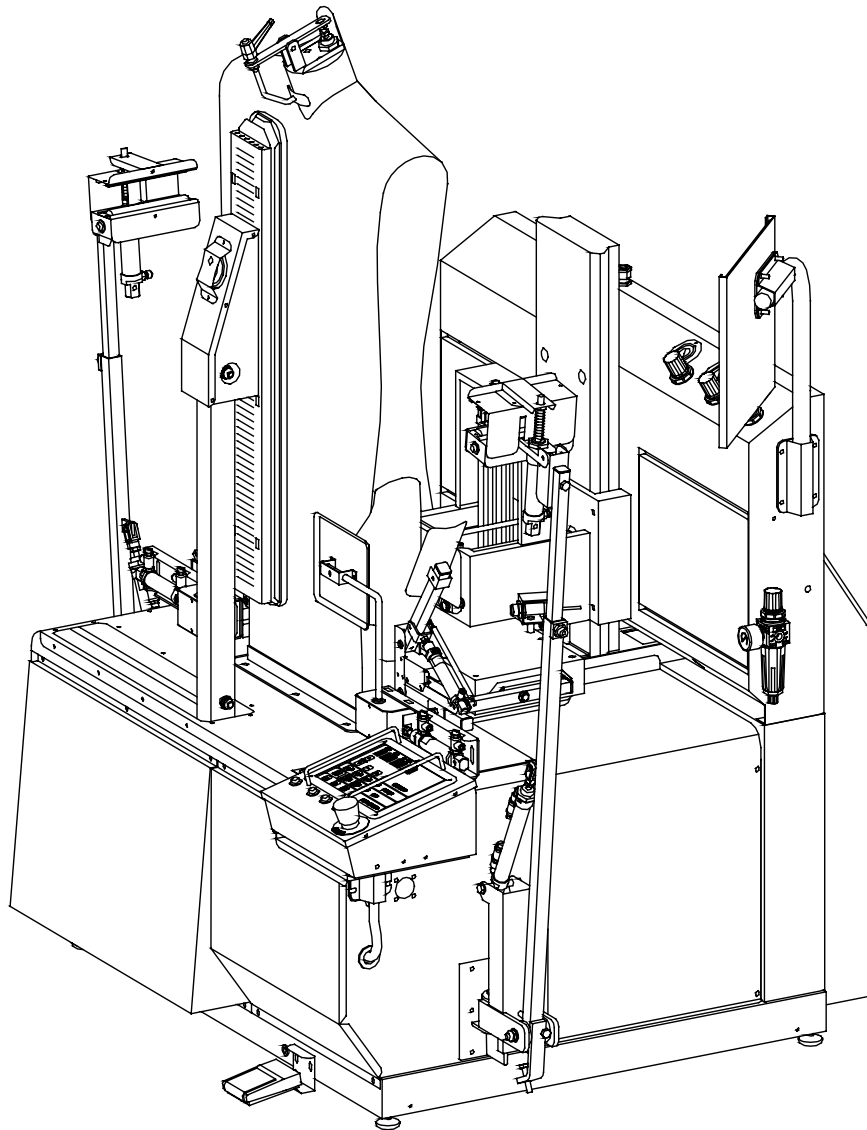


 **Electrolux**

F4VA1

Shirt finisher

Usage and Maintenance



CE

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1. Introduction

1.1. Content and purpose of this manual

This manual contains instructions concerning the installation and maintenance of pressing equipment in conformity to the present European Community Directive. Therefore you will find information on the following subjects:

- Information on machine technical features;
- Instructions on installation and operating of the machine.
- Instructions on maintenance and servicing.
- Technical diagrams
- Exploded views of spare parts

This manual is for the user, the installer and the technician; they will have to read and understand it carefully before installing, using or servicing the machine.

This manual should be kept with the machine and read before operation; in case of loss or damage please ask the builder for a new copy.

The builder is not responsible for any consequences arising from the neglecting of all instructions reported in this manual.










The content of this manual is property of the manufacturer. Duplication of this manual is forbidden.

1.2. Safety precautions

Ignoring the following safety precautions can cause damage either to people, linen, animals and to the machine.

The following symbols, on the machine and in this manual, advise about possible risks.

Legend of the safety symbols found on the machine and in this book:

	Warning: live electricity
	General warning: follow instructions to avoid damage to the machine or to people.
	Warning: hot surface / burn hazard
	Warning: high temperature
	Risk of injury to hands of feet
	Wear gloves
	Wear protective shoes
	Wear a helmet
	Information, notice, advice

Carefully read the entire manual before installing, operating or servicing the machine.

Installation and maintenance the product described in this manual must be performed by authorised and qualified technicians who know the products and are acquainted with standards for installation of industrial pressing equipment.

The builder is not responsible for external connections not duly performed.

The product described in this manual must be used only to iron garments and linen. Any other use is forbidden unless builder authorizes it in writing.

Do not press fabrics contaminated by dangerous substances such as explosives, inflammable, etc. Make sure they are rinsed or aired before ironing.

To prevent fire hazard or explosions do not stand near the machine with explosive or inflammable products.

Use of the machine is allowed only to professional operators who have been trained on how to operate the machine. In any case the use of the machine is forbidden to children under 14 years of age.

Do not remove safety protection devices.

Do not leave machine unattended while in operation.

Do not remove safety symbols from the machine

1.3. Residual risks

Residual risks are defined as those derived from normal machine utilisation that could not be eliminated by manufacturer.

The risk assessment has determined only one risk that cannot be eliminated: the risk of touching the heated front clamp. The risk is highlighted to the user in this manual and on the machine.

  **WARNING - BURN HAZARD - The front clamp may reach very high temperature. Do not touch it while the machine is on.**

1.4. Manufacturer's liability

This manual instructions are not intended to substitute, but only to combine obligations of current legislation on safety standards.

With reference to information included in this manual, the manufacturer is not responsible in case of:

- neglect of local safety standards during machine utilisation;
- incorrect installation of the machine;
- neglect or incorrect observance of instructions included in this manual;
- faults of voltage or of the feeding systems;
- connection to electrical plant non compliant with EC safety requirement, in particular if the plant lacks grounding, thermal magnetic protection and differential protection;
- unauthorized changes on the machine;
- utilisation of the machine by unauthorized, untrained or non-professional operators;
- neglect of maintenance operations;
- use of non original spare parts.

2. Description of the machine

The unit described in this manual is a form finisher for pressing wet shirts. This shirt finisher is designed for:

- Garment manufacturing industries;
- Large and small Industrial dry cleaners;
- Garment finishing industries.

The shirt finisher must be utilized by only qualified personnel, who have been specifically trained on this type of machinery.

The manufacturer does not accept any responsibility for damage caused to persons or things due to improper, erroneous or unreasonable utilization of the machine.

2.1. How to identify the machine

The machine is identified by a technical data plate. The plate is found on the back of the machine, as shown in Figure 2.1. Do not alter or modify in any way the data on the identification plate. Do not remove the identification plate.

Description of the data in the identification plate

Serial N	5 digits serial number
Type	Product code
V	Tension
Hz	Frequency (cycles)
kW	Power absorption
Date	Date of production

2.2. Technical specifications

Refer to Table 2.3 for technical specifications. Figure 2.1 shows the dimensions of the machine.

i This manual describes all the versions of the machine. Before reading the manual identify the version of the machine you own by reading the machine "type" in the technical data plate. While reading the manual take into account only the information related to the version of machine you own.

Figure 2.1 - Identification plate

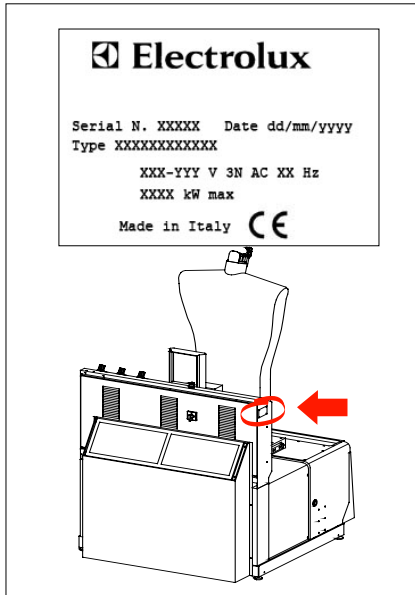


Figure 2.2 - Machine dimensions

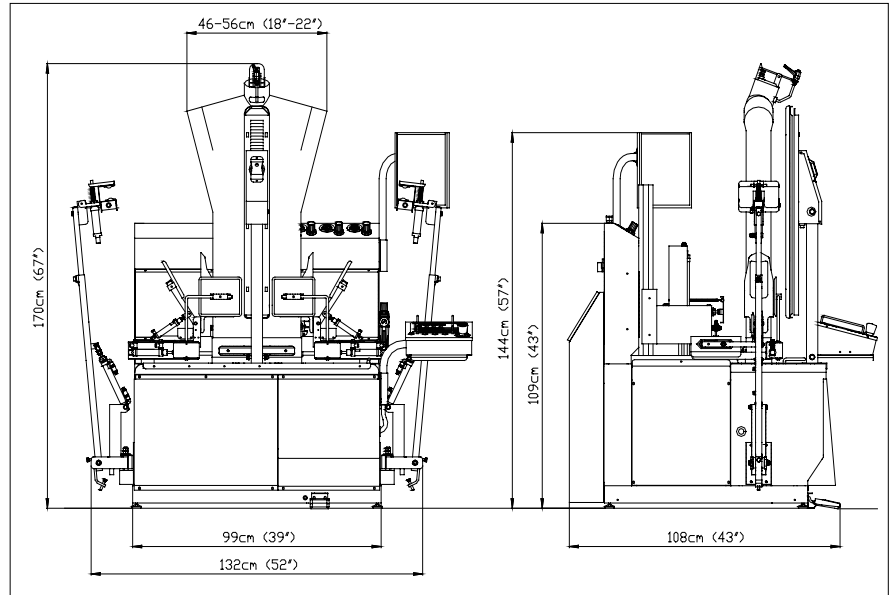


Table 2.3 - Technical specifications


	Type	
	F4VA1 50Hz	F4VA1 60Hz
Electrical requirements	400V 3N50Hz	220V 3 60Hz
Steam inlet	1/2"	1/2"
Condensate return	1/2"	1/2"
Air inlet	1/4"	1/4"
Blowing motor	2,85kW	3,8 HP
Suction motor	0,6kW	0,8 HP
Front clamp	1000W	1000W
Steam pressure	500 - 600 kPa	80 PSI
Air pressure	600 - 700 kPa	80 PSI
Steam consumption	45 - 50 kg/h	100 - 110 lbs/hr
Air consumption	14 nl/min	0,5 cfm
Net/Gross Weight	270/300 kg	595/660 lbs
Noise	70 dB	70 dB
Ambient temperature	15 to 40 °C	60 to 105 °F



3. Installation

3.1. Upon receiving the goods

The machine is delivered mounted on crate and protected by a plastic film and, in some cases, by a cardboard box.

1. Position the crated machine near to the final location of installation. The crated machine must be moved using suitable devices, such as a forklift (Figure 3.1)
2. Unpack the machine and separate cardboard from plastic. Dispose of carton and plastic according to local regulations.
3. Unscrew the bolts that fix the machine to the crate
4. Move the machine from the crate to its final position.

 **CAUTION** - To avoid damaging the machine, do not move the machine by grabbing the form or the clamps.

  **CAUTION** - The machine can be moved by hand by experienced personnel only. Wear gloves, helmet and protective shoes when moving the machine.

3.2. Packing list

The package contains:

1. Machine, complete with all mechanical parts and tensioning devices.
2. Plastic bag containing covers and padding (if not already in place on the machine).
3. Mirror.
4. Instruction manual.
5. Boxes of optional items ordered with the machine (if any)

Upon receiving the goods, check that the package contains all the above listed items.


3.2.1 Assembling disassembled parts

The machine is supplied with the control panel folded against the side of the machine. Rotate the support of the control panel to bring it in the most comfortable position.

Mount the mirror on the machine cabinet (see Figure 3.2):

1. Loosen the screws that hold support (2) in place;
2. Insert the tube (1) into the support (2);
3. Choose the right position for the mirror and tighten the screws.


3.3. Electrical connections

 **WARNING** - The electrical connection is to be made by a licensed electrician only and according to local safety regulations.

The manufacturer is not responsible for damage or injury caused by improper installation.

Refer to Figure 3.3.

1. Install a multi-pole switch (circuit breaker) to facilitate installation and service operations. See table 3.5 for rating and type of connection.
2. In most countries the circuit breaker should include a protection against overcurrents (e.g. thermal-magnetic circuit breaker or fuse). If using a fuse, see power absorption on the identification plate of the appliance (see figure 2.1). In some countries the circuit breaker must include a ground fault interrupt protection.
3. Mount a plug on the power cord, see table 3.5 for rating
4. Connect the plug to the circuit breaker. The cable should hang in a gentle curve.
5. Check that the motor is rotating counterclockwise, otherwise switch two of three phases wires.

 **WARNING** -The electrical line must be properly grounded to insure the safety of the operator.



 **INDICATION** - If a Ground Fault Interrupt protection is installed: every month test the safety of the circuit by pressing the Test button of the circuit breaker. The protection ought to trip. If it does not, call a technician immediately, as the safety of the equipment is impaired.

Table 3.5 - Data for electric connection

Installation	Plug	Power cord
400V 50Hz	Plug 3P+N+T 400V 3N 16A as per standard IEC60309	Type H05VV-F 5 x 1,5mm ²
210-240V 60Hz	3P+T 210-240V 3 25A	Type H05VV5-F 4 x 14AWG


 **WARNING** - The power cord can be replaced only by an authorised service center.

3.4. Compressed air connection


 **WARNING** - The steam connection is to be made by a licensed technician only and according to local safety regulations.

Refer to Figure 3.4.

1. Connect the machine to a compressed air source with pressure 6 bar (90 PSI) minimum
2. Make connections as indicated
3. Set the general pressure regulator on the machine at 6 bar (90 PSI)

 **WARNING** - Do not set the pressure higher than 6 bar. Risk of damage to the machine.

3.5. Steam connection

 **WARNING** - The steam connection is to be made by a licensed technician only and according to local safety regulations.

Refer to Figure 3.5.

Connect the machine to a steam source with steam pressure at 5 bar (75 PSI) capable of providing 30 Kg/h (66 lbs/hr) of steam.

The numbers in the figure indicate the following parts (not supplied with the machine):

- 1 – Steam line
- 2 – Condensate return line
- 3 – Ball valve
- 4 – Check valve
- 5 – Steam trap


 **WARNING** - Do not connect the machine to a steam line having pressure exceeding recommended values. Risk of serious damage to the machine and injury to people.

Figure 3.1 - How to move the crated machine

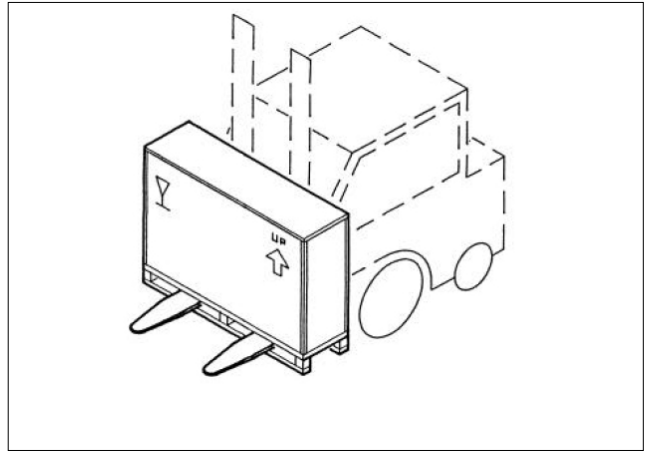


Figure 3.2 - Assembling the mirror

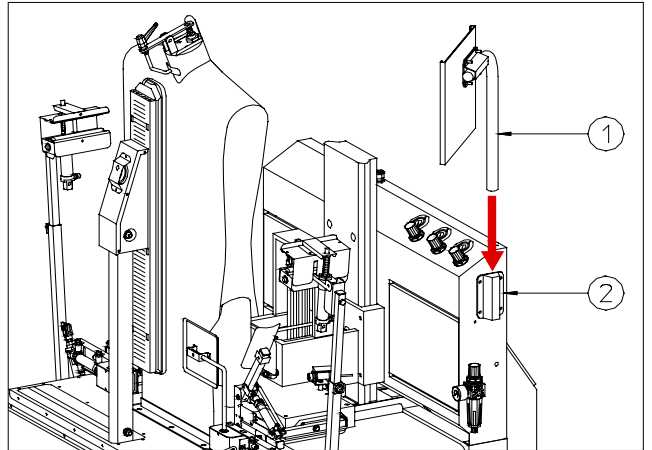


Figure 3.5 - Steam connections

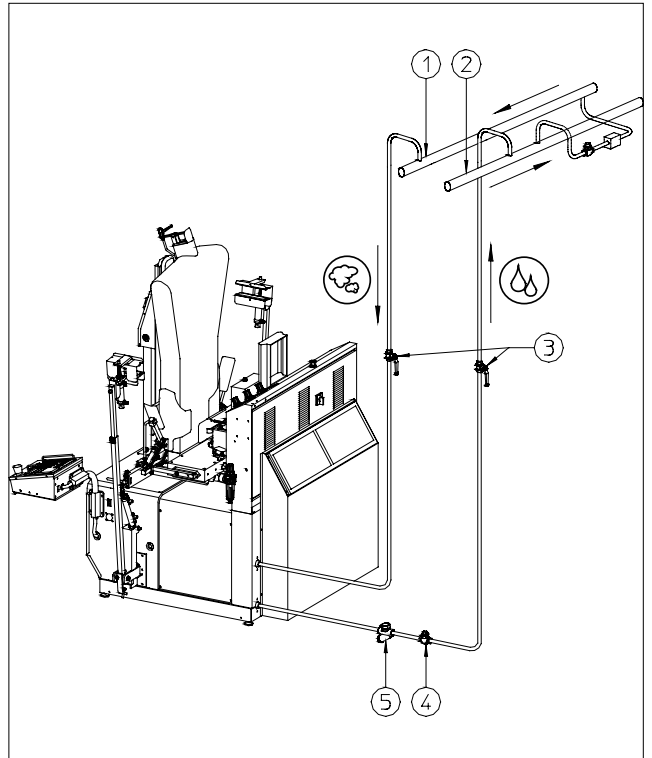


Figure 3.3 - Electrical connection

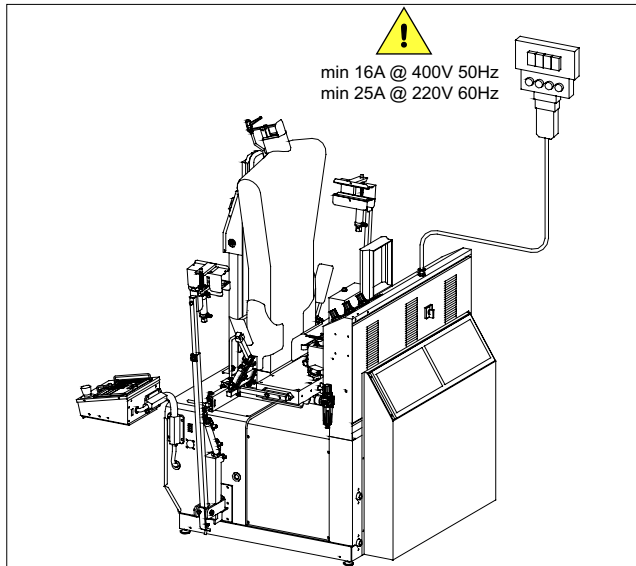
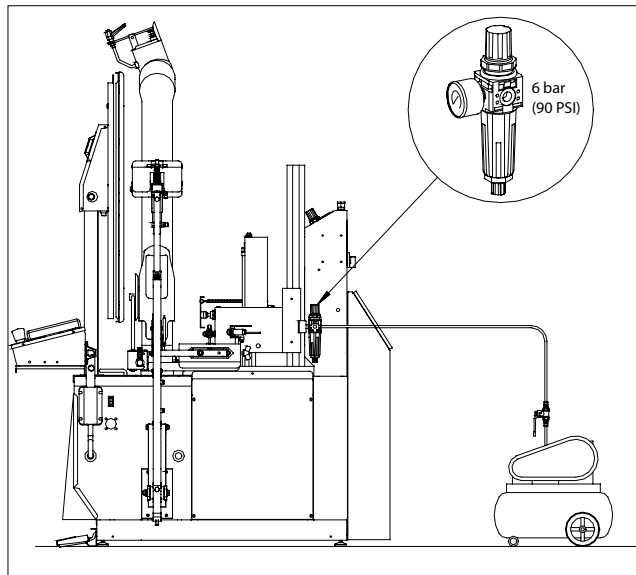


Figure 3.4 - Compressed air connection



4. Use

The form finisher here described is made for pressing wet cleaned shirts.

This shirt finisher is designed for:

- Garment manufacturing industries;
- Large and small Industrial dry cleaners;
- Garment finishing industries.

The shirt finisher must be utilized by qualified personnel, who have been specifically trained on this type of machinery.

