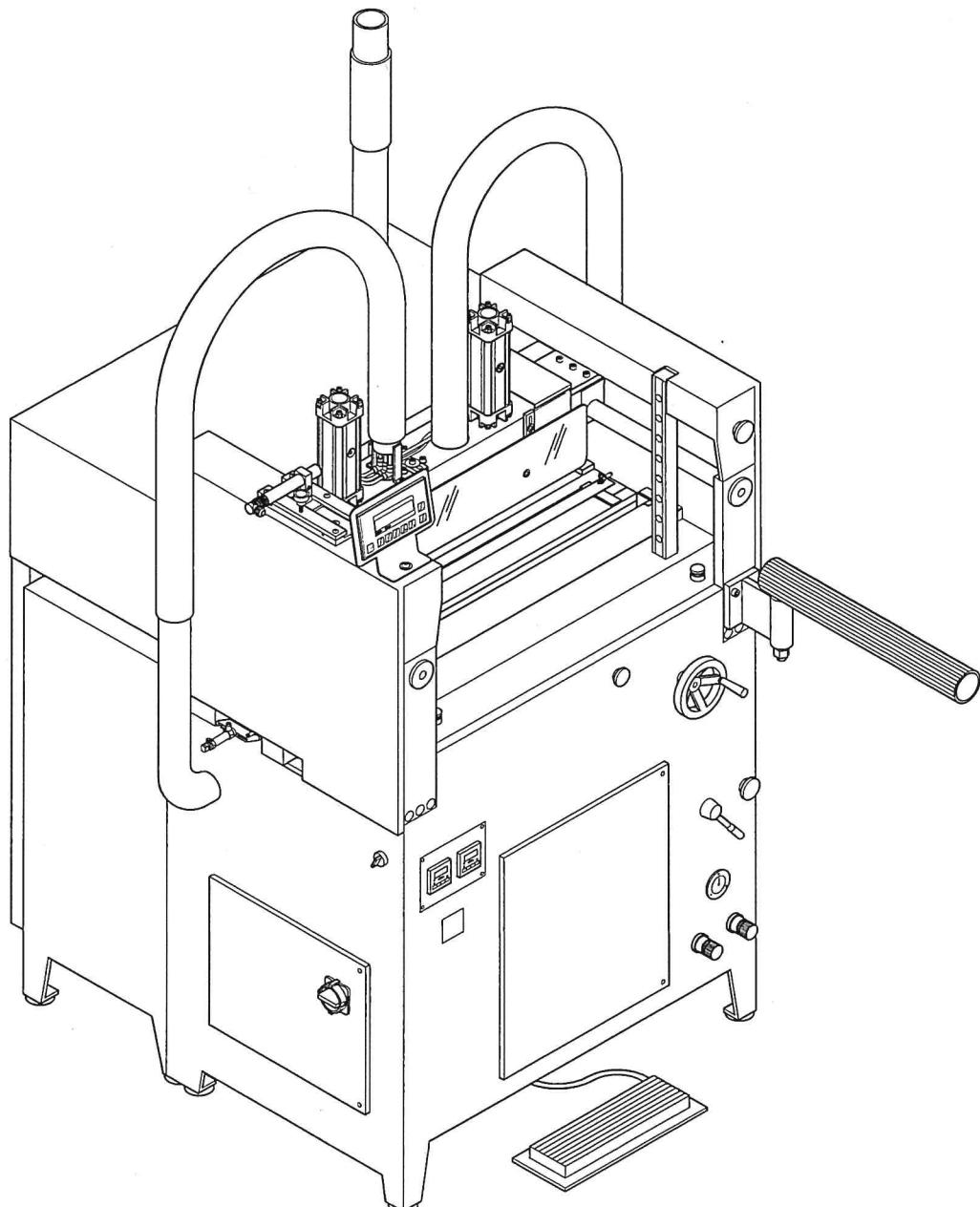


# **IRONING MACHINE**

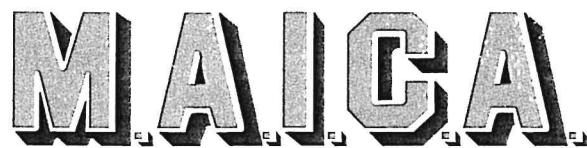
## **mod. 1005**



### **Instructions for use and maintenance**



**MAICA** Macchine Automatismi Industriali Camicerie Abbigliamento



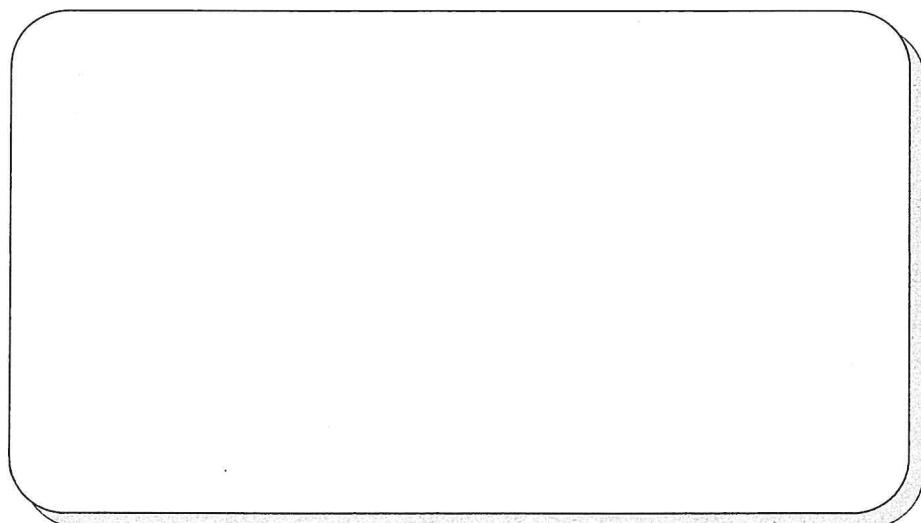
**Macchine Automatismi Industriali Camicerie Abbigliamento**

Via Casale, 23 - 24060 Torre de' Roveri (Bergamo) - ITALY  
Telefono (+39) 35 580040 - Telefax (+39) 35 580920

web: [www.maicaitalia.com](http://www.maicaitalia.com)

e-mail: [info.maicaitalia@maicaitalia.com](mailto:info.maicaitalia@maicaitalia.com)

AUTHORIZED AREA DEALER FOR ASSISTANCE



## **EEC CONFORMITY DECLARATION**

The **1005 ironing machine**, 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)
<b>EN 60825</b>	Radiation safety of laser products; plant classification; requirements and guide for the operator.

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

# 01 - GENERALITIES

## CHARACTERISTICS AND FIELD OF APPLICATION

The 1005 ironing machine has been designed specifically for the folding of the front facing and short sleeves, or any application where an edge must be folded back with one or two pleats. This machine folds the edge of the fabric with perfect accuracy along the whole length for ironing.

Measurements can be modified quickly and easily, without the need for special devices.

The machine can produce pleats measuring a minimum of 20 mm to a maximum of 70 mm with continuous increases over a length of 900 mm.

The 1005 can be used to insert the stiffener, whether adhesive-backed or otherwise, normally or automatically.

It has an automatic stacker that picks up the folded part after ironing.

For ironing striped material, there is a laser device that feeds the fabric. If the cut is not perfect, it folds the extra part back to re-absorb the excess length (even if only 1 mm).

New PLC control system.

## ADVISED USE

The 1005 ironing machine **must only be used** in applications where a folded back edge is required. 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.

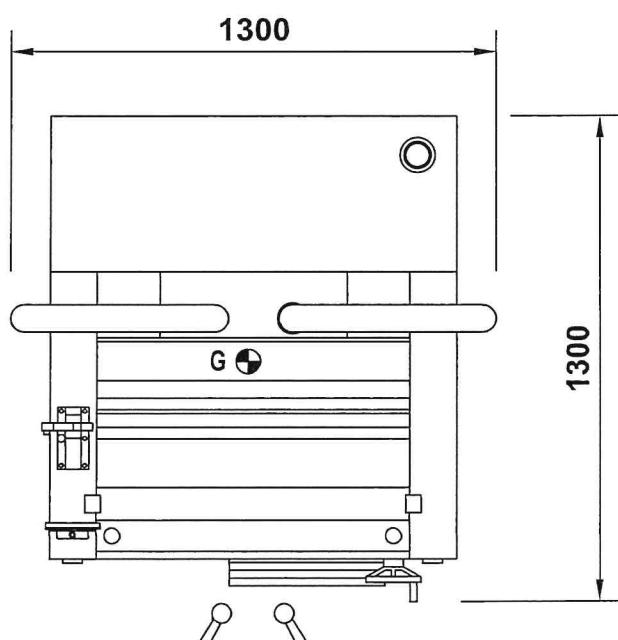
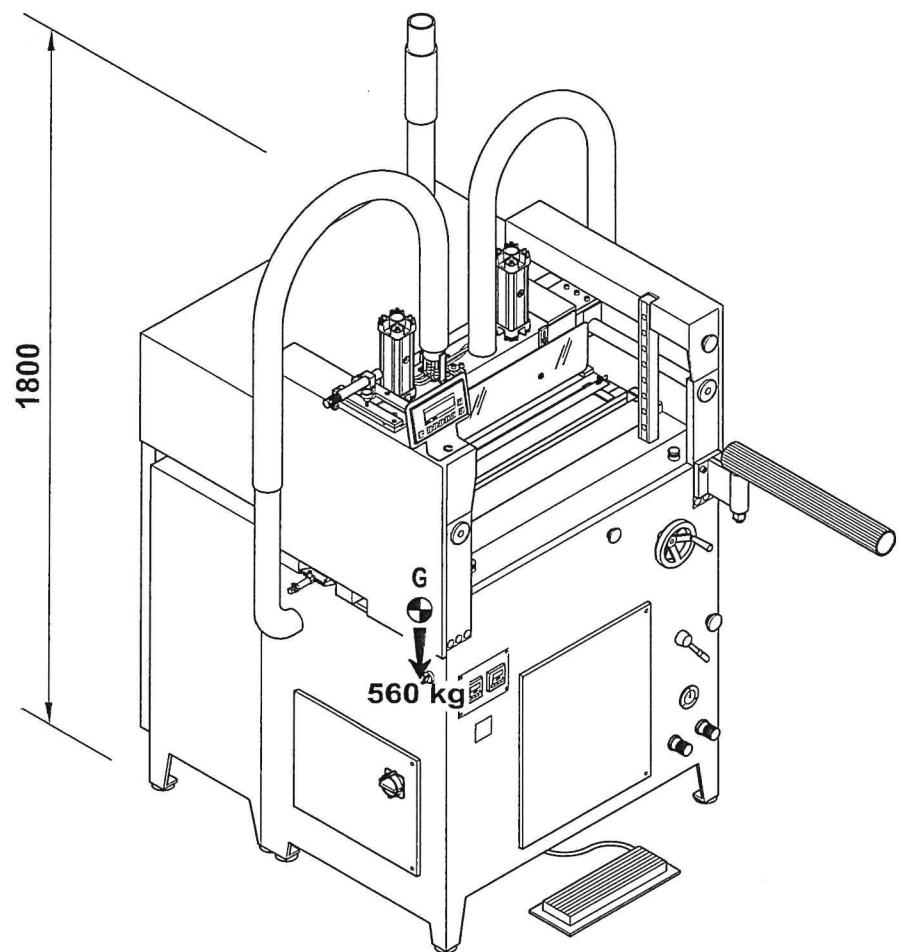
The  symbol indicates there exists a risk or danger for the health of the operator and, therefore, much care must be taken at this point.

The machine has an ironing unit which can reach temperatures above 70°C during use. Be very careful when touching these parts.

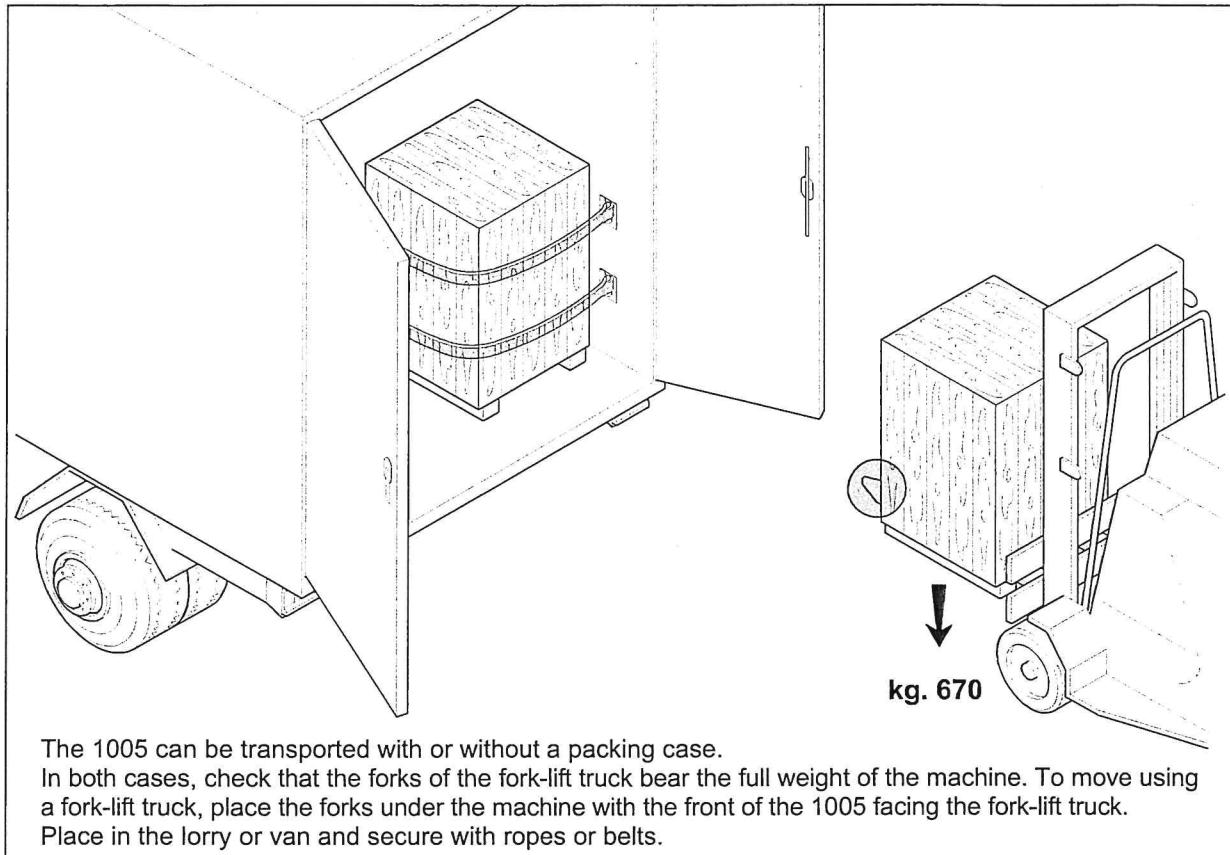
Always disconnect the machine from the mains supply, the compressed air supply and wait for the ironing parts to cool down before undertaking any adjustment, replacement or maintenance work.

