination of sound power levels
- UNI EN ISO 12100: 2010 Safety of machinery – Risk assessment
- UNI EN 60335-1:2012-01 Household And Similar Electrical Appliances - Safety
- CEI EN 60335 – 2-79:2013 Particular requirements for high-pressure cleaners and steam cleaners.

Person authorised to compile the technical file
Moreno Mazzoni
c/o Mazzoni S.R.L.

Official Representative MAZZONI S.R.L.
Barbara Mazzoni

Barbara Mazzoni

Date: 1st of June, 2021





1.5 MH3061 CE DECLARATION OF CONFORMITY

**Declaration of Conformity
Directive 2006/42 EC Annex II A**



MAZZONI SRL
Via Prati Vecchi 5
42025 CAVRIAGO (REGGIO EMILIA), ITALY

**DECLARES UNDER ITS SOLE RESPONSIBILITY THAT
THE MACHINERY:**

- Machine type: Pressure Washer - Class. no. 27 annex I part C 2000/14/EC Directive

- Model: MH3061
- Net installed power (kW): 5.5
- Flow rate (l/min): 13
- Voltage: 400 V
- Frequency: 50 Hz
- Measured sound power level LWA (dB): 97
- Guaranteed sound power level LWA (dB): 98

**fulfils all the relevant provisions of 2006/42/EC Directive;
complies with those other Directives and/or relevant
provisions:**

DIR 2014/30/EU.....Electromagnetic Compatibility Directive
DIR 2000/14/EC.....Environmental Acoustic Emission Directive
DIR 2014/35/EU.....Low Voltage Directive
DIR 2009/125/EU.....Energy-related Products Directive
Reg. EU 640-2009
Reg. EU 4-2014

Reference standards:

- UNI EN ISO 3744: 2010 Determination of sound power levels
- UNI EN ISO 12100: 2010 Safety of machinery – Risk assessment
- UNI EN 60335-1:2012-01 Household And Similar Electrical Appliances - Safety
- CEI EN 60335 – 2-79:2013 Particular requirements for high-pressure cleaners and steam cleaners.

Person authorised to compile the technical file

Moreno Mazzoni
c/o Mazzoni S.R.L.

Official Representative MAZZONI S.R.L.
Barbara Mazzoni

Barbara Mazzoni

Date: 1st of June, 2021

1.6 MH4000 CE DECLARATION OF CONFORMITY

**Declaration of Conformity
Directive 2006/42 EC Annex II A**



MAZZONI SRL
Via Prati Vecchi 5
42025 CAVRIAGO (REGGIO EMILIA), ITALY

**DECLARES UNDER ITS SOLE RESPONSIBILITY THAT
THE MACHINERY:**

- Machine type: Pressure Washer - Class. no. 27 annex I part C 2000/14/EC Directive

- Model: MH4000
- Net installed power (kW): 7.5
- Flow rate (l/min): 15
- Voltage: 400 V
- Frequency: 50 Hz
- Measured sound power level LWA (dB): 83
- Guaranteed sound power level LWA (dB): 85

**fulfils all the relevant provisions of 2006/42/EC Directive;
complies with those other Directives and/or relevant
provisions:**

DIR 2014/30/EU.....Electromagnetic Compatibility Directive
DIR 2000/14/EC.....Environmental Acoustic Emission Directive
DIR 2014/35/EU.....Low Voltage Directive
DIR 2009/125/EU.....Energy-related Products Directive
Reg. EU 640-2009
Reg. EU 4-2014

Reference standards:

- UNI EN ISO 3744: 2010 Determination of sound power levels
- UNI EN ISO 12100: 2010 Safety of machinery – Risk assessment
- UNI EN 60335-1:2012-01 Household And Similar Electrical Appliances - Safety
- CEI EN 60335 – 2-79:2013 Particular requirements for high-pressure cleaners and steam cleaners.

Person authorised to compile the technical file

Moreno Mazzoni
c/o Mazzoni S.R.L.

Official Representative MAZZONI S.R.L.
Barbara Mazzoni

Barbara Mazzoni

Date: 1st of June, 2021





1.7 PH3025 CE DECLARATION OF CONFORMITY

1.8 PH3040 CE DECLARATION OF CONFORMITY

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Declaration of Conformity
Directive 2006/42 EC Annex II A



MAZZONI SRL
Via Prati Vecchi 5
42025 CAVRIAGO (REGGIO EMILIA), ITALY

MAZZONI SRL
Via Prati Vecchi 5
42025 CAVRIAGO (REGGIO EMILIA), ITALY

DECLARES UNDER ITS SOLE RESPONSIBILITY THAT THE MACHINERY:

DECLARES UNDER ITS SOLE RESPONSIBILITY THAT THE MACHINERY:

- Machine type: Pressure Washer - Class. no. 27 annex I part C 2000/14/EC Directive
- Model: PH3025
- Net installed power (kW): 2.2
- Flow rate (l/min): 11
- Voltage: 230 V
- Frequency: 50 Hz
- Measured sound power level LWA (dB): 97
- Guaranteed sound power level LWA (dB): 98

- Machine type: Pressure Washer - Class. no. 27 annex I part C 2000/14/EC Directive
- Model: PH3040
- Net installed power (kW): 4
- Flow rate (l/min): 13
- Voltage: 230 V
- Frequency: 50 Hz
- Measured sound power level LWA (dB): 83
- Guaranteed sound power level LWA (dB): 85

fulfils all the relevant provisions of 2006/42/EC Directive; complies with those other Directives and/or relevant provisions:

fulfils all the relevant provisions of 2006/42/EC Directive; complies with those other Directives and/or relevant provisions:

DIR 2014/30/EU.....Electromagnetic Compatibility Directive
DIR 2000/14/EC.....Environmental Acoustic Emission Directive
DIR 2014/35/EU.....Low Voltage Directive
DIR 2009/125/EU.....Energy-related Products Directive
Reg. EU 640-2009
Reg. EU 4-2014

DIR 2014/30/EU.....Electromagnetic Compatibility Directive
DIR 2000/14/EC.....Environmental Acoustic Emission Directive
DIR 2014/35/EU.....Low Voltage Directive
DIR 2009/125/EU.....Energy-related Products Directive
Reg. EU 640-2009
Reg. EU 4-2014

Reference standards:

Reference standards:

- UNI EN ISO 3744: 2010 Determination of sound power levels
- UNI EN ISO 12100: 2010 Safety of machinery - Risk assessment
- UNI EN 60335-1:2012-01 Household And Similar Electrical Appliances - Safety
- CEI EN 60335 - 2-79:2013 Particular requirements for high-pressure cleaners and steam cleaners.

- UNI EN ISO 3744: 2010 Determination of sound power levels
- UNI EN ISO 12100: 2010 Safety of machinery - Risk assessment
- UNI EN 60335-1:2012-01 Household And Similar Electrical Appliances - Safety
- CEI EN 60335 - 2-79:2013 Particular requirements for high-pressure cleaners and steam cleaners.

Person authorised to compile the technical file
Moreno Mazzoni
c/o Mazzoni S.R.L.

Person authorised to compile the technical file
Moreno Mazzoni
c/o Mazzoni S.R.L.

Official Representative MAZZONI S.R.L.
Barbara Mazzoni

Official Representative MAZZONI S.R.L.
Barbara Mazzoni

Barbara Mazzoni

Barbara Mazzoni

Date: 1st of June, 2021

Date: 1st of June, 2021





1.9 PH3060 CE DECLARATION OF CONFORMITY

**Declaration of Conformity
Directive 2006/42 EC Annex II A**



MAZZONI SRL
Via Prati Vecchi 5
42025 CAVRIAGO (REGGIO EMILIA), ITALY

**DECLARES UNDER ITS SOLE RESPONSIBILITY THAT
THE MACHINERY:**

- Machine type: Pressure Washer - Class. no. 27 annex I part C 2000/14/EC Directive

- Model: PH3060
- Net installed power (kW): 5.5
- Flow rate (l/min): 15
- Voltage: 400 V
- Frequency: 50 Hz
- Measured sound power level LWA (dB): 97
- Guaranteed sound power level LWA (dB): 98

fulfils all the relevant provisions of 2006/42/EC Directive; complies with those other Directives and/or relevant provisions:

DIR 2014/30/EU.....Electromagnetic Compatibility Directive
DIR 2000/14/EC.....Environmental Acoustic Emission Directive
DIR 2014/35/EU.....Low Voltage Directive
DIR 2009/125/EU.....Energy-related Products Directive
Reg. EU 640-2009
Reg. EU 4-2014

Reference standards:

- UNI EN ISO 3744: 2010 Determination of sound power levels
- UNI EN ISO 12100: 2010 Safety of machinery – Risk assessment
- UNI EN 60335-1:2012-01 Household And Similar Electrical Appliances - Safety
- CEI EN 60335 – 2-79:2013 Particular requirements for high-pressure cleaners and steam cleaners.

Person authorised to compile the technical file
Moreno Mazzoni
c/o Mazzoni S.R.L.

Official Representative MAZZONI S.R.L.
Barbara Mazzoni

Barbara Mazzoni

Date: 1st of June, 2021

1.10 PH4000 CE DECLARATION OF CONFORMITY

**Declaration of Conformity
Directive 2006/42 EC Annex II A**



MAZZONI SRL
Via Prati Vecchi 5
42025 CAVRIAGO (REGGIO EMILIA), ITALY

**DECLARES UNDER ITS SOLE RESPONSIBILITY THAT
THE MACHINERY:**

- Machine type: Pressure Washer - Class. no. 27 annex I part C 2000/14/EC Directive

- Model: PH4000
- Net installed power (kW): 7.5
- Flow rate (l/min): 15
- Voltage: 400 V
- Frequency: 50 Hz
- Measured sound power level LWA (dB): 83
- Guaranteed sound power level LWA (dB): 85

fulfils all the relevant provisions of 2006/42/EC Directive; complies with those other Directives and/or relevant provisions:

DIR 2014/30/EU.....Electromagnetic Compatibility Directive
DIR 2000/14/EC.....Environmental Acoustic Emission Directive
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- CEI EN 60335 – 2-79:2013 Particular requirements for high-pressure cleaners and steam cleaners.

Person authorised to compile the technical file
Moreno Mazzoni
c/o Mazzoni S.R.L.

Official Representative MAZZONI S.R.L.
Barbara Mazzoni

Barbara Mazzoni

Date: 1st of June, 2021





1.11 W4000 CE DECLARATION OF CONFORMITY

1.12 W4050 CE DECLARATION OF CONFORMITY

Declaration of Conformity
Directive 2006/42 EC Annex II A

Declaration of Conformity
Directive 2006/42 EC Annex II A



MAZZONI SRL
Via Prati Vecchi 5
42025 CAVRIAGO (REGGIO EMILIA), ITALY

MAZZONI SRL
Via Prati Vecchi 5
42025 CAVRIAGO (REGGIO EMILIA), ITALY

DECLARES UNDER ITS SOLE RESPONSIBILITY THAT
THE MACHINERY:

DECLARES UNDER ITS SOLE RESPONSIBILITY THAT
THE MACHINERY:

- Machine type: Pressure Washer - Class. no. 27 annex I part C 2000/14/EC Directive

- Machine type: Pressure Washer - Class. no. 27 annex I part C 2000/14/EC Directive

- Model: W4000
- Net installed power (kW): 7.5
- Flow rate (l/min): 15
- Voltage: 400 V
- Frequency: 50 Hz
- Measured sound power level LWA (dB): 97
- Guaranteed sound power level LWA (dB): 98

- Model: W4050
- Net installed power (kW): 7.5
- Flow rate (l/min): 21
- Voltage: 400 V
- Frequency: 50 Hz
- Measured sound power level LWA (dB): 83
- Guaranteed sound power level LWA (dB): 85

fulfils all the relevant provisions of 2006/42/EC Directive; complies with those other Directives and/or relevant provisions.

fulfils all the relevant provisions of 2006/42/EC Directive; complies with those other Directives and/or relevant provisions.