4.1. Safety precautions



During operation the unit is under electrical tension:

- **Do not operate machinery with partially exposed or frayed wiring.**
- **Never permit water to come into contact with machine: danger of electrical shock, short-circuiting and damage to machine may result.**
- **Do not open the machine cabinet.**



The unit has various parts that reach extremely high temperatures:

- **Do not leave the machine unattended while it is on;**
- **Keep all flammable substances away from machine, to avoid risk of fire;**
- **Do not open machine body**
- **Do not replace cover and padding while machine is hot (wait at least 2 hours after turning it off). Always check the temperature of the form before proceeding to substitute covers.**



The unit generates hot steam vapors - Stay clear of steam reflex jet.

4.2. Before starting

1. Open the steam and condensate return valves
2. Open the air delivery valve
3. Turn on main power switch (2 - Figure 4.3)

4.3. Operation

Refer to figures 4.2 and 4.3



WARNING - BURN HAZARD - The front clamp may reach very high temperature. Do not touch it while the machine is on.

4.3.1. Position of the operator

During dressing, cycle start and undressing the operator stands in front of the machine.

4.3.2. Settings

1. Select program number with buttons (A) on the control panel
2. Select blowing power shifting the lever (12)



Check the general pressure in the machine, displayed by the gauge located on the air filter (3). The gauge should display 6 bar. Use the knob on top of the air filter (3) to adjust the general pressure.

4.3.3. Pressing

Press the Start pedal (13) to move one step forward in the dressing sequence. If you make a mistake, press the BACK CYCLE button on the control panel to "undo" the last step.

1. Place the shirt on the form and adjust shoulder width with the buttons (E) and (F) on the control panel;
2. Step on the start pedal (13) to close the collar clamp;
3. Step on the start pedal to find the height;

4. Grab the sides of the shirt and tense the back part of the shirt against the form while stepping on the start pedal: the rear clamp closes. During this operation, look in the mirror (14) to check that there are no wrinkles in the area where the rear clamp closes;
5. Grab the two front edges of the shirt and position them parallel along the front part of the form;
6. The suction keeps the two parts in position. Smooth the front edges to make sure there are no wrinkles;
7. Step on the start pedal to close the front clamp and expand sides;
8. Insert a cuff in the cuff clamp and push button (8) to close the clamp. If you want to re-open the clamp, push the button again. To avoid marks insert the cuff unbuttoned and as shown in figure 4.1;
9. Insert the other cuff in to the other clamp and push the button to close. When the second cuff clamp closes, the machine automatically starts the cycle;
10. Adjust sleeve arms height so that there are no wrinkles in the armpit area (see paragraph 4.6.1);
11. At the end of the cycle the clamps are automatically released.

4.3.4. Use of the iron (optional)

If your shirt finisher is equipped with an iron for touch-ups (the iron is an optional feature), the iron can be used at any time during the pressing cycle to perfect finishing.

If you want to keep full control of the quality of the garment proceed as follows:

1. Insert the MANUAL END function located in the "mode" section of the control panel (C). At the end of the pressing cycle the clamps are not released and the garment is kept in place for visual inspection;
2. If the garment needs touch-ups: press AIR in the "manual controls" section of the control panel (D) to start the blowing and inflate the garment;
3. Use the iron to finish the garment or add manual steam by pressing the button STEAM in section (D) of the control panel;
4. Press END CYCLE in the "manual controls" section of the control panel (D) to release the clamps.

- The iron must be used and rested on a stable surface;
- when placing the iron on its stand, ensure that the surface on which the stand is placed is stable;
- the iron is not to be used if it has been dropped, if there are visible signs of damage or if it is leaking.

4.4. In case of emergency

In case of emergency at any time during the cycle, push the red mushroom (G). The machine will stop immediately any operation and the clamps will be released. To reset the machine, turn the mushroom clockwise.

4.5. Upon terminating work

1. Turn off the main power switch.
2. Close steam and condensate return valves.
3. Close air delivery valve.

4.6. Fine adjustments

Refer to Figure 4.3 if not otherwise specified

The machine has several fine adjustment, to match any kind of application.

Front clamp temperature: Rotate the temperature dial to adjust the temperature of the front clamp. The temperature needed for most fabrics is between 160 and 180 °C. This temperature must be selected according to type of fabric and degree of extraction.

Rear clamp and side clamps pressure adjustment: pull knob (18) and rotate clockwise to increase the pressure on rear clamp and side clamps. The pressure value is indicated by gauge (17). When finished, push knob in to lock in position. The recommended value is 3 bar.

Strength of additional sleeve tension: When additional sleeve tension is activated (see parameter H04 in the next paragraph) the strength of the tension can be adjusted.

(> Continued on page 10)

Figure 4.1 - How to clamp the cuff

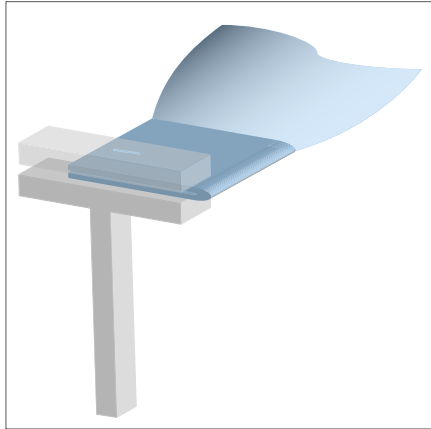


Figure 4.2 - Control panel

- (A) Program selection buttons
- (B) Exclusion section
- (C) Mode section
- (D) Manual controls section
- (E) Expand shoulders
- (F) Retract shoulders
- (G) Emergency stop
- (L) Antistretch exclusion
- (M) Carriage down

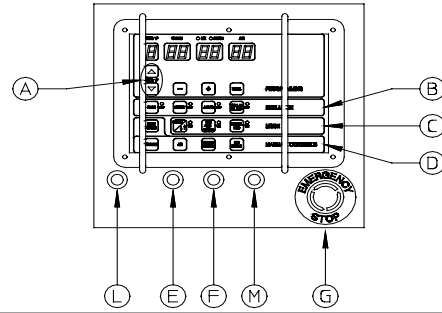
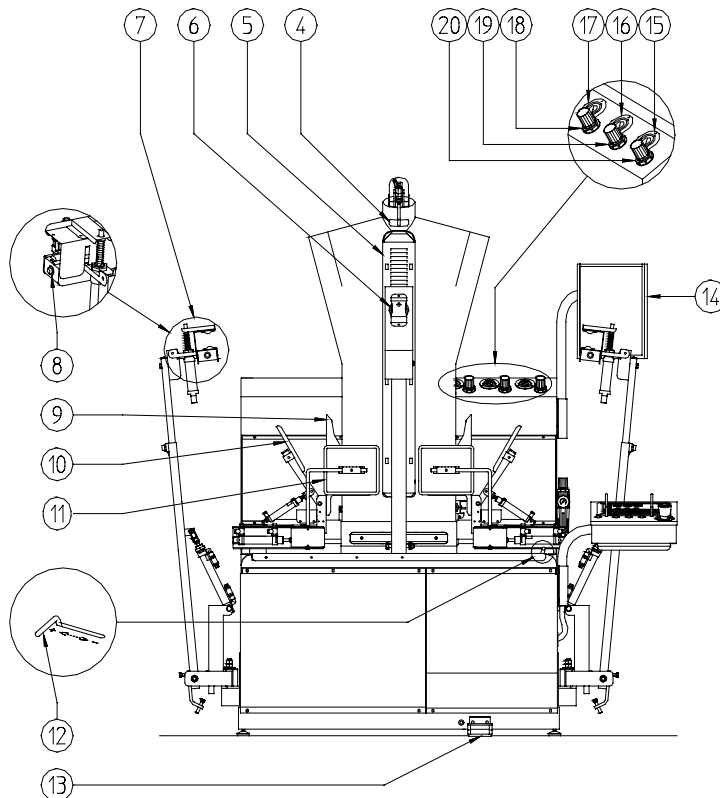
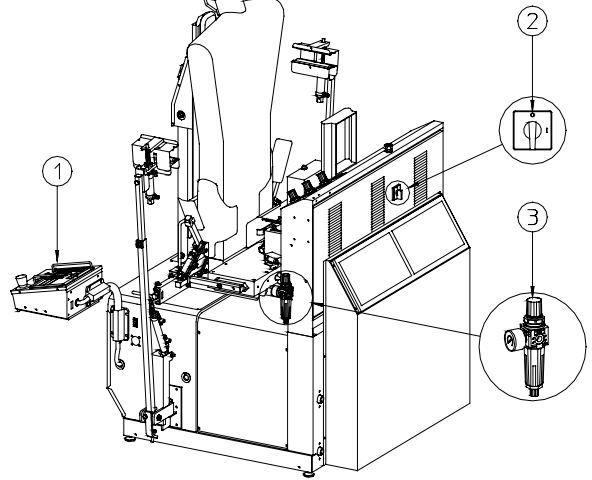


Figure 4.3 - Machine parts

- (1) Control panel
 - (2) Main power switch
 - (3) Air filter
 - (4) Collar clamp
 - (5) Front clamp
 - (6) Front clamp temperature adjustment
 - (7) Cuff clamp
 - (8) Cuff clamp button
 - (9) Side expander
 - (10) Side clamp
 - (11) Front hem clamps
 - (12) Blowing strength adjustment
 - (13) START pedal
 - (14) Mirror
 - (15) Sleeves tensioning pressure adjustment
 - (16) Arms counter-pressure adjustment
 - (17) Clamps* pressure adjustment
 - (18) Clamps* pressure gauge
 - (19) Arms counter-pressure gauge
 - (20) Sleeves tensioning pressure gauge
- * Rear clamps, side clamps and front hem clamps



The higher the value displayed by gauge (15), the lower the tension on the sleeves. To adjust the tension, pull knob (20) and turn to change the value displayed. Push the knob to lock the value**.

Sleeve arms counter-pressure: This pressure determines how fast the sleeve arms return to their rest position after releasing the shirt cuffs. Check periodically that the value displayed by gauge (16) is correct*. Otherwise, pull knob (19) and rotate to adjust the pressure. When finished, push knob in to lock in position.

Antistretch exclusion: To exclude the antistretch, push the button (L) on the console prior to starting a cycle. When the button is pushed in, the side expanders keep stretching the shirt during the cycle. When the button is released the antistretch feature is activated, that is, it prevents the side expanders from overstressing the fabric.

Carriage down button: Push and hold button (M) on the console to lower the carriage. This feature allows to manually increase vertical tension during the cycle.

See the next chapter “Use of the control board” to learn how to program pressing cycles and to discover the power of the control board.

* The recommended value is 4 bar.

** The recommended value is 2 bar.

4.6.1. Adjusting sleeve arms height

1. Loosen the knob located on the sleeve arm
2. Slide the top part of the arm to the desired height
3. Tighten the knob

5. Use of the control board

The microprocessor programmer manages the pressing cycle in all of its functions. The user can pre-set 9 pressing programs.

The control panel is subdivided into 4 sections:

- **PROGRAMMING:** allows storage of 9 different work programs with programmable times and modes.
- **EXCLUSION:** allows partial or total exclusion of various pressing functions.
- **MODE:** permits choice of various pressing cycle modes
- **MANUAL CONTROLS:** allows manual function of main pressing functions.

When the machine is switched on the control panel shows the last program used.

It is possible to **adjust the brightness of the display:** press \uparrow to increase, press \downarrow to decrease.

5.1. PROGRAMMING section - basic features

The programming section consists of:

- Program number display: from 1 to 9
- STEAM time display: from 00 to 99 seconds
- MIX / PAUSE time display. The two-figure display is shared by the two functions MIX (mixed steam + air) and PAUSE (pause between steam and blowing; used e.g. for touch ups)
- AIR time display: blowing time
- 5 programming buttons.

To program a pressing cycle, do as follows:

1. Press the button PROG (P) on the panel. A letter "P" appears in the PROG display and the STEAM time display begins to flash.
1. Press buttons \oplus or \ominus to increase or reduce the steam time.
2. Press the PROG. button (P) to memorize the steam time.
3. The green light MIX and the display below begin to flash: press \oplus or \ominus to set a time of mixed steam + air after steaming, if needed.
4. Press the PROG. button to memorize the mix time
5. The green light PAUSE and the display below begin to flash: press \oplus or \ominus to set a pause time between steam and blowing, if needed (e.g. for touch ups with the iron)
6. Press the PROG. button to memorize the pause time.
7. The AIR indicator starts to flash. Press \oplus or \ominus to set blowing time.
8. Press the PROG. button. The display stops to flash. Programming is finished

If you need to change only one of the times, repeat all steps without modifying the other times.

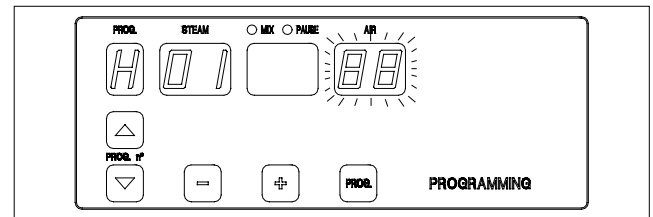
Mix and Pause times can be used or not, depending on the needs. Table 5.1 shows the possible combinations.

5.2. PROGRAMMING section - advanced features

The PROGRAMMING sections allows adjustment of several parameters. Refer to Table 5.2 for description of the parameters and their status. Figure 5.3 shows the look of the displays during programming of advanced parameters.

1. To access advanced programming press the PROG. button until the letter H appears in the program number display
2. The steam time display shows the number of the parameter under programming. Press PROG. to step forward to another parameter
3. The air time display shows a flashing number indicating the parameter value. Press \oplus or \ominus to change parameter value
4. Press PROG. to memorize the value

Figure 5.3 - Displays during advanced parameters programming



5. Press PROG. several times, until the displays return to normal pressing times visualization.

The settings of the advanced parameters remain stored in the memory associated to the program in which they were entered.

For example: if the machine is running program number 5 and the user enters advanced programming and excludes sleeve arms, the sleeve arms will remain excluded for future use of program number 5, even after switching off the machine.

5.3. Pressing cycle counter meters

The machine is equipped with two cycle counters:

- The total counter counts all the pressing cycles carried out by the machine in its work life and cannot be reset.
- The partial counter can be reset and can be utilized, for example, to count the number of garments processed in one day.

Partial counter meter

- To access the counters press push buttons \uparrow and \downarrow together for two seconds.
- The letter "C" appears on the PROG display. The other displays show the number of cycles.
- To reset the counter press "PROG".
- To exit meter mode, press \uparrow and \downarrow together till the displays STEAM, MIX, PAUSE, AIR show pressing times.

Total counter meter

- To access the counters press push buttons \uparrow and \downarrow together for two seconds.
- The letter "C" appears on the PROG display. The other displays show the number of cycles.
- Press + to view the total cycles counter meter. The total cycles counter cannot be reset.
- To exit meter mode, press \uparrow and \downarrow together till the displays STEAM, MIX, PAUSE, AIR show pressing times.

The machine can work while the counter is visualized.

5.4. EXCLUSION section

This section consists of 4 buttons with red LED. The buttons allow exclusion of the following functions:

- rear clamp movement
- front clamp movement
- sleeve arms movement
- collar clamp movement

Pushing the button relative to the function effects exclusion. When the LED is on, the relative function is excluded.

Exclusions remain stored in the memory of the selected program.

REAR Excludes the rear clamp. When the light is on the clamp does not close. If the button is pushed during a cycle, the clamp opens but the cycle continues.

FRONT Excludes the front clamp. When the light is on the clamp does not close. If the button is pushed during a cycle, the clamp opens but the cycle continues.

ARMS Excludes the sleeve arms and cuff clamps. When the light is on the sleeve arms do not operate. If the button is pushed during a cycle, the cuff clamps open but the cycle continues.

COLLAR CLAMP Excludes the collar clamp. When the light is on the collar clamp does not operate. If the button is pushed during a cycle, the collar clamp opens but the cycle continues.

5.5. MANUAL CONTROLS section

AIR Press once to start blowing. Press it again to stop blowing. In order to have manual MIX press STEAM during the blowing operation.

REPEAT CYCLE Repeats the cycle without further tensioning; this button is enabled only at end of the pressing cycle and only if the MANUAL END mode is selected.

END CYCLE Ends the cycle immediately, interrupts all ongoing commands, opens all clamps. When the MANUAL END mode is selected, press this button to open the clamps at the end of the cycle.

STEAM Keep pressed to steam the shirt.

BACK CYCLE Use this button to undo the last step in the dressing sequence.

5.6. Operating MODE

The Mode section consists of 3 buttons with green LED.

To select a mode press the relative button: the green LED turns on.

5.6.1. Button



When the LED is ON: the side clamps (10 - Figure 4.3) close at the beginning of the cycle and open automatically after the time programmed in the H03 parameter (see table 5.2). This mode is useful for thick fabric or low extraction, because closed clamps may hinder proper drying of the area.

When the LED is OFF: the side clamps stay closed during the whole cycle.

The button has no function if the side clamps are excluded (parameter H05 = 00).

5.6.2. Button



The MANUAL END function is utilized when it is necessary to verify garment pressing quality at the end of a cycle.

When the MANUAL END function is active (the green LED of the button "MANUAL END" is on), the clamps remain are not released at end of the cycle.

This allows to:

- run another cycle by pushing REPEAT CYCLE
- manually steam and blow the garment with buttons AIR and STEAM
- manually touch up the garment with the iron (if mounted on your machine).

When the garment is properly finished, end the cycle and open the clamps by pressing the "END CYCLE" button (in the "manual controls" section).

5.6.3. Button



The button is not active.

Table 5.1 - Setting mix and pause times







What is your need?	What you should do	How the displays will look
I do not need mix or pause times	Set both times at zero	 Mix and pause lights are off. The displays show no numbers.
I want both mix and air times	Set the two times according to the procedure described in chapter 5.1.1. Note that each of the two times cannot exceed 9 seconds.	 Mix and pause lights are on. The digit on the left is mix time. The digit on the right is pause time.
I need only a mix time, no pause	Set mix time at the desired value. If this value is below 10 seconds, you must set pause time at zero. If mix time is 10 seconds or above, the pause time is automatically set at zero.	  Mix light is on. Pause light is off. The two displays show mix time (8 seconds and 12 seconds in the example).
I need only a pause time, no mix	Set mix time at zero. Set pause time at the desired value.	 Mix light is off. Pause light is on. The two displays show pause time.

Table 5.2 - Advanced programming parameters

Parameter number	Parameter description	Meaning of the number in the display AIR (press + or - to change the value)
H 01	Garment positioning time. This parameter allows to vary the distance of the rim of the garment from the bottom of the form. The higher this time, the greater the distance. The machine is pre-set with 0,1 seconds positioning time	Positioning time in 1/10 of second
H 02	Vertical tension time. The machine is pre-set with 0,2 second tensioning time. Longer tensioning time means more vertical tension to the shirt. The machine is pre-set with 2/10 of second tensioning time	Tensioning time in 1/10 of second
H 03	Side clamps (10 - Figure 4.3) opening time. If the "TIMER SIDE CLAMPS" function is activated, the value of this parameter indicates when the clamps will open. The pre-set value is 5 seconds.	Opening time in seconds (from the beginning of blowing)
H 04	Sleeve arms additional tension. This parameter allows to add extra-tension to the sleeves during the cycle. The pre-set value is 00. This pressure can be adjusted by means of knob (20 - Figure 4.3)	00 means no additional tension 01 means additional tension after 3 seconds of steam 02 means additional tension after 10 seconds of air
H 05	Side clamps exclusion. The side clamps (10 - Figure 4.3) can be excluded.	00 means side clamps excluded 01 means side clamps activated
H 06	This parameter allows to program several actions: <ul style="list-style-type: none"> position of the carriage at the end of the cycle: the carriage can either return to its lowest position or stay in the same position (this is useful when pressing several identical shirts) additional tensioning to the shirt: at the beginning of the cycle, the carriage moves down to tension the shirt. This parameter allows to add two additional downward movements during the cycle fast mode: for high productivity. When this mode is selected, the machine automatically closes the clamps without stepping on the start pedal. The operator must keep the machine pace. 	00=carriage down - no additional tension 01=carriage down - additional tension, light 02=carriage down - additional tension, stronger 03=carriage still - no additional tension 04=carriage still - additional tension, light 05=carriage still - additional tension, stronger 06=fast mode - no additional tension 07=fast mode - additional tension, light 08=fast mode - additional tension, stronger
H 07	Automatic positioning of sleeve arms height (only model with short sleeve device)	00 means automatic positioning OFF 01 means automatic positioning ON


6. Maintenance

6.1. Maintenance allowed to the user


 **WARNING:** Before performing any maintenance on the machine, disconnect from electric power.


6.1.1. Every week

- Clean machine body with a soft non abrasive cloth.

 **WARNING:** Do not use aggressive detergents or solvents that may ruin machine parts

- Verify visually that steam, condensate and compressed air connections do not leak
- Verify that visible electrical cabling and air and steam connection tubing are in perfect working order
- Verify that pads and covers are in good condition. If they show any sign of deterioration replace them immediately. Pressing quality may decrease dramatically if pads and covers are dirty or damaged.

 **WARNING:** Do not run a machine that does not look in proper order

 **INDICATION:** always ask for original spare parts. Non original parts may damage to the machine or decrease its safety

6.1.2. Every six months

Call the authorised technician to perform the maintenance operations described in the following chapter.

6.2. Maintenance to be carried out by the technician every six months

 **WARNING:** The maintenance operations described in this chapter must only be carried out by qualified personnel.

   **WARNING for the technician:**

Before any kind of maintenance or control intervention:

- Disconnect the machine from electricity, air and steam
- Discharge air pressure from the pneumatic circuit by opening the valve at the air inlet
- Make sure that all the parts of the machine have cooled down

6.2.1. Electrical circuit maintenance

- Verify that electrical connections are properly tightened and do not show oxidation;
- Verify tightening of solenoid valve coils;
- Verify state of cable and electrical wiring conditions.

