

INSTALLATION, OPERATING AND MAINTENANCE MANUAL

**RESISTANCE WELDING POWER SOURCE
FAST SPOTTER 3.5 E & 5.0**





INDEX

1. GENERAL INSTRUCTIONS

- 1.1 Manufacturer and welding machine identification data
- 1.2 General safety warnings
- 1.3 Prevention measures to be taken by the user
- 1.4 Technical data
- 1.5 Intended and non intended use
- 1.6 Description of the product and how it works

2. INSTALLATION INSTRUCTIONS

- 2.1 Environmental conditions
- 2.2 Energy requirement
- 2.3 Connection to the energy sources
- 2.4 Transporting, storage and assembly information
- 2.5 Wiring diagrams

3. INSTRUCTIONS FOR THE OPERATOR

- 3.1 Description of the functions
- 3.2 Guide to starting the welding machine for the first time
- 3.3 Getting ready to weld
- 3.4 Influence of the different welding parameters
- 3.5 Checking spot quality
- 3.6 Operating guide
- 3.7 Description of the welding control unit
- 3.8.1 Troubleshooting
- 3.8.2 How to eliminate welding defects

4. MAINTENANCE INSTRUCTIONS

- 4.1 Maintenance information
- 4.2 Guide to maintenance
- 4.3 Spare parts
- 4.4 Technical assistance



1. GENERAL INSTRUCTIONS

1.1 MANUFACTURER AND WELDING MACHINE IDENTIFICATION DATA

Manufacturer data

P.E.I.-POINT SRL

Welding machine data

Resistance type welding machine; see the data plate on the machine and the certificate of conformity attached to this manual for the model, serial number and year of construction.

Introduction

This manual contains the information needed to install, use and service your welding machine. Follow the instructions to get the best out of your welding machine, in the most economical way and in complete safety.

1.2 GENERAL SAFETY WARNINGS








THE FAILURE TO OBSERVE THESE WARNINGS AND/OR ANY MODIFICATION OF OR TAMPERING WITH THE WELDING MACHINE WILL RELEASE P.E.I.-POINT SRL FROM ANY LIABILITIES IN THE CASE OF ACCIDENTS TO PEOPLE OR DAMAGE TO THINGS AND/OR TO THE WELDING MACHINE ITSELF.

Before turning the welding machine on it is essential that the user knows how to carry out all the operations described in this manual.

The manual is an integral of the machine and must be kept until it is disposed of.

RESIDUAL RISKS

By residual risks we mean any hazard that could not be totally eliminated with the design or protection means and any potential hazard that is not evident.

	<p>There must not be excessive quantities of dust, acids, corrosive substances or gases etc., on the premises except those generated by the welding machine. We recommend keeping an extinguisher near the workstation.</p>
	<p>It must not be excessively humid on the premises. We recommend using an insulating platform. All maintenance jobs must be done on the machine only after having disconnected it from the electricity mains.</p>
	<p>Mind your hands when working; always keep them well away from the electrodes and moving parts when welding.</p>
	<p>The strong magnetic field that the welding machine generates during welding can be dangerous for people wearing pacemakers. Watches and electronic devices in general, if placed near the welding machine, can be damaged.</p>
	<p>Only use the spot welder on a horizontal plane. If it slants more than 15° with respect to the floor it could tip over.</p>
	<p>An incorrect adjustment of welding pressure, an erroneous setting of parameters or malfunctioning of the pneumatic system can all cause squirts of melted material during welding.</p>
	<p>The electrodes become very hot during welding. Do not touch them with your bare hands immediately after welding.</p>

1.3 PREVENTION MEASURES TO BE TAKEN BY THE USER

- We recommend wearing safety glasses.
- The user must observe the safety instructions given on the welding machine.
- Personal protection gear must comply with and be certified by current standards.
- Signs must be placed in the vicinity of the machine relative to the risks that call for personal protection gear.
- It is compulsory that the user observe the accident prevention laws in force in his country.
- Just one operator who has been specifically trained to use welding machines and welding equipment can use the welding machine.
- Install a suction unit if the material to be welded produces fumes.
- The operator must wear glasses to protect his eyes against squirts of melted material, a protective apron and leather gloves.
- The operator must avoid wearing metal objects (bracelets, watches etc.)
- Routine and extraordinary maintenance jobs must only be done on the machine after having disconnected the power sources (electricity, pneumatic power).
- **Make sure the machine is earthed effectively and protected by a suitable RCD/CB.**

1.4 TECHNICAL DATA

		FAST SPOTTER 3,5 E		FAST SPOTTER 5.0	
		400V	230V	400V	230V
Rated Power output at 50% duty cycle	kVA	2,8		5	
Sec. short circuit current	kA	3,0		4.0	
Secondary voltage	V	6,6		6.3	
Single-phase supply voltage	V	400	230	400	230
Nominal frequency	Hz	50 *		50*	
Delayed fuses	A	10	16	10	16
Dimensions WxDxH	mm	320*345*280		320*345*280	
Weight	Kg	20		32	

Spotter Gun			
Welding capacity	mm	0,8+0,8	1 + 1
Section cables	mm ²	95	95
Gun cable length	mm	1800	1900
Earth cable length	mm	1800	1500

* other frequency on request

1.5 INTENDED AND NON INTENDED USE

The failure to observe the prescribed instructions constitutes a condition of improper use from a technical point of view and as regards the safety of people.

