

TABLE OF CONTENTS

SECTION	PAGE NO.
1. INTRODUCTION	1-1
1.1 General Description of Machines	1-1
1.1.1 The 6000 Series	1-1
1.1.2 The 6100 Series	1-1
1.1.3 The 6300 Series	1-1
1.1.4 The 6400 Series	1-1
1.2 The Operating and Maintenance Manual	1-2
1.3 Important Warranty Notice	1-2
1.4 Patent Notice	1-2
2. UNPACKING	2-1
3. SPECIFICATIONS	3-1
3.1 The 6000 Series	3-1
3.2 The 6100 Series	3-1
3.3 The 6300 Series	3-2
3.4 The 6400 Series	3-2
4. ORDERING INSTRUCTIONS	4-1
5. ASSEMBLY AND INSTALLATION	5-1
5.1 Assembly of 70,80,90, and 100 Inch Sealers	5-1
5.2 Installation of All Models	5-1
6. FILM LOADING	6-1
6.1 Mounting the Film	6-1
6.2 Package Support Tray Adjustment	6-1
6.3 Threading the Film	6-1
7. OPERATION OF 6000 SERIES SEALERS	7-1
7.1 Adjustment of Element Compensator for All Films Except Polyethylene	7-1
7.2 Adjustment of Element Compensator for Polyethylene Film	7-1
7.3 Instructions for Production Operation of Sealer	7-2

TABLE OF CONTENTS

SECTION	PAGE NO.
8. OPERATION OF 6100,6300,6400 SERIES SEALERS	8-1
8.1 Preliminary	8-1
8.2 Element Compensator Adjustment	8-1
8.2.1 Element Compensator Adjustment for All Films Except Polyethylene on All But 70 Inch or Longer Machines	8-2
8.2.2 Element Compensator Adjustment for Polyethylene Film on All But 70 Inch or Longer Machines	8-2
8.2.3 Element Compensator Adjustment for All Films Except Polyethylene on 70 Inch or Longer Machines	8-3
8.2.4 Element Compensator Adjustment for Polyethylene Film on 70 Inch or Longer Machines	8-3
8.3 Instructions for Production Operation of Sealers	8-4
8.4 Instructions for Operation in Thermoline Sealing Mode (Optional Feature)	8-6
9. SERVICE ADJUSTMENTS	9-1
9.1 Element Compensator Adjustment	9-1
9.2 Sealing Element Cleaning	9-1
10. MAINTENANCE	10-1
10.1 Sealing Element Replacement	10-1
10.1.1 Front Element	10-1
10.1.2 Side Element	10-2
10.2 Tape Replacement	10-3
10.3 Silicone Rubber Sealing Pad Replacement	10-3
10.4 Sealing Pad Pressure Adjustment	10-3
10.5 Element Pulses Switch Adjustment	10-4
10.6 Contactor CR-1 Contact Cleaning and Replacement	10-4
10.7 Adjustment of Magna-Lok Magnets for Correct Sealing Pressure	10-5
11. TROUBLESHOOTING CHART	11-1
12. REPLACEMENT PARTS LIST, 6000,6100,6300,6400, SERIES SEALERS	12-1

LIST OF ILLUSTRATIONS

FIGURE NO.		PAGE NO.
6.1	Film Threading Diagram, 6000 Series Sealers	6-3
6.2	Film Threading Diagram, 6100,6300,6400 Series	6-4
10.1	Compensator Air Gap Adjustment, & Element Replacement	10-7
10.2	Sealing Pad Maintenance	10-8
10.3	Contact CR-1, Contact Cleaning & Replacement	10-9
10.4	Adjustment of Magna-Lok Sealing Pressure	10-10
10.5	Electrode Bar Assembly, Complete, Front	10-11
10.6	Electrode Bar Assembly Complete, Side	10-12
11.1	Parts Locations, Electrical Chassis, Model 6081-6082	11-3
11.2	Parts Locations, Electrical Chassis, Model 6100	11-4
11.3	Parts Locations, Electrical Chassis, Model 6300	11-5
11.4	Parts Locations, Electrical Chassis, Model 6400	11-6
11.4A	Parts Locations, Electrical Chassis, Model 6400A "Ref Parts Listing 64000803	11-7
11.5	Chart of Secondary Voltages from Element Transformers	11-8
13.1	Electrical Schematic Diagram, 6000 Series Sealers	13-1
13.2	Electrical Schematic Diagram, 6100 Series Sealers	13-2
13.3	Electrical Schematic Diagram, 6300 Series Sealers	13-3
13.4	Electrical Schematic Diagram, 6400 Series Sealers	13-4

1. INTRODUCTION

1.1 GENERAL DESCRIPTION OF MACHINES

The Weldotron L-Sealers Series utilize advanced sealing techniques to completely wrap any item, using most heat shrinkable or non-shrinkable films. When used with shrinkable films and a hot air tunnel, a tight contour fit is obtained for complete product visibility, sales appeal, and protection.

1.1.1 The 6000 Series

This is a simple and reliable series, available in two sizes, at a lower cost than other L-Sealers previously available. Of deluxe construction and features, the 6000 Series utilizes impulse-radiant sealing techniques and is intended for applications such as are found in the printing industry, or others, in which a lower production rate is acceptable. Straightforward, easy manual operation is employed.

1.1.2 The 6100 Series

This is the original and improved L-Sealer Series, featuring reliable operation in the impulse-radiant (or, optionally, THERMOLINEtm constant heat) operating mode to provide a very efficient means for manually-operated packaging and is available in a wide range of sizes for most packaging applications.

1.1.3 The 6300 Series

This series, otherwise similar to the 6100 Series, incorporates a unique electromagnetic (MAGNA-LOKtm) sealing head hold-down system. This frees the operator to load another package while the preceding one is being sealed, and assures uniform sealing pressure over the full length of the sealing boars (up to 100 inches long) and provides consistent sealing results from package to package.

1.1.4 The 6400 Series

Available in two sizes, with all of the features of the 6100 and 6300 Series, this series provides the added flexibility and utility of a motorized package take-away conveyor for highest-speed manual sealing operations.

1.2 THE OPERATING AND MAINTENANCE MANUAL

This Operating and Maintenance Manual has been carefully prepared by our Technical Publications Department to provide the user with all information needed to properly install, operate, and maintain the Weldotron Sealer. In addition to this manual, regional Sales/Service Centers provide complete maintenance facilities, if required.

Please read this manual carefully and refer to it for information on the care and use of your Weldotron machine. It is recommended that additional copies be ordered for use by production, maintenance, and supervisory personnel. Although the design of this sealer incorporates safeguards to protect personnel, care should be used in operating, adjusting, and servicing.

1.3 IMPORTANT WARRANTY NOTICE

Attention is directed to the Standard Weldotron Parts and Service Warranty which accompanies all new Weldotron machines. The terms and conditions of this warranty apply only to unmodified units. Any unauthorized modifications to the equipment automatically invalidate this warranty.

1.4 PATENT NOTICE

The purchase, use, or possession of any Weldotron machine gives no license express or implied, under any letters patent. This equipment is protected by one or more of the following patents and patents pending:

UNITED STATES PATENTS:

3047991, 3135077, 3191356, 3200561, 3116394, 3222800, 3243330, 3253122, 3262833, 3291963, 3299251, 3316653, 3321353

BRITISH PATENTS:

953490, 984587, 971422

FRENCH PATENTS:

1338356, 1326937, 1397917, 1332396

ITALIAN PATENTS:

671769, 691457, 673104

CANADIAN PATENTS:

756064

GERMAN PATENTS:

1209046

2. UNPACKING

Remove sealer from shipping crate and inspect for possible damage. IF ANY DAMAGE IS NOTED, CONTACT CARRIER IMMEDIATELY. DO NOTHING FURTHER UNTIL CARRIER'S AGENT HAS MADE AN INSPECTION OF THE DAMAGE TO THE UNIT.

If no damage is evident, check for the presence of the following items:

1. Operating and Maintenance Manual.
2. Four extra sets of elements.
3. Two extra lengths of Fiberglas Teflon tape.
4. Fuses, line, F1 and F2 (see Replacement Parts List for Part No.).

If any of the above items are missing, contact manufacturer immediately.

3. SPECIFICATIONS

3.1 6000 SERIES

MODEL	SEAL AREA		VOLTS* AMPS**		OVERALL SIZE		APPROX. SHIP. WGT (LBS)
	W"	L"			W"	L"	
6081	20	16	220	7	30	47	230
6082	20	28	220	9	30	71	295
6001	20	16	110	14	30	47	230

All units are 50/60 cycle, 1 phase.

* Other voltages available on special order.

** At listed voltage (peak current while sealing, not steady drain).

CONTROLS:

Automatic sealing temperature compensator; adjustable loading tray; adjustable-height package support tray; lateral and vertical positioning adjustment of film separator rod.

3.2 6100 SERIES

MODEL	SEAL AREA		VOLTS* AMPS**		OVERALL SIZE		APPROX. SHIP. WGT (LBS)
	W"	L"			W"	L"	
6100	13	13	110	25	25	41	180
6101	20	16	220	17	30	47	235
6102	20	28	220	23	30	71	300
6103	20	40	220	28	30	95	400
6113	30	40	220	33	40	95	400

All units are 50/60 cycle, 1 phase.

* Other voltages available on special order.

** At listed voltage (peak current while sealing, not steady drain).

CONTROLS:

Automatic sealing temperature compensator; synchronous timer heat control tap switch; adjustable loading tray; adjustable-height package support tray; adjustable film roll friction brake. Sealer with Thermoline Optional feature Thermoline/Impulse mode selector switch.

