



Tenco Srl
Via Arbora 1
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(GE)

FOUR NOZZLES VACUUM FILLING MACHINE

E★N★O★L
MASTER

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TECHNICAL HANDBOOK

E★N★O★L
MASTER



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DICHIARAZIONE DI CONFORMITA'

EC DECLARATION OF CONFORMITY



Noi / We

Tenco s.r.l.-Unipersonale
VIA ARBORA, 1 - 16030 AVEGNO (GE) - ITALY

dichiaro sotto la ns. responsabilità che: / declare under our own responsibility that:

La riempitrice a depressione
The vacuum filling machine

Riempitrice a depressione
Enolmaster
N. di serie 17/4090

È conforme alla direttiva europea
Complies with the European directive

2006/42/CE
2006/95/CE
2004/108/CE

Data: / Date: **14-03-2017**

Firma / Signature | Il Direttore / The
Managing Director



CHAPTER 1 – GENERAL DIRECTIONS AND INSTRUCTIONS

1.1 FOREWARD

Before using Enolmaster, carefully read these directions for use, using the table enclosed. Make sure that voltage shown on the data plate -to be found on the bottom- corresponds to your home supply.

1.2 DESCRIPTION OF EQUIPMENT

Enolmaster is a professional vacuum filling machine for the filling of approx. 600 bottles/hour.

1.3 USE

This equipment is to be used with wine, oil, tomato sauce, spirits, fruit juices and thick products.

NOTE: Products with more than 20% alcohol content could damage Enolmaster.

Therefore, in this case, we recommend to request the model P9921 (equipped with **pyrex** recovery vessel).

In case the machine is used with the filter, please request TANDEM PROFESSIONAL mod. P9915 (equipped with **pyrex** filter holder).

Also, if Enolmaster is employed to fill sugary liquors or products like balsamic vinegar, the oil-filled air filter must be employed to avoid damage to the machine vacuum pump; this accessory is not part of the standard supply and, if necessary, it must be ordered directly from the manufacturer.

Tenco srl. shall not be held responsible in case of malfunctioning of Enolmaster when the machine is operated to fill products as those described above, without using the above specified accessories.

1.4 TECHNICAL FEATURES

Refer to the label on the machine.

1.5 CUSTOMER'S RESPONSIBILITY

Installation of filling machines in premises complying with all applicable sanitary regulations and fitted with certified electrical systems shall be responsibility of the user.

1.6 CONNECTION AND START-UP

Place the equipment on a suitable surface. Ensure the main switch is on OFF position and connect power cable.

1.7 SAFETY INSTRUCTIONS

Do not spill liquids into slots.

Do not open the machine, and, if so, only after power disconnection

1.8 DIRECTIONS FOR USE

- 1.8.1. *Start-up*: this equipment is started by acting on the relevant control or main switch.
- 1.8.2. When the pump is working, in case the vacuum indicator is not moving, exert a small pressure on the recovery vessel cover and check that the vacuum regulator is completely open (turned clockwise)
- 1.8.3. *Stopping and emergency procedures*: emergency stop is activated by sectioning the mains through electrical plug removal

IMPORTANT: if you switch engine off while using Enolmaster, it's absolutely necessary, before switching it on again, to raise knob until there is no vacuum. The same operation must be performed to remove the bowl cover.



