

CETM **CLEVELAND**
EQUIPMENT & MACHINERY COMPANY

CE-554TS & CE-557TS

Semi-Automatic Carton Sealing Machine

Operation Manual





Contents

1. Specification	4
2. Assembly and Adjustment	5
2.1 Wheel Assembly	5
2.1.2 Table Height Adjustment.....	5
2.4 Machine parts.....	6
2.5 Box Adjustment	7
2.6 Tape Installation.....	8
2.6.2 Tension adjustment.....	9
3. Operation procedures	10
4. Troubleshooting.....	12
5. Electrical Schematic.....	14
6. Parts Index / Diagrams.....	15
6.1 Machine frame	15
6.2 Tower	17
6.3 Driving Belts.....	19
6.5 Tape head	25
7. Features	29
8. Usage	29
9. Maintenance	29
10. Precautions	30

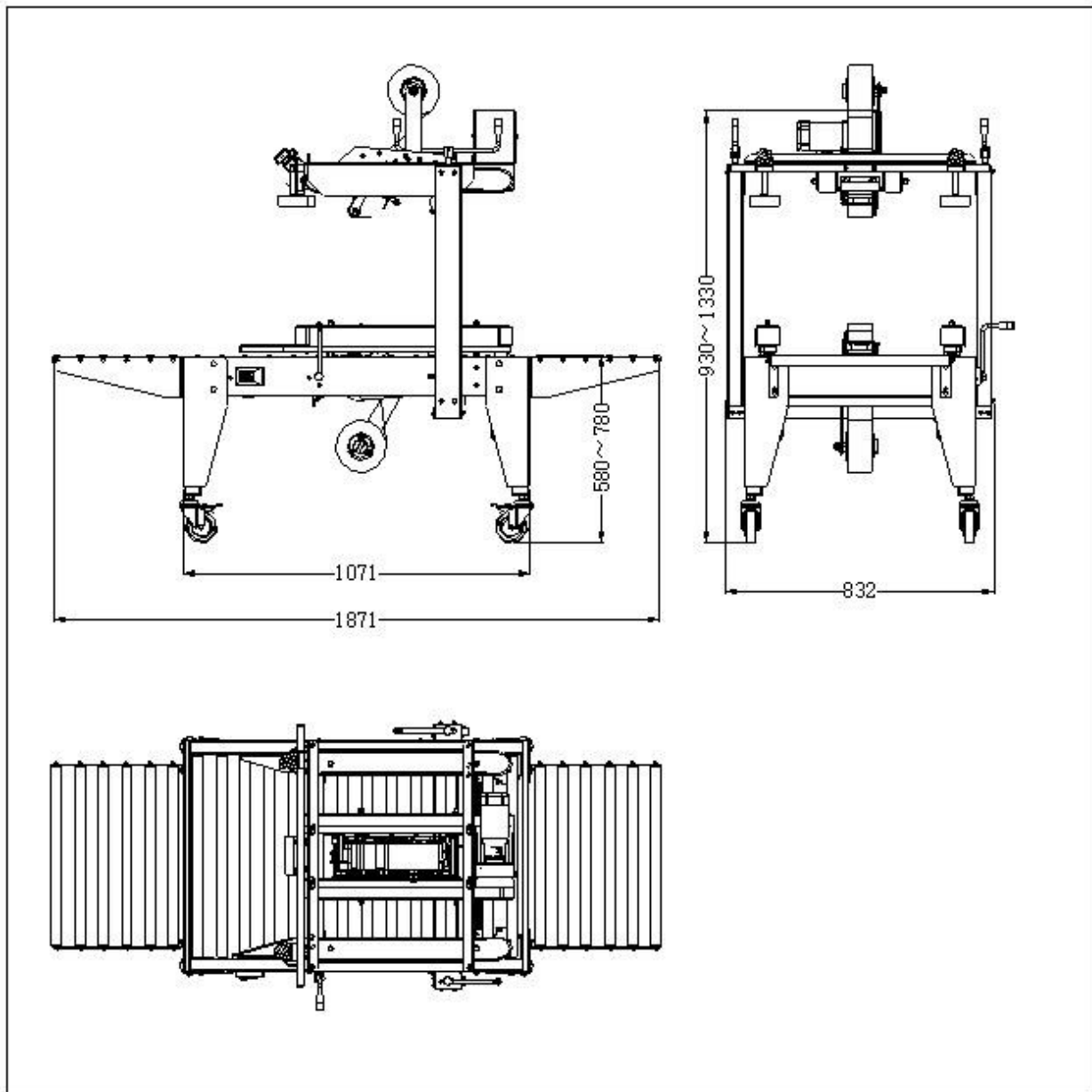


CE-554TS - CE-557TS User Manual

1. Specification

Model	Machine size(mm)				Machine weight(kg)	Box size(mm)		
	L	W	H(Adjustable)	Table height		L	W	H
CE554TS5050	107 1	832	930~1330	(Adjustable) 580~780	120	150~∞	150~500	110~500
CE554TS6060		932	930~1430		135		150~600	110~600
CE554TS7070		1032	930~1530		150		150~700	110~700

Tape width:48~75mm ; Sealing speed:15M/min; Power:1 ϕ , 220VAC,50HZ。



2. Assembly and Adjustment

2.1 Wheel Assembly

Assembly brake wheel and adjust the table height
(refer to right picture)

2.1.1 Assembly brake caster:

Screw caster into leg nut A; fasten nut B,

2.1.2 Table Height Adjustment

Adjust the leg length to make machine even on the ground
Method: Loose screws, IN or OUT the legs to the suitable length,
fasten the screws again.

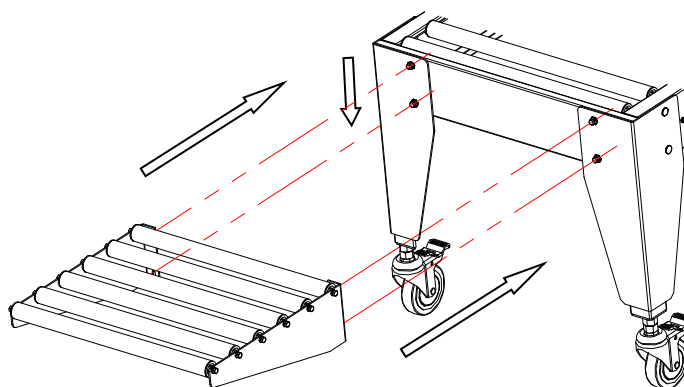
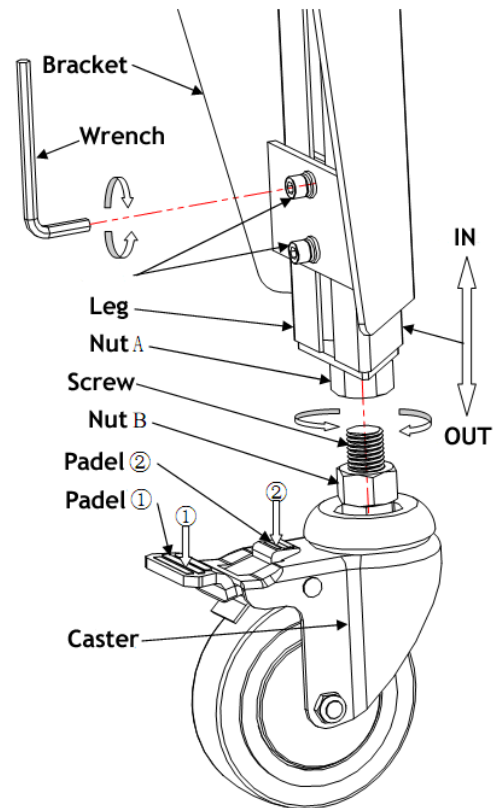
2.2 Move the machine

Fix a machine in a production line

Method: Stepping down pedal (1) to brake the caster; Stepping down pedal (2) to move the machine.

