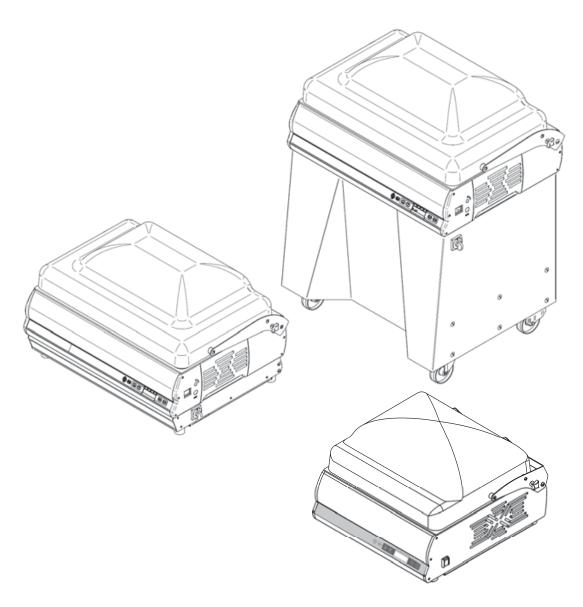


VACUUM PACKAGING MACHINE



USER AND MAINTENANCE MANUAL

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1 Delivery and warranty

1.1 - Foreword

ATTENTION!

The symbols used in this manual intend to call the reader's attention to points and operations that put the operator's personal safety at risk or which can cause damage to the machine itself.

Do not operate with the machine if you are not certain to have correctly understood that highlighted in these notes.

ATTENTION!

Some illustrations in this manual represent the machine or parts of the same with panels or guards removed. This is in order to make things clearer.

Do not use the machine in these conditions, but only with all protections mounted correctly and in perfect working order.

The Manufacturer prohibits reproduction, even partial, of this manual and its content cannot be used for purposes not permitted by the same.

Any breach thereof will be dealt with under the provisions of said Law.

1.2 - Preservation and use of the manual

The purpose of this manual is to make the users of the machine aware of the prescriptions and essential criteria relative to transport, handling, use and maintenance of the machine itself, via texts and figures.

Therefore, this manual must be read thoroughly before the machine is used. Keep it in a safe place near to the machine, which is easy and quick to access for future consultation.

If the manual is lost or deteriorated, request a copy from your dealer or the Manufacturer directly.

If the machine is transferred, inform the Manufacturer of the name and address of the new owner.

This manual reflects the state of the art at the time of marketing and cannot be considered inadequate merely because it is updated successively on the basis of new developments. The manufacturer also reserves the right to update production and relative manuals without the obligation to updating earlier issues, except in exceptional cases.

If in doubt, consult the nearest after-sales centre or the Manufacturer directly.

The manufacturer is intent on continuous optimisation of its product.

For this reason it is pleased to receive any signals or proposals for improvement of the machine and/or manual.

The machine has been delivered to the user with valid warranty conditions at the time of purchase.

Contact your own supplier for all clarifications.

1.3 - Warranty

The Manufacturer is committed for 12 (twelve) months, from the date of shipping and direct delivery of the goods, to guaranteeing the customer or authorised dealer the integrity and good operation of the components relative to the machinery in question.

The warranty excludes all parts of the machinery subject to normal wear, i.e components in which use generates unstoppable constant wear:

- A. Electric resistances Teflon Sealing gaskets Dome opening pistons Sealing membrane– Air filters Oil filters Oil change Pump vanes.
- B. Whenever a vacuum pump relative to a machine under warranty is returned to the Manufacturer due to problems regarding suction and malfunctioning, the Manufacturer reserves the right to control whether foreign bodies have been sucked up: (liquids, solids, juices, sauces etc.). If this situation is verified, the repair materials and labour will be charged regularly, as the problem is not linked to manufacturing defects but Customer negligence during use.
- C. Any problems linked to the electronic circuit boards of the circuit must be examined by the Manufacturer before the piece to be replaced is sent under warranty. A voltage change, electric over-feeding, interference in the external mains, could cause damage that is not the manufacturer's fault or which can be blamed on the manufacture of the piece.
- D. Any problems linked to pneumatic, structural, mechanical parts, will be solved normally under warranty without charge.
- E. During the warranty period, for interventions covered by the same, there will be no charge for the materials replaced, while labour costs will be calculated. For any interventions performed during the warranty period that are not covered by the warranty itself, the materials replaced and the labour will be charged regularly.
- F. If external interventions by our technicians are requested during the warranty period, travel expenses (return) will be charged in full, independent of the cause of the intervention.

1.4 - General recommendations and limits of liability of the Manufacturer

Every operator-machine interaction, within the declared use ambit and the entire life cycle of the same, has been carefully and thoroughly analysed by the Manufacturer during the design and construction phases and when drawing up the instruction manual. In spite of this, it is intended that nothing can replace the experience, suitable training and especially the "good common sense" of those interacting with the machine. The last requisites are therefore deemed indispensible in every operational phase inherent the machine and when reading this manual.

Failure to comply with the precautions or specific recommendations present in this manual, use of the machine by unsuitable staff, violate all Safety Standards concerning the design, manufacture and declared use of the supply and relieve the Manufacturer from all liability in the event of damage/injury to objects/persons.

The Manufacturer is not deemed liable for the consequences caused by the user's failure to comply with the safety precautions given in this manual.

1.5 - Description of the machine

The vacuum packaging machine with dome is controlled electrically and therefore not subject to wear. The electronically-governed sealing system, is composed of a flat resistance (5mm) stainless steel bar which, thanks to an excellent pneumatic system installed, guarantees balanced and even sealing on any type of bag to be used (nylon, polyethylene, Cryovac).

The vacuum pumps used are very modern and guarantee surprising silence even though operating with uninterrupted cycles along with a very high level of final vacuum.

The models represented in this manual have been created in compliance with the directives **UL 963** norms and **CSA 22.2** regulations.

In the event of an accident, the manufacturer cannot be held responsible if the machine has been modified, tampered with, the safety protections have been removed or used in ways not declared by the manufacturer.

1.6 - Declared use

The machine has been designed and manufactured to vacuum pack products according to the instructions in this manual and must be intended for this use only. Any other use must be considered improper and therefore dangerous. The Manufacturer cannot be considered responsible for any damage deriving from improper, incorrect or unreasonable use.