3.3 6300 SERIES

MODEL	SEAL AREA				OVERALL SIZE		APPROX. SHIP. WGT (LBS)
	W"	L"	VOLTS*	AMPS**	W"	L"	
6300	13	13	110	25	25	41	200
6301	20	16	220	17	30	47	255
6302	20	28	220	23	30	71	320
6303	20	40	220	28	30	95	420
6304	20	70	220	44	30	155	470
6305	20	80	220	48	30	175	520
6306	20	90	220	52	30	195	570
6307	20	100	220	56	30	215	620
6313	30	40	220	33	40	95	420
6314	30	70	220	48	40	155	470
6315	30	80	220	52	40	175	520
6316	30	90	220	56	40	195	570
6317	30	100	220	60	40	215	620

All units are 50/60 cycle, 1 phase.

* Other voltages available on special order.

** At listed voltages (peak current while sealing, not steady drain).

CONTROLS:

Automatic sealing temperature compensator; synchronous timer heat control tap switch; adjustable loading tray; adjustable-height package support tray; adjustable film roll friction brake. Sealer with Thermoline Optional feature Thermoline/Impulse mode selector switch.

3.4 6400 SERIES

MODEL	SEAL AREA				OVERALL SIZE		APPROX. SHIP. WGT (LBS)
	W"	L"	VOLTS*	AMPS**	W"	L"	
6401	20	16	220	18	30	47	300
6402	20	28	220	24	30	71	365

All units are 50/60 cycle, 1 phase.

* Other voltages available on special order.

* At listed voltage (peak current while sealing, not steady drain).

CONTROLS:

Automatic sealing temperature compensator; synchronous timers for heat & conveyor; other features similar to 6300 Series. Sealer with Thermoline optional feature Thermoline/Impulse mode selector switch.

4. ORDERING INSTRUCTIONS

In order to avoid delay in filling orders for parts, customers should follow the procedure recommended below:

1. State the machine name, model number, and serial number.
2. List the part number, part name, and part description of required part exactly as shown on the Replacement Parts List at the rear of this manual.
3. Specify the quantity desired.
4. Specify when needed.
5. Specify desired shipping method: Parcel Post, Truck, Air Freight, etc.

5. ASSEMBLY AND INSTALLATION

5.1 ASSEMBLY OF 70, 80, 90, AND 100-INCH SEALERS

The shorter units are one-piece machines, but, due to their length, the 70-inch, and longer, seal units (see page 3-2 for listing) are shipped in two sections. To assemble, proceed as follows:

- a. Align both machine halves next to each other. Using bolts supplied in envelope, bolt the two halves of the sealer together. Insert rear head-shaft into bearing, fastening by means of bolts and shims supplied.
- b. Plug the two power plugs into the two corresponding-type power sockets on the rear of the sealer.
- c. Using the bolts supplied, mount the two legs and the lower cross-brace. Tighten all bolts securely.
- d. Place assembled sealer in desired operating position.

5.2 INSTALLATION OF ALL MODELS

Locate the sealer in the desired position with the required electric power source available*. Make sure electric wiring is adequate to guard against low voltage. If the voltage is too low the power company can frequently adjust it to the proper level if the wiring capacity is adequate.

* See power requirements for each model in the charts of pages 3-1 & 3-2.

SAFETY REQUIREMENTS & RECOMMENDATIONS

CAUTION

DO NOT ATTEMPT TO INSTALL, ADJUST, OR OPERATE THIS MACHINE WITHOUT FIRST READING THE CONTENTS OF THIS MANUAL. ALTHOUGH THE DESIGN OF THIS EQUIPMENT INCORPORATES SAFEGUARDS TO PROTECT OPERATING AND MAINTENANCE PERSONNEL, CARE SHOULD BE USED IN OPERATING, ADJUSTING, AND SERVICING.

WHEN MACHINE IS UNPACKED, INSPECT CAREFULLY FOR POSSIBLE SHIPPING DAMAGE. IF ANY IS FOUND, CONTACT CARRIER IMMEDIATELY AND DO NOTHING FURTHER WITH MACHINE UNTIL CARRIER'S AGENT HAS MADE INSPECTION, REPORT, ETC.

The design of this machine includes safety features required to eliminate potential hazards during operation or maintenance.

Applicable OSHA, ANSI, NEMA, and NEC standards have been followed as guidelines in the design and construction of this machine. References are made in this text to special areas of CAUTION. It is strongly recommended that you familiarize yourself with these CAUTION statements.

Tampering with or removing safety devices and/or improper operation or maintenance can result in exposing personnel to possible injury.

Please become familiar with this machine and follow the recommendations for safe operation, maintenance, and sanitation in the following page.

WELDOTRON CORPORATION SAFETY RECOMMENDATIONS

SAFETY IS ENGINEERED INTO ALL WELDOTRON EQUIPMENT; CERTAIN PRACTICES AND MINOR ALTERATIONS BY THE USER COULD INCREASE THE POTENTIAL TO ACCIDENTS AND/OR INJURY. IN THE INTEREST OF SAFE INSTALLATION, OPERATION AND MAINTENANCE, THE FOLLOWING RECOMMENDATIONS SHOULD BE STRICTLY ADHERED TO:

1. WARNING

Do not attempt to start or operate the machine until all safety items, installation instructions, operator/s guide & maintenance procedures have been followed & understood.

2. CAUTION

Adjustments, repairs or lubrication should be performed only by qualified maintenance personnel and by following the instructions in this manual and the LOCKOUT/TAGOUT PROCEDURE.

3. WARNING

Operator must keep fingers, hands, clothing or long hair away from the machine while it is in operation.

4. CAUTION

Do not place or leave tools, parts or other objects in or on the machine.

5. ALWAYS

Disconnect the main electrical power supply before performing any electrical work or removing any electrical component.

6. ALWAYS

Keep the machine clean & lubricated and in good operating condition.

WELDOTRON SUPPLEMENTARY BULLETIN

AUXILIARY INSTRUCTIONS FOR 6400 Series Magna-Lok Sealers

TECHNICAL DOCUMENT NO. 661
February, 1973

I. INTRODUCTION:

This Supplementary Bulletin provides Auxiliary Operating Instructions for the 6400 Series Magna-Lok Sealers. The 6400 Series Sealers are equipped with a powered package take-away conveyor. With the exception of the powered conveyor and the following information, the Sealer is the same as described in Technical Document No. 408-Operating and Maintenance Instructions for L-Series Sealers. A copy of which accompanies this Sealer.

II. OPERATING INSTRUCTIONS:

- 2-1 Refer to T.D. No. 408 paragraph 7 (starting on page 7-1) and make all adjustments and settings required.
- 2.2 Initially, set the CONVEYOR TIMER to approximately 1 second on its scale.
- 2.3 To operate the Sealer, press the sealing handle down. Immediately release hand pressure. The sealing head will remain down for the duration of the time set on the HEAT timer and will then rise. As the sealing head rises, the package take-away conveyor will transport the package away from the sealing area, making room for the next package and the next sealing operation.
- 2.4 In order to achieve maximum sealing speed, and efficiency in production use of the sealer, the CONVEYOR timer setting should be set to move the package the minimum distance necessary to permit loading and sealing of the next package. It is not necessary to have each sealed package move entirely off the conveyor after sealing is completed. The package need move away from the sealing area only a distance sufficient to provide space for the next package to be properly sealed. To do this, experiment with different settings of the CONVEYOR timer until the desired package spacing is obtained.

III. CONVEYOR BELT ADJUSTMENT:

- 3-1 To adjust conveyor tracking and belt tension, turn the two adjustment bolts located at the shaft-ends on the right side of the conveyor (package infeed side) until correct tension and tracking is achieved.

6. FILM LOADING

NOTE

Refer to Figure 6.1 throughout for 6000 Series Sealers; refer to Figure 6.2 throughout for 6100, 6300, or 6400 Series Sealers.

6.1 MOUNTING THE FILM

- a. Select the proper width of centerfold film for the item being packaged, allowing for width and height of package. With the package properly positioned within the film in the sealing area, allow sufficient film to overlap the sealing bars so that a seal can readily be made without any possibility of open areas due to insufficient film.
- b. Lift film support shaft out of film supply rack.
- c. Remove rear cone from film support shaft by loosening the locking lever and sliding cone off shaft.
- d. Place film roll on film support shaft so that open edge of folded film is toward front of sealer.
- e. Replace rear cone on film support shaft. Press cone firmly into film core and tighten cone's locking lever.

6.2 PACKAGE SUPPORT TRAY ADJUSTMENT

- a. Place the package in the sealing position, on the support tray (in the case of the 6400 Series units, on the package conveyor).
- b. Turn the height-adjustment knob (located on the front panel) until center-line of the package is even with the top surface of the front and side sealing pads. This will insure that the seal occurs along the center-line of the package.

6.3 THREADING THE FILM

- a. Refer to either Figure 6.1 or 6.2 (see note at top of this page). Thread film under the roller and pull out several feet of film (sufficient to reach far end of package support tray).
- b. Place sample package to be sealed between top and bottom layers of film. Position package against the folded (i.e., rear) edge of the film. Place package in the sealing position. Pull film containing package toward the front right-hand corner so package is almost touching both the front and side sealing pads.

