

INDUPack 502

STRAPPING MACHINE



OPERATION MANUAL
SPARE PARTS LIST

INDUPRO

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.

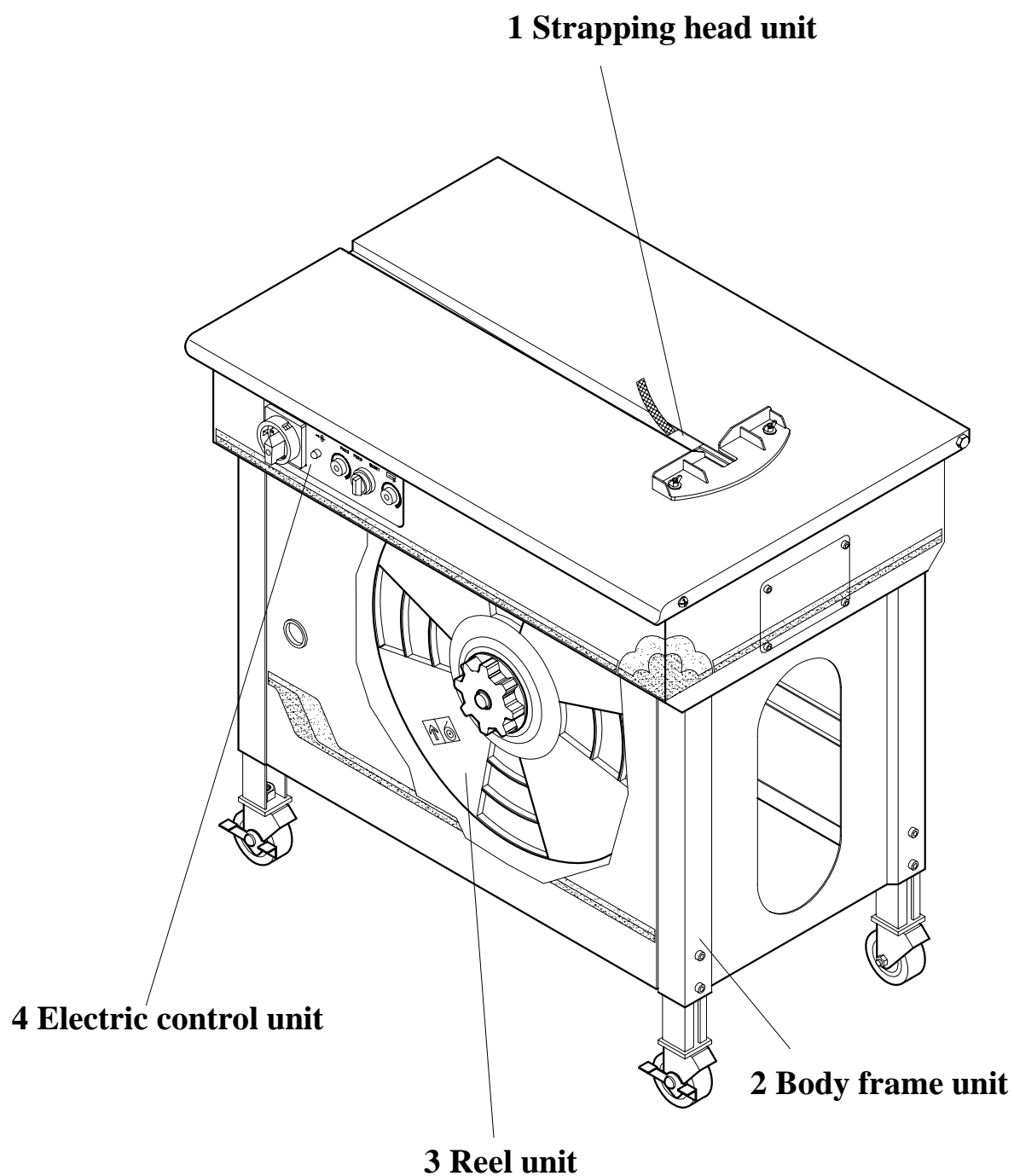
(2) Maintenance

- 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.

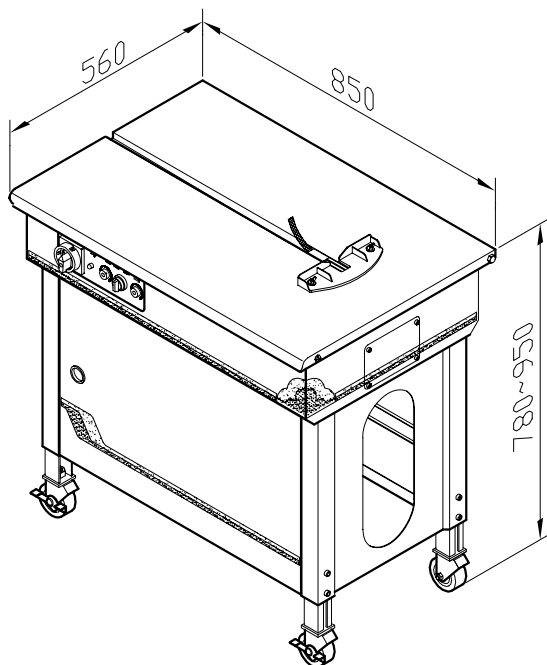
7. Basic Specifications

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

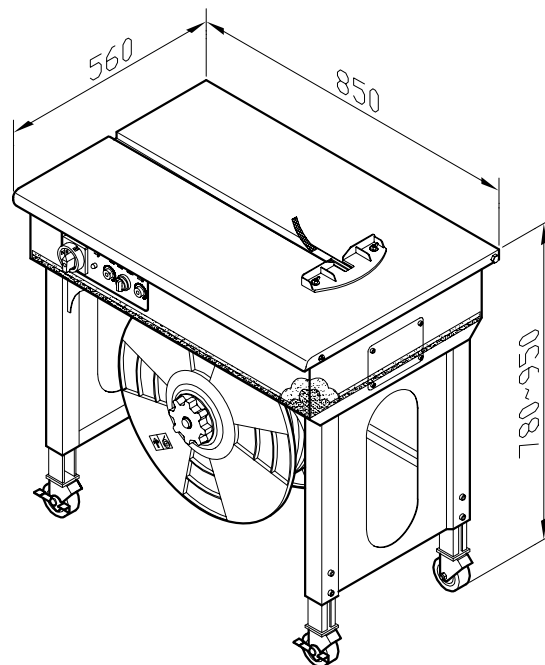
8. Minimum Requirements

- (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

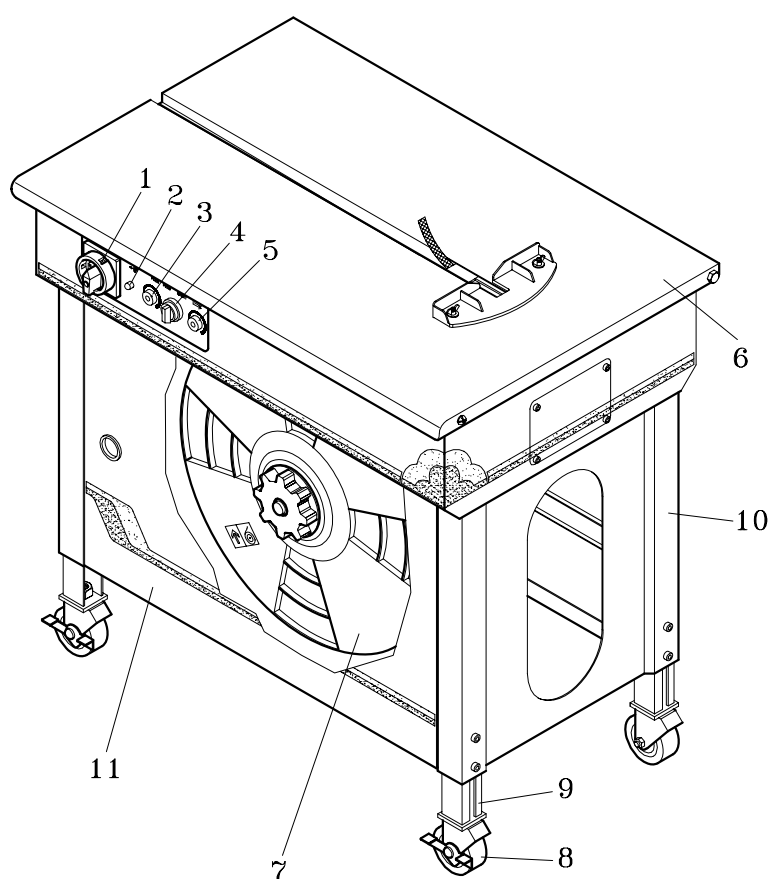
AC 110V/220V/230V/240V

(50/60Hz), Single phase

70kg (TP-502), 76kg (TP-501)

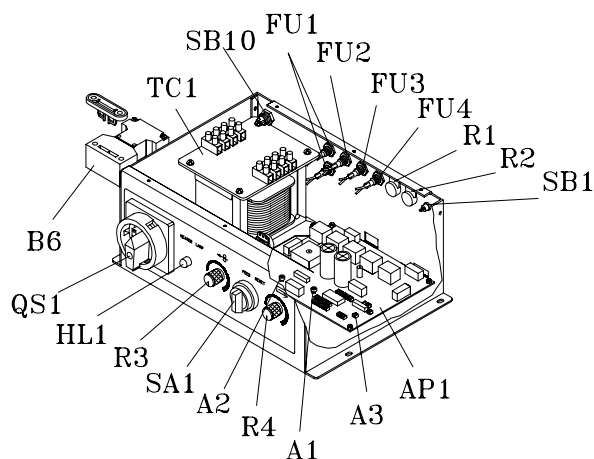
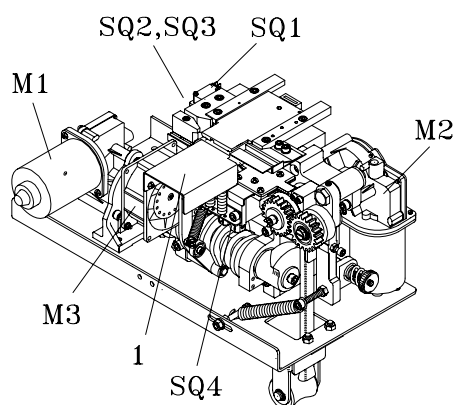
65dB (A)

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)

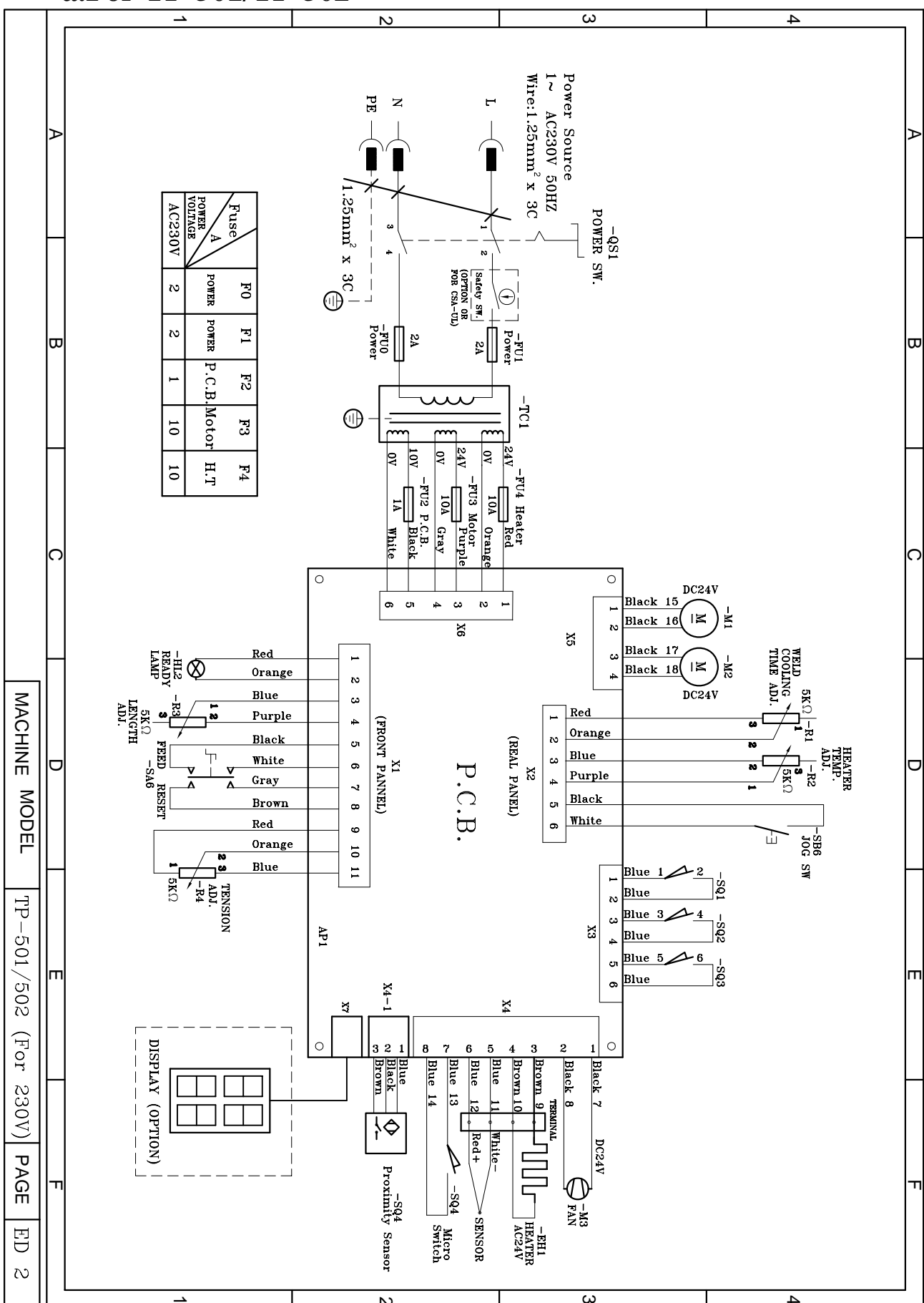
11. Installation Diagram



M1	Motor 1, unit drive
SQ2	Switch, home position
SQ3	Switch, sealing position
SQ1	Switch, start
M2	Motor 2, strap feed and reverse
M3	Fan
1	Heater ass'y
SQ4	Switch, low tension (under 20 kgs)