It must be used in professional environments and any staff using the machine must have experience in the sector and have read and understood this manual.

1.7- Uses not allowed

1.7.1 - Safety prescriptions

The following points must be respected:

- 1 never touch the metal parts of the machine with wet or damp hands;
- 2 do not pull the power supply cable or the appliance itself, to disconnect the plug from the current;
- 3 do not allow the packaging machine to be used by children or untrained staff;.
- 4 the electric safety of this machine is only assured when the same is correctly connected to an efficient earth plant, as envisioned by the electric Safety Standards in force; this fundamental requirement must be verified. If in doubt, request an accurate control of the system by professionally qualified staff; the Manufacturer cannot be considered responsible for any damage caused by the failure to earth the system;
- 5 in the event of possible damage to the earth protection, the machine must be put out of service, in order to prevent undesired and/or involuntary activation;
- 6 always use protection fuses that are in compliance with the Safety Standards in force, with the correct value and suitable mechanical features;

- 7 avoid the use of repaired fuses and the creation of short circuits between the terminals on the fuse holders:
- 8 the packaging machine power supply cable must never be replaced by the user; contact the machine manufacturer exclusively in the event of damage to the cable, or for its replacement;
- 9 keep the cable away from hot parts;
- 10 always switch the machine off and disconnect it from the mains electricity before starting any global clearing procedure or washing operation;
- 11 clean the machine coverings, panels and commands using soft, dry cloths dampened in a weak solution of detergent or alcohol;
- 12 The machines for use with Gas are not set-up for use with mixtures containing over 20% oxygen.

1.7.2 - Lighting

The place of installation of the machine must have sufficient natural and artificial lighting in compliance with the Standards in force in the country of installation of the packaging machine.

In all cases, the lighting must be uniform and guarantee good visibility in all parts of the packaging machine and must not create dangerous reflections.

The lighting must allow the control panels to be read correctly and clearly identify the emergency buttons.

1.8 - Company details

An exact description of the "Model", the "Serial number" and the "Year of Manufacture" of the machine will facilitate quick and effective response by our after-sales assistance. It is advised to indicate the model of the machine and the serial number every time the after-sales service is contacted.

Identify the plate data represented in fig. 1.8.1.

We suggest you write the data of your machine in the box below as a reminder.

Machine Madel
Machine Model
Serial number
Year of construction
Type

(
MOD:	Α		_
VOLT:	В	WATT:	С
HZ:	D	KG:	E
AMPS:	F	ANNO:	G
SERIA	L NO:		Н
	<u> </u>		X 57
			ĈE
		L	

A = Machine model B = Power supply C = Motor power

D = Motor frequency Hz

E = Weight

F = Amperage

G = Year of construction

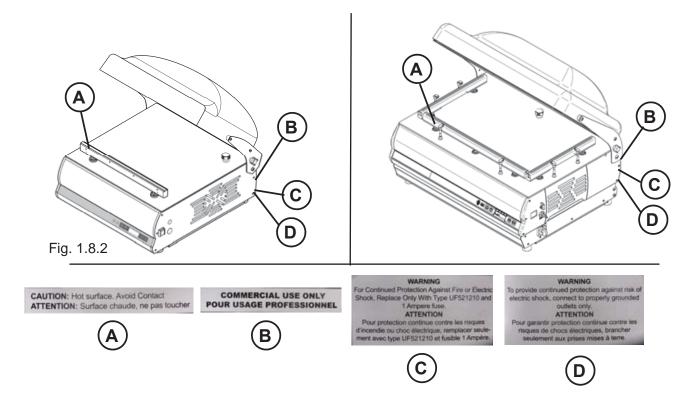
H = Serial N°

I = Manufacturer

L = Bar code

Fig. 1.8.1

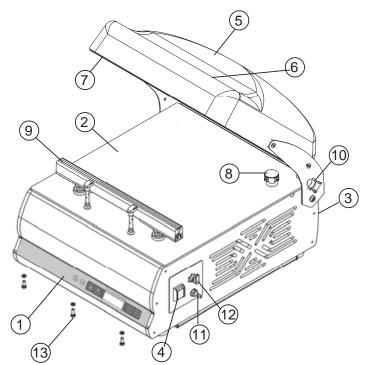
1.8.1 - Warning and danger plates (Fig. 1.8.2)



2 Technical features

2.1 - Main parts

To facilitate comprehension of the manual, the main machine components are listed below and represented in fig. 2.1.1.



- 1. Control panel
- 2. Surface
- 3. Power supply cable
- 4. Master switch
- 5. Transparent Plexiglas dome
- 6. Silicon counter-bar
- 7. Sealing gasket
- 8. Suction pipe for vacuum
- 9. Sealing bar
- 10. Dome fixing knob
- 11. Gas pipe fitting.
- 12. Soft-air cock
- 13. Front profile locking screws

Fig. 2.1.1

2.2 - Technical features

	30/8	30/12	40	50	50 x2	70/40
Power Kw	0,35	0,45	0,75	0,75	0,75	1.5 KW
Vacuum pump	8 mc/h	12 mc/h	21 mc/h	21 mc/h	21 mc/h	40 mc/h
Sealing bar	310 mm	310 mm	410 mm	510 mm	n. 2 x 410 mm	n. 1 x 640 mm n. 2 x 410 mm
Chamber dimensions	340x360x h130 mm	340x360x h130 mm	430x410x h140 mm	540x430x h190 mm	545x460x h190 mm	780 x 480 h 190 mm
Power supply	120V/60Hz	120V/60Hz	120V/60Hz	120V/60Hz	120V/60Hz	220V / 60Hz
Oil tank capacity	ml 250	ml 450	ml 450	ml 450	ml 450	1 It

2.3 - Dimensions and weight of the machine

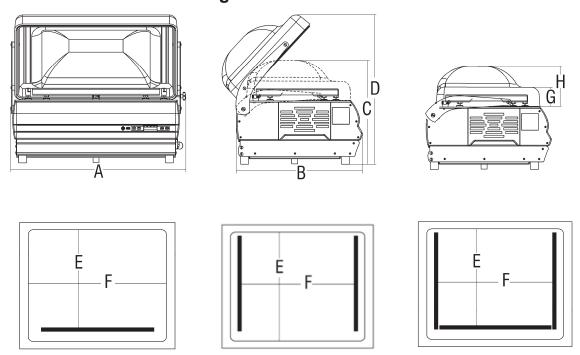


Fig. 2.3.1

	Α	В	С	D	E	F	G	Н	Peso netto
	mm	mm	mm	mm	mm	mm	mm	mm	Kg
30	402	525	360	480	333,5	340	85	140	46
40	493	585	370	542	390	430	85	150	56
50	609	640	420	605	430	540	90	200	70
50 x2	609	640	420	605	424	428	90	200	71
70	850	650	520	670	424	660	90	200	115
70 P	850	650	1134	1368	424	660	95	200	167

