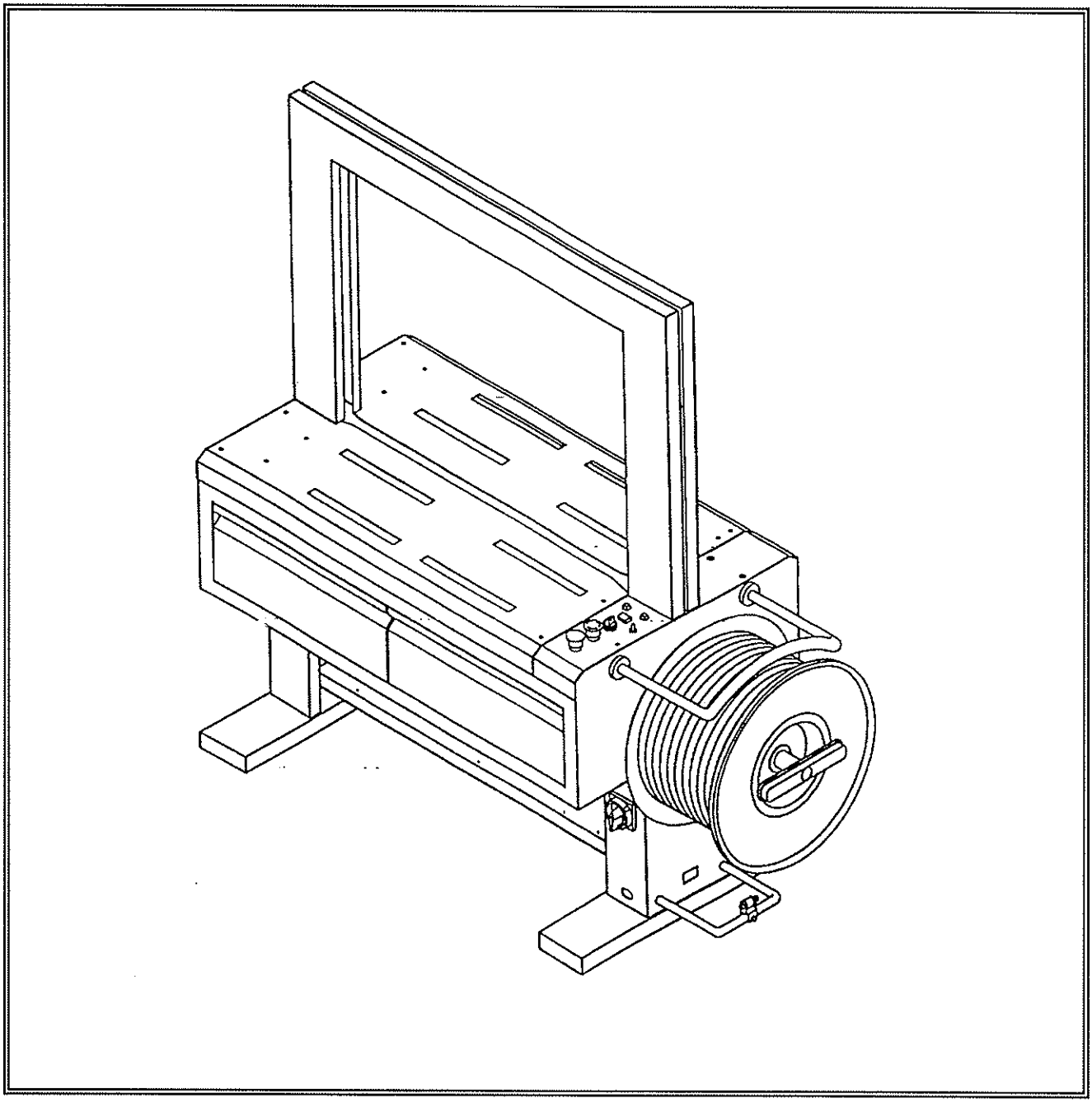
SAFETY, OPERATION, MAINTENANCE AND PARTS MANUAL

Samuel Strapping Systems



P-225

STRAPPING MACHINE

A Samuel Manu-Tech Company

Columbus, OH Etobicoke, ON Fountain Inn, SC Kilnhurst, U.K. Maidenhead, U.K. Paris, France Scarborough, ON
Detroit, MI Fort Mill, SC Hodgkins, IL Longview, TX Mississauga, ON Rock Hill, SC Winchester, TN

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.

OPERATION

1. Do not operate the machine with the table tops or covers removed.
2. Make sure the proper voltage is being used to operate the machine.
3. Never put any part of your body near, under or into a moving machine.
4. Do not operate the machine with any safety devices removed or disabled.
5. Follow instructions provided in this manual.
6. Only trained people should operate this machine.
7. Do not attempt to strap any part of your body.
8. Do not overload the machine by exceeding the performance limitations specified in this manual.

MAINTENANCE

1. Shut off and lock out all electrical power before performing any maintenance procedure.
2. Use the correct tools and parts to repair the machine.
3. Only trained people should service the machine.
4. Follow instructions provided in this manual.

ADDITIONAL CONSIDERATIONS

1. Do not touch the heater and the surrounding area. The heater operates at approximately 700° F. (370° C). Allow sufficient time for the heater to cool down.
2. The machine should be placed on a level floor and the surrounding area should be kept free of debris and discarded strap.
3. If you are unsure about the operation or the maintenance of the machine, contact your nearest **Samuel Strapping Systems** office.

This symbol:  is used throughout this manual and in conjunction with one of three words: **CAUTION, WARNING** or **DANGER.** It is used to alert operators and maintenance personnel to a condition that requires special to extreme care to avoid personal injury.

CONTENT

INTRODUCTION

Safe, efficient and long term operation of the **P-225 Samuel Strapping Machine** requires proper operation and maintenance. This manual contains the details needed to guide and alert operating and service personnel with respect to safety, operation and maintenance procedures and it contains a complete parts list so replacement parts can be identified and ordered when they are needed.

⚠ CAUTION

- ***ALWAYS CLEAN DUST AND DEBRIS FROM THE MACHINE AFTER EACH USE.***
- ***MAKE SURE ALL ELECTRICAL POWER HAS BEEN DISCONNECTED AND LOCKED OUT BEFORE PERFORMING ANY INSPECTION, ADJUSTMENT OR MAINTENANCE PROCEDURE.***
- ***WHEN THE MACHINE IS NOT TO BE USED FOR A LONG PERIOD OF TIME, REMOVE THE STRAP THAT WAS FED INTO THE MACHINE AND PROTECT THE REEL WITH A DUST COVER.***
- ***IF A DIFFERENT WIDTH STRAP IS TO BE USED, SPECIFIC PARTS MUST BE CHANGED. PLEASE CONSULT YOUR DISTRIBUTOR OR*** **SAMUEL STRAPPING SYSTEMS** ***FOR ASSISTANCE.***

SECTION I

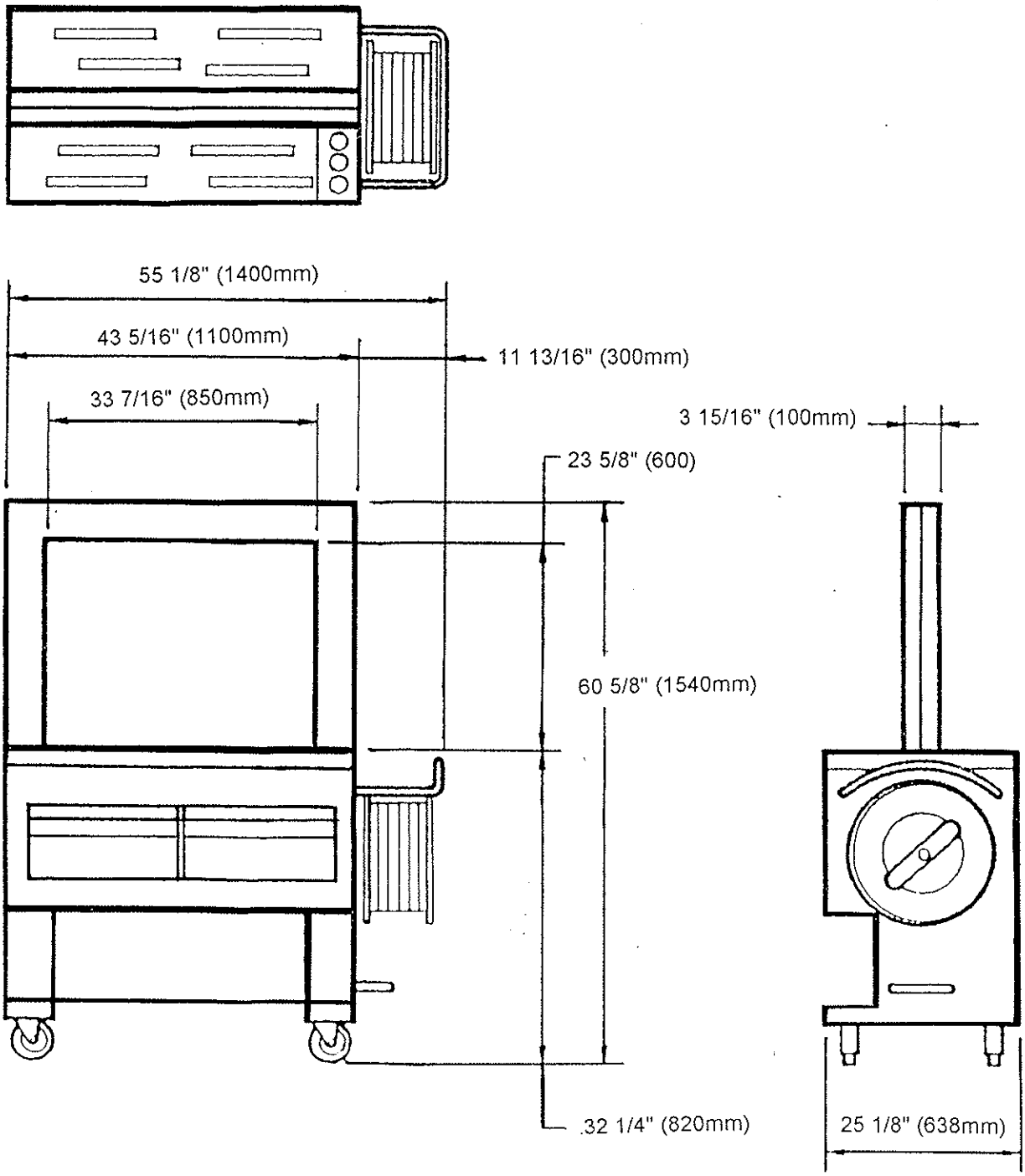
SPECIFICATIONS

MAJOR DIMENSIONS

SPECIFICATIONS

MODEL	**P-225**
POWER SOURCE	1 ph, 60Hz, 110V.
STRAP WIDTH	7mm, 3/8", 1/2"
CAPACITY	28/minute
PACKAGE SIZE	4 1/3" W. x 1" H. Min. 33" W. x 31" H. Max.
HEATER	Direct heating system Initial heat-up time approx. 3 minutes
MOTORS	Single Phase 115 V., 1/3 Hp Chamber Feed/Strap Take-up Single Phase 115 V., 1/2 Hp Main Drive/Strap Feed
NET WEIGHT	550 Lb.
ARCH SIZES	33" W. x 23" H. (7mm, 3/8",1/2") 33" W. x 31" H. (3/8", 1/2")

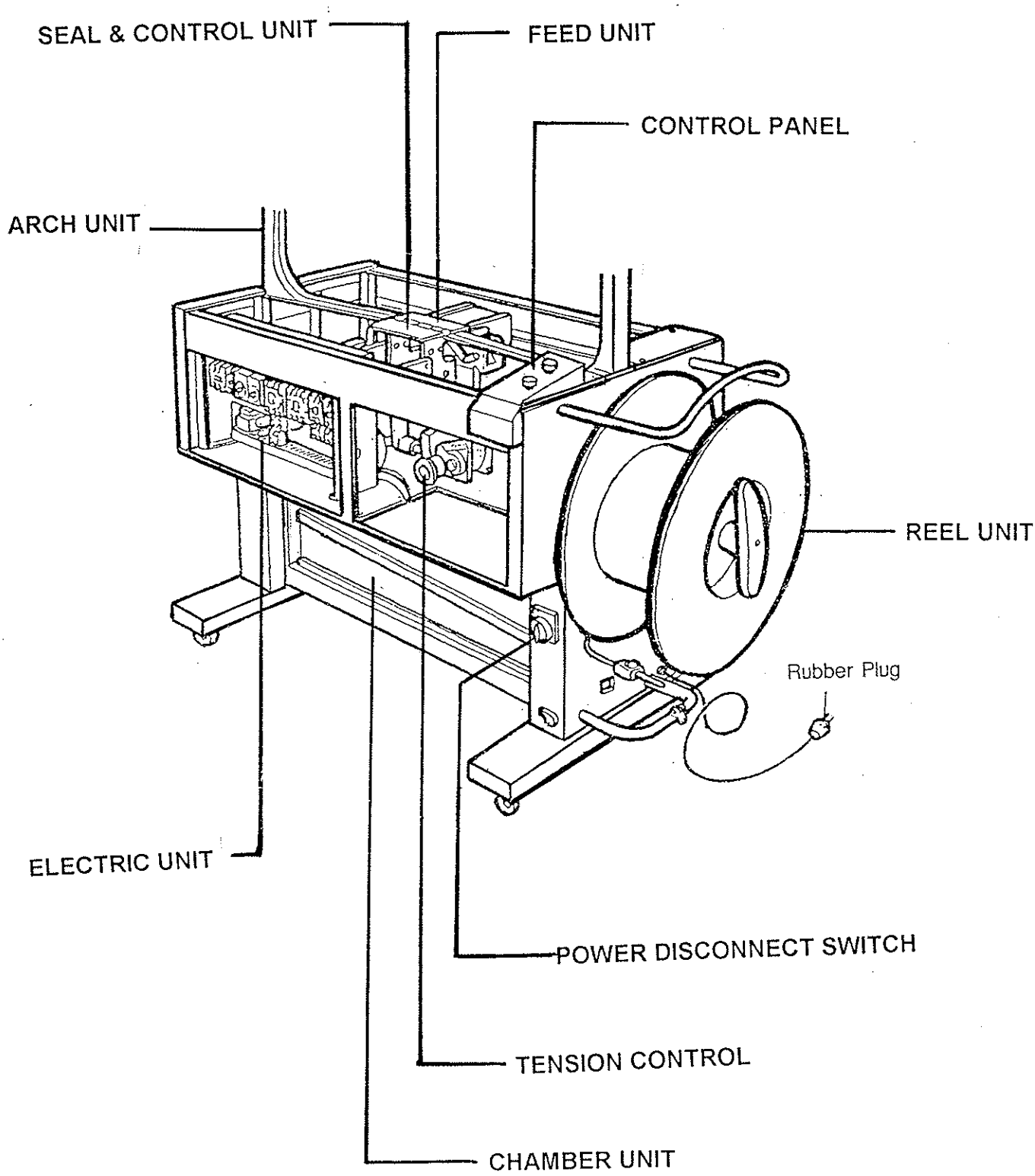
MAJOR DIMENSIONS



SECTION II

MACHINE CONTROLS

MACHINE COMPONENTS



MACHINE CONTROLS

STRAP BUTTON (1)
Push Strap Button for strapping operation.

STOP BUTTON (2)
The Stop Button can be used as the EMERGENCY STOP button. Push to stop, twist counter clockwise to release.

FEED/TAKE-UP SWITCH (3)/(4)
The Feed/Take-up switch serves to manually fill the strap chute or back out strap from the machine. Rotate the switch counter clockwise to feed strap and clockwise to retract the strap.

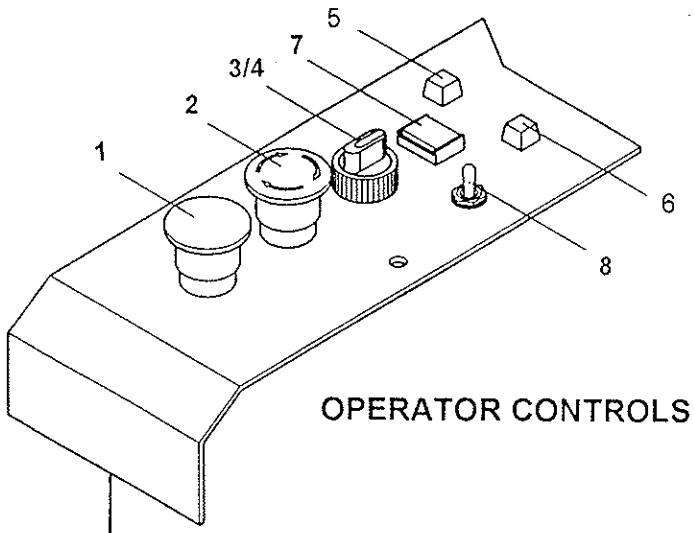
READY PILOT LAMP (5)
This is a Green lamp which illuminates when the strap is properly loaded and ready for the strapping operation.

ERROR PILOT LAMP (6)
This is an Orange lamp which illuminates if the strap has not loaded properly or the strap has not fed completely around the arch. When this lamp is illuminated, the feed switch can be turned on to feed the strap to the ready position.

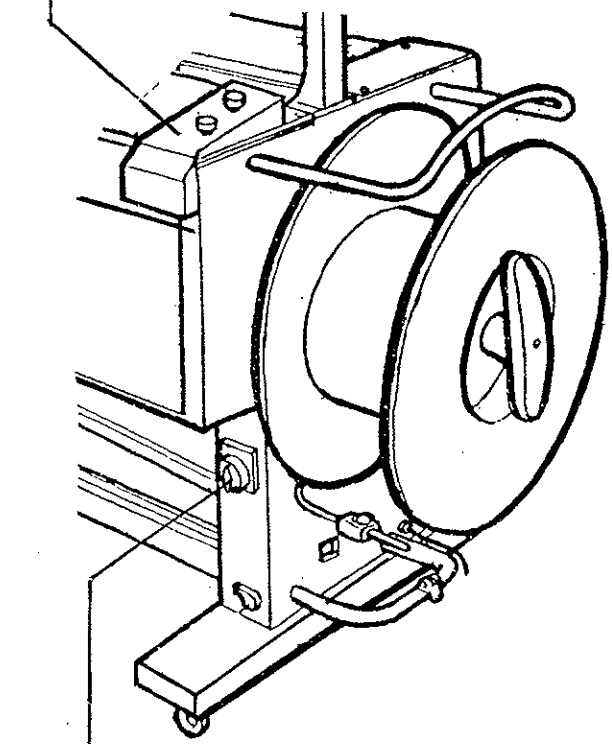
RESET BUTTON (7)
The Reset button is a button with a scissors on the face. The purpose of this button is to cycle the head to clear a malfunction such as strap exiting the arch. The reset button cuts away any damaged strap and returns the head to the ready position.

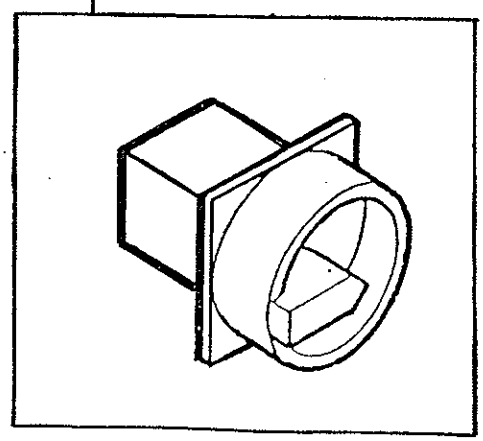
MANUAL/AUTO SWITCH (8)
This is an optional switch if the machine is equipped with a table top switch. With the switch in Auto position, the table-top switch is activated.

POWER DISCONNECT SWITCH
This switch is located below the machine and is used to bring power to the machine. This switch also provides for a lockout of power from the power plug to the rest of the machine to protect you from any electrical hazard when servicing the machine.



OPERATOR CONTROLS





POWER DISCONNECT SWITCH

SECTION III

OPERATING PROCEDURE

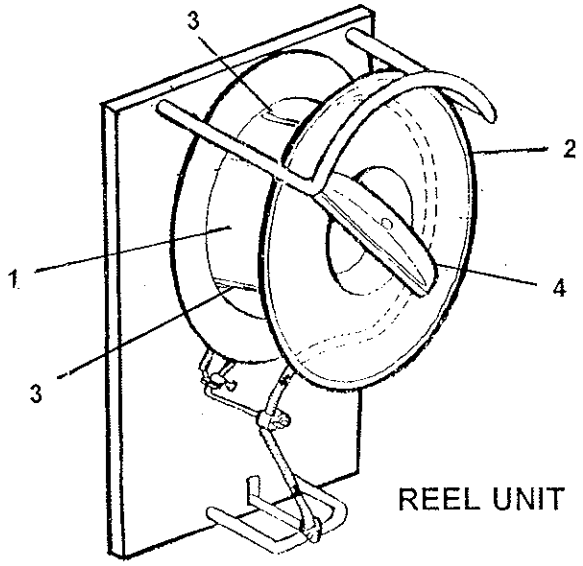
OPERATING PROCEDURE

STRAP LOADING

The following steps should be followed when loading strap into the machine. Be sure power is off.

LOADING STRAP COIL

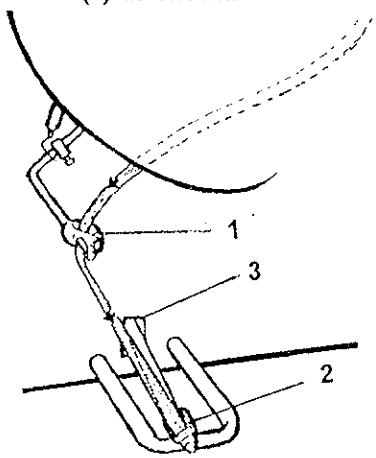
1. To load a new coil of strap (1) in the machine, unscrew reel handle (4) and remove outer disk (2).
2. Place coil of strap with strings(3) still attached onto reel unit. Be sure strap end is in the clockwise direction as shown.
3. Reattach outer disk (2) and tighten reel handle (4) to secure coil on reel then cut and remove the strings securing the strap (3).