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

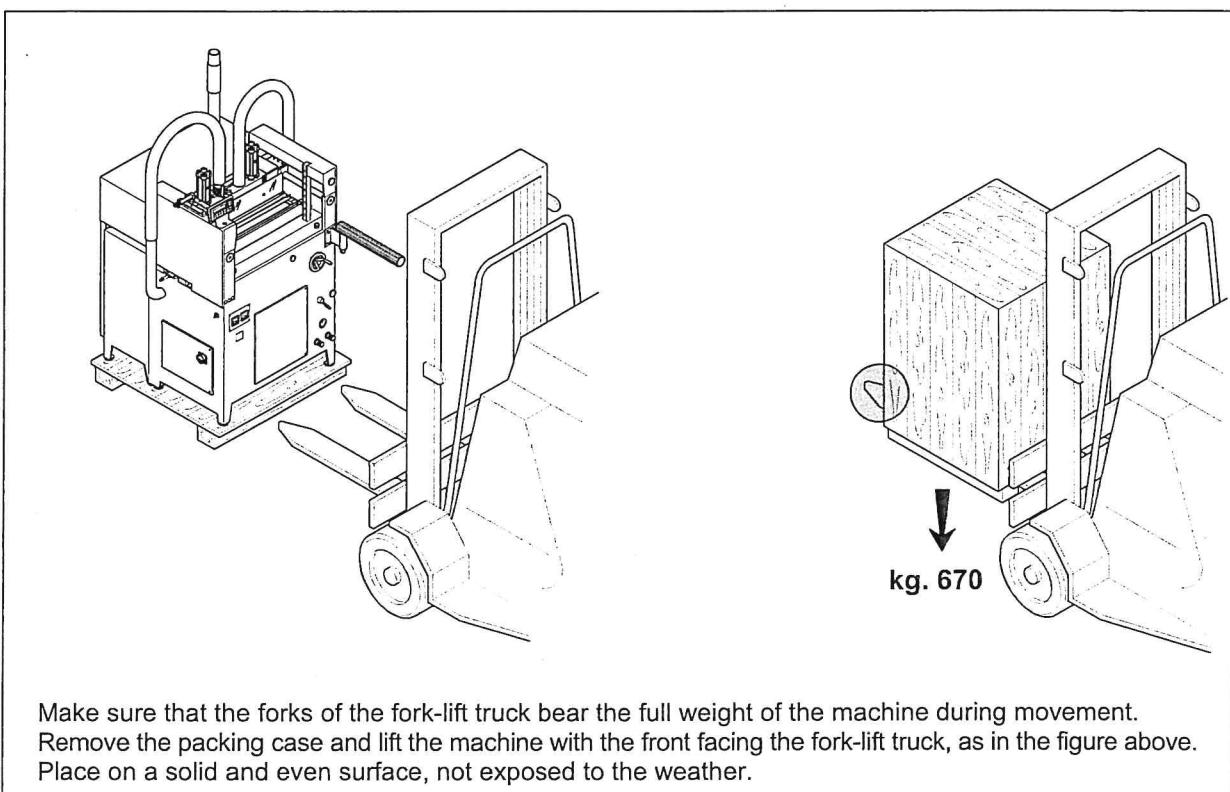
## 02 - IRONING MACHINE 1005 TECHNICAL DATA



## 03 - LIFTING AND TRANSPORTATION



## 04 - LOADING AND UNLOADING



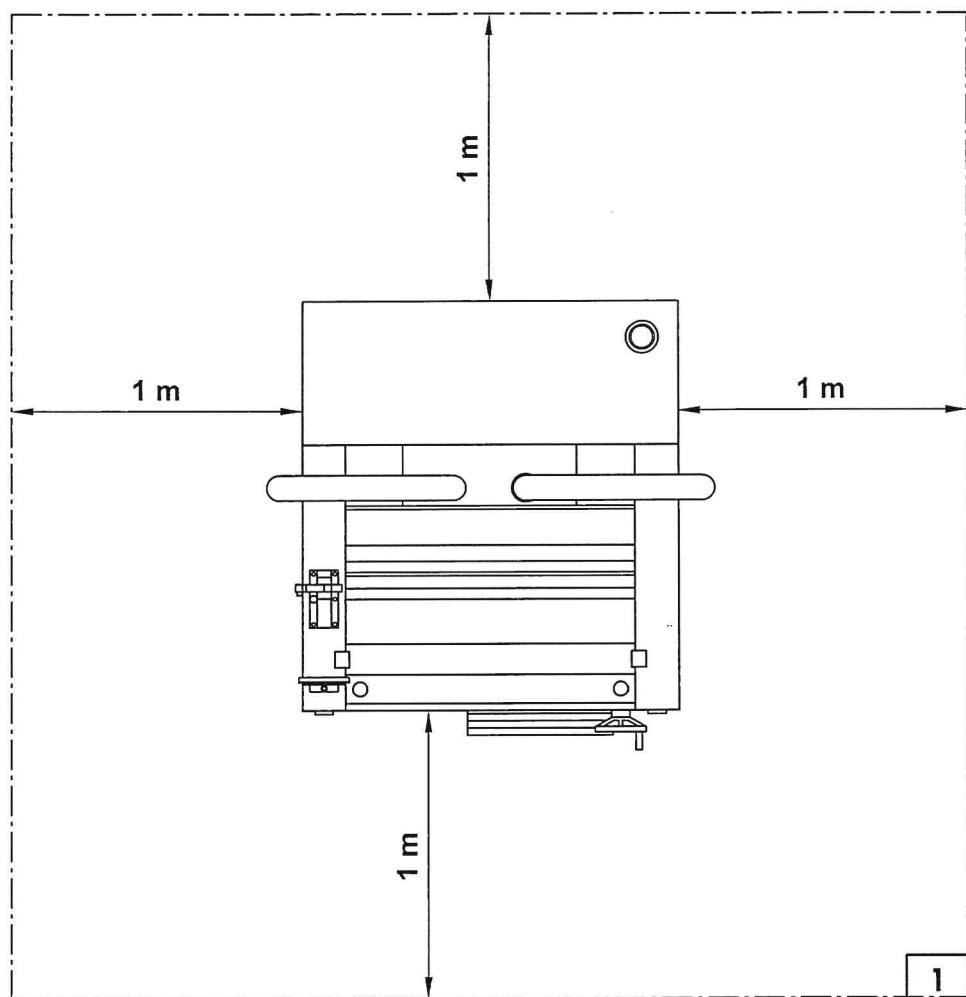
## 05 - INSTALLATION

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

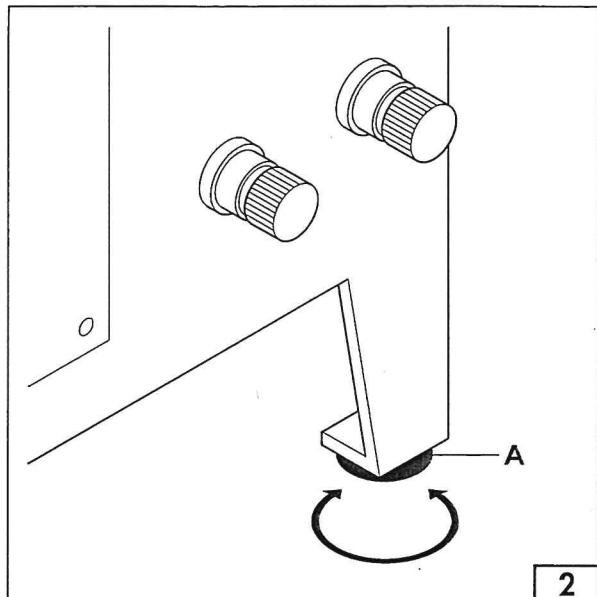
The manufacturer cannot be held liable for any damage to persons or to property arising from incorrect installation not in accordance with these instructions and connection to a mains supply that does not meet the necessary requirements.

**!** 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.



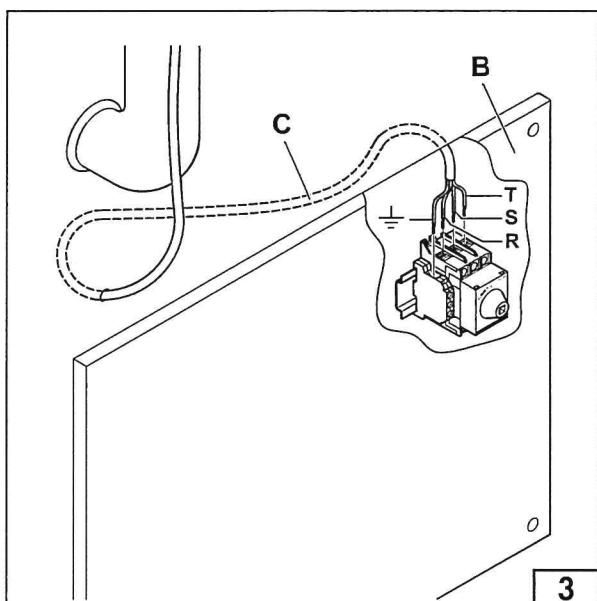
The machine must be placed on a solid and even surface. Use levelling feet "A" to adjust the height (fig. 2).



## ELECTRICAL CONNECTION

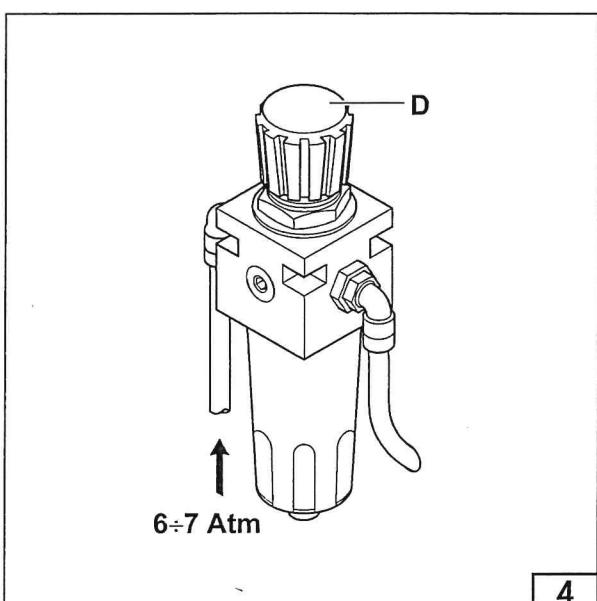
To connect the power cable (see fig. 3):

- open side panel "B";
- pass cable "C" through the cable holes on the machine;
- connect phases R - S - T and the earth  $\text{---}$  to the relevant terminals;
- supply the machine with 380V-50Hz.

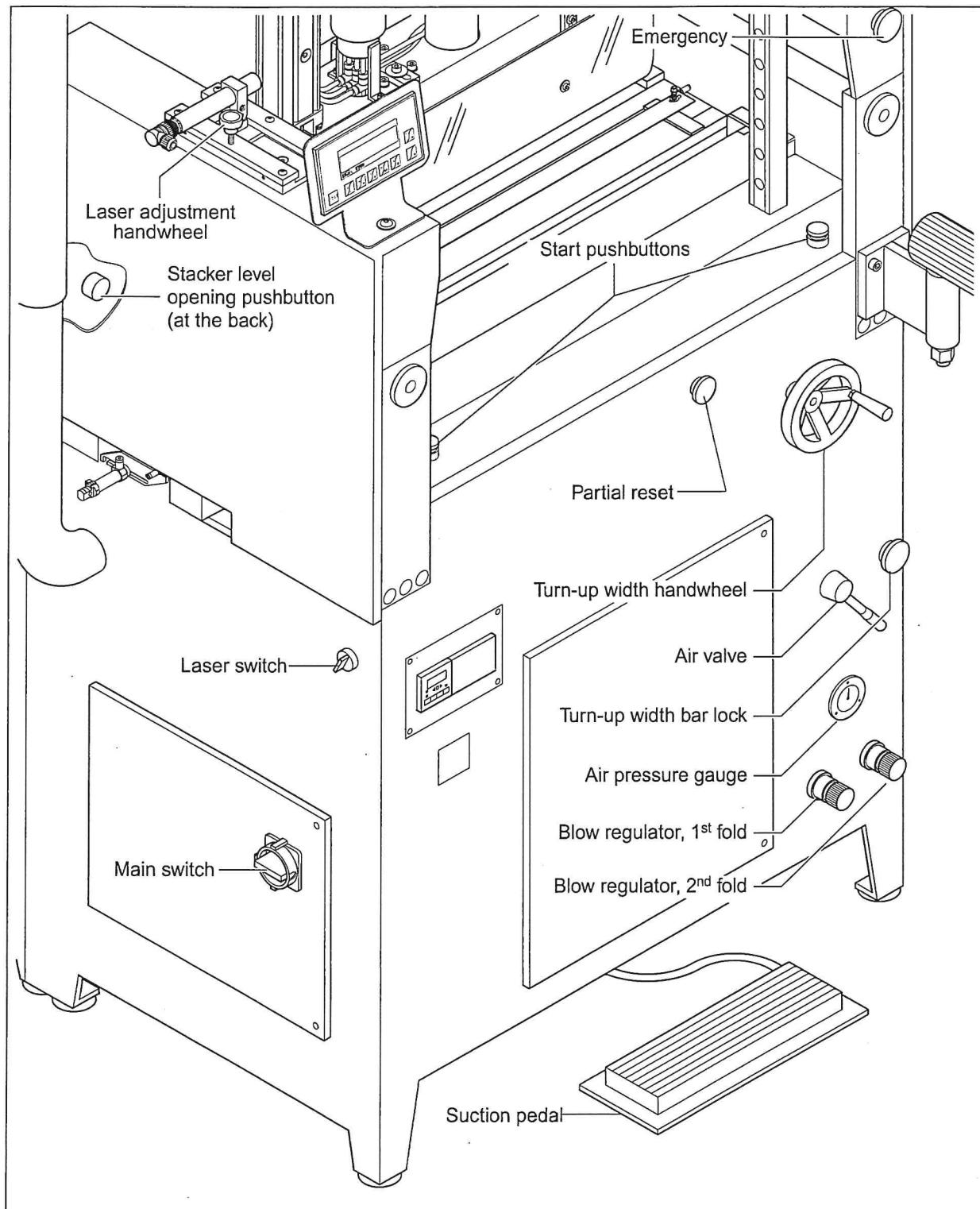


## PNEUMATIC CONNECTION

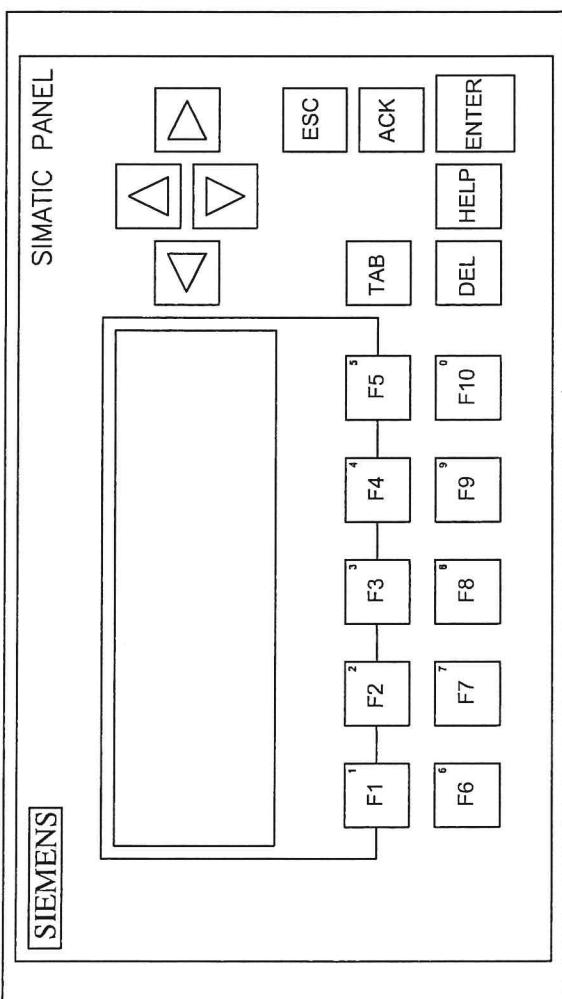
- Connect the machine to the compressed air outlet and make sure that the air flow is sufficient to allow for operation with a constant rate of pressure of 6÷7 Atm.
- Calibrate pressure regulator "D" at between 6÷7 Atm (fig. 4).



## 06 - MACHINE CONTROLS



# TASTIERA SIEMENS KP300 X(1005)



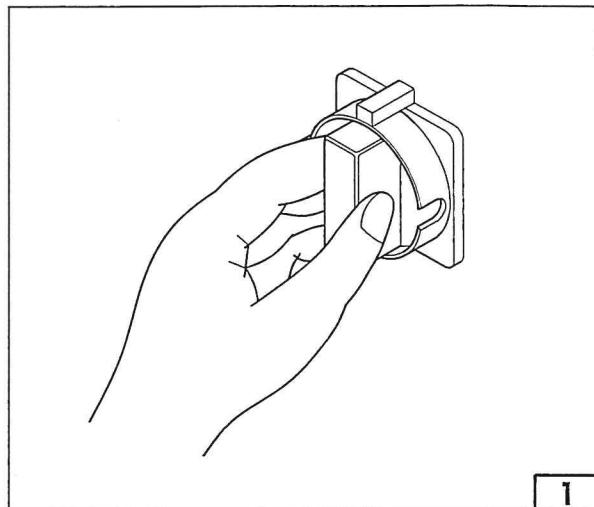
FUNZIONE TASTI	
CAMBIO LINGUA: IL CAMBIO LINGUA E' POSSIBILE PREMENDO IL TASTO <b>F5</b> <sup>5</sup>	
CAMBIO PAGINA: PER IL CAMBIO PAGINA AVANTI PREMERE IL TASTO <b>△</b> PER IL CAMBIO PAGINA INDIETRO PREMERE IL TASTO <b>▽</b>	
CAMBIO VALORI: PER IL CAMBIO VALORI PORTARSI CON I TASTI <b>△</b> SULLA PAGINA DEL VALORE DA MODIFICARE PREMERE IL TASTO <b>ENTER</b> IL VALORE VERRA VISUALIZZATO	
INSERIRE IL NUOVO VALORE CON I TASTI NUMERICI DA <b>F1</b> <sup>1</sup> A <b>F10</b> <sup>0</sup> PER CONFIRMARE PREMERE IL TASTO <b>ENTER</b>	
ALLARMI A BORDO	
REGOLAZIONI DA TASTIERA	
01 TEMPO PRELIEVO STOFFA 02 TEMPO STIRATURA STOFFA 03 TEMPO SOFFIO I PIEGA 04 TEMPO SOFFIO II PIEGA 05 TEMPO ATTESA VUOTO II 06 TEMPO II PIEGA X INTERVENTO BARRIERA 07 TEMPO RAFFREDDAMENTO X STRETCH 08 TEMPO RITORNO CARRO PRELIEVO 09 TEMPO SPRUZZO AQUA 10 RESET CONTEGGIO PEZZI	01 EMERGENZA INSERTA 02 IMPILATORE BLOCCATO 03 SCARICO NON PARTITO 04 ANOMALIA CARRO STIRO BASSO 05 INTERVENTO BARRIERA 06 ANOMALIA CARRO STIRO AVANTI 07 ANOMALIA CARRO STIRO RIPOSO 08 SCATTO TERMICO 09 PORTA SCARICO APERTA
INSERIMENTO FASI DA TASTIERA IL CONTROLLO FASI TRAMITE PULSANTI FUNZIONA SOLO NELLE PAGINE SPECIFICHE	
RESET CONTEGGIO <b>F4</b> SPRUZZO AQUA <b>F5</b> DOPPIA PRESSATA <b>F6</b> BLOCCO I LAMA <b>F7</b> FASE SETA <b>F8</b> FASE MANUALE <b>F9</b> BLOCCO VUOTO II <b>F10</b> <sup>4</sup> <sup>5</sup> <sup>6</sup> <sup>7</sup> <sup>8</sup> <sup>9</sup> <sup>0</sup>	

M.A.I.C.A.s.r.l. ISTRUZIONI X TASTIERA SIEMENS KP300 X(1005) Ver. 0.1

## 07 - OPERATION

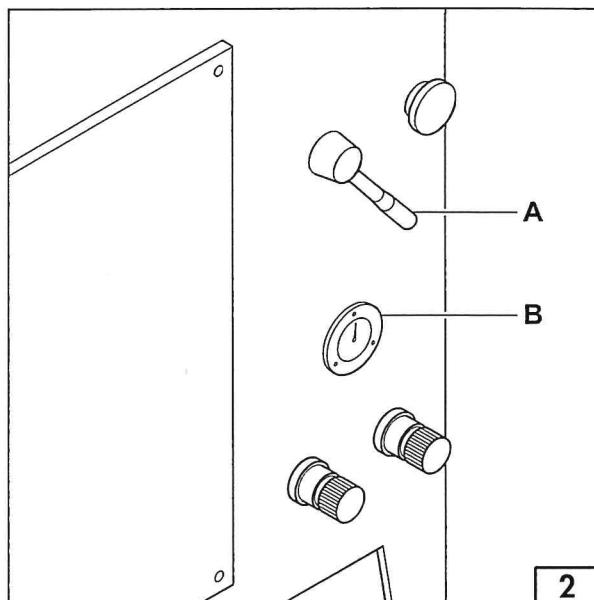
### STARTUP

- Turn the main switch to I (fig. 1). The electrical resistances in the ironing plates start to heat up and after about 15 minutes they reach working temperature. The ideal temperature, set in the factory, is approx. 150°C. Depending on the fabrics being used, this can be changed by entering a new value on the keyboard.