Intended use conditions

P.E.I.-POINT SRL welding machines must only be used for welding metals keeping within the power limits given on the data plate. Only one trained operator is allowed to use the machine, who has experience in handling welding equipment.

Non intended use conditions

P.E.I.-POINT SRL welding machines cannot be used to exert pressure or deform materials. It is forbidden to weld materials that can generate toxic vapours or cause explosions due to heating.



1.6 DESCRIPTION OF THE PRODUCT AND HOW IT WORKS

P.E.I.-POINT SRL spot welders belong to the family of resistance type welding machines. By this we mean autogenous welding obtained by *pressure*, without using weld material, using the thermal effect of electricity flowing through the components to be welded (Joule effect) for heating. The components to be welded are gripped between two electrodes with a dual purpose: to let electricity pass through and to exert enough force for welding. The intensity of the current, the force on the electrodes and weld time are the most important parameters for welding. Force must be applied during the electrodes' squeeze time phases, weld time and holding time. The welding cycle phases are managed by the welding control unit; the times set are given in mains periods (1/50th of a second if mains frequency is 50 Hz).

The main switch turns the welding machine on (item 6) which also has the function of an emergency stop switch. Welding is started the lever switch (trigger) on the studder gun (2). The welding machine is equipped with safety thermostats to stop operation if it overheats.



2. INSTALLATION INSTRUCTIONS

2.1 ENVIRONMENTAL CONDITIONS

Operating clearances

The machine must be positioned to ensure working and maintenance clearances and for any emergency situations that may arise. For this reason we recommend leaving a clearance of about 1 metre all around the machine.

Environmental characteristics

The place where the machine is going to be used must be suitably illuminated for both production and maintenance, free from dust, acids, corrosive substances or gases, with temperatures ranging between +5°C and +40°C. Altitude must be less than 1000 metres.

Relative air humidity: 50% up to 40°C
 90% up to 20°C

Floor

The machine must be put on a flat surface that must also be able to withstand its weight.

2.2 ENERGY REQUIREMENT

Electricity

Model	Mains power (single-phase power) kVA
FAST SPOTTER 3,5 E	5
FAST SPOTTER 5.0	6

2.3 CONNECTION TO THE ENERGY SOURCES

Qualified personnel who can also certify their work must install the machine.

THE INSTALLER IS RESPONSIBLE FOR A CORRECT INSTALLATION AND, IN PARTICULAR, FOR THE CHOICE OF DEVICES TO PROTECT AGAINST SHORT CIRCUITING, OVERLOADS, LEAKAGE CURRENTS IN THE CASE OF A FAILURE AND OF THE WIRES USED TO CONNECT TO THE MAINS WHICH MUST COMPLY WITH CURRENT LAWS AND STANDARDS.

THE INSTALLER MUST ALSO CHECK THAT THE EARTHING SYSTEM, TO WHICH THE WELDING MACHINE IS CONNECTED, IS EFFECTIVE. **THE MACHINE MUST BE CONNECTED WITH A PLUG TO THE POWER SOURCE IN ORDER TO BE UNDER THE OPERATOR SURVEILLANCE.**

Electrical connection

Dimensioning of line fuses and the cross section of the supply cables.

With a mains voltage of V1=400V and a mains frequency of f=50Hz.

Model	Normal current delayed fuses (A)	Supply cable cross section up to 20 metres (mm ²)
FAST SPOTTER 3,5 E	10	4
FAST SPOTTER 5	16	6

- Check machine plate data before connecting it (voltage rating, nominal frequency and number of phases).
- Connect the welding machine to an RCD with a minimum current dispersion of 30 mA.
- The welding machine must be protected with either delayed line fuses or a circuit breaker with the values given in the above table.



2.4 DATA ON TRANSPORTING, STORAGE AND ASSEMBLY

Shipping

Make sure that the means used to transport the welding machine is strong enough to withstand its weight.

Pay attention to the air connections and projecting parts to avoid any damage being done.

