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SEMI AUTOMATIC POLYPROPYLENE



# STRAPPING MACHINE IMPACT



# 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. 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 unsufficient capacity will cause a drop in line voltage resulting in loss of power and overheating. Refer to the following table:

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

#### 3. 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.

#### 4. 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.

#### 5. 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.

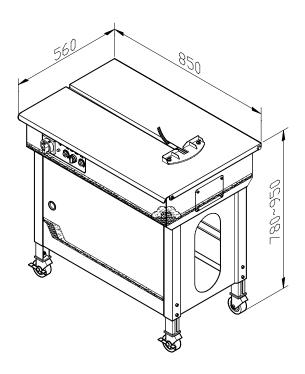
#### **6. Basic Specifications**

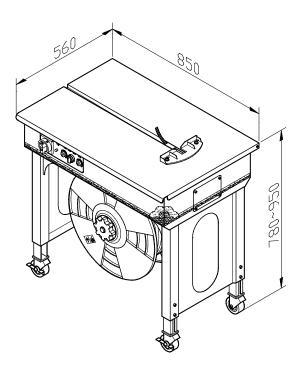
System configuration: 1L+N+PE1L+N+PENominal power: 0.5KW 0.5KW Rated current: 2A 3A 220V/230V/240V 110V Rated voltage: Rated frequency: 50Hz 60Hz Type of current: ACAC

#### 7. 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  $3x1.0m\,\text{m}^3$ .

#### 8. Technical Date





TP-501(Enclosed Frame)

TP-502(Open Frame)

Sealing method: Heat

Strap width: 5 mm up to 13 mm
Strap reel diameter: 200 mm / 280mm

(If strap core is 280mm, you can take off the center drum to have core size 200mm.)

Width: 850 mm Depth: 560 mm

Height: minimum 780 mm

maximum 950 mm

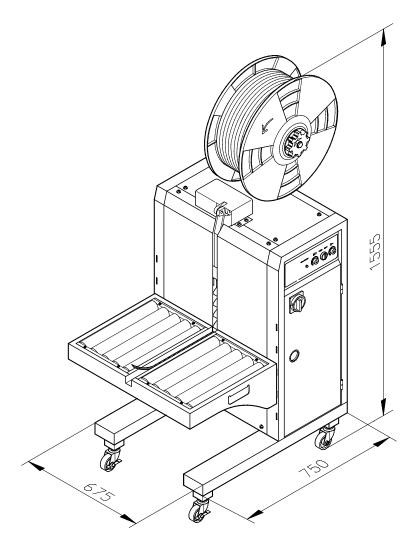
Electrical connection: AC 110V/220V/230V/240V

(50/60Hz), Single phase

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

Noise emission: 65dB (A)

#### 8. Technical Date



#### TP-501Y

Sealing method: Heat

Strap width: 5 mm up to 13 mm Strap reel diameter: 200 mm / 280mm

(If strap core is 280mm, you can take off

the center drum to have core size 200mm.)

 Width:
 675 mm

 Depth:
 750 mm

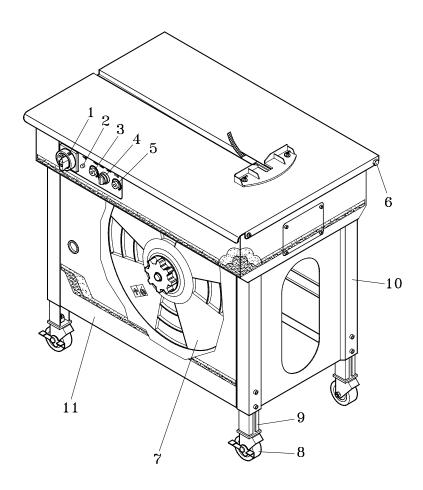
 Height:
 1555 mm

Electrical connection: AC 110V/220V/230V/240V

(50/60Hz), Single phase

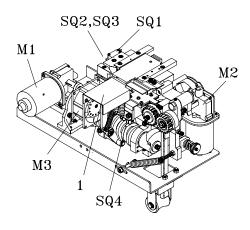
Weight: 100kg
Noise emission: 65dB (A)

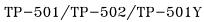
#### 9. Machine and Operating Elements

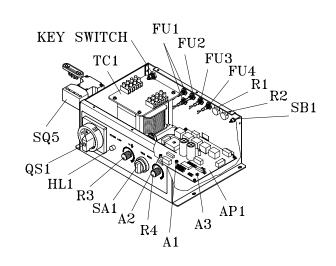


- 1. Main switch
- 2. Ready lamp, lamp will light up on when proper sealing temperature is reached
- 3. Potentiometer, strap feed length
- 4. Button, strap feed and reset
- 5. Potentiometer, strap tension adjustment
- 6. Table top, hinged
- 7. Strap reel
- 8. Castor, two lockable
- 9. Adjustable legs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

### 10. Installation Diagram







Main switch
Ready lamp
Strap feed length
Button, strap feed and reset
Strap tension adjustment
P.C.B. Unit control
Transformer
Fuse 110V/3A,
220V/230V/240V/2A (For power)
Fuse 1A (For P.C.B.)
Fuse 10A (For Motor)
Fuse 10A (For Heater)
Weld cooling timer
Heater temperature adjustment
Jogging switch
High tension knob

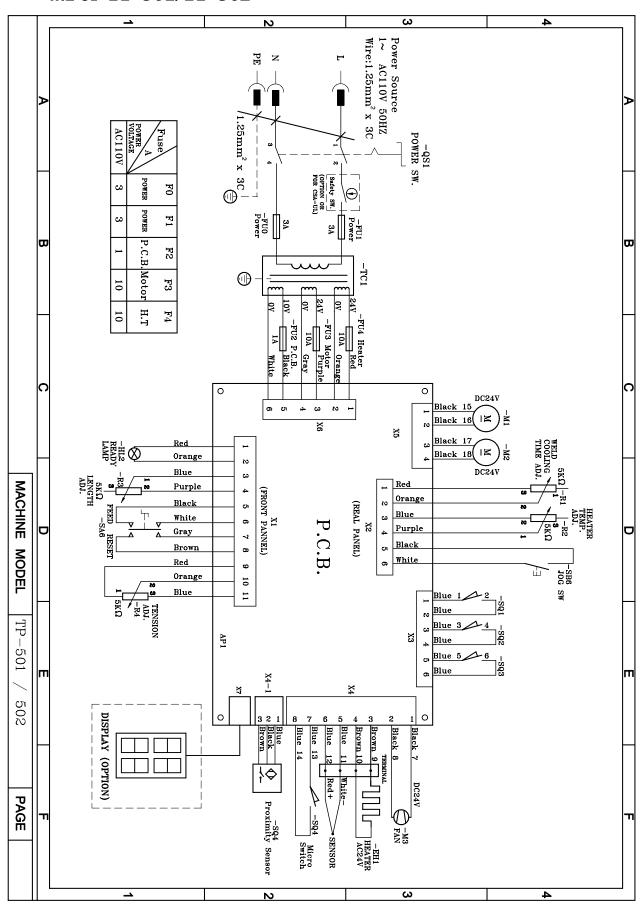
Feed length knob

**A2** 

<b>A3</b>	Heater temperature knob
<b>M</b> 1	Motor 1, unit drive
SQ1	Switch, start
SQ2	Switch, home position
SQ3	Switch, sealing position
SQ4	Switch, low tension (under 20 kgs)
SQ5	Safety switch
M2	Motor 2, strap feed and reverse
1	Heating unit
M3	Fan
KEY	SWITCH