REEL UNIT

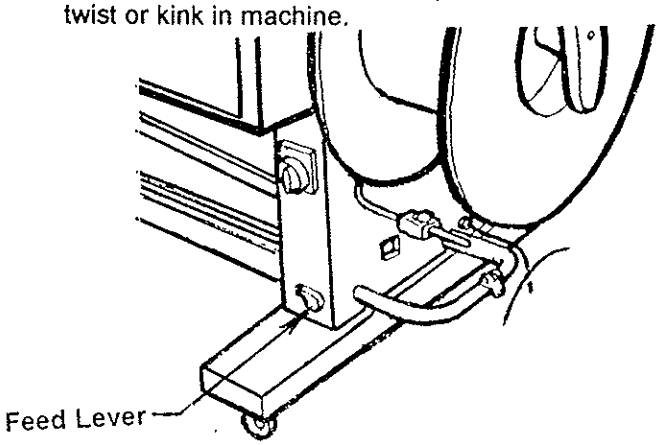
THREADING STRAP FROM COIL

1. Take the end of the strap and pass it through the Slide roller (1) and twist 90 degree. Insert into free angle roller (2) and into body of machine (3) as shown.



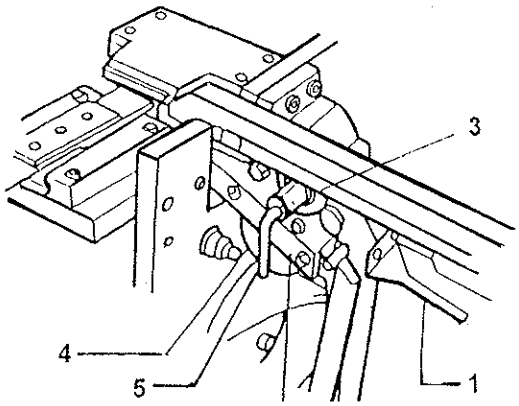
THREADING STRAP INTO MACHINE

1. Press and hold feed lever (1) down while hand feeding strap into machine until strap emerges from Chamber assembly next to the balance arm. (The lever releases the feed rollers allowing strap to pass between rollers.)
2. Take the end of the strap from the opening and while still holding the feed lever down, pull about 3 feet of strap from reel.
3. Take the strap and insert it vertically into the chamber box slot. Be sure strap does not twist or kink in machine.



THREADING STRAP INTO HEAD

1. Open access door and take the end of the strap and guide it under the Tension-Shooter (1) and into the head.
2. While still feeding the strap by hand, rotate the Upper-roller-grip (5) clockwise. This allows the strap to pass through the Upper Rollers (3) and the feed roller (4). Push about 2 inches of strap into the head.



When the strap has been securely inserted into the head, check that any excess strap has been tucked into the chamber and the access door is closed. Turn machine on by turning power switch on and releasing stop button. The machine should automatically feed strap into Chamber box. Turn feed switch lever to feed strap around arch. When strap loading is complete, a green ready light will illuminate on the control panel.

SECTION IV

ADJUSTMENTS

ADJUSTMENTS

STRAP CHANGE

If a strap change is required, a conversion kit is available. Please consult an Interlake Distributor for further information.

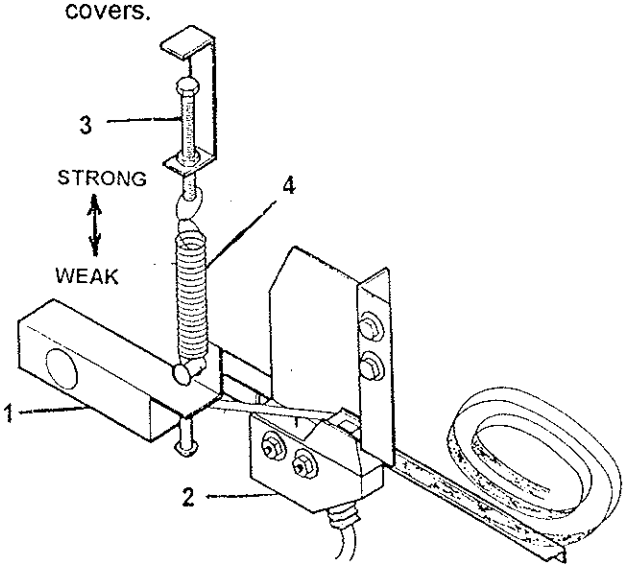
CHAMBER

The strapping machine has been preset to correctly store the proper amount of strap in the strap chamber.

If too little strap is in the chamber, there is a possibility that a short feed and strap error will occur. If too much strap is in the chamber, the strap may get pinched or damaged which may cause a strapping error. The chamber should have sufficient strap to keep up with the strapping operating.

If a change is required, the following procedure should be followed.

1. The adjustment screw for the Chamber box is located on the back side of the machine. After shutting power to machine, remove the left back cover of the machine by removing four screws.
2. The amount of strap in the Chamber is determined by the spring force (4) on the Chamber balance bar. When the strap in the Chamber box pushes the balance bar down, the limit switch LS-4, strap to the Chamber is shut off through clutch C4.
3. For more strap in the Chamber, the adjustment screw (3) should be raised, for less strap, the screw should be lowered. After the adjustment has been made, run a number of strap cycles and see how much strap is in the Chamber. Ideally, you should have two to three times the arch capacity in the chamber at any time.
4. After the Chamber spring has been adjusted, tighten all locking nuts and replace the covers.



STRAP THICKNESS CHANGE

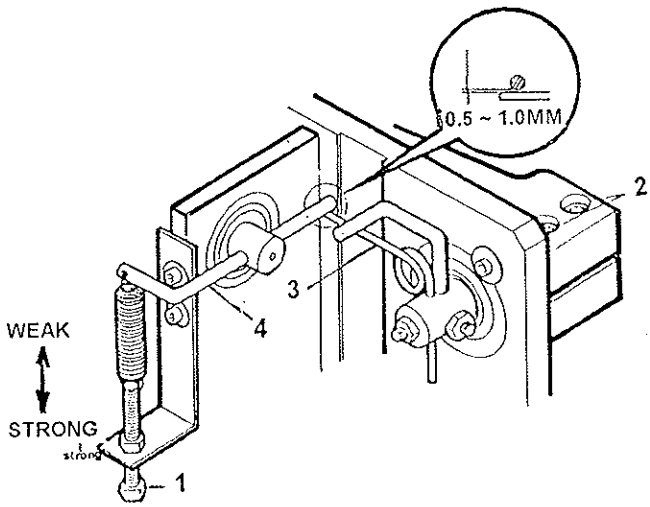
The machine has been pre-adjusted to acc acommodate strap thickness of 0.02 to 0.03" (.55-.75MM). If the strap is slipping during feed or take-up, this indicates too little pressure is on the feed roll. If twisting or waving of the strap occurs, this can indicate too much pressure on the feed roll. The following procedure should be used to correct the above conditions.

ADJUSTING FOR FEED ROLL PRESSURE

1. Loosen upper lower nuts on adjusting screw (1).
2. Adjust screw up for less feed force or down for more feed force.
3. When adjustment is correct, tighten nuts to lock the setting in place.

ADJUSTING TAKE-UP ROLLER PRESSURE

1. Loosen two screws (2).
2. Insert strap being used in under shooter and between upper and lower feed rollers.
3. Adjust the gap between the upper roller spring (3) and upper roller weight adjustment (4) to read 0.02 to0.04" (.5-1.0MM).
4. Lock screws (2) to maintain adjustment.



REEL BRAKE ARM ADJUSTMENT

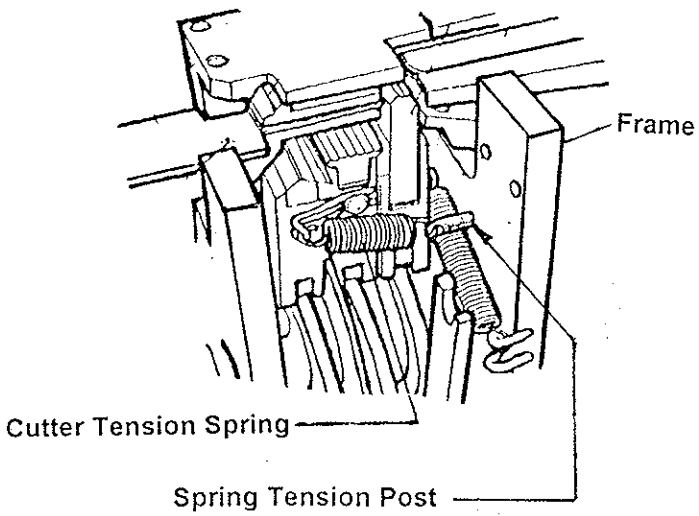
The reel brake prevents the reel from over rotating and maintains tension on the strap. If the brake is too tight, the machine will work harder to pull strap from the reel. If the brake is too weak, the strap in the reel may twist due to slack in the strap.

1. The adjustment of the reel brake is by increasing or decreasing the reel brake arm spring.

CUTTER-TENSION SPRING

To insure a clean strap cut-off, the cutter upper and the universal press must fit tight against each other. This is accomplished by the cutter tension spring. The spring should provide enough tension between the two parts to give a clean cut-off.

1. The adjustment to the spring is made by adjusting the length of the spring tension post.
2. The spring tension post is attached to the end of the spring and extends through the control frame. It is secured by two jam nuts on the outside of the frame.
3. Loosen the jam nuts and shorten or lengthen the spring as required. After the adjustment has been made, retighten the jam nut to secure the setting.



⚠ CAUTION

Disconnect power before adjusting limit switch cams

LIMIT SWITCH CAM

The proximity limit switches (LS1, LS2, LS3) attached to the main cam shaft control the various functions of the machine. The switches have been preset, however, if an adjustment is required, the following describes the proper adjustment to these switches.

To adjust the cam switches first remove the table tops. The cam switches can be accessed from the top and they can be rotated manually by attaching a 19mm socket on the end of the right angle gear box and rotate it clockwise to rotate the cam through the cycle.

LS-1

The LS-1 Prox. stops the cam rotation and activates the reverse motor.

1. When the roller of the cam follower is in the position shown (Fig. A-A) on the tension cam, the LS-1 switch contact should be aligned to the cam as shown (Fig. A).
2. The upper cutter is at the top of its stroke and the tension arm has not separated from the feed shooter.

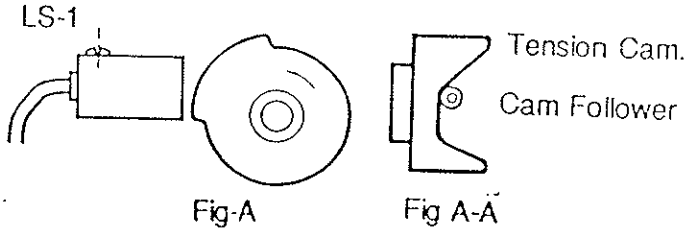


Fig-A Fig A-A

LS-2

The LS-2 Prox. actuates the forward motor.

1. When the roller of the cam follower is in the position shown (Fig. B-B), The LS-2 switch should be aligned to the cam as shown (Fig. B).
2. The tension arm is at the end of the tension stroke.

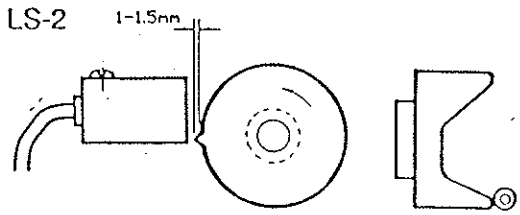


Fig-B Fig B-B

LS-3

The LS-3 returns the Seal and Control unit to its home position.

1. When the roller of the cam follower is in the position shown (Fig C-C), the LS-3 switch should be aligned to the cam as shown (Fig. C).
2. Check that the cutter upper is down to lowest position. If it starts to raise, set LS-3 to make contact earlier on cam.

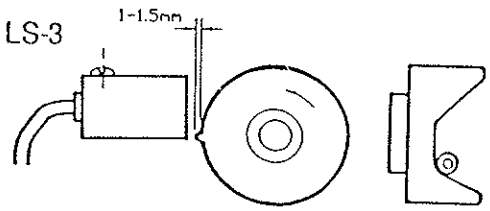


Fig. C Fig C-C

ADJUSTMENTS, Continued

STRAP TENSION SETTING

The strap tension is controlled by a tension knob located behind the front access doors.
To rotate the knob, pull the knob out and rotate it left or right then release and knob will lock in place. As the tension dial is rotated from the 0 to 10 position, the tension applied to the package is increased.
By varying the dial position, the correct tension on the package will be obtained. Please note that narrower strap widths may not be strong enough to withstand the higher tension setting. Set tension level only as high as required to apply a proper strap. Too much tension will reduce the life of machine components.

HEAT BLADE ADJUSTMENT

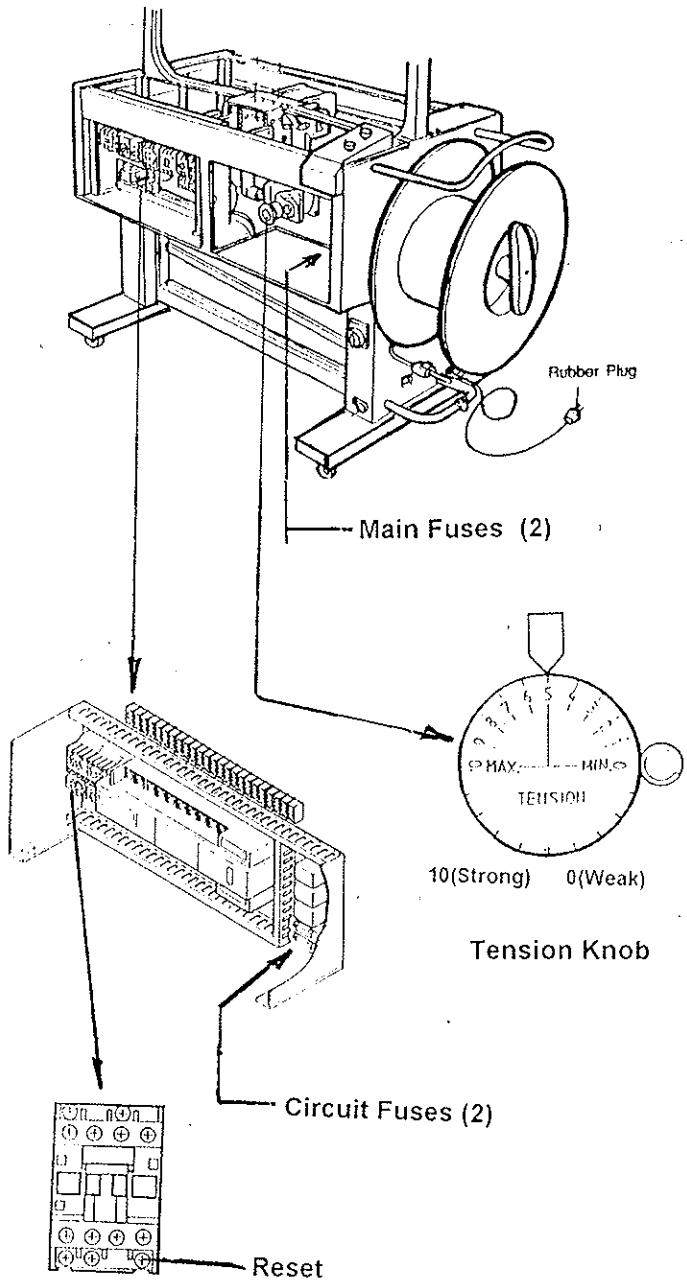
The heat blade temperature is important in achieving a proper weld. The adjustment is made through a transformer dial located behind the front access door.
The heat setting should be increased if weld is not achieved and the ends appear to have been peeled apart.
The heat setting should be decreased if the weld does not appear solidified or the joint has not completely set.
Higher cycle rates may also require increasing the temperature setting.
If joint is still not obtained, check if heat blade is aligned properly with the centering guide.

THERMAL RELAY

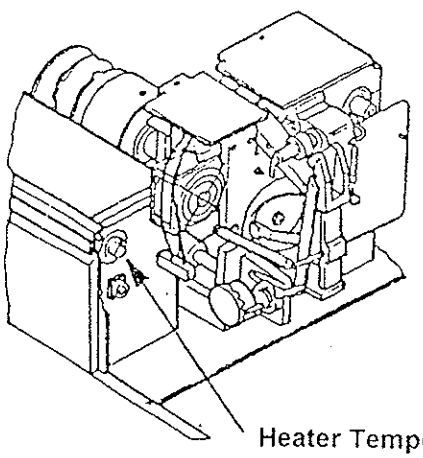
The Thermal Relays are located in the electrical enclosure behind the left front access door. These relays protect the Motors by disconnecting power if there is an overload to the motors. To reset the relays, first check what may have caused the overload then after waiting 5 minutes to allow the relay to cool down, press the red reset button on the relay.

FUSES

This machine is equipped with fuses to protect both the operator and the machine if a overload or circuit interruption should occur. There are 2 main fuses located behind the right access door and 2 circuit fuses located behind the left access door. Disconnect the power plug when replacing the fuse and always replace the fuse with the recommended size stated in the manual.



Motor Thermal Relay



TIMER ADJUSTMENT (T1 AND T2)

The internal timers in the PLC have been pre-set. They can be changed by using a MITSUBISHI "F" type programmer.

The factory settings for this machine are as follows:

Key No.	Function	Min. Unit	Setting Time
50	Feed Strap	0.1 second	Input
650	Take-up Strap	0.01 second	0.01 x Input
57	Auto-Stop	0.1 second	Input
651	Cooling Time Starting	0.01 second	0.01 x Input
652	Cooling Time Finishing	0.01 second	0.01 x Input

Procedure

1. Turn machine power OFF

2. Insert the Programmer on the PLC and turn power on.

3. Adjust the switch on the Programmer to MONITOR position

4. Run through adjustment sequence.

Example #1: Adjust Feed Strap time from 0.04 seconds to 0.05 seconds

Example #2: Adjust Take-up Strap time from 0.28 seconds to 0.3 seconds

Note: For setting the feed strap time, you only need to input the seconds you need, but for take-up, you need to calculate the minimum units (0.01 seconds) therefore for a setting of 0.3 seconds, you have to input 030 (0.3/0.01=030).

