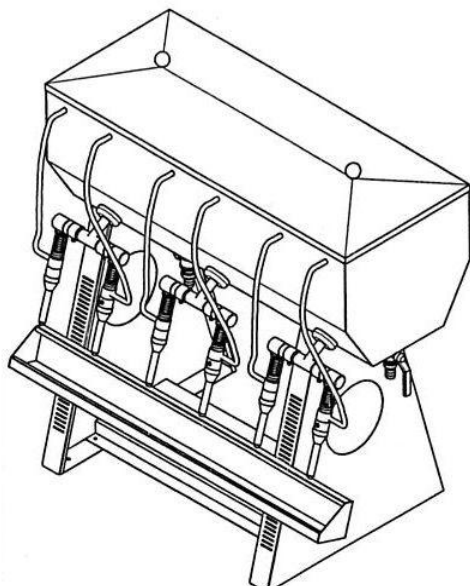
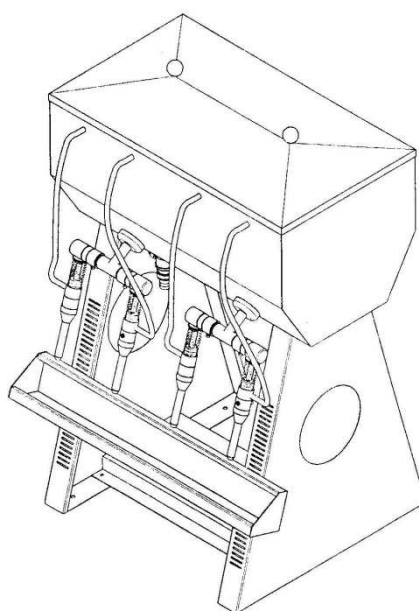
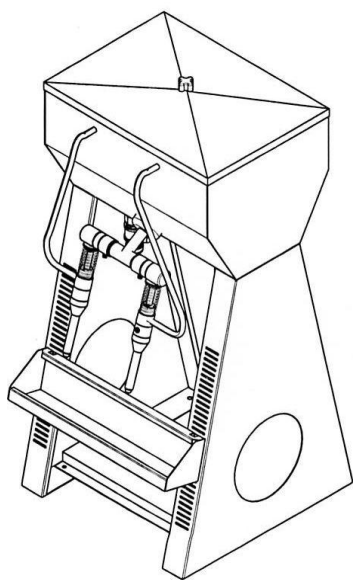




# ***FILLER TIVOLI***

## ***2 – 4 – 6 CONNECTIONS***



***INSTRUCTION MANUAL  
AND SPARE PARTS***

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## ***EC Declaration of Conformity***



The undersigned:

***ZAMBELLI ENOTECH srl  
Via dell' Artigianato, 70  
36043 – Camisano Vicentino  
Vicenza (ITALY)***

Assuming full responsibility, declares that the following machine: **FILLER**

|                      |               |
|----------------------|---------------|
| Type                 | <b>TIVOLI</b> |
| Serial number        | n° _____      |
| Year of construction | <b>2014</b>   |

Complies with:

- Normative CEI 17-13/1 concerning switchboards with low voltage type ANS (Mod. GE-PE)
- Electromagnetic Compatibility (EMC) Directive 2004/108/EC (Mod. GE-PE)
- Reg. EC n. 1935/2004 Materials and objects in contact with food products
- Reg. EC n. 2023/2006 Good practice in the fabrication of objects destined for contact with food products

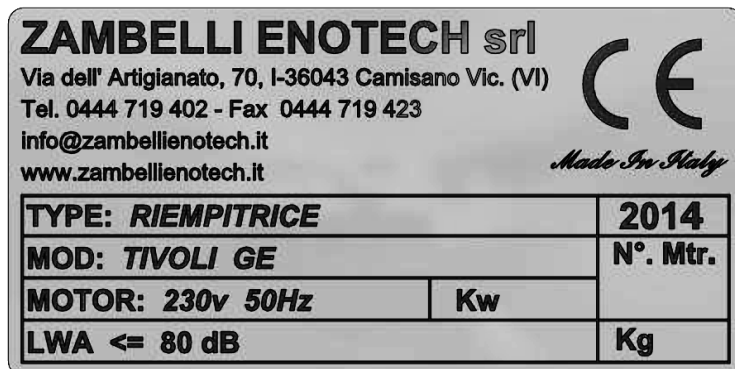
NATIONAL REGULATIONS OBSERVED: D.P.R. 27.4.55, N. 547

Legal Administrator Zambelli Enotech:

Lorenzo Pillan

Responsible for the technical file:

Giorgio Pillan

**NAMEPLATE ATTACHED TO THE MACHINE****IMPORTANT:**

**THIS BOOKLET IS THE PROPERTY OF ZAMBELLI ENOTECH.  
ANY REPRODUCTION, EVEN PARTIAL, IS PROHIBITED.**

TYPE OF DOCUMENT: **INSTRUCTION MANUAL**

FOR THE FOLLOWING MACHINE: **FILLER TIVOLI 2 – 4 – 6 CONNECTIONS**

**EUROPEAN COMMUNITY LEGISLATION**

Instructions taken from the following have been used in composing this manual:

| Reference                    | Title   |
|------------------------------|---|
| Normative <b>CEI 17-13/1</b> | Concerning switchboards with low voltage type ANS <b>(Mod. GE-PE)</b>               |
| Directive <b>2004/108/EC</b> | Electromagnetic Compatibility (EMC) Directive <b>(Mod. GE-PE)</b>                   |
| Reg. EC n. <b>1935/2004</b>  | Materials and objects in contact with food products                                 |
| Reg. EC n. <b>2023/2006</b>  | Good practice in the fabrication of objects destined for contact with food products |

## 1. INTRODUCTION

First of all, we thank you for purchasing our product.

Since many years our company manufactures enological equipments for medium and large cellars.

In reference to our items' achievement, we always try that they are convenient to use, safe, of quality and long lasting; so that we suggest to read the manual carefully.

### 1.1 HOW TO READ THIS MANUAL

#### 1.1.1 Purpose and content of the manual

This manual was written to allow machine operators to:

- know the operational issues related to the machine;
- work in safety.

Inside this manual, operators will find instructions and information for using and correctly maintaining the machine, as well as safety and injury regulations.

#### 1.1.2 General warnings



**ATTENTION: BEFORE CARRYING OUT ANY OPERATION ON THE MACHINE, OPERATORS MUST CAREFULLY READ THE INSTRUCTIONS IN THIS MANUAL AND FOLLOW THEM WHILE EXECUTING ALL OPERATIONS.**



**ATTENTION: ZAMBELLI ENOTECH is not responsible for:**

- damage caused by using the machine for aims different than those indicated;
- damage caused by unqualified personnel attempting to repair the machine.