CHAPTER 2 - INSTALLATION AND DIRECTIONS FOR USE

1. Before using Enolmaster, carefully read these directions for use, using the table enclosed. Make sure that voltage shown on the data plate -to be found on the bottom- corresponds to your home supply.
2. Place Enolmaster on the work table.
3. Assemble the overflow float (fig. 1) by placing the knob with its gasket into the proper hole at the centre of the vessel cover. Then place the float under the cover while slightly pressing the tapered plug of the knob into the proper float housing.
4. Connect transparent hoses "A" to fittings on the cover of bowl and black hose "B" to fitting on bowl cover (fig. 2).
5. Connect the manifold from nozzles with the rigid suction pipe by using the 2 m transparent pipe supplied with the unit. The end side (suction control) must be set to allow for fluid flow (fig. 3).
6. Connect the pipes of manifold to the nozzles
7. Connect the power cable by plugging in the plug into the Enolmaster socket and switch Enolmaster on by pressing switch (fig. 4).
8. Place the suction pipe into the demijohn (or container). Be sure not to place the end in a way lees or sediments may be sucked in.
9. Place the bottles on the proper base and one after the other into the nozzles. When the bottle is properly placed, the lever should be in horizontal position (fig. 5). To properly adjust the lever, adjust the height of the nozzle-holding shaft and lock it with the knob.
10. For adjusting the fill level it is necessary to adjust the cone position ring height. The maximum fill level is achieved by moving the ring at the lower level (Fig.6-2), while the minimum fill level is achieved by moving the ring at the top level (Fig.6-1). Intermediate levels can be achieved by positioning the ring and the silicone cone in a middle position. For adjusting the ring position, loosen the 2 screws (A) and scroll it up / down until reaching the required position (using the notches as a reference) then tighten the screws. Make sure the silicone cone (B) is completely adherent to the ring. For obtaining precise and repetitive levels remove the filled bottles with a quick movement without lifting them.
11. Filling speed may be adjusted by turning the vacuum knob (fig. 8). When using Enolmaster to fill thick fluids (oil, tomato sauce, a.s.o.) turn the knob to maximum position. Conversely, when filling sparkling wines, beer, a.s.o., turn the knob to minimum. Excessively high filling speed may cause too much foam.
12. In order to empty the recovery tank without removing it from its housing, lift the "S" knob of the float (fig. 7) until you have no more vacuum inside. Then raise the lid and open the appropriate emptying tap.

