



# **Operating Instructions**

V.350<sup>®</sup> | V.400<sup>®</sup> | V.500<sup>®</sup> Premium

(Art.Nr. VL0350P | VL0400P | VL0500P)

Your Lava vacuum packing machine V.350 / V.400 / V.500 Premium is covered by a five-year warranty. This warranty specifically excludes breakdown caused by liquid entering the air-pump. It is very important that you are aware that allowing liquid to enter the air-pump will cause the machine to breakdown and invalidate your warranty.

If you are vacuum packing items which have a high liquid content (soup etc.) then you should use acrylic containers rather than bags, as the design of containers prevents liquid from being drawn into the machine.

All Lava machines are fitted with a liquid trap which prevents liquid from entering the pump. However once the liquid trap is full, the liquid has nowhere else to go and will be sucked into the pump. If you see liquid being drawn out of the bag and into the machine then you must stop the machine immediately and empty out the liquid trap.

The cause of the problem needs to be determined and this is usually 'over-packing' something which contains a significant amount of liquid. For example, raw meat has a fairly high liquid content and if you 'over-pack' it, you will squeeze the liquid out of the meat and into the bag which will then be sucked into the machine.

To prevent 'over-packing' you can either manually seal the bag before maximum pressure is reached by pressing the seal button (Nr.5 - Image 2) before maximum pressure is reached, or use a variable pressure valve in combination with the pressure gauge and pack at a lower pressure. For example -0.2 bar instead of -0.9 bar. This will have some effect on the longevity of the product being packed since less air is being removed but it can improve the presentation of softer food items as they will be able to keep their shape better. An alternative is to use a new product called Liquid Stop which can help prevent liquid uptake.

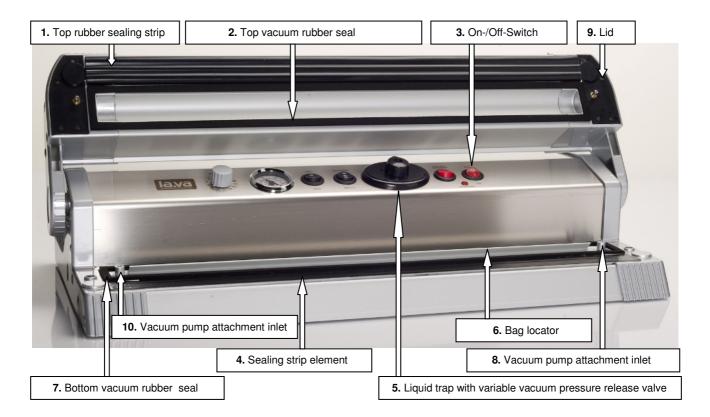
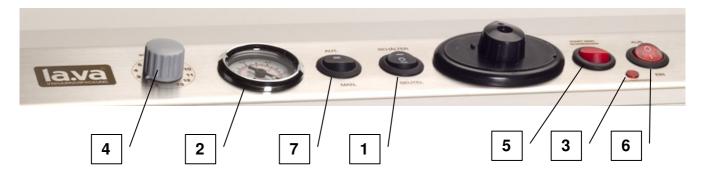


IMAGE 1: Main-Parts of the vacuum-machine

**IMAGE 2:** Control board of the vacuum-machine



- 1 Control of vacuum pump (= Pump Off / (I = Container / II = Bag vacuum)
- 2 Vacuum pressure indicator
- 3 Light indicator bag sealing

- 4 Duration of bag sealing time
- 5 Manual switch for bag sealing
- 6 On-Off switch
- 7 Manual/Auto selection for bag sealing

## **Vacuum Packing in Bags**

Place the machine on a flat level work surface. You will need to allow enough space in front of the machine to lay the bag flat and you may find it easier to place a one inch high cutting board or something similar underneath the bag to keep it as flat as possible.

Plug-in the machine and switch it on using switch (Nr.3 - Image 1). The switch should light-up red. If not then check both the power supply and fuse.

You should choose a bag that is the correct size. Allow an inch or so on either side of the item you want to pack and at least 2-3 inches at the top of the bag.