- c. Hold package within film in position on package support tray with left hand. With right hand, turn film supply reel to take up slack in film.
- d. On all series except the 6000 Series, the lateral positioning of the film supply rack may be adjusted by tipping the rack slightly to the right and pushing or pulling the rack forward or backward until the rear edge of the film roll is in line with the rear edge of the package in the sealing position on the package-support tray. Remove package.
- e. Loosen the film separator rod's lateral adjustment and position rod so rear end of rod is about 1 inch forward of folded (rear) edge of film. Tighten lateral adjustment.
- f. Position adjustable loading tray so its rear edge is in line with rear end of film separator rod.
- g. Open the film and slip the film separator rod and the adjustable loading tray between the upper and lower layers of film.
- h. On 6000 Series Sealers, the film separator rod height is adjusted by means of the vertical-adjustment bolt (shown in Figure 6.1). Rod height should be as low as possible consistent with the height of the package being wrapped, in order to prevent excessive drag on the film. On 6100, 6300, and 6400 Series Sealers, the film separator rod height is adjusted by lifting and tipping the film roll rack to the right while raising or lowering the rubber-tipped height-adjusting bolt at the rear side of the roll rack. As with the 6000 Series, the rod should be kept as low as possible, as explained above.
- i. As film is being pulled off the film roll of 6100, 6300, or 6400 Series Sealers, the friction brake should not touch the front cone of the reel. The brake should touch the cone when film is not being pulled off the roll. To increase braking turn the brake adjustment screw clockwise; to decrease braking turn screw counter-clockwise. Test action and readjust as required (see Figure 6.2).

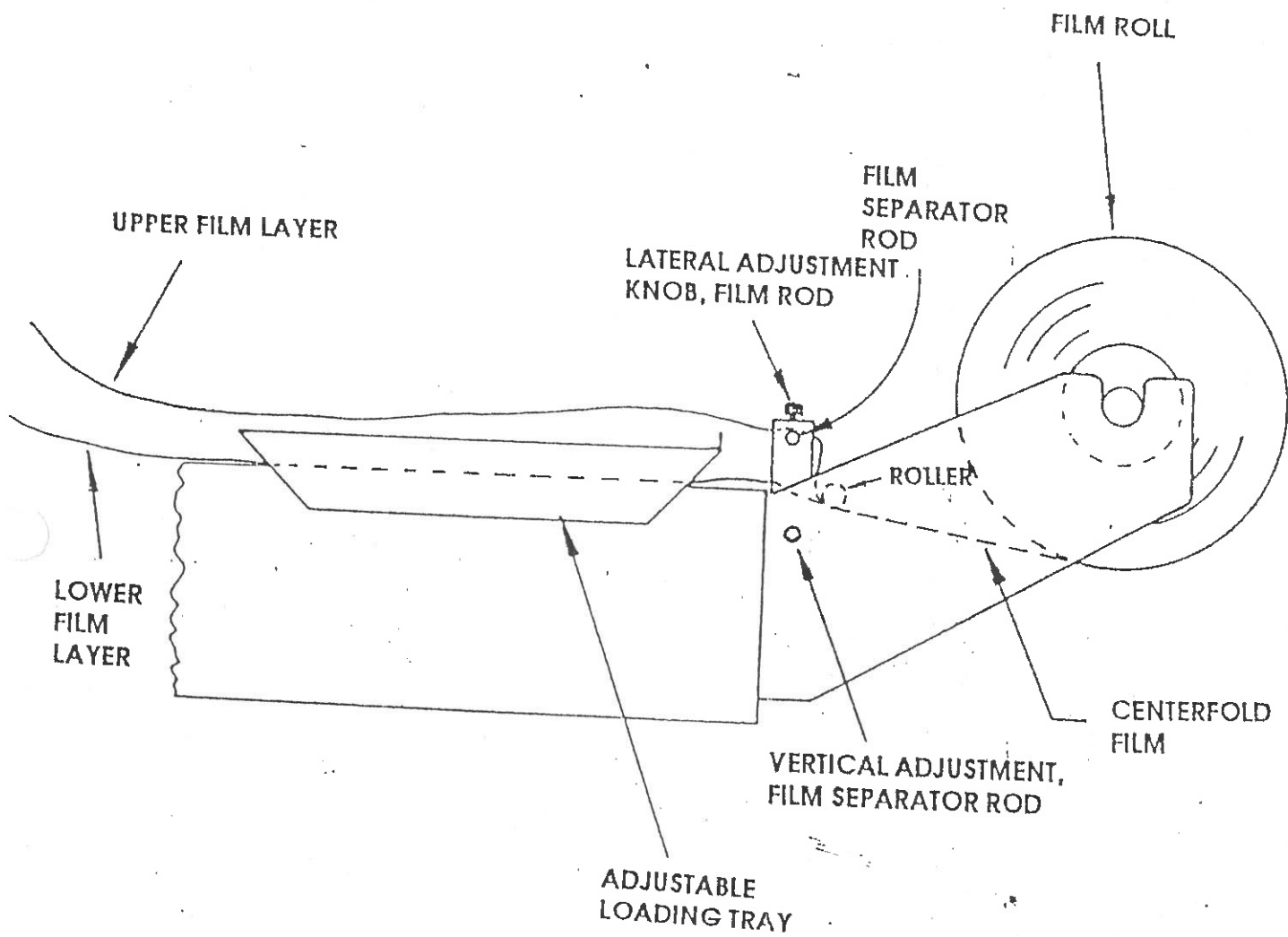


Figure 6.1 Film Threading Diagram, 6000 L-Sealer Series

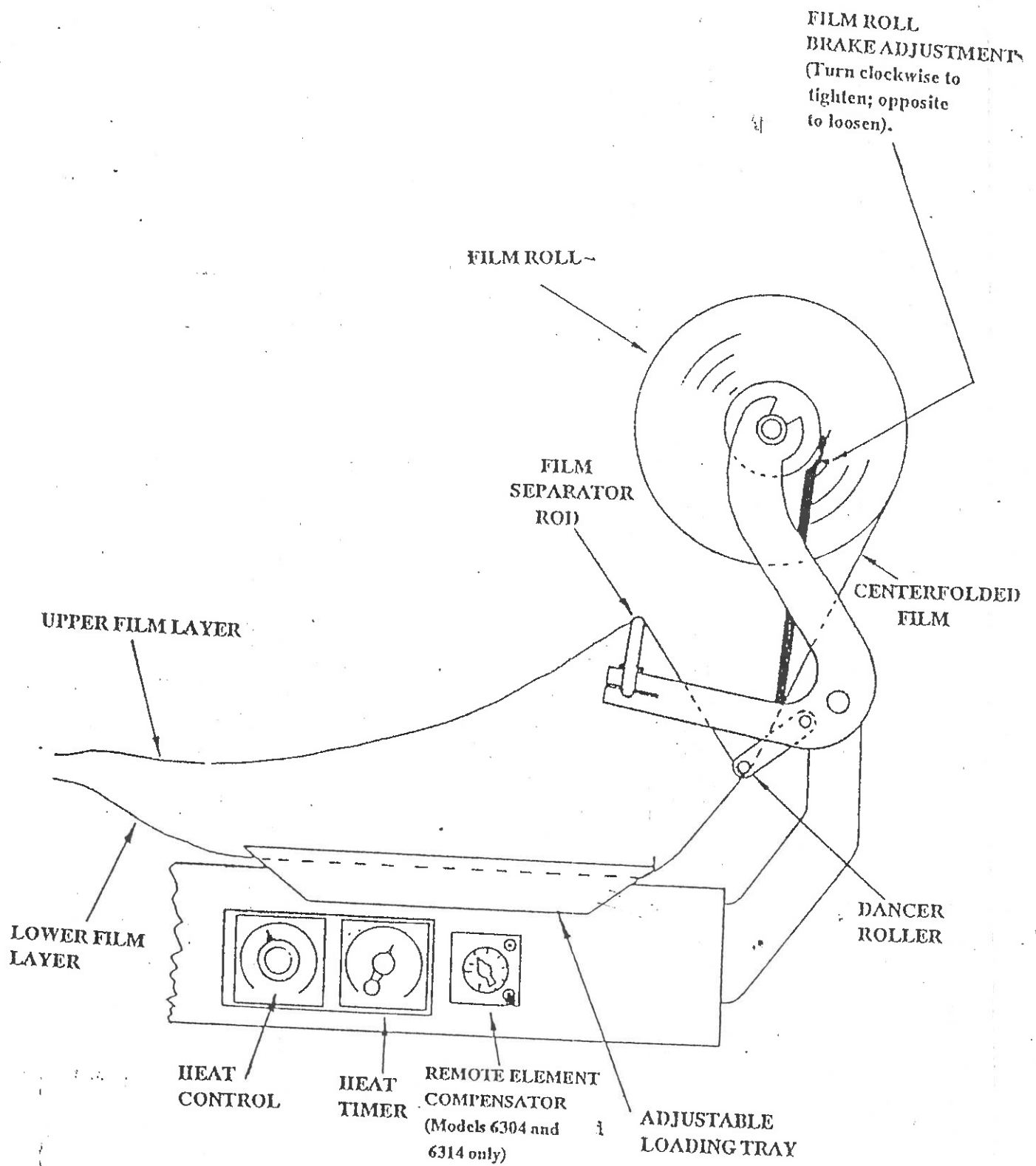


Figure 6.2 Film Threading Diagram, 6100, 6300, 6400 Series

7. OPERATION OF 6000 SERIES SEALERS

After performing film threading as described in paragraph 6, and as shown in Figure 6.1, plug the sealer's power cord into the proper power source as shown in the listing of paragraph 3.1.

Because of the importance of the adjustment of the Element Compensator to the successful operation of the sealer, the following explanation of its theory of operation is given.

THEORY OF OPERATION OF ELEMENT COMPENSATOR

Heat produced by the resistance of a wire to the passage of an electrical current causes the wire to increase in length. In as much as the expansion of the wire is in direct proportion to its length, and to its resistance to the passage of current, its increase in length due to heating can be used to actuate an electrical switch to shut off power to the wire, thus controlling its degree of heating. Refer to the appropriate paragraph below for specific adjustment instructions.