SECTION V

TROUBLESHOOTING

TROUBLESHOOTING

NO READY LIGHT (Green Light) or ERROR LIGHT (Orange Light)

Power Disconnect switch turned off	Turn Power Disconnect Switch **ON**
Main power to machine turned off	Check Power outlet at plug
Main Fuse burned out	Replace fuse
One or more Access doors open	Close all access doors

LIGHT ON BUT MACHINE DOES NOT START

Emergency stop button off	Pull Emergency Stop Button out to **ON**
One or more fuses burned out	Check and replace fuses as needed
Motor Thermal Relay tripped	Reset Thermal Relay

STRAP TAKE-UP/CHAMBER MOTOR DOES NOT SHUT OFF AFTER STRAP LOADED IN MACHINE

Chamber switch not correctly set	Check and adjust Chamber switch
Clutch not disengaging	Check Clutch

CANNOT REMOVE REEL TO LOAD STRAP

Reel on too tight	Secure inner flange while turning knob CCW

STRAP WILL NOT LOAD INTO MACHINE

Obstruction in strap path	Clear strap path of obstruction
Motor Thermal Relay tripped	Reset Thermal Relay

STRAP DOES NOT FEED FROM REEL

Strap incorrectly threaded	Pull strap out of machine and refeed
Strap is pulled down on side of coil	Check that flange is tight against coil
Reel brake set too tight	Readjust brake belt length and check spring tension

REEL CREATES EXCESSIVE SLACK AFTER PAY OUT

Strap incorrectly threaded	Check and rethread strap
Reel brake set too loose	Readjust brake belt length and check spring tension
Strap coil on reel backwards	Strap must pay out in Clockwise direction

MACHINE DOES NOT APPLY STRAP WHEN STRAP BUTTON PUSHED

Ready light not on	Turn strap feed switch to feed and retry strap button
Strap not loaded in machine or Error light on	Load strap in machine

MACHINE PUTS ON A LOOSE STRAP OR SEALS PREMATURELY

Strap not pulling out of arch chute	Check track gates for free movement
Time too short for strap retract	Check for return roller slippage
Return roller not in proper contact with strap	Check for roller wear and roller contact

WELD POPS AFTER STRAP APPLIED OR POOR WELD

Not enough time for knife to attain temperature	Allow more time for knife to heat up
Heater Blade temperature setting too low	Increase Heater Blade temperature
Strap alignment incorrect	Check strap guide adjustment
Heater Blade temperature too high	Lower Heater Blade temperature
Heater Blade alignment incorrect	Align Heater Blade

STRAP BREAKS NEXT TO WELD

Tension setting too high	Lower tension setting
Package not secured while tensioning	Hold package secure when strapping

STRAP HAS DIFFICULTY FEEDING

Feed wheel rollers not enough traction	Check setting of feed roll
Not enough strap in Chamber	Check amount of strap in chamber and adjust spring
Too much strap in Chamber or strap damaged	Remove strap from Chamber, adjust chamber spring. Cut away damaged strap and reload

STRAP HAS DIFFICULTY RETRACTING

Strap binding in track	Check that track gates open freely
Take-up wheels not properly contacting strap	Check for slippage in clutch

STRAP FORMS LOOP IN ARCH (LITTLE OR NO STRAP RETRACT)

Track binding or not correctly set	Set track to open according to strap width used
Overfeed cause buckle on previous cycle	Clear damaged strap and retry

EDGE OF STRAP SCUFFED AND/OR SURFACE OF STRAP SCUFFED(EXCESSIVE DUST)

Strap path not aligned with strap	Check for misalignment in strap path
Strap path narrower than strap	Check and adjust guides
Strap has excessive curl or camber	Check strap on coil and replace if not to spec.
Sharp burr or edge in strap path	Remove sharp edges
Bundle not square when strapping package	Hold bundle firmly when strapping

STRAP BUBBLES OUT OF CHUTE IN FEED CYCLE

Obstruction in strap chute	Check and clear strap path
Strap has excessive curl or camber	Check that strap moves smoothly through machine

STRAP DOES NOT CUT-OFF CLEAN AFTER STRAPPING

Strap cutter dull	Replace cutter and universal press
Gap between cutter and universal press	Adjust Cutter tension spring
Bundle not stationary when strapping	Secure bundle while strapping

STRAP PULLS OUT OF HEAD DURING TAKE-UP

Alignment of anvil and grippers incorrect	Check alignment and check for dull gripper teeth
Too much tension on strap	Lower tension
Strap not in anvil properly when cycle starts	Check that Ready light is on

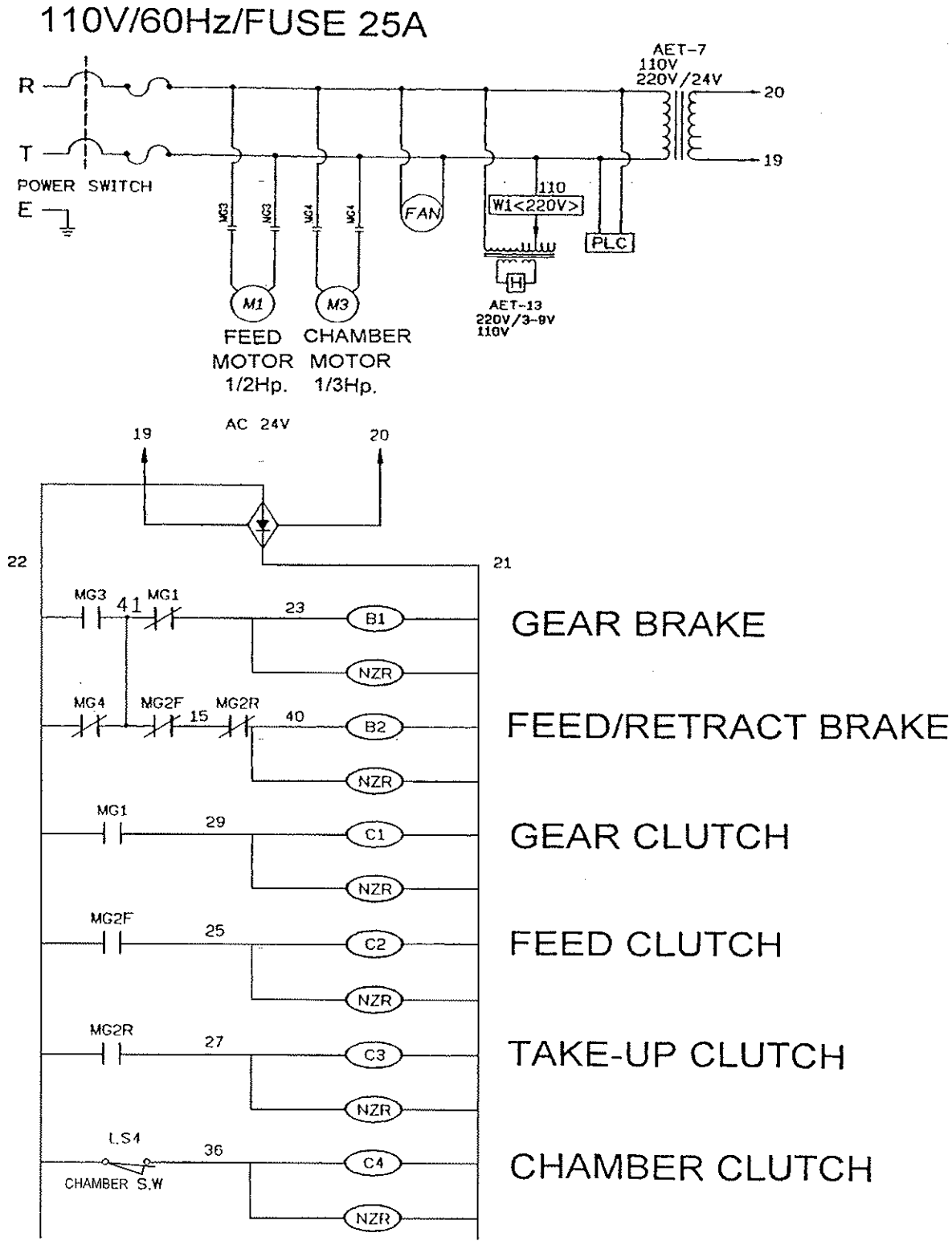
BEARING NOISE

Excessive Vibration around bearing housing	Check bearing for wear or damage. Replace bearing
Bearing housing Hot	Check for contamination around bearing or high loads
Bearing makes Grinding sounds	Check bearing for wear or damage. Replace bearing

