INSTRUCTION MANUAL FOR WIRE WELDING MACHINE

IMPORTANT: BEFORE STARTING THE EQUIPMENT, READ THE CONTENTS OF THIS MANUAL, WHICH MUST BE STORED IN A PLACE FAMILIAR TO ALL USERS FOR THE ENTIRE OPERATIVE LIFE-SPAN OF THE MACHINE. THIS EQUIPMENT MUST BE USED SOLELY FOR WELDING OPERATIONS.

1 SAFETY PRECAUTIONS

WELDING AND ARC CUTTING CAN BE HARMFUL TO YOURSELF AND OTHERS. The user must therefore be educated against the hazards, summarized below, deriving from welding operations. For more detailed information, order the manual code 3.300.758

ELECTRIC AND MAGNETIC FIELDS - May be dangerous.



- · Electric current following through any conductor causes localized Electric and Magnetic Fields (EMF). Welding/cutting current creates EMF fields around cables and power sources.
- · The magnetic fields created by high currents may affect the operation of pacemakers. Wearers of vital electronic equipment (pacemakers) shall consult their physician before beginning any arc welding, cutting, gouging or spot welding operations.
- · Exposure to EMF fields in welding/cutting may have other health effects which are now not known.
- · All operators should use the followingprocedures in order to minimize exposure to EMF fields from the welding/cutting circuit:
- Route the electrode and work cables together
- Secure them with tape when possible.
- Never coil the electrode/torch lead around your body.
- Do not place your body between the electrode/torch lead and work cables. If the electrode/torch lead cable is on your right side, the work cable should also be on your right side.
- Connect the work cable to the workpiece as close as possible to the area being welded/cut.
- Do not work next to welding/cutting power source.

EXPLOSIONS

· Do not weld in the vicinity of containers under pressure, or in the presence of explosive dust, gases or fumes. · All cylinders and pressure regu-

lators used in welding operations should be handled with care.

ELECTROMAGNETIC COMPATIBILITY.

This machine is manufactured in compliance with the instructions contained in the standard IEC 60974-10 (CL. A), and must be used solely for professional purposes in an industrial environment. There may be potential difficulties in ensuring electromagnetic compatibility in non-industrial environments.

DISPOSAL OF ELECTRICAL AND ELECTRONIC EQUIPMENT.

Do not dispose of electrical equipment together with normal waste!In observance of European Directive 2002/96/EC on Waste Electrical and Electronic

Equipment and its implementation in accordance with national law, electrical equipment that has reached the end of its life must be collected separately and returned to an environmentally compatible recycling facility. As the owner of the equipment, you should get information on approved collection systems from our local representative. By applying this European Directive you will improve the environment and human health!

IN CASE OF MALFUNCTIONS, REQUEST ASSISTANCE FROM QUALIFIED PERSONNEL.

1.1 WARNING LABEL

The following numbered text corresponds to the label numbered boxes.



- B. Drive rolls can injure fingers.
- Welding wire and drive parts are at welding voltage during operation — keep hands and metal objects away.
- Electric shock from welding electrode or wiring can kill.
- 1.1 Wear dry insulating gloves. Do not touch electrode with bare hand. Do not wear wet or damaged gloves.
- 1.2 Protect yourself from electric shock by insulating yourself from work and ground.
- 1.3 Disconnect input plug or power before working on machine.
- 2 Breathing welding fumes can be hazardous to your health.
- 2.1 Keep your head out of fumes.
- 2.2 Use forced ventilation or local exhaust to remove fumes.

- 2.3 Use ventilating fan to remove fumes.
- Welding sparks can cause explosion or fire.
- 3.1 Keep flammable materials away from welding.
- 3.2 Welding sparks can cause fires. Have a fire extinguisher nearby and have a watchperson ready to use it.
- 3.3 Do not weld on drums or any closed containers.
- Arc rays can burn eyes and injure skin.
- 4.1 Wear hat and safety glasses. Use ear protection and button shirt collar. Use welding helmet with correct shade of filter. Wear complete body protection.
- Become trained and read the instructions before working on the machine or welding.
- Do not remove or paint over (cover) label.

2 GENERAL DESCRIPTION

2.1 SPECIFICATIONS

This manual has been prepared for the purpose of educating personnel assigned to install, operate and service the welding machine.

This equipment is a constant-voltage power source, suitable for MIG/MAG and OPEN-ARC welding.

Upon receiving the machine, make sure there are no broken or damaged parts.

The purchaser should address any complaints for losses or damage to the vector. Please indicate the article and serial number whenever requesting information about the welding machine.

2.2 EXPLANATION OF TECHNICAL SPECIFICATIONS

This machine is manufactured according to the following international standards: IEC 60974.1 - IEC 60974.3 -IEC 60974.10 CL. A - IEC 61000-3-11 (see note 2) - IEC 61000-3-12 (see note 2).

N°

serial number, which must always be indicated on any type of request regarding the welding machine.

Single-phase transformer - rectifier

Three-phase transformer-rectifier.

Flat characteristic.

MIG/MAG. Suitable for continuous electrode welding.

I2 max Unconventional welding current.

This value represents the max. limit

attainable in welding.

U0. Secondary open-circuit voltage.

Duty cycle percentage. X.

The duty cycle expresses the percentage of 10 minutes during which the welding machine may run at a certain current without overheating.

12. Welding current

U2. Secondary voltage with welding current I2.

Rated supply voltage U1.

1~ 50/60Hz 50- or 60-Hz single-phase power supply.

3~ 50/60Hz 50- or 60-Hz three-phase power supply.

I1 max Maximum absorbed current value.

I1 eff This is the maximum value of the actual

current absorbed, considering the duty

cycle.

IP21S Protection rating for the housing.

> Grade 1 as the second digit means that this equipment is suitable for use outdoors.

S

Suitable for use in high-risk environments.

NOTES:

- 1- The machine has also been designed for use in environments with a pollution rating of 1. (See IEC
- 2- This equipment complies with IEC 61000-3-12 provided that the maximum permissible system impedance Zmax is less than or equal to 0,023 (Art. 622-624) -0,276 (Art. 625-627) - 0,181 (Art. 633) - 0,088 (Art. 641) at the interface point between the user's supply and the public system. It is the responsibility of the installer or user of the equipment to ensure, by consultation with the distribution network operator if necessary, that the equipment is connected only to a supply with maximum permissible system impedance Zmax less than or equal to 0,023 (Art. 622-624) - 0,276 (Art. 625-627) - 0,181 (Art. 633) - 0,088 (Art. 641).

2.3 Overload cut-out

This machine is protected by a thermostat, which prevents the machine from operating if the allowable temperatures are exceeded. In these conditions the fan continues to operate.

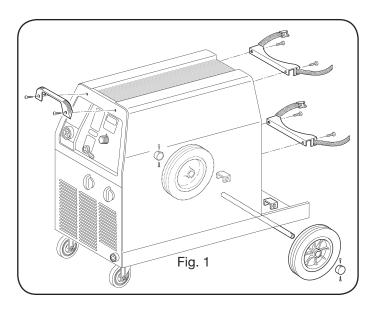
3 INSTALLATION

- Only skilled personnel should install the machine.
- All connections must be carried out according to current regulations, and in full observance of safety laws (CEI 26-23 - IEC/TS 62081 standards).

Make sure that the supply voltage corresponds to the value indicated on the power cable. If it is not already fitted, connect a plug suited to the power cable, making sure that the yellow/green conductor is connected to the earth pin.

The capacity of the overload cutout switch or fuses installed in series with the power supply must be equivalent to the absorbed current I1. of the machine.

3.1 PLACEMENT



Mount the handle, wheels and the two cylinder supports. The handle must not be used for lifting the welding machine.

Place the welding machine in a ventilated area.

Dust, dirt, and any other foreign matter entering the welding machine can interfere with ventilation and thus with smooth operation.

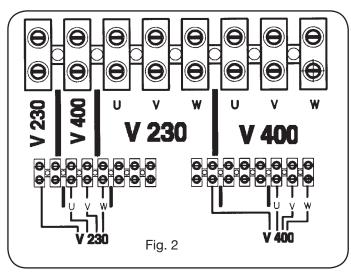
Therefore, in relation to the environment and working conditions, it is important to keep the internal parts clean. Clean using a jet of dry, clean air, being careful to avoid damaging the machine in any way.

Before working inside the welding machine, make sure it is unplugged from the power mains.

Any intervention carried out inside the welding machine must be performed by qualified personnel.

3.2 INTERNAL CONNECTIONS

- Any intervention carried out inside the welding machine must be performed by qualified personnel.
- Before working inside the welding machine, make sure that the plug is disconnected from the power mains.
- After final inspection, the welding machine is connected to the voltage indicated on the power supply cable.
- To change the supply voltage, remove the right side panel and arrange the voltage change terminal board connections as shown in the figure.



- The supply voltage may not be changed on singlephase power sources.
- Do not use the welding machine without its cover or side panels for obvious safety reasons, and to avoid altering the cooling conditions for internal components.
- Connect a plug suitable for the absorbed current to the power supply cable.
- Connect the yellow-green wire of the machine mains to an efficient grounding socket.

3.3 EXTERNAL CONNECTIONS

3.3.1 Connecting the mass clip.

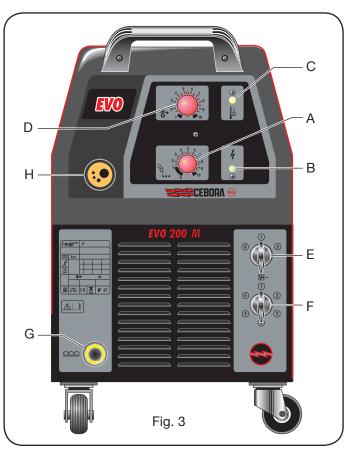
• - Connect the earth cable terminal to the socket of the welding machine, and connect the earth clamp to the workpiece.

3.3.2 Cylinder placement and connecting the gas hose

- Position the cylinder on the cylinder holder of the welding machine, using the straps provided to fasten it to the rear panel of the machine.
- The gas cylinder must not be higher than 1.65m (Art. 633-641) and 1m (Art. 622-624-625-627), to avoid creating hazardous conditions.
- Periodically check for wear on the straps, and order replacements if necessary.
- The cylinder must be equipped with a pressure regulator complete with flow gauge.
- Only after positioning the cylinder, connect the outgoing gas hose from the rear panel of the machine to the pressure regulator.
- Adjust the gas flow to approximately 10/12 liters/minute.