2.4 - Wiring diagram

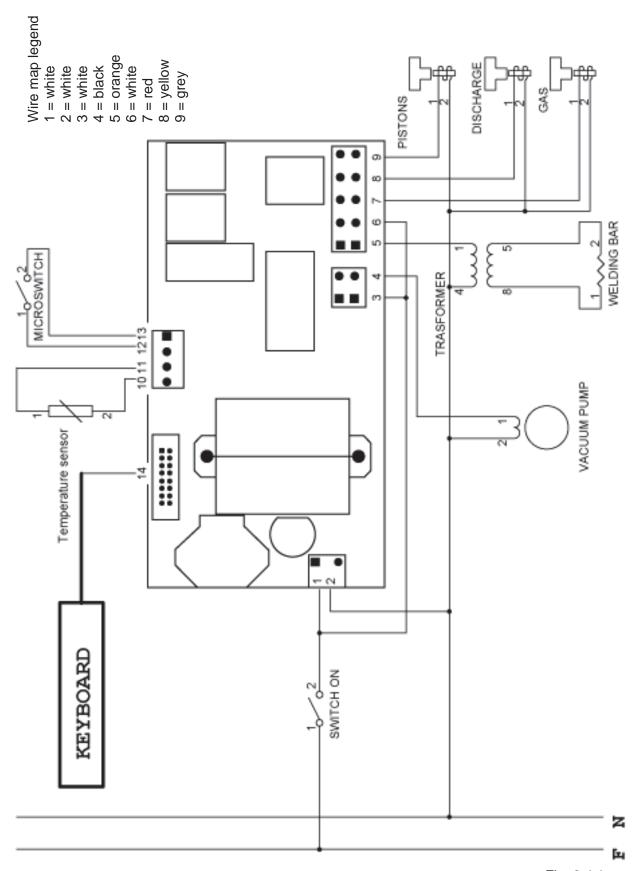


Fig. 2.4.1

2.4.2 - Wiring diagram Mod. Easy

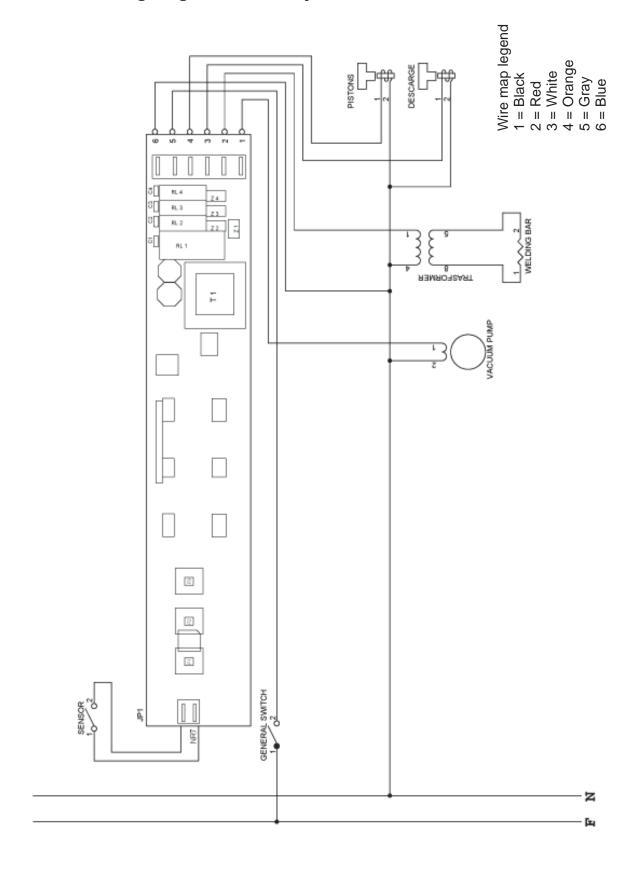


Fig. 2.4.2

3 Inspection, transport, delivery and installation

3.1 - Inspection

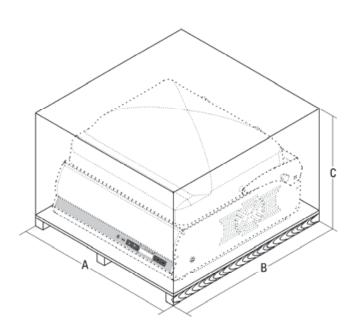
The machine you own has been inspected at our establishment in order to certify correct operation and adjustment.

3.2 - Delivery and handling the machine

All material delivered has been accurately controlled before consignment to the carrier.

Unless agreed differently with the Customer or for particularly onerous transport, the machine is wrapped in nylon and cardboard.

The packaging dimensions are given in fig. 3.2.1



	Α	В	С	Gross weight
	mm	mm	mm	Kg
30	720	570	770	57
40	760	640	770	67
50	840	870	750	84
70	1200	800	720	
70 P	1200	800	1350	

On receipt of the machine, check the integrity of the packaging.

If the packaging is damaged, sign the documents for receipt with the following note:

"Accepted subject to checking..." and the reason.

Open the packaging, and in the presence of machine components that are really damaged, make a claim to the carrier within three days from the date indicated on the documents.

3.3 - Installation

After having removed the packaging, check the integrity of the machine.

In particular, check that the machine is integral and without visible damage, which could have been caused during transport.

If in doubt, do not use the machine and contact the Manufacturer.

Place

Position the packaging machine place with a low percentage of humidity and away from heat sources.

Before carrying out any check that leads to the removal of some items, the plug must be removed from the mains electricity.

3.3.1 - Disposal of the packaging

The packaging materials such as cardboard, nylon and wood are products similar to solid urban waste. They can therefore be disposed of freely.