DIR 2014/30/EU.....Electromagnetic Compatibility Directive
 DIR 2000/14/EC.....Environmental Acoustic Emission Directive
 DIR 2014/35/EU.....Low Voltage Directive
 DIR 2009/125/EU.....Energy-related Products Directive
 Reg. EU 640-2009
 Reg. EU 4-2014

DIR 2014/30/EU.....Electromagnetic Compatibility Directive
 DIR 2000/14/EC.....Environmental Acoustic Emission Directive
 DIR 2014/35/EU.....Low Voltage Directive
 2014/35/EU.....Low Voltage Directive
 Reg. EU 640-2009
 Reg. EU 4-2014

Reference standards:

Reference standards:

- UNI EN ISO 3744: 2010 Determination of sound power levels
- UNI EN ISO 12100: 2010 Safety of machinery – Risk assessment
- UNI EN 60335-1:2012-01 Household And Similar Electrical Appliances - Safety
- CEI EN 60335 – 2-79:2013 Particular requirements for high-pressure cleaners and steam cleaners.

- UNI EN ISO 3744: 2010 Determination of sound power levels
- UNI EN ISO 12100: 2010 Safety of machinery – Risk assessment
- UNI EN 60335-1:2012-01 Household And Similar Electrical Appliances - Safety
- CEI EN 60335 – 2-79:2013 Particular requirements for high-pressure cleaners and steam cleaners.

Person authorised to compile the technical file
Moreno Mazzoni
c/o Mazzoni S.R.L.

Person authorised to compile the technical file
Moreno Mazzoni
c/o Mazzoni S.R.L.

Official Representative MAZZONI S.R.L.
Barbara Mazzoni

Official Representative MAZZONI S.R.L.
Barbara Mazzoni

Date: 1st of June, 2021

Date: 1st of June, 2021





1.13 W5000 CE DECLARATION OF CONFORMITY

Declaration of Conformity
Directive 2006/42 EC Annex II A



MAZZONI SRL
Via Prati Vecchi 5
42025 CAVRIAGO (REGGIO EMILIA), ITALY

**DECLARES UNDER ITS SOLE RESPONSIBILITY THAT
THE MACHINERY:**

- Machine type: Pressure Washer - Class. no. 27 annex I part C 2000/14/EC Directive

- Model: W5000
- Net installed power (kW): 7.5
- Flow rate (l/min): 21
- Voltage: 400 V
- Frequency: 50 Hz
- Measured sound power level LWA (dB): 97
- Guaranteed sound power level LWA (dB): 98

fulfils all the relevant provisions of 2006/42/EC Directive; complies with those other Directives and/or relevant provisions:

DIR 2014/30/EU.....Electromagnetic Compatibility Directive
DIR 2000/14/EC.....Environmental Acoustic Emission Directive
DIR 2014/35/EU.....Low Voltage Directive
DIR 2009/125/EU.....Energy-related Products Directive
Reg. EU 640-2009
Reg. EU 4-2014

Reference standards:

- UNI EN ISO 3744: 2010 Determination of sound power levels
- UNI EN ISO 12100: 2010 Safety of machinery – Risk assessment
- UNI EN 60335-1:2012-01 Household And Similar Electrical Appliances - Safety
- CEI EN 60335 – 2-79:2013 Particular requirements for high-pressure cleaners and steam cleaners.

Person authorised to compile the technical file
Moreno Mazzoni
c/o Mazzoni S.R.L.

Official Representative MAZZONI S.R.L.
Barbara Mazzoni

Barbara Mazzoni

Date: 1st of June, 2021

1.14 W5025 CE DECLARATION OF CONFORMITY

Declaration of Conformity
Directive 2006/42 EC Annex II A



MAZZONI SRL
Via Prati Vecchi 5
42025 CAVRIAGO (REGGIO EMILIA), ITALY

**DECLARES UNDER ITS SOLE RESPONSIBILITY THAT
THE MACHINERY:**

- Machine type: Pressure Washer - Class. no. 27 annex I part C 2000/14/EC Directive

- Model: W5025
- Net installed power (kW): 11
- Flow rate (l/min): 21
- Voltage: 230 V
- Frequency: 50 Hz
- Measured sound power level LWA (dB): 83
- Guaranteed sound power level LWA (dB): 85

fulfils all the relevant provisions of 2006/42/EC Directive; complies with those other Directives and/or relevant provisions:

DIR 2014/30/EU.....Electromagnetic Compatibility Directive
DIR 2000/14/EC.....Environmental Acoustic Emission Directive
DIR 2014/35/EU.....Low Voltage Directive
DIR 2009/125/EU.....Energy-related Products Directive
Reg. EU 640-2009
Reg. EU 4-2014

Reference standards:

- UNI EN ISO 3744: 2010 Determination of sound power levels
- UNI EN ISO 12100: 2010 Safety of machinery – Risk assessment
- UNI EN 60335-1:2012-01 Household And Similar Electrical Appliances - Safety
- CEI EN 60335 – 2-79:2013 Particular requirements for high-pressure cleaners and steam cleaners.

Person authorised to compile the technical file
Moreno Mazzoni
c/o Mazzoni S.R.L.

Official Representative MAZZONI S.R.L.
Barbara Mazzoni

Barbara Mazzoni

Date: 1st of June, 2021





1.15 W5050 CE DECLARATION OF CONFORMITY

1.16 W5090 CE DECLARATION OF CONFORMITY

Declaration of Conformity
Directive 2006/42 EC Annex II A

Declaration of Conformity
Directive 2006/42 EC Annex II A



MAZZONI SRL
Via Prati Vecchi 5
42025 CAVRIAGO (REGGIO EMILIA), ITALY

MAZZONI SRL
Via Prati Vecchi 5
42025 CAVRIAGO (REGGIO EMILIA), ITALY

DECLARES UNDER ITS SOLE RESPONSIBILITY THAT THE MACHINERY:

DECLARES UNDER ITS SOLE RESPONSIBILITY THAT THE MACHINERY:

- Machine type: Pressure Washer - Class. no. 27 annex I part C 2000/14/EC Directive

- Machine type: Pressure Washer - Class. no. 27 annex I part C 2000/14/EC Directive

- Model: W5050
- Net installed power (kW): 11
- Flow rate (l/min): 25
- Voltage: 400 V
- Frequency: 50 Hz
- Measured sound power level LWA (dB): 97
- Guaranteed sound power level LWA (dB): 98

- Model: W5090
- Net installed power (kW): 11
- Flow rate (l/min): 18
- Voltage: 400 V
- Frequency: 50 Hz
- Measured sound power level LWA (dB): 83
- Guaranteed sound power level LWA (dB): 85

fulfils all the relevant provisions of 2006/42/EC Directive; complies with those other Directives and/or relevant provisions:

fulfils all the relevant provisions of 2006/42/EC Directive; complies with those other Directives and/or relevant provisions:

DIR 2014/30/EU.....Electromagnetic Compatibility Directive
DIR 2000/14/EC.....Environmental Acoustic Emission Directive
DIR 2014/35/EU.....Low Voltage Directive
DIR 2009/125/EU.....Energy-related Products Directive
Reg. EU 640-2009
Reg. EU 4-2014

DIR 2014/30/EU.....Electromagnetic Compatibility Directive
DIR 2000/14/EC.....Environmental Acoustic Emission Directive
DIR 2014/35/EU.....Low Voltage Directive
DIR 2009/125/EU.....Energy-related Products Directive
Reg. EU 640-2009
Reg. EU 4-2014

Reference standards:

Reference standards:

- UNI EN ISO 3744: 2010 Determination of sound power levels
- UNI EN ISO 12100: 2010 Safety of machinery - Risk assessment
- UNI EN 60335-1:2012-01 Household And Similar Electrical Appliances - Safety
- CEI EN 60335 - 2-79:2013 Particular requirements for high-pressure cleaners and steam cleaners.

- UNI EN ISO 3744: 2010 Determination of sound power levels
- UNI EN ISO 12100: 2010 Safety of machinery - Risk assessment
- UNI EN 60335-1:2012-01 Household And Similar Electrical Appliances - Safety
- CEI EN 60335 - 2-79:2013 Particular requirements for high-pressure cleaners and steam cleaners.

Person authorised to compile the technical file
Moreno Mazzoni
c/o Mazzoni S.R.L.

Person authorised to compile the technical file
Moreno Mazzoni
c/o Mazzoni S.R.L.

Official Representative MAZZONI S.R.L.
Barbara Mazzoni

Official Representative MAZZONI S.R.L.
Barbara Mazzoni

Barbara Mazzoni (signature)

Barbara Mazzoni (signature)

Date: 1st of June, 2021

Date: 1st of June, 2021





1.17 W16/400 CE DECLARATION OF CONFORMITY

Declaration of Conformity
Directive 2006/42 EC Annex II A



MAZZONI SRL
Via Prati Vecchi 5
42025 CAVRIAGO (REGGIO EMILIA), ITALY

**DECLARES UNDER ITS SOLE RESPONSIBILITY THAT
THE MACHINERY:**

- Machine type: Pressure Washer - Class. no. 27 annex I part C 2000/14/EC Directive

- Model: W16/400
- Net installed power (kW): 11
- Flow rate (l/min): 16
- Voltage: 400 V
- Frequency: 50 Hz
- Measured sound power level LWA (dB): 97
- Guaranteed sound power level LWA (dB): 98

**fulfils all the relevant provisions of 2006/42/EC Directive;
complies with those other Directives and/or relevant
provisions:**

DIR 2014/30/EU.....Electromagnetic Compatibility Directive
DIR 2000/14/EC.....Environmental Acoustic Emission Directive
DIR 2014/35/EU.....Low Voltage Directive
DIR 2009/125/EU.....Energy-related Products Directive
Reg. EU 640-2009
Reg. EU 4-2014

Reference standards:

- UNI EN ISO 3744: 2010 Determination of sound power levels
- UNI EN ISO 12100: 2010 Safety of machinery – Risk assessment
- UNI EN 60335-1:2012-01 Household And Similar Electrical Appliances - Safety
- CEI EN 60335 – 2-79:2013 Particular requirements for high-pressure cleaners and steam cleaners.

Person authorised to compile the technical file
Moreno Mazzoni
c/o Mazzoni S.R.L.

Official Representative MAZZONI S.R.L.
Barbara Mazzoni

Barbara Mazzoni

Date: 1st of June, 2021

1.18 W6000 CE DECLARATION OF CONFORMITY

Declaration of Conformity
Directive 2006/42 EC Annex II A



MAZZONI SRL
Via Prati Vecchi 5
42025 CAVRIAGO (REGGIO EMILIA), ITALY

**DECLARES UNDER ITS SOLE RESPONSIBILITY THAT
THE MACHINERY:**

- Machine type: Pressure Washer - Class. no. 27 annex I part C 2000/14/EC Directive

- Model: W6000
- Net installed power (kW): 11
- Flow rate (l/min): 30
- Voltage: 400 V
- Frequency: 50 Hz
- Measured sound power level LWA (dB): 83
- Guaranteed sound power level LWA (dB): 85

**fulfils all the relevant provisions of 2006/42/EC Directive;
complies with those other Directives and/or relevant
provisions:**

DIR 2014/30/EU.....Electromagnetic Compatibility Directive
DIR 2000/14/EC.....Environmental Acoustic Emission Directive
DIR 2014/35/EU.....Low Voltage Directive
DIR 2009/125/EU.....Energy-related Products Directive
Reg. EU 640-2009
Reg. EU 4-2014

Reference standards:

- UNI EN ISO 3744: 2010 Determination of sound power levels
- UNI EN ISO 12100: 2010 Safety of machinery – Risk assessment
- UNI EN 60335-1:2012-01 Household And Similar Electrical Appliances - Safety
- CEI EN 60335 – 2-79:2013 Particular requirements for high-pressure cleaners and steam cleaners.