Decide whether you are going to use automatic or manual operation. If you use automatic operation then the item will be packed at a pressure of about -0.9 bar. This is enough negative pressure to crush a Coke can and it can squeeze the liquid out of soft food items and this liquid may then be drawn into the liquid trap. It may also force food items out of shape which may be important if they are being displayed for sale. See Packing at a Lower Pressure.

#### **Using Continuous Rolls**

Continuous rolls give you a lot of flexibility when packing and keep wastage to a minimum. These must be cut to length and one end heat sealed before use. You will need to allow an extra inch or so for the first/bottom seal (which you should make with nothing in the bag) and about three inches for the top seal. The quickest way to make the first/bottom seal is as follows:

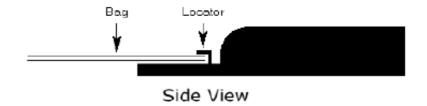
- 1. Set the vacuum pump control switch (Nr.1 Image 2) to 'II'
- 2. Place the end of the roll in the machine. You do not need to place the end of the roll into the locator strip, just place over Teflon heating strip.
- 3. Close the lid and press down firmly.
- 4. Depress and hold switch (Nr.5 Image 2). The red sealing indicator light (M) will come on. Please note that you have to push and hold this button till the pump switches off.

- 5. Set the vacuum pump control switch (Nr.1 Image 2) to "0".
- 6. You can now raise the lid and remove the sealed roll. Check that the seals look OK see Checking the Seal.

### **Automatic Operation**

Use this when the item you are packing is fairly resilient and does not contain too much liquid. You may need to experiment to discover which items are suitable.

- 1. Set the vacuum pump control switch (Nr.1 Image 2) to 'II'
- 2. Set the manual/auto switch (Nr.7 Image 2) to 'AUT'.
- 3. Set the rotary switch (Nr.4 Image 2) which controls the bag sealing time to 5.
- 4. Place the item in the bag and place the bag with the rough/embossed side down. Lift the front of the machine and place the top of the bag into the bag locator (Nr.6 Image 1).



It is vital that the top of the bag is correctly located with the full width of the bag <u>inside</u> the bag locator. Failure to locate the bag properly is the most common cause of problems with Lava machines.

- 5. Close the lid and you will hear the pump start up. You must then <u>press down firmly</u> on the corners of the lid. NOTE when the machine is new or the seals have just been replaced you will need to <u>press down very hard</u> on the corners of the lid for about one second to initiate the vacuum. Failure to press down hard enough at this stage is the second most common cause of problems with Lava machines.
- 6. The machine will draw all of the air out of the bag to a pressure of -0.9 bar and will then seal the bag automatically before switching off. You can however initiate the sealing process at any time before maximum pressure is reached just by pressing button (Nr.5 Image 2) please note that you have to push and hold this button till the pump switches off.
- 7. You can now raise the lid and remove the sealed bag. Before packing other items, check that the seals look OK see "Checking the Seal".

#### **Manual Operation**

Use this when the item you are packing is fairly soft or contains too much liquid for automatic operation. See Packing at a Lower Pressure.

- 1. Set the vacuum pump control switch (Nr.1 Image 2) to 'II'
- 2. Set the manual/auto switch (Nr.7 Image 2) to 'MAN'
- 3. Set the rotary switch which controls the bag sealing time (Nr.4 Image 2) to 5
- 4. Place the item in the bag and place the bag with the rough/embossed side down. Lift the front of the machine and place the top of the bag into the bag locator (Nr.6 Image 1). It is vital that the top of the bag is correctly located with the full width of the bag inside the bag locator. Failure to locate the bag properly is the most common cause of problems with Lava machines.
- 5. Close the lid and you will hear the pump start up. You must then <u>press down firmly</u> on the corners of the lid. Failure to press down hard enough at this stage is the second most common cause of problems with Lava machines.
- 6. When the desired pressure is reached, firmly depress and hold switch (Nr.5 Image 2). The red sealing indicator light (Nr.3 Image 2) will come on. Please note that you have to push and hold this button till the pump switches off.
- 7. You can now raise the lid and remove the sealed bag. Before packing other items, check that the seals look OK see Checking the Seal.