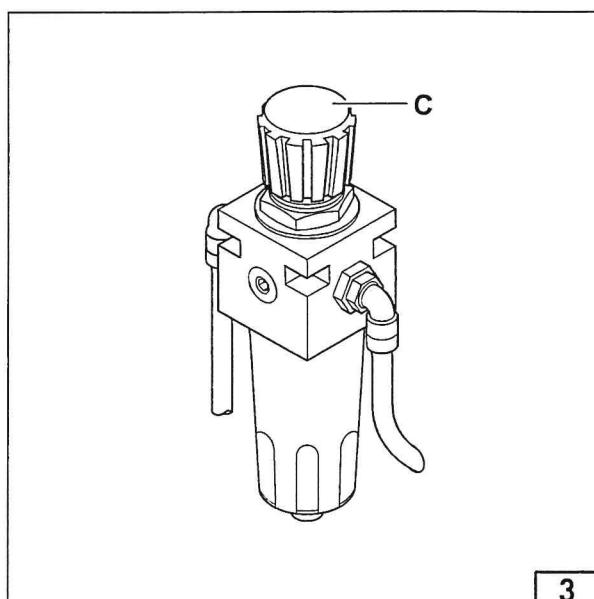
1

- Open air valve "A" and make sure that pressure gauge "B" reads a pressure of approx. 6-7 Atm (fig. 2).



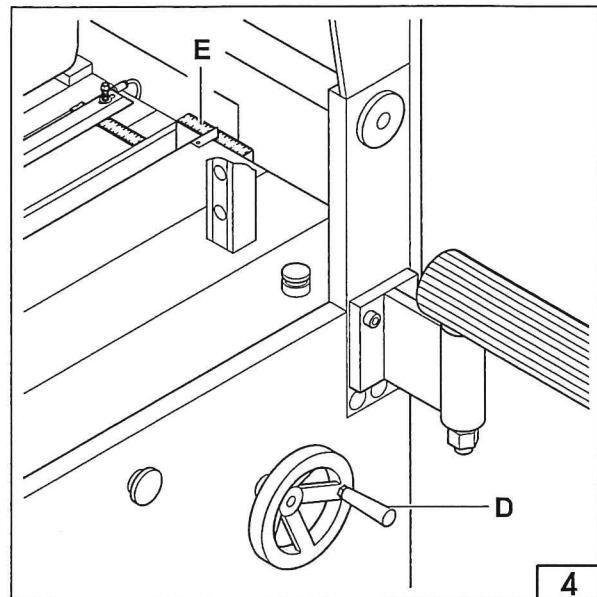
2

- If necessary, use regulator "C" on the filter unit to adjust the air pressure (fig. 3).



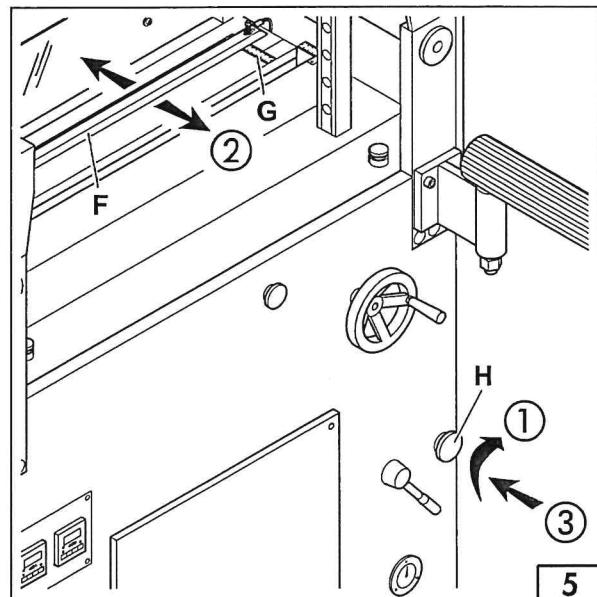
3

- Before starting ironing, the width of the turn-up must be set. This can be anything between 20 and 70 mm. Use handwheel "D" on the right-hand side of the machine to adjust the setting on graduated scale "E" (fig. 4).



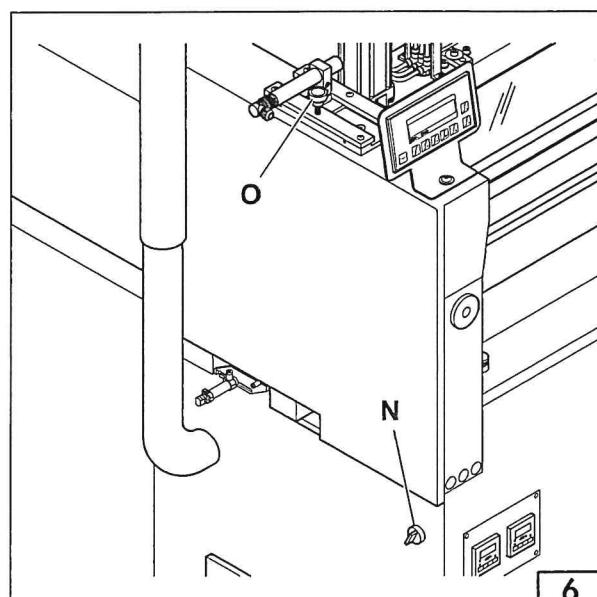
4

- Now set the width of the inside fold, again between 20 and 70 mm, by moving stop rod "F" by hand to adjust the setting on graduated rod "G" (fig. 5). To move the stop rod, first release it by turning pushbutton "H" as shown in the figure. Once the inside fold measurement has been set, block the rod by pressing pushbutton "H".
- For sizes in excess of 30 mm, use the fabric-support spacers. These must never be set fast, but should have a certain amount of play.



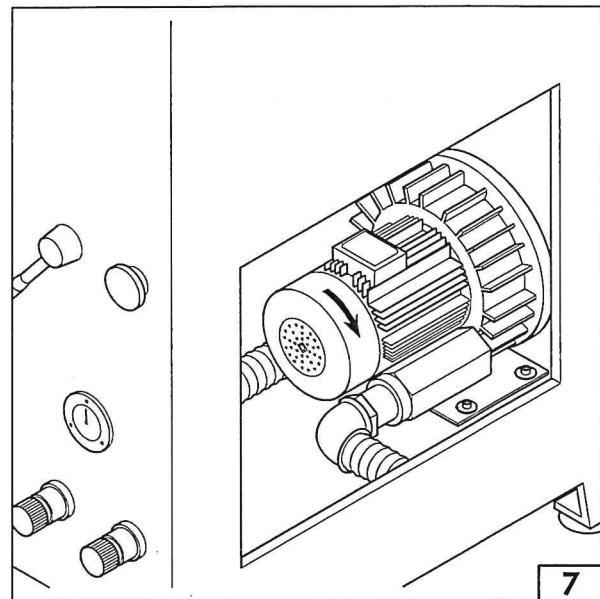
5

- If using a stiff fabric, the laser beam is necessary for perfect alignment. Use switch "N" (fig. 6). This beam can be adjusted by means of handwheel "O" on the left-hand side of the machine.
- Turn on the aspirator by pressing one of the two START pushbuttons on the machine. The aspiration stops automatically about 2 minutes after it starts, in the case in which the machine does not come used.



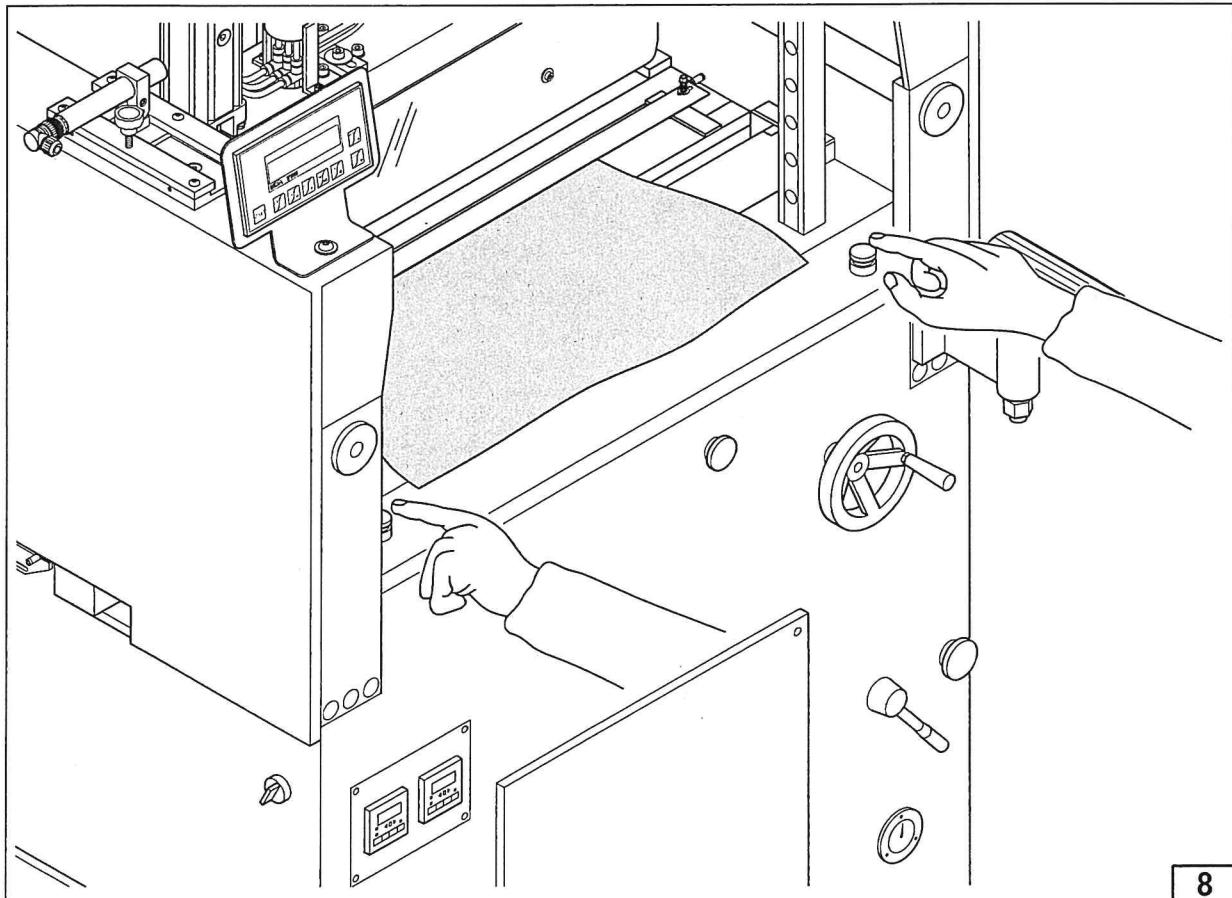
6

- Check that the machine rotates in the same direction as that shown by the arrow on the motor (fig. 7).



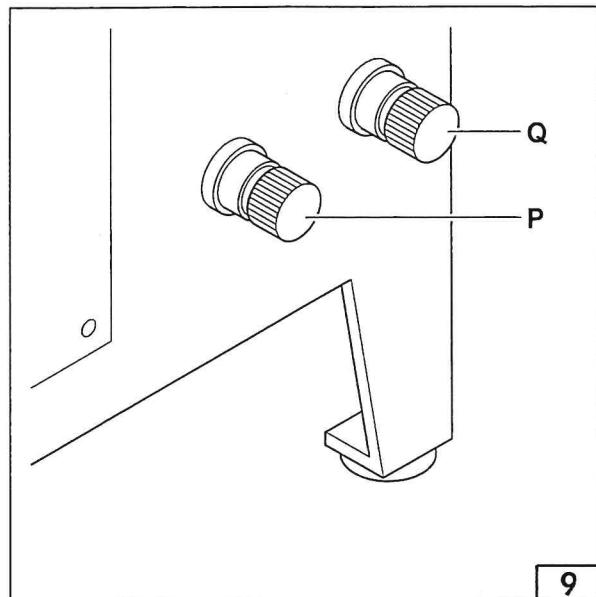
7

- Place the fabric for folding on the machine, lining it up against the stop rod. If the fabric is striped, check the alignment using the laser beam starting from the armhole or neck notch.
- If using a stiffener, press the pedal to get sufficient fabric suction.
- Start the machine up by pressing the two green pushbuttons, as in figure 8. The 1<sup>st</sup> fold is then made, the fabric is turned and the 2<sup>nd</sup> fold made, together with the ironing of the whole turn-up.



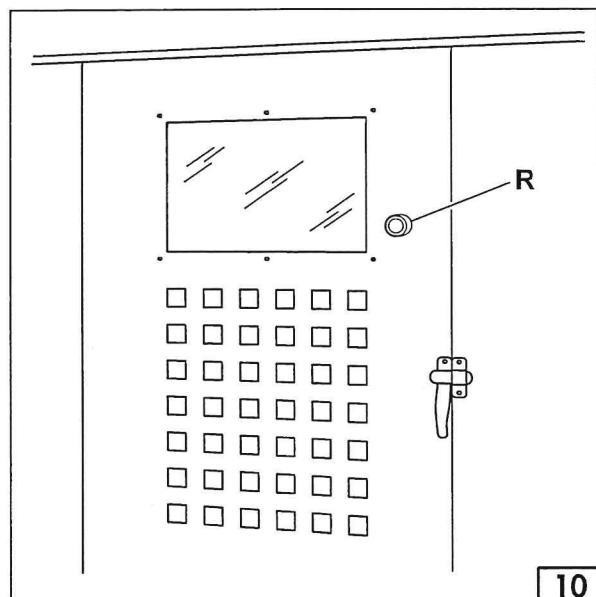
8

- If there are any imperfections during the 1<sup>st</sup> fold, use regulator "P" (fig. 9) to decrease or increase the air pressure. We recommend using the minimum pressure needed. The 1<sup>st</sup> fold is blown under the moving rod that stops the fabric.
- During the 2<sup>nd</sup> fold, check that the fabric is turned properly. If the blow is not strong enough, the fabric will not turn sufficiently; if it is too strong, the fabric comes away from the suction surface (this may happen with particularly light-weight fabric). Use regulator "Q" to adjust the strength.
- If the guard barrier is excited during ironing, the machine automatically stops. Press the two green pushbuttons again to restart.



- It may happen that, after second ironing, especially in the case of synthetic fabrics, the turn-up tends to open when it is removed.
- To avoid this problem, delay the stacker brush movement by adjusting the brush start time.
- We recommend removing the ironed items from the stacker when there are 50-60. To make this easier to do, press pushbutton "R" on the back of the machine (fig. 10).
- Open the back door, remove the ironed items and close the door again to start the machine back up.

**Attention:** if the back door is left open during operation, the machine will stop. Press the two green startup pushbuttons to restart the cycle.

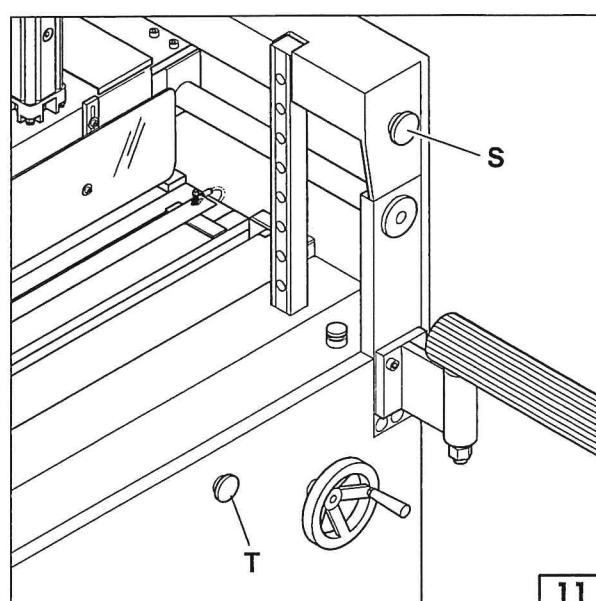


Emergency pushbutton "S" for stopping the machine completely in the event of a malfunction (fig. 11).