Person authorised to compile the technical file
Moreno Mazzoni
c/o Mazzoni S.R.L.

Official Representative MAZZONI S.R.L.
Barbara Mazzoni

Barbara Mazzoni

Date: 1st of June, 2021



1.19 WARRANTY

The generic warranty conditions applied make reference to Directive 1999/44/EC “on certain aspects of the sale of consumer goods and associated guarantees”, and more specifically:

- 1. Manufacturer liability:** The warranty shall not apply to parts subject to wear and tear through normal use, in particular: brush, o-rings, seals, hoses, floor cleaning tool gasket, valves, thermostats and pressure gauges. The warranty is limited to demonstrable defects in labour and/or materials. Defects arising through normal wear and tear, incorrect/improper use, or incorrect electrical connection of the equipment are not covered by warranty.
- 2. Maintenance:** Any maintenance work performed by unauthorised personnel shall invalidate the warranty and rule out any further manufacturer liability, in particular for property damage or injury to third parties. The manufacturer shall make the final, incontestable judgement on replacement or repair of defective parts. All rights deriving from the warranty shall lapse if any work is performed on the equipment and/or its system without explicit authorisation by the service centre. Only service centres and/or specialised resellers may receive spare parts supplied on the basis of this warranty.
- 3. Authorised Service Centres:** Authorised service centres substitute the manufacturer with regard to the obligations and rights on the terms laid out by this warranty. Claims and/or rights which fall outside the points specified by this warranty shall not be advanced by the Authorised Service Centre.
- 4. Misc.:**
 - The warranty commences at the time of purchase.
 - The purchaser shall assume the cost and risk of transporting the product in all cases.
 - Periodic inspections, calibration and any other maintenance and/or modification work are not covered by the warranty.
 - A receipt or invoice must be presented in order to benefit from the provisions of this warranty.
 - All rights provided by the warranty shall lapse should the identification label attached to the machine (containing the technical testing data and the SERIAL NUMBER – see the section “LABELLING AND IDENTIFICATION”) be removed, tampered with or made illegible.
 - The reseller must stamp and sign within the space provided on the last page of this booklet.
The manufacturer reserves the right to make modifications to this booklet and to the technical specification of its products without prior notice.

Reservation of title: Goods remain the sole property of the seller until full payment of the agreed price has been made, as provided for by article 1523 of the Italian Civil Code.

Disputes: All disputes shall be resolved under the sole legal jurisdiction of Reggio Emilia (Italy).

IMPORTANT!

The full clauses of the warranty are specified in the sales contract.

**1.20 AUDIENCE**

This manual has been written for the operators assigned to use and management of the machine throughout its technical life cycle. It contains the topics which refer to correct use of the machine in order to ensure that its functional and qualitative characteristics remain unchanged over time. It also contains all information and warnings required for correct use in complete safety.

IMPORTANT!

All documentation must be read before performing any operation, in order to prevent potential injury and damage to property or the machine itself.

Do not use the machine if there are any doubts as to the correct interpretation of the instructions.





2.1. INTRODUCTION

The machine in question has been manufactured in compliance with EC directives governing the free circulation of industrial products within the EU; it is therefore provided with all documentation required by these directives.

2.2. MANUAL IDENTIFICATION DATA

DOCUMENT TYPE: CE COMPLIANT USER MANUAL WITH WARNINGS
 MACHINE: HOT-WATER PRESSURE WASHER
 MODELS DESCRIBED: MH - PH - W SERIES
 MANUAL TRANSLATED INTO: ENGLISH
 EDITION: 2017
 VERSION: 1.0

2.3. SUPPLY AND PRESERVATION OF THE MANUAL

The manual is provided in hardcopy and electronic formats. All additional documentation (wiring diagrams, subcontracted supplier manuals) are provided as annexes to this manual.



WARNING!
 Keep this manual together with the machine in order to allow operators to consult it easily when required.

The manual is an integral part of the product for safety purposes, and as such:

- All parts must be retained. If it should be lost or damaged, a replacement copy must be ordered.
- It must remain with the machine until this is scrapped (including in the event of transfers, sale, hire etc.).

2.4. UPDATES

In the event that the machine requires functional modifications or replacements, the manufacturer is responsible for updating the manual.

2.5. LANGUAGE

The original manual was written in Italian.

Any translations, such as this, into additional languages are based on the original Italian instructions.

The manufacturer holds itself responsible for the content of the original instructions; for any apparent discrepancies, refer to the text in the original language, or contact the technical department of MAZZONI S.R.L..

2.6. TIPS FOR USERS

We recommend that users take note of the following points:

- Read this manual in full (in order to fully understand and learn the procedures).
- Always follow the procedures laid out in the technical documentation to the letter.
- Do not carry out actions which differ from those indicated unless instructed to do so by the manufacturer.

2.7. TERMINOLOGY USED

Technical terminology or terms which differ from common usage are used in the manual.

The terms used are explained below:

TERM	DESCRIPTION
ALARM	Warning of a fault or malfunction.
STOPPAGE	Operation to stop a process being performed through a voluntary action performed by the operator.
FAULT	Status of a machine/component involving its inability to perform the requested function, with the exception of periods of scheduled maintenance or other scheduled actions, or else due to the lack of external devices.
USAGE WARNINGS	General provisions for correct use of the machine and the prevention of the possible risk of accidents.
MANUFACTURER	MAZZONI S.R.L.



TERM	DESCRIPTION
DECLARATION OF CONFORMITY	This is a document, or collection of documents, which certifies that a product conforms to the standards laid out by technical standards and/or legislation.
EMERGENCY DEVICE	A safety device which allows operations such as deliberate stoppages to be performed in the event of a hazardous situation or machine malfunctions.
SAFETY DEVICE	Device which eliminates or reduces risk.
SAFETY DISTANCE	The minimum distance from a danger zone at which a protective structure must be placed.
FAULT	When a machine/component ceases to perform the requested function.
MALFUNCTION	Anomalous operation which does not meet the expected process conditions.
MAINTENANCE	Collection of regular, predefined operations which aim to maintain the machine's operation in all aspects as a consequence of the intrinsic wear and tear from use.
OPERATING METHODS	Collection of operations necessary to use all functions of the machine.
OPERATOR	Person responsible for the installation, operation, adjustment, maintenance, cleaning, repair or transport of the machine.
HAZARD/DANGER	Source of possible injury or damage to health.
EXPOSED PERSON	Any operator located entirely or partially within a danger zone.
GUARD	Machine component used specifically to provide protection through a physical barrier. A guard can work: <ul style="list-style-type: none"> • On its own, and is therefore effective only when closed • In combination with an interlock device, with or without locking of the guard
FIXED GUARD	"Closed", with reference to a fixed guard, means "kept in position". Guard kept in position (closed): <ul style="list-style-type: none"> • Permanently (e.g. welded etc.) • By means of fasteners (screws, bolts etc.) making it impossible to remove/open without the aid of tools.
MOBILE GUARD	A guard which is generally connected mechanically to the machine's frame or a nearby fixed guard (for example, via a hinge or guide), or which can be opened without the use of tools.
RISK	Combination of the probability and seriousness of possible injury or damage to health in a dangerous situation.
RESIDUAL RISK	A risk which remains, above all during maintenance, installation and cleaning, even after the application of design and construction safety measures, of safety devices and deterrents.
OPERATING SPECIFICATIONS	List of all possible situations in which the machine may find itself during operation, including all types of emergencies.
IDENTIFICATION PLATE	Distinctive element indicating the most general and significant machine data along with its serial number.
USER	The machine user.
DANGER ZONE	Any area within/near a machine in which a person is exposed to the risk of injuries or damage to health.





3.1 PRELIMINARY INFORMATION

Reference standards and legislation

In the design, manufacture and installation of the machine, reference was made to the following standards:

DIRECTIVES	
2006/42/EC	MACHINERY DIRECTIVE
2014/30/UE	ELECTROMAGNETIC COMPATIBILITY DIRECTIVE
2014/35/UE	LOW VOLTAGE DIRECTIVE
2000/14/EC	OUTDOOR NOISE DIRECTIVE
ERP 2009/125/EC	ENERGY-RELATED PRODUCTS DIRECTIVE
STANDARDS	
UNI EN ISO 3744: 1995	Acoustics - Determination of sound power levels
UNI EN ISO 12100: 2010	Safety of machinery - Risk assessment
UNI EN ISO 60335-1: 2012-01	Household And Similar Electrical Appliances - Safety
UNI EN ISO 60335-2-79: 2013	Particular requirements for high-pressure cleaners and steam cleaners.

3.2. GENERAL SAFETY INSTRUCTIONS

This chapter contains information and instructions relating to:

- Hazardous situations which can occur during use and maintenance of the machine
- Security devices adopted and their correct use
- Residual risks and behaviour to adopt (general and specific precautions to eliminate or limit them)

These instructions will be referenced in summary fashion later in this manual at the points relating to the situations described.

The safety warnings and instructions in this manual have been written taking into account that the provisions of applicable workplace health and safety legislation (Italian Legislative Decree 81/08 within Italy) must be known and applied. They contain important information for:

- The safety of operators and maintenance technicians
- The safety, condition and correct operation of the machine



IMPORTANT!

Before working with/on the machine, operators/maintenance technicians must have perfect knowledge of:

- The position, function and use of all controls
- The position, function and use of all safety devices
- The machine's characteristics
- This manual, its annexes, and how to read/refer to it
- The operating instructions and safety instructions contained in the manual



WARNING!

It is forbidden to operate the machine if you have any doubts regarding the correct interpretation of the instructions. Consult the section "TERMINOLOGY USED" for the meaning of some of the terms used in the manual, or contact the manufacturer or authorised service centre for any further clarification required.



DANGER!

Some illustrations may show machine parts with guards or other safety features removed. This is done in order to provide maximum clarity.

It is always prohibited to operate the machine without its guards and protective devices fitted, or to disable such equipment. Failure to observe this requirement can lead to serious injuries.



MAZZONI S.R.L.

Via Prati Vecchi 5, 42025 Cavriago (RE), Italy
Tel. +39 0522 575156 / 577793 - Fax +39 0522 575903

PROFESSIONAL

3.1 PRELIMINARY INFORMATION

Reference standards and legislation

In the design, manufacture and installation of the machine, reference was made to the following standards:

UK SI 2008 No. 1597	The Supply of Machinery (Safety) Regulations 2008
UK SI 2016 No. 1101	The Electrical Equipment (Safety) Regulations 2016
UK SI 2016 No. 1091	Electromagnetic Compatibility Regulations 2016
UK SI 2001 No. 1701	The Noise Emission in the Environment by Equipment for use Outdoors Regulations 2001
UK SI 2015 No. 98	The Noise Emission in the Environment by Equipment for use Outdoors (Amendment) Regulations 2015
UK SI 2010 No. 2617	The Ecodesign for Energy-Related Products Regulations 2010
BS EN ISO 3744:2010	Acoustics. Determination of sound power levels and sound energy levels of noise sources using sound pressure. Engineering methods for an essentially free field over a reflecting plane
BS EN ISO 12100:2010	Safety of machinery. General principles for design. Risk assessment and risk reduction
BS EN 60335-1 :2012+A15:2021	Household and similar electrical appliances. Safety - General requirements
BS EN 60335-2-79:2012	Household and similar electrical appliances. Safety - Particular requirements for high pressure cleaners and steam cleaners

3.2. GENERAL SAFETY INSTRUCTIONS

This chapter contains information and instructions relating to:

- Hazardous situations which can occur during use and maintenance of the machine
- Security devices adopted and their correct use
- Residual risks and behaviour to adopt (general and specific precautions to eliminate or limit them)

These instructions will be referenced in summary fashion later in this manual at the points relating to the situations described.