TC1	Transformer
SB10	Key switch (Option)
FU1	Fuse 110V/3A, 220V/230V/240V/2A (For power)
FU2	Fuse 1A (For P.C.B.)
FU3	Fuse 10A (For Motor)
FU4	Fuse 10A (For Heater)
R1	Weld cooling timer
R2	Heater temperature adjustment
SB1	Jog switch
B6	Interlock safety switch (Option)
QS1	Main power switch
HL1	Ready lamp
R3	Feed length knob
SA1	Selector switch, strap feed and reset
A2	Feed length knob
R4	Tension adjustment knob
A1	High tension knob
A3	Heater temperature knob
AP1	P.C.B.

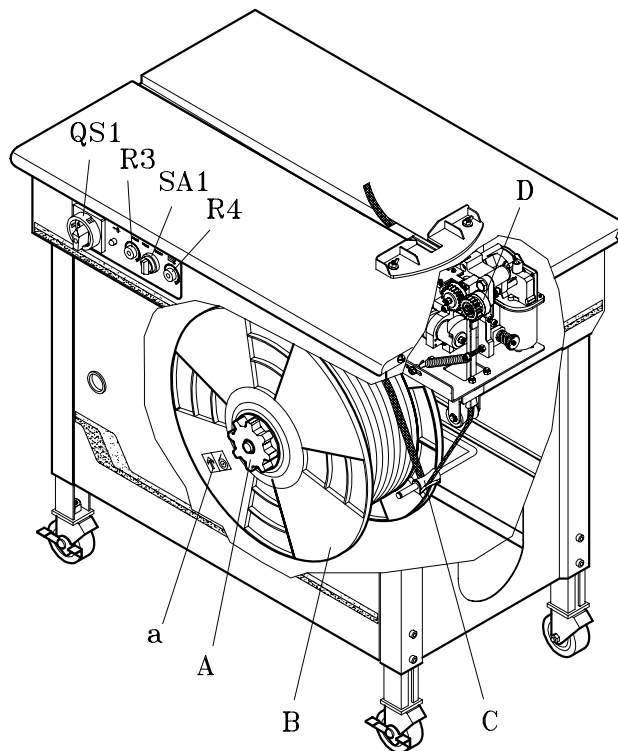
a.For TP-501/TP-502



13. Start-up and Functioning Sequence

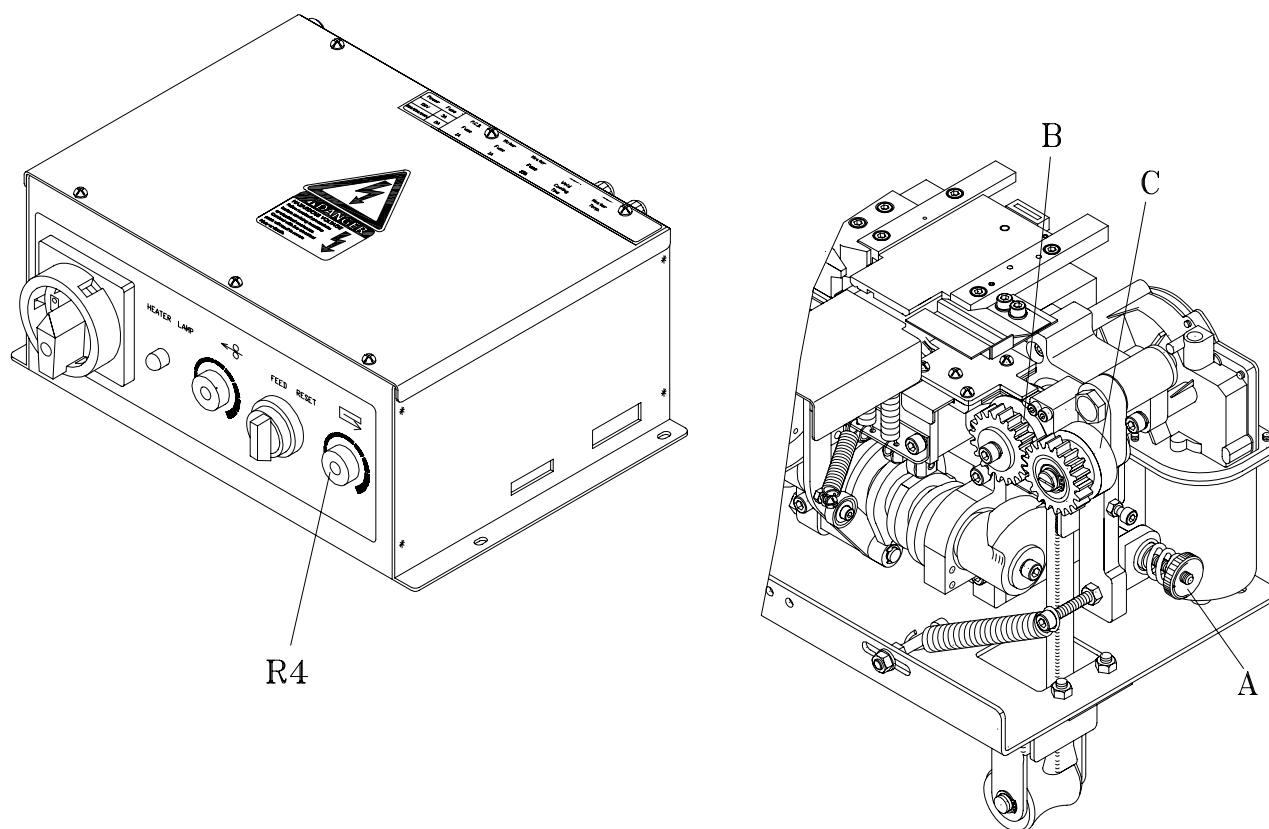
- (1) Put strap on the strap reel and thread the strap.
- (2) Turn main switch QS1 to ON. The heating element reaches the working temperature **at** approximately 1.5 minute.
- (3) Use potentiometer R3 to adjust the strap length.
- (4) Place the strap around the package to be strapped and insert the 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.

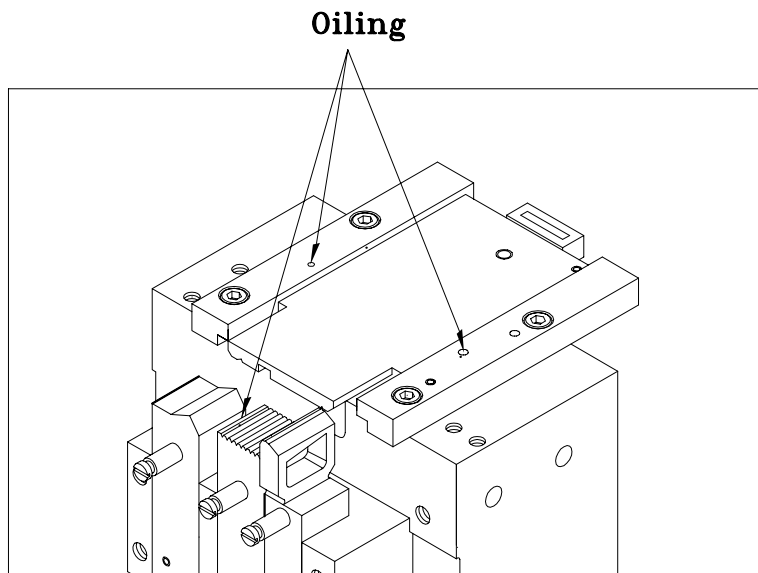
Keep the machine clean and take particular care of the strap guides.

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.

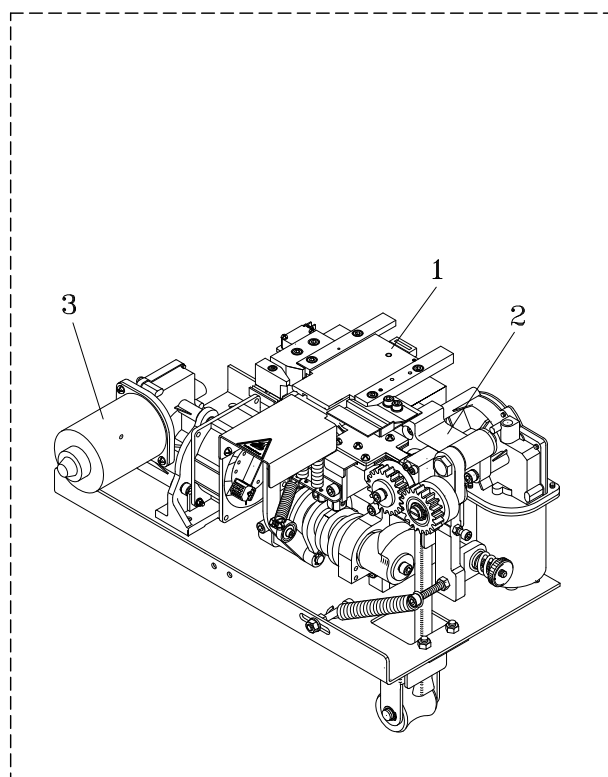
Note: Any other servicing shall be performed by an authorized service representative.

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 \$ 8x \$ 12~ \$ 16x0.4~0.8t \$ 6x \$ 13~ \$ 14x0.8~1.5t
	NTE		PWB \$ 8x \$ 14~ \$ 16x1.3~1.5t \$ 6x \$ 15~ \$ 16x1.0~1.5t
	PN		PWC \$ 8x \$ 20~ \$ 23x2.0t \$ 6x \$ 16~ \$ 19x2.0t
	PW		PWD
	SW		DS
	TW		TTP
	BWW		FTP

PART II

CONTENTS

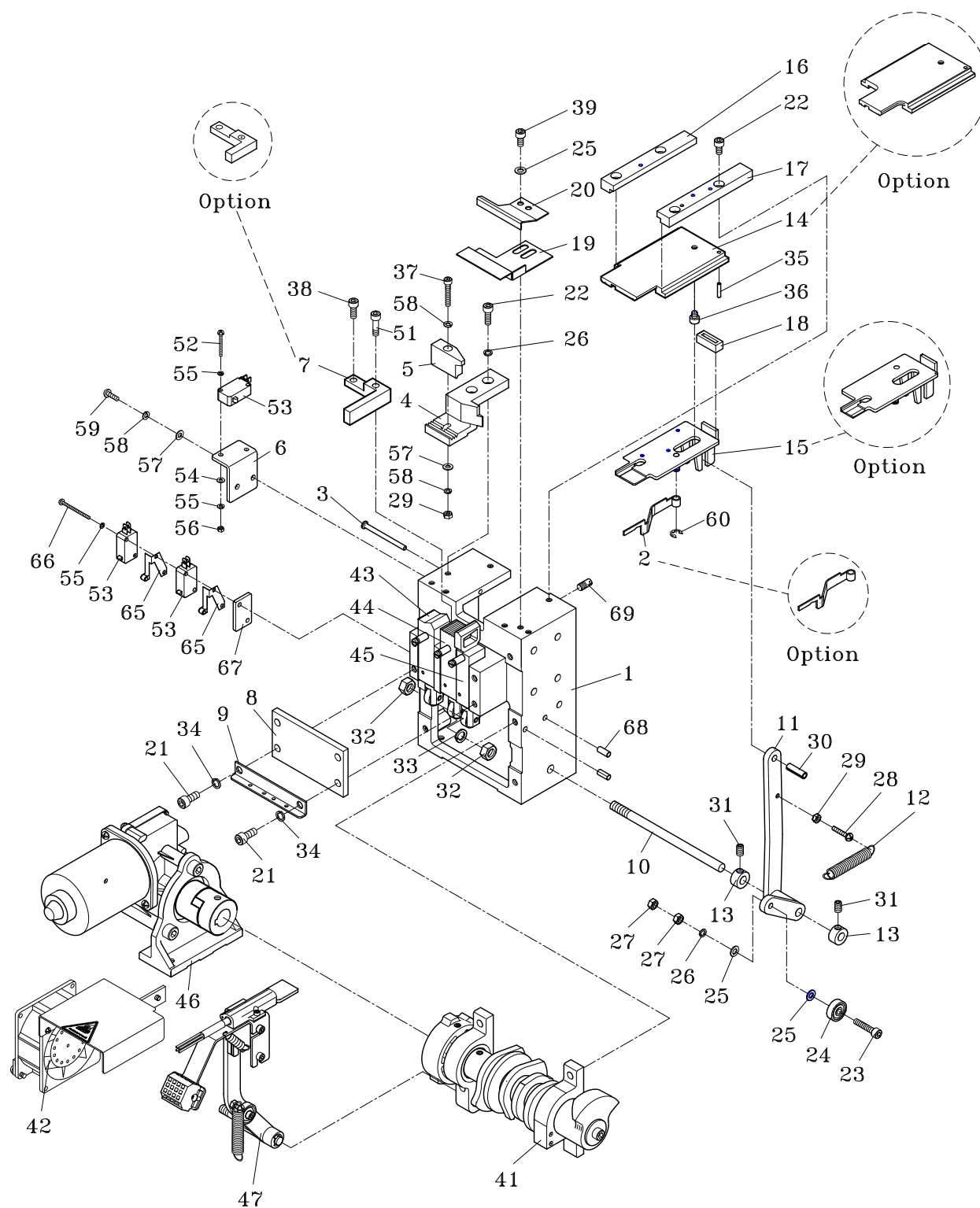
1. Strapping Head Unit	1~17
2. Body Frame Unit	18~22
3. Reel Unit	23~25
4. Electric Control Unit	26~31

