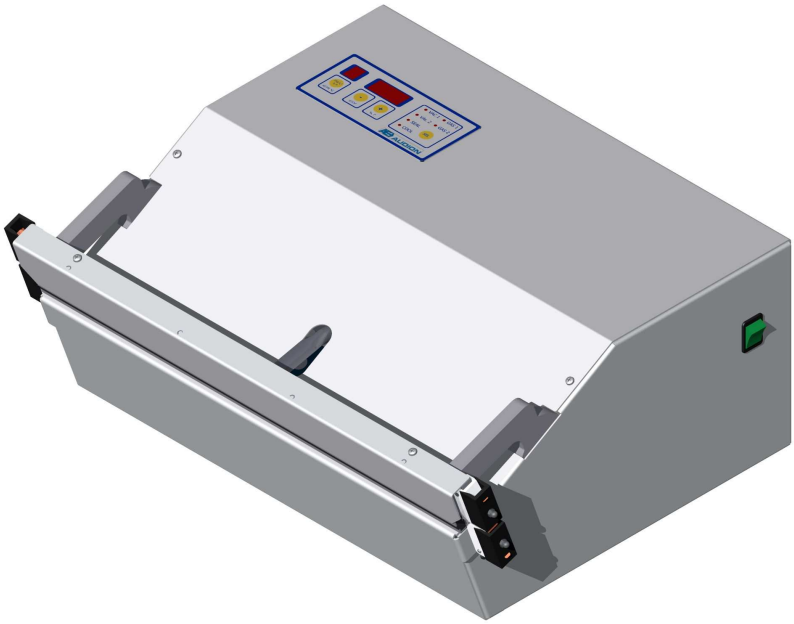
02 9452-3566
sales@getpacked.com.au

AUDION ELEKTRO®

MAGVAC

MV

520 / 720 / 1020



MANUAL

520-720-1020 MV ENG Rev06

CONTENTS

1 Unpacking the Magvac

While unpacking the Magvac, use the following list to check if everything is present. The Magvac should be lifted from the package (box) only by two people.

- Magvac
- Mains cable
- Foot pedal
- Manual

Check the data on the type plate (fig. 1) at the rear of the Magvac and copy them to the following figure of the type plate.

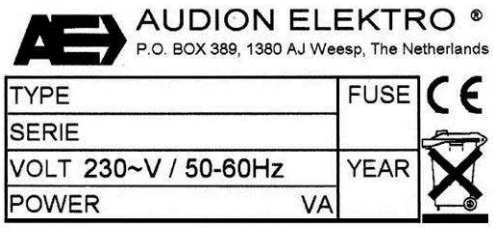


fig. 1

The Magvac is mounted for transport on a wooden base plate and packaged in a cardboard box. These materials are environmentally friendly and can be disposed of as regular household waste. We recommend keeping the packaging, so that the Magvac can be transported safely if required in the future.

2 Safety instructions

Before putting the Magvac into use, carefully read the operating instructions!

- Before putting the Magvac into use, check if the data on the type plate match the voltage (V), frequency (Hz) and power (W) of the local electricity mains.
- Remove the plug from the mains socket if the Magvac will not be used for a prolonged period of time.
- Always remove the plug from the mains socket if work is to be performed on the Magvac, otherwise there will be a risk of electric shock.
- Do not use any water, abrasives, chemical solvents or other liquids to clean the Magvac. See also chapter 9.
- When in doubt about the correct functioning of the Magvac, immediately unplug the device and consult a mechanic.
- Never open the housing to avoid a risk of electric shock. Only allow authorised maintenance personnel to perform repairs.
- Should any liquid or an object fall into the Magvac, immediately remove the plug from the mains and have the Magvac checked by an expert before putting it back into use.
-  The warning label indicates that the surface may be hot.

Only use original parts recommended by the manufacturer if certain parts need to be replaced.

Only use sealable materials suitable for the Magvac.

3 General description

The Magvac is a stand-alone sealing device that is operated by means of a foot pedal. The film is sealed by pressing two seal bars together and heating them up. The seal bars have a good sealing pressure because they are closed pneumatically. It is possible to remove the air from and/or add a gas to the packaging before sealing. By default the Magvac is supplied with a control panel with soft-touch keys. Nine freely programmable sealing programmes can be stored. The machine also comes with a compressed air filter and vacuum filter. All film widths up to the width of the seal bars can be sealed. The Magvac is suitable for removing the air from and/or adding gas to and sealing the following packaging materials:

- Polyethylene (PE)
- Polypropylene (PP)
- Paper laminate + PP / PE / PET
- Various laminates

The complete sealing cycle of the Magvac consists of the following steps:
- Inserting a packaging between the seal bars and around the vacuum/gas tube.
- After operating the foot pedal the seal bars are closed under low pressure.
- This is followed by removing the air from and/or adding gas to the bag.
- After the vacuum/gas cycle the seal wires are preheated.
- The vacuum tube is then retracted and the seal bars close under high pressure.
- The seal bars are heated to the sealing temperature set.
- The cooling time starts when the set sealing time has passed.
- After the cooling time the seal bars reopen.

4 Dimensional sketch of 520-720-1020 MV

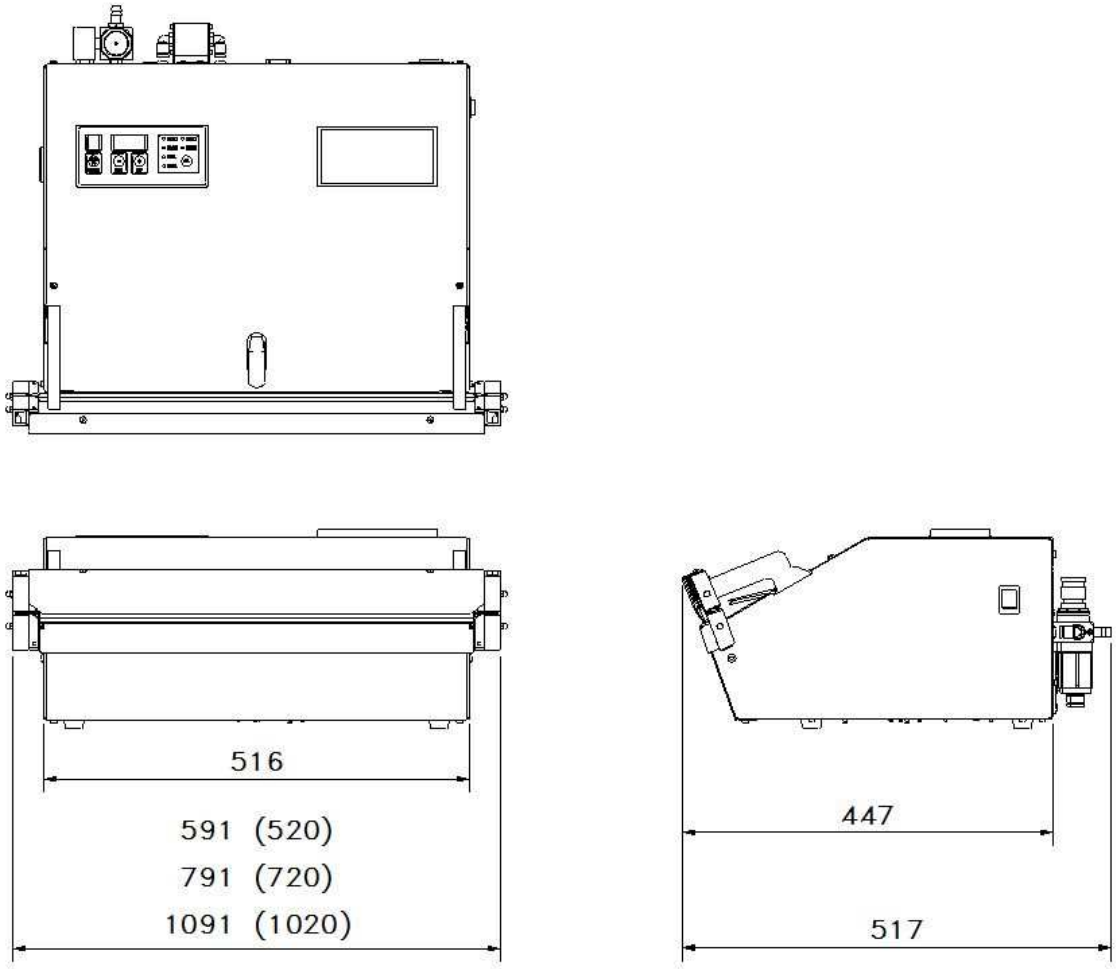


fig. 2

5 Installation

5.1 Installation instructions

Place the Magvac in a ventilated, well-lit room.
Place the Magvac on a flat surface.
Make sure that the Magvac is not exposed to mechanical shocks or vibrations.
Make sure that the Magvac is not exposed to direct sunlight, extreme temperatures, moisture, dust or sand.

5.2 Connecting the Magvac

Make sure that the main switch is set to 0/OFF before connecting the Magvac.