SECTION VI

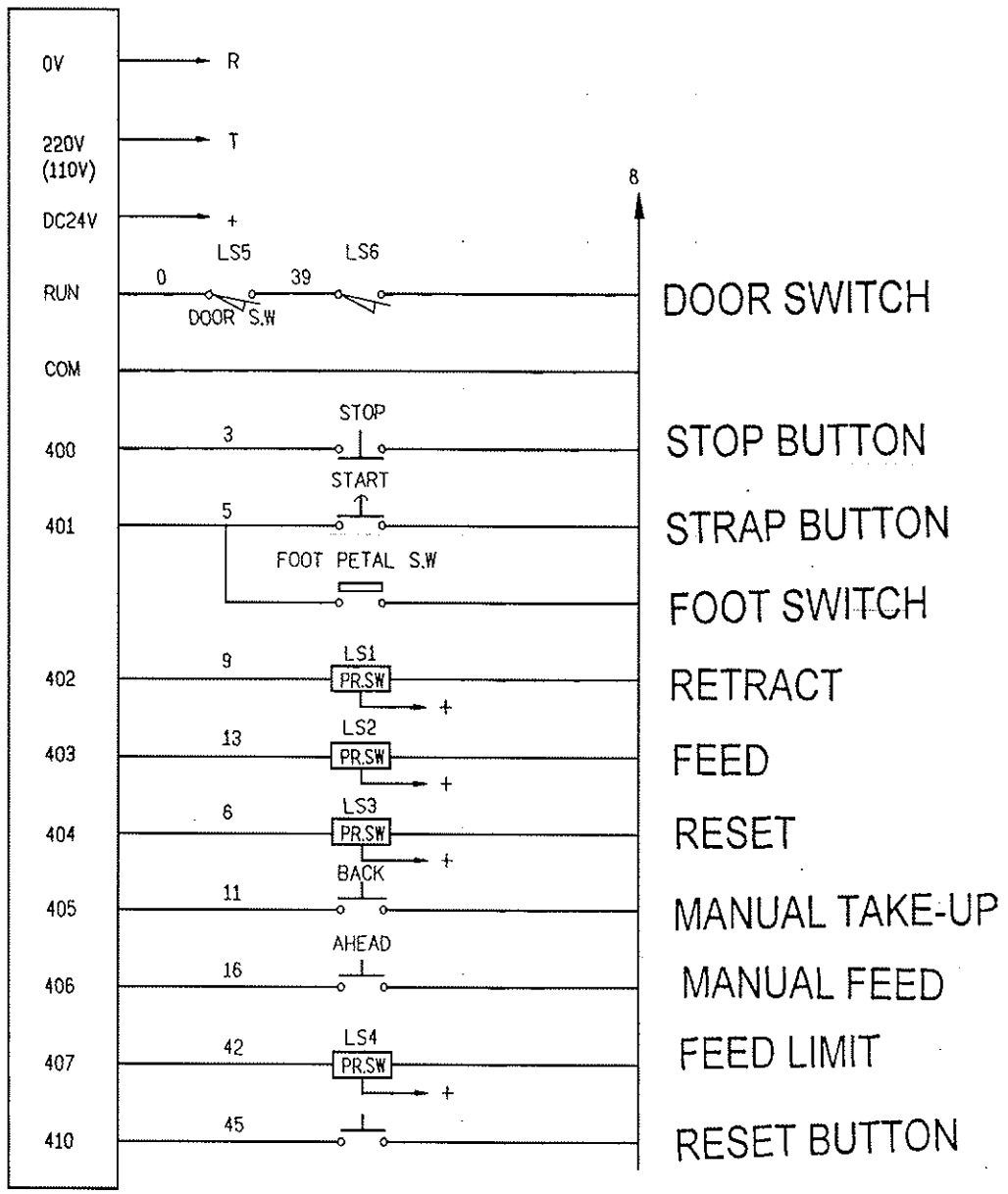
ELECTRICAL CIRCUIT

ELECTRICAL CIRCUIT



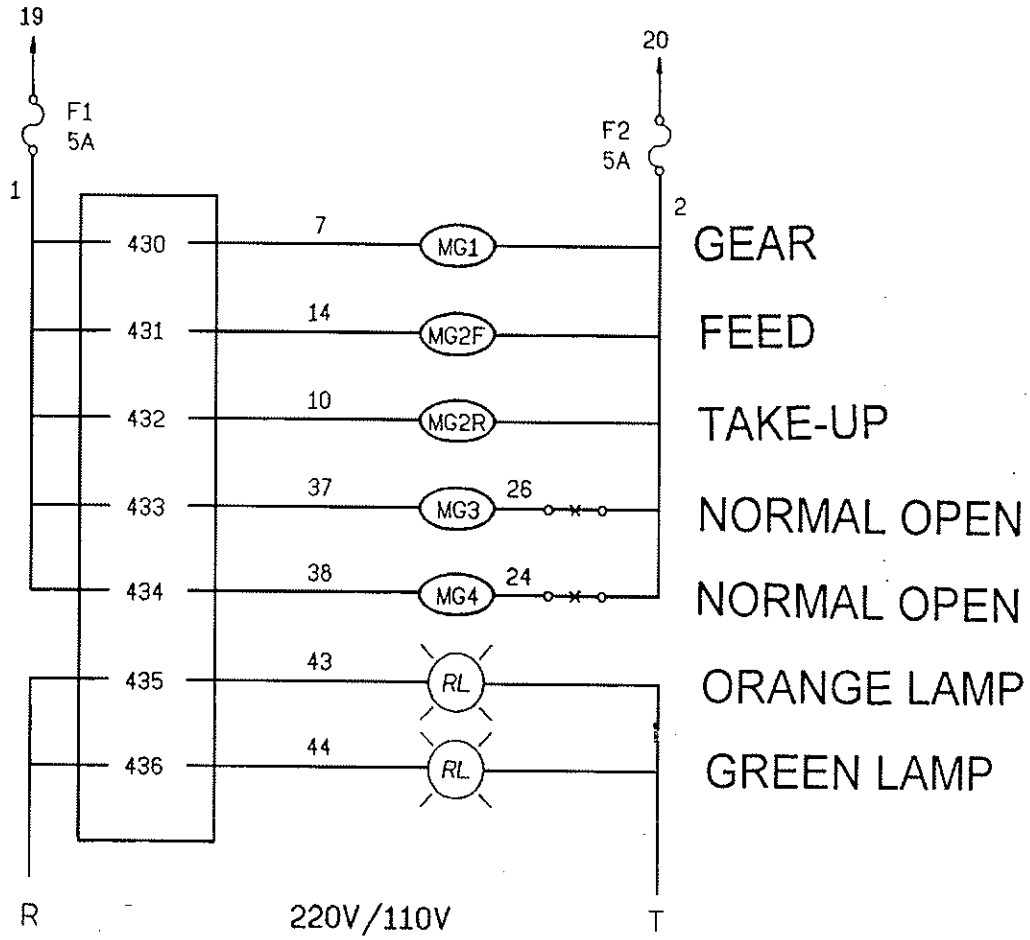
INPUT

A1-20MR

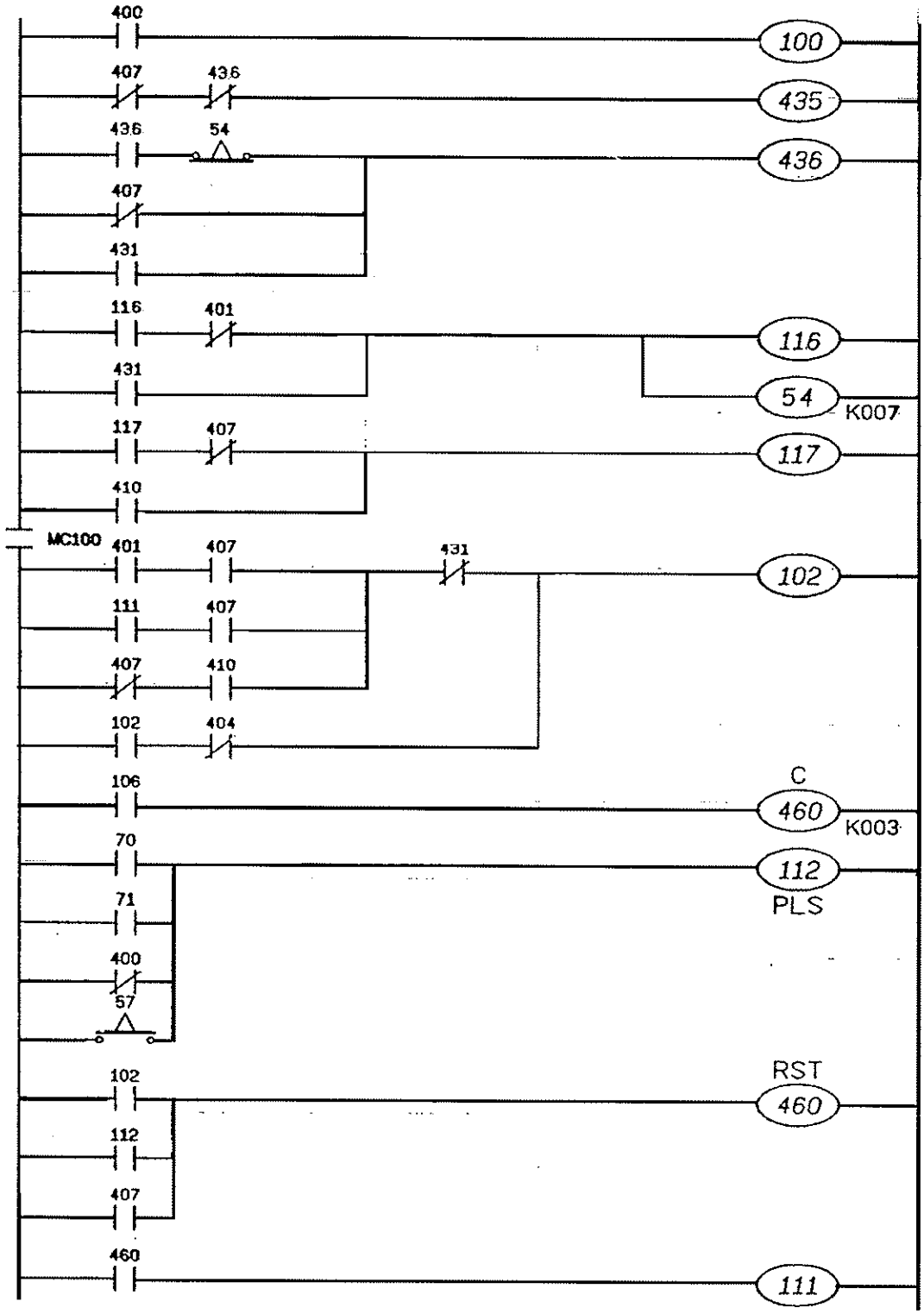


ELECTRICAL CIRCUIT, CONTINUED

OUTPUT

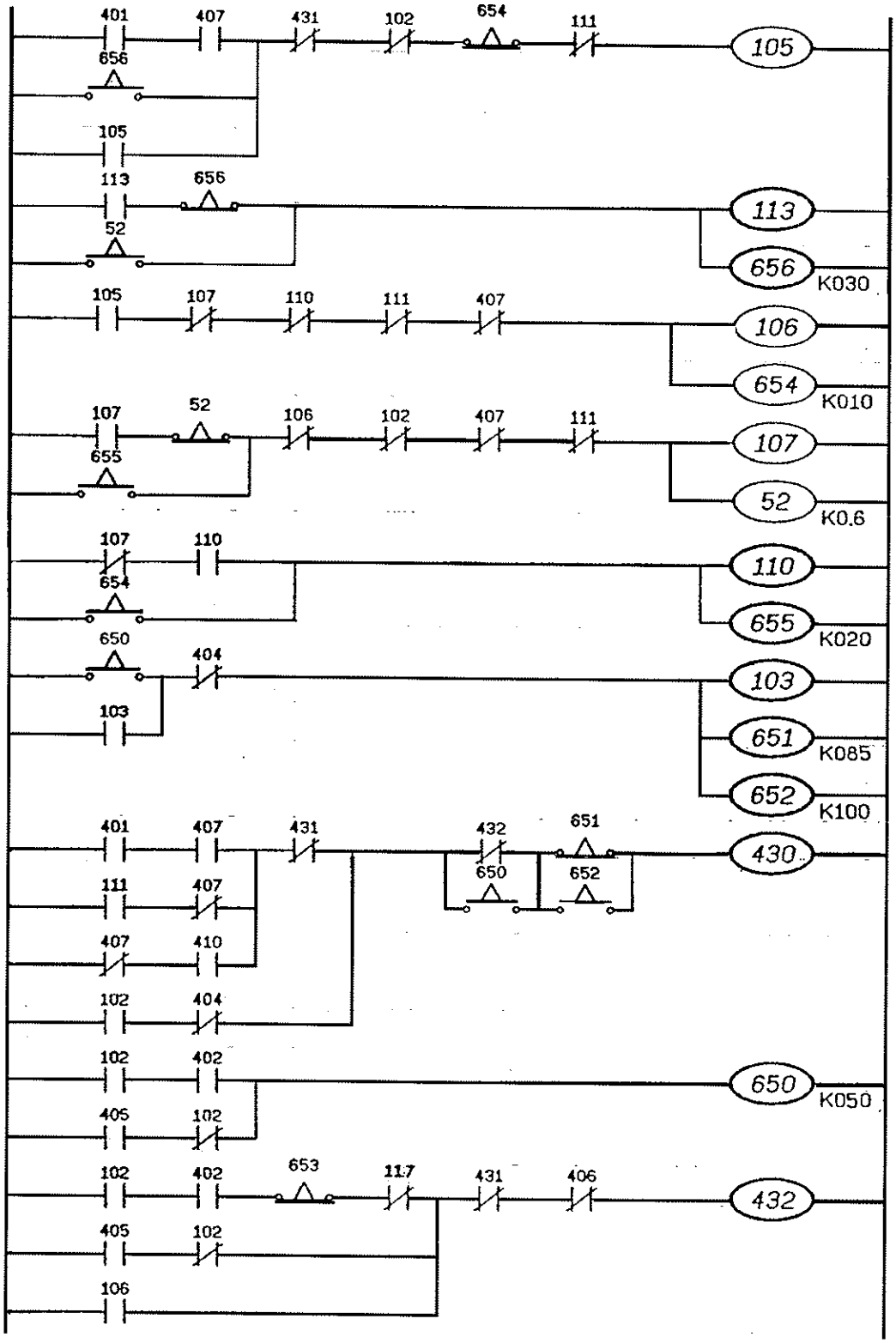


LADDER DIAGRAM

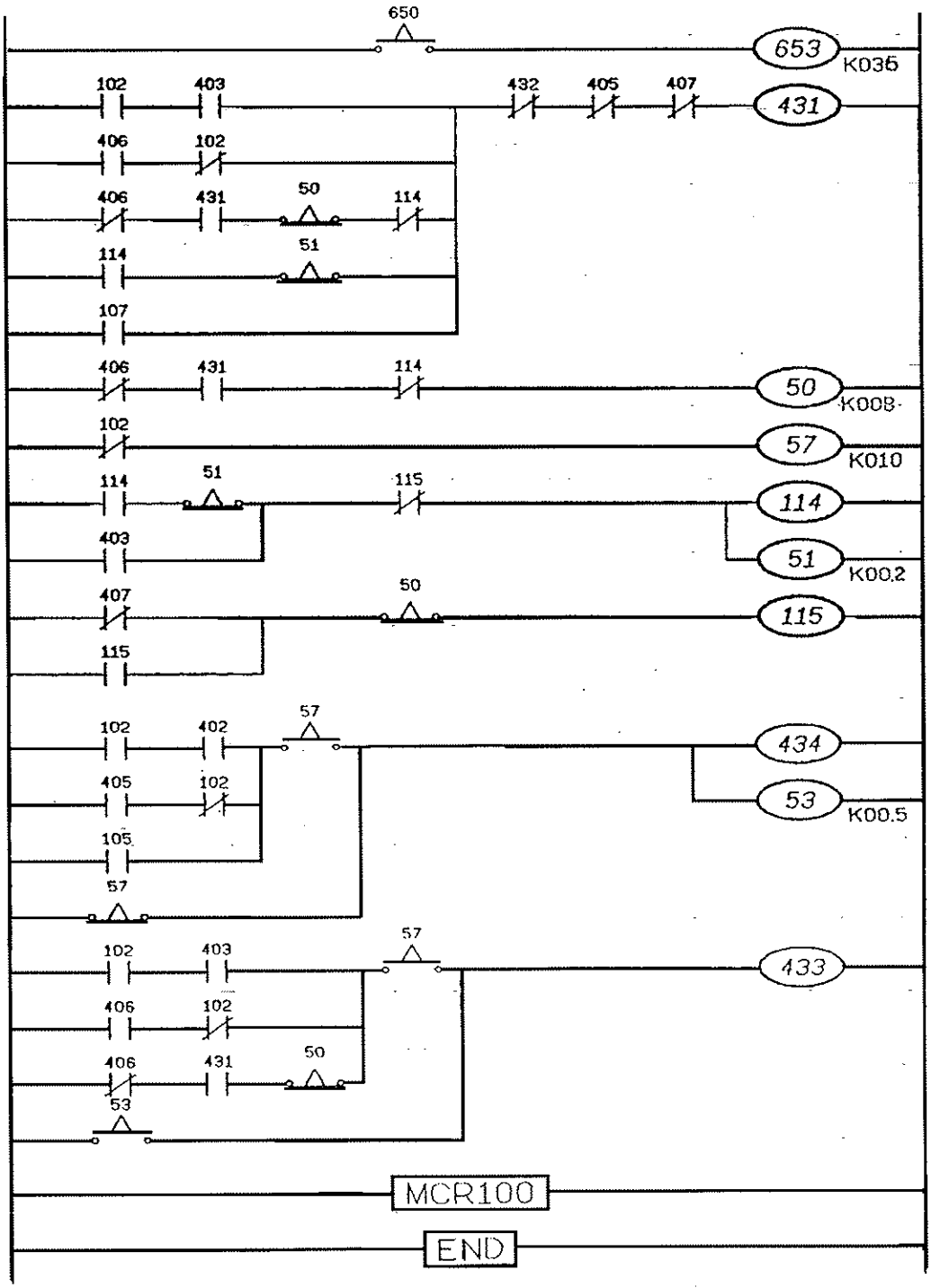


ELECTRICAL CIRCUIT, CONTINUED

LADDER DIAGRAM



LADDER DIAGRAM



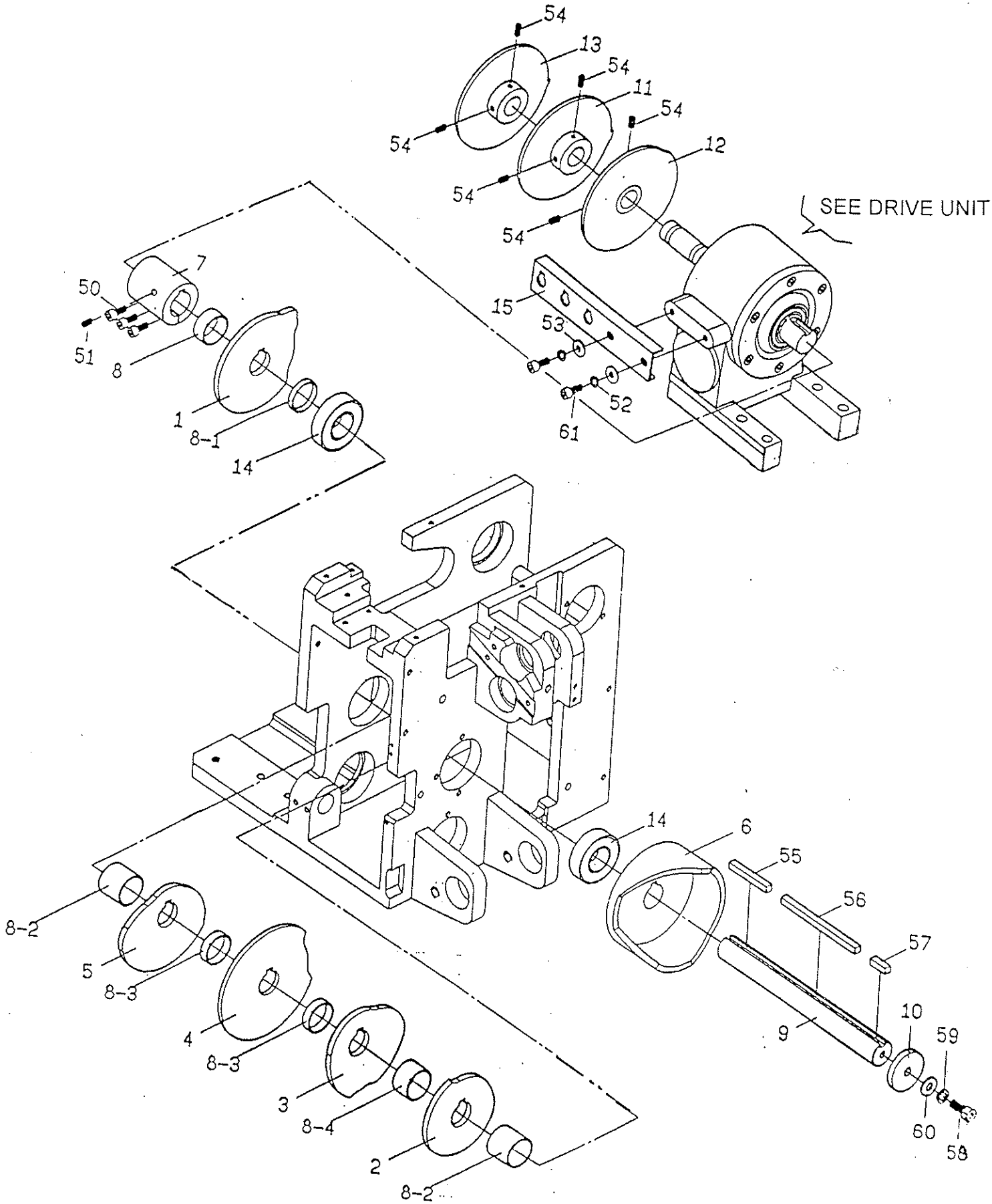
SECTION VII

PARTS AND ASSEMBLY

CAM UNIT

KEY	PART NO.	QTY.	DESCRIPTION
1	0101-00	1	Slide Table Cam
2	0102-00	1	Right Press Cam
3	0102-01	1	Center Press Cam
4	0103-00	1	Heater Cam
5	0103-01	1	Left Press Cam
6	0104-00	1	Tension Cam
7	0105-00	1	Cam Shaft Coupling
8	0106-00	1	Cam Collar (L-13mm)
8-1	0106-01	1	Cam Collar (L-15mm)
8-2	0106-02	2	Cam Collar (L-27mm)
8-3	0106-03	2	Cam Collar (L-7mm)
8-4	0106-04	1	Cam Collar (L-19mm)
9	0107-00	1	Cam Shaft
10	0108-00	1	Cam Shaft End Plate
11	0109-00	1	Limit Switch Cam (LS-1)
12	0110-00	1	Limit Switch Cam (LS-2)
13	0111-00	1	Limit Switch Cam (LS-3)
14	2201-02	2	Ball Bearing 6205ZZ
15	0122-00	1	Limit Switch Bracket
50	SCM 6x20R	3	Socket Head Cap Screw 6x20
51	SSM 8x10	1	Socket Head Set Screw 8x10
52	SSPWM6	2	Spring Washer 6mm
53	SWM 6x21	2	Plain Washer 6x21
54	SSM 6x10	6	Socket Head Set Screw 6x10
55	KEY-7750	1	Key 7x7x50
56	KEY-77100	1	Key 7x7x100
57	KEY-7723	1	Key 7x7x23
58	SCM8x25R	1	Socket Head Cap Screw 8x25
59	SSPWM8	2	Spring Washer 8mm
60	SSWM8x18x2R	1	Plain Washer 8x18
61	SCM 6x20R	2	Socket Head Cap Screw 6x20

CAM UNIT


54
13
54
11
54
12
54
54
54
SEE DRIVE UNIT
50
51
7
8
1
8-1
14
15
53
52
61
14
6
55
56
57
10
59
60
58
9
8-2
5
8-3
4
8-3
3
8-4
2
8-2

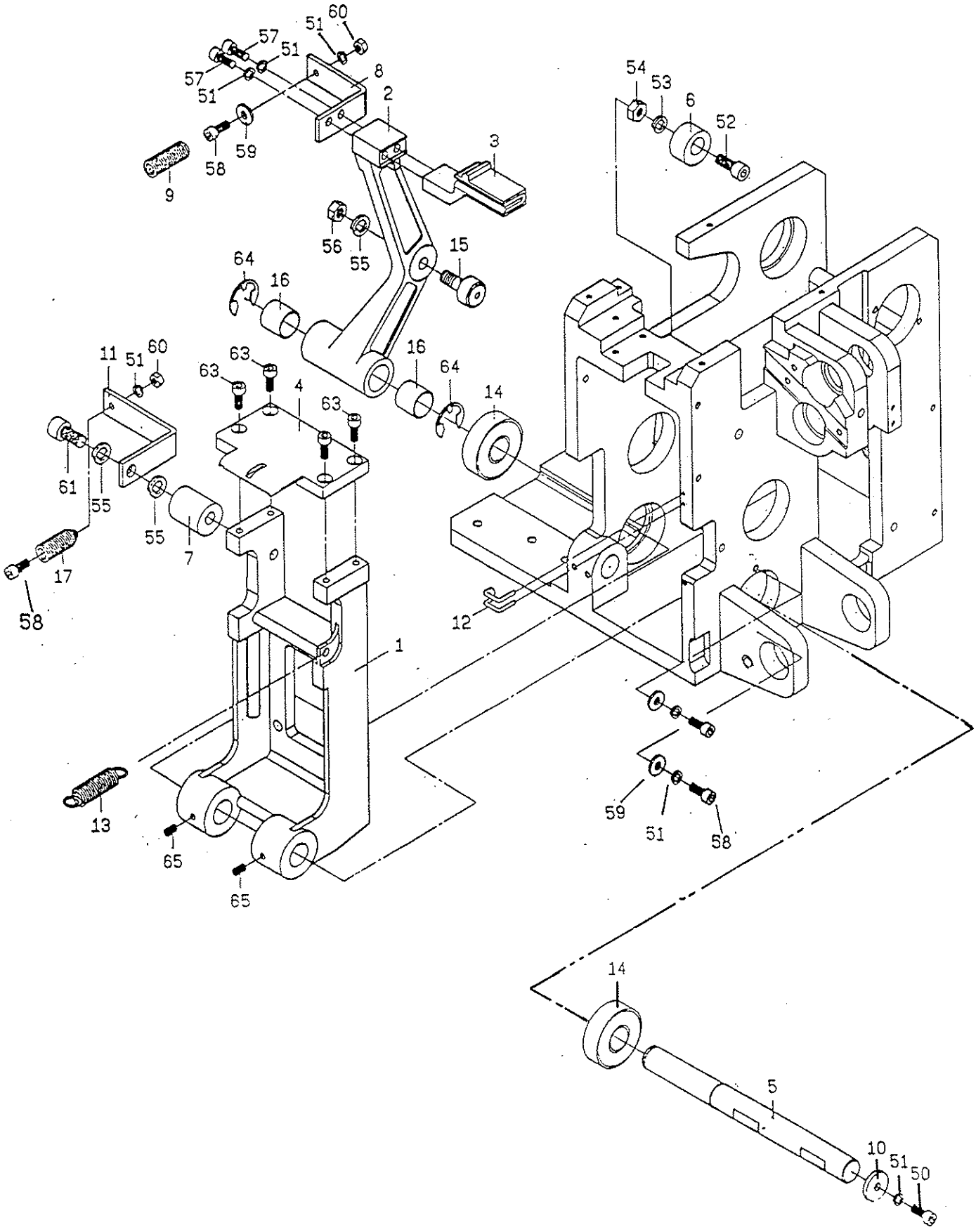
d

SLIDE TABLE UNIT

KEY	PART NO.	QTY.	DESCRIPTION
1	0201-00	1	Slide Table Frame
2 *	0202-01	1	Band Guide Arm
3	0203-02	1	Band Guide
4-1	0204-00	1	Slide Table (1/2")
4-2	0204-02A	1	Slide Table (3/8")
4-3	0204-03	1	Slide Table (7mm)
5	0205-00	1	Slide Table Frame Shaft
6	0206-00	1	Slide Table Stopper
7	0207-00	1	Slide Table Back Adjustment
8	0208-00	1	Flap Connecting Spring Bracket
9	0208-01	1	Band Guide Spring
10	0210-00	1	Slide Table Shaft End Plate
11	0222-00	1	Band Guide Spring Bracket
12	0212-00	1	Slide Table Frame Spring Hook
13	0220-00	1	Slide Table Tension Spring
14	2201-03	2	Ball Bearing 6304ZZ
15	2204-00	1	Cam Follower CF-10
16	2202-04	2	Metal Bushing MB2025
17	0214-00	1	Band Guide Spring
50	SCM 6x20R	1	Socket Head Cap Screw 6x20
51	SSPWM6	7	Spring Washer 6mm
52	SCM8x30R	1	Socket Head Cap Screw 8x30
53	SSPWM8	1	Spring Washer 8mm
54	SNM 8x125R	1	Hex Nut 8x1.25
55	SSPWM10	3	Spring Washer 10mm
56	SNM10x15R	1	Hex Nut 10mm
57	SCM 6x50R	2	Socket Head Cap Screw 6x50R
58	SCM 6x15R	4	Socket Head Cap Screw 6x15R
59	SWM 6x21	3	Plain Washer 6x21
60	SNM 6x10R	2	Hex Nut 6x1.0
61	SCM 10x50R	1	Socket Head Cap Screw 10x50R
63	SSCM6x15	4	Stainles Socket Cap Screw 6x15
64	RE-15	2	E-Ring #15
65	SSM6x10	2	Socket Head Set Screw 6x10

* See Appendix 1 for Sub-Assembly part numbers

SLIDE TABLE UNIT

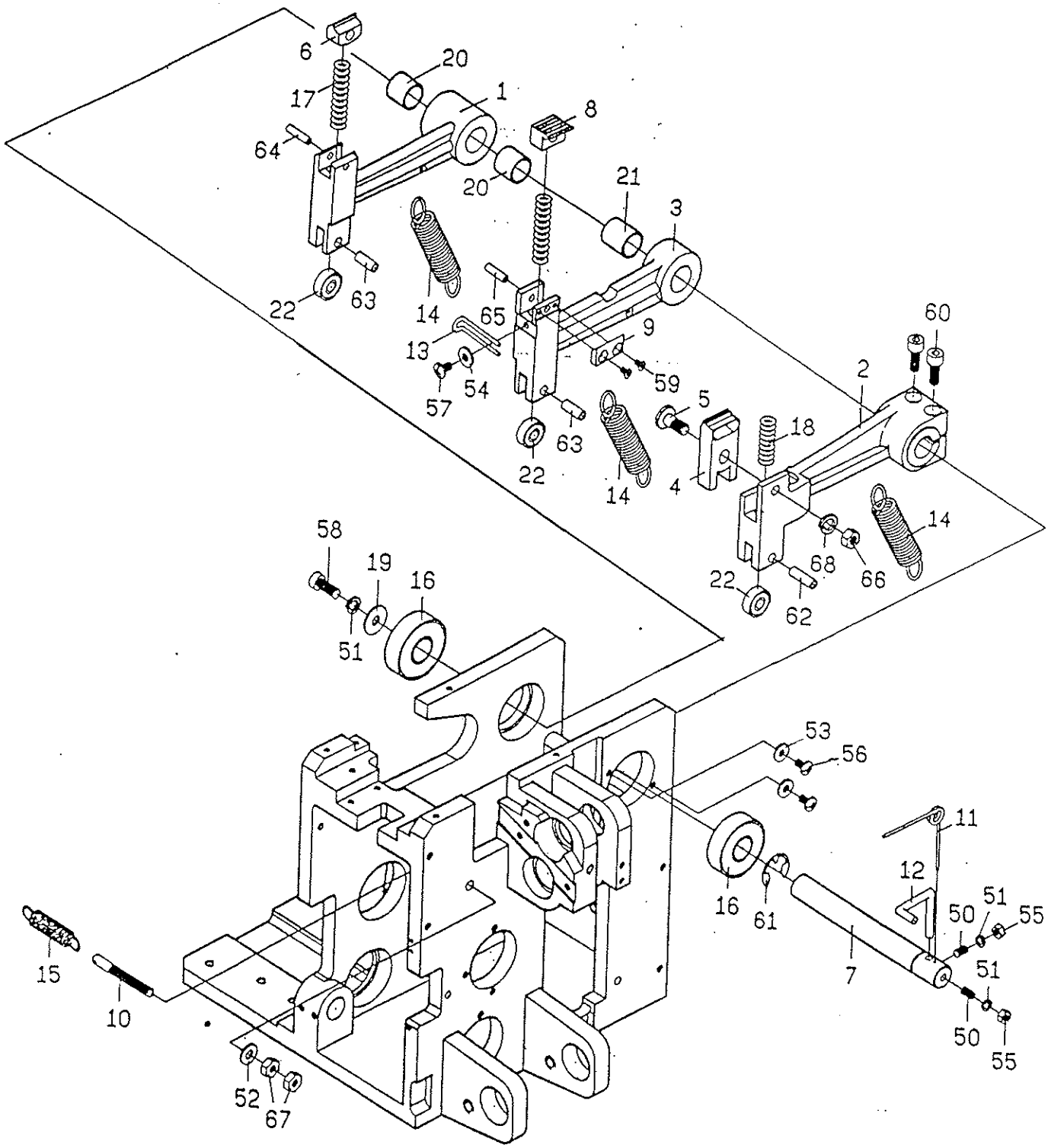


PRESS UNIT

KEY	PART NO.	QTY.	DESCRIPTION
1 *	0301-00	1	LH Block Arm
2 *	0302-02	1	RH Block Arm
3 *	0303-00	1	Center Block Arm
4	0304-00	1	Cutter Upper (3/8" - 1/2")
4-1	0304-01	1	Cutter Upper (7mm)
5	0305-00	1	Cutter Pin
6	0306-01	1	Jam Left
7	0307-00	1	Press Arm Shaft
8	0308-00	1	Universal Press
9	0309-00	1	Cutter Lower
10	0310-00	1	Cutter Tension Spring Post
11	0311-00	1	Upper Roller Spring
12	0312-00	1	Upper Shaft Spring Adjuster
13	0313-00	1	Cutter Spring Hook
14	0314-00	3	Press Tension Spring
15	0315-00	1	Cutter Tension Spring
16	2201-03	2	Ball Bearing 6304ZZ
17	0317-01	2	LH & Center Block Spring
18	0318-00	1	RH Block Spring
19	0319-00	1	Press Arm End Plate
20	2202-03	2	Metal Bushing MB2020
21	2202-04	1	Metal Bushing MB2025
22	2201-05	3	Ball Bearing 628ZZ
50	SSM 6x16	2	Socket Head Set Screw 6x16
51	SSPWM6	3	Spring Washer 6mm
52	SWM 8x18	1	Plain Washer 5/16x18
53	SWM 6x21	2	Plain Washer 6x21
54	SWM 6x16	1	Plain Washer 6x16
55	SNM 6x10R	2	Hex Nut 6x1.0
56	SB1M 6x15	2	Truss Head Screw 6x15
57	SB1M 6x10	1	Truss Head Screw 6x10
58	SCM 6x20R	1	Hex Head Bolt 6x20
59	SCH 5x8	2	Flat Head Socket Screw 5x8
60	SCM 8x35R	2	Hex Head Bolt 8x35
61	RE-15	1	E-Ring #15
62	Pin-824	1	V-Spring Pin (Straight) 8ϕx24
63	Pin-820	2	V-Spring Pin (Straight) 8ϕx20
64	Pin-624	1	V-Spring Pin (Straight) 6ϕx24
65	Pin-622	1	V-Spring Pin (Straight) 6ϕx22
66	SNM 10x15	1	Hex Nut 10x1.5
67	SNM 8x125R	2	Hex Nut 8x1.25
68	SSPWM10	1	Spring Washer 10mm

