

GENESIS

**SEMI AUTOMATIC POLYPROPYLENE
STRAPPING MACHINE**

TP-501 TP-502

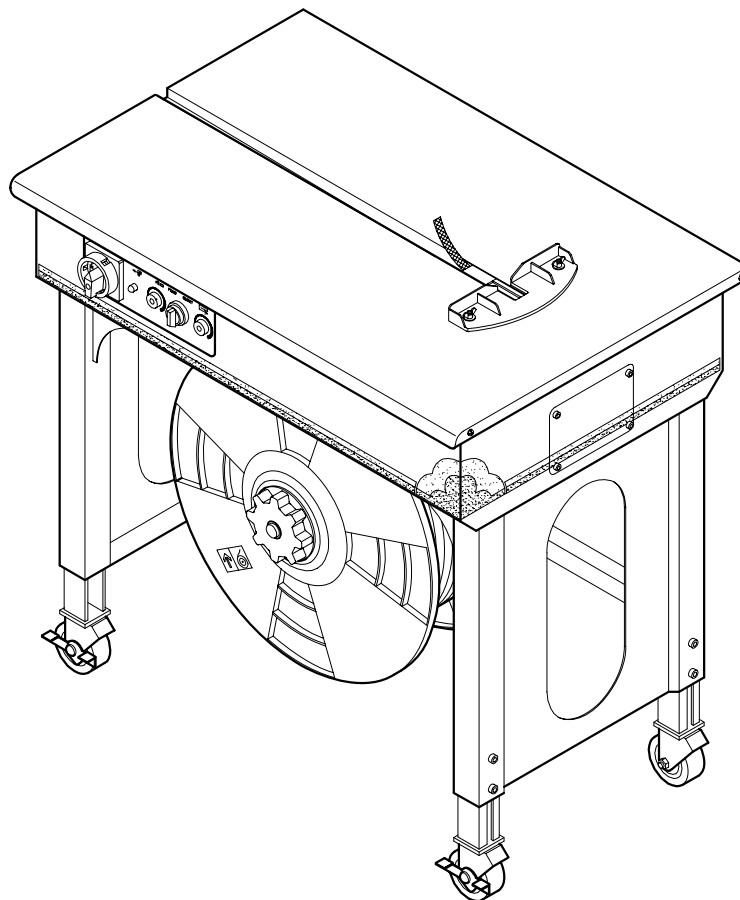
OPERATION MANUAL

&

SPARE PARTS LIST



**IMPORTANT!
KEEP IT WELL**



READ ALL INSTRUCTIONS BEFORE OPERATING THIS PRODUCT

PART I

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1. Safety Instructions

THIS MANUAL GIVES YOU INFORMATION ON SAFETY INSTRUCTIONS, SPECIFICATIONS, OPERATION AND MAINTENANCE OF STRAPPING MACHINES.

BEFORE OPERATING OR SERVICING THE MACHINE, PLEASE REVIEW THE ENTIRE MANUAL AND FOLLOW THE SAFETY INSTRUCTIONS CAREFULLY.

(1) Operation

- a. Do not operate the machine with the table tops or covers removed.
- b. Make sure the proper voltage is being used to operate the machine.
- c. Never put any part of your body near, under or into a moving machine.
- d. Do not operate the machine with any safety devices removed or disabled.
- e. Follow instructions provided in this manual.
- f. Only trained people should operate this machine.
- g. Do not attempt to strap any part of your body.
- h. Do not overload the machine by exceeding the performance limitations specified in this manual.