**ATTENTION: with regards to some important European Directive norms that regulate safety at work, THE PERSON RESPONSIBLE FOR SAFETY in the factory must:**

- check that the workers in charge of using the machine are capable of understanding and applying the basic existing safety norms, in any working environment.
- provide adequate practical training and ascertain, even through tests, that the operators are capable of running the machine in a correct and safe way, under normal working situations and in emergency situations.

#### 1.1.3 Preserve the manual

IT IS MANDATORY TO PRESERVE THE PRESENT MANUAL and all attached documents in an easily accessible place that is near the machine and known to all users. THE MANUAL IS AN INTEGRAL PART OF THE MACHINE FOR SAFETY REASONS.

Therefore:

- It must be preserved in tact (in all its parts);
- It must accompany the machine until the machine is demolished (even if the machine is moved, sold, rented, leased, etc.).

## **1.2 MACHINE MANUFACTURER DATA**

### **ZAMBELLI ENOTECH srl**

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CAP 36043 CAMISANO VICENTINO (VI) Italy  
Tel.: +39 0444 - 719402  
Fax: +39 0444 - 719423  
e-mail : [info@zambellienotech.it](mailto:info@zambellienotech.it)  
sito : [www.zambellienotech.it](http://www.zambellienotech.it)

## **1.3 TECHNICAL ASSISTANCE**

After-sales service is available to Clients for:

- clarifications and information;
- spare parts shipment.



**ATTENTION: remember that:**

- the Client is under the obligation to buy always original spare parts or spare parts authorized by the manufacturer;
- the disassembly or assembly of parts must be done by qualified personnel, following the manufacturer' s instruction;
- the use of no original parts and defective or incorrect assembly relieve the manufacturer from any responsibility.

## **1.4 WARRANTY**

ZAMBELLI ENOTECH guarantees that the machine was built in compliance with existing norms, in particular those related to the health and safety of workers.

The product warranty lasts 12 months; electrical parts are excluded from the warranty.

All expendable items are also excluded from the warranty.

The buyer has the right to substitute defective parts exclusively, after confirmation has been made at our headquarters or at the Client's location, with charges applied for transfer costs and labor fees. Transportation fees for defective parts are at the buyer's expense and are excluded from the warranty.

Damages derived from mishandling the machine, non-compliance with maintenance norms, as well as erroneous manoeuvres by operators are excluded from the warranty.

Any tampering with the product, especially with the safety devices, will decay the WARRANTY and relieve the Manufacturer of any responsibility.

No compensation is due for any machine inactivity.

## 2. DESCRIPTION

### 2.1 DESCRIPTION OF THE MACHINE

FILLER TIVOLI is manufactured in STAINLESS STEEL AISI 304. Depending on the several models, it can be supplied without float, with ball float, with electric float, combine with a Filter, with a Pump or only Filler.

### 2.2 TECHNICAL DATA SHEET

| DESCRIPTION                         | TIVOLI 2                                  | TIVOLI 4          | TIVOLI 6          |
|-------------------------------------|---|-------------------|-------------------|
| Size<br><i>mm</i>                   | 390 x 400 x H 830                         | 630 x 500 x H 900 | 865 x 500 x H 900 |
| Weight<br><i>Kg</i>                 | 14  | 23                | 26                |
| Hourly output<br><i>Bottle/hour</i> | 200-300                                   | 500-600           | 750-900           |
| Voltage supply<br><i>V</i>          | ONLY MOD. GE-PE: See machine's data sheet |                   |                   |

### 2.3 PURPOSE OF USE

#### 2.3.1 Intended use

Fillers Tivoli are provided for filling bottles with food liquids such as wine, oil, beer etc.

The Fillers are for indoor use.

All working operations must be carried out by one single operator.

It is FORBIDDEN to use the Filler for:

1. liquids of any type, explosive, inflammable, corrosive, etc.;
2. solid products;
3. animal products;
4. any other use than that for which it was created.

#### ATTENTION: EXPLOSIVE ENVIRONMENT.

This machine is not explosion proof, but rather it is made of standard equipment.

IT IS THEREFORE FORBIDDEN TO USE IT IN PLACES WHERE GAS CONCENTRATIONS CAN EXCEED THE ESTABLISHED LIMITS AND CREATE AIR WITH THE RISK OF COMBUSTION.



#### 2.3.2 Machine use

To work with the Filler, the working surface has to be flat to guarantee the maximum stability.

#### 2.3.3 Noise

The noise level of the Filler during manufacturing is less than 70 db.

### 3. TRANSPORTATION

The Filler is shipped completely assembled and packed in a box.

Upon delivery, check that the machine was not damaged during transportation and that you receive all the pieces indicated in the shipping papers. In case of damage, it is mandatory to tell the carrier and to immediately inform both the manufacturer and the shipper.



**ATTENTION:** the vehicles used to move and lift the Filler must be suitable considering its shape, its dimensions and its mass.



**WARNING:** Avoid blows and/or pressure on the box.

### 4. SAFETY

#### 4.1 GENERAL INFORMATION

The aim of the following chapter is to inform operators of possible risks and safety regulations to keep in mind when using the machine. However, such regulations must be respected in any working environment.

#### 4.2 WORKING SAFETY AREA

The working area must be free of any obstacles, so that operators can move freely, and must have adequate lighting. Also, the following more common norms must be respected:

- comply with the guidelines on the plates on the machine;
- before starting-up the machine, make sure no one is cleaning or performing maintenance on the machine;
- do not perform any cleaning, maintenance or disassembly operation without first disconnecting the machine from the electrical power network.

#### 4.3 SAFETY INTEGRATED INTO THE MACHINE AND WORKING CYCLE

##### Working cycle:

The entire working cycle must be controlled by a single operator.

The operator is not exposed to risk if s/he respects:

- the intended use;
- the procedures described in the manual;
- the tasks and competencies that are in keeping with his/her own professional knowledge.

#### 4.4 HAZARDOUS MATERIAL RESIDUES

The Filler is built with materials that do not present danger or risk to operators.

However, if not properly disposed of, the following can be hazardous to the environment, waste products that result from processing operations and from maintenance operations. These materials must be collected and disposed of in accordance with the laws that exist in the country where the machine is installed.

#### 4.5 PROTECTION MEASURES AGAINST RISKS DUE TO ELECTRICITY (ONLY MOD. GE)

The drawing of the electrical system in the table and in particular the connection to the source of energy, the connections to the save-all circuit, the quality and the arrangement of the components guarantee the prevention of risks due to electricity.



