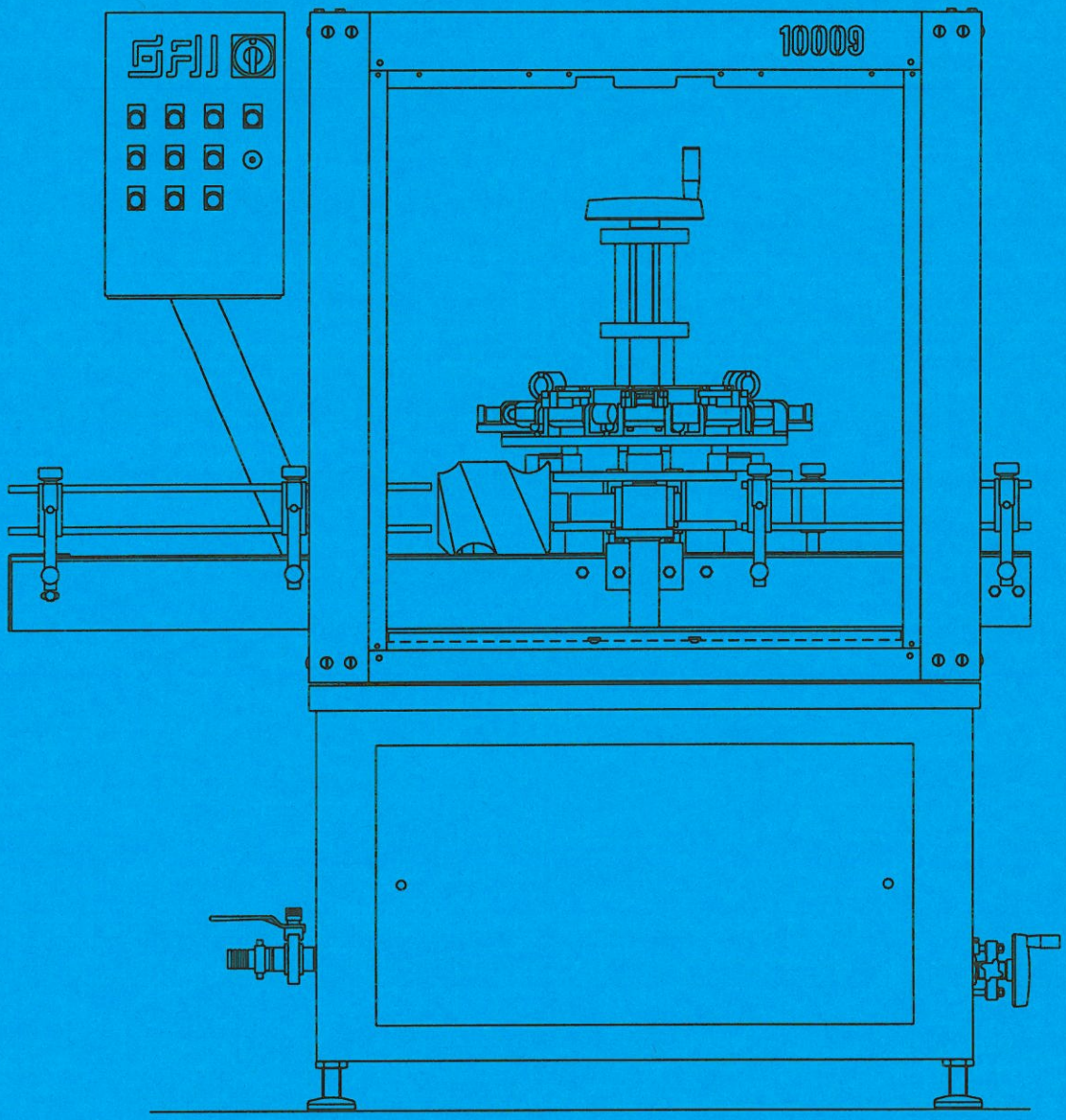
Operating and servicing instruction manual

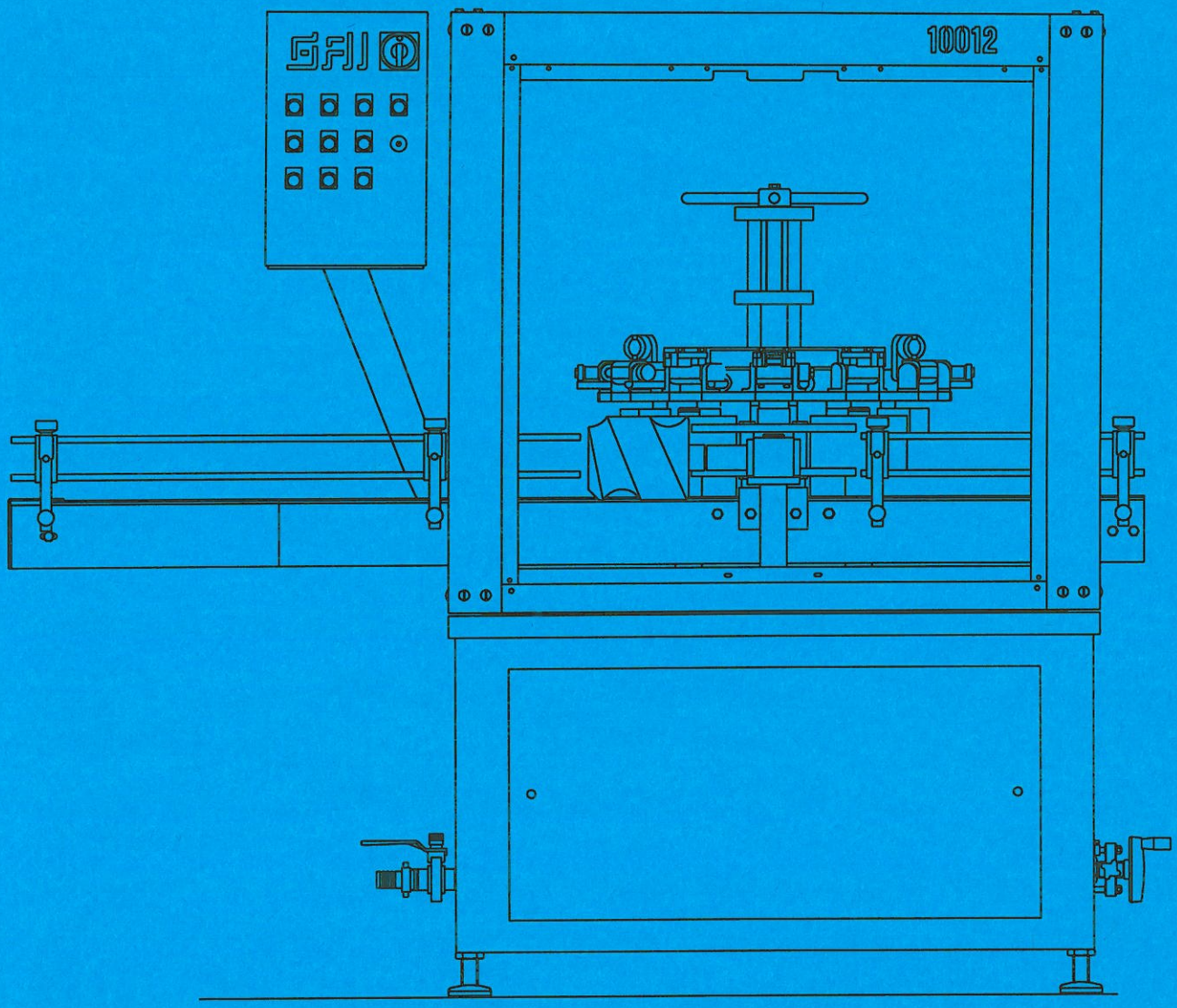


10009
10012

AUTOMATIC RINSERS

GAI spa.
Fraz. Cappelli 33 b
12040 CERESOLE D'ALBA
Tel. 0172-574416
Fax 0172-574088
E-mail: gai@gai-it.com
Internet: www.gai-it.com

Operating and servicing instruction manual



10009
10012

AUTOMATIC RINSERS

GAI MACCHINE IMBOTTIGLIATRICI
GAI spa.
Fraz. Cappelli 33 b
12040 CERESOLE D'ALBA
Tel. 0172-574416
Fax 0172-574088
E-mail: gai@gai-it.com
Internet: www.gai-it.com

1.
INDEX

TECHNICAL DATA SHEET .....
BROCHURE .....
1.
INDEX **1**
1.1 LIST OF DRAWINGS 3
1.2 LIST OF SPECIAL SYMBOLS AND TERMS 4

2.
GENERAL INFORMATION **5**
2.1 TECHNICAL SERVICE 7
2.2 PRELIMINARY SAFETY RULES 8
2.3 OPERATIONAL SAFETY RULES 9
2.4 MAINTENANCE SAFETY RULES 10

3.
TRANSPORT AND MOVEMENT **12**

4.
DESCRIPTION OF THE MACHINE **13**
4.1 USE 13
4.2 TECHNICAL DATA 13
4.3 OVERALL SIZE 14
4.4 DESCRIPTION OF OPERATION 15
4.4.1 STANDARD OPERATION 15
4.4.2 OPERATION WITH ACCESSORIES 16
WATER STERILISATION KIT 10100 16
WINE RINSER KITE 10200 16

5.
INSTALLATION AND OPERATION **17**
5.1 INSTALLATION AND START-UP 17
5.2 FINAL OPERATIONS 20
5.3 WASHING AND STERILIZING 21
5.3.1 WASHING AND STERILIZING THE RINSER 21
5.4 CORROSION PREVENTION 21

6.
CHANGING BOTTLE SIZE AND SPECIAL ADJUSTMENTS **22**
6.1 CHANGING BOTTLE SIZE 22
6.2 SPECIAL SETTINGS AND TIMING OPERATIONS 23

7.
MAINTENANCE AND LUBRICATION **26**
7.1 MAINTENANCE 26
OUTLET OF RINSER INJECTOR 26
7.2 LUBRICATION 27
7.2.1 RINSER TURRET 28
7.2.2 OTHER LUBRICATION 31
7.2.3 EVERY 40 HOURS OF OPERATION 31
7.2.4 EVERY 200 HOURS OF OPERATION 32