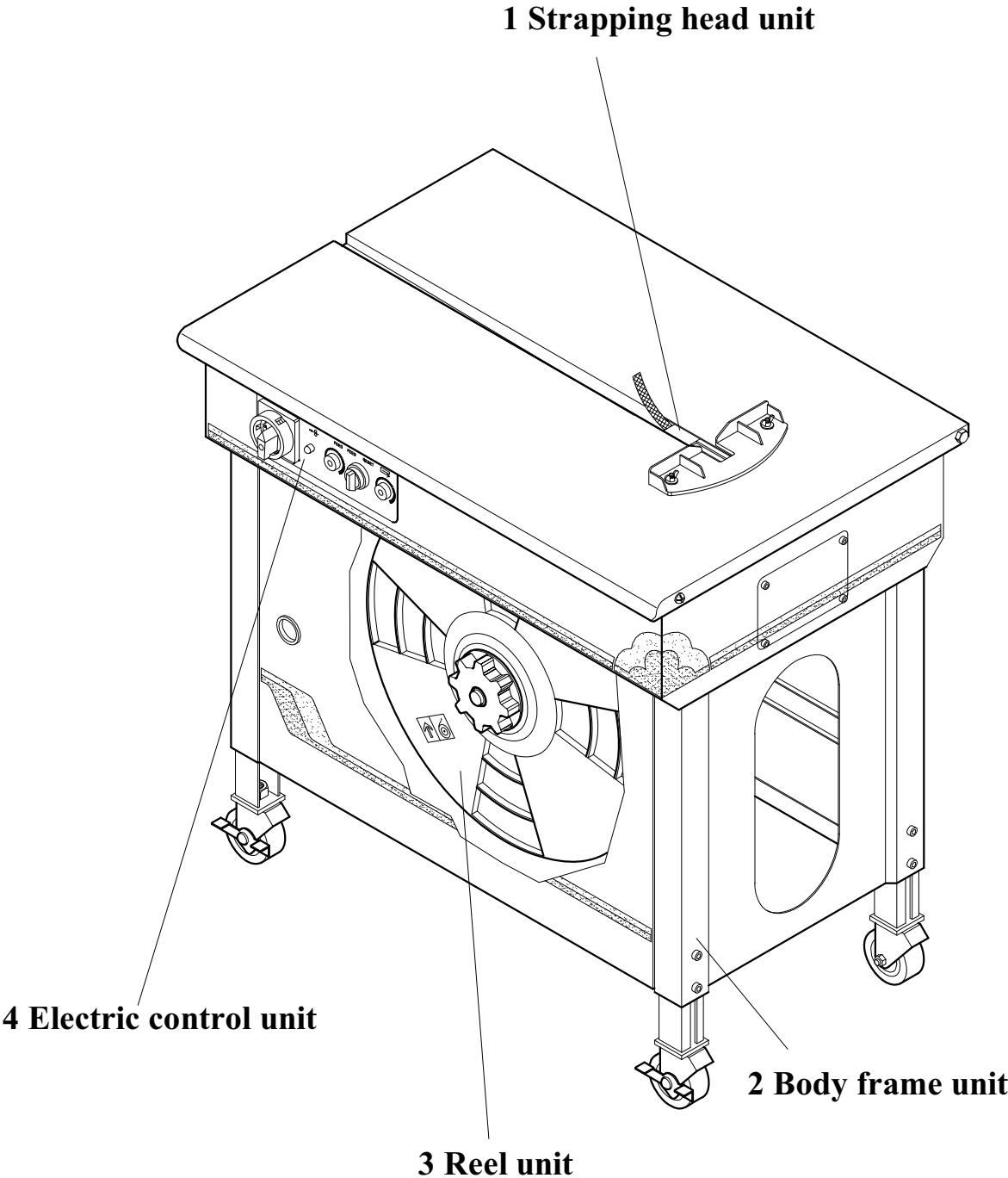
(2) Maintenance

- a. Shut off and lock out all electrical power before performing any maintenance procedure.
- b. Use the correct tools and parts to repair the machine.
- c. Only trained people should service the machine.
- d. Follow instructions provided in this manual.

(3) Additional Considerations

- a. Do not touch the heater and the surrounding area. the heater operates at approximately 340°C. Allow sufficient time for the heater to cool down.
- b. The machine should be placed on a level floor and the surrounding area should be kept free of debris and discarded strap.

2. Constuction and Units



3. General Safety Remarks

(1) Basic Operation

The manual and the safety remarks are to be read before use. The operator manual should be kept with the machine at all times. Intervals for maintenance and inspections are to be adhered to.

This machine was built with state of the art technology and rigid adherence to safety standards.

Unless used properly, it can cause injury to operators or persons in close proximity to the machine. In addition, improper use can cause damage to the machine or property around the machine.

(2) Basic Safety Precautions

The user is to be instructed in all other generally applicable legal and other mandatory regulations relevant to accident prevention and environmental protection in addition to the operating instructions.

For safety reasons, long hair must be tied back or otherwise secured, garments must be close fitting and no jewelry may be worn.

Use protective equipment whenever required by circumstances or by law.

Carefully observe all safety instructions and warnings attached to the machine and make sure that they are always complete and perfectly legible.

Always make certain that persons being trained and instructed in working on or with the machine are permanently supervised by an experienced person.

Work on the electrical system and equipment of the machine is only to be carried out by a skilled electrician or by persons under the supervision and guidance of a skilled electrician and in accordance with the rules and regulations of electrical engineering.

(3) Safety Instructions Governing Specific Operational Phases

Avoid any operation mode that might be unsafe.

All necessary precautions to ensure that the machine is only used being in a safe and reliable state are to be taken. The machine is only to be operated if all protective and safety devices, including removable safety devices, emergency shut-off equipment, noise-protection elements and exhaust systems are in right place and fully functional

The machine is to be checked for damage and defects at least once per work shift. Any changes including the working behavior of the machine are to be reported to competent persons immediately. If necessary, the machine is to be stopped and locked immediately.

In case of any malfunction the machine must be stopped and locked until the defect has been eliminated.

Generally make sure that nobody is at risk before starting up the machine. All personnel that will be operating this machine should be thoroughly trained in all phases of operation and safety.

Always tighten unscrewed connections after maintenance and repair.

After completing maintenance and repair all safety devices removed for setting up or repairing the machine must be reinstalled and checked for functionality prior to putting the machine back into service.

To minimize the environmental impact all consumables and replaced parts must be disposed of safely.

Before starting the machine check that the accessories have been stowed away safely.

Do not attempt any operation that may be a risk to the stability of the machine.

Do not step on conveying equipment.

(4) Warning of Electrical Dangers

Only use original fuses with specified current rating. Switch off the machine immediately in case of trouble in the electrical system.

Only a skilled electrician or specially instructed personnel under the supervision of a skilled electrician may work on the electrical system and always in accordance with the applicable electrical engineering rules.

The power supply should be disconnected from the machine before performing any maintenance. After disconnecting the power supply, it is essential to verify that the machine is not getting power before proceeding. In addition, always check for proper grounding.

The electrical equipment of the machine is to be checked and inspected at regular intervals. Loose connections or scorched wires must be replaced at once.

If maintenance must be performed on the machine while still connected to a power source, or in a "live" mode, always have a stand by person ready to disconnect the power immediately, if necessary. The work area should always be marked by safety tape in accordance with the applicable regulations. Please always use only properly insulated tools.

Ground the feeder cable and any components with a ground rod before starting to work on high-voltage assemblies, always disconnect the power supply before grounding.

Before restarting the machine carefully refit and fasten all parts removed for transport.

Always disconnect the power supply before moving the machine.

(5) Grounding Instructions Shall Include the Following:

-GROUNDING INSTRUCTIONS

-This product should be grounded. In the event of an electrical short circuit, grounding reduces the risk of electric shock by providing an escape wire for the electric current. This product is equipped with a cord having a grounding wire with an appropriate grounding plug. The plug must be plugged into an outlet that is properly installed and grounded in accordance with all local codes and ordinances.

-DANGER- Improper installation of the grounding plug bears the risk of electrocution shock. If repair or replacement of the cord or plug is necessary, do not connect the grounding wire to any of the flat blade terminals. The wire with a green insulation sheath (with or without yellow stripes) is the grounding wire.