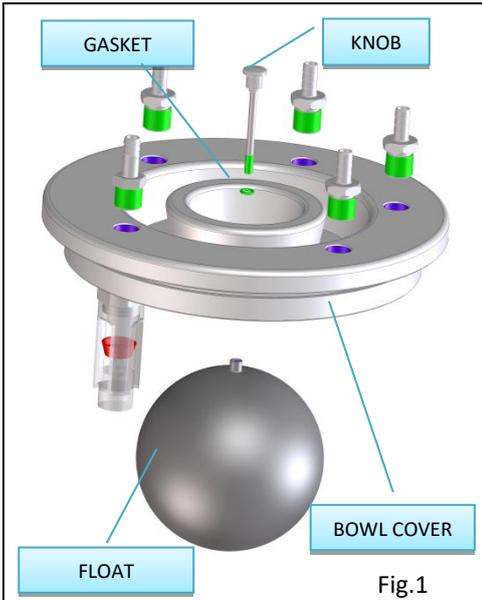


Fig.1

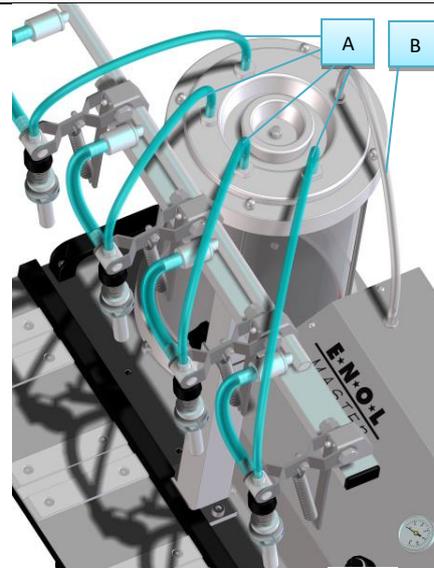


Fig.2

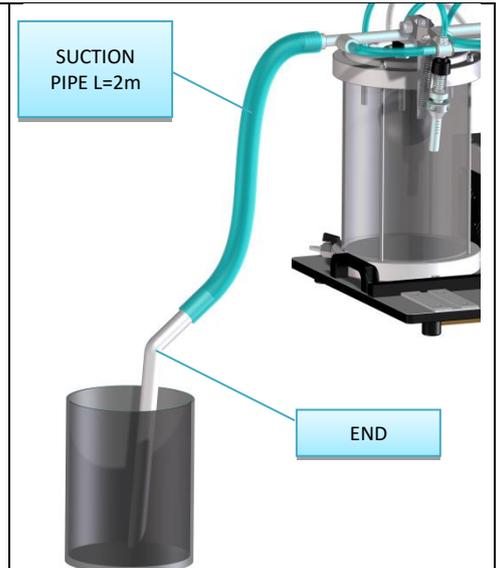


Fig.3

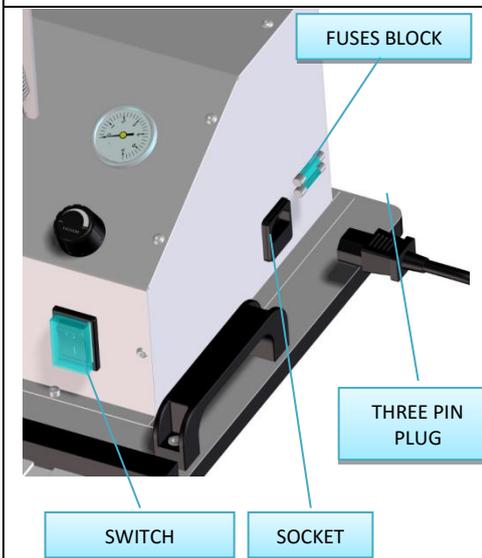


Fig.4



Fig.5

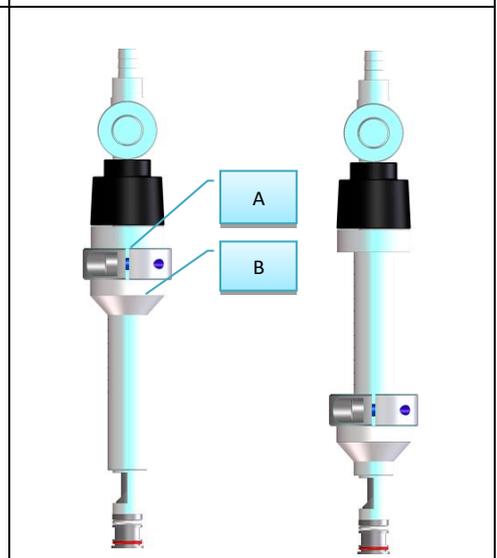


Fig.6

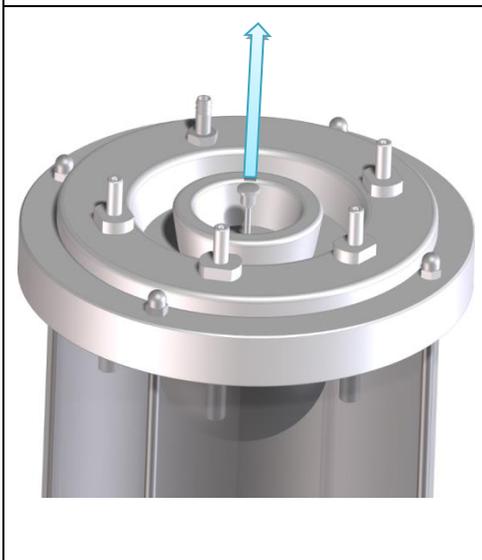


Fig.7

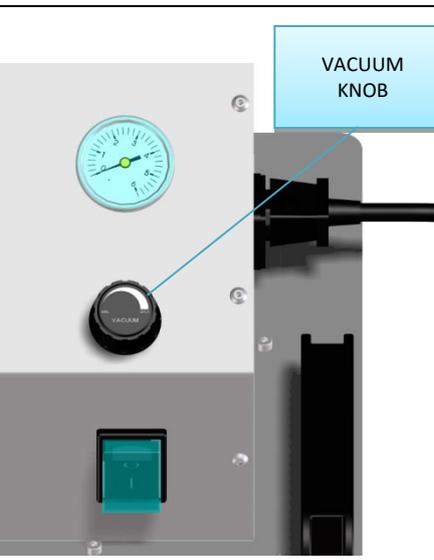


Fig.8

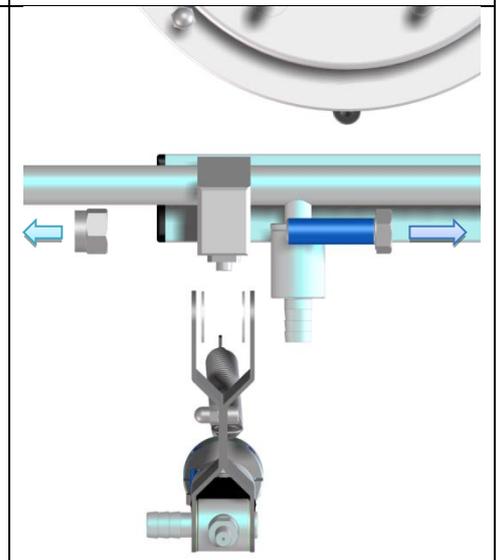


Fig.9



CHAPTER 3 – CLEANING AND MAINTENANCE

For replacing the nozzles, loosen the nut and take away the screw (fig. 9). Unfasten the nozzle with its arms from the rod. Unhook the spring. For installing another nozzle follow the procedure backwards.

No maintenance is required, except for cleaning and sanitizing before and after use.

In order to clean equipment, after rising, isolate the equipment by sectioning power supply.

The recovery tank can be washed with water alone or, in case of edible oil bottling, with dishwashing liquid.

When handling different products, kits supplied by Tenco s.r.l. (Oil kit, Jar kit, Tomato kit, ecc.) are recommended.

To replace the nozzles, rotate the “T” handle by half turn and remove the “U” pin (fig. 9). Open the two plastic elements of the lever and disconnect the entire assembly from the rod. Then disengage the spring. To install others nozzles, follow the above instructions in the opposite way.

CHAPTER 4 - DIAGNOSTICS

4.1 POSSIBLE TROUBLES WHILE ENOLMASTER IS RUNNING

In case of malfunctioning and/or breakdown/failure, set the main switch on OFF and immediately unplug the unit.

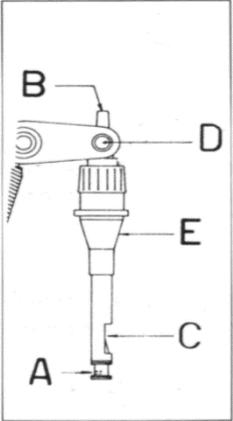
Any operation on electrical parts inside the case shall be performed by authorised and specifically trained personnel.

Warning: hazardous voltage can harm you during maintenance on energised apparatus.