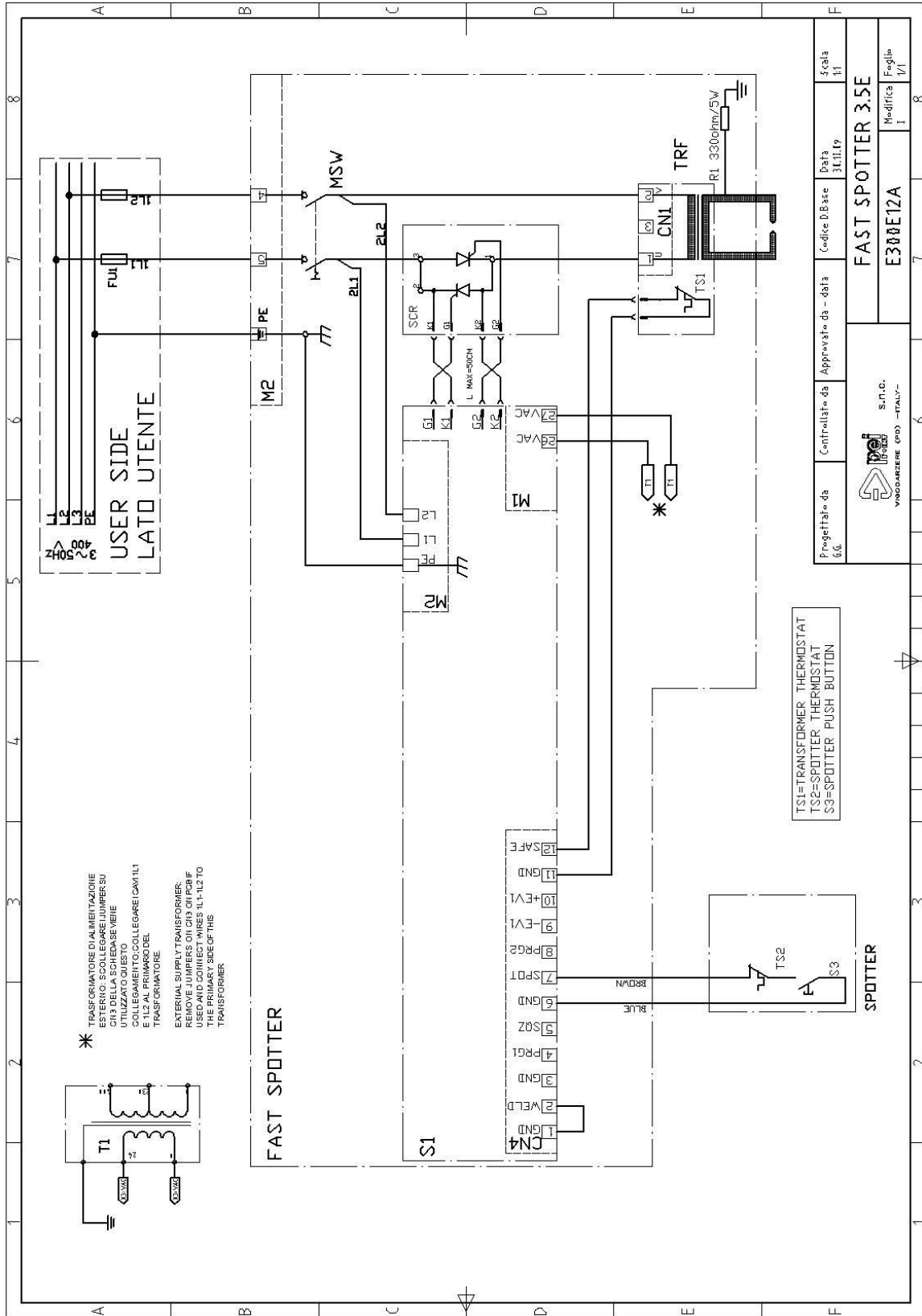
The weights of the different models are given in the technical data.

Unpacking - Assembly

Remove the packaging from the welding machine with care, checking that all the accessories are inside and that nothing has been damaged during shipping.

THE PEOPLE IN CHARGE OF LIFTING AND POSITIONING THE MACHINE MUST BE SUITABLY QUALIFIED.

2.5 WIRING DIAGRAMS





3. INSTRUCTIONS FOR THE OPERATOR

3.1 DESCRIPTION OF THE FUNCTIONS

To weld, the operator can either press the green button on the gun or use the lever switch on the studder gun. Squeeze time tests can be run without welding by pressing the black push button. When the welding control unit receives consent to start the cycle it performs the welding sequence according to the parameters set on it. The sequence can be interrupted at any time by releasing the cycle start push button. **If the start push button is released during weld time, the spot might not be strong enough.**

3.2 GUIDE TO STARTING THE WELDING MACHINE FOR THE FIRST TIME

- a) power on via the main switch
- b) set welding parameters on the control unit (see next paragraph)

3.3 GETTING READY TO WELD

WELDING CYCLE

The welding cycle consists of three basic times:

- Squeeze time:** it is the interval of time between the start of the cycle and the moment the electrodes, under the force exerted on them, come into contact with the piece to be welded.
- Weld time:** this is the time during which the welding current passes through the electrode contact area.
- Holding time:** this is the time during which the force of the electrodes is maintained after weld time has finished

3.4 INFLUENCE OF THE VARIOUS PARAMETERS ON THE WELDING RESULT

Force on the electrodes

The greater the force is on the electrodes, the weaker contact resistance will be between the electrodes and the sheets and the **less risk** there will be **of melted material being squirted**. However, the force on the electrodes is limited by the welding machine's capacity. The greater the force is on the electrodes, the greater the current value will be to achieve welding.