To restart the machine:

- release the emergency pushbutton by turning it a quarter turn anti-clockwise;
- press one of the two black pushbuttons;
- press the two black start pushbuttons until the ironing carriage returns to the start position.

Partial emergency (or reset) pushbutton "T" is for stopping the machine without resetting the next work cycle.



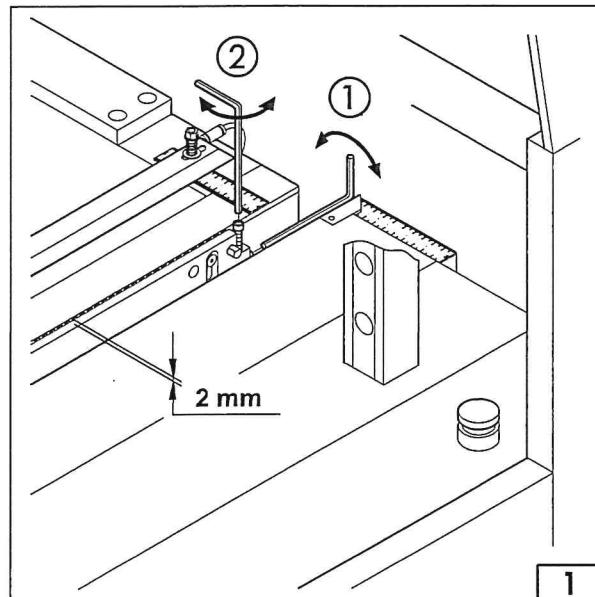
## 08 - ADJUSTMENTS



Always disconnect the machine from the mains supply, the compressed air supply and wait for the ironing parts to cool down before undertaking any adjustment, replacement or maintenance work.  
The operations described below must only be carried out by specialized personnel.

### VARYING THE FABRIC THICKNESS

If the thickness of the fabric differs, the bar can be adjusted using the side screws as shown in figure 1.  
The recommended distance is 2 mm.



## 09 - MAINTENANCE



Always disconnect the machine from the mains supply, the compressed air supply and wait for the ironing parts to cool down before undertaking any adjustment, replacement or maintenance work.

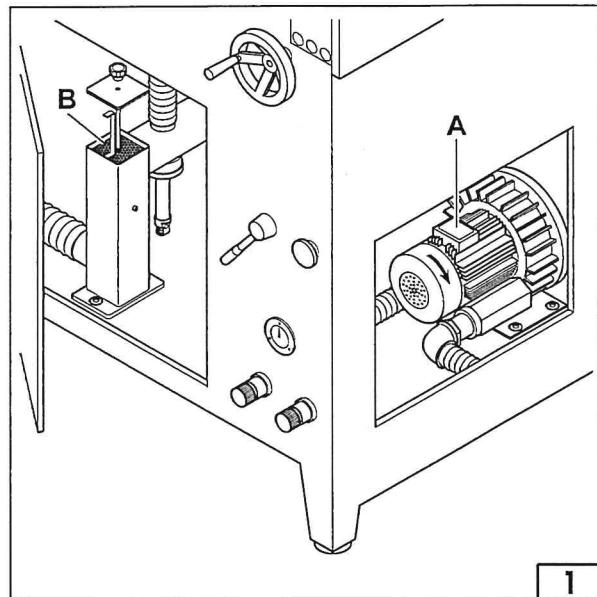
The operations described below must only be carried out by specialized personnel.

The 1005 does not require any special maintenance during use thanks to its rational design.

We recommend lubricating the joints regularly and following all instructions in this manual very carefully to keep this machine in good and reliable working condition.

### REGULAR CLEANING

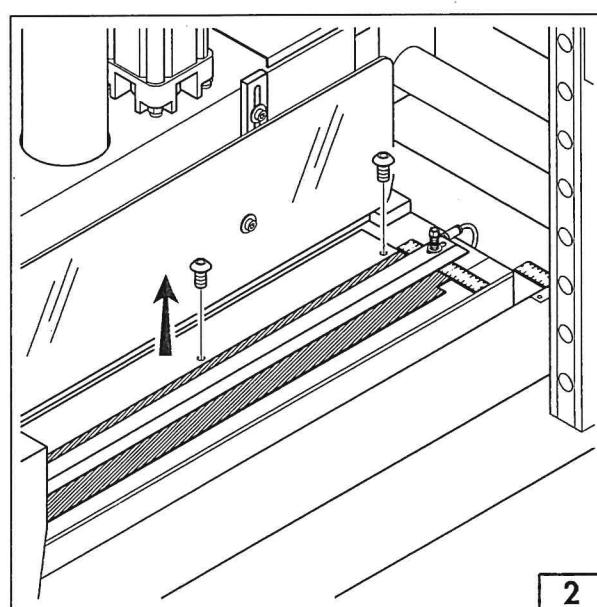
Open the doors at the front and on the right-hand side of the machine and clean motor "A" and safety valve "B" with an air jet (fig. 1).



1

If there is insufficient suction, use a stiff-bristle brush or pin to remove any threads or substances blocking the slits on the folding surface.

After long periods of use, we recommend removing the covers on this surface and removing any deposits underneath (fig. 2).



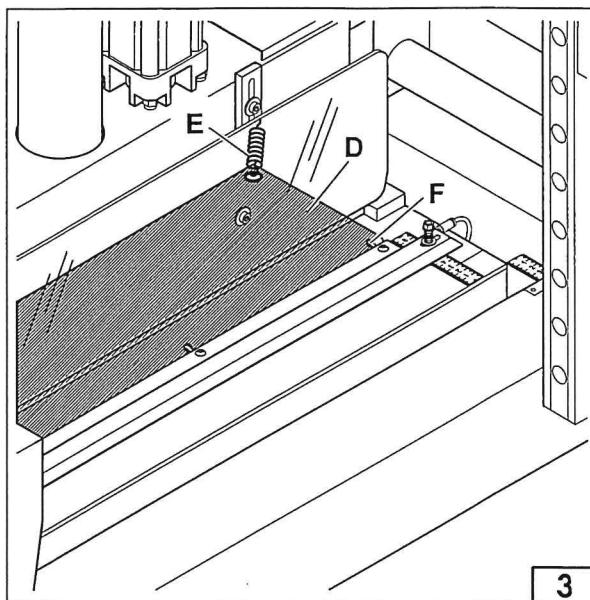
2

## REPLACING THE NO-SHINE SHEET

If, when unloading the ironed turn-up, the turn-up tends to open up, check that teflon sheet "D" is not worn (fig. 3).

If necessary, replace by releasing the two lateral springs "E" at the back of the machine and remove the sheet from the three front hooks "F".

When replacing with a new sheet, make sure that the rough side of the sheet is facing upwards.



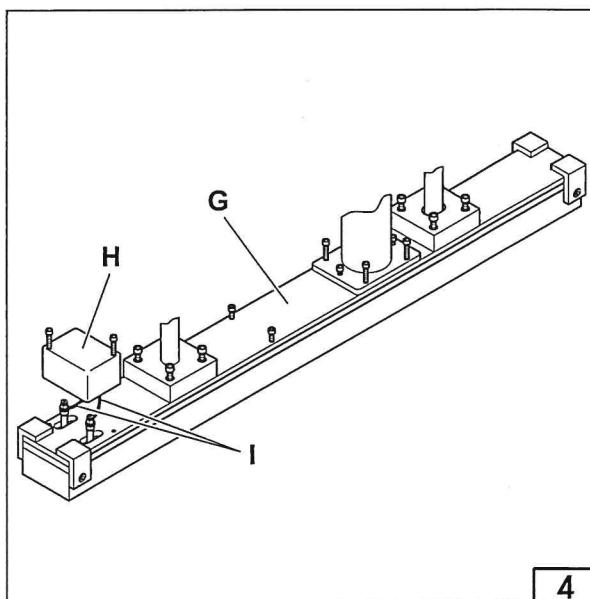
3

## REPLACING THE RESISTANCES

If the ironing is not perfect, check that the top and bottom plates heat up properly. If this is not the case, check the efficiency of the resistances and replace if necessary as described below.

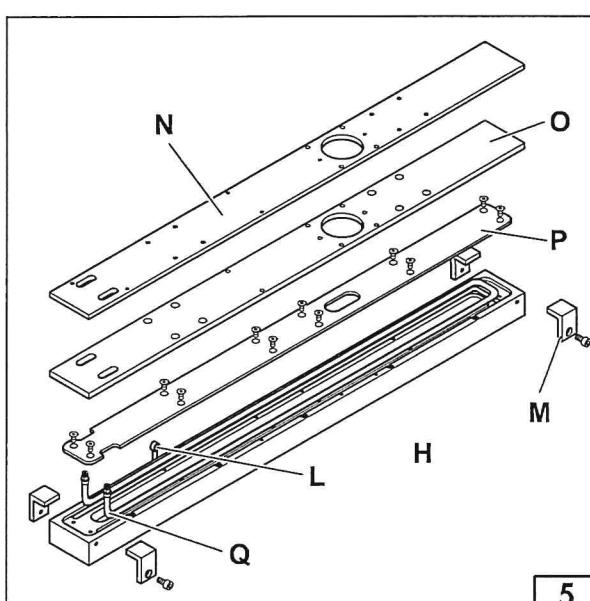
### Upper resistance

- (Cut off the air).
- Unscrew all the screws on cover "G" and box "H" (fig. 4).
- Disconnect the resistance wires "I".



4

- Disconnect thermal sensor "L" (fig. 5).
- Unscrew the screws from the support brackets "M" to remove cover "N" and spacer "O" (fig. 4).
- Unscrew the screws and remove cover "P".
- Extract resistance "Q".



5

## **10 - MALFUNCTIONS, CAUSES AND REMEDIES**

### **Ironing plates do not heat up**

- Check the efficiency of the resistances (see page 16 to replace).
- Check the efficiency of the thermal sensors.
- Check the efficiency of the electromagnetic switch with a tester.

### **Irregular temperature**

- Check the efficiency of the thermal sensors.
- Check the set temperature (see "Keyboard setting", page 9).

### **Imperfect ironing**

- Check that the set temperature is sufficiently hot (see "Keyboard setting", page 9).
- Check that the ironing time is not too short (see "Keyboard setting", page 9).

### **Ironed turn-up tends to open up**

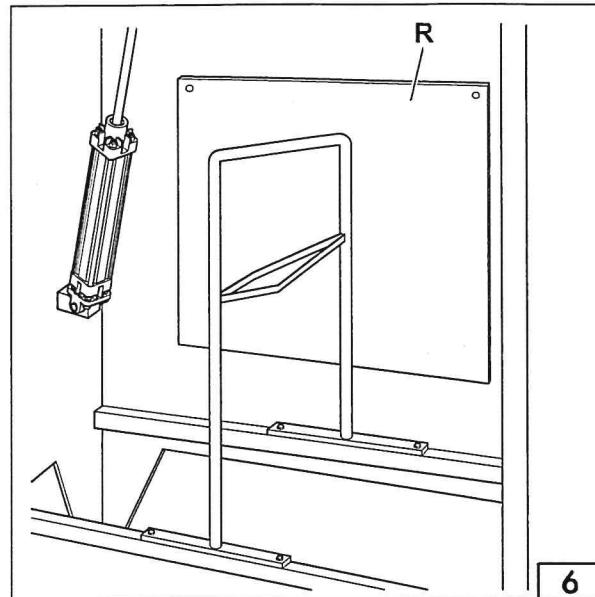
- Check the teflon sheet (see page 16 to replace).
- Delay the stacker brush movement (see "Keyboard setting", page 9).

### **Not enough suction**

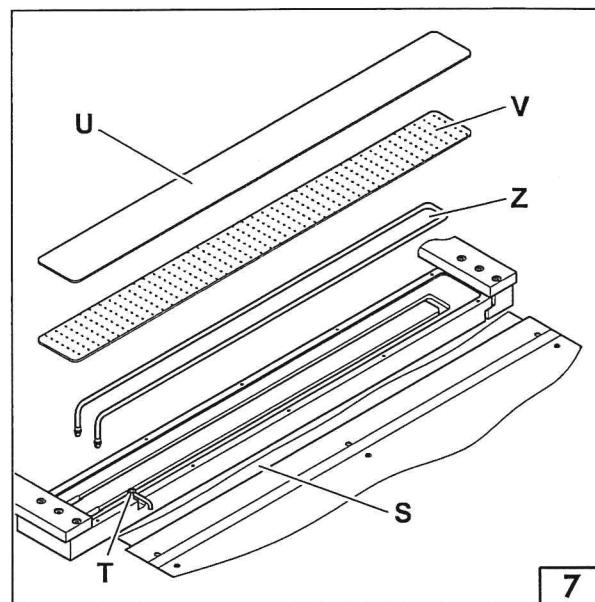
- Check the air pressure.
- Remove any threads or dirt (see page 15).

### **Lower resistance**

- Access the machine from the front or back by removing panel "R" (fig. 6).



- Remove sheet "S" and disconnect the resistance wires (fig. 7).
- Disconnect thermal sensor "T".
- Extract copper strip "U" and rubber strip "V".
- Extract resistance "Z".

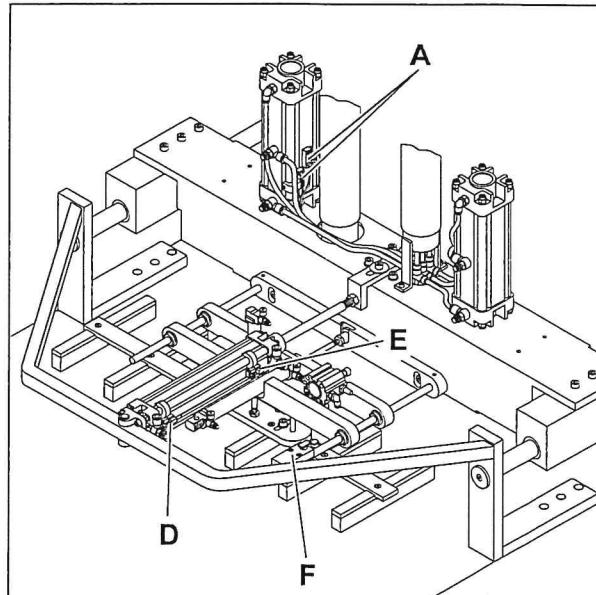


### **DEMOLITION**

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.

### **The ironing carriage does not move**

- Check that there is no dirt or dust on the photoelectric cells in the hand barrier.
- Check that limit stop "A" is pressed.
- Check that limit stop "B" at the end of the unloading cylinder gives the OK for the ironing plates to close.
- Check the efficiency of led "C" (if the unloading surface does not close, check that the led is properly positioned. If not, move in either direction until it lights up and then lock).



### **The carriage does not lift the fabric when fully forward**

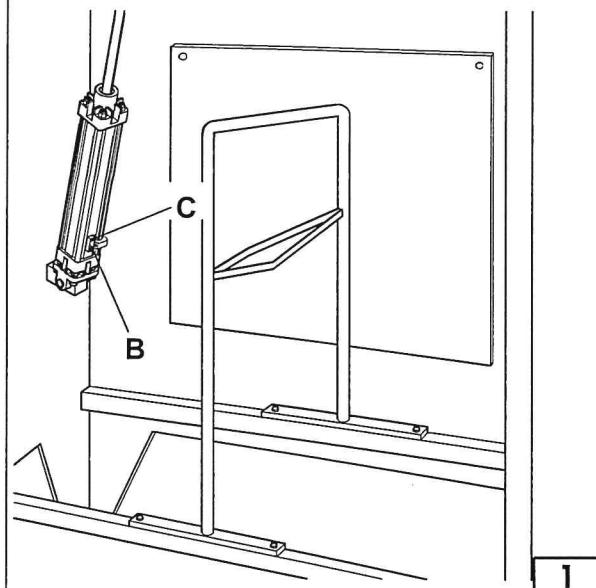
- If occurs during 1<sup>st</sup> ironing, check the efficiency of magnetic sensor "D".
- If occurs during 2<sup>nd</sup> ironing, check the efficiency of magnetic sensor "E".

### **The carriage does not rise**

- Check that limit stop "A" is free of obstructions.

### **Stacker surfaces do not open**

- Check the efficiency of limit stop "F".