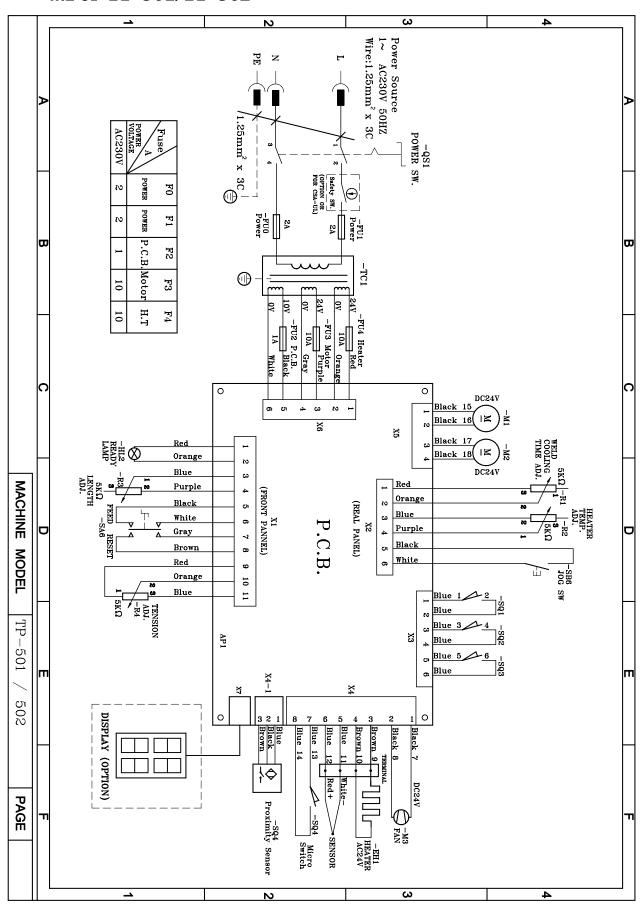
#### 11. Wiring Diagram

#### a.For TP-501/TP-502

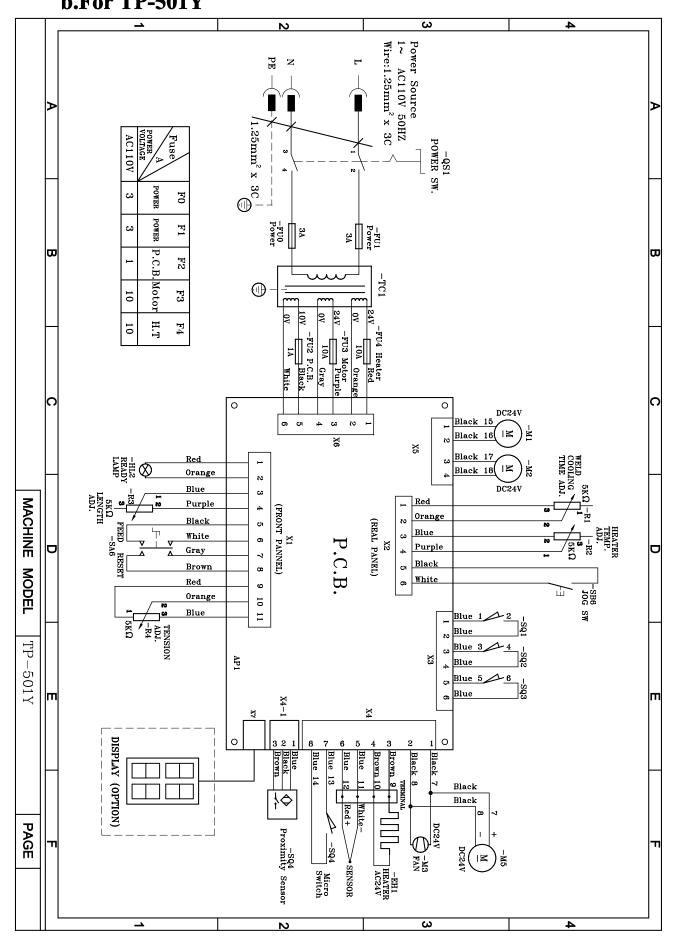


#### 11. Wiring Diagram

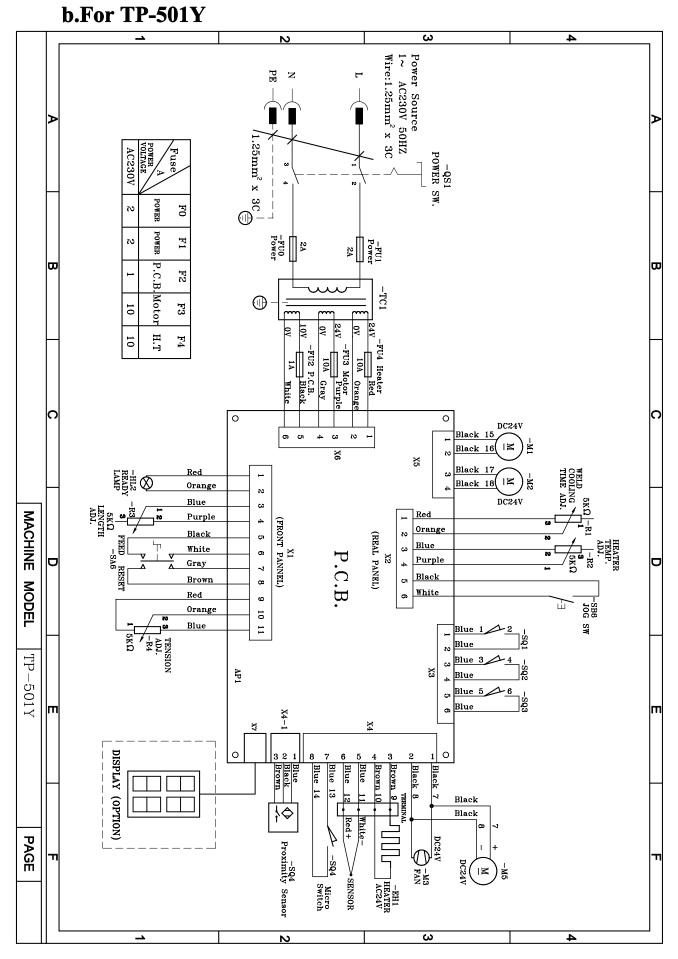
#### a.For TP-501/TP-502



# 11.Wiring Diagram b.For TP-501Y

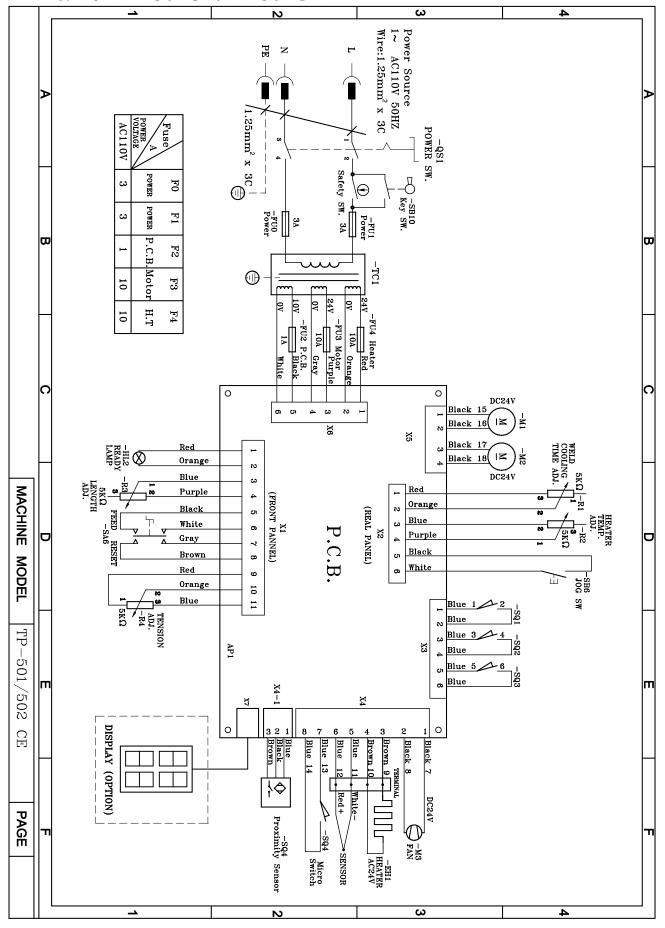


# 11. Wiring Diagram



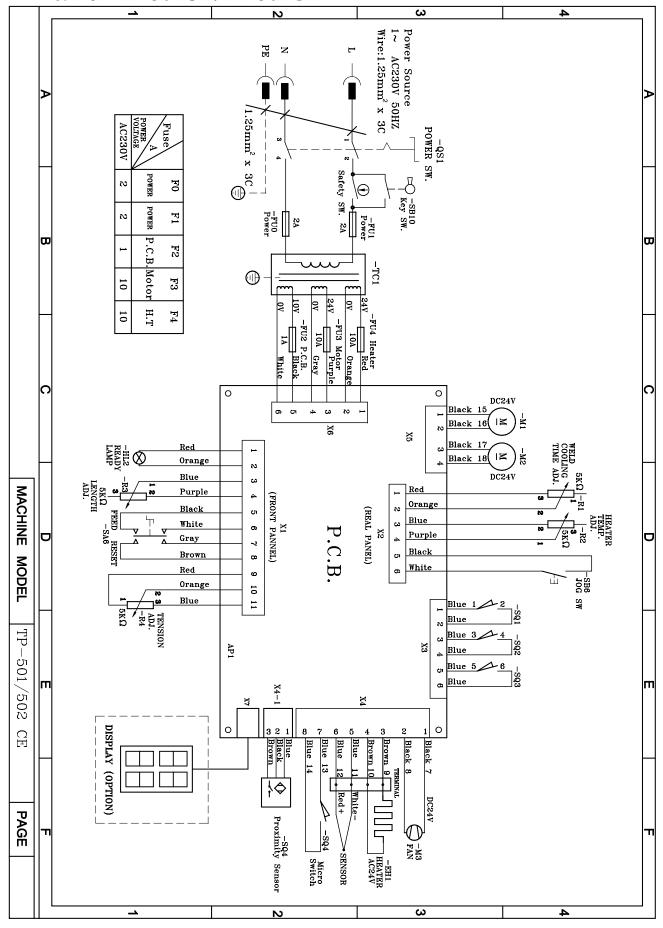
#### 11. Wiring Diagram (For TUV Certified Version)

#### c. For TP-501CE/TP-502CE



#### 11. Wiring Diagram (For TUV Certified Version)

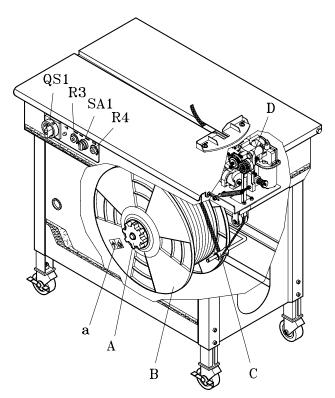
#### c. For TP-501CE/TP-502CE



#### 12. Start-up and Functioning Sequence

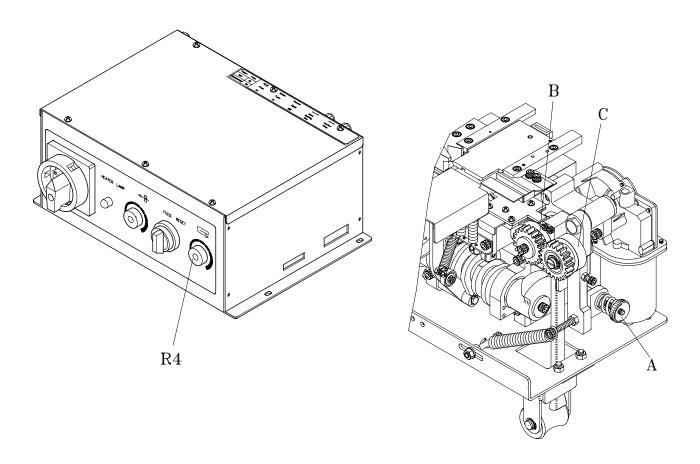
- (1) Put strap on the strap reel and thread the strap.
- (2) Turn main switch QS1 to ON. The heating element reaches the working temperature in approximately 1.5 minute.
- (3) Use potentiometer R3 to adjust the strap length.
- (4) Place the strap around the package to be strapped and insert the strap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

#### 13. Threading Diagram



- (1) Turn reel nut handle (A) left and remove it.
- (2) Remove the cover reel (B) and install the strap reel.
- (3) Make sure that the sense of rotation is counterclockwlse (a) when unrolling.
- (4) Put the reel cover 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.

#### 14. Strap Tension Adjustment



#### Adjustment:

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

If R4 (strap tension adjustment) 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.

#### 15. 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.

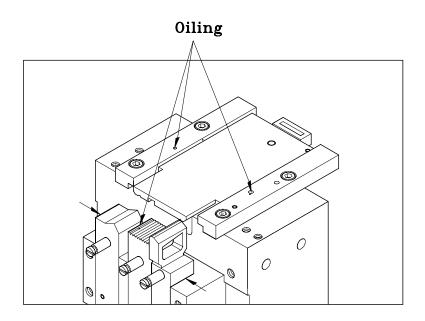
Keep the machine clean and take particular care of the strap guides.

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.

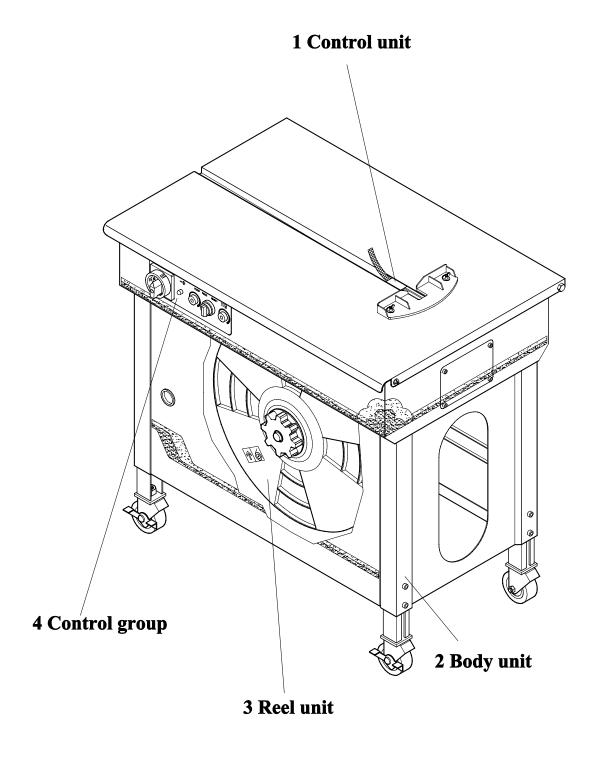
#### 16. Maintenance of the Unit



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

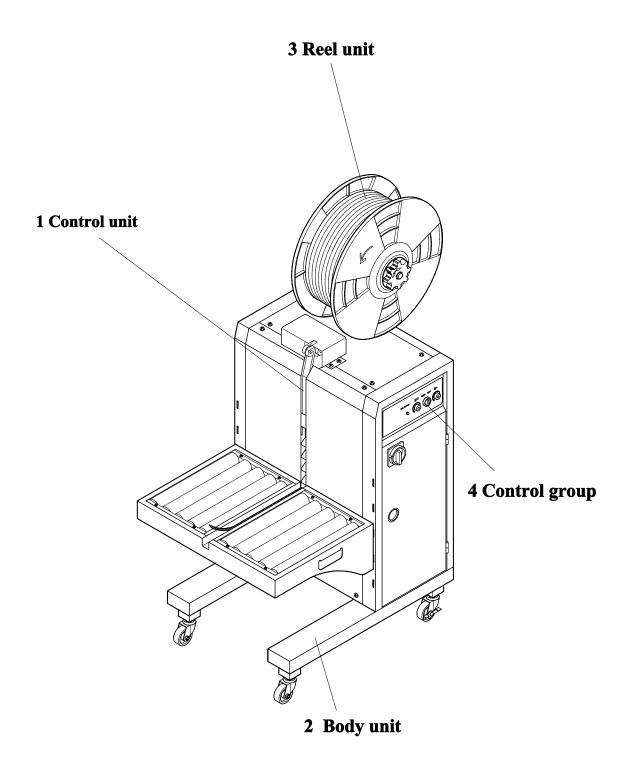
Note: Any other servicing shall be performed by an authorized service representative.