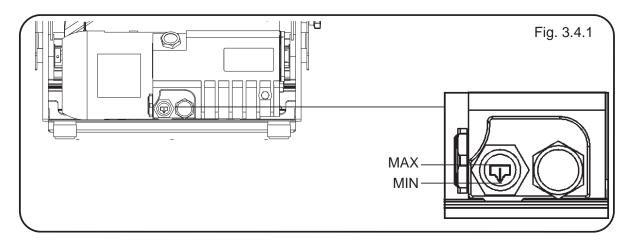
Nylon is a pollutant, which produces toxic fumes if burned.

Do not burn and disperse in the environment, but dispose according to the Laws in force.

If the machine is in a country where there are particular regulations, dispose of the packaging in compliance with that described by the Standards in force.

3.4 - Connections

Before start-up, check the oil level via the control window present on the pump.



Before connecting the packaging machine, make sure that the plate data correspond with that of the mains electricity.

The plate is on the rear of the machine.

When the level has been checked and everything closed, connect the plug to the 120V or 220V socket.

In the event of incompatibility between the socket and plug, have the socket replaced with a suitable one by professionally qualified staff.

In particular, the latter must check that the section of the cables is suitable for the input power of the machine. In general, the use of adapters, multiple socket outlets and/or extensions is not recommended.

Whenever their use is indispensible, only simple or multiple adapters and extensions must be used that are in compliance with Safety Standards in force; however paying attention not to exceed the capacity limit in terms of current value, and the maximum power value marked on the multiple outlet.

3.5 - Electrical system hook-up

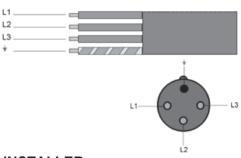
ATTENTION!

- Connect the 16 ampere plug supplied by the manufacturer to the power cable. Make sure that its voltage matches the value displayed on the machine's rating Plate. All work on the electrical system of the machine must be carried out by specialized staff duly authorized for its performance by the manager in charge. Hook the machine to a power grid that has an efficient earthing connection.

3.5.1 - 3-phase machine (220 V/50 Hz)

These machine versions include a power cable with a diameter of 4 x 1 mm.

The power cable is plugged into a quadripolar 3-phase socket. Hook the cable to the 3-phase power grid, interposing a 16 ampere differential circuit breaker.



3.5.2 - Check the electrical connection - ONLY FOR INSTALLER

Connect the plug to the power supply.

Starting the machine and check the rotation sense of vacuum pump. The rotation sense

must be clockwise (Fig. 3.5.3).

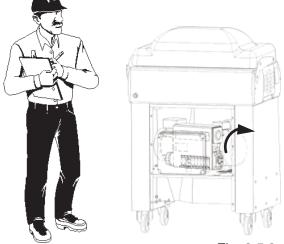


Fig. 3.5.3

If the rotation sense is not correct, disconnect the machine to the power supply and reverse two wires (Fig. 3.5.4).

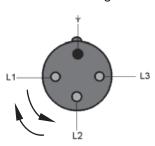


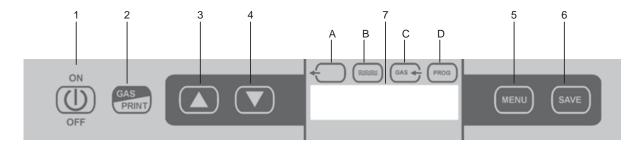
Fig. 3.5.4

Note: For the machines connected to a single-phase line, the rotation sense is set by the manufacturer.

4 Using the machine

4.1- Control board key

Fig. 4.1.1



- 1. ON-OFF Machine switch-on and access to the machine programming menu.
- 2. Activation of inert gases (on machine set-up only)
 Activation of thermal printer (on machine set-up only)
- 3. Increase times.
- 4. Decrease times.
- 5. Selection of suction times (A).
 - Selection of sealing times (B).
 - Selection of gas injection time (C) (on machine set-up).
 - Selection of automatic or saved programs (D).
- 6. Storing programs.

The current selection can be saved by holding this key down until "program saved" appears on the display.

7. Analogue display for logo, programs, times, date and time.

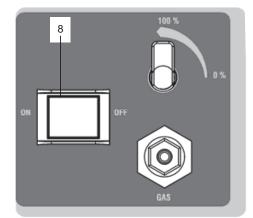


Fig. 4.1.2

A = suction time

B = sealing time

C = gas injection time

D = selected program

Button 1 pressed once when the machine is in vacuum mode, allows the bags to be sealed immediately. If it is pressed twice, when the machine is in vacuum mode, it allows the operator to run a quick discharge, instantly reopening the bell and avoiding the welding.

!!! CAUTION !!!

All the following functions and adjustments must be performed with the machine powered (main switch ref. 8 fig. 4.1.2 in position ON)

and the board switched to OFF (the display will intermittently read OFF and the DATE and TIME).

If the board is on, switch it off before you perform the following operations, by pressing the key ref. 1 fig. 4.1.1

4.1.1 Adjusting the MENU language

Hold key 1 down (fig. 4.1.1) for at least 5 seconds.

"Languages" will appear on the display. By pressing keys 3 and 4 (fig. 4.1.1) the desired language can be selected and then confirmed by pressing key 1 (fig. 4.1.1).

4.1.2 Automatic vacuum adjustment

Hold key 1 (fig. 4.1.1) down for at least 5 seconds. The wording "language" appears on the display. Press key 5 (fig. 4.1.1) and select "Setting PROG. A". Use keys 3 and 4 (fig. 4.1.1) to select the final pressure you want to reach in the bell.

1 mb (hard vacuum)

5 mb (standard vacuum)

10 mb (soft fast vacuum)

Confirm by pressing 1 (fig. 4.1.1).

4.1.3 Activation of the thermal printer

Press the button 2 (fig 4.1.1.) for 3 seconds to activate the thermal printer.

Finished every cycle of work the machine will make the label printing.

By pressing the button SAVE (6 fig. 4.1.1) you can reprint the last label.

To deactivate the printer it will be sufficient press the button 2 for 3 seconds.

4.1.4 Date adjustment

Hold key 1 down (fig. 4.1.1) for at least 5 seconds.

"Languages" will appear on the display. Press key 5 (fig. 4.1.1) and select "date". By pressing keys 3 and 4 (fig. 4.1.1) it will be possible to set the date. Confirm by pressing key 1 (fig. 4.1.1).

4.1.5 Time adjustment

Hold key 1 down (fig. 4.1.1) for at least 5 seconds.