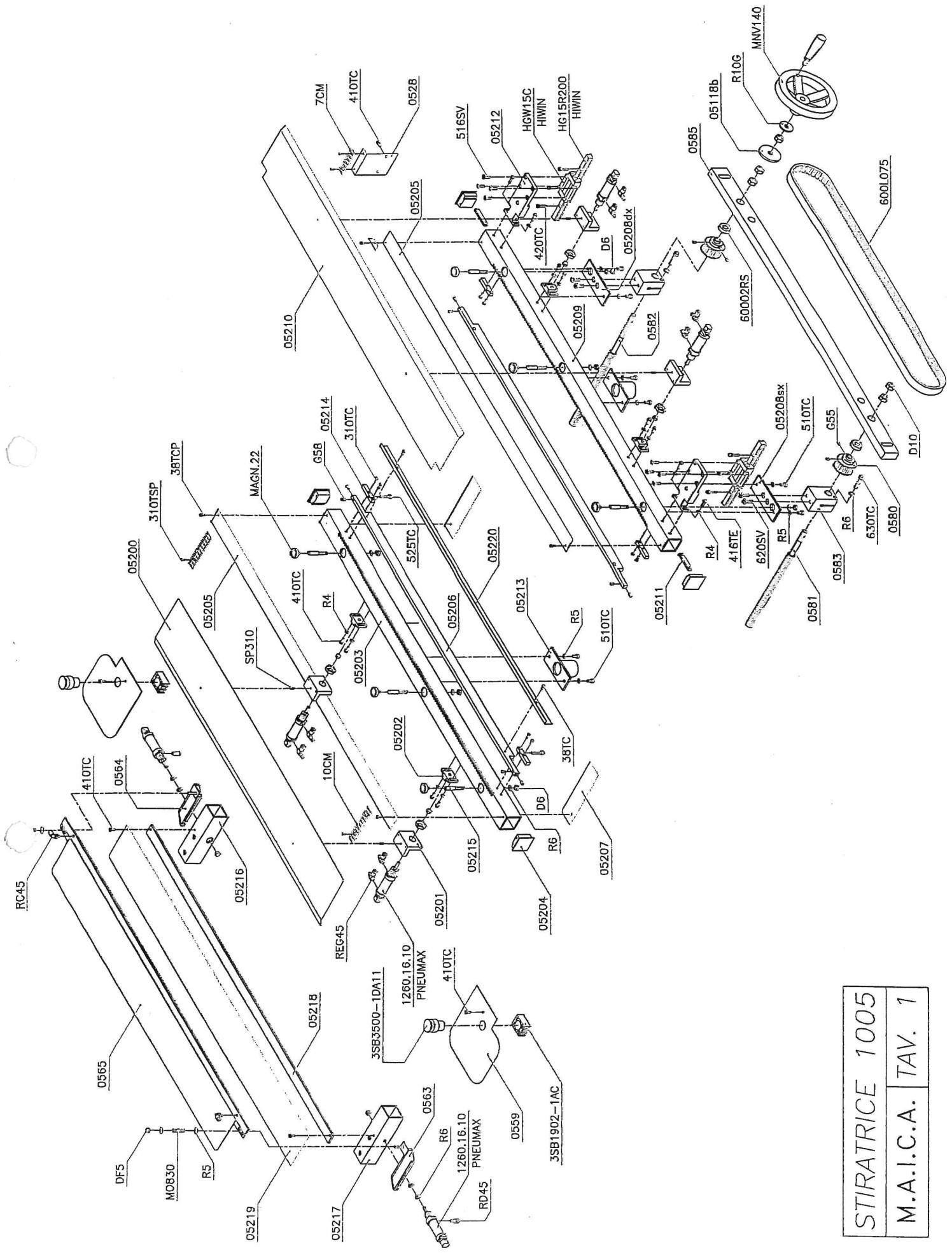
1

## **11 - SPARE PARTS TABLES**

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

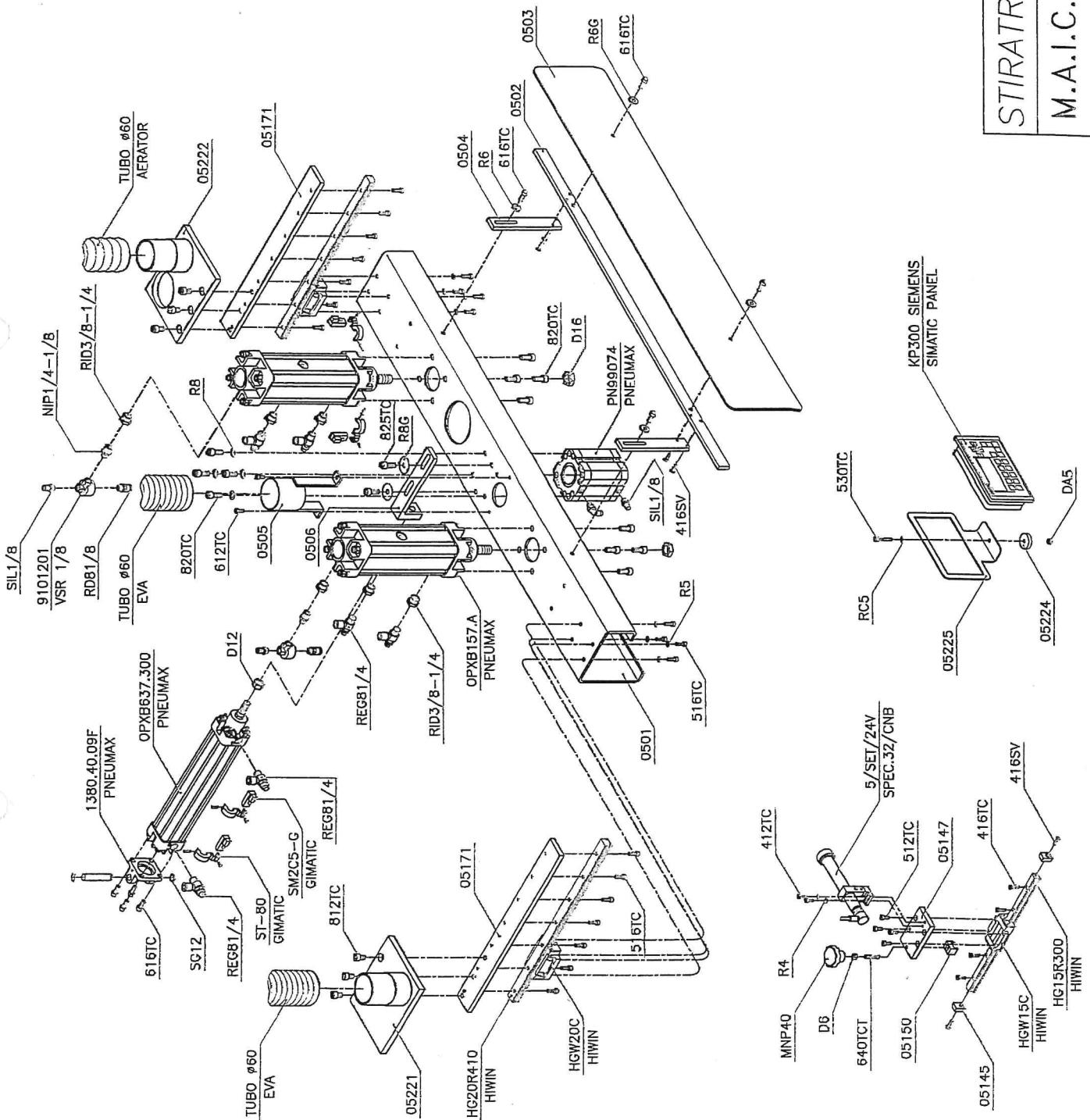
1. Model and serial number of the machine
2. Spare part code
3. Corresponding spare part table

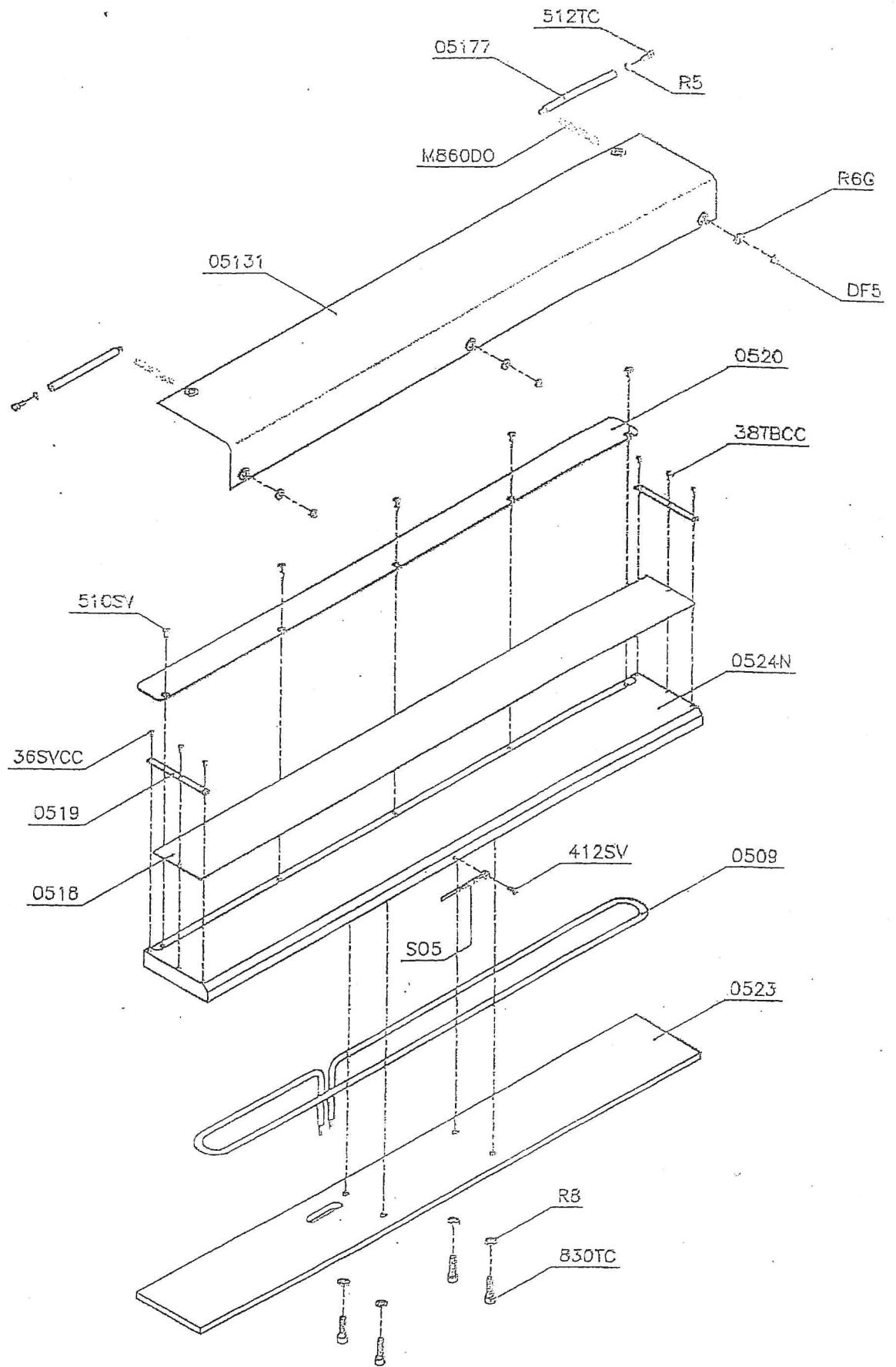
**Example:**    IRONING MACHINE model 1005    Serial no. ....    Code 0524    Table 1



