

AUTO UNIFORM CARTON SEALER

MODEL : EC-701WS

**OPERATION MANUAL
&
SPARE PARTS**

GENERAL SAFETY RULES

1. Read and understand the entire instruction manual before operating the machine. Know it's limitations, as well as the specific potential hazards peculiar to it.
2. Make certain the machine is properly grounded.
3. Before operating the machine, remove ties, rings, watches, other jewelry, and roll up sleeves above the elbows. Remove all loose clothing and confine long hair. Do not wear gloves.
4. Keep the floor around the machine clean.
5. Keep machine guards in place at all times when the machine is in use.
6. Do not over reach. Maintain a balanced stance at all times so that you do not fall or lean against blades or other moving parts.
7. Make all machine adjustments or maintenance with the machine unplugged from the power source.
8. Replace warning labels if they become obscured or removed.
9. Make sure the power source switch is in the OFF position before connecting the machine to the power source.
10. Make a habit of checking to see that the keys and adjusting wrenches are removed before turning on the machine.
11. Keep belt guard and blade guards in place and in working order.
12. Failure to comply with all of these warnings could lead to serious injury.

IDENTIFICATION BEFORE OPERATION

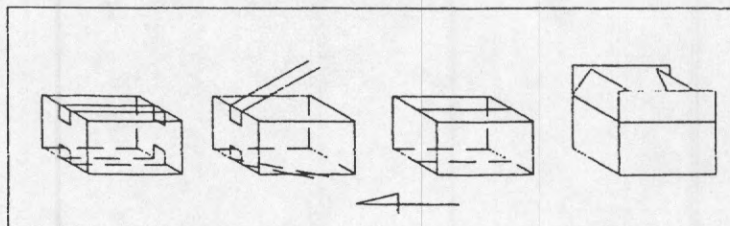
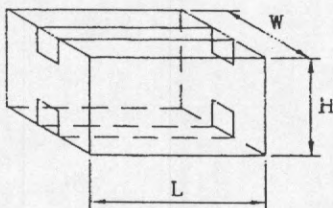
1. Make sure the voltage level is correct.
2. Check to see if the driving belts run in the correct direction. (3 phase only)
3. Is width and height for box size correctly adjusted ?
4. Keep all guards in place and in working order.
5. Make sure the tape has been properly installed.

OPERATION PROCEDURES

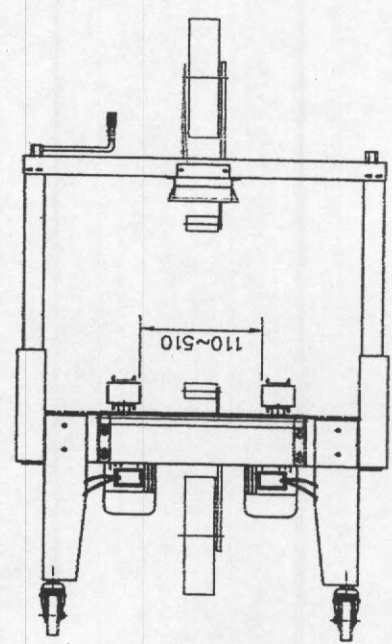
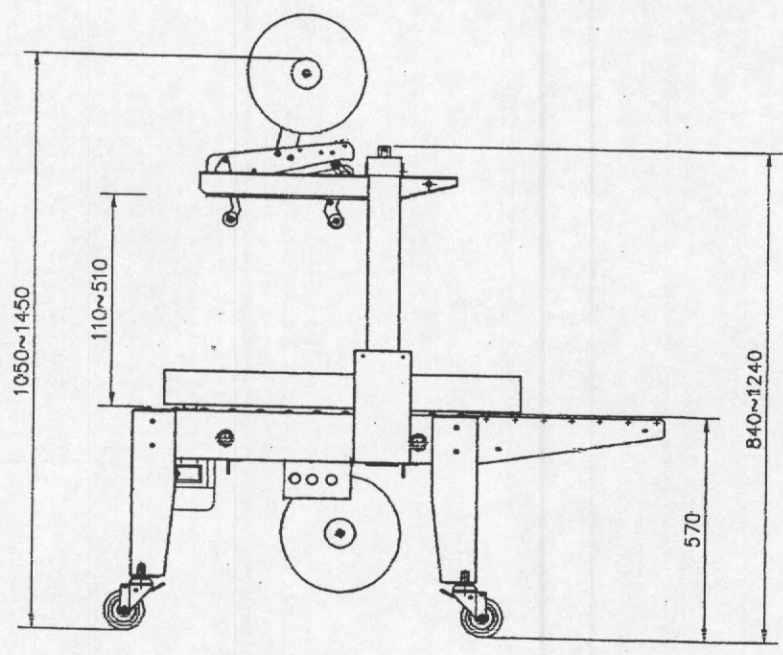
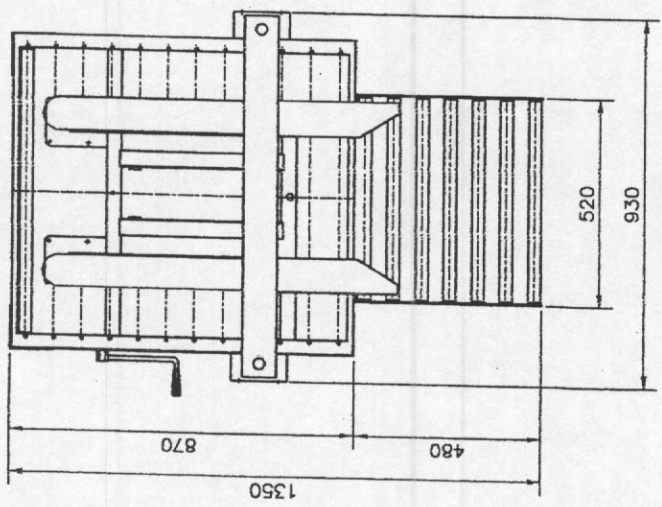
1. Place the box to be sealed onto the roller conveyor table.
2. Adjust the width of right and left driving belt.
3. Adjust the height of top driving belt.
4. Adjust the guide wheel width.
5. Start the driving belt to feed the box forward.
6. Check to see if the box feeds smoothly. Make proper adjustment in accordance with procedures (2) (3) (4) if necessary.
7. Then feed the box into the inlet end of the driving belt. The box will automatically move through the tape heads for sealing operations on the top and bottom of the box.

SPECIFICATIONS :

Range of box dimensions	Length 150-unlimited mm Width 110-550 mm Height 100-500 mm
Tape width	50-75 mm
Driving belt speed	22M/Min. (60Hz power source) 18M/Min. (50Hz power source)
Box driving device	Right, Left driving motor
Height of roller conveyor table	570-780mm (adjustable)
Motor	1/5HP (right belt), 1/5HP (left belt)
Machines dimensions	(L)870mm × (W)930mm × 1050mm
Power source	Single phase 100/110/220V or Three phase 220/380V
Net weight	120kgs
Gross weight	150kgs