"Languages" will appear on the display. Press key 5 (fig. 4.1.1) and select "time". By pressing keys 3 and 4 (fig. 4.1.1) it will be possible to set the data. Confirm by pressing key 1 (fig. 4.1.1).

4.1.6 Simplified Menu

To access the menu to set machine parameters, hold the



key pressed for 5".

By doing so, you will access the parameters menu, which can be used and is accessible to all users.

Use the



key to scroll the menu items.

		DEFAULT	NOTE	
4	LANGUAGE	ITALIANO	6 selectable display languages.	
5	AUTOMATIC VACUUM	5 mb	1 mb (hard vacuum) - 5 mb (standard vacuum) -	
	ADJUSTMENT	O IIID	10 mb (soft fast vacuum)	
6	YEAR			
7	MONTH		Date and time are set by default when assembling the machine and a buffer battery avoids the hass	
8	DAY			
9	TIME		of having to set it again after a voltage black-out.	
10	MINUTE			

Use the



and

•

keys to modify the set parameters.

Use the



key to confirm the changed or wait for the machine to return to OFF mode after 30 seconds.

4.1.7 Pressure sensor calibration (must be done at first use of the machine) for vacuum full versions with pressure sensor

Reasons and procedures

Firmware rel. W8VD1A V4.4 and subsequent versions

This machine is equipped with a very precise "relative pressure" sensor that allows you to automatically manage optimal operation time without having to carry out checks or manual settings.

To use the vacuum sensor, all you need to do is make sure the machine is powered up and turned on, then check that the letters "AA" appear on the right of the display; this shows that the automatic vacuum is functioning.

Otherwise, move to the MENU button (button 6) in the D display field and, using button 3 and 4, select the automatic program position AA.

The relative pressure is the difference between the location's air pressure and the desired final vacuum point (you can select from 1, 5 or 10 Mb as in the manual in point 4.1.2).

This relative pressure is, however, affected by the air pressure of the place where the machine has been installed, which may differ substantially from the one in which the machines are produced and tested (20 m above sea level with an average pressure of 1020 Mb).

With an increase in altitude, the pressure goes down considerably and the sensor may have difficulties taking readings, which has an effect on the vacuum percentage shown on the display. It isn't the functionality of the machine that changes, the pump is not affected in any way, and the actual pressure reached in the room is, at such a time of operation, the same as or even less than what it was when the machine was manufactured.

However, the following problem occurs: despite the fact that the room has reached the vacuum required, the display continues to indicate a lower vacuum, and therefore the pump continues to run uninterrupted.

In order to recalibrate the sensor to the new pressure situation of the machine's installation location, different from the altitude and pressure of under which the machine was manufactured, a simple sensor calibration program has therefore comes with the machine.

To calibrate, enter the programming menu: when the machine is powered up and turned off, you should hold down the ON/OFF button (button 1) for 5 seconds. Move on using the MENU button (button 5) until you get to: VACUUM CALLIBRATION, choose "yes" with the arrows (buttons 3-4), confirm with the MENU button (button 5) and follow the instructions indicated on the display (closing the chamber).

Once the machine's calibration cycle is complete, the machine is ready to work under the best conditions. If you lose power or the calibration procedure is necessarily interrupted, we recommend repeating the steps described.

All of the machines with firmware release W8VD1A V4.1 and subsequent versions can be updated with this V4.4 release.

4.2 - Using the packaging machine

4.2.1 Vacuum packaging

- 1. Connect the machine to the mains power supply
- 2. Unscrew the black knob on the right side of the machine until the dome is released and work can be started.
- 3. Supply power to the machine on using the switch on the right side. "OFF _____" will appear on the display.
- 4. Switch the board by pressing the key ref. 1 fig. 4.1.1
- 5. Set the suction time, the sealing time and the gas injection time (if the packaging machine is fitted with this system).
- 6. Place the bag on the surface resting the open end of the bag on the sealing bar in a perfectly flat manner.
- 7. Lower the dome, applying pressure so that it remains closed and allows the work cycle to begin.

4.2.2 Automatic packaging

If the operator selects program "AA" using key 6, the suction time will be calculated automatically by the machine, while the operator must only set the sealing time by evaluating the thickness of the bags used.

In this situation the following will appear on the screen in correspondence with:

A the wording AUT

B the sealing time that can be set

C any gas time (machine set-up only)

D the wording "AA"

After having set the desired times, place the bag on the surface, resting the open end of the bag on the sealing bar in a perfectly flat manner.

Lower the dome, applying pressure so that it remains closed an the work cycle can begin.

4.2.3 Automatic packaging with adjustable vacuum percentage

If the operator selects program "AA" using key 6, the suction time will be calculated automatically by the machine, while the operator can set the sealing time, by evaluating the thickness of the bags used and, via keys 3 and 4, set the vacuum percentage that the machine must achieve (50% - 60% - 70% - 80% - 90%).

In this situation the following will appear on the screen in correspondence with:

A the wording AUT

B the sealing time that can be set

C any gas time (machine set-up only)

D the wording "AA"

After having set the desired times, place the bag on the surface, resting the open end on the sealing bar in a perfectly flat manner.

Lower the dome, applying pressure so that it remains closed and the work cycle can begin.

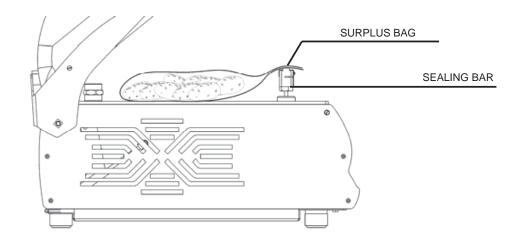


Fig. 4.2.1

4.2.4 Packaging with introduction of inert gases. (Optional)

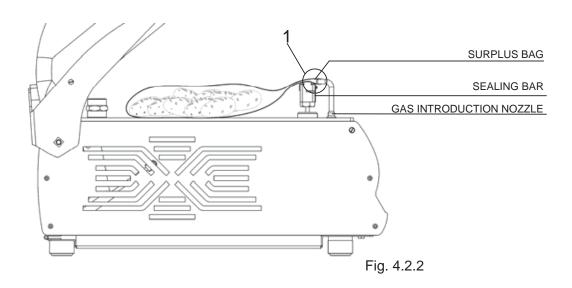
ATTENTION, ONLY USE GAS WITH MAXIMUM 20% OXYGEN. MIXES WITH A HIGH OXYGEN PERCENTAGE ARE POTENTIALLY DANGEROUS IF USED WITH THIS MACHINE

Connect the pipe coming from the fitting cylinder ref. 12 fig. 2.1.1 positioned on the right side of the machine and adjust the manometer positioned on the cylinder to a pressure value equal to 0.4 - 0.5 Bar.