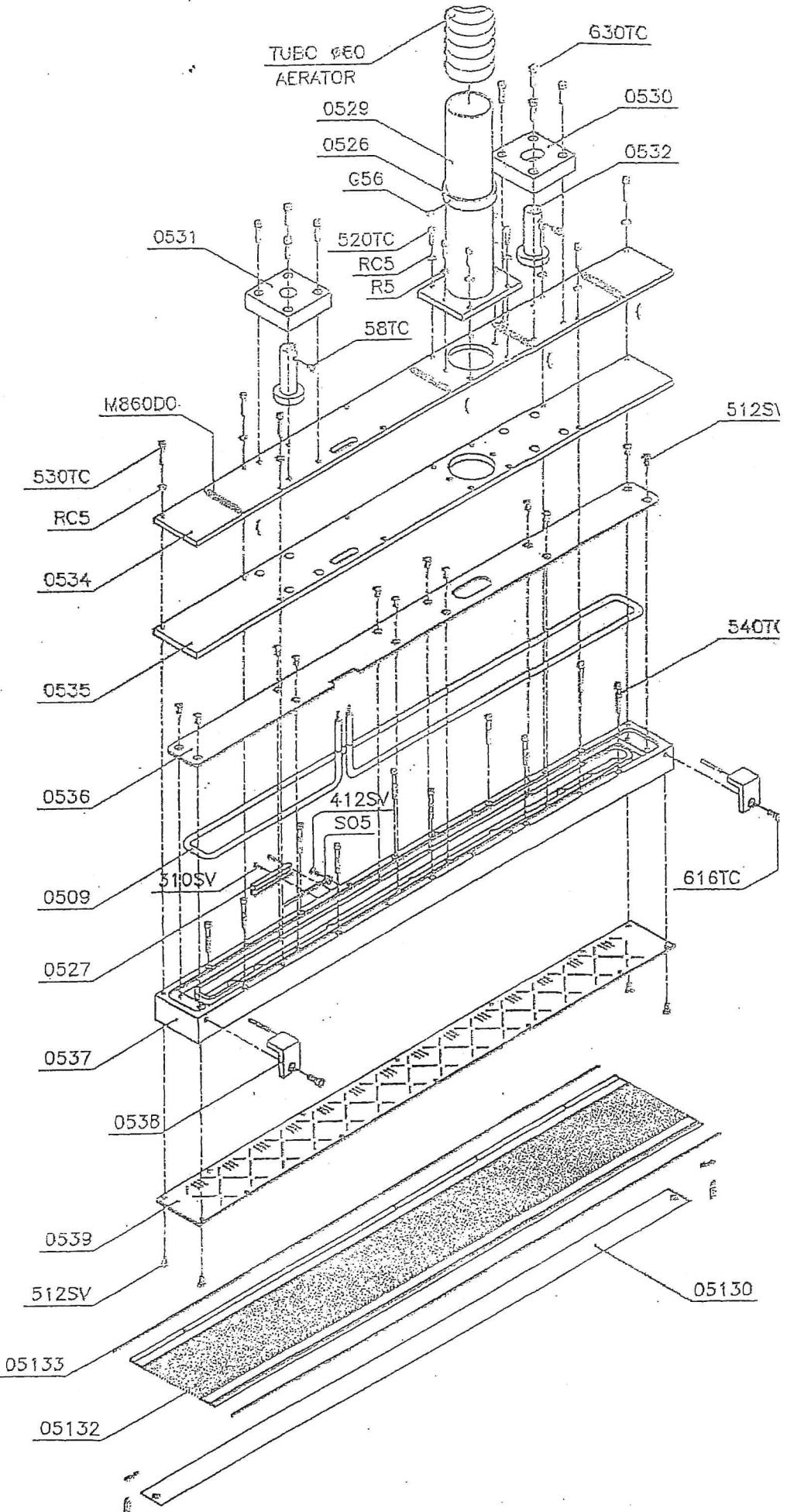
STIRATRICE 1005

STIRATRICE 1005  
 M.A.I.C.A. | TAV. 2

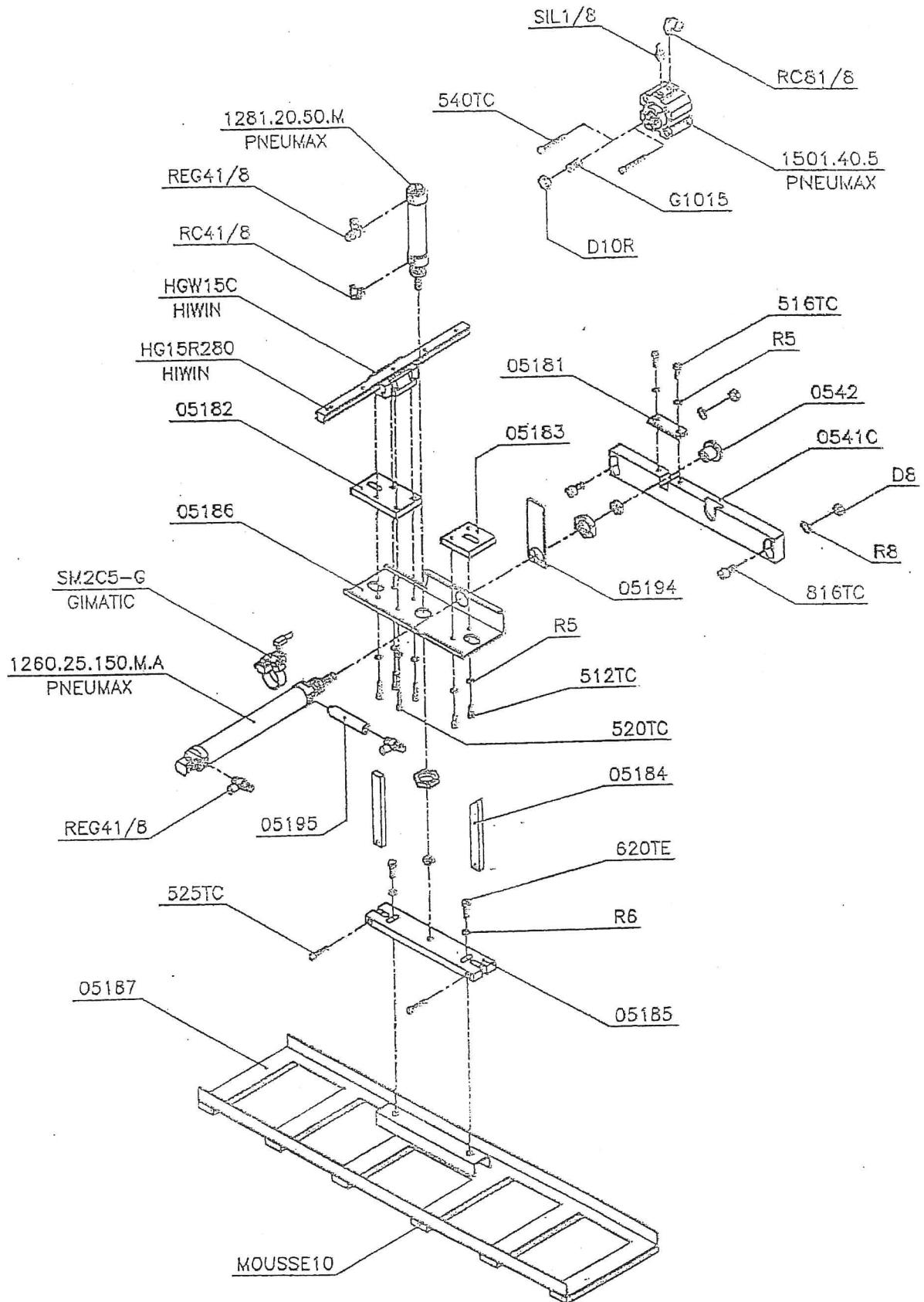


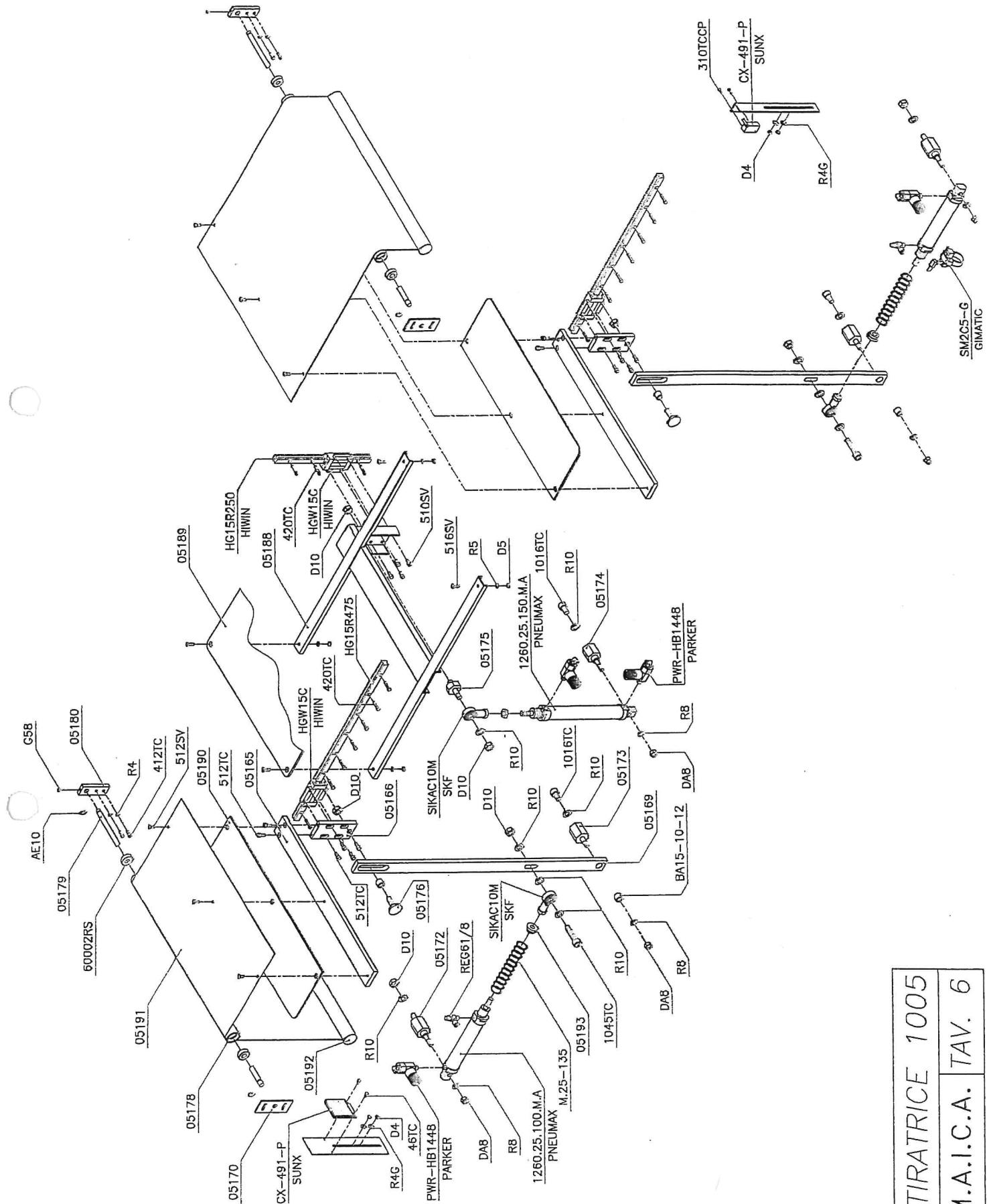


STIRATRICE 1005  
M.A.I.C.A. TAV. 3



STIRATRICE 1005  
M.A.I.C.A. TAV. 4

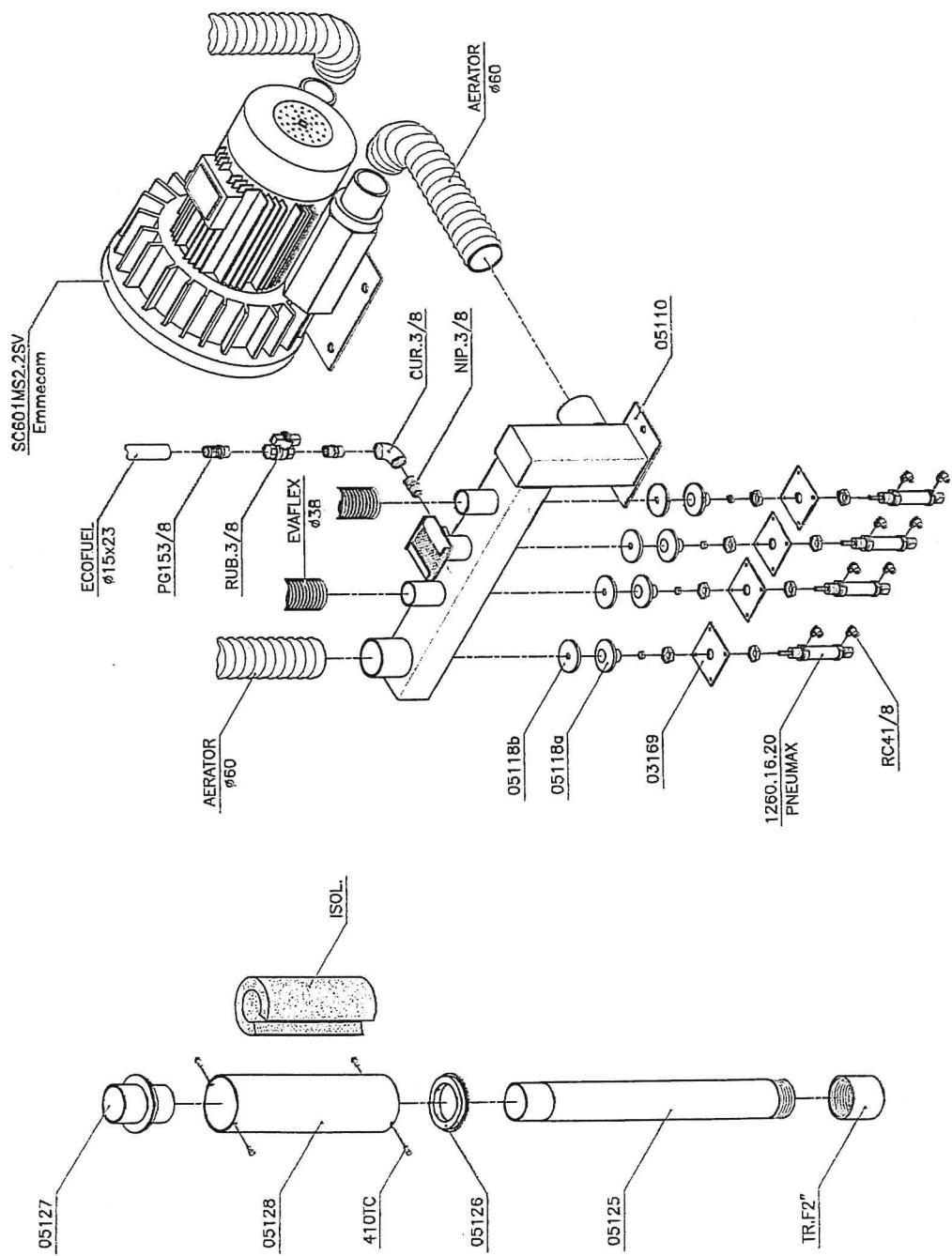


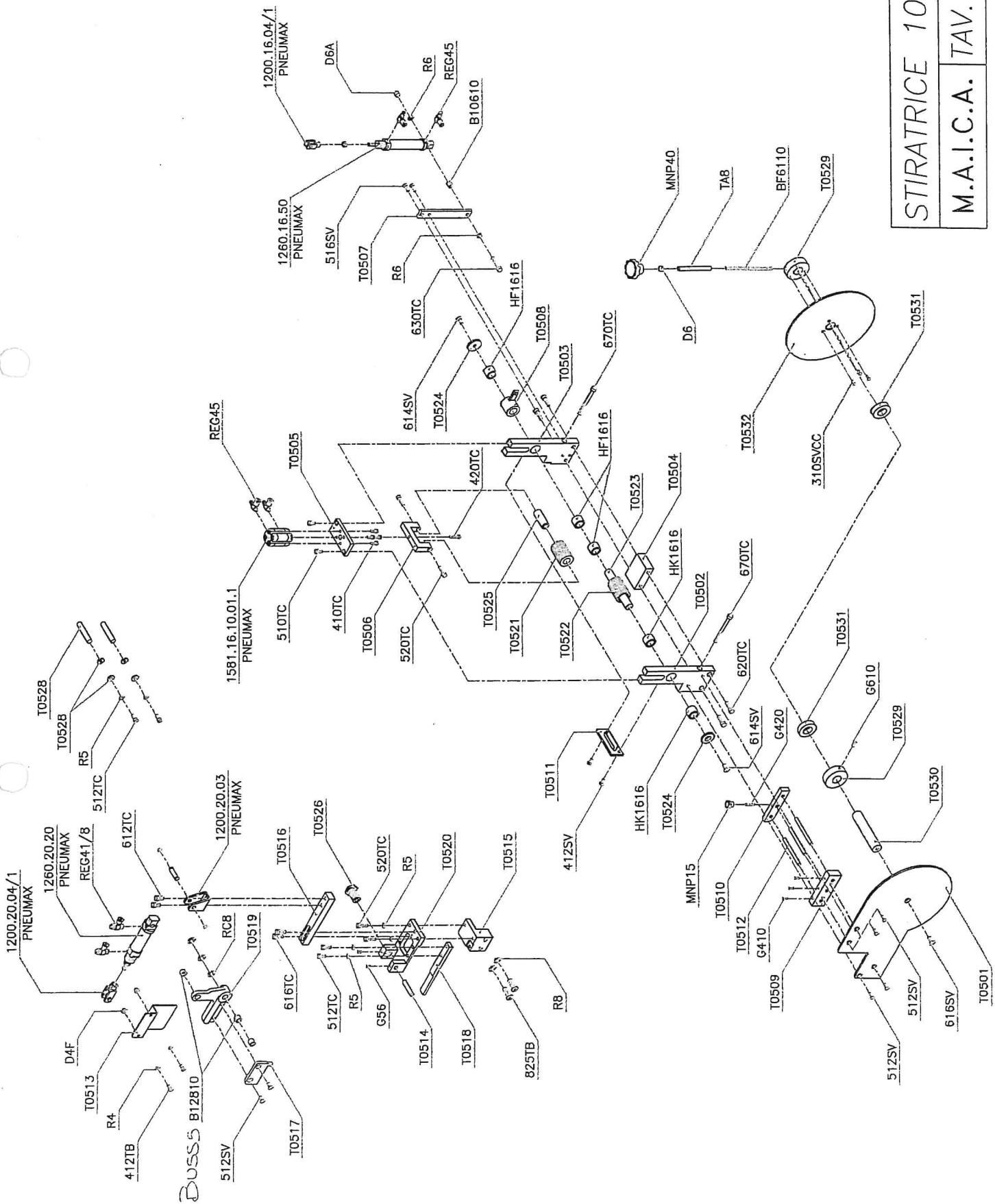


STIRATRICE 1005

M.A.I.C.A. TAV. 6

STIRATRICE 1005	M.A.I.C.A.	TAV. 7
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STIRATRICE 1005  
M.A.I.C.A. TAV. 8

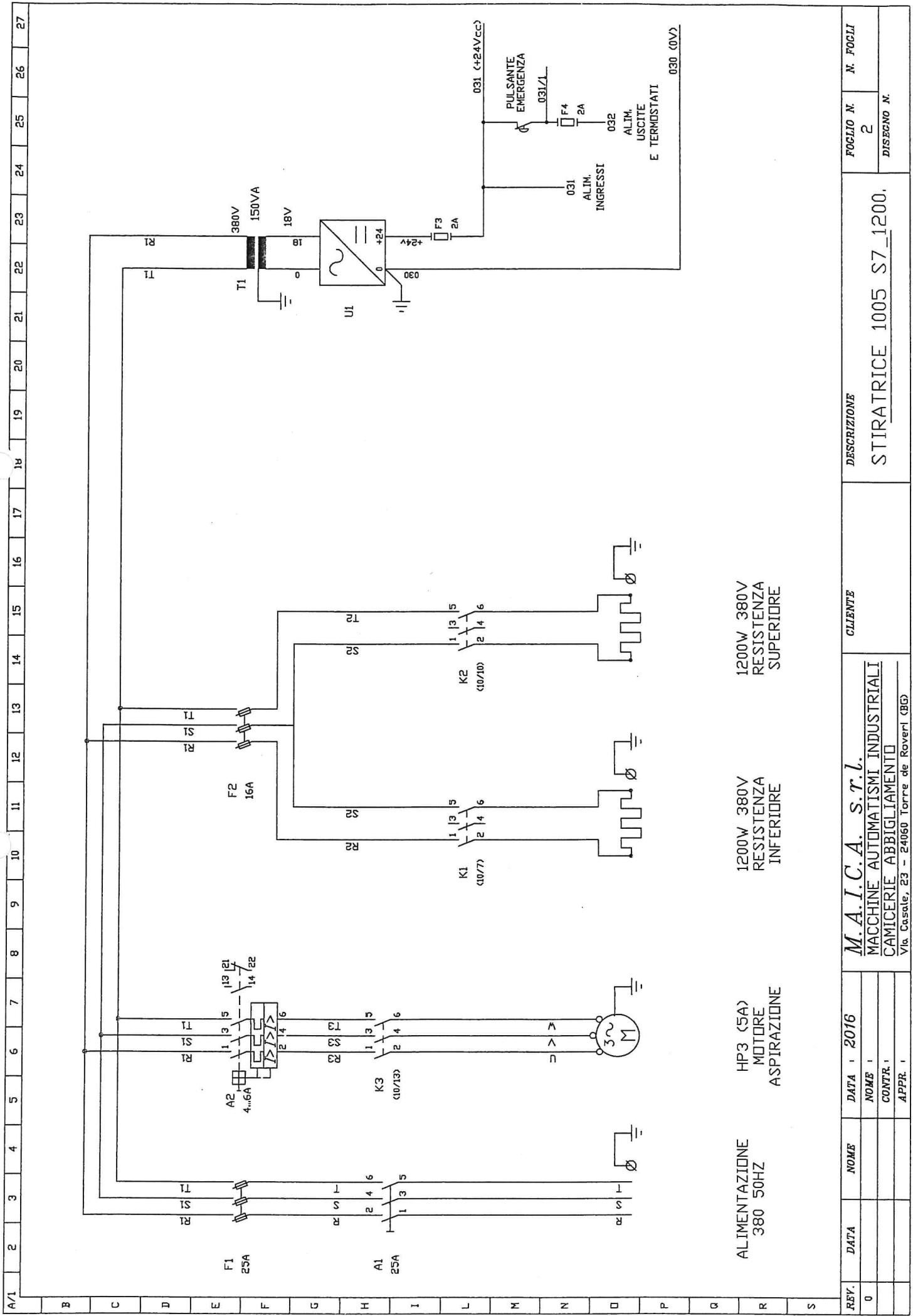
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B      C      D      E      F      G      H      I      J      K      L      M      N      O      P      Q      R      S

MACCHINA STIRRATRICE  
MOD. 1005 S7-1200.

M.A.I.C.A.S.T.R.I.  
M.A.I.C.A.S.T.R.I.