The safety warnings and instructions in this manual have been written taking into account that the provisions of applicable workplace health and safety legislation (Italian Legislative Decree 81/08 within Italy) must be known and applied. They contain important information for:

- The safety of operators and maintenance technicians
- The safety, condition and correct operation of the machine

IMPORTANT!



Before working with/on the machine, operators/maintenance technicians must have perfect knowledge of:

- The position, function and use of all controls
- The position, function and use of all safety devices
- The machine's characteristics
- This manual, its annexes, and how to read/refer to it
- The operating instructions and safety instructions contained in the manual

WARNING!



It is forbidden to operate the machine if you have any doubts regarding the correct interpretation of the instructions. Consult the section "TERMINOLOGY USED" for the meaning of some of the terms used in the manual, or contact the manufacturer or authorised service centre for any further clarification required.



DANGER!

Some illustrations may show machine parts with guards or other safety features removed. This is done in order to provide maximum clarity.

It is always prohibited to operate the machine without its guards and protective devices fitted, or to disable such equipment. Failure to observe this requirement can lead to serious injuries.

The following general requirements must be met in all cases:

- Do not use the machine in an improper manner, that is for anything other than the “INTENDED USE”
- Protect the machine from the weather
- Always unplug the machine before commencing any maintenance, repair or cleaning work
- Use original spare parts Do not lubricate moving parts
 - Always unplug the machine before commencing any maintenance work on its electrical system or components



WARNING!
Each operator is responsible for their own health and safety, as well as that of any bystanders or other nearby workers who could be affected by their actions or omissions.

More specifically, **workers must:**

- Make correct use of the machines, equipment, tools, hazardous substances, means of transport and other work equipment, as well as of the safety devices
- Use PPE appropriately.

Moreover, **assigned operators must not:**

- Remove or modify the safety, warning or monitoring devices without authorisation
- Perform operations or manoeuvres under their own initiative which they are not qualified/authorised for, or which could compromise their own safety or that of bystanders
- Work with equipment other than that indicated
- Modify the machine or its components
- Plug in/unplug the machine with wet hands
- Use the power cable or connecting hoses to move the machine
- Use the plug to switch the machine off and on
- Use the machine if the power cable or other important parts are damaged (safety devices, high-pressure hoses, spray gun, electrical cables etc.)
- Place objects of any kind on the machine's casing
- Modify the electrical connections so as to disable the internal safety devices.




3.3 SAFETY TERMINOLOGY

The areas around the machine are divided as follows:

TERM	DESCRIPTION
WORK ZONES	These are the areas where the operator and other workers can command and control the cyclical functions of the machine.
DANGER ZONES	All areas around the machine and within its range of operation are considered danger zones.

3.4 SAFETY SYMBOLS IN THE MANUAL

The following symbols are used in the manual to identify possible sources of danger:

SYMBOL	DESCRIPTION
	<p>This indicates procedures for which failure to comply - in whole or in part - with the instructions provided in the manual can lead to personal injury or damage to the equipment. It is combined with the terms listed below according to the level of danger.</p> <ul style="list-style-type: none"> • DANGER = Indicates a high-risk hazard which, if not avoided, could lead to serious injury or even death. • WARNING = Indicates a low-risk hazard which, if not avoided, could lead to minor or moderate injuries.
	<p>IMPORTANT This symbol is used to indicate:</p> <ul style="list-style-type: none"> • Operations requiring particular attention in order to avoid damage to the equipment and the environment • Procedures for which brief yet significant references or clarifications are given
	<p>This symbol is used next to the description of operations which cause the operator to come into contact with parts which are normally live. Contact with such parts can lead to instant death.</p>





3.5 SAFETY WARNINGS ON THE MACHINE

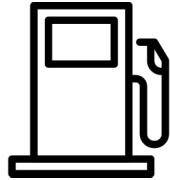
Hazard warning labels/plates are applied to the machine in the areas of greatest residual risk regarding operating, maintenance and cleaning operations. Labels/plates indicating requirements and prohibitions are also present. When these are not standardised, the writing will be in the user's language.

The following labels/plates indicating warnings, requirements and prohibitions are present on this machine:

POS.	DESCRIPTION
1	"CE" PLATE (See chapter 1)
2	MOTOR IDENTIFICATION PLATE
3	FUEL TANK IDENTIFICATION PLATE
4	DO NOT DIRECT THE JET AT PEOPLE, ANIMALS OR LIVE ELECTRICAL COMPONENTS
5	DETERGENT TANK CAP
6	READ THE USE AND MAINTENANCE MANUAL BEFORE USING THE MACHINE
7	BURN HAZARD
8	ANTI-SCALE TANK CAP PLATE
9	MINIMUM FUEL FOR MACHINE OPERATION WARNING
10	PLUG PHASE INVERSION WARNING IN THE EVENT OF LACK OF VOLTAGE
11	SAFE START-UP WARNING
12	PRESSURE GAUGE USAGE DESCRIPTION



1



3



4



5

2



6



9



11



12



7



8



10



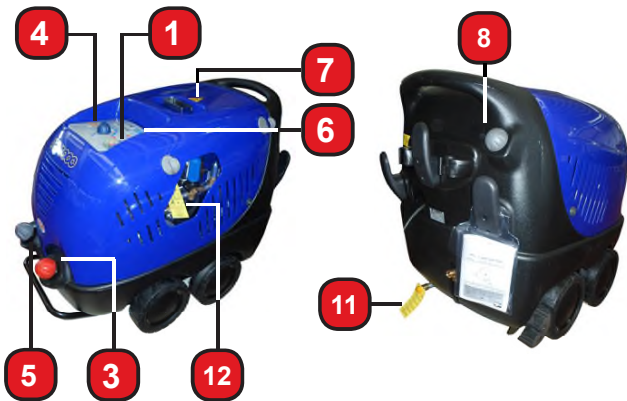
MH 3001-3061



MH 4000



PH 3025-3040
3060-4000



W 4000-4050-5000-5025
5050-5090-16/400



W 6000



WARNING!

It is prohibited to remove or modify the plates installed on the machine.



HIGH PRESSURE WASHER SAFETY

GENERAL SAFETY RULES

To avoid damage to people, animals and things, read the instructions carefully before starting the system:

- the user manual
- all safety regulations
- the legal provisions in force at national level

To make sure:

- to have understood all the rules and warnings
- that all users of the system are informed about the regulations and warnings and that they have understood them.

All persons involved in installation, commissioning, maintenance, service and use must be:

- qualified in the matter,
- know and observe this user manual,
- know and observe the regulations in force,

If the system is used indoors:

- the combustion gases must be discharged by means of pipes or chimneys,
- Adequate ventilation must also be provided.

Use in potentially explosive atmospheres is prohibited.

Do not use the facility near people unless they are wearing protective clothing.

Do not aim the jet at yourself or at others to clean clothing or footwear.

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

Do not use the system when the connection cable or important parts of the system are damaged, eg. safety devices, high pressure hoses, spray gun.

- The heating device of the appliance is a combustion system. Combustion plants must be checked at regular intervals in accordance with the relevant national regulations.
- When designing a fireplace, follow the local directives in force.

If you use the appliance indoors, make sure that there is sufficient ventilation and that the exhaust gases are eliminated (danger of poisoning).

Do not switch on the appliance if important parts of the appliance, e.g. safety components, high pressure hoses, spray gun are damaged.

Do not spray objects that may contain toxic substances (eg asbestos).

Use only the fuel specified in the owner's manual. The use of unsuitable fuels involves the risk of explosions.

Do not store, accidentally spill or use fuel in the vicinity of open flames or appliances such as ovens, boilers or water heaters from which sparks or pilot flames could be emitted.

Do not smoke and do not use naked flames when refueling and in the fuel storage area.

Do not overfill the tank. There must be no fuel in the filler neck.

Refueling can only be carried out in a well ventilated area and with the engine switched off.

After refueling, make sure that the fuel tank lid is properly closed.

Avoid repeated or prolonged contact between fuel and skin, as well as inhalation of vapors.

Highly flammable materials and objects must be kept at least 2 meters away from the exhaust system.

Do not start the system if it is not equipped with an exhaust system. The latter must be checked regularly, cleaned and possibly replaced.

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

The system is not suitable for use by people with limited physical, sensory or mental abilities. The system must not be used by children and unauthorized persons.

To protect yourself from splashing water or dirt, wear suitable protective clothing and goggles.

Prolonged use of the device can cause vascular disturbances in the hands, due to vibrations. Wear warm gloves to protect your hands in the winter. Operation interrupted by pauses is better than continuous operation.

The water jet coming out of the high pressure nozzle causes a repulsive force of the spray gun. Assume a safe stance, firmly hold the spray gun and lance
Using improper water can damage the system. Only water of potable quality must be used to feed the system.

DANGERS AND RESIDUAL RISKS

- Danger and residual risk of burns from exhaust gases. Do not place your hands on the exhaust outlet hole. Do not touch the chimney cover.
- Danger and residual risk of burns from system components (eg pumps or motors). Allow the system components to cool down before intervening.
- Danger and residual risk generated by electrical voltages. Any interventions concerning the system components must be carried out exclusively by specialized electricians or by authorized and qualified personnel. Connection to the mains must be carried out by an experienced electrician. The installation must be protected with a differential switch whose trip current is equal to or less than 30 mA.
- Danger and residual risk of injury from the high-pressure jet. Do not aim the high pressure jet at people or animals. Risk of injury from electric shock. Do not aim the high-pressure jet at appliances, cables or the system. Never use the appliance without the lance. Before each use, make sure that the lance is fixed correctly. The lance screwing must be tightened by hand. During the operations, hold the spray gun and the lance with both hands.
- Danger and residual risk of explosion. Do not spray any flammable liquid.
- Danger and residual risk of fire. Observe the regulations and legal requirements relating to the use of fuel in the country of installation. Do not use inappropriate fuels as they can be dangerous.
- Danger and residual risk of fire due to overheating of the fan heater. The air inlets / outlets must not be covered.
- Danger and residual risk of slipping due to the formation of icy layers. When icy layers form, stop the plant.
- Danger due to substances. All detergents are supplied with their respective safety data sheets. Read and observe the instructions before using the product. Wear the protective clothing and / or protective equipment indicated therein.









3.6. OPERATOR QUALIFICATIONS

Consult the following table in order to establish with certainty the skills and qualifications of the operators assigned to the various tasks:

TERM	DESCRIPTION
OPERATOR	Operator assigned, qualified and authorised to: <ul style="list-style-type: none"> • Operate the machine • Perform cleaning and scheduled maintenance operations.
MAINTENANCE TECHNICIAN	Operator assigned, qualified and authorised to: <ul style="list-style-type: none"> • Perform cleaning and scheduled maintenance operations, as well as more complex operations required on a less frequent basis for various regulations and repairs • Perform extraordinary maintenance operations or repairs which require specific knowledge of the machine, its operations, the safety devices and their method of operation.
MANUFACTURER TECHNICIAN	Employee of the manufacturer or authorised service centres qualified and authorised to perform extraordinary maintenance operations or repairs which require particular knowledge of the machine, its operations, the safety devices and their method of operation.