Warning: any operation on equipment shall be performed after releasing any remaining pressure and disconnecting from mains (see chap. 2- point 9).

If things go wrong, check the table below. If none of the solutions listed gives a positive result, get in touch with our authorized retailer.

4.2 TROUBLESHOOTING

Troubles	Causes	Solutions
<p>Engine doesn't start</p>	<ol style="list-style-type: none"> 1)no electricity supply 2)plug not connected 3)the fuses of the power socket may have burnt out (fig. 4) 4)the whole device is in a vacuum 	<ol style="list-style-type: none"> 1)check 2)check 3)disconnect the power cable and remove them by unscrewing the fuse block in the socket by one quarter of turn. Check the fuse conditions and if necessary replace them (1,6 A 250 V) 4)raise knob of the float for few seconds (fig. 7)
<p>Liquid doesn't go into the bottle</p> 	<ol style="list-style-type: none"> 1)engine off 2)the bowl cover is improperly closed 3)the speed adjuster is improperly set to minimum 4)the nozzles are clogged 5)the suction pipe is resting on the demijohn bottom 6)the bottle mouth edge is chipped 7)the rubber ring of the closing cone is broken 8)the nozzles fail to slide properly 	<ol style="list-style-type: none"> 1)check 2)close it well by pushing downwards 3)turn the knob clockwise to maximum (fig. 8) 4)check whether the "A" suction hole is obstructed. Blow into the nozzle from the side of the "B" foam recovery hose, while raising the "E" closing cone. Further, check that the "C" fluid outflow hole is not clogged by blowing from the side of the "D" suction pipe, while still raising the "E" closing cone. (fig. 13) 5)adjust the end side to maintain the suction pipe at a certain distance from the bottom 6)replace the bottle 7)replace it 8)check the 2.02 and 2.06 o-rings. (see exploded drawing). Grease nozzles with vaseline oil (see 4.03 on the exploded drawing)