7.1 ADJUSTMENT OF ELEMENT COMPENSATOR FOR ALL FILMS EXCEPT POLYETHYLENE

Refer to Figure 10.1. (At the rear of Section 10 of this manual). Adjust the Element Compensator (located at the left end of the front sealing bar of View "A") by loosening the wing-nut and turning the knurled-head screw until a $1/32"$ air gap exists. With folded film (i.e., two layers of film) in the sealing position, bring down the sealing head. Hold the head down, in the sealing position, until about 1 second after the buzzer stops sounding, then raise. Examine the seal. Ordinarily, it will not be possible to obtain a satisfactory seal with the $1/32"$ gap setting. Experimentally, in small increments, increase the Element Compensator air gap setting until a setting is obtained which yields a satisfactory seal and film cut-off. It is important to remember that the smallest air gap at which a satisfactory seal and film cut-off is obtained is the correct setting, with the exception that the air gap may have to be increased slightly in order to produce a light brown residue at the seal point when using PVC films.

7.2 ADJUSTMENT OF ELEMENT COMPENSATOR FOR POLYETHYLENE FILM

Refer to Figure 10.1. (At the rear of Section 10 of this manual). On the Element Compensator, loosen the wing-nut and turn the knurled-head screw until a $1/16"$ air gap exists. Tighten the wing-nut. With folded film (i.e., two layers of film) in the sealing position, bring down the sealing head. Hold the head down, in the sealing position, until the buzzer stops sounding, then raise immediately. (On Magnalok Sealers, head will raise automatically). Examine the seal. Ordinarily, it will not be possible to obtain a satisfactory seal with the $1/16"$ gap setting. Experimentally; in small increments, increase the Element Compensator air gap setting until a setting is obtained which yields a satisfactory seal and film cutoff. It is important to remember that the smallest air gap at which a satisfactory seal and film cutoff is obtained is the correct setting.

7.3 INSTRUCTIONS FOR PRODUCTION OPERATION OF SEALER

After setting the Element Compensator for the film type in use (as in paragraph 7.1 or 7.2), proceed as follows:

- a. With the film extended to the left, past the side seal bar, make an initial film seal on the roll of film intended for production use. Hold the film open with the left hand. With the right hand, slide the package into the upper left hand corner of the film (i.e., corner formed by folded rear edge of film and previously sealed left edge of film).
- b. Using both hands, move package and film into lower right corner of sealing area and then slightly back, away from the corner formed by the sealing bars. This will allow some slack film between the package and the sealing bars.
- c. Press sealing handle down. Buzzer will sound, indicating the heating (or sealing) cycle. Continue to hold operating handle down for about one second after the buzzer stops sounding in order to allow some cooling (or setting) time.

IMPORTANT

When sealing polyethylene, raise operating handle immediately after buzzer stops. Do Not allow for setting time with this material (except the very briefest setting time if required, and as explained in paragraph 7.2).

- d. Raise operating handle and pull off sealed and cut section of film. Remove sealed package from sealing area, ready for next package to be placed in the sealing position. This completes the description of operation for the 6000 Series Sealers.

8. OPERATION OF 6100, 6300, 6400 SERIES SEALERS

(See Section 7 for operation of 6000 Sealers Series).

NOTE

The instructions which follow are for machines which were factory-equipped for use in the Impulse Sealing mode. Instructions for operation of machines which were factory-equipped for Thermoline Sealing are given in paragraph 8.4.

8.1 PRELIMINARY

- a. Refer to Figure 6.2. Before plugging in the sealer to its power source, turn the front-panel toggle switch to its "IMPULSE" sealing position (to prevent immediate continuous heating of the sealing elements).
- b. After performing film threading as described in Section 6, and as shown in Figure 6.2, set controls as follows:

FILM MATERIAL	HEAT CONTROL TAP NUMBER	HEAT TIMER	CONVEYOR TIMER* (on 6400 Series)
PVC	3	0.5 SEC.	0 SEC. (FULL LEFT)*
POLYPROPYLENE	4	0.5 SEC.	0 SEC. (FULL LEFT)*
D-925	6	0.5 SEC.	0 SEC. (FULL LEFT)*
POLYETHYLENE	6	0.25 SEC.	0 SEC. (FULL LEFT)*

* See paragraph 8.3 for production use setting instructions.

8.2 ELEMENT COMPENSATOR ADJUSTMENT

Because of the importance of the adjustment of the Element Compensator to the successful operation of the sealer, the following explanation of its theory of operation is given.

THEORY OF OPERATION OF ELEMENT COMPENSATOR

Heat produced by the resistance of a wire to the passage of an electrical current causes the wire to increase in length. In as much as the expansion of the wire is in direct proportion to its length, and to its resistance to the passage of current, its increase in length due to heating can be used to actuate an electrical switch to shut off power to the wire, thus controlling its degree of heating. Refer to the appropriate paragraph below for specific adjustment instructions.

8.2.1 Element Compensator Adjustment for All Films Except Polyethylene on All But 70-Inch or Longer Machines

Refer to Figure 10.1 (at the rear of Section 10). Adjust the Element Compensator (located at the left end of the front sealing bar of View "A") by loosening the wing-nut and turning the knurled-head screw until a $1/32$ " air gap exists. With folded film (i.e., two layers of film) in the sealing position, bring down the sealing head. In the case of 6100 Series units, hold the head in sealing position until about 1 second after the buzzer stops sounding. In the case of 6300 and 6400 Series units, release hand pressure on the sealing head operating handle. The head will remain down for the proper time and then will rise. Examine the seal. Ordinarily, it will not be possible to obtain a satisfactory seal with the $1/32$ " gap setting. Experimentally, in small increments, increase the Element Compensator air gap setting until a setting is obtained which yields a satisfactory seal and film cutoff. It is important to remember that the smallest air gap at which a satisfactory seal and film cutoff is obtained is the correct setting, with the exception that the air gap may have to be increased slightly in order to produce a light brown residue at the seal point when using PVC films.

8.2.2 Element Compensator Adjustment for Polyethylene Film on All But 70-Inch or Longer Machines

Refer to Figure 10.1 (at the rear of Section 10). On the Element Compensator, loosen the wing-nut and turn the knurled-head screw until a $1/16$ " air gap exists. Tighten wing-nut. With folded film (i.e., two layers of film) in the sealing position, bring down the sealing head. Hold the head down, in the sealing position, until the buzzer stops sounding, then raise immediately. (On Console and Magnalok Sealers head will raise automatically). Examine the seal. Ordinarily, it will not be possible to obtain a satisfactory seal with the $1/16$ " gap setting. Experimentally, in small increments, increase the Element Compensator air gap setting until a setting is obtained which yields a satisfactory seal and film cutoff. It is important to remember that the smallest air gap at which a satisfactory seal and film cutoff is obtained is the correct setting.

8.2.3 Element Compensator Adjustment for All Films Except Polyethylene on 70-Inch or Longer Machines

On the 70" and longer seal length machines, the Element Compensator (located at the right on the sealer's control panel) is adjusted for use with all types of film except polyethylene in the following manner:

- a. Actuate and hold the Element Compensator's toggle switch while turning the Compensator knob clockwise until the pilot light comes on.
- b. Release the toggle switch. Pilot light will go out.
- c. The Compensator is now set at zero effect. Turn the movable dial scale (not the knob) until zero on the dial scale coincides with the position of the pointer on the knob.
- d. Set the sealer's front panel timer to maximum time (30). Turn the Compensator knob counterclockwise one-half of a scale increment. With folded film (i.e., two layers of film) in the sealing position, bring down the sealing head, then release hand pressure on the operating handle. The head will remain down for the proper time and then will rise. Examine the seal and film cutoff obtained. If not satisfactory, turn the Compensator knob counterclockwise an additional one-half of a scale increment. Make a seal. If required, repeat until satisfactory film seal and cutoff is obtained.
- e. Notice that every time the sealer is pulsed to make a seal, the Element Compensator pilot light will light at the end of the seal (or heat) cycle to indicate the length of the dwell period during which the sealing head is retained in its downward position. Note, also, that since these are Magna-Lok machines, the length of the dwell period may be varied by changing the setting of the front panel timer.

8.2.4 Element Compensator Adjustment for Polyethylene Film on 70-Inch or Longer Machines

On the 70" and longer seal length machines, the Element Compensator (located at the right on the sealer's control panel) is adjusted for use with polyethylene film in the following manner:

- a. Actuate and hold the Element Compensator's toggle switch while turning the Compensator knob clockwise until the pilot light comes on.
- b. Release the toggle switch. Pilot light will go out.
- c. The Compensator is now set at zero effect. Turn the movable dial scale (not the knob) until zero on the dial scale coincides with the position of the pointer on the knob.

8.2.4 Element Compensator Adjustment for Polyethylene Film on 70-Inch or Longer Machines (cont'd)

- d. Set the sealer's front panel timer to maximum time (30). Turn the Compensator knob counterclockwise one-half of a scale increment. With folded film (i.e., two layers of film) in the sealing position, bring down the sealing head, then release hand pressure on the operating handle. The head will remain down for the proper time and then will rise. Examine the seal and film cutoff obtained. If not satisfactory, turn the Compensator knob counterclockwise and additional one-half of a scale increment. Make a seal. If required, repeat until satisfactory film seal and cutoff is obtained.
- e. Notice that every time the sealer is pulsed to make a seal, the Element Compensator pilot light will light at the end of the seal (or heat) cycle. The sealing head should raise immediately.