REV.	DATA	NOME	DATA	2016	DESCRIZIONE	FOGLIO N.	N. FOGLI
0					MACCHINE AUTOMATISMI INDUSTRIALI	1	
					CAMICERIE ABBIGLIAMENTO		
					Via Cassale, 23 - 24060 Torre de Rovere (BG)		



A/1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	20	19	18	21	22	23	24	25	26	27
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035(24V)

B

C

D

E

F

G

H

I

J

L

M

N

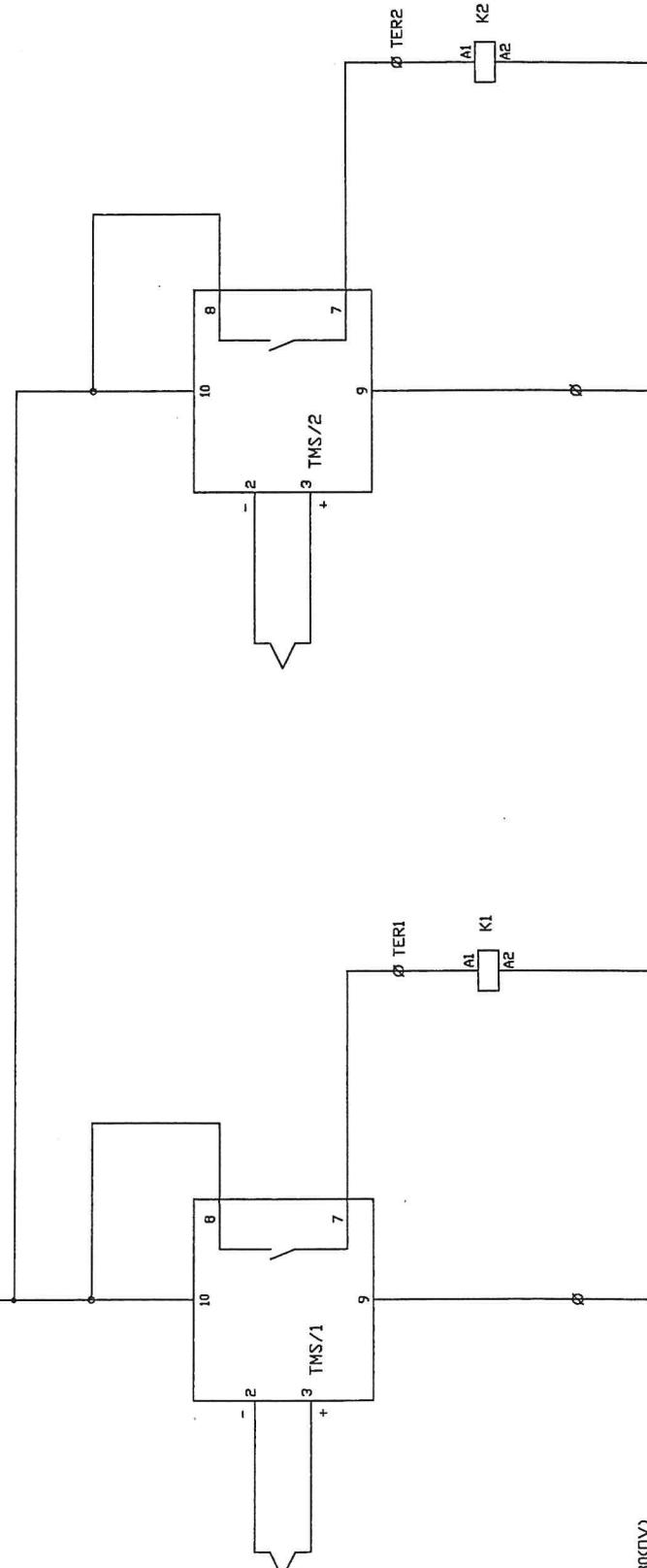
O

P

Q

R

S



TERMOSTATO RESISTENZA INFERIORE

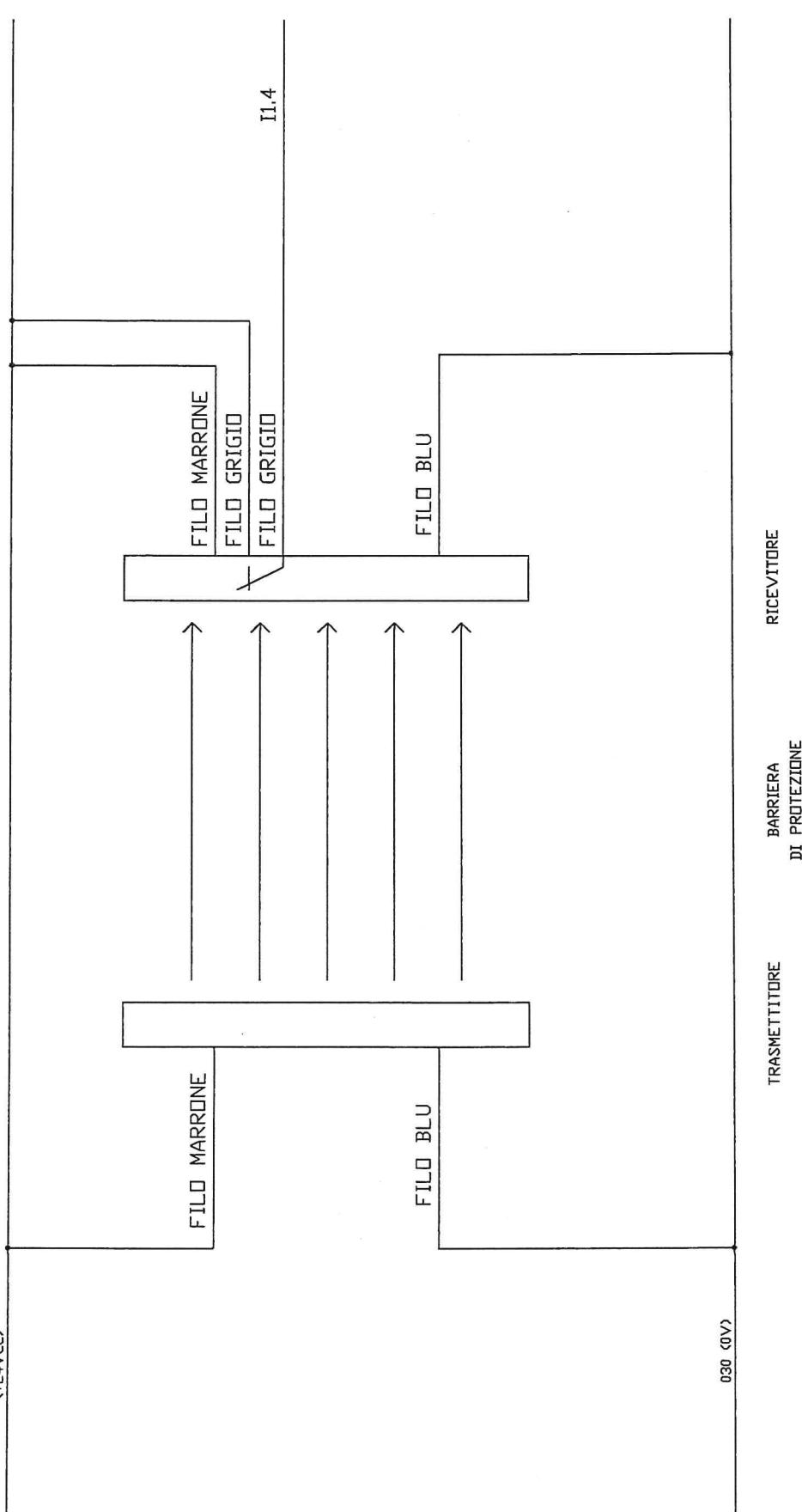
TERMOSTATO RESISTENZA SUPERIORE

REV.	DATA	NOME	DATA : 2016	M. A. I. C. A. S. T. L.	CLIENTE	DESCRIZIONE	FOGLIO N.	N. FOGLI
0				MACCHINE AUTOMATISMI INDUSTRIALI CASICERIE ABBIGLIAMENTO	STIRRATRICE 1005 S7_1200		3	DISEGNO N.

Via Casale, 23 - 24060 Torre de Roveri (BG)  
APP. 1

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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(+24Vcc)



REV. DATA Nome Data - 2016

CLIENTE

DESCRIZIONE

FOGLIO N.

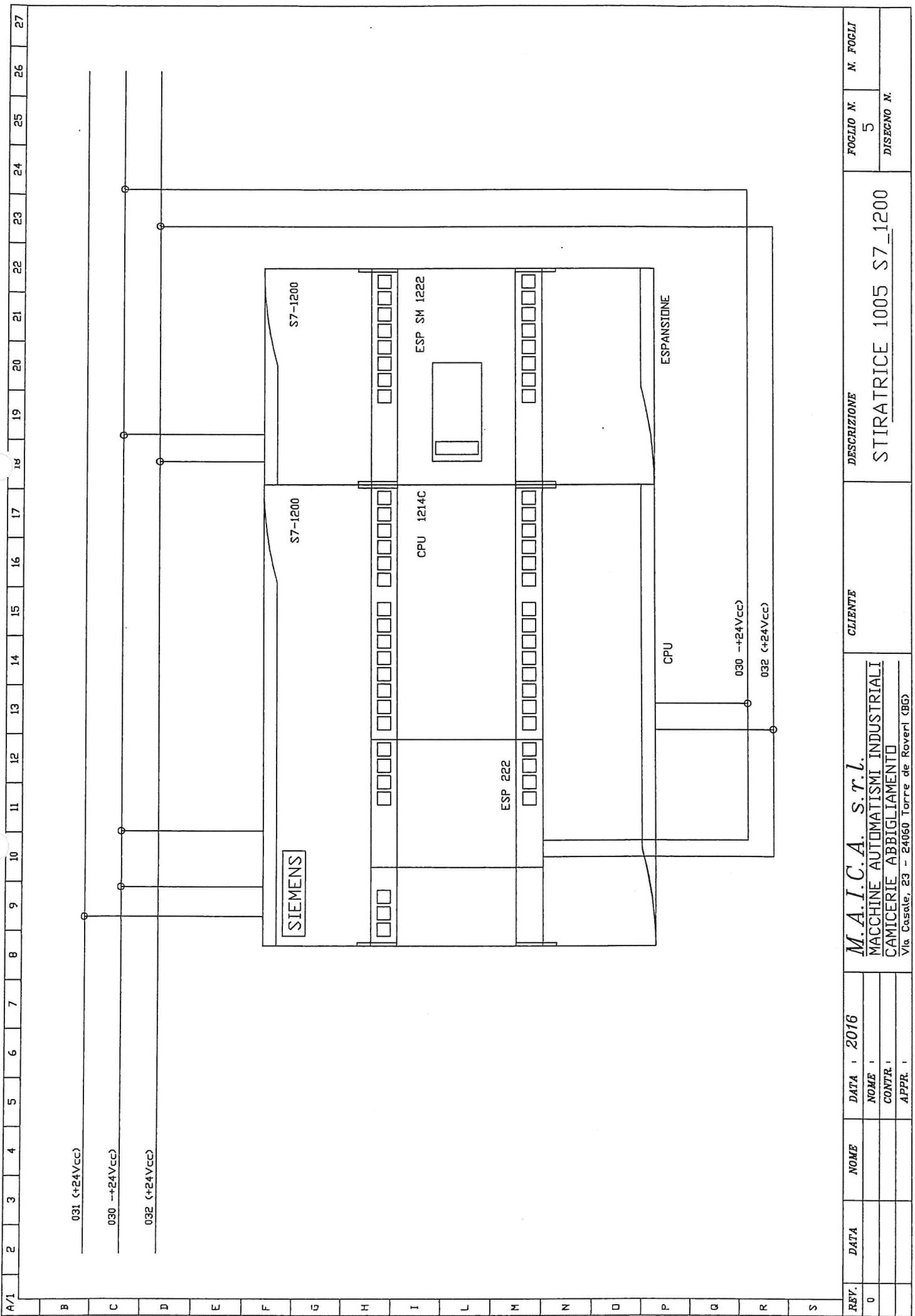
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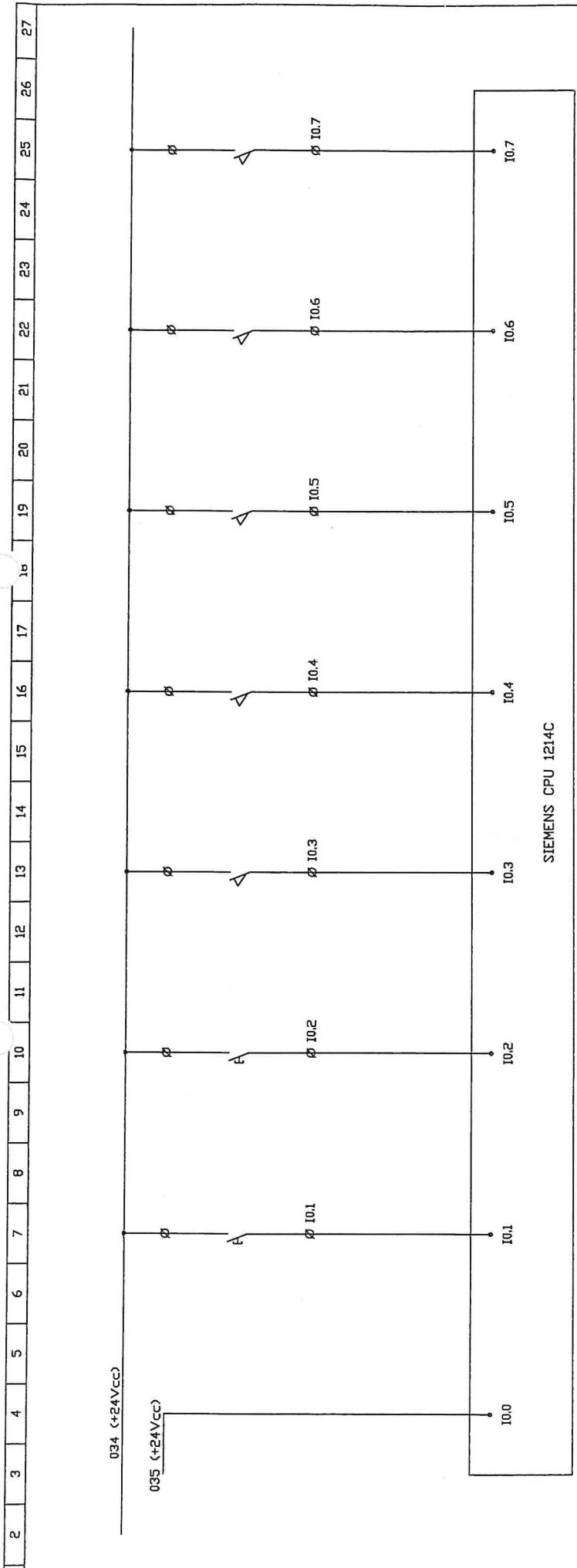
N. FOGLI

DISCENDO M.

STIRRATRICE 1005 S7\_1200

DISCENDO M.

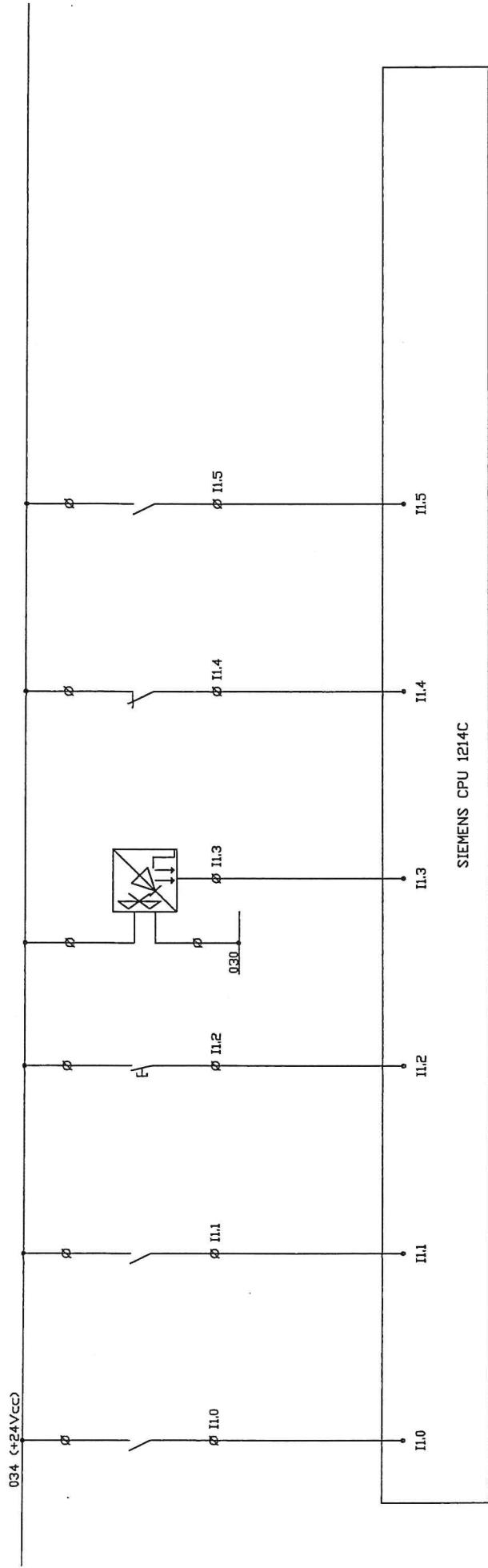




030 (0V)	EMERGENZA	PULSANTE START DX	PULSANTE START SX	CARRO STIRO ALTO	CARRO STIRO AVANTI	FINECORSAS	CARRO STIRO RIPUSO	CARRO STIRO IMPILATORE	FINECORSAS	FINECORSAS
									PIANI IMPILATORE	PIANI APERTI

R.S.V.	DATA	NOME	DATA	DESCRIZIONE	FOGLIO N.	
					6	N. FOGLI
0			20/16	M. A. I. C. A. S. r. l.		
				MACCHINE AUTOMATISMI INDUSTRIALI		
				CAMICERIE ABBIGLIAMENTO		
				Via Casale, 23 - 24060 Torre de Roveri (BG)		
				SТИRATRICE 1005 S7_1200		
						DISEGNO N.