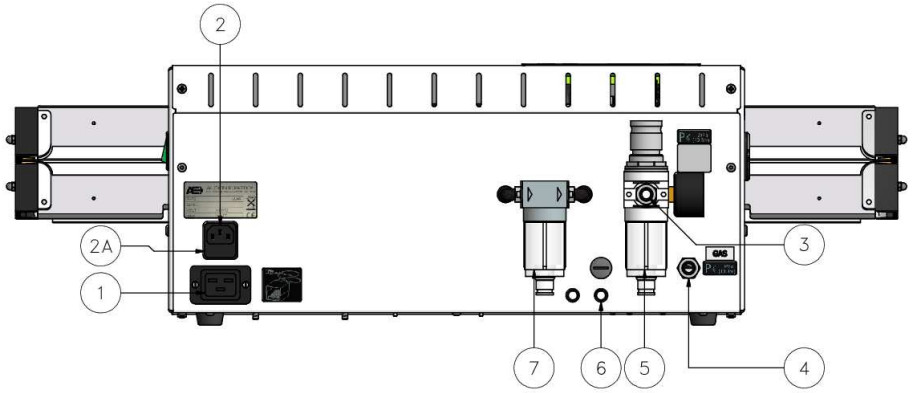


fig. 3

1	Foot pedal connection	3	Pneumatic connection	6	Vacuum air outlets
2	Mains socket	4	Gas connection	7	Vacuum filter pot
2A	Fuses (2x)	5	Compressed air filter pot		

5.2.1 Connecting the foot pedal

Place the foot pedal on the work floor.

Insert the plug into the connection (1) at the rear of the machine. (see fig. 3).

5.2.2 Connecting to the mains

Insert the female plug of the mains cable into the mains socket (2) at the rear of the sealer. (see fig. 3).

Then insert the plug of the mains cable into the mains.

Always use an earthed mains connection with a fuse of 16A max.

5.2.3 Connecting the compressed air

Connect an air hose to the connecting nipple (3). (see fig. 3).

Connect the other end to the compressor or compressed air network with a quick-release coupling.

Standard compressed air pressure setting 6 bar. Maximum 10 bar.

5.2.4 Connecting the gas supply

Connect the gas hose to the gas connection (4) at the rear of the machine (see fig. 3).

Connect the other end of the gas hose to a gas cylinder.

Make sure that the gas cylinder is always well secured and protected against falling.

The maximum connected gas pressure is 1 bar.

The use of explosive and corrosive gases is not permitted.

6 Control panel

6.1 Control panel (vacuum/gas)

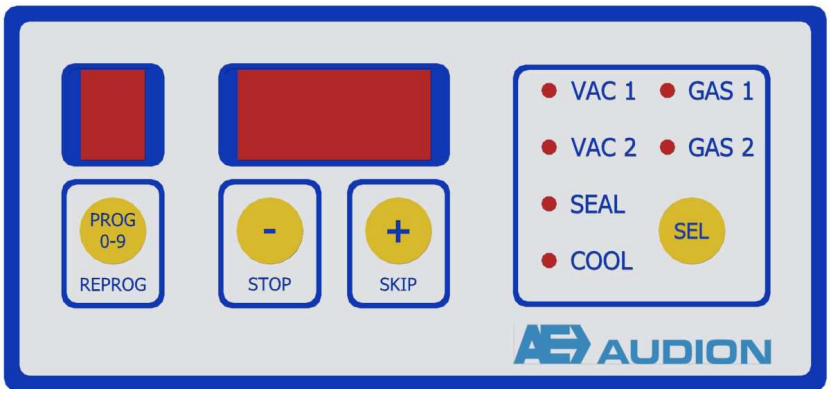


fig. 4

No.	Name	Function
1	PROG 0-9 / REPROG	Press to select the sealing programme. Hold down for 2 sec. to store the set values of the sealing programme. In the event of an error code: press to reset the machine.
2	- / STOP	During programming: press to decrease the set time by 0.1 second. Hold the key down to change the value faster. During the cycle: press to stop the sealing programme.
3	+ / SKIP	During programming: press to increase the set time by 0.1 second. Hold the key down to change the value faster. During the cycle: press to cancel the current step of the sealing programme and continue with the next step.
4	SEL	Press to select the desired step of the sealing programme. If the SEAL LED is selected. Hold the SEL key down for 2 seconds to open the upper-lower bar selection. This is used to switch the upper bar on/off. (See par. 7.3.1).
5	Screen (small)	Shows the number of the chosen sealing programme. Nine sealing programmes (1-9) can be stored.
6	Screen (large)	Shows the set vacuum, gas, sealing and cooling times in seconds.
7	LED (6x)	During programming: lights up for the selected step of the sealing

		programme. During the cycle: lights up for the current step of the sealing programme that is being performed.

6.2 Start-up screens (vacuum/gas)

While the machine is started up, the screens on the left and right show a number of start-up codes. These codes are used to indicate how the PCB is set. The screen on the right shows the following codes in succession: software version, jumper settings, programme order, foot pedal function, error function and the preheat time. Finally, the screen on the left shows the programme number and the screen on the right shows the programmed vacuum time.

Left screen code	Right screen code	Description
	S2.0	Software version.
	J00	Jumper setting. (See par.9.8.4).
	U-G	Programme order vacuum -> gas. (See par. 9.8.3).
	P02	Foot pedal function. (See par. 9.8.3).
	F00	Error function. (optional). (See par. 9.8.3).
L	PH3	Preheat time. (See par. 9.8.3).
	PRO	Program function
	vt2	Vacuumtube
	EC2	End cuclus time
1	10	Small screen: shows programme number. Large screen: shows programmed vacuum time.

7 Operation

7.1 Switching the Magvac on

To switch the machine on:

- Set the main switch to 1/ON.

The green light in the switch will now be lit and the machine is started up.

7.2 Switching the Magvac off

To switch the machine off:

- Set the main switch to 0/OFF.

The green light in the switch will now go out.

7.3 Programming a programme

Nine programmes (1-9) can be programmed in the Magvac. Each programme consists of six steps* that are completed one after the other during the cycle:

Step	Name	Description	Time (s)**
1	VAC 1	Vacuum time 1, time in seconds that the air is extracted from the bag.	0.0 – 60
2	GAS 1	Gas time 1, time in seconds that gas is blown into the bag.	0.0 – 10
3	VAC 2	Vacuum time 2, time in seconds that the air is extracted from the bag.	0.0 – 60
4	GAS 2	Gas time 2, time in seconds that gas is blown into the bag.	0.0 – 10
5	SEAL	Sealing time, time in seconds that the seal bars*** are closed and the seal wires are heated up.	0.0 – 4.0
6	COOL	Cooling time, time in seconds that the seal bars remain closed after the sealing time. The film is cooled down after the heating has stopped.	0.0 – 5.0

* It is possible to change the order of removing the air and adding gas, see par. 9.8.3.

** By setting the vacuum time or gas time to 0.0, this function is disabled. The screen will show OFF instead of 0.0.

*** It is possible to disable the upper seal bar, see par. 7.3.1.

7.3.1 Switching from double to single seal

During sealing both bars or only the lower seal bar can be heated. Complete the following steps to change this setting:

- Select SEAL with the ‘SEL’ key.
- Now hold the ‘SEL’ key down for 2 seconds. (the dot in the small screen will now start blinking).
- Then select whether both bars or only the lower seal bar is used with the ‘+’ and ‘-’ keys.
- Hold the ‘PROG 0-9’ key down for 2 seconds to store the setting.

Both sealing bars are used Lower sealing bar is used

fig. 5

7.3.2 Vacuum packaging

The oxygen percentage in the packaging can be reduced by removing the air or adding gas several times. An overview of this is presented in the following table.

VAC	This reduces the volume in the packaging.
VAC-GAS	To reduce the remaining oxygen content of the packaging.
VAC-GAS-VAC	The same, but also to increase the vacuum capacity (repeated function).
VAC-GAS-VAC-GAS	For an even greater reduction of the oxygen content of the packaging.

7.3.3 Gas packaging

The repeated function can also be used to reduce the oxygen percentage in a ‘bulging’ packaging. An overview is presented in the following table.

GAS	This increases the volume in the packaging.
GAS-VAC*	To reduce the remaining oxygen content of the packaging.
GAS-VAC-GAS	The same, but also to increase the gas capacity (repeated function).
GAS-VAC-GAS-VAC	For an even greater reduction of the oxygen content of the packaging.

* It is possible to change the order of removing the air and adding gas, see par. 9.8.3.

7.4 Sealing

Complete the following steps to start sealing:

- Set the main switch to 1/ON.
- Use the PROG key to select the desired programme number 1-9.
- Set the sealing and cooling temperatures and also the sealing time on the temperature controller.
- Position the bag between the seal bars.
- Make sure that the vacuum tube is inserted in the bag if vacuum and/or gas time is set.
- Operate the foot pedal to start the machine.

The programme is now followed and the seal is made. When the programme is ready the seal bars reopen automatically.

To cancel a step during the cycle, press the 'SKIP' key or the foot pedal*. The current step is interrupted and the programme continues with the next step.

To stop the programme completely, press the 'STOP' key during sealing. The programme is stopped and the seal bars open up.

If you observe the following guidelines, you will be guaranteed high-quality sealing results:

- Do not pull on the material during sealing and make sure it does not move.
- Make sure that the part of the bag to be sealed is clean and dry on the inside.
- Make sure that the part to be sealed is completely flat until the seal bars are fully closed to prevent folds and wrinkles.
- During sealing, only switch off the machine in an emergency.
- Start preparing the next bag during sealing; the seal bars will reopen automatically at the end of the cycle.
- Leave some material above the seal; that makes it easier to open the bag later on.

For optimum results and ease of operation, the bag should be filled for no more than 3/4 lengthwise and at least 30 mm of free space must be present between the product and the inside of the seal.

Never place bags with labels or sticky tape between the seal bars.

* Only possible for pedal function P02. See par. 9.8.3.

8 Specifications

The technical details such as the weight and dimensions of the Magvac can be found in chapter 10.