8.3 INSTRUCTIONS FOR PRODUCTION OPERATION OF SEALERS

After setting the heat timer and the heat control tap switch as described in paragraph 8.1, and the Element Compensator as described in the proper sub-paragraph of Section 8.2 for the sealer and film in use, proceed as follows:

- a. With the film extended to the left, past the side seal bar, make an initial film seal on the roll of film intended for production use. Hold the film open with the left hand. With the right hand, slide the package into the upper left corner of the film (i.e., corner formed by folded rear edge of film and previously sealed left edge of film).
- b. Using both hands, move package and film into lower right corner of sealing area and then slightly back, away from the corner formed by the sealing bars. This will allow some slack film between the package and the sealing bars.

NOTE

Steps c. and d., which follow, apply only to 6100 Series (manual) Sealers, not to 6300 & 6400 Series (Magna-Lok) Sealers.

- c. Bring sealing handle down. Buzzer will sound, indicating the heating (i.e., sealing) cycle. Continue to hold operating handle down for about one second after the buzzer stops sounding in order to allow some cooling (or setting) time.

IMPORTANT

WHEN SEALING POLYETHYLENE, RAISE OPERATING HANDLE IMMEDIATELY AFTER BUZZER STOPS. DO NOT ALLOW FOR SETTING TIME WITH THIS MATERIAL.

8.3 INSTRUCTIONS FOR PRODUCTION OPERATION OF SEALERS (cont'd)

d. Raise operating handle and pull off sealed and cut section of film. Remove sealed package from sealing area, ready for next package to be placed in the sealing position.

NOTE

The steps which follow apply only to 6300 & 6400 Series (Magna-Lok) Sealers, not to 6100 Series (manual) Sealers.

e. Press sealing handle down. Immediately release hand pressure. The sealing head will remain down for the duration of the time set on the heat timer. The cooling period is the time difference between the Compensator-set sealing heat application time and the over-all heat timer setting. To raise or lower cooling time, vary the setting of the heat timer.

IMPORTANT

WHEN SEALING POLYETHYLENE:

1. THROW "IMPULSE-THERMOLINE" SWITCH TO IMPULSE.

f. During the time the sealing head is being held down by the action of the Magna-Lok electromagnets (the operator having removed his hand from the operating handle), it is not necessary to wait. The operator can load the next package into the package loading area, thus speeding up sealing operation.

g. On 6300 Series Sealers, as soon as the sealing head rises, move the first package away from the sealing area and place the second package in position for sealing. Another package is then placed in the loading area and inserted in the film while the sealing operation is occurring on the previous package.

h. On 6400 Series Sealers, initially set the CONVEYOR timer to approximately 1 second on its scale. Continuing from step f. above, as the sealing head rises, the package take-away conveyor will transport the package away from the sealing area, making room for the next package and the next sealing operation.

8.3 INSTRUCTIONS FOR PRODUCTION OPERATION OF SEALERS (cont'd)

i. In order to achieve maximum sealing speed and efficiency in production use of 6400 Series Sealers, the CONVEYOR timer setting should be set to move the package the minimum distance necessary to permit loading and sealing of the next package. It is not necessary to have each sealed package move entirely off the conveyor after sealing is completed. The package need move away from the sealing area only the minimum distance needed to provide space for the next package to be properly sealed. To do this, experiment with different settings of the CONVEYOR timer until the desired package spacing is obtained.

8.4 INSTRUCTIONS FOR OPERATION IN THERMOLINE SEALING MODE

NOTE

The instructions which follow are for machines which were factory-equipped for use in the Thermoline Sealing mode.

This is an optional feature.

- a. Refer to Figure 6.2. Before plugging in the sealer to its power source, temporarily throw the front-panel toggle switch to its "IMPULSE" sealing position (to prevent immediate continuous heating of the sealing elements).
- b. Refer to Figure 10.1 (at the rear of Section 10). Adjust the Element Compensator (located at the left end of the front sealing bar of View "A") by loosening the wing-nut and turning the knurled-head screw until the maximum possible air gap exists. Tighten the wing-nut.
- c. Turn the front panel HEAT CONTROL tap switch to tap no. 4.
- d. Set the HEAT timer to about 1/4-th second.
- e. Turn the "IMPULSE" - "THERMOLINE" toggle switch to its "THERMOLINE" position.
- f. Plug in the sealer to the power source. The sealing elements will now become continuously heated as long as the sealer is plugged in and the toggle switch is in the "THERMOLINE" position.
- g. Thread film as described in paragraph 6, and as shown in Figure 6.2, of this manual.
- h. Extend the film to the left, past the side seal bar. To make an initial film seal on a 6100 Series (manual) sealer, bring down the operating handle and hold down for the duration of the buzzer sound. Immediately raise the handle when the buzzer stops sounding. To make an initial film seal on a 6300 or 6400 Series (Magna-Lok) sealer, bring down the operating handle. Immediately release hand pressure. The sealing head will remain down for the duration of the time set on the HEAT timer.

8.4 INSTRUCTIONS FOR OPERATION IN THERMOLINE SEALING MODE (cont'd)

- i. After the sealing head is up, inspect the seal. If not satisfactory, readjust the HEAT timer setting slightly and/or the HEAT CONTROL tap switch setting, experimentally, until good seals are obtained. No exact setting instructions can be given, as exact settings will vary depending upon the various gauges and types of film which may be used.
- j. When a satisfactory initial film seal has been made, hold the film open with the left hand. With the right hand, slide the package into the upper left corner of the film (i.e., corner formed by folded rear edge of film and previously sealed left edge of film).
- k. Using both hands, move package and film into lower right corner of sealing area and then slightly back, away from the corner formed by the sealing bars. This will allow some slack film between the package and the sealing bars.
- l. Depress the operating handle. On 6100 Series units hold down for the duration of the buzzer sound and immediately raise handle when buzzer stops sounding. On 6300 and 6400 Series units, after bringing down the operating handle, immediately release hand pressure. The sealing head will remain down for the duration of the time set on the timer.
- m. Remove sealed package from sealing area, ready for next package to be placed in the sealing position.
- n. Continue production sealing operations, using the operating techniques described in paragraphs 8.3 f., g., h., and i. above.

CAUTION

When the sealer is not in use, be sure to throw toggle switch to the "IMPULSE" position, as the sealing elements would be on continuously if left in the "THERMOLINE" position.

9. SERVICE ADJUSTMENTS

9.1 ELEMENT COMPENSATOR ADJUSTMENT

Adjustment of the Element Compensator may be required under the following conditions:

- a. During continuous use. After about 15 minutes of sealer operation, check seal quality and, if required, reset Compensator. This may be needed as a result of heat build-up in the sealing head and in the sealing element wire.
- b. After installing new sealing elements.
- c. If charring of film is noted (too much heat).
- d. If sealing is incomplete (too little heat).

To adjust the Element Compensator, refer to the adjustment instructions given in paragraph 7 or 8, as applicable to the specific sealer-type in use.

9.2 SEALING ELEMENT CLEANING

Seal quality is greatly affected by dirt or deposit build-up. Some plastic films have a tendency to produce deposits on the sealing elements. This build-up can be inhibited by the application of a release agent, such as type 2250 Weldotron "Therm-O-Seal", to the sealing elements. If build-up is severe, * the elements may be cleaned by applying several passes of a fine-bristled brass brush. Never use steel wool for sealing element cleaning. Cleaning is easier when the elements are hot. Momentarily pulse the sealer (by pressing and releasing the pulse switch located near the rear end of the side sealing bar) to heat up the elements, then clean immediately. Do Not use the brush on the elements when the pulse switch is depressed.

Severe film residue build-up may indicate improper Element Compensator adjustment. Use the procedure described in paragraph 7 or 8 which applies to the machine in use.

LOCKOUT/TAGOUT PROCEDURE (OSHA Standard 1910.147)
(THE CONTROL OF HAZARDOUS ENERGY)

WARNING

This standard covers the servicing and maintenance of machines and equipment in which the unexpected energization or start up of the machines or equipment, or release of stored energy could cause injury to employees. This standard establishes minimum performance requirements for the control of such hazardous energy.

APPLICATION

This standard applies to the control of all energy during servicing and/or maintenance of Weldotron machines and equipment.

PURPOSE

This procedure establishes the minimum requirement for the lockout or tagout of energy isolating devices. It shall be used to ensure that the machine or equipment is isolated from all potentially hazardous energy and locked out or tagged out before employees perform any servicing or maintenance activities.

RESPONSIBILITY

Appropriate employees (Maintenance employees and Machine set-up employees) must be instructed in the safety significance of the lockout (tagout) procedure. Each person transferred or newly hired into such positions shall be trained at time of hire or transfer.

PREPARATION FOR LOCKOUT/TAGOUT

Identify all isolating devices to be certain which switches, valves, or other energy isolating devices apply to the equipment to be locked or tagged out.

1. Electrical boxes - Power off, remove fuses.
2. Air - disconnect air.
3. Placing a tag on machine, indicates the machine is disconnected from power and out of service.

SEQUENCE OF LOCKOUT OR TAGOUT SYSTEM PROCEDURE

1. Notify all affected employees that a lockout or tagout system is going to be utilized and the reason therefore, i.e.: Foreman and operator.
2. Shut down equipment by normal stopping procedure.
3. Open switch, disconnect air, and unplug equipment isolating it from its energy source. Stored energy (such as that in springs, elevated machine members, rotating flywheels, hydraulic systems, and air, gas, or water pressure, etc.) must be dissipated or restrained by methods such as repositioning, blocking, bleeding down, etc.
4. Lockout and/or tagout the energy isolating devices with assigned individual locks or tags. In the case of a disconnect switch tagout and/or lockout. In the case of a plug, unplug, and tagout.
5. After ensuring that no personnel are exposed and as a check on having disconnected the energy sources, operate the pushbutton or other normal operating controls to make certain the equipment will not operate.