6.2.2. Steam circuit maintenance

- Verify that steam and condensate return connections are properly tightened and do not leak
- Verify that steam valve is in good working order and does not present leakage

6.2.3. Air circuit maintenance

- Verify that valves and cylinders do not show any loss of air;

6.2.4. Other controls

- Check that fan blades are free of dirt and lint deposits.

7. Troubleshooting

Refer to Table 7.4 for solutions to the most common malfunction situations.

If the proposed solutions do not work, enter self-diagnosis (paragraph 7.1) to determine if there are failed components.

WARNING - DO NOT SERVICE THE MACHINE YOURSELF
Call the service center in any of the following cases:

- the machine has a problem that is not listed in table 7.4
- none of the remedies proposed by the table work
- control board self-diagnosis shows one or more failures.

7.1 Control board self-diagnosis

The control board is equipped with a self-diagnosis software that can detect common problems to the pneumatic circuit.

1. To enter self-diagnosis mode, press and together for two seconds. The letter "C" appears on the PROG display.
2. Press button once. The letter F appears on the PROG display. The other displays (STEAM, MIX/ PAUSE, AIR) show information concerning the status of the pneumatic circuit:
 - If there is no failure, the displays show: F -- -- --
 - If there are failures, the display STEAM shows the number of failures occurred (use + or - to scroll all the references). The display MIX/PAUSE shows the code of the failed component. The display AIR shows the code of the type of failure.

Failure references are displayed using the codes in tables 7.1 and 7.2.

Figure 7.3 shows an example:

The pneumatic circuit has more than one failures.

The displays show information regarding failure number 2: the back clamp solenoid valve has no power.

To erase faults memory, press PROG until the displays show: F -- -- --

To exit self-diagnosis program, press and together until the displays STEAM, MIX, PAUSE, AIR show pressing times.

Table 7.1

Number displayed in the Air display	The following fault has occurred
00	Neutral and phase are inverted
01	No power to the component
02	Short circuit at the component

Table 7.2

Number in the Mix Pause display	The following component has failed
06	Solenoid valve E7 - Sleeve arms relaxation
07	Solenoid valve E5 - Open front clamp
08	Solenoid valve E6 - Sleeve arms positioning
09	Solenoid valve E4 - Front clamp side movement
10	Solenoid valve E3 - Rear clamp
11	Coil of remote control switch VT2 - Suction motor
12	Solenoid valve E2 - Suction
13	Solenoid valve E1 - Collar clamp
14	Coil of remote control switch VT1 - Blower motor
15	Solenoid valve E11 - Cuff clamp right
16	Steam valve E12
17	Solenoid valve E10- Cuff clamp left
21	Solenoid valve E14 - Carriage down
22	Solenoid valve E13 - Carriage up
23	Solenoid valve E8 - Side clamps
24	Solenoid valve E17 - Open side expanders
28	Solenoid valve E26 - Sleeve arms counter-pressure

Figure 7.3 - Self diagnosis example

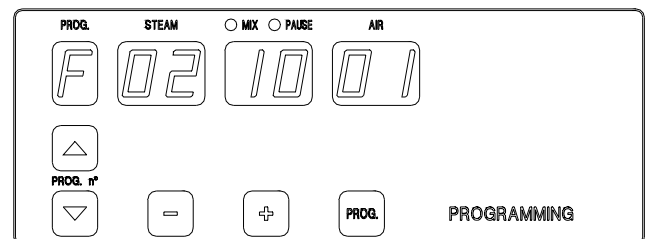


Table 7.4 - Troubleshooting

Problem	Possible cause	What the user should do
The machine does not start	No power to machine	Check there is electrical power in the facility Check connection to power lines Turn on the main power switch
The display is dim	Brightness of the display set too low	Increase brightness by pressing button + on the control panel
The collar clamp does not close	The clamp is excluded	Press the COLLAR exclusion button on the control panel to deselect (when the light is off the clamp works)
	Air pressure is inadequate or absent	Check and regulate general pressure to 6 bar (Figure 4.3, knob and gauge on filter 3)
The carriage does not move	The parameter H06 is set to 03, 04 or 05	Change the setting of the parameter (see table 5.2)
	Reflective material is worn out	Replace reflective material strip
	The photocell beam does not hit the reflective material	Check that the photocell has not been moved. If necessary, redirect the photocell beam on the reflective material and lock well the photocell position
The front clamp does not move	Clamp is excluded	Remove the exclusion by pressing the FRONT button on the control panel (when the light is off the clamp is active)
	Air pressure is inadequate or absent	Check and regulate general pressure to 6 bar (Figure 4.3, knob and gauge on filter 3)
The rear clamp does not move	Clamp is excluded	Remove the exclusion by pressing the REAR button on the control panel (when the light is off the clamp is active)
	Air pressure is inadequate or absent	Check and regulate general pressure to 6 bar (Figure 4.3, knob and gauge on filter 3) Check and regulate clamps pressure. Minimum pressure is 3 bar (Figure 4.3, knob 18 and gauge 17)
Both side clamps do not move	Clamps are excluded (parameter H05 set to 00)	Set parameter H05 to 01
	Air pressure is inadequate or absent	Check and regulate general pressure to 6 bar (Figure 4.3, knob and gauge on filter 3) Check and regulate clamps pressure. Minimum pressure is 3 bar (Figure 4.3, knob 18 and gauge 17)
Both side expanders do not move	Air pressure is inadequate or absent	Check and regulate general pressure to 6 bar (Figure 4.3, knob and gauge on filter 3)
		Check and regulate clamps pressure. Minimum pressure is 3 bar (Figure 4.3, knob 18 and gauge 17)
Both sleeve arms do not move	The arms are excluded	Press the ARMS exclusion button on the control panel to deselect (when the light is off the arms work)
	Air pressure is inadequate or absent	Check and regulate general pressure to 6 bar (Figure 4.3, knob and gauge on filter 3)
No steam from machine	Steam feed valve closed	Open steam feed valve
	Steam time set at zero	Set steam time greater than zero
No blowing	Blowing time set at zero	Set blowing time greater than zero
Inadequate ventilation	Blowing adjustment set too low	Shift the blowing adjustment lever (12 - Figure 4.3) towards the + mark

8. Machine stop

8.1. Prolonged stop

In case of prolonged stop of the machine:

1. Close steam and air connections
2. Disconnect from electrical power
3. Discharge the pressure in the air circuit
4. Discharge residual condensate
5. Clean the cabinet and the grids from dust and lint
6. Protect the form so that the covers do not get dirty

8.2. Transportation

In case the machine must be moved, follow the instructions below.

1. Close steam and air connections
2. Disconnect from electrical power
3. Discharge the pressure in the air circuit
4. Disconnect air, steam and condensate return connections
5. Discharge residual condensate
6. Clean the cabinet and the grids from dust and lint
7. Move the machine to a crate of suitable size
8. Screw the machine to the crate, using suitable brackets (Figure 8.1)
9. Fold any protruding elements (such as the control panel)
10. Protect the form so that the covers do not get dirty
11. Wrap the machine in cellophane or bubble plastic
12. If necessary, cover the whole machine with a cardboard box and tighten it to the crate

8.3. Decommissioning

At the end of its life the machine must be properly dismantled and its parts must be disposed of according to local regulations.

1. Close steam and air connections
2. Disconnect from electrical power
3. Discharge the pressure in the air circuit
4. Disconnect air, steam and condensate return connections
5. Discharge residual water condensate
6. Move the machine to a crate of suitable size
7. Screw the machine to the crate, using suitable brackets (Figure 8.1)
8. Fold any protruding elements (such as the control panel)
9. Give the machine to a specialized recycling center for proper separation and recycling of all materials (painted steel, stainless steel, copper, plastic, fiberglass, cloth)

Figure 8.1. - How to screw the machine to the crate



Figure 8.2. - How to pack the machine for transportation



Disposal of Waste Electrical and Electronic Equipment (WEEE) in the European Union

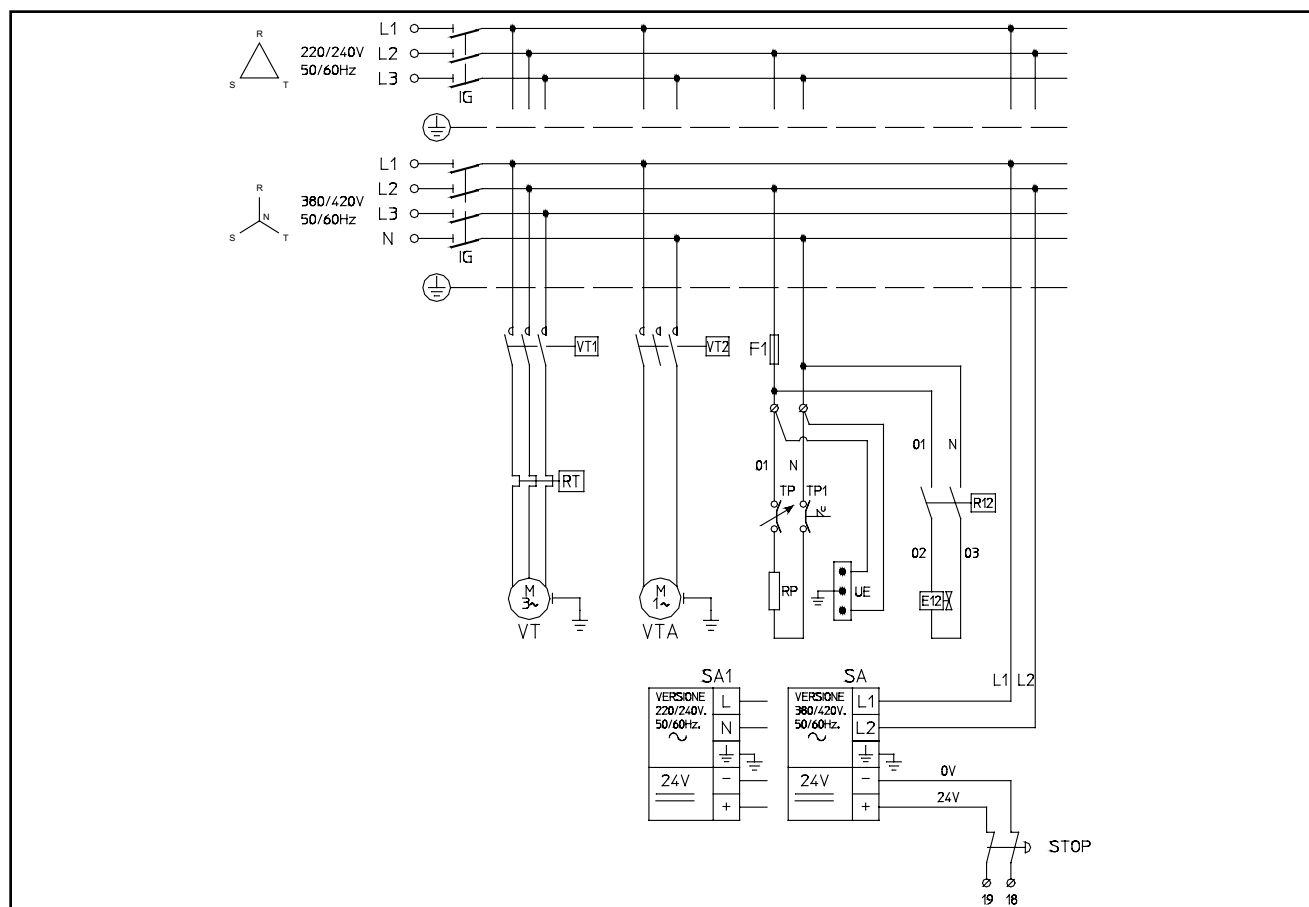
This symbol on the product or on its packaging indicates that this product is subject to separate collection and recycling. It is your responsibility to dispose of your waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact the dealer where you purchased the product.

9. Technical diagrams

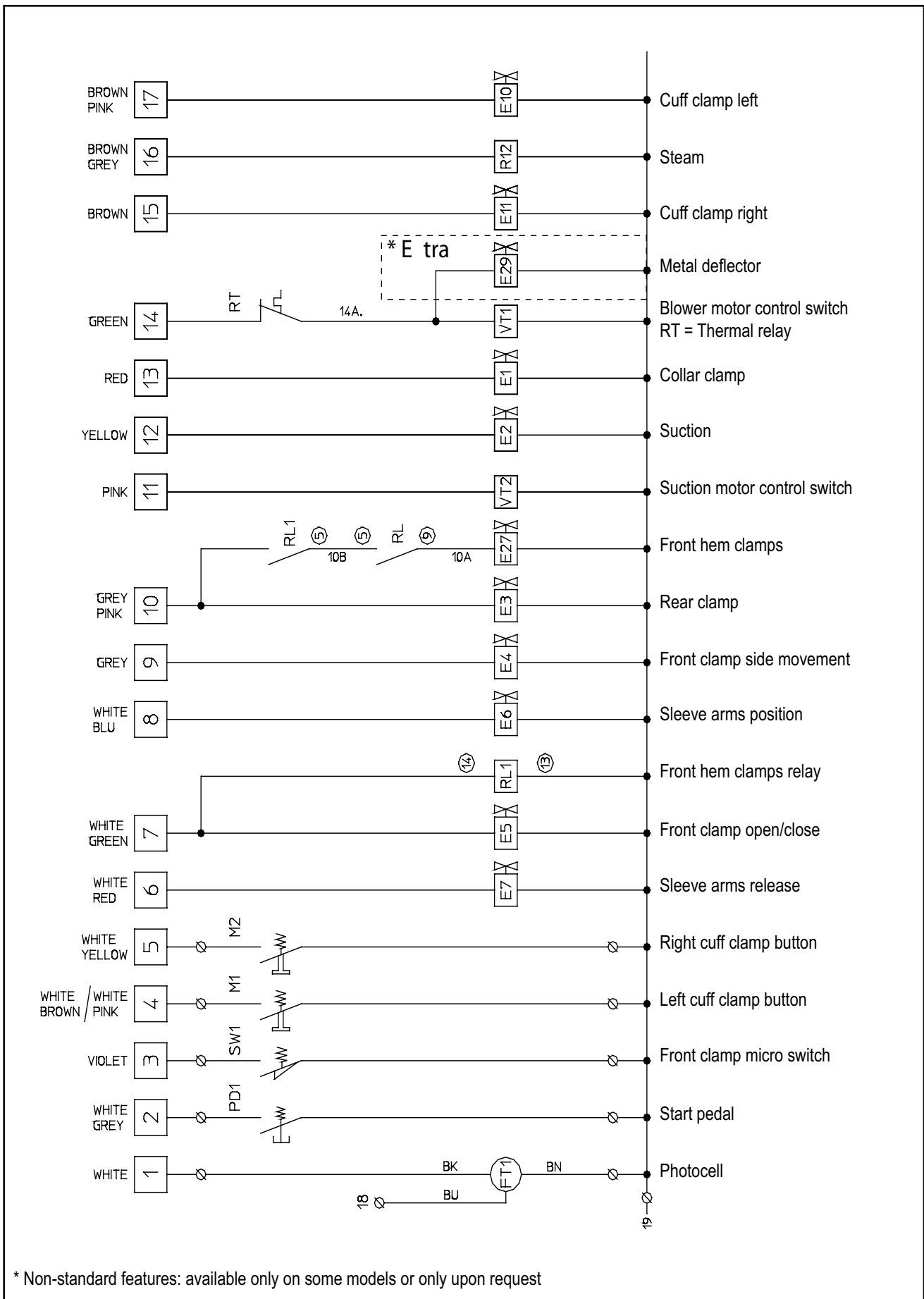
The diagrams in this chapter are for the exclusive use of the authorized assistance center.



Do not perform maintenance on the machine if not authorized in writing by the Manufacturing Company.



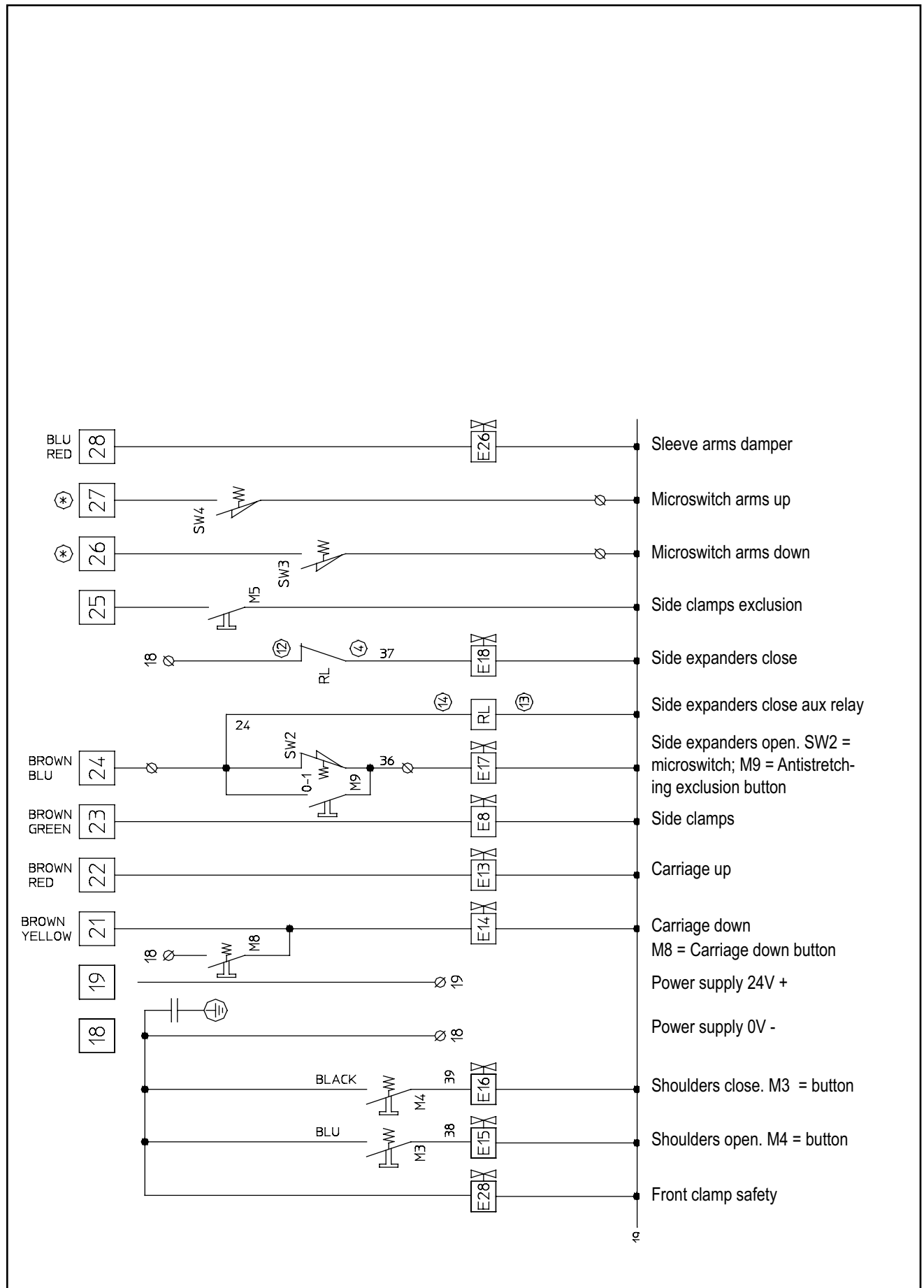
E12	ELETTROVALVOLA VAPORE	STEAM SOLENOID VALVE	ELEKTROVENTIL DAMPF	ELECTROVANNE VAPEUR	ELECTROVALVULA VAPOR
F1	FUSIBILE 10A	10A FUSE	SICHERUNG 10A	FUSIBLE 10A	FUSIBLE 10A
IG	INTERRUTTORE GENERALE	MAIN SWITCH	HAUPTSCHALTER	INTERRUPTEUR GENERA.	INTERRUPTOR GENERAL
R12	RELE' COMANDO ELETTROV. VAPORE	STEAM VALVE CONTROL RELAY	RELAIS DAMPFSTEUERUNG	RELAIS COMMANDE VANNE VAPEUR	RELÈ MANDO VAPOR
RP	RESISTENZA PALA ANTERIORE	FRONT CLAMP ELEMENT	WIDERSTAND VORDERE AN-DRUCKLEISTE	RESISTANCE PALE ANTERIEURE	RESISTENCIA PALA FRONTAL
RT	PROTEZ. TERMICA VENTILATORE	BLOWER THERMAL PROTECTION	THERMOSCHUTZ VENTILATOR	PROTECTION THERMIQUE VENTILATEUR	PROTECCIÓN TÉRMICA VENTILADOR
SA	ALIMENTATORE TRIFASE 6A	POWER FEED 3ph	SPEISER 3-PHASIG	ALIMENTATEUR 3 PHASE	ALIMENTADOR TRIFASICO
SA1	ALIMENTATORE MONOFASE 6A	POWER FEED 1ph	SPEISER 1-PHASIG	ALIMENTATEUR 1 PHASE	ALIMENTADOR MONOFASICO
TP	TERMOSTATO PALA ANTERIORE	FRONT CLAMP THERMOSTAT	THERMOSTAT VORDERE AN-DRUCKLEISTE	THERMOSTAT PALE ANTERIEURE	TERMOSTATO PALA FRONTAL
TP1	TERMOSTATO SICUREZZA PALA ANTER.	FRONT CLAMP SAFETY THERMOSTAT	SICHERHEITSTHERMOSTAT	THERMOSTAT DE SECURITE PALE ANTERIEURE	TERMOSTATO SEGURIDAD
VT	VENTILATORE	BLOWER	VENTILATOR	MOTEUR SOUFFLAGE	VENTILADOR
VTA	ASPIRATORE	SUCTION MOTOR	SAUGLÜFTER	MOTEUR ASPIRATION	ASPIRADOR
VT1	CONTATTORE COMANDO VENTILATORE	BLOWER CONTROL SWITCH	SCHALTSCHÜTZ STEUERUNG VENTILATOR	CONTACTEUR COMMANDE MOTEUR VT	CONTACTOR MANDO VENTILADOR
VT2	CONTATTORE COMANDO ASPIRATORE	SUCTION MOTOR CONTROL SWITCH	SCHALTSCHÜTZ STEUERUNG SAUGLÜFTER	CONTACTEUR COMMANDE MOTEUR VTA	CONTACTOR MANDO ASPIRADOR
UE	PRESA FERRO ELETTRICO	ELECTRIC IRON PLUG	BÜGELEISEN STECKER	PRISE FER ELECTRIQUE	TOMA PLANCHA
Part	Descrizione	Description	Beschreibung	Désignation	Descripción
ELECTRIC DIAGRAM - SCHEMA ELETTICO					ed 0306