8.
TROUBLESHOOTING **33**

9.
ANNEXES **34**
9.1 NOISE-LEVEL READINGS 34

10.
MISCELLANEOUS **34**
10.1 NOTES ON DISMANTLING AND DEMOLITION 34
10.2 SPARE PARTS SUPPLIED 35
10.3 ORDERING SPARES 36

1.1 LIST OF DRAWINGS

PAGE	DRAWING	DESCRIPTION
11	10009-10000 10012-10000	FRAME AND BELT FRAME AND BELT
12	10009-20000 10012-20000	MOVEMENTS MOVEMENTS
13	10009-30000 10012-30000	STARS AND WORMS STARS AND WORMS
14	10009-40000 10012-40000	RINSER TURRET RINSER TURRET
15	10009-50005 10012-50005	CE STANDARD PROTECTIONS CE STANDARD PROTECTIONS
16	10009-60000 10012-60000	ELECTRICAL SYSTEM ELECTRICAL SYSTEM
17	10009-86000 10012-86000	STANDARD DOTATIONS STANDARD DOTATIONS
18		ACCESSORIES

1.2 LIST OF SPECIAL SYMBOLS AND TERMS

	General danger
	Important
	Recommendation
	Major warning
	Link with another section of the manual to be read carefully
l	unit of volume : litres
bott	number of bottles
h	unit of time : hours
kg	unit of weight : kilograms (~10 N)
mm	unit of length : millimetres
V	Volts
Hz	Hertz = frequency in cycles per second
kW	unit of power : kilowatts
bar	unit of pressure : (~1 Atm ≅ 10^5 N/m^2)
dB	noise level : decibels

2.
GENERAL INFORMATION

This manual contains the information required to understand the machine's features and performance, and to provide for its safe operation and maintenance.
The following are described in detail:

- ❑ start-up
- ❑ settings
- ❑ use (in standard configuration and with optional)
- ❑ cleaning
- ❑ maintenance
- ❑ decommissioning and demolition

A copy of this manual should be kept throughout the machine's working life. If the machine is sold to another user, the manual should be passed on to the new user.



IMPORTANT NOTE

GAI disclaims any liability in the event of faults, breakages or accidents caused by the failure to apply the indications and recommendations contained in this manual.
All liability is also disclaimed in the event of accidents resulting from any modifications made to the machine by the user and/or the fitting of accessories which were not authorized in advance.

All liability is disclaimed in particular in the event of any damage resulting from:

- ❑ natural disasters
- ❑ uprisings, insurgencies
- ❑ errors of use
- ❑ incorrect maintenance
- ❑ damage to electrical and/or electronic components due to condensation or foreign electromagnetic fields.

The information contained in this manual may be subject to change without notice. GAI reserves the right to modify the machine or any of its components without being obliged to update this manual and the parts catalogue immediately.

RECOMMENDATIONS

Only **genuine spare parts** supplied by GAI should be used.

The intervals and methods given in this manual should be strictly complied with for correct maintenance of the machine. The replacement of a worn component in good time and the lubrication of a mechanical part according to instructions mean savings in terms of time and money.

2.1 TECHNICAL SERVICE

To solve any problems which may arise during the use of a machine manufactured by our company, users may contact directly:

GAI S.p.A. MACCHINE IMBOTTIGLIATRICI

✉ 12040 CERESOLE D'ALBA (CN)
Frazione CAPPELLI 33B
ITALY

☎ Tel: 0172-574416
Fax 0172-574088



E-mail: gai@gai-it.com
Internet: www.gai-it.com

In requests for service, please supply:

- ☞ the machine's serial number
- ☞ the model
- ☞ the year of construction

These data are given on the machine's nameplate, as in figure 1 below:

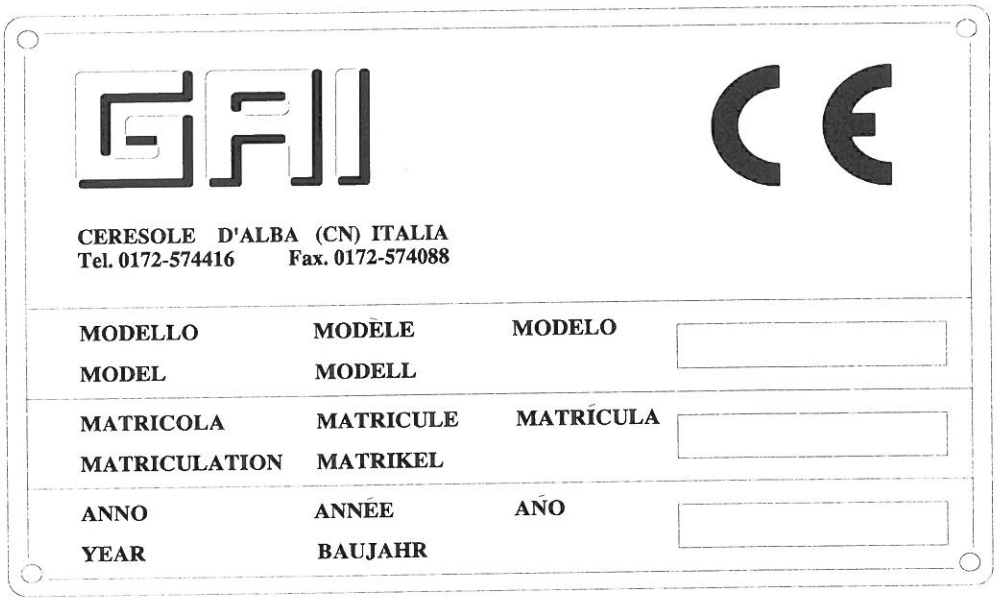


Figure 1

2.2 PRELIMINARY SAFETY RULES

The person who is responsible for the machine must know the contents of this instruction manual, and must comply with all the instructions given herein, as well as the rules in force relating to the safety and health of personnel at work.

In particular, whoever is responsible for the machine must know the operating instructions and the safety devices fitted to the machine and described herein and must instruct any operators on the following:

- ❑ safety and accident-prevention regulations
- ❑ specific regulations relating to the machine
- ❑ locating the machine controls
- ❑ locating the emergency button

The person who is responsible for the machine shall nominate the operators authorized to operate, adjust, clean and maintain it and must deny access to the machine to unauthorized personnel and/or personnel who are unable to carry out operations in conditions of maximum safety.



IMPORTANT

BEFORE STARTING WORK

- ❑ make sure that the transport, unloading and assembly of the machine are only carried out by skilled, authorized personnel

- ❑ make sure that the power line voltage corresponds to the voltage given on the plate on the electrical control box

- ❑ make sure that the electrical power system has been carried out in keeping with the regulations in force and that the electrical cabling is in good condition and of the correct size for the machine's power-rating.

2.3 OPERATIONAL SAFETY RULES



Before using the machine, read carefully this section and the section relating to the operation of the machine **(Sect.5)**.

Before starting work, make sure that the emergency stop button works correctly and is not stuck.
When the machine is connected to the electrical system, make sure that:

- ✓ the machine's main switch is in position ⓪
- ✓ the emergency stop button is off (rotate clockwise)
- ✓ the plug is fitted correctly to the electrical socket
- ✓ the main switch phases are correctly connected



MAKE SURE THAT:

- ✓ no unauthorized personnel are within the machine's operating range
- ✓ there is no foreign matter on the machine
- ✓ the piping (liquid, air, gas, ..) inputs are connected tightly
- ✓ the protection doors are well-closed
- ✓ none of the operators are wearing clothing that could get caught up in the moving parts
- ✓ the machine is running normally (correct direction of rotation, ..)



It is advisable to use:

- ✓ caps to hold in hair (for users with long hair)
- ✓ shoes with non-slip soles

2.4 MAINTENANCE SAFETY RULES



Before carrying out any maintenance on the machine, read carefully this section and the section relating to the maintenance of the machine. **(Sect.7)**



IMPORTANT

Before carrying out any adjustments, maintenance or lubrication, make sure that:

- ✓ the machine is not running
- ✓ the power is off
- ✓ the emergency stop button is off
- ✓ the machine is in a stable position and is not subject to any movement



IMPORTANT

During adjustment, maintenance and lubrication operations that require the machine to be running, turn on the power only for as long as is absolutely necessary. Any disconnecting of safety devices must be carried out by skilled personnel.
The operations must be carried out taking the utmost care to avoid any damage to persons and to the machine.



IMPORTANT

In the event that the machine has to run in manual mode with the side protections open during setting or timing operations, any persons who are not assigned to these operations must be kept away from the machine.



DURING MAINTENANCE

- ✓ fit a notice to the machine's control panel
- ✓ make sure that no-one can connect the machine to a power point by accident
- ✓ disconnect pressure lines before carrying out any work on the hydraulic and/or pneumatic parts
- ✓ prevent unauthorized persons from having access to the machine
- ✓ prevent wine or other liquids reaching the electrical parts



RECOMMENDATION

If parts of the machine are to be washed, follow the instructions provided by GAI carefully, using the recommended products and avoiding aggressive detergents and acids. In any event, it is advisable to use gloves and goggles.



IMPORTANT

If more than one person is involved in adjustment, maintenance or lubrication operations, make sure that they are all warned before the machine is started.

3.
TRANSPORT AND MOVEMENT

The machine can be transported as follows:

- ❑ wrapped in shrink-film only without any other packaging
- ❑ in a wooden crate with tar paper

The type of packing is agreed with the customer.

To unload the machine, use a fork-lift truck (cranes or hoists cannot be used).

IMPORTANT

Fork the machine preferably from the side shown in the figure; make sure that the forks exit several centimetres from the other side. Make sure that the machine is stable on the forks (figure 1).