#### **Checking the Seal**

The V.350 / V.400 / V.500 Premium seals bags with a triple seal, these should be clear lines running uninterrupted the full width of the bag. If the bag is melted through then you will need to turn the rotary switch (Nr.4 - Image 2) down a little. If the seal is interrupted then you will need to turn it up. Once this has been correctly set for the type of bag you are using, you should not need to alter it again. It is also very important not to contaminate the area of bag to be sealed with grease or liquid, this can also create a bad seal.

Please note that if you are packing at a very low pressure then you may need to <u>press down</u> <u>very hard</u> on the lid of the machine during the sealing process.

## **Vacuum Packing in Containers**

Acrylic containers (Image 3) available from your Lava Dealer in many different sizes are ideal for packing things like soup, fresh salad or soft fruit like raspberries or strawberries. They are also great for curing or speed marinating meat. Using see (Image 3).



- 1. Place the machine on a flat level work surface. Plug-in the machine and switch it on using switch (Nr.3 Image 1). The switch should light-up red. If not then check both the power supply and fuse.
- 2. Lift the lid and place the end of the container attachment tube over the vacuum pump inlet (Nr.8 Image 1) which can be found on the right of the bag locator strip.
- 3. Place the food item into the acrylic container and close the lid firmly.
- 4. Set the vacuum pump control switch (Nr.1 Image 2) to 'I' and also put the little orange stick (see Image 4) in the small vacuum pump attachment inlet on the other side.
- 5. The pump will start up and begin sucking air through the container attachment.
- 6. Place the container attachment over the valve on the top of the container and press it down firmly. When the desired vacuum pressure (max. -0.4 bar) is reached then switch the vacuum pump control switch (Nr.1 Image 2) to '0'. It is very important not to over vacuum the container. As soon as the -0.4 bar is reached or the ORANGE nipple, located on the top, inverts stop the vacuum process. Too much negative pressure can cause the container to crack or even implode.

**Note** that you will be unable to remove the lid from the container until you have released the pressure using the release valve on the top.

#### Packing at a Lower Pressure

When the item you are packing is fairly soft or contains too much liquid to be packed at -0.9 bar then you will need to pack at a lower negative pressure. You will need to experiment to find the optimum setting. This can be done as follows:

- 1. Set the vacuum pump control switch (Nr.1 Image 2) to 'II'
- 2. Set the manual/auto switch (Nr.7 Image 2) to 'MAN'
- 3. Close the lid and you will hear the pump start up. <u>Press down firmly</u> on the corners of the lid to initiate the vacuum.

- 4. When the pressure gauge (Nr.2 Image 2) reaches -0.9 bar then gently unscrew the pressure release valve on the top of the liquid trap (Nr.5 Image 1). As you unscrew the pressure release valve you will see the pressure fall. Use the pressure release valve to set the pressure to the desired setting.
- 5. When the desired pressure is reached, set the vacuum pump control switch (Nr.1 Image 2) to '0'.

You can now pack at this lower pressure as detailed in Manual Operation. Please note that if you are packing at a very low pressure then you may need to <u>press down very hard</u> on the lid of the machine during the sealing process.

## **Emptying the Liquid Trap**

The Lava range of vacuum packing machines have been equipped with a liquid trap (Nr.5 - Image 1). If at any time liquid of any sort enters this trap please stop the machine immediately. The liquid trap is designed to stop liquids from entering the vacuum pumps and damaging components beyond repair. This important facility is not found on other inferior makes and distinguishes the Lava machines from other competitors.

To empty the liquid trap switch the machine off, remove the lid of the liquid trap and dry out the inside of the trap using a paper towel or similar. You can then replace the lid.

#### Cleaning

Always unplug and switch off the machine before cleaning. Wipe the machine down with a damp cloth. Make certain that the machine is completely dry before using.

#### Warning

The vacuum packing unit is not a toy and should not be used by children. Keep bags out of reach of children.

Never submerse or spray water on the vacuum packing machine.

Always disconnect from power when not in use.



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