CHAPTER 5 – REFERENCE STANDARDS

Statutory Regulations

- European Directive on Electromagnetical Compatibility n° 2004/108/CE
- Law n° 791, dd. 18/10/1977 - Transposition of the Community Directive (DB) (73/23/EEC) on electrical equipment safety assurance.
- Decree Law n° 626, dd. 25/11/1996 - Transposition of the directive 93/68/EEC on CE marking for electrical equipment to be used within specific voltage ranges.

Voluntary Regulations

- EN 60335-1 (1989 - Safety on household electrical appliances and similar appliances.
- General provisions (IEC 335-1/1/1976).

CHAPTER 6 - WARRANTY

The Manufacturer guarantees that the equipment to which these documents refer has been tested and that the established test results have been achieved.

The warranty period shall last 12 months, beginning on the date of delivery of the equipment (as indicated in the transport document), except as otherwise agreed upon between the Parties.

The Manufacturer guarantees the equipment to be free from defects in materials and workmanship. Damage deriving from transport not carried out by transport means of the Manufacturer, from improper maintenance, failure of electrical equipment, improper use or negligence, or adjustments/repairs carried out by service personnel not duly authorized by the Manufacturer or in any case beyond the control of the Manufacturer shall NOT be covered by this warranty.

The warranty cannot be transferred by the initial owner of the product to third parties.

During the applicable warranty period, the Manufacturer will repair or replace free of charge any warranted parts that prove defective. For these operations to be carried out, the equipment shall have to be transported to the Manufacturer, who shall not be responsible for any transport charges.