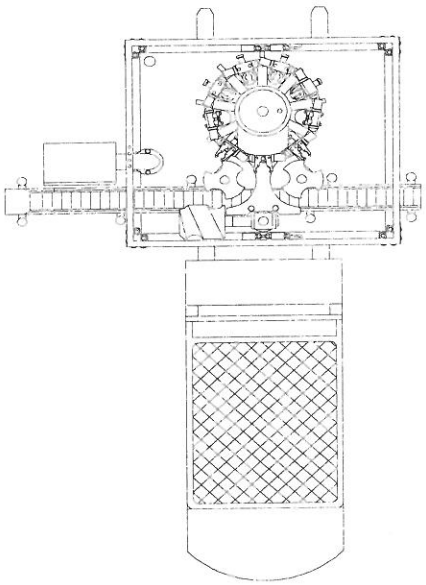


Figure 1

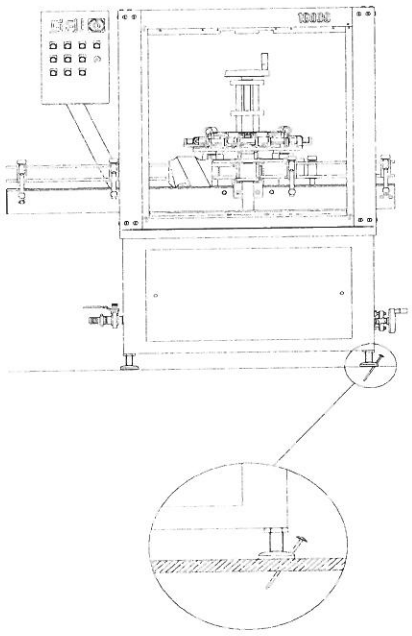


Figure 2

During transport, the feet can be fixed in position on wooden platforms using nails (figure 2) or firmly fixed with ropes.

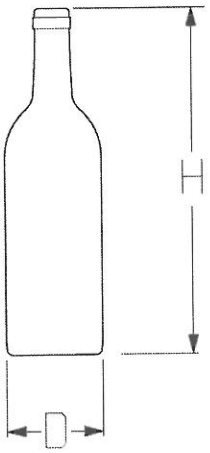
4.
DESCRIPTION OF THE MACHINE

4.1 USE

Rinser 10009 and **10012** are automatic machines for rinsing bottles of different sizes in a production line. The machines are composed of a rinsing station fitted with 9 or 12 grips. The speedy is adjustable manually by means of a handwheel.

4.2 TECHNICAL DATA

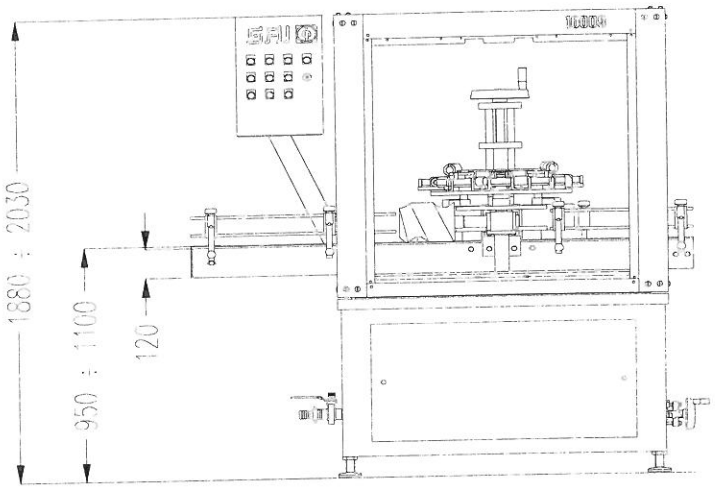
MODEL		10009	10012
RINSER PINCERS	N°	9	12
SPEED	bott./h	800÷1.800	1.200÷3.000
WEIGHT	kg	650	900
INPUT VOLTAGE	V	See metal plate and technical schedule	
FREQUENCY	Hz	See metal plate and technical schedule	
INSTALLED POWER:			
MOTOR	kW	0,75	0,75
TOTAL POWER	kW	0,75	0,75



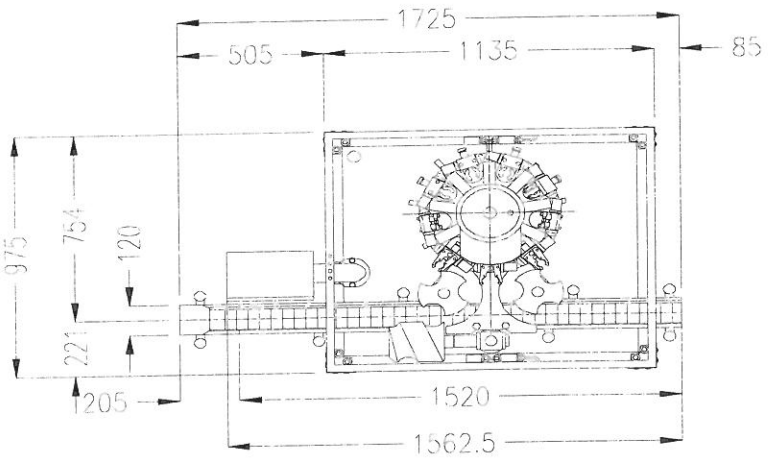
Mod.	10009	10012
D min÷max	60÷112	60÷115
H min÷max	180÷370	180÷370

4.3 OVERALL SIZE

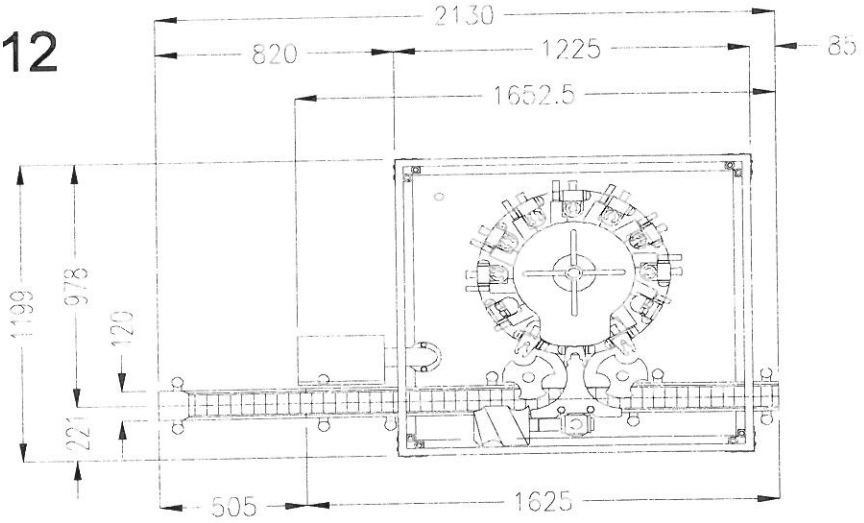
The overall sizes are shown below.



10009



10012



4.4 DESCRIPTION OF OPERATION

4.4.1 STANDARD OPERATION

The automatic rinsers 10009, 10012 are designed for rinsing new bottles prior to filling. The bottles are rinsing only internally, in order not to wet the outside, to prevent possible later problems with labelling. Whit this simple treatment any possible dust particles, fragment of glass and cardboard, as well as any condensate from humidity are removed. A gripper device takes the bottle by the neck and through a system of cams turns it upside down. The injector enters the bottle mouth and sprays the inside with the injecting liquid (figure1). The drip water is recovered in a closed circuit without wetting the machine. At the end, with the bottle still in upside down position, a shaking device facilitates the removal of drops from the bottle bottom. Finally, air is blown to eliminate any drops left on the outside of the neck of the bottle. The gripper then turns the bottle and releases it in the discharge star which carries it onto the conveyor belt.

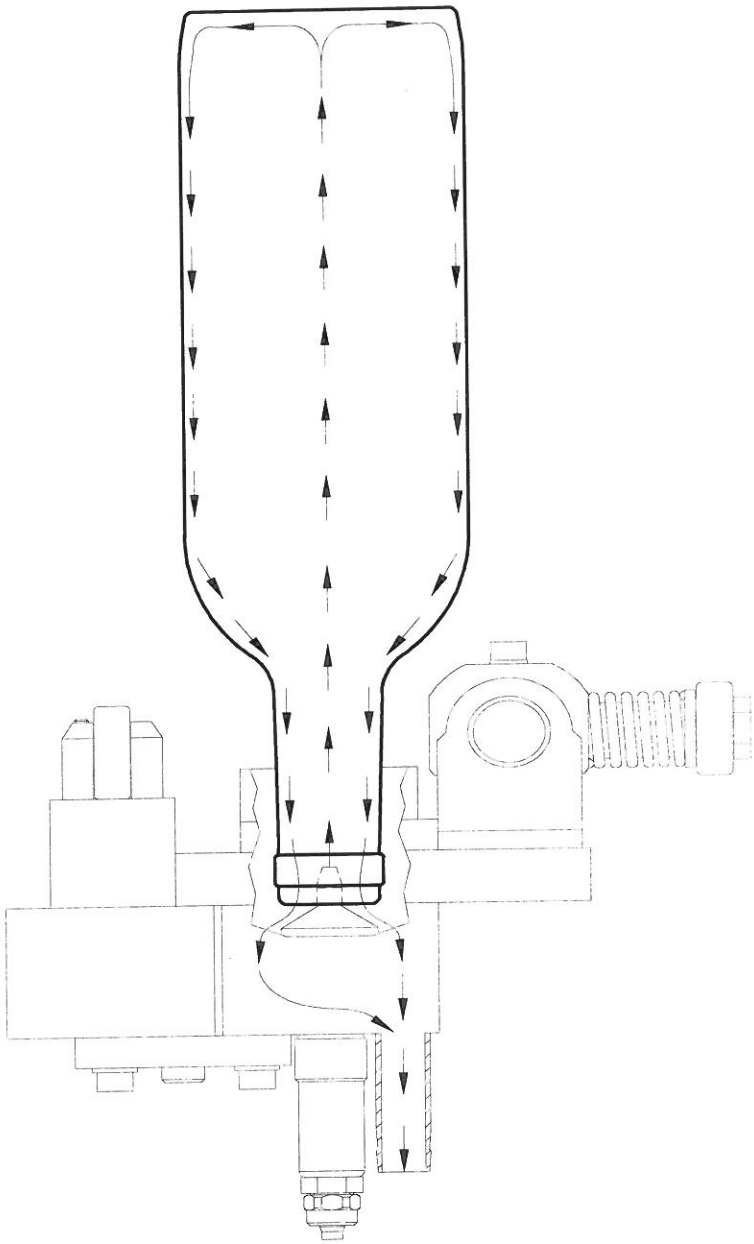


Figure 1

The water to be injected can be sterilised using an optional KIT provided with two membrane filters: 1 x 1 micron + 1 x 0.45 micron. (**See STERILISATION KIT 10100, section 4.4.2**).
A special KIT is also available as an optional to use the liquid to be bottled in rinsing the machine (**See STERILISATION KIT 10200, section 4.4.2**).

