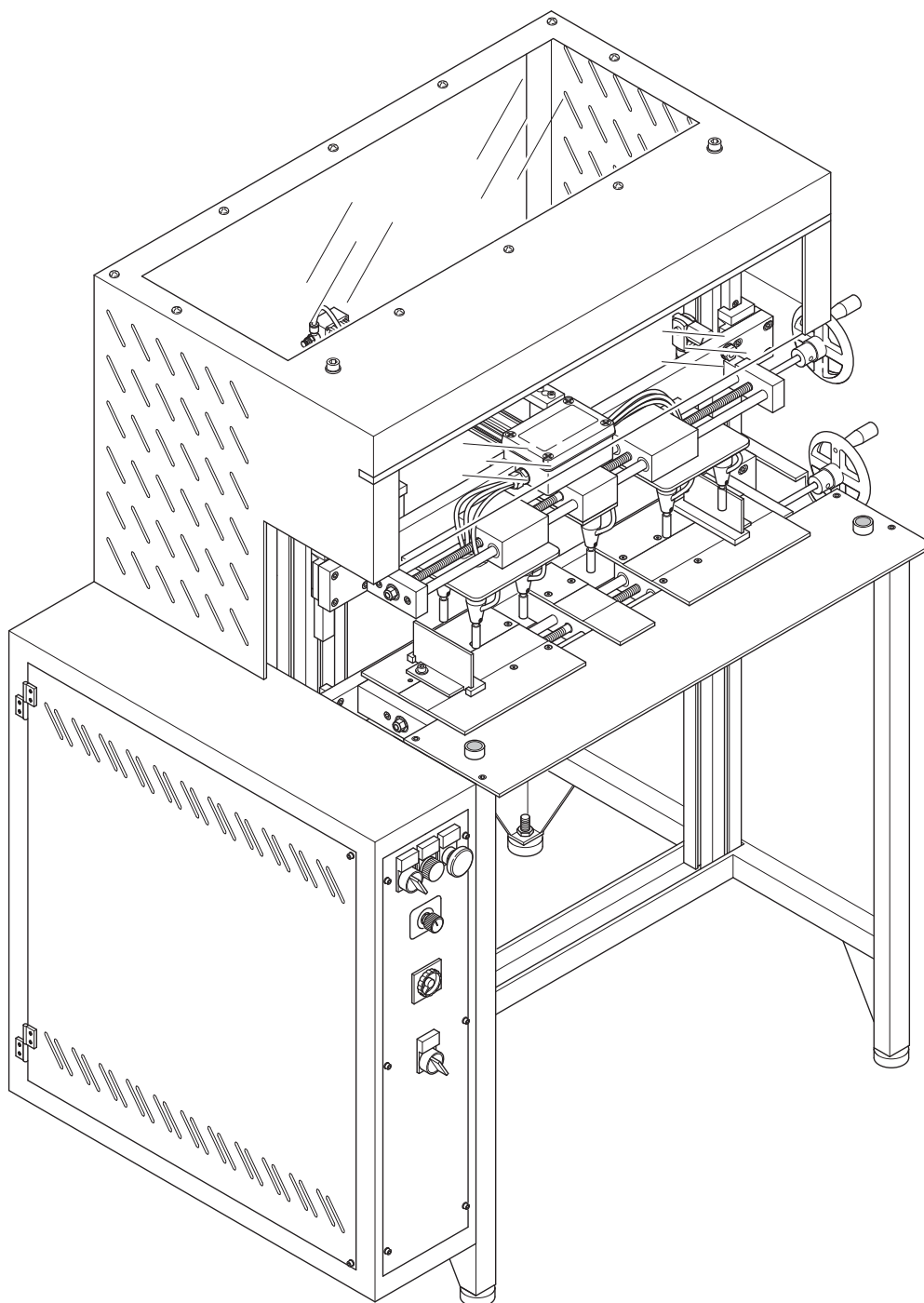


# **COLLAR STITCHER** **mod. 3009**



## **Instructions for use and maintenance**





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AUTHORIZED AREA DEALER FOR ASSISTANCE



# EEC CONFORMITY DECLARATION

The "**3009 Collar Stitcher**", as described in this manual, complies with the standards set down by the following EEC Directives:

<b>UNI EN 292-1</b>	Machine safety. Essential principles.
<b>UNI EN 292-2</b>	Machine safety. Essential principles.
<b>UNI EN 294</b>	Machine safety. Safety distances for arms.
<b>UNI EN 349</b>	Machine safety. Minimum crushing distances.
<b>UNI EN 418</b>	Machine safety. Emergency stop devices.
<b>pr EN 563</b>	Machine safety. Contact surface temperatures. Ergonomic data.
<b>pr EN 574</b>	Machine safety. Two-hand control devices.
<b>pr EN 953</b>	Machine safety. Guard design and construction.
<b>pr EN 1088</b>	Machine safety. Interlocking devices with or without guard locking.
<b>EN 60204-1</b>	Electrical devices on industrial machines. Part 1: general standards.
<b>EN 60529</b>	Levels of protection guaranteed by guards (IP code).

Manufacturer:  
**M.AI.C.A.** S.r.l.


# 01 - GENERALITIES

## CHARACTERISTICS AND APPLICATION

The new machine **mod. 3009** allows the lower adhesive part to be fixed to any type of shirt collar using 7 totally adjustable pointers. The collar is positioned by reference points that are also adjustable. It is equipped with an automatic stacker which lifts the collar after processing and a thermostatic system to regulate the temperature of the pointers. Operation is electro-pneumatically controlled by a PLC.

## RECOMMENDATIONS FOR USE

The Collar Stitcher mod. 3009 **may only be used** for fixing the adhesive part onto shirt collars. The manufacturer cannot be held liable for any damage to persons or property arising from the incorrect use of this machine or any use differing from the instructions indicated in this manual.

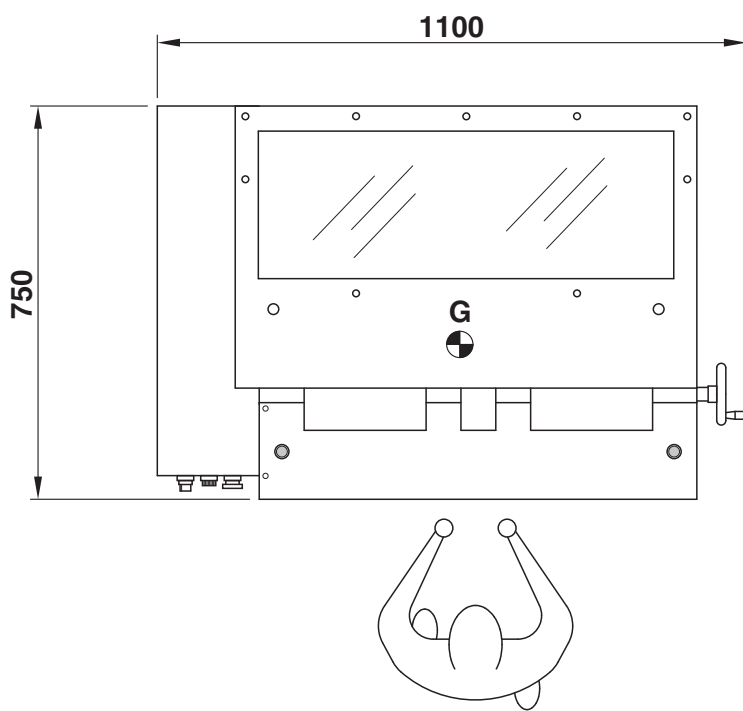
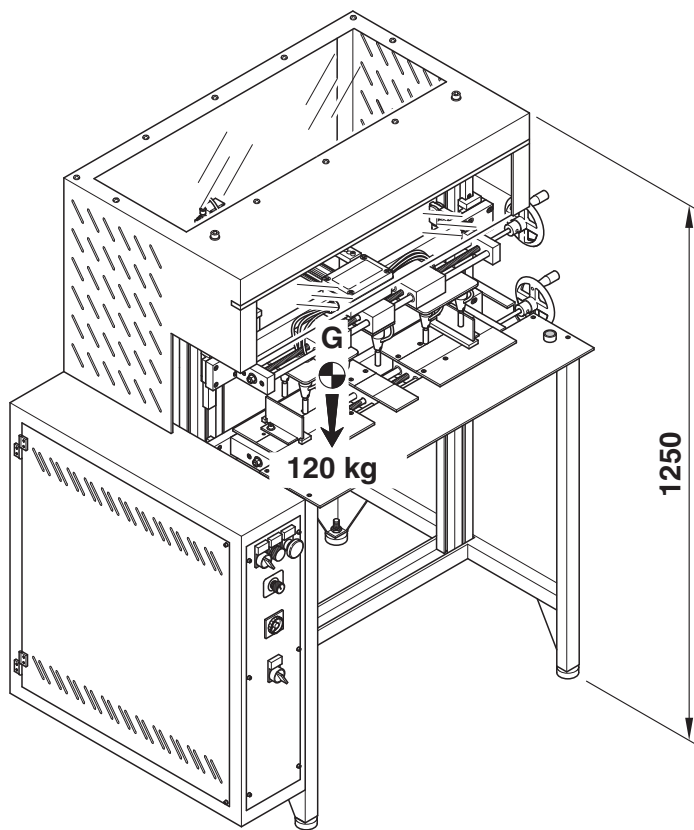
The  symbol indicates there exists a risk or danger for the health of the operator and, therefore, much care must be taken at this point.