1**STRAPPING HEAD UNIT****T5-1-90000****T5-1-90000**

REF. NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1	T5-1-10000	Strapping Head Group	1	SEE PAGE 2
2	T5-1-20000	Feed Group	1	SEE PAGE 10
3	T5-1-30000	Transmission Group	1	SEE PAGE 17

1-1

STRAPPING HEAD GROUP T5-1-10000



1-1**STRAPPING HEAD GROUP****T5-1-10000**

REF. NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1	T5-1-10110	Main Body Block	1	
2	T5-1-10120	Switch Lever	1	
	T5-1-10730	Switch Lever (For Small Package) (Option)	1	
3	T5-1-10130	Switch Pin	1	
4	T5-1-10140	Strap Guide (A)	1	
5	T5-1-10150	Strap Guide (B)	1	
6	T5-1-10160	Switch Bracket	1	
7	TA-239	Cutter Holder	1	
	T5-1-10740	Cutter Holder (For Small Package) (Option)	1	
8	TA-067	Bar Guide Lid	1	
9	TA-072	Spring Hook	1	
10	TA-094	Shaft	1	
11	TA-090	Arm	1	
12	TB-114	Return Spring	1	
13	TA-229	Collar	2	
14	TA-080	Slide	1	
	T5-1-10710	Slide (For Small Package)(Option)	1	
15	T5-1-10250	Separator	1	
	T5-1-10720	Separator (For Small Package)(Option)	1	
16	TA-095	Guide (L)	1	
			1	
17	TA-226	Guide (R)	1	
18	TA-236	Rubber Buffer	1	

1-1**STRAPPING HEAD GROUP****T5-1-10000**

REF. NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
19	TB-208	Front Plate		
20	TB-197	Guide Front	1	
21	HBS0616	HBS, M6×16	4	
22	HBS0512	HBS, M5×12	6	
23	HBS0525	HBS, M5×25	1	
24	BR635ZZ	Bearing, 635ZZ	1	
25	PW05	PW, M5	2	
26	SW05	SW, M5	5	
27	HN05	HN, M5	2	
28	PMS0420	PMS, M4×20	1	
29	HN04	HN, M4	2	
30	SP0620	Spring Pin, 6×20	1	
31	HSS0606	HSS, M6×6	2	
32	HN08	HN, M8	2	
33	SW08	SW, M8	1	
34	SW06	SW, M6	4	
35	SP0314	Spring Pin, 3×14	1	
36	HBS0505.2	HBS, M5×5.2	1	
37	HBS0425	HBS, M4×25	1	
38	HBS0516	HBS, M5×16	1	
39	HBS0510	HBS, M5×10	2	
41	T5-1-11000	Cam Group	1	SEE PAGE 5
42	T5-1-12001	Fan Ass'y	1	SEE PAGE 6
43	T5-1-13000	Rear Bar Ass'y	1	SEE PAGE 7
	T5-1-13200	Rear Bar Ass'y (For Small Package) (Option)	1	SEE PAGE 7

1-1

STRAPPING HEAD GROUP

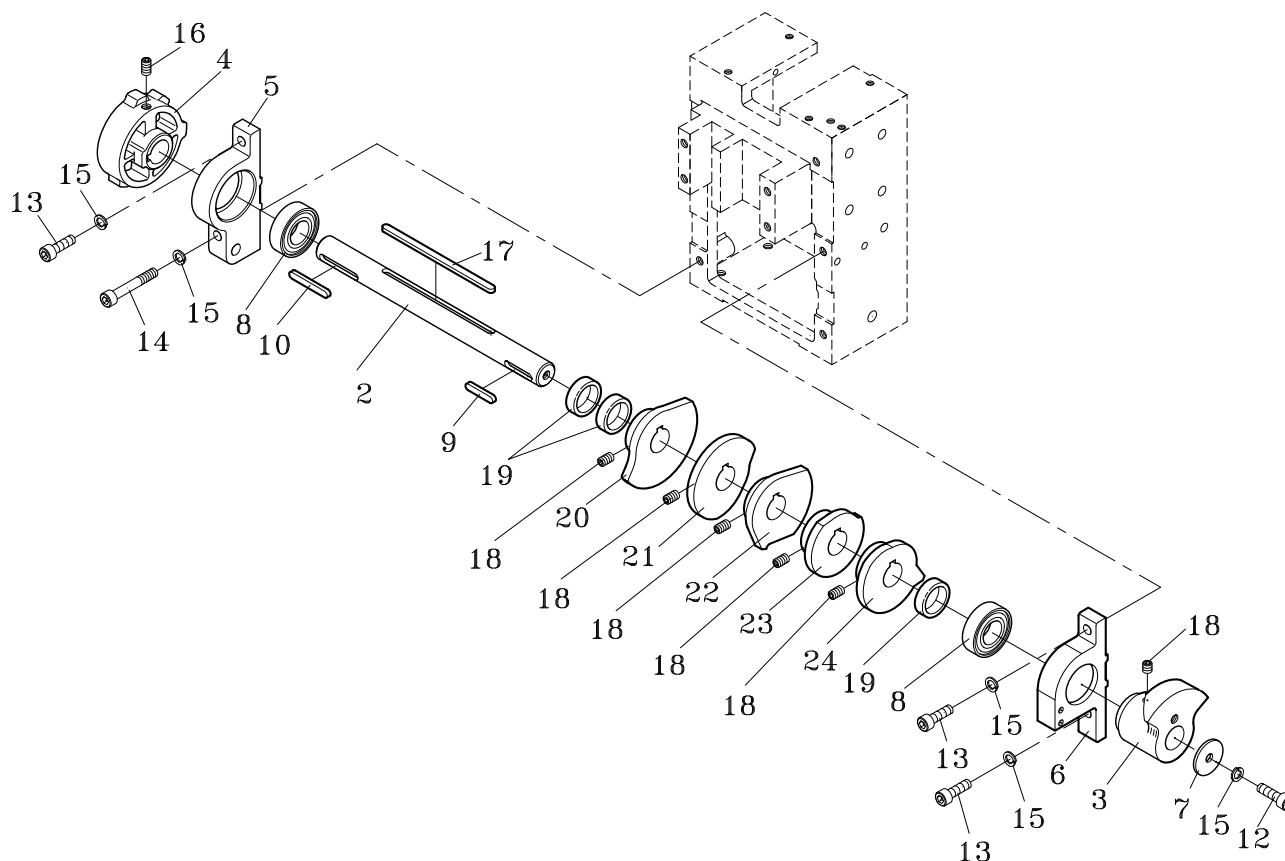
T5-1-10000

REF. NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
44	T5-1-14000	Press Bar Ass'y	1	SEE PAGE 8
	T5-1-14200	Press Bar Ass'y (For Small Package) (Option)	1	SEE PAGE 8
45	T5-1-15000	Front Bar Ass'y	1	SEE PAGE 9
46	T5-1-30000	Transmission Group	1	SEE PAGE 17
47	T5-1-12002	Heater Ass'y	1	SEE PAGE 6-1
51	HBS0525H	HBS, M5×25 (H)	1	
52	PMS0320	PMS, M3×20	2	
53	TF-006	Micro Switch	3	
54	PW03	PW, M3	2	
55	SW03	SW, M3	6	
56	HN03	HN, M3	2	
57	PW04	PW, M4	3	
58	SW04	SW, M4	4	
59	PMS0412	PMS, M4×12	2	
60	ER03	Snap Ring, E-3	1	
65	TF-009	Switch Trigger	2	
66	PMS0335	PMS, M3×35	2	
67	T5-1-10770	Plate	1	
68	SP0512	Spring Pin, 5×12	2	
69	TA-089	Spring Hook	1	

1-1-1

CAM GROUP

T5-1-11000

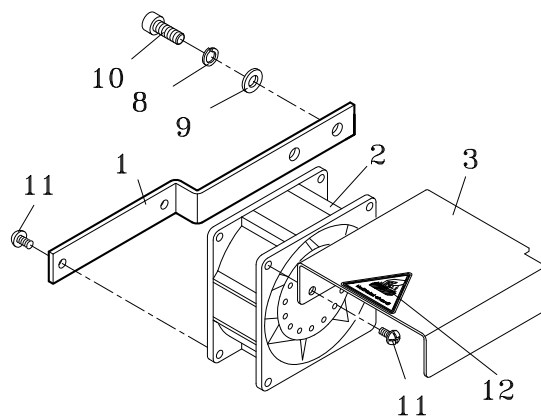


REF. NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
2	T5-1-11121	Cam Shaft	1	
3	T5-1-11130	Tension Cam	1	
4	T5-1-11140	Limit Switch Contactor	1	
5	TA-008-2	Bearing Support (L)	1	
6	TA-017-2	Bearing Support (R)	1	
7	TB-223	Washer	1	
8	BR6003ZZ	Bearing, 6003ZZ	2	
9	KYA050520	Key, 5×5×20	1	
10	KYA050535	Key, 5×5×35	1	
12	HBS0616	HBS, M6×16	1	
13	HBS0620	HBS, M6×20	3	
14	HBS0645H	HBS, M6×45 (H)	1	
15	SW06	SW, M6	5	
16	HSS0610	HSS, M6×10	1	
17	KYA0505101	Key, 5×5×101	1	
18	HSS0608	HSS, M6×8	6	
19	TA-241	Spacer	3	
20	TA-015A	Rear Bar Cam	1	
21	TA-015B	Heater Cam	1	
22	TA-012A	Grip Cam	1	
23	TA-012B	Grip Cam	1	
24	TA-014	Cam Separator	1	

1-1-2

FAN ASS'Y

T5-1-12001

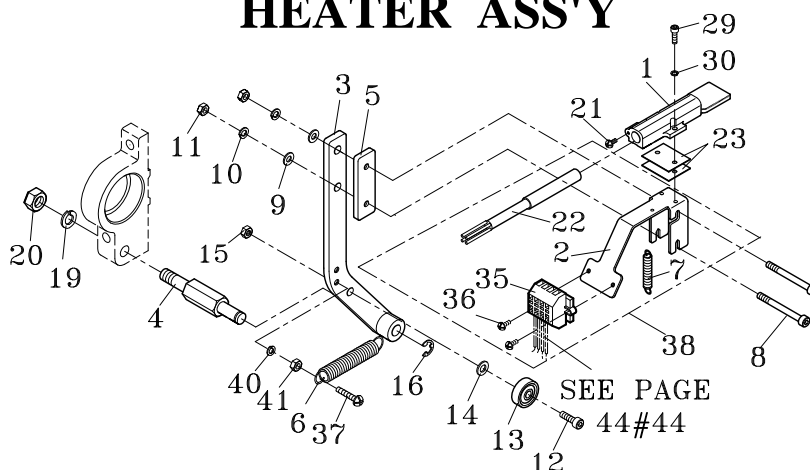


REF. NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1	T5-1-12360	Fan Support	1	
2	T5-1-12370	Fan	1	
3	T5-1-12380	Fan Cover	1	
8	SW06	SW, M6	2	
9	PW06A	PW, M6 (A)	2	
10	HBS0616	HBS, M6x16	2	
11	TMS0408	TMS, M4x8	4	
12	LA-40002	Label	1	