# CONSTUCTION AND UNITS (TP-501/TP-502)



shape	classification	shape	classification
	HBS	6	ER
	TMS		RR
	PMS	0	SR
	FMS		SP
	НВ		BR
	THS	9	MB
	HSS	0	KYA
	CAP	0	KYB
	HN		KYC
	WN		HBW
	FLG	<b>©</b>	PWA  § 8x § 12~ § 16x0.4~0.8t  § 6x § 13~ § 14x0.8~1.5t
(2)	NTE	0	PWB § 8x § 14~ § 16x1.3~1.5t § 6x § 15~ § 16x1.0~1.5t
	PN	0	PWC § 8x § 20~ § 23x2.0t § 6x § 16~ § 19x2.0t
0	PW	(i)	DS
0	SW		TTP
(3)	TW	(3)	FTP
	BWW		

# CONSTRUCTION AND UNITS (TP-501Y)



# **PART II**

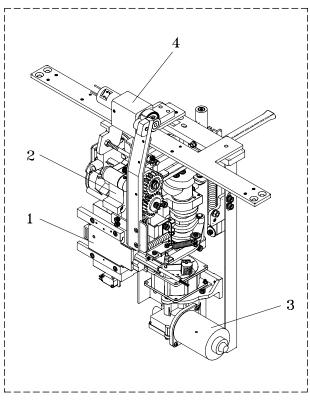
# **CONTENTS**

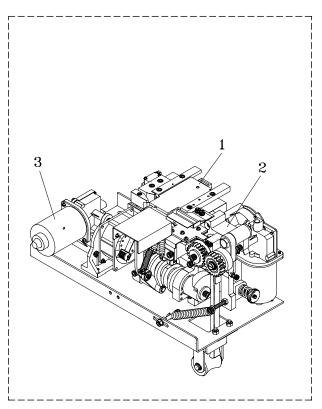
1. Control Unit	1~24
2. Body Unit	. 25~32-1
3. Reel Unit·····	· 33~41-1
4. Control Group	. 42~49

### 1-1

### **CONTROL UNIT**

#### T5-1-90000 T5-1-90001



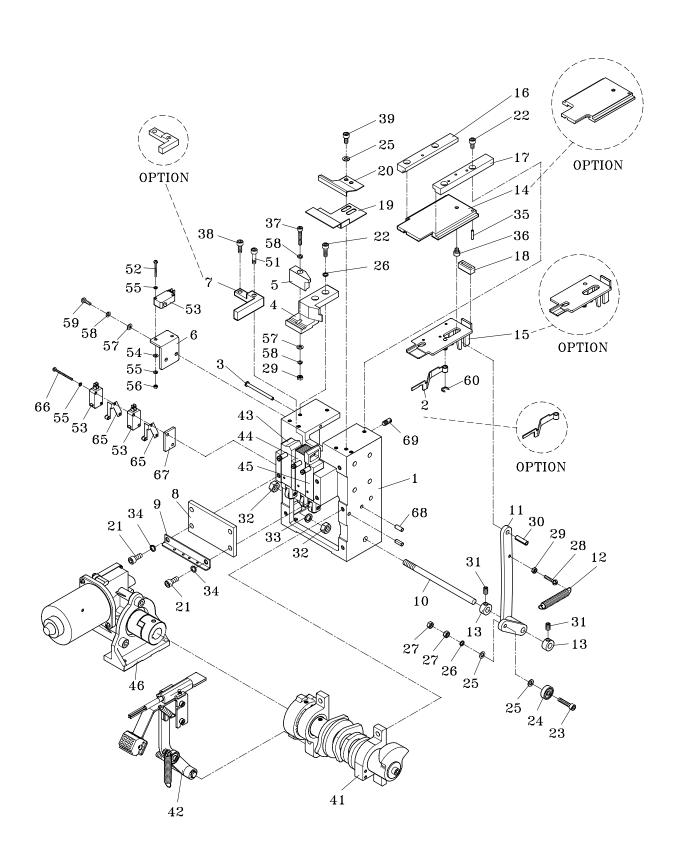


T5-1-90001

T5-1-90000

REF.	PART NO.	DESCRIPTION	Q'TY	REMARKS
	T5-1-90000	Control Unit (For TP-501/TP-502)	1	
	T5-1-90001	Control Unit (For TP-501Y)	1	
1	T5-1-10000	Control 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 19
4	T5-1-40000	Auto Strap Loading Group (For TP-501Y)	1	SEE PAGE 20

#### 1-1 CONTROL HEAD GROUP T5-1-10000



#### 1-1 CONTROL HEAD GROUP T5-1-10000

1-1		CONTROL HEAD GROOT		13-1-10000
REF.	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)	1	
3	T5-1-10130	Switch Pin	1	
4	T5-1-10140	Strap Guide (A) (For TP-501/TP-502)	1	
5	T5-1-10150	Strap Guide (B) (For TP-501/TP-502)	1	
6	T5-1-10160	Switch Bracket	1	
7	TA-239	Cutter Holder	1	
	T5-1-10740	Cutter Holder (For Small Package)	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	
	TA-080S	Slide (Stainless Steel Model)	1	
	T5-1-10710	Slide (For Small Package)	1	
	T5-1-10710S	Slide (For Small Package)	1	
		(Stainless Steel Model)		
15	T5-1-10250	Separator	1	
	T5-1-10250S	Separator (Stainless Steel Model)	1	
	T5-1-10720	Separator (For Small Package)	1	
	T5-1-10720S	Separator (For Small Package)	1	
		(Stainless Steel Model)		
16	TA-095	Guide (L)	1	
	TA-095S	Guide (L) (Stainless Steel Model)	1	
17	TA-226	Guide (R)	1	
	TA-226S	Guide (R) (Stainless Steel Model)	1	
18	TA-236	Gum	1	
19	TB-208	Front Plate (For TP-501/TP-502)	1	
20	TB-197	Guide Front (For TP-501/TP-502)	1	
21	HBS0616	HBS, M6x16	4	
22	HBS0512	HBS, M5x12	6	
	HBS0512S	HBS, M5x12 (Stainless Steel Model)	6	
23	HBS0525	HBS, M5x25	1	
24	BR635ZZ	Bearing, 635ZZ	1	
25	PW05	PW, M5	2	
26	SW05	SW, M5	5	
27	HN05	HN, M5	2	

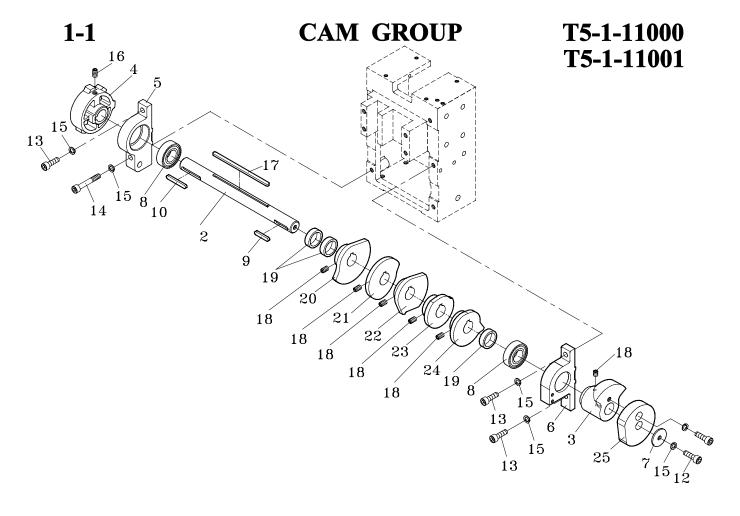
# 1-1 CONTROL HEAD GROUP T5-1-10000

REF.			<u> </u>	
NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
28	PMS0420	PMS, M4x20	1	
29	HN04	HN, M4	2	
30	SP0620	Spring Pin, 6x20	1	
31	HSS0606	HSS, M6x6	2	
32	HN08	HN, M8	2	
33	SW08	SW, M8	1	
34	SW06	SW, M6	4	
35	SP0314	Spring Pin, 3x14	1	
36	HBS0505.2	HBS, M5x5.2	1	
	HBS0505.2S	HBS, M5x5.2 (Stainless Steel Model)	1	
37	HBS0425	HBS, M4x25	1	
38	HBS0516	HBS, M5x16	1	
39	HBS0510	HBS, M5x10	2	
41	T5-1-11000	Cam Group (For TP-501/TP-502)	1	SEE PAGE 5
	T5-1-11001	Cam Group (For TP-501Y)	1	SEE PAGE 5
42	T5-1-12001	Heater Ass'y	1	SEE PAGE 6
	T5-1-12002	Heater Ass'y	1	SEE PAGE 6
43	T5-1-13000	Rear Bar Ass'y	1	SEE PAGE 7
	T5-1-13000S	Rear Bar Ass'y (Stainless Steel Model)	1	SEE PAGE 7
	T5-1-13200	Rear Bar Ass'y (For Small Package)	1	SEE PAGE 7
	T5-1-13200S	Rear Bar Ass'y (For Small Package)	1	SEE PAGE 7
		(Stainless Steel Model)		
44	T5-1-14000	Press Bar Ass'y	1	SEE PAGE 8
	T5-1-14000S	Press Bar Ass'y (Stainless Steel Model)	1	SEE PAGE 8
	T5-1-14200	Press Bar Ass'y (For Small Package)	1	SEE PAGE 8
	T5-1-14200S	Press Bar Ass'y (For Small Package)	1	SEE PAGE 8
		(Stainless Steel Model)		
45	T5-1-15000	Front Bar Ass'y	1	SEE PAGE 9
	T5-1-15000S	Front Bar Ass'y (Stainless Steel Model)	1	SEE PAGE 9
46	T5-1-30000	Transmission Group	1	SEE PAGE 19
51	HBS0525H	HBS, M5x25 (H)	1	
52	PMS0320	PMS, M3x20	2 3	
53	TF-006	Micro Switch		
54	PW03	PW, M3	2	
55	SW03	SW, M3	6	
56	HN03	HN, M3	2 3	
57	PW04	PW, M4		
58	SW04	SW, M4	4	
59	PMS0412	PMS, M4x12	2	
60	ER03	Snap Ring, E-3	1	

1-1

## CONTROL HEAD GROUP T5-1-10000

		CONTROL HEAD GROEF		15 1 10000
REF.	PART NO.	DESCRIPTION	Q'TY	REMARKS
	PART NO.  TF-009 PMS0335 T5-1-10770 SP0512 TA-089		Q'TY 2 1 2 1	

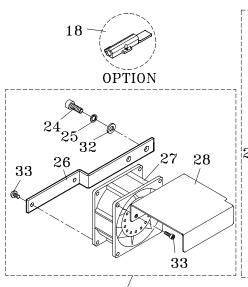


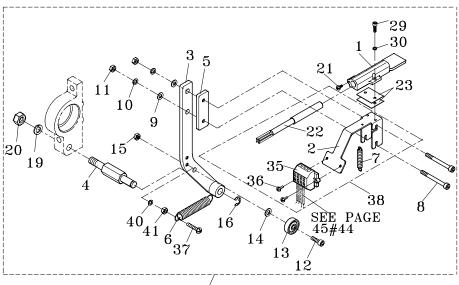
REF.	PART NO.	DESCRIPTION	Q'TY	REMARKS
NO.	TAKT NO.	DESCRIPTION		KEWAKKS
	T5-1-11000	Cam Group (For TP-501/TP-502)	1	
	T5-1-11001	Cam Group (For TP-501Y)	1	
2	T5-1-11121	Cam Shaft	1 1	
2 3	T5-1-11130	Tension Cam	1	
	T5-1-11131	Tension Cam (For TP-501Y)	1	
4	T5-1-11140	Limit Switch Contactor	$ \bar{1} $	
5	TA-008-2	Bearing Support (L)	1 1	
5 6	TA-017-2	Bearing Support (R)	1 1	
7 8 9	TB-223	Washer (For TP-501/TP-502)	1 1	
8	BR6003ZZ	Bearing, 6003ZZ	1 2 1	
	KYA050520	Key, 5x5x20	1 1	
10	KYA050535	Key, 5x5x35	1 1	
12	HBS0616	HBS, M6x16	1 2 3 1	
13	HBS0620	HBS, M6x20	3	
14	HBS0645H	HBS, M6x45 (H)	1 1	
15	SW06	SW, M6	6	
16	HSS0610	HSS, M6x10	1 1	
17	KYA0505101	Key, 5x5x101	1	
18	HSS0608	HSS, M6x8	6 3 1	
19	TA-241	Spacer	3	
20	TA-015A	Rear Bar Cam	1 1	
21	TA-015B	Heater Cam	1 1	
22	TA-012A	Grip Cam	1	
23	TA-012B	Grip Cam	1	
24	TA-014	Cam Separator	1	
25	T5-1-11350	Cam (For TP-501Y)	1	

#### 1-1-2

#### **HEATER ASS'Y**

T5-1-12001 T5-1-12002





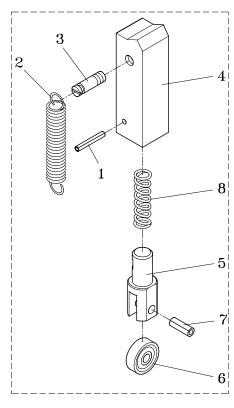
Т	5-1-12001	T5-1-12002		
REF.	PART NO.	DESCRIPTION	Q'TY	REMARKS
NO.				
	T5-1-12001	Fan Ass'y	1	
	T5-1-12002	Heater Ass'y	1	
1	T5-1-12110	Heater Tongue	1	
2	T5-1-12121	Heater Bracket	1	
3	TB-102	Heater Arm	1	
4	TB-103	Pin	1	
5	TB-107	Side Plate	1	
6	TB-114	Return Spring	1	
7	TB-115	Spring	1	
8	HBS0440HS	HBS, M4x40 (H) (SUS)	2	
9	PW04S	PW, M4 (SUS)	2	
10	SW04S	SW, M4 (SUS)	2	
11	HN04S	HN, M4 (SUS)	2	
12	HBS0516	HBS, M5x16	1	
13	BR635ZZ	Bearing, 635ZZ	1	
14	PW05	PW, M5	1	
15	HN05	HN, M5	1	
16	ER06	Snap Ring, E-6	1	
18	T5-1-12280	Heater Tongue (For Small Package)	1	
19	SW08	SW, M8	1	
20	HN08	HN, M8	1	
21	TMS0308S	TMS, M3x8 (SUS)	1	
22	T5-1-12320	Heater	1	
23	T5-1-12330	Heat-Insulation	2	