Weld time

Welding can be achieved with different weld times:

- Short weld time:** (less than 10 periods) it effects a small area of material being heated but the welding machine's performance is superior.
- Long weld time:** (20-60 periods) it leaves a heavy electrode mark on the sheets and utilises the machine to the utmost.
- Medium weld time:** (10÷20 periods) a good compromise between the two extremes







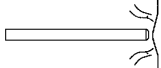
Current

Welding current influences the strength of the spot as does weld time but the influence is much stronger.

This means that current is the variable factor and must be adjusted with maximum attention.

To find the optimum welding current you have to make several attempts on some sample pieces, starting from a low value (10) and gradually increasing up to a satisfactory value (max. 100).

Approximate adjustments are given in the following table for the most common uses.

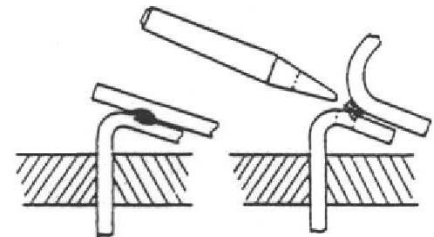
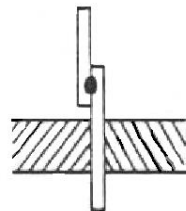
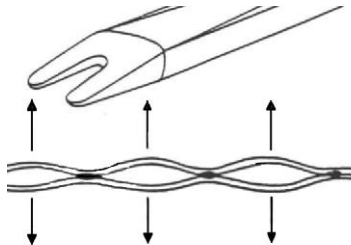
		
 0.8+0.8 mm	20	100
	15	40
 5mm	10-12	75
	60	80

3.5 CHECKING SPOT QUALITY

There are different ways to check the quality of a welding spot.

The best way, for the strength test, is the separation test of the welded parts.

This test entails gripping the welded sample pieces in a clamp and opening them with a scalpel. Strength is good if, after the sheets have been separated, there is a hole on one sheet and the melted core on the other sheet.



3.6 GUIDE TO STARTING

Prior to welding:

- Turn the welding machine on with the main switch (6) and make sure the green LED ("mains present") is on.
- Check that the set welding parameters are ideal for the piece you are welding and for electrode aperture (squeeze time).
- Wear individual protection gear (gloves, glasses, aprons, etc.).

Starting:

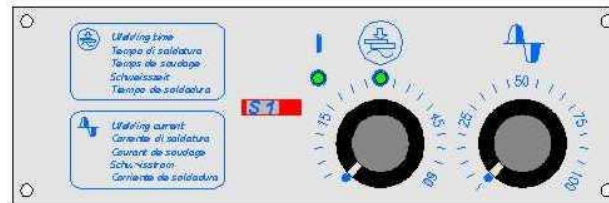
- **Spotter:** Use the gun's lever switch to spot weld.

Stopping the cycle and emergency stopping:

- The cycle can be stopped at any time, when you take your foot off the pedal.
- To stop in an emergency, turn the main switch off and discharge the pneumatic circuit through the dump valve VS-R (item 7).

3.7 DESCRIPTION OF THE WELDING CONTROL UNIT

S1





DESCRIPTION OF THE SYNOPTIC PANEL

The synoptic panel is divided in two parts. The top shows the graphical symbols of the available functions as well as the two LEDs signalling the power on and the welding time. The bottom includes two potentiometer for time and power adjustment.

DESCRIPTION OF THE FUNCTIONS

S1 is a timer that controls the welding cycle . A mains period is the timer's unit of time, corresponding to 1/50th of a second (50Hz). If, for instance, a welding time of 50 periods is set, time will be equal to 1 second.

	Weld time (0-60 periods): time during which the pieces to be welded have welding current passing through them.
	Power adjustment (0-100%): The value of the welding current is determined as a percentage of power.

OPERATING INSTRUCTIONS

When the welding machine is turned on the welding control turns on all the power on indicator light **I**.
Simply press START for the welding machine to start the work cycle. During welding **S1** displays the welding time of the cycle by turning the function LED on.