4 CONTROLS ON THE FRONT OF THE MACHINES

4.1 EVO (Fig. 3).



A- Setting knob.

Turning this knob adjusts the spot welding time. The machine begins welding when the torch trigger is pressed. The spot welding time is set via the knob. To start the cycle over, release and press the torch trigger again.

B- Green LED.

Signals that the machine is on.

C- Yellow LED.

Lights when the thermostat interrupts the welding

machine operation.

D-Setting knob.

Adjusting this knob changes the welding wire speed.

E- Selector switch.

Turns the machine on or off and selects the welding voltage ranges.

F- Selector switch.

Fine-tunes the welding voltage within the range previously selected via selector switch ${\bf E}$.

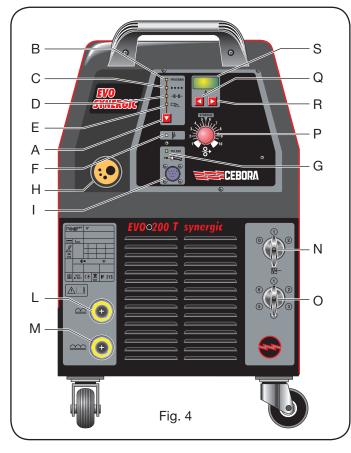
G- Earth sockets.

Sockets to which to connect the earth cable. (Some versions have a single earth socket).

H- Central adapter.

This is where the welding torch is to be connected.

4.2 EVO SYNERGIC (Fig. 4).



A- Selection key.

Pressing this key causes the LEDs **B**, **C**, **D** and **E** to light in sequence.

From within the sub-menu activated by the 2 keys **Q** and **R**, select the Soft Start, PULL 2003 motor speed variation, and post gas functions.

B- Green LED (PROGRAM).

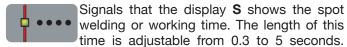
Signals that the display **S** shows the program number being used.

Check the instructions posted inside the mobile side panel for the diameter, wire type and gas corresponding to the program number displayed.

The figure on the display S is always preceded by the

letter P.

C- Green LED.



Setting the time to 0 disables the function. The function is active only while welding. The value shown on the display **S** is always preceded by the letter **t**.

D- Green LED.

Signals that the display **S** shows the pause time between welding segments. The length of this time is adjustable from 0.3 to 5 seconds. Setting the time to 0 disables the function. The function is active only if the welding time is not 0 and while welding. The value shown on the display **S** is always preceded by the letter **t**.

E- Green LED (Burn-Back).

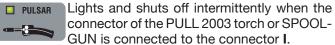
Signals that the display **S** shows the time for which the wire exits the welding torch, after the operator has released the torch trigger.

This time ranges from 10 to 400 milliseconds. The value shown on the display **S** is always preceded by the letter **t**.

F- Yellow LED.

Lights when the thermostat interrupts the welding machine operation.

G- Green LED (PULSAR).



H- Central adapter.

This is where the welding torch is to be connected.

I- 10-pin connector.

This connector must be connected to the 10-pin patch connector of the PULL 2003 torch or SPOOL- GUN.**L-M Earth sockets.**

Sockets to which to connect the earth cable. (Some versions have a single earth socket).

N- Selector switch.

Turns the machine on or off and selects the welding voltage ranges.

O- Selector switch.

Fine-tunes the welding voltage within the range selected with the selector switch ${\bf N}$.

P- Setting knob.

Adjusts the wire speed, and is active only when using the standard welding torch and not the PULL 2003 torch or SPOOL- GUN.

When using the program 00, adjusts the welding wire speed from 0 to 20 meters/minute.

When using any synergic program, the knob indicator must be set to the label SYNERGIC. Choose a synergic program; the display **S** indicates the current set by the selected program. This current corresponds to a given

speed. If you wish to correct this speed, simply turn the knob clockwise to increase or counter-clockwise to decrease. Changes in wire speed are always indicated on the display **S** by a current.

Q and R- Keys.



• When the LED **B** is lit, the display **S** shows the program number selected by the 2 keys. Once the selection has been completed the

LED remains lit for 5 more seconds, then shuts off.

- When the LED **C** is lit the display **S** shows the time selected by the 2 keys. Once the selection has been completed the LED remains lit for 5 more seconds, then shuts off.
- When the LED **D** is lit, the display **S** shows the time selected by the 2 keys. Once the selection has been completed the LED remains lit for 5 more seconds, then shuts off.
- When the LED **E** is lit the display **S** shows the time selected by the 2 keys. Once the selection has been completed the LED remains lit for 5 more seconds, then shuts off.
- When the LEDs **B**, **C**, **D**, and **E** are off and we are within any synergic program, pressing one of the 2 keys will cause the display **S** to show either the current set or the recommended thickness in millimeters.

Adjusting the 2 selector switches $\bf N$ and $\bf O$ allows you to immediately see, on the display $\bf S$, the increase or decrease in the value selected. This function is used when one wishes to know in advance at what current or thickness welding is to begin.

• Pressing the 2 keys simultaneously for at least 5 seconds causes us to enter the sub-menu, where we find 3 functions that may be selected via the key A:

1- Soft Start (speed).

Changes the wire speed from the one set; this speed remains active for the time governed by the Soft Start function (time).

The speed may be adjusted using the 2 keys **Q** and **R** from 10% to a maximum of 150% of the set welding speed.

This function, combined with the Soft Start function (time), serves to improve arc striking. The value shown on the display **S** is preceded by the letter (A).

2- Speed set on the motor of the PULL 2003.

Adjusting the two keys $\bf Q$ and $\bf R$ varies the speed of the PULL 2003 from –9 to +9 compared to the set value. This function maximizes wire advancement, putting the wire feeder motor of the welding machine in step with the motor of the PULL 2003. The value shown on the display $\bf S$ is preceded by the letter (H).

3- Post gas.

Using the two keys **Q** and **R**, it is possible to adjust the gas flow after welding to between 0 and 5 seconds. This function is especially useful when welding stainless steel and aluminum. The value shown on the display **S** is preceded by the letter (P).

4- Soft Start (time).

Adjusts the time for which the Soft Start speed remains active. This function, combined with the Soft Start function

(speed), serves to improve arc striking.

Using the 2 keys **Q** and **R**, the Soft Start time may be adjusted from 0 to 1 second. The value shown on the display **S** is preceded by the letter (d).

5- Two-stage manual mode and 4-stage automatic mode.

Adjust the 2 keys **Q** and **R** to select the **2-stage** or **4-stage** mode.

If the welding machine is set to **2-stage** manual mode, welding begins when the button E is pressed, and stops when it is released.

If the welding machine is set to **4-stage** automatic mode, press the torch trigger to begin welding; you may release the trigger once the procedure has begun.

Press and release the trigger again to stop welding. This setting is suitable for long-term welding, where the welder may tire of holding down the torch trigger. The value shown on the display **S** is preceded by the symbols (2T and 4T).

S- Display.

Using the manual program 00 the instrument displays the wire speed in meters per minute before welding, and the current while welding.

Using the synergic programs it always displays the current.

As described in the paragraphs above, the following may be displayed on the instrument before beginning to weld: the program being used, the spot welding time, the pause time, the Burn-Back time, the recommended thickness, the Soft Start function, the speed set on the motor of the PULL 2003, and the post-gas time.

5 WELDING

5.1 Installation

Make sure that the wire diameter corresponds to the diameter indicated on the wire feeder roller, and that the selected program is compatible with the material and type of gas. Use wire feeder rollers with a "U"-shaped groove for aluminum wires, and with a "V"-shaped groove for other wires.

5.2 THE MACHINE IS READY TO WELD

When using the Pull-2003 or Spool-Gun torch, follow the instructions enclosed.

- Connect the earth clamp to the workpiece.
- Set the switch to 1.
- Remove the gas nozzle.
- Unscrew the contact tip.
- Insert the wire in the wire liner of the torch, making sure that it is inside the roller groove and that the roller is in the correct position.
- Press the torch trigger to move the wire forward until it comes out of the torch.
- Caution: keep your face away from the gun tube assembly while the wire is coming out.
- Screw the contact tip back on, making sure that the hole diameter is the same as that of the wire used.
- Assemble the gas nozzle.

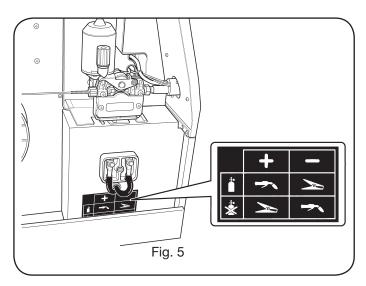
5.3 WELDING CARBON STEELS WITHOUT GAS

PROTECTION. (only for Arts. 622, 624 and 625).

Make sure that the cables are properly inserted on the terminal board, so that the poles match correctly (see

To attain well connected and protected welds, always work from left to right and top to bottom. Remove all waste at the end of each welding session.

The flux-cored wire to be used is our Art. 1587, Ø 0.9mm.



5.4 WELDING CARBON STEELS WITH GAS PROTECTION.

Make sure that the cables are properly inserted on the terminal board, so that the poles match correctly (only for Art. 622, 624 and 625, see figure 5).

In order to weld these materials you must:

 Use a welding gas with a binary composition, usually ARGON + CO2 with percentages of Argon ranging from 75% up. With this blend, the welding bead will be well jointed and attractive.

Using pure CO2 as a protection gas will produce narrow beads, with greater penetration but a considerably increase in splatters.

- Use a welding wire of the same quality as the steel to be welded. It is best to always use good quality wires, avoiding welding with rusted wires that could cause welding defects.
- Avoid welding rusted parts, or those with oil or grease stains.

5.5 WELDING STAINLESS STEEL

Make sure that the cables are properly inserted on the terminal board, so that the poles match correctly (only for Art. 622, 624 and 625, see figure 5).

Series 300 stainless steels must be welded using a protection gas with a high Argon content, containing a small percentage of O2 or carbon dioxide CO2 (approximately 2%) to stabilize the arc.

Do not touch the wire with your hands. It is important to keep the welding area clean at all times, to avoid contaminating the joint to be welded.

Make sure that the cables are properly inserted on the terminal board, so that the poles match correctly (only for Art. 622, 624 and 625, see figure 5).