8.1 Operating specifications

- operating speed : max. 10 runs per minute
- ambient temperature : +5° . . . +40° Celsius
- relative humidity : 30% . . . 95% rel. (without condensation)
- attachment, base : the Magvac is positioned on four legs
- explosion safety : cannot be used in explosive environment
- extraction, ventilation : use in a ventilated room

8.2 Non-permitted applications

- use in an explosive environment
- packaging of toxic, corrosive or irritating substances
- packaging of explosive materials
- packaging of toxic, suffocating or irritating gases
- packaging of (hazardous) dustlike products

9 Maintenance

The Magvac is a relatively simple machine that does not require a lot of maintenance. There are a few minor repairs that you can perform yourself. Contact your dealer or Audion Elektro BV for other repairs.

Always remove the plug from the mains before performing maintenance or repairs on the Magvac.

Only use original parts recommended by the manufacturer if anything needs to be replaced.

The following maintenance schedule is based on regular use of the machine. If the machine is used intensively or in extreme conditions, maintenance should be performed at shorter intervals.

Component	Task	Frequency
Entire machine	Clean the Magvac after use with a moist cloth and soft soap.	Daily, after use
Seal bar	Check the condition of the seal wires and the PTFE covering of the seal bars. See paragraph 9.1 for replacement of these parts.	Weekly
Filter pots	Check if any water and/or dirt is present in the collection reservoirs. See paragraph 9.2 for the cleaning of these parts.	Weekly

9.1 Maintenance of the seal bars

9.1.1 Replacing the PTFE cover

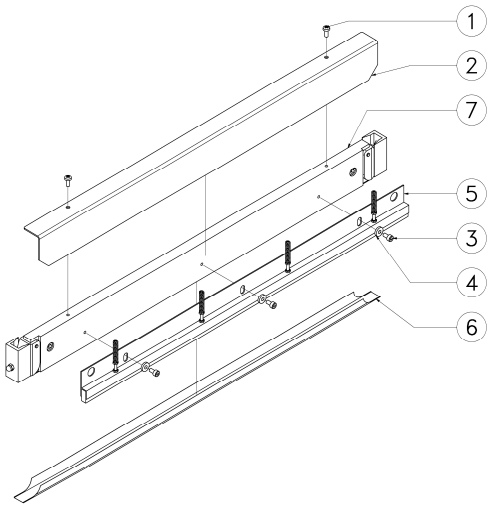


fig. 6 Upper seal bar

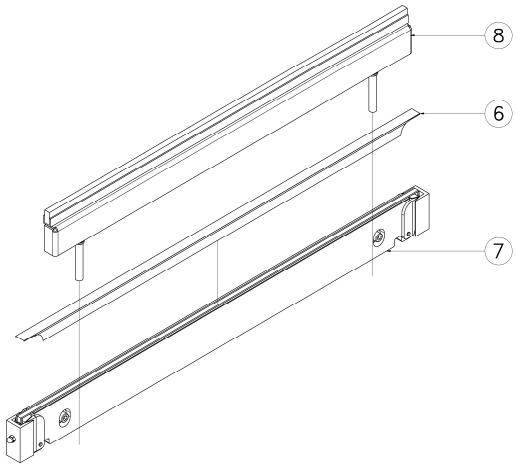


fig. 7 Lower seal bar

Burnt or worn PTFE can be replaced easily. Complete the following steps:

- Disassemble the upper vacuum rubber holder cap (2) by unscrewing the two upper screws (1).
- Remove the upper vacuum rubber holder cap (5) by unscrewing the three screws (3) at the front.
- Remove the lower vacuum rubber holder (8) by sliding it upwards, out of the two guides.
- Remove the old PTFE cover (6) from the seal bars.
- Remove any old glue residue from the sides of the seal bars (7)
- Attach the new PTFE cover over the seal bars.
- Reassemble all components in the reverse order.

9.1.2 Replacing the seal wire

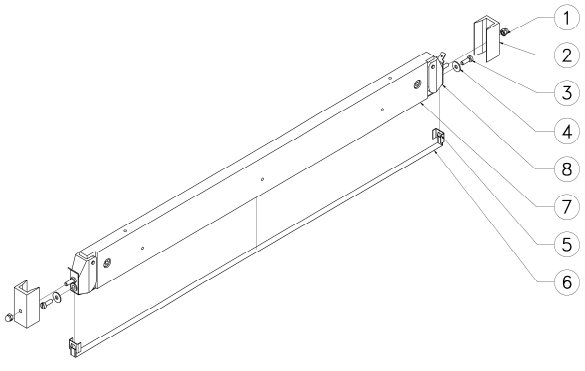


fig. 8 Upper seal bar

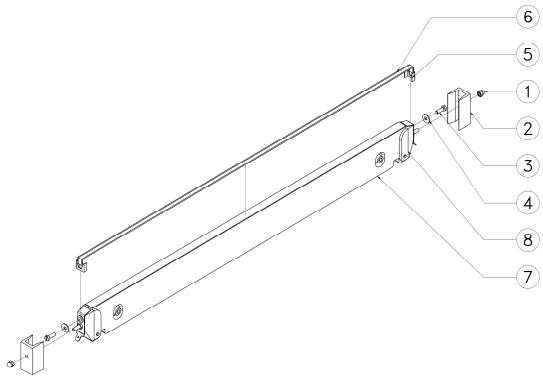
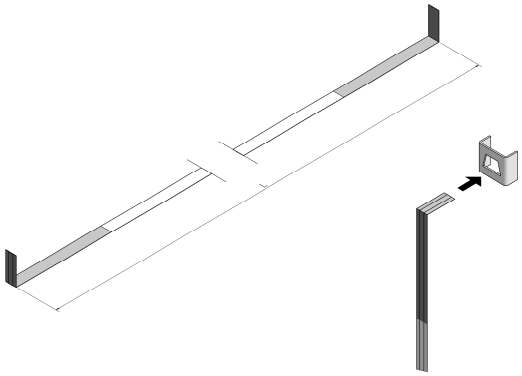


fig. 9 Lower seal bar



Seal wire	MV		
	520	720	1020
L [mm]	594	794	1094

fig. 10

- Remove the PTFE cover (see par. 9.1.1).
- Disassemble the rocker caps (2) by unscrewing the cap nuts (1).
- Unscrew screws (3) from the rocker (8).
- Remove the seal wires (6).
- Bend the new seal wires 90° at the ends as indicated.
  Attention: Bend the seal wire ends towards the rear of the seal wire. The sealing side of the seal wires can be recognised by the two bevelled edges.
- Place one end of the seal wire from the outside in through the bracket (5).
- Mount the bracket (5) onto the rocker (8).
- Insert the other end of the seal wire through the other bracket (5) (from the outside in).
- Mount the bracket onto the rocker on the other side.
- **Check if the rockers are well tensioned; if this is not the case you should bend the seal wire further from the ends.**

9.1.3 Replacing the silicone rubber

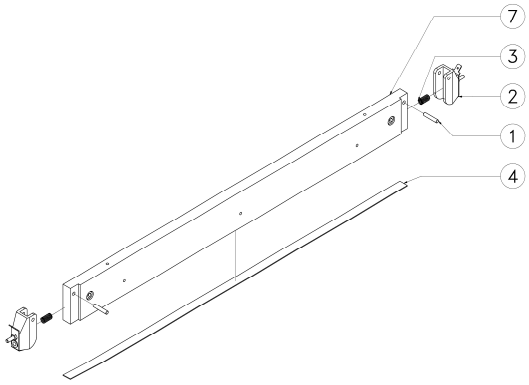


fig. 11 Upper seal bar

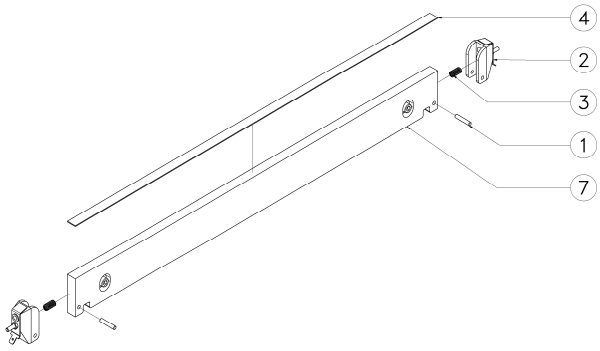


fig. 12 Lower seal bar

- Remove the PTFE cover (see par. 9.1.1).
- Remove the seal wire (see par. 9.1.2).
- Now remove the old silicone rubber (4).
- Remove any glue residue from the seal bar (7).
- Attach the new silicone rubber (4) to the seal bar (7).
- Mount the seal wire (see par. 9.1.2).
- Attach the PTFE cover (see par. 9.1.1).

9.1.4 Replacing the vacuum rubber

Where required, the vacuum rubber can be replaced by pulling it out of the U-shaped holder and pressing the new rubber evenly into the holder.

9.2 Cleaning of filter pots

9.2.1 Cleaning of compressed air filter pot

The compressed air filter pot is located at the rear of the machine (see pos. 5 fig. 3).

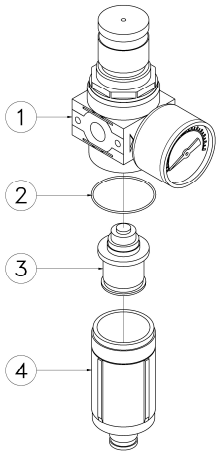


fig. 13

Complete the following steps to clean the compressed air filter pot:

- Set the main switch to 0/OFF.
- Close the compressed air supply.
- Unscrew the filter pot (4) and clean it.
- Unscrew the filter cartridge (3).
- Clean the filter or replace it if it is dirty.
- Check the O ring (2) in the holder (1) and replace it if it is damaged.
- Mount all components in the reverse order, make sure that the
  O ring is in the correct position.
- Reconnect the compressed air supply.
- Set the main switch to 1/ON.
- Check the filter for leaks.