3.7. PROTECTION OF OPERATORS

Workers must wear work clothes (with tight sleeves) in addition to any PPE required (gloves, goggles, masks etc.) in accordance with applicable safety standards and legislation. A complete list of the personal protective equipment (PPE) which may be required for the procedures described in this manual is given below:

SIGNAL	DESCRIPTION
	Protective gloves required. Indicates that operators are required to use gloves which are protective or insulating, and in any case suited to the risk involved.
	Hearing protection required. Indicates that operators are required to use ear defenders or ear plugs.
	Eye protection required. Indicates that operators are required to use protective eyewear (goggles).
	Mask required. Indicates that operators are required to wear respiratory protection (masks).
	Safety footwear required. Indicates that operators are required to use safety footwear.
	Protective clothing required. Indicates that operators are required to wear specific, tight-fitting protective clothing.



3.8 SAFETY DEVICES ON THE MACHINE

In order to protect operator safety, MAZZONI S.R.L. has equipped the machine with a series of safety devices:

POS.	ELEMENT
1	Fixed guards. Fixed guards isolate areas which are hazardous to the operator; they are fastened to the structure with screws or bolts, and can be removed with dedicated tools. This operation may be necessary for extraordinary maintenance operations requiring the intervention of a properly trained maintenance technician. The following are installed on this machine: a - Cowling b - Casing.
2	TST: Device which automatically stops the machine around 25 seconds after the gun is released.
3	Main switch: Operating the main switch causes the machine to stop completely and instantaneously.

VIBRATIONS

The vibrations produced by the machine when operating it are not a health hazard.



WARNING!

Excessive vibration can only be caused by a mechanical fault, which must be immediately reported and eliminated in order to prevent risks to the operators and the machine itself.



WARNING!

It is strictly prohibited to remove and/or bypass the safety devices installed on the machine.

NOISE

The machine has been designed in order to reduce the sound power level at source.

Check the requirements of applicable legislation in the country of use and adopt the appropriate PPE (expandable foam earplugs, silicone earplugs, reusable earplugs, ear defenders, helmet-mounted ear defenders etc.).

SOUND POWER LEVEL LWA (dB)	MEASURED	GUARANTEED
MH3001	78	80
MH3061	87	88
MH4000 PH3025 W4000 W4050 W5050 W5090 W16/400 W6000	88	89
PH3040	95	96
PH3060 PH4000	88	92
W5000	95	96
W5025	93	94

The actual noise level produced by the machine during operation will be different from that measured, as it is influenced by certain factors such as:

- Type and characteristics of the work environment
- Duration of exposure
- Other equipment running nearby.

It is the user's responsibility to apply the resulting health and safety measures in accordance with standards and legislation in the machine's country of use.



DANGER!

The operator must use hearing protection during use of the machine.

ELECTROMAGNETIC COMPATIBILITY

The machine contains electronic components subject to electromagnetic compatibility regulations, influenced by conducted and irradiated emissions.

The emissions values meet regulations thanks to the use of components which comply with the EMC directive, suitable connections and the installation of filters where required.

The machine is therefore compliant with the Electromagnetic Compatibility (EMC) Directive.



DANGER!

Non-compliant maintenance or incorrect replacement of components could compromise the effectiveness of the solutions adopted.





3.9 INTENDED USE, REASONABLY FORESEEABLE MISUSE, IMPROPER USE INTENDED USE

The machine in question has been designed for cleaning machines, vehicles, constructions, tools, equipment, building façades etc. using a high-pressure jet of hot water.

The machine is designed and manufactured to operate in safety when:

- It is used within the limits specified in this manual
- It is used by a single operator
- The procedures in the user manual are followed
- Scheduled maintenance is performed in accordance with the specified methods and time frames
- Extraordinary maintenance is performed in a timely manner when required
- The safety devices are not removed and/or bypassed.

IMPROPER USE

The following are considered improper use:

- Use in outdoor environments which expose the system to the risk of lightning
- Use in environments with a high fire risk deriving from any material or ignition source
- Use in environments with a high or partial explosion risk
- Use in environments subject to electromagnetic disturbances
- Use in corrosive environments
- Use in environments with a high concentration of dust or powder.

Any use of the machine other than those specified must be authorised in advance by the manufacturer in writing. Without such written authorisation, the use shall be considered “improper”. In this case, the manufacturer shall not be held liable for any property damage or personal injury, and any and all warranties shall be void.

REASONABLY FORESEEABLE MISUSE

As regards reasonably foreseeable misuse, i.e. use of the machine in ways other than that specified in this instruction manual due to reasonably foreseeable human behaviour, the following have been taken into consideration:

- Operation of the machine for over five minutes with the gun closed (only for machines without total stop)
- Use of the machine around people not wearing protective clothing
- Use of the plug to switch the machine off and on
- Use of the power cable or connecting hoses to move the machine
- Directing the water jet towards people or animals
- Directing the water jet towards the machine itself
- The use of unsuitable or unapproved plugs and extensions
- Instinctive human reactions during use in the event of malfunctions, accidents, faults etc.
- Behaviour resulting from a desire to keep the machine operational under all circumstances
- The behaviour of certain persons not suited to use of the machine, such as children and the disabled.

The manufacturer shall bear no liability for property damage and/or personal injury in the event that it is found that the equipment has been used in one of the above-mentioned environments. Always use personal protective equipment during operation.



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Chapter Machine Description



MODEL	MH3001		MH3061				MH3061				MH4000			
FREQUENCY	50 Hz	60 Hz	50 Hz	60 Hz		50 Hz	60 Hz		50 Hz	60 Hz		50 Hz	60 Hz	
MAX. PRESSURE	140 bar		170 bar				200 bar				150 bar			
FLOW RATE	11 l/min		13 l/min				15 l/min				15 l/min			
MOTOR POWER	2.2 KW / 3 Hp		4 KW / 5.5 Hp				4 KW / 5.5 Hp				5.5 kW / 7.5 Hp			
DIESEL NOZZLE	1.25		1.25				1.25				1.25			
DIESEL CONSUMPTION	4.725 (l/h @ 10 bar)		4.725 (l/h @ 10 bar)				4.725 (l/h @ 10 bar)				4.725 (l/h @ 10 bar)			
SINGLE-PHASE VOLTAGE (V)	230		/				/				/			
THREE-PHASE VOLTAGE (V)	/	/	230	400	220	400	230	400	220	400	230	400	220	400
CURRENT DRAW (A)	13.2	14	14	9	14	9	14	9	14	9	21	12.5	21	12.5
MAX SPEED (RPM)	1450	1740	1400		1740		1400		1740		1446		1740	
MOTOR INGRESS PROTECTION	IPx5		IPx5				IPx5				IPx5			
INSULATION CLASS	F		F				F				F			
MOTOR PROTECTION	THERMAL		THERMAL				THERMAL				THERMAL			
MAX WATER SUPPLY TEMP.	45°C		45°C				45°C				45°C			
MAX WATER TEMP.	150°C		150°C				150°C				150°C			
MAX SUPPLY PRESSURE	4 bar		4 bar				4 bar				4 bar			
HOSE LENGTH	R1 - 5/16" 10 m		R1 - 5/16" 10 m				R1 - 5/16" 10 m				R2 - 5/16" 10 m			
OIL CAPACITY	0.45 l		0.45 l				0.45 l				0.7 l			
FUEL CAPACITY	Max 20 l		Max 20 l				Max 20 l				Max 20 l			
DETERGENT CAPACITY	/		/				/				/			
OIL TYPE	SAE 15/40		SAE 15/40				SAE 15/40				SAE 15/40			
DIMENSIONS (cm)	93x63 h:84		93x63 h:84				93x63 h:84				93x63 h:84			
WEIGHT (kg)	102		102				102				130			

MODEL	PH3025		PH3040				PH3060				PH4000			
FREQUENCY	50 Hz	60 Hz	50 Hz	60 Hz		50 Hz	60 Hz		50 Hz	60 Hz		50 Hz	60 Hz	
MAX. PRESSURE	120 bar		140 bar				150 bar				200 bar			
FLOW RATE	11 l/min		13 l/min				15 l/min				15 l/min			
MOTOR POWER	2.2 KW / 3 Hp		3 KW / 4 Hp				4 KW / 5.5 Hp				5.5 kW / 7.5 Hp			
DIESEL NOZZLE	1.25		1.25				/				1.5			
DIESEL CONSUMPTION	4.725 (l/h @ 10 bar)		4.725 (l/h @ 10 bar)				/				5.67 (l/h @ 10 bar)			
SINGLE-PHASE VOLTAGE (V)	230		230				/				/			
THREE-PHASE VOLTAGE (V)	/	/	/	/	/	/	230	400	220	400	230	400	220	400
CURRENT DRAW (A)	13.2	14	18	18		14	9	14	9	21	12.5	21	12.5	
MAX SPEED (RPM)	1450	1725	1450	1740		1400		1740		1436		1740		
MOTOR INGRESS PROTECTION	IPx5		IPx5				IPx5				IPx5			
INSULATION CLASS	F		F				F				F			
MOTOR PROTECTION	THERMAL		THERMAL				THERMAL				THERMAL			
MAX WATER SUPPLY TEMP.	45°C		45°C				45°C				45°C			
MAX WATER TEMP.	150°C		150°C				150°C				150°C			
MAX SUPPLY PRESSURE	5 bar		5 bar				5 bar				5 bar			
HOSE LENGTH	R1 - 5/16" 10 m		R1 - 5/16" 10 m				R2 - 5/16" 10 m				R2 - 5/16" 10 m			
OIL CAPACITY	0.4 l		0.4 l				0.7 l				0.7 l			
FUEL CAPACITY	45 l		45 l				45 l				45 l			
DETERGENT CAPACITY	10 l		10 l				10 l				10 l			
OIL TYPE	SAE 15/40		SAE 15/40				SAE 15/40				SAE 15/40			
DIMENSIONS (cm)	113x73 h:89		113x73 h:89				113x73 h:89				113x73 h:89			
WEIGHT (kg)	118		125				125				130			





MODEL	W4000				W4050				W5000				W5025	
FREQUENCY	50 Hz		60 Hz		50 Hz		60 Hz		50 Hz		60 Hz		50 Hz	60 Hz
MAX. PRESSURE	200 bar				150 bar				200 bar				250 bar	
DIESEL NOZZLE	1.65				2				2				2	
DIESEL CONSUMPTION	6.237 (l/h @ 10 bar)				7.56 (l/h @ 10 bar)				7.56 (l/h @ 10 bar)				7.56 (l/h @ 10 bar)	
FLOW RATE	15 l/min				21 l/min				21 l/min				21 l/min	
MOTOR POWER	5.5 kW / 7.5 Hp				5.5 kW / 7.5 Hp				7.5 kW / 10 Hp				11 kW / 15 Hp	
THREE-PHASE VOLTAGE (V)	230	400	220	400	230	400	220	400	230	400	220	400	400	400
CURRENT DRAW (A)	21	12.5	21	12.5	21	12.5	21	12.5	26	17	26	17	24	24
MAX SPEED (RPM)	1436		1740		1436		1740		1453		1750		1451	1740
MOTOR INGRESS PROTECTION	IPx5				IPx5				IPx5				IPx5	
INSULATION CLASS	F				F				F				F	
MOTOR PROTECTION	THERMAL				THERMAL				THERMAL				THERMAL	
MAX WATER SUPPLY TEMP.	45°C				45°C				45°C				45°C	
MAX WATER TEMP.	150°C				150°C				150°C				150°C	
MAX SUPPLY PRESSURE	5 bar				5 bar				5 bar				5 bar	
HOSE LENGTH	R2 - 5/16" 10 m				R2 - 3/8" 10 m				R2 - 3/8" 10 m				R2 - 3/8" 10 m	
OIL CAPACITY														
FUEL CAPACITY	30 l				30 l				30 l				30 l	
DETERGENT CAPACITY	16 l				16 l				16 l				16 l	
ANTI-SCALE PRODUCT CAPACITY	1.5 l				1.5 l				1.5 l				1.5 l	
OIL TYPE	SAE 15/40				SAE 15/40				SAE 15/40				SAE 15/40	
DIMENSIONS (cm)	144x77 h:95				144x77 h:95				144x77 h:95				144x77 h:95	
WEIGHT (kg)	192				196				212				231	