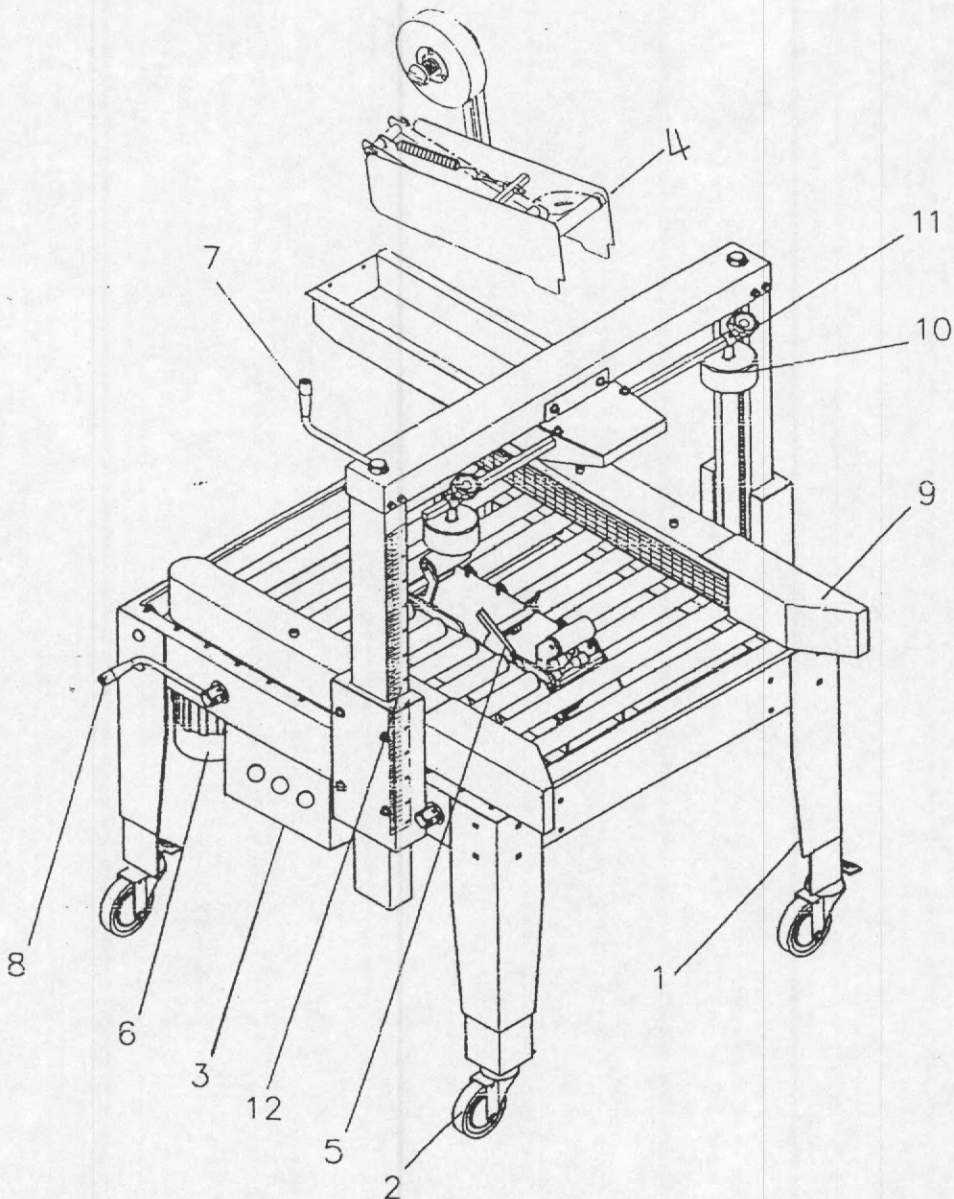


DIMENSIONAL DRAWING



LEGEND OF THE MACHINE

- | | |
|------------------------------|-----------------------------------|
| 1. Leveling adjustment screw | 7. Height adjustment crank handle |
| 2. Caster | 8. Width adjustment crank handle |
| 3. Control box | 9. Driving belt |
| 4. Upper tape head mechanism | 10. Guide wheel |
| 5. Lower tape head mechanism | 11. Guide wheel adjustment knob |
| 6. Belt driving motor | 12. Height rule gauge |



POWER SOURCE WIRING

1. Before connecting, make sure the voltage is the same for both the machine and the power source.

The machine has been wired before shipment, and all electrical information (such as voltage) indicated on the electrical instruction label.

2. Connect the power source wires to the "R.S.T." connection points.

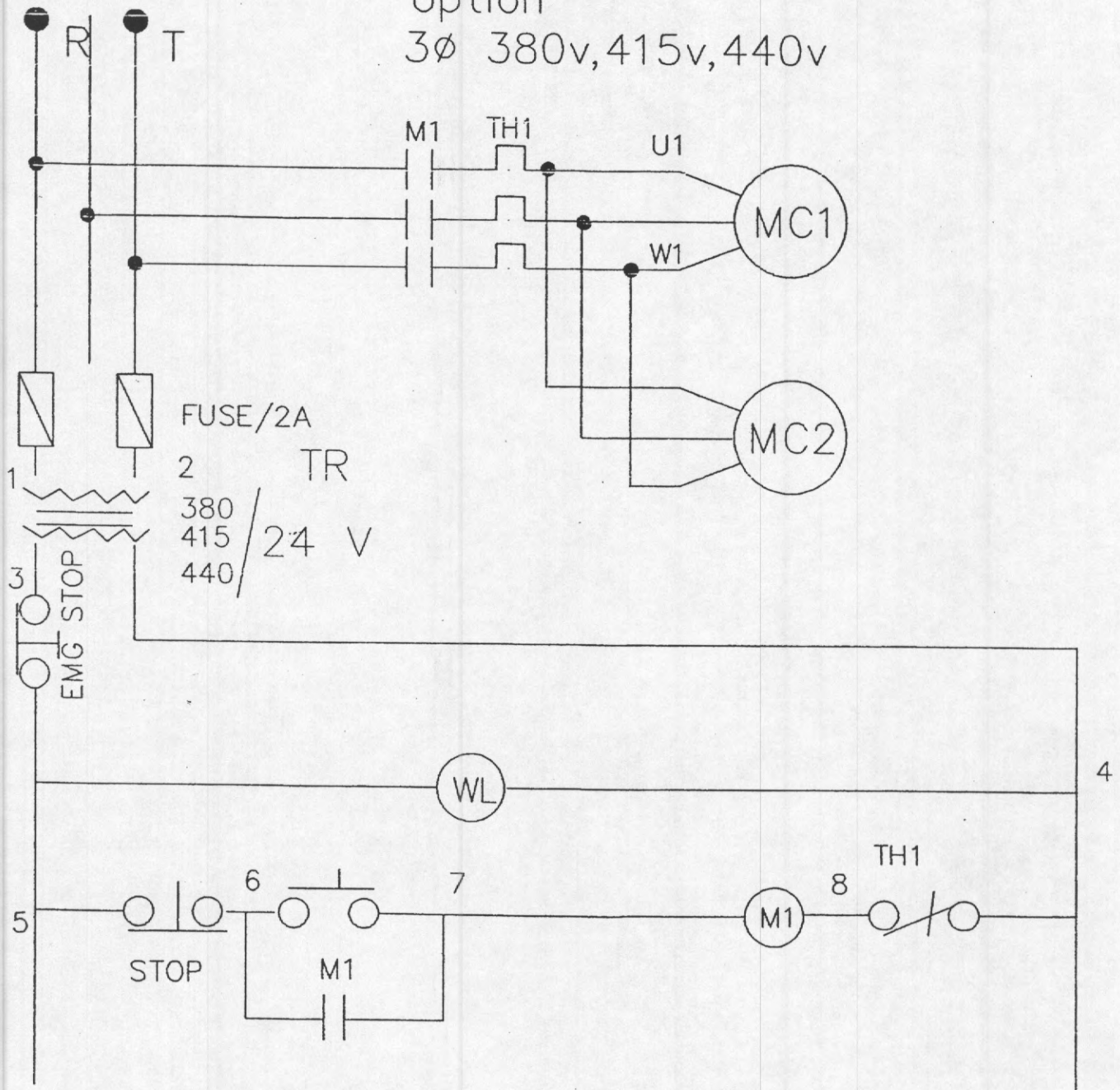
The machine must be properly grounded to prevent possible damage from electric shocks. (3 phase only)

3. After the power source wires have been connected, check to see if the wires are connected to the correct points by the running direction of the left and right driving belts. If the driving belts run in the correct direction, then the power source wires are connected to the correct points. If the driving belts run in the opposite direction, cut off the power source and change any two of the three power source wires to obtain the correct running direction. (3 phase only)