In order to weld aluminum you must use:

- Pure Argon as the protection gas.
- A welding wire with a composition suitable for the base material to be welded.
- Use mills and brushing machines specifically designed for aluminum, and never use them for other materials.
- In order to weld aluminum you must use the torches: PULL 2003 Art. 2003 or SPOOL-GUN Art. 1562 with the connection Art. 1196 (only for Art. 622, 627 and 641).

NOTE: If only a torch prepared for steel wires is available, it must be altered as follows:

- Make sure that the cable is no more than 3 meters long.
- Remove the brass liner nut, gas nozzle, contact tip, and then slip off the liner.
- Insert our liner Art. 1929, making sure that it protrudes from both ends.
- Screw the contact tip back on so that the liner adheres to it.
- In the free end of the liner, insert the liner nipple and O-ring, and fasten with the nut without over-tightening.
- Insert the brass tube on the liner and insert the entire unit in the adapter, after first removing the iron sleeve.
- Cut the liner diagonally so that it is as close as possible to the wire feeder roller.
- Use wire feeder rollers suitable for aluminum wire.
- Adjust the pressure exerted by the arm of the wire feeder group on the roller, to the lowest possible setting.

6 WELDING DEFECTS

1 DEFECT-**CAUSES**

Porosity (within or outside the bead)

• Electrode defective (rusted surface) • Missing shielding gas due to:

- low gas flow

- flow gauge defective

- regulator frosted due to no preheating of the CO2 protection gas

- defective solenoid valve

contact tip clogged with spatter

- gas outlet holes clogged

- air drafts in welding area.

2 DEFECT

- Shrinkage cracks

CAUSES

• Wire or workpiece dirty or rusted.

Bead too small.

Bead too concave.

• Bead too deeply penetrated.

3 DEFECT **CAUSES**

- Side cuts

Welding pass done too quickly

Low current and high arc voltages.

4 DEFECT - Excessive spraying

CAUSES

Voltage too high.

• Insufficient inductance.

• No preheating of the CO2 protection gas.

7 MAINTENANCE

5.6 WELDING ALUMINUM

Any maintenance operation must be carried out by qualified personnel in compliance with standard CEI 26-29 (IEC 60974-4).

7.1 GENERATOR MAINTENANCE

In the case of maintenance inside the machine, make sure that the switch is in position "O" and that the power cord is disconnected from the mains.

It is also necessary to periodically clean the interior of the machine from the accumulated metal dust, using compressed air.

7.2 PRECAUTIONS AFTER REPAIRS.

After making repairs, take care to organize the wiring so that there is secure insulation between the primary and secondary sides of the machine. Do not allow the wires to come into contact with moving parts or those that heat up during operation. Reassemble all clamps as they were on the original machine, to prevent a connection from occurring between the primary and secondary circuits should a wire accidentally break or be disconnected. Also mount the screws with geared washers as on the original machine.

QUESTA PARTE È DESTINATA ESCLUSIVAMENTE AL PERSONALE QUALIFICATO.

THIS PART IS INTENDED SOLELY FOR QUALIFIED PERSONNEL.

DIESER TEIL IST AUSSCHLIEßLICH FÜR DAS FACHPERSONAL BESTIMMT.

CETTE PARTIE EST DESTINEE EXCLUSIVEMENT AU PERSONNEL QUALIFIE.

ESTA PARTE ESTÁ DESTINADA EXCLUSIVAMENTE AL PERSONAL CUALIFICADO.

ESTA PARTE È DEDICADA EXCLUSIVAMENTE AO PESSOAL QUALIFICADO.

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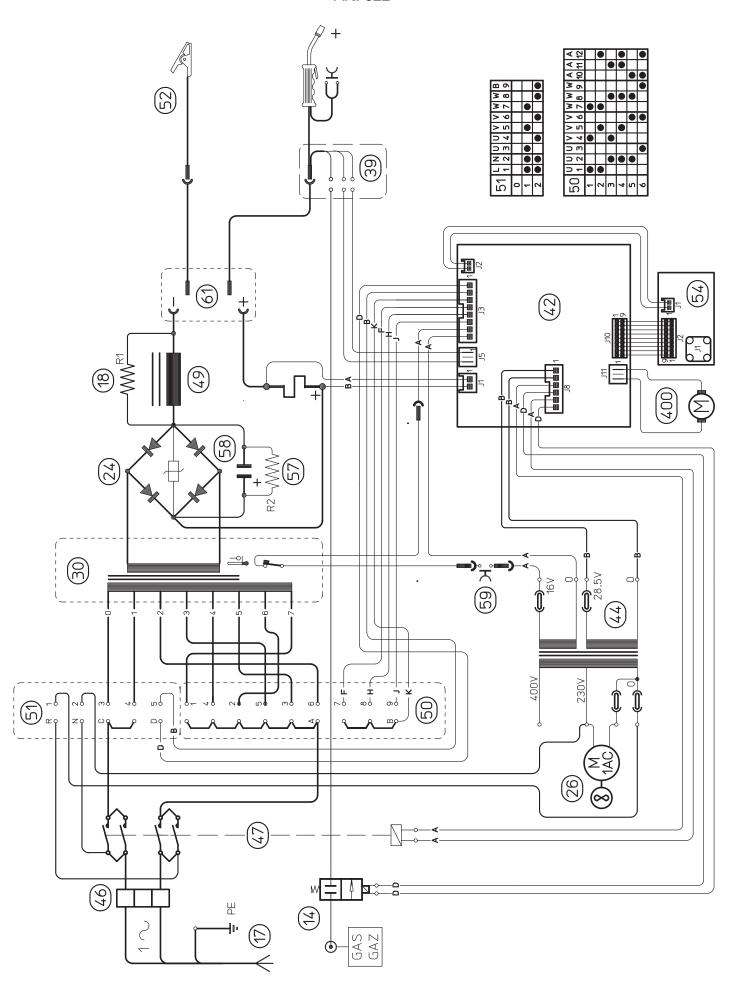
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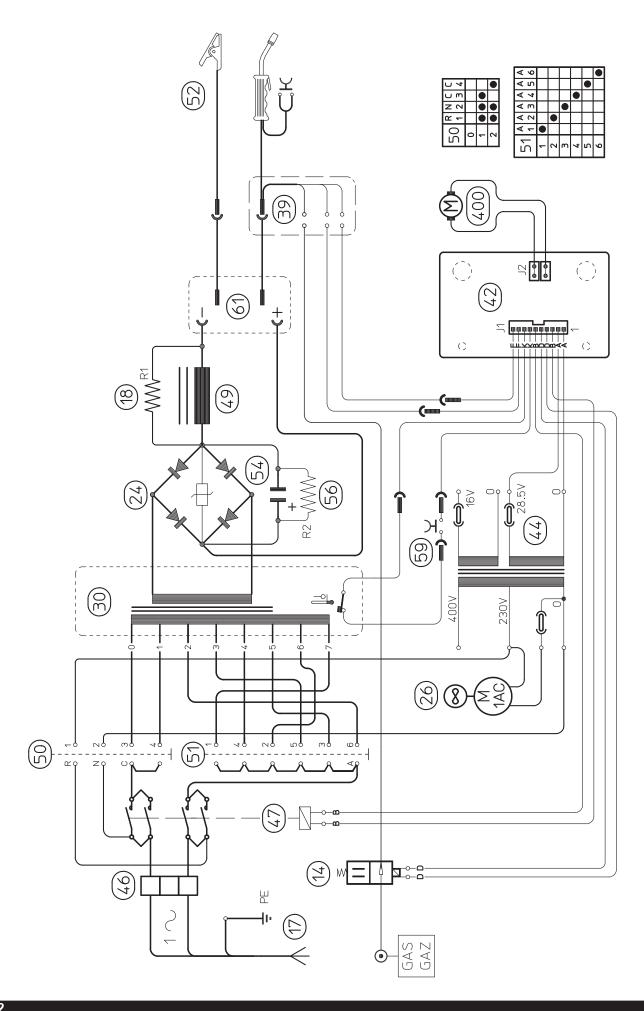
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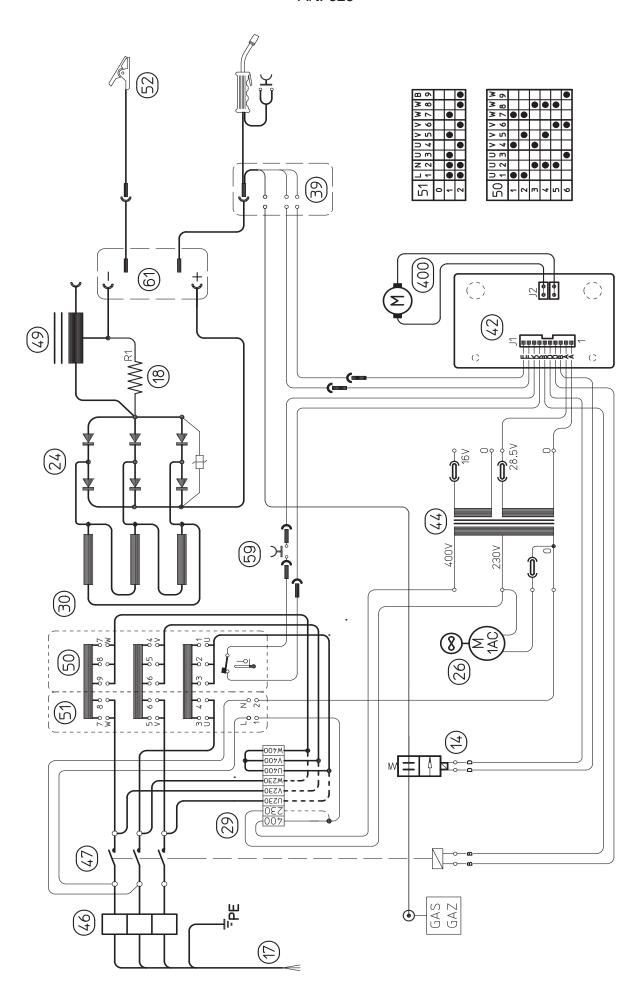
ΑΥΤΌ ΤΟ ΤΜΉΜΑ ΠΡΟΟΡΙΖΕΤΑΙ ΑΠΟΚΛΕΙΣΤΙΚΑ ΓΙΑ ΤΟ ΕΙΔΙΚΕΥΜΕΝΟ ΠΡΟΣΩΠΙΚΟ.