## 5. INSTALLATION AND WORKING



### **WARNING: General introduction.**

*Remember that all the operators must respect the intended destination of use of the machine.*



### **Safety warning:**

*The personnel charged with operating the machine should know this manual well and all the information relative to safety.*

*"The improper use" of the machine causes the expiry of the guarantee and the full assumption of responsibility on the part of the user.*

*The internal environment should be suitable for the use of the machine, and clear of boxes or other objects that could impede the intended use of the machine.*

**In reference to the Filler with electric float and/or Pump (mod. GE-PE), the operator must always pay attention to the following points before using the machine:**

- ***check the integrity of the plug and the electrical connection cable;***
- ***do not pass the electrical power supply cable over devices or machines which could irreparably damage it;***
- ***do not rest the cable on wet or muddy ground;***
- ***the interrupters, outlets or plugs upstream from the plugs provided with the machine, should have an adequate degree of protection;***
- ***check that the data on the plate of the machine corresponds with the data of the power supply network;***
- ***check that the electrical power supply device upstream from the machine is equipped with the adequate lifesaving differential and breaker, and earthing cable to secure the safety of persons in case of failure;***
- ***if extension cables are used, they must be equipped with an earthing cable;***
- ***be sure that there are no children present while the machine is in use;***
- ***do not EVER leave the machine unattended while it is running;***
- ***do not EVER leave the machine connected to a power supply network; after using it, ALWAYS be sure that the plug has been disconnected.***



**WARNING** *Keep children and unauthorised persons away from the electrical devices.*



**WARNING** *In case of failure or motor anomalies, the operator should never disassemble it, but consult the assistance centre or the constructor.*

## 5.1 POSITIONING

Be sure to place the filler in a safe place to prevent that any accidental knocks or vibrations can drop it and then cause damages to people or property.

Adjust the **P** front feet so that the filler is stable.

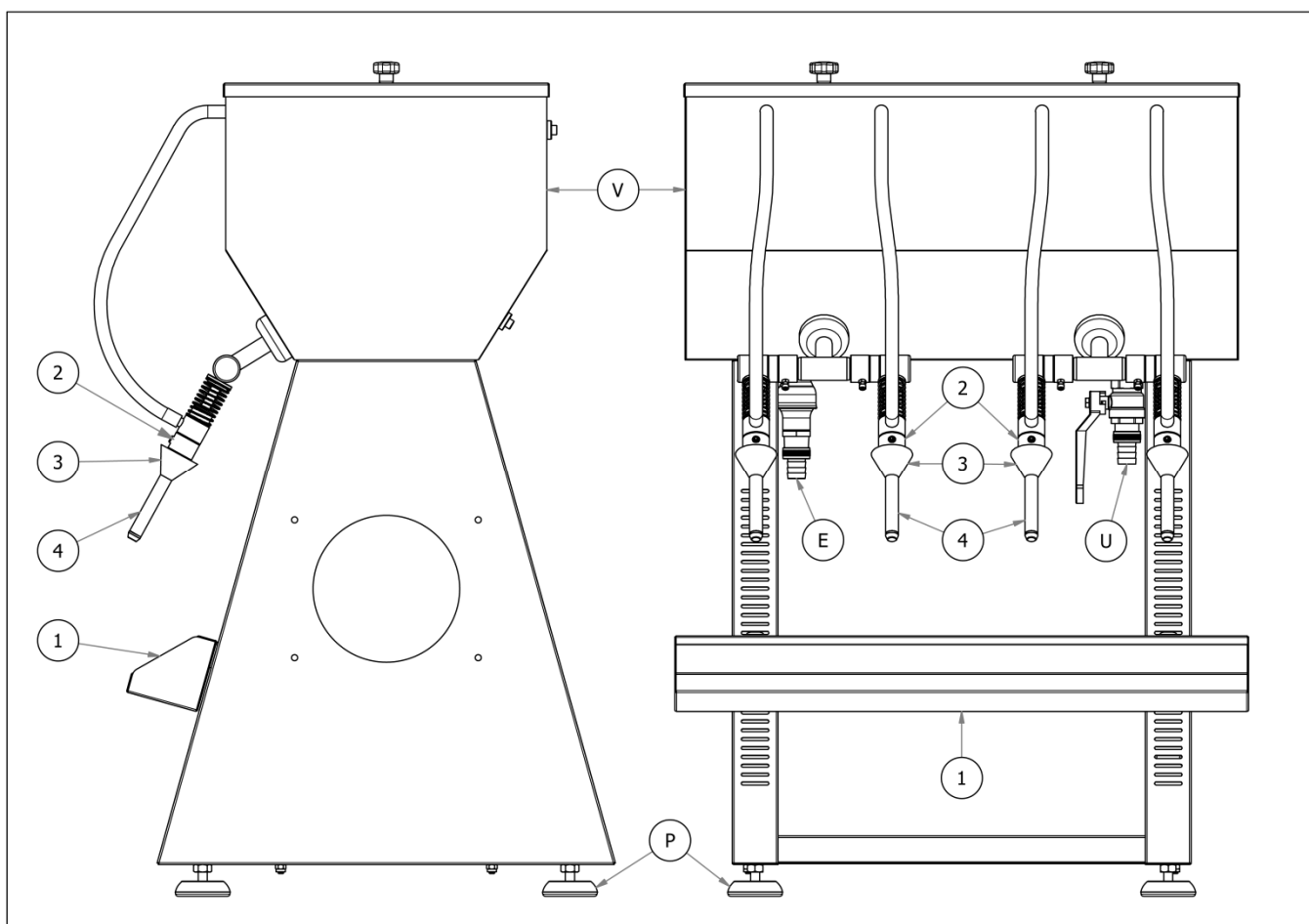
Connect rubber hoses to the incoming fittings **E** for the filling and to the output fittings **U** for the dumping of the liquid.

## 5.2 STARTING THE MACHINE

You can use various sizes of bottles.

According to the height of the bottle to be used, you have to adapt the filler by moving up or down the bottle holder **1**, by hooking it to the sequence of cracks on the front of the legs of the filler.

The final level of the liquid in the bottle can be varied by adjusting the spacer **2**, located above the rubber sealing cone **3**, placed on each nozzle **4**.