The machine is fitted with pointers which reach high temperatures during operation. Be very careful when touching these parts.

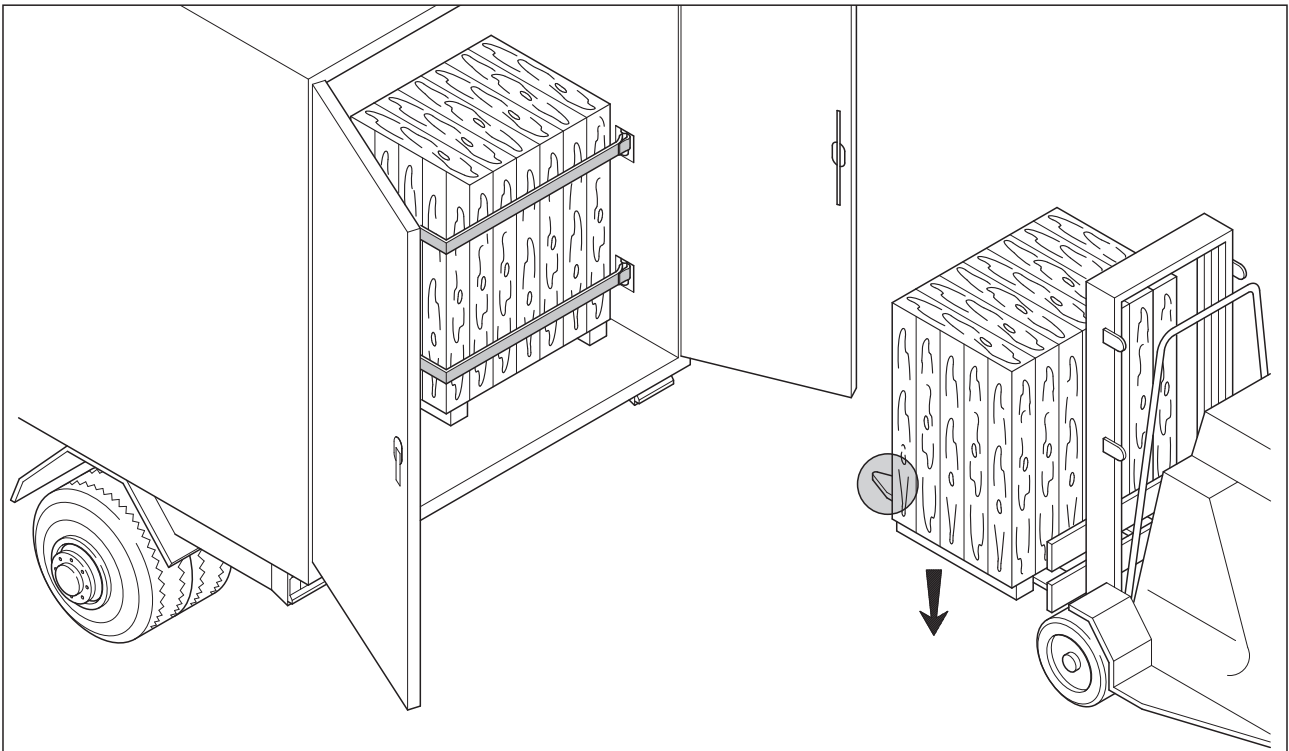
Before making any adjustments, replacements or maintenance, cut off the power supply to the machine, disconnect the compressed air and wait for the pointers to cool down.

The machine **must not be** exposed to the weather (rain, sun, etc).

**02 - COLLAR STITCHER TECHNICAL DATA mod. 3009**

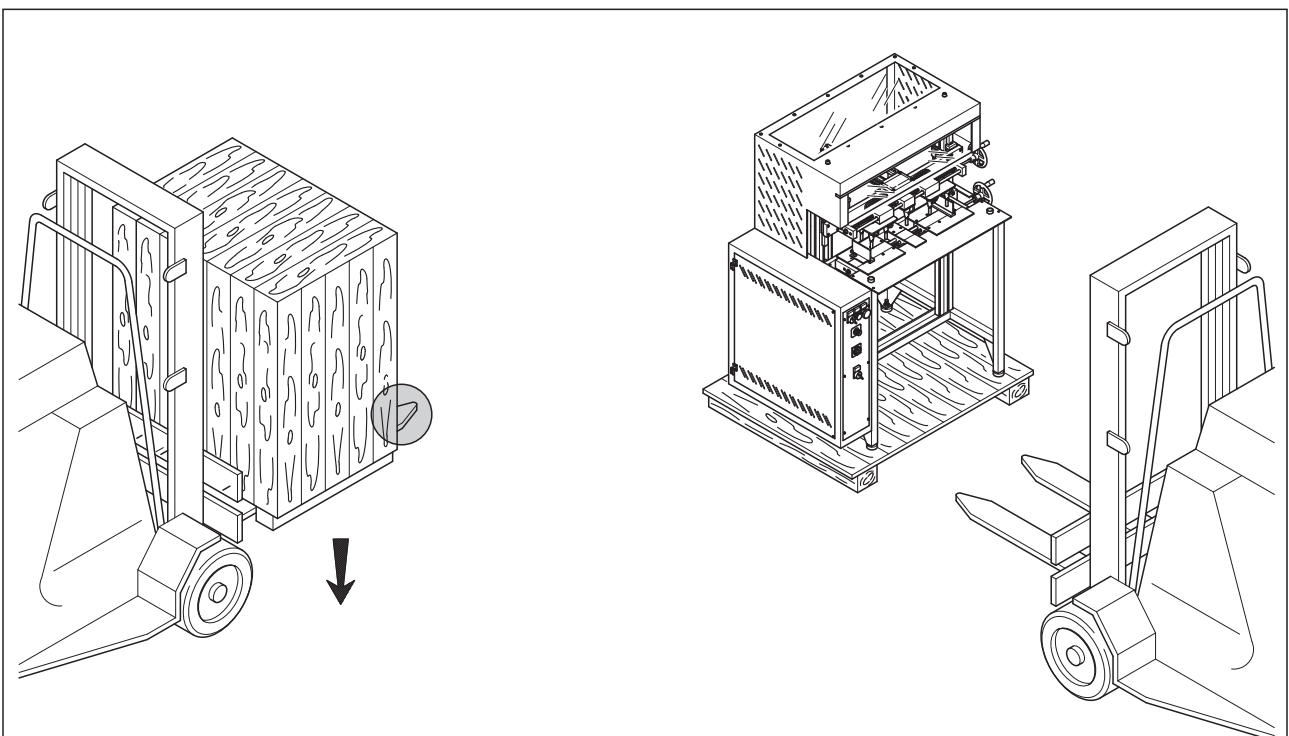


## 03 - LIFTING AND TRANSPORTATION



The machine can be transported with or without a packing case.  
In both cases, check that the forks of the fork-lift truck bear the full weight of the machine.  
Place in the lorry or van and secure with ropes or belts.

## 04 - LOADING AND UNLOADING



Make sure that the forks of the fork-lift truck bear the full weight of the machine during movement.  
Remove the packing case and lift the machine from the front or sideways.  
Place on a solid and even surface, not exposed to the weather.

## 05 - INSTALLATION

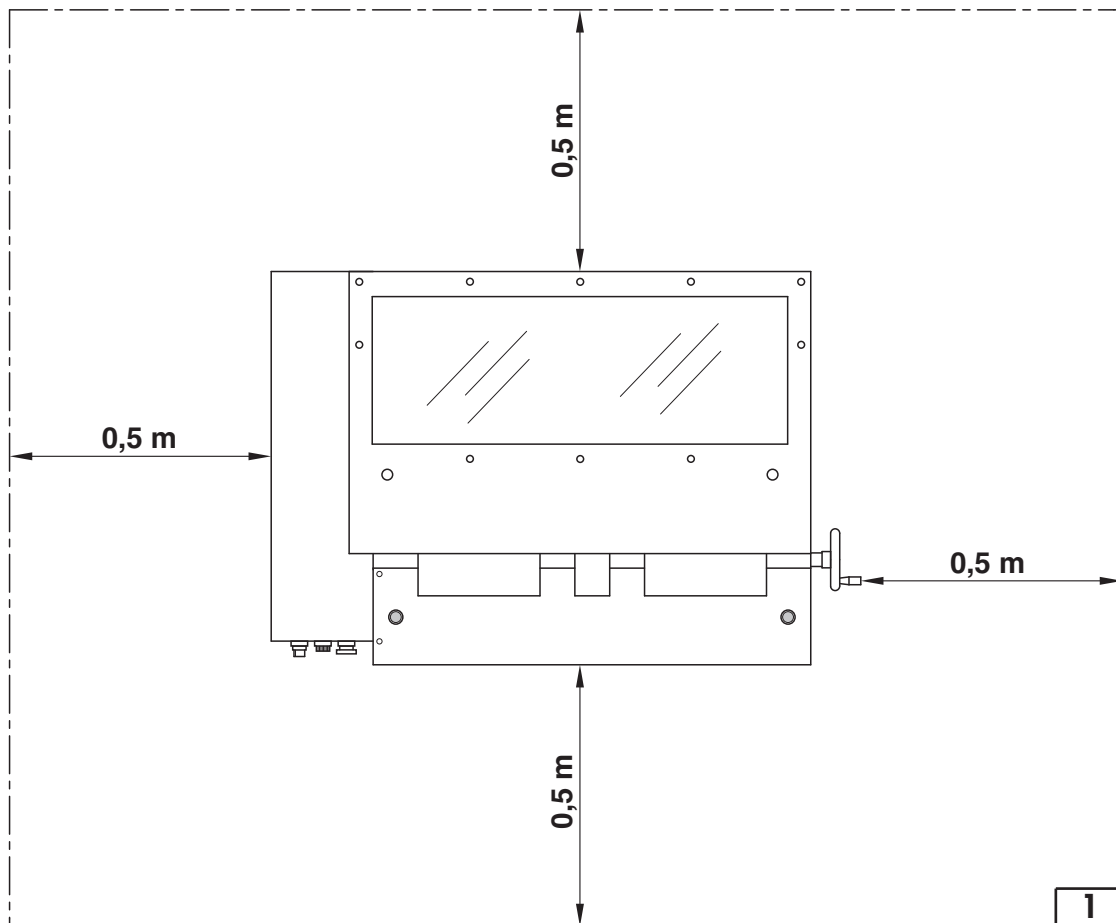
**ATTENTION:** This machine must only be installed by specialized personnel.