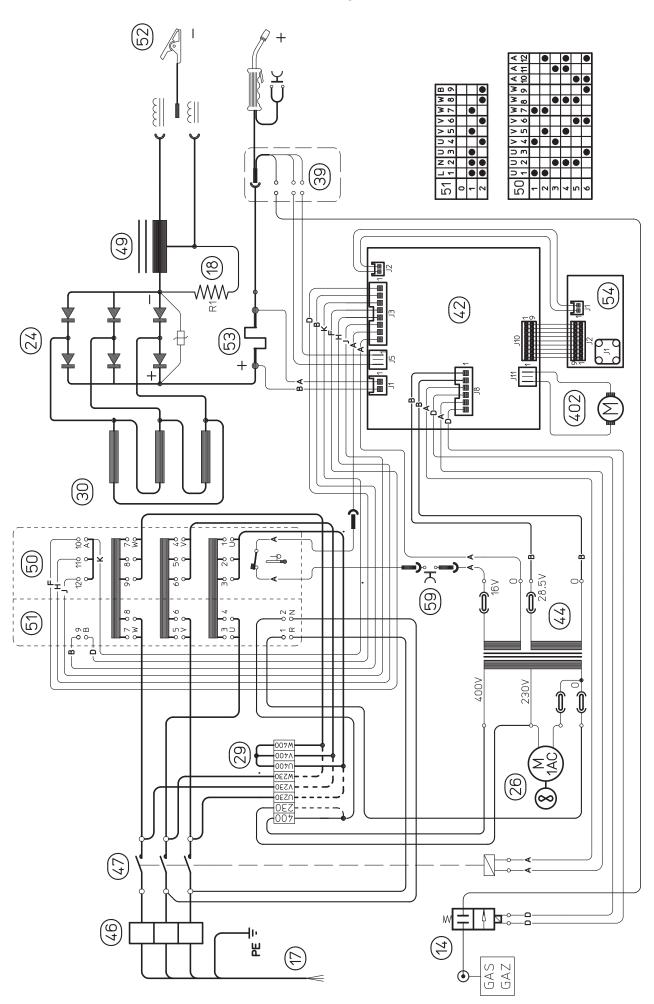
CODIFICA COLORI CABLAGGIO ELETTRICO		WIRING DIAGRAM COLOUR CODE
Α	NERO	BLACK
В	ROSSO	RED
С	GRIGIO	GREY
D	BIANCO	WHITE
Е	VERDE	GREEN
F	VIOLA	PURPLE
G	GIALLO	YELLOW
Н	BLU	BLUE
K	MARRONE	BROWN
J	ARANCIO	ORANGE
I	ROSA	PINK

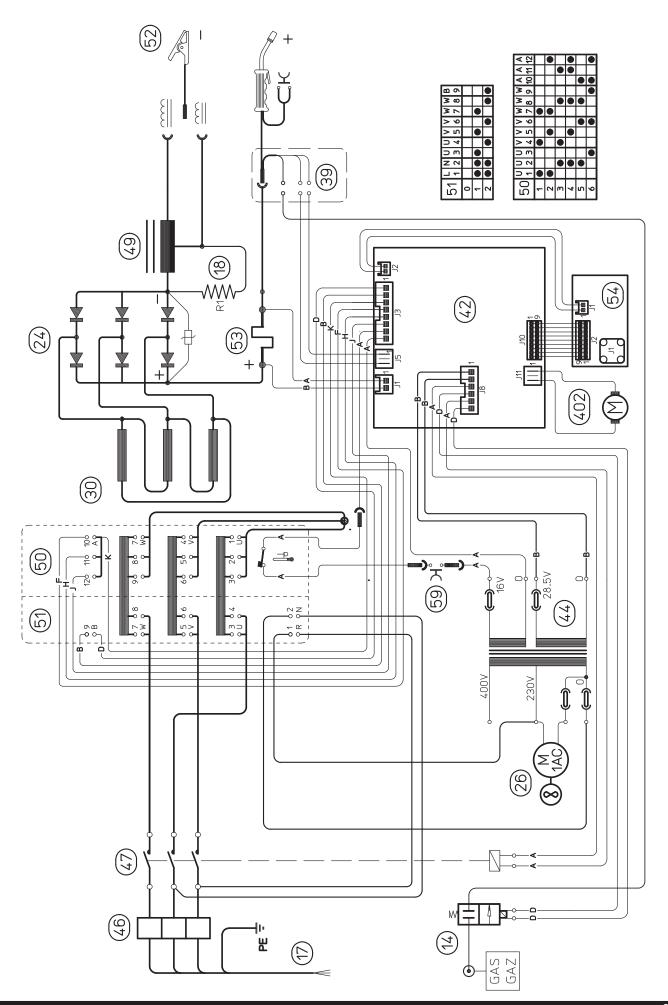
CODIFICA COLORI CABLAGGIO ELETTRICO		WIRING DIAGRAM COLOUR CODE
L	NROSA-NERO	PINK-BLACK
М	GRIGIO-VIOLA	GREY-PURPLE
N	BIANCO-VIOLA	WHITE-PURPLE
0	BIANCO-NERO	WHITE-BLACK
Р	GRIGIO-BLU	GREY-BLUE
Q	BIANCO-ROSSO	WHITE-RED
R	GRIGIO-ROSSO	GREY-RED
S	BIANCO-BLU	WHITE-BLUE
Т	NERO-BLU	BLACK-BLUE
U	GIALLO-VERDE	YELLOW-GREEN
V	AZZURRO	BLUE