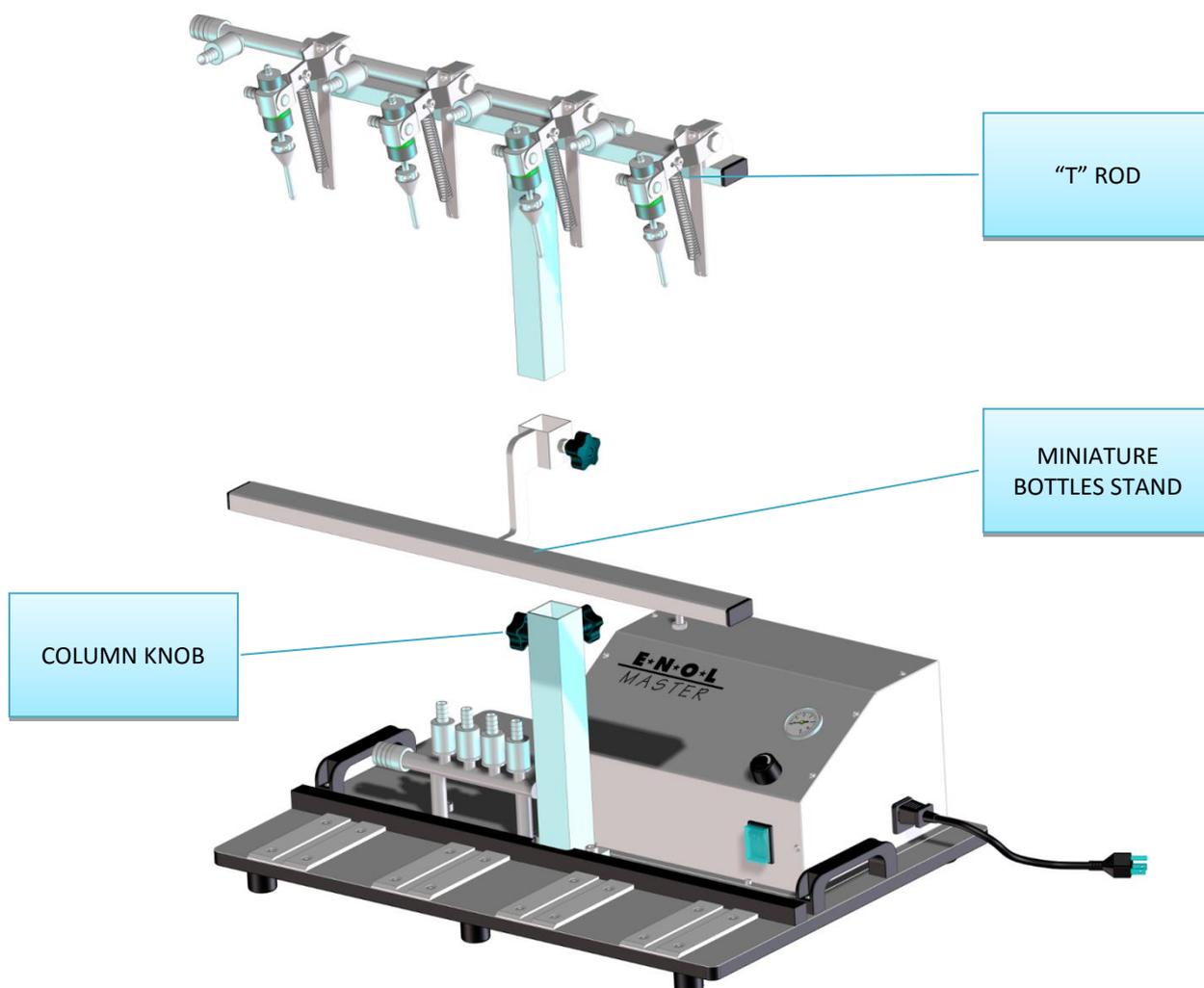
The Manufacturer shall not repair the equipment during the warranty period at the Customer's premises, except as otherwise agreed upon between the Parties.