The manufacturer cannot be held liable for any damage to persons or to property arising from incorrect installation not in accordance with these instructions and connection to a mains supply that does not meet the necessary requirements.

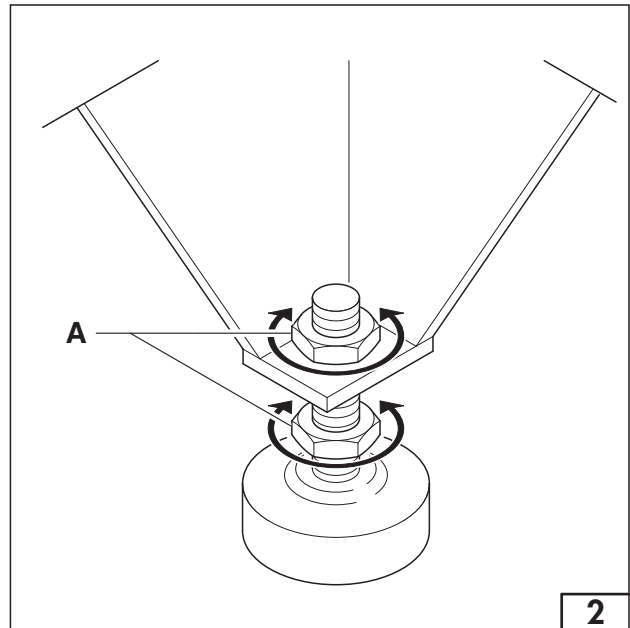


If the machine is installed on a suspended surface, check that the surface can withstand the weight of the machine. This machine must not be installed in areas where there are explosive or inflammable materials and substances.

Make sure that the distances shown in figure 1 below are respected as these are necessary for the maintenance and operation of the machine.



The machine must be placed on a solid and even surface. The height can be further adjusted using the screws “A” (fig. 1).



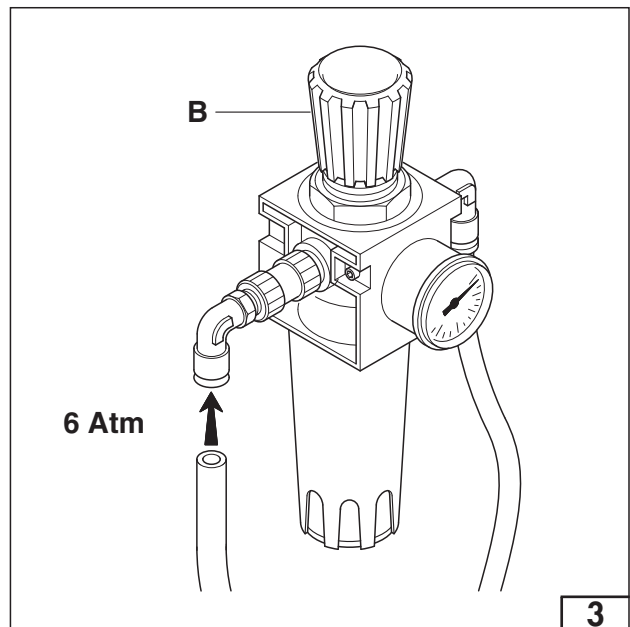
## ELECTRICAL CONNECTIONS

The machine is usually delivered with the power cable wired inside the electrical panel. Therefore, all that needs to be done is to connect it to a 220V-50Hz single-phase power outlet.

The power consumption is 500 W.

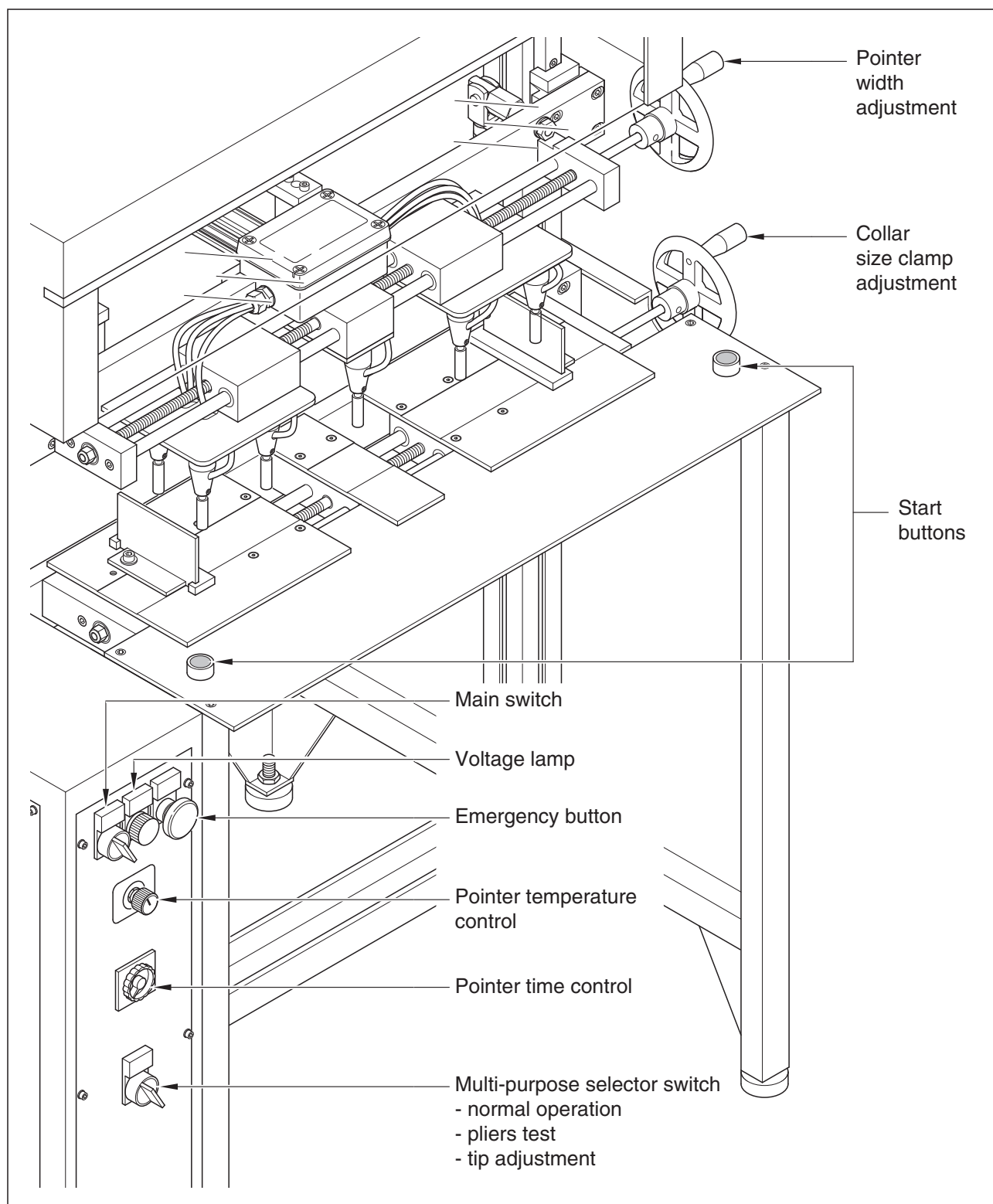
## PNEUMATIC CONNECTION

- Connect the machine to the compressed air outlet and make sure that the air flow is sufficient to allow for operation with a constant rate of pressure of 6 Atm.
- Calibrate pressure regulator “B” at between 6 Atm (fig. 3).