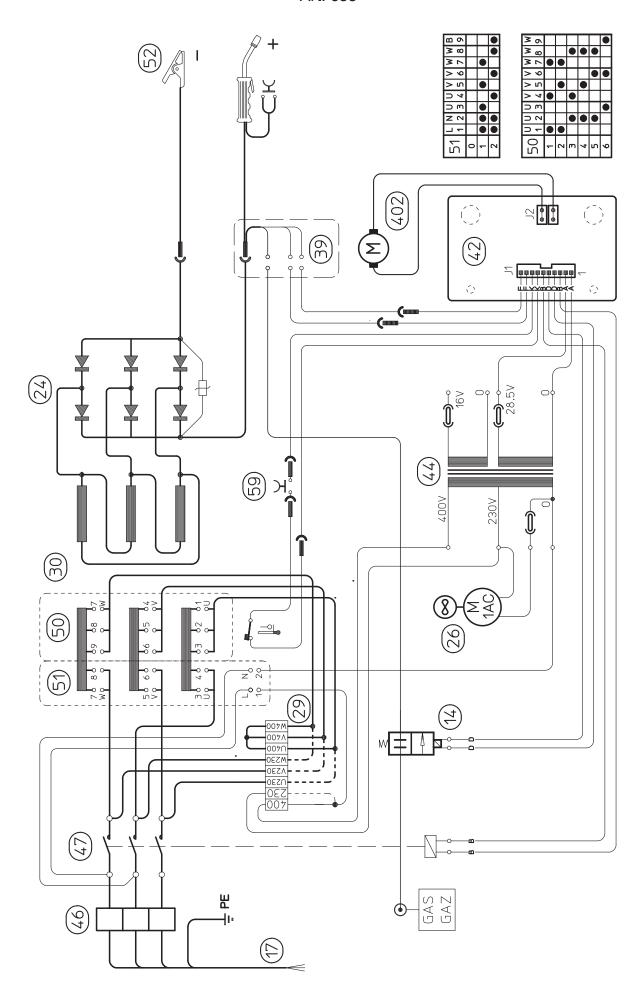


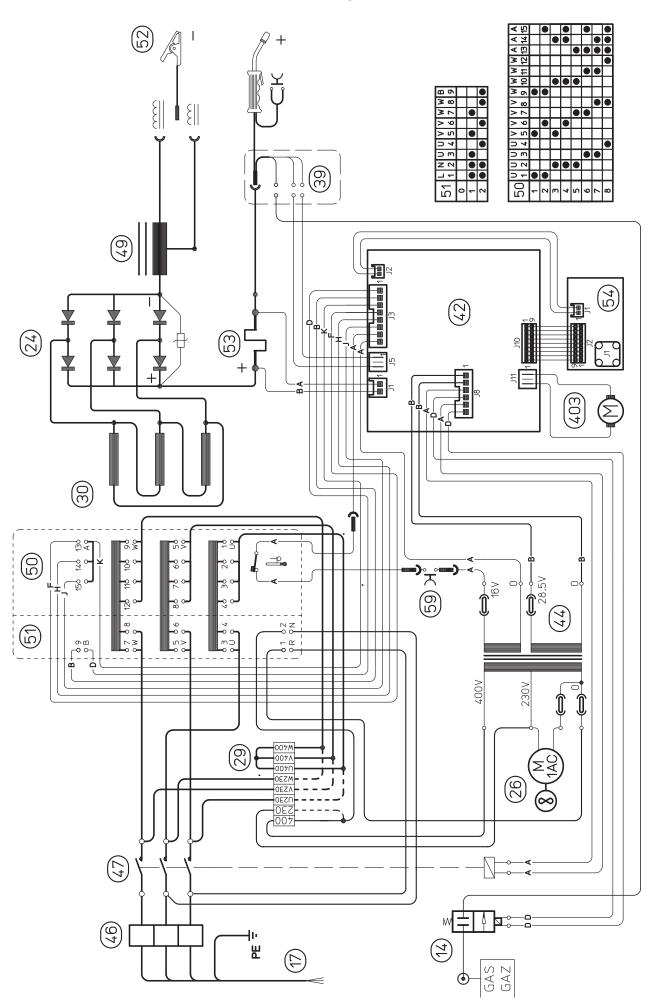


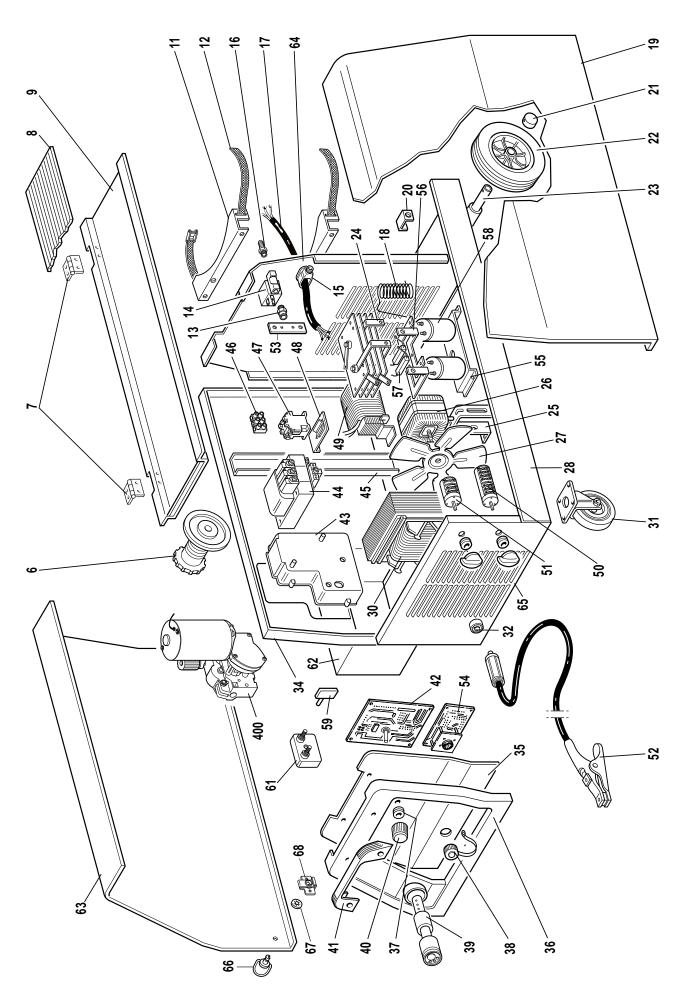








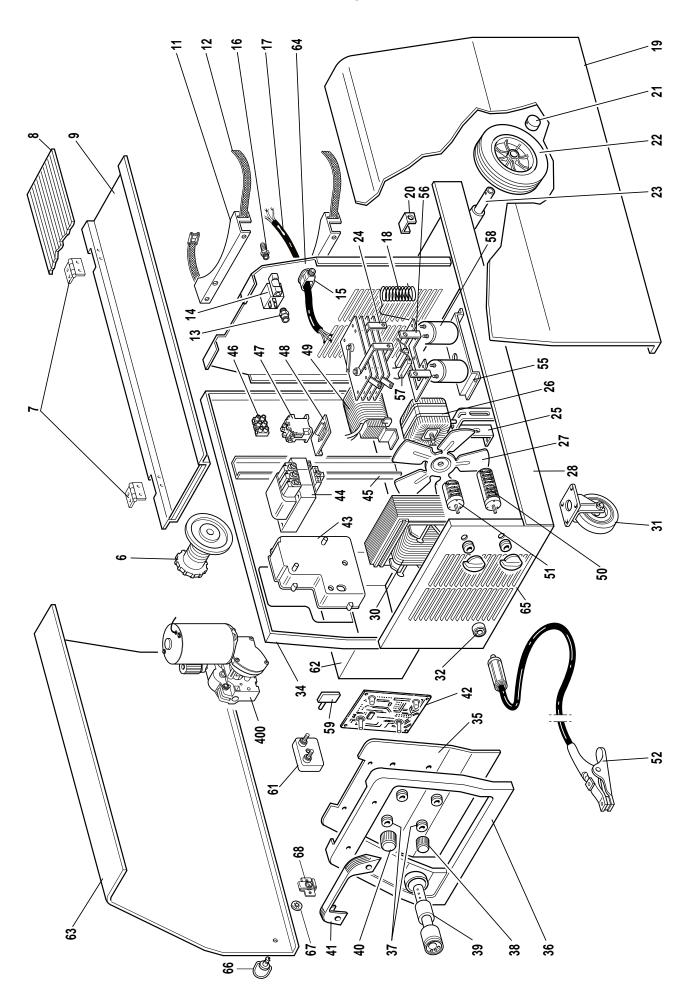




POS	DESCRIZIONE	DESCRIPTION
06	SUPPORTO BOBINA	COIL SUPPORT
07	CERNIERA	HINGE
08	COPERTURA GOMMA	RUBBER MAT
09	COPERCHIO	COVER
11	APPOGGIO BOMBOLA	GAS CYLINDER SUPPORT
12	CINGHIA	BELT
13	RACCORDO	FITTING
14	ELETTROVALVOLA	SOLENOID VALVE
15	PRESSACAVO	STRAIN RELIEF
16	RACCORDO	FITTING
17	CAVO RETE	POWER CORD
18	RESISTENZA	RESISTANCE
19	LATERALE FISSO	FIXED SIDE PANEL
20	SUPPORTO	SUPPORT
21	TAPP0	CAP
22	RUOTA FISSA	FIXED WHEEL
23	ASSALE	AXLE
24	RADDRIZZATORE	RECTIFIER
25	SUPPORTO	SUPPORT
26	MOTORE	MOTOR
27	VENTOLA	FAN
28	FONDO	BOTTOM
30	TRASFORMATORE	TRANSFORMER
31	RUOTA PIROETTANTE	SWIVELING WHEEL
32	PRESA GIFAS	GIFAS SOCKET
34	PIANO INTERMEDIO	INSIDE BAFFLE
35	PANNELLO COMANDI	CONTROL PANEL
36	CORNICE	FRAME
37	PROTEZIONE IN GOMMA	RUBBER PROTECTION
38	TAPP0	CAP
39	CORPO ADATTATORE	ADAPTOR BODY

POS	DESCRIZIONE	DESCRIPTION
40	MANOPOLA	KNOB
41	MANICO	HANDLE
42	CIRCUITO DI COMANDO	CIRCUIT BOARD
43	CARTER DI PROTEZIONE	PROTECTION CASE
44	TRASFORMATORE DI SERVIZIO	AUXLIARY TRANSFORMER
45	SUPPORTO	SUPPORT
46	MORSETTIERA	TERMINAL BOARD
47	TELERUTTORE	CONTACTOR
48	SUPPORTO	SUPPORT
49	IMPEDENZA	CHOKE
50	COMMUTATORE	SWITCH
51	COMMUTATORE	SWITCH
52	CAVO MASSA	EARTH CABLE
53	SHUNT	SHUNT
54	CIRCUITO DI CONTROLLO	CONTROL CIRCUIT
55	SUPPORTO	SUPPORT
56	SUPPORTO	SUPPORT
57	RESISTENZA	RESISTANCE
58	CONDENSATORE	CAPACITOR
59	PULSANTE	SWITCH
61	MORSETTIERA	TERMINAL BOARD
62	CARTER DI PROTEZIONE	PROTECTION CASE
63	LATERALE MOBILE	HINGED SIDE PANEL
64	PANNELLO POSTERIORE	BACK PANEL
65	PANNELLO ANTERIORE	FRONT PANEL
66	CHIUSURA	CLOSING
67	ROSETTA	WASHER
68	CHIUSURA	CLOSING
400	GRUPPO TRAINAFILO COMPLETO	COMPLETE WIRE FEED UNIT

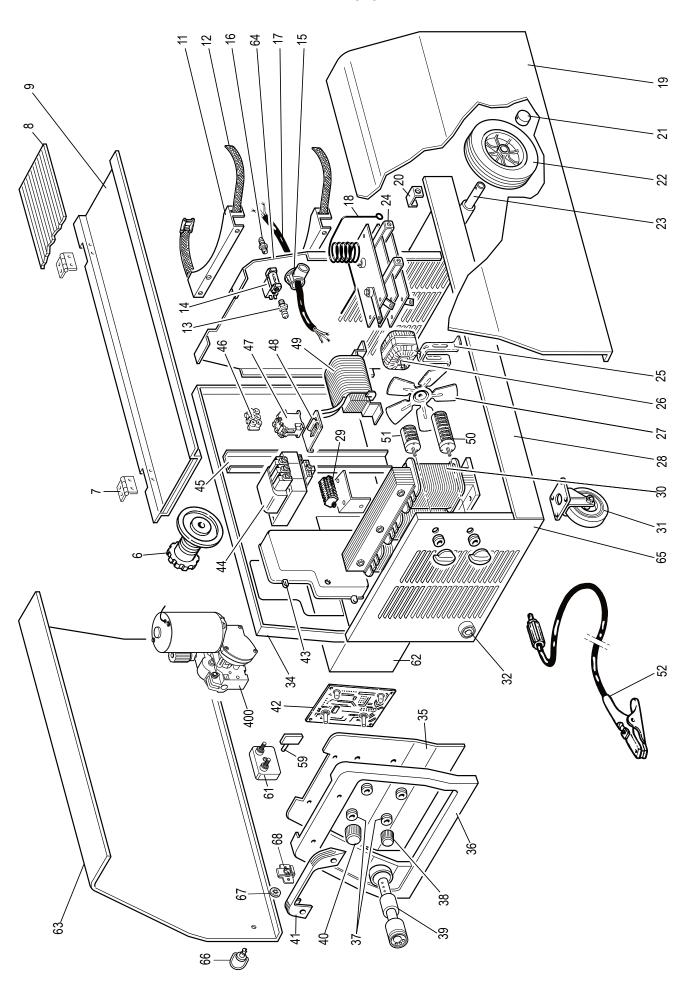
La richiesta di pezzi di ricambio deve indicare sempre: numero di articolo, matricola e data di acquisto della macchina, posizione e quantità del ricambio.