After the above specified period, this warranty shall expire

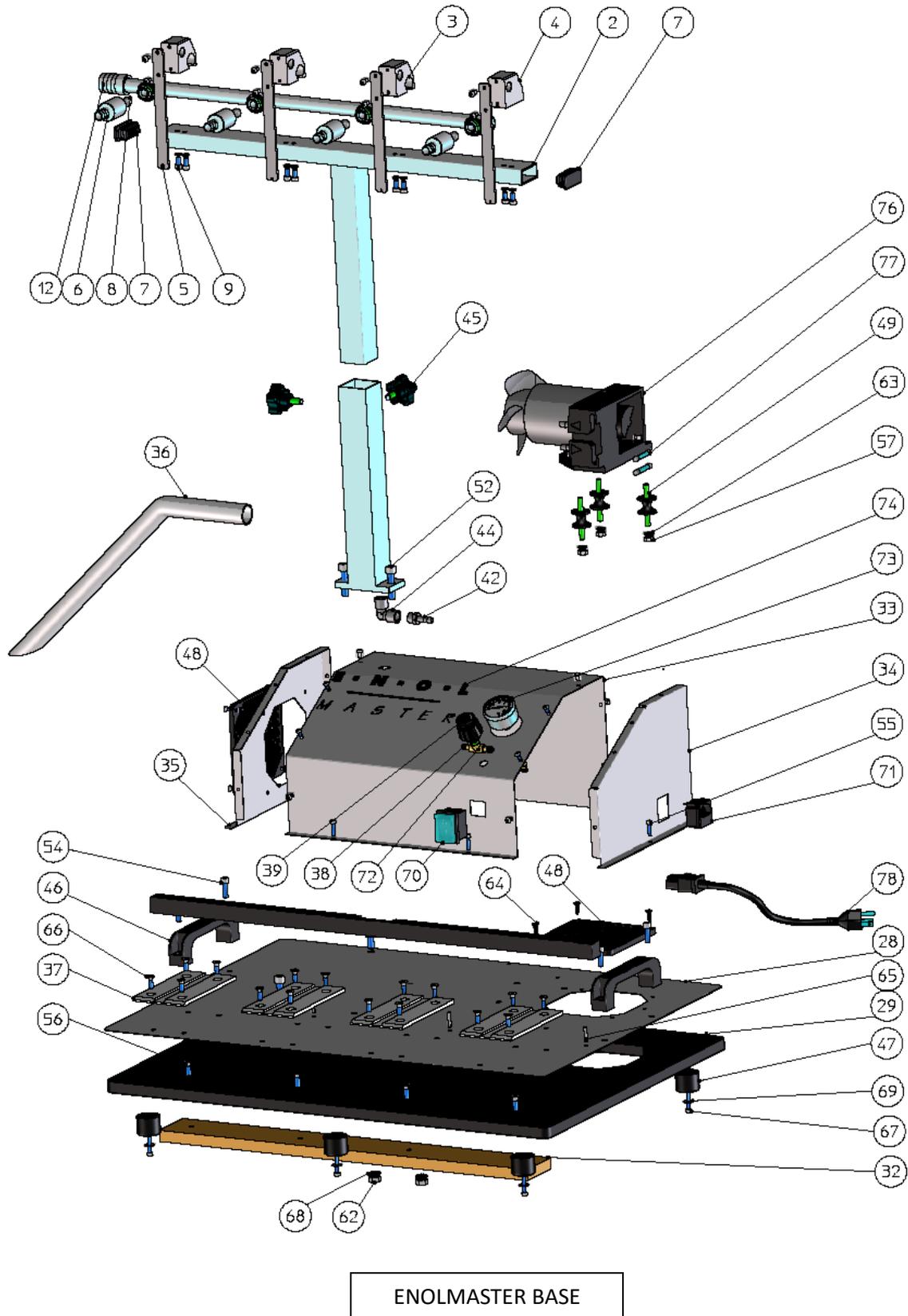
The Manufacturer shall in no event be liable for any direct, consequential, incidental, indirect or special damages caused to people or property by original defects of the equipment, equipment failure, or subsequent forced stoppage in the use of the equipment.