* Non-standard features: available only on some models or only upon request

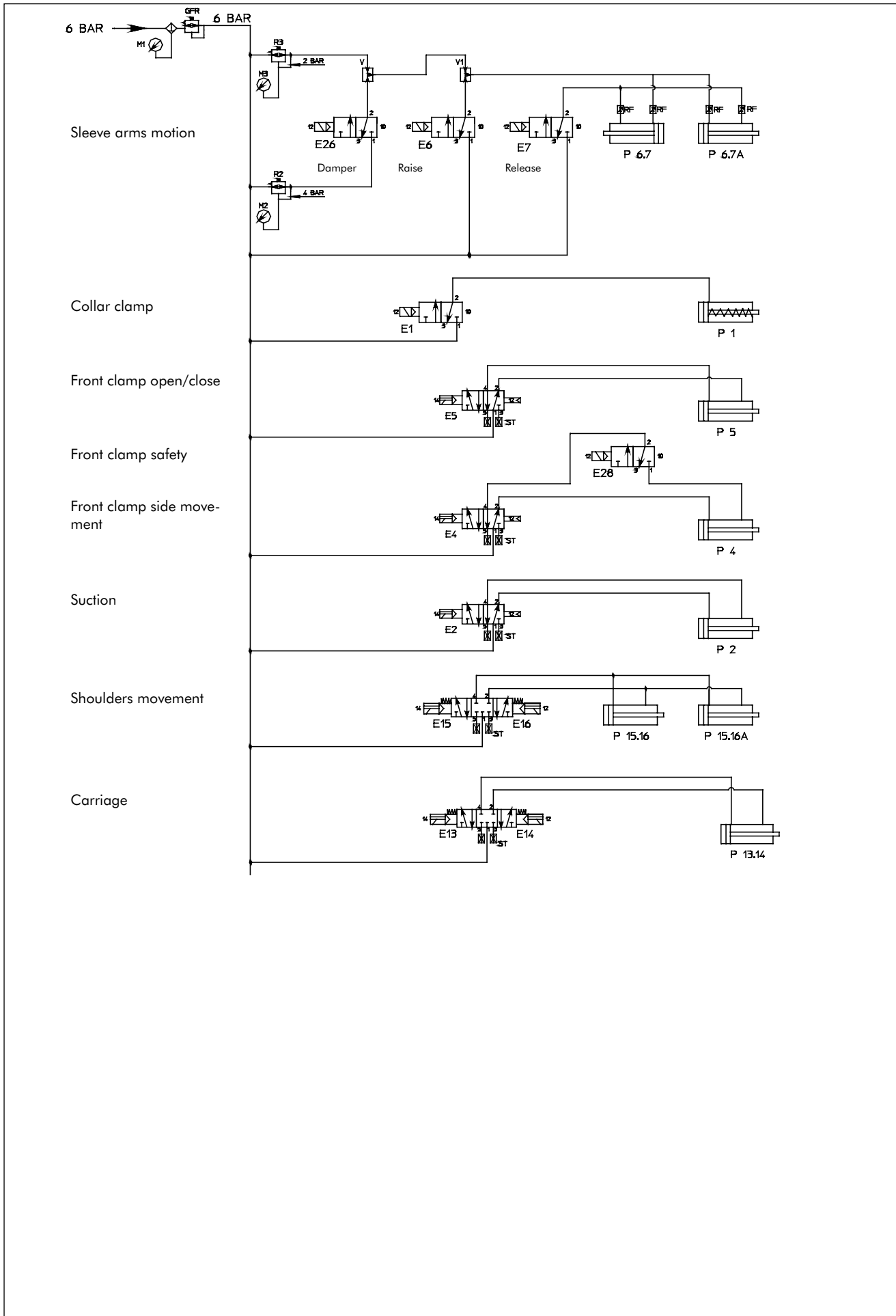
CONTROL BOARD CONNECTIONS part 1/2
INGRESSI E USCITE PANNELLO DI CONTROLLO parte 1/2

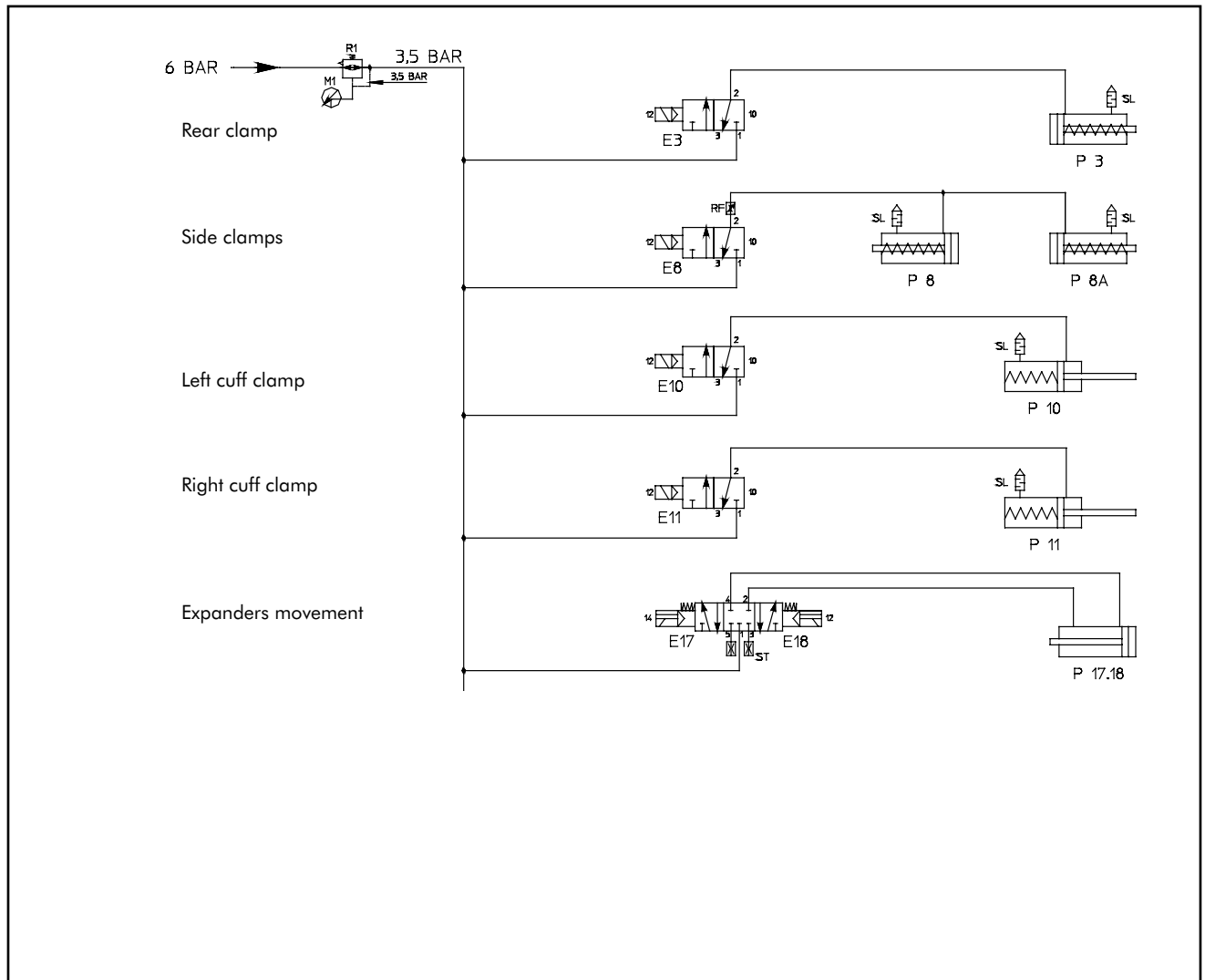
ed 4506



CONTROL BOARD CONNECTIONS part 2/2
INGRESSI E USCITE PANNELLO DI CONTROLLO parte 2/2

ed 4506



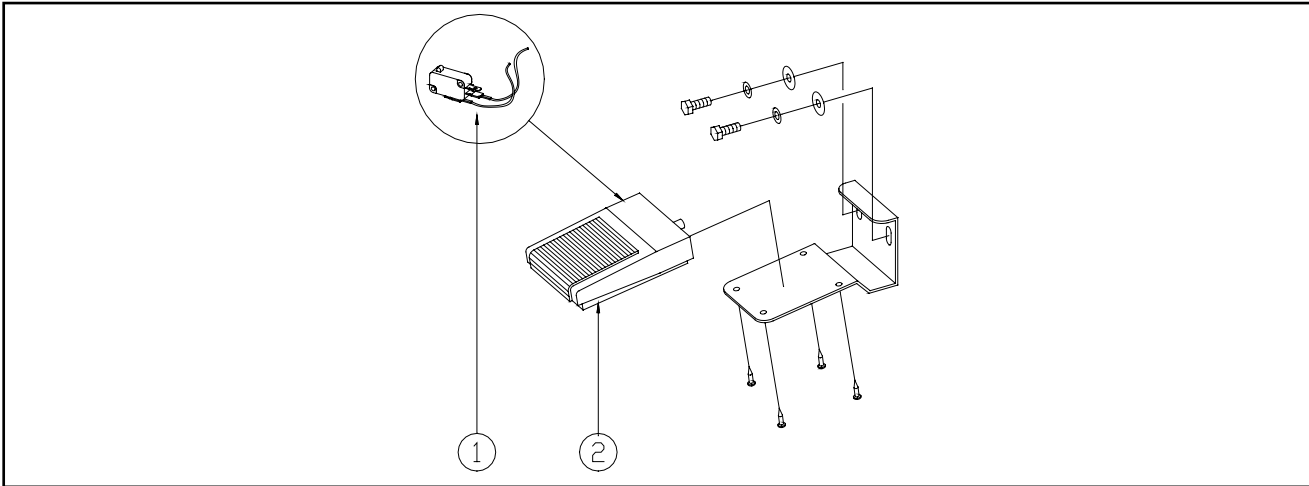


E1	Elettrov. Fermancollo	Collar clamp valve	P4	Pistone traslazione pala frontale	Front clamp side movement cylinder
E2	Elettrov. Aspirazione	Suction valve	P5	Pistone apri/chiodi pala frontale	Front clamp open/close cylinder
E3	Elettrov. Pala posteriore	Rear clamp valve	P6.7	Pistone posizionamento braccio SX	Left arm positioning cylinder
E4	Elettrov. Traslazione pala anteriore	Front clamp side movement valve	P6.7A	Pistone posizionamento braccio DX	Right arm positioning cylinder
E5	Elettrov. apertura/chiusura pala anteriore	Front clamp open/close valve	P8	Pistone paletta laterale SX	Left side clamp cylinder
E6	Elettrov. posizionamento bracci	Arms positioning valve	P8A	Pistone paletta laterale DX	Right side clamp cylinder
E7	Elettrov. rilascio bracci	Arms release valve	P10	Pistone pinza polso SX	Left cuff clamp cylinder
E8	Elettrov. palette laterali	Side clamps valve	P11	Pistone pinza polso DX	Right cuff clamp cylinder
E10	Elettrov. pinza polso sinistra	Left cuff clamp valve	P13, P14	Pistoni salita/discesa carro	Carriage up/down cylinders
E11	Elettrov. pinza polso destra	Right cuff clamp valve	P15, P16	Pistoni apri/chiodi spalla SX	Left shoulder open/close cylinder
E13, E14	Elettrov. salita e discesa carro	Carriage up/down valve	P17, P18	Pistoni apri/chiodi espansori	Side expanders open/close cylinders
E15, E16	Elettrov. apri/chiodi spalle	Shoulders open/close valve	P15, P16A	Pistoni apri/chiodi spalla DX	Right shoulder open/close cylinder
E17, E18	Elettrov. apri/chiodi espansori	Side expanders open/close valve	RF	Regolatori di flusso	Flow regulators
E26	Elettrov. ammortizzatore	Damper valve	R1, R2, R3	Riduttori di pressione	Pressure reducers
GFR	Gruppo entrata aria	Air in group	SL	Silenziatori	Silencers
M1, M2, M3	Manometri	Pressure gauges	ST	Valvola di strozzamento	Speed controls
P1	Pistone fermancollo	Collar clamp cylinder	V, V1	Valvola OR	Logic OR valve
P2	Pistone aspirazione	Suction cylinder			
P3	Pistone pala posteriore	Rear clamp cylinder			
Pos.	Descrizione	Description	Pos.	Descrizione	Description
PNEUMATIC DIAGRAM - SCHEMA PNEUMATICO					ed 3605

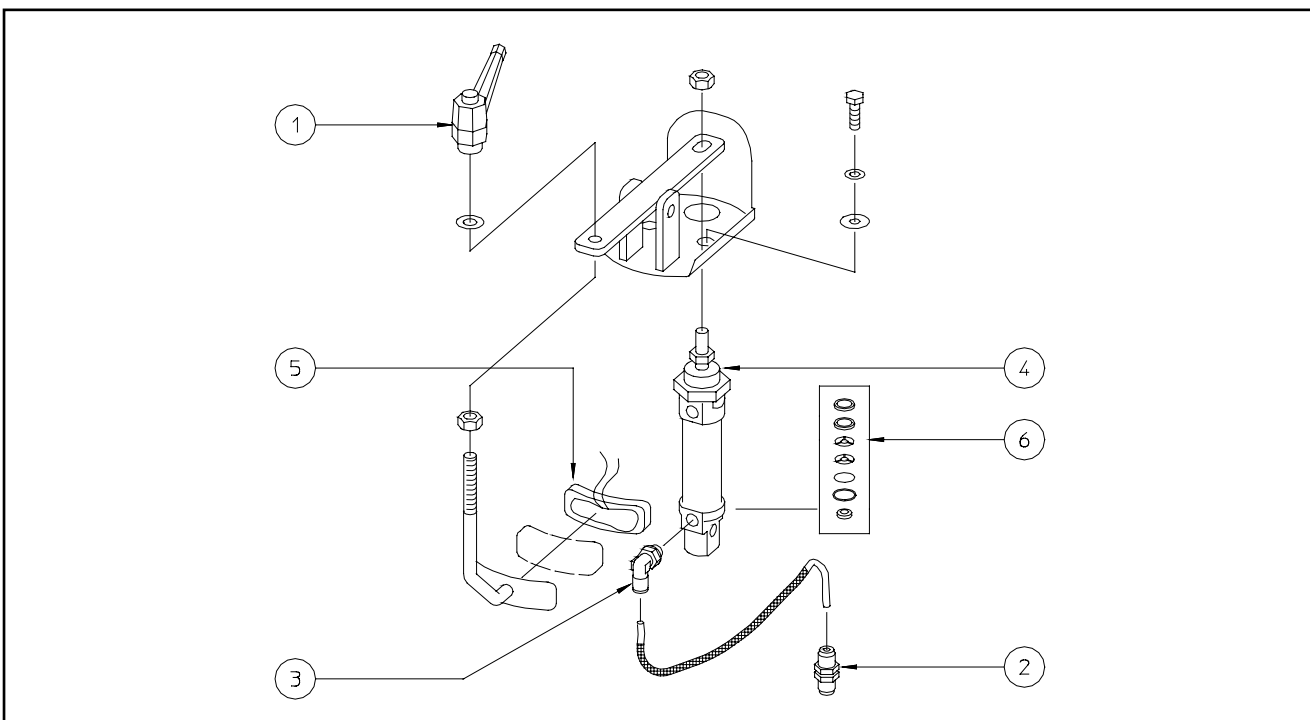
10. Spare parts diagrams

Please refer to the following diagrams when ordering spare parts.
To avoid mistakes, always provide code and description of the required spare part.