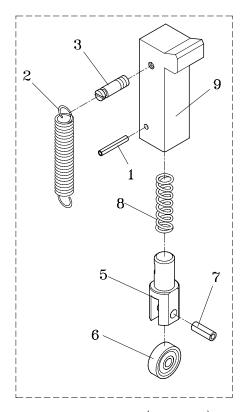
# 1-1-2

#### HEATER ASS'Y FAN ASS'Y

T5-1-12001 T5-1-12002

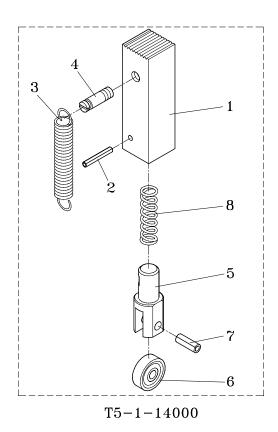
REF.	PART NO.	DESCRIPTION	Q'TY	REMARKS
NO. 24			2	
24 25	HBS0616 SW06	HBS, M6x16 SW, M6	2	
26	T5-1-12360	Fan Support	1	
27	T5-1-12370	Fan	1	
28	T5-1-12380	Fan Cover (For TP-501/TP-502)	1	
29	HBS0308S	HBS, M3x8 (SUS)	1	
30	SW03S	SW, M3 (SUS)	1	
32	PW06A	PW, M6 (A)	2	
33	TMS0408	TMS, M4x8	4	
35	T5-1-12451	Heater Terminal	1	
36	PMS0306	PMS, M3x6	2	
37	PMS0420	PMS, M4x20	1	
38	T5-1-12003	Heater A'ssy	1	
40	SW04	SW, M4	1	
41	HN04	HN, M4	1	

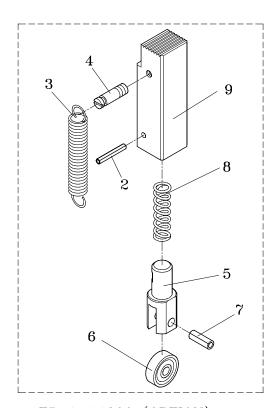




T5-1-13000 T5-1-13200 (OPTION)

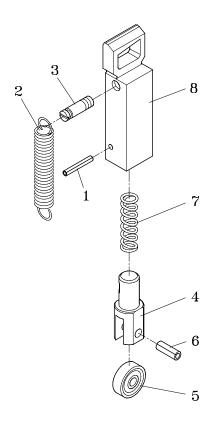
REF.	PART NO.	DESCRIPTION	Q'TY	REMARKS
	T5-1-13000	Rear Bar Ass'y	1	
	T5-1-13200	Rear Bar Ass'y (For Small Package)	1	
1	SP0318	Spring Pin, 3x18	1	
2	TA-071	Return Spring	1	
3	TA-073	Spring Hook	1	
4	TA-074	Rear Bar	1	
	TA-074S	Rear Bar (Stainless Steel Model)	1	
5	TA-075	Plunger	1	
6	BR635ZZ	Bearing, 635ZZ	1	
7	SP0514	Spring pin, 5x14	1	
8	TA-078	Spring	1	
9	T5-1-13190	Rear Bar (For Small Package)	1	
	T5-1-13190S	Rear Bar (For Small Package)	1	
		(Stainless Steel Model)		



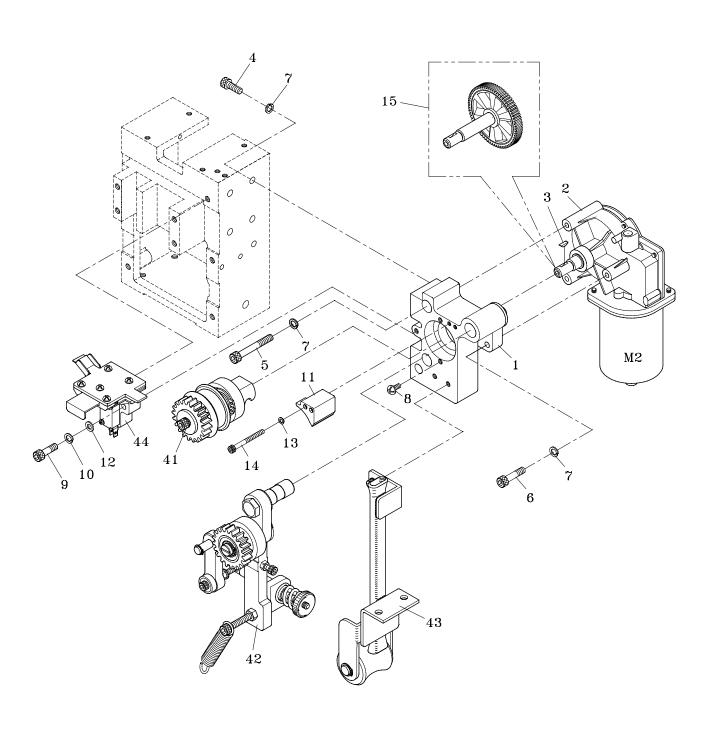


T5-1-14200 (OPTION)

REF.	PART NO.	DESCRIPTION	Q'TY	REMARKS
	T5-1-14000	Rear Bar Ass'y	1	
	T5-1-14200	Rear Bar Ass'y (For Small Package)	1	
1	TA-069	Press Bar	1	
	TA-069S	Press Bar (Stainless Steel Model)	1	
2	SP0318	Spring Pin, 3x18	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, 5x14	1	
8	TA-078	Spring	1	
9	T5-1-14190	Press Bar (For Small Package)	1	
	T5-1-14190S	Press Bar (For Small Package)	1 1	
		(Stainless Steel Model)		

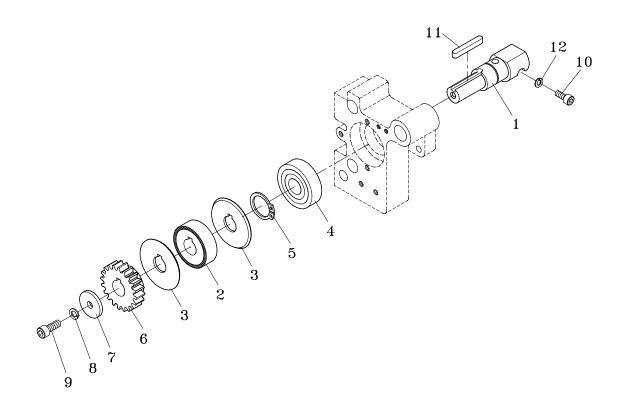


REF.	PART NO.	DESCRIPTION	Q'TY	REMARKS
NO.	TAKT NO.	DESCRIPTION	~	
1	SP0318	Spring Pin, 3x18	1	
2	TA-071	Return Spring	1 1	
3	TA-073	Spring Hook	1	
4	TA-075	Plunger	1	
5	BR635ZZ	Bearing, 635ZZ	1	
6	SP0514	Spring Pin, 5x14	1	
7	TA-078	Spring	1	
8	TA-079	Front Bar	1	
	TA-079S	Front Bar (Stainless Steel Model)	1	

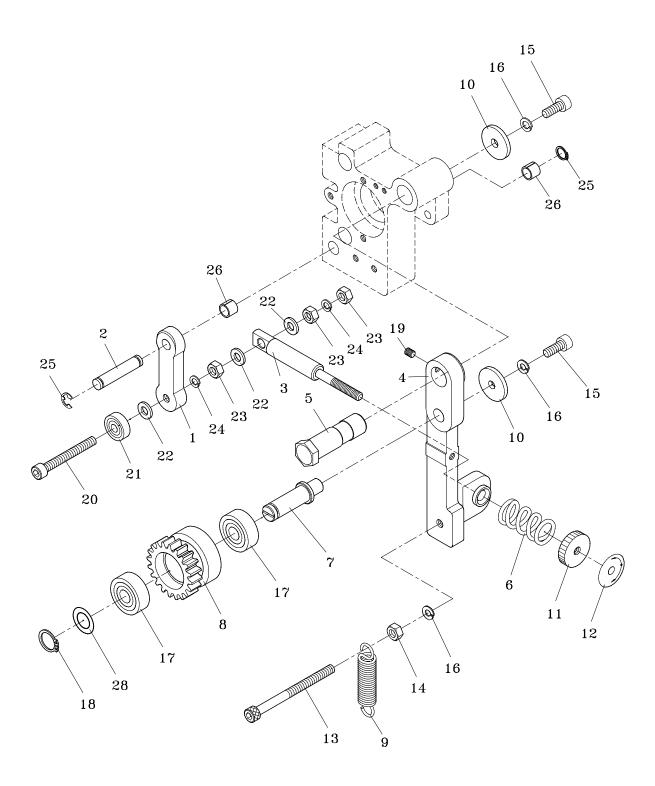


### 1-2 FEED GROUP T5-1-20000

REF.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1	T5-1-20110	Bracket	1	
2	T5-1-20120	Motor (M2)	1	
3	KYC0310	Key, 3x10	1	
4	HBS0620	HBS, M6x20	3	
5	HBS0650H	HBS, M6x50 (H)	2	
6	HBS0630H	HBS, M6x30 (H)	$\begin{array}{ c c c c }\hline 1 & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ $	
7	SW06	SW, M6	6	
8				
	TMS0508	TMS, M5x8	2	
9	HBS0525H	HBS, M5x25 (H)	2 2	
10	SW05	SW, M5		
11	T5-1-20210	Guide	1	
12	PW05	PW, M5	1	
13	SW04	SW, M4	2 2	
14	HBS0440H	HBS, M4x40 (H)		
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 (For TP-501/TP-502)	1	SEE PAGE 13
	T5-1-22001	Roller Arm Ass'y (For TP-501Y)	1	SEE PAGE 15
43	T5-1-23000	Feed Shooter Ass'y	1	SEE PAGE 17
.5		•		
	T5-1-23002	Feed Shooter Ass'y (For TP-501Y)	1	SEE PAGE 17
44	T5-1-24005	Strap Guide Ass'y	1	SEE PAGE 18



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	BR6004ZZ	Bearing,6004ZZ	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,M6x16	1	
10	HBS0516	HBS,M5x16	1	
11	KYA050535	Key,5x5x35	1	
12	SW05	SW,M5	1	



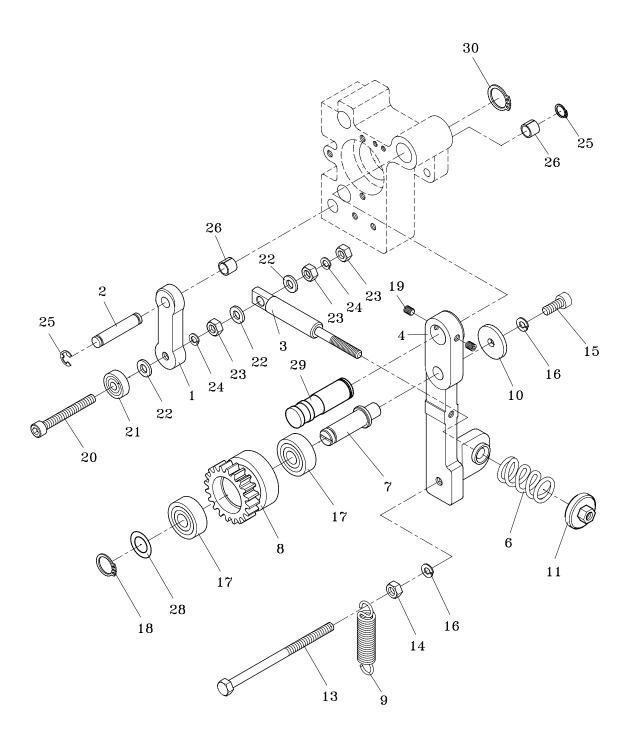
#### 1-2-2

#### 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	T5-1-22220	Name Plate	1	
13	HBS0675H	HBS, M6x75 (H)	1	
14	HN06	HN, M6	1	
15	HBS0616	HBS, M6x16	2	
16	SW06	SW, M6	3	
17	BR6001ZZ	Bearing, 6001ZZ	2	
18	SR12	Stop Ring, S-12	1	
19	HSS0508	HSS, M5x8	$\begin{bmatrix} 1 \\ 1 \end{bmatrix}$	
20	HBS0540	HBS, M5x40	$\begin{bmatrix} 1 \\ 1 \end{bmatrix}$	
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	$\frac{1}{2}$	
_		, , , , , , , , , , , , , , , , , , , ,		
28	T5-1-22380	Spacer	1	
		<u>l</u>		