-Check with a qualified electrician or serviceman if the grounding instructions are not completely understood, or if in doubt as to whether the product is properly grounded. Do not modify the plug provided; if it will not fit the outlet, have the proper outlet installed by a qualified electrician.

-This product is for use on a nominal 110(220/230/240)-volt circuit and has a grounding plug. Make sure that the product is connected to an outlet having the same configuration as the plug.

(6) Extension Cords:

Only use a 3-wire extension cord that has a 3-blade grounding plug, and a 3-slot receptacle suitable for the plug of the product. Make sure your extension cord is in good condition. When using an extension cord, be sure to use the right cable size to carry the load of your product. A cord of insufficient capacity will cause a drop in line voltage resulting in loss of power and overheating. Refer to the following table:

<u>Length</u> (ft)	<u>25</u>	<u>50</u>	<u>100</u>	<u>150</u>	<u>200</u>	<u>250</u>	<u>300</u>	<u>400</u>	<u>500</u>
<u>Gauge</u>	16	14	10	8	6	6	6	4	4

4. Areas of Application

This plastic strapping machine can be used for a wide range of applications where the minimum package width is at least 80mm, and the minimum height is 30mm. When equipped with a "small package option ", the machine is acceptable for packages as small as 50mm wide and 30mm high.

This machine is particularly suitable for heavy packaged goods as well as printed products, boxes, etc.

5. Machine Description

Semi-automatic plastic strapping machine for use with polypropylene strapping

Heavy duty construction

Simple, safe and user-friendly operation

Moveable, with large table area high capacity strap reel and stainless steel table

Two locking castors, to ensure safe operation

Extremely low-noise sealing unit

Strap tension adjustable from low to extremely high with infinitely variable strap feed.

6. Description of the Safety Devices

The machine is ready to operate when connected to the main power supply and the main switch QS1 is switched to ON position. It takes approximately 1.5 minute for the heating element to reach its operating temperature.

The machine is switched on and off with the main switch QS1 located on the machine front operating panel.

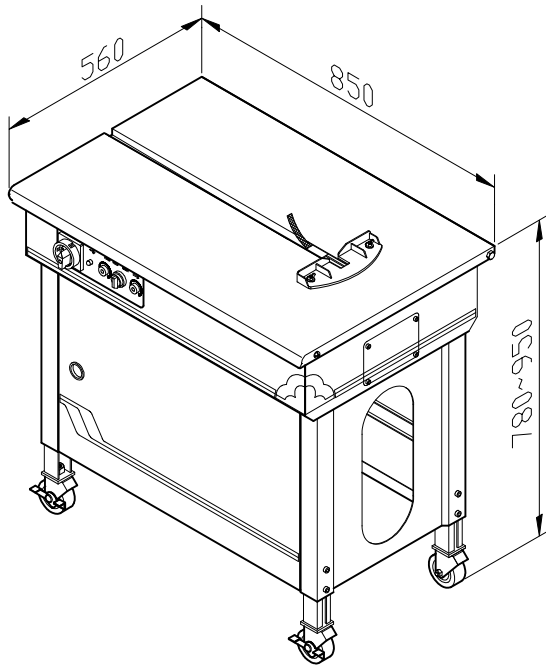
7. Basic Specifications

System configuration :	1L+N+PE	1L+N+PE
Nominal power :	0.5KW	0.5KW
Rated current :	2A	3A
Rated voltage :	220V/230V/240V	110V
Rated frequency :	50Hz	60Hz
Type of current :	AC	AC

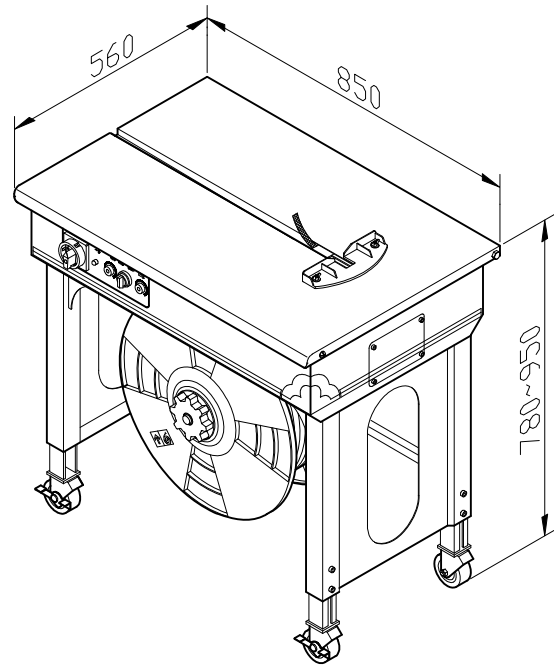
8. Minimum Requirements

- (1) The machine must only be operated in dry rooms.
- (2) The electrical supply line for the machine must have a minimum cross-section of at least $3 \times 1.0\text{mm}^2$.

9. Technical Data



TP-501(Enclosed Frame)



TP-502(Open Frame)

Sealing method:
Strap width:
Strap reel diameter:

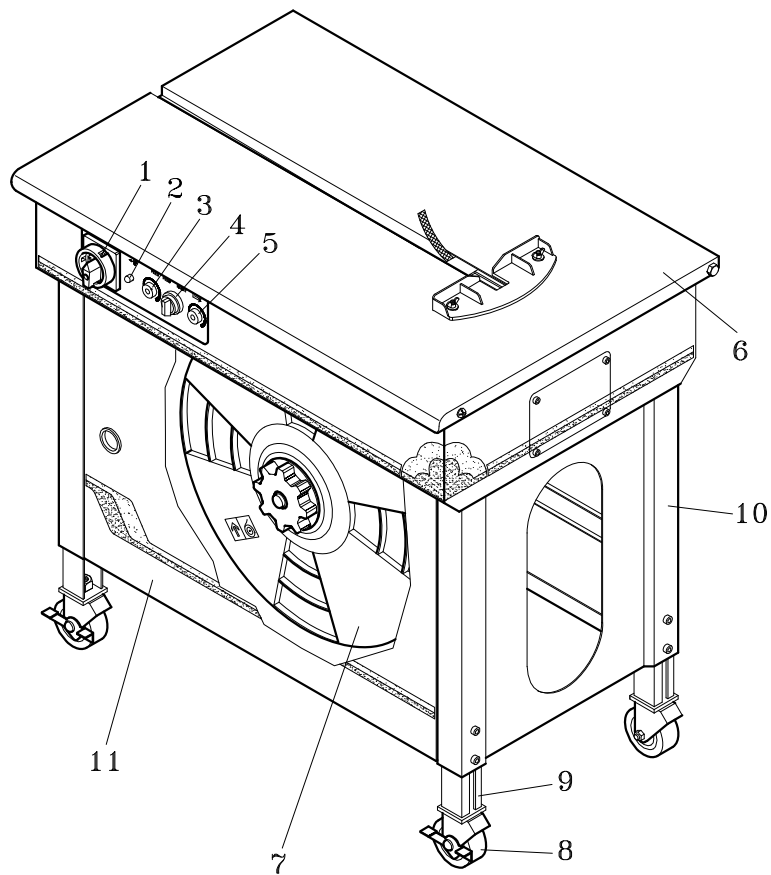
Width :
Depth:
Height:

Electrical connection:

Weight:
Noise emission:

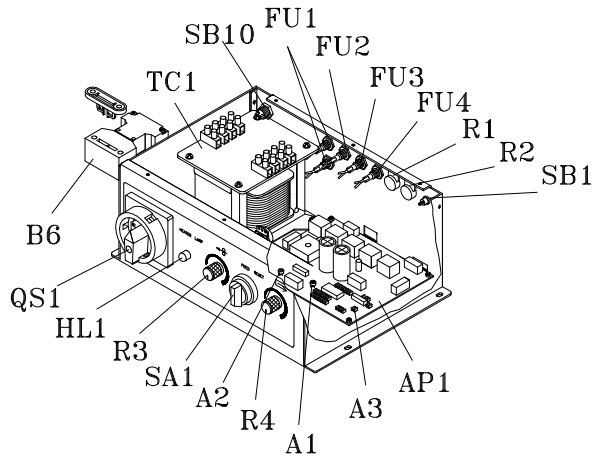
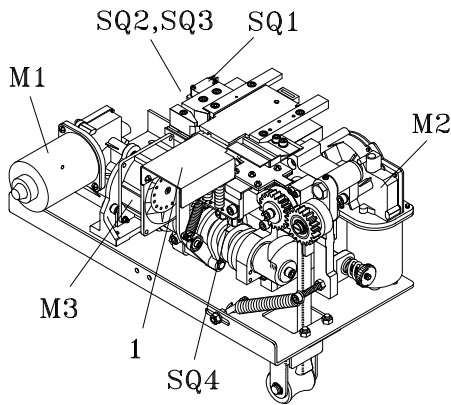
Heat
5 mm up to 13 mm
200 mm / 280mm
(If strap core is 280mm, you can take off the center drum to have core size 200mm.)
850 mm
560 mm
minimum 780 mm
maximum 950 mm
AC 110V/220V/230V/240V
(50/60Hz), Single phase
70kg (TP-502), 76kg (TP-501)
65dB (A)

10. Machine and Operating Elements



1. Main power switch
2. Ready lamp, lamp will light up on when proper sealing temperature is reached
3. Feed length knob, strap feed length
4. Selector switch, strap feed and reset
5. Tension adjustment knob, strap tension adjustment
6. Table top
7. Strap reel
8. Castor, two lockable 、 two free
9. Adjustable legs
10. Frame
11. Door (For TP-501)