## 5.3 WORKING

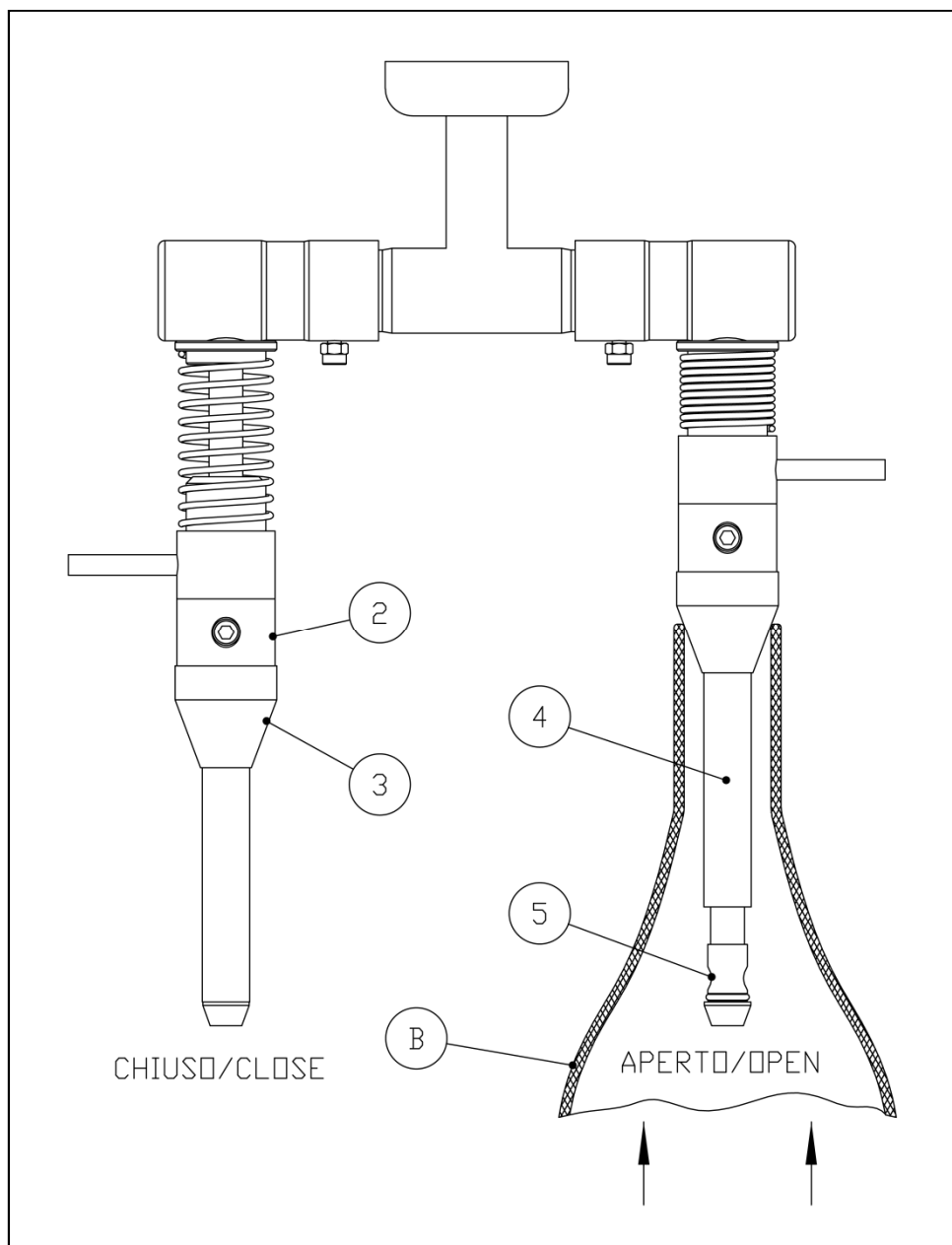
The working is simple and it is based on the principle of communicating vases.

The tank **V**, is filled by introducing the liquid through a tube connected to the incoming fitting **E**, either manually or by means of a pump. In the PE version, the pump is installed directly on the filler.

Once the tank is filled, you can proceed to fill the bottles.

Insert the spout **4** within the neck of the bottle **B** and place it on the bottle holder **1**. Bear in mind that once it is placed, the head of the spout **5** has to remain in open position.

Once the bottle is filled, you have to push up to remove it from the bottle holder **1**, then you have to pull out from the nozzle **4**, which will close, preventing the discharge of the liquid.



As the product decreases inside the tank, the level will be restored in different ways, depending on the machine versions:

**N:** WITHOUT FLOAT: the level of liquid in the tank will be kept constant by manual regulation of the loading valve

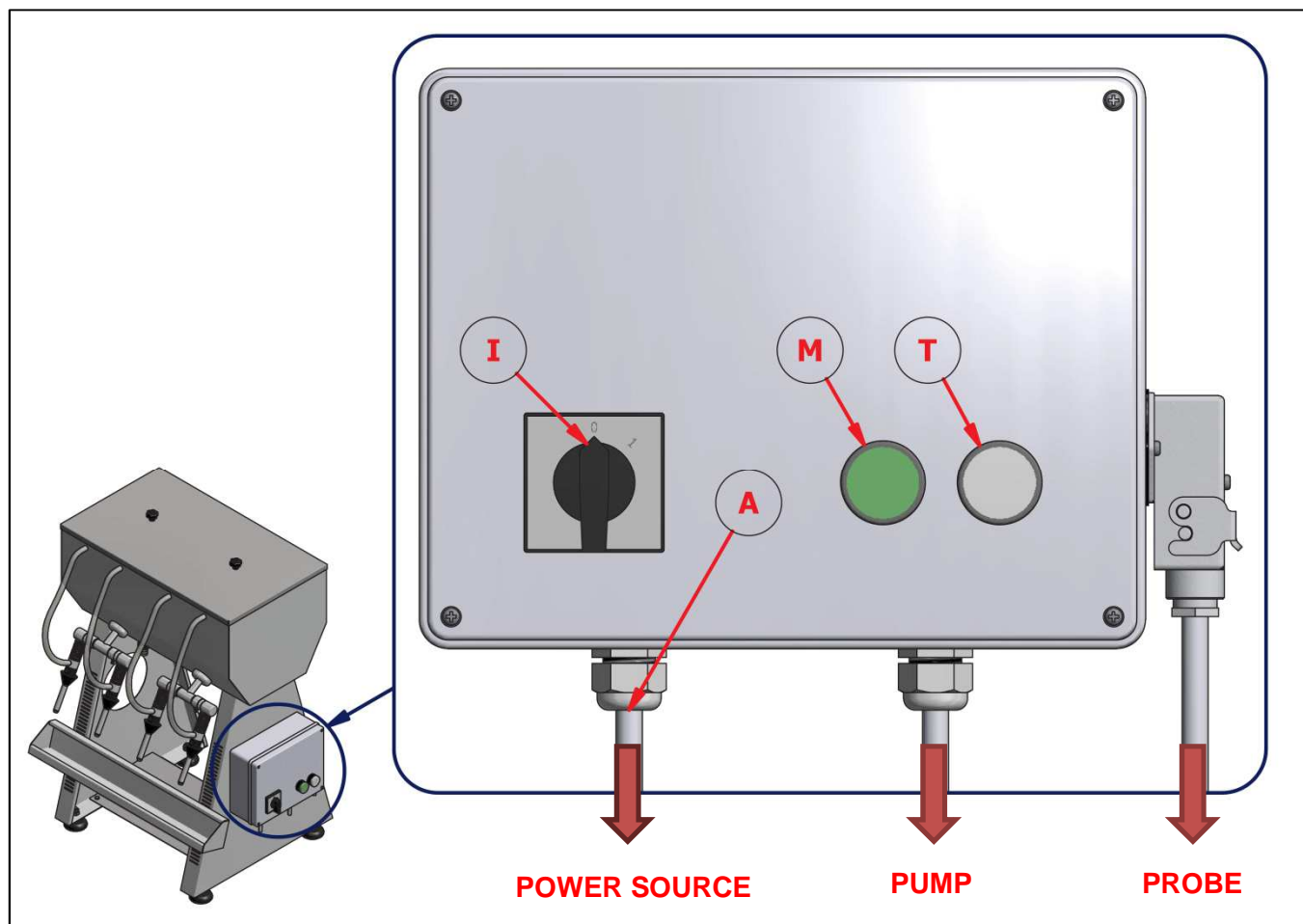
**GS:** WITH BALL FLOAT: the level of liquid in the tank will be kept constant automatically by the float connected to the incoming fitting **E**, situated inside the tank (see TAV. IV on page 21).