1-1-3

HEATER ASS'Y

T5-1-12002



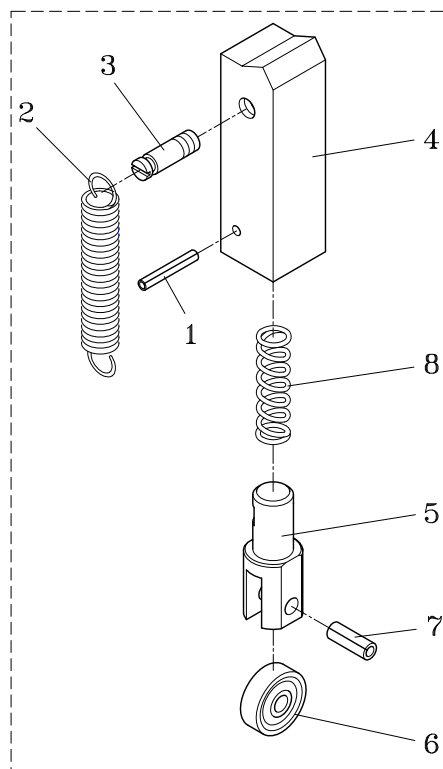
REF. NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1	T5-1-12110	Heater Tongue	1	
	T5-1-12280	Heater Tongue (For Small Package)(Option)	1	
2	T5-1-12121	Heater Bracket	1	
3	TB-102	Heater Arm	1	
4	TB-103	Pin	1	
5	TB-107	Side Plate	1	
6	TB-114	Return Spring	1	
7	TB-115	Spring	1	
8	HBS0440HS	HBS, M4×40 (H) (SUS)	2	
9	PW04S	PW, M4 (SUS)	2	
10	SW04S	SW, M4 (SUS)	2	
11	HN04S	HN, M4 (SUS)	2	
12	HBS0516	HBS, M5×16	1	
13	BR635ZZ	Bearing, 635ZZ	1	
14	PW05	PW, M5	1	
15	HN05	HN, M5	1	
16	ER06	Snap Ring, E-6	1	
19	SW08	SW, M8	1	
20	HN08	HN, M8	1	
21	TMS0308S	TMS, M3×8 (SUS)	1	
22	T5-1-12320	Heater	1	
23	T5-1-12330	Heat-Insulation	2	
29	HBS0308S	HBS, M3×8 (SUS)	2	
30	SW03S	SW, M3 (SUS)	2	
35	T5-1-12451	Heater Terminal	1	
36	PMS0306	PMS, M3×6	2	
37	PMS0420	PMS, M4×20	1	
38	T5-1-12003	Heater Ass'y	1	
40	SW04	SW, M4	1	
41	HN04	HN, M4	1	

1-1-4

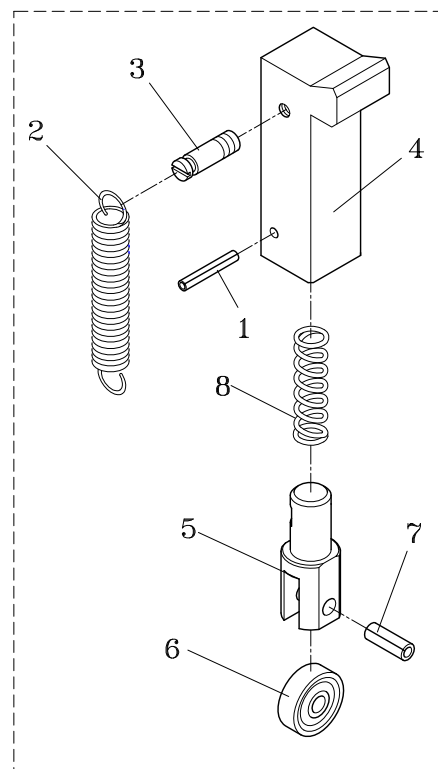
REAR BAR ASS'Y

T5-1-13000

T5-1-13200



T5-1-13000



T5-1-13200 (Option)

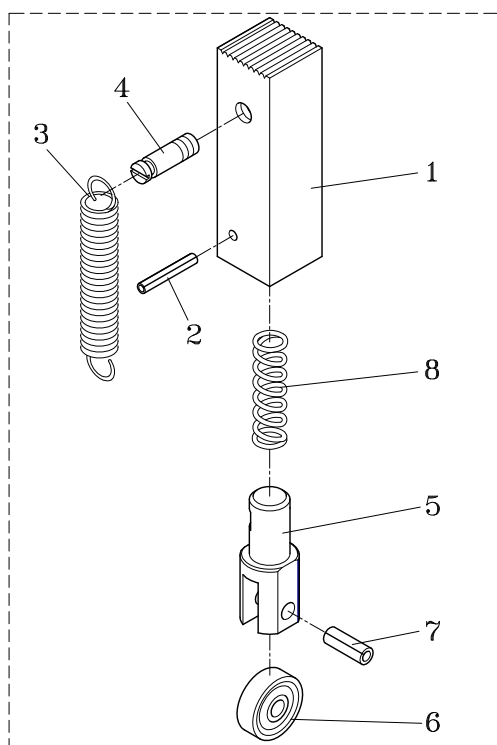
REF. NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
	T5-1-13000	Rear Bar Ass'y	1	
			1	
	T5-1-13200	Rear Bar Ass'y (For Small Package)(Option)	1	
			1	
		(Stainless Steel Model)		
1	SP0318	Spring Pin, 3×18	1	
2	TA-071	Return Spring	1	
3	TA-073	Spring Hook	1	
4	TA-074	Rear Bar	1	
			1	
	T5-1-13190	Rear Bar (For Small Package) (Option)	1	
			1	
5	TA-075	Plunger	1	
6	BR635ZZ	Bearing, 635ZZ	1	
7	SP0514	Spring pin, 5×14	1	
8	TA-078	Spring	1	

1-1-5

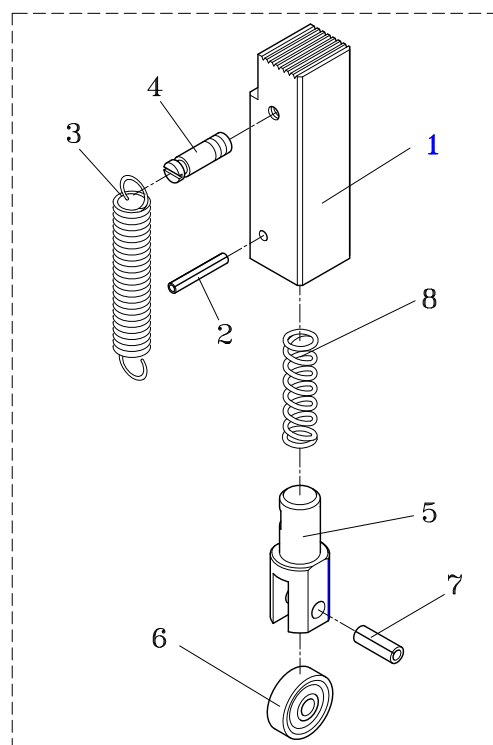
PRESS BAR ASS'Y

T5-1-14000

T5-1-14200

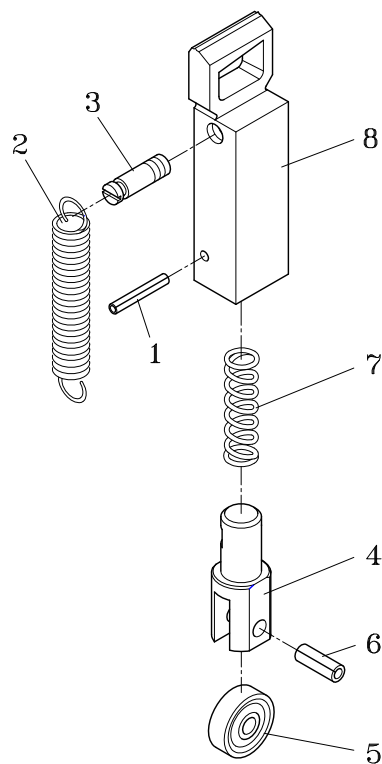


T5-1-14000



T5-1-14200 (Option)

REF. NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1	T5-1-14000	Rear Bar Ass'y	1	
			1	
	T5-1-14200	Rear Bar Ass'y (For Small Package) (Option)	1	
			1	
	TA-069	Press Bar	1	
			1	
	T5-1-14190	Press Bar (For Small Package) (Option)	1	
			1	
2	SP0318	Spring Pin, 3×18	1	
3	TA-071	Return Spring	1	
4	TA-073	Spring Hook	1	
5	TA-075	Plunger	1	
6	BR635ZZ	Bearing, 635ZZ	1	
7	SP0514	Spring Pin, 5×14	1	
8	TA-078	Spring	1	

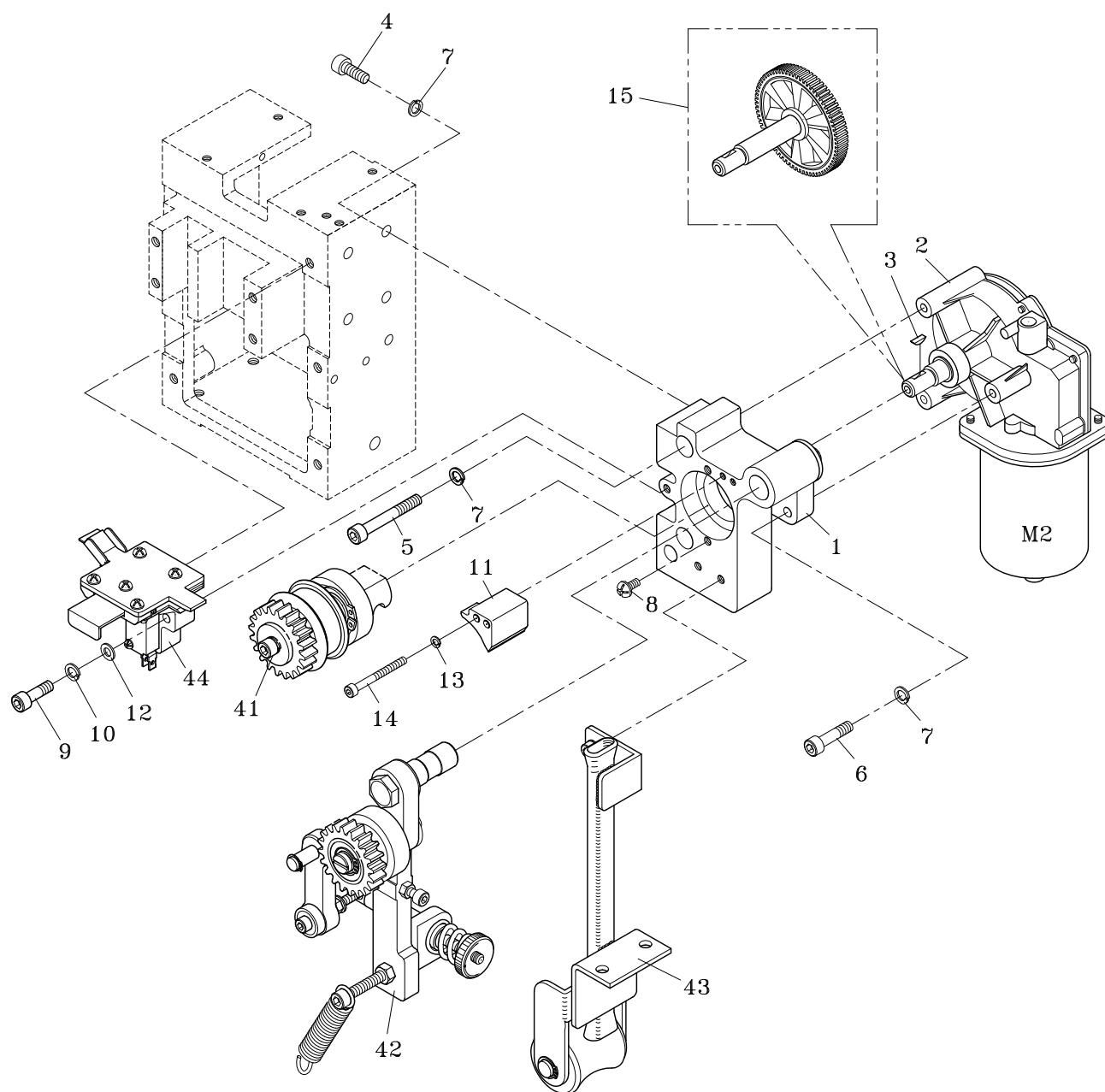
1-1-6**FRONT BAR ASS'Y****T5-1-15000**

REF. NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1	SP0318	Spring Pin, 3×18	1	
2	TA-071	Return Spring	1	
3	TA-073	Spring Hook	1	
4	TA-075	Plunger	1	
5	BR635ZZ	Bearing, 635ZZ	1	
6	SP0514	Spring Pin, 5×14	1	
7	TA-078	Spring	1	
8	TA-079	Front Bar	1	