DESCRIPTION OF CONTROL CONNECTIONS CN4

No.	name	Description
4	PRG1 (in)	Start cycle
7	SPOT (in)	Start cycle without solenoid valve EV1 (active when low)
2	WELD (in)	Welding time enable (active when low)
12	SAFE (in)	Safety input: if open, cycle is not possible and both green LEDs flashing
5	SQZ (in)	When active, change status of output EV1
1-3-6-11	GND	∅ volt, common line for all the inputs
9-10	-EV1+EV1 (out)	EV1 supply (welding stroke) 24V / 7W

DESCRIPTION OF CONTROL CONNECTIONS M2

L1	Supply phase L1-400V 50/60 Hz
L2	Supply phase L2-400V 50/60 Hz
PE	Protection earth connection

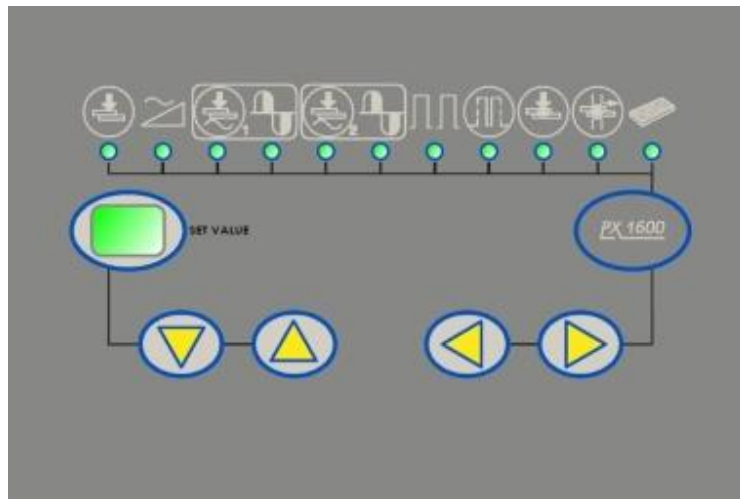
DESCRIPTION OF CONTROL CONNECTIONS M1

1-2	Vac IN	Connections to supply control (24V ac) from external source: jumpers on CN3 must be removed
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DESCRIPTION OF JUMPERS ON CN3

	CLOSED	OPEN
CN3	Internal supply transformer enabled (parallel jumpers)	Internal supply transformer disabled (parallel jumpers)

3.7 DESCRIPTION OF THE WELDING CONTROL UNIT













PX1600 WELDING CONTROL

DESCRIPTION OF THE SYNOPTIC PANEL

The synoptic panel is divided in two parts. The top shows the graphical symbols of the functions available as well as the LEDs signalling the function selected. The bottom part has the four arrow keys for programming and a two-digit display that shows the value of the function selected.


DESCRIPTION OF THE FUNCTIONS

PX1600 is a timer that controls the welding cycle . A mains period is the timer's unit of time, corresponding to 1/50th of a second (50Hz). If, for instance, a squeeze time of 50 periods is set, time will be equal to 1 second.


	<p>Squeeze time (0-99 periods): it is the time needed by the welding machine's electrodes to come into contact with the piece to be welded and to exert the welding pressure Melted material will squirt if this time is too short.</p>
	<p>Current risetime (0-20 periods): Weld time with growing current increase. If this value is not zero, welding current will gradually reach the value required during risetime. This technique is used when welding extra thick sheets that are not well matched together, or for welding steel.</p>
	<p>Adjustment 1-2: Welding time and current, together with the force at the electrodes, are the most important parameters to make a spot weld. If the thickness of the pieces to be welded differ then (at least) the welding current has to be modified, leaving all the other parameters as they are. Adjustment 1 or 2 are automatically selected during welding program execution. If the welder has only one start device, only Adjustment 1 will be executed.</p>
	<p>Weld time (0-99 periods): time during which the pieces to be welded have welding current passing through them.</p>
	<p>Power adjustment (0-99%): The value of the welding current is determined as a percentage of power.</p>
	<p>Number of pulses (1-20): weld time is repeated without opening the electrodes, according to the value set. If no. of pulses=1 control makes single cycle with set welding time If no. of pulses >1 control makes infinite welding time (seam welding)</p>
	<p>Cold time (0-99 periods): pause time between welding pulses.</p>
	<p>Holding time (0-99 periods): No effect on seam welder</p>
	<p>Pause time (0-99 periods): No effect on seam welder</p>
	<p>Energy function (0-1): No effect on seam welder</p>

PROGRAMMING

When the control is not carrying out a welding cycle it can be used to programme or modify welding parameters.

Simply press the  key to select the parameters of the welding cycle wanted.

The illuminated green LED under the graphical symbol highlights the function selected.

The SET VALUE display shows the value of the function selected. With keys  the value contained in the SET VALUE is either increased or decreased.

OPERATING INSTRUCTIONS

When the welding machine is turned on the welding control carries out a test on all the indicator lights. The SET VALUE display shows the software version installed.

Subsequent to self-testing, control returns as it was prior to turning off; simply press START for the welding machine to start the work cycle.

During welding PX1600 displays all the phases of the cycle by turning the function LEDs on in sequence.