**GE:** WITH ELECTRIC FLOAT: see next paragraph.

## 5.4 "GE" MODEL WITH ELECTRIC FLOAT

Fillers Bacco GE with electric float have on the right side of the frame a switchboard connected to an external pump or installed directly on the filler (**mod. GE-PE**).

The floating system is constituted by two level probes, placed inside the tank, which control automatically the pump connected to the switchboard. When the liquid level drops below the lower probe (MIN), the pump starts to fill the tank; when the liquid level arrives at the upper probe (MAX), the pump switches off automatically.



### 5.4.1 Start up

To start up, you have to follow these steps:

- 1) connect the power source cable **A** to the electricity grid according to the data plate located on the label;
- 2) turn the switch off **I** on position **1** to give power to the switchboard (white light **T** on);
- 3) at this point, the pump will be controlled automatically by the probes, depending on the liquid level inside the tank (green light **M** on: pump in active use; green light **M** off: nonfunctional pump).

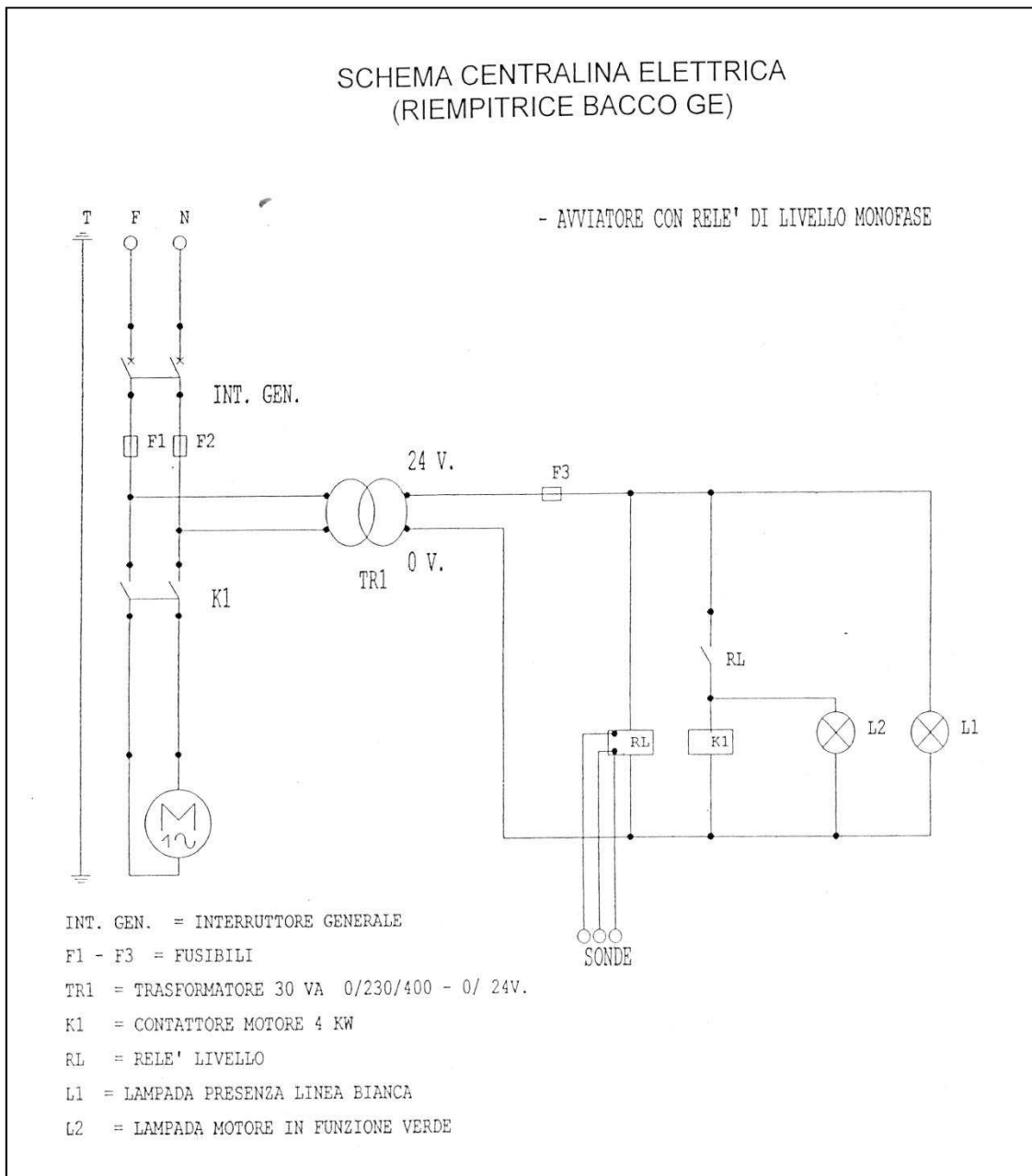
### 5.4.2 Switching off

To the switching off, you have to follow these steps:

- 1) turn the switch off **I** on position **0** to take off power to the switchboard (white light **T** off);
- 2) disconnect the power source cable **A** from the electricity grid.

### 5.4.3 Switchboard Compliance

The switchboard (serial number 03-14-QRI) complies with the normative CEI 17-13/1, concerning low voltage switchboards type ANS.



**In case of Three Phase Switchboard, see diagram attached aside**



#### IT'S FORBIDDEN

**Perform any work on the electrical devices.**

In particular, it's forbidden:

- open the switchboards and work on devices placed inside them;
- remove the protections of the energy voltage parts and/or disconnect electrical devices (remove connectors, covers of electrical devices, etc.).

## 6. MAINTENANCE

### 6.1 ORDINARY MAINTENANCE ACTIVITIES (GENERAL INFORMATION)

#### 6.1.1 Technical warnings for good maintenance

For good maintenance:

- use only original spare parts, suitable equipment for the task and in good conditions;
- respect the frequency of interventions indicated in the manual for programmed maintenance (preventative and periodic);
- good preventative maintenance requires constant attention and continuous surveillance of the machine. Immediately check the cause of eventual anomalies such as excessive noise, overheating, etc. and attempt to remedy.

In case of doubts, consult the constructor or the authorised assistance centre.