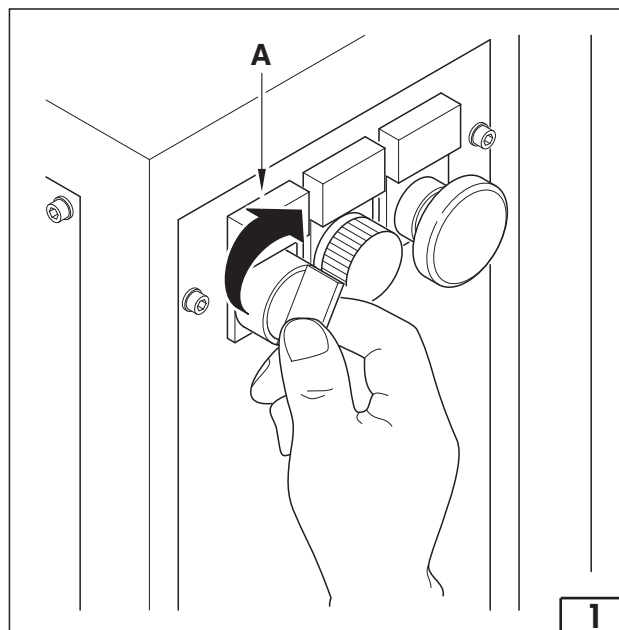
## 06 - MACHINE CONTROLS



## 07 - OPERATION

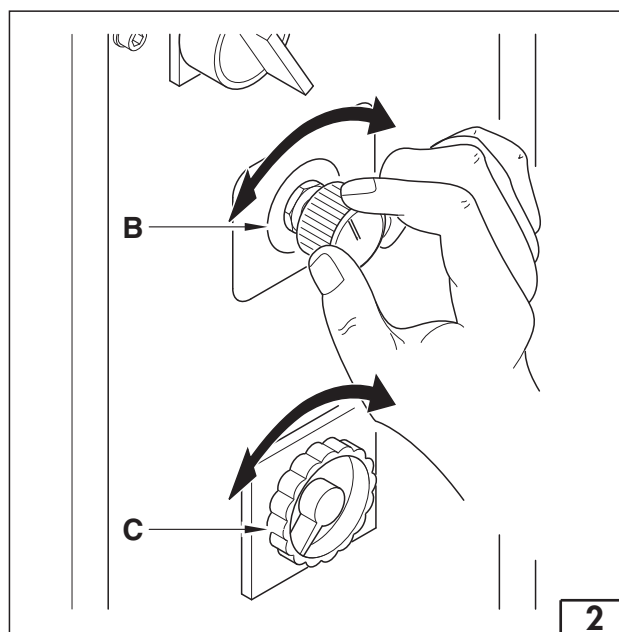
### START-UP

- Turn on main switch “A” (fig. 1) by turning it to the right.

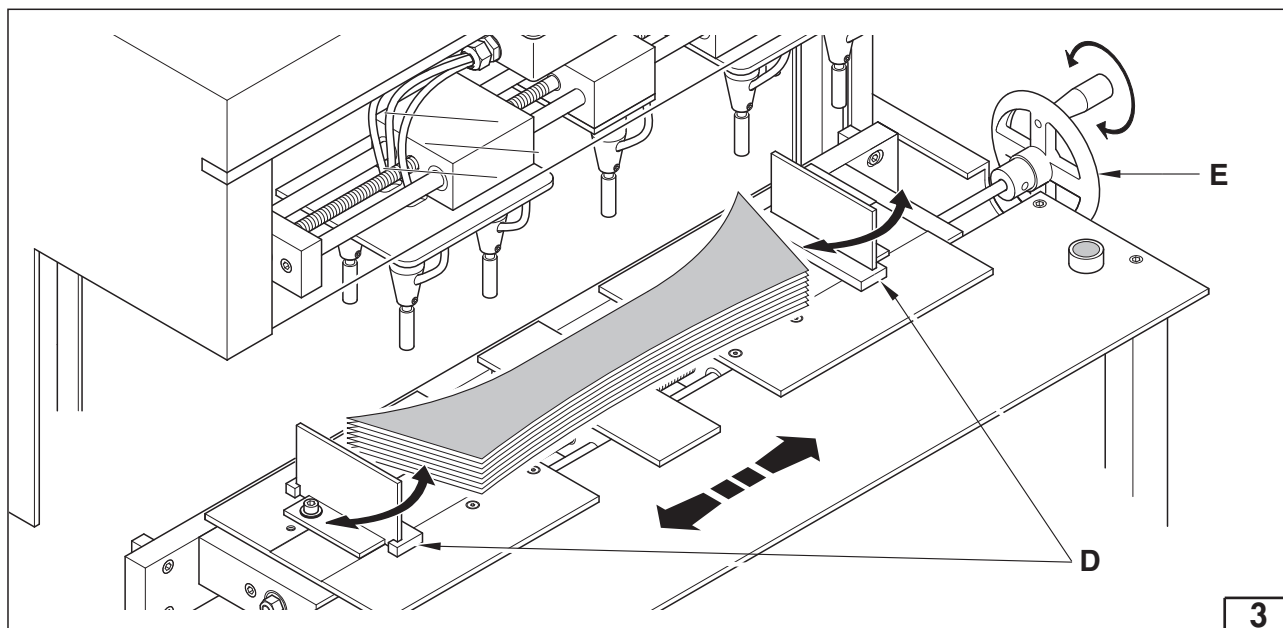


- Check you have set the right temperature and stitching time.

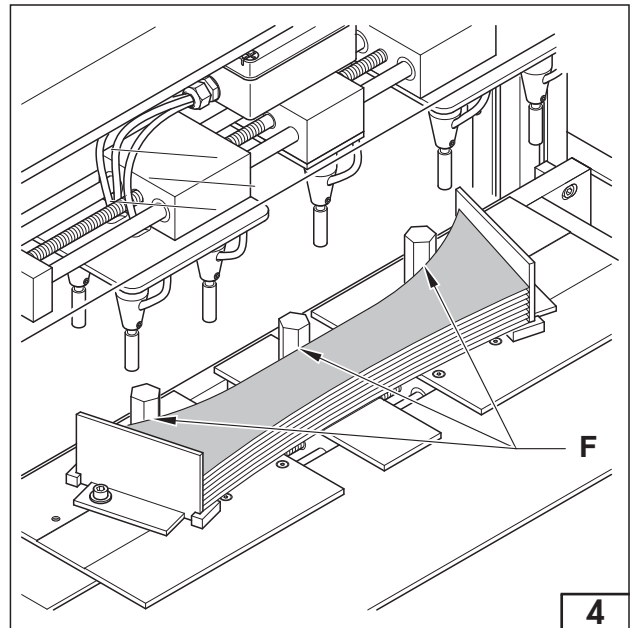
If necessary, turn control “B” (fig. 2) to set the temperature or control “C” (fig. 2) to set the time.



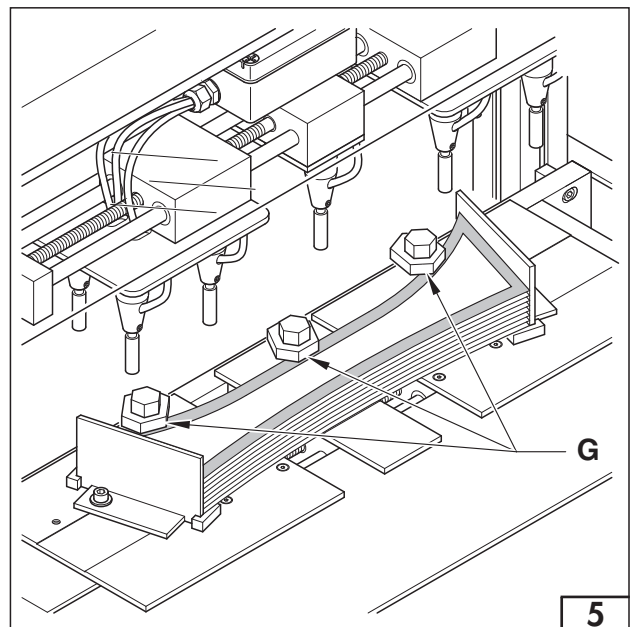
- Position the collar pack by adapting the side clamps “D” (fig. 3) and regulating wheel “E” according to the collar measurements.



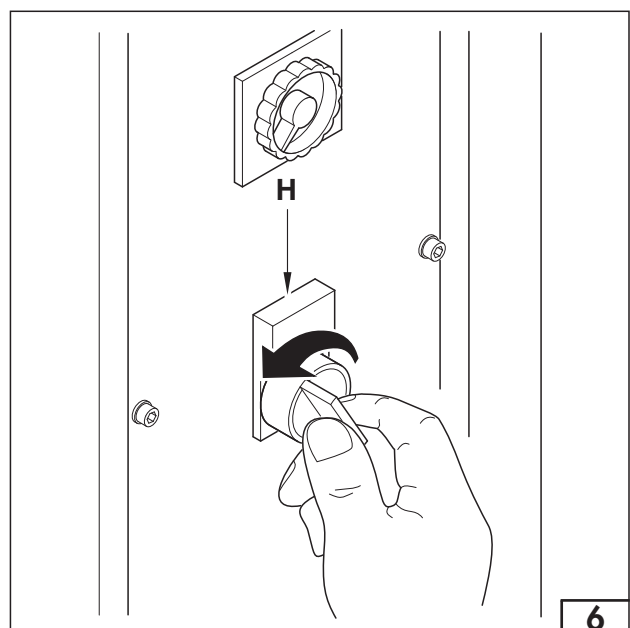
- Position the three rear magnetic clamps “F” (fig. 4) following the collar shape.