ELECTRICAL WIRING DIAGRAM

1Ø 110v, 220v, 50/60Hz

option
3Ø 380v, 415v, 440v

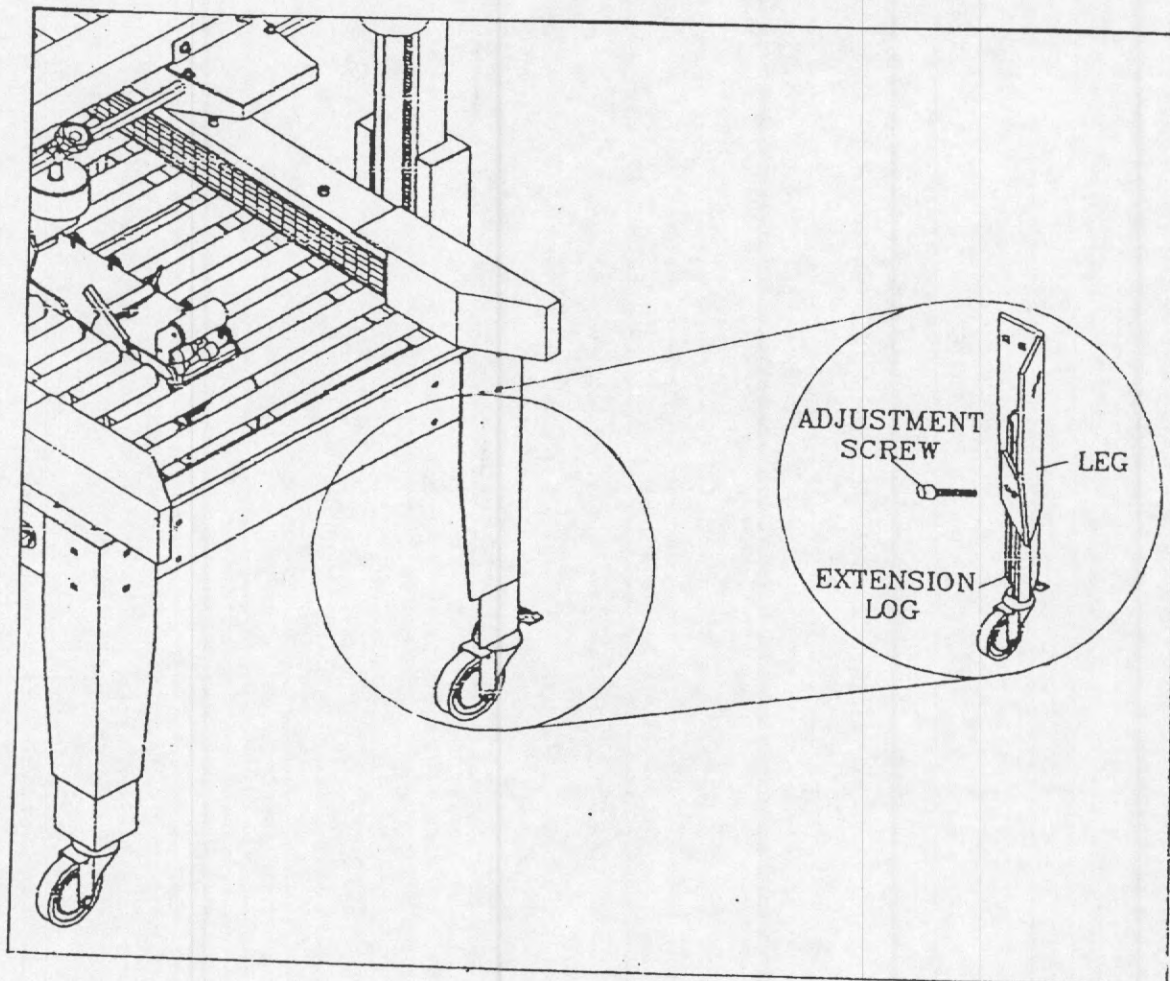


LEVELING ADJUSTMENT FOR ROLLER CONVEYOR TABLE

Once the machine has been located at the work site, there needs to be a proper leveling adjustment for the roller conveyor table to suit your production line.

The leveling adjustment screws are located at the bottom of the 4 legs. Make the leveling adjustment by simply turning the leveling adjustment screws. First loosen the lock nut. Tighten the lock nut after the level has been properly adjusted.

Fix the machine in place after the leveling adjustment. Press the caster lock pedal to fix the machine position.



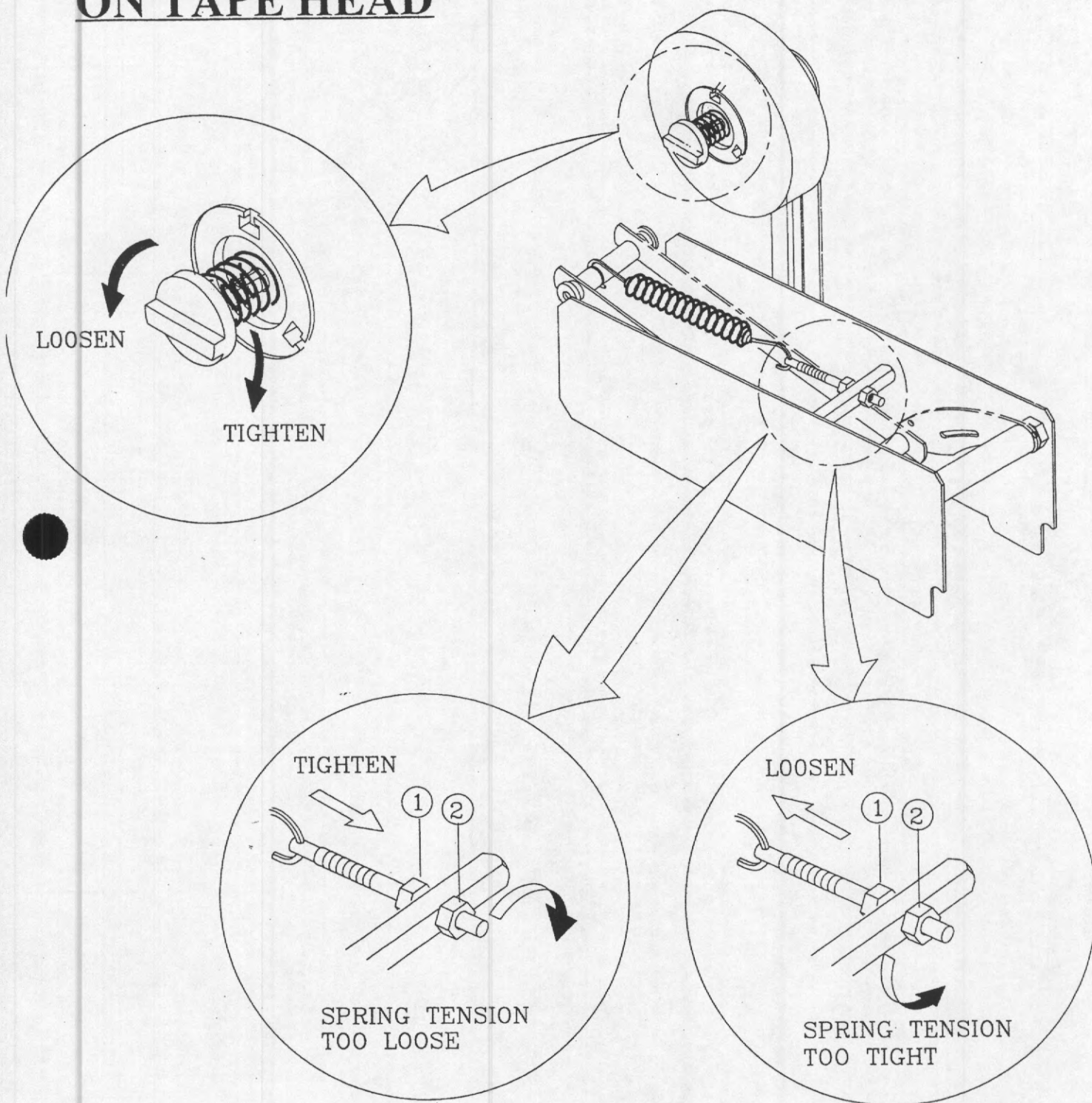
BOX WIDTH ADJUSTMENT

1. Loosen the guide wheel fixing knob.
2. 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.
3. Turn the right/left driving belts with the adjustment crank handle until the distance between the right and left driving belt is wider than the width of the box.
4. Place a box onto the roller conveyer table in proper position (see page. 4)
With the top and bottom covers folded, turn the width adjustment crank handle so that the right/ left driving belts properly press against both sides of the box.
5. Adjust the box height.
6. Move the guide wheels so that they touch both top sides of the box.
7. Tighten up the guide wheel fix knobs.

BOX HEIGHT ADJUSTMENT

1. Make sure the box height is within the range of the systems.
2. Turn the height adjustment crank handle until the top driving belt holds down the box.
3. The box height can be read on the height gauge attached to the left frame of the machine.

SPRING TENSION ADJUSTMENT ON TAPE HEAD



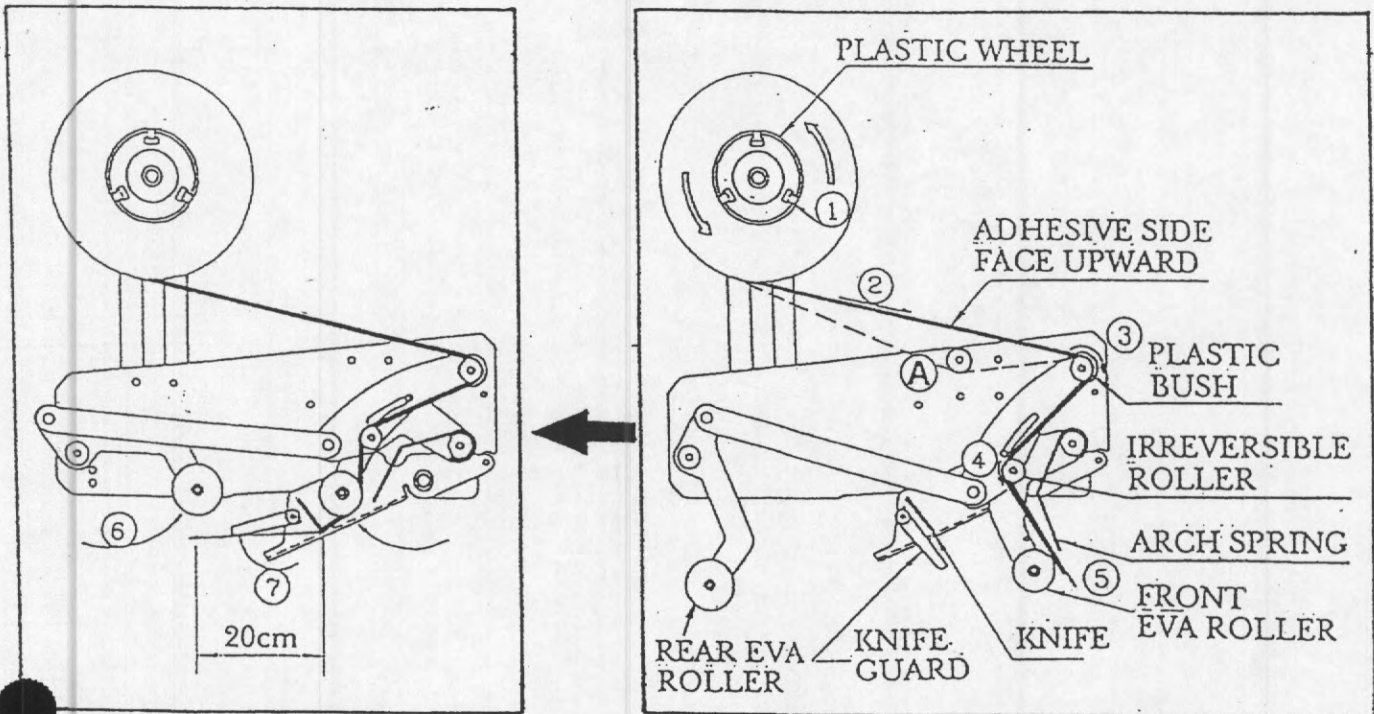
Correction: Tighten the main spring tension as instructed in the figure.