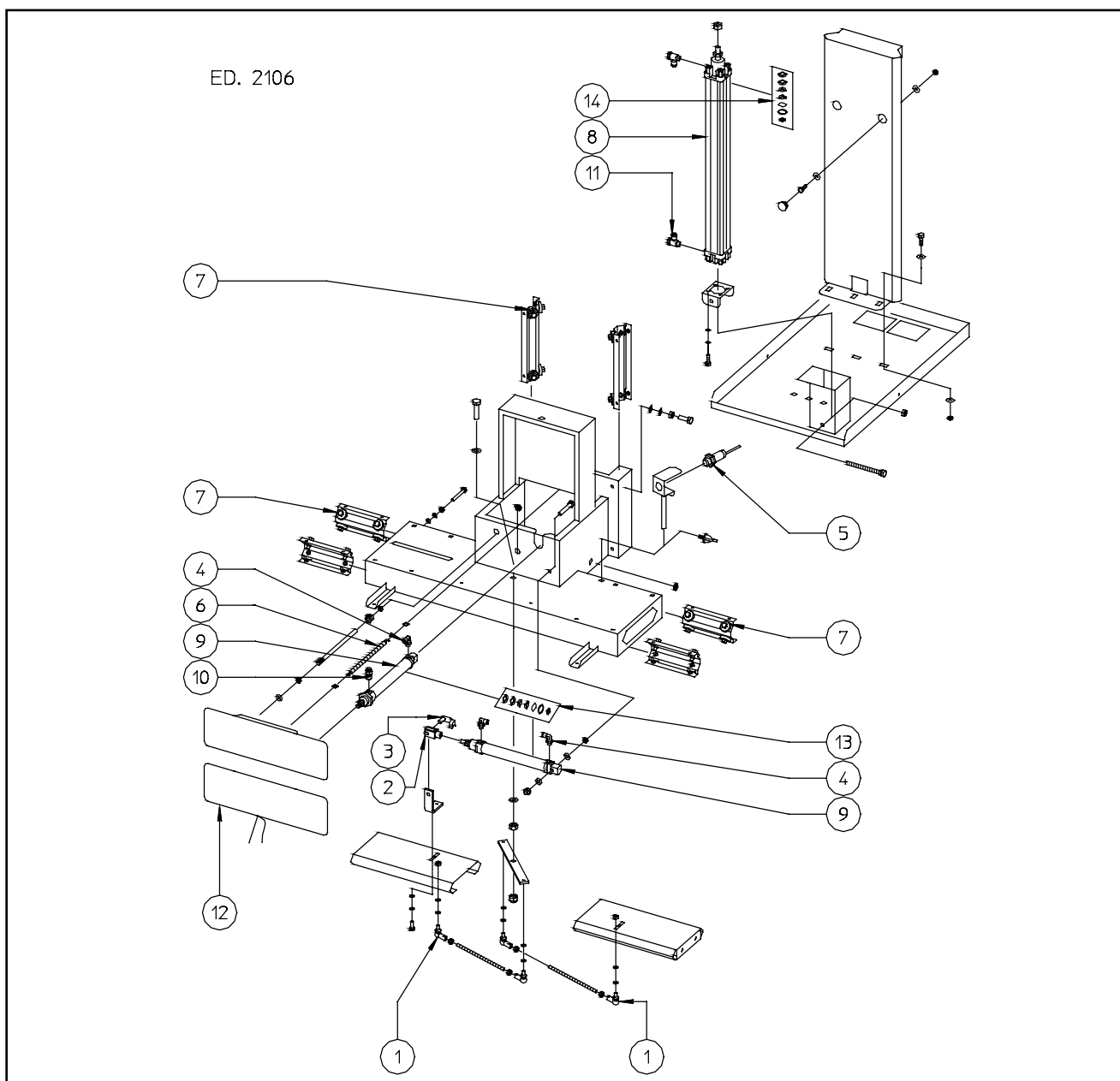
 **Always use original spare parts.**



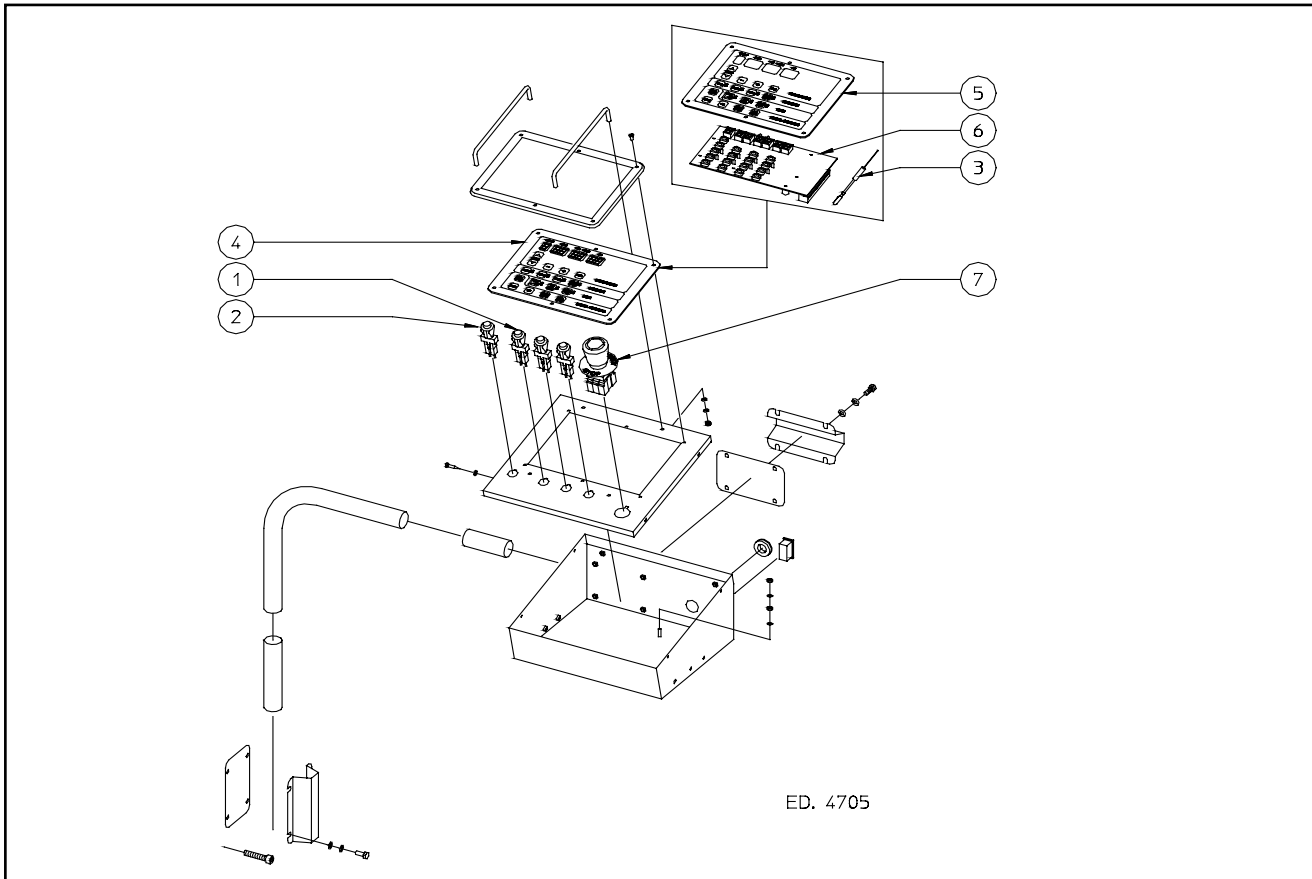
2	0220581	1	PEDALE	PEDALE MOBILE	PEDAL	PEDAL	PEDAL
1	0220574	1	MICRO PEDALE	MICROINTERRUPTEUR	MIKROSCHALTER	MICRO	MICROINTERR. PEDAL
pos	Code	Q.ty	Descrizione	Designation	Beschreibung	Description	Descripción
5200A06			PEDAL - PEDALE				ed 0905



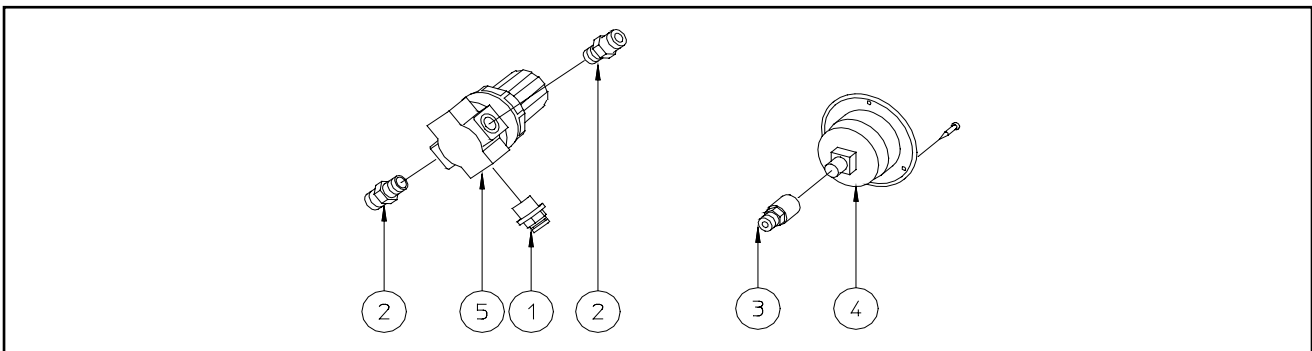
6	ZC01	1	KIT GUARNIZIONI	KIT JOINTS	DICHTUNGEN	GASKET KIT	KIT EMPAQUET.
5	T603015	1	PRONTO TOP	PRONTO TOP	PRONTO TOP	PAD+COVER	MULLIDO+ TELA COB.
4	C29	1	CILINDRO Ø20	CYLINDRE Ø20	ZYLINDER	CYLINDER	CILINDRO D=20 C=25
3	0210304	1	RACCORDO	RACCORD	VERBINDUNG	CONNECTION	CODO
2	0210110	1	RACCORDO	RACCORD	VERBINDUNG	CONNECTION	CODO
1	0180321	1	MANIGLIA F. M8	POIGNEE	GRIFF	HANDLE	MANIJA F. M8
pos	Code	Q.ty	Descrizione	Designation	Beschreibung	Description	Descripción
5200A35			COLLAR CLAMP - GRUPPO PALA FERMACOLLO				ed 1004



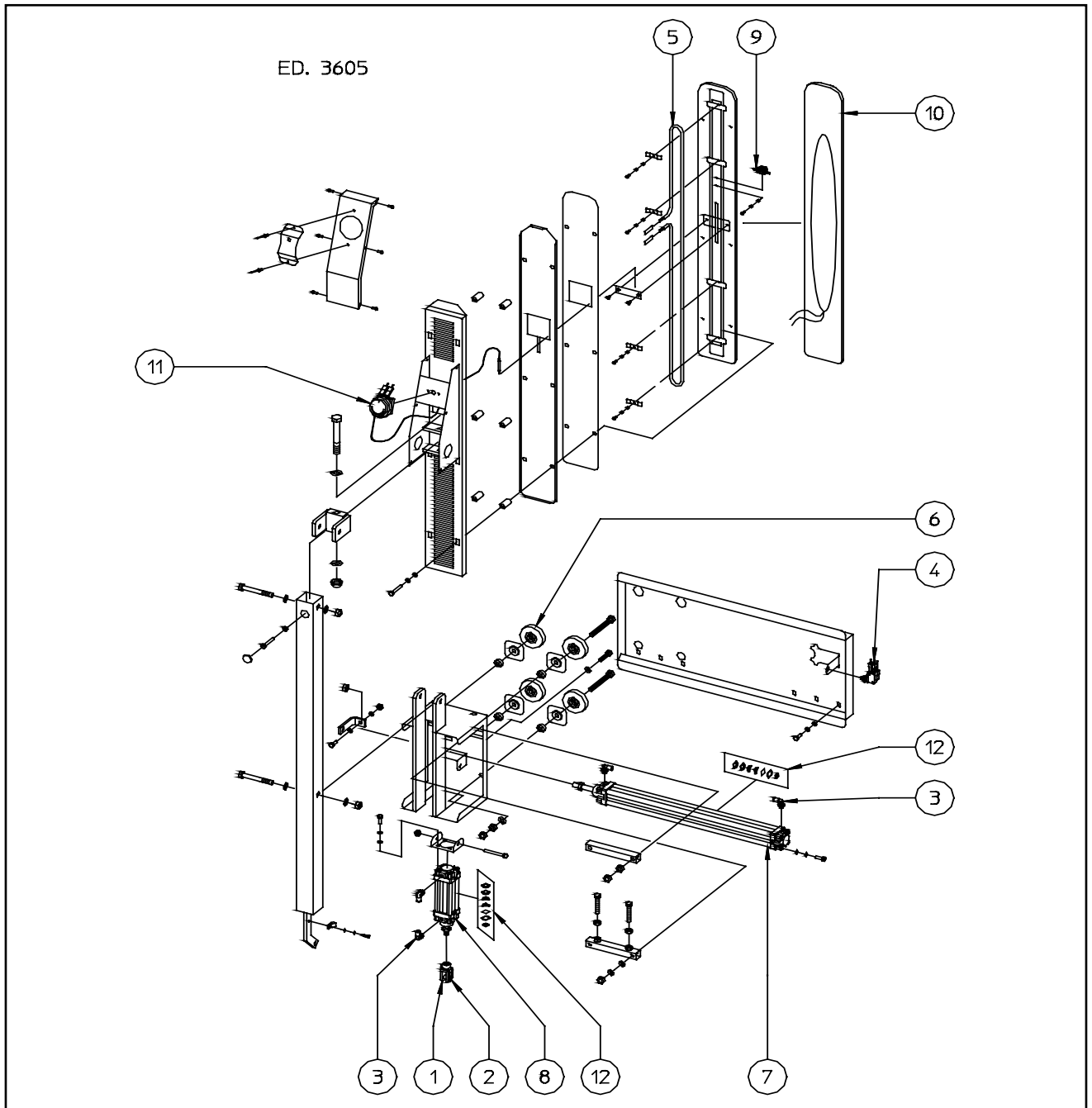
14	ZC02	1	KIT GUARNIZIONI	KIT JOINTS	DICHTUNGEN	GASKET KIT	KIT EMPAQUET.
13	ZC01	2	KIT GUARNIZIONI	KIT JOINTS	DICHTUNGEN	GASKET KIT	KIT EMPAQUET.
12	T603040	1	PRONTO TOP	PRONTO TOP	PRONTO TOP	PAD+COVER	MULLIDO+TELA COP.
11	C33	2	REGOLATORE	REGULATEUR FLUX	REGLER	REGULATOR	REGULADOR
10	C22	1	SILENZIATORE	SILENCIEUX 1/8"	SCHALLDÄMPFER	SILENCER	SILENCIADOR
9	C10	2	CILINDRO Ø20	CYLINDRE Ø20	ZYLINDER	CYLINDER	CILINDRO D=20 C=125
8	C030	1	CILINDRO Ø32	CYLINDRE Ø32	ZYLINDER	CYLINDER	CILINDRO D=32 C=400
7	35293005	24	CUSCINETTO	PALLIER	LAGER	BEARING	COJINETE
6	0240107	1	MOLLA	RESSORT	FEDER	SPRING	MUELLE
5	0221424	2	FOTOCPELLULA	PHOTOCPELLULE	FOTOCZELLE	PHOTOCELL	FOTOCÉLULA
4	0210302	3	RACCORDO M 1/8"	RACCORD M 1/8"	VERBINDUNG	CONNECTION	CODO
3	0190509	1	CLIPS FORCELLA	CLIPS FOURCHE	CLIPS	CLIPS	CLIPS HORQUILLA
2	0190508	1	FORCELLA M8	FOURCHE M8	GABEL	FORK	HORQUILLA
1	0190503	4	TESTINA	CONNEXION	ANSCHLUSSE	CONNECTION	CODO
pos	Code	Q.ty	Descrizione	Designation	Beschreibung	Description	Descripción
5200A33			CARRIAGE ASSEMBLY - GRUPPO CARRO				ed 2106



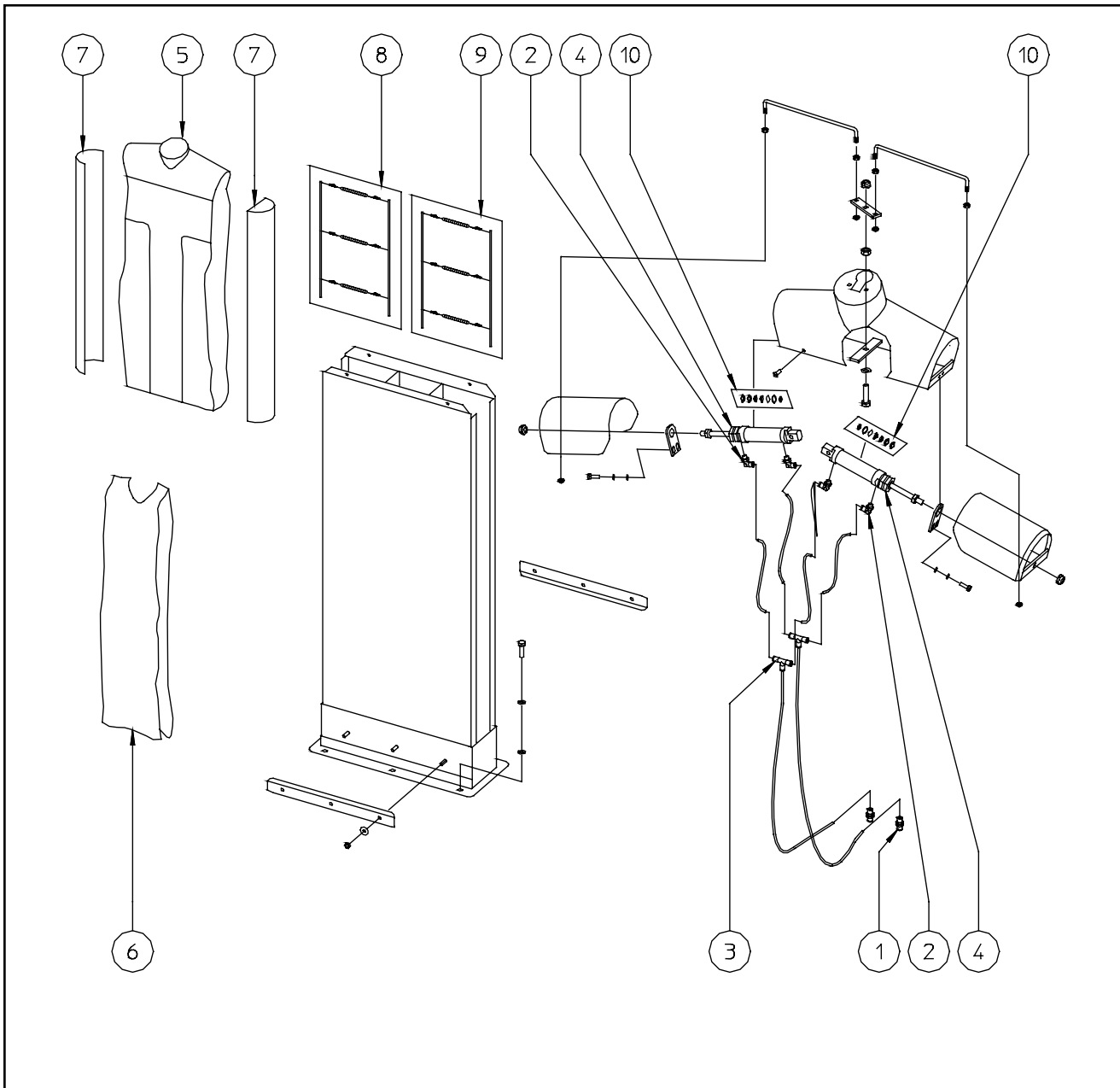
7	Z500	1	INTERRUTT. EMERG.	INTERRUPT. EMERG.	STOP-SCHALTER	EMERG. SWITCH	INTERRUPT. STOP
6	0221412	1	SCHEDA	CARTE ELECTRONIQUE	PLATINE	CARD	TARJETA
5	022140901	1	PANNELLO	PANNEAU	PANEEL	PANNEL	PANEL
4	0221409	1	PANNELLO COMPL.	PANNEAU COMPLET	ELEKTR.	COMPLETE PANEL	PANEL COMPLETO
3	0220591FAS	1	CONDENSATORE	CAPACITOR	KONDENSATOR	CONDENSATEUR	CONDENSADOR
2	0220583	1	INTERRUTT. COMPL.	INTERRUPTEUR COMPL.	SCHALTER	COMPLETE SWITCH	PULSANTE COMPL.
1	0220570	3	INTERRUTT. PULS.	INTERRUPTEUR COMPL.	SCHALTER	COMPLETE SWITCH	PULSANTE COMPL.
pos	Code	Q.ty	Descrizione	Designation	Beschreibung	Description	Descripción
5200A60			CONTROL PANEL - PANNELLO DI CONTROLLO				ed 4705



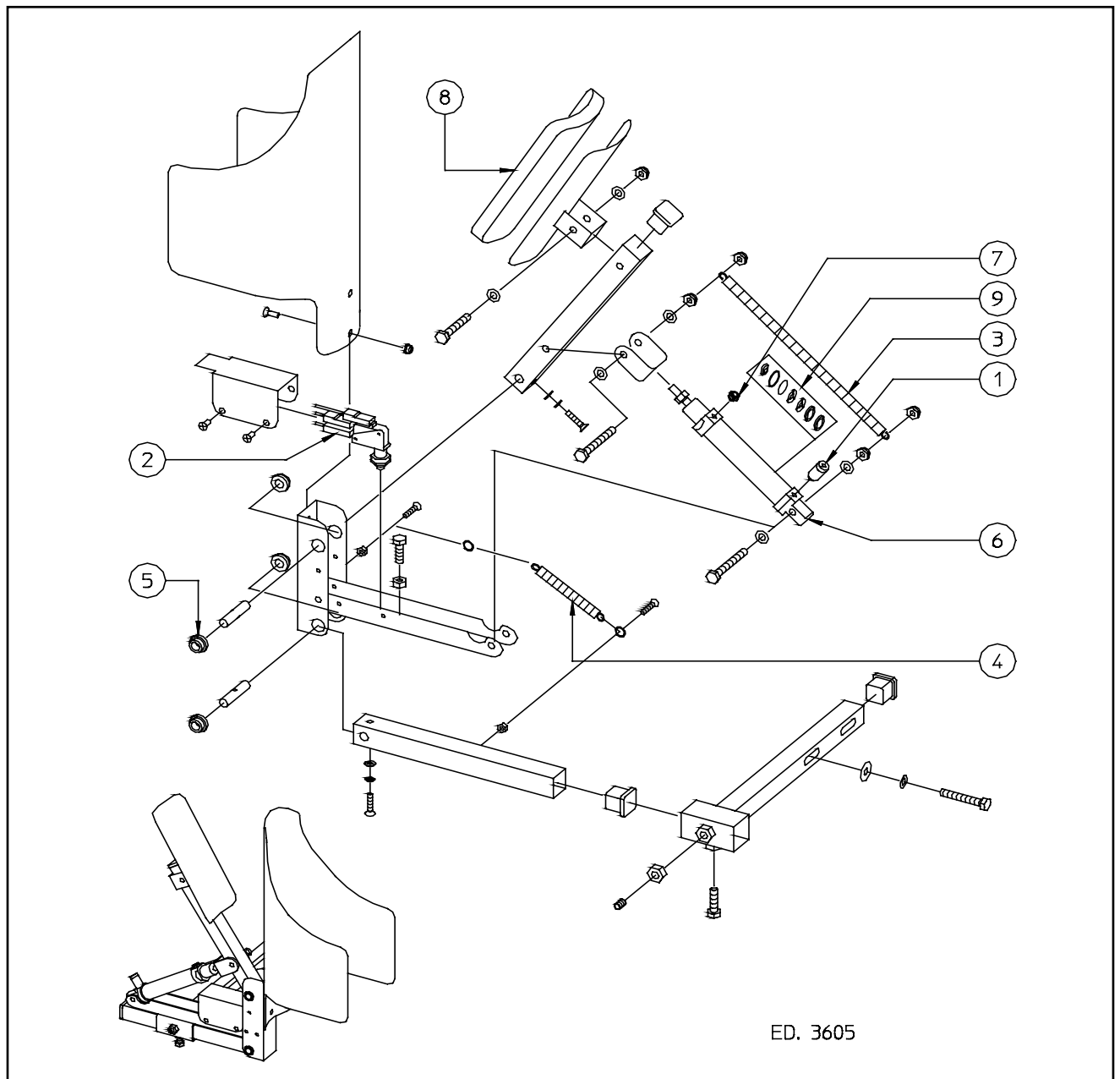
5	C06	3	REGOLATORE	REGULATEUR	REGLER	REGULATOR	REGULADOR
4	0280501	3	MANOMETRO	MANOMETRE 0-6bar	DRUCKWACHTER	PRESSURE GAUGE	MANÓMETRO 0-6bar
3	0210106	3	RACCORDO	RACCORD	VERBINDUNG	CONNECTION	CODO
2	0210104	6	RACCORDO	RACCORD	VERBINDUNG	CONNECTION	CODO
1	0210103	3	RACCORDO	RACCORD	VERBINDUNG	CONNECTION	CODO
pos	Code	Q.ty	Descrizione	Designation	Beschreibung	Description	Descripción
5200A5004			PNEUMATIC ADJUSTMENTS - GRUPPO REGOLAZIONI PNEUMATICHE				ed 1004