- 1. Start the gas cycle by pressing key 2.
- 2. Use keys 3 and 4 to set the gas injection time. Normally, it never exceeds 6 7 seconds, as gas saturation in the dome would cause the sealing bars sealing pressure to drop (min. vacuum percentage in dome = 70%).
- 3. Place the bag containing the product inside the vacuum chamber, inserting the gas introduction nozzle inside the mouth of the bag, taking care that there are no folds that prevent the gas escaping.

Whenever large bags are used, two nozzle can be inserted at the same time in order to eliminate waste gas in the dome.

4. To deactivate the gas cycle pressing key 2.



The main food gas suppliers are:

SIAD SIO SAPIO RIVOIRA

PERGINE LINDE GAS SOL

Addresses can normally found in the telephone directory under the GAS heading. The following table shows some product types with relative pre-determined mixture.

"We recommend the use of a gas pressure adjustment manometer with scale from 0 to 6 Bar to guarantee gas inlet pressure into the machine of 0.4 - 0.5 Bar, as it is much more accurate than a manometer with scale from 0 to 30 Bar. If the gas inlet pressure should not be that indicated, the machine could have problems in the working phase"

SEALING TIME	MATERIAL	THICKNESS (micro)
2	CRYOVAC / HEAT-SHRINKABLE	-
3	BAGS	100
4/5	BAGS	140

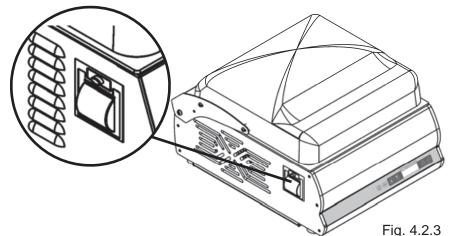
4.2.5 - Packaging with the use of the thermal printer

If the thermal printer has been activated in the machine, as described in paragraph 4.1.3, a label containing the following data will be printed at every vacuum cycle:



Data Date Fecha Tag
00.00.0000
Ora Time Hora Uhrzeit
00:00

Vuoto: -100% Tempo GAS -0.0 Saldatura -6.3 s



By briefly pressing the SAVE key (ref. 6 fig. 4.1.1) it is possible to have several copies of the last label printed.

4.2.6 - Edit label printing

You can change the text "Vacuum packaging" on the label by adding a text up to 16 characters

With the machine powered (the main switch ref. 8 fig. 4.1.2 in ON) and the board OFF Press and hold the (1) key (1 fig. 4.1.1) for at least 5 seconds.

Press the key (5 fig. 4.1.1) and select "change printer".

Press the and keys (3 and 4 fig. 4.1.1) to select the character and confirm it by pressing the key (6 fig. 4.1.1).

It will then go on to the next character until the desired text has been written

Confirm the new text by pressing the key (5 fig. 4.1.1)

Press the (1) key (1 fig. 4.1.1) or wait 30 seconds to return to the OFF mode.

4.3 - Packaging liquids or semi-liquids

With the dome vacuum packing machines we produce, it is possible to vacuum pack liquids and semi-liquids (soups, juices, sauces, etc...) lengthening their duration and maintaining flavour and hygiene unaltered.

In these cases, remember that the bags must never be filled up to maximum limit, but up to 50% of the capacity, making sure that the edge is at a higher level with respect to the sealing bar.

- 1. Select the program "LA" using key 6 The vacuum cycle remains programmed as described in the USING THE PACKAGING MACHINE chapter. (4.2)
- 2. As liquids are incompressible, they do not require packaging in modified environments, i.e. with the addition of inert gases.
- 3. Before sealing the bag, the machine will make two breaks

4. All of the packets can be stored in a cold room and stacked normally.

4.3.1 - Packaging liquids or semi-liquids with the use of standard inclined surface

When liquid products must be packed, the use of the inclined surface is recommended, in order to facilitate the operation.

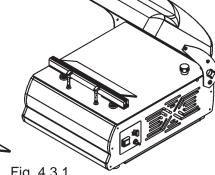


Fig. 4.3.1

4.3.2 - Packaging of thin products with the use of the optional raised surface

When thin products such as sliced cured meats must be packed, the use of the raised surface is recommended. in order to facilitate the operation

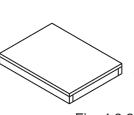
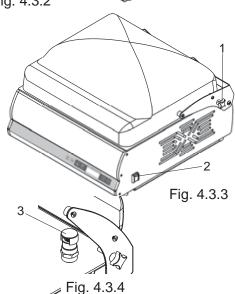


Fig. 4.3.2

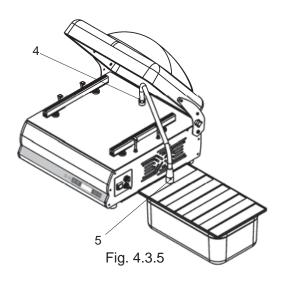
4.3.3 - Packaging products in an external pan (with % vacuum control)

When products stored in external trays must be packed, the use of the external suction kit is recommended in order to facilitate the operation.

- 1. Connect the machine to the mains power supply.
- 2. Unscrew the black knob (ref. 1 fig. 4.3.3) to positioned on the right side of the machine, in order release the dome and start to work.
- 3. Turn the machine on using the switch (ref. 2 fig. 4.3.3) on the right side. "OFF _____" will appear on the display.
- 4. Select the program XA by pressing the key Ref 6 fig. 4.1.1



- 5. Remove the suction cap (ref. 3 fig. 4.3.4).
- 6. Attach the suction kit pipe (ref. 4 fig. 4.3.5)
- 7. Attach the suction kit dome nut to the tray lid valve (ref. 5 fig. 4.3.5)
- 8. Use buttons ref. 3 and 4 fig. 4.1.1 to select the percentage vacuum desired inside the tray. (the choice is from 50% to 100%)
- 9. Press the key ref. 1 fig. 4.1.1 to start the vacuum cycle.
- 10. Once the vacuum percentage equal to 100% has been reached, the machine stops automatically.