Correction: Loosen the main spring tension as instructed by the figure.

INSTALLING THE TAPE

1. Fit the tape onto the tape loading wheel, and press it lightly to the extreme bottom.
(Make sure the adhesive side of tape faces upwards)
2. Pull out the tape.
3. Wind the tape around the plastic bush.
4. Wind the tape around the irreversible roller.
5. Pull out the tape through the space between the arch spring and front EVA roller.
6. Press the rear EVA roller inward to the extreme bottom. Pull the tape to the position of 20cm beyond the cutting knife.
7. Open the knife guard. Try to have the knife touch the tape for cutting off.

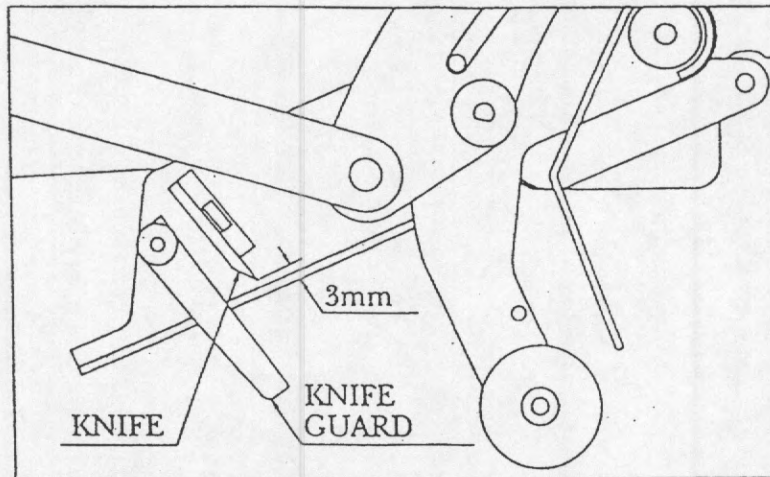
CAUTION: Pay special attention to avoid injury from the knife, while opening the knife guard and doing the cutting test.



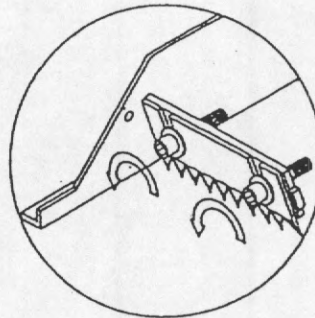
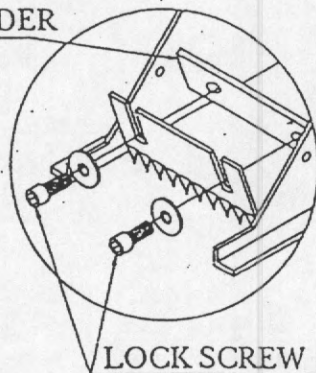
Ramark: If the carton height is over 450mm, the tape needs to be inserted through the plastic roller (A) as dotted line instructed.

REPLACING THE KNIFE

1. Make sure the power switch is in the OFF position.
2. Loosen the knife lock screw.
3. Open the knife guard. Carefully take out the old knife, and fit the new knife in place. Be careful not to fit the knife over the knife holder. (The proper distance between the knife and knife holder is 3mm)
4. Tighten the knife lock screw.



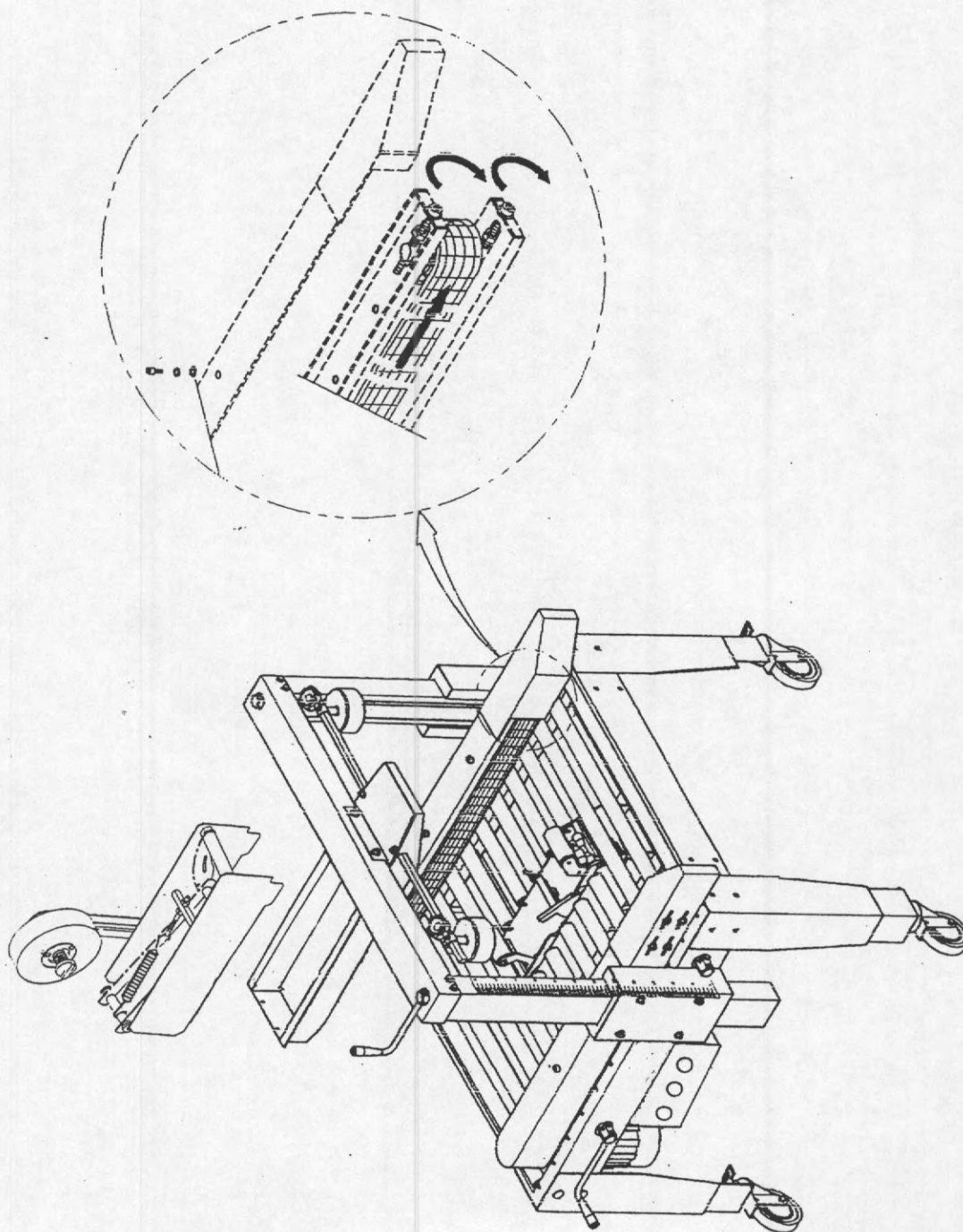
KNIFE HOLDER



LOWER BELTS TENSION ADJUSTMENT

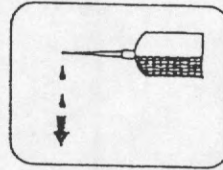
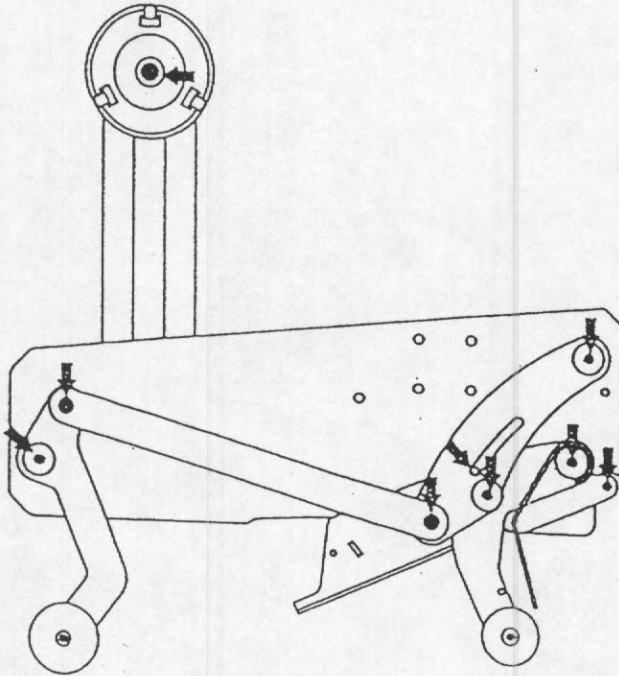
In case the driving belt is too loose to drive the carton, simply adjust the belt tension.