4.4.2 OPERATION WITH ACCESSORIES

WATER STERILISATION KIT 10100

The liquid generally used for new bottles is the water.

Advise to use a filter system in way that the water injected in the bottle is waste. In this way the small part in the bottle (abt 2-2,5 gr) will give no pollution problem.

Generally a pre filter 1 micron can be used followed by a filter of 0,45 micron (figure 2). It's advised to contact a skilled person.

The filter's system isn't fitted with the machine. If you want it have to pay and additional cost.

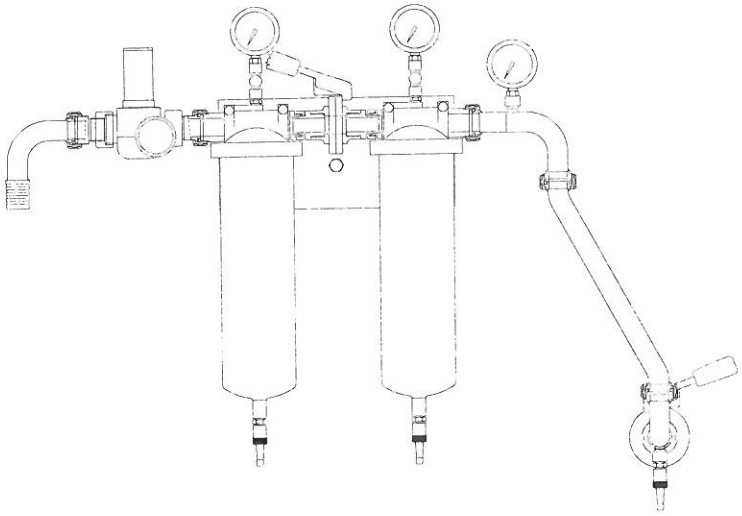


Figure 2

WINE RINSER KIT 10200

Sometimes it's preferred to use the same wine to be bottled for bottles rinser too. For this meaning, we supply on request and with an overprice a kit consisting of: recycling tank, pump, filter of 1 micron, filter of 0,45 micron (figure 3). The danger of this system is the eventual chemical pollution of one bottle that should be partially passed to next bottles.

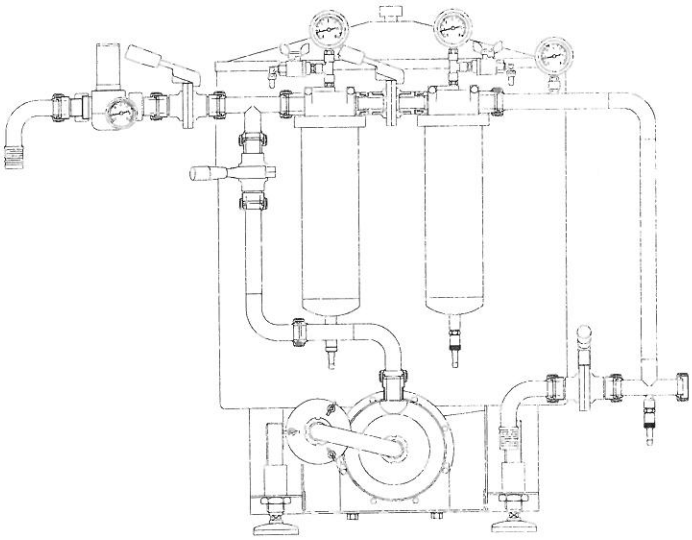


Figure 3

5.
INSTALLATION AND OPERATION

5.1 INSTALLATION AND START-UP

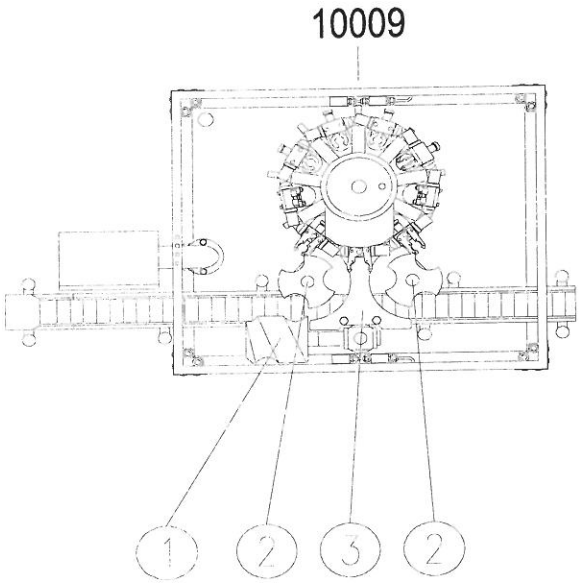
1) **EQUIPMENTS**

Position the stars, centre-pieces and counter-stars in correspondence with the bottles to be processed. For cylindrical bottles, the space for the stars, centre-pieces and counter-stars must be 1-4 mm. larger than the diameter of the bottles; for example, the 85 mm. stars, centre-pieces and counter-stars are suitable for 81-84 mm. diameter bottles.

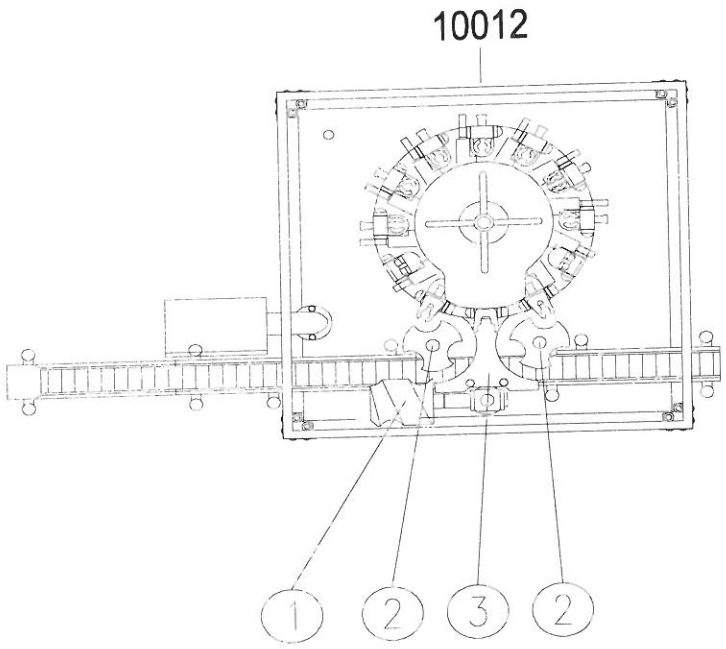
N.B. the number stamped on the star should be face-up.

2) **WORMS**

Fit the worm which corresponds to the bottles being processed. For cylindrical bottles, the diameter of the worm should be from 1 to 10 mm larger than the diameter of the bottles; for example, a Ø 90 mm worm is suitable for Ø 80-89 mm bottles.



1	70-1012--
2	10-1012--
3	40-2500--



1	70-1012-
2	10-1012-
3	40-2500-

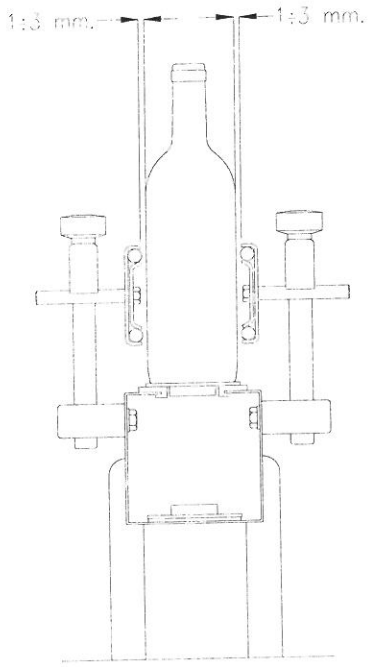


Figure 1

3) **SIDE-WALLS**

Adjust the side-walls so that the bottle in the centre of the belt has 1÷3 mm of clearance from each side. (Figure 1)

4) ADJUSTING THE HEIGHT OF THE RINSER

Loosen the handle locks **M** that set the height of the grip-holder head (figure 2 and 3). There are 2 handles above the grip-holder head and one below the grip-holder head on the central column.

- 10009 adjust the height of the holder pincers head thought the wheel **V** (figure 2)
- 10012 adjust the height of the holder pincers head trough the lever **L** (figure 3).

The height of the head is correct if the top of the grip closes c. 1 mm below the rim of the bottle. Re-close the handle locks **M** by hand.