CAUTION

Return operating controls to "NEUTRAL" or "OFF" position after test.

6. The equipment is now in a lockout and /or tagout condition.

RESTORING MACHINE OR EQUIPMENT TO NORMAL PRODUCTION OPERATIONS

1. After servicing and/or maintenance is complete and equipment is ready for normal use, check the area around the machine or equipment to ensure that no one is exposed.
2. After all tools have been removed from the machine or equipment, guards have been reinstalled and employees are in the clear, remove all lockout or tagout devices. Reinstall fuses and undo any other energy isolating devices to restore energy to the machine or equipment.

PROCEDURE INVOLVING MORE THAN ONE PERSON

In the preceding steps, if more than one person is required to lockout or tagout equipment, each shall place his or her own personal lockout device or tagout device on the energy isolating device. Maintenance personnel will use multiple locks. When mechanic and electrician work together, each will tagout the plug and no one but the person installing the tag can remove it and equipment is not to be plugged in with any tagout on it.

BASIC RULES FOR USING LOCKOUT OR TAGOUT SYSTEM PROCEDURE

All equipment must be locked out or tagged out to protect against accidental or inadvertent operation when such operation could cause injury to personnel. Do not attempt to operate any switch, valve, or other energy isolating device where it is locked or tagged out.

10. MAINTENANCE

10.1 SEALING ELEMENT REPLACEMENT

The sealing elements are subject to constant wear, and will eventually require replacement. To replace sealing elements, proceed as described below. Refer to Figures 10.1, 10.5, and 10.6.

10.1.1 Front Element

- a. Refer to view "A" of Figure 10.1. Remove heat sink by removing screws "A". Remove old sealing element by pushing it out to the left.
- b. Referring to view "A", loosen the knurled-head nut on the right termination unit. Straighten the hook at the top of the old sealing element and pull the element out toward the bottom.
- c. To install a new element, use a pair of long-nose pliers to form a small loop at the end of the element having about a two-inch long area of polished material. Insert the element into the left termination unit, from the left, so the element extends to the right.
- d. With the left hand, compress the left termination unit fully inward toward the right. Using the right hand, depress the element compression-retaining pin. Release left-hand pressure on the left termination unit. The unit is now held compressed by the compression-retaining pin.
- e. With the sealing element's left-end loop firmly pressed into the left termination unit after insertion as in c. above, lay the element in the ceramic bead track and, at the point on the element at which it intersects the hole in the crossover bead, mark the element with a pencil.
- f. Using the long-nose pliers, grip the element at the point where the pencil mark was inscribed and bend the element upward 90 degrees at this point.
- g. Insert the upward-bent right end of the element into the hole in the crossover bead, making sure to insert the wire to the left of the side sealing element.
- h. With the right end of the element inserted into the hole in the crossover bead so that the end of the element protrudes above the top of the sealing bar, tighten the knurled-head nut moderately with a screwdriver so as not to damage the wire. Make sure the element is firmly and properly positioned in the bead track for the entire length. Pull up on the element compression-retaining pin. Element is now securely in place, under tension, in the ceramic bead track. Using the long-nose pliers, form a small hook in the right end of the element, as shown in View "A" of Figure 10.1.

10.1 SEALING ELEMENT REPLACEMENT (cont'd)

- i. Replace heat sink by means of screws "A". Make sure heat sink is flat and is in firm contact with the sealing element.

10.1.2 Side Element

- a. Refer to View "B" of Figure 10.1. Remove heat sink by removing screws "A". Remove old sealing element by pushing it out to the rear of the sealer.
- b. Referring to View "B", loosen the wing-nut and pull out the other piece of the old element.
- c. Using a pair of long-nose pliers, form a small loop at the end of the new sealing element which has about a two-inch long area of polished material. Insert the element into the rear element termination unit, from the rear, so the element extends toward the front of the sealer.
- d. Referring to View "B" of Figure 10.1, compress the rear termination unit fully inward, toward the front of the sealer. Depress the element compression-retaining pin. Release hand pressure on the rear termination unit. The unit is now held compressed by the compression-retaining pin.
- e. With the element's rear-end loop pressed firmly against the rear termination unit, lay the element in the ceramic bead track and insert the front end of the element into the hole in the front termination unit. Tighten the wing-nut on the front termination unit securely, using hand pressure. Make sure the element is firmly and properly positioned in the bead track for its entire length. Pull up on the element compression-retaining pin. The element is now securely in place under tension.
- f. Replace heat sink by means of screws "A". Make sure heat sink is flat and is in firm contact with the sealing element.

IMPORTANT

After replacing sealing elements, be sure to adjust the setting of the Element Compensator, as described in the applicable procedure of paragraph 7 or 8.

10.2 TAPE REPLACEMENT

The item most subject to wear on the sealer is the Teflon-Fiberglas tape used to cover the silicone sponge rubber sealing bar. This tape should never be permitted to burn through so much that the thinner tape underneath can cut through. To replace tape, proceed as follows:

- a. Strip off old tape.
- b. Cut off proper length of new Teflon-Fiberglas tape, peel off white backing, and press new tape into position.

10.3 SILICONE RUBBER SEALING PAD REPLACEMENT

Occasionally it will be necessary to replace the silicone rubber sealing pads. This should be done if the following effects are noted:

Gaps in the seal.

Weak seals.

Improper film cut-off.

If excessive sealing pressure is required.

To replace the rubber, proceed as follows:

- a. Refer to Figure 10.2. Using an allen-wrench, loosen all four screws "A" and remove both sealing bars from the sealer.
- b. Strip off the two-inch wide and the 3/8-inch wide tapes.
- c. Lay proper length of rubber in place. If one piece of the proper length is not available, it is perfectly satisfactory to use several short sections to make up the required length.
- d. Replace the old tapes with new lengths of both types.
- e. Replace the sealing bars on screws "A". Perform the sealing bar pressure adjustment described in paragraph 10.4 below.

10.4 SEALING PAD PRESSURE ADJUSTMENT

Uniform pressure between the sealing elements and the sealing pads must always be maintained for proper sealing uniformity, and to prevent element hot-spots and premature burn-out. This adjustment should be checked periodically, and should always be checked when sealing gaps occur. Proceed as follows:

- a. Disconnect the sealer's power plug from the power source. Referring to Figure 10.2, loosen all four screws "A" just enough to maintain a moderate sliding pressure.

10.4 SEALING PAD PRESSURE ADJUSTMENT (cont'd)

- b. Cut six strips of film, each about 3" x 6". Lay three of them across the front sealing bar, and the other three across the side sealing bar, with the 6" length extending.
- c. Grasp the sealer's operating handle at its exact center and hold down firmly. Push up on the sealing bars. Inspect visually. There should be no light visible between the sealing pads and the sealing head. Tighten all four screws "A".
- d. With the sealing head still down, pull the film strips back and forth. All should have the same resistance or "drag". If not, repeat steps a., b., and c. until uniform pull is obtained on all film strips.

10.5 ELEMENT PULSE SWITCH ADJUSTMENT

The sealing cycle should not begin until the sealing head has made proper contact with the film to be sealed and with the sealing pad. If the buzzing sound, indicating the beginning of the sealing cycle, is heard before the head is fully down onto the film, loosen the wing-nut and turn the screw (located at the rear end of the side seal bar) up slightly (counterclockwise as viewed from above). The correct adjustment has been obtained when slight additional hand pressure on the operating handle produces a normal sealing-cycle buzzing sound. If the sound is not heard, turn the screw down slightly (clockwise as viewed from above). When adjustment is correct, tighten the wing-nut.

10.6 CONTACTOR CR-1 CONTACT CLEANING AND REPLACEMENT

If the contacts of contactor CR-1 (used for element pulsing) should require cleaning or replacement due to pitting or burning, proceed as follows:

- a. Disconnect sealer's power plug from power source socket. Remove package loading tray, and unscrew and remove the sheet metal retaining screws from the electrical chassis top cover plate (located under the package loading tray).
- b. Refer to Figure 10.3. Remove the two screws "A" and lift off contactor CR-1's top cover plate.
- c. Press down on spring retainer "B" and slide off along slot.
- d. Remove spring "C" and plate "D".
- e. Remove contact plate "E".

10.6 CONTACTOR CR-1 CONTACT CLEANING AND REPLACEMENT (cont'd)

f. Using a soft brush, saturate contacts (including the stationary ones on the contactor itself) with carbon tetrachloride. Allow to dry. A soft cloth may be used but make sure no threads are left on the contacts. Do not touch or scrape surface of contacts.

CAUTION

Never use emery cloth or anything that may abrade contact surfaces.

g. To replace contacts (or install new ones if contacts are badly pitted), place contact plate "E" back on stud, replace plate "D", replace spring "C" (with small end upward) and replace spring retainer "B".

h. Replace contactor cover plate and screws "A".

NOTE

Although scraping or filing of contacts is not recommended, a fine file may be used to clean badly pitted contacts, as a temporary measure only, until new contacts have been installed. After filing, clean contacts with carbon tetrachloride to remove any loose particles.

10.7 ADJUSTMENT OF MAGNA-LOK MAGNETS FOR CORRECT SEALING PRESSURE

In order to obtain the full advantages of increased accuracy and uniformity of sealing pressure possible with the Magna-Lok feature of the 6300 Sealers Series, all magnets have been factory-adjusted for equal holding pressure and correct and uniform distribution of sealing pad pressure throughout the length of both the front and the side seal bars. If, however, adjustment is ever required, proceed as follows:

- a. Disconnect the sealer's power plug from the power source.
- b. Refer to Figure 10.4. Loosen the lower magnet screws on all lower magnets so that the magnets settle to their lowest position in their mounting slots.
- c. Lower the sealer's operating handle fully and hang the special weight* onto the operating handle, centered at the middle of the handle.