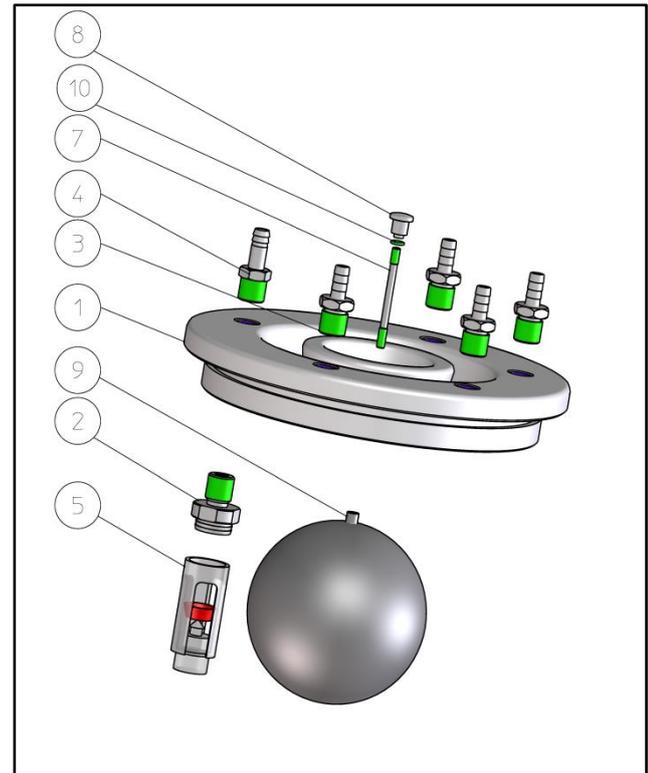
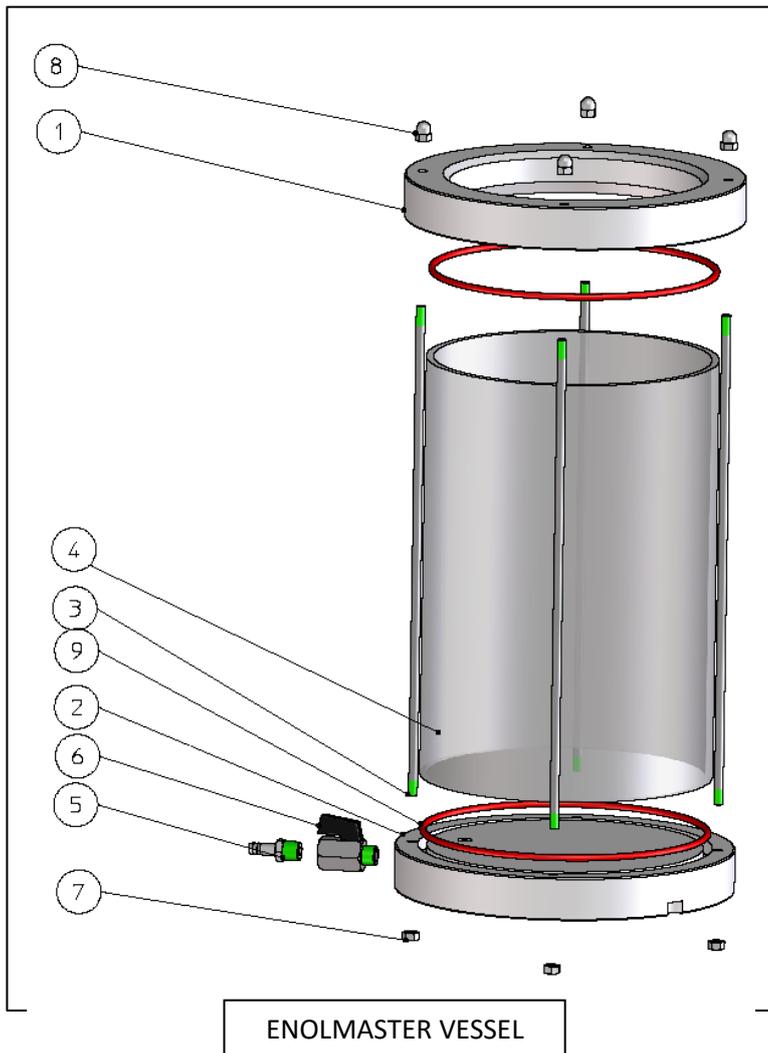
The Manufacturer shall not be liable for filling defects if, at the time of equipment construction, the Client has failed to provide a full sampling of containers and products required in order to carry out the necessary tests.

MIGNON SET - INSTALLATION



1. Loosen the column knobs.
2. Pull out the "T" rod.
3. Install the miniature bottles stand (2 or 4 positions) on the "T" rod. Pull in the rod on its column. Fasten the knobs.
4. Connect the flexible hoses from the suction collector to the nozzles lateral manifolds.





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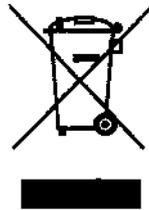


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DIRECTIVE 2002/96/EC (RAEE): INFORMATION FOR USERS

This product is compliant with the European directive EU 2002/96/EC.

The crossed waste bin symbol showed on the appliance indicates that the product, by the end of its lifetime, must be thrown out separately from usual domestic garbage, it has to be consigned to a waste differentiation centre equipped for electronic and electric appliances or to the company a similar item is to be bought from.

The user is responsible of the appliances consignment to an appropriate structure, by the end of its lifetime.

The proper differentiated waste collection for the proceeding of the treatment and the recycling of the appliance, environmentally compliant, contributes to avoiding possible negative effects on the environment and health, and favours the recycle of the compounds of the appliance.

For more detailed information regarding waste collection systems available, please refer to your local recycling centre, or to the appliance retailer