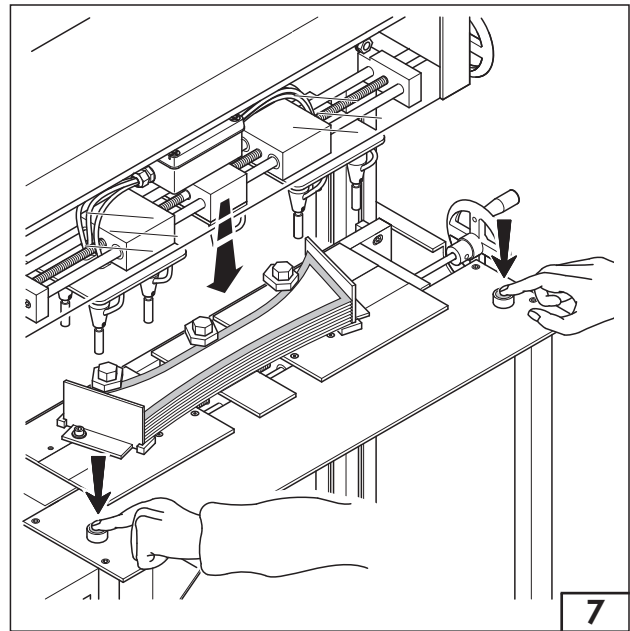
- Position the adhesive part and insert the hexagonal regulators “G” (fig. 5), with sides of a different thickness to get the right distance between the collar and the adhesive part.



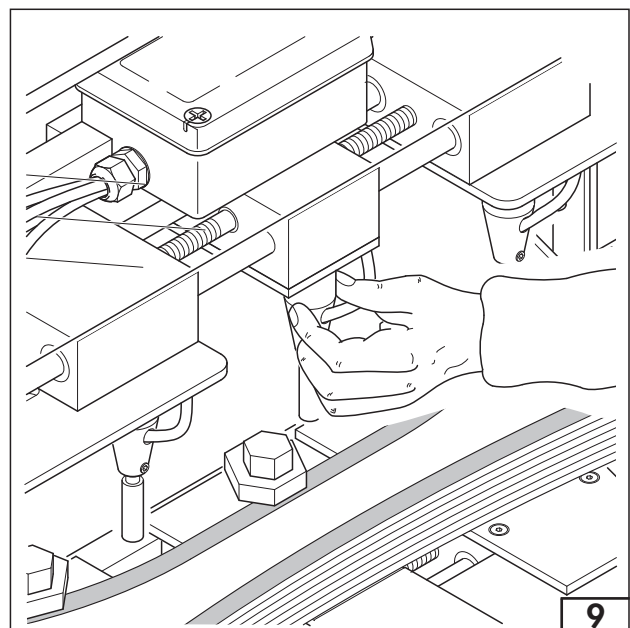
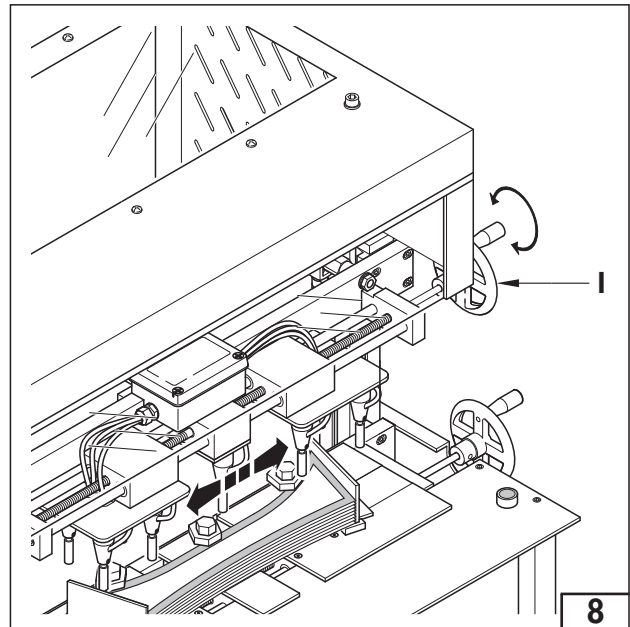
- Turn selector switch “H” (fig. 6) to the left to adjust the position of the pointers.



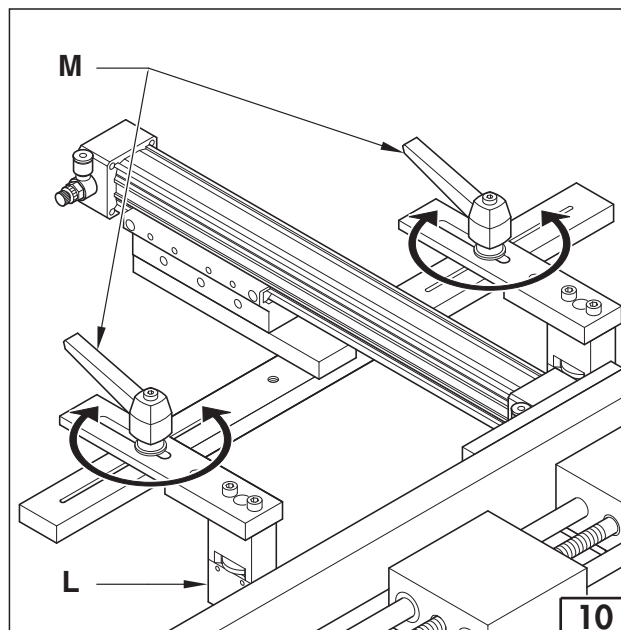
- Press both start buttons at the same time to lower the carriage (fig. 7).



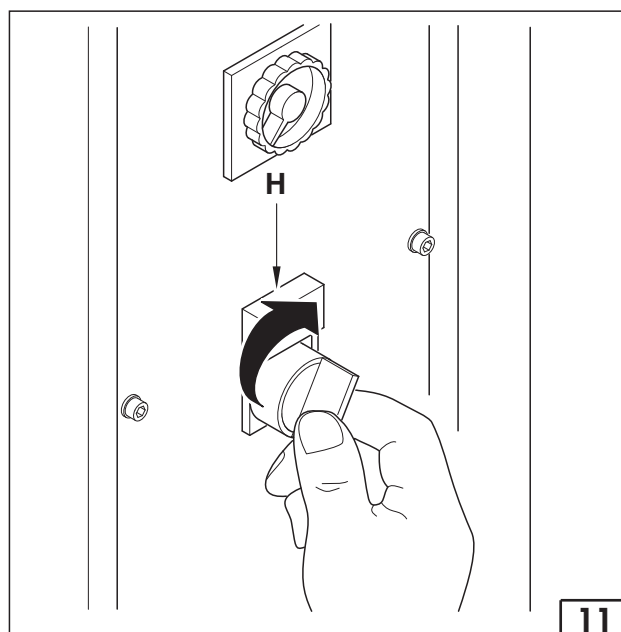
- Regulate the position of the 7 pointers with wheel "I" (fig. 8), or move them to the desired position using the magnetic attachment (fig. 9).



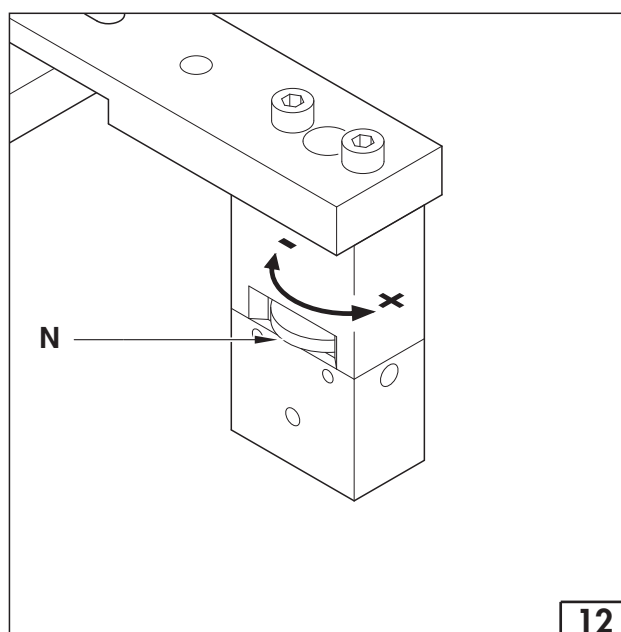
- Regulate the position of the unloading pliers “L” (fig. 10) by loosening crank handles “M” and moving them according to the shape of the collar.



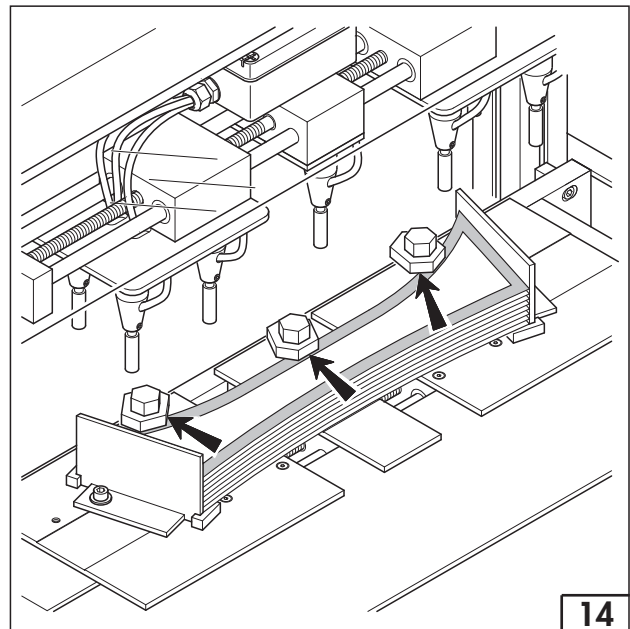
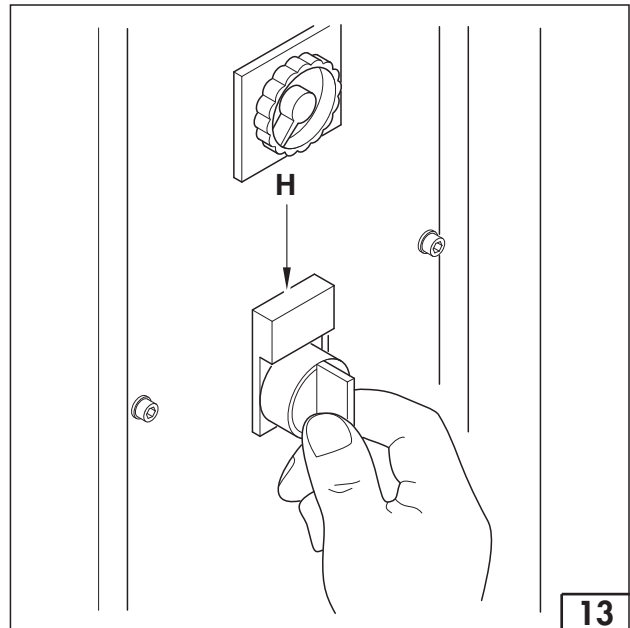
- Turn selector switch “H” (fig. 11) to the right to test the pliers as they pick up the collar.