(For TP-501Y)



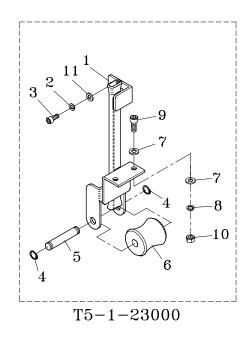
#### ROLLER ARM ASS'Y (For TP-501Y)

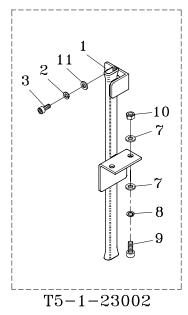
T5-1-22001

(FUI 11-3011)					
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		
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	1		
11	T7-1-22420	Nut	1		
13	HB06100H	HB, M6x100 (H)	1		
14	HN06	HN, M6	1		
15	HBS0616	HBS, M6x16	1		
16	SW06	SW, M6	2		
17	BR6001ZZ	Bearing, 6001ZZ	2		
18	SR12	Stop Ring, S-12	1		
19	HSS0508	HSS, M5x8	2		
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		
29	T5-1-22390	Shaft (For TP-501Y)	1		
30	SR15	Stop Ring, S-15	1		

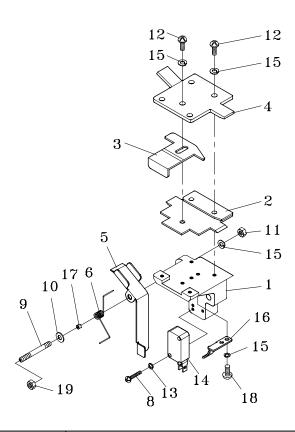
### 1-2-3 FEED SHOOTER ASS'Y

T5-1-23000 T5-1-23002



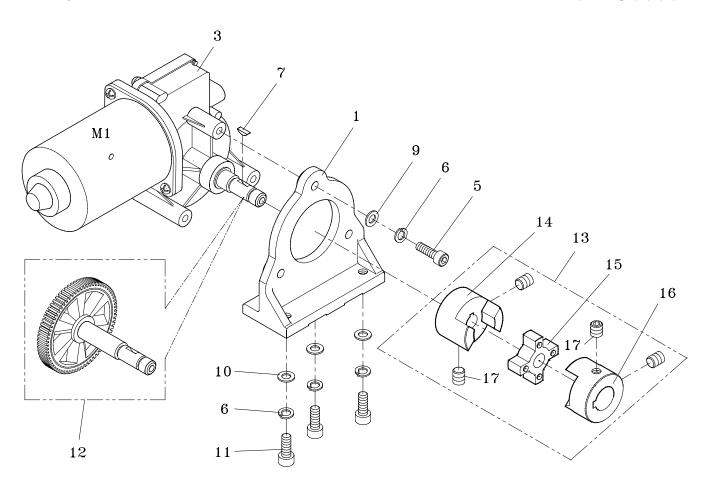


REF.	PART NO.	DESCRIPTION	Q'TY	REMARKS
	T5-1-23000	Feed Shooter Ass'y (For TP-501/TP-502)	1	
	T5-1-23002	Feed Shooter Ass'y (For TP-501Y)	1	
1	T5-1-23110	Feed Shooter (For TP-501/TP-502)	1	
	T5-1-23020	Feed Shooter (For TP-501Y)	1	
2	SW05	SW, M5	2	
3	HBS0512	HBS, M5x12	2	
4	SR10	Stop Ring, S-10 (For TP-501/TP-502)	2	
5	TC-048	Shaft (For TP-501/TP-502)	1	
6	TC-049	Roller (For TP-501/TP-502)	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	



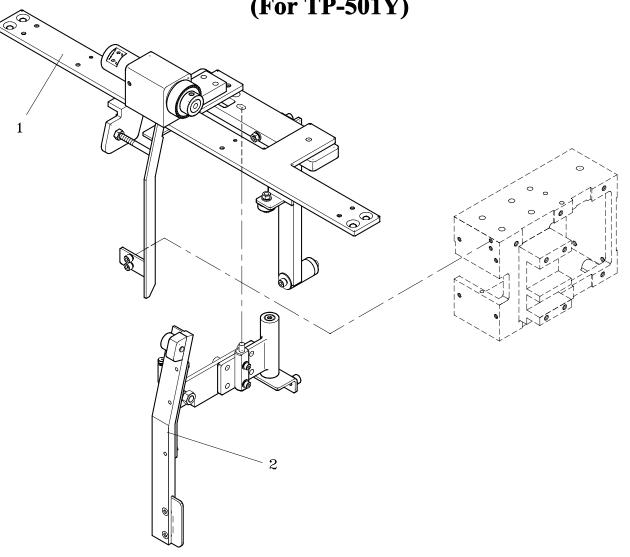
REF.	PART NO.	DESCRIPTION	Q'TY	REMARKS
NO.	TAKI NO.	DESCRI HON	Q 1 1	
1	T5-1-24110	Strap Guide Support	1	
2	T5-1-24120	Strap Guide (A)	1	
3	T5-1-24131	Strap Guide (B)	1	
4	T5-1-24142	Strap Guide Cover	1	
5	T5-1-24151	Strap Guide (C)	1	
6	T5-1-24182	Spring	1	
8	PMS0315	PMS, M3x15	2	
9	T5-1-24191	Spring Shaft	1	
10	PW04	PW, M4	1	
11	HN04	HN, M4	1	
12	PMS0412	PMS, M4x12	5	
13	SW03	SW, M3	2	
14	TF-006	Micro Switch	1 1	
15	SW04	SW, M4	8	
16	T5-1-24260	Tension Socket	1 1	
17	T5-1-24270	Spring Bush	1	
18	PMS0408	PMS, M4x8	2	
19	NTE04	NTE, M4	1	

### 1-3 TRANSMISSION GROUP T5-1-30000



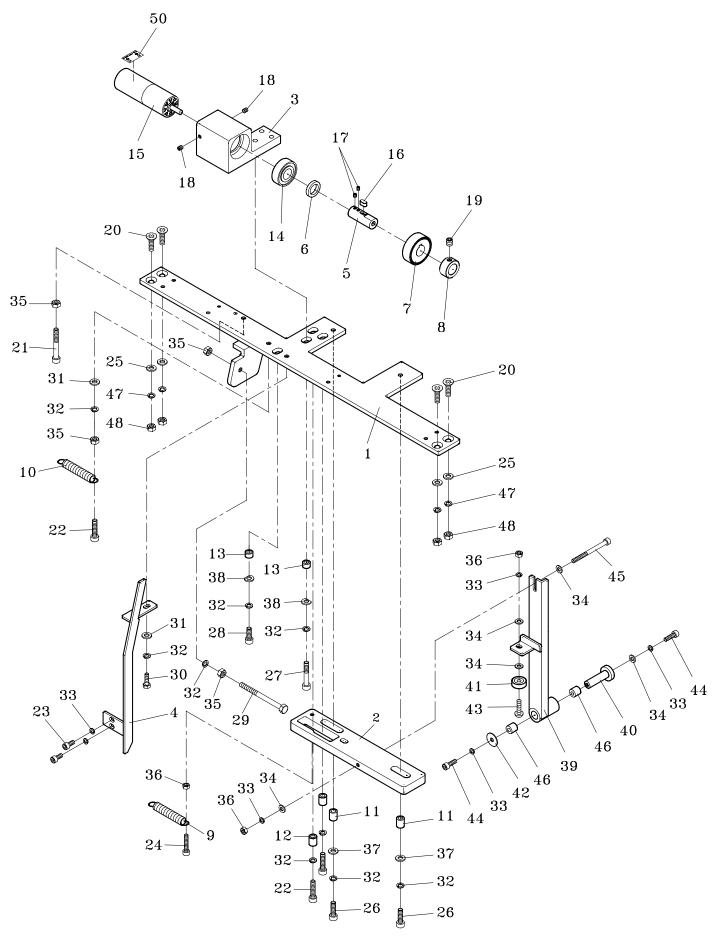
REF.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1	T5-1-30110	Main Motor Support	1	
3	T5-1-30130	Main Motor (M1)	1	
5	HBS0625	HBS,M6x25	3	
6	SW06	SW,M6	6	
7	KYC0310	Key,3x10	1 1	
9	PW06A	PW,M6 (A)	3	
10	PW06C	PW,M6 (C)	3	
11	HBS0616	HBS,M6x16	3	
12	T5-1-30220	Worm Gear For M1 Motor	1 1	
13	T5-1-30230	Flexible Coupling	1 1	
14	T5-1-30240	Hub (L.H.)	1 1	
15	T5-1-30250	Flexible Spacer	1 1	
16	T5-1-30260	Hub (R.H.)	1 1	
17	HSS0608	HSS,M6x8	4	

# 1-4 AUTO STRAP LOADING GROUP T5-1-40000 (For TP-501Y)



REF.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1	T5-1-41000	Feeding Motor Ass'y	1	SEE PAGE 21
2	T5-1-42000	Auto Strap Loading Guide Ass'y	1	SEE PAGE 23

#### 1-4-1 FEEDING MOTOR ASS'Y T5-1-41000



### 1-4-1 FEEDING MOTOR ASS'Y T5-1-41000

	•	TEEDING MOTOR MODEL		10 1 11000
REF.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1	T5-1-41110	Support	1	
2	T5-1-41120	Slide Plate	1	
3	T5-1-41130	Bracket	1	
4	T5-1-41140	Guide Plate	1	
5	T5-1-41150	Connector	1	
6	T5-1-41160	Spacer	1	
7	T5-1-21120	Main Roller	1	
8	T7-2-10300	Collar	1	
9	T6-3-10120	Accumulator Balance Spring	1	
10	TB-114	Return Spring	1	
11	T5-1-41210	Collar		
12	T6-3-20170	Spacer 15 mm	2 2	
13	T5-1-41230	Spacer	2	
14	BR6202ZZ	Bearing, 6202ZZ	1	
15	T6-1-61210	Motor (M5-1)	1	
16	KYA050510	Key, 5x5x10	1	
17	HSS0404	HSS, M4x4	2	
18	HSS0506	HSS, M5x6	2	
19	HSS0606	HSS, M6x6	1	
20	FMS0620S	FMS, M6x20 (SUS)	4	
21	HBS0645H	HBS, M6x45 (H)	1	
22	HBS0630	HBS, M6x30	3	
23	HBS0512	HBS, M5x12	2	
24	HBS0525	HBS, M5x25	1	
25	PW06BS	PW, M6 (B)(SUS)	4	
26	HBS0620S	HBS, M6x20 (SUS)	2	
27	HBS0635H	HBS, M6x35 (H)	1	
28	HBS0616	HBS, M6x16	1	
29	HB0680H	HB, M6x80 (H)	1	
30	HB0612	HB, M6x12	1	
31	PW06A	PW, M6 (A)	2	
32	SW06	SW, M6	8	
33	SW05S	SW, M5 (SUS)	6	
34	PW05S	PW, M5 (SUS)	5	
35	HN06	HN, M6	3	
36	HN05S	HN, M5 (SUS)	3	
37	PW06B	PW, M6 (B)	2	
38	PW06D	PW, M6 (D)	2	
39	T5-1-41490	Arm	1	
40	T5-1-41500	Pin	1	