2.3 Install out-feed and in-feed rollers. (Refer to below figure).

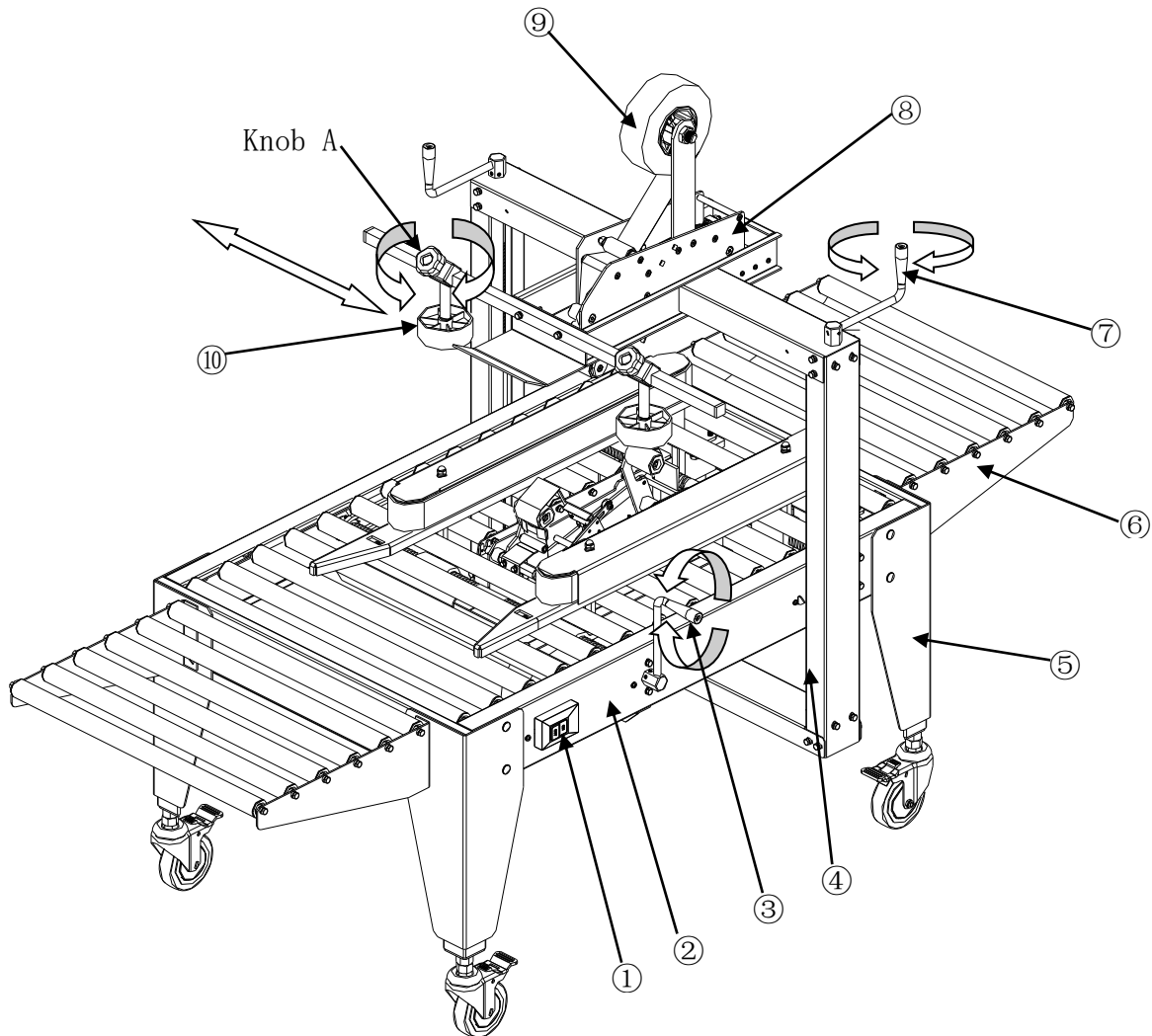
Hang rollers on machine body.





2.4 Machine parts

NO	Description	NO	Description
1	ON OFF switch	6	In-feed /out-feed roller
2	Machine body	7	Height adjustment crank handle
3	Width adjustment crank handle	8	Tape head
4	Tower frame	9	tape
5	Leg frame	10	Guide wheel



2.5 Box Adjustment:

Box width/height adjustment:

Loosen the guide wheel fixing knob A.

- Move the guide wheel directly with your hands until the distance between guide wheels is about 30-50mm wider than the width of the box.
- Adjust the distance between the side belts by crank (3) until it is 30-50mm wider than the box.
- Adjust the height by crank (7) until it is 30-50mm higher than the box
- Place a box onto the roller conveyor in proper position with the top and bottom covers folded.
- Adjust crank (3) until side belts press against both sides of the box.
- Adjust crank (7) until top belt press against top side of the box.
- Move the guide wheels so that they touch both sides of the box
- Tighten the guide wheel fix knobs.

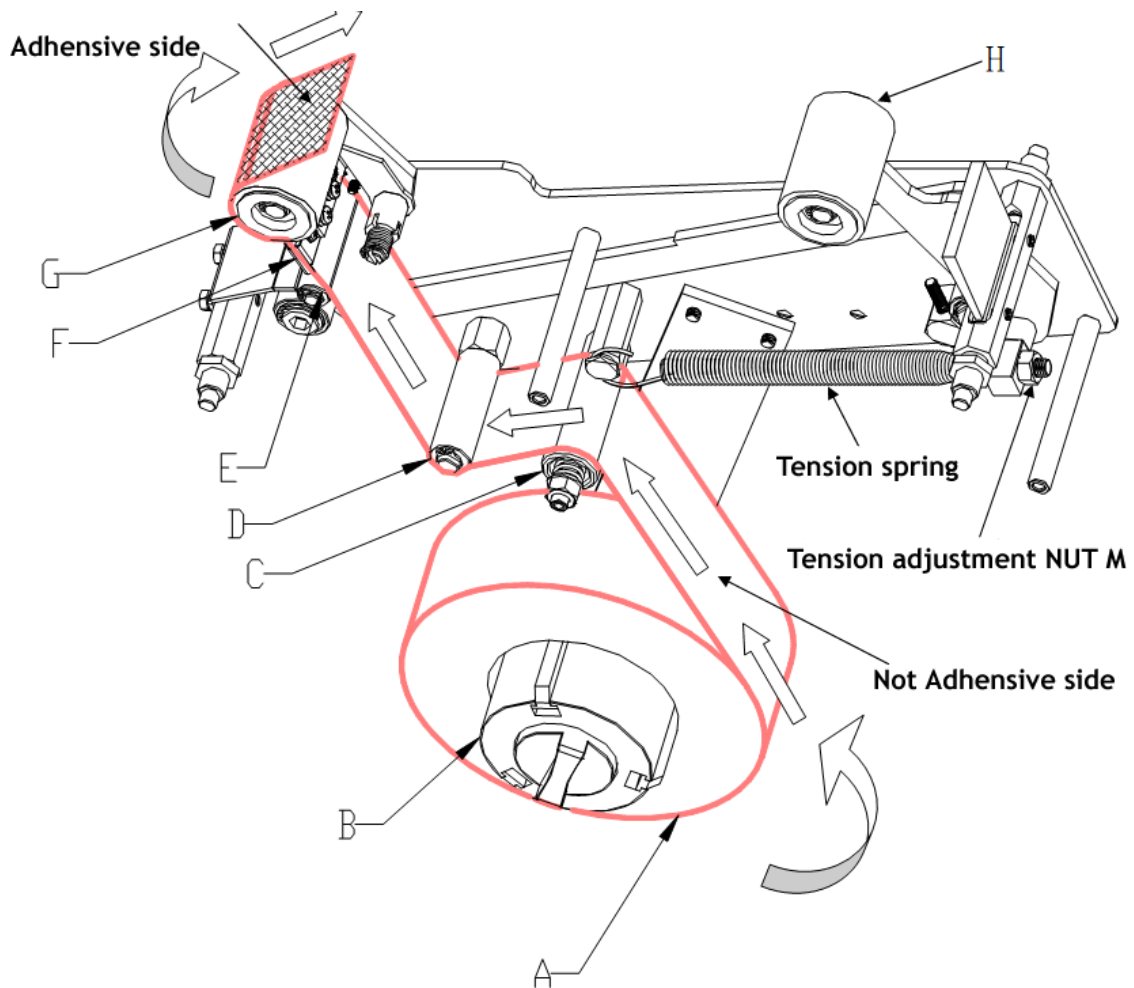


2.6 Tape Installation

2.6.1 Installing tape

- a. Put tape A onto the tape head B
 - b. pull out the tape, wind the tape around irreversible roller C
 - C. Wind the tape around the brass roller.
 - d. wind through front embossed roller E, through Knife guard plate F and Front rubber roller G
- (refer to below figure)