* See Appendix 1 for Sub-Assembly part numbers

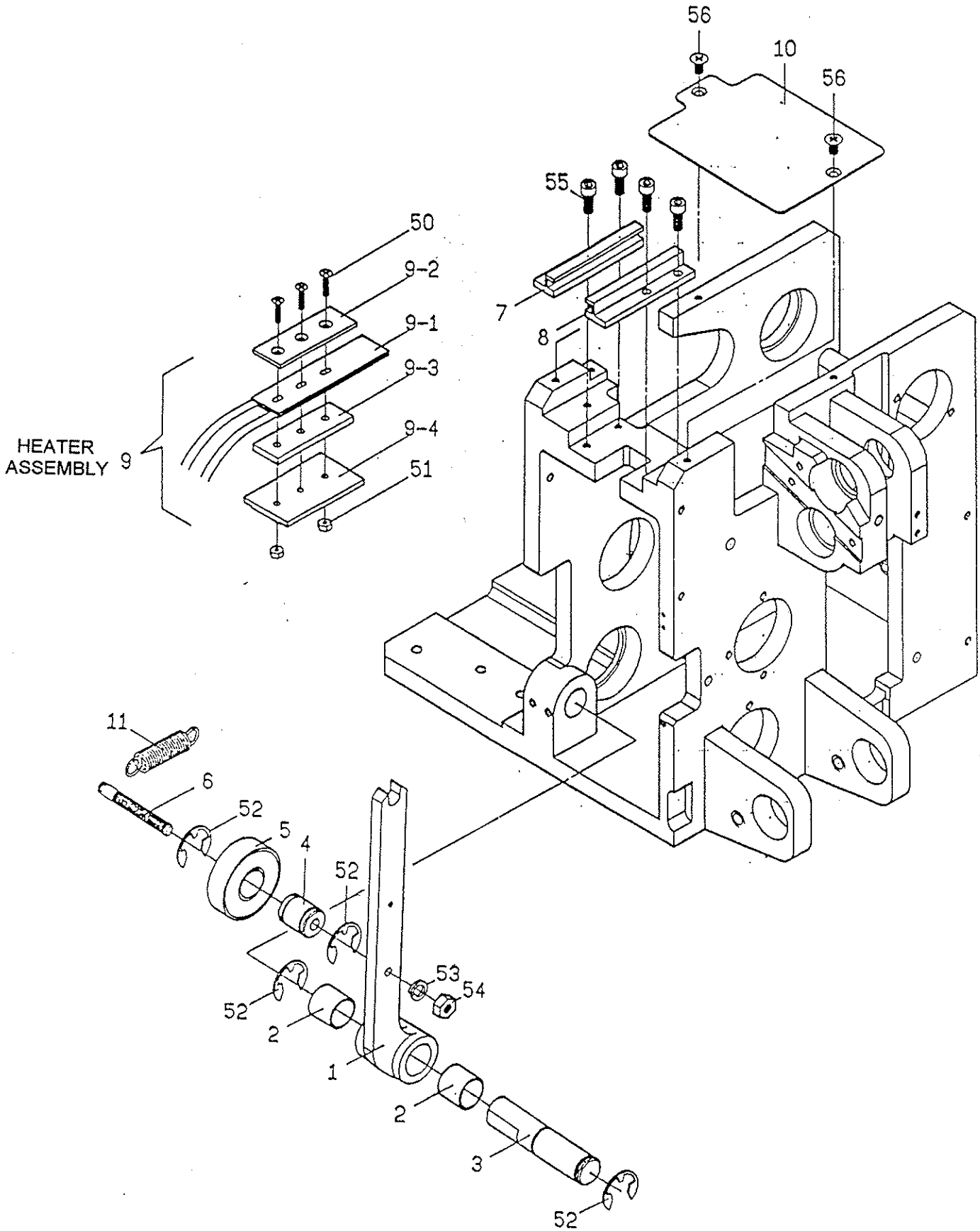
PRESS UNIT


6
20
17
1
8
64
20
21
3
22
63
14
65
60
13
9
2
57
54
59
5
63
18
22
14
4
14
58
19
16
68
66
22
62
51
53
56
11
12
16
61
50
51
55
15
7
51
10
50
55
52
67

HEATER UNIT

KEY	PART NO.	QTY.	DESCRIPTION
1	0401-00	1	Heater Crank
2	2202-03	2	Metal Bushing MB2020
3	0404-01	1	Heater Crank Shaft
4	0405-00	1	Heater Crank Roller Collar
5	2201-03	1	Ball Bearing 6304ZZ
6	0407-02	1	Heater Bearing Shaft
7	0403-01	1	Heater Slide Guide (LH)
8	0403-00	1	Heater Slide Guide (RH)
9	0409-02AS1	1	Heater Assembly
9-1	0409-02	1	Heater Plate
9-2	0409-03	1	Cover Plate
9-3	0409-04	1	Heater Guide
9-4	0409-05	1	Heater Seat
10	0408-02	1	Heater Cover
11	0411-00	1	Heater Crank Spring
50	SFM 4x20	3	Flat Head Screw 4x2
51	SNM 4x07R	2	Hex Nut 4x0.7
52	RE-15	4	E-Ring #15
53	SSPWM8	1	Spring Washer 8mm
54	SNM 8x125R	1	Hex Nut 8x1.25
55	SCM 5x16	4	Socket Head Cap Screw 5x16
56	SFM 5x10	2	Flat Head Cap Screw 5x10

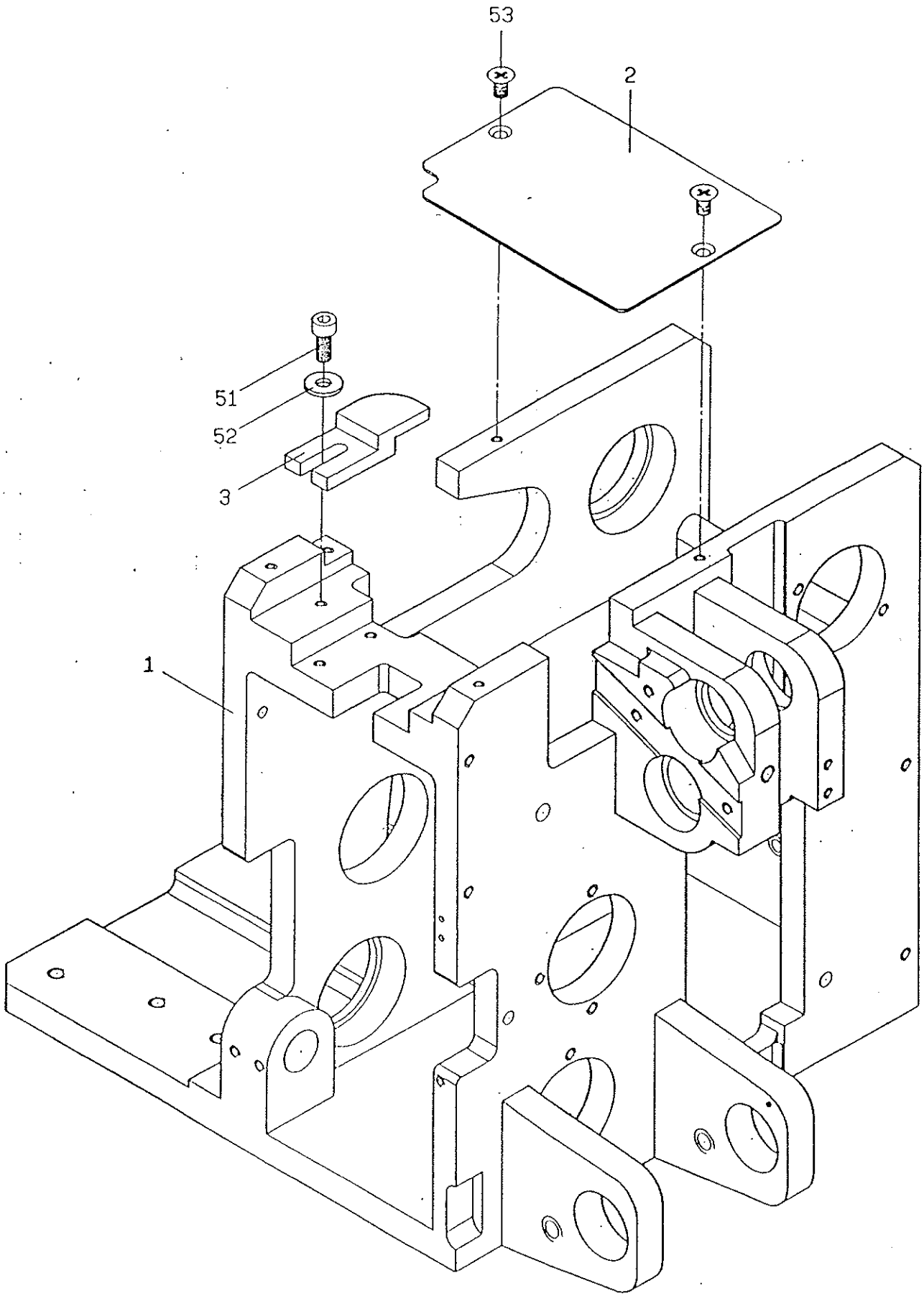
HEATER UNIT


56
10
56
55
50
9-2
9-1
9-3
9-4
51
HEATER
ASSEMBLY
9
7
8
11
6
52
5
4
52
52
53
54
52
2
1
2
3
52

CONTROL UNIT

KEY	PART NO.	QTY.	DESCRIPTION
1	0501-06	1	Control Frame
2	0507-01	1	Slide Table Cover
3	0506-02	1	Band Width Block
51	SCM 6x16	1	Socket Head Cap Screw 6x16
52	SWM 6x16	1	Plain Washer
53	SFM 5x10	2	Flat Head Cap Screw 5x10

CONTROL UNIT

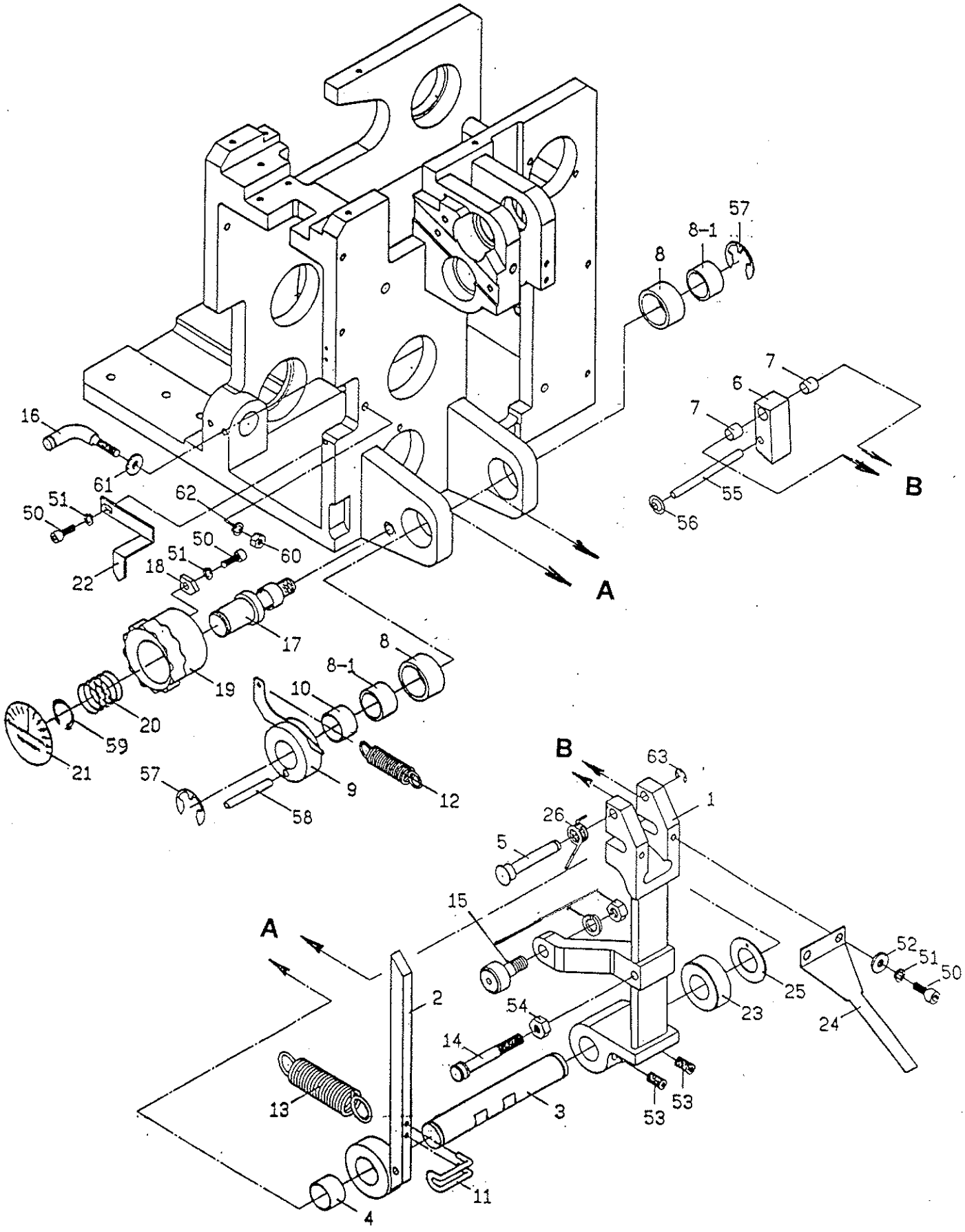


TENSION UNIT

KEY		PART NO.	QTY.	DESCRIPTION
1	*	0601-00	1	Tension Arm
2	*	0602-02	1	Tension Adjustment Arm
3		0603-00	1	Tension Arm Shaft
4		2202-02	1	Metal Bushing MB2015
5		0605-00	1	Tension Jaw Shaft
6	*	0606-01	1	Tension Jaw
7		2202-00	2	Metal Bushing MB0808
8		2203-00A	2	Needle Bearing HK2516
8-1		2203-00B	2	Needle Bearing Inner Irt2015-1
9		0609-02	1	Tension Adjustment
10		2202-02	1	Metal Bushing MB2015
11		0611-00	1	Tension Adjustment Arm Spring Hook
12		0617-02	1	Tension Adjustment Arm Spring
13		0616-02	1	Tension Arm Spring
14		0614-00	1	Tension Arm Spring Hook-1
15		2204-00	1	Cam Follower CF-10
16		0620-00	1	Tension Arm Hook
17		0638-01	1	Tension Adjustment Cam Shaft
18		0646-02	1	Tension Adjustment Cam Lock
19	*	0613-01	1	Tension Adjustment Cam
20		0643-02	1	Tension Adjustment Cam Spring
21		0632-00	1	Tension Select Dial
22		0628-00	1	Tension Finger
23		0634-01	1	Tension Arm Collar
24		0637-02	1	Strap Guide (1/2")
24-1		0637-02A	1	Strap Guide (3/8" - 7mm)
25		2205-00	1	Thrust Washer WC18DUN
26		0615-00	1	Tension Jaw Spring
50		SCM 5x12	4	Socket Head Cap Screw 5x12
51		SSPWM5	4	Spring Washer 5mm
52		SWM 5x12	2	Plain Washer 5x12
53		SSM6x10	2	Socket Head Set Screw 6x10
54		SWM8x125	1	Plain Washer 8x1.25
55		Pin-675	1	Pin 6x75
56		1135-00	1	Lock Washer 6mm
57		RE-15	2	E-Ring #15
59		RR-20	1	E-Ring #20
58		Pin-645	1	Pin 6x45
60		SNM 6x10	1	Hex Nut 6x1.0
61		SWM 6x16	1	Plain Washer 6x16
62		SSPWM6	1	Spring Washer 6mm
63		RE-6	1	E-Ring #6

* See Appendix 2 for Sub-Assembly part number

TENSION UNIT

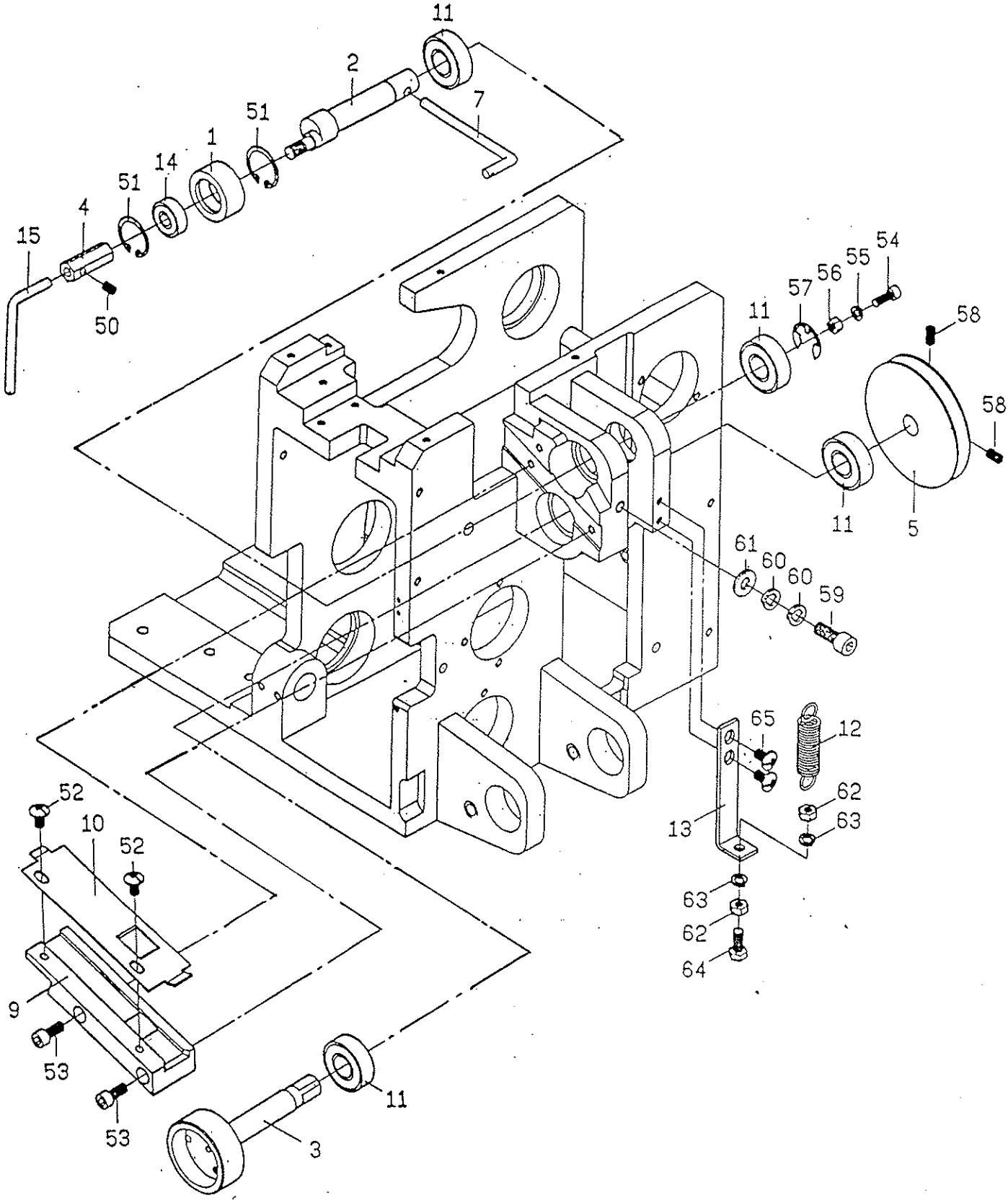


FEED UNIT

KEY	PART NO.	QTY.	DESCRIPTION
1-1	0702-01	1	Feed Upper Roller (7mm and 3/8")
1-2	0702-02	1	Feed Upper Roller (1/2")
2	0703-00	1	Feed Upper Roller Shaft
3	0704-00	1	Feed Roller
4	0705-01	1	Upper Roller Grip
5	0706-01	1	Feed Roller Pulley M-48ϕ
7	0708-02	1	Upper Roller Weight Adjustment
9-1 *	0710-01A	1	Feed Shooter (7mm and 3/8")
9-2 *	0710-02A	1	Feed Shooter (1/2")
10	0711-00	1	Feed Shooter Cover
11	2201-01	4	Ball Bearing 6202ZZ
12	0721-00	1	Feed Spring
13	0724-00	1	Adjustment Base
14	2201-05	1	Ball Bearing 628ZZ
15	0726-00	1	Upper Roller Grip (L Type)
50	SSM 6x6	1	Socket Head Set Screw 6x6
51	RR-24	2	Ring R-24
52	SB1M 6x10	2	Phillips Head Screw 6x10
53	SCM 6x45R	2	Socket Head Cap Screw 6x45R
54	SMC 6x16	1	Socket Head Cap Screw 6x16
55	SSPWM6	1	Spring Washer 6mm
56	SNM 6x10	1	Hex Nut 6x1.0
57	RE-12	1	E-Ring #12
58	SSM 6x10	2	Socket Head Set Screw 6x10
59	SCM 8x12	1	Socket Head Cap Screw 8x12
60	SSPWM8	2	Spring Washer 8mm
61	0607-00	1	Shim 8.1ϕx13ϕx0.3mm
62	SNM 6x10	2	Hex Nut 6x1.0
63	SSPWM6	2	Spring Washer 6mm
64	0722-00	1	Adjustment Screw 6x50mm

* See Appendix 2 for Sub-Assembly part numbers

FEED UNIT


11
2
7
51
1
14
51
4
15
50
11
57
56
55
54
58
58
11
5
61
60
60
59
65
12
62
63
13
63
62
64
52
10
52
9
53
53
11
3