1-2

FEED GROUP

T5-1-20000



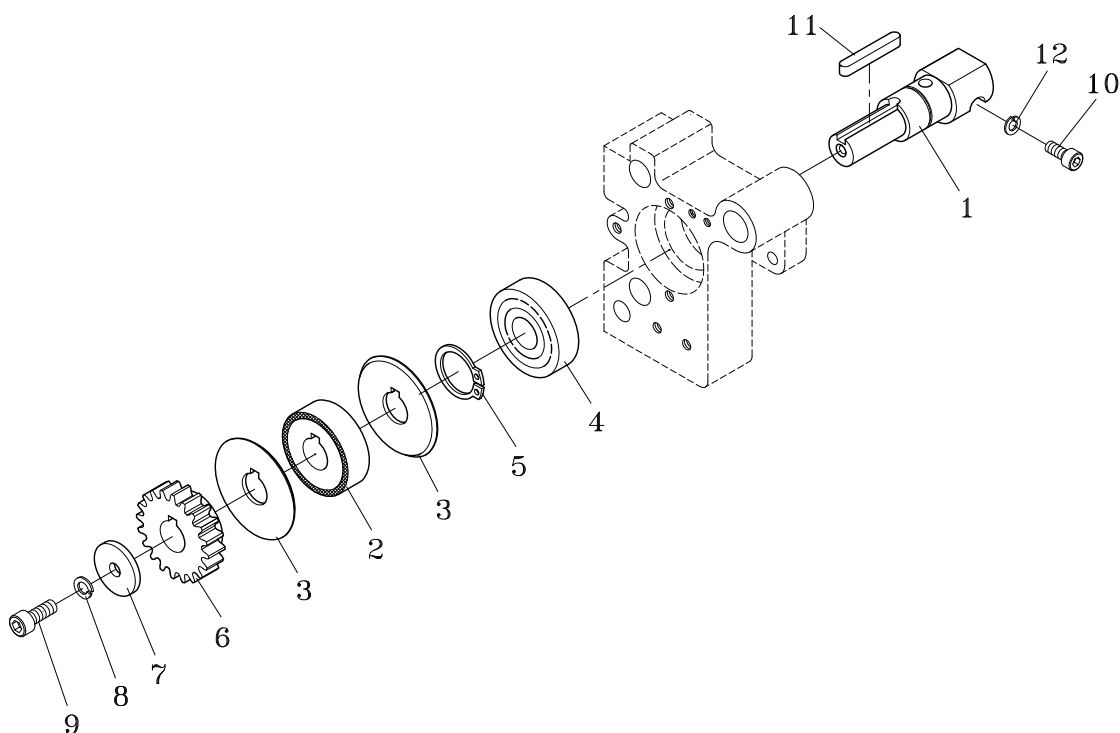
1-2**FEED GROUP****T5-1-20000**

REF. NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1	T5-1-20110	Bracket	1	
2	T5-1-20120	Motor (M2)	1	
3	KYC0310	Key, 3×10	1	
4	HBS0620	HBS, M6×20	3	
5	HBS0650H	HBS, M6×50 (H)	2	
6	HBS0630H	HBS, M6×30 (H)	1	
7	SW06	SW, M6	6	
8	TMS0508	TMS, M5×8	2	
9	HBS0525H	HBS, M5×25 (H)	2	
10	SW05	SW, M5	2	
11	T5-1-20210	Guide	1	
12	PW05	PW, M5	2	
13	SW04	SW, M4	2	
14	HBS0440H	HBS, M4×40 (H)	2	
15	T5-1-20250	Worm Gear For M2 Motor	1	
41	T5-1-21000	Main Roller Ass'y	1	SEE PAGE 12
42	T5-1-22000	Roller Arm Ass'y	1	SEE PAGE 13
43	T5-1-23000	Feed Shooter Ass'y	1	SEE PAGE 15
44	T5-1-24007	Strap Guide Ass'y (For 8-12mm)	1	SEE PAGE 16
	T5-1-24008	Strap Guide Ass'y (For 5-7mm)	1	SEE PAGE 16

1-2-1

MAIN ROLLER ASS'Y

T5-1-21000

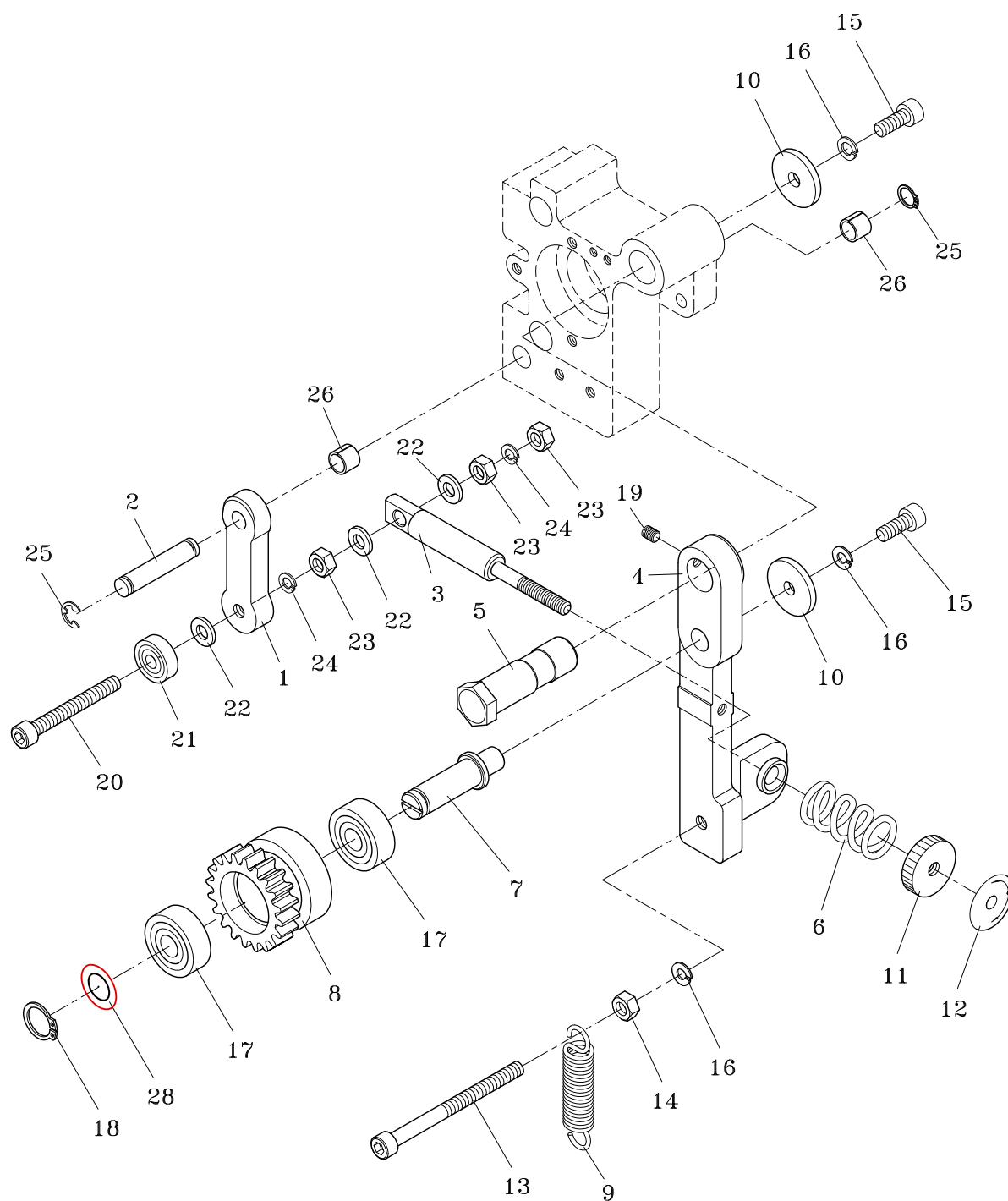


REF. NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1	T5-1-21110	Main Roller Shaft	1	
2	T5-1-21120	Main Roller	1	
3	T5-1-21130	Side Plate	2	
4	BR6004 2RS	Bearing, 6004 2RS	1	
5	SR20	Stop Ring,S-20	1	
6	T5-1-21160	Gear	1	
7	TB-223	Washer	1	
8	SW06	SW, M6	1	
9	HBS0616	HBS, M6×16	1	
10	HBS0516	HBS, M5×16	1	
11	KYA050535	Key, 5×5×35	1	
12	SW05	SW, M5	1	

1-2-2

ROLLER ARM ASS'Y

T5-1-22000



1-2-2

ROLLER ARM ASS'Y

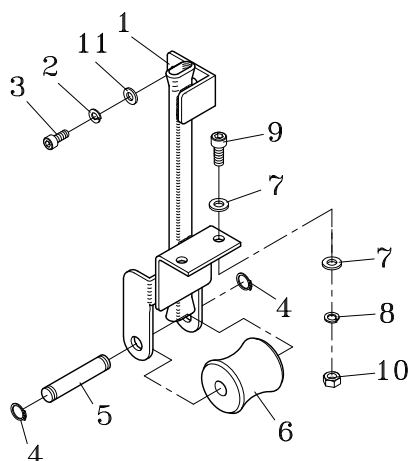
T5-1-22000

REF. NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1	T5-1-22110	Tension Arm	1	
2	T5-1-22120	Shaft	1	
3	T5-1-22130	Connecting Rod	1	
4	T5-1-22140	Roller Arm	1	
5	T5-1-22150	Shaft	1	
6	T5-1-22160	Spring	1	
7	T5-1-22170	Roller Shaft	1	
8	T5-1-22180	Roller	1	
9	TC-025	Spring	1	
10	TB-223	Washer	2	
11	TB-133	Nut	1	
12	LA-50030	Label	1	
13	HBS0675H	HBS, M6×75 (H)	1	
14	HN06	HN, M6	1	
15	HBS0616	HBS, M6×16	2	
16	SW06	SW, M6	3	
17	BR6001ZZ	Bearing, 6001ZZ	2	
18	SR12	Stop Ring, S-12	1	
19	HSS0508	HSS, M5×8	1	
20	HBS0540	HBS, M5x40	1	
21	BR635ZZ	Bearing, 635ZZ	1	
22	PW05	PW, M5	3	
23	HN05	HN, M5	3	
24	SW05	SW, M5	2	
25	ER06	Snap Ring, E-6	2	
26	MB0808	Metal Bush, 0808	2	
28	T5-1-22380	Spacer	1	

1-2-3

FEED SHOOTER ASS'Y

T5-1-23000



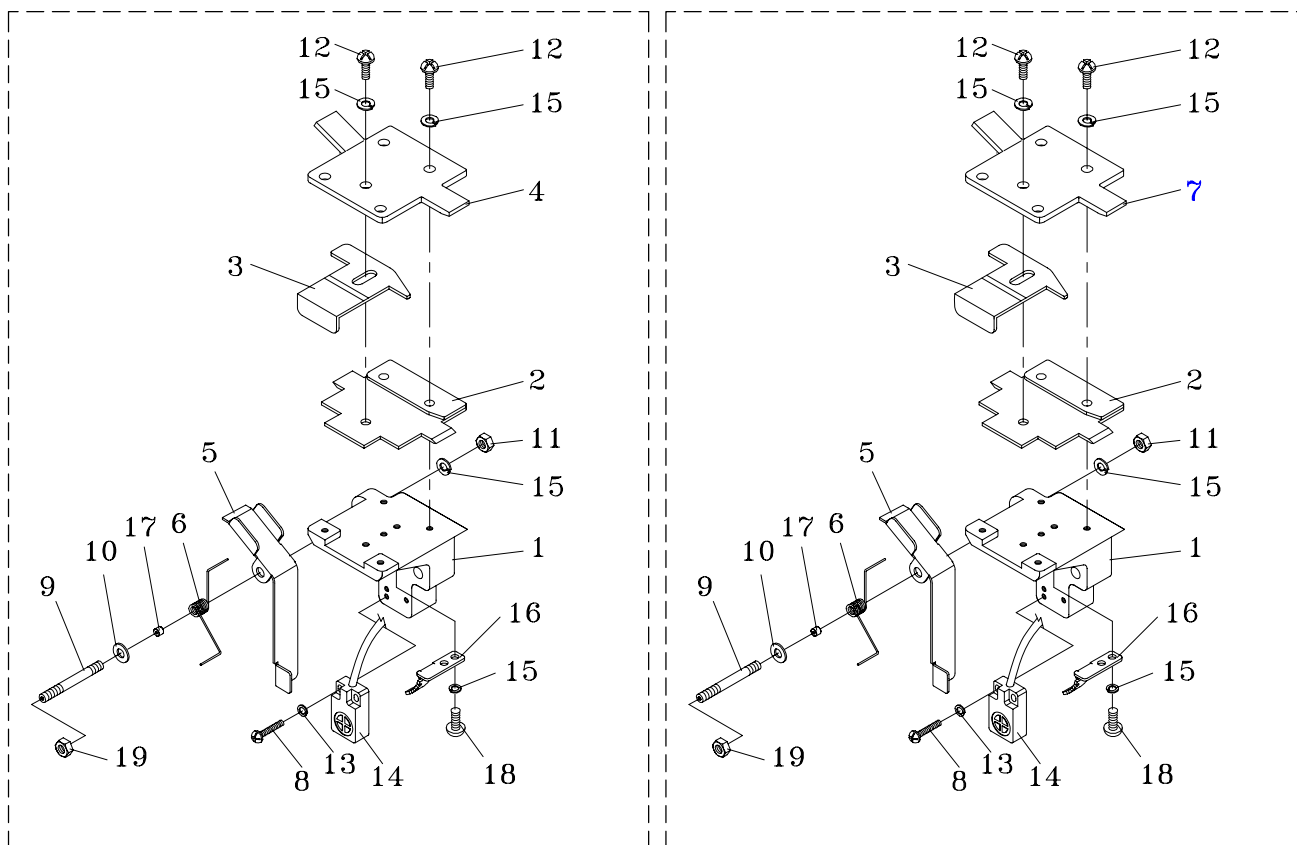
REF. NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1	T5-1-23110	Feed Shooter	1	
2	SW05	SW, M5	2	
3	HBS0512	HBS, M5x12	2	
4	SR10	Stop Ring, S-10	2	
5	TC-048	Shaft	1	
6	TC-049	Roller	1	
7	PW06A	PW, M6 (A)	4	
8	SW06	SW, M6	2	
9	HBS0616	HBS, M6x16	2	
10	HN06	HN, M6	2	
11	PW05	PW, M5	2	