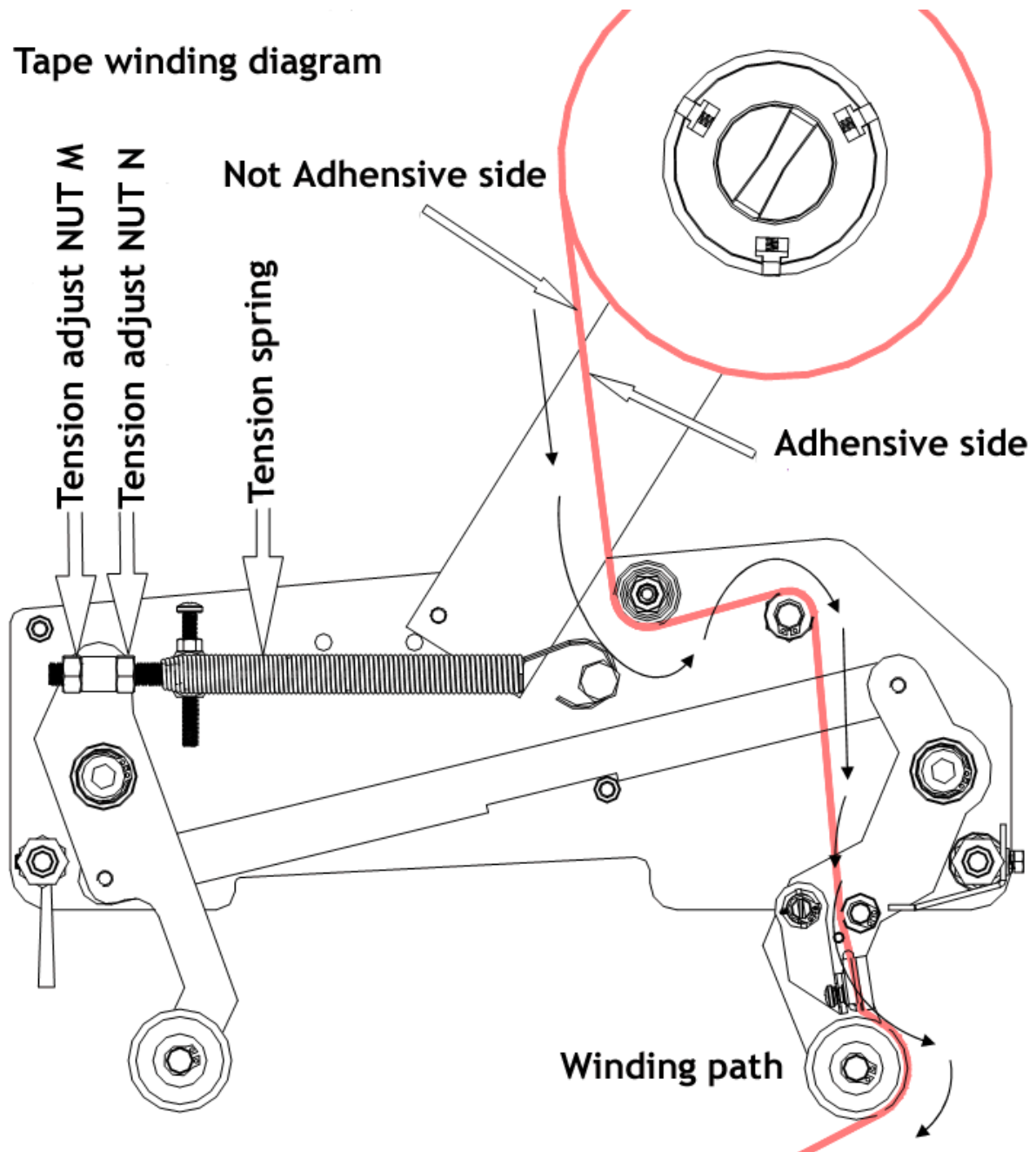
Remark: During the threading, the adhesive side is outward.



2.6.2 Tension Adjustment

- (1) Purpose: Make sure the tape adhere on box firmly without wrinkles.
- (2) principle: Keep the taping speed is proportional to the belts speed.
- (3) Method: Loosen tension lock nut N, fasten or loosen tension adjustment nut M until get required tension, fasten tension nut N.

Tape winding diagram





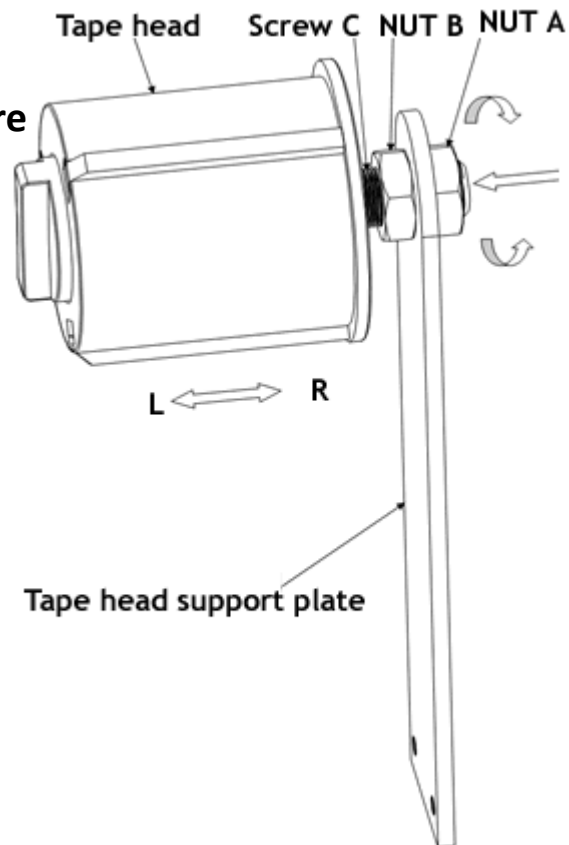
2.6.3 Put tape roller in the center of tape holder

- (1) Use OPP adhesive tape
- (2) If the tape is off the center of the box, clockwise or anti-clockwise adjust Nut A,B
- (3) Method (refer to below figure)

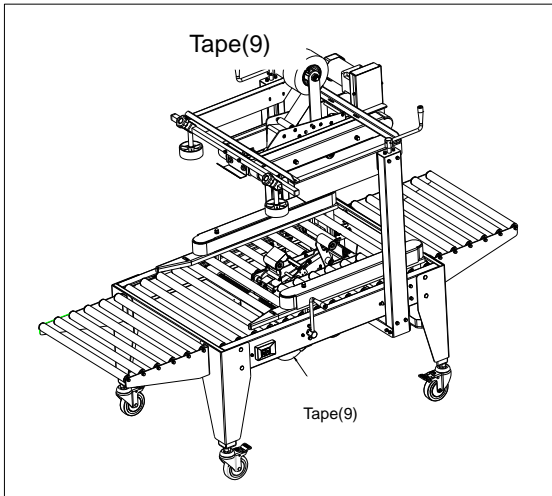
Move to left: Screw out Nut A, move the lock screw C left, fasten Nut B;

Move to right: Screw in Nut B, move the lock screw C right, fasten nut A;

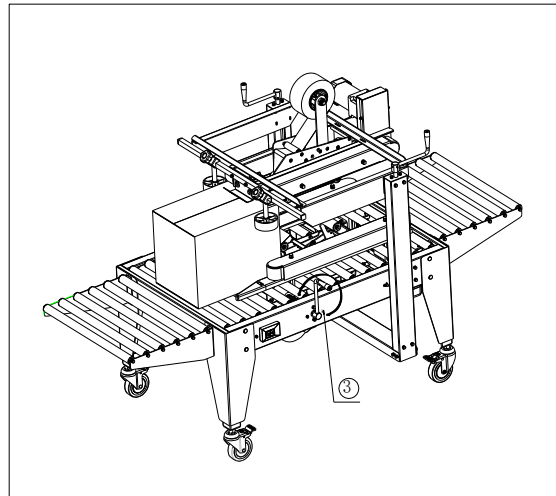
3. Operation procedure



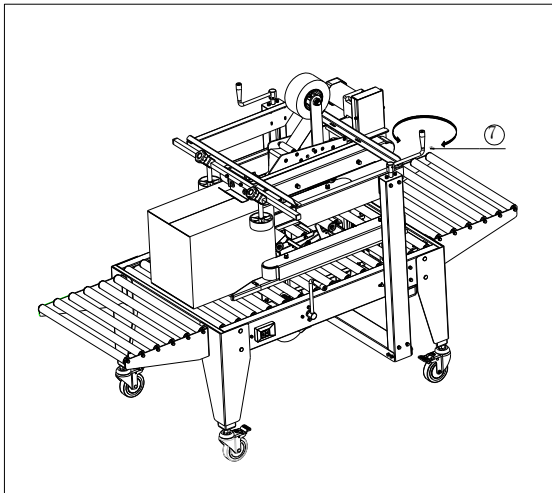
Install tape (9) onto tape head



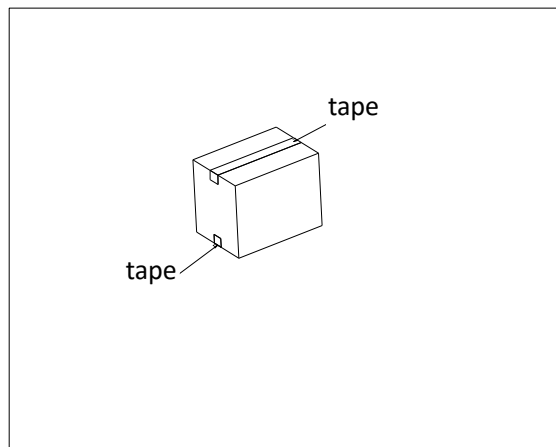
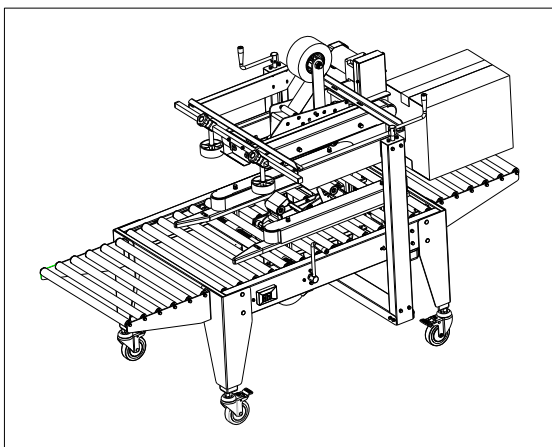
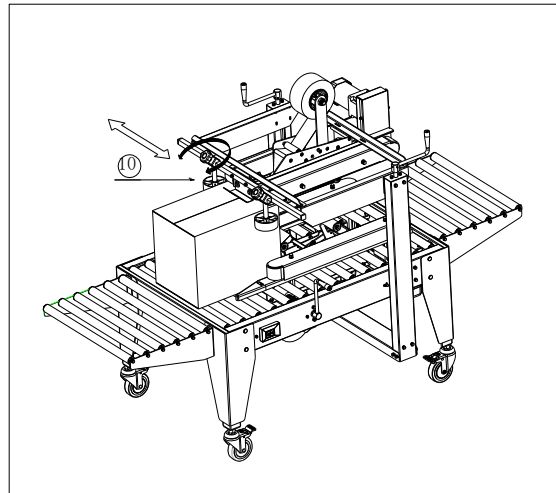
Adjust the width by crank (5)