1. Remove the two screws on the belt guard, and remove the belt guard.
2. Loosen the upper and lower adjustment nut. Turn it clockwise to tighten the screw until proper tension is obtained.
3. Fit the belt guard to its position and tighten the screws.

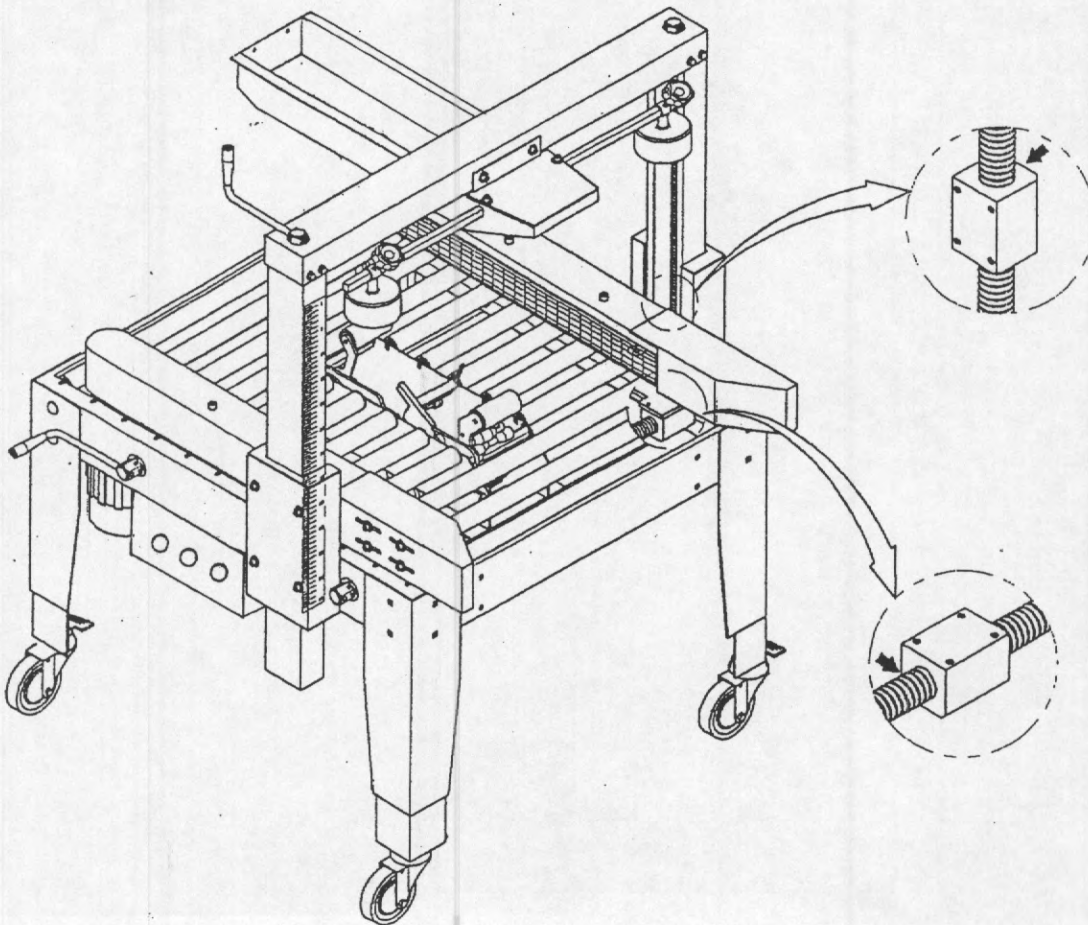


MAINTENANCE AND LUBRICATION

To ensure the service life of the machine, lubricate periodically all moving points as instructed by the arrowhead on the figures below :



LUBRICATION OF TAPE
HEAD MECHANISM



TROUBLE SHOOTING

TROUBLE	PROBABLE CAUSES	REMEDY
Tape isn't being 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
A trailing of tape after cut off motion	<ul style="list-style-type: none"> *Unsmooth motion of knife holder due to choke *Extension spring fatigue of knife holder. 	<ul style="list-style-type: none"> *Check if the Knife holder screws are loose. Lubricate when necessary. *Replace it.
Tape is not fully adhering to the box.	<ul style="list-style-type: none"> *Main spring too loose *The roller shafts which tape run over are not effected due to accumulated tape adhesive. 	<ul style="list-style-type: none"> *Tighten the main spring *Lubricate those roller shafts *Loosen.
Box choked on the way	<ul style="list-style-type: none"> *Improper Box Height Adjustment. *Main spring too tight. 	<ul style="list-style-type: none"> *Re-adjust the height. *Loosen the main spring.
Tape broken while in sealing on box	<ul style="list-style-type: none"> *Knife protrudes too far. 	<ul style="list-style-type: none"> *Lower the knife position
Tape can't travel smoothly	<ul style="list-style-type: none"> *Tape adhesion is not even *The roller shafts which tape runs over are not effected due to accumulated tape adhesive. *Irreversible roller is not effected. *Tape loaded incorrectly *Tape wheel adjustment nut too tight. 	<ul style="list-style-type: none"> *Replace with a new tape roll *Lubricate those roller shafts *Replace it. *Correct tape loading so that adhesive side faces upward. *Loosen
Tape mistakes frequently	<ul style="list-style-type: none"> *Irreversible roller is not effected. 	<ul style="list-style-type: none"> *Replace
*Tape is off central application.	<ul style="list-style-type: none"> *Both Guide wheels give uneven pressure on the box. 	<ul style="list-style-type: none"> *Re-adjust the distance between both Guide wheels.