1-2-4

STRAP GUIDE ASS'Y

T5-1-24007

T5-1-24008



T5-1-24007 (For 8~12mm)

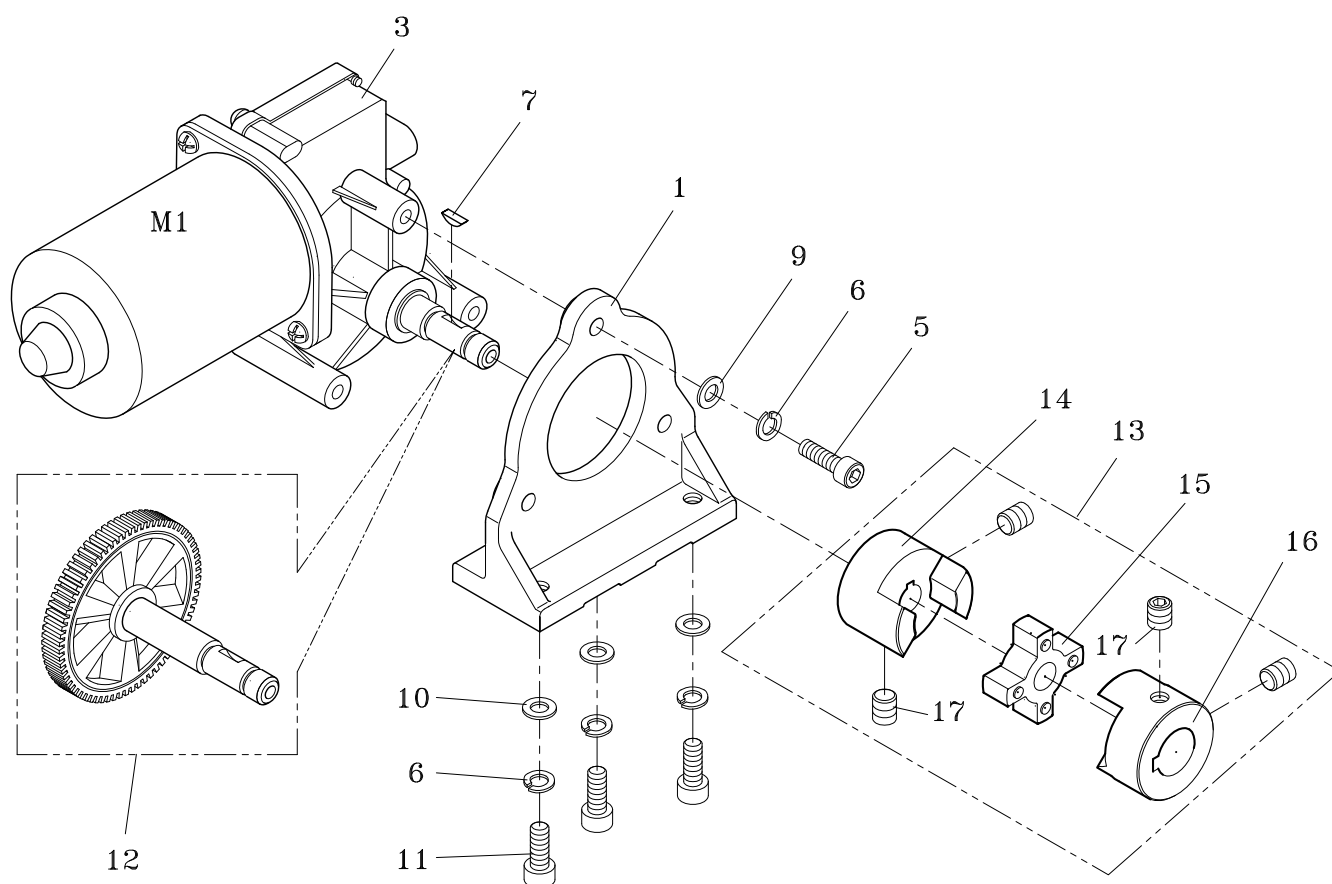
T5-1-24008 (For 5~7mm)

REF. NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
	T5-1-24007	Strap Guide Ass'y (For 8-12mm)	1	
	T5-1-24008	Strap Guide Ass'y (For 5-7mm)	1	
1	T5-1-24110	Strap Guide Support	1	
2	T5-1-24120	Strap Guide (A)	1	
3	T5-1-24131	Strap Guide (B)	1	
4	T5-1-24142	Strap Guide Cover (For 8-12mm)	1	
5	T5-1-24151	Strap Guide (C)	1	
6	T5-1-24181	Spring	1	
7	T5-1-24172	Strap Guide Cover (For 5-7mm)	1	
8	PMS0315	PMS, M3×15	2	
9	T5-1-24191	Spring Shaft	1	
10	PW04	PW, M4	1	
11	HN04	HN, M4	1	
12	PMS0412	PMS, M4×12	5	
13	SW03	SW, M3	2	
14	T7-1-10750	Proximity Sensor	1	
15	SW04	SW, M4	8	
16	T5-1-24260	Tension Socket	1	
17	T5-1-24270	Spring Bush	1	
18	PMS0408	PMS, M4×8	2	
19	NTE04	NTE, M4	1	

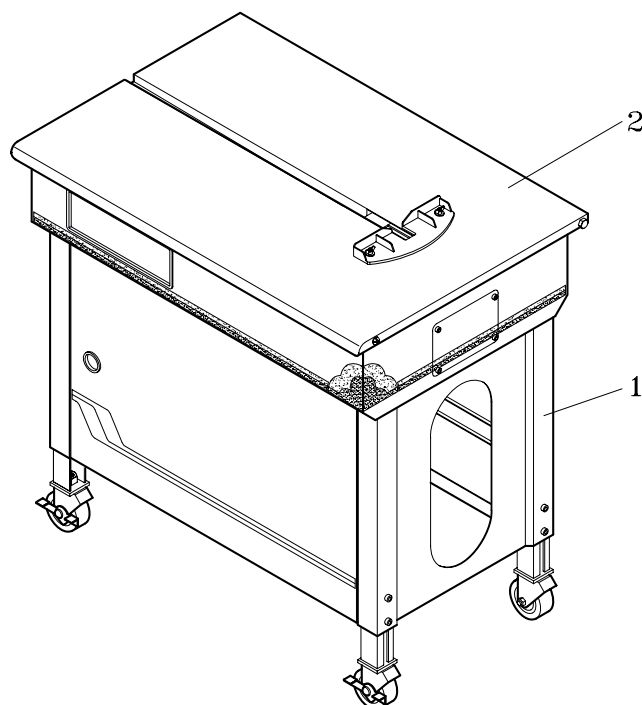
1-3

TRANSMISSION GROUP

T5-1-30000



REF. NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1	T5-1-30110	Main Motor Support	1	
3	T5-1-30130	Main Motor (M1)	1	
5	HBS0625	HBS, M6×25	3	
6	SW06	SW, M6	6	
7	KYC0310	Key, 3x10	1	
9	PW06A	PW, M6 (A)	3	
10	PW06C	PW, M6 (C)	3	
11	HBS0616	HBS, M6×16	3	
12	T5-1-30220	Worm Gear For M1 Motor	1	
13	T5-1-30230	Flexible Coupling	1	
14	T5-1-30240	Hub (L.H.)	1	
15	T5-1-30250	Flexible Spacer	1	
16	T5-1-30260	Hub (R.H.)	1	
17	HSS0608	HSS, M6×8	4	

2**BODY FRAME UNIT****T5-2-90001****T5-2-90002**

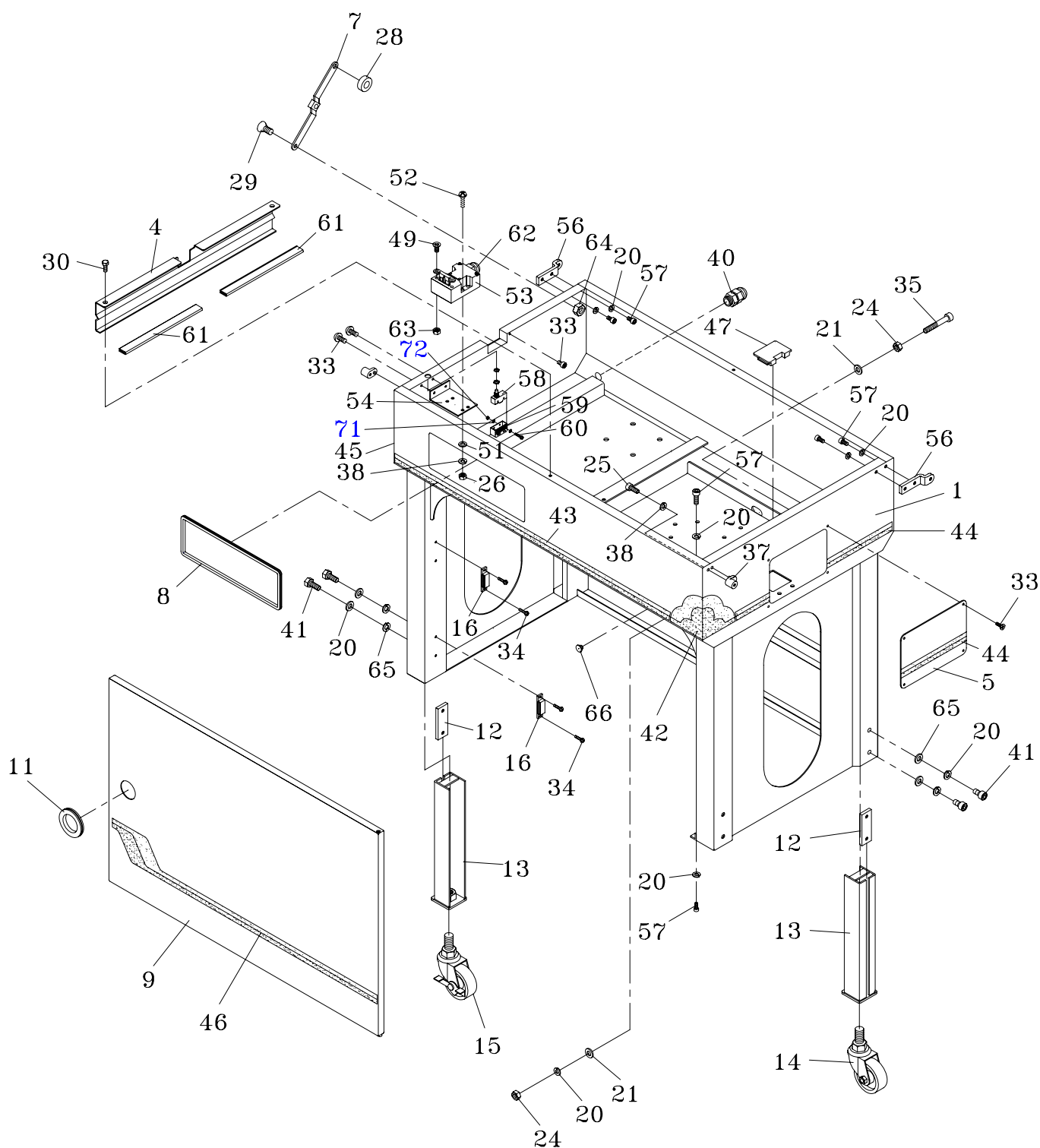
REF. NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
	T5-2-90001	Body Frame Unit (For TP-501)	1	
	T5-2-90002	Body Frame Unit (For TP-502)	1	
1	T5-2-10004	Body Frame Group (For TP-501)	1	SEE PAGE 19
	T5-2-10003	Body Frame Group (For TP-502)	1	SEE PAGE 19
2	T5-2-20000	Table Top Group	1	SEE PAGE 23