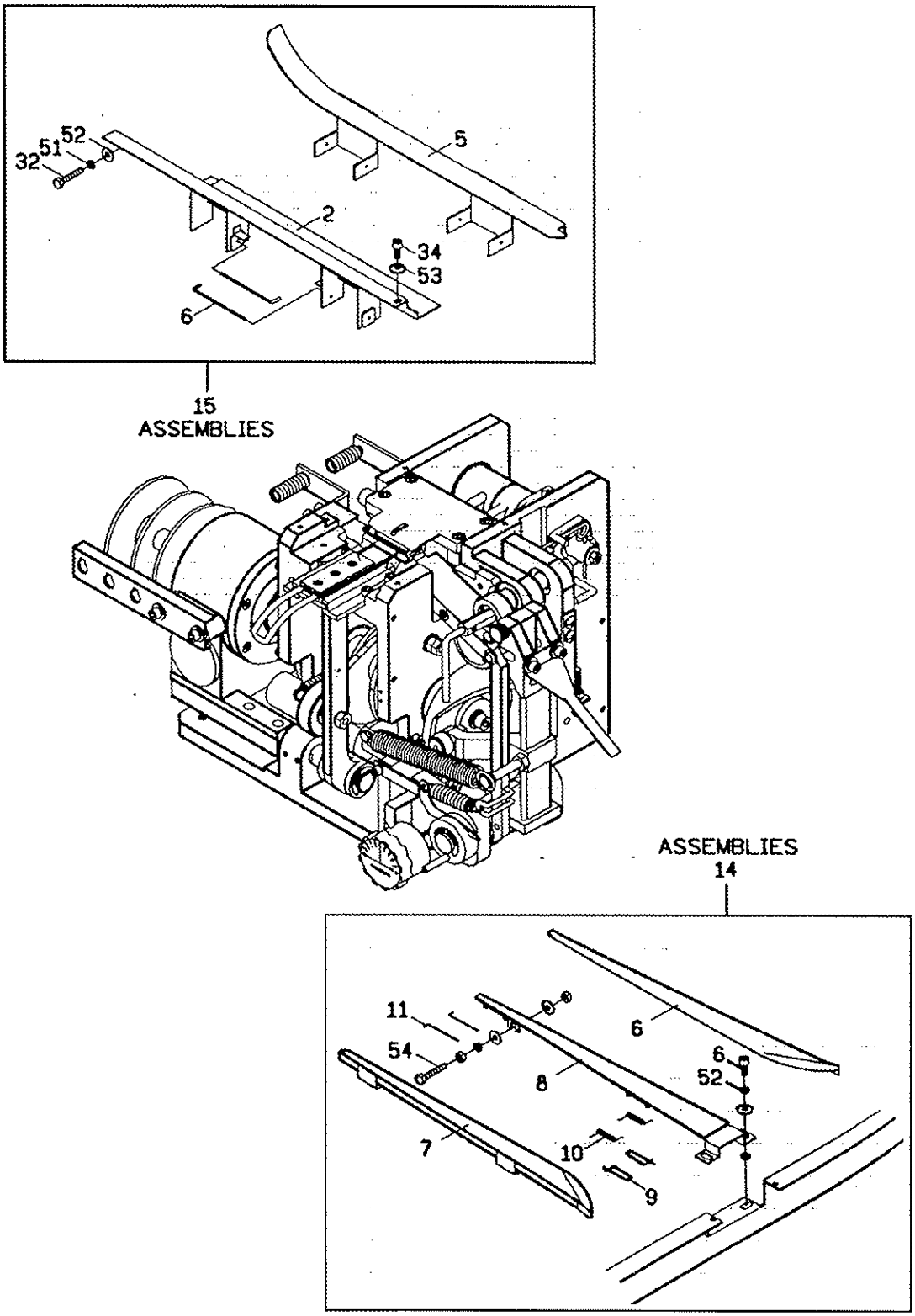
d

BAND WAY UNIT

KEY	PART NO.	QTY.	DESCRIPTION
1	0801-00	1	RH Bandway
2	0802-01	1	LH Bandway
3	0803-00	1	RH Bandway Rear Flap
4	0804-00	1	RH Bandway Front Flap
5	0805-00	1	LH Bandway Flap
6	0806-00	1	LH Bandway Flap Pin
7	0807-00	1	RH Bandway Flap Pin (Rear)
8	0808-00	1	RH Bandway Flap Spring
10	0810-00	1	LH Bandway Flap Spring
11	0811-00	1	RH Bandway Flap Pin (Front)
14-1	0814-AS2	1	RH Bandway Set (7mm and 3/8")
14-2	0814-AS3	1	RH Bandway Set (1/2")
15-1	1815-AS1	1	LH Bandway Set
15-2	1815-AS2	1	LH Bandway Set Addition 200mm
15-3	1815-AS3	1	LH Bandway Set Addition 400mm
15-4	1815-AS4	1	LH Bandway Set Addition 600mm
15-5	1815-AS5	1	LH Bandway Set Addition 800mm
15-5	1815-AS6	1	LH Bandway Set Dec. 200mm
31	SHM 6x45R	1	Hex Head Bolt 6x45
32	SCM 6x10R	2	Hex Head Bolt 6x10
33	SB1M 6x15	2	Truss Head Screw 6x15
34	SBH 5x10	1	Button Head Screw 5x10
51	SSPWM6	4	Spring Washer 6mm
52	SWM 6x16R	4	Plain Washer 6x16
53	SWM 5x12	1	Plain Washer 5x12
66	SNM 6x10R	4	Hex Nut 6x1.0R

d

BAND WAY UNIT

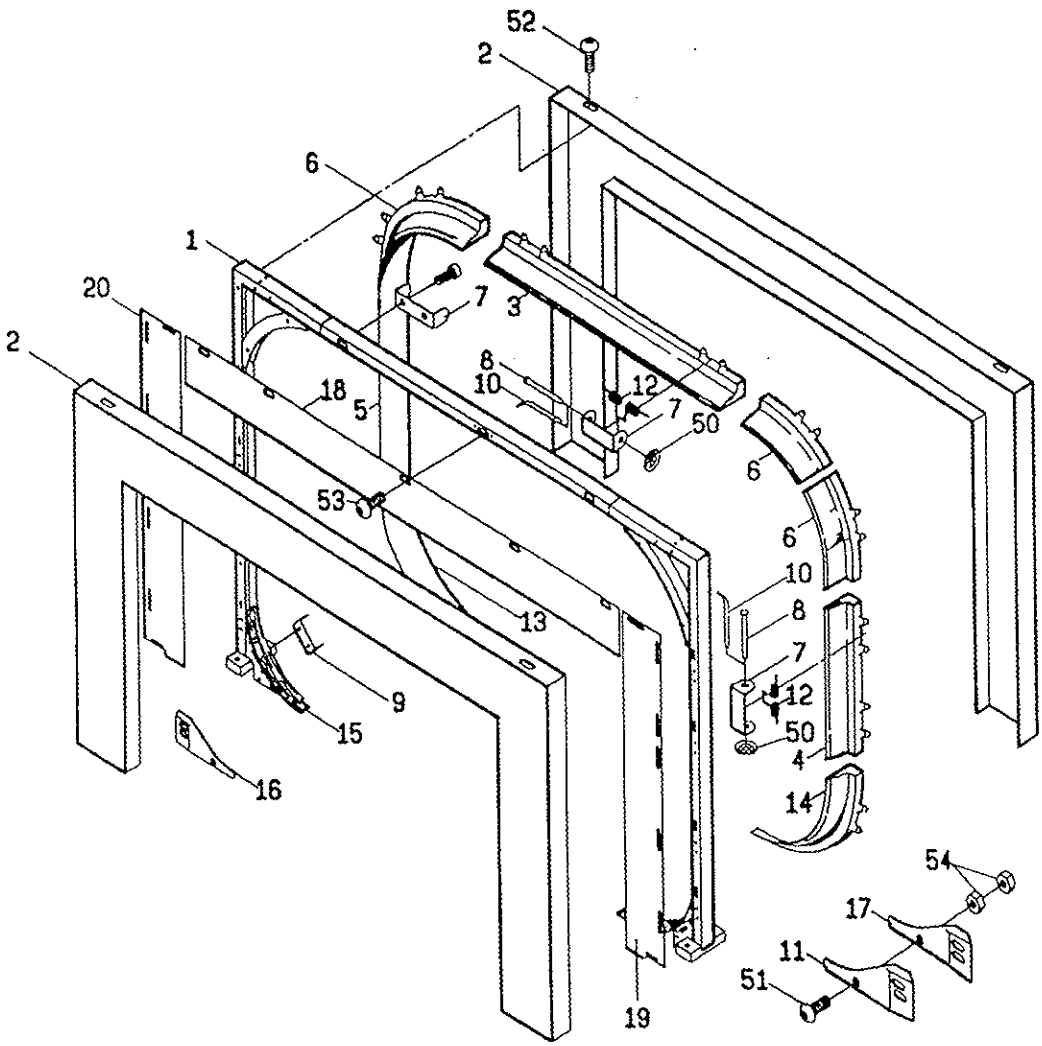


ARCH UNIT

KEY	PART NO.	QTY.	DESCRIPTION
1	0903-00	1	Arch Frame
2	0904-00	1	Arch Cover
3	0905-01	1	Upper Flap
4	0906-00	1	Side Flap (RH)
5	0907-00	1	Side Flap (LH)
6	0908-00	4	Corner Flap (Upper)
7	0909-00	11	Flap Hinge (A)
8	0910-00	12	Flap Hinge Shaft (A)
9	0911-02	1	Flap Hinge (B)
10	0912-00	11	Flap Hinge Shaft (B)
11	0913-01	1	Arch Bandway Corner
12	0916-00	11	Arch Flap Spring
13	0918-00	1	Corner Flap (Lower LH)
14	0919-01	1	Corner Flap (Lower RH)
15	0923-00	1	Arch Bandway
16	0925-00	1	Arch Bandway Corner
17	0926-00	1	Arch Bandway Corner (B)
18	0938-00	1	Arch Band Guide Plate
19	0939-00	1	Arch Band Guide Plate (RH)
20	0940-00	1	Arch Band Guide Plate (LH)
50	0948-00	12	Pushing Nut 4ϕ
51	SHM 6x50R	1	Hex Head Bolt 6x50
52	SB1M 5x10	8	Truss Head Screw 5x10
53	SB1M 4x8	68	Truss Head Screw 4x8
54	SNM 6x10	2	Hex Nut 6R

d

ARCH UNIT

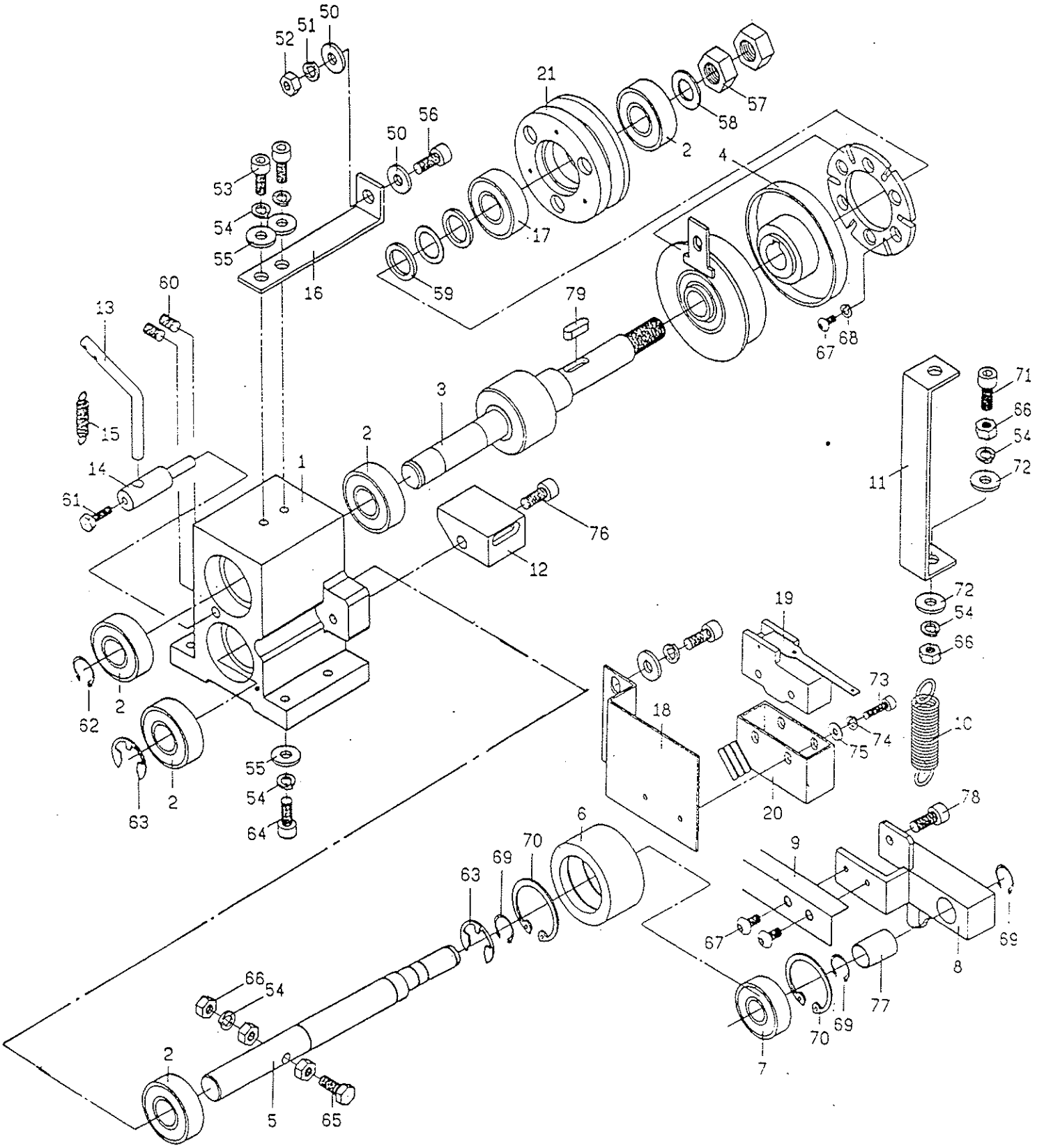

52
2
6
1
20
7
3
2
8
10
12
7
50
18
5
6
53
6
10
13
8
7
12
9
50
15
4
16
14
54
17
11
51
19

CHAMBER UNIT (I)

KEY	PART NO.	QTY.	DESCRIPTION
1 *	1001-03	1	Chamber Feed Bearing Housing
2	2201-01	5	Ball Bearing 6202ZZ
3	1004-01	1	Chamber Feed Roller & Shaft
4	1021-00	1	Clutch DC24/0.6K
5	1002-00	1	Chamber Feed Lower Shaft
6	1003-00	1	Chamber Feed Lower Roller
7	2201-00	1	Ball Bearing 6201ZZ
8	1005-04	1	Chamber Balance Bar Holder
9-1	1008-03	1	Chamber Balance Bar (7mm)
9-2	1008-04	1	Chamber Balance Bar (3/8")
9-3	1008-05	1	Chamber Balance Bar (1/2")
10	1034-01	1	Chamber Spring
11	1050-01	1	Chamber Spring Holder
12-1	1006-00	1	Chamber Feeder Shooter (7mm)
12-2	1006-01	1	Chamber Feeder Shooter (3/8")
12-3	1006-02	1	Chamber Feeder Shooter (1/2")
13	1010-01A	1	Chamber Adjustment Shaft Assembly
14	1013-00	1	Chamber Adjustment Shaft
15	1010-02	1	Chamber Adjustment Spring
16	0724-00	1	Chamber Clutch Holder
17	EA-08-00	1	Ball Bearing 6002ZZ
18	1038-00	1	Limit Switch Seat
19	1040-00	1	Limit Switch
20	KSW-11	1	Limit Switch Cover
21	1703-00	1	Clutch Pulley
50	SWM 5x12	2	Plain Washer 5x12
51	SSPWM5	1	Spring Washer M5
52	SNM 5x08	1	Hex Nut M5
53	SLCM 6x12R	2	Socket Head Screw 6x12
54	SSPWM6	9	Spring Screw 6mm
55	SWM 6x21R	6	Plain Washer 6x21
56	SLCM 5x12R	1	Socket Head Cap Screw 5x12
57	SNM 12x125R	2	Hex Nut M12
58	SSPWM12R	1	Spring Washer 1/2"
59	SWM13x21x2	3	Plain Washer 13x21
60	SAEM 5x6	2	Socket Head Cap Screw 5x6
61	SHM 5x12	1	Hex Head Bolt 5x12
62	RE-15	1	E-Ring #15
63	RE-12	2	E-Ring #12
64	SLCM 6x20R	4	Socket Screw 6x20
65	SHM 6x45R	1	Hex Head Bolt 6x45
66	SNM6x10	6	Hex Nut 6x10
67	SBH 4x8	6	Socket Head Screw 4x8
68	SSPWM4	4	Spring Washer M4
69	RS-12	3	Ring S-12
70	RS-32	2	Ring S-32
71	SLCM 6x50R	1	Socket Screw 6x50
72	SWM 6x16	2	Plain Washer 6x16
73	SBM 4x25	2	Phillips Head Screw 4x25
74	SSPWM4	2	Spring Washer M4
75	SWM 4x12	2	Plain Washer 4x12
76	SLCM 6x35R	1	Socket Screw 6x35
77	2202-05	1	Ball Bearing MB1220
78	SLCM 6x10R	1	Socket Screw 6x10
79	Key-5514	1	Key 5x5x14

* See Appendix 3 for Sub-Assembly part number

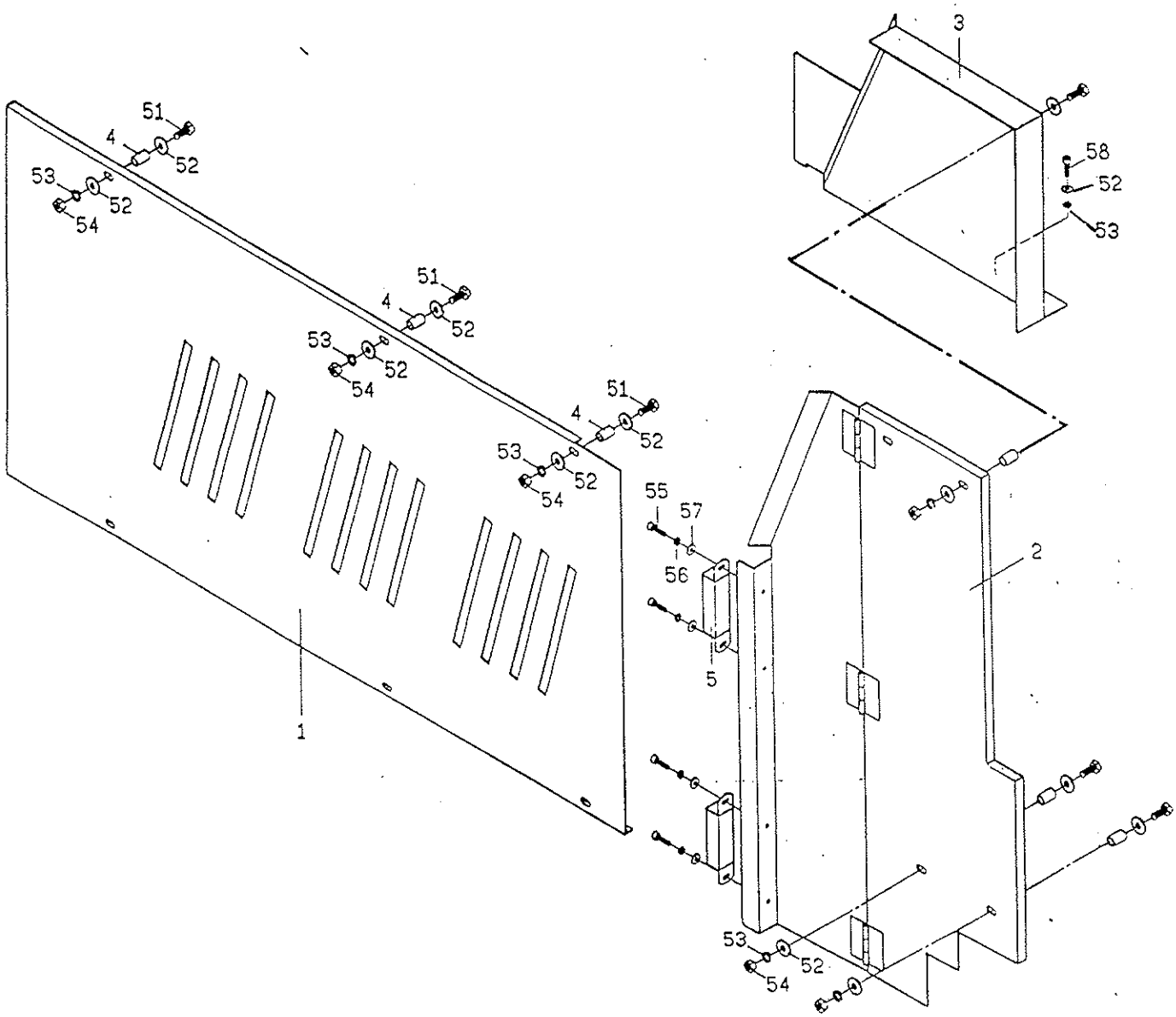
CHAMBER UNIT (I)



CHAMBER UNIT (II)

KEY	PART NO.	QTY.	DESCRIPTION
1	1250-30	1	Chamber Box (Front)
2	1250-31	1	Back Chamber (Front)
3	1250-32	1	Back Chamber (Rear)
4-1	1046-09	9	Chamber Collar (7mm and 3/8")
4-2	1046-12	9	Chamber Collar (1/2")
5	1217-01	2	Magnet Catch
51-1	SHM 6x25	9	Hex Head Bolt 6x25 (7mm and 3/8")
51-2	SHM 6x30	9	Hex Head Bolt 6x30 (1/2")
52	SWM 6x21	18	Plain Washer 6x21
53	SSPWM6	11	Spring Washer 6mm
54	SNM 6x10R	11	Hex Nut M6
55	SBM 4x10	4	Phillips Head Screw 4x10
56	SSPWM4	4	Spring Washer 4mm
57	SWM 4x12	4	Plain Washer
58	SCM 6x20	2	Socket Head Cap Screw 6x20

CHAMBER UNIT (II)