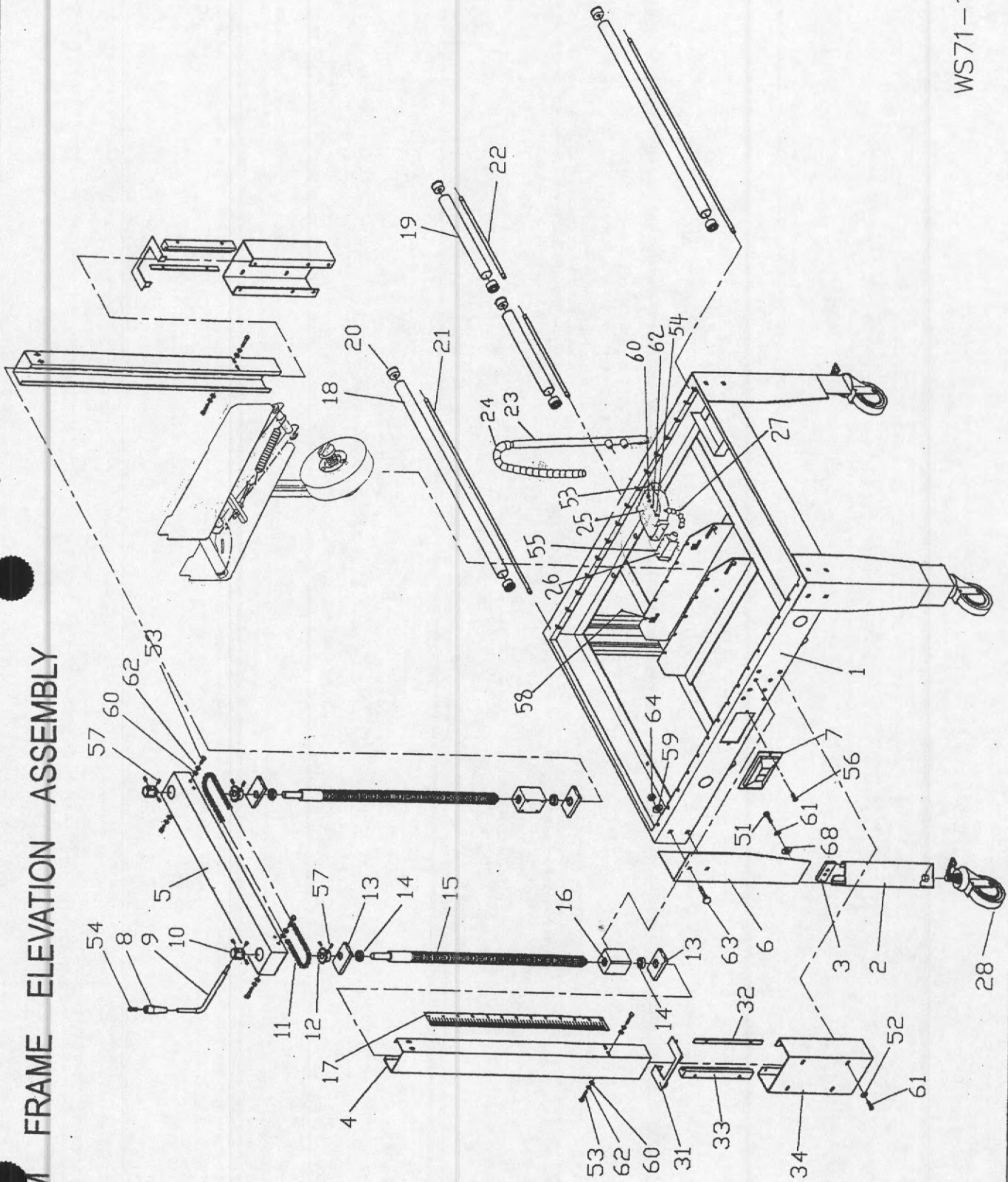
TROUBLE SHOOTING

PROBLEM	PROBABLE CAUSES	REMEDY
Tape end wrinkling on the carton.	<ul style="list-style-type: none"> * Tape wheel assembly (A) is too tight. * Inside tape wheel assembly with sharp edges & dust. * Tape does 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.

NOTE: Clean the knife daily with a toothbrush and gasoline.

WS71-100

BOTTOM FRAME ELEVATION ASSEMBLY



BOTTOM FRAME ELEVATION ASSEMBLY

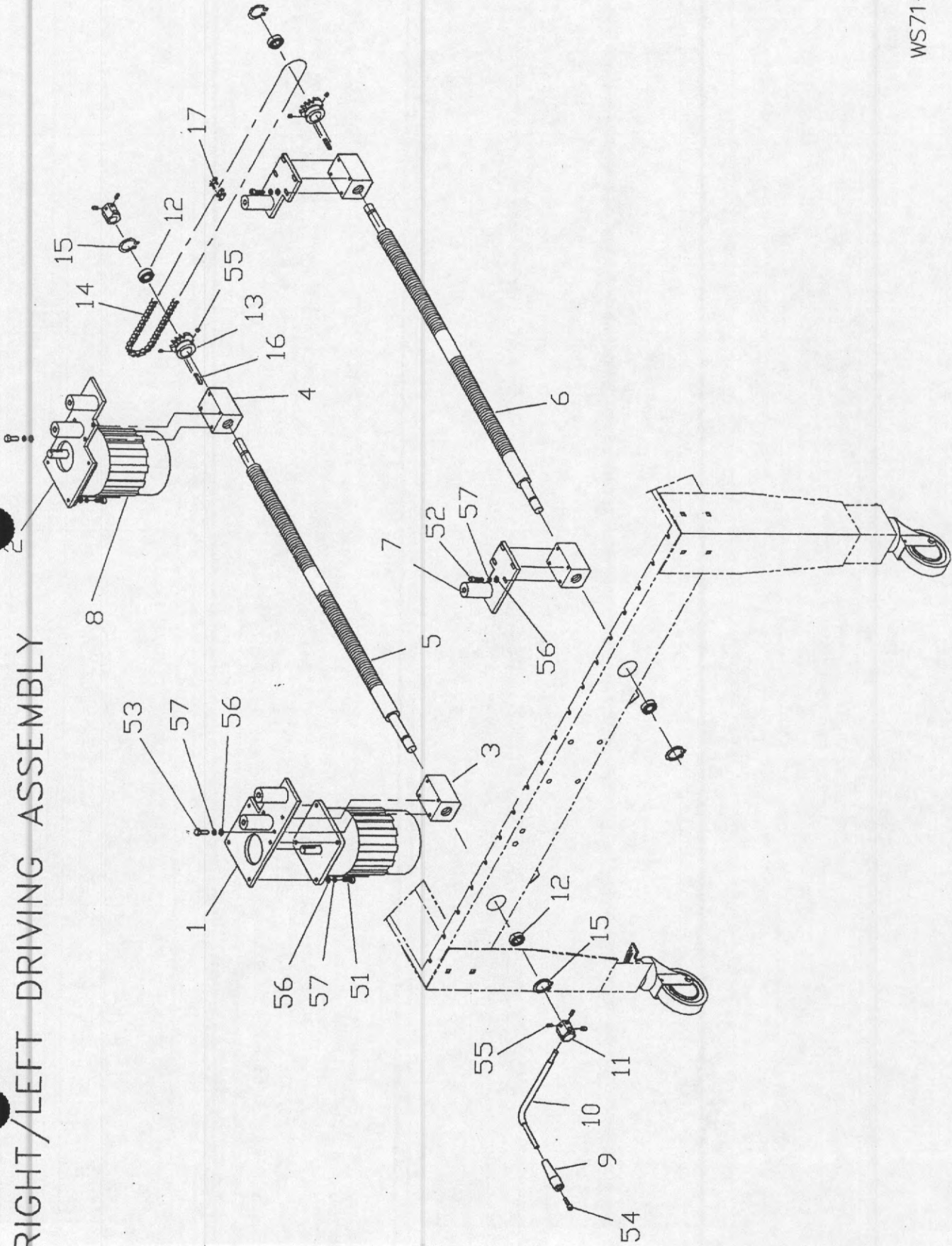
NO	DRAWING	Q'TY	PART NAME	NOTE
1	E71-S101	1	Bottom frame	
2	E00-1020	4	Extension leg	
3	E00-1030	4	Leg fixing piece	
4	LE73-PL1	2	Inner column	
5	E71-S105	1	Top beam	
6	E72-1060	4	Let	
7	E72-1070	1	Power source switch	
8	E00-1080	1	Crank handle knob	
9	E00-1090	1	Crank handle	
10	E00-1100	2	Bush	
11	E00-1110	1	Chain	
12	E00-4090	2	Chain sprocket	
13	E00-1130	4	Bearing mounting plate	
14	E00-1140	4	Ball bearing	
15	E00-1150	2	Elevation screw	
16	E72-2040	2	Nut	
17	E00-1170	1	Rule gauge	
18	ROL-0714	7	Roller (1)	
19	ROL-0287	10	Roller (2)	
20	E00-1200	34	Plastic bush	
21	ROS-0729	7	Roller shaft (1)	
22	ROS-0302	10	Roller shaft (2)	
23	E00-1230	1	Wire	
24	E00-1240	1	Tube	
25	E00-1250	1	Fan	
26	E00-1260	1	Fan nozzle	
27	E00-1270	1	Fan pipe	
28	E00-1280	4	Caster	
31	E71-PL22	2	Outer column beam	
32	E71-PL23	2	Guiding block fixed plate	
33	E71-PL21	2	Extension screw guiding block	
34	E71-PL2	2	Outer column	
51	M8*25	8	Hexagonal socket head screw	
52	M8*16	8	Hexagonal socket head screw	
53	M6*16	18	Hexagonal socket head screw	

BOTTOM FRAME ELEVATION ASSEMBLY

NO	DRAWING	Q'TY	PART NAME	NOTE
54	M6*12	1	Hexagonal socket head screw	
55	M6*12	2	Round cross head screw	
56	M5*12	2	Round cross head screw	
57	M6*8	10	Fix screw	
58	M3*12	4	Round cross head screw	
59	M8 , 23	16	Plain washer	
60	M6 , 19	16	Plain washer	
61	M8	16	Spring washer	
62	M6	16	Spring washer	
63	M8*16	16	Screw	
64	M8	16	Lock screw	
65	M6	2		
66	M4*10	2	Round cross head screw	
67	M4	2	Nut	
68	M8, ϕ 16	16	Plain washer	
69	M6, ϕ 13	4	Plain washer	