POS	DESCRIZIONE	DESCRIPTION
06	SUPPORTO BOBINA	COIL SUPPORT
07	CERNIERA	HINGE
08	COPERTURA GOMMA	RUBBER MAT
09	COPERCHIO	COVER
11	APPOGGIO BOMBOLA	GAS CYLINDER SUPPORT
12	CINGHIA	BELT
13	RACCORDO	FITTING
14	ELETTROVALVOLA	SOLENOID VALVE
15	PRESSACAVO	STRAIN RELIEF
16	RACCORDO	FITTING
17	CAVO RETE	POWER CORD
18	RESISTENZA	RESISTANCE
19	LATERALE FISSO	FIXED SIDE PANEL
20	SUPPORTO	SUPPORT
21	TAPP0	CAP
22	RUOTA FISSA	FIXED WHEEL
23	ASSALE	AXLE
24	RADDRIZZATORE	RECTIFIER
25	SUPPORTO	SUPPORT
26	MOTORE	MOTOR
27	VENTOLA	FAN
28	FONDO	ВОТТОМ
30	TRASFORMATORE	TRANSFORMER
31	RUOTA PIROETTANTE	SWIVELING WHEEL
32	PRESA GIFAS	GIFAS SOCKET
34	PIANO INTERMEDIO	INSIDE BAFFLE
35	PANNELLO COMANDI	CONTROL PANEL
36	CORNICE	FRAME
37	PROTEZIONE IN GOMMA	RUBBER PROTECTION
38	TAPP0	CAP

POS	DESCRIZIONE	DESCRIPTION
39	CORPO ADATTATORE	ADAPTOR BODY
40	MANOPOLA	KNOB
41	MANICO	HANDLE
42	CIRCUITO DI COMANDO	CIRCUIT BOARD
43	CARTER DI PROTEZIONE	PROTECTION CASE
44	TRASFORMATORE DI SERVIZIO	AUXLIARY TRANSFORMER
45	SUPPORTO	SUPPORT
46	MORSETTIERA	TERMINAL BOARD
47	TELERUTTORE	CONTACTOR
48	SUPPORTO	SUPPORT
49	IMPEDENZA	CHOKE
50	COMMUTATORE	SWITCH
51	COMMUTATORE	SWITCH
52	CAVO MASSA	EARTH CABLE
55	SUPPORTO	SUPPORT
56	SUPPORTO	SUPPORT
57	RESISTENZA	RESISTANCE
58	CONDENSATORE	CAPACITOR
59	PULSANTE	SWITCH
61	MORSETTIERA	TERMINAL BOARD
62	CARTER DI PROTEZIONE	PROTECTION CASE
63	LATERALE MOBILE	HINGED SIDE PANEL
64	PANNELLO POSTERIORE	BACK PANEL
65	PANNELLO ANTERIORE	FRONT PANEL
66	CHIUSURA	CLOSING
67	ROSETTA	WASHER
68	CHIUSURA	CLOSING
400	GRUPPO TRAINAFILO COMPLETO	COMPLETE WIRE FEED UNIT

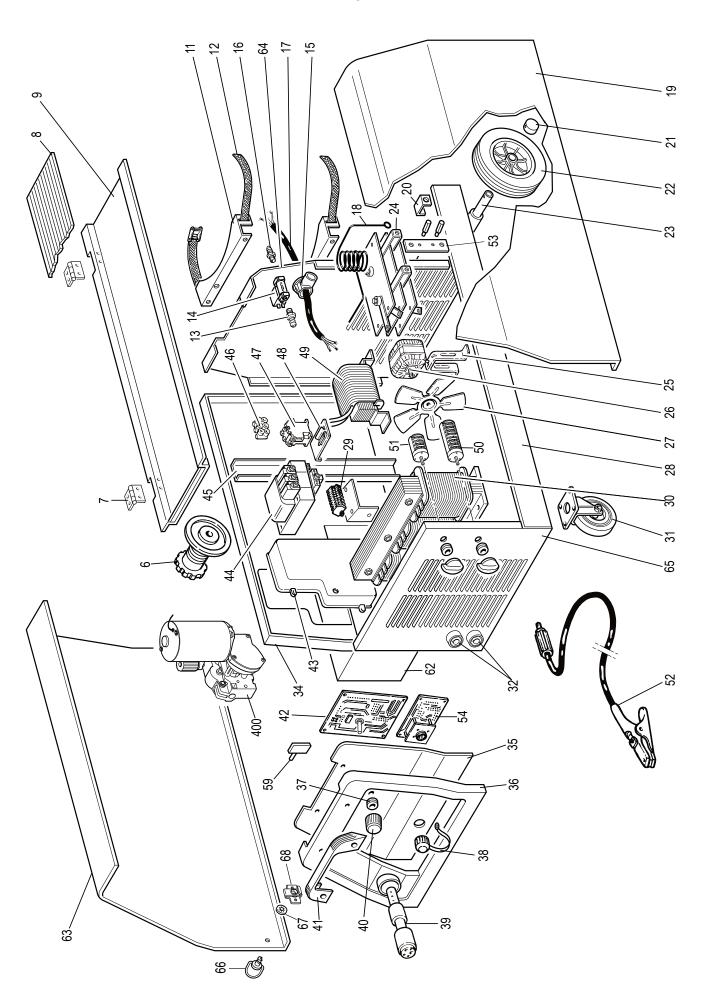
La richiesta di pezzi di ricambio deve indicare sempre: numero di articolo, matricola e data di acquisto della macchina, posizione e quantità del ricambio.



POS	DESCRIZIONE	DESCRIPTION
06	SUPPORTO BOBINA	COIL SUPPORT
07	CERNIERA	HINGE
08	COPERTURA GOMMA	RUBBER MAT
09	COPERCHIO	COVER
11	APPOGGIO BOMBOLA	GAS CYLINDER SUPPORT
12	CINGHIA	BELT
13	RACCORDO	FITTING
14	ELETTROVALVOLA	SOLENOID VALVE
15	PRESSACAVO	STRAIN RELIEF
16	RACCORDO	FITTING
17	CAVO RETE	POWER CORD
18	RESISTENZA	RESISTANCE
19	LATERALE FISSO	FIXED SIDE PANEL
20	SUPPORTO	SUPPORT
21	TAPPO	CAP
22	RUOTA FISSA	FIXED WHEEL
23	ASSALE	AXLE
24	RADDRIZZATORE	RECTIFIER
25	SUPPORTO	SUPPORT
26	MOTORE	MOTOR
27	VENTOLA	FAN
28	FONDO	BOTTOM
29	MORSETTIERA	TERMINAL BOARD
30	TRASFORMATORE	TRANSFORMER
31	RUOTA PIROETTANTE	SWIVELING WHEEL
32	PRESA GIFAS	GIFAS SOCKET
34	PIANO INTERMEDIO	INSIDE BAFFLE
35	PANNELLO COMANDI	CONTROL PANEL

POS	DESCRIZIONE	DESCRIPTION
36	CORNICE	FRAME
37	PROTEZIONE IN GOMMA	RUBBER PROTECTION
38	TAPP0	CAP
39	CORPO ADATTATORE	ADAPTOR BODY
40	MANOPOLA	KNOB
41	MANICO	HANDLE
42	CIRCUITO DI COMANDO	CIRCUIT BOARD
43	CARTER DI PROTEZIONE	PROTECTION CASE
44	TRASFORMATORE DI SERVIZIO	AUXLIARY TRANSFORMER
45	SUPPORTO	SUPPORT
46	MORSETTIERA	TERMINAL BOARD
47	TELERUTTORE	CONTACTOR
48	SUPPORTO	SUPPORT
49	IMPEDENZA	CHOKE
50	COMMUTATORE	SWITCH
51	COMMUTATORE	SWITCH
52	CAVO MASSA	EARTH CABLE
59	PULSANTE	SWITCH
61	MORSETTIERA	TERMINAL BOARD
62	CARTER DI PROTEZIONE	PROTECTION CASE
63	LATERALE MOBILE	HINGED SIDE PANEL
64	PANNELLO POSTERIORE	BACK PANEL
65	PANNELLO ANTERIORE	FRONT PANEL
66	CHIUSURA	CLOSING
67	ROSETTA	WASHER
68	CHIUSURA	CLOSING
400	GRUPPO TRAINAFILO COMPLETO	COMPLETE WIRE FEED UNIT

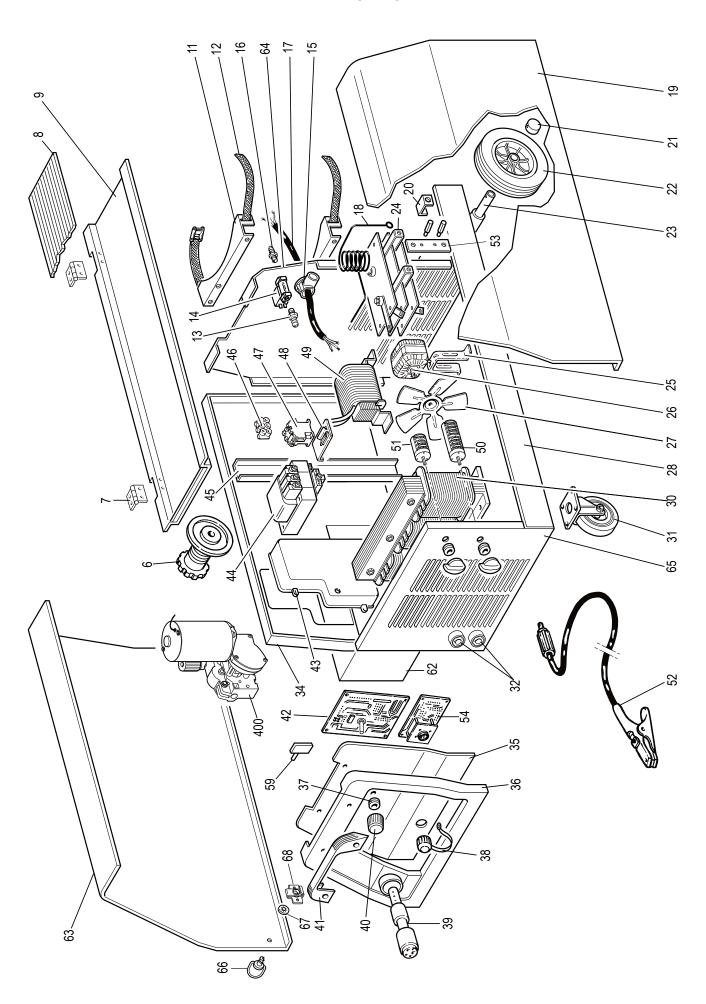
La richiesta di pezzi di ricambio deve indicare sempre: numero di articolo, matricola e data di acquisto della macchina, posizione e quantità del ricambio.