10.7 ADJUSTMENT OF MAGNA-LOK MAGNETS FOR CORRECT SEALING PRESSURE (cont'd)

d. With the weight in place on the handle, raise the vertical positioning of all lower magnets until they just contact the bottom surface of the upper magnets. Tighten the mounting screws securely to retain the proper adjustment.

* As shown on Figure 10.4, the special weight should be fabricated from a piece of cold-rolled steel 3" x 3" x 1 1-3/4" with the mounting hooks spaced 9 inches apart and centered equally from the ends of the steel bar.

NOTE

This represents the type of weight actually used for factory adjustment but any type of weight may be used provided it clears the front of the machine and is hung either from one point at the center of the operating handle, or from two points equidistant from the center of the handle.

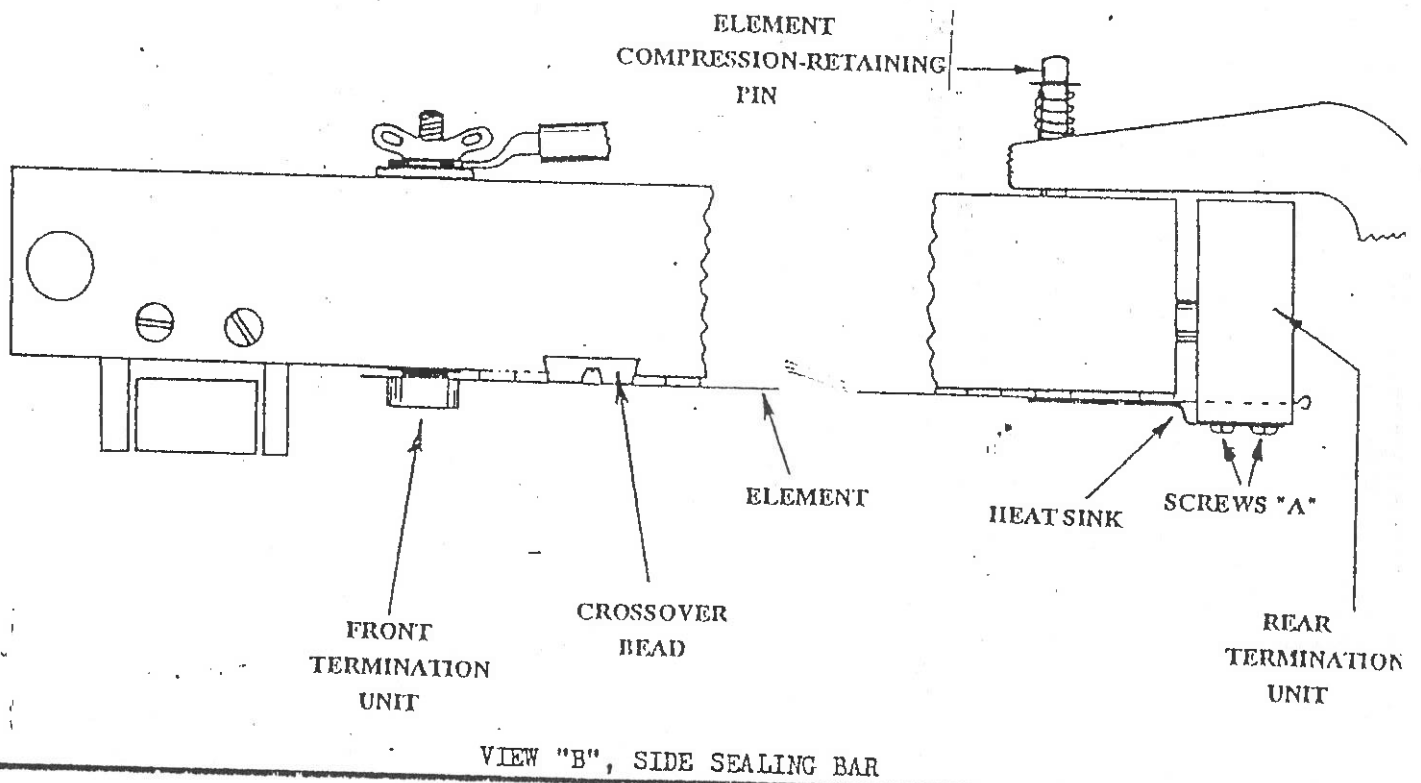
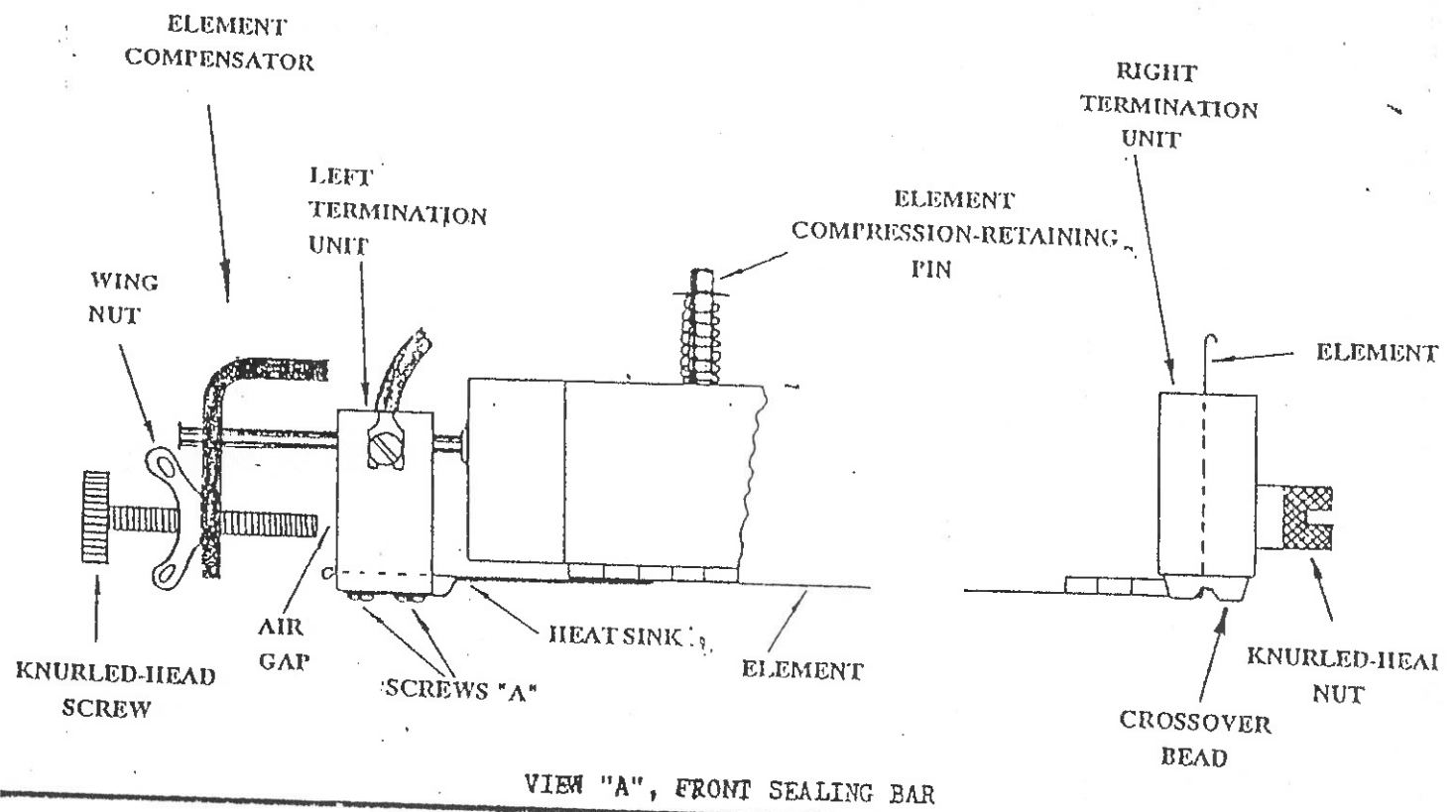