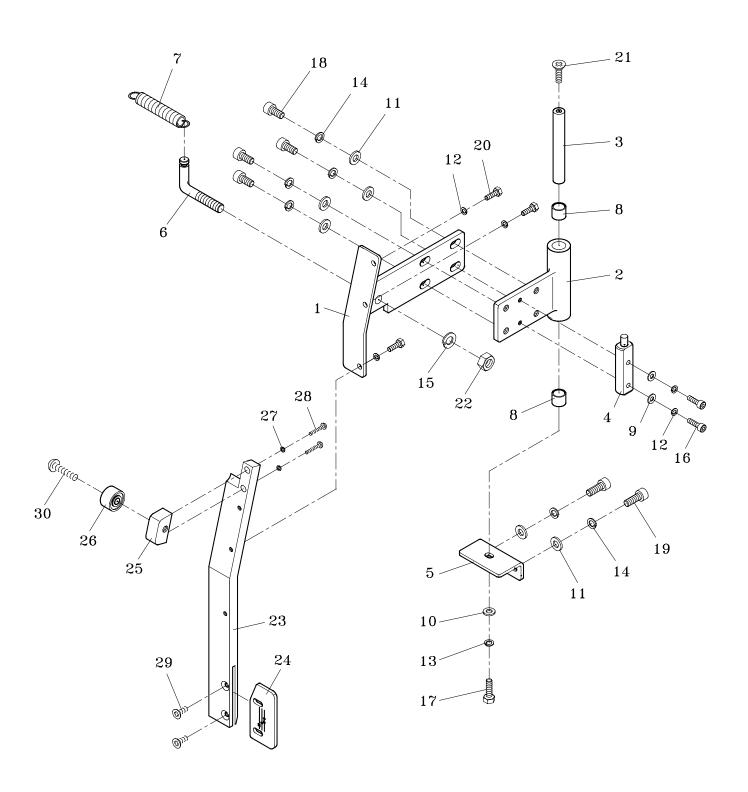
1-4-1

#### FEEDING MOTOR ASS'Y

T5-1-41000

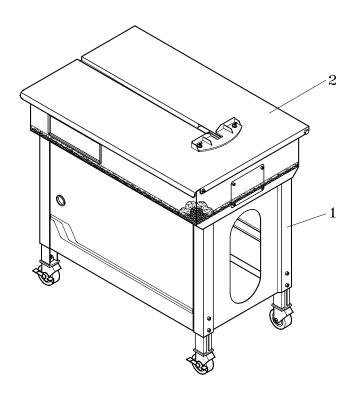
T-4-1	<u></u>	TEEDING MOTOR ADD T		13-1-41000
REF.	PART NO.	DESCRIPTION	Q'TY	REMARKS
41	BR635ZZ	Bearing, 635ZZ	1	
42	PW06C	PW, M6 (C)	1	
43	PMS0520	PMS, M5x20	1	
44	HBS0516S	HBS, M5x16 (SUS)	2	
45	HBS0560H	HBS, M5x60 (H)	1	
46	MB1010	Metal Bush, 1010	2	
47	SW06S	SW, M6 (SUS)	4	
48	HN06S	HN, M6 (SUS)	4	
50	T5-1-41600	Panel	1	
			<u> </u>	<u> </u>

### 1-4-2 AUTO STRAP LOADONG GUIDE ASS'Y T5-1-42000



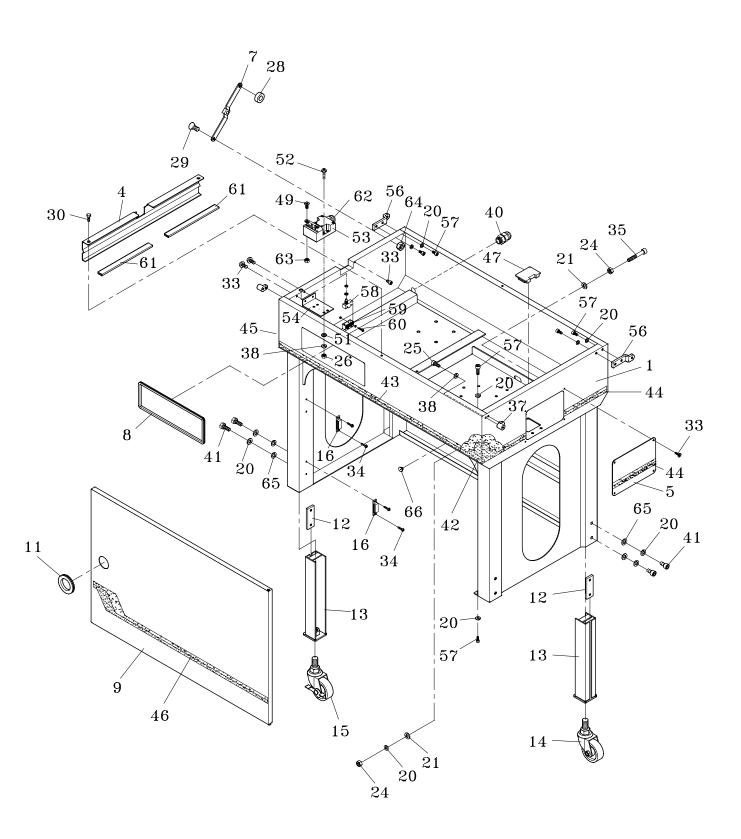
#### 1-4-2 AUTO STRAP LOADING GUIDE ASS'Y T5-1-42000

1-4-4	Z AUTU	STRAF LUADING GUIDE ASS	1	15-1-42000
REF.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1	T5-1-42110	Strap Guide Support	1	
2	T5-1-42120	Arm	$\begin{pmatrix} 1 \\ 1 \end{pmatrix}$	
3	T5-1-42130	Shaft	$\begin{pmatrix} 1 \\ 1 \end{pmatrix}$	
4	T5-1-42140	Pin	1	
5	T5-1-42150	Bracket	1	
6	T6-1-60160	Tension Arm Spring Hook L-Type	1	
7	T6-3-10120	Accumulator Balance Spring	1	
8	MB1010	Metal Bush, 1010	2	
9	PW04S	PW, M4 (SUS)	2	
10	PW05S	PW, M5 (SUS)	1	
11	PW06	PW, M6	6	
12	SW04S	SW, M4 (SUS)	5	
13	SW05S	SW, M5 (SUS)	1	
14	SW06	SW, M6	6	
15	SW08S	SW, M8 (SUS)	1	
16	HBS0416	HBS, M4x16	2	
17	HB0516	HB, M5x16	$\frac{1}{1}$	
18	HBS0612	HBS, M6x12	4	
19	HBS0616	HBS, M6x16	2	
20	HB0412	HB, M4x12	3	
21	FMS0512S	FMS, M5x12 (SUS)	1	
22	HN08	HN, M8	1	
	HN08S	HN, M8 (Stainless Steel Model)	1	
23	T5-1-42330	Strap Guide	1	
24	T5-1-42340	Adjusting Plate	1	
25	T5-1-42350	Support	1	
26	BRNART6R	Bearing, NART6R	1	
27	SW03S	SW, M3 (SUS)	2	
28	PMS0315	PMS, M3x15	2	
29	FMS0410	FMS, M4x10	2	
30	THS0625S	THS, M6x25 (SUS)	1	



REF.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1	T5-2-10000	Body Group (For TP-501/TP-502)	1	SEE PAGE 26
2	T5-2-30000 T5-2-20000	Body Group (For TP-501Y) Table Top Group (For TP-501/TP-502)	1	SEE PAGE 31 SEE PAGE 30
_	15 2 20000	ruble top Group (For 11 201/11 202)	•	

### (For TP-501/TP-502)

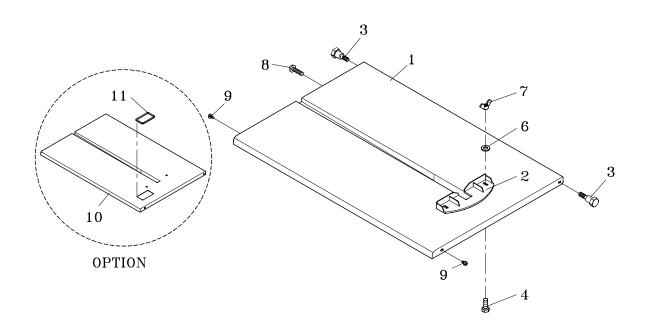


REF.				
NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1	T5-2-10110	Body Frame (For TP-501)	1	
	T5-2-10210	Body Frame (For TP-502)	1	
		, , , , , , , , , , , , , , , , , , ,		
4	T5-2-10140	Support	1	
5	T5-2-10150	Side Cover	1	
7	T5-2-10170	Hinge	1	
8	T5-2-10180	Grommet	1	
9	T5-2-10190	Front Door (For TP-501)	1	
11	TE-010	Grommet	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, M5x12	4	
26	HN05	HN, M5	6	
28	TC-068	Collar	1	
29	FMS0612	FMS, M6x12	1	
30	FMS0408	FMS, M4x8	2	
33	TMS0408	TMS, M4x8	7	
34	TMS0308	TMS, M3x8 (For TP-501)	4	
35	HBS0630	HBS, M6x30	1	
37	T5-2-10471	Collar	2	
38	SW05	SW, M5	8	
40	T5-2-10500	Grommet (PG9)	1	
41	HB0616	HB, M6x16	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	
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)	2	
51	PW05	PW, M5	4	

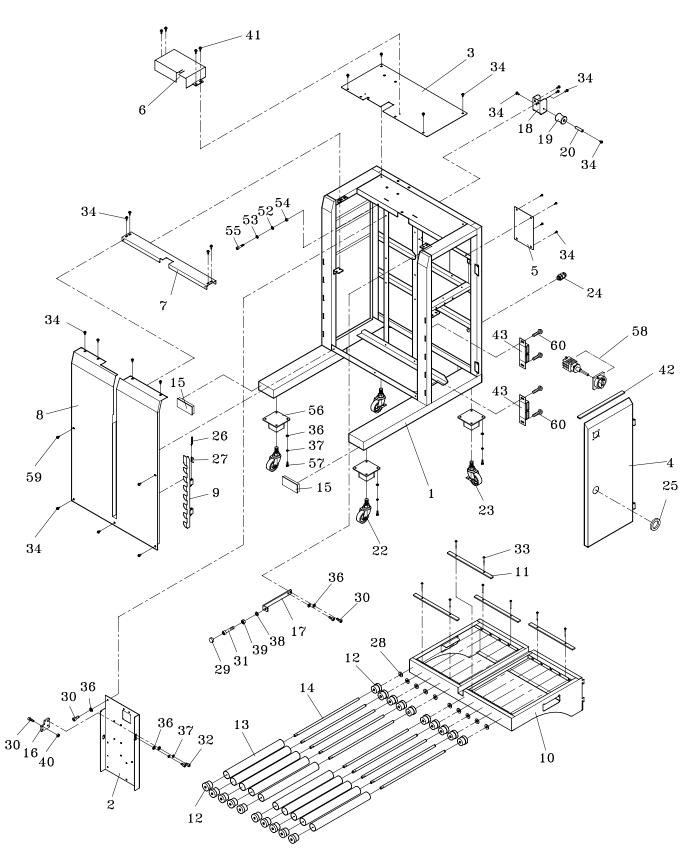
REF.		,		
NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
52	PMS0520	PMS, M5x20	4	_
53	TK-035	Interlock Safety Switch	1	
		(For TUV CE Version)		
54	T5-2-10640	Safety Switch Plate	1	
		(For TUV CE Version)		
56	T5-2-10660	Table Top Holder	2	
57	HBS0612	HBS, M6x12	6	
58	TF-018	Safety Limit Switch (OPTION For CSA/UL)	1	
59	TF-031	Switch Cover (OPTION For CSA/UL)	1	
60	PMS0430	PMS, M4x30 (OPTION For CSA/UL)	2	
61	T5-2-10710	Cushion	2	
62	T6-6-10980	Grommet (PG11)	1	
63	HN05	HN, M5	2	
64	NTE06	NTE, M6	1	
65	PW06A	PW, M6 (A)	8	
66	T7-5-20210	Rubber Plug (For TP-502)	1	



# 2-2 TOP PLATE GROUP T5-2-20000 (For TP-501/TP-502)



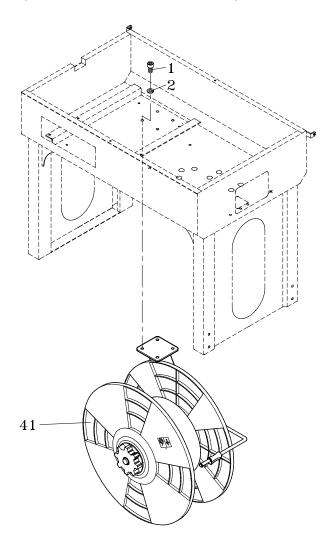
REF.	PART NO.	DESCRIPTION	Q'TY	REMARKS
NO.	FART NO.	DESCRIPTION	Q 1 1	KEWAKKS
1	T5-2-20110	Table Top (TP-501/TP-502)	1	
2	TC-004	Package Guide	1	
3	TC-070	Shaft	2	
4	HB0612	HB, M6x12	2	
6	PW06B	PW, M6 (B)	2	
7	WN06	WN, M6	2	
8	TMS0612	TMS, M6x12	1	
9	TMS0508	TMS, M5x8	2	
10	T5-2-20200	Table Top (OPTION For Display Version)	1	
11	TE-034	Grommet (OPTION For Display Version)	1	