POS	DESCRIZIONE	DESCRIPTION
06	SUPPORTO BOBINA	COIL SUPPORT
07	CERNIERA	HINGE
08	COPERTURA GOMMA	RUBBER MAT
09	COPERCHIO	COVER
11	APPOGGIO BOMBOLA	GAS CYLINDER SUPPORT
12	CINGHIA	BELT
13	RACCORDO	FITTING
14	ELETTROVALVOLA	SOLENOID VALVE
15	PRESSACAVO	STRAIN RELIEF
16	RACCORDO	FITTING
17	CAVO RETE	POWER CORD
18	RESISTENZA	RESISTANCE
19	LATERALE FISSO	FIXED SIDE PANEL
20	SUPPORTO	SUPPORT
21	TAPP0	CAP
22	RUOTA FISSA	FIXED WHEEL
23	ASSALE	AXLE
24	RADDRIZZATORE	RECTIFIER
25	SUPPORTO	SUPPORT
26	MOTORE	MOTOR
27	VENTOLA	FAN
28	FONDO	ВОТТОМ
29	MORSETTIERA	TERMINAL BOARD
30	TRASFORMATORE	TRANSFORMER
31	RUOTA PIROETTANTE	SWIVELING WHEEL
32	PRESA GIFAS	GIFAS SOCKET
34	PIANO INTERMEDIO	INSIDE BAFFLE
35	PANNELLO COMANDI	CONTROL PANEL
36	CORNICE	FRAME

POS	DESCRIZIONE	DESCRIPTION
37	PROTEZIONE IN GOMMA	RUBBER PROTECTION
38	TAPP0	CAP
39	CORPO ADATTATORE	ADAPTOR BODY
40	MANOPOLA	KNOB
41	MANICO	HANDLE
42	CIRCUITO DI COMANDO	CIRCUIT BOARD
43	CARTER DI PROTEZIONE	PROTECTION CASE
44	TRASFORMATORE DI SERVIZIO	AUXLIARY TRANSFORMER
45	SUPPORTO	SUPPORT
46	MORSETTIERA	TERMINAL BOARD
47	TELERUTTORE	CONTACTOR
48	SUPPORTO	SUPPORT
49	IMPEDENZA	CHOKE
50	COMMUTATORE	SWITCH
51	COMMUTATORE	SWITCH
52	CAVO MASSA	EARTH CABLE
53	SHUNT	SHUNT
54	CIRCUITO DI CONTROLLO	CONTROL CIRCUIT
59	PULSANTE	SWITCH
62	CARTER DI PROTEZIONE	PROTECTION CASE
63	LATERALE MOBILE	HINGED SIDE PANEL
64	PANNELLO POSTERIORE	BACK PANEL
65	PANNELLO ANTERIORE	FRONT PANEL
66	CHIUSURA	CLOSING
67	ROSETTA	WASHER
68	CHIUSURA	CLOSING
400	GRUPPO TRAINAFILO COMPLETO	COMPLETE WIRE FEED UNIT

La richiesta di pezzi di ricambio deve indicare sempre: numero di articolo, matricola e data di acquisto della macchina, posizione e quantità del ricambio.

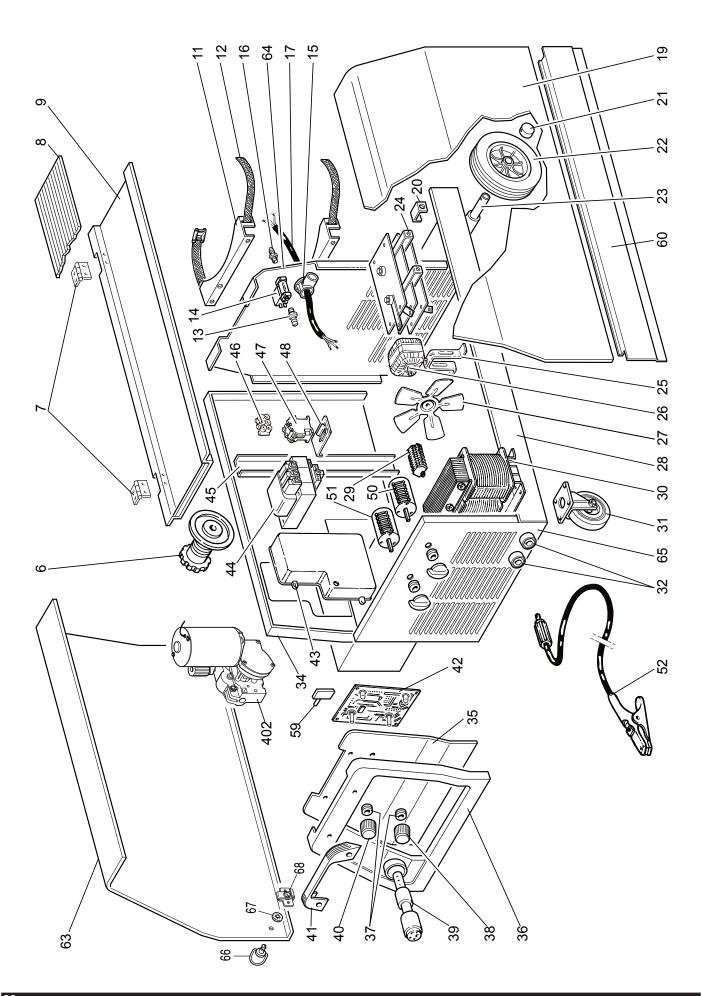


Art. 627.48

POS	DESCRIZIONE	DESCRIPTION
06	SUPPORTO BOBINA	COIL SUPPORT
07	CERNIERA	HINGE
08	COPERTURA GOMMA	RUBBER MAT
09	COPERCHIO	COVER
11	APPOGGIO BOMBOLA	GAS CYLINDER SUPPORT
12	CINGHIA	BELT
13	RACCORDO	FITTING
14	ELETTROVALVOLA	SOLENOID VALVE
15	PRESSACAVO	STRAIN RELIEF
16	RACCORDO	FITTING
17	CAVO RETE	POWER CORD
18	RESISTENZA	RESISTANCE
19	LATERALE FISSO	FIXED SIDE PANEL
20	SUPPORTO	SUPPORT
21	TAPP0	CAP
22	RUOTA FISSA	FIXED WHEEL
23	ASSALE	AXLE
24	RADDRIZZATORE	RECTIFIER
25	SUPPORTO	SUPPORT
26	MOTORE	MOTOR
27	VENTOLA	FAN
28	FONDO	BOTTOM
30	TRASFORMATORE	TRANSFORMER
31	RUOTA PIROETTANTE	SWIVELING WHEEL
32	PRESA GIFAS	GIFAS SOCKET
34	PIANO INTERMEDIO	INSIDE BAFFLE
35	PANNELLO COMANDI	CONTROL PANEL
36	CORNICE	FRAME
37	PROTEZIONE IN GOMMA	RUBBER PROTECTION

POS	DESCRIZIONE	DESCRIPTION
38	TAPP0	CAP
39	CORPO ADATTATORE	ADAPTOR BODY
40	MANOPOLA	KNOB
41	MANICO	HANDLE
42	CIRCUITO DI COMANDO	CIRCUIT BOARD
43	CARTER DI PROTEZIONE	PROTECTION CASE
44	TRASFORMATORE DI SERVIZIO	AUXLIARY TRANSFORMER
45	SUPPORTO	SUPPORT
46	MORSETTIERA	TERMINAL BOARD
47	TELERUTTORE	CONTACTOR
48	SUPPORTO	SUPPORT
49	IMPEDENZA	CHOKE
50	COMMUTATORE	SWITCH
51	COMMUTATORE	SWITCH
52	CAVO MASSA	EARTH CABLE
53	SHUNT	SHUNT
54	CIRCUITO DI CONTROLLO	CONTROL CIRCUIT
59	PULSANTE	SWITCH
62	CARTER DI PROTEZIONE	PROTECTION CASE
63	LATERALE MOBILE	HINGED SIDE PANEL
64	PANNELLO POSTERIORE	BACK PANEL
65	PANNELLO ANTERIORE	FRONT PANEL
66	CHIUSURA	CLOSING
67	ROSETTA	WASHER
68	CHIUSURA	CLOSING
400	GRUPPO TRAINAFILO COMPLETO	COMPLETE WIRE FEED UNIT

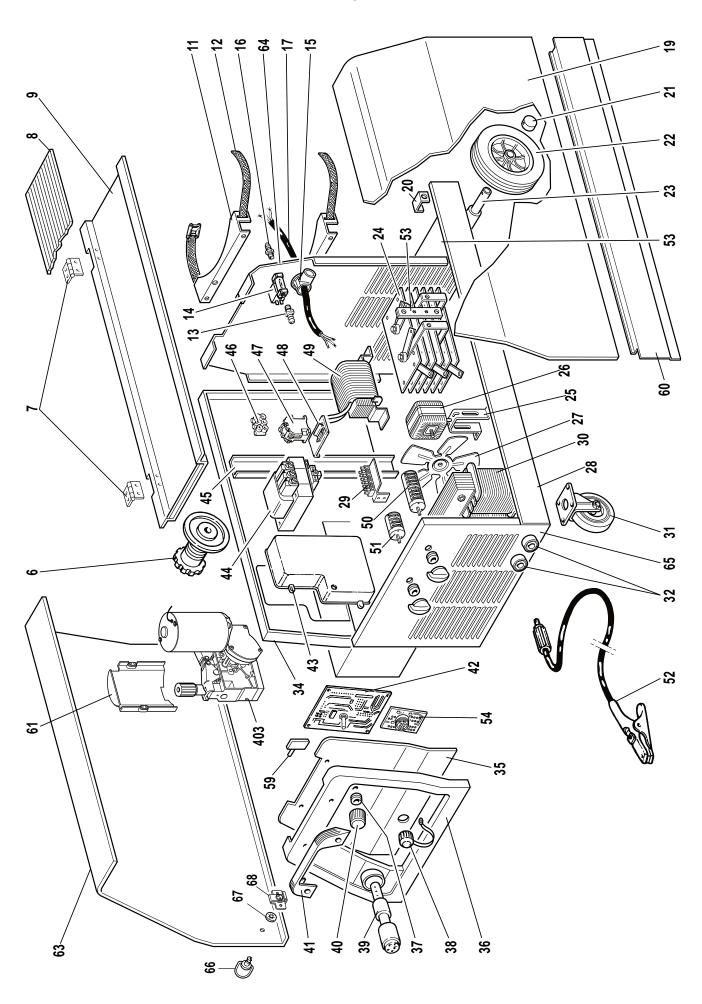
La richiesta di pezzi di ricambio deve indicare sempre: numero di articolo, matricola e data di acquisto della macchina, posizione e quantità del ricambio.