SELECTING THE WELDING PROGRAMME

PX1600 can carry out nine different welding programmes.

To select the one you want, press the key  several times until the display starts flashing.

PX1600 will now display the active programme.

If you wish to recall a different programme use the keys  selecting a value between 1 and 9.

DESCRIPTION OF CONTROL CONNECTIONS

No.	name	Description
4	PRG1 (in)	Start cycle with time-current 1 (active when low)
8	PRG2* (in)	Start cycle with time-current 2 (active when low)
7	SPOT (in)	Start cycle with time-current 2 without solenoid valve EV1 (active when low)
2	WELD (in)	Welding time enable (active when low)
17	WNW* (in)	Excludes the current from the welding cycle (active when low)
12	SAFE (in)	Safety input: if high, cycle is not possible and display "00" flashing
5	SQZ (in)	When active, change status of output EV1
25	PSQZ (in)	When active, change status of output EV2 (if SW 1.1 = ON) If SW1.1 = OFF EV2 is "on" if the input PSQZ is active
16	WEND* (out)	End of welding time: become low after the welding time; it will be active till the start signal (PRG1 or PRG2) are active (open connectors 500mA max)
15	CEND* (out)	End cycle: become low after the welding time; it will be active till the start signal (PRG1 or PRG2) are active (open connectors 500mA max)
1-3-6-11-18	GND	Ø volt, common line for all the inputs
22-23	+24V	Supply voltage (24V dc 500mA max)
24	C+EV1	COMUNE (+24V EV1 Elettrovalvola accostaggio)
13-14	-EV2+EV2* (out)	EV2 supply (extra stroke cylinder) 24V / 7W
9-10	-EV1+EV1 (out)	EV1 supply (welding stroke) 24V / 7W
19-20	TAEN-TAEN (in)	Input signal for welding current sensor
26-27	Vac IN	Connections to supply control (24V ac) from external source: JP8-JP9 must be removed
21	TRG	Firing signal for external SCR firing module : JP7 must be removed if this signal is used
L1		Supply phase L1-400V 50/60 Hz
L2		Supply phase L2-400V 50/60 Hz
PE		Protection earth connection

(*only PX1500 plus and PX1500P plus)

DESCRIPTION OF DIP-SWITCHES FUNCTION

SOFTWARE VERSION 2.0

		OFF	ON
SW1.1	OUT EV2	MONOSTABLE	BISTABLE
SW1.2	ENERGY COMPENSATION	DISABLED	ENABLED
SW1.3	COS FI ADJUSTMENT	MINIMUM	MAXIMUM
SW1.4	TIME UNIT	1 CYCLE	½ CYCLE
SW1.5	PAUSE TIME	ENABLED	DISABLED
SW1.6	OUT EV1	FREE	EV1=ON IF EV2=ON
SW1.7	FIRST HALF CYCLE DELAY	3.5 mSec.	4 mSec.
SW1.8	SEAM WELDING OPERATION	NOT	YES

DESCRIPTION OF JUMPERS ON PCB

	CLOSED	OPEN
JP7	INTERNAL FIRING CIRCUIT ENABLED	INTERNAL FIRING CIRCUIT DISABLED
JP8-JP9	INTERNAL SUPPLY TRANSFORMER ENABLED (PARALLEL JUMPERS)	INTERNAL SUPPLY TRANSFORMER DISABLED (PARALLEL JUMPERS)

3.8.1 TROUBLESHOOTING AND A GUIDE TO ELIMINATING PROBLEMS IN THE WELDING CYCLE

PROBLEM	CAUSE	REMEDY
The control unit does not turn when the main switch has been turned on.	<ul style="list-style-type: none"> No electricity Line fuses have blown Fuses on the control unit have blown 	<ul style="list-style-type: none"> Check mains voltage and soundness of the fuses
The control unit turns on but when the push button is pressed the welding cycle fails to start.	<ul style="list-style-type: none"> Mains voltage is too low Microswitch damaged Thermostats gun have tripped 	<ul style="list-style-type: none"> Check mains voltage and compare it with the machine's rating plate data. Welding time too long
S1 welding control is turns on, the two leds flashes.	<ul style="list-style-type: none"> The thermostats have tripped 	<ul style="list-style-type: none"> Welding time too long
Squirts of material when the electrodes come into contact	<ul style="list-style-type: none"> Electrodes' pressure is too low SCR has short circuited 	<ul style="list-style-type: none"> Increase force on the electrodes Change the SCR
While you are welding there is a loud noise coming from the welding transformer and the line fuses blow	<ul style="list-style-type: none"> SCR has failed 	<ul style="list-style-type: none"> Change the SCR Change the control card