- If necessary, regulate the hold of the needles using ring nuts “N” (fig. 12): turn them anti-clockwise to increase and clockwise to decrease the hold.



- Turn selector switch “H” (fig. 13) to a vertical position, arrange the adhesive part on the first collar by positioning it up against the hexagonal regulators of the rear clamps (fig. 14).

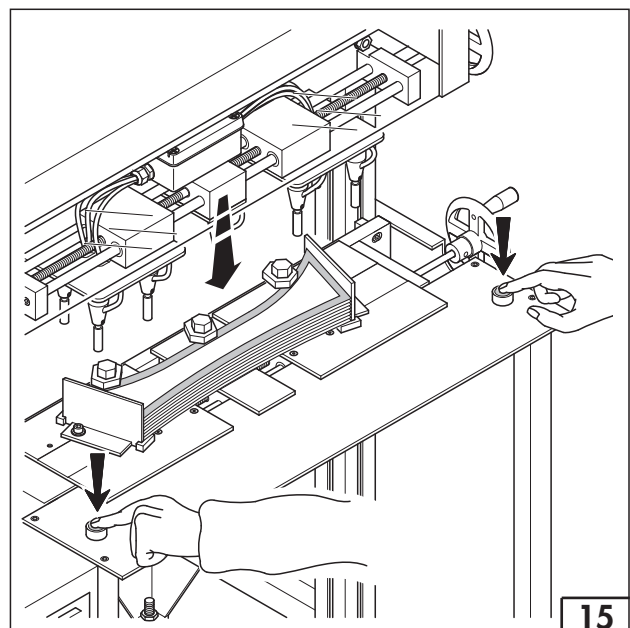


- Press both start buttons at the same time to lower the pointer carriage (fig. 15).
- When you release the start buttons, the following operations take place: the collar is stitched, the carriage goes up, the pliers pick up the collar and deposit it on the rear stacker.

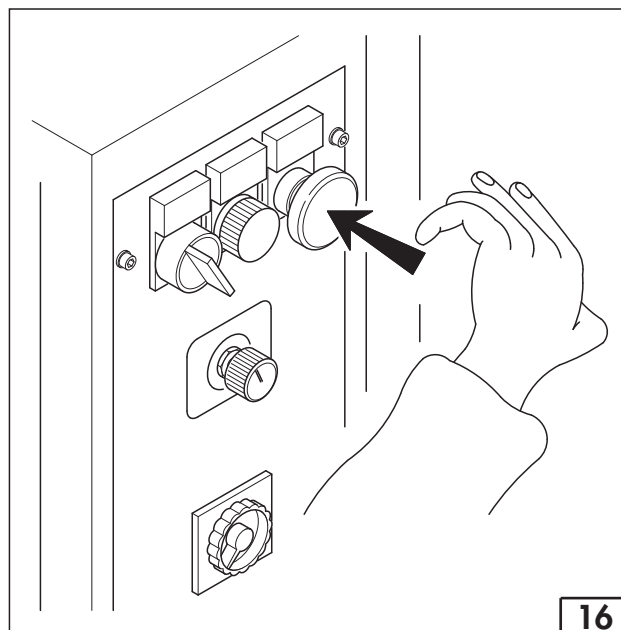
The machine resets for a new cycle.

When the pack is finished, remove the collars from the stacker and start another cycle by inserting a new pack.

All the activating cylinders are fitted with a regulator which allows you to increase or decrease the speed.



- If necessary, you can stop the machine by pressing emergency button “O” (fig. 16).



## 08 - MAINTENANCE



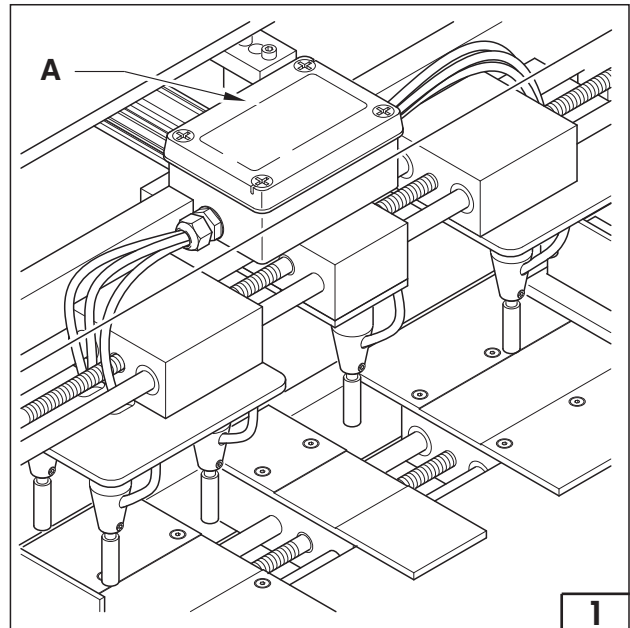
Before carrying out any maintenance or replacements, cut off the power supply, disconnect the compressed air and wait for the pointers to cool down.

The operations described below must be performed only by specialized personnel.

Thanks to their construction, the mod. 3009 collar stitcher do not require any special maintenance servicing during their use. A good periodic lubrication of the joints and accurate compliance with the instructions described in this manual will extend machine's efficiency and reliability.

### POINTER REPLACEMENT

To replace the faulty pointers, disconnect it from electric box "A" (fig. 1) and fit a new one, making the necessary connections.



### DEMOLITION

In case of machine demolition, separate the different materials making up the machine so that they can be shipped to designated collection sites for re-cycling.



## 09 - MALFUNCTIONS, CAUSES AND REMEDIES

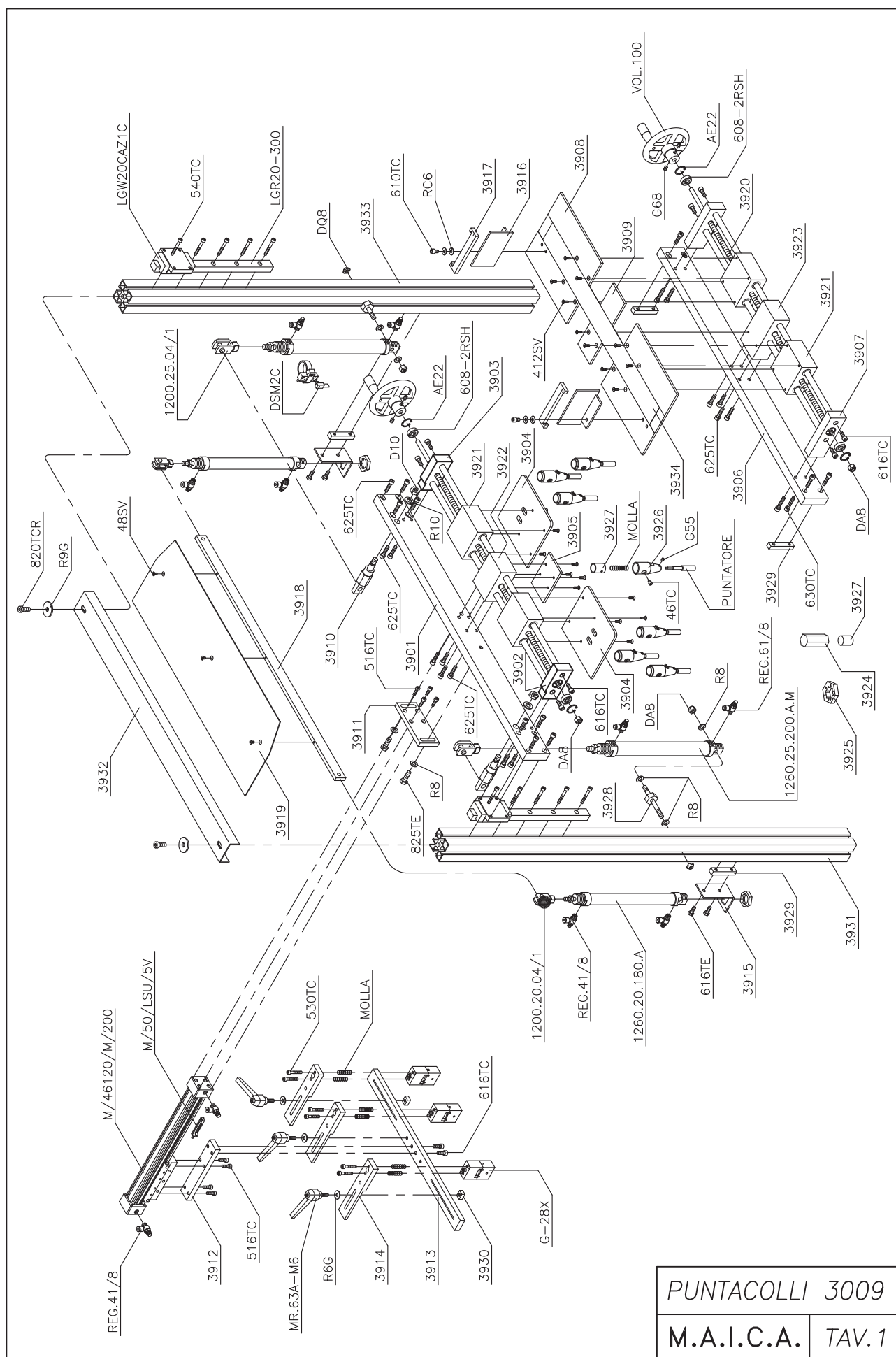
MALFUNCTION	CAUSE	REMEDY
<b>Machine does not start</b>	Emergency activated	Deactivate emergency
	Main switch not on	Turn the switch to the right or check that the main switch inside the electrical panel is in position I.
	Inefficient LOGO controller	Check the efficiency of the controller inside the electric panel.
	Faulty fuses	Check that the fuses inside the electrical panel are good.
	Lack of pressure	Check the pneumatic system pressure
<b>Defective stitching</b>	High or insufficient temperature	If stitching marks the fabric, lower the temperature; if the adhesive part tends to come away, increase the temperature
<b>The carriage does not go down</b>	Inefficient carriage limit switch	Check the efficiency of the limit switch
	Inefficient cylinder sensor	Check that the sensor next to the cylinder shaft works efficiently
<b>Not all the stitchings are made</b>	Faulty pointer	Replace the pointer See page 15
<b>The pliers do not pick up the collars or pick up two collars at the same time or becomes shiny</b>	Needle hold insufficient or too high	Increase or decrease the needle hold using the regulating ring nut. See page 12