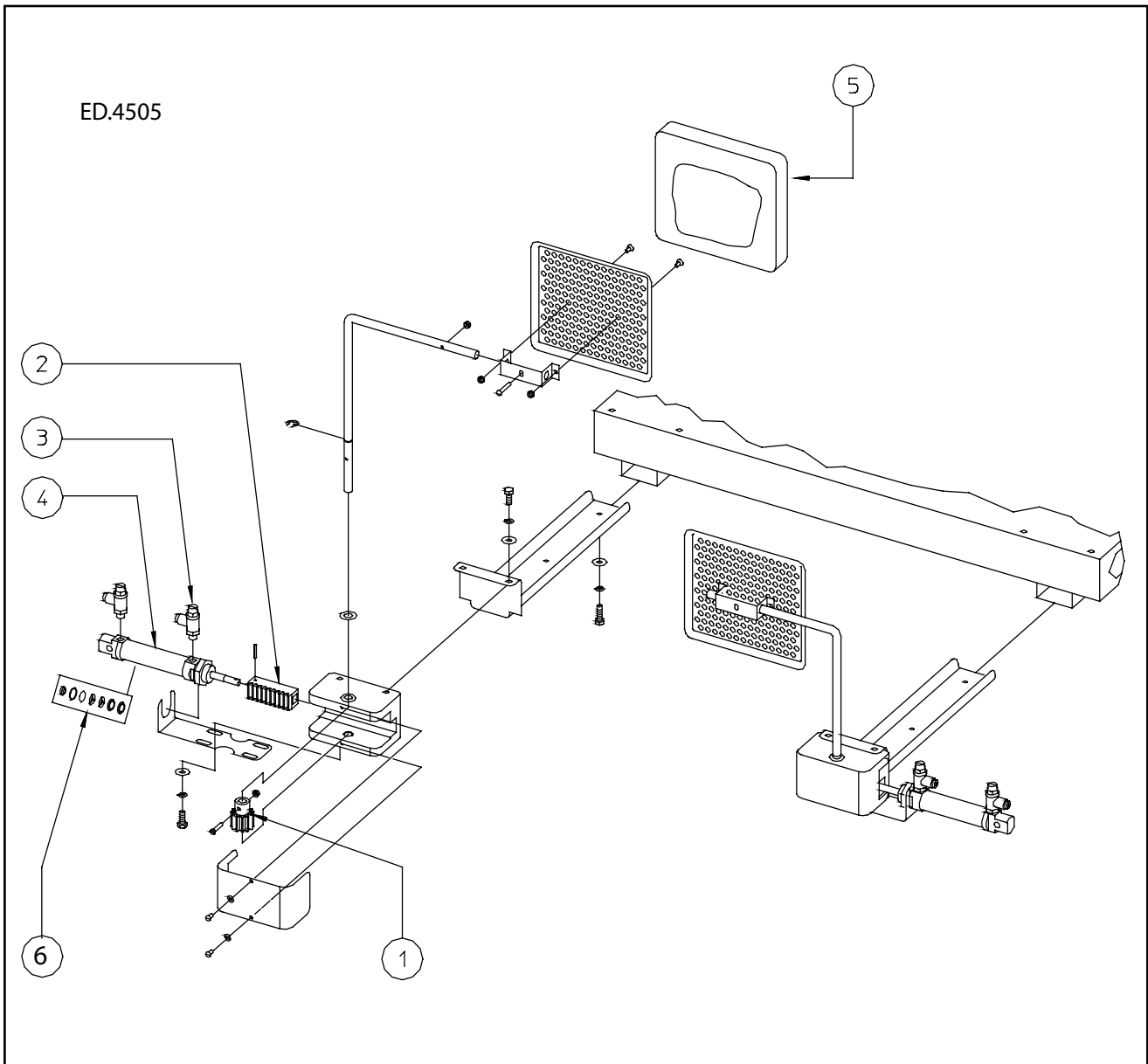
12	ZC10	2	KIT GUARNIZIONI	KIT JOINTS	DICHTUNGEN	GASKET KIT	KIT EMPAQUET.
11	Z501	1	TERMOREG. 50-220°	THERMORÉGLATEUR	WÄRMERREGLER	THERMORÉGLAT.	TERMORREGULADOR
10	T603012	1	PRONTO TOP	PRONTO TOP	PRONTO TOP	PAD+COVER	MULLIDO+ TELA COB.
9	0220405	1	TERMOST. SIC. 220°C	THERMOSTAT	THERMOSTAT	THERMOSTAT	TERMÓSTATO
8	C031	1	CILINDRO Ø32	CILINDRO Ø32	ZYLINDER	CYLINDER	CILINDRO D=32 C=50
7	C030	1	CILINDRO Ø32	CYLINDRE Ø32	ZYLINDER	CYLINDER	CILINDRO D=32 C=400
6	6311350	4	RUOTA Ø60	ROUE Ø60	RADER Ø60	WHEEL Ø60	RUEDA Ø60
5	0230128	1	RESISTENZA 1000W	RESISTANCE 1000W	HEIZSTAB 1000W	1000W ELEMENT	RESIST. 1000W
4	0220557	1	MICROINTERRUTT.	MICROINTERRUPTEUR	MIKROSCHALTER	MICRO	MICROINTERRUPTOR
3	0210303	4	RACCORDO	RACCORD	VERBINDUNG	CONNECTION	CODO
2	0190507	1	CLIPS FORCELLA	CLIPS FOURCHE	CLIPS	CLIPS	CLIPS HORQUILLA
1	0190506	1	FORCELLA F. M10	FOURCHE F. M10	GABEL	FORK	HORQUILLA
pos	Code	Q.ty	Descrizione	Designation	Beschreibung	Description	Descripción
5200A30			FRONT CLAMP ASSEMBLY - GRUPPO PALA FRONTALE				ed 2107



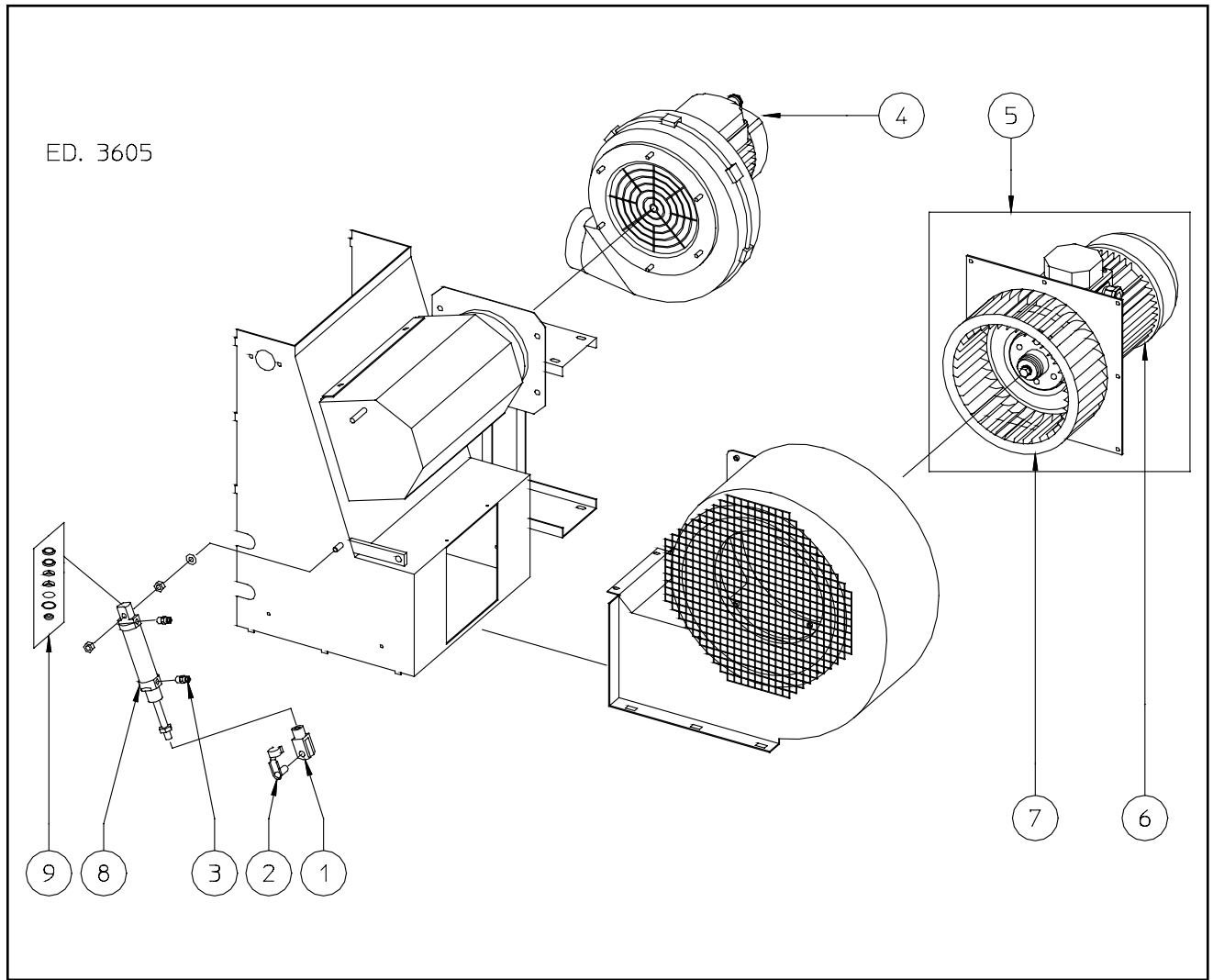
10	ZC05	2	KIT GUARNIZIONI	KIT JOINTS	DICHTUNGEN	GASKET KIT	KIT EMPAQUETAD.
9	Z506	1	KIT MOLLE+GANCI	KIT RESSORTS	FEDER	SPRING KIT	KIT MUELLE+GANCHO
8	Z505	1	KIT MOLLE+GANCI	KIT RESSORTS	FEDER	SPRING KIT	KIT MUELLE+GANCHO
7	T603037	2	SOFFIETTO	LATERALE	BALG	SIDE COVER	EXTENCIÓN LATERAL
6	T603011	1	PAD-MAT CAMICIE	MOLLETON	PAD-MAT VERKLEIDUNG	PADDING	MULLIDO CAMISA
5	T603038	1	CAMICIOTTO	COUVERTURE	BEZUG	COVER	CAMISA
4	C30	2	CILINDRO Ø25	CYLINDRE Ø25	ZYLINDER	CYLINDER	CILINDRO D=25 C=50
3	0210533	2	RACCORDO	RACCORD	VERBINDUNG	CONNECTION	CODO
2	0210304	4	RACCORDO	RACCORD	VERBINDUNG	CONNECTION	CODO
1	0210110	2	RACCORDO	RACCORD	VERBINDUNG	CONNECTION	CODO
pos	Code	Q.ty	Descrizione	Designation	Beschreibung	Description	Descripción
STANDARD SIZE FORM - GRUPPO BUSTO UOMO							ed 3105



9	ZC08	2	KIT GUARNIZIONI	KIT JOINTS	DICHTUNGEN	GASKET KIT	KIT EMPAQUETAD.
8	T603023	2	RIVESTIMENTO	COUVERTURE	BEZUG	COVER	REVESTIMIENTO
7	C34	2	SILENZIATORE	SILENCIEUX 1/4"	SCHALLDÄMPFER	SILENCER	SILENCIADOR
6	C034	2	CILINDRO Ø16	CYLINDRE Ø16	ZYLINDER	CYLINDER	CILINDRO D=16 C=50
5	0290131	8	BUSSOLA	DOUILLE	KOMPASS	BUSH FOR CLAMPS	CASQUILLO
4	0240108	2	MOLLA	RESSORT	FEDER	SPRING	MUELLE
3	0240107	2	MOLLA	RESSORT	FEDER	SPRING	MUELLE
2	0220557	1	MICROINTERRUTT.	MICRINTERRUPTEUR	MIKROSCHALTER	MICRO	MICROINTERRUPTOR
1	0210105	2	RACCORDO	RACCORD	VERBINDUNG	CONNECTION	CODO
pos	Code	Q.ty	Descrizione	Designation	Beschreibung	Description	Descripción
5200A36			SIDE CLAMPS GROUP - GRUPPO PALETTE LATERALI				ed 3605

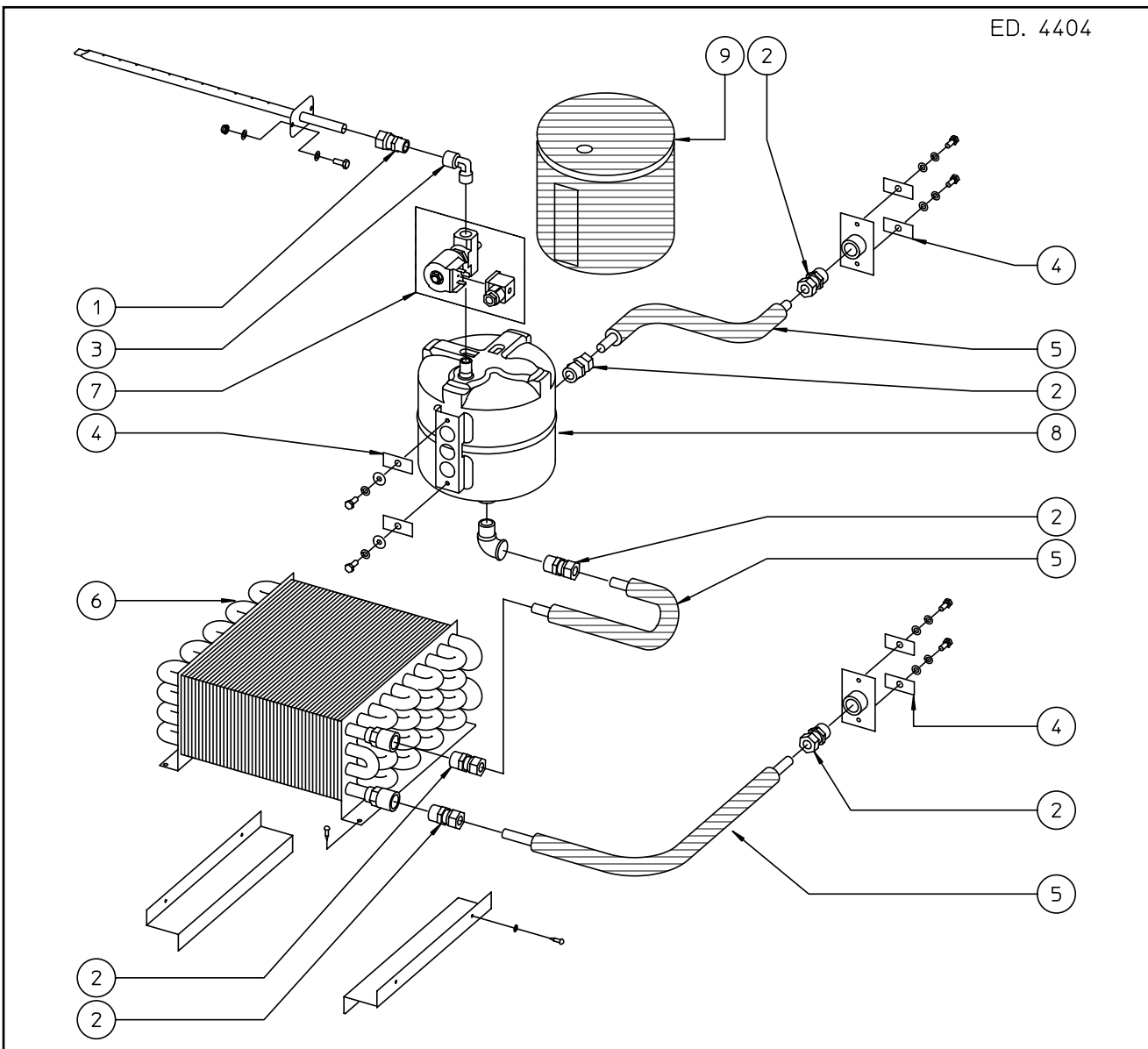


6	ZC01	2	KIT GUARNIZIONI	KIT JOINTS	DICHTUNGEN	GASKET KIT	KIT EMPAQUETAD.	
5	T603013	2	PRONTO TOP	PRONTO TOP	PRONTO TOP	PAD+COVER	MULLIDO+ TELA COB.	
4	C36	2	CILINDRO Ø20	CYLINDRE Ø20	ZYLINDER Ø20	CYLINDER Ø20	CILINDRO Ø20	
3	C12	4	REGOLATORE	REGULATEUR	REGLER	REGULATOR	REGULADOR	
2	0280904	2	CREMAGLIERA	CREMAILLIERE	ZAHNSTANGE	TOOTHED RACK	CREMALLERA	
1	0280903	2	RUOTA DENTATA	ROUE	RADER	WHEEL	RUEDA	
pos	Code	Q.ty	Descrizione	Designation	Beschreibung	Description	Descripción	
L550			SIDE EXPANDERS AND FRONT HEM CLAMPS ESPANSORI LATERALI CON PALETTE ANTERIORI				ed 4505	

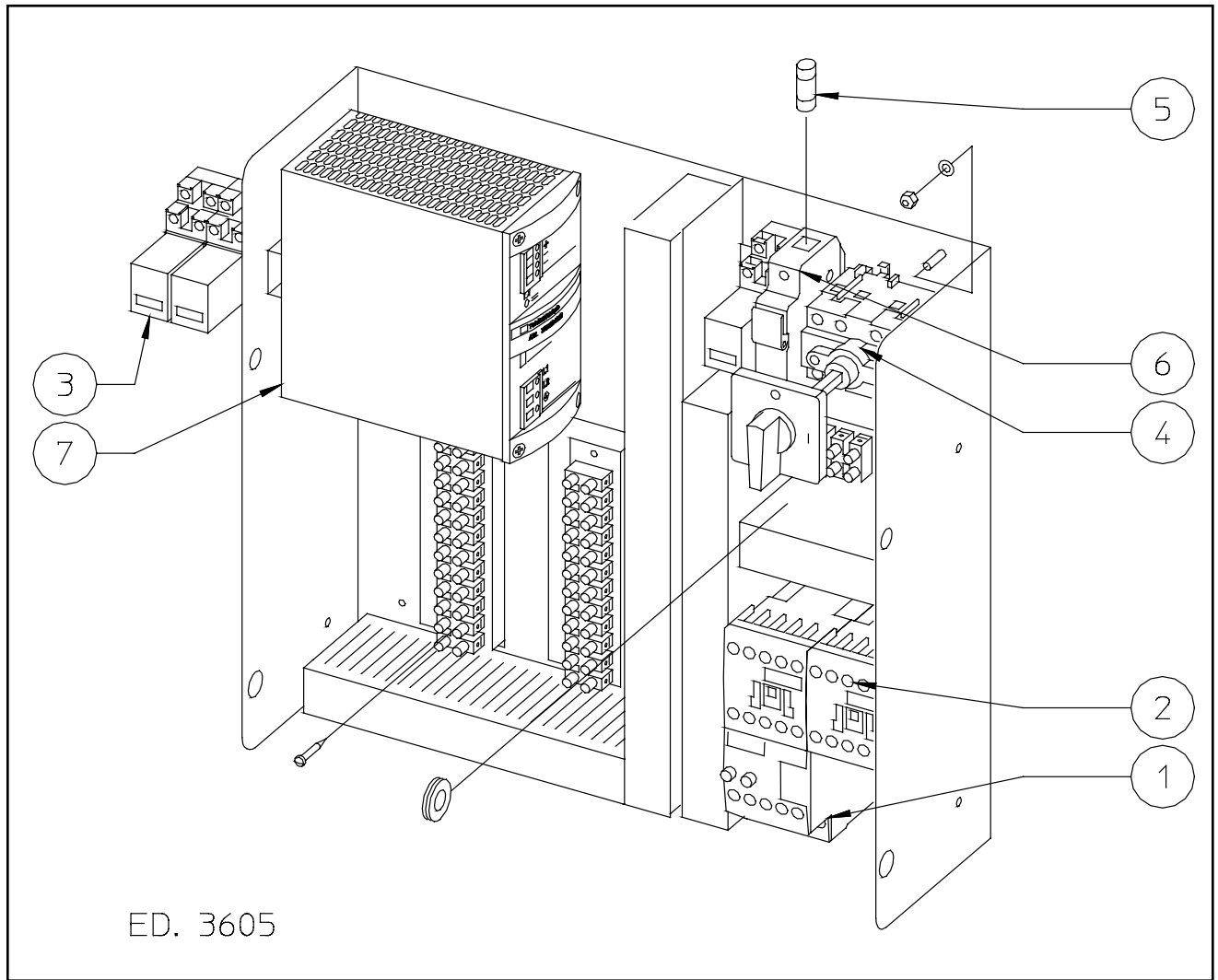


9	ZC00	1	KIT GUARNIZIONI	KIT JOINTS	DICHTUNGEN	GASKET KIT	KIT EMPAQUET.
8	C26	1	CILINDRO Ø25	CYLINDRE Ø25	ZYLINDER	CYLINDER Ø25	CILINDRO D=25 C=50
7	A3138502	1	VENTOLA DX	ROTOR VENTIL. DX	RECHTE GEBLÄSE	RIGHT FAN	ROTOR DERECHO
6	A3138501	1	MOTORE 230/400-50	MOTEUR 230/400-50	MOTOR 230/400-50	MOTOR 230/400-50	MOTOR 230/400-50
5	A31385	1	GR. MOT. 230/400-50	GR. MOT. 230/400-50	GR. MOT. 230/400-50	GR. MOT. 230/400-50	GR. MOT. 230/400-50
4	A03225	1	ASPIRATORE	ASPIRATEUR	ABSAUGER	VACUUM	ASPIRADOR
3	0210103	2	RACCORDO M 1/8"	RACCORD M 1/8"	VERBINDUNG	CONNECTION	CODO
2	0190507	1	CLIPS FORCELLA	CLIPS FOURCHE	CLIPS	CLIPS	CLIPS HORQUILLA
1	0190506	1	FORCELLA F. M10	FOURCHE F. M10	GABEL	FORK	HORQUILLA
pos	Code	Q.ty	Descrizione	Designation	Beschreibung	Description	Descripción
MOTOR ASSEMBLY 50Hz - GRUPPO ARIA 50Hz							ed 3605
Part of:			all models at 50Hz				