WS71-200

RIGHT/LEFT DRIVING ASSEMBLY

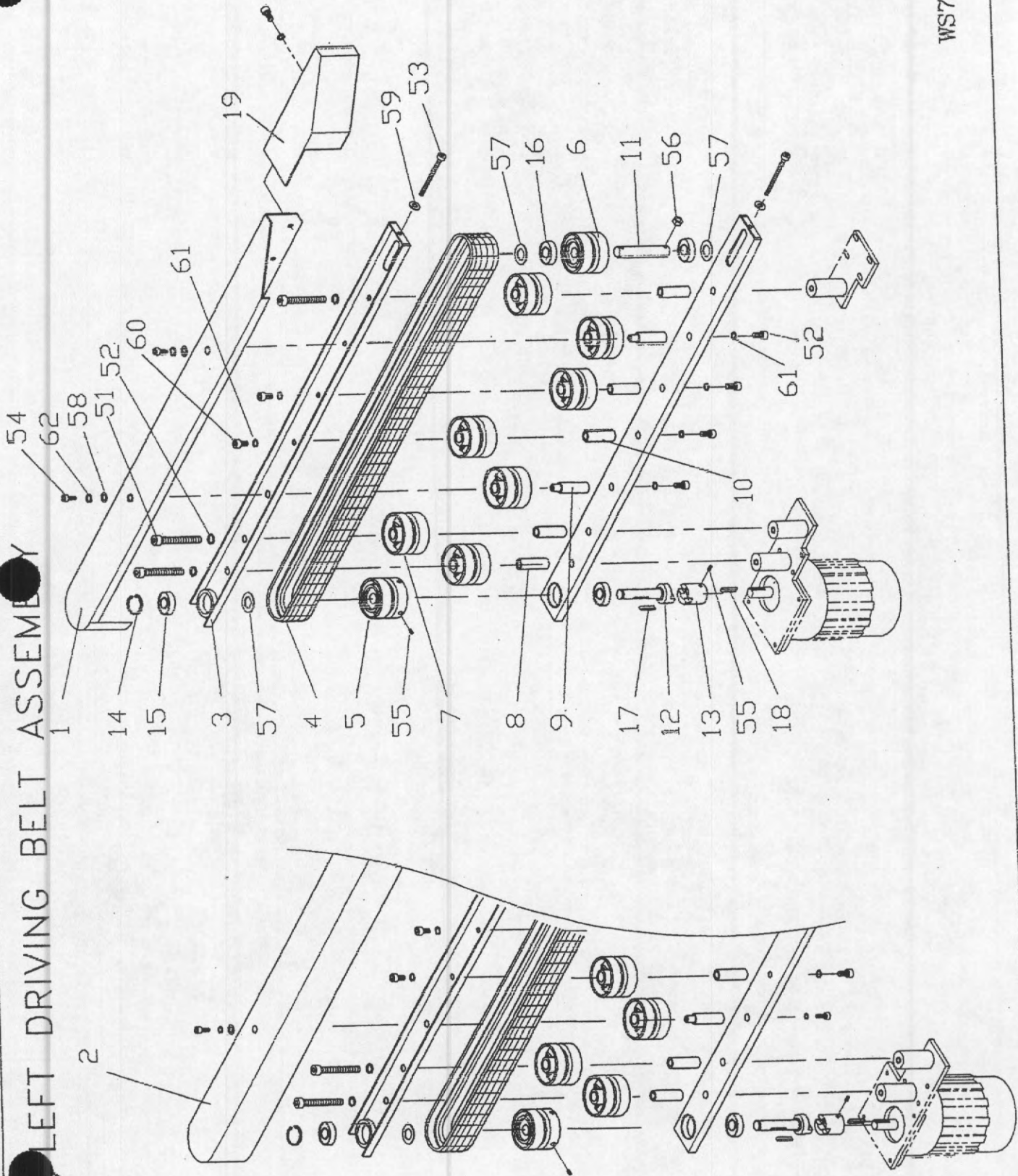


RIGHT/LEFT DRIVING ASSEMBLY

NO	DRAWING	SPEC	Q'TY	PART NAME	NOTE
1	E71-S201		1	Motor base (left)	
2	E71-S202		1	Motor base (right)	
3	E72-2030		2	Nut (left thread)	
4	E72-2040		2	Nut (right thread)	
5	E72-2050		1	Adjusting Screw (rear)	
6	E72-2060		1	Adjusting Screw (front)	
7	E71-S207		2	Belt adjustment plate	
8	E00-2080		2	Motor	
9	E00-1080		1	Crank handle knob	
10	E00-1090		1	Crank handle	
11	E00-1100		2	Bush	
12	E00-2120	6003ZZ	4	Ball bearing	
13	E00-4090		2	Chain sprocket	
14	E72-2140		1	Chain	
15		S17	4	"C" circllet	
16		5*25	2	Round end key	
17		RS30	1	Chain joint	
51		M6*25	8	Hexagonal socket head screw	
51		M6*20	8	Hexagonal socket head screw	
53		M6*20	8	Hexagonal socket head screw	
54		M6*16	1	Hexagonal socket head screw	
55		M6*8	10	Fix screw	
56		M6	24	Plain washer	
57		M6	24	Spring washer	

WS71-300

RIGHT LEFT DRIVING BELT ASSEMBLY

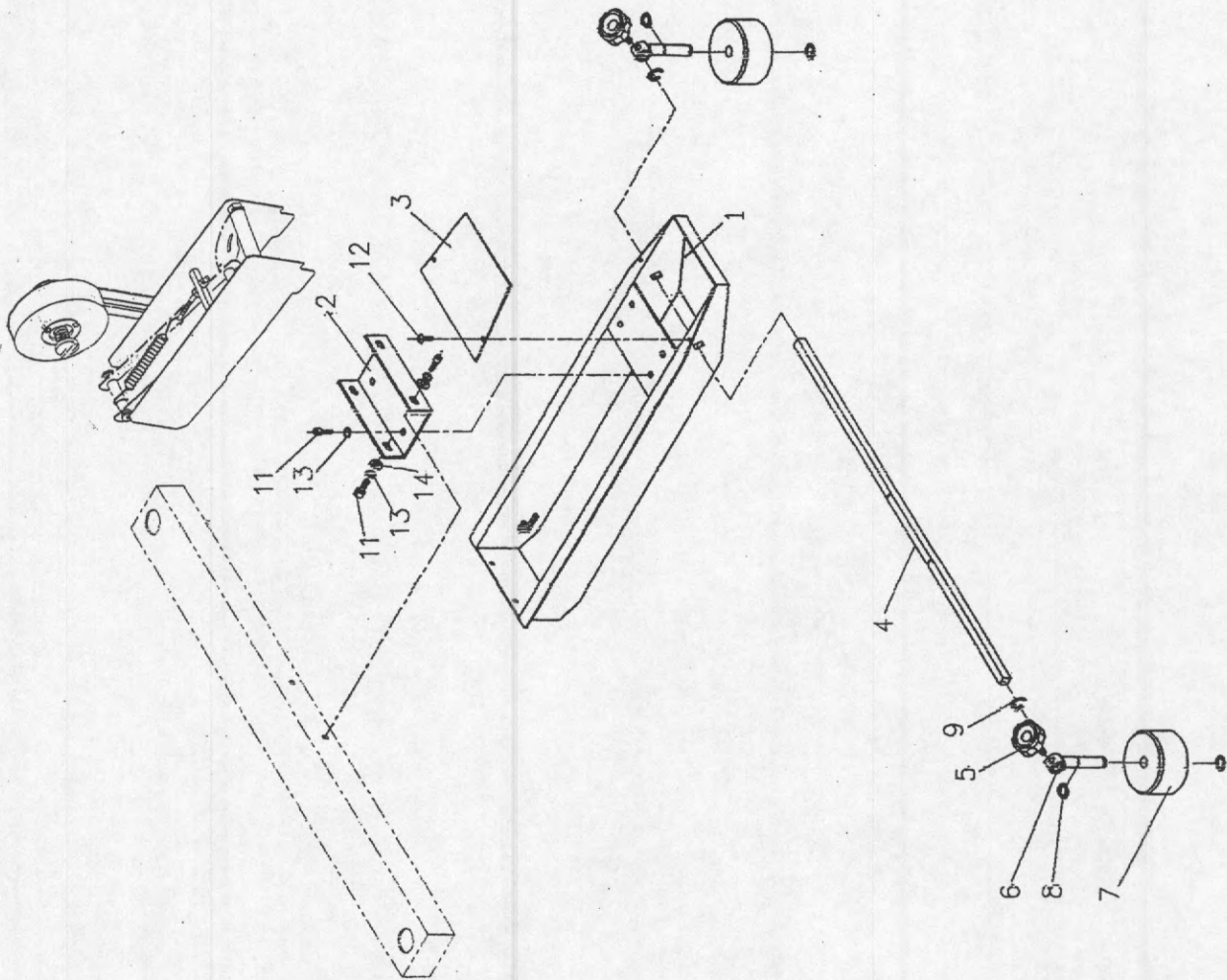


RIGHT/LEFT DRIVING BELT ASSEMBLY

NO	DRAWING	SPEC	Q'TY	PART NAME	NOTE
1	E71-S301		1	Driving belt guard (right)	
2	E71-S302		1	Driving belt guard (left)	
3	E71-S303		4	Pulley belt guard fixing plate	
4	E00-4030		2	Driving belt	
5	E00-4050		2	Driving aluminum pulley	
6	E00-4060		2	Driving aluminum pulley	
7	E00-4040		14	Plastic pulley	
8	E72-3080		6	Plastic pulley shaft (1)	
9	E72-3090		4	Plastic pulley shaft (2)	
10	E72-3100		4	Plastic pulley shaft (3)	
11	E72-3110		2	Driven pulley shaft	
12	E72-3120		2	Transmission shaft	
13	E72-3130		2	Transmission collar	
14		S17	2	"C" circlip	
15	E00-2120	6003ZZ	4	Ball bearing	
16	E00-3160	6202ZZ	4	Ball bearing	
17		5*40	2	Round end key	
18		5*25	2	Round end key	
19	E71-S3011		2	Belt guard adjustment	
51		M10*80	6	Hexagonal socket head screw	
52		M8*16	12	Hexagonal socket head screw	
53		M6*80	4	Hexagonal socket head screw	
54		M6*12	4	Hexagonal socket head screw	
55		M6*8	8	Fix screw	
56		M6	4	Nut	
57		M17	7	Plain washer	
58		M6, ϕ 19	4	Plain washer	
59		M6, ϕ 13	4	Plain washer	
60		M10	6	Spring washer	
61		M8	12	Spring washer	
62		M6	4	Spring washer	