## 10 - SPARE PARTS TABLES

To help us identify the necessary spare parts quickly, please communicate the following data:

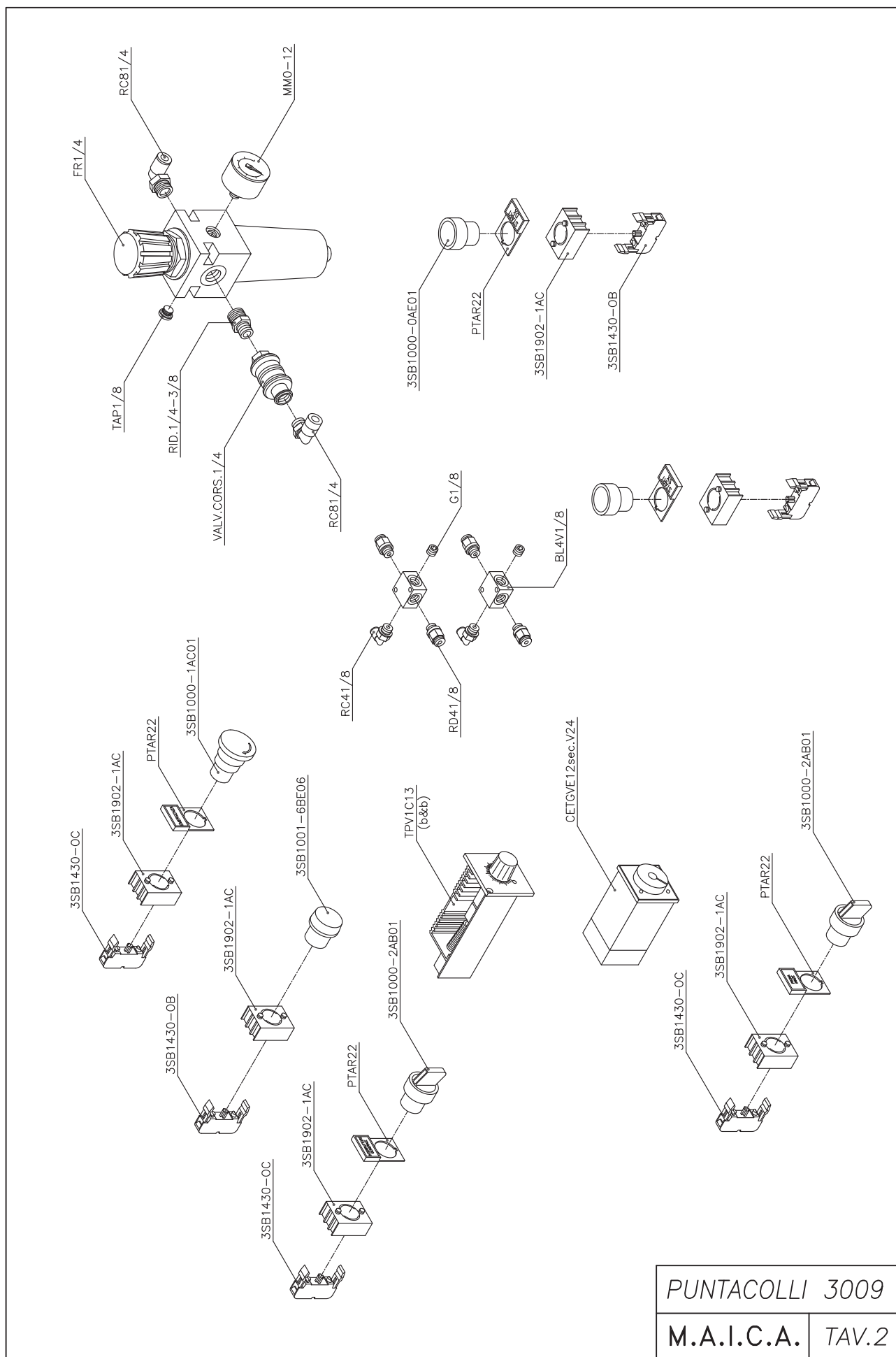
1. Model and serial number of the machine
2. Spare part code
3. Corresponding spare part table