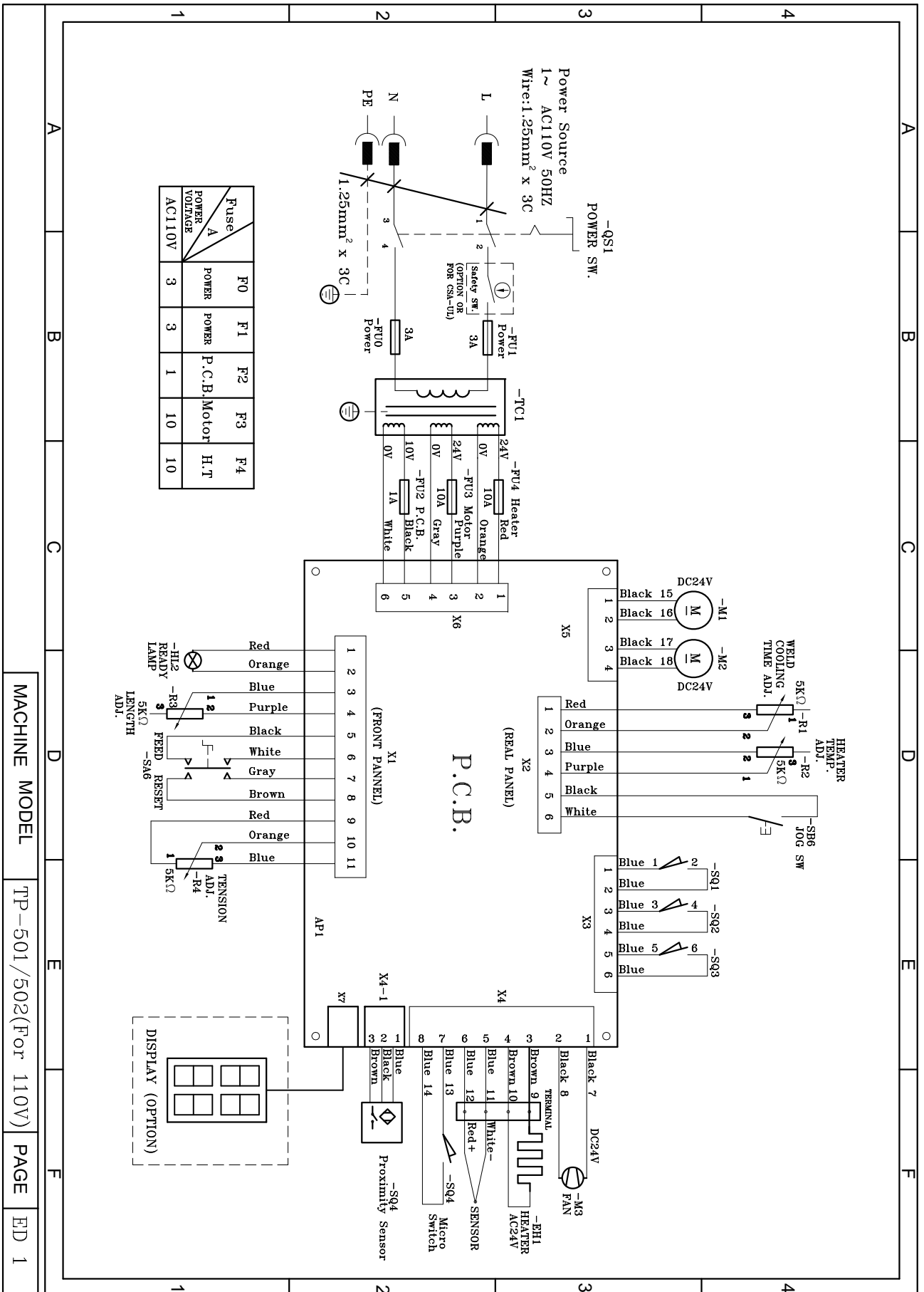
11. Installation Diagram



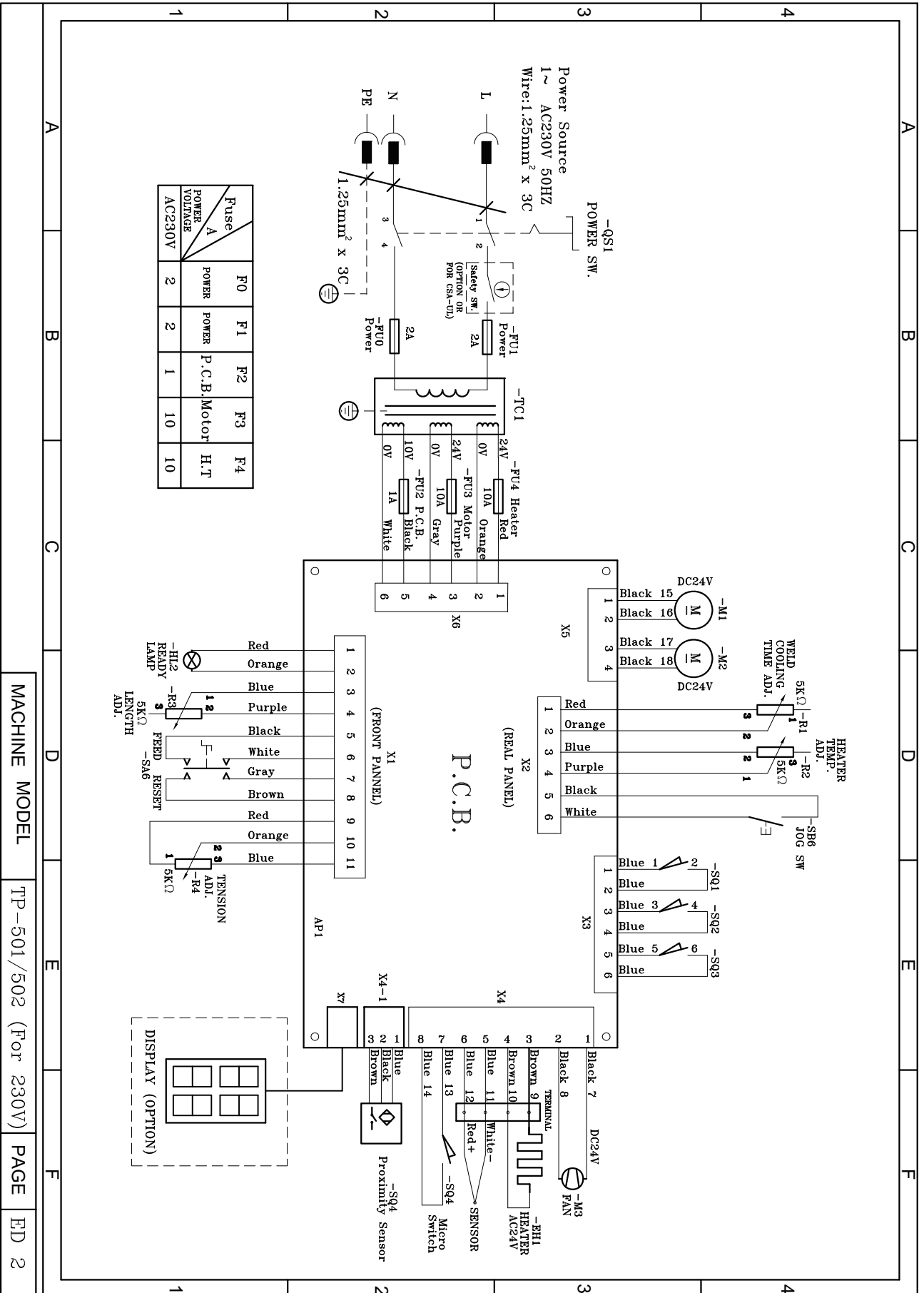
M1	Motor 1, (unit drive)	B6	Interlock safety switch (Option)
M3	Fan	QS1	Main power switch
SQ2	Switch, home position	HL1	Ready lamp
SQ3	Switch, sealing position	TC1	Transformer
1	Heater ass'y	R3	Feed length knob
SQ1	Switch, start	FU1	Fuse 110V/3A, 220V/230V/240V/2A (For power)
SQ4	Switch, low tension (under 20 kgs)	SA1	Selector switch,(strap feed and reverser)
M2	Motor 2, (strap feed and reverse)	A2	Feed length knob
		R4	Tension adjustment knob
		FU2	Fuse 1A (For P.C.B.)
		FU3	Fuse 10A (For Motor)
		A1	High tension knob
		A3	Heater temperature knob
		FU4	Fuse 10A (For Heater)
		R1	Weld cooling timer
		R2	Heater temperature adjustment
		AP1	P.C.B.
		SB1	Jog switch