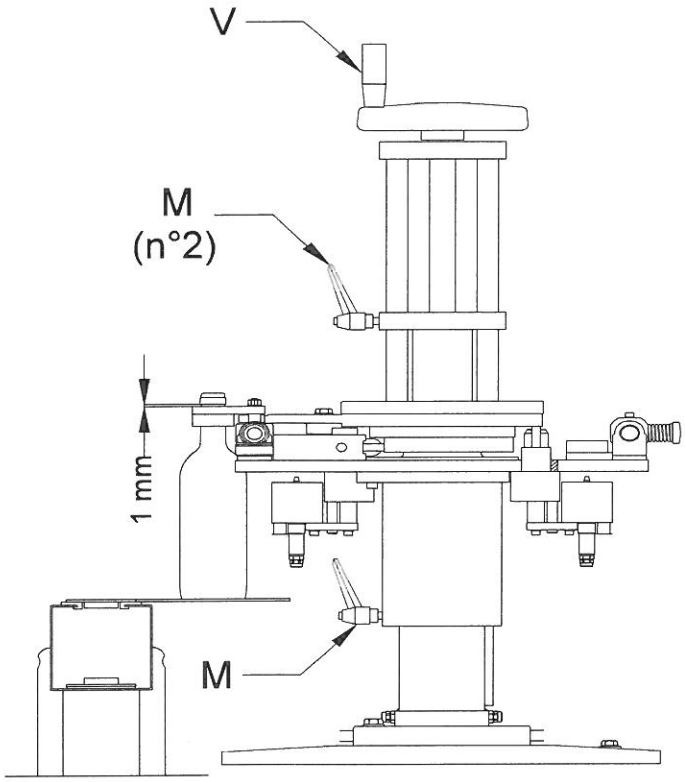


Figure 2

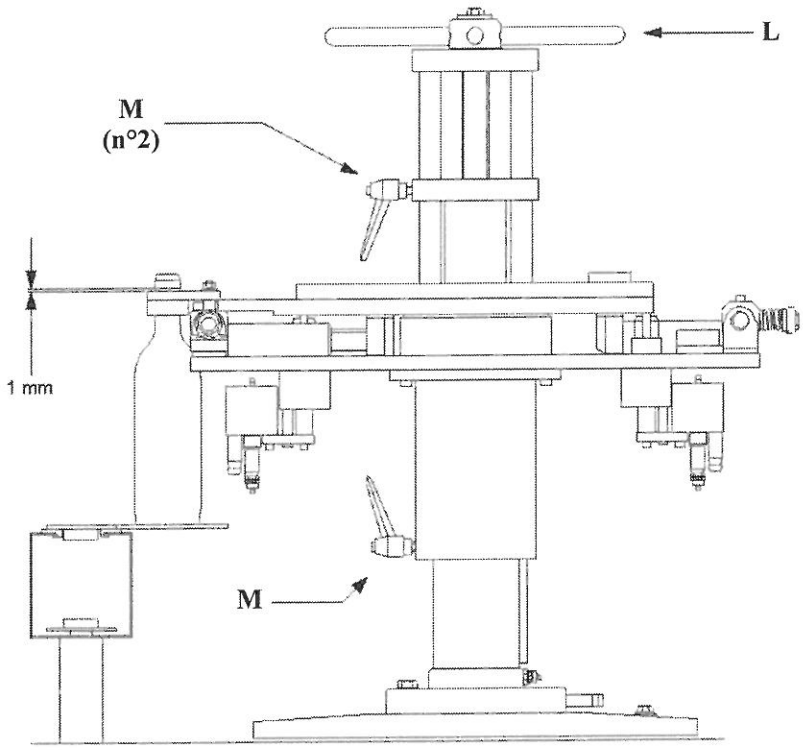


Figure 3

5) **ADJUST SPEED**
10009 and 10012 Adjust the speed of the machine using the handwheel **VT** (see fig.4) according to the capacity of the bottles and the type of wine to be bottled.

N.B.: The speed adjustment should only be carried out when the machine is running.

It is advisable to start work at a lower speed than expected and to then regulate the output rate during operation as appropriate.

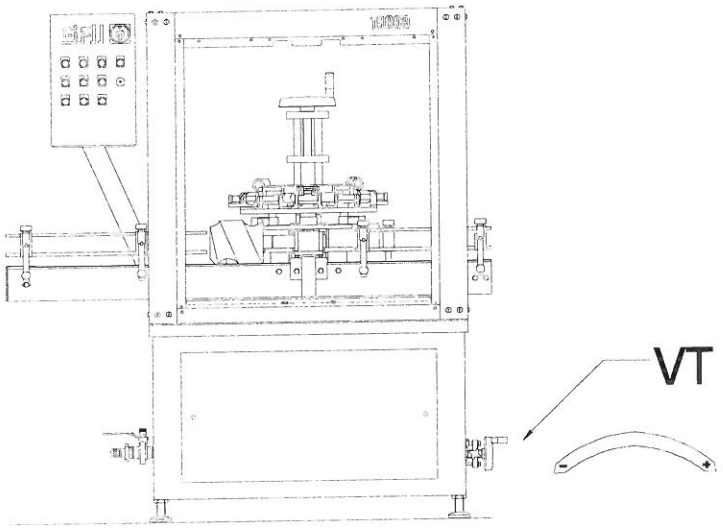


Figure 4

6) **FINAL TEXT**
Place some bottles on the line and make sure that everything is working correctly. The machine can only be operated without having to stop when all the settings have been carried out as required. It is advisable to find a continuous work-rate that ensures that there are always bottles ready to enter the filling machine.

5.2 FINAL OPERATIONS

1) Close the manual wine infeed spout.
2) Place some bottles in way to discharge the pressure in the tubes.
3) Disconnect the feed tube to discharge completely the machines tube.
4) Follow the washing and sterilization instructions.

5.3 WASHING AND STERILIZING

The inside of the filler tank, the spouts and the injector should be washed each time after bottling.

5.3.1 WASHING AND STERILIZING THE RINSER

Insert the sterilizing caps **A** using the 13mm spanner (Figure 5). Connect the liquid input to the superheated steam, letting it circulate in the machine for a sufficient length of time (approx.30 mins). If hot water is used instead of steam, adjust the inlet flow so that the discharge works.

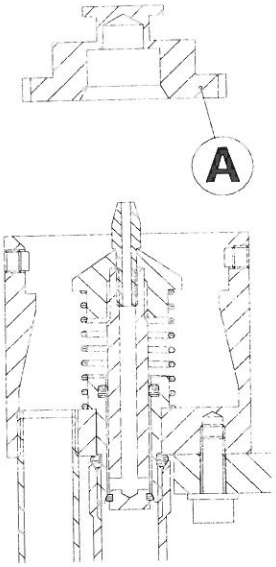


Figure 5

Do not run the machine during sterilization

NB: Remove the sterilizing caps A before feeding in the bottles.(fig.5)

5.4 CORROSION PREVENTION

The types of steel used in building the monobloc are:
- *AISI 304* (composition C 0.07 max. Cr 18-19 Ni 8-9) or AISI 304L (composition C 0.03 max. Cr 18-19 Ni 8-9) for all the components which enter into contact with the product

- *AISI 303* (composition C 0.07 max. Cr 17-18 Ni 8.2-9.5 S 0.25-0.35) for all the components which do not enter into contact with the product, for example the feet supporting the monobloc or the star supports.

These types of steel can be corroded by a number of acids, in particular those containing chlorine.

The end user must make sure that the water used does not contain a high percentage of chlorine, and above-all must not use chlorine-based products for cleaning or sterilizing the machine. If these products are used, the machine must be thoroughly rinsed with water, and dried if possible after washing.

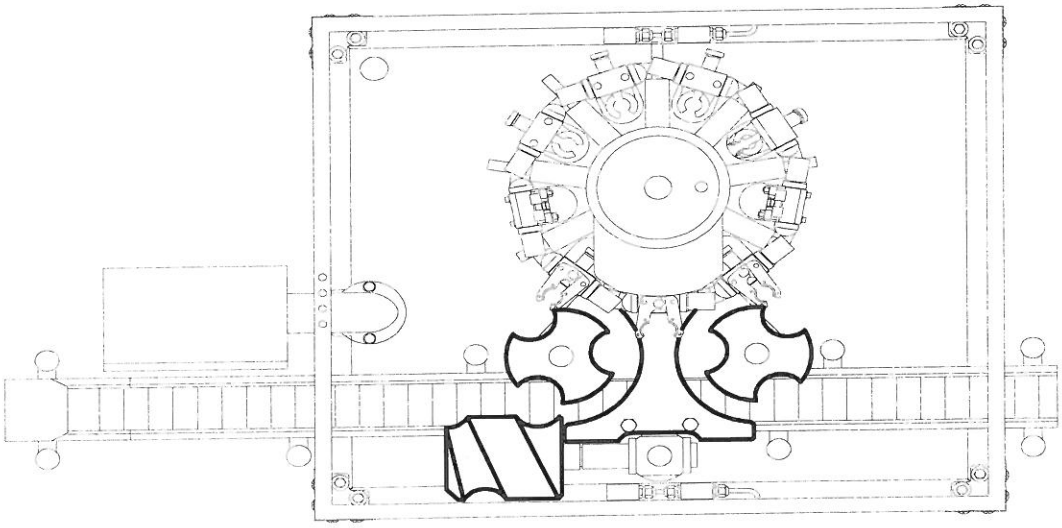
If products containing sulphur dioxide or sulphuric acid are used for cleaning or other operations, it is essential that all the parts which have come into contact with these products are thoroughly rinsed with water.

6.
CHANGING BOTTLE SIZE AND SPECIAL ADJUSTMENTS

6.1 CHANGING BOTTLE SIZE

The diagram below shows the parts of the machine which must be replaced if the size f the bottles and/or corks used is to be changed.

The operations to be carried out are as described in **section 5.1**



6.2 SPECIAL SETTINGS AND TIMING OPERATIONS

The settings described below are carried out in the factory when the machine is assembled; they must only be performed again in exceptional circumstances and must in any case always be carried out by skilled personnel.

1) **Rinser and filler stars** (figure 1)
The rinser stars must release and re-engage the bottles centrally with respect to the pincers. If not, undo the cover **CP1**, loosen the screw **VT**, reset the timing on the star accurately and re-tighten **VT**.

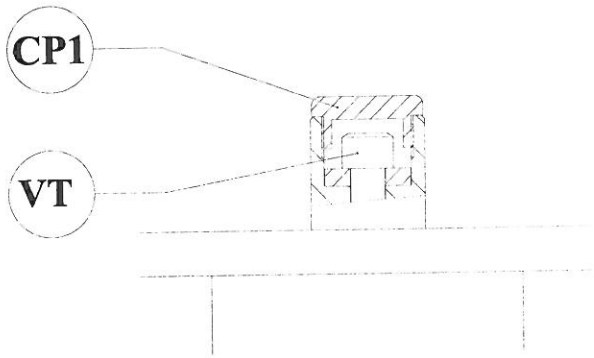


Figure 1

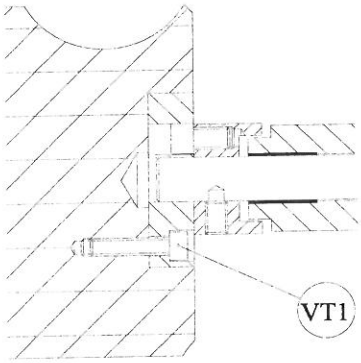


Figure 2

2) **Worm screw** (Figure 2)
The worm screw must release the bottles centrally with respect to the input star. If not, loosen the three screws **VT1**, reset the timing of the worm screw and tighten the screws **VT1** without applying too much force.