Adjust the height by crank (7)



Adjust the side wheels(10) to close box





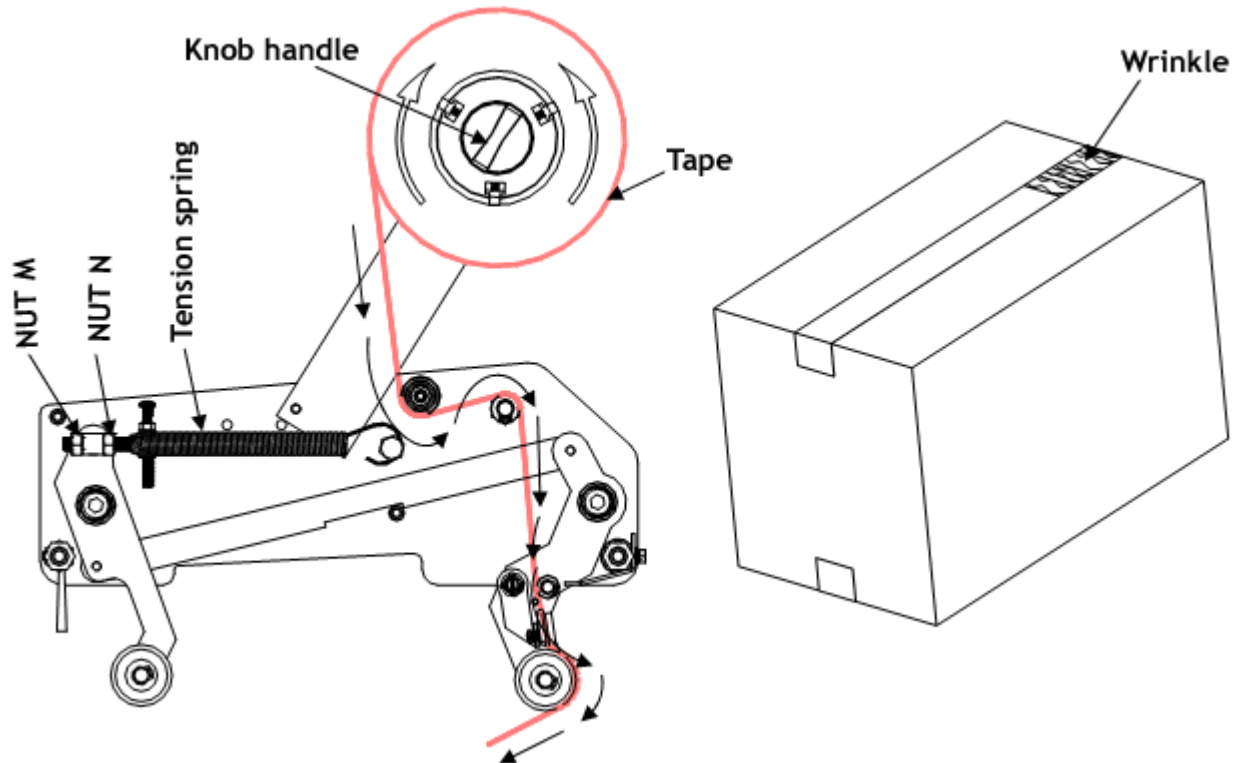
4. Trouble shooting

	Trouble	Causes	Remedy
1	Tape can not be cut off	<ul style="list-style-type: none"> *Knife is not sharp enough *Knife tip is jammed with adhesive 	<ul style="list-style-type: none"> *Replace with a new knife * Clean the knife with volatile solvent
2	A trailing of tape after cut off motion	<ul style="list-style-type: none"> *Unsmooth motion of knife holder due to Choke *Knife holder extension spring fatigue 	<ul style="list-style-type: none"> * Check if the knife holder screw are loose. Lubricate when necessary. * Replacement
3	Tap is not fully adhering to the box	<ul style="list-style-type: none"> *Main spring too loose *The roller shafts which the tape runs over are not effective due to accumulated tape adhesive *Tape wheel adjustment nut is too tight 	<ul style="list-style-type: none"> * Tighten the main spring * Lubricate roller shaft
4	Box chocked on the way	<ul style="list-style-type: none"> *Improper box height adjustment * Main spring too tight 	<ul style="list-style-type: none"> *Readjust the height *Loosen the main spring
5	Tape broken during sealing on box	<ul style="list-style-type: none"> *Knife protrudes too far 	<ul style="list-style-type: none"> *readjust the knife position
6	Tape can not travel smoothly	<ul style="list-style-type: none"> *tape adhesion is not even *The roller shafts which the tapes runs over are not effective due to accumulated tape adhesive *Irreversible roller is not effective * Tape loaded incorrectly *Tape wheel adjustment nut is too tight 	<ul style="list-style-type: none"> * Replace with a new tape roll *lubricate roller shaft *Replacement * Correct tape loading *Loosen it
7	Tape is off center on the application	<ul style="list-style-type: none"> *both guide wheels have uneven pressure on the box 	<ul style="list-style-type: none"> *re-adjust the distance between both guide wheels
8	Curious noise while in sealing	<ul style="list-style-type: none"> *Bearing set covered with dust 	<ul style="list-style-type: none"> *Clean and lubricate
9	Tape end wrinkling on the carton	<ul style="list-style-type: none"> *Tape wheel assembly is too tight *Inside tape wheel assembly with sharp edges & dust *tape dose not travel smoothly * Knife is not sharp enough or is jammed with tape adhesive * The knife holder is not functioning smoothly *Bronze roller(irreversible roller) is not functioning 	<ul style="list-style-type: none"> * Loosen tape wheel assembly spring * Remove tape wheel washer sharp edges and keep it clean. Grease the tape wheel. *Lubricate the roller shafts which the tape runs over *Clean the knife with gasoline or alcohol (volatile solvents) * Check and lubricate to ensure that it functions smoothly. Adjust the knife holder's spring tension *Replace it

4. Trouble shooting

Tape end is wrinkling on the box. Please follow below to adjust the tape head

1. Turn Knob clockwise
2. Adjust Nut N.M to make sure Main tension spring has proper tension

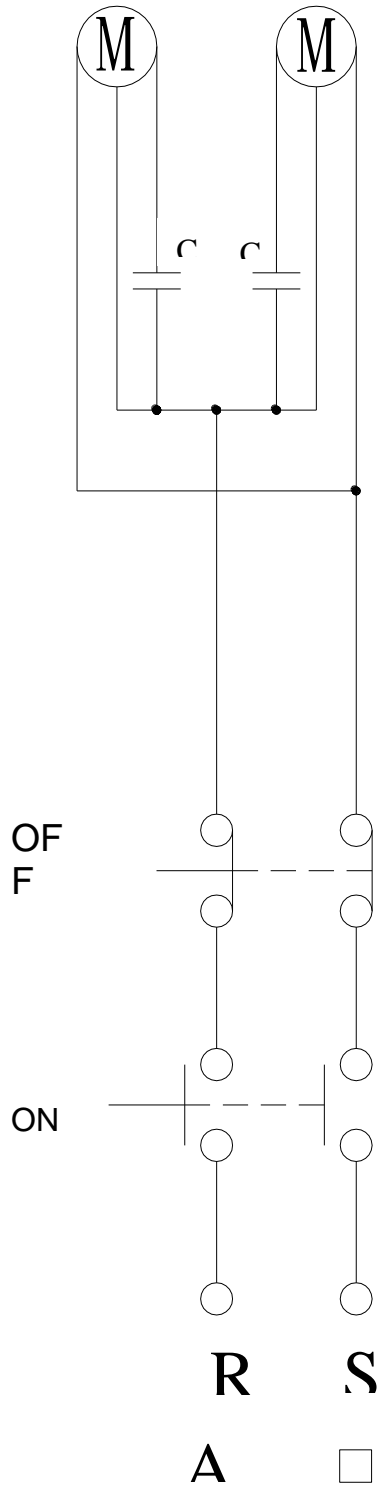


Remark:

1. Switch off before repair or adjust
2. Blade must be clean up and lubricate before using
3. After using for a while, adjustable belt a little bit tighter