MODEL	W5050				W5090				W16/400				W6000			
FREQUENCY	50 Hz		60 Hz		50 Hz		60 Hz		50 Hz		60 Hz		50 Hz		60 Hz	
MAX. PRESSURE	200 bar				300 bar				400 bar				200 bar			
DIESEL NOZZLE	2.25				/				2				2.5			
DIESEL CONSUMPTION	8.505 (l/h @ 10 bar)				/				7.56 (l/h @ 10 bar)				12.3 (l/h @ 10 bar)			
FLOW RATE	25 l/min				18 l/min				16 l/min				30 l/min			
MOTOR POWER	11 kW / 15 Hp				11 kW / 15 Hp				11 kW / 15 Hp				11 kW / 15 Hp			
THREE-PHASE VOLTAGE (V)	400	692	220	400	400	692	220	400	400	692	220	400	400	692	220	400
CURRENT DRAW (A)	20.8	12	24	13.7	20.8	12	24	13.7	20.8	12	24	13.7	20.8	12	24	13.7
MAX SPEED (RPM)	1451		1740		1451		1740		1451		1740		1451		1740	
MOTOR INGRESS PROTECTION	IPx5				IPx5				IPx5				IPx5			
INSULATION CLASS	F				F				F				F			
MOTOR PROTECTION	THERMAL				THERMAL				THERMAL				THERMAL			
MAX WATER SUPPLY TEMP.	45°C				45°C				45°C				45°C			
MAX WATER TEMP.	150°C				150°C				150°C				150°C			
MAX SUPPLY PRESSURE	5 bar				5 bar				5 bar				5 bar			
HOSE LENGTH	R2 - 3/8" 10 m				R2 - 3/8" 10 m				R2 - 3/8" 10 m				R2 - 3/8" 10 m			
FUEL CAPACITY	30 l				30 l				30 l				30 l			
DETERGENT CAPACITY	16 l				16 l				16 l				16 l			
ANTI-SCALE PRODUCT CAPACITY	1.5 l				1.5 l				1.5 l				1.5 l			
OIL TYPE	SAE 15/40				SAE 15/40				SAE 15/40				SAE 15/40			
DIMENSIONS (cm)	144x77 h:95				144x77 h:95				144x77 h:95				144x77 h:95			
WEIGHT (kg)	231				258				258				258			



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Chapter Machine Description



4.2 MAIN COMPONENTS

POS.	ELEMENT
1	COWLING
2	START-UP / TEMP. REGULATION
3	HIGH-PRESSURE HOSE CONNECTION
4	PUMP INLET
5	PUMP ASSEMBLY
6	ELECTRIC MOTOR
7	DETERGENT TANK

POS.	ELEMENT
8	FUEL TANK
9	ANTI-SCALE TANK
10	DETERGENT QUANTITY REGULATION
11	JET PRESSURE REGULATION
12	BOILER
13	BOILER EXHAUST

MH 3001-3061



MH 4000



PH 3025-3040 3060-4000



W 4000-4050-5000
5025-5050

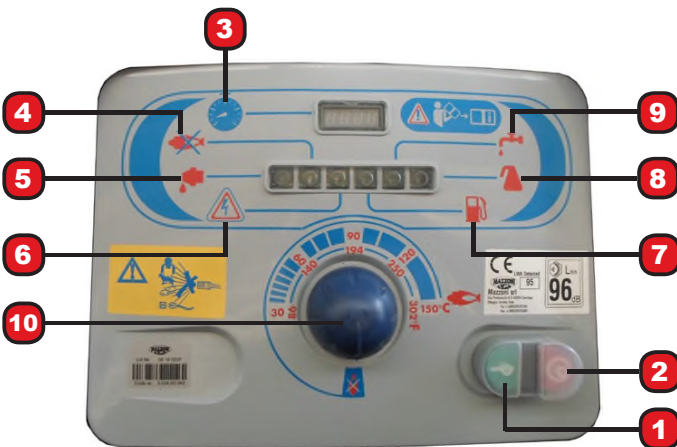


W 6000



4.3 ELECTRICAL PANEL AND REGULATION PANEL

The electrical panel and regulation panel are present on all W Series machines.





1	On button
2	Off / Emergency button
3	Hour counter: displays the hours worked while the machine is in TST.
4	Flame monitoring alarm: indicates that the flame in the boiler has not ignited and consequently shuts off the boiler.
5	DSS alarm: indicates the presence of a leak in the machine's water circuit and consequently shuts off the pump.
6	White light (lit steadily): indicates that the electrical connection is present. (Power to electrical panel).
7	Diesel reserve alarm: when the red light is on, the boiler is not operational.
8	No detergent alarm: stops product uptake. (OPTIONAL).
9	No water alarm: stops the machine if there is no water in the tank. (OPTIONAL).
10	Water temperature regulation knob.
11	Detergent tank cap.
12	Detergent quantity regulation knob.
13	Pressure gauge.
14	Jet pressure regulation knob.
15	Anti-scale tank cap.

4.4 SAFETY DEVICES TST - TOTAL STOP DEVICE

The pressure washer models described in this manual are equipped with a device to prevent machine overheating in the event of a prolonged pause in use. Models equipped with the Totalstop device feature an additional safety feature which consists of stopping the machine at the conclusion of the spraying phase (spray gun closed with trigger not pressed); in this case, the machine will stop completely, and to resume use it is sufficient simply to press the trigger on the spray gun.

DSS - DROP STOP SYSTEM DEVICE

This system disables the TOTAL STOP system in the event of small leakages

MAZZONI PRESSURE GAUGE PROTECTION Device

The pressure washer models described in this manual (with the exception of W series models) are equipped with a pressure gauge protection device. This device is designed to reduce wear on the pressure gauge and allow use of the machine even if it should break.

On delivery, Mazzoni pressure washers are supplied with the pressure gauge operational, and therefore subject to wear. Users may decide to protect the gauge by disabling it at any moment, or else should it break it can be disabled very quickly as follows in order to allow work to continue:

- Shut off the machine.
- Check that there is no pressure in the circuit.
- Use the 14mm combination spanner to turn the pressure gauge 45° clockwise.
- The pressure gauge is now deactivated.

It is possible to re-enable operation of the pressure gauge at any time simply by returning it to its original position, ensuring the machine is always shut off when this is performed.

In order to disable this system, proceed as follows:

- Shut off the machine.
- Check that there is no pressure in the circuit.
- Using the 14mm combination spanner, completely unscrew the pressure gauge.
- Use a small screwdriver to remove the seat and gasket.
- Insert the Teflon pellet (supplied inside the pressure washer booklet – See chapter 4.4 H).
- Screw on the pressure gauge by hand.
- Tighten with the 14mm combination spanner, turning the pressure gauge clockwise by at least one turn.
- Check that there are no leaks during use.

After performing this operation, the pressure gauge will be permanently operational, and if it fails the machine will not be usable until the gauge is replaced

WATER LEAK DEVICE

Stops the machine after the sixth restart due to a water leak (on PH and W series).

FUEL LEVEL Device

If there is insufficient diesel fuel, this device will prevent the boiler from operating, while on the MH series it stops the machine.

SDL - SECURITY DETERGENT LEVEL Device

Prevents air being drawn in when the detergent in the tank is finished.



4.5 STANDARD EQUIPMENT

The standard equipment comprises:

- High-pressure hose R1 5/16" - length 10 m. Supplied with machines which generate pressures of up to 150 Bar (A).
- High-pressure hose R2 5/16" or R2 3/8" - length 10 m. Supplied with machines which generate pressures of over 150 Bar (B).
- Spray gun and lance installation kit (C).
- Water intake connection and filter (D).
- Nozzle (E).
- Teflon pellet for pressure gauge (F). (For models with Mazzoni pressure gauge protection system).

A

C



D



B



E



F



D



4.6 OPTIONAL EQUIPMENT

The pressure washers can be equipped with further accessories depending on cleaning requirements:

ACCESSORY	FUNCTION
Rotating nozzle	To extend the working area of the jet.
Rotating brushes	To remove stubborn dirt
Hose flushing kit	For effective cleaning of blocked hoses.
Sandblasting kit	For sand-blasting with high-pressure power.
Floor washing lance	For cleaning floors.
Hour readout	To obtain a readout of the machine's working hours.
Hose reel	For neat winding of the high-pressure hose.
Detergent tank	For installation of a detergent tank on machines which are not supplied with one.
External detergent intake kit	To be applied to the high-pressure outlet to draw in detergent from the tank.
Anti-scale filter	To filter water at the pump intake.
Flue extension	To raise the boiler exhaust flue outlet.
Detergent solenoid valve	To remotely enable or disable detergent supply.



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Chapter Machine Description



DEVICE	MH 3001-3061 4000	PH 3025-3040 3060-4000	W 4000-4050	W 5000-5025 5050-5090 16/400	W6000
Rotating brush (Max 60°)	•	•	•	•	•
Rotating nozzle	•	•	•	•	•
Hose flushing kit	•	•	•	•	•
Sandblasting kit	•	•	•	•	•
Floor washing lance	•	•		•	
Hour readout	•				
Hose reel	•	•	•	•	•
Iron handle					
Detergent tank	•				
Detergent intake kit	•				
Anti-scale filter	•	•	•	•	•
Flue extension	•	•	•	•	•
Detergent solenoid valve		•			
TST	•	•	•	•	•
DSS		•	•	•	•
Pressure gauge protection device		•			
Water leak device		•	•	•	•
Fuel level device		•	•	•	•
SDL					•





5.1 CUSTOMER RESPONSIBILITIES

Unless otherwise contractually provided for, the customer is usually responsible for supplying:

- **Electrical systems** up to the machine power supply point; these must comply with electrical code in the country of installation and/or the manufacturer's instructions
- **Supplementary services** suited to the machine's requirements
- Tools and consumables required for assembly and installation
- Appropriate lifting and handling devices.

5.2 ENVIRONMENTAL CONDITIONS

The machine is designed and manufactured to operate safely in the following environmental conditions:

ENVIRONMENTAL TEMPERATURE: Between +5°C and +45°C

RELATIVE HUMIDITY: 80%

AMBIENT LIGHTING: 200 Lux (customer responsibility)

5.3 TRANSPORT AND HANDLING

The machine is sent to the customer packaged in protective wooden crates or cardboard boxes of appropriate size, and shrink wrapped for further protection.

Receipt and Inspection:

Upon receipt or purchase, the following should be checked immediately:

- That the delivery note/sales receipt corresponds with what is actually contained in the packaging.
- That the packaging and machine components are undamaged, in order to allow any damage to be reported.

Removal of Packaging:

The machine is delivered on a pallet; in order to remove the packaging, position the machine in its final location and proceed as follows:

- Remove the outer packaging
- Remove the strapping
- Remove the shrink wrap
- Remove any fasteners holding the equipment to the pallet.

IMPORTANT!



The packaging is an integral part of the supply and will therefore not be collected; removal of the machine's packaging is the responsibility of the user, and must be performed with respect for the environment, preventing pollution of the ground, air and water and complying with applicable legislation in the country of use.

Movement/Handling

Refer to Chapter 4 for the machine's weight and dimensions. Moving the machine around its destination can be performed while still on the pallet, or using the supplied wheels.