4.3.4 - Packaging products in external pan (with vacuum time control)

- 1. Connect the machine to the power supply Network.
- 2. Loosen the black knob (ref. 1 fig. 4.3.3) positioned on the right side of the machine until the dome is released and the job can start.
- 3. Turn the machine on via the switch (ref. 2 fig. 4.3.3) on the right side. "OFF _____" will appear on the display.
- 4. Select the program XT by pressing the key ref 6 fig. 4.1.1
- 5. Remove the suction cap (ref. 3 fig. 4.3.4).
- 6. Attach the suction kit pipe (ref. 4 fig. 4.3.5)
- 7. Attach the suction kit dome nut to the tray lid valve (ref. 5 fig. 4.3.5)
- 8. Pressing on the menu key ref 5 fig. 4.1.1 take the display cursor to position A
- 9. Pressing the buttons ref 3 and 4 fig. 4.1.1 select the desired suction time
- 10. Press the key ref. 1 fig. 4.1.1 to start the vacuum cycle.
- 11. When the suction time selected has expired, the machine stops automatically.

4.4 - Examples of packaging in controlled atmosphere NEVER USE MIXTURES WITH OXYGEN OVER 20%

PRODUCT	OXYGEN % (O ₂)	CARBON DIOXIDE % (CO ₂)	NITRO- GEN % (N ₂)
Deli cold cuts	-	20	80
Bear/Beverages in cans	-	100	
Biscuits and baked products	-	100	100
Coffee	-	100	100
Freeze-dried meats and spices	-	-	100
Minced meat	-	-	100
Chocolate	-	100	-
Fresh cheese/Mozzarella	-/-	20/-	80/100
Hard cheeses	-	-	100
Fresh salad/Parsley	-	50	50
Yogurt/Puff pastry	-	100	-
Powdered milk	-	30	70
Powdered dry yeast	-	100	100

PRODUCT	OXYGEN % (O ₂)	CARBON DIOXIDE % (CO ₂)	NITRO- GEN % (N ₂)
Apples	2	1	97
Sliced pork belly	-	35	65
Sliced bread/Bread	-	100	-
Toast/Danish toasts	-	80	20
Pasta	-	-	100
Fresh pasta/tortellini/lasagne	-	70/100	30
Potatoes/Chips/Snacks/Hops	-		100
Blue Fish	-	60	40
Pizza	-	30	70
Poultry	-	75	25
Tomatoes	4	4	92
Pre-cooked products	-	80	20
Cured meats	-	20	80
Fruit juices	-	-	100
Trouts/ Farmed fish		100	-
Wine/Oil	-	-	100

PRESERVATION TIME OF VACUUM PACKE DPRODUCTS KEPT AT A TEMPERATURE OF +0°/+3° C.

FISH: Average duration 7/8 days with extremely fresh product

CURED COLD CUTS: Maintenance time to perfection over 3 months

MATURED CHEESES: Grana, pecorino, etc. 120 days **FRESH CHEESES:** Mozzarella, brie, etc 30/60 days

VEGETABLES: In general 15/20 days

FRESH MEATS	
BEEF	30/40 days
VEAL	30/40 days
PORK	20/25 days
WHITE MEATS	20/25 days
RABBIT AND GAME ON THE BONE	20 days
LAMB/GOAT	30 days
SAUSAGES	30 days
OFFAL	10/12 days

24

4.5 - Cleaning the machine ATTENTION!

Disconnect the machine from the mains electricity before cleaning.

Do not clean the machine using a jet of water.

Use non-toxic detergents only, expressly intended for clearing components coming into contact with foodstuffs. **DO NOT** use chlorine-based detergents.

DO NOT use ethyl alcohol to clean the Plexiglas dome.

The Plexiglas must be cleaned regularly with a soft, damp cloth, using cold or warm water, with a small amount of neutral detergent.

It is recommended to avoid:

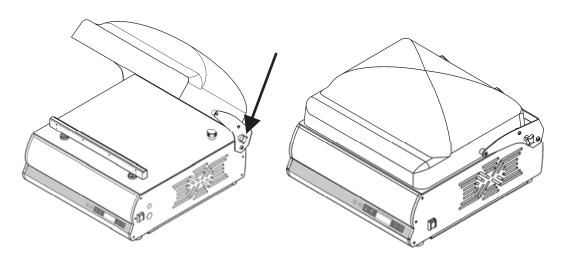
- the use of products containing: denatured ethyl alcohol, solvents in general, Benzene, Trichloroethylene
- the use of abrasive materials and contact with sharp objects

Drying

When the dome has been cleaned, it can be dried using a slightly damp chamois cloth, without rubbing hard.

4.6 - Machine at rest ATTENTION!

If the machine is not used for a long period of time, to prevent dirt and dust depositing inside the chamber, close and fix the dome using the relevant fixing knob.



4.7 - Vacuum pump heating

During the winter period, in the morning it is recommended to briefly pre-heat the pump in order to fluidify the oil before it goes into circulation:

- Position the master switch (ref. 4 fig. 2.1.1) at ON.
- Close the suction cock (ref. 8 fig 2.1.1)
- Press the SAVE key 4 times (ref. 6 fig 4.1.1)

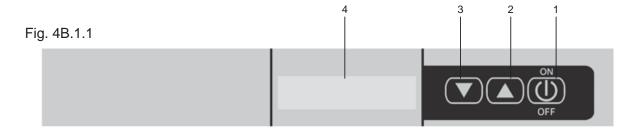
The machine will perform an oil heating cycle and the cycle will block automatically on reaching a temperature of 50 °C.

If the operator wants to interrupt the cycle before it ends, he must press the switchon key ref. 1 fig 4.1.1.

N.B. This operation must only be performed with the intake cock closed.

4B Use of the Mod. Easy Machine

4B.1 - Mod Easy Control Panel Legend



1. ON-OFF

- Turning the machine on and off: briefly pressthe ON button pressthe OFF button for 3 sec.
- Interruption of work phase: During the work phases, if pressed, it stops the processing and passes to the next one.
- Vac Time or Seal Time Selection: when in the ON mode, if pressed, it allows you to move the arrow in order to select Between VacTime and Seal Time (for their modification use keys 2 and 3 to increase or decreasetheirvalues)

Note: the software always saves the latest change.