3) **Security couples**
The torque of the star and worm safety devices can be adjusted by acting on nut **D**. (figure 3)

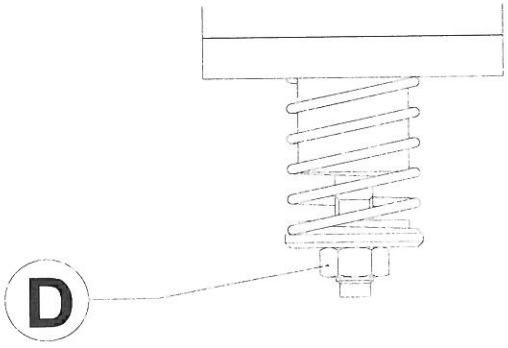


Figure 3

4) **Pincer rinser** (figure 4)
The roller **R** must touch lightly the cam **CM1**.If this does not happen unblock to the screw **VT4**, put the roller **R** again the cam **CM1** and close firmly the screw **VT4**.

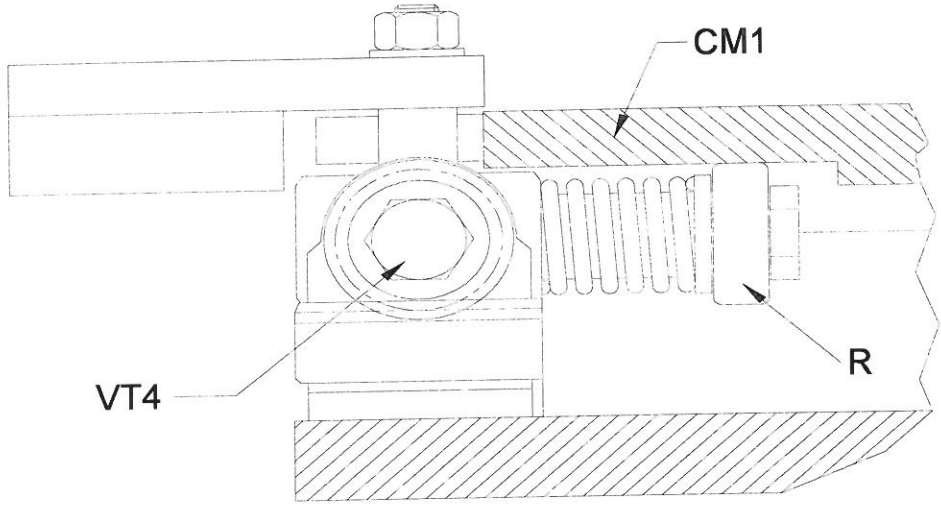


Figure 4

5) **Maximum speed**
The maximum speed is regulated by block **B** secured by screw **VT2.** (Figure 5)

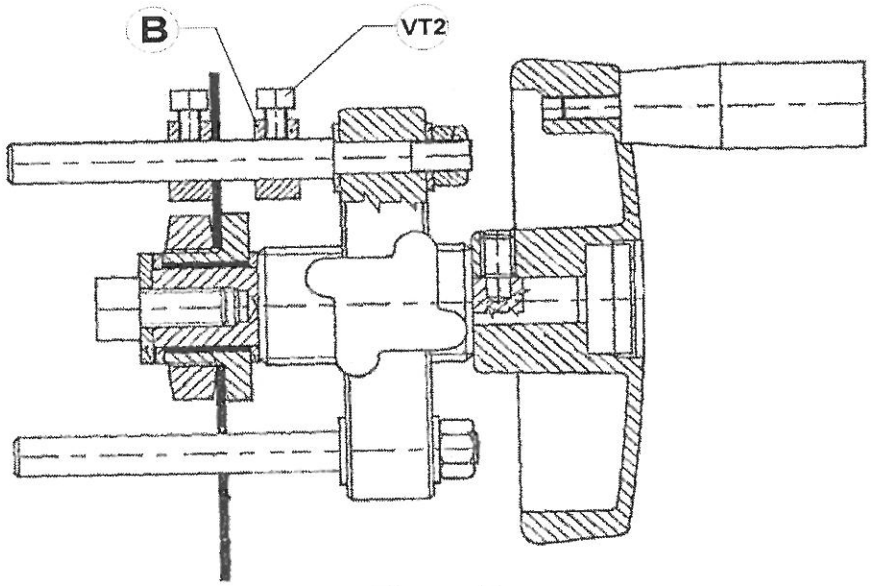


Figure 5

6) Change of voltage

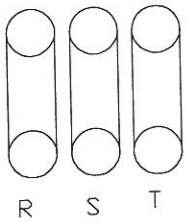


Figure 6

To connect to **220V/3-phase**, position the motor plates as shown in fig.6 and connect the transformer input inside the device to 220V.

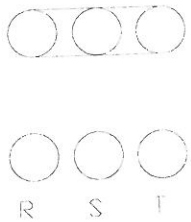


Figure 7

To connect to **380V/3-phase**, position the motor plates as shown in fig.7 and connect the transformer input to 380V.

THERMAL SETTINGS	220/3 PHASE	380/3 PHASE
	Rotation	Rotation
10009	3,5	2
10012	3,5	2

7
MAINTENANCE AND LUBRICATION

7.1 MAINTENANCE

OUTLET OF RINSER INJECTOR

To ensure good machine performance, clean the **RF** filter net (figure 1) regularly using running water or a jet of compressed air.

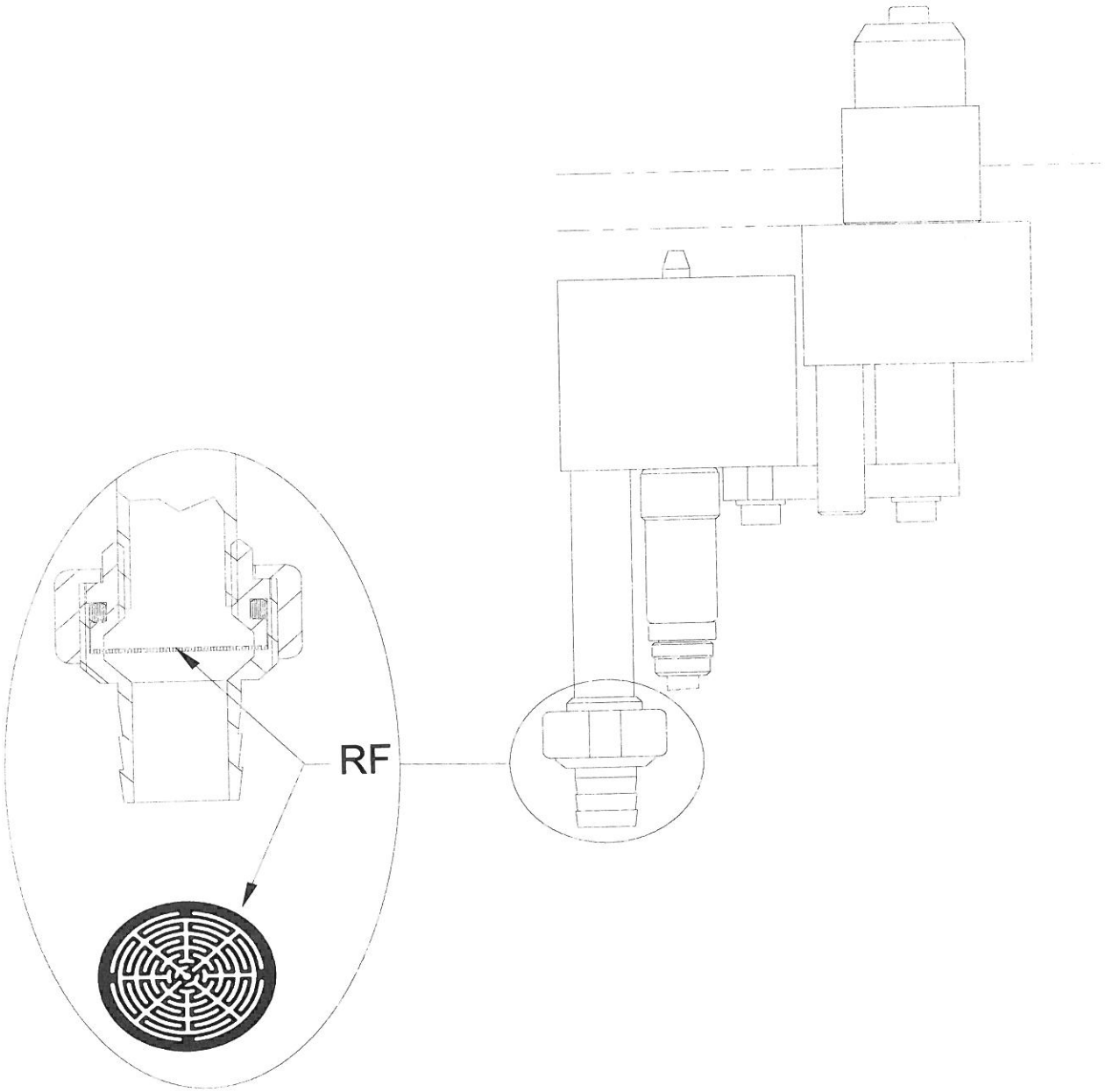


Figure 1

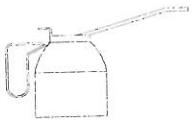
7.2 LUBRICATION

IMPORTANT

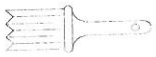
All the operations described here must be carried out with the **machine off**, the emergency button on and the electrical power off.
The operations to be carried out each time the machine is used and at regular 6-month intervals are described here.



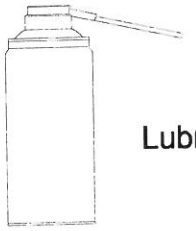
Lubrificate using a hand grease pump



Lubrificate using an oil can



Lubrificate using a grease brush



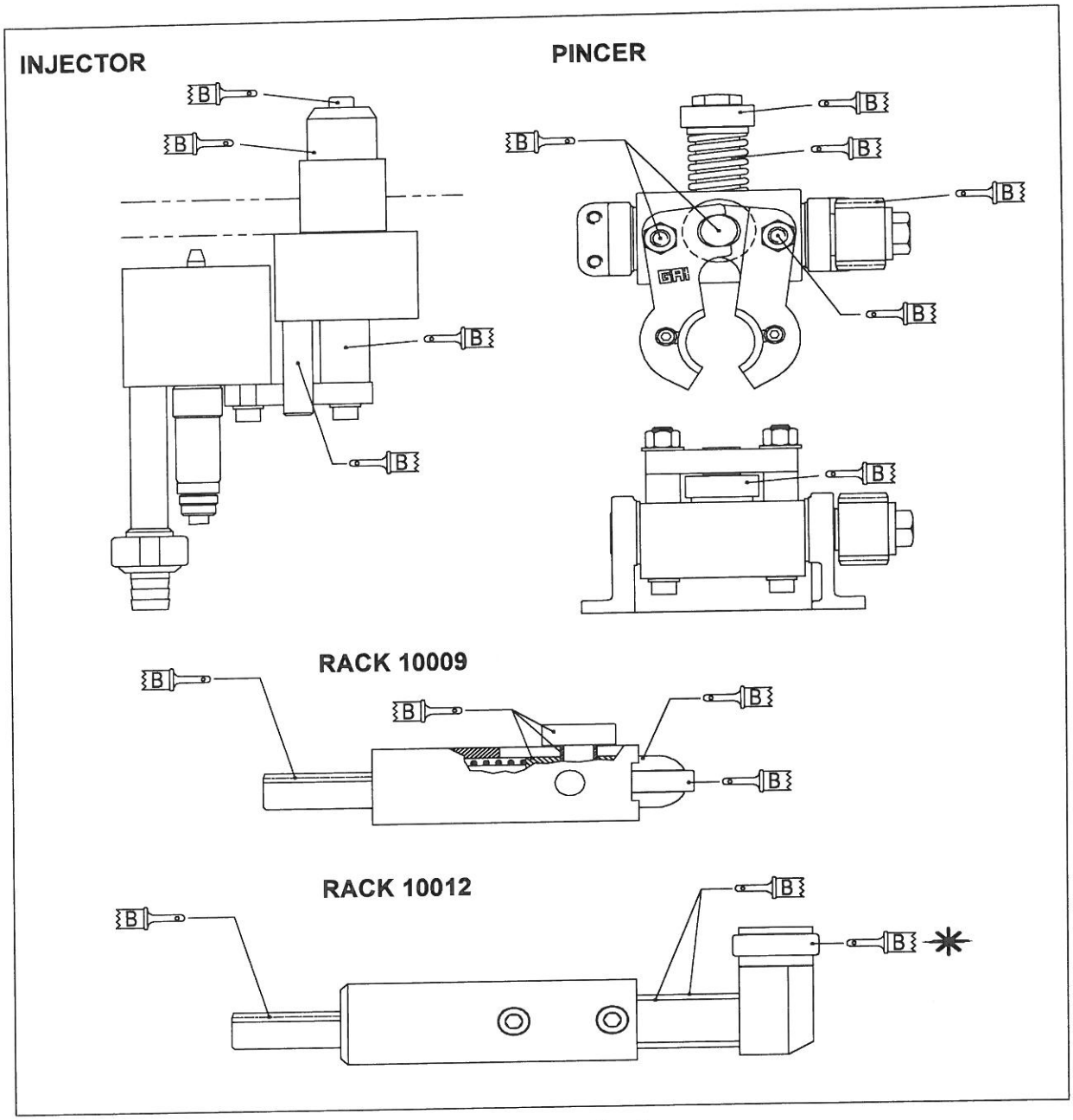
Lubrificate using a spray

A= OIL KLUBER VASLUB P40
B= GREASE PARALIQ GA351
C= GREASE MOLYGUARD X R120



Interval between lubrifications

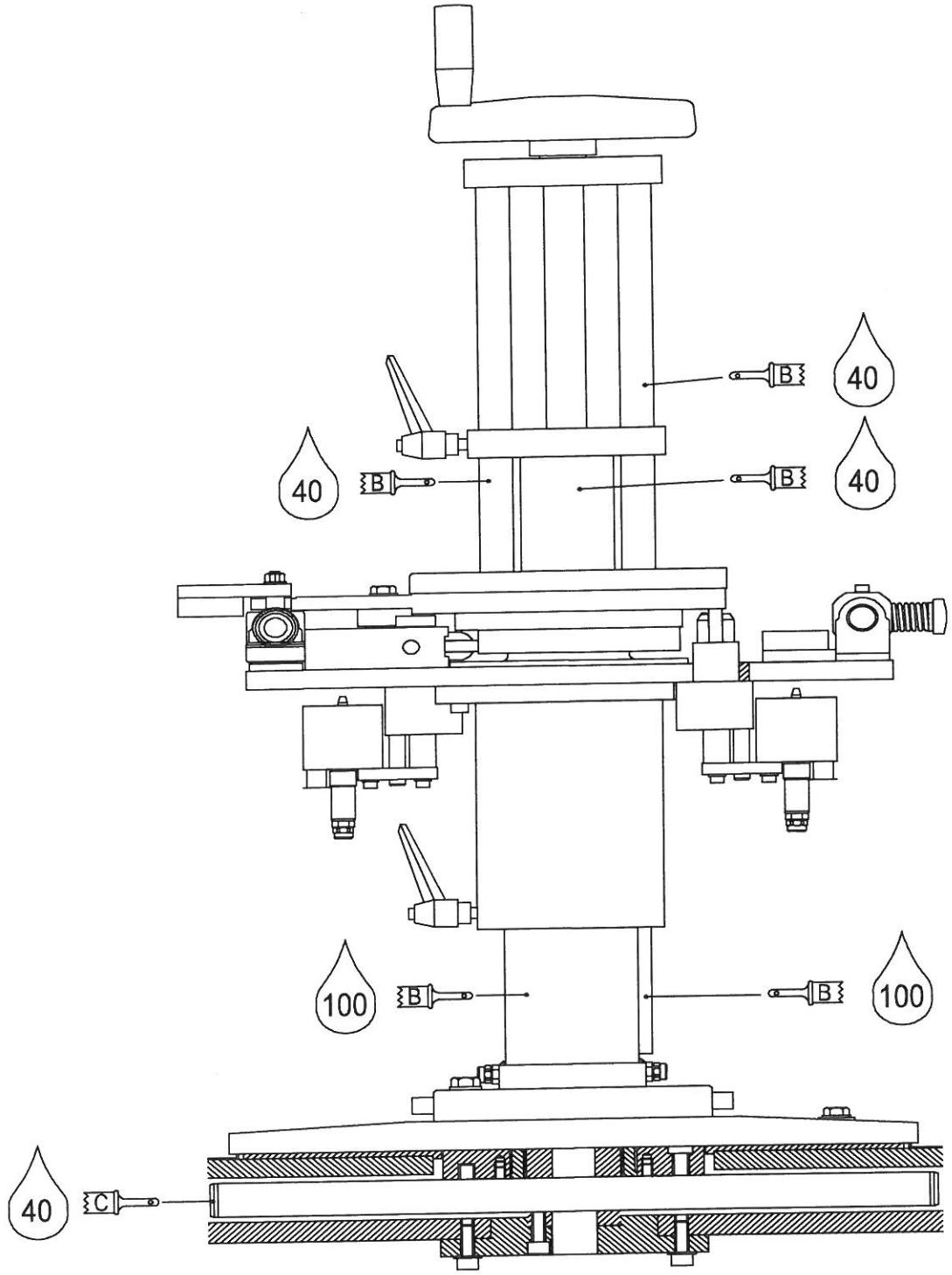
7.2.1 RINSER TURRET



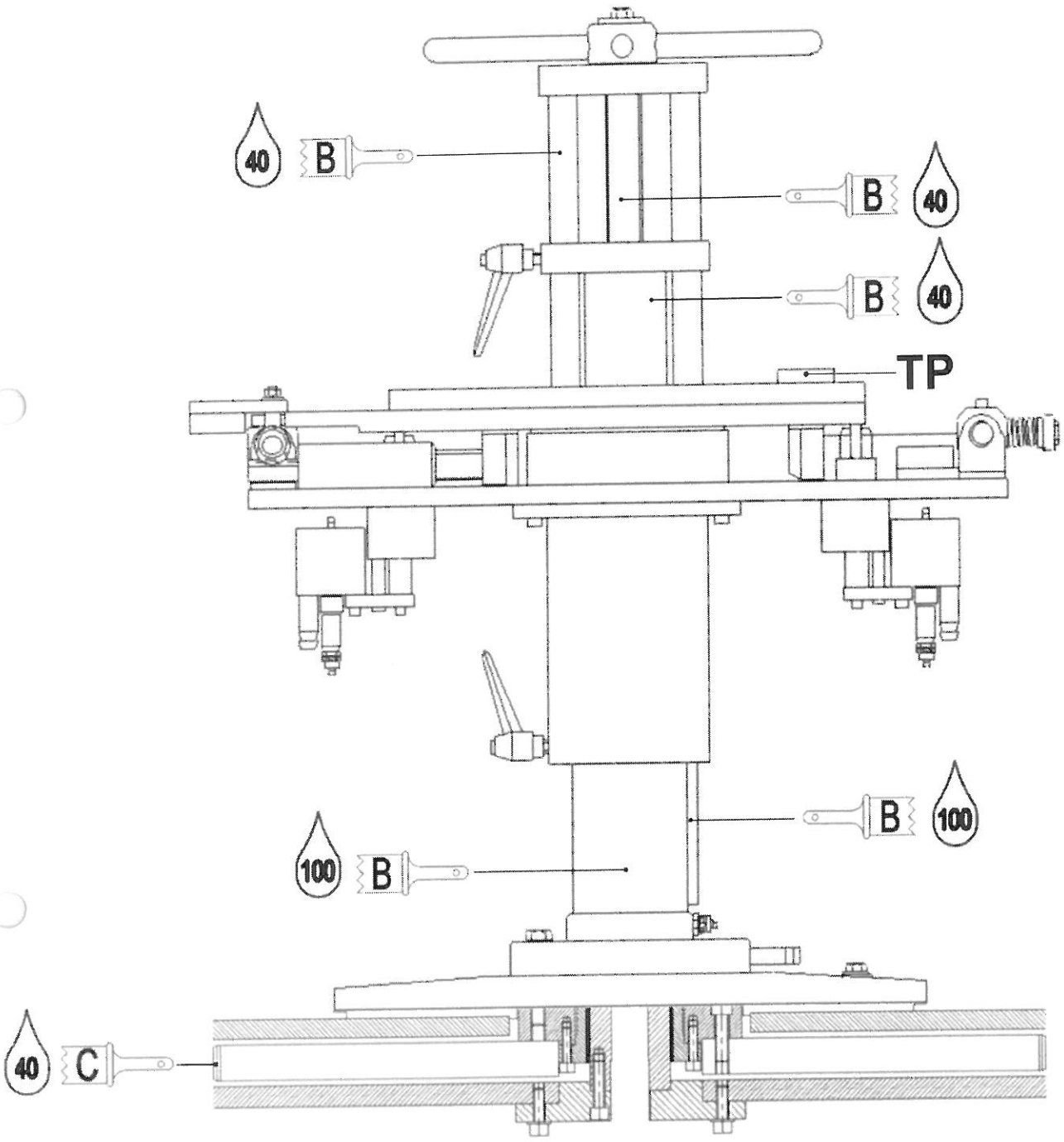
✱ To perform this lubrication, unscrew the TP plastic cap (see rinser 10012 turret page 30)

NB: The operations to be carried out each time the machine is used

RINSER 10009



RINSER 10012



7.2.2 OTHERS LUBRICATION

Bottle conveyor chain
Dampen with special oil.

Worm movement gearing. Unscrew the cover **CP1**, and lubricate the conical gearing **IC** using a brush (figure 2).

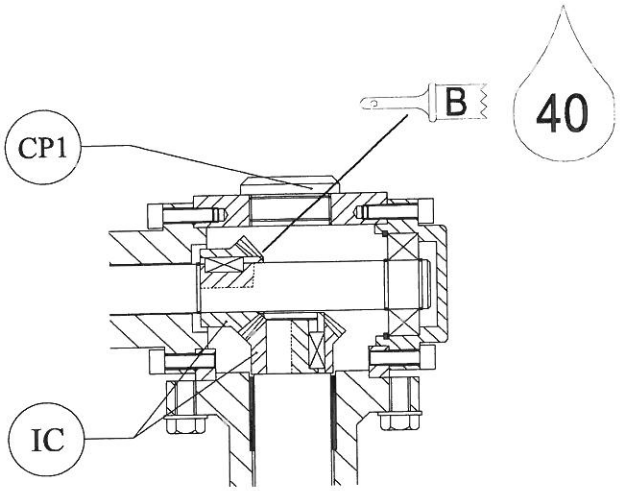


Figure 2

7.2.3 EVERY 40 HOURS OF OPERATION

Lubricate with SHELL OMALA 320 oil (or equivalent):

- ❑ the thrust bearing **RL** of the rinser through the cap **TP**. (Figure 13)

- ❑ the thrust bearing **RL** of the filler through the cap **TP** (Figure 3)

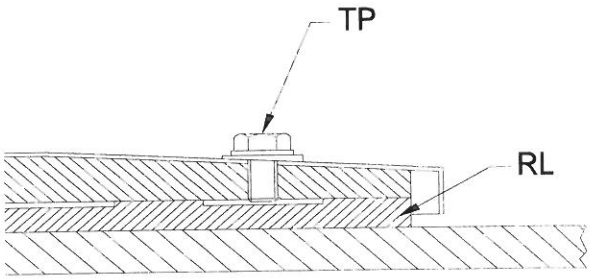


Figure 3

7.2.4 EVERY 200 HOURS OF OPERATION (AT LEAST ONCE A YEAR)

- ❑ Check the oil level in the **ROTATION REDUCTION UNIT**; if necessary, top up or change. The reduction unit is filled in the factory with 1 litre of **SHELL OMALA 320**

- ❑ Lubricate all the **KINEMATIC MECHANISMS IN THE BASE** of the machine with viscous grease such as **MOLYGUARD XR120** or equivalent.



IMPORTANT

Do not lubricate the transmission chain. Clean it with a cloth and dry it if any lubricant drops on it by accident.

8.
TROUBLESHOOTING

This section lists some of the problems that may be found more frequently when using the machine, giving their probable causes and the measures to be taken to re-start normal production.
If a problem is found which is not included here, please contact GAI S.p.A.'s technical service.

PROBLEM	CAUSE	REMEDY
The machine does not re-start after the emergency stop button has been pressed.	The emergency button is stuck	Turn the emergency button
	The side protections are not well-closed	Tighten the protections
The bottles fall from the clamps	The height of the head is incorrect	Adjust the height of the head so that the clamp closes 1 mm below the rim
	The bottle-neck size has changed	Check the size of the neck and whether the clamps used correspond with those given on the technical data sheet
The exit star safety trips	The height of the head is incorrect	Adjust the height of the head so that the clamp closes 1 mm below the rim
The jet of water is insufficient for rinsing all the inside of the bottle	The water pressure is too low	Adjust the pressure to 2 bar, increasing it to 3 or at the most 4 bar if the rotation speed is very high.
	The speed of the machine is too high compared with the bottle capacity	Reduce the machine speed or increase the pressure (max. 4 bar)

9.
ANNEXES

9.1 NOISE-LEVEL READINGS

The noise produced by the machine, measured without bottles, is lower than:

10009	**70 dB**
10012	**70 dB**

10.
MISCELLANEOUS

10.1 NOTES ON DISMANTLING AND DEMOLITION

At the end of the machine's life-cycle the machine must be dismantled in conformity with environmental regulations.
A large number of the machine's parts are made of AISI 304 stainless steel or metal. These can be recycled or are, in any case, to be considered as environmentally safe.
The parts made of plastic must not be dispersed into the environment or burnt.

 It is advisable to go to a specialist plastic and metal collection and disposal centre.

 The lubricating oil contained in the machine reduction units must not be emptied into waste disposal facilities or drains. There are precise rules relating to the collection and recovery of used oils and the regulations in force must be complied with.

10.2 SPARE PARTS SUPPLIED

CAP.	TAB.	DRAWING	NAME	10009	10012
			Instruction manual	1	1
			Socket wrenches sizes: 2,5 - 3 - 4 -5.-10 6 - 8 with spherical head	1	1
			Non-adjustable wrench 13-17	1	1
			Ring nut 45-50 spanner	1	1
			Black key -chain Gai	1	1
			Microswitch XCMA 1022	-	-
			Microswitch D4MC 1000	1	1
			Spray oil	1	1
14	612-600	612-6090	Rubber holder DN25	1	1
14	612-600	612-6100	Curved pipe-holder DN 25	1	1
14	612-600	612-6080	Ring nut DN 25	2	2
14	612-600	612-6070	Seal	2	2
14			Sterilisation cap	9	12
14	110-000	110-420	Nozzle spring	1	1
14	110-000	110-170	Spring back injector	1	1
14	110-000	110-411	Nozzle	1	1
14	110-000	110-440	OR 112	5	6
14	110-000	110-500	OR VITON 106	6	6
		110-530	Rilsan tube Ø 6 X 8 X 500 (X 555)	1	1
		110-340	Cristal tube Ø 14 X 19 X 550 (X 570)	1	1
14	1209-1000	120-340	Pincer-close spring	1	1
14	1209-1000	120-140	TCE inox 5x20	3	4
14	1209-1000	1209-411	Spring pincers return	1	-
		710-124	Bracket C union belt	2	2
		710-125	TE inox 10x20	8	8
		710-126	Washer inox Ø 10	16	16
		710-127	Medium inox nut 10 MA	8	8

10.3 ORDERING SPARES

The following information should be given when ordering spare parts:

1) The model of the machine
2) The serial number stamped on the metal plate (fig.1) on the right side of the machine.
3) The quantity required
4) The page number in the instruction manual
5) The number appearing on a side of the drawing
6) The part number.

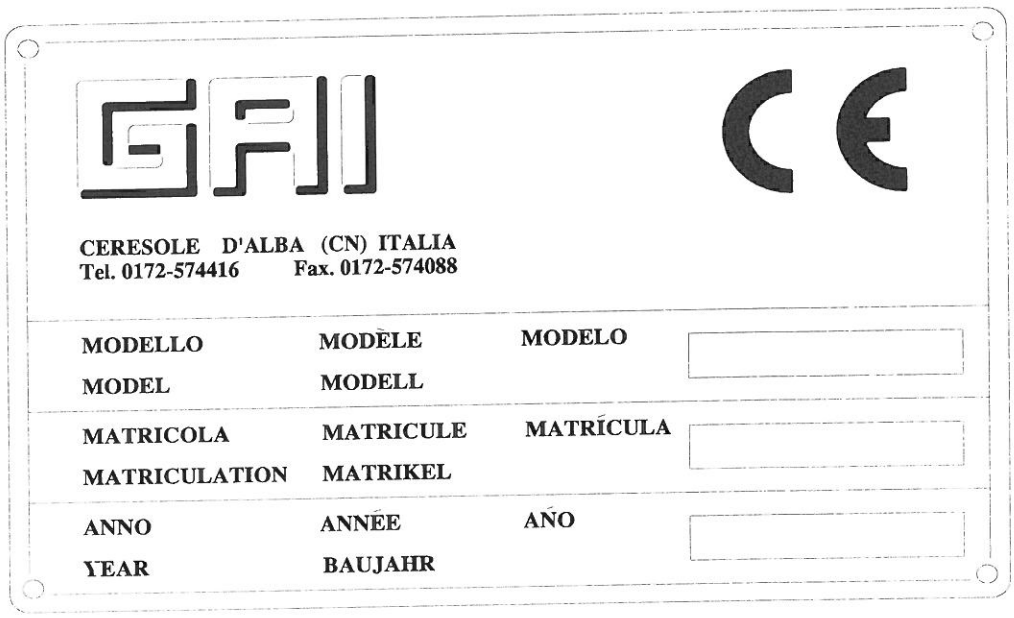


Figure 1

Example:

MODEL	**10012**
SERIAL NO.	**RG 3701**
QUANTITY	**4**
PAGE	**073.00.0100**
DRAWING	**210-000**
PART	**130**