Moving the machine using a pallet truck

If the machine is to be moved using a forklift truck or pallet truck, follow the procedure outlined below:

STEP	ACTION
1	Position the machine on a pallet and fasten it appropriately so that it is locked in place.
2	Position the forklift truck facing the (left-hand or right-hand) side of the machine.
3	The forks must be appropriately spaced and long enough to support the entire base of the machine.
4	Insert the forks of the forklift truck under the machine.
5	Ensure that the forks protrude on the opposite side sufficiently to eliminate any risk of the machine tipping.
6	Slowly lift the load, ensuring that the centre of gravity of the machine is positioned in the centre of the forks (the machine's centre of gravity is fairly close to its geometric centre).
7	Avoid sudden manoeuvres during movement and handling.



5.4 STORAGE

Storage

The machine and any accessories must be stored in a clean, sheltered environment in order to prevent deterioration and keep it in good working order.

If it is essential to store the machine outdoors, it must be protected with a waterproof cover in order to prevent it coming into contact with dust and water. The electrical and electronic components are sensitive to moisture and low temperatures, and thus require extra

protection. Ensure the machine is not subjected to vibration.

Storage Temperature

The storage temperature must not drop below +5°C or exceed 50°C

WARNING!



- Do not leave the machine exposed to very low temperatures. Freezing conditions can damage the pump and seriously compromise the other circuits. In the event of prolonged storage at temperatures below freezing, drain down the circuits in advance. Run the pump for a few minutes with antifreeze through the water intake line.
- Conversely, overly high temperatures can cause the motor to overheat when the machine is running.

Storage for prolonged periods

If the period of storage exceeds three months, the machine and corresponding equipment must be kept in a clean environment and protected from vibrations, the weather, dust and corrosive fumes.



WARNING!

Do not leave the machine in enclosed areas without adequate ventilation.

In the event of long periods of disuse:

- Drain the water
- Rinse the interior of the machine with antifreeze
- Drain the detergent tank
- Drain the diesel tank.

5.5 MACHINE POSITIONING

The machine must be positioned and installed in accordance with the supplied layout. In any case, it is essential to respect the minimum clearance (**at least 1 metre**) between the machine and other equipment or between the machine and the walls of the work environment.

5.6 MACHINE INSTALLATION

Incorrect installation of the machine, its components or accessories can cause damage to the machine itself and presents a risk to operator safety.

To correctly install the machine, proceed as follows:

STEP	ACTION
1	Screw the connector (D) onto the machine supply hose (A), then connect the high-pressure hose to the connector by screwing the ring nut tight.
2	Connect the other end of the high-pressure hose to the end of the automatic spray gun (C) by screwing it down tight, ensuring that the supplied copper washer (E) is inserted.
3	Check that the specifications of the electricity supply (Volt/Hz) meet those specified on the machine data plate, then plug the machine in. Extensions and plugs which do not meet code must not be used. The electrical system to which the machine is connected must comply with applicable code in the country of installation, and must be sized to the machine's requirements. It is advisable that the power supply circuit be protected with a 30 mA RCD or RCCB.
4	Screw on the connector (F) with the corresponding filter (G) installed on the end of the water inlet line (B), then connect the water supply line (minimum diameter 14 mm) to the connector itself (B). N.B.: ensure that the inlet filter contained in the inlet connector is clean at all times. A dirty filter would inhibit the water supply due to poor pump operation, with the inevitable risk of rapid deterioration and breakage of the internal mechanisms.



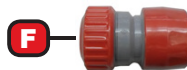
MH 3001-3061
4000



PH 3025-3040
3060-4000



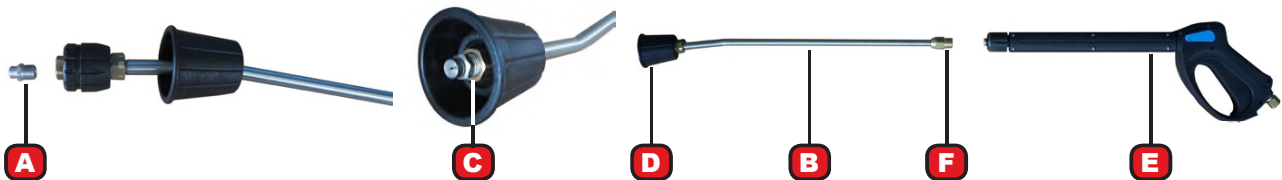
W 4000-4050-5000-5025-5050
5090-16/400-6000



5.7 INSTALLING THE LANCE

Incorrect installation of the lance, its components or accessories can cause damage and presents a risk to operator safety. To correctly install the lance, proceed as follows:

TYPE	ACTION
1	Screw the nozzle (A) into the seat at the end of the lance (B), ensuring it is fully inserted. Screw the ring nut (C) onto the thread of the lance and firmly tighten the coupling.
2	Insert the protective cone (D) from the connection side of the lance (B), applying sufficient pressure between the two parts to ensure that the coupling is solid and the assembly is as shown in the figure.
3	Once the lance (B) has been installed, attach it to the spray gun (E) by tightening the corresponding ring nut (F). Tighten the coupling firmly.



DANGER!

The electrical supply circuit to this machine should include a residual current device which is able to break the power supply if the earth leakage current exceeds 30 mA for 30 ms.
An earth connection is mandatory.



WARNING!

The manufacturer shall bear no liability for the correct operation or longevity of the machine if modifications and/or adjustments are made to it which are not agreed to in writing by the company itself.



MAZZONI S.R.L.

Via Prati Vecchi 5, 42025 Cavriago (RE), Italy
Tel. +39 0522 575156 / 577793 - Fax +39 0522 575903

5.8

PLUG CONNECTION FOR THREE-PHASE MACHINES

Connection for 400V three-phase machines with 4-pin plug:

- Pin M:yellow-green cable
- Pin L1:black cable
- Pin L2:brown cable
- Pin L3:grey cable



Connection for 400V three-phase machines with 5-pin plug:

- Pin M:.....yellow-green cable
- Pin L1:black cable
- Pin L2: brown cable
- Pin L3:..... grey cable
- Neutral pin (N): no connection



DANGER!

The electrical supply circuit to this machine should include a residual current device which is able to break the power supply if the earth leakage current exceeds 30 mA for 30 ms.
An earth connection is mandatory.



WARNING!

The manufacturer shall bear no liability for the correct operation or longevity of the machine if modifications and/or adjustments are made to it which are not agreed to in writing by the company itself.



6.1 USAGE PROCEDURES

Preliminary Checks

Before using the pressure washer, proceed as follows:

1. Connect the machine to the electrical socket
2. Connect the machine to the water tap
3. Open the water supply
4. Let the water run out of the high-pressure hose for around 20 seconds in order to eliminate any residue which could block the lance nozzle
5. Close the water supply
6. Connect the spray gun and the lance.

Running In

The machine requires a brief running-in period for the pump/motor assembly. This **running in** consists of:

1. Operating the machine for no more than one hour
2. Waiting for the machine to cool down
3. Repeating steps 1 and 2 at least 2-3 times.

6.2 MACHINE START-UP

In order to start up the machine, proceed as follows (after performing the preliminary checks):

STEP	ACTION
1	Open the water supply
2	Check that the water supply line is not kinked or blocked
3	Connect the high-pressure hose (A) to the spray gun (B)
4	Open the spray gun and keep it open for a few seconds in order to allow the air present in the lines and low-pressure water to come out (C)
5	Keeping the gun open, turn the starting knob (D) or press the start button (E) to position "1". N.B.: grip the lance and gun firmly with both hands.
6	Once the machine has been started up, you can release the spray gun and prepare for the work to be performed
7	Pay the utmost attention to the direction of the pressure jet during start-up.

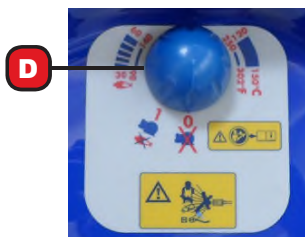


MH 3001-3061

MH 4000

PH 3025-3040
3060-4000

W 4000-4050-5000-5025
5050-5090-16/400-6000





WARNING!

MH series machines will not operate if there is not at least 6 litres of transport diesel in the fuel tank, while on PH and W series machines the boiler will not operate.



WARNING!

The water jet can be dangerous if used improperly; do not direct it towards people or animals. Do not use the machine near bystanders who are not wearing protective clothing.

USE BY MINORS IS PROHIBITED.



WARNING!

Do not operate the machine in closed spaces/unventilated areas. Install a device to vent the exhaust gases outdoors. Venting the exhaust indoors is extremely dangerous.

6.3 USE OF THE PUMP

The pump can draw in (at low pressure) and mix detergents and other liquid additives, thanks to an incorporate automatic device which can be controlled remotely by the head.

In order to draw in detergent and other liquid additives, operate the head to obtain the low pressure, which allows for automatic suction.

Once the detergent uptake operation is complete, the pump is returned to high-pressure mode by operating the head.



WARNING!

Do not draw in corrosive or very dense liquids (paints, acids, solvents etc.): these could permanently damage the pump.



WARNING! (ONLY APPLIES TO MACHINES WITHOUT TOTAL STOP).

Do not leave the machine running for over five minutes with the spray gun closed.

Beyond this time, the pump would overheat, damaging it severely and posing a serious risk to operator safety.



IMPORTANT!

After using detergents or other liquids, draw in clean water in order to prevent deposits and encrustation. Only use anaerobic detergents (which will not solidify in the air). In the event of any doubts, consult your specialist reseller.

6.4 SPRAY GUN SAFETY

The spray gun is fitted with a safety device:

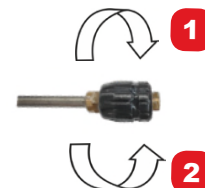
1. Releasing the safety: Pull the trigger towards the outside and press on the block in the position shown in figure one.
2. Engaging the safety: Pull the trigger towards the outside and press on the block in the position shown in figure two.



6.5. ADJUSTABLE HEAD

Switching from high to low pressure is performed by rotating the nozzle as shown in the figure below. With the nozzle open, water will come out at low pressure; conversely, with the nozzle closed, the water jet obtained will be at high pressure.

1. High-pressure operation
2. Low-pressure operation



**WARNING!**

Switching between low and high pressure **MUST** be performed with the spray gun closed.

6.7 CLEANING METHODS

To **dissolve dirt**: spray the detergent and leave it to work for around five minutes, before the product dries on the surface. After treating the surface with the detergent, scrub with a sponge.

To **remove dirt**: rinse off the dissolved dirt with the high-pressure water jet.

**IMPORTANT!**

Always keep the jet at a sufficient distance in order to prevent damage from excessive pressure. Adapt the pressure, temperature and detergent concentration to the surface to be cleaned.

6.8 MACHINE SHUT-DOWN

To **shut down the machine**, proceed as follows (refer to the image in the previous section):

STEP	DESCRIPTION
1	Close the water supply (A) .
2	Open the spray gun (B) , keeping it open for a few seconds in order to allow the water present in the lines to come out.
3	Turn the machine on-off switch to position "0", or press the on-off button.
4	Close the spray gun (B) .
5	Cut the power supply to the machine by removing the plug from the socket.
6	Position the accessories in the accessory holder and the electric cable on the hook along with the spray gun hose.
7	Stow the machine.

6.9 END OF ACTIVITIES

On concluding the cleaning operations, after shutting off the machine and draining down the lines, put the machine away on a level floor in a location protected from weather and frost.

Ensure that there are no kinks in the power cable and high-pressure hose when coiling them up.

**WARNING!**

Do not leave the machine exposed to very low temperatures. Freezing conditions can damage the pump and seriously compromise the other circuits. In the event of prolonged storage at temperatures below freezing, drain down the circuits.