Figure 10.1 Compensator Air Gap Adjustment, and Element Replacement

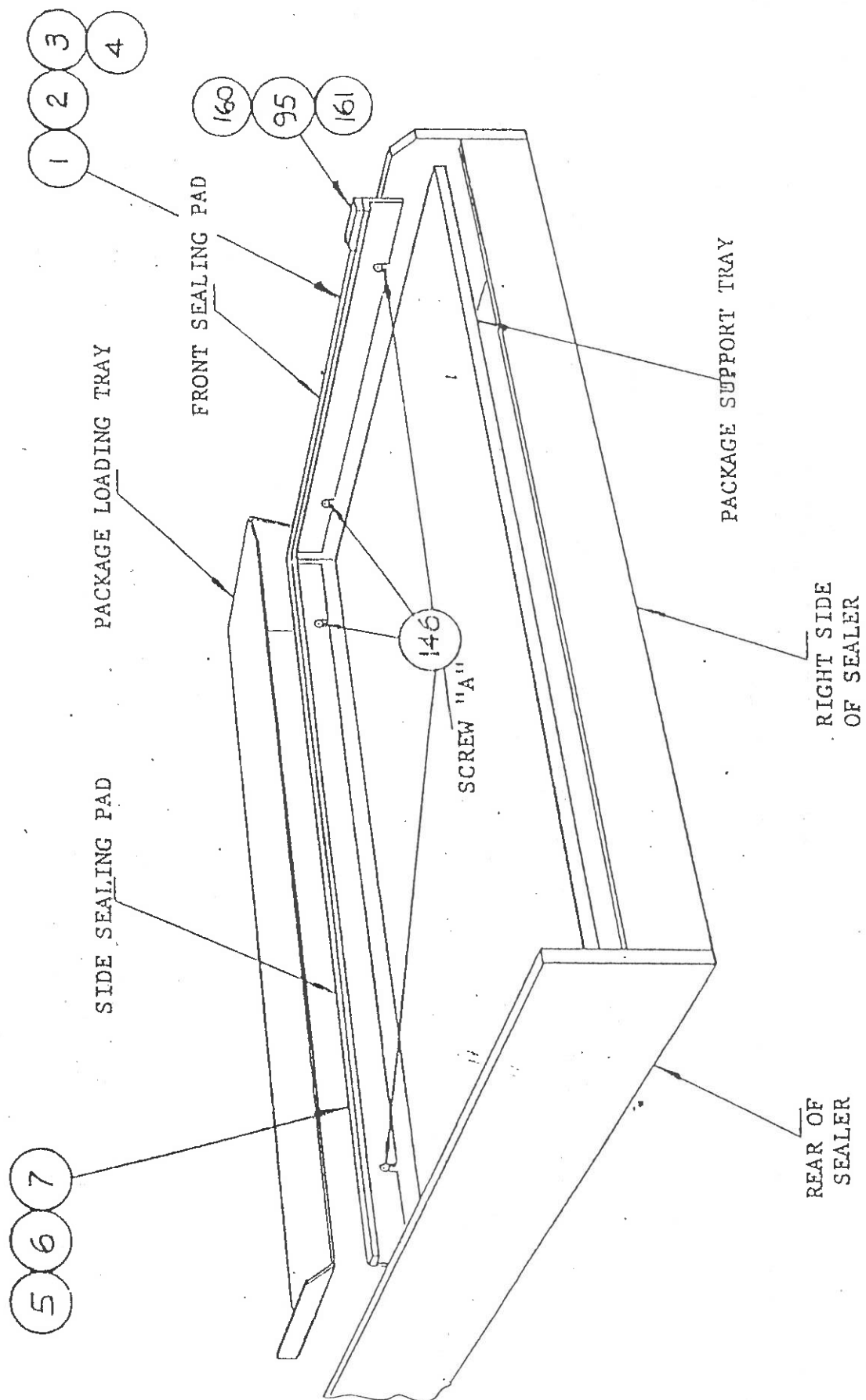


Figure 10.2 Sealing Pad Maintenance

TOP VIEW OF CONTACTOR

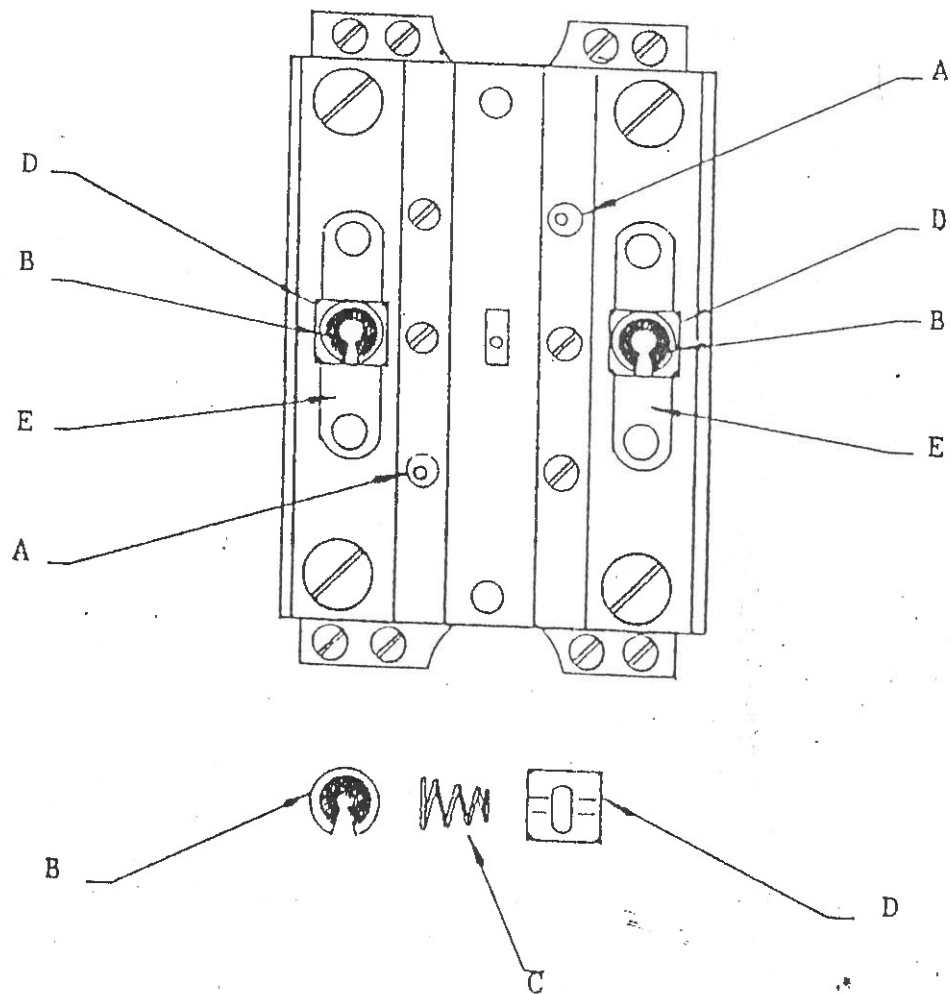


Figure 10.3 Contactor CR-1 Contact Cleaning and Replacement

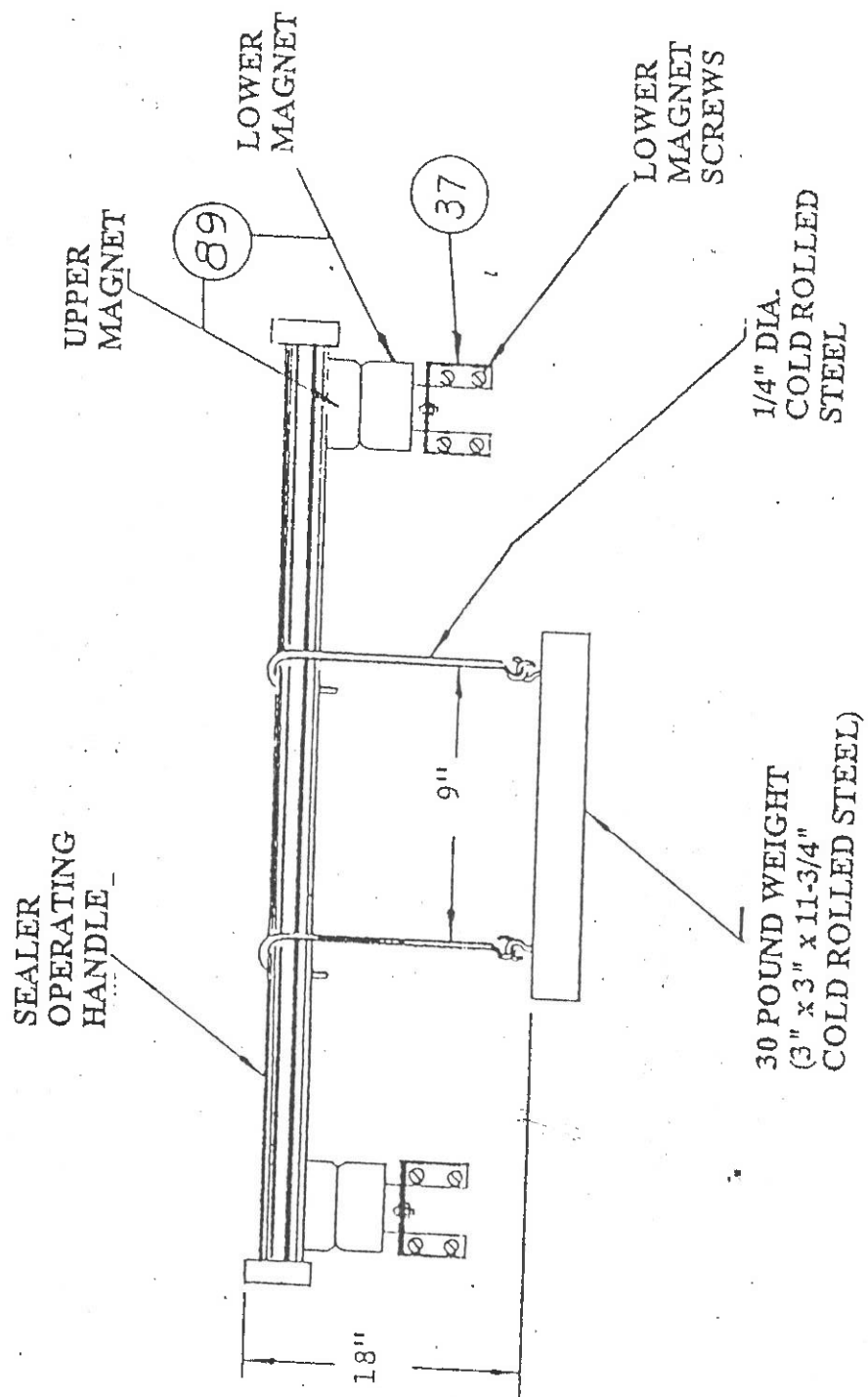


Figure 10.4 Adjustment of Magna-Lok Sealing Pressure