REF.	PART NO.	DESCRIPTION	Q'TY	REMARKS	
1	T5-2-30110	Body Frame (For TP-501Y)	1		
	T5-2-30110S	Body Frame (For TP-501Y)	1		
		(Stainless Steel Model)			
2	T5-2-30120	Base Plate	1		
	T5-2-30120S	Base Plate (Stainless Steel Model)	1		
3	T5-2-30130	Table Top	1		
	T5-2-30130S	Table Top (Stainless Steel Model)	1		
4	T5-2-30141	Front Door	1		
	T5-2-30141S	Front Door (Stainless Steel Model)	1		
5	T5-2-30150	Cover	1		
	T5-2-30150S	Cover (Stainless Steel Model)	1		
6	T5-2-30160	Motor (M5) Cover	1		
	T5-2-30160S	Motor (M5) Cover(Stainless Steel Model)	1		
7	T5-2-30170	Support	1		
	T5-2-30170S	Support (Stainless Steel Model)	1		
8	T5-2-30180	Front Plate	1		
	T5-2-30180S	Front Plate (Stainless Steel Model)	1		
9	T5-2-30190	Flap	1		
	T5-2-30190S	Flap(Stainless Steel Model)	1		
10	T5-2-30200	Table Support	1		
	T5-2-30200S	Table Support (Stainless Steel Model)	1		
11	T5-2-30210	Plate	4		
	T5-2-30210S	Plate (Stainless Steel Model)	4		
12	T5-2-30220	Bush	20		
13	T5-2-30230	Table Roller	10		
14	T5-2-30240	Table Roller Shaft	10		
15	T5-2-30250	Grommet	4		
16	T5-2-30260	Plate	1		
17	T5-2-30270	Support	1		
18	T5-2-30280	Support	1		
	T5-2-30280S	Support (Stainless Steel Model)	1		
19	TC-049	Roller	1		
20	T5-2-30300	Shaft	1		
	T5-2-30300S	Shaft (Stainless Steel Model)	1		
22	TC-006	Caster (Free)	2		
	TC-006S	Caster (Free) (Stainless Steel Model)	2		
23	TC-007	Caster (Brake)	2		
	TC-007S	Caster (Brake) (Stainless Steel Model)	2		

REF.				
NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
24	T5-2-10500	Grommet (PG9)	1	
25	TE-010	Grommet	1	
26	T6-2-11140	RH Strap Guide Flap Pin (Rear)	1	
27	T6-2-11150	RH Strap Guide Flap Spring	1	
28	T7-1-10300	Washer	10	
29	T7-1-10330	Bumper	1	
30	HBS0616	HBS, M6x16	9	
31	HBS0840H	HBS, M8x40 (H)	1	
32	HBS0612	HBS, M6x12	2	
33	PMS0430HS	PMS, M4x30(H) (SUS)	8	
34	TMS0508S	TMS, M5x8 (SUS)	8	
36	PW06A	PW, M6 (A)	26	
	PW06AS	PW, M6 (A) (Stainless Steel Model)	26	
37	SW06	SW, M6	24	
	SW06S	SW, M6 (Stainless Steel Model)	24	
38	SW08S	SW, M8 (SUS)	1	
39	HN08	HN, M8	1	
	HN08S	HN, M8 (Stainless Steel Model)	1	
40	HN06	HN, M6	1	
41	TMS0408S	TMS, M4x8 (SUS)	4	
42	T5-2-30520	Grommet	1	
43	T6-5-10160	Magneg Catch (For TP-501Y)	2	
52	PW05S	PW, M5 (OPTION) (SUS)	2	
53	SW05S	SW, M5 (SUS)	3	
54	HN05S	HN, M5 (SUS)	3	
55	HBS0525H	HBS, M5x25 (H)	1	
	HBS0525HS	HBS, M5x25 (H) (Stainless Steel Model)		
56	T5-2-30660	Supporting Leg	4	
	T5-2-30660S	Supporting Leg (Stainless Steel Model)	4	
57	HB0616	HB, M6x16	16	
	HB0616S	HB, M6x16 (Stainless Steel Model)	16	
58	T6-6-40010	Main Power Switch	1	
59	FMS0508S	FMS, M5x8 (SUS)	2	
60	TMS0308	TMS, M3x8 (For TP-501Y)	4	
		, , , , , , , , , , , , , , , , , , , ,		

REEL UNIT (For TP-501/TP-502)

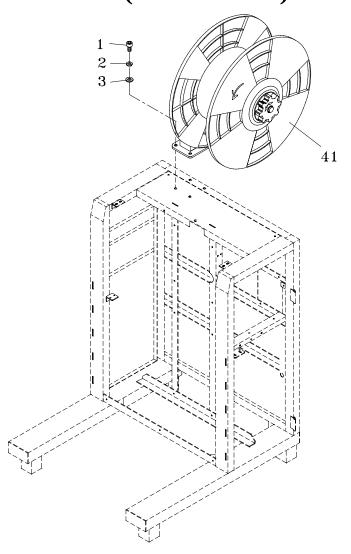


REF.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1	HBS0816	HBS, M8x16	4	
2	SW08	SW, M8	4	
41	T5-3-11000	Reel Control Group (TC-044A) (For TP-501/TP-502)	1	SEE PAGE 36



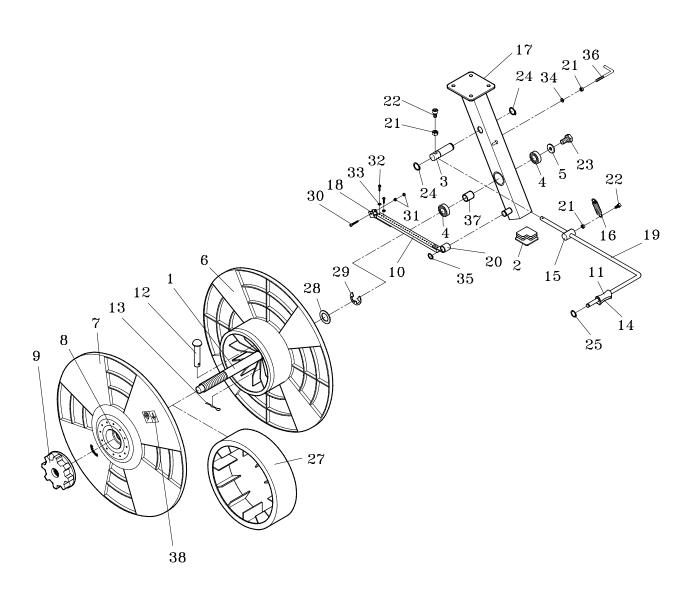
# REEL UNIT (For TP-501Y)

T5-3-10003



REF.	PART NO.	DESCRIPTION	Q'TY	REMARKS
NO.	TAKT NO.	DESCRIPTION	Q 1 1	KENIAKKS
1	HBS0816S	HBS, M8x16 (SUS)	4	
2	SW08S	SW, M8 (SUS)	4	
3	PW08BS	PW, M8 (B) (SUS)	4	
41	T6-4-20002	Reel Control Group	1	SEE PAGE 40
	T6-4-20002S	Reel Control Group	1	SEE PAGE 40
		(Stainless Steel Model)		

# 3-1 REEL CONTROL GROUP T5-3-11000 (For TP-501/TP-502)



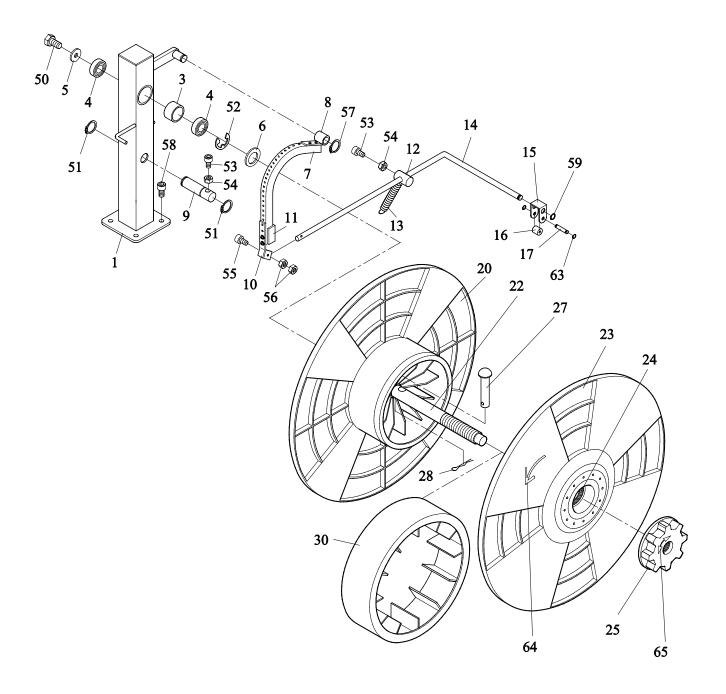
### 3-1 REEL CONTROL GROUP T5-3-11000 (For TP-501/TP-502)

REF.	DADENO	DEGCRIPTION	O ITEX	DEMARKS
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 (For TP-501/TP-502)	1	
20	TC-050	Lining Holder	1	
21	HN06	HN, M6	3	
22	HBS0616	HBS, M6x16	2	
23	HB0816	HB, M8x16	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, M4x25	1	
31	HN04	HN, M4	2	
32	PMS0416	PMS, M4x16	3	
33	PW04	PW, M4	3	
34	SW06	SW, M6	1	
35	SR15	Stop Ring, S-15	1	
36	TC-092	Holder	1	
37	TC-094	Spacer	1	
38	TE-096	Panel	1	





# 3-1 REEL CONTROL GROUP T6-4-20002S (For TP-501Y)



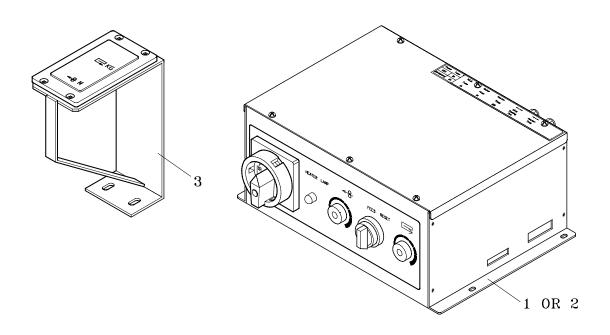
### 3-1 REEL CONTROL GROUP T6-4-20002S (For TP-501Y)

		,		
REF.	PART NO.	DESCRIPTION	Q'TY	REMARKS
NO.			,	
1	T6-4-20011	Reel Support	1	
	T6-4-20011S	Reel Support (Stainless Steel Model)	1	
3	TC-094	Spacer	1	
	TC-094S	Spacer (Stainless Steel Model)	1	
4	BR6003ZZ	Bearing, 6003ZZ	2	
5	TC-011	Washer	1	
	TC-011S	Washer (Stainless Steel Model)	1	
6	TC-076	Washer	1	
	TC-076S	Washer (Stainless Steel Model)	1	
7	T6-4-20017	Brake Belt	1	
8	TC-050	Lining Holder	1	
9	TC-009	Brake Shaft	1	
	TC-009S	Brake Shaft (Stainless Steel Model)	1	
10	TC-045-1	Fising Brake Lining Bracket	1	
11	T6-4-20021	Lining Fixed Bracket	1	
12	TC-024	Brake Adjuster	1	
	TC-024S	Brake Adjuster (Stainless Steel Model)	1	
13	TC-025	Spring	1	
	TC-025S	Spring (Stainless Steel Model)	1	
14	T6-4-20024	Brake Arm	1	
	T6-4-20024S	Brake Arm (Stainless Steel Model)	1	
15	TE-027	Roller Holder	1	
	TE-027S	Roller Holder (Stainless Steel Model)	1	
16	TE-028	Roller	1	
17	TE-029	Pin	1	
	TE-029S	Pin (Stainless Steel Model)	1	
		(4.44.		
20	TC-013	Inner Flange	1	
22	TD-003	Reel Shaft (LH)	1	
	TD-003S	Reel Shaft (LH) (Stainless Steel Model)		
23	TC-014	Outer Flange	1	
24	TC-015	Protector	1	
25	TD-016	Reel Nut Handle (LH)	1	
27	TC-020	Pin	1	
28	TC-021	Split Pin	1	
20	10 021	Spirt i iii	1	
30	TC-075	Center Drum 280MM (OPTION)	1	

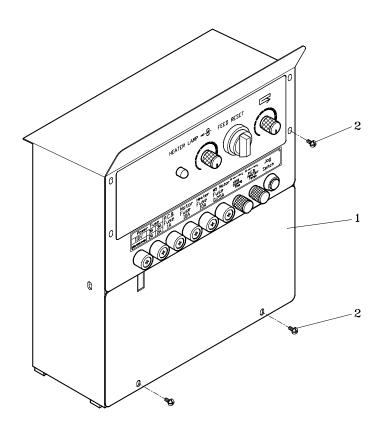
### 3-1 REEL CONTROL GROUP T6-4-20002S (For TP-501Y)