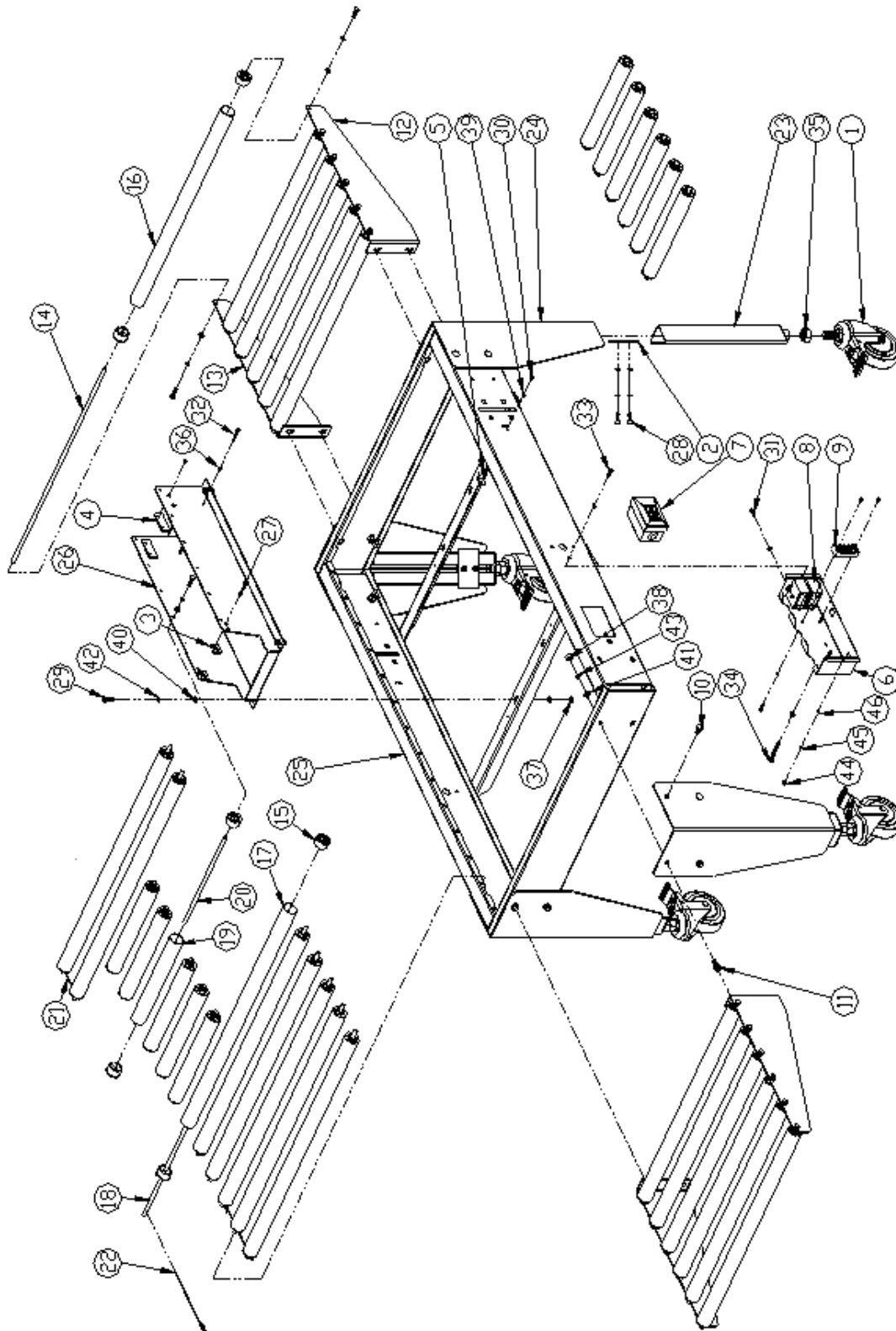


5. Electrical Schematic



6. Parts Index / Diagrams

6.1 Machine frame



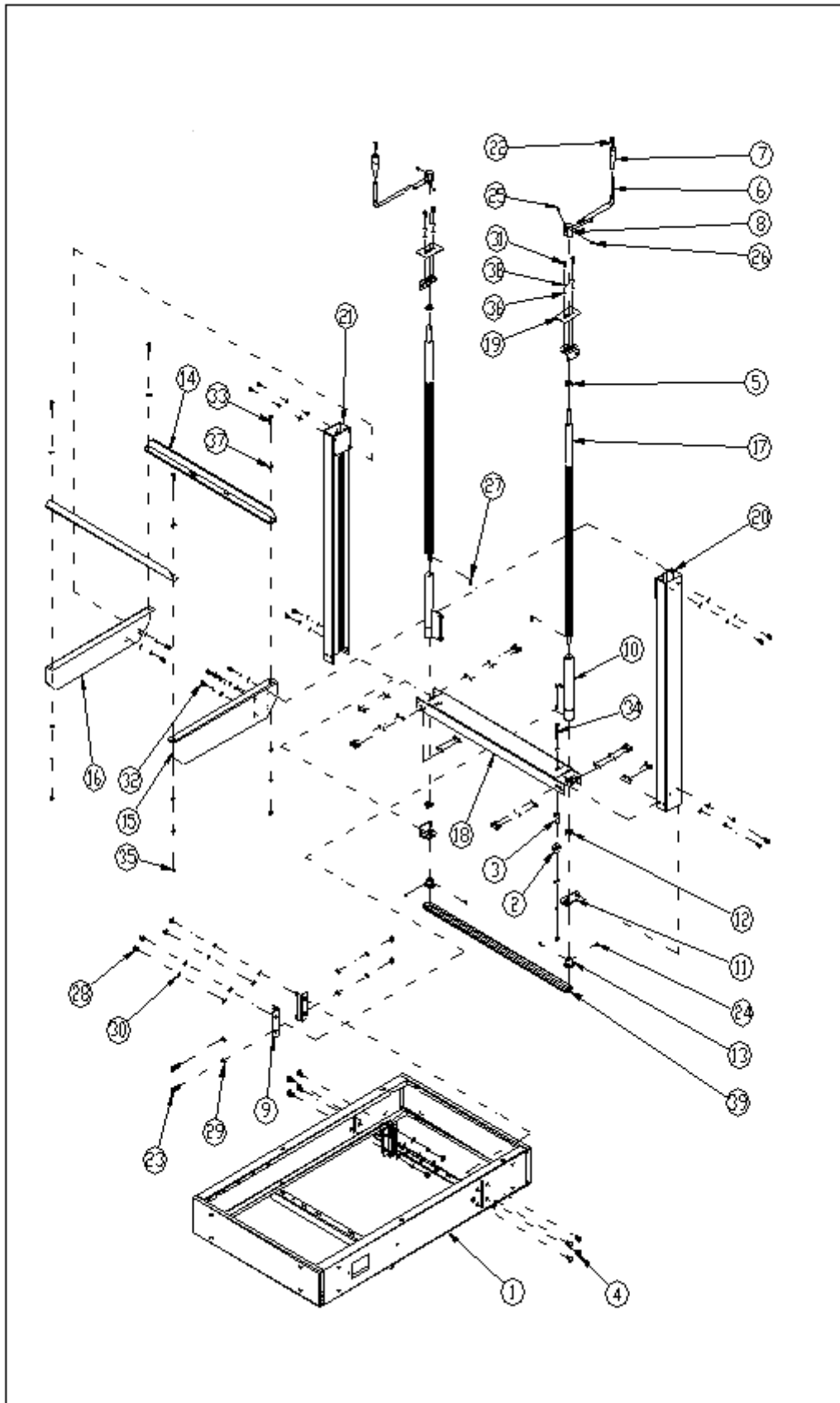


CE-554TS - CE-557TS User Manual

6.1 Machine frame parts

No	Part No	QTY	description
1	965501000 (PA00111)	4	Brake caster
2	965501040 (A2504A)	4	Leg fix block
3	965501131	2	Bottom tap head fix plate 1
4	965501132	2	Bottom tap head fix plate 2
5	965501160 (A2507B)	1	Indicator
6	965501170	1	Motor box
7	965501171	1	LAK-10 on/off switch 500V2.2KW
8	965501172	2	Capacitor 6uF±5%500VAC50Hz
9	965501173	1	Terminal connection 600V15A4P
10	965501180 (SJ816F)	8	Frame screw
11	965501190	8	Roller screw
12	965505000 (A1507A)	2	Out-feed roller
13	965505002 (A1507B)	2	In-feed roller
14	965505010 (A1508A)	12	Roller shaft
15	965505020 (A1509A)	64	Roller cover
16	965505030 (A1510A)	12	Out-feed/ in-feed roller
17	965505040 (A1514A)	8	Frame long roller
18	965505050 (A1513A)	8	Frame long roller shaft
19	965505060 (A1512A)	12	Frame short roller
20	965505070 (A1511A)	12	Frame short roller shaft
21	965505080 (FD001A-1)	1	R pin100
22	965505081 (FD001A-2)	2	R pin 170
23	965580000 (A1503A)	4	Leg post
24	965580010 (A1502A)	4	Leg bracket
25	965580020 (A1101A)	1	Frame
26	965580030	1	Bottom tape head support
27	GBT70D3-LD-M4x6	8	screw
28	GBT70D1-LD-M6x16	8	screw
29	GBT5783-LS-M6X20	40	bolt
30	GBT818-LD-M4x6	2	screw
31	GBT818-LD-M4x16	4	screw
32	GBT818-LD-M4x30	2	screw
33	GBT818-LD-M5x16	2	screw
34	GBT818-LD-M6x50	2	screw
35	GBT6170-LM-M16	4	Nut
36	GBT6170-LM-M4	6	Nut
37	GBT6170-LM-M6	4	Nut
38	GBT6170-LM-M8	16	Nut
39	GBT97D1-QP-4	5	washer
40	GBT97D1-QP-6	54	Washer
41	GBT97D1-QP-8	16	washer
42	GBT93-QT-6	48	washer
43	GBT93-QT-8	16	washer
44	GBT6170-LM-M5	2	nut
45	GBT93-QT-5	2	washer
46	GBT97D1-QP-5	4	Plain washer