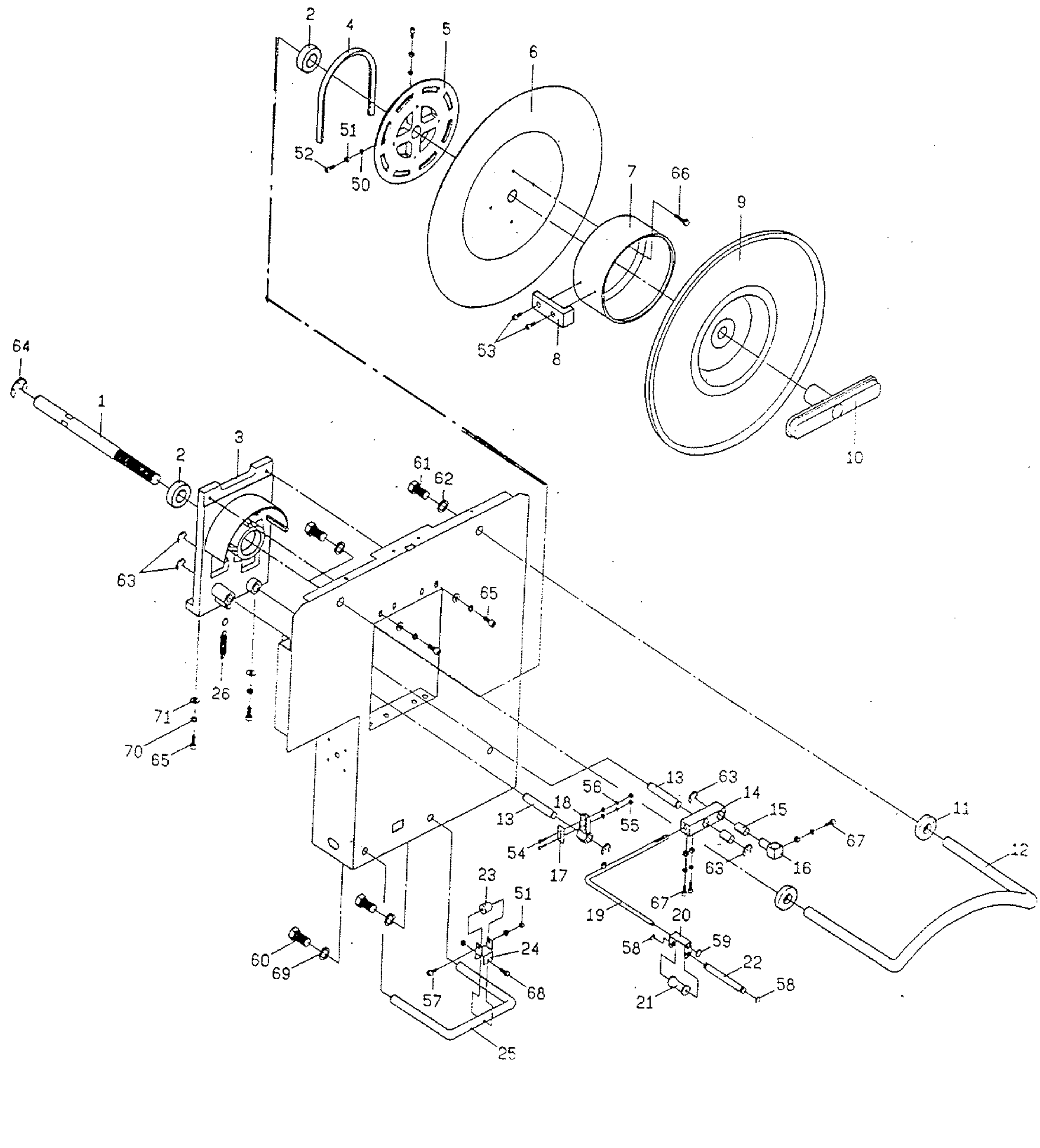


REEL UNIT

KEY	PART NO.	QTY.	DESCRIPTION
1	1107-01	1	Reel Shaft
2	2201-02	2	Ball Bearing 6205ZZ
3 *	1101-01	1	Reel Unit Base
4 *	1126-01	1	Brake V-Belt
5	1103-02	1	Reel Brake Pulley
6	1118-00	1	Reel In Circular
7	1124-00	1	Reel Center Drum 200ϕ
7-1	1124-01	1	Reel Center Drum 280ϕ
8	1103-04	3	Reel Adder Plater 223ϕ
9	1119-00	1	Reel Out Circular 200ϕ
9-1	1119-01	1	Reel Out Circular 280ϕ
10	1108-00	1	Reel Handle
11	1224-02	2	Reel Guard Plate
12	1122-01	1	Reel Guard (Upper)
13	1109-01	2	Holder Shaft
14	1105-00	1	Brake Tension Holder
15	2202-01	2	Metal Bushing MB1525
16	1106-02	1	Brake Belt Tightener
17	J-17-20	1	Brake Belt Plate
18	1104-04	1	Brake Belt Guard
19	1111-00A	1	Brake Arm
20 *	1113-01	1	Roller Bracket
21	1115-00	1	Brake Roller
22	J-11-11-1	1	Brake Roller Shaft
23	1112-01	1	Brake Roller
24 *	1112-00	1	Angle Roller Bracket
25	1123-01	1	Reel Guard (Lower)
26	1125-02	1	Brake Arm Spring
50	SSPWM6	2	Spring Washer 6mm
51	SNM 6x10R	3	Hex Nut M6
52	SCM 6x20R	2	Socket Head Cap Screw 6x20
53	SLCM 6x45R	6	Socket Head Cap Screw 6x45
54	SSCM 4x25	2	Socket Head Cap Screw 4x25
55	SNM 4x07	2	Hex Nut M4
56	SSPWM4	2	Spring Washer 4mm
57	SLCM 6x35	1	Socket Head Cap Screw 6x35
58	RE-6	2	Ring E-6
59	1133-00	1	Ring
60	SHM 14x25R	2	Hex Bolt 14x25
61	1122-03	2	Hex Bolt 18x30
62	SSPWM19	2	Spring Washer 19mm
63	RE-12	5	E-Ring #12
64	RE-19	1	E-Ring #19
65	SLCM 8x20R	4	Socket Head Cap Screw 8x20
66	SHM 6x16	4	Hex Bolt M6x16
67	SCM 6x20R	2	Socket Head Cap Screw 6x20
68	SHM 6x30R	1	Hex Bolt M6x30
69	SSPWM14	2	Spring Washer 14mm
70	SSPWM8	4	Spring Washer 8mm
71	SSWM 8x18x2R	4	Plain Washer 8x18

* See Appendix 3 for Sub-Assembly part numbers

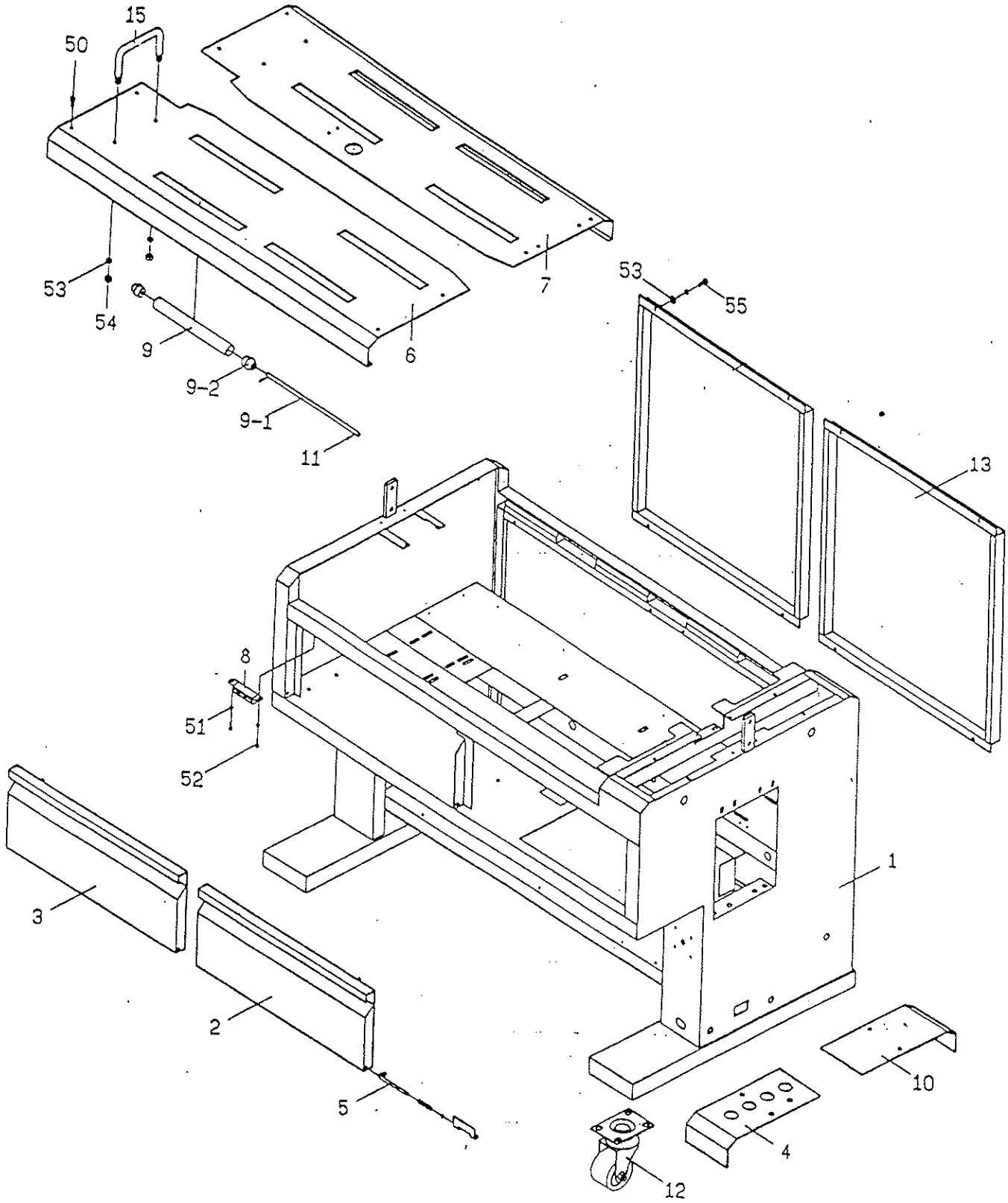
REEL UNIT


2
4
5
6
51
52
50
7
66
9
53
8
64
1
10
3
2
61
62
63
65
26
71
70
65
13
63
56
14
18
15
11
13
55
67
54
12
17
63
16
23
67
51
19
20
58
59
24
22
60
58
69
57
68
21
25

BODY UNIT

KEY	PART NO.	QTY.	DESCRIPTION
1	1201-03	1	Angle Frame
2	1250-28	1	Front Door (RH)
3	1250-28A	1	Front Door (LH)
4	1205-04	1	Operation Box Panel
5	1217-00	2	Door Holder
6	1210-0-2F	1	Upper Table (Front) 7mm,3/8"
6-1	1211-0-2F	1	Upper Table (Front) 1/2"
7	1210-0-2B	1	Upper Table (Rear) 7mm,3/8"
7-1	1211-0-2B	1	Upper Table (Rear) 1/2"
8	1217-01	4	Magnetic Catch
9	1222-00	8	Table Roller
9-1	1222-04	8	Roller Shaft
9-2	1234-01	16	Roller Holder
10	1205-02	1	Cover Holder
11	1228-00	16	Roller Shaft Pin
12	1226-03	2	Wheel Swivel
12-1	1226-04	2	Wheel Fixed
13	1250-29	2	Rear Panel
15	1212-00	4	Top Cover Holder
50	SSB1M6x10	8	Truss Head Screw (Stainless) 6x10
51	SWM 4x12	8	Plain Washer
52	SBM 4x8	8	Phillips Head Screw 4x8
53	SSPWM6	16	Spring Washer 6mm
54	SNM 6x10	8	Hex Nut
55	SLCM 6x10	8	Socket Screw 6x10

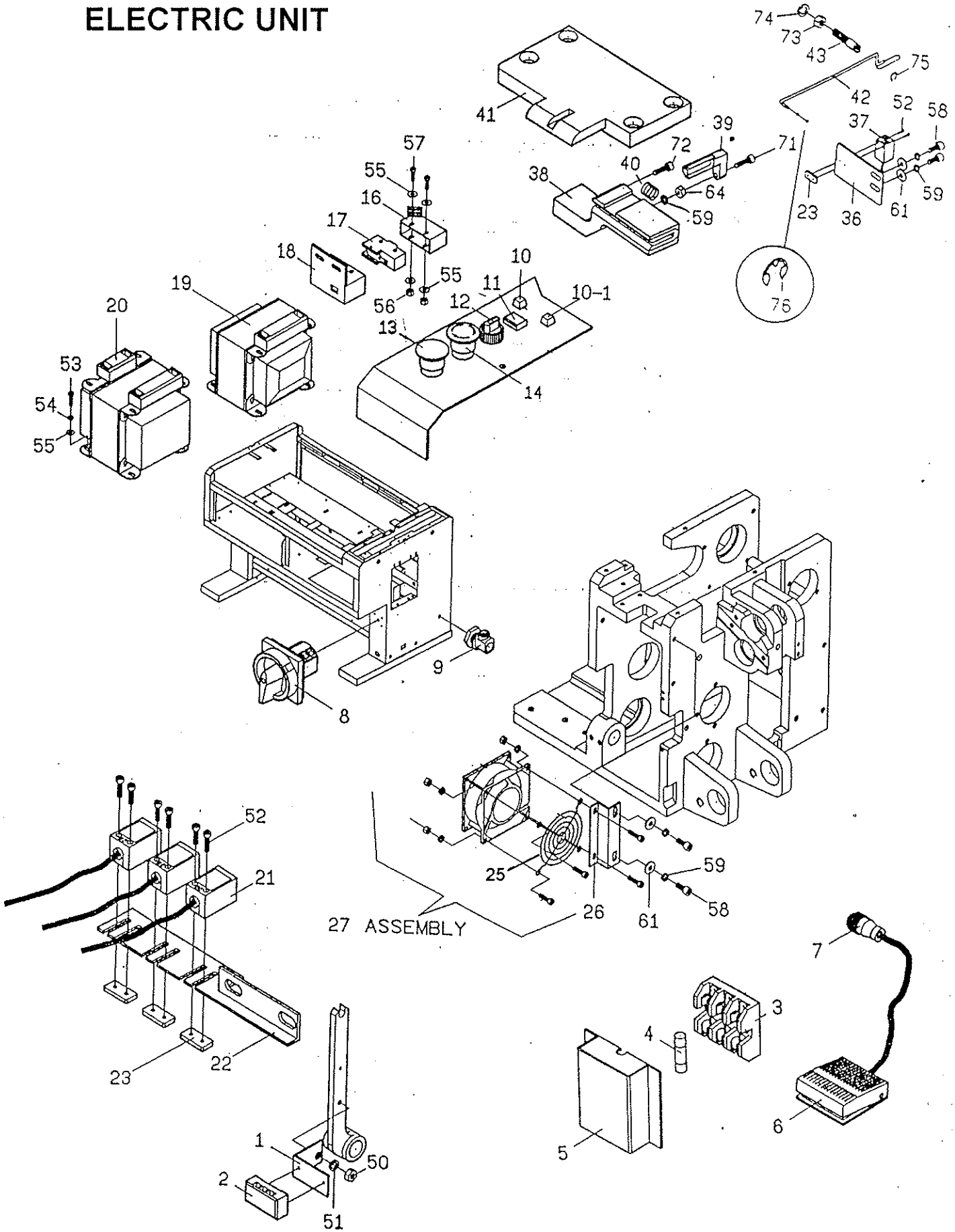
BODY UNIT



ELECTRIC UNIT

KEY	PART NO.	QTY.	DESCRIPTION
1	1304-01	1	Heater Terminal Bracket
2	1305-00	1	Heater Terminal Bracket
3	1336-00	1	Fuse Seat (3P30A)
4	1337-00	2	Fuse 10A (14x51)
5	1336-01	1	Fuse Cover
6	1320-00	1	Foot Pedal Switch
7	1319-00	1	Foot Pedal Switch Base
8	1327-00	1	Power Switch
9	1308-01	1	Cord Connector
10	KSW-39	1	Pilot Lamp (Green)
10-1	KSW-38	2	Pilot Lamp (Orange)
11	KSW-37	1	Reset Switch
12	1407-16	1	Toggle Switch 22ϕ 2A1B
13	1407-20	1	Start Button 22ϕ 1A
14	1407-18	1	Stop Button 22ϕ 1B
16	KSW-11	1	Cut Switch Cover
17	1318-00	1	Cut Switch
18	KSW-12	1	Cut Switch Cover
19	1306-05	1	Transformer (Heater)
20	1415-06	1	Transformer 110/28
21	1503-06	3	Proximity Switch
22	0122-01	1	Proximity Bracket
23	0123-00	4	Proximity Bracket Guide
25	1325-00	1	Smoke Fan Cover 3"
26	1324-01	1	Smoke Fan Fixed Plate
27	1324-AS2	1	Smoke Fan Assembly 110V
36	0203-04	1	Proximity Set
37	1503-14	1	Proximity Set
38	0203-03	1	Band Guide
39	0203-05	1	Proximity Lever
40	0203-06	1	Proximity Lever Spring
41-1	0204-00A	1	Slide Table (1/2")
41-2	0204-02A	1	Slide Table (7mm and 3/8")
42	0203-07	1	Proximity Bracket Guide
43	0203-08	1	Proximity Bracket
50	SNM 8x125R	1	Hex Nut M8
51	SSPWM8	1	Spring Washer 8mm
52	SBM 3x25	8	Phillips Head Screw 3x25
53	SBM 4x10	8	Phillips Head Screw 4x10
54	SSPWM4	8	Spring Washer 4mm
55	SWM 4x12R	12	Plain Washer 4x12
56	SNM 4x07R	3	Hex Nut M4
57	SBM 4x30	2	Phillips Head Screw 4x30
58	SCM 6x15R	4	Socket Head Cap Screw 6x15
59	SSPWM6	4	Spring Washer 6mm
61	SWM 6x16	4	Plain Washer 6x16
64	SNM6x10R	2	Hex Nut 6mm
71	SBM 3x20	1	Phillips Head Screw 3x20
72	SBM 3x10	1	Phillips Head Screw 3x10
73	SNM 10x15	1	Hex Nut M10
74	SSPWM10	1	Spring Washer 10mm
75	RS-10	1	Ring S-10
76	RE-3	2	Ring E-3

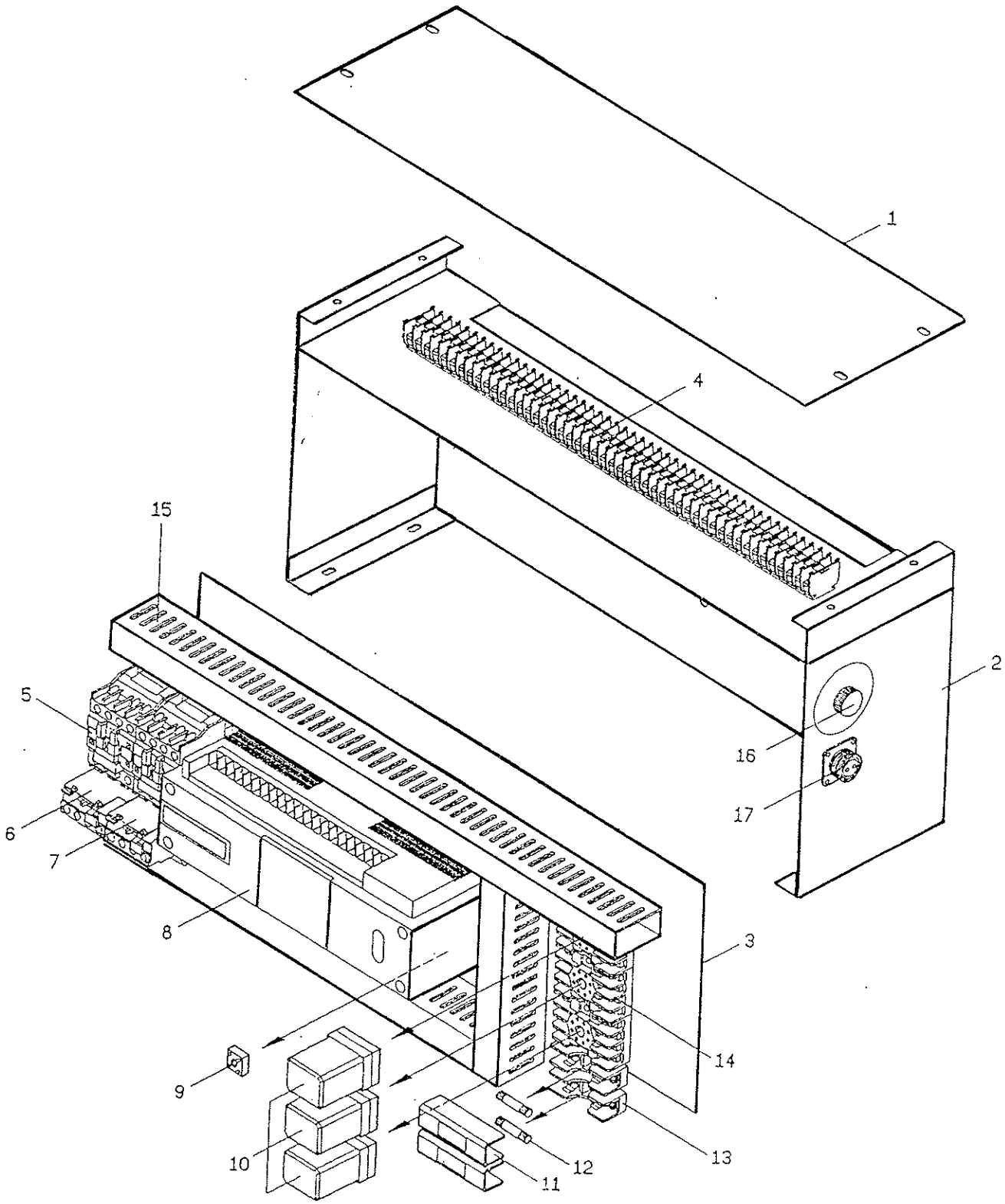
ELECTRIC UNIT



CONTROL BOX UNIT

KEY	PART NO.	QTY.	DESCRIPTION
1	1423-00	1	85# Control Box Cover
2	1423-01	1	85# Control Box
3	1423-02	1	85# Control Box Base
4	1404-04	1	34P Terminal Bracket
5	1405-01	2	Magnetic Switch AC24-4A
6	1412-04	1	Thermal Relay 55.5-8A (220V/1Ph)
7	1412-03	1	Thermal Relay 4-6A (220V/1Ph)
8	1430-01	1	PLC A1-20MR
9	1410-00	1	Rectifier (BR-610)
10	1427-06	3	Relay RR2P-U AC24V
11	1425-00	2	Fuse Cover
12	1416-00	2	Fuse 5A
13	1424-00	2	Fuse Seat
14	1427-05	3	Relay Seat PF-083A
15	KAD-08-02	2	Wire Duct 25mmx45mm
16	1419-AS1	1	Heater Temperature Adjustment (110V)
17	1319-00	1	Foot Switch Plug LLPN-600-20-2P