9.2.2 Cleaning of vacuum filter pot

The vacuum filter pot is located at the rear of the machine (see par. 5.2 fig. 3).

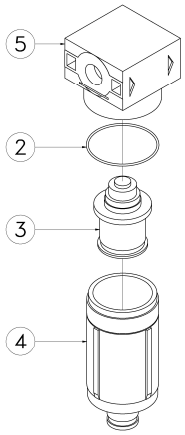


fig. 14

Complete the following steps to clean the vacuum filter pot:

- Set the main switch to 0/OFF.
- Unscrew the filter pot (4) and clean it.
- Unscrew the filter cartridge (3).
- Clean the filter or replace it if it is dirty.
- Check the O ring (2) in the holder (5) and replace it if it is damaged.
- Mount all components in the reverse order, while making sure that the O ring is in the correct position.
- Set the main switch to 1/ON.
- Check the filter for leaks.

9.3 Replacing fuses

The fuses can be found on the rear of the machine (see item 2A – par 5.2).

fig. 15

Replace the fuses as follows:

fig. 16 Set the main switch to 0/OFF.
fig. 17 Remove the plug from the mains socket.
fig. 18 Open the fuse compartment.
fig. 19 Replace the fuses.
(2x fuse 10AT-20x5 item number 355-05010).
fig. 20 Close the fuse compartment.
fig. 21 Plug the plug into the mains socket again.
fig. 22 Set the main switch to 1/ON.

9.4 Setting the MV sealing pressure 520-720 model

Complete the following steps to set the sealing pressure:

fig. 16

1	Bottom vacuum rubber holder
2	Bottom front cap

- Switch off the machine using the main switch.
- Remove the bottom vacuum rubber holder (1) by sliding it upwards, out of the two guides.
- Disassemble the bottom front cap (2) of the machine by unscrewing the two socket screws at the bottom.

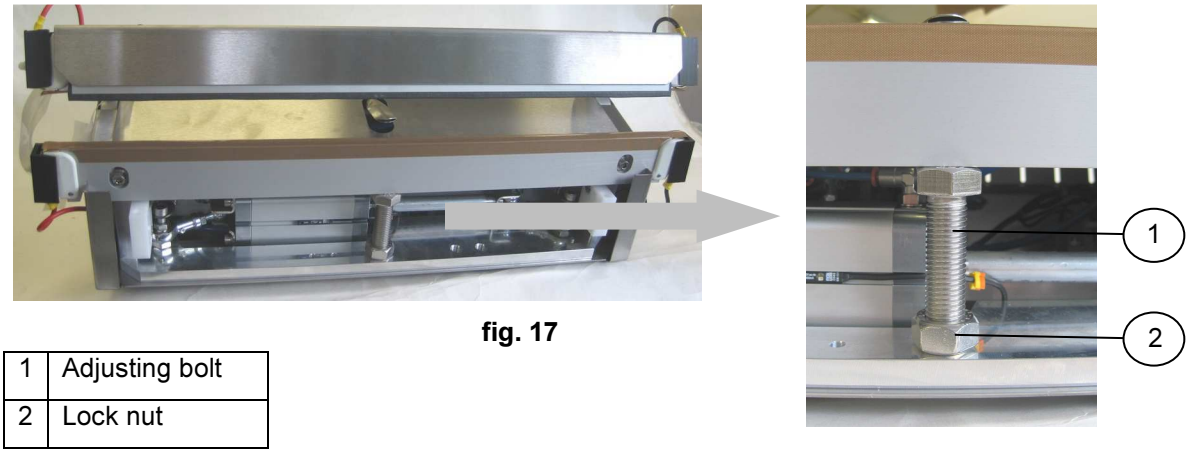


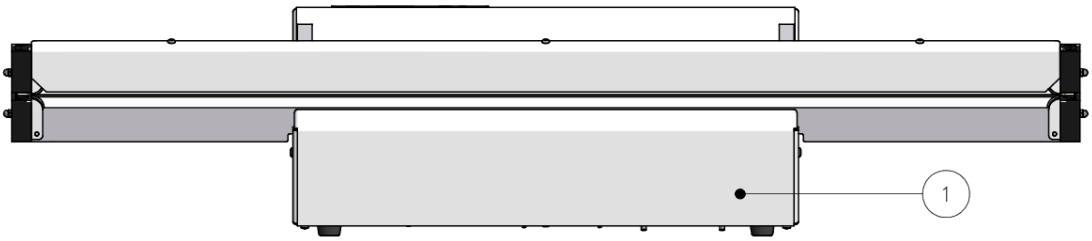
fig. 17

1	Adjusting bolt
2	Lock nut

- Loosen the lock nut (2) from the adjusting bolt (1) underneath the lower seal bar.
- Turn the adjusting bolt (1) clockwise until the lower seal bar can move up and down freely.
- Now set the sealing pressure with the adjusting bolt. Turn the adjusting bolt counter clockwise until the lower seal bar can no longer move up and down freely.
- Retighten the lock nut of the adjusting bolt.
- Replace the bottom front plate and reattach the screws.
- Replace the bottom vacuum rubber holder.

9.5 Setting the MV sealing pressure 1020 model

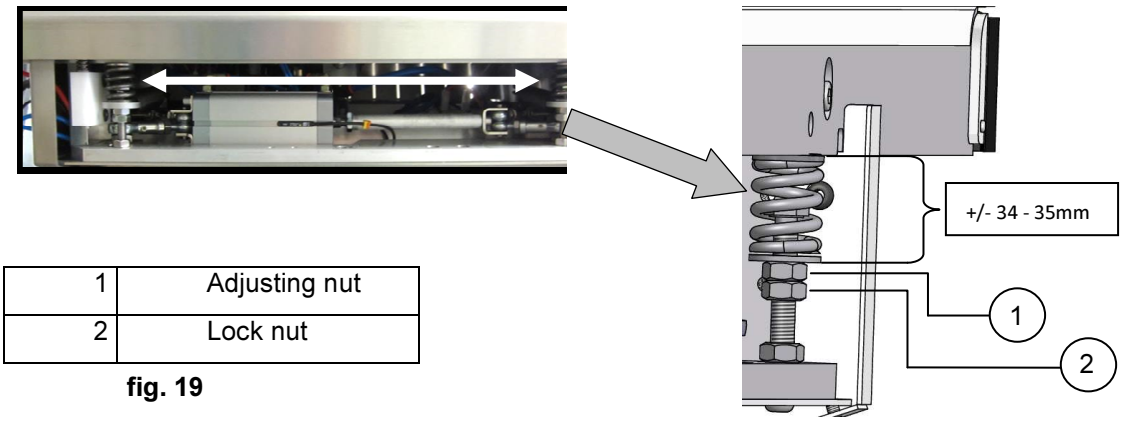
Perform the following steps to adjust the sealing pressure:



1	Bottom front cover

fig. 18

- Set the main switch to the 0/OFF position.
- Remove the bottom front cover (1) of the machine by unscrewing the two Allen screws underneath.



1	Adjusting nut
2	Lock nut

fig. 19

- Adjust the length of the spring (pre-tensioning) to 34mm. up to 35mm. (including spring disks), see figure 19. (with jaws open)
- Close the jaws so that the spring 1.5mm. is pressed.
  (length tensioned spring 35mm - length compression spring by 33.5 mm.)
- Adjust the spring height (pressed) by screwing or unscrewing the bolt on the left side and right side of the machine (see figure 20). Then lock the adjusting bolt with the nut.