6.2 Tower



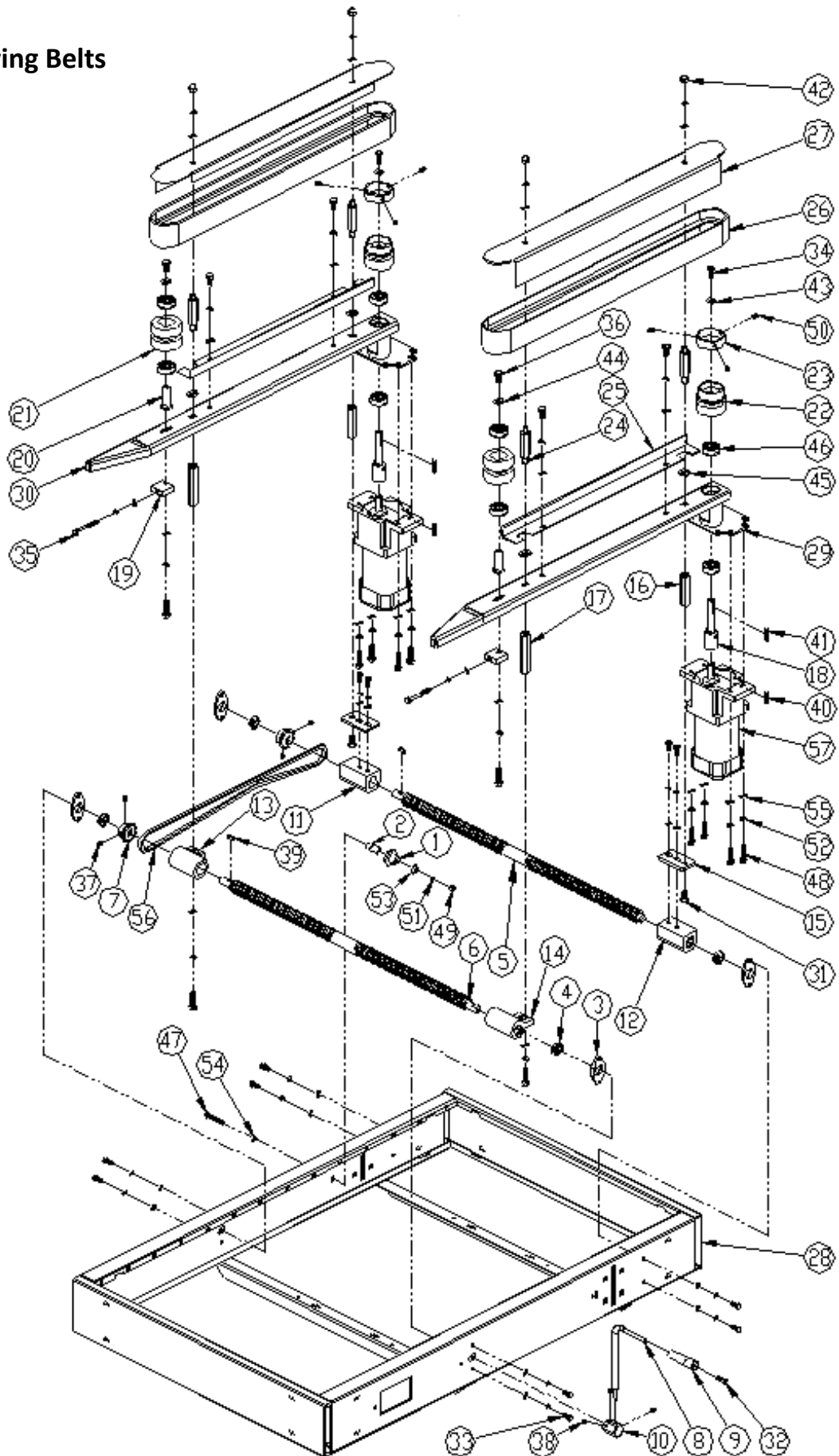


CE-554TS - CE-557TS User Manual

6.2 Tower parts list

NO	Part NO	QTY	Description
1	975580020 (A1101A)	1	Frame
2	965501140	1	Roller
3	965501150	1	Roller shaft
4	965501180 (SJ816F)	8	Frame screw
5	965502010	2	Sleeve
6	965502050 (A1516A-1)	2	Crank
7	965502060 (A1517A)	2	Crank handle
8	965502070	2	Crank fix house
9	965503000	4	Nut holder
10	965503010 (A2505B)	2	Spindle support
11	965503050 (A2503C)	4	Screw holder
12	965503060	2	Brass house
13	965503070 (CB001N)	2	Tower China wheel RS35 Z=10
14	975502180	2	Top frame support
15	975502191	1	Left top frame plate
16	975502192	1	Right top frame plate
17	975504040 (B2504A)	2	Tower screw
18	975504100 (B2507A)	1	Chain wheel cover
19	975504120 (B2506A)	2	Tower top cover
20	975580121 (B2501A)	1	Left tower
21	975580122 (B2501A-1)	1	Right tower
22	GBT70D1-LD-M6x16	2	bolt
23	GBT5783-LS-M8x30	4	Bolt
24	GBT77-LD-M5x6	4	Bolt
25	GBT77-LD-M6x6	4	Bolt
26	GBT77-LD-M6x10	2	bolt
27	GBT1069-J-4x20	2	Key
28	GBT6170-LM-M8	12	Nut
29	GBT97D1-QP-8	16	ring
30	GBT93-QT-8	12	washer
31	GBT5783-LS-M6X12	12	Bolt
32	GBT5783-LS-M6X16	16	Bolt
33	GBT5783-LS-M6X20	4	Bolt
34	GBT5783-LS-M6X45	1	Bolt
35	GBT6170-LM-M6	13	Nut
36	GBT93-QP-6	41	Plain washer
37	GBT96-QP-6	5	Plain washer
38	GBT97D1-QT-6	33	Spring washer
39	RS35-156	1	Chain RS35-156