2-1

BODY FRAME GROUP

T5-2-10003

T5-2-10004



2-1**BODY FRAME GROUP****T5-2-10003****T5-2-10004**

REF. NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
	T5-2-10004	Body Frame Group (For TP-501)	1	
	T5-2-10003	Body Frame Group (For TP-502)	1	
1	T5-2-10110	Body Frame (For TP-501)	1	
	T5-2-10210	Body Frame (For TP-502)	1	
4	T5-2-10140	Support	1	
5	T5-2-10150	Side Cover	1	
7	T5-2-10170	Hinge	1	
8	T5-2-10180	Grommet	1	
9	T5-2-10190	Front Door (For TP-501)	1	
11	TE-010	Grommet (For TP-501)	1	
12	TC-031	Fixing Plate	4	
13	T7-5-10160	Adjustable Leg	4	
14	TC-006	Caster (Free)	2	
15	TC-007	Caster (Brake)	2	
16	T6-5-10160	Magnet Catch (For TP-501)	2	
20	SW06	SW, M6	11	
24	HN06	HN, M6	1	
25	HBS0512	HBS, M5×12	4	
26	HN05	HN, M5	6	
28	TC-068	Collar	1	
29	FMS0612	FMS, M6×12	1	
30	FMS0408	FMS, M4x8	2	
33	TMS0408	TMS, M4×8	7	
34	TMS0308	TMS, M3×8 (For TP-501)	4	
35	HBS0630	HBS, M6×30	1	
37	T5-2-10471	Collar	2	
38	SW05	SW, M5	8	
40	T5-2-10500	Grommet (PG9)	1	
41	HB0616	HB, M6×16	8	
42	T5-2-10520	Colored Adhesive Tape (A)	1	
43	T5-2-10530	Colored Adhesive Tape (B)	1	
44	T5-2-10540	Colored Adhesive Tape (C)	1	

2-1

BODY FRAME GROUP

T5-2-10003

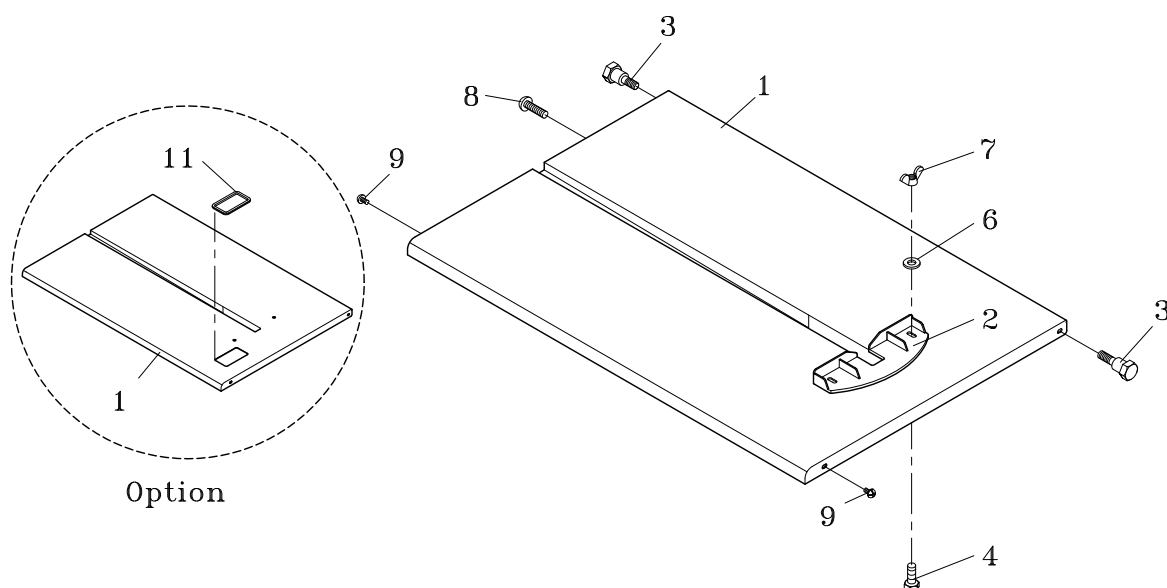
T5-2-10004

REF. NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
45	T5-2-10550	Colored Adhesive Tape (D)	1	
46	T5-2-10560	Colored Adhesive Tape (E) (For TP-501)	1	
47	T5-2-10570	Grommet (For CE)	1	
49	FMS0508	FMS, M5x8 (For TUV CE Version) (Option)	2	
51	PW05	PW, M5	4	
52	PMS0520	PMS, M5×20	4	
53	TK-035	Interlock Safety Switch (For TUV CE Version) (Option)	1	
54	T5-2-10640	Safety Switch Plate (For TUV CE Version) (Option)	1	
56	T5-2-10660	Table Top Holder	2	
.	HBS0612	HBS, M6×12	6	
58	TF-018	Safety Limit Switch (For CSA/UL) (Option)	1	
59	TF-031	Switch Cover (For CSA/UL)(Option)	1	
60	PMS0430	PMS, M4×30 (For CSA/UL)(Option)	2	
61	T5-2-10710	Cushion	2	
62	T6-6-10980	Grommet (PG11) (For TUV CE Version)(Option)	1	
63	HN05	HN, M5 (For TUV CE Version) (Option)	2	
64	NTE06	NTE, M6	1	
65	PW06A	PW, M6 (A)	8	
66	T7-5-20210	Rubber Plug (For TP-502)	1	
71	PW04	PW, M4	4	
72	HN04	HN, M4	2	

2-2

TABLE TOP GROUP

T5-2-20000

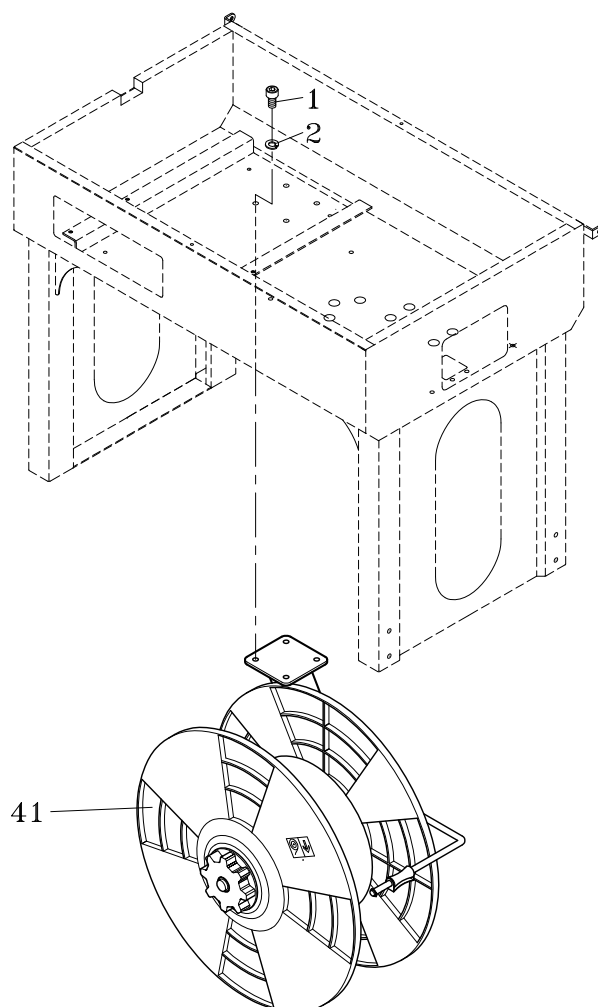


REF. NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1	T5-2-20110	Table Top	1	
	T5-2-20200	Table Top (For Display Version) (Option)	1	
2	TC-004	Package Guide	1	
3	TC-070	Shaft	2	
4	HB0612	HB, M6x12	2	
6	PW06B	PW, M6 (B)	2	
7	WN06	WN, M6	2	
8	TMS0612	TMS, M6x12	1	
9	TMS0508	TMS, M5x8	2	
11	TE-034	Grommet (For Display Version) (Option)	1	

3

REEL UNIT

T5-3-90000

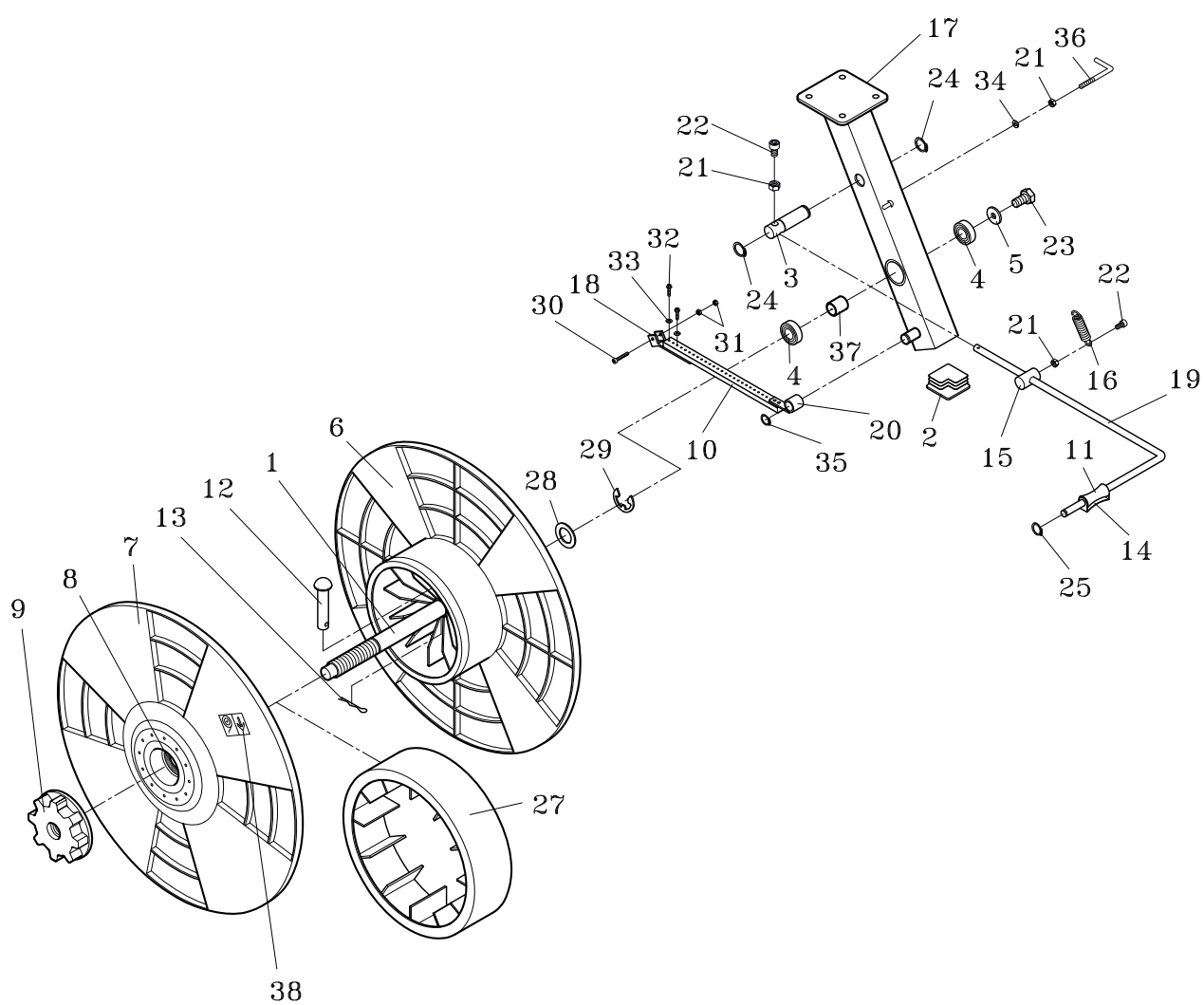


REF. NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1	HBS0816	HBS, M8x16	4	SEE PAGE 24
2	SW08	SW, M8	4	
41	T5-3-11000	Reel Control Group	1	