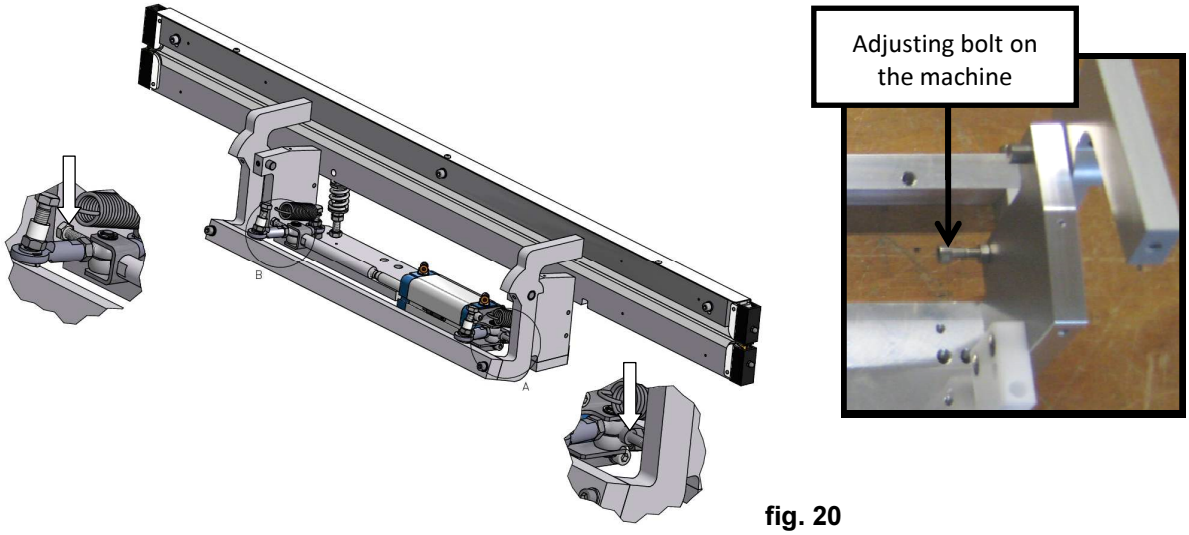
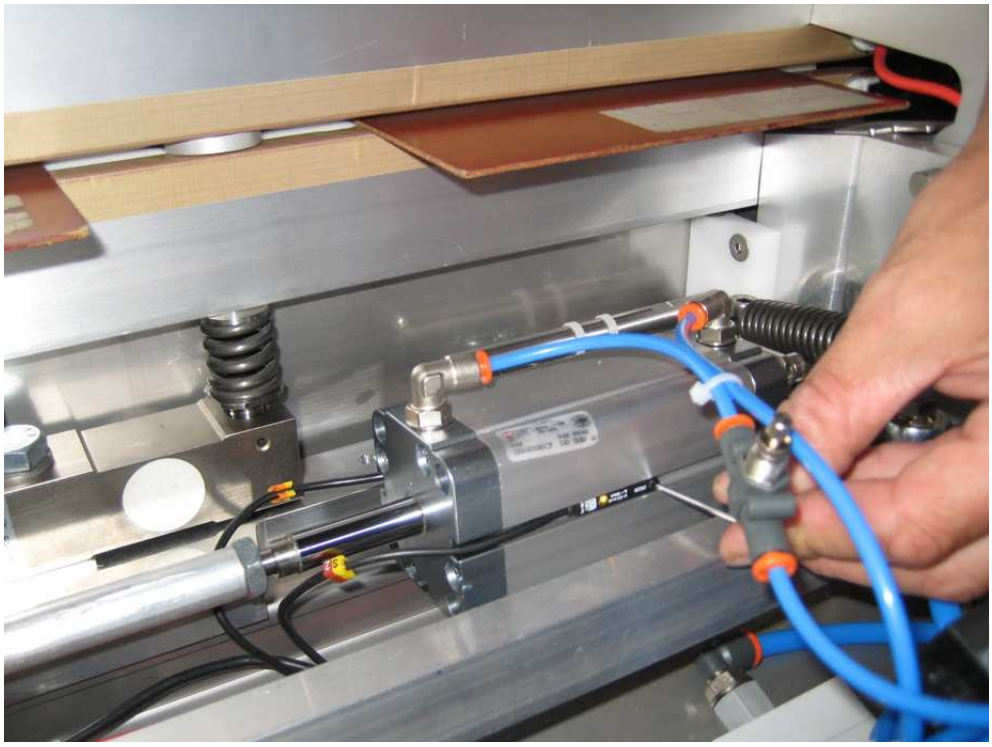


fig. 20

9.6 Adjusting low pressure reed switch S2

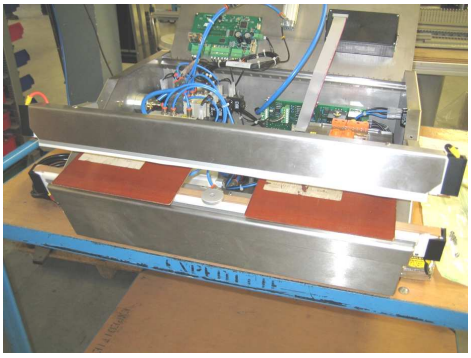
Do the following to adjust the reed switch S2.

The reed contact is located at the rear of the master cylinder. See photo



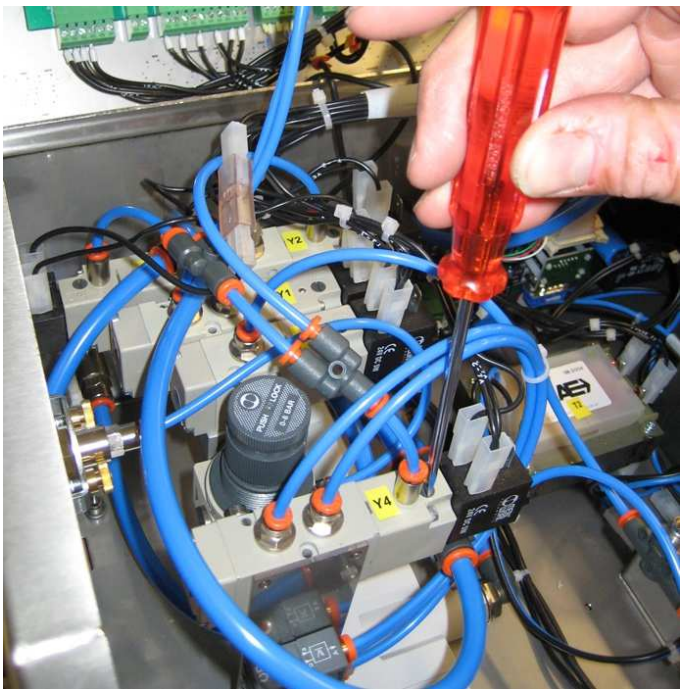
- Check that the high pressure is 6 bar.
- Check that the low pressure is 2 bar.
- Make a seal and see if the pressure remained constant

- Open the top cover.
- Loosen the Allen-screw on the reed switch S2 (Allen 1.5) and slide the reed switch to the side in the direction of the cylinder rod. See photo
- Place a small plate (□ or Ø 25mm, thickness 5mm), in the middle, between the sealbars and over the vacuum rubber.
- Place two plates (100x185mm, thickness 2mm) on both sides between the sealbars. See photo



- Activate valve Y4 (low pressure) manually with a screwdriver. See photos

CAUTION,
sealing bar
CLOSES

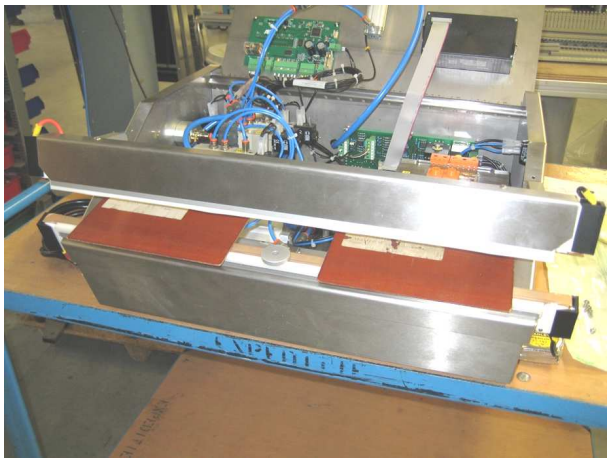


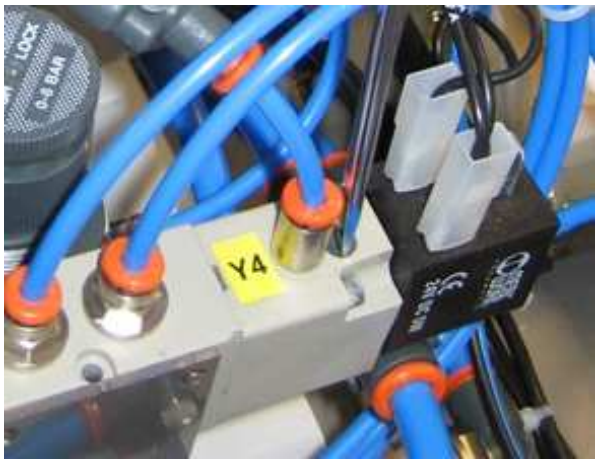
- Slide the reed switch S2 until the LED on the reed switch just goes on.
  See photo

- Tighten the reed switch screw.
- Using a screwdriver, turn the valve Y4 "OFF".

Check

- Check with a **2mm PLATE** on the left and right side between the sealing bars
- Activate valve Y4 manually with a screwdriver.
- CAUTION, sealing bar CLOSES !!!!
- Now the reed switch **SHOULD** light up.
- Using a screwdriver, turn the valve Y4 "OFF".



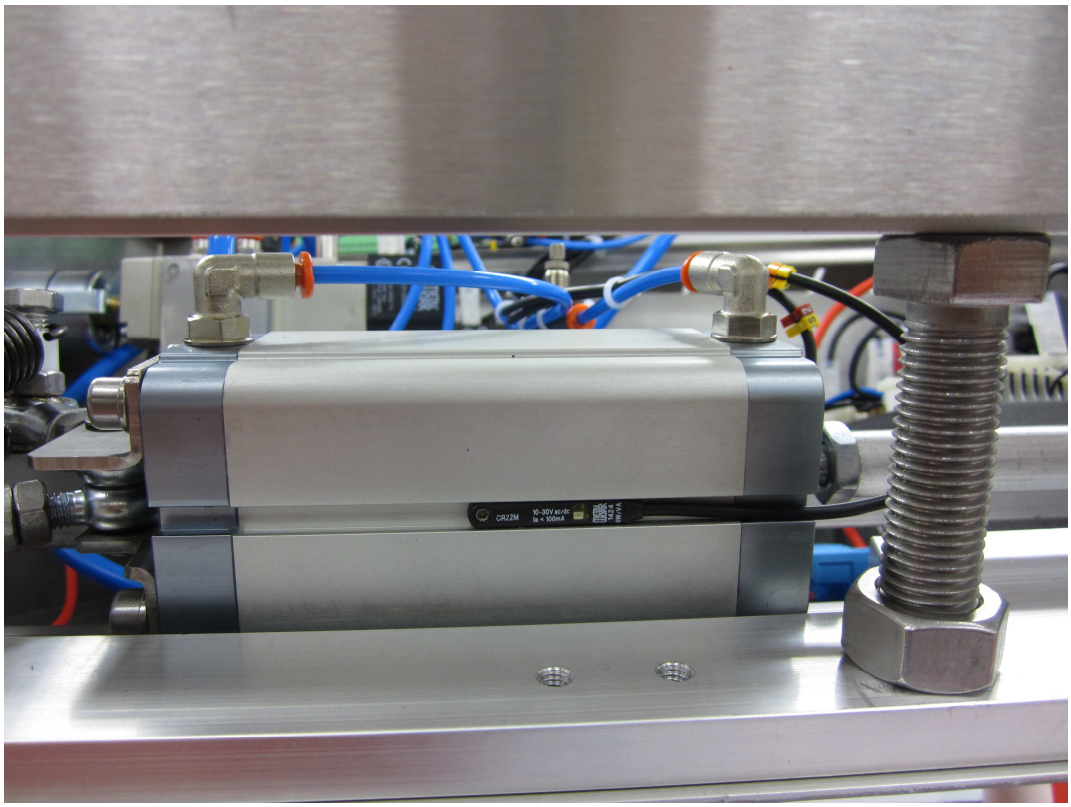


- Check with a **4mm PLATE** on the left and right side between the sealing bars
- Activate valve Y4 manually with a screwdriver.
- CAUTION, sealing bar CLOSES !!!!
- Now the reed switch **SHOULD NOT** light up.
- Using a screwdriver, turn the valve Y4 "OFF".