#### 6.1.2 Maintenance plan

From a structural point of view, the interventions regarding the mechanical and electrical parts.

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

- ordinary programmed (or preventative) maintenance;
- ordinary maintenance according to condition.

Ordinary programmed (periodic or preventative) maintenance includes inspections, controls and interventions which, to prevent stops and malfunctions, keep the mechanical conditions of the machine, and in particular its operations, under systematic control.

Ordinary maintenance according to condition refers to the components of the machine for which wear times or intervention times cannot be pre-established.

These components should be kept under control and replaced when wear status makes them unsuitable for use.

### 6.2 ORDINARY MAINTENANCE

To keep the machine running at full capacity, please follow the maintenance schedule as indicated. The lack in conformity with the above exonerates the constructor from any and all responsibility in respect to the guarantee.

**NOTE: The indicated frequency refers to normal functioning conditions, i.e. it corresponds to foreseen and contractually established working conditions.**

| TYPE OF OPERATION                      | FREQUENCY              |                      |
|--|------------------------|----------------------|
|  | START OF WORKING CYCLE | END OF WORKING CYCLE |
| Clean the machine                      |                        | X                    |
| Tightness and welding control          | YEARLY                 |                      |
| Button efficiency control (mod. GE/PE) | X                      |                      |
| Check electrical cables (mod. GE/PE)   | X                      | X                    |

## 6.3 CLEANING THE MACHINE

Cleaning the machine permits the removal of eventual incrustations or deposits which may compromise the optimal functioning of the machine and the processed product.

When the manufacturing is finished, empty the tank through the ball valve **9**, placed under it, and wash carefully the tank and the spouts.

In models GE/PE:



**WARNING** Before realizing the cleaning, disconnect the filler from the electricity grid, by removing the plug from the electricity supply.



**WARNING** Although it is equipped by a sufficient degree of protection, avoid that electrical devices come in external contact with any liquid.



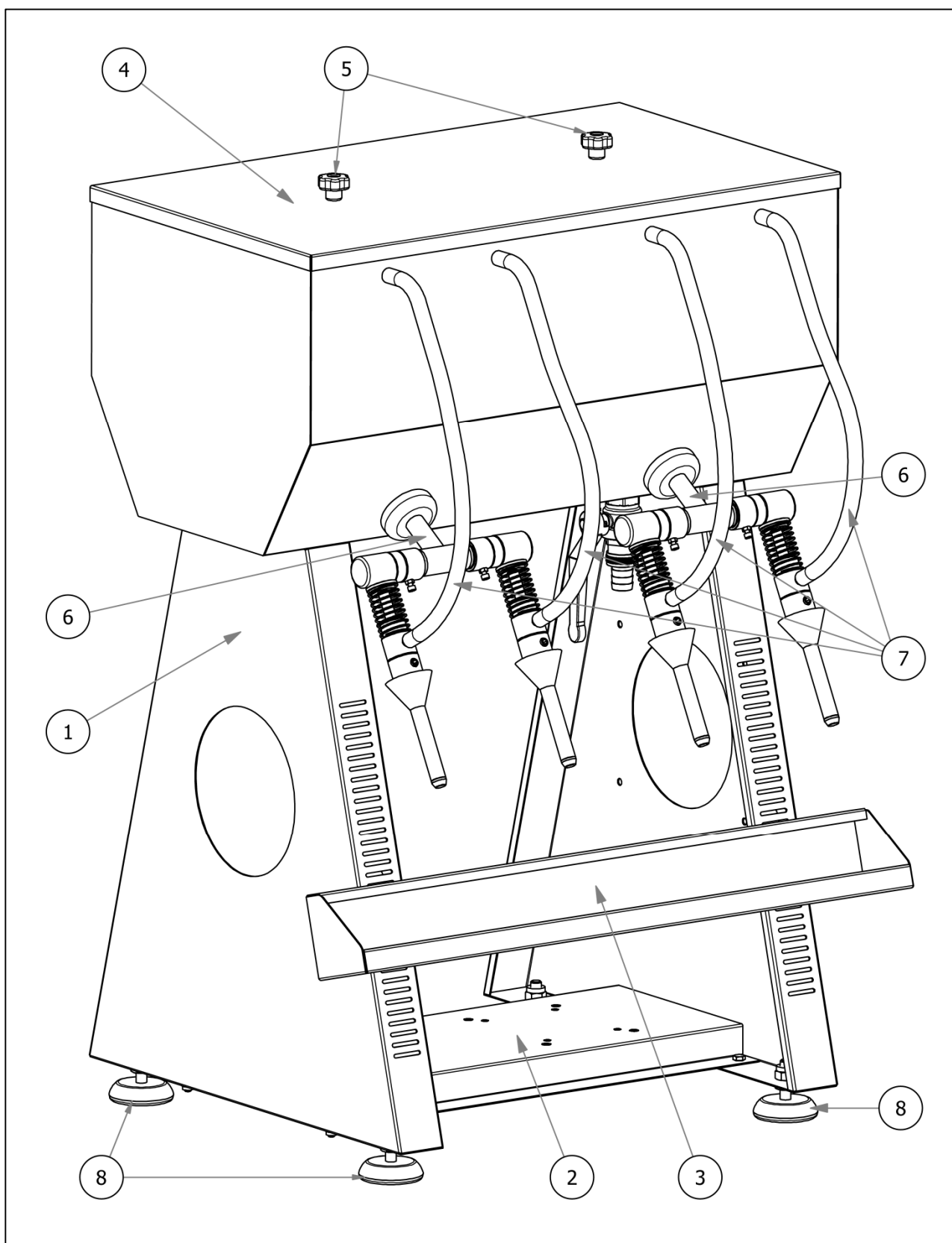
**Warning:**  
keep tidy the warning plates and the nameplate of the machine.