12. Wiring Diagram

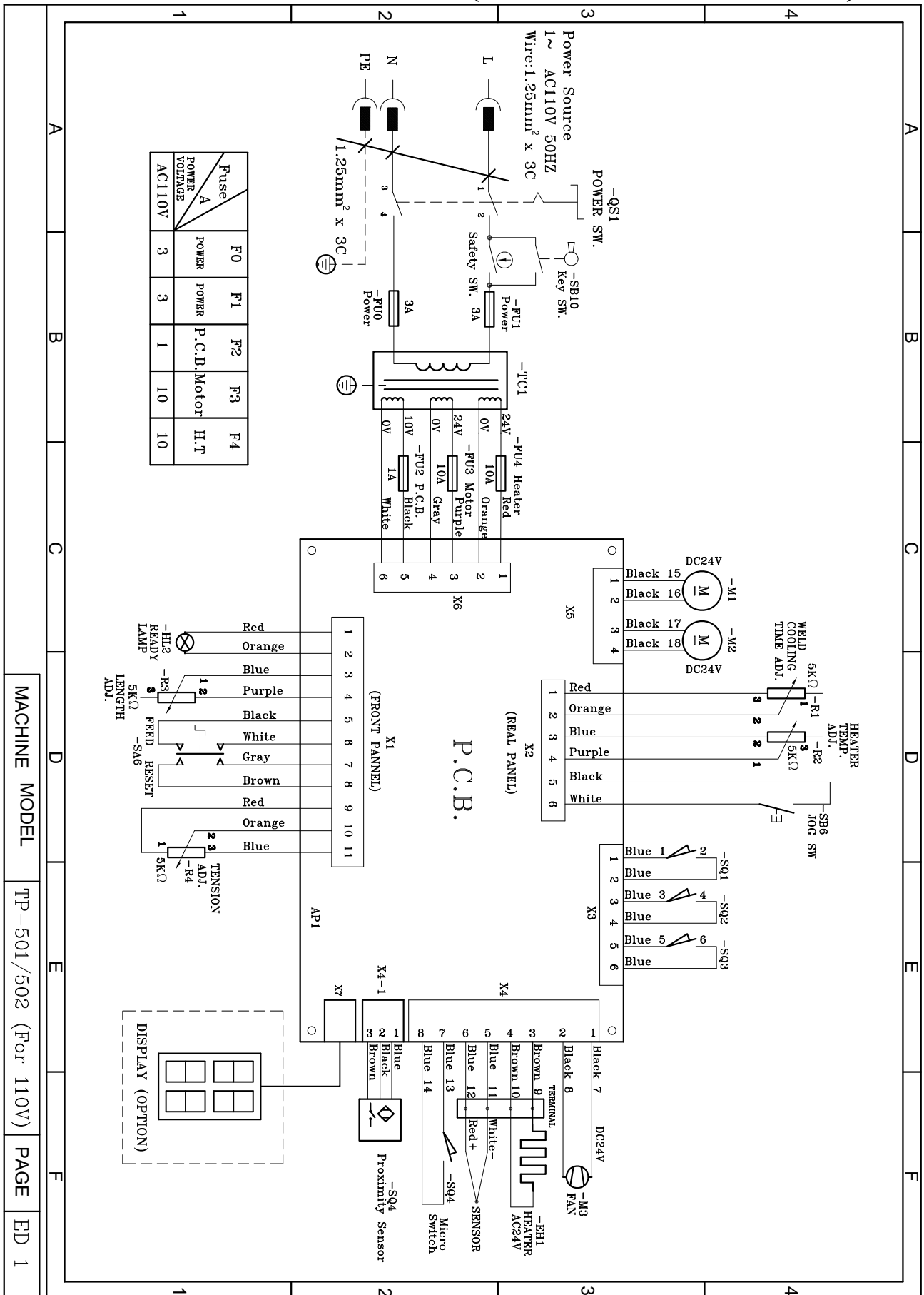
a. For TP-501/TP-502



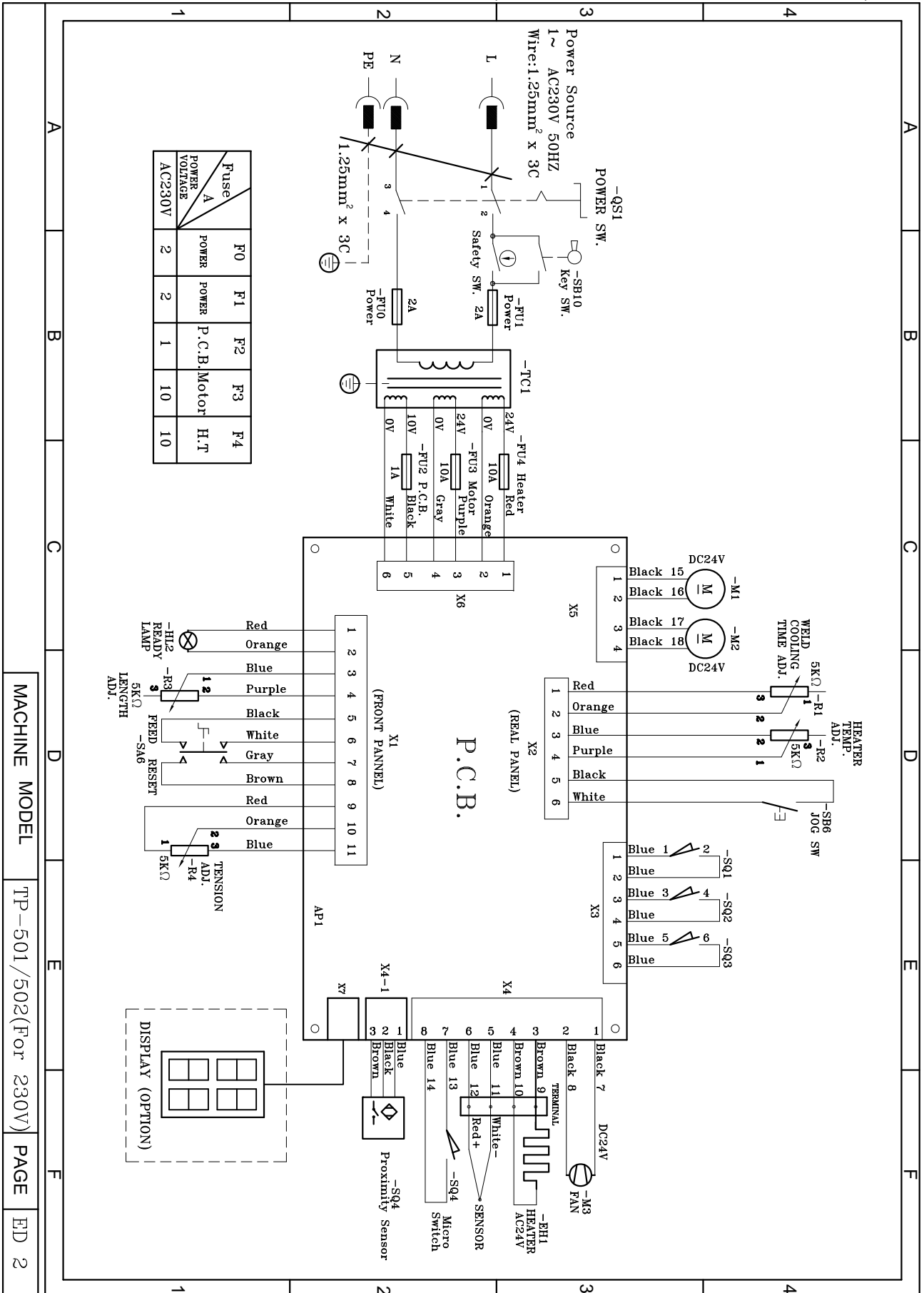
a.For TP-501/TP-502



b. For TP-501CE/TP-502CE (For TUV Certified Version)