- Close the top cover

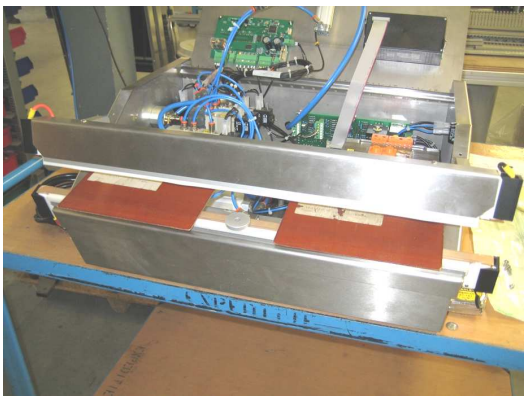
9.7 Adjusting pressure reed switch S3

Do the following to adjust the reed switch S3.
The reed contact is located at the front of the main cylinder. See photo



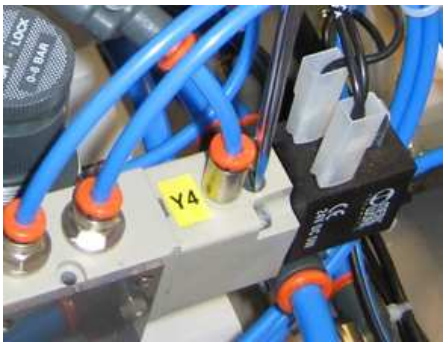
- Check that the high pressure is adjusted to 6 bar.
- Check that the low pressure is adjusted to 2 bar.
- Make a seal and see if the pressure remained constant

- Open the top cover
- Remove the front cover.
- Loosen the Allen-screw on the reed switch S2 (Allen 1.5) and slide the reed switch to the side in the direction of the cylinder rod. See photo
- Place two plates (100x185mm, thickness 2mm) on both sides between the sealing bar and the vacuum rubber. See photo

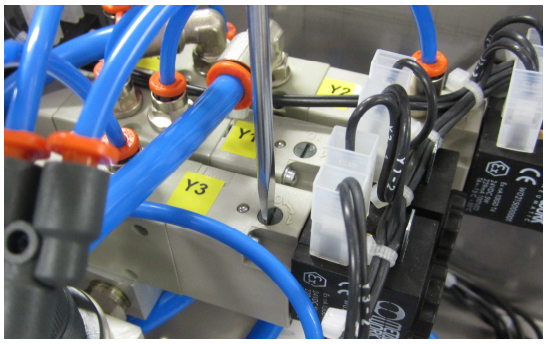


- Activate first valve Y4 (low pressure) manually with a screwdriver. See photo

CAUTION,
sealing bar
CLOSES



- Activate below valve Y3 (high pressure) manually with a screwdriver. See picture.

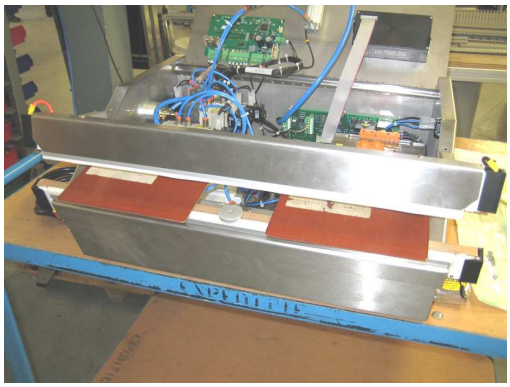


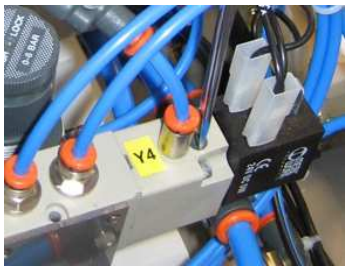
- Slide the reed switch S3 until the LED on the reed switch just goes on.
  See picture

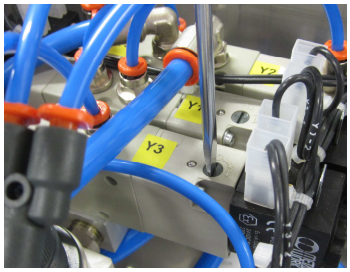
- Screw the reed switch fixed.
- Using a screwdriver, turn the valve Y3 "OFF" and then Y4 "OFF".

Check

- Check with a **2mm PLATE** on the left and right side between the sealing bars
- Activate valve Y4 and then Y3 manually with a screwdriver.
- CAUTION, sealing bar CLOSES !!!!
- Now the reed switch **SHOULD** light up.
- Using a screwdriver, turn the valve Y3 "OFF" and then Y4 "OFF".







- Check with a **4mm PLATE** on the left side and right between the sealing bars
- Activate valve Y4 and then Y3 manually with a screwdriver.
- CAUTION, sealing bar CLOSES !!!!
- Now the reed switch **SHOULD NOT** light up.
- Using a screwdriver, turn the valve Y3 "OFF" and then Y4 "OFF".

- Close the top cover.
- Mount the front cover.

9.8 Extra control panel functions (vacuum/gas)

9.8.1 Control panel error codes

If an error occurs during start-up or the cycle, the programme is stopped and an error code appears on screen. The following table presents an overview of the error codes and possible solutions to the problem.

Error code	Description	Cause	Reset / solution
E01	The seal bars do not close.	Something is present between the seal bars during the low pressure cycle.	Error code is automatically reset after displaying it for 3 seconds. Check if anything is stuck between the seal bars.
E02	The vacuum tube is not retracted properly.	The vacuum tube is stuck.	Error code is automatically reset after displaying it for 3 seconds. Check if the vacuum tube can move smoothly.
E03	The seal bars do not close.	Something is between the seal bars during the high pressure cycle.	Error code is automatically reset after displaying it for 3 seconds. Check if anything is stuck between the seal bars.
E05	The vacuum tube is not retracted properly during sealing.	The vacuum tube is stuck between the seal bars during sealing.	Error code is automatically reset after displaying it for 3 seconds. Check if the vacuum tube can move smoothly.
E06	The seal bars do not open.	The seal bars are blocked. (The safety (S2) or sealing (S3) switch on the main cylinder remains activated).	Press the PROG key to reset the error code. Check why the seal bars will not open.
E07	Control panel start-up error	During start-up one or more signals are set to high: • Vacuum tube retracted. (Vacuum tube switch S1). • Seal bars closed. (Safety (S2) or sealing switch (S3) on the main cylinder).	Press the PROG key to reset the error code. Check if: • Vacuum tube extends • Seal bars are opened.
E08	If reed contact S2 is de-energized or is not present during GAS en/or vacuum.	Reed contact S2 has been adjusted too critically	Re-adjust reed contact S2 
E10	Temperature controller malfunction.	Temperature controller does not provide a reset signal within 30 seconds of starting	Press the PROG key to reset the error code.

		the cycle.	Check temperature controller screen.
E11	Temperature controller malfunction.	Temperature controller sends reset signal even though the seal cycle has not started yet.	Press the PROG key to reset the error code. Check temperature controller screen.
E13	External error message. (Optional).	Machine is set to F01, F02 or F03. External device sends error message.	Press the PROG key to reset the error code. Set control panel to F00. See par. 9.8.3. Reset external error message

9.8.2 Control panel inputs / outputs

For maintenance purposes the control panel inputs can be read on screen and the outputs can be controlled manually. Complete the following steps for this:

- Switch off the machine using the main switch.
- Hold the '+' and '-' keys down and switch the machine on. Release the '+' and '-' keys when 'IN' appears on screen.
- Use the SEL key to select the inputs (IN) or the outputs (OUT).
- Hold the PROG key down until an I or O is displayed in the small screen.
- Use the SEL key to select the number of the input or output.

Screen (small)	**Screen (large)**	**Description**
I	1-0	Input 1 is set to low.
O	3-1	Output 3 is set to high.

Inputs

Input	Code	Function	Location
1	FOOT	Foot pedal	Connection at rear of machine
2	S1	Vacuum tube in switch	On side of vacuum tube construction
3	S2	Safety switch for seal bars (low pressure)	At rear of pneumatic cylinder
4	S3	Sealing switch for seal bars (high pressure)	At front of pneumatic cylinder
5	MED IN	No function	X
6	OPT.	Optional inputs for external error messages (F01 to F03)	X

Outputs

Output	Code	Function
1*	SEAL	Start seal 1 lower seal bar
2	Y1	Vacuum tube in / out
3	Y2	Vacuum off / on
4	Y3	Close seal bars HP (high pressure)
5	Y4	Close seal bars LP (low pressure)
6	Y5	Gas off / on
7*	MEDOUT (ST)	Start seal 2 top seal bar

Valves Y1 and Y5 are integrated into 1 valve.