## 7. SPARE PARTS



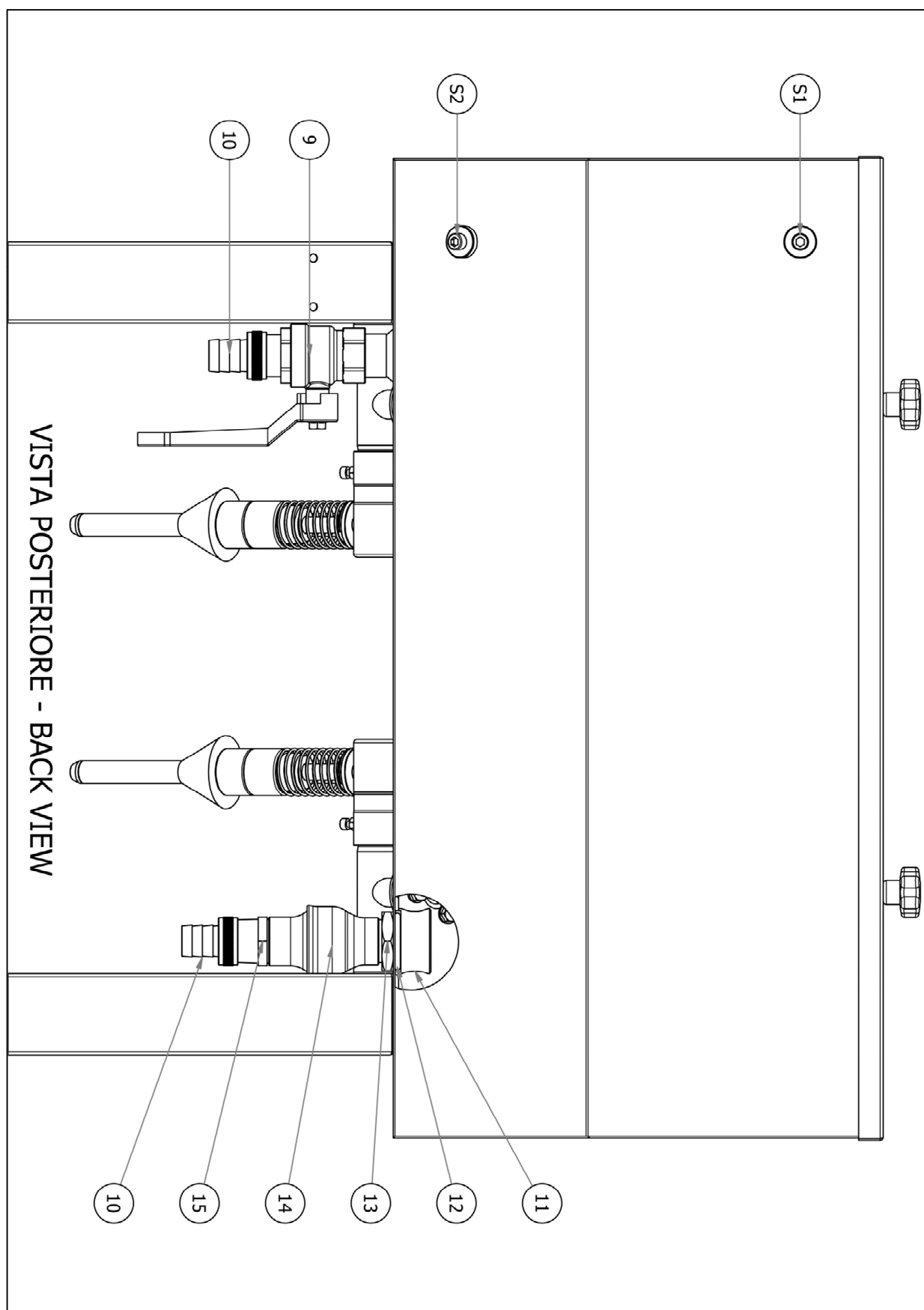
To have the machine operate correctly, it is recommended that original spare parts supplied by the manufacturer are always used.

| Standard Version TAV. I – II – III |                                    |    |                             | GS Version TAV. IV |                          |
|------------------------------------|------------------------------------|----|-----------------------------|--------------------|--------------------------|
| 1                                  | Frame                              | S2 | Probe compartment MIN       | 30                 | Ball float               |
| 2                                  | Omega frame                        | 18 | OR 18x3,55 NBR              | 31                 | Ball ring nut ½"         |
| 3                                  | Bottle-holder                      | 19 | Inner spout journal box     | 32                 | Curve MF ½"              |
| 4                                  | Cover                              | 20 | Spout washer                | 33                 | Loading connection ¾" GS |
| 5                                  | Knob                               | 21 | Spout spring                | 34                 | OR 28x3,55 NBR           |
| 6                                  | Spouts                             | 22 | OR 10x1,8 NBR               |                    |                          |
| 7                                  | Spout pipe                         | 23 | Outer spout journal box     |                    |                          |
| 8                                  | Front foot                         | 24 | Outer spout pipe            |                    |                          |
| 9                                  | Ball valve ¾" MF                   | 25 | Spout spacer                |                    |                          |
| 10                                 | Hose end fitting Ø 20              | 26 | Rubber cone                 |                    |                          |
| 11                                 | Loading connection ¾"              | 27 | Inner spout                 |                    |                          |
| 12                                 | OR 28x3,55 NBR                     | 28 | OR 8,5x1,8 NBR              |                    |                          |
| 13                                 | Ring nut for loading connection ¾" | 29 | Spout head                  |                    |                          |
| 14                                 | Non-return valve ¾" FF             | V1 | Screw TE 6x12               |                    |                          |
| 15                                 | Nipples ¾" MM                      | R1 | Washer Ø6                   |                    |                          |
| 16                                 | Spout clamp                        | V2 | Cylindrical head screw 4x10 |                    |                          |
| 17                                 | OR 38,7x3,55 NBR                   | D1 | Hexagonal nut M4            |                    |                          |
| S1                                 | Probe compartment MAX              | G1 | Grain 8x10                  |                    |                          |