Conversely, overly high temperatures can cause the motor to overheat when the machine is running.



7.1 SAFETY WARNINGS



DANGER!
Shut off the machine and unplug the power supply before performing any maintenance, repair or cleaning work.

All technical work must be performed by an authorised service centre.

It is mandatory for all maintenance technicians to wear all PPE (gloves, goggles, clothing etc.) required by the operation to be performed.

During the maintenance operations, staff who are not authorised must remain outside the area affected by the operations.

After performing the maintenance work, and before starting the machine back up, the following checks must be performed:

- Check that any replaced parts and/or tools used for the maintenance work have been removed from the machine
- Check the safety devices (ensuring that they have been re-installed and fastened in place).



WARNING!
Before starting the machine and beginning work, all guards must be installed as specified by the manufacturer. Before restarting the machine, a check must be made to ensure that there are no exposed persons within the danger zones.



DANGER!
It is forbidden to make improper repairs to the electrical cable.



WARNING!
The high-pressure hoses, connectors and accessories are important for the device's safety.
USE ONLY ORIGINAL SPARE PARTS AND ACCESSORIES.

7.2 GENERAL INFORMATION

Maintenance of the machine involves the operations (inspection, checks, tests, adjustments and replacements) necessary following normal use of the machine. These operations involve the mechanical and electrical components.

To ensure maintenance is performed correctly:

- Use only original spare parts, and suitable tools in good condition.
- Comply with the frequency of works indicated in the scheduled maintenance manual (both preventive and regular maintenance).
The time/number of working cycles between maintenance operations should be understood to be the maximum acceptable interval: maintenance may be performed more frequently.
- Good preventive maintenance requires constant attention to and monitoring of the machine.
Promptly check the cause of any unusual behaviour such as excessive noise, overheating, leaks etc. and remedy them.
- Timely removal of the causes of any faults or malfunctions will prevent further damage to the equipment and guarantee operator safety.



IMPORTANT!
You must not operate the machine if you have any doubts. Contact the manufacturer for the necessary clarifications.

For maintenance, always refer also to the documents provided as annexes, such as:

- Functional diagrams of the systems and equipment provided as annexes to the manual

- Lists of components with the data necessary for ordering spare parts
- List of possible malfunctions and recommended solutions (troubleshooting).

From an operational point of view, the operations are divided into two categories for the maintenance technician:

1. Ordinary (scheduled) maintenance
2. Extraordinary maintenance

To deactivate the machine before performing maintenance, proceed as follows:



STEP	ACTION
1	Turn the machine on-off switch to position "0".
2	Close the water supply.
3	Open the spray gun.
4	Operate the pump for around five seconds using the switch on the machine.
5	Unplug the machine from the power socket. Warning! Danger! Do not remove the plug with wet hands.
6	Disconnect the water supply.
7	Operate the spray gun until the machine is fully depressurised, then lock the spray gun.
8	Leave the machine to cool down.

7.3 EXTRAORDINARY MAINTENANCE

WARNING!



Extraordinary maintenance and repairs to the machine are restricted to qualified, trained and authorised technicians employed by the manufacturer or by an authorised service centre. These operations require in-depth, specialist knowledge of the machines, the necessary operations, the related risks and the correct procedures in order to operate in safety.

Operations not included in "scheduled maintenance" shall be considered extraordinary maintenance.

DANGER!

Spare parts must be ordered from MAZZONI S.R.L.



In the event that a customer does not use original spare parts or equivalents authorised in writing by the manufacturer, the latter shall bear no further liability for machine operation and operator safety. Authorisation and/or instructions must always be received in writing. It is prohibited to operate without such written authorisation, and the manufacturer shall bear no liability in this case.




7.4 ORDINARY (SCHEDULED) MAINTENANCE

In order to ensure correct operation of the machine, regular and preventive inspections and maintenance must be performed on the machine in accordance with the specified maintenance schedule.






































































Failure to comply with these requirements shall exempt the manufacturer from any responsibilities under the warranty.

Scheduled (ordinary) maintenance comprises of inspections, checks and work to prevent faults and stoppages.

The meanings of the symbols used in the following table are given below:

SIGNAL	MEANING
	Visual inspection
	Regular inspection
	Replacement



SCHEDULED MAINTENANCE OPERATIONS FOR 2,000 HOURS OF OPERATION	TIME INTERVAL (HOURS)				
	50	500	1,000	1,500	2,000
Oil change					
Boiler electrodes					
Pressure switch operation					
Boiler operation					
Diesel nozzle					
VBR pressure reg. valve					
Anti-scale pump					
High-pressure hose					
Leaks on inlet and outlet side					
Lance nozzle					
Check of TST, DSS					
Check connectors for leaks					
Check alarms on electrical panel					
Pressure gauge operation					
Check and clean water intake filters					
Change VBR pump gaskets					
Check valve disc and spring					
Elastic coupling between pump and motor					

8.1. INTRODUCTION

Some of the faults and problems which may be encountered during normal use of the machine are listed below.



IMPORTANT!

If the fault persists or does not fall under the cases outlined below, MAZZONI S.R.L.'s technical support department is available to provide all support and means necessary to attain the best possible results.

8.2. POSSIBLE FAULTS AND SOLUTIONS

FAULT	CAUSE	SOLUTION
The pump turns but does not reach the required pressure	The pump is drawing in air	Check the intake line and seals
	Inlet/outlet valves worn, dirty or blocked	Clean or replace
	Nozzle unsuitable or worn	Replace
	Worn seals	Replace
	Intake filter blocked	Clean or replace
Irregular pressure oscillations	Adjustment valve needle worn or stuck	Clean or replace
	Inlet/outlet valves worn, dirty or blocked	Check, clean or replace
	Air intake	Check the seals on the intake ducts
	Worn seals	Replace
Drop in pressure	Worn nozzle	Replace
	Outlet intake valves dirty	Clean or replace
	Adjustment valve needle worn or dirty	Clean or replace
Noise	Worn seals	Replace
	Air intake	Check the seals on the intake ducts
	Worn or dirty valves	Clean or replace
Oil contaminated with water	Worn bearings	Replace
	Water-oil sealing rings worn	Replace
Water leaking from head	Worn seals	Replace
	Sealing o-rings worn	Replace
Oil leaks	Oil sealing rings worn	Replace
The motor does not start up	The plug is not correctly inserted	Check the switch cable and plug
	No current	Check the switch cable and plug
The motor makes a noise but does not start up	The voltage is below that required	Check that the electrical system is suitable
	Extension cord of insufficient cable size	Check the table for correct use of extension cords
The motor stops suddenly	The thermal protection device has tripped due to overheating	Check that the voltage is within the specified range
		Disconnect the switch and leave to cool for a few minutes.



DANGER!

Contact the manufacturer or an authorised service centre for each of these operations.



DANGER!

Before performing any kind of work, disconnect the machine from the electricity supply.





9.1. SCRAPPING THE MACHINE



WARNING!

Before proceeding to dismantle the machine, disconnect all power supply sources (electricity, water, compressed air) from the machine and discharge any residual energy/pressure.



WARNING!

Dismantling/scrapping operations must only be performed by specialised personnel with the necessary mechanical and electrical training and qualifications. Follow the safety instructions provided in Chapter 3 of this manual.

The machine presents no particular problems in terms of decommissioning and scrapping. Appropriate measures must be taken in order to prevent reuse by unauthorised personnel. Proceed as follows:

STEP	DESCRIPTION
1	Prepare a sufficiently spacious work area free of clutter in order to allow the dismantling operations to be performed in safety.
2	Drain any liquid from the internal tanks.
3	Cut the external power supply cable and all electrical components after implementing the safety measures specified for such operations.
4	Cut the power supply cable to the motor after implementing the safety measures specified for such operations.
5	Disconnect any other connections.
6	Proceed to dismantle the machine by separating its components for separate waste collection (as described in the next section).



IMPORTANT!

Disposal of the machine's packaging, any replaced parts, the machine in its entirety, and the various fluids must be performed with respect for the environment, preventing pollution of the ground, air and water and complying with applicable legislation in the country of use. Comply with legislative provisions in the country of use for disposal of the machine.

9.2. WASTE PROCESSING INSTRUCTIONS

The following have been used to manufacture the machine, albeit in small amounts for some materials:

- AISI 304 stainless steel
- Other metals (steel, aluminium, cast iron, bronze etc.)
- Plastics (PE, POM-C etc.)
- Other materials contained in components

Before proceeding to scrap the machine, it is mandatory to remove all parts which could cause damage to the environment, and dispose of them in accordance with relevant legislation.

MATERIAL	ACTION
Plastic	This must be removed and disposed of separately at a landfill, incinerator or waste disposal/recycling facility.
Lubricants and Oils	Inside gear units and variable speed drives. They must be collected and handed over to specialised centres authorised to collect and dispose of used oil (in Italy: <i>Consorzio Obbligatorio Oli usati</i>).
Iron	Remove and separate. Must be recycled at waste disposal/recycling centres.
Copper	Remove and separate. Must be recycled at waste disposal/recycling centres.
Steel	Remove and separate. Must be recycled at waste disposal/recycling centres.
Aluminium	Remove and separate. Must be recycled at waste disposal/recycling centres.
Pneumatic or Electrical Components	These must be removed to allow reuse in the event that they are still in good condition, or else overhauled and recycled where possible.





DANGER!
In order to eliminate any risk, repair operations and the installation of spare parts must only be performed by an authorised service centre.



WARNING!
Use only accessories and spare parts authorised by the manufacturer.
Original spare parts and accessories guarantee safe machine operation without malfunctions.

10.1 TECHNICAL SUPPORT

All support requests must be sent to the Customer Technical Support Service:



(+39) 0522 575156 / 577793



(+39) 0522 575903 / 374156



info@e-mazzoni.it

Specifying:

1. The machine's characteristics (obtainable from the identification plate)
2. The defect(s) encountered
3. The name, telephone number, email address (or fax number) of the person requesting the work and who will become the contact person for future communications.
Or else by filling out the following form

10.2 SPARE PARTS

All requests for spare parts must be sent to the Customer Technical Support Service:



(+39) 0522 575156 / 577793



(+39) 0522 575903 / 374156



info@e-mazzoni.it

Specifying:

1. The machine's characteristics (obtainable from the identification plate, per section 1.2)
2. Spare part code
3. Quantity required
4. Shipping method

Please also indicate:

- Whether you are placing an order or requesting prices
- The required date of delivery
- The delivery address and invoice address (where different)
- Any shipping instructions
- The name, telephone number, email address (or fax number) of the person making the request and who will become the contact person for future communications Or complete the spare parts request form.



MAZZONI S.R.L.

Via Prati Vecchi 5, 42025 Cavriago (RE), Italy
Tel. +39 0522 575156 / 577793 - Fax +39 0522 575903


PROFESSIONAL


10.01



10.3 SPARE PARTS ORDER FORM

To order spare parts for our machines, contact the spare parts department, using the request form below which must be completed in full.

 (+39) 0522 575156 / 577793

 (+39) 0522 575903 / 374156

 info@e-mazzoni.it

MAZZONI S.R.L. - SPARE PARTS DEPARTMENT

Company

Address

Tax code/ VAT number

Contact person

Spare parts destination address

Machine model

Series

Serial number

Year of manufacture

SPARE PARTS

CODE	DESCRIPTION	QUANTITY





Professional Hot-Water Pressure Washer Use and Maintenance Manual



On the internet:

- <http://www.industrialcleaningmachines.eu/product/acqua-calda>



MAZZONI S.R.L.

Via Prati Vecchi 5, 42025 Cavriago, REGGIO EMILIA (Italy)

www.e-mazzoni.it