Use the + key to switch the output to high and the – key to switch it back to low.

* Outputs 1 and 7 automatically switch off after 0.5 sec. due to burning of seal wires.

9.8.3 Changing of programme cycle, foot pedal function, error function and preheat time

The following machine settings can be changed:

- Programme cycle order U-G or G-U.
- Pedal function P01, P02 or P03.
- Error function F00, F01, F02 or F03.
- Preheat time PH0, PH1, PH2, PH3, PH4 or PH5.

You can change the machine settings as follows:
- Switch off the machine using the main switch.
- Hold the ‘SEL’ key down and switch on the machine. Release the ‘SEL’ key when ‘SEL’ is displayed on screen. Then the screen will show U-G or G-U.
- Use the ‘SEL’ key to select the setting to be changed U-G, P01, F00 or PH3.
- Use the ‘+’ and ‘-’ keys to select the programme cycle U-G / G-U, the pedal function P01 / P02 / P03, the error function F00 / F01 / F02 / F03 or the preheat time PH0 / PH1 / PH2 / PH3 / PH4 / PH5.
- Hold the ‘PROG 0-9’ key down for 2 seconds to store the modified setting.

The vacuum/gas programme cycle can be set to two different orders.

Code	Description
U-G	VAC 1 – GAS 1 – VAC 2 – GAS 2 – SEAL – COOL
G-U	GAS 1 – VAC 1 – GAS 2 – VAC 2 – SEAL – COOL

The foot pedal can be set to three different functions.

Code	Description
P01	Hold pedal down until the first step of the programme starts. Releasing sooner stops the programme.
P02	Hold pedal down until the seal bar is closed. Pressing it again interrupts the current step of the programme and the programme continues with the next step.
P03	Hold pedal down until the SEAL step of the programme starts (the seal bars are then closed under high pressure). Releasing sooner stops the programme.

The control PCB of the Magvac also includes an error function. The error function means that an external error signal, e.g. from another machine, can be connected to the Magvac. In the event of an external error signal, the Magvac will stop for a malfunction and show the error code E13 in the display. Four different error functions can be set. The error function is not used by default and is therefore set to F00 ex works.

Code	Description
F00	Control PCB does not respond to input (Opt-IN).
F01	If input (Opt-IN) is high for 0.2 seconds the display will show error code E13. Press the PROG key to reset the error code.
F02	If during sealing input (Opt-IN) is high for 0.2 seconds the display will show error code E13. Press the PROG key to reset the error code.
F03	If during sealing and cooling input (Opt-IN) is high for 0.2 seconds the display will show error code E13. Press the PROG key to reset the error code.

The Magvac control PCB also has a **PRE-HEAT function**. This function enables PRE-HEAT to be set to between 0.1 and 0.5 sec and is shown in the display as
PH1-5 for “Early PRE-HEAT” and as **L PH1-5** for “Late PRE_HEAT”. The PH function is set to L PH3 by default.

The sealing wires are pre-heated during the time that the pre-heat function is active. This causes the sealing wires to expand before the seal bars are closed. Pre-heating helps prevent the sealing wires kinking. If the pre-heating time is too long, the sealing wires and/or PTFE may burn. The pre-heating time starts after the vacuum or gassing cycle and can be set to between 0 and 0.5 seconds. The previously started vacuum or gassing cycle continues during the pre-heating time.

Setting the pre-heating function

Pre-heating has been divided into two main functions; late pre-heating L (default) and early pre-heating E.

Late pre-heating does not start until the vacuum tube has retracted completely. The advantage of this procedure is that the pre-heating time no longer depends on the vacuum tube retraction speed. This eventually creates a more consistent seal.
Early pre-heating starts simultaneously with the vacuum tube retraction. The advantage of this is that the wires have already been pre-heated when the vacuum tube is retracted from between the bars as a result of which the machine will start sealing immediately, resulting in less loss of vacuum.

The times of both functions can be set as well. However, if the time is set too high, there is a risk of the wires and/or the PTFE burning. Late pre-heating can be set from 0 to 0.5 second. Early pre-heating can be set from 0.1 to 0.5 second.

	Code	Description
E	**PH1-5**	Early pre-heat setting 0.1 - 0.5 sec.
L	**PH0**	Late pre-heat setting 0.0 sec. (no preheat not recommended)
L	**PH1-5**	Late pre-heat setting 0.1 – 0.5 sec. (default setting is L PH3)

The Magvac control PCB also contains the settings for PR0 to PR2 and is shown in the display as **PR1-2**
The default setting for the PR function is PR0.

Code	Description
PR0	The values for vac, gas, seal, and cooling can be changed or programmed as usual.
PR1	The values for vac, gas, seal, and cooling CANNOT be changed or programmed. *It must be possible to view the settings via the "SEL" button*.
PR2	See PR1 + the selection of programs P1 to /m P9 cannot be changed. The default setting is P1. *It must be possible to view the settings via the "SEL" button.*

The Magvac control PCB also has a **vacuum tube waiting time function**. This function enables the time between the opening of the welding bars and the forward movement of the vacuum tube to be set. The vacuum tube waiting time values can be set from vt1 to vt5 and are shown in the display as **vt1-5** The default setting for this function is vt2

Code	Default	Description
vt1 **to** **vt5**	Default=vt2	vt2=2sec, vt3=3sec. etc

The Magvac control PCB also has a **waiting time at end of cycle function**. This function enables the waiting time between the end of a cycle and the start of a new cycle to be set. The waiting time values can be set from EC1 to EC5 and are shown in the display as **EC1-5** The default setting for this function is EC2

Code	Default	Description
EC1 **to** **EC5**	Default=EC2	EC1=1sec , EC2=2sec. etc

9.8.4 Control panel (vacuum/gas) PCB jumpers

Two jumpers are located at the rear of the control PCB.

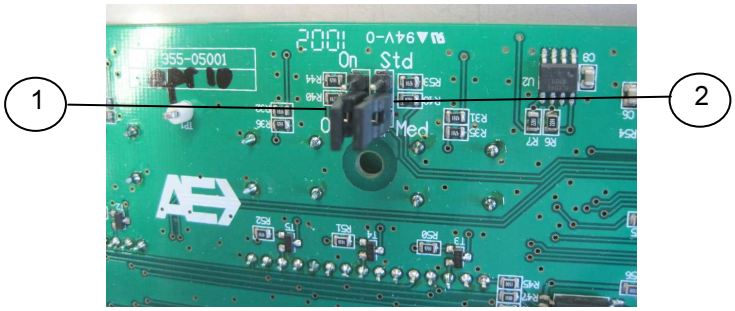


fig. 21

These two jumpers are used to set the following:

1	Jumper ON / OFF	2	Jumper STD / MED

The current jumper settings are visible on screen. Switch on the Magvac using the main switch. After the software version the jumper settings are displayed. The jumper code on screen starts with a J.

Code on screen	Jumper	Machine
J01	OFF / STD	MV

9.8.5 Resetting to factory settings

Both the programme cycles (PRG) and the machine settings (RES) can be reset to the factory settings (see following table).

Complete the following steps to reset the machine to the factory settings:

- Set the main switch to 0/OFF.
- Hold the 'PROG' key down and switch on the machine. Release the 'PROG' key when 'PRG' is displayed on screen.
- Use the 'SEL' key to select the settings PRG or RES to be reset.
- Use the '+' and '-' keys to select YES.
- Hold the PROG key down for 3 seconds to reset the selected settings.

Programme cycle (PRG)				**Machine settings (RES)**	
Setting	**Time (s)**			**Setting**	**Value**
	Prog. 1 - 8*	Prog. 9		Programme cycle order	U-G
VAC 1	10	Off		Pedal function	P02
GAS 1	Off	Off		Error function (optional)	F00
VAC 2	Off	Off		Preheat time	PH3
VAC 3	Off	Off		Prog.function	PR1
SEAL	0.8 (MV)	0.8 (MV)		Vacuumtube	vt2
COOL	2.0 (MV)	2.0 (MV)		END cyclus time	EC2

Attention: all settings are lost when the machine is reset.

*For programme 8 the upper seal bar (seal 2) is disabled. The Magvac now uses the lower seal bar only for sealing. See also par. 7.3.1.

10 Technical details

Description	520 MV	720 MV	1020 MV
Dimensions (mm)	See chapter 4	See chapter 4	See chapter 4
Weight (kg)	32	34	36
Seal length (mm)	520	720	1020
Seal width (mm)	5	5	5
Sealing temperature (°C)	Min 40, max 200	Min 40, max 200	Min 40, max 200
Sealing temperature tolerance (°C)	±5	±5	±5
Power (W)	900	1650	1300
Voltage (V)	240 – 16 A	240 – 16 A	240 – 16 A
Frequency (Hz)	50/60	50/60	50/60
Noise level (dB(A))	≤ 85	≤ 85	≤ 85
Compressed air (bar)	6 bar, max. 10 bar	6 bar, max. 10 bar	6 Bar, max. 10 Bar
Gas pressure (bar)	Max. 1 bar	Max. 1 bar	Max. 1 Bar
Nominal suction capacity (m^3/h)	11.3	11.3	11,3
Max altitude for use	Max 2000 mtr above sea-level		

11 Problems and solutions

If you cannot resolve a malfunction, please contact your dealer or Audion Elektro BV directly.