2. Increase the Selected Values

- Press to increase the values previously selected:
 Adjustable values: vacuum packing time; seal time or external vacuumpacking time
- When in the OFF mode, if pressed for 3 times in a row,the pre-heating cycle or expulsion of water residues from the oil pump will be started
 To be performed after vacuum cycles with liquid products, or every 15 days.
 The duration of the cycle is 15 minutes and can be interrupted by pressing the 1 button
 NB This should be always performed with the suction cap closed (turn the cap to close the slots)

3. Decrease the Selected Values

- Press to decrease the values previously selected:

Adjustable values: vacuum packing time; sealing time or external vacuum packingtime Pressing buttons 2 and 3 simultaneously switching from vacuumpacking chamber mode to external vacuum packing mode in a cyclic modality.

4. Analog Display

- It allows the working modalities to be viewed:

OFF

chamber vacuum packing external vacuum packing pre-heating or expulsion of water residuals Vacuum percentage

4B.1.1 Chamber Vacuum Packing Cycle

- 1 Press the general switch (right side of machine) Ref. 8 Fig. 4B.1.2 in the ON position. The display lights up and the word OFF appears
- 2 Press the 1 button and put the machine in an ON mode. The machine is ready for the chambervacuum packing cycle. Check that the timing of vacuum packing and sealingtimes are optimal (the machine is sold with preset vacuum packing and sealing values).
- 3 Place the bag inside the chamber and close the chamber to start a work cycle.
- 4 Check that the vacuum packaging percentage has reached 100%
- 5 Finish the cycle, open the chamber and extract the sealed vacuum packedproduct. Start again from phase 3 for a new cycle.

Note: Every work step may be stopped by pressing the 1 button

Pressing the 1 button once = stop the vacuum packing and start the sealing cycle

Pressing the 1 button twice = cancel the cycle without sealing

4B.1.2 External Vacuum Packing Cycle

Place the switch (right side of the machine) Ref. 8 fig. 4B.1.2 in the ON position The display will read OFF

Press the 1 button and put the machine in the ON mode (vacuum packing chamber). Simultaneously press buttons 2 and 3 for 1 sec.

The display will show the message EXT. VACUUM

Check that the set time is sufficient.

If necessary, increase or decrease the time with keys 2 and 3.

Insert the tube for external suction (optional) in the suction hole, being careful to remove the adjustable cap.

Press the 1 button to start the cycle.

The cycle will stop automatically when it reaches the set time.

Please note: Pressing buttons 2 and 3 at the same time will return it to the vacuum chamber packing mode.

5 Controls and maintenance

5.1 - Controls and maintenance

Access to the internal part of the machine is reserved exclusively to our specialised technician.

If the machine is accessed voluntarily, the manufacturer declines all civil and penal liability regarding any accidents or damage caused to persons or objects. All electric components are protected within the machine body and the relative guard must be removed in order to gain access. Whenever access must be made, remove the plug from the electric control board current socket.

5.2- Maintenance

- 1. Clean the sealing bars and the silicon counter-bar more or less every 15 days using alcohol.
- 2. Change the oil every 400 hours of working (data variable depending on the type of product packed).
 - After 2000 cycles the machine envisions an automatic oil control, the display shows the "oil change" message. The user must call the dealer, who will check the efficiency of the oil and will replace it, if necessary.
- 3. Replacement of electric resistances, Teflon sealing bar, lid sealing gaskets about every 200 working hours.
- 4. Replacement of the silicon counter-bar
- 5. Check pump vanes, filters, pneumatic solenoid valve seals every 35,000 work cycles.

5.2.1 - Vacuum pump

For the safeguarding and the duration of the vacuum pump, follow the indications given below scrupulously:

- Do not suck up steam, liquids and flours of any type.

 This compromises the viscosity of the pump oil and damages the pump itself.
- Periodically check the pump oil level through the visual inspection window (ref. 4 fig. 5.2.2)

A level below minimum can damage the pump

A level above maximum can damage the pump filter and the pump itself

- Periodically check the colour of the pump oil. If the oil appears cloudy, dark or emulsioned, it must be replaced immediately.
- Replace the pump oil every 2 / 4 / 6 or 12 months, depending on use and location of the equipment, or appearing the notice "*change oil*" on the display. The pump oil may have to be replaced every month.
- Replace the pump oil before prolonged machine shutdown.

ATTENTION!!:

Considering that the vacuum packaging machine is nearly always located in the kitchen, an environment full of steam and humidity, the level and quality of the pump oil must be checked constantly and replaced frequently and periodically.

Types oil	
AGIP ARNICA 32	Q8 HAENDEL 32
SHELL TELLUST 32	ESSO INVAROL EP46

6 Obligations in the event of malfunctioning and/or potential dangers

The operators must inform their direct seniors of any deficiency and/or potential dangerous situation that should occur.

6.1 - User obligations

The user must inform the manufacturer immediately if any defects and/or malfunctioning of the accident-prevention system are detected, as well as any presumed dangerous situation of which he becomes aware. It is prohibited for the user and/or third parties (excluding duly authorised manufacturer's staff) to make any type or entity of modifications to the machine and its functions, as well as to this technical document. In the event of malfunctioning and/or dangers, owing to failure to respect the afore-said, the manufacturer is not liable for any consequences. We recommend you request any

7 Troubleshooting

modifications from the Manufacturer.

7.1 - Troubleshooting

1 After having connected the master switch, the machine does not start:

- a) Check that the plug is well inserted into the socket and, if necessary, control the contacts inside the plug itself.
- b) Check that on lowering the dome, the micro switch positioned on the rear below the left fixing hinge, is excited.

2 The machine operates regularly, but the package is not sealed when the dome is opened

a) Lift the Teflon and check that the resistance is not interrupted and it is blocked on the lateral clamps.

3 If the machine does not achieve an excellent vacuum

- a) Close the dome and disconnect the line when a negative pressure of about 90% has been reached. Check whether the vacuum percentage indicated on the display remains fixed or decreases.
 - In the first case, there are no leaks, therefore the problem has another source (pump vanes, oil replacement).
 - In the second case, there is the presence of air infiltration into the dome:
 - Check the membrane below the sealing bar, checking that it has no holes or is ripped
 - Check the integrity of the sealing gasket positioned under the lid; if the afore-mentioned pieces must be replaced, request them directly from the authorised dealer.

7.2 Putting the machine out of service

If for some reason, you decide to put the machine out of service, make sure nobody can use it: **disconnect it from the mains and eliminate the electrical connections.**



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AUTHORISED DEALER