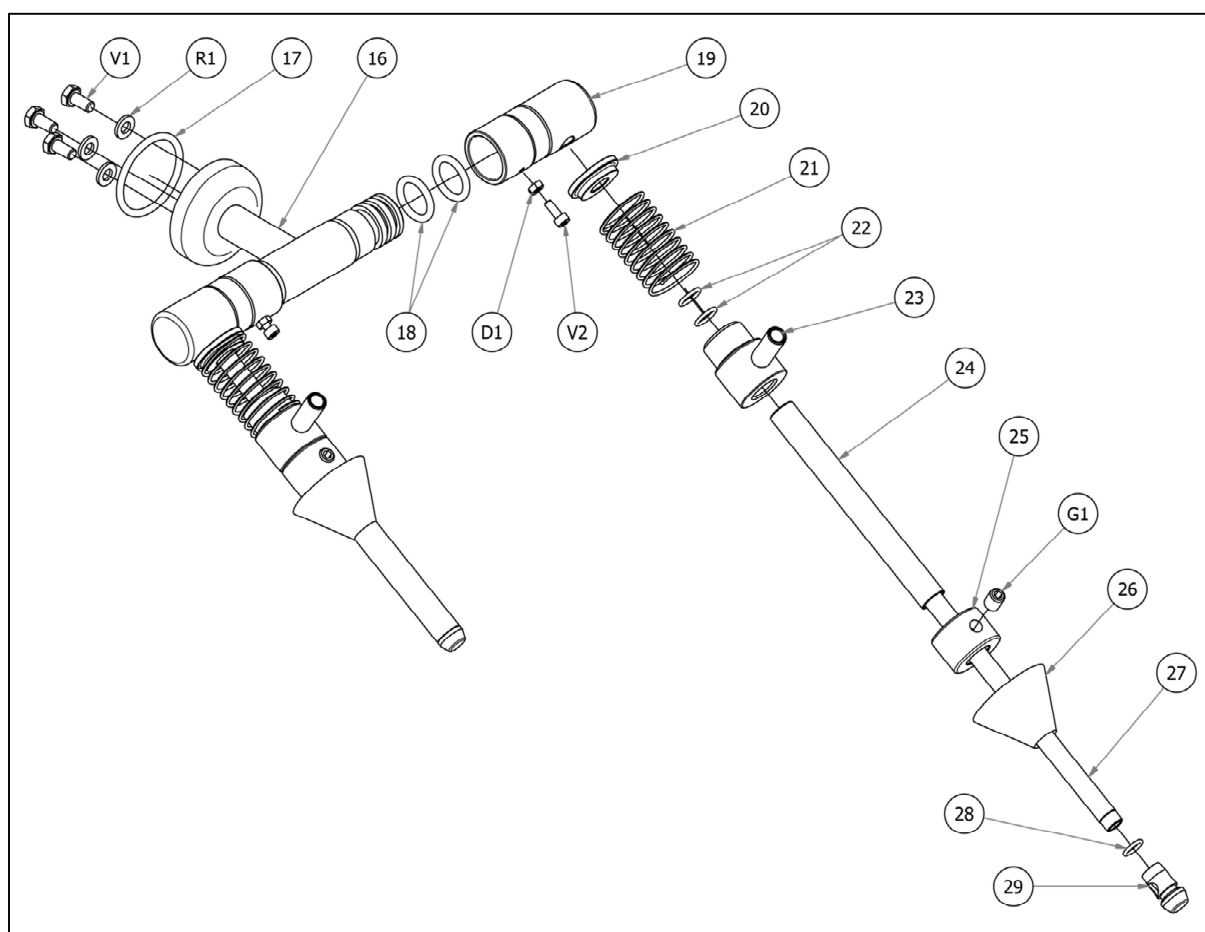


TAV. I

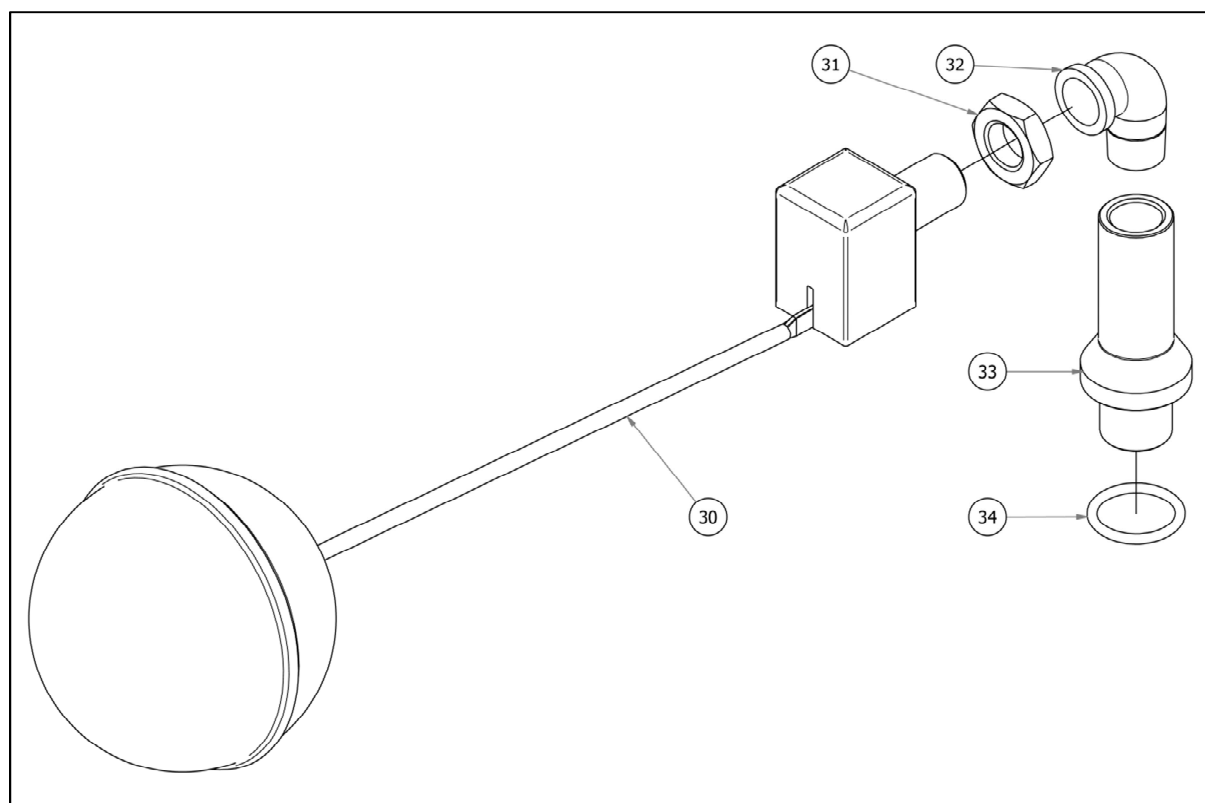




TAV. II



**TAV. III**



**TAV. IV**

## 8. WASTE DISPOSAL AND DEMOLITION

### WASTE DISPOSAL

When using the machine waste materials are generated during processing which must be collected, recycled or disposed of in accordance with the laws that exist in the country where the machine is installed. Machine parts which are substituted must also be handled in the same way.

### MACHINE DEMOLITION

When demolishing the machine it is necessary to separate the plastic parts and electrical components, which must be recycled separately in accordance with existing laws.

With regards to the parts made of metal, simply separate the parts made of steel from those made of other metals or alloy, so that the parts can be melted properly at the recycling center.



**ATTENTION:** any discharged fluids must not be mixed together, instead, they must be preserved separately in closed containers to avoid being contaminated by foreign substances. They must absolutely be disposed of at the appropriate Waste Disposal Centers.



**ATTENTION:** The disposal of materials must be made according to the rules applicable to the product type.

## 9. GENERAL SALES CONDITIONS

**TRANSPORTATION:** Responsibility of the buyer.

**CLAIMS:** Claims will not be accepted if more than eight days have passed since receiving the goods and returns are not accepted without our prior authorization.

**RISERVE:** We are not responsible for any damages resulting from unintended use. Furthermore, the warranty does not cover deficiencies or defects due to parts that are subject to wear or pieces that are returned disassembled, mishandled or which were repaired outside our headquarters.

**WARRANTY:** Our products are thoroughly tried, tested and guaranteed for 12 months from the date of delivery. Our responsibility under this warranty is limited to substituting pieces which are eventually found to be defective, after careful examinations conducted at our headquarters or at the Client's location, with charges applied for transfer costs and labor fees.

**DISPUTES:** The Competent court is the Court of Vicenza (Italy).

**TECHNICAL DATA:** The technical data in this booklet is informational and not binding. The company reserves the right to implement changes to its products without notice.



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