POS	DESCRIZIONE	DESCRIPTION
06	SUPPORTO BOBINA	COIL SUPPORT
07	CERNIERA	HINGE
08	COPERTURA GOMMA	RUBBER MAT
09	COPERCHIO	COVER
11	APPOGGIO BOMBOLA	GAS CYLINDER SUPPORT
12	CINGHIA	BELT
13	RACCORDO	FITTING
14	ELETTROVALVOLA	SOLENOID VALVE
15	PRESSACAVO	STRAIN RELIEF
16	RACCORDO	FITTING
17	CAVO RETE	POWER CORD
19	LATERALE FISSO	FIXED SIDE PANEL
20	SUPPORTO	SUPPORT
21	TAPP0	CAP
22	RUOTA FISSA	FIXED WHEEL
23	ASSALE	AXLE
24	RADDRIZZATORE	RECTIFIER
25	SUPPORTO	SUPPORT
26	MOTORE	MOTOR
27	VENTOLA	FAN
28	FONDO	ВОТТОМ
29	MORSETTIERA	TERMINAL BOARD
30	TRASFORMATORE	TRANSFORMER
31	RUOTA PIROETTANTE	SWIVELING WHEEL
32	PRESA GIFAS	GIFAS SOCKET
34	PIANO INTERMEDIO	INSIDE BAFFLE
35	PANNELLO COMANDI	CONTROL PANEL

POS	DESCRIZIONE	DESCRIPTION
36	CORNICE	FRAME
37	PROTEZIONE IN GOMMA	RUBBER PROTECTION
38	TAPPO	CAP
39	CORPO ADATTATORE	ADAPTOR BODY
40	MANOPOLA	KNOB
41	MANICO	HANDLE
42	CIRCUITO DI COMANDO	CIRCUIT BOARD
43	CARTER DI PROTEZIONE	PROTECTION CASE
44	TRASFORMATORE DI SERVIZIO	AUXLIARY TRANSFORMER
45	SUPPORTO	SUPPORT
46	MORSETTIERA	TERMINAL BOARD
47	TELERUTTORE	CONTACTOR
48	SUPPORTO	SUPPORT
50	COMMUTATORE	SWITCH
51	COMMUTATORE	SWITCH
52	CAVO MASSA	EARTH CABLE
59	PULSANTE	SWITCH
60	LATERALE FISSO	FIXED SIDE PANEL
63	LATERALE MOBILE	HINGED SIDE PANEL
64	PANNELLO POSTERIORE	BACK PANEL
65	PANNELLO ANTERIORE	FRONT PANEL
66	CHIUSURA	CLOSING
67	ROSETTA	WASHER
68	CHIUSURA	CLOSING
402	GRUPPO TRAINAFILO COMPLETO	COMPLETE WIRE FEED UNIT

La richiesta di pezzi di ricambio deve indicare sempre: numero di articolo, matricola e data di acquisto della macchina, posizione e quantità del ricambio.

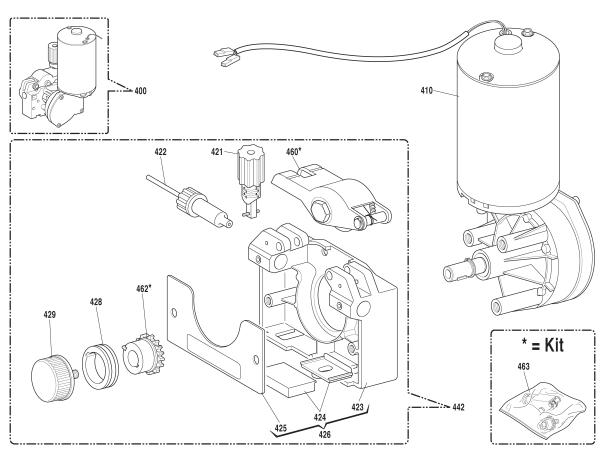


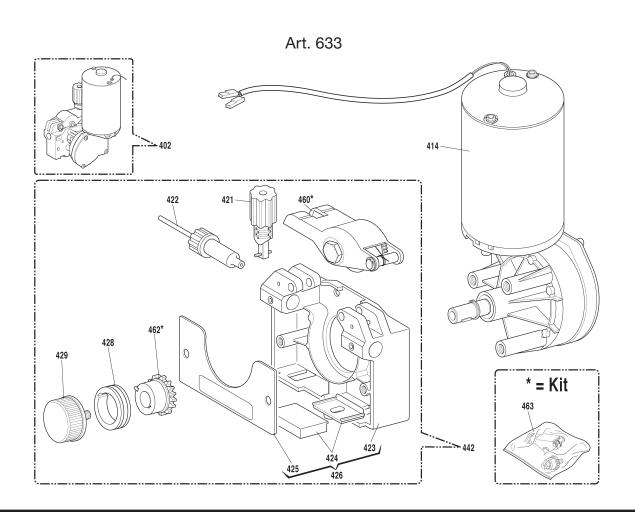
POS	DESCRIZIONE	DESCRIPTION
06	SUPPORTO BOBINA	COIL SUPPORT
07	CERNIERA	HINGE
08	COPERTURA GOMMA	RUBBER MAT
09	COPERCHIO	COVER
11	APPOGGIO BOMBOLA	GAS CYLINDER SUPPORT
12	CINGHIA	BELT
13	RACCORDO	FITTING
14	ELETTROVALVOLA	SOLENOID VALVE
15	PRESSACAVO	STRAIN RELIEF
16	RACCORDO	FITTING
17	CAVO RETE	POWER CORD
19	LATERALE FISSO	FIXED SIDE PANEL
20	SUPPORTO	SUPPORT
21	TAPPO	CAP
22	RUOTA FISSA	FIXED WHEEL
23	ASSALE	AXLE
24	RADDRIZZATORE	RECTIFIER
25	SUPPORTO	SUPPORT
26	MOTORE	MOTOR
27	VENTOLA	FAN
28	FONDO	ВОТТОМ
29	MORSETTIERA	TERMINAL BOARD
30	TRASFORMATORE	TRANSFORMER
31	RUOTA PIROETTANTE	SWIVELING WHEEL
32	PRESA GIFAS	GIFAS SOCKET
34	PIANO INTERMEDIO	INSIDE BAFFLE
35	PANNELLO COMANDI	CONTROL PANEL
36	CORNICE	FRAME
37	PROTEZIONE IN GOMMA	RUBBER PROTECTION

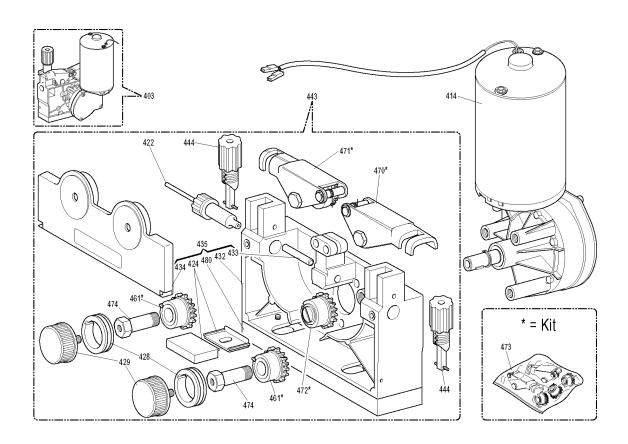
POS	DESCRIZIONE	DESCRIPTION
38	TAPP0	CAP
39	CORPO ADATTATORE	ADAPTOR BODY
40	MANOPOLA	KNOB
41	MANICO	HANDLE
42	CIRCUITO DI COMANDO	CIRCUIT BOARD
43	CARTER DI PROTEZIONE	PROTECTION CASE
44	TRASFORMATORE DI SERVIZIO	AUXLIARY TRANSFORMER
45	SUPPORTO	SUPPORT
46	MORSETTIERA	TERMINAL BOARD
47	TELERUTTORE	CONTACTOR
48	SUPPORTO	SUPPORT
49	IMPEDENZA	CHOKE
50	COMMUTATORE	SWITCH
51	COMMUTATORE	SWITCH
52	CAVO MASSA	EARTH CABLE
53	SHUNT	SHUNT
54	CIRCUITO DI CONTROLLO	CONTROL CIRCUIT
59	PULSANTE	SWITCH
60	LATERALE FISSO	FIXED SIDE PANEL
61	PROTEZIONE MOTORE	MOTOR PROTECTION
62	CARTER DI PROTEZIONE	PROTECTION CASE
63	LATERALE MOBILE	HINGED SIDE PANEL
64	PANNELLO POSTERIORE	BACK PANEL
65	PANNELLO ANTERIORE	FRONT PANEL
66	CHIUSURA	CLOSING
67	ROSETTA	WASHER
68	CHIUSURA	CLOSING
403	GRUPPO TRAINAFILO COMPLETO	COMPLETE WIRE FEED UNIT

La richiesta di pezzi di ricambio deve indicare sempre: numero di articolo, matricola e data di acquisto della macchina, posizione e quantità del ricambio.

Art. 622-624-625-627







POS	DESCRIZIONE	DESCRIPTION
400 402 403	GRUPPO TRAINAFILO COMPLETO	COMPLETE WIRE FEED UNIT
410 414	MOTORIDUTTORE	WIRE FEED MOTOR
421	BLOCCAGGIO GRADUATO	ADJUSTMENT KNOB
422	GUIDAFILO	WIRE DRIVE PIPE ASSY
423	CORPO TRAINAFILO	WIRE FEED BODY
424	ISOLANTE COMPLETO	INSULATION ASSY
425	PROTEZIONE	PROTECTION
426	TRAINAFILO COMPLETO	COMPLETE WIRE FEED
428	RULLO TRAINAFILO	WIRE FEED ROLLER
429	POMELLO	KNOB
432	CORPO TRAINAFILO	WIRE FEED BODY
433	CANNETTA GUIDAFILO	WIRE INLET GUIDE
434	PROTEZIONE	PROTECTION

POS	DESCRIZIONE	DESCRIPTION
435	CORPO TRAINAFILO COMPLETO	COMPLETE WIRE FEED BODY
442 443	GRUPPO TRAINAFILO	WIRE FEED UNIT
444	BLOCCAGGIO GRADUATO	ADJUSTMENT KNOB
460	SUPPORTO PREMIRULLO	ROLLER PRESSER SUPP.
461	INGRANAGGIO	GEAR
462	INGRANAGGIO	GEAR
463	KIT INGRANAGGI	GEARS KIT
470	SUPPORTO PREMIRULLO DESTRO	RIGTH ROLLER PRESSER SUPPORT
471	SUPPORTO PREMIRULLO SINISTRO	LEFT ROLLER PRESSER SUPPORT
472	INGRANAGGIO CENTRALE	CENTRAL GEAR
473	KIT TRAINAFILO	WIRE FEED KIT
474	PERNO PERNO	PIN
480	DISTANZIALE	SPACER

La richiesta di pezzi di ricambio deve indicare sempre: numero di articolo, matricola e data di acquisto della macchina, posizione e quantità del ricambio.



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