6.3 Driving Belts



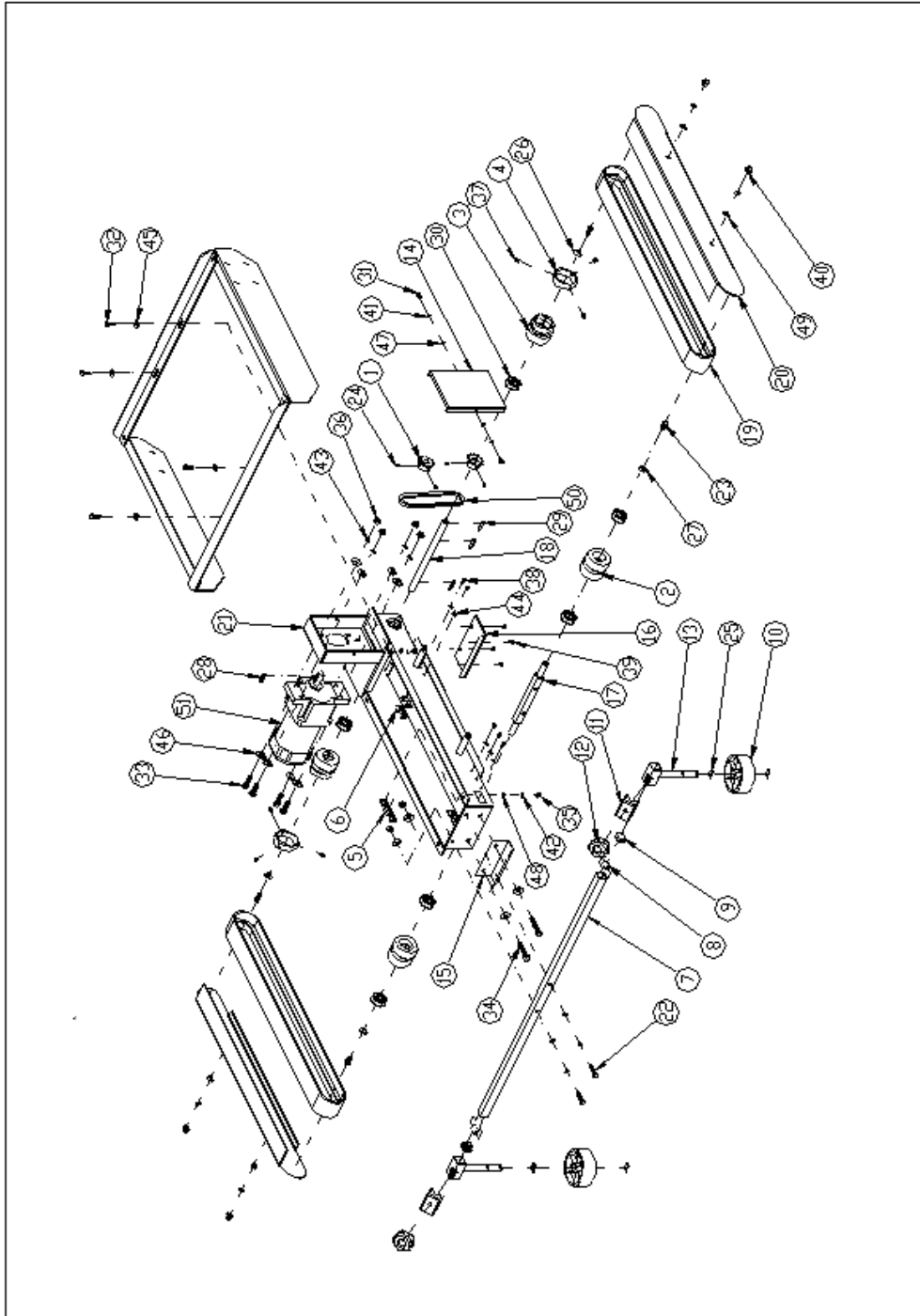


CE-554TS - CE-557TS User Manual

6.3 Driving belts parts list:

No	Part NO	QTY	description
1	965501140	1	Nylon roller
2	965501150	1	Nylon roller shaft
3	965502000 (A3514A)	4	Screw bolt fixed block
4	965502010	4	BUSHING
5	965502020 (A3515A)	1	Right screw
6	965502030 (A3521A)	1	Left screw
7	965502040 (CB002N)	2	Chain wheel RS35 Z=12
8	965502050 (A1516A-1)	1	Crank
9	965502060 (A1517A)	1	Crank handle
10	965502070	1	Handle fixed set
11	965502080 (A3530B)	1	Right adjusted nut(right handed)
12	965502081 (A3528B)	1	Right adjusted nut(left handed)
13	965502090 (A3529B)	1	left adjusted nut (right handed)
14	965502091 (A3513B)	1	left adjusted nut (left handed)
15	965502100 (A3511B)	2	Right bottom pillar
16	965502110	2	Right pillar
17	965502120 (A3512B)	2	Left pillar
18	965502180 (A3510A)	2	motor shaft
19	965502200 (A3518A)	2	Tension adjusting plate
20	965502220 (A3517A)	2	Rear driving roller shaft
21	965502230 (A3516A)	2	Rear driving roller
22	965502240 (A3504A)	2	Main driving roller
23	965502250	2	Main driving roller sleeve
24	965502260 (A3507B)	4	Cover support
25	965502270 (A3527A)	2	Belt side plate
26	965502280 (RA004H)	2	Belt
27	965502290 (A3501A)	2	Belt cover
28	965580020 (A1101A)	1	Machine body frame
29	965580040 (A3524A)	1	Left motor base
30	965580042 (A3509A)	1	Right motor base
31	GBT70D3-LD-M8x20	2	bolt
32	GBT70D1-LD-M6x16	1	bolt
33	GBT5783-LS-M6x16	12	bolt
34	GBT5783-LS-M6x20	2	bolt
35	GBT5783-LS-M6x60	2	bolt
36	GBT5783-LS-M8x16	6	bolt
37	GBT77-LD-M5x8	4	bolt
38	GBT77-LD-M6x6	2	bolt
39	GBT1096-J-5x16	2	Key

No	Part No	QTY	description
40	GBT1096-J-5x25	2	Key
41	GBT1096-J-5x28	2	key
42	GBT923-LM-M8	4	nut
43	OQDP-6-20	2	washer
44	OQDP-8-20	2	washer
45	OGBT97D1-QP-12	4	washer
46	GBT276-ZC-6202ZE	8	bearing
47	GBT5783-LS-M6x45	1	bolt
48	GBT5783-LS-M8x30	12	bolt
49	GBT6170-LM-M6	1	nut
50	GBT77-LD-M6x10	7	bolt
51	GBT93-QT-6	15	Washer
52	GBT93-QT-8	20	washer
53	GBT96-QD-6	1	Plain washer
54	GBT97D1-QP-6	15	Plain washer
55	GBT97D1-QP-8	20	Plain washer
56	RS35-115	1	Chain RS35-115
57	MDG-120	2	Motor



6.4

No	Part No	QTY	Description
1	965502040 (CB004H)	2	Chain wheel RS35 Z=12
2	965502230 (A3516A)	2	Rear driving roller
3	965502240 (A3504A)	2	Main driving roller
4	965502250	2	Main driving roller sleeve
5	965504061	2	Top tape head fix plate 1
6	965504062	2	Top tape head fix plate 2
7	965504070 (A2510A)	1	Compression roller support
8	965504080 (A2516A)	2	Side roller guide rod iron washer
9	965504090 (A2511A)	2	Side roller guide rod bushing
10	965504120 (A2515A)	2	Compression roller
11	965504130 (A2513A)	2	Compression roller block
12	965504140 (A2512A)	2	Handle pressed screw
13	965580080 (A2514A)	2	welding parts side bar
14	975502080 (B3501A)	1	Motor cover
15	975502150 (B3511A)	1	Top guide plate
16	975502160 (B3510A)	1	Top cover
17	975503000 (B3505A)	1	Drive Pulley shaft
18	975503010 (B3507A)	1	Follow Pulley shaft
19	975503070 (RA003H)	2	Belt
20	975503090 (N23508B)	2	Top belt cover
21	975580080 (B3509A)	1	120W Motor base
22	GBT5783-LS-M6x30	2	Bolt
23	GBT5783-LS-M8x16	2	Bolt
24	GBT77-LD-M5x8	4	Screw
25	GBT894.1-DQ-17	4	ring
26	0QDP-6-20	2	washer
27	0QDP-8-20	2	washer
28	GBT1096-J-5X25	1	Key
29	GBT1096-J-5X28	3	Key
30	GBT276-ZC-6202ZE	6	Bearing
31	GBT5783-LS-M5X10	2	Bolt
32	GBT5783-LS-M6X20	6	Bolt
33	GBT5783-LS-M8X30	4	Bolt
34	GBT5783-LS-M8X50	2	Bolt
35	GBT6170-LM-M6	4	Nut
36	GBT6170-LM-M8	6	Nut
37	GBT77-LD-M6X10	6	screw
38	GBT818-LD-M4X8	10	screw
39	GBT819-LD-M4X8	4	screw