3-1

REEL CONTROL GROUP

T5-3-11000

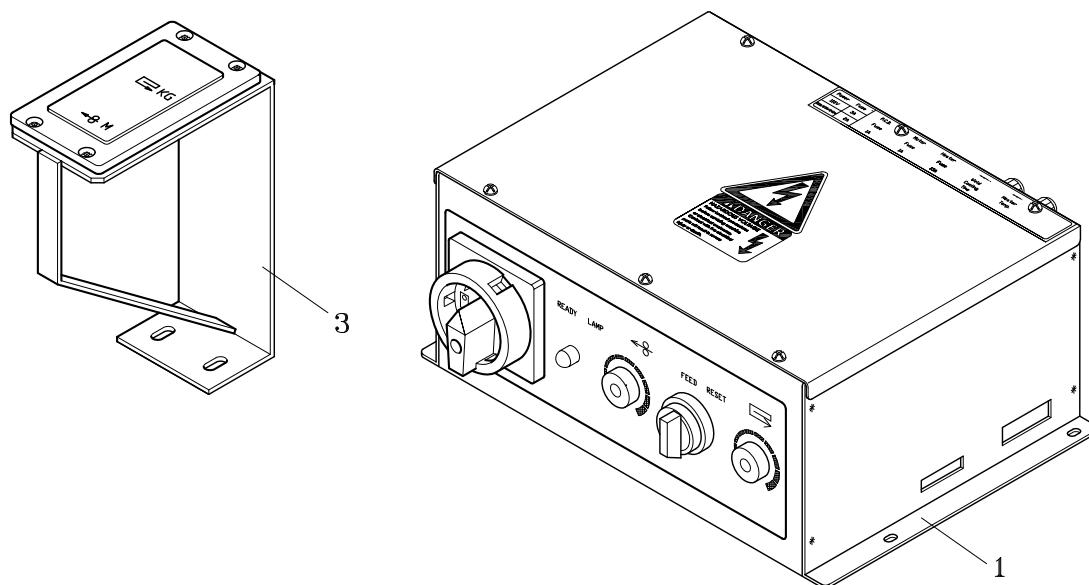


3-1 REEL CONTROL GROUP T5-3-11000

REF. NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1	TC-003	Reel Shaft	1	
2	TC-005	Lid	1	
3	TC-009	Brake Shaft	1	
4	BR6003ZZ	Bearing, 6003ZZ	2	
5	TC-011	Washer	1	
6	TC-013	Inner Flange	1	
7	TC-014	Outer Flange	1	
8	TC-015	Protector	1	
9	TC-016	Reel Nut Handle	1	
10	TC-018	Brake Lining	1	
11	TC-019	Roller	1	
12	TC-020	Pin	1	
13	TC-021	Split Pin	1	
14	TC-022	Roller Holder	1	
15	TC-024	Brake Adjuster	1	
16	TC-025	Spring	1	
17	TC-044	Reel Support	1	
18	TC-045-1	Fixing Brake Lining Bracket	1	
19	TC-046-1	Arm	1	
20	TC-050	Lining Holder	1	
21	HN06	HN, M6	3	
22	HBS0616	HBS, M6×16	2	
23	HB0816	HB, M8×16	1	
24	SR20	Stop Ring, S-20	2	
25	SR10	Stop Ring, S-10	1	
27	TC-075	Center Drum 280MM	1	
28	TC-076	Washer	1	
29	ER19	Snap Ring, E-19	1	
30	HBS0425	HBS, M4×25	1	
31	HN04	HN, M4	2	
32	PMS0416	PMS, M4×16	4	
33	PW04	PW, M4	4	
34	SW06	SW, M6	1	
35	SR15	Stop Ring, S-15	1	
36	TC-092	Holder	1	
37	TC-094	Spacer	1	
38	LA-31010	Label	1	

4

ELECTRIC CONTROL UNIT T5-4-90005 **T5-4-90006**

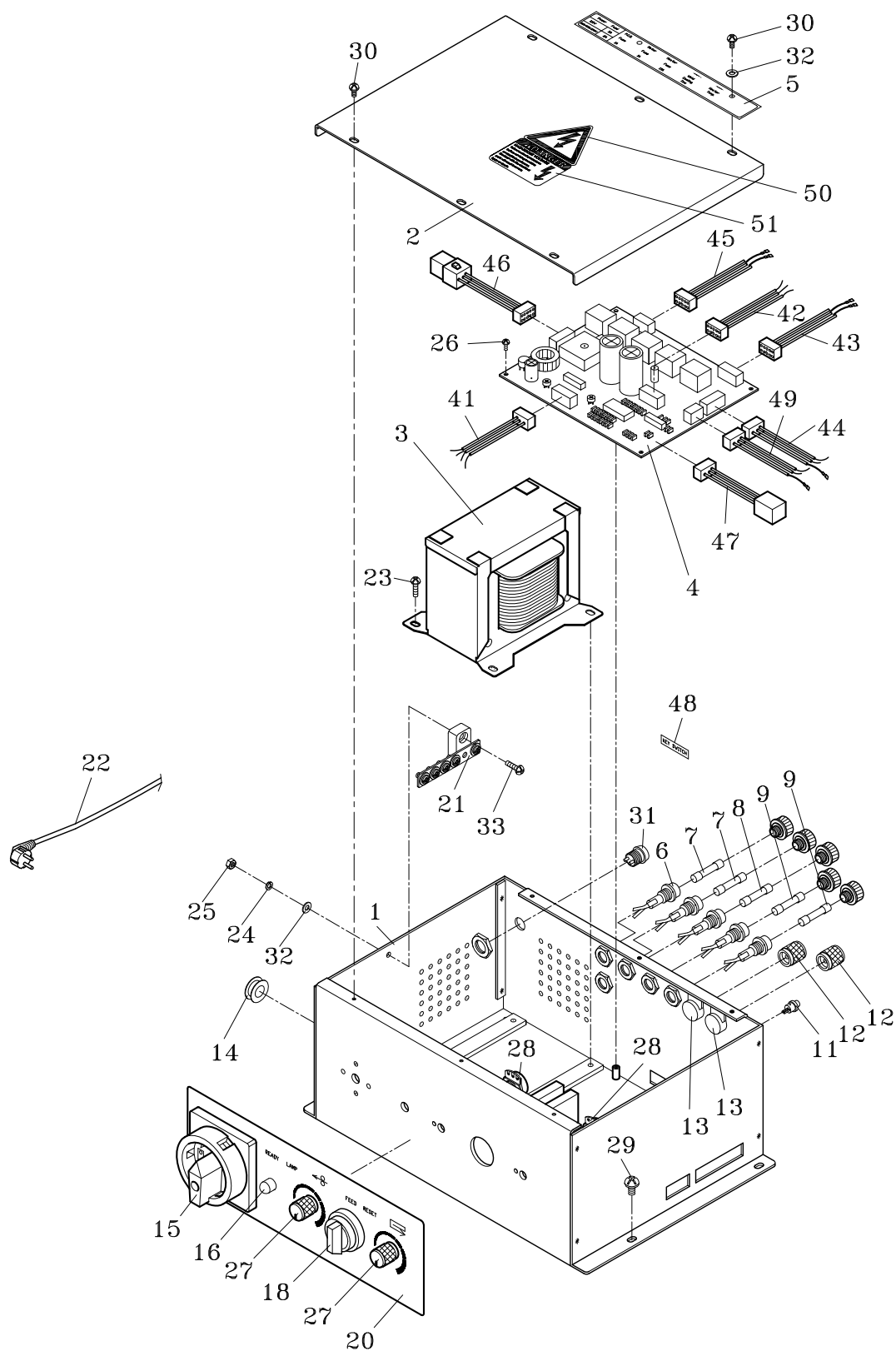


REF. NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1	T5-4-90005	Electric Control Unit (For Standard, CE , CSA-UL Version)	1	
	T5-4-90006	Electric Control Unit (For with Display) (For Standard, CE , CSA-UL Version) (Option)	1	
	T5-4-10002	Electric Control Group (For Standard, CE , CSA-UL Version)	1	SEE PAGE 27
	T5-4-10003	Electric Control Group (For TUV CE Version) (Option)	1	SEE PAGE 27
	T5-4-20002	Electric Control Group (For with Display) (For Standard, CE , CSA-UL Version) (Option)	1	SEE PAGE 27
	T5-4-20003	Electric Control Group (For with Display) (For TUV CE Version)(Option)	1	SEE PAGE 27
	T5-4-30000	Indicator Group (For with Metric Display) (Option)	1	SEE PAGE 30
	T5-4-30001	Indicator Group(For with Imperial Display) (Option)	1	SEE PAGE 30

4-1

ELECTRIC CONTROL GROUP

T5-4-10002
T5-4-10003
T5-4-20002
T5-4-20003



4-1 ELECTRIC CONTROL GROUP T5-4-10002 T5-4-20002

REF. NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
	T5-4-10002	Electric Control Group (For Standard, CE , CSA-UL Version)	1	
	T5-4-10003	Electric Control Group (For TUV CE Version)(Option)	1	
	T5-4-20002	Electric Control Group (For with Display) (For Standard, CE , CSA-UL Version) (Option)	1	
	T5-4-20003	Electric Control Group (For with Display)(For TUV CE Version)(Option)	1	
1	T5-4-10111	Box	1	
2	T5-4-10120	Cover	1	
3	T5-4-10130	Transformer (For 220V/230V/240V)	1	
	T5-4-10131	Transformer (For 110V)	1	
4	T5-4-10141	P.C.B.	1	
	T5-4-20501	P.C.B. (For Machine With Display For Metric Size) (Option)	1	
	T5-4-20511	P.C.B.(For Machine With Display For Imperial Size) (Option)	1	
5	LA-20055	Label	1	
6	T5-4-10160	Fuse Holder	5	
7	T6-6-30032	Fuse (For 110V/3A)	2	
	T6-6-30031	Fuse (For 220V/230V/240V/2A)	2	
8	T6-6-30036	Fuse (1A)	1	
9	T6-6-30133	Fuse (10A)	2	
11	T5-4-10210	Jog Switch	1	
12	T5-4-10221	Knob	2	
13	T5-4-10231	Variable Resistor (5K)	2	
14	T5-4-10580	Grommet	2	
15	TK-001	Main Power Switch	1	
16	T5-4-10260	Ready Lamp	1	
18	TG-036	Selector Switch (Feed/Reset)	1	
20	LA-10015	Label	1	
21	T5-4-10310	Earth Plate (5P)	1	

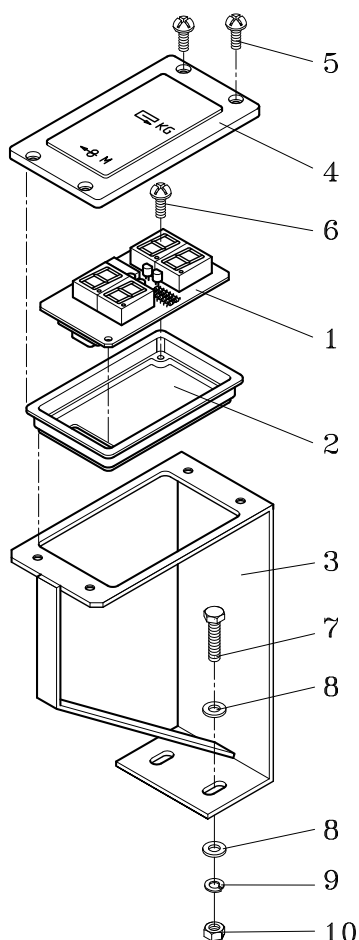
4-1 ELECTRIC CONTROL GROUP T5-4-10002 T5-4-20002

REF. NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
22	TG-019	Power Cord	1	
	T5-4-10322	Power Cord (For CE)	1	
	T5-4-10323	Power Cord (For CSA/UL)	1	
23	TMS0408	TMS, M4×8	4	
24	SW04	SW, M4	1	
25	HN04	HN, M4	1	
26	PMS0306	PMS, M3x6	4	
27	T5-4-10221	Knob (φ 3.0)	2	
	T5-4-10222	Knob (φ 6.0)	2	
28	T5-4-10231	Variable Resistor (5K) (φ 3.0)	2	
	T5-4-10232	Variable Resistor (5K) (φ 6.0)	2	
29	PMS0610	PMS, M6×10	4	
30	TMS0408	TMS, M4×8	6	
31	T5-4-10410	Key Switch (For TUV CE Version) (Option)	1	
32	PW04	PW, M4	2	
33	TMS0412	TMS, M4×12	1	
41	T5-4-10510	Wire Ass'y X1 (For Electric Group)	1	
42	T5-4-10520	Wire Ass'y X2 (For Jog Switch /Weld Cooling Timer/Heater Temperature Adjustment)	1	
43	T5-4-10530	Wire Ass'y X3 (For Micro Switch, SQ1/SQ2/SQ3)	1	
44	T5-4-10542	Wire Ass'y X4 (For Heater/Fan/ Micro Switch SQ4)	1	
45	T5-4-10550	Wire Ass'y X5 (For Motor M1/M2)	1	
46	T5-4-10560	Wire Ass'y X6 (For Power)	1	
47	T5-4-10570	Wire Ass'y X7 (For With Display) (Option)	1	
48	LA-50055	Label (Option)	1	
49	T7-1-10750	Wire Ass'y X4-1 (For Proximity Sensor SQ4)	1	
50	LA-40001	Label	1	
51	LA-40003	Label	1	

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INDICATOR GROUP (OPTION) T5-4-30000

T5-4-30001



REF. NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
	T5-4-30000	Indicator Group(For Metric Size)(Option)	1	
	T5-4-30001	Indicator Group (For Imperial Size)(Option)	1	
1	T5-4-30110	Tension And Length Indicators	1	
2	TG-039	Lower Indicator Cover	1	
3	TG-038	Indicator Support	1	
4	TG-041	Upper Indicator Cover (For Metric Size)	1	
	TG-041-1	Upper Indicator Cover (For Imperial Size)	1	
5	PMS0408	PMS, M4×8	4	
6	PMS0412	PMS, M4×12	2	
7	HB0616	HB, M6×16	2	
8	PW06C	PW, M6 (C)	4	
9	SW06	SW, M6	2	
10	HN06	HN, M6	2	

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