b. For TP-501CE/TP-502CE (For TUV Certified Version)



MACHINE MODEL

TP-501/502(For 230V)

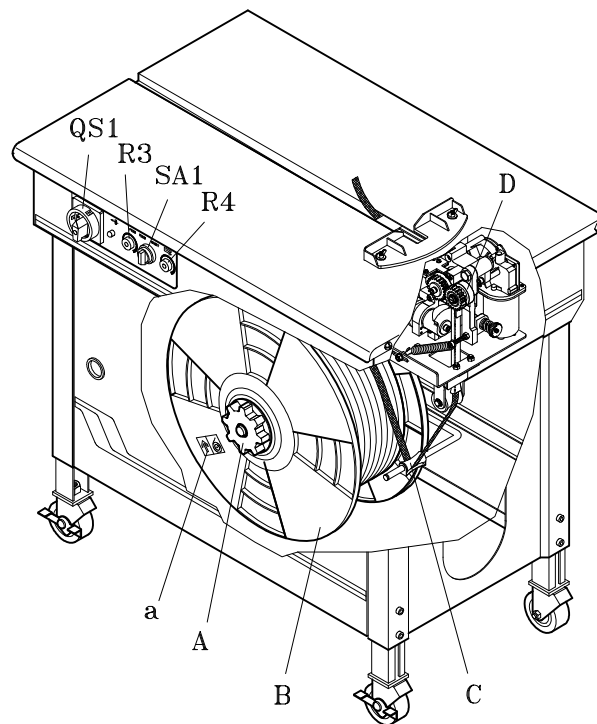
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13. Start-up and Functioning Sequence