9	ZC00	1	KIT GUARNIZIONI	KIT JOINTS	DICHTUNGEN	GASKET KIT	KIT EMPAQUET.
8	C26	1	CILINDRO Ø25	CYLINDRE Ø25	ZYLINDER	CYLINDER Ø25	CILINDRO D=25 C=50
7	A3138502	1	VENTOLA DX	ROTOR VENTIL DX	RECHTE GEBLÄSE	RIGHT FAN	ROTOR DERECHO
6	A3138505	1	MOTORE 220/380-60	MOTEUR 220/380-60	MOTOR 220/380-60	MOTOR 220/380-60	MOTOR 220/380-60
5	A31386	1	GR. MOT. 220/380-60	GR. MOT. 220/380-60	GR. MOT. 220/380-60	GR. MOT. 220/380-60	GR. MOT. 220/380-60
4	A03226	1	ASPIRATORE	ASPIRATEUR	ABSAUGER	VACUUM	ASPIRADOR
3	0210103	2	RACCORDO M 1/8"	RACCORD M 1/8"	VERBINDUNG	CONNECTION	CODO
2	0190507	1	CLIPS FORCELLA	CLIPS FOURCHE	CLIPS	CLIPS	CLIPS HORQUILLA
1	0190506	1	FORCELLA F. M10	FOURCHE F. M10	GABEL	FORK	HORQUILLA
pos	Code	Q.ty	Descrizione	Designation	Beschreibung	Description	Descripción
MOTOR ASSEMBLY 60Hz - GRUPPO ARIA 60Hz							ed 3605
Part of:			all models at 60Hz				

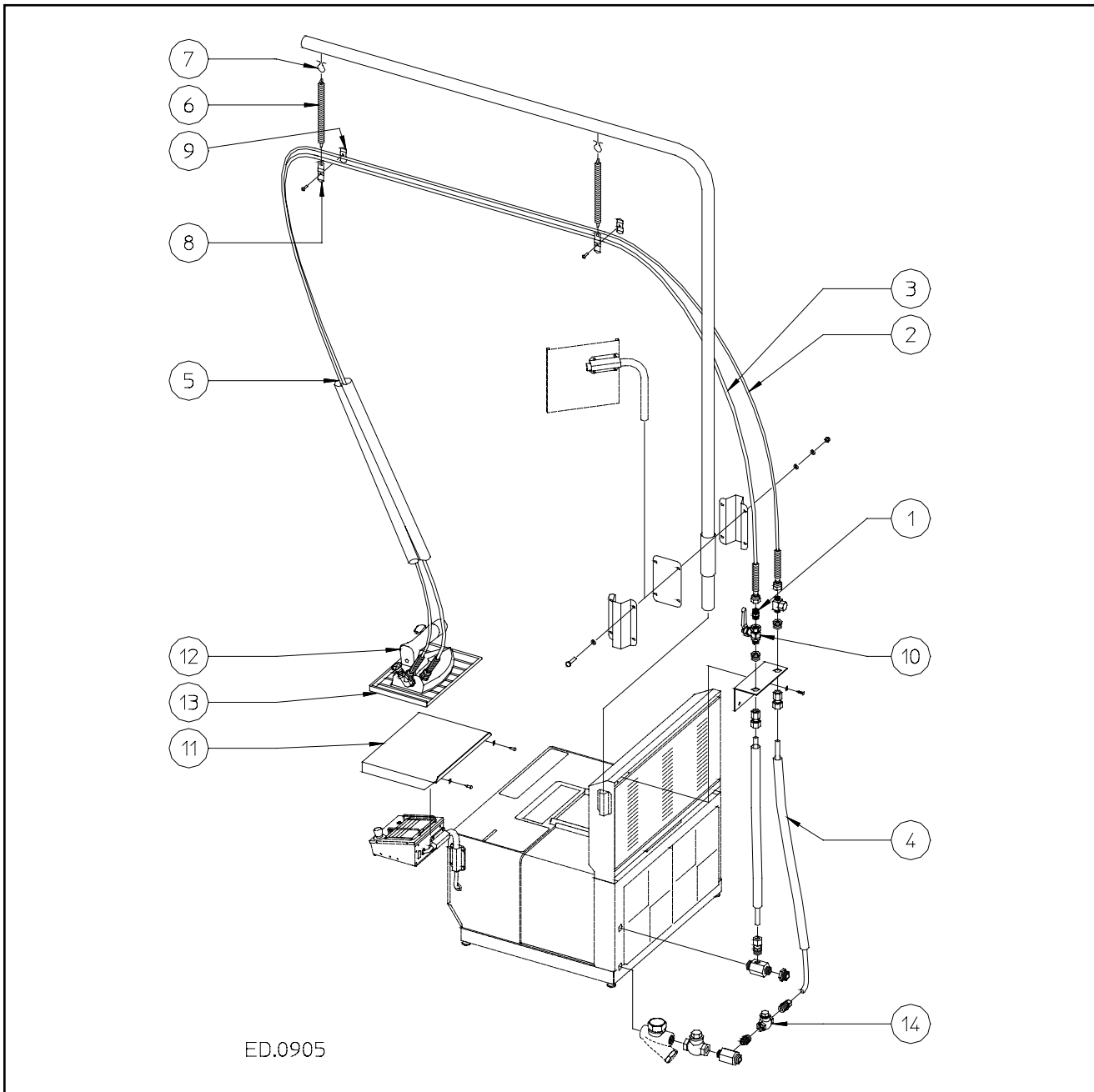


9	S025901	1	COIBENTAZIONE	ISOLATION	ISOLIERUNG	ISOLATION	AISLAMIENTO
8	S025401	1	RECIP. DI VAPORE	GENERATEUR	KESSEL	BOILER	CALDERA
7	E028235	1	ELETTRORVALVOLA	ELECTROVANNE	ELEKTROVENTIL	SOLENOID VALVE	ELECTROVALVULA
6	0230702	1	BATTERIA A PACCO	BATTERIE	BATTERIE	BATTERY	BATERIA
5	0220750	3	GUAINA METALIZZ.	GAINES METALLISEE	HÜLLE	COVER	VAINA METALIZADA
4	0220402	6	DISTANZIALE	ENTRETOISE	ABSTÄNDER	SPACER	RIOSTRA
3	0160407	1	GOMITO	GENOUILLERE	KNIE	ELBOW	CODO
2	0160109	6	RACCORDO	RACCORD	VERBINDUNG	CONNECTION	CODO
1	0160108	1	RACCORDO	RACCORD	VERBINDUNG	CONNECTION	CODO
pos	Code	Q.ty	Descrizione	Designation	Beschreibung	Description	Descripción
5200A40			STEAM GROUP - GRUPPO VAPORE				ed 4404

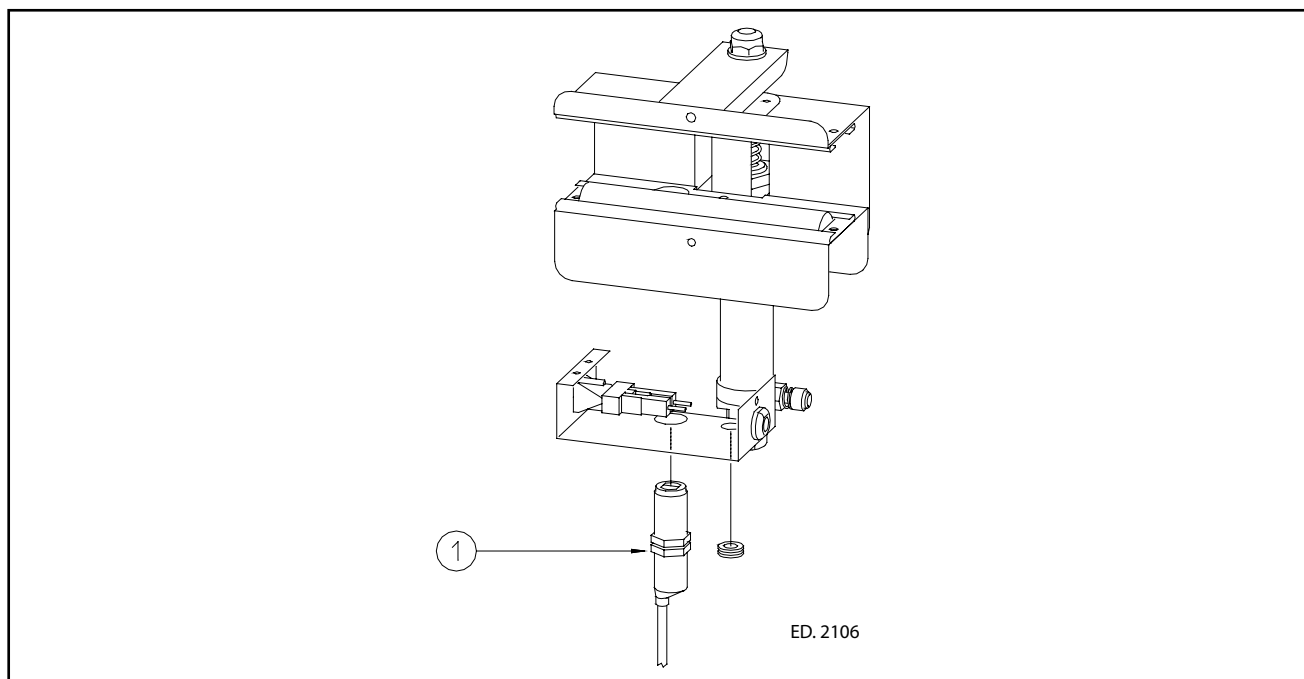


7	0221419	1	ALIMENTATORE 6A	ALIMENTATEUR 6A	SPEISER	FEEDING CARD 6A	ALIMENTADOR 6A
6	0220817	1	PORTAFUSIBILE	PORTE FUSIBLE	SICHERUNGHALTER	FUSE SUPPORT	PORTAFUSIBILE
5	0220801	1	FUSIBILE 10Ax38	FUSIBLE 10AX38	SICHERUNG	FUSE	FUSIBILE 10A
4	0220763	1	INTERRUT. BLOCC.	INTERRUPTEUR BLOC	HAUPTSCHALTER	MAIN SWITCH	INTERRUPTOR
3	0220586	3	RELE'	RELAIS	RELAIS	RELAY	RELÉ
2	0220529	1	RELE' TERMICO	RELAIS THERMIQUE	RELAIS	RELAY	RELÉ TÉRMICO
1	0220566	2	CONTATTORE 20A	CONTACTEUR 20A	KONTAKTOR	CONTACTOR	CONTACTOR 20A
pos	Code	Q.ty	Descrizione	Designation	Beschreibung	Description	Descripción
5200A61			ELECTRIC PANEL 400V 50Hz GRUPPO ELETTRICO 400V 50Hz				ed 3605
Part of:			all models at 50Hz				

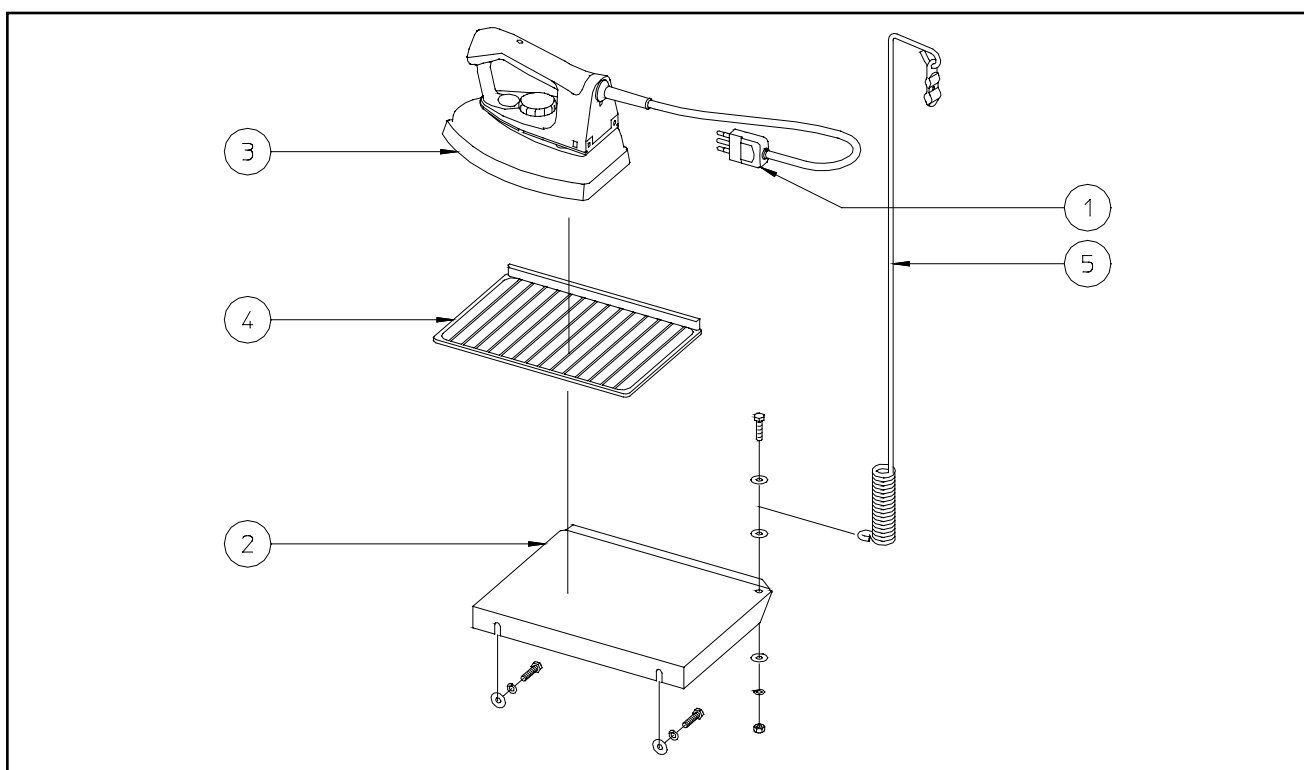
7	0221414	1	ALIMENTATORE 6A	ALIMENTATEUR 6A	SPEISER	FEEDING CARD 6A	ALIMENTADOR 6A
6	0220817	1	PORTAFUSIBILE	PORTE FUSIBLE	SICHERUNGHALTER	FUSE SUPPORT	PORTAFUSIBILE
5	0220801	1	FUSIBILE 10Ax38	FUSIBLE 10AX38	SICHERUNG	FUSE	FUSIBILE 10A
4	0220517	1	INTERRUT. BLOCC.	INTERRUPTEUR BLOC	HAUPTSCHALTER	MAIN SWITCH	INTERRUPTOR
3	0220586	3	RELE'	RELAIS	RELAIS	RELAY	RELÉ
2	0220594	1	RELE' TERMICO	RELAIS THERMIQUE	RELAIS	RELAY	RELÉ TÉRMICO
1	0220566	2	CONTATTORE 20A	CONTACTEUR 20A	KONTAKTOR	CONTACTOR	CONTACTOR 20A
pos	Code	Q.ty	Descrizione	Designation	Beschreibung	Description	Descripción
5200A63			ELECTRIC PANEL 60Hz GRUPPO ELETTRICO 60Hz				ed 3605
Part of:			all models at 60Hz				



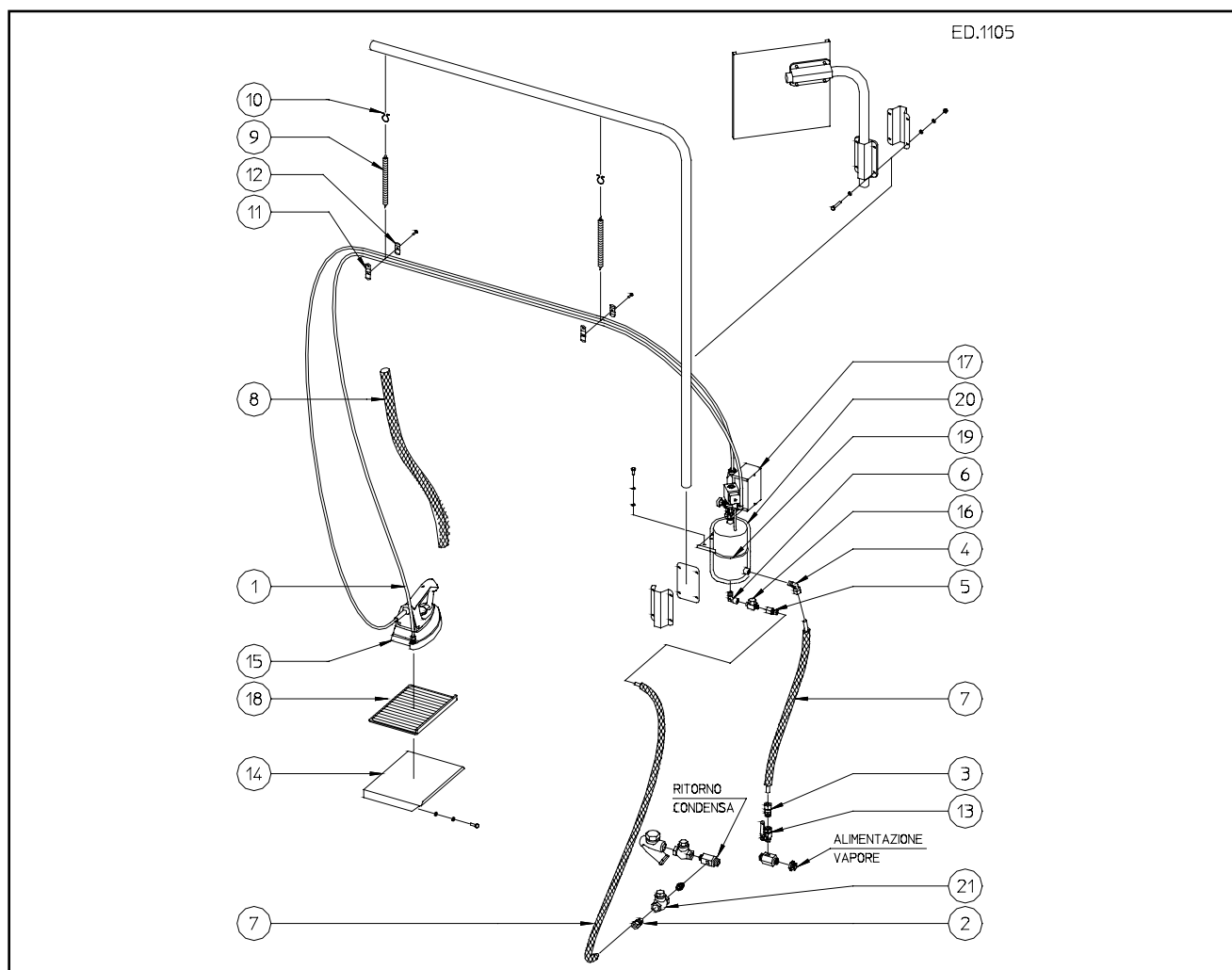
14	W02	2	VALVOLA DI RITEGNO	NON RETURN VALVE	RÜCKSCHLAUGVENTIL	VANNE NON RETOURN	VÁLVULA DE RETENCIÓN	
13	S0191001	1	SOTTOFERRO	IRON REST	BÜGELEISENABLAGE	REPOSE FER	ALFOMBRA PLANCHA	
12	F316	1	FERRO TUTTO VAPORE	ALL STEAM IRON	ALLE-DAMPF BUEGELEISEN	FER TOUT-VAPEUR	PLANCHA TODO VAPOR	
11	1230106	1	POGGIAFERRO	IRON REST	BÜGELEISENS-HALTER	SUPPORT FER	APOYO PLANCHA	
10	0280101	1	VALVOLA SFERA	BALL VALVE	KUGELVENTIL	VANNE À BILLE	VÁLVULA DE BOLA	
9	0240203	2	GANCIO FORATO	HOOK	HAKEN	CROCHET	GANCHO AGUJERADO	
8	0240202	2	GANCIO FILETTATO	HOOK	HAKEN	CROCHET	GANCHO	
7	0240109	2	ANELLO SUPP. MOLLA	RING	RING	BAGUE	ANILLO	
6	0240103	2	MOLLA REGGICAVO	SPRING	PEITSCHKE	RESSORT	MUELLE	
5	0220777	2	RIVESTIMENTO	COVER	ABDECKUNG	REVÊTEMENT	REVESTIMIENTO	
4	0220750	2	GUAINA	INSULATION	HÜLLE	GAINE METALLISEE	VAINA METALIZADA	
3	0130416	1	TUBO 7x5	HOSE 7x5	SCHLAUCH 7x5	TUYAU 7x5	TUBO 7x5	
2	0130407	1	TUBO 5.5x3.5	HOSE 5.5x3.5	SCHLAUCH 5.5x3.5	TUYAU 5.5x3.5	TUBO 5.5x3.5	
1	0090202	1	NIPPLO	NIPPLE	NIPPEL	NIPPLE	NIPLE	
pos	Code	Q.ty	Descrizione	Designation	Beschreibung	Description	Descripción	
L520			ALL-STEAM IRON GROUP (option) GRUPPO FERRO TUTTO VAPORE (opzionale)				ed 0905	