POWER SUPPLY	
PROBLEM	**SOLUTION**
The Magvac is not working and the green main switch is not lit.	Check if the main switch is on. Check if the mains cable is properly connected. Disconnect the mains cable from the Magvac and check the fuses underneath the mains input. If the above does not resolve the situation, please contact your dealer or Audion Elektro BV.
ELECTRICAL FAULTS	
PROBLEM	**SOLUTION**
The fuses are constantly blowing.	Check the connections of the seal wire connecting wires. Check if the seal wires are short-circuiting.
The Magvac sometimes loses power.	Check if the mains cable is properly connected.
SEALING FAULTS	
PROBLEM	**SOLUTION**
The Magvac is working, but is not sealing properly.	Check if the sealing time is not set to 0 seconds and set the sealing parameters to the correct values. Replace the seal wires. Then contact your dealer or Audion Elektro BV.
The seal is incorrect: wrinkled, too stretched or its thickness is not uniform	Check the sealing parameters by performing a few sealing tests. Examples are sealing time too long or cooling time too short for the material you are using. Check if the edge of the bag to be sealed is properly cleaned and dry. Establish if the wrinkles or folds are caused by the bag being overfilled. Check if the PTFE shows any signs of wear.

12 Recommended spare parts

520 MV		
Article number	**Description**	**Number per machine**
355-03007	Top PTFE cover 520 mm	2
355-03005	Seal wire 5 mm 520 mm	2
355-03006	Bottom PTFE 520 mm	2
355-03009	Silicone rubber 520 mm (red)	2
355-02021	Vacuum rubber 520 mm (black)	2
178-05040	Reed sensor	2
AUDC	Audiocone, antisticking paste	1
355-1201	Spare parts set for 520 MV consisting of: • 10x Top PTFE cover 520 mm • 10x Seal wire 5mm 520 mm • 5x Bottom PTFE cover 520 mm • 5x Silicone rubber 520 mm (red) • 2x Vacuum rubber 520 mm (black) • 1x Audiocone, antisticking paste	

720 MV		
Article number	**Description**	**Number per machine**
355-03017	TopPTFE cover 720 mm	2
355-03015	Seal wire 5 mm 720 mm	2
355-03016	Bottom PTFE 720 mm	2
355-03019	Silicone rubber 720 mm (red)	2
355-02031	Vacuum rubber 720 mm (black)	2
178-05040	Reed sensor	2
AUDC	Audiocone, antisticking paste	1
355-1203	Spare parts set for 720 MV consisting of: • 10x Top PTFE cover 720 mm • 10x Seal wire 5mm 720 mm • 5x Bottom PTFE cover 720 mm • 5x Silicone rubber 720 mm (red) • 2x Vacuum rubber 720 mm (black) • 1x Audiocone, antisticking paste	

1020 MV		
Article number	**Description**	**Number per machine**
355-03027	Top PTFE cover 1020 mm	2
033512-17	Seal wire 1020 - 5mm	2
355-03046	Bottom PTFE 1020 mm	2
355-03029	Silicone rubber 1020 mm (red)	2
355-02041	Vacuüm rubber 1020 mm (black)	2
178-05040	Reed sensor	2
AUDC	Audiocone, anti-sticking paste	1
355-1205	Spare parts set for 1020 MV consisting of: • 10x Top PTFE 1020 mm • 10x Seal wire 5mm 1020 mm • 5x Bottom PTFE 1020 mm • 5x Silicone rubber 1020 mm (red) • 2x Vacuüm rubber 1020 mm (white) • 1x Audiocone, anti-sticking paste	

13 To discard the Magvac

The logo below indicates that the equipment concerned is not to be disposed of as ordinary waste at the end of its useable life. The equipment is to be delivered to a suitable depot that will dispose of the equipment in a proper way in accordance with the legislation on this subject, or to the supplier of new equipment in case of replacement. The owner of the equipment is responsible for proper disposal of the equipment. For further information we advise you to contact your local waste facility.

Appropriate disposal of Waste of Electric and Electronic Equipment prevents unnecessary pollution of the environment and negative influence on general health.

14 Conditions of guarantee

14.1 Liability

- We exclude any liability as far as it has not been arranged by law.
- Our liability will never exceed the amount of order.
- Subject to the general valid regulations of the law, we are not obliged to any compensation of damage of which kind ever, directly or indirectly, under which company damage, to movable' and immovable or to persons, both to the opposite party as to third persons.
- In no way we are liable for damage arisen from or caused by the supplied or by the unsuitability of this for the purpose for which the opposite party has purchased the Sealer.

14.2 Guarantee

- With due observance of the restrictions stated hereafter, we allow 12 months of guarantee to the products supplied by us. This guarantee is restricted to the occurring manufacture errors and does not imply interruptions caused by any form of wear spare parts subject to use.
- To spare parts or enclosures obtained from third persons we do not give longer guarantee than this third supplier does.
- Guarantee expires if the opposite party and/or third parties associated make improper use of the supplied.
- Guarantee also expires if the opposite party and/or third parties associated execute activities and/or modifications to the supplied.
- In case we replace spare parts to fulfill our guarantee engagement, the spare parts replaced become property of AUDION ELEKTRO B.V.
- In case the opposite party does not come up completely, partially or does not come up in time to the obligations arisen from the engagement closed between the parties, we are not obliged to guarantee as long as the situation continues.

AUDION ELEKTRO®

EG-VERKLARING VAN OVEREENSTEMMING

AUDION ELEKTRO B.V., gevestigd op de Hogeweyselaan 235
te Weesp, Holland

verklaren hiermede dat de

MAG VAC SEALER

Type:
520 MV-2 ; 720 MV-2 ; 1020 MV-2

- voldoet aan de bepalingen van de volgende EEG richtlijnen: 2006/42/EG Machinerichtlijn ; 2004/108/EG EMC-Richtlijn ;

- en verklaart voorts dat de volgende (onderdelen van) geharmoniseer-de normen zijn toegepast:

EN-ISO 12100; EN 983+A1; EN 1037+A1; EN-IEC 60204-1;

Weesp 1-4-2014

E.Tangelder
Directeur

PGR366A

EC-DECLARATION OF CONFORMITY

AUDION ELEKTRO B.V., located at the Hogeweyselaan 235 in
Weesp, The Netherlands

herewith declares that the

MAG VAC SEALER

Type:
520 MV-2 ; 720 MV-2 ; 1020 MV-2

- is in conformity with the provisions of the following EEC directives: 2006/42/EC Machine Directive ; 2004/108/EC EMC-Directive ;

- and that the following (parts/clauses of) harmonized standards have been applied:

EN-ISO 12100; EN 983+A1; EN 1037+A1; EN-IEC 60204-1;

Weesp 1-4-2014

E.Tangelder
Director

PGR366A

EG-KONFORMITÄTSERKLÄRUNG FÜR MASCHINEN

AUDION ELEKTRO B.V., mit Sitz Hogeweyselaan 235
Weesp, Holland

Erklärt hiermit, dass

MAG VAC SEALER

Modell:
520 MV-2 ; 720 MV-2 ; 1020 MV-2

- konform ist mit den relevanten Bestimmungen der EG-Maschinenrichtlinie: 2006/42/EG Machinenrichtlinien ; 2004/108/EG Elektromagnetische Vertraglichkeit Richtlinie ;

- und dass folgende harmonisierte Normen (oder Teile/Klauseln hieraus) angewendet werden:

EN-ISO 12100; EN 983+A1; EN 1037+A1; EN-IEC 60204-1;

Weesp 1-4-2014

E.Tangelder
Geschäftsführer

PGR355A

DÉCLARATION CE DE CONFORMITÉ

AUDION ELEKTRO B.V., Hogeweyselaan 235 Weesp Hollande

Déclare que la machine désigne ci-après

MAG VAC SEALER

Type:
520 MV-2 ; 720 MV-2 ; 1020 MV-2

- est conforme aux dispositions des directives CEE suivantes: 2006/42/CE Directive Machine ; 2004/108/CE Directive EMC ;

- et que les (parties/paragraphes) suivants des normes harmonisées ont été appliquées:

EN-ISO 12100; EN 983+A1; EN 1037+A1; EN-IEC 60204-1;

Weesp 1-4-2014

E.Tangelder
Directeur

PGR355A

DICHIARAZIONE DI CONFORMITA' CE

AUDION ELEKTRO B.V., Hogeweyselaan 235
Weesp, Olanda

dichiara, che la macchina

MAG VAC SEALER

Type:
520 MV-2 ; 720 MV-2 ; 1020 MV-2

- è conforme alle seguenti direttive:
2006/42/EC Direttiva Macchine ; 2004/108/EG Direttiva EMC ;

- le norme armonizatte di riferimento per la dichiarazione sono:

EN-ISO 12100; EN 983+A1; EN 1037+A1; EN-IEC 60204-1;

Weesp 1-4-2014

E.Tangelder
Direttore

PGR355A

DECLARACIÓN DE CONFORMIDAD DE LA CE

AUDION ELEKTRO B.V., con sede en la calle Hogeweyselaan 235, en
Weesp, Holanda

declara, por la presente, que

MAG VAC SEALER

el Tipo:
520 MV-2 ; 720 MV-2 ; 1020 MV-2

- cumple las estipulaciones de las siguientes normativas de la CE:
2006/42/EC Sobre maquinaria y ; 2004/108/EG Sobre compatibilidad de campos magneticos ;

- y declara, además, que se han aplicado (parcialmente) las siguientes normativas armonizadas:

EN-ISO 12100; EN 983+A1; EN 1037+A1; EN-IEC 60204-1;

Weesp 1-4-2014

E.Tangelder
Director

PGR355A

AUDION ELEKTRO
Hogeweyselaan 235,
1382 JL Weesp, The Netherlands
Tel : +31(0)294 491717
Fax: +31(0)294 491761
E-mail: export@audion.nl
E-mail: holland@audion.nl
Website: www.audion.com

Represented by