3.8.2 HOW TO ELIMINATE WELDING DEFECTS

DEFECT	CAUSE	REMEDY
Squirts of melted material	<ul style="list-style-type: none"> Squeeze time is too short Force on the electrodes is too weak Welding current is too high Insufficient contact of the electrodes 	<ul style="list-style-type: none"> Increase squeeze time Increase force on the electrodes Reduce welding current
The mark on the welded pieces is too pronounced	<ul style="list-style-type: none"> Electrodes' diameter is insufficient Force on the electrodes is too strong Welding current is too high Welding time too long 	<ul style="list-style-type: none"> Change the electrodes with ones of a suitable diameter Reduce pressure Reduce welding power (time and current)
Spot strength is not good enough	<ul style="list-style-type: none"> Weld time is too short Current is too weak Electrodes' diameter is too big Excessive force on the electrodes Secondary circuit contacts are dirty 	<ul style="list-style-type: none"> Increase weld time Increase welding current Reduce electrode diameter Reduce electrode force Clean the secondary circuit
Deformed electrodes	<ul style="list-style-type: none"> Weld time is too long Excessive force on the electrodes Excessive current Insufficient contact area The electrodes' copper alloy is too weak 	
Craters in the welding core	<ul style="list-style-type: none"> Holding time is too short Insufficient electrodes force Material is dirty 	

4. MAINTENANCE INSTRUCTIONS

4.1 MAINTENANCE INFORMATION

Maintenance personnel must be qualified, know the welding machine and work without modifying the safety of the product. The maintenance person must also respect the general accident prevention rules and regulations.

Small maintenance jobs

Use a fine grain file to keep the electrode tips free from ferrous waste and from the small craters that form. Restore electrode diameter to its original size because welding tends to widen it.

4.2 GUIDE TO MAINTENANCE

Daily checks

- clean surfaces that are dirty with oil, grease and water
- clean the area around the welding machine
- clean any transparent guards
- make sure that all the protection devices are in their place and working properly

**Attention: do not squirt jets of water on the welding machine
do not use solvents to clean the painted parts**

Electrical system and welding control unit

- check condition of the protection circuit and tightness of the "PE" terminal
- check condition of the electric contacts (microswitches)
- check condition of the setting keypads/potentiometers
- see if there is any noise coming from secondary connections that have not been fixed properly
- check that all the signalling lights are in proper working order

Weekly checks

- check any unusual operations with the operator
- remove oil stains from the welding area floor

Electrical system and control unit

- check the microswitches
- check to see if any unauthorised changes have been made to the programming parameters.

Electrodes and electrode holder

- carry out an internal inspection of the electrodes and electrode holder
- clean the electrodes, electrode holder, clamps
- check parallelism of the arms in the welding position

Six-monthly checks

Electrical system

- clean all the contacts of the secondary circuit to remove corrosion with fine grain abrasive material
- tighten all connections
- check protection devices and overloads (thermostats)
- check welding parameters and correct them if necessary
- check tightness of the power, transformer and welding control unit terminals

When the welding machine is not going to be used

If the welding machine is not going to be used for some time there are a few things that need doing to prevent damage:

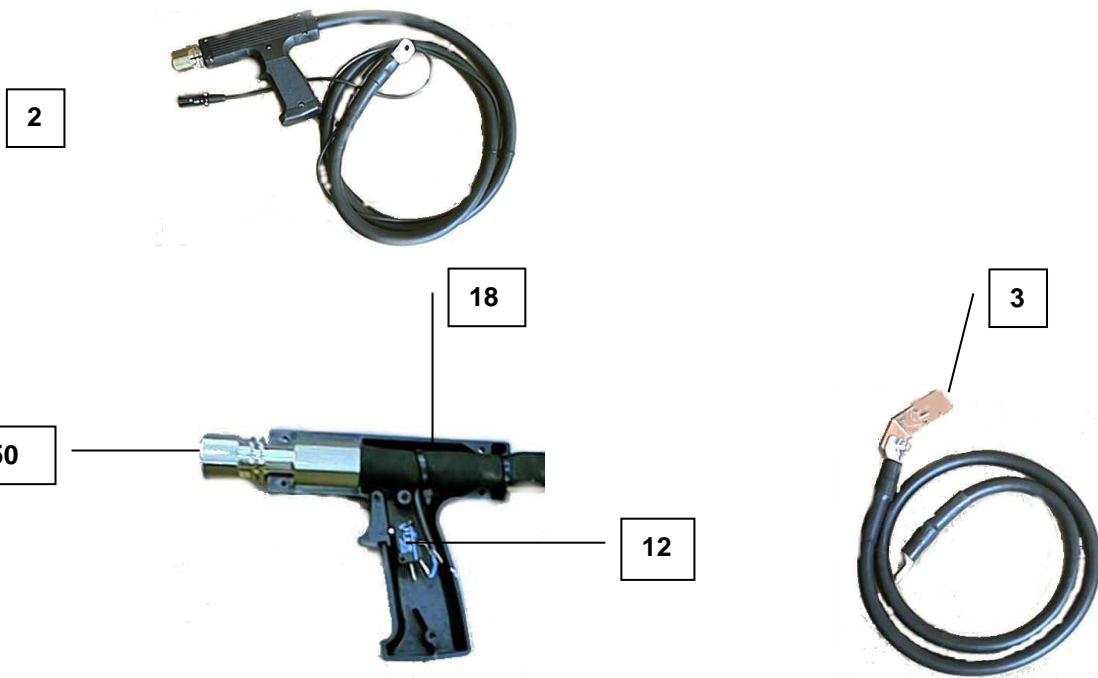
- lock the cylinder in the completely retracted position
- if the machine has to be stored away protect it by wrapping it with a protective film
- the welding machine must be stored in a dry place
- protect unpainted parts from dirt and corrosion