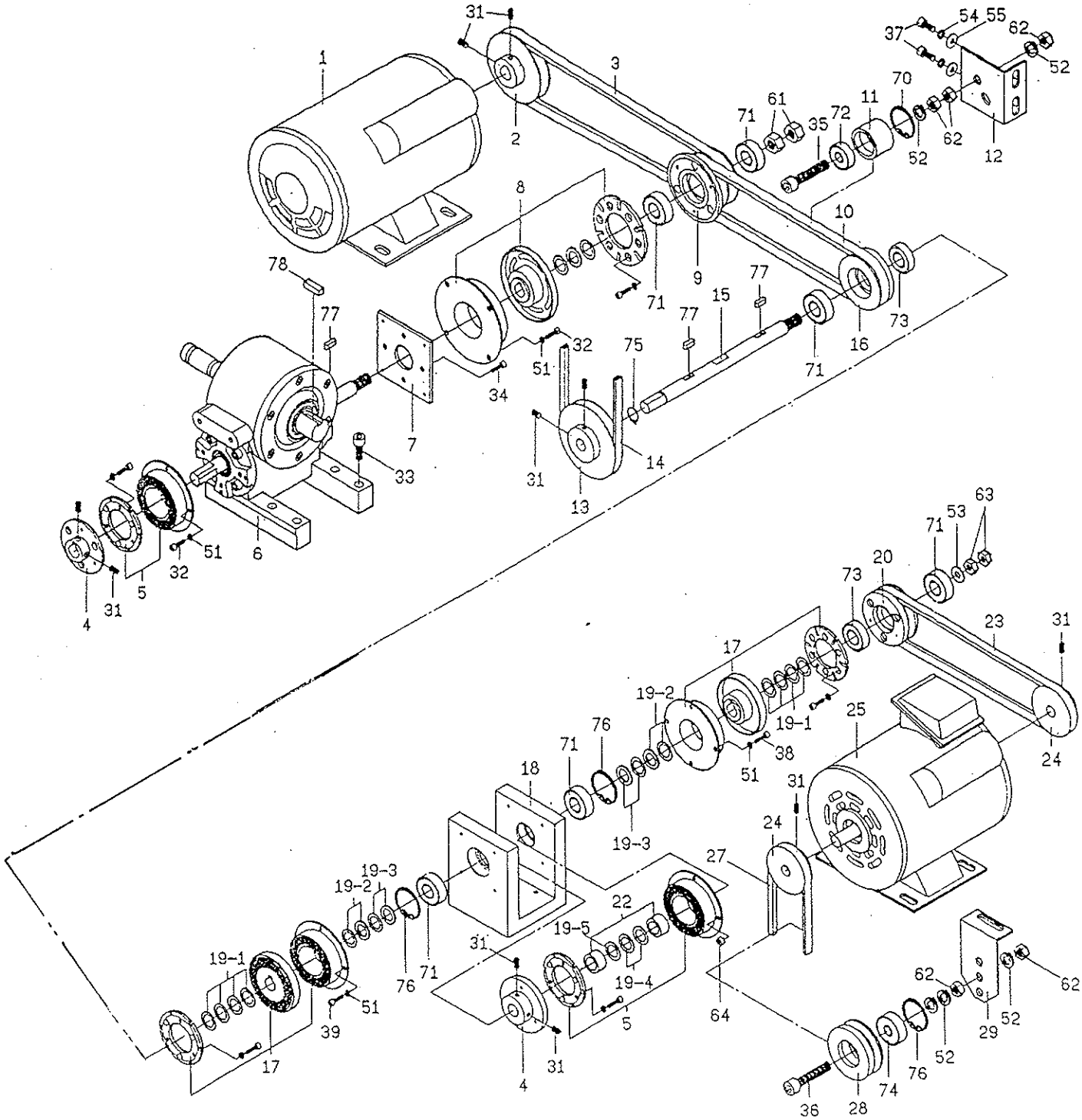
CONTROL BOX UNIT



SINGLE PHASE DRIVE UNIT

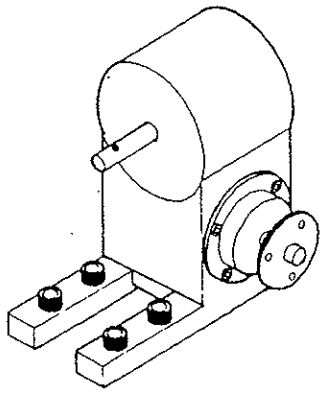
KEY	PART NO.	QTY.	DESCRIPTION
1	1301-07A	1	Timing Motor (1Ph 110,220/60Hz, 1/2Hp)
2	1302-03	1	Timing Motor Pulley A84ϕ
3	0120-00	1	V-Belt A-26 (J)
4	1705-01	2	Brake Pulley
5	0114-AS1	2	Magnetic Brake Assembly
6	0119-01	1	Gear Box (Single)
7	0113-00	1	Brake Screw Seat
8	1021-04	1	Clutch DC-24V CTC-0.8
9	1707-01	1	Gear Box Pulley
10	0120-09	1	V-Belt A-34 (J)
11	1833-00	1	Feeding Roller (Single Ph)
12	1712-00	1	Roller Fixed Seat (1Ph)
13	0706-03	1	Pulley 86ϕ
14	0120-10	1	V-Belt M-20 (J)
15	1702-00	1	Drive Shaft 15ϕ x 230
16	1704-00	1	Clutch Pulley CP2
17	D-02-00	2	Magnetic Clutch DC-24V
18	1701-00	1	Bearing Fixed Seat
19	1701-03	12	Pulley Collar 20ϕx15.1x2L
19-1	D-02-04	4	Clutch Interval Tube 0.10mm
19-2	D-02-05	2	Clutch Interval Tube 0.30mm
20	1703-00	1	Clutch Pulley CP1
22	1701-00-2	2	Brake Tube 15ϕx12L
23	0120-07	1	Belt M-24 (J)
24	1007-00	2	Chamber Feed Pulley
25	1014-04	1	Chamber Motor (1Ph 110,220/60 1/3Hp)
27	0120-06	1	V-Belt M-42 (J)
28	1715-00	1	Roller (1Ph)
29	1714-00	1	Roller Fixed Seat
31	SAEM 6x10	10	Flat Head Screw 6x10x1.0
32	SLCM 4x10R	8	Hex Head Bolt 4x10
33	SCM 8x45R	4	Hex Head Bolt 8x45
34	SFM 5x10	4	Flat Head Screw 5x10
35	SCM 10x70	1	Hex Head Bolt 10x70
36	SCM 10x50R	1	Hex Head Bolt 10x50
37	SCM 6x20	2	Hex Head Bolt 6x20
38	SBM 4x30	4	Pan Head Screw 4x30
39	SBM 4x20	4	Pan Head Screw 4x20
51	SSPWM4	16	Spring Washer 4mm
52	SSPWM10	4	Spring Washer 10mm
53	SSPWM8	1	Spring Washer 8mm
54	SSPWM6	2	Spring Washer 6mm
55	SWM 6x16x2R	2	Plain Washer 6x6x2.0
61		2	Hex Nut M3
62	SNM 10x15	5	Screw Nut 10x1.5
63	SNM 8x125	2	Screw Nut 8x1x1.25
64	SUNM4	4	Nut M4
70	RR-30	1	R-Stop Ring #30
71	2201-01	6	Ball Bearing 6202ZZ
72	2201-25	1	Ball Bearing 6200ZZ
73	G-14-00	2	Ball Bearing 6000ZZ
74	2201-26	1	Ball Bearing 6300ZZ
75	RS-15	1	R-Stop Ring #15
76	RR-35	3	R-Stop Ring #35
77	Key-5515	3	Key 5x5x15
78	Key-7723	1	Key 7x7x23

SINGLE PHASE DRIVE UNIT



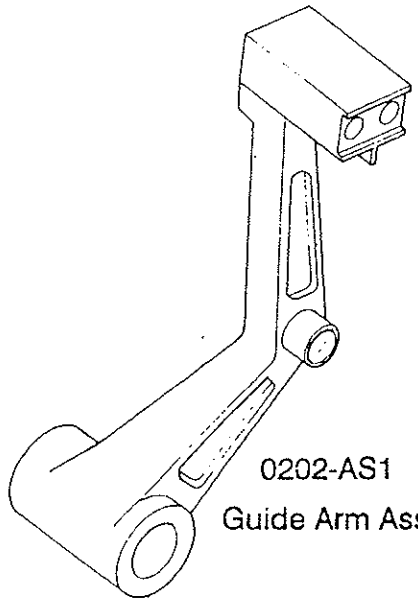
APPENDIX 1 SUB-ASSEMBLY DRAWINGS

DRAWING 1



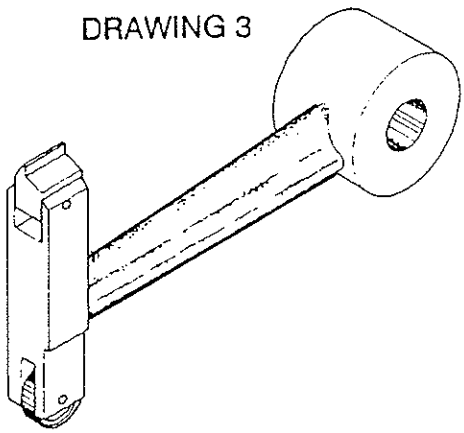
0119-AS2 Gear Box Assembly

DRAWING 2



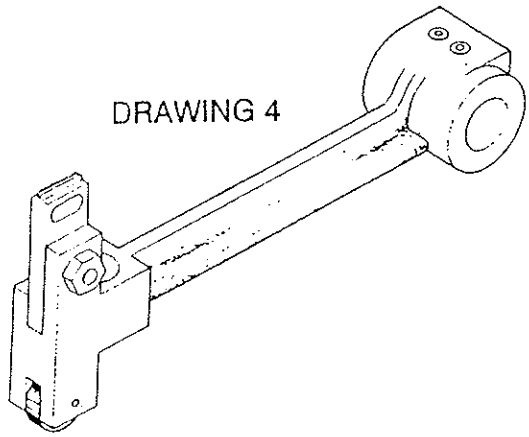
0202-AS1 Band Guide Arm Assembly

DRAWING 3



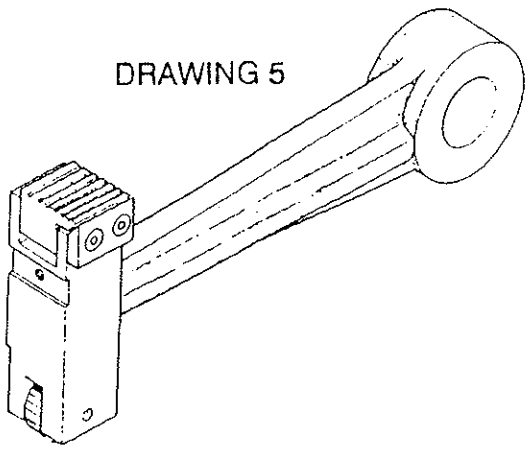
0301-AS1 LH. Block Arm Assembly

DRAWING 4



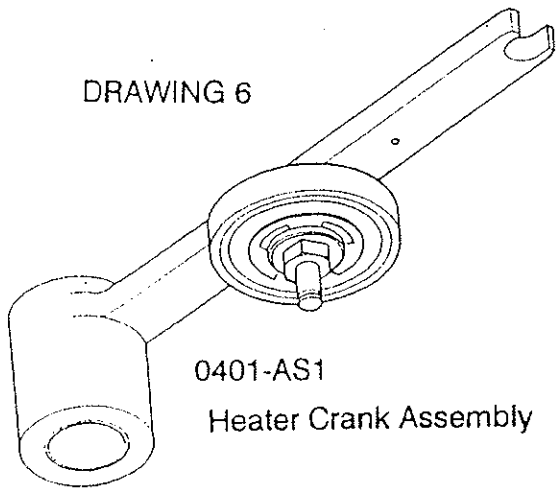
0302-AS1 RG. Block Arm Assebmly

DRAWING 5



0303-AS1 Center Block Arm Assembly

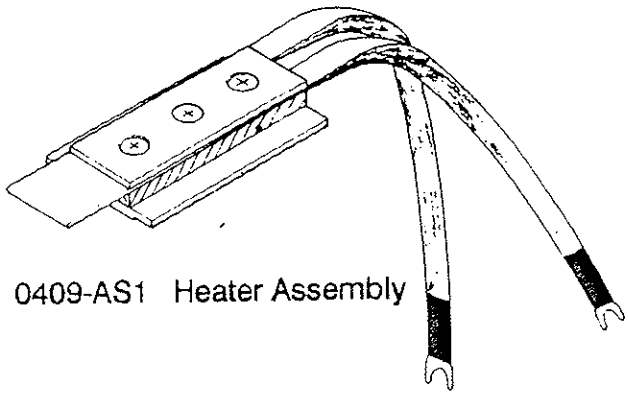
DRAWING 6



0401-AS1
Heater Crank Assembly

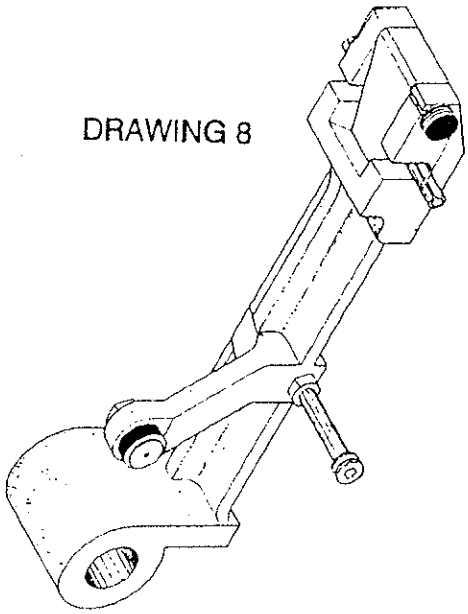
APPENDIX 2 SUB-ASSEMBLY DRAWINGS

DRAWING 7



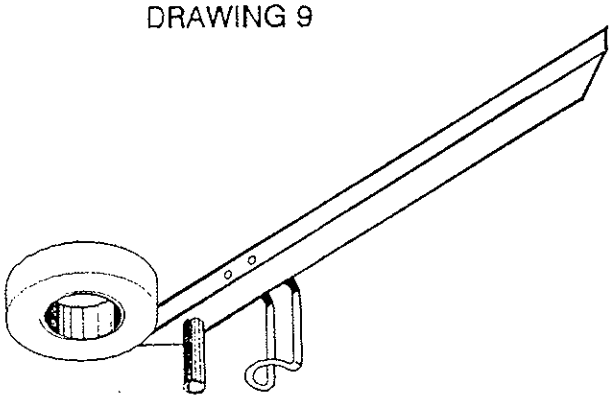
0409-AS1 Heater Assembly

DRAWING 8



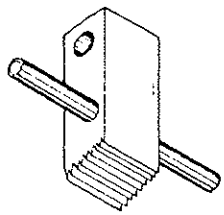
0601-AS1 Tension Arm Assembly

DRAWING 9



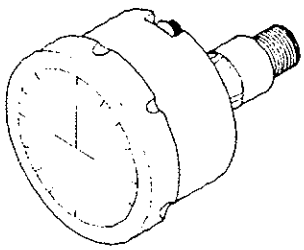
0602-AS2 Tension Adjust Arm Assembly

DRAWING 10



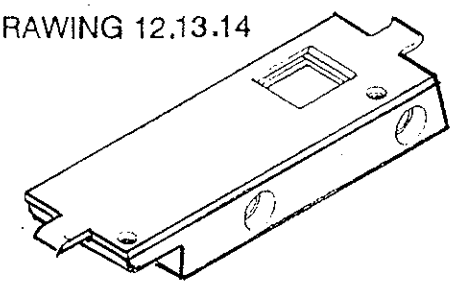
0606-AS1 Tension Jaw Assembly

DRAWING 11



0619-AS1 Tension Adjust Assembly

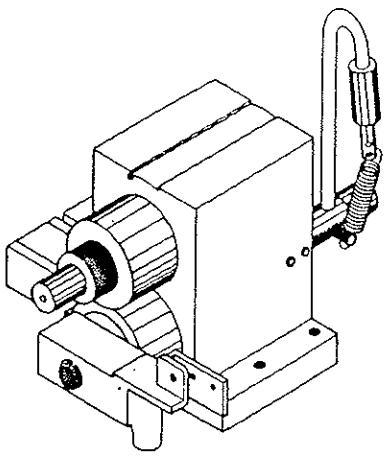
DRAWING 12.13.14



0710-AS1 Feed Shooter (9m/m) Assembly
0710-AS2 Feed Shooter (12m/m) Assembly
0710-AS3 Feed Shooter (15m/m) Assembly

APPENDIX 3 SUB-ASSEMBLY DRAWINGS

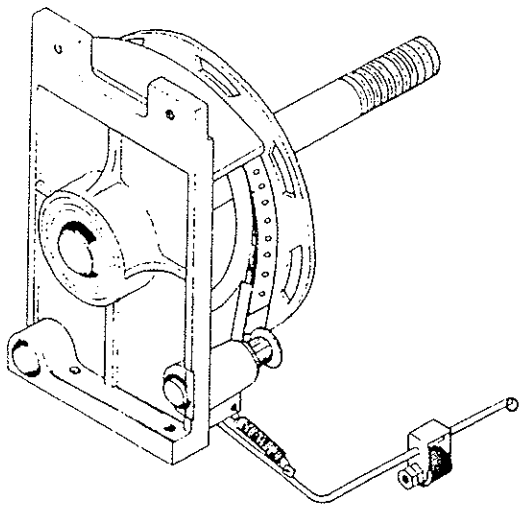
DRAWING 16



1001-AS2-3

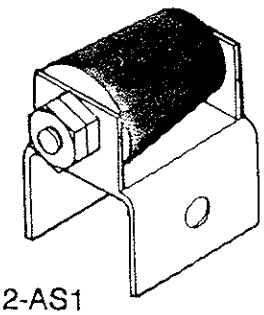
Chamber Feed Bearing Case Assembly 85#

DRAWING 17



1101-AS1 Reel Unit Base Assembly

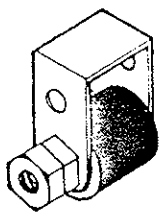
DRAWING 18



1112-AS1

Free Angle Roller Bracket Assembly

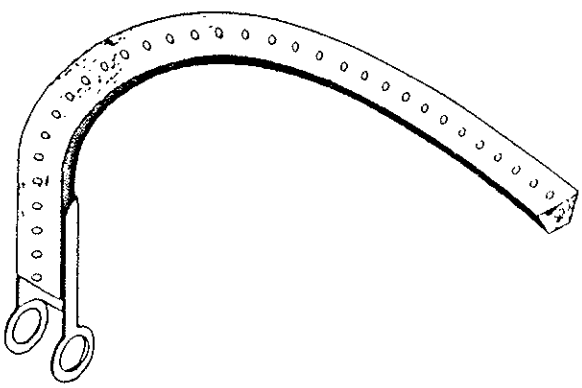
DRAWING 19



1113-AS1

Free Slide Roller Bracket Assembly

DRAWING 20



1126-AS1 Brake V-Belt Assembly

SECTION IIIV

RECOMMENDED SPARE PARTS

RECOMMENDED TOOLS

RECOMMENDED SPARE PARTS LIST

PART NO.	QTY.	DESCRIPTION
0120-00	1	V-Belt A-26 (J)
0120-06	1	V-Belt M-42 (J)
0120-07	1	Belt M24 (J)
0120-09	1	V-Belt A-34 (J)
0120-10	1	V-Belt M-20 (J)
0203-06	1	Proximity Lever Spring
0208-01	1	Band Guide Spring
0214-00	1	Band Guide Spring
0220-00	1	Slide Table Tension Spring
0309-00	1	Cutter Lower
0311-00	1	Upper Roller Spring
0314-00	3	Press Tension Spring
0315-00	1	Cutter Tension Spring
0317-01	2	LH & Center Block Spring
0318-00	1	RH Block Spring
0409-02	1	Heater Plate
0617-02	1	Tension Arm Spring
0616-02	1	Tension Arm Spring
0615-00	1	Tension Jaw Spring
0721-00	1	Feed Spring
0808-00	1	RH Bandway Flap Spring
0810-00	1	LH Bandway Flap Spring
0916-00	4	Arch Flap Spring
1010-02	1	Chamber Adjustment Spring
1034-01	1	Chamber Spring
1040-00	1	Limit Switch
1126-01	1	Brake V-Belt
0337-00	2	Fuse 10A (14x51)
1318-00	1	Cut Switch
1412-04	1	Thermal Relay 55.5-8A (220V/1Ph)
1412-03	1	Thermal Relay 4-6A (220V/1Ph)
1427-06	1	Relay RR2P-U AC 24V
1416-00	2	Fuse 5A
1503-06	1	Proximity Switch
1503-14	1	Proximity Set
2201-01	5	Ball Bearing 6202ZZ
2204-00	1	Cam Follower CF-10

RECOMMENDED TOOLS

There are no special tools required to make any adjustments to this machine, however, you will require some standard metric wrenches and hex wrenches in addition to the normal compliment of tools to service this machine. Some basic tools recommended are as follows:

Screwdriver	Slotted blade (Large and Small) Phillips head (Large and Small)
Hex Wrench	2mm 2.5mm 3mm 4mm 5mm 6mm 8mm
Adjustable Wrench	6" (15/16" jaw capacity)
Hammer	
Open End Wrench	Metric set
Pin Punch	

SAMUEL STRAPPING SYSTEMS
6843 Santa Fe Drive
Hodgkins, IL 60525
1-800-323-4424
P-225 - REV. 11/97