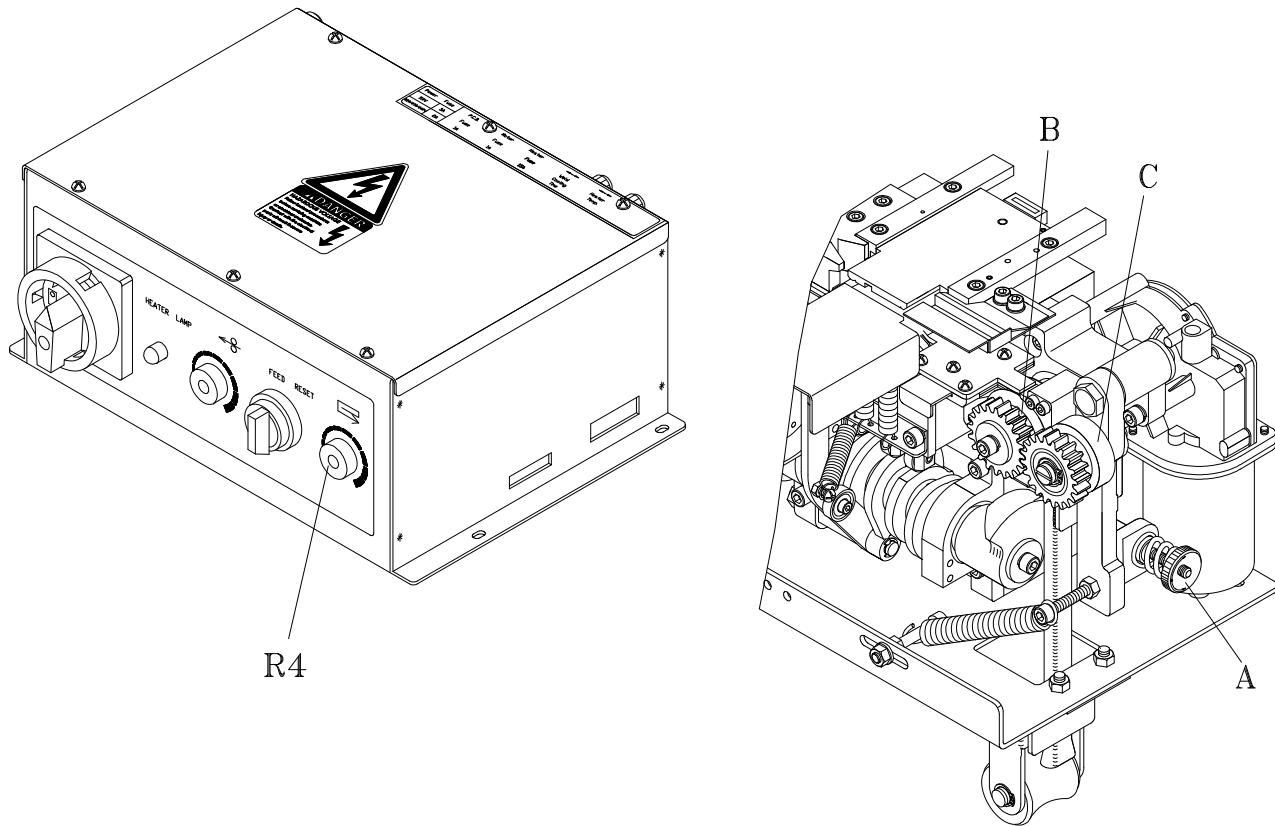
- (1) Put strap on the strap reel and thread the strap.
- (2) Turn main switch QS1 to ON. The heating element reaches the working temperature at approximately 1.5 minute.
- (3) Use potentiometer R3 to adjust the strap length.
- (4) Place the strap around the package to be strapped and insert the strap into the strapping head until it stops.
- (5) The strapping and welding sequence should complete.
- (6) At end of strapping sequence the strap end is fed automatically.
- (7) R4 adjusts the strap tension.

14. Threading Diagram



- (1) Turn reel nut handle (A) left and remove it.
- (2) Remove the outer flange (B) and install the strap reel.
- (3) Make sure that the sense of rotation is counterclockwise (a) when unrolling.
- (4) Put the outer flange back on and tighten reel nut handle (A) to the right.
- (5) Remove all adhesive strips or other adhesive material.
- (6) Unroll about 1.5 m of strap and make sure that it is not twisted.
- (7) Thread the strap over (C) to roller (D) in direction of the arrow.
- (8) Turn left button SA1 (strap feed) to the left until obtaining the length you need.

15. Strap Tension Adjustment



Adjustment :

The specified measures are for factory presetting which results in medium strap tension.

If R4 (tension adjustment knob) is on MAX position make sure that A is turned clockwise until the strap is no longer sliding between rollers B and C.

Reverse action to achieve lower strap tension.

16. Maintenance and Lubrication

Maintenance:

To ensure that the semi-automatic strapping machine is always ready for proper and reliable operation keep to regular and attentive maintenance.

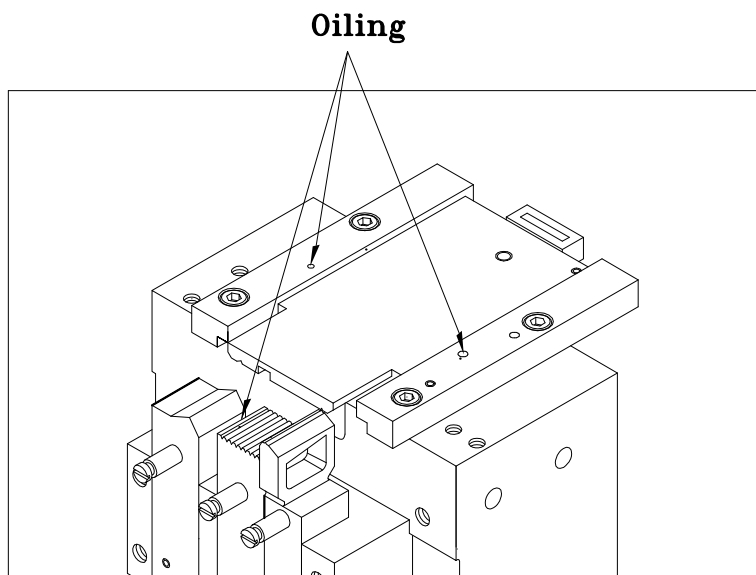
Keep the machine clean and take particular care of the strap guides.

Any small particles of loose strap should always be removed from all parts of the machine. In addition to the strap guides, the strap feed devices of the unit, the tops of the dies and the feed devices on the strap accumulator have to be blown free of any dust at least once per week.

Lubrication:



































The dies on the unit have to be lightly lubricated weekly.

17. Maintenance of the Unit



Lubricate the marked points weekly. Use only resin-free branded oil for lubrication. All other assemblies are maintenance free. The strap guides and the sealing unit have to be kept clean! Do not oil feedrollers.

Note: Any other servicing shall be performed by an authorized service representative.

shape	classification	shape	classification
	HBS		ER
	TMS		RR
	PMS		SR
	FMS		SP
	HB		BR
	THS		MB
	HSS		KYA
	CAP		KYB
	HN		KYC
	WN		HBW
	FLG		PWA ϕ 8x ϕ 12~ ϕ 16x0.4~0.8t ϕ 6x ϕ 13~ ϕ 14x0.8~1.5t
	NTE		PWB ϕ 8x ϕ 14~ ϕ 16x1.3~1.5t ϕ 6x ϕ 15~ ϕ 16x1.0~1.5t
	PN		PWC ϕ 8x ϕ 20~ ϕ 23x2.0t ϕ 6x ϕ 16~ ϕ 19x2.0t
	PW		PWD
	SW		DS
	TW		TTP
	BWW		FTP