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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030 <0V>

P  
FINE CORSA  
PORTA  
SCARICO

P  
PEDALE  
ASPIRAZIONE

BARRIERA  
DI PROTEZIONE

FOTOCELLULA  
CONTROLLO  
PIANO SCARICO

SCATTO  
TERMICO

COLLEGATO  
SOLO X  
MODELLO  
CON TAGLIO  
ADESIVO

M. A. I. C. A. S. r.l.  
MACCHINE AUTOMATISM. INDUSTRIALI  
Camicerie Abbigliamento  
Via Casale, 23 - 24060 Torre de Roveri (BG)

FOGLIO N.  
7

N. FOGLI  
DISSEGN. N.

SIIRATRICE 1005 S7\_1200

FOGLIO N.  
7

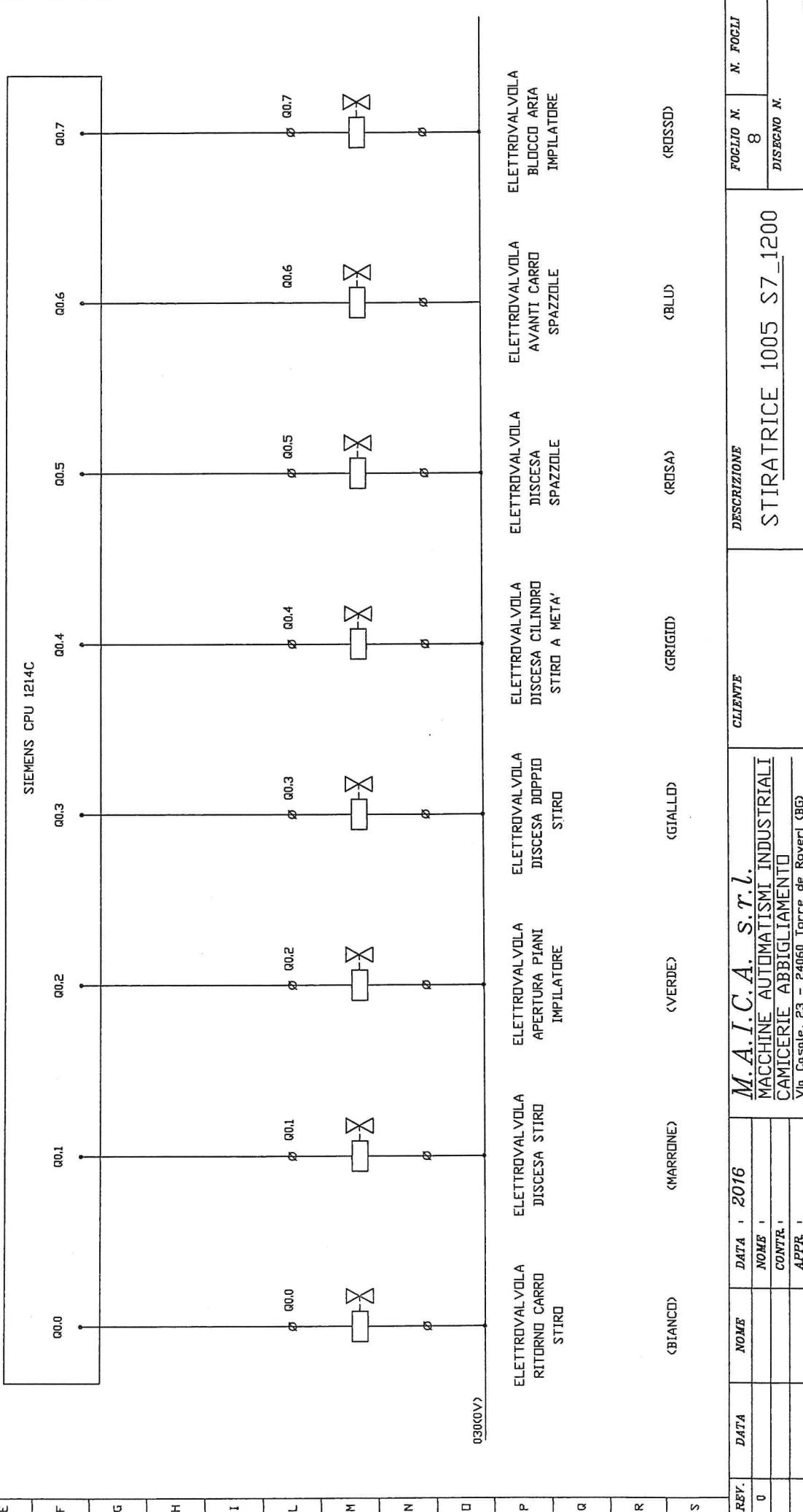
N. FOGLI  
DISSEGN. N.

REV. DATA NOME DATA 2016 M. A. I. C. A. S. r.l. CLIENTE DESCRIZIONE

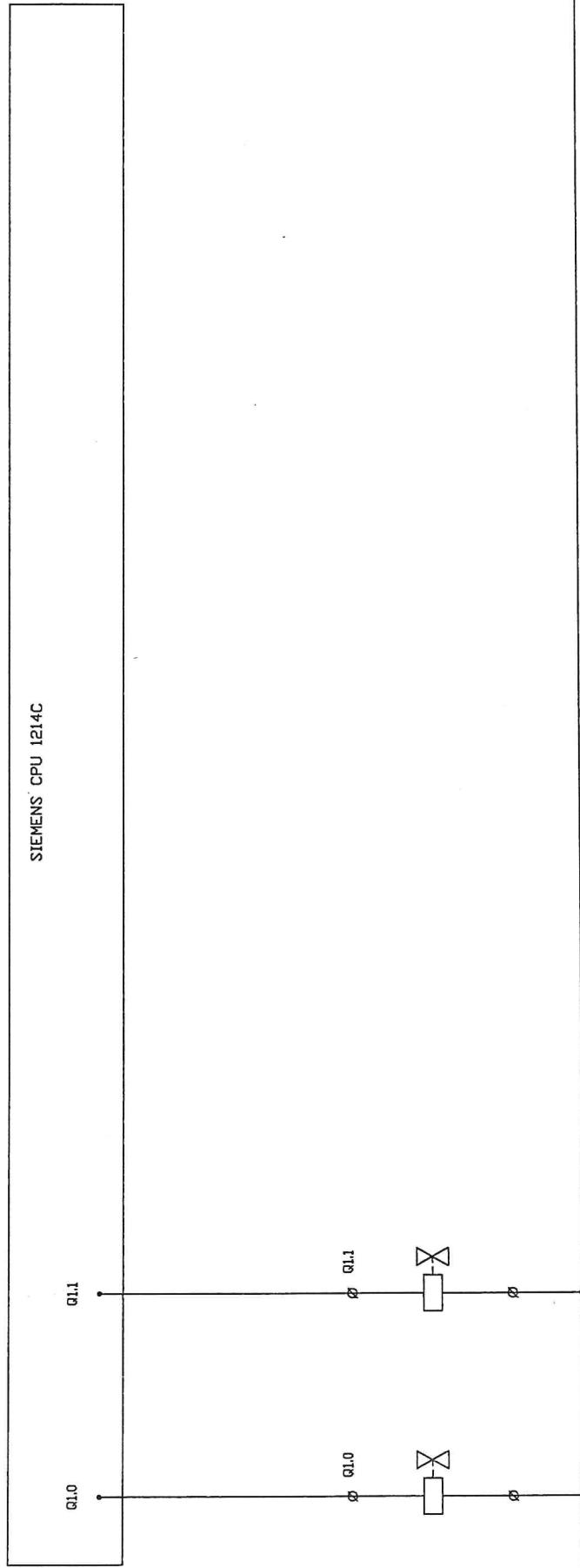
0 NOME : MACCHINE AUTOMATISM. INDUSTRIALI

CONTROLLI Camicerie Abbigliamento

APPR. Via Casale, 23 - 24060 Torre de Roveri (BG)



032 (+24VCC)



- ELETROVALVOLA AVANTI LAMA II
- ELETROVALVOLA ASPIRAZIONE VUOTO III
- + DISCESA CILINDRO STIRO A META'

《NETBEUI》

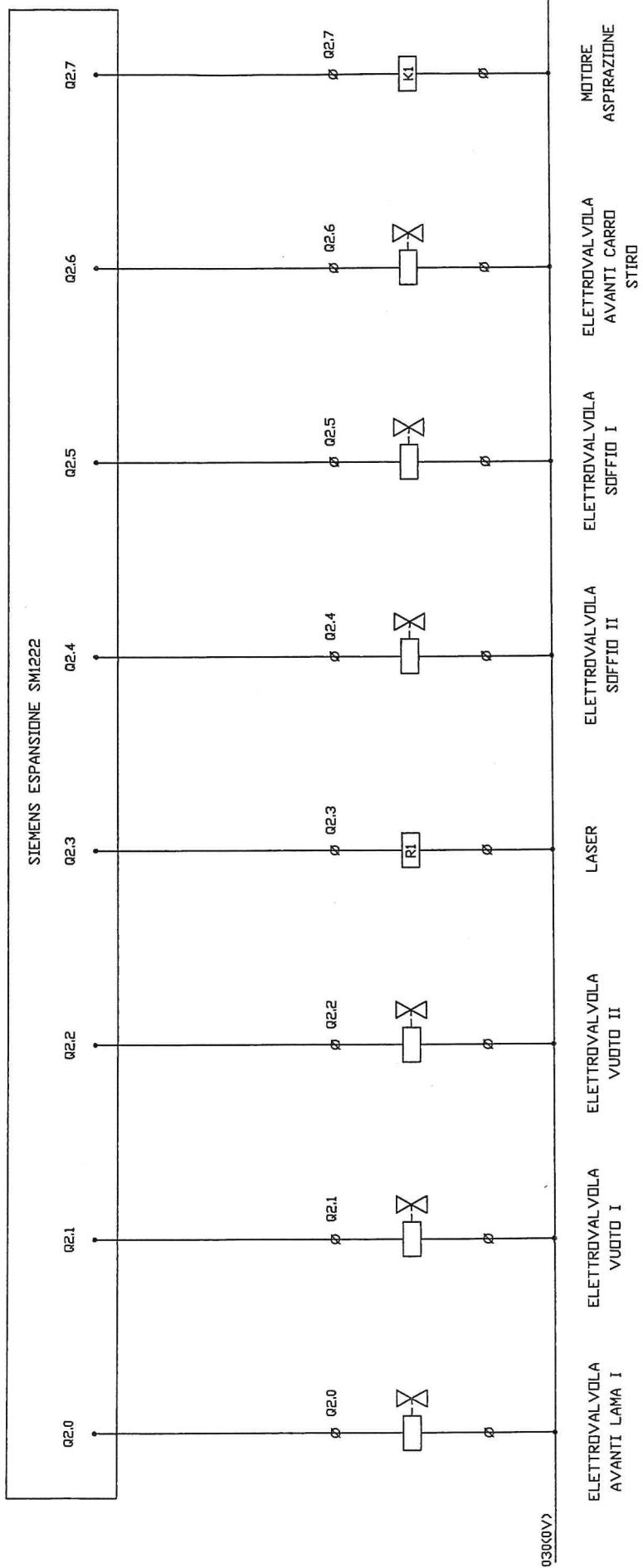
KINEKU

VULCA

REF.	DATA	NAME	DATA	2016	M. A. I. C. A. S. r. l.	DESCRIZIONE	FAGLIO N.	N. FOGLI
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					CAMICERIE ABBIGLIAMENTO			
					Via Casale, 23 - 24060 Torre de Roveri (BG)			
					APPR. : _____			
						STIRATRICE 1005 S7_1200		
							DISEGNO N.	

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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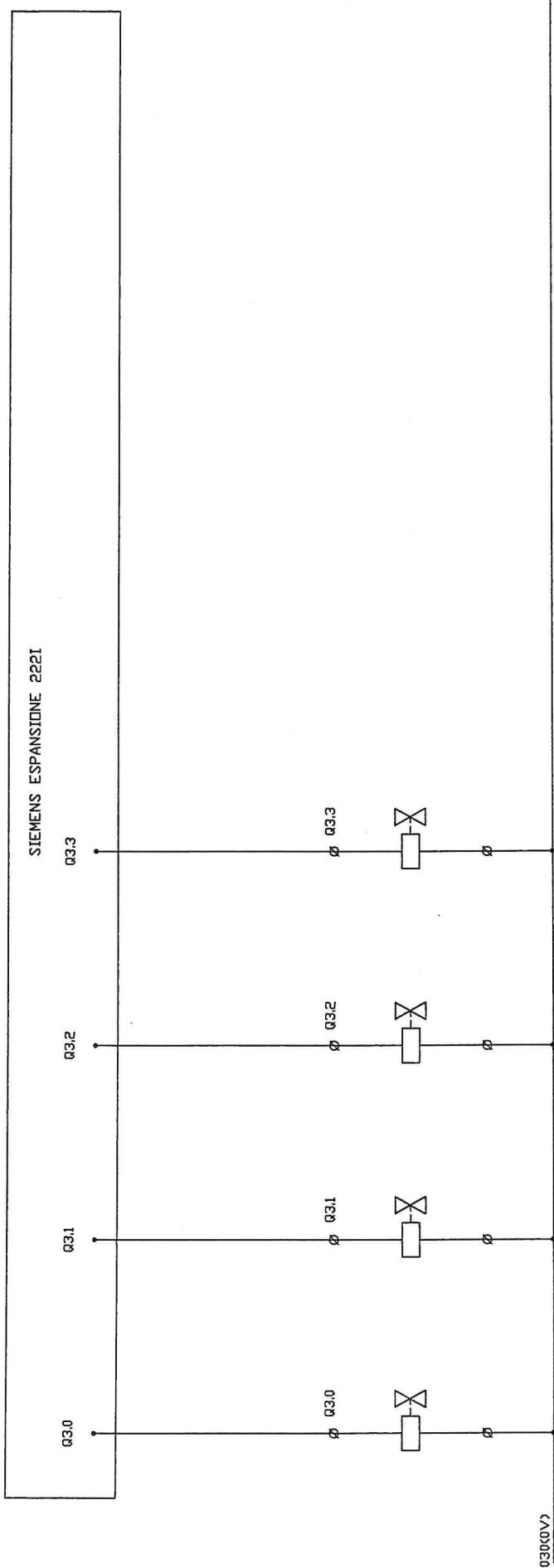
032 (<24VCC)



REV.	DATA	NOME	DATA ' 2016	DESCRIZIONE		FOGLIO N.	N. FOGLI
				NOME	CONTR.		
0				MACCHINE AUTOMATISMII INDUSTRIALI CASICERIE ABIGLIAMENTO		STIRATRICE 1005	S7_1200
				Via Casale, 23 - 24060 Torre de Roveri (BG)	APP. 1	DISSENO N.	

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

035 (+24VCC)



SETTROVALVOLA  
CILINDRO TIRA  
SFERA

ELETTRONICO  
AVANTI ADESIVO

ELETTRONICO  
VALVOLA  
TAGLIO ADESIVO

COLLEGATI SOLO  
SU MODELLO CON  
TAGLIO ADESIVO

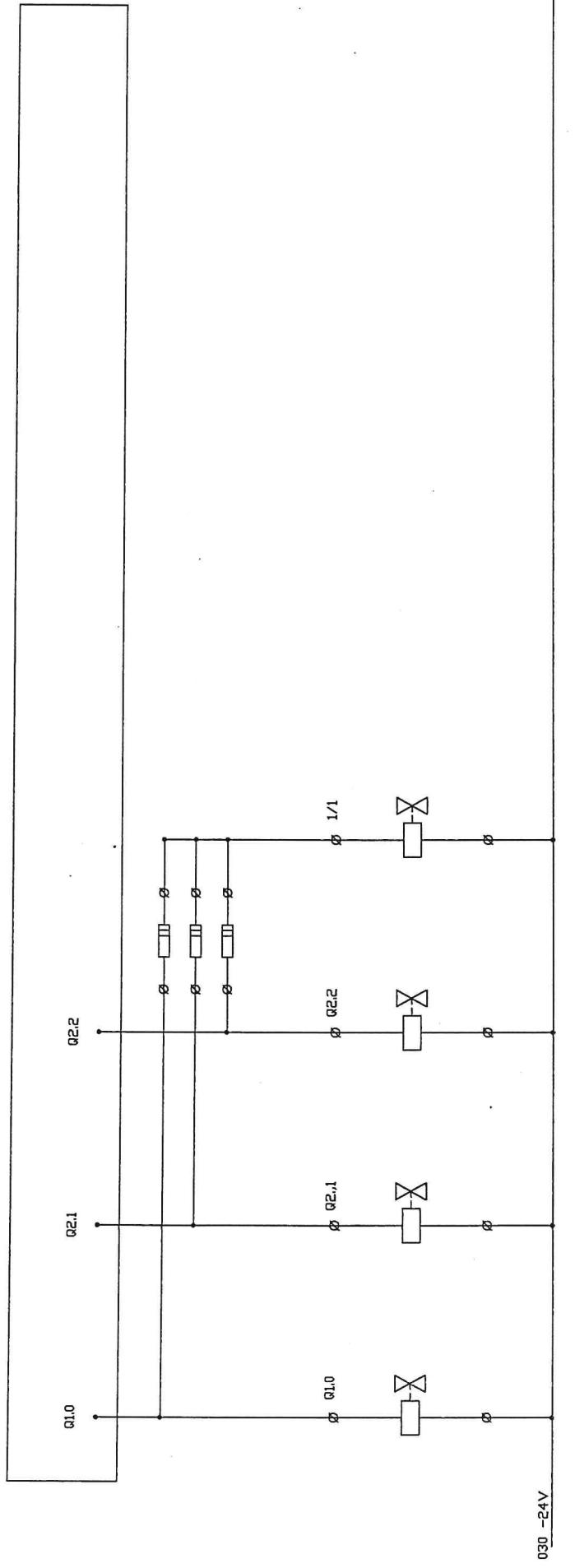
(GRIGIO-MARRONE)

REV.	DATA	NOME	DATA	M.A.I.C.A. S.R.L.	DESCRIZIONE	FOGLI N.	N. FOGLI
0		NAME	2016	MACCHINE AUTOMATISM INDUSTRIALI		11	
		NAME		CAMICERIE ABBIGLIAMENTO			
		CONTR.		Via Casale, 23 - 24060 Torre de Roveri (BG)			
		APPR.					
					STIRATRICE 1005 S7_1200	DISEGNO N.	

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

032 (+24VCC)

COLLEGAMENTO VALVOLA ROMPI VUOTO



(MARRONE-VERDE)