UPPER BELT ASSEMBLY

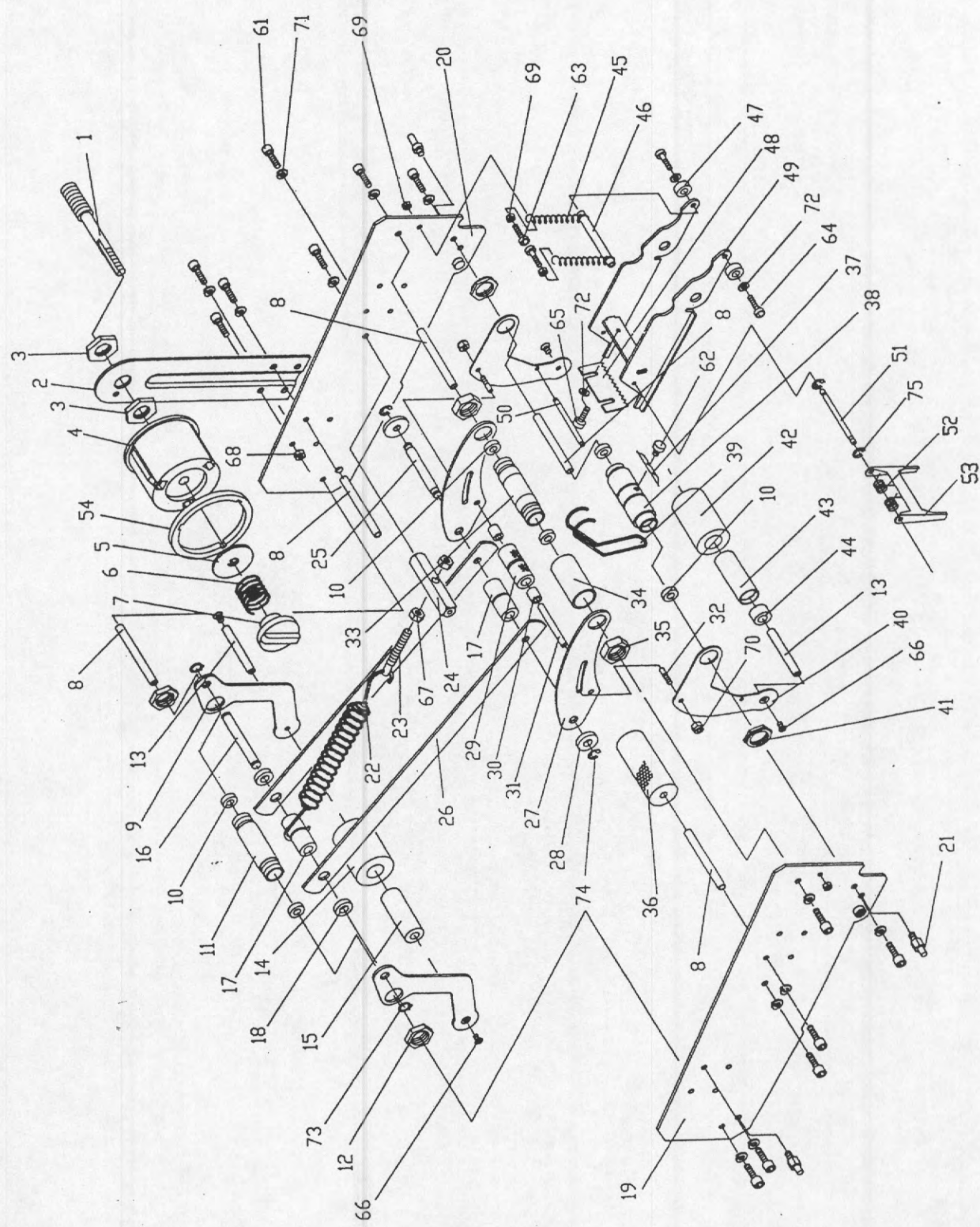
NO	DRAWING	Q'TY	PART NAME	NOTE
1	E71-S407	1	Upper unit	
2	E71-S426	1	Upper unit fix plate	
3	E71-S408	1	Upper unit cop	
4	E72-4320	1	Square shaft	
5	E72-4310	1	Guide wheel fix knob	
6	E72-4300	1	Guide wheel arbor	
7	E72-4290	1	Guide wheel	
8	S15	2	C circlet	
9	E15	2	E circlet	
		2		
11	M8*16		Hexagonal socket screw	
12	M5*6	2	Round cress head screw	
13	M8	2	Spring washer	
14	M8	2	Plastic washer	



UPPER BELT ASSEMBLY

WS71-400

TAPE HEAD MECHANISM



TAPE HEAD MECHANISM

SEQ.NO	PART NO.	Q'TY	DESCRIPTION
1.	E20-0010	1	Tape wheel shaft
2.	E20-0020	1	Tape wheel bracket
3.	E20-0030	2	Tape wheel lock nut
4.	E20-0040	1	Tape wheel
5.	E20-0050	1	Tape wheel washer
6.	E20-0060	1	Tape wheel spring
7.	E20-0070	1	Tape wheel adjustment nut
8.	E20-0080	5	Shaft
9.	E20-0090	2	Rubber roller bracket
10.	E20-0100	6	Nylon bearing
11.	E20-0110	1	Holding shaft (rear)
12.	E20-0120	2	Rear holding shaft lock nut
13.	E20-0130	2	Rubber roller shaft
14.	E20-0140	1	Rubber roller (M)
15.	E20-0150	1	Rubber roller quill (M)
16.	E20-0160	1	Shaft
17.	E20-0170	2	Bush
18.	E20-0180	2	Rear nylon washer
19.	E20-0190	1	Tape head side plate (left)
20.	E20-0200	1	Tape head side plate (right)
21.	E20-0210	4	Tape head fix screw
22.	E20-0220	1	Extension spring (rear)
23.	E20-0230	1	Adjustment screw
24.	E20-0240	1	Square shaft
25.	E20-0250	1	Shaft (2)
26.	E20-0260	2	Guide shaft plate
27.	E20-0270	2	Irreversible roller bracket
28.	E20-0280	2	Nylon washer (front)
29.	E20-0290	1	Irreversible roller
30.	E20-0300	2	Irreversible bearing (1)

TAPE HEAD MECHANISM

SEQ.NO	PART NO.	Q'TY	DESCRIPTION	
31.	E20-0310	1	Irreversible roller shaft	
32.	E20-0320	2	Guide screw	
33.	E20-0330	1	Tape head guide shaft	
34.	E20-0340	1	Plastic bush	
35.	E20-0350	2	Irreversible roller bracket lock nut	
36.	E20-0360	1	Plastic roller	
37.	E20-0370	1	Arch spring hold down plate	
38.	E20-0380	1	Front holder plate	
39.	E20-0390	1	Arch Spring	
40.	E20-0400	2	Front roller bracket	
41.	E20-0410	2	Front holder plate lock nut	
42.	E20-0420	1	Rubber roller (S)	
43.	E20-0430	1	Rubber roller shaft (S)	
44.	E20-0440	1	Irreversible bearing (2)	
45.	E20-0450	2	Extension spring (front)	
46.	E20-0460	1	Spring fix shaft	
47.	E20-0470	2	Buffering washer	
48.	E20-0480	1	Knife	
49.	E20-0490	2	Knife holder	
50.	E20-0500	1	Tape holder rod	
51.	E20-0510	1	Guard shaft	
52.	E20-0520	1	Guard spring	
53.	E20-0530	1	Knife guard	
54.	E20-0540	1	Plastic washer	
61.		15	Hexagonal socket head screw	M6x12
62.		1	Hexagonal socket head screw	M6x10
63.		2	Hexagonal socket head screw	M5x20
64.		2	Hexagonal socket head screw	M5x16
65.		2	Hexagonal socket head screw	M5x12

TAPE HEAD MECHANISM

SEQ.NO	PART NO.	Q'TY	DESCRIPTION	
66.		2	Hexagonal screw	M5x12
67.		2	Nut	M8
68.		3	Nut	M6
69.		4	Nut	M5
70.		2	Nut	M6
71.		15	Teeth washer	M6
72.		3	Plain washer	M5
73.		2	"C" circlip	S-9
74.		2	"E" circlip	E-7
75.		2	"E" circlip	E-3