4.3 SPARE PARTS

Here is a list of the basic spare parts for those parts subject to wear and tear and for the machine's safety devices.

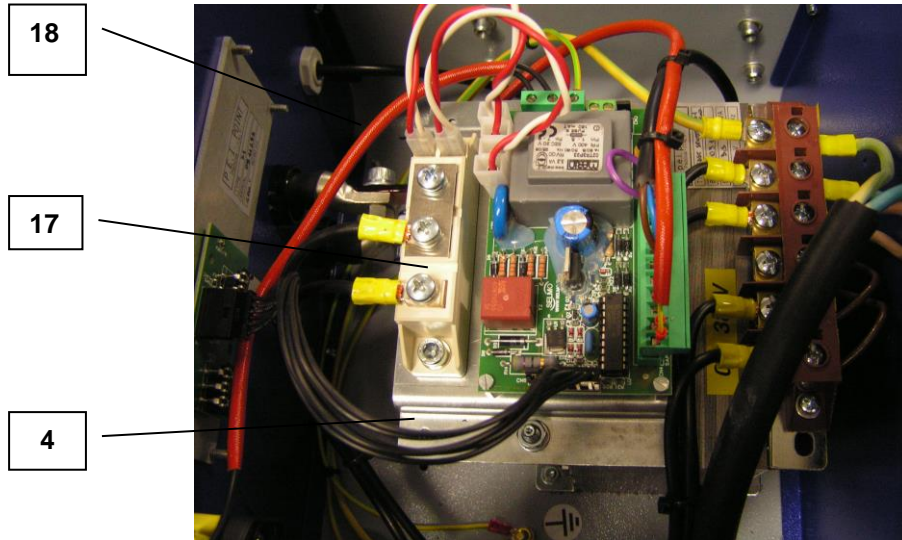


item	code	description
5	Cs150	Welding control S1 without SCR thyristor module
6	ME341	Main switch 16A 2 POLI P0160002R001



Item	Code	description
STUDDER GUN:		
2	GM841	SPOTTER 95mm ² - Studder gun with cables sect. 95mm ²
3	OM024	Ground clamp
12	ME354	Studder gun microswitch
18	ME178	Thermostat 70° L01.070.05.300
50	OM400	Chuck gun 30901

SPARE PARTS



item	code	description
4	TR084	Welding transformer FAST SPOTTER 3,5 E – 400V
17	ME050	Thyristor module SCR SKKT 92/16E
18	ME178	Thermostat 70° L01.070.05.300

4.4 TECHNICAL ASSISTANCE

If the problem you have with the welding machine is not mentioned in the TROUBLESHOOTING table then contact an authorised dealer.



Resistance Welding Solutions

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**ESTRATTO DALLA DICHIARAZIONE DI CONFORMITA'
EXTRACTED FROM DECLARATION OF CONFORMITY
EXTRAHIERT VON DER KONFORMITÄTSEKTLÄRUNG
EXTRAIT DE LA DECLARATION DE CONFORMITE'
EXTRAIDO DE LA DECLARACIÓN DE CONFORMIDAD**

Dichiariamo che la macchina: Hereby declares that the machine: Wir erklären daß die Maschine: Nous déclarons que la machine: Declaramos que la maquina	FAST SPOTTER 3,5
E' conforme alle direttive comunitarie: It conforms with community directives: Im Übereinstimmung mit den Richtlinien und Normen del Europäischen ist: Il est conformes aux directives communautaires: Es conforme con las directivas comunitarias::	- 2006/42/CE; - 2004/108/CE - 2006/95/CE
Persona autorizzata a costituire il fascicolo tecnico: Authorized person to constitute the technical issue: Für die Verfassung der technischen Ausgabe verantwortliche Person: Personne autorisée pour constituer l'issue technique : Persona autorizada para constituir la edición técnica:	Marzaro Silvano c/o P.E.I.-POINT SRL Via Martin Piva, 34 – 35010 Limena (Padova) Italy
Il legale rappresentante: The legal representative: Der Gesetzliche Vertreter: Le représentant légal : Representante Legal:	Silvano Marzaro

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