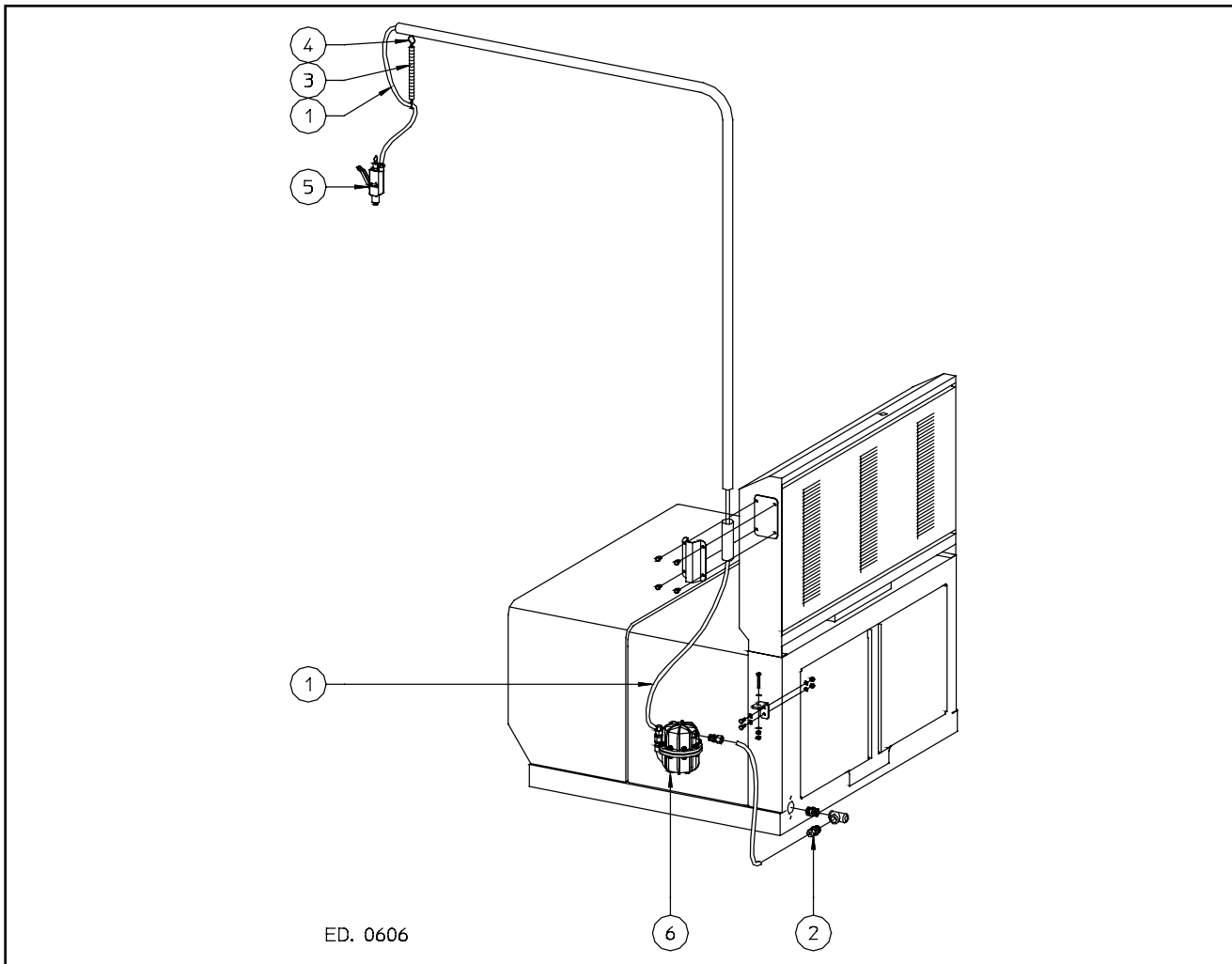
1	0221424	2	FOTOCCELLULA	PHOTOCELL	FOTOZELLE	PHOTOCELLULE	FOTOCÉLULA	
pos	Code	Q.ty	Descrizione	Designation	Beschreibung	Description	Descripción	
L522		CLAMPS PHOTOCELL (option) FOTOCCELLULA PINZE (opzionale)					ed 2106	



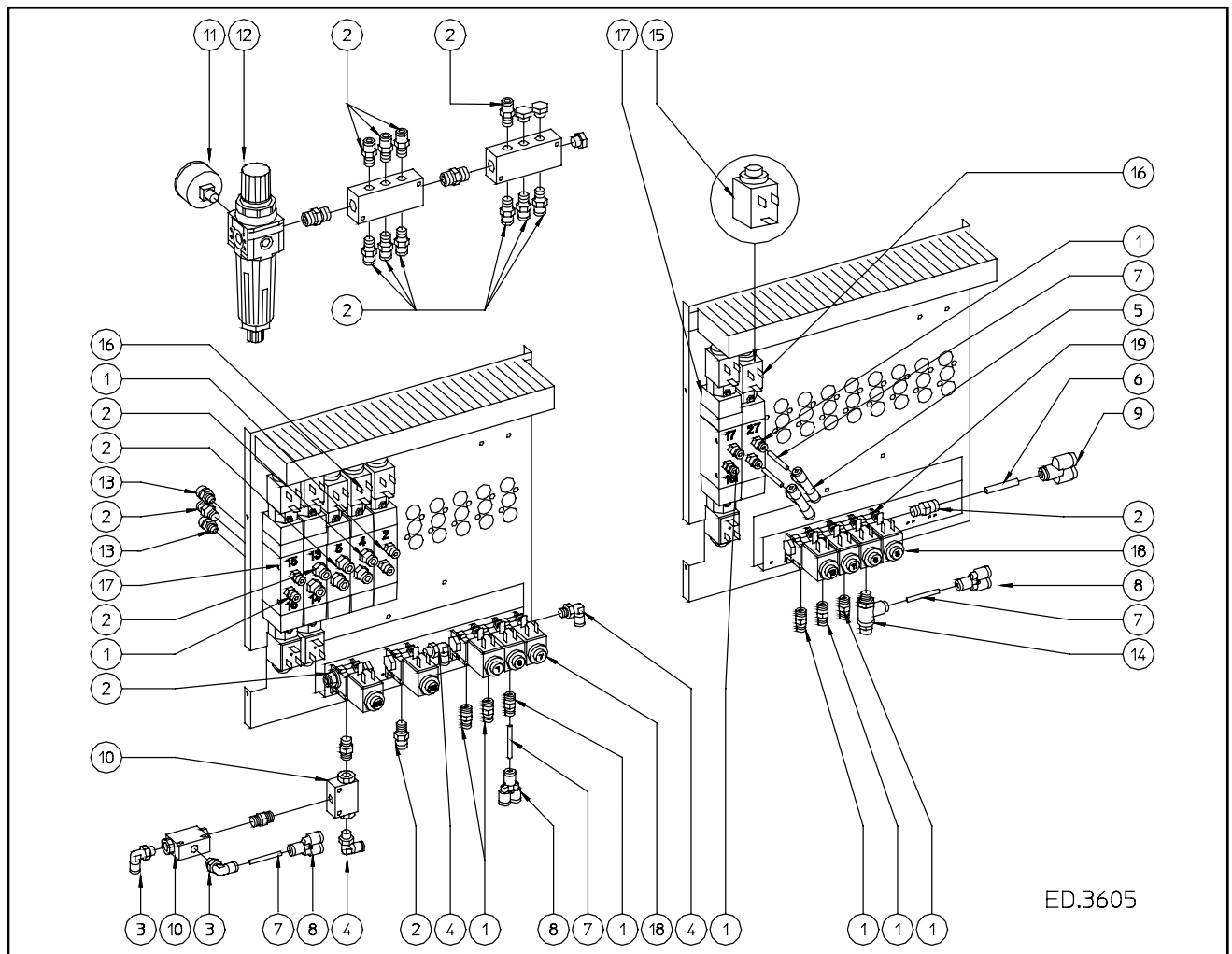
5	ZX00	1	ASTA REGGICAVO	CABLE HOLDER ROD	KABELHALTER	TIGE SOUTIEN CABLES	ASTA SUJETACABLE	
4	S0191001	1	SOTTOFERRO SILICONE	SILICON IRON REST	SILIKONABLAGE	REPOSE FER SILICONE	ALFOMBRA PLANCHA SIL.	
2	F012	1	FERRO ELETTRICO	ELECTRIC IRON	BÜGELEISEN	FER ELECTRIQUE	PLANCHA ELÉCTRICA	
1	1230106	1	POGGIAFERRO	IRON REST	BÜGELEISENABLAGE	SUPPORT FER	APOYO PLANCHA	
1	0220588	1	SPINA	PLUG	STECKER	FICHE	ENCHUFE	
pos	Code	Q.ty	Descrizione	Designation	Beschreibung	Description	Descripción	
L541		ELECTRIC IRON (option) FERRO ELETTRICO (opzionale)					ed 4204	



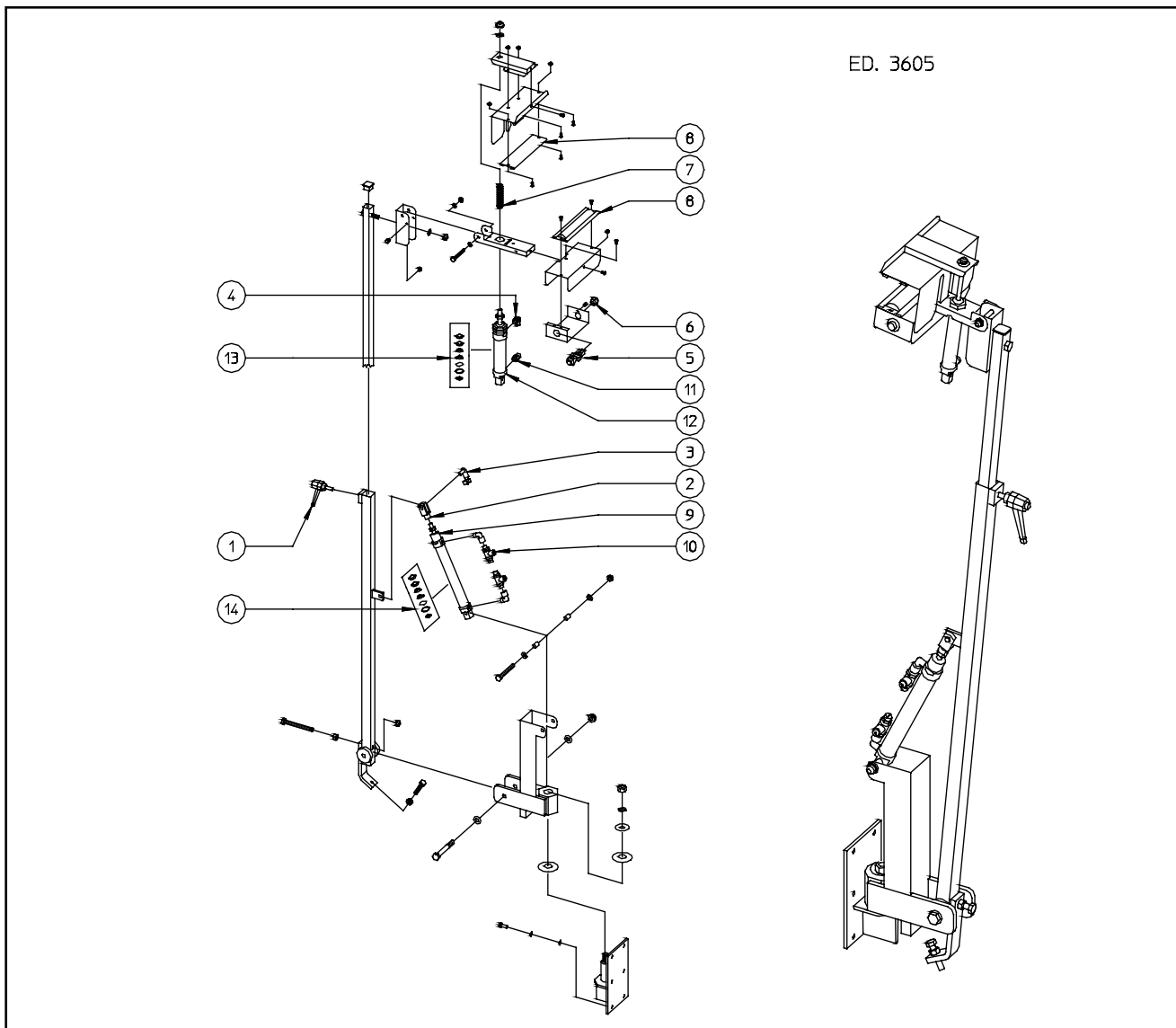
21	W02	2	VALVOLA RITEGNO	NON-RETURN VALVE	RÜCKSCHLAUGVENTIL	VANNE NON RETOURN	VÁLVULA DE RETENCIÓN	
20	S201402	1	RIVESTIMENTO	BOTTLE COVER	VERKLEIDUNG	RETEMENT	REVESTIMIENTO	
19	S201401	1	SEPARATORE	STEAM SEPARATOR	DAMPFABSCHIEDER	SEPARATEUR	SEPARADOR	
18	S0191001	1	SOTTOFERRO SIL.	SILICON IRON REST	SILIKONABLAGE	REPOSE FER SIL.	ALFOM. PLANCHA SIL.	
17	S006	1	MINIVALET	MINIVALET	MINIVALET	MINIVALET	MINIVALET	
16	F16035	1	SCARIC. CONDEN.	STEAM TRAP	AUSLADER	PURGEUR	DESCARGADOR	
15	F021	1	FERRO	IRON	BÜGELEISEN	FER	PLANCHA	
14	1230106	1	POGGIAFERRO	IRON REST	BÜGELEISENABLAGE	SUPPORT FER	APOYO PLANCHA	
13	0280101	1	VALVOLA	VALVE	VENTIL	VANNE	VÁLVULA	
12	0240203	2	GANCIO FORATO	HOOK	HAKEN	CROCHET	GANCHO	
11	0240202	2	GANCIO FILETTATO	HOOK	HAKEN	CROCHET	GANCHO	
10	0240109	2	ANELLO	RING	RING	BAGUE	ANILLO	
9	0240103	2	MOLLA REGGICAVO	SPRING	PEITSCH	RESSORT	MUELLE	
8	0220786	1	PRONTO TOP	PAD+COVER	PRONTO TOP	PRONTO TOP	MULLIDO+TELA COB.	
7	0220750	2	GUAINA METALIZZ.	COVER	HÜLLE	GAINÉ METALLISÉE	VAINA METALIZADA	
6	0160404	1	RACCORDO	CONNECTION	VERBINDUNG	GENOUILLÈRE	CODO	
5	0160302	1	RACCORDO	CONNECTION	VERBINDUNG	RACCORD	CODO	
4	0160202	1	RACCORDO	CONNECTION	VERBINDUNG	RACCORD	CODO	
3	0160106	1	RACCORDO	CONNECTION	VERBINDUNG	RACCORD	CODO	
2	0160103	1	RACCORDO	CONNECTION	VERBINDUNG	RACCORD	CODO	
1	0130408	1	TUBO VAPORE	STEAM HOSE	DAMPFSCHLAUCH	TUYAU VAPEUR	TUBO VAPOR	
pos	Code	Q.ty	Descrizione	Designation	Beschreibung	Description	Descripción	
L527		STEAM ELECTRIC IRON GROUP (option) GRUPPO FERRO ELETTROVAPORE (opzionale)					ed 1105	



6	S210	1	SEPARATORE	SEPARATEUR	ABSCHIEDER	SEPARATOR	SEPARADOR	
5	P10	1	NEBULIZZATORE	NEBULISEUR	ZERSTÄNKES	SPRAY	NEBULIZADOR	
4	0240109	1	ANELLO	RING	RING	BAGUE	ANILLO	
3	0240103	1	MOLLA REGGICAVO	SPRING	PEITSCHKE	RESSORT	MUELLE	
2	0160110	1	RACCORDO	CONNECTION	VERBINDUNG	GENOUILLERE	CODO	
1	0130408	3mt	TUBO VAPORE	STEAM HOSE	DAMPFSCHLAUCH	TUYAU VAPEUR	TUBO VAPOR	
pos	Code	Q.ty	Descrizione	Description	Beschreibung	Designation	Descripción	
L563		SPRAY GROUP WITH P10 (option) GRUPPO NEBULIZZATORE CON P10 (opzionale)					ed 0606	



19	E700001	9	CORPO ELETTROVALVOLA	CORPS ELECTROVANNE	VENTILBODEN	SOLENOID VALVE BODY	CUERPO ELECTR.
18	E600024	9	BOBINA	BOBINE	SPÜLE	COIL	BOBINA 24V DC
17	E2524	3	ELETTROV. 5/3 VIE	ELECTROVANNE 5/3 V	ELEKTROVENTIL	SOLENOID VALVE	ELECTROV. 5/3 V
16	E2124	4	ELETTROV. 5/2 VIE	ELECTROVANNE 5/2 V	ELEKTROVENTIL	SOLENOID VALVE	ELECTROV. 5/2 V
15	E0212006	10	BOBINA	BOBINE	SPÜLE	COIL	BOBINA 24V DC
14	C12	1	REGOLATORE	REGULATEUR 1/8"	REGLER	REGULATOR	REGULADOR
13	C22	14	SILENZIATORE	SILENCIEUX 1/8"	SCHALLDÄMPFER	SILENCER	SILENCIADOR
12	C16	1	GRUPPO FILTRO	FLITRE	FILTER	FILTER	GR. FILTRO
11	35251001	1	MANOMETRO	MANOMETRE	DRUCKWACHTER	PRESSURE GAUGE	MANÓMETRO
10	0280303	2	SELETTORE CIRC.	SELECTEUR 1/8 OR	WÄHLER	SELECTOR	SELECTOR
9	0210521	1	RACCORDO	RACCORD	VERBINDUNG	CONNECTION	CODO
8	0210520	3	RACCORDO	RACCORD	VERBINDUNG	CONNECTION	CODO
7	0210511	5	RACCORDO	RACCORD	VERBINDUNG	CONNECTION	CODO
6	0210506	1	RACCORDO	RACCORD	VERBINDUNG	CONNECTION	CODO
5	0210501	2	RACCORDO	RACCORD	VERBINDUNG	CONNECTION	CODO
4	0210303	3	RACCORDO	RACCORD	VERBINDUNG	CONNECTION	CODO
3	0210302	2	RACCORDO	RACCORD	VERBINDUNG	CONNECTION	CODO
2	0210107	26	RACCORDO	RACCORD	VERBINDUNG	CONNECTION	CODO
1	0210103	14	RACCORDO	RACCORD	VERBINDUNG	CONNECTION	CODO
pos	Code	Q.ty	Descrizione	Designation	Beschreibung	Description	Descripción
5202A50			PNEUMATIC COMPONENTS - GRUPPO PNEUMATICO				ed 3605



14	ZC01	2	KIT GUARNIZIONI	KIT JOINTS	DICHTUNGEN	GASKET KIT	KIT EMPAQUETAD.
13	ZC00	2	KIT GUARNIZIONI	KIT JOINTS	DICHTUNGEN	GASKET KIT	KIT EMPAQUETAD.
12	C26	2	CILINDRO Ø25	CYLINDRE Ø25	ZYLINDER	CYLINDER	CILINDRO D=25 C=50
11	C22	2	SILENZIATORE	SILENCIEUX 1/8"	SCHALLDÄMPFER	SILENCER	SILENCIADOR
10	C12	4	REGOLATORE	REGULATEUR 1/8"	REGLER	REGULATOR	REGULADOR
9	C10	2	CILINDRO Ø20	CYLINDRE Ø20	ZYLINDER	CYLINDER	CILINDRO D=20 C=125
8	5210379	4	FISSAGGIO POLSINO	RUBBER	MOUSSE CAOUTCHOUTEE	GUMMI	GOMA
7	0240132	2	MOLLA	RESSORT	FEDER	SPRING	MUELLE
6	0220611	2	PRESSACAVO	PRESSE-CABLE	KABELPRESSEN	CABLE HOLDER	PISACABLE
5	0220570	2	INTERRUTT. PULS.	INTERRUPTEUR	SCHALTER	COMPLETE SWITCH	PULSANTE COMPL.
4	0210302	2	RACCORDO	RACCORD	VERBINDUNG	CONNECTION	CODO
3	0190509	2	CLIPS FORCELLA	CLIPS FOURCHE	CLIPS	CLIPS	CLIPS HORQUILLA
2	0190508	2	FORCELLA M8	FOURCHE M8	GABEL	FORK	HORQUILLA
1	0180301	2	MANIGLIA A RIPR.	POIGNEE	GRIFF	HANDLE	MANIJA
pos	Code	Q.ty	Descrizione	Designation	Beschreibung	Description	Descripción
5200A34			MANUAL SLEEVE CLAMP - PINZA MANICHE MANUALE				ed 3605

Dealer

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Manufacturer

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