(FOI 11-3011)					
REF.	PART NO.	DESCRIPTION	Q'TY	REMARKS	
50	HB0816	HB, M8x16	1		
	HB0816S	HB, M8x16 (Stainless Steel Model)	1		
51	SR20	Stop Ring, S-20	2		
0.1	SR20S	Stop Ring, S-20 (Stainless Steel Model)	2		
52	ER19	Snap Ring, E-19	1		
	ER19S	Snap Ring, E-19(Stainless Steel Model)	1		
53	HBS0616	HBS, M6x16	2		
	HBS0616S	HBS, M6x16 (Stainless Steel Model)	2		
54	HN06	HN, M6	2		
	HN06S	HN, M6 (Stainless Steel Model)	2		
55	HBS0525H	HBS, M5x25 (H)	1		
	HBS0525HS	HBS, M5x25(H) (Stainless Steel Model)	1		
56	HN05	HN, M5	2		
	HN05S	HN, M5 (Stainless Steel Model)	2		
57	SR15	Stop Ring, S-15	1		
	SR15S	Stop Ring, S-15(Stainless Steel Model)	1		
58	HBS0830	HBS, M8x30	4		
	HBS0830S	HBS, M8x30 (Stainless Steel Model)	4		
59	SR10	Stop Ring, S-10	1		
	SR10S	Stop Ring, S-10 (Stainless Steel Model)	1		
63	ER04	Snap Ring, E-4	2		
03	ER04S	Snap Ring, E-4(Stainless Steel Model)	2		
64	TD-097	Panel	1		
65	TD-098	Panel	1		
05	12 070		1		

# 4 CONTROL GROUP T5-4-90000 (For TP-501/TP-502)

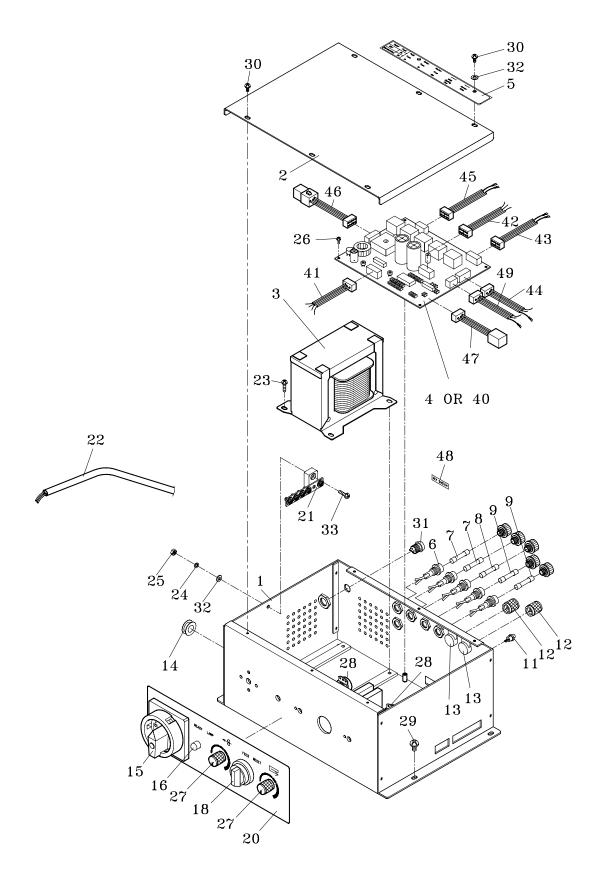


REF.	PART NO.	DESCRIPTION	Q'TY	REMARKS
NO.	PART NO.	DESCRIPTION	QII	KEWAKKS
1	T5-4-10000	Electric Control Unit	1	SEE PAGE 44
		(For Standard, CE, CSA-UL Version)		
	T5-4-10001	Electric Control Unit (For TUV CE Version)	1	SEE PAGE 44
2	T5-4-20000	Electric Control Unit (For with Display) (OPTION)	1	SEE PAGE 44
		(For Standard, CE, CSA-UL Version)		
	T5-4-20001	Electric Control Unit	1	SEE PAGE 44
		(For with Display) (For TUV CE Version)		
3	T5-4-30000	Indicator Unit (For with Metric Display)	1	SEE PAGE 46
		(OPTION)		
	T5-4-30001	Indicator Unit (For with Inch Display)	1	SEE PAGE 46
		(OPTION)		



REF.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1	T5-4-60001	Electric Control Unit	1	SEE PAGE 47
2	TMS0408	TMS, M4x8	6	
	TMS0408S	TMS, M4x8 (Stainless Steel Model)	6	

# 4-1 ELECTRIC CONTROL UNITS T5-4-10000 T5-4-10001 T5-4-20000 T5-4-20001



### 4-1 ELECTRIC CONTROL UNIT (For TP-501/TP-502)

T5-4-10001 T5-4-20000 T5-4-20001

T5-4-10000

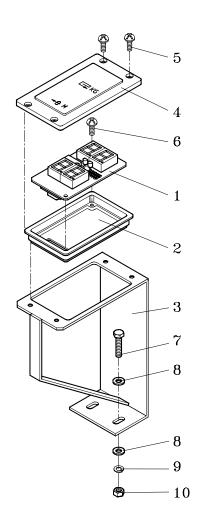
REF.	PART NO.	DESCRIPTION	Q'TY	REMARKS
NO.				
1	T5-4-10111	Box	1	
2	T5-4-10120	Cover	1	
3	T5-4-10130	Transformer (For 220V/230V/240V)	1 1	
	T5-4-10131	Transformer (For 110V)	1	
4	T5-4-10141	P.C.Board	1	
5	T5-4-10150	Panel	1	
6	T5-4-10160	Fuse Holder	5	
7	T6-6-30032	Fuse (For 110V/3A)	2	
	T6-6-30031	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	T5-4-10300	Panel	1	
21	T5-4-10310	Earth Plate (5P)	1	
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, M4x8	4	
24	SW04	SW, M4	1	
25	HN04	HN, M4	1	
26	PMS0306	PMS, M3x6	4	
27	T5-4-10221	Knob ( § 3.0)	2	
	T5-4-10222	Knob ( § 6.0)	2	
28	T5-4-10231	Variable Resistor (5K) ( § 3.0)	2	
	T5-4-10232	Variable Resistor (5K) ( § 6.0)	2	
29	PMS0610	PMS, M6x10	4	
30	TMS0408	TMS, M4x8	6	
31	T5-4-10410	Key Switch (For TUV CE Version)	1	
32	PW04	PW, M4	2	
33	TMS0412	TMS, M4x12	1	

### 4-1 ELECTRIC CONTROL UNIT (For TP-501/TP-502)

T5-4-10000 T5-4-10001 T5-4-20000 T5-4-20001

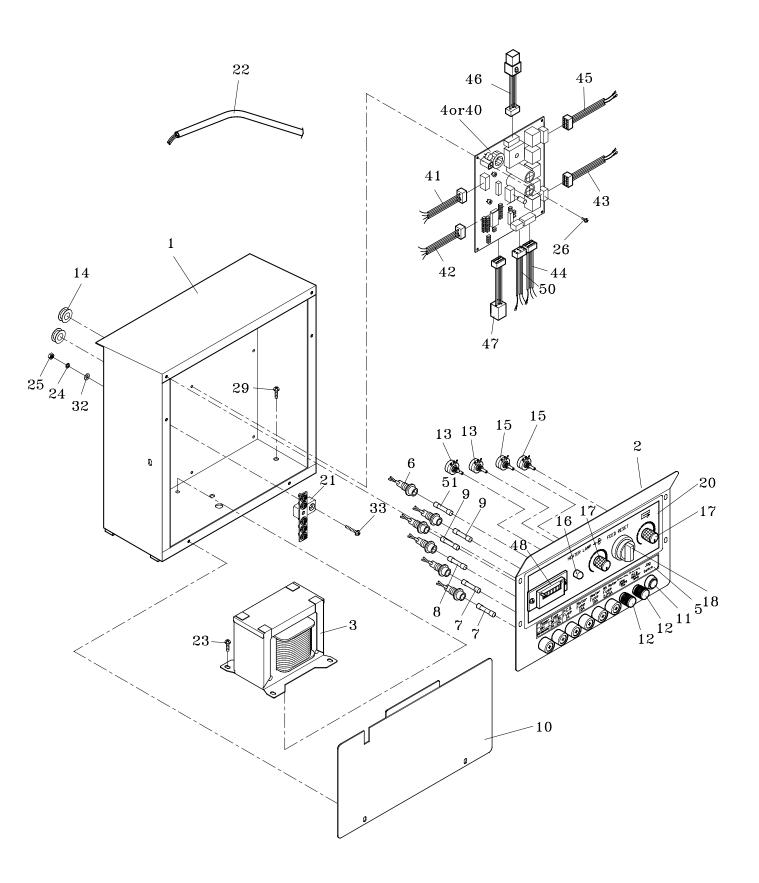
			13-4-20001	
REF.	PART NO.	DESCRIPTION	Q'TY	REMARKS
40	T5-4-20501	P.C.B. For Machine With Display For Metric Size (OPTION)	1	
	T5-4-20511	P.C.B. For Machine With Display For Inch Size (OPTION)	1	
41	T5-4-10510	Wire Ass'y X1 (For Electric Group)	1	
42	T5-4-10520	Wire Ass'y X2 (For Jog Switch /Weld Cooling 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)		
48	T5-4-10590	Panel	1	

### 4-3 INDICATOR UNIT (OPTION) T5-4-30000 T5-4-30001



REF.	PART NO.	DESCRIPTION	Q'TY	REMARKS
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 Inch Size)	1	
5	PMS0408	PMS, M4x8	4	
6	PMS0412	PMS, M4x12	2	
7	HB0616	HB, M6x16	2	
8	PW06C	PW, M6 (C)	4	
9	SW06	SW, M6	2	
10	HN06	HN, M6	2	

# 4-6 ELECTRIC CONTROL UNIT T5-4-60001 (For TP-501Y)



### 4-6 ELECTRIC CONTROL UNIT T5-4-60001

				1 1	
REF. NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS	
1	T5-4-60110	Box	1		
2	T5-4-60123	Cover	1		
	T5-4-60122	Cover (OPTION, For Counter)	1		
3	T5-4-10130	Transformer (For 220V/230V/240V)	1		
	T5-4-10131	Transformer (For 110V)	1		
4	T5-4-10141	P.C.Board	1		
5	T5-4-60151	Panel	1		
6	T5-4-10160	Fuse Holder	6		
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		
10	T5-4-60201	Cover	1		
11	T5-4-10210	Jogging Switch	1		
12	T5-4-10221	Knob	2		
13	T5-4-10231	Variable Resistor (5K)	2		
14	T5-4-10580	Grommet	2		
15	T5-4-10231	Variable Resistor (5K)( § 3.0)	2		
	T5-4-10232	Variable Resistor (5K)( ∮ 6.0)	2		
16	T5-4-10260	Heater Lamp	1		
17	T5-4-10221	Knob ( § 3.0)	2		
	T5-4-10222	Knob ( § 6.0)	2		
18	TG-036	Selector Switch (Feed/Reset)	1		
20	T5-4-60300	Panel	1		
	T5-4-60301	Panel (OPTION, For Counter)	1		
21	T5-4-10310	Earth Plate (5P)	1		
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, M4x8	4		
24	SW04	SW, M4	1		
25	HN04	HN, M4	1		
26	PMS0306	PMS, M3x6	6		
29	TMS0508	TMS, M5x8	4		
32	PW04	PW, M4	1		
33	TMS0412	TMS, M4x12	1		
40	T5-4-20501	P.C.B. For Machine With Display	1		
		For Metric Size (OPTION)			
	T5-4-20511	P.C.B. For Machine With Display	1		
		For Inch Size (OPTION)			

#### 4-6 ELECTRIC CONTROL UNIT T5-4-60001

REF. NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
41	T5-4-10510	Wire Ass'y X1 (For Electric Group)	1	
42	T5-4-10520	Wire Ass'y X2 (For Jogging Switch	1	
		/Weld Cooling Timer/Heater		
		Temperature Adjustment)		
43	T5-4-10530	Wire Ass'y X3 (For Micro Switch,	1	
		SQ1/SQ2/SQ3)		
44	T5-4-10541	Wire Ass'y X4 (For Heater/Fan/	1	
		Micro Switch SQ4)		
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 Dispaly)	1	
		(OPTION)		
48	T6-6-10530	Counter (OPTION)	1	
49	FTP0306	FTP, M3x6	2	
51	T5-4-60610	Fuse (0.25A)	1	
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03/2006