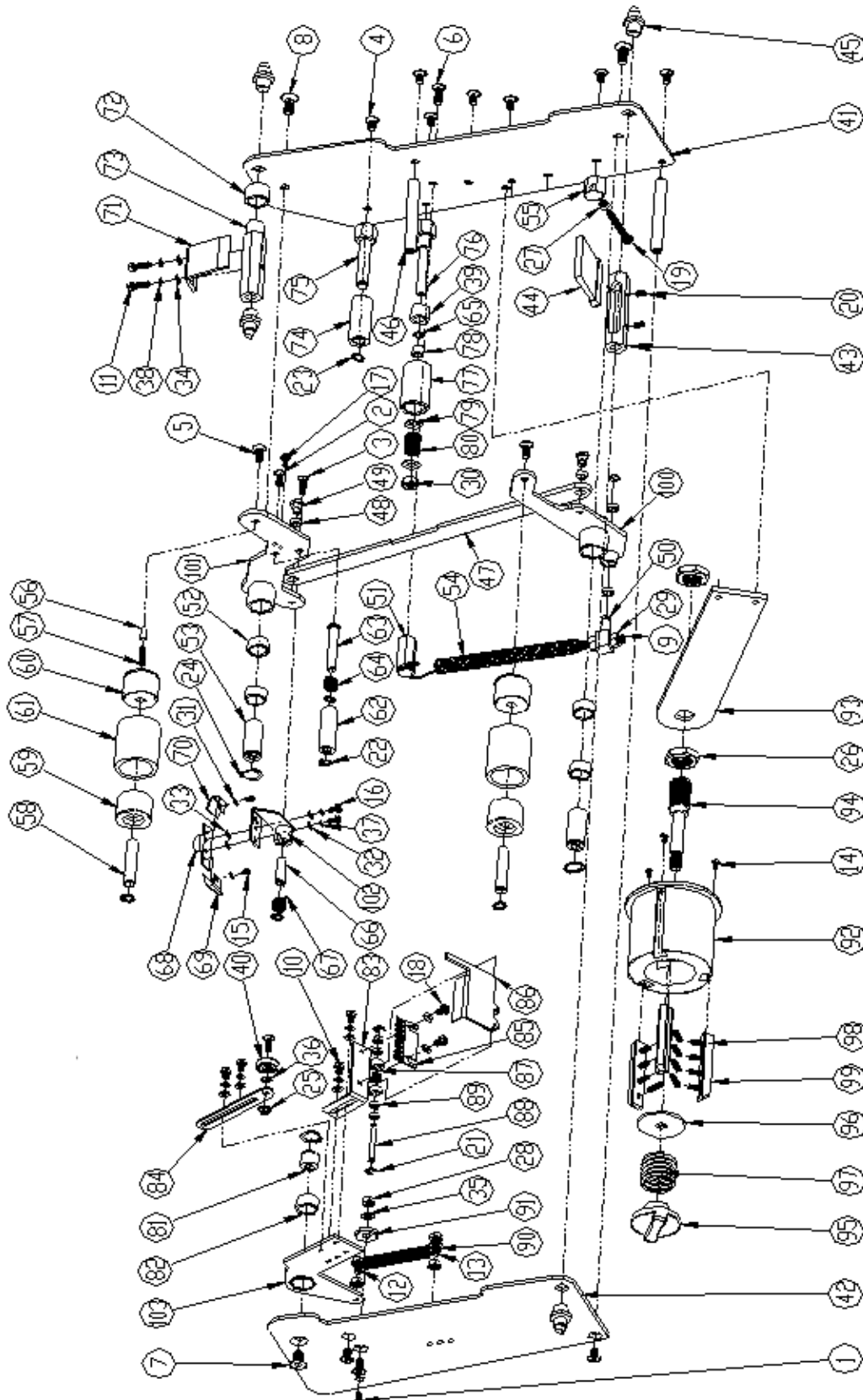


CE-554TS - CE-557TS User Manual

6.4

No	Part No	QTY	Description
40	GBT923-LM-M8	4	Nut
41	GBT93-QT-5	2	washer
42	GBT93-QT-6	6	washer
43	GBT93-QT-8	8	washer
44	GBT96-QD-4	10	Plain washer
45	GBT96-QD-6	4	Plain washer
46	GBT96-QD-8	12	Plain washer
47	GBT97D1-QP-5	2	Plain washer
48	GBT97D1-QP-6	6	Plain washer
49	GBT97D1-QP-8	4	Plain washer
50	RS35-41	1	Chain RS35-41
51	MDG-120	1	Motor

6.5 Tape head





6.5 Tape head parts

No	Part No	QTY	Description
1	GBT70D3-LD-M4*12	1	Nut
2	GBT70D3-LD-M5*16	2	Nut
3	GBT70D3-LD-M5*20	1	Nut
4	GBT70D3-LD-M6*12	9	Nut
5	GBT70D3-LD-M6*16	3	Nut
6	GBT70D3-LD-M6*20	1	Nut
7	GBT70D3-LD-M8*16	1	Nut
8	GBT70D3-LD-M8*20	2	Nut
9	GBT70D1-LD-M8*50	1	Nut
10	GBT5783-LS-M5*8	4	Nut
11	GBT5783-LS-M5*16	2	Nut
12	GBT5783-LS-M6*12	1	Nut
13	GBT5783-LS-M6*20	1	Nut
14	GB/T 9074.18 ST3.5×9.5	3	Nut
15	GBT818-LD-M3*5	2	Nut
16	GBT818-LD-M4*8	2	Nut
17	GBT818-LD-M4*10	1	Nut
18	GBT818-LD-M5*8	2	Nut
19	GBT818-LD-M5*50	1	Nut
20	GBT77-LD-M5*8	2	Nut
21	ETW-5	2	Washer
22	GBT894D1-DQ-8	3	Washer
23	GBT894D1-DQ-10	3	Washer
24	GBT894D1-DQ-16	3	Washer
25	GBT6177-LM-M5	1	Nut
26	OMZL-M18-1	2	Nut
27	GBT6170-LM-M5	1	Nut
28	GBT6170-LM-M6	3	Nut
29	GBT6170-LM-M8	2	Nut
30	OMZL-M8	1	Nut
31	GBT97D1-QP-3	2	Washer
32	GBT97D1-QP-4	2	Washer
33	0QDP-4-H06	2	Washer
34	GBT97D1-QP-5	8	Washer
35	GBT97D1-QP-6	2	Washer
36	0QDP-6-H06	1	Washer
37	GBT93-QT-4	2	Washer
38	GBT93-QT-5	6	Washer
39	OZDX-HF1216	1	One direction bearing

NO	Part No	QTY	Description
40	GBT276-ZC-635ZZ	1	Bearing
41	BT201 (TH422A)	1	Left plate
42	BT202 (TH411A)	1	Right plate
43	BT203 (TH419A)	1	Brush pillar
44	BT204 (TH420B)	1	Brush
45	BT205 (TH421A)	4	Brush support screw
46	BT206 (TH412A)	2	Pillar
47	BT207 (TH440A)	1	Connection bar
48	BT208	4	sleeve
49	BT209 (SJ010F)	2	Connection bar screw
50	BT211	1	Extension spring after the column
51	BT213	1	Extension spring swing rod columns
52	BT215	4	Fixed set of kit copper
53	BT216 (TH439A)	2	Fixed axis
54	BT217 (FB006C)	1	Long extension spring
55	BT220 (TH426A)	1	Fixed block
56	BT221 (TH430)	1	Fixed axis
57	BT222 (FA004A)	1	Positioning spring
58	BT223 (TH433A)	2	Rubber wheel
59	BT224 (TH452A)	2	Tire
60	BT225 (TH452A)	2	Positioning wheel
61	BT226 (TH431A)	2	Rubber wheel sets
62	BT228 (TH429A)	1	Former embosser round
63	BT229 (TH428A)	1	Former flower axle
64	BT230 (FA003A)	1	Former flower axle spring
65	BT231 (HC008S)	2	Former flower axle washer
66	BT232 (TH437A)	1	Retaining shaft with stent
67	BT234 (ED005A)	1	Retaining shaft spring
68	BT236 (TH434A)	1	Cover fixed panels
69	BT237 (TH441A)	1	Right tape holder
70	BT237-2 (TH435A)	1	Left tape holder
71	BT238 (TH408A)	1	Guide plate
72	BT239	1	Bar sets
73	BT240 (TH424A)	1	Holding shaft
74	BT241 (TH405A)	1	Roller
75	BT242 (TH404A)	1	Roller shaft
76	BT243 (TH406A)	1	Irreversible roller shaft
77	BT244 (TH407A)	1	Irreversible roller
78	BT245	1	Irreversible roller sleeve



CE-554TS - CE-557TS User Manual

No	Code	QTY	Description
79	BT246 (HS010S)	2	Irreversible roller washer
80	BT247 (FA010A)	1	Irreversible roller spring
81	BT251 (TH413A)	1	Blade support shaft
82	BT252	1	Blade support shaft sleeve
83	BT253 (TH423A)	1	Blade support
84	BT254 (TH415A)	1	Blade arm adjustable bar
85	BT255 (TH416A)	1	blade
86	BT256 (TH417A)	1	Blade cover
87	BT257 (FD002A)	1	Twist spring
88	BT258 (TH418A)	1	Blade cover shaft
89	BT259	4	Blade cover shaft sleeve
90	BT260 (FB003A)	1	Spring
91	BT261 (TH410A)	1	Blade arm cushion
92	BT263 (TH402A)	1	Tape fixed support
93	BT264 (TH401A)	1	Tap head fix plate
94	BT265 (TH403A)	1	Tap head fix shaft
95	BT266 (NF010A)	1	Adjusting Knob
96	BT268 (HA010B)	1	Keyed washer
97	BT269 (FA001A)	1	Spring
98	BT270	12	Compression plate spring
99	BT271	3	Compression plate
100	BTH21 (TH438A)	1	Rear roller arm assly
101	BTH22 (TH427A)	1	Front roller arm assly
102	BTH23 (TH436A)	1	Tap support
103	BTH24 (TH414A)	1	Blade arm

7. Features

- (1) easy operation, easy maintenance, low noise
- (2) rigid structure
- (3) easy to adjust height and width
- (4) International standard, tool kit free with machine
- (5) Roller table could be disassembled.

8. Usage

- (1) hold tape by hands and install it onto the tape head(adhesive side is outward)refer to 2.6.1
- (2) Adjust height and width manually by cranks. Refer to page7
- (3) Press ON switch, machine is started
- (4) Close the flaps before sealing
- (5) Put box to the entrance

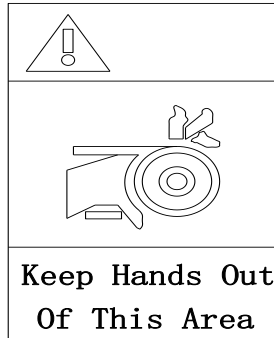
9. Maintenance

- (1) Lubricate: Once a month to oil the every moving parts by greasy
- (2) Inspection: Check all screws, nuts and belts once a month. If any loose, please fasten it.

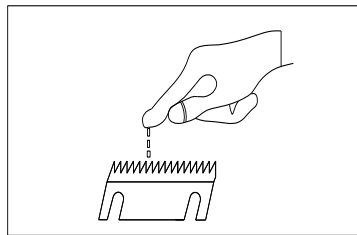


10. Precautions

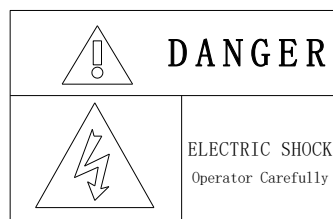
(1) Safety: a. Belts unit is moving parts, please don't touch when machine is running in case of any injury.



b. Blade is very sharp, when serve the machine, please be careful.



c. When checking machine, please cut off power.



(2) Tape and box

- A. Deformed tape or long-stored tape is forbidden to use
- B. Please keep boxes dry (wet boxes are not allowed)