**Example:** COLLAR STITCHER mod. 3009    Serial no. ....    Code 3919    Table 1

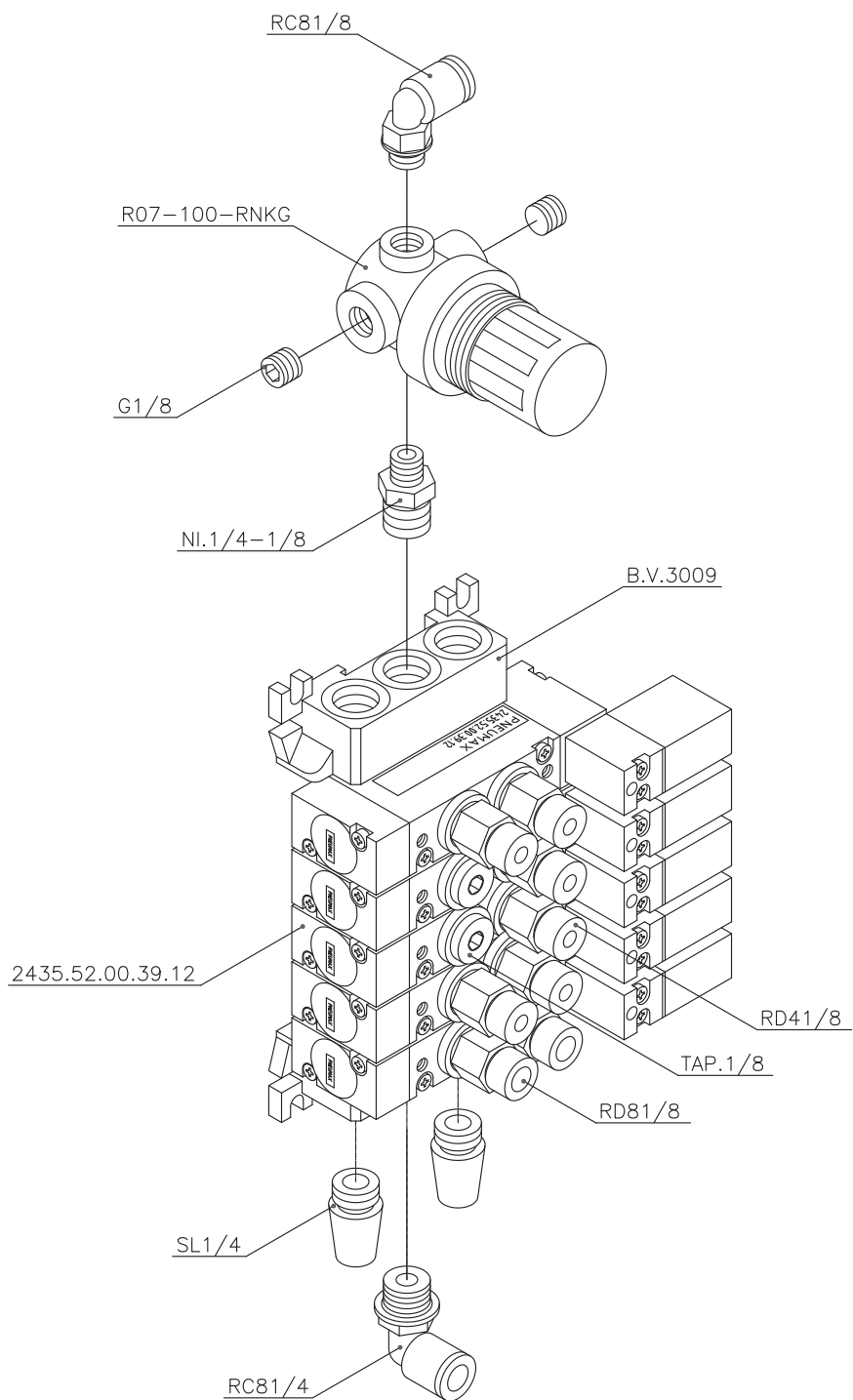


PUNTACOLLI 3009

M.A.I.C.A. TAV.1



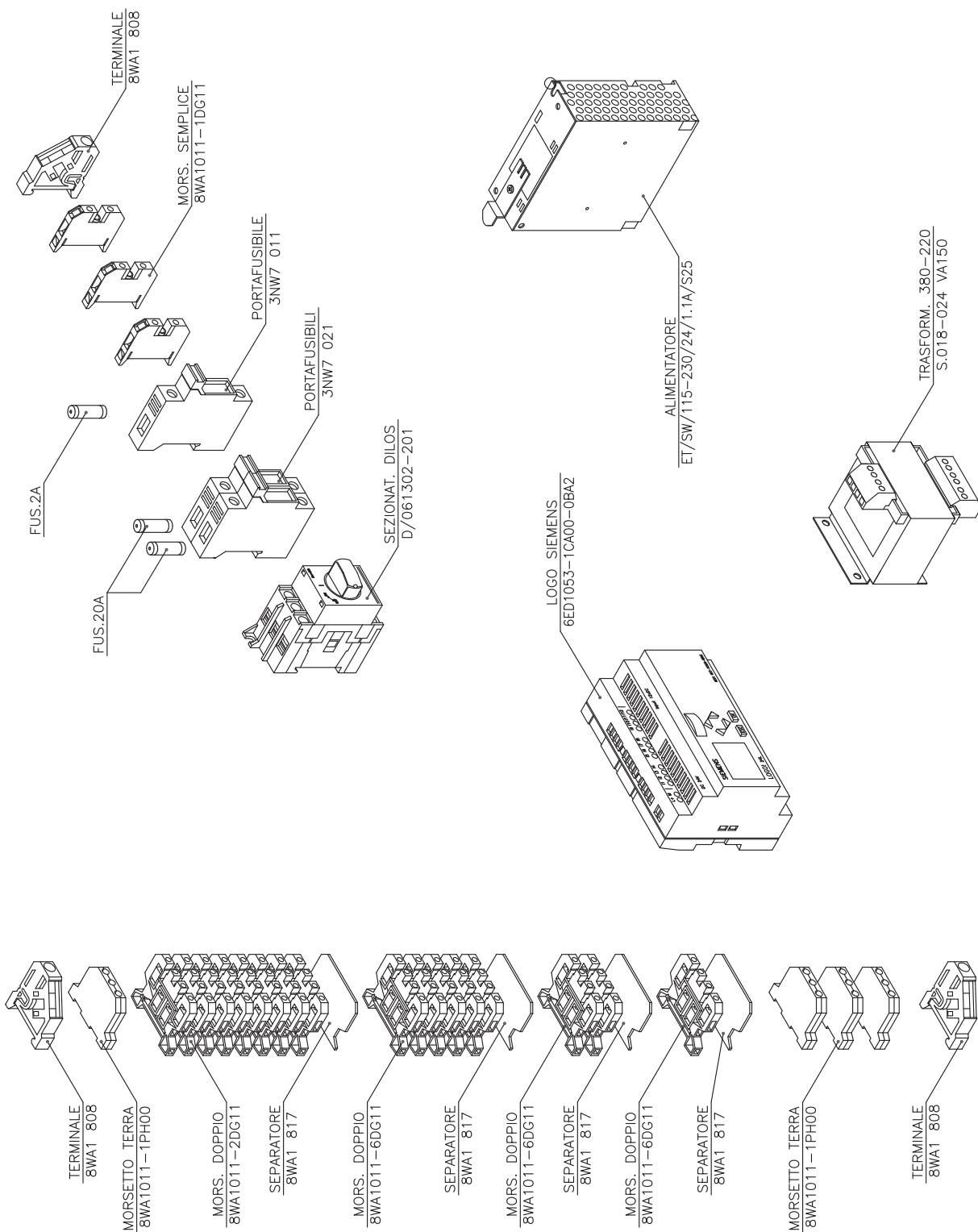
PUNTACOLLI 3009	
M.A.I.C.A.	TAV.2



PUNTACOLLI 3009

M.A.I.C.A.

TAV.3



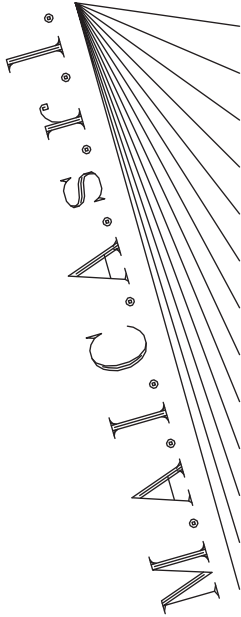
PUNTACOLLI 3009

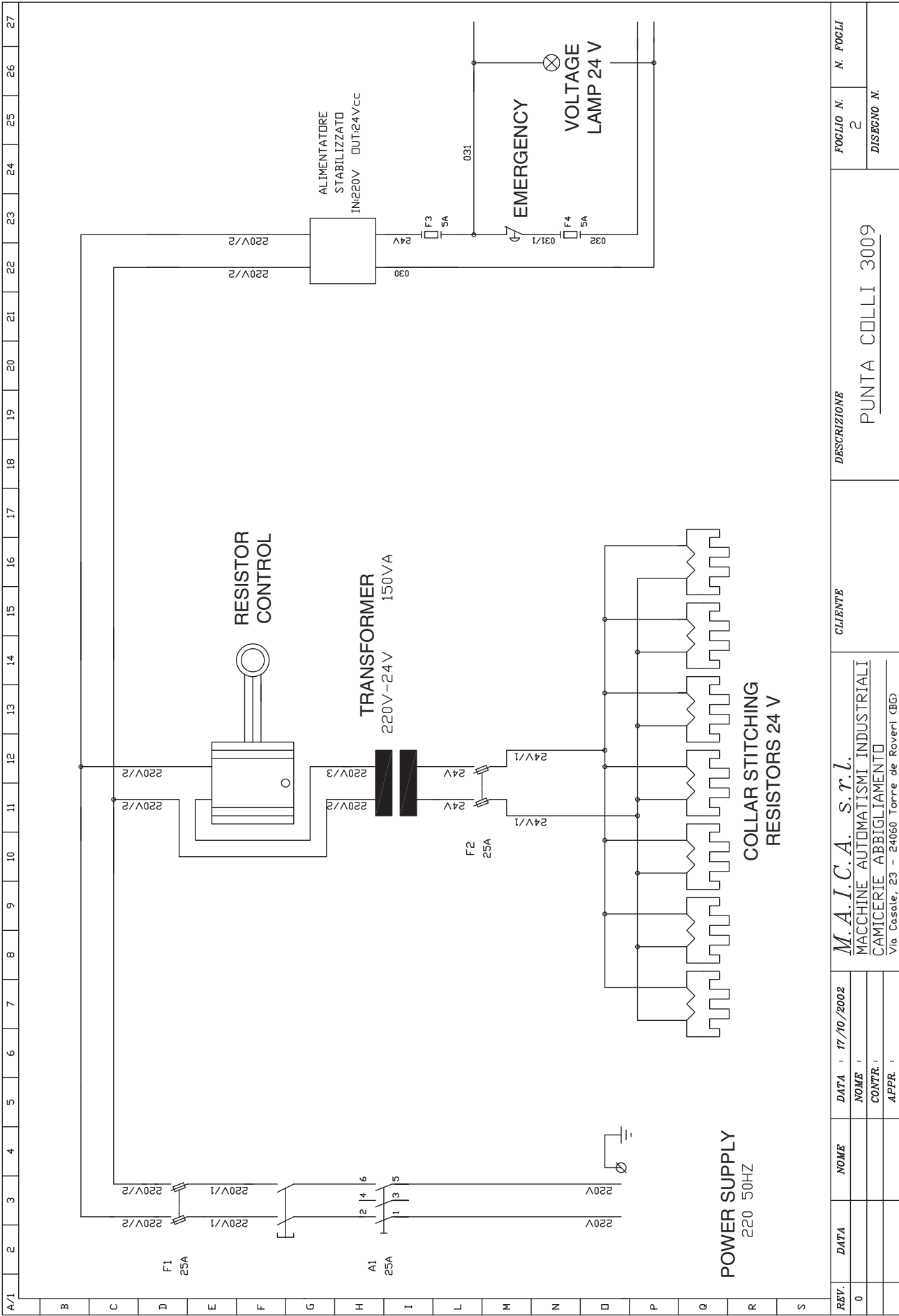
M.A.I.C.A.

TAV.4

A/1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
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						Via Casale, 23 - 24060 Torre de Roverè (BG)																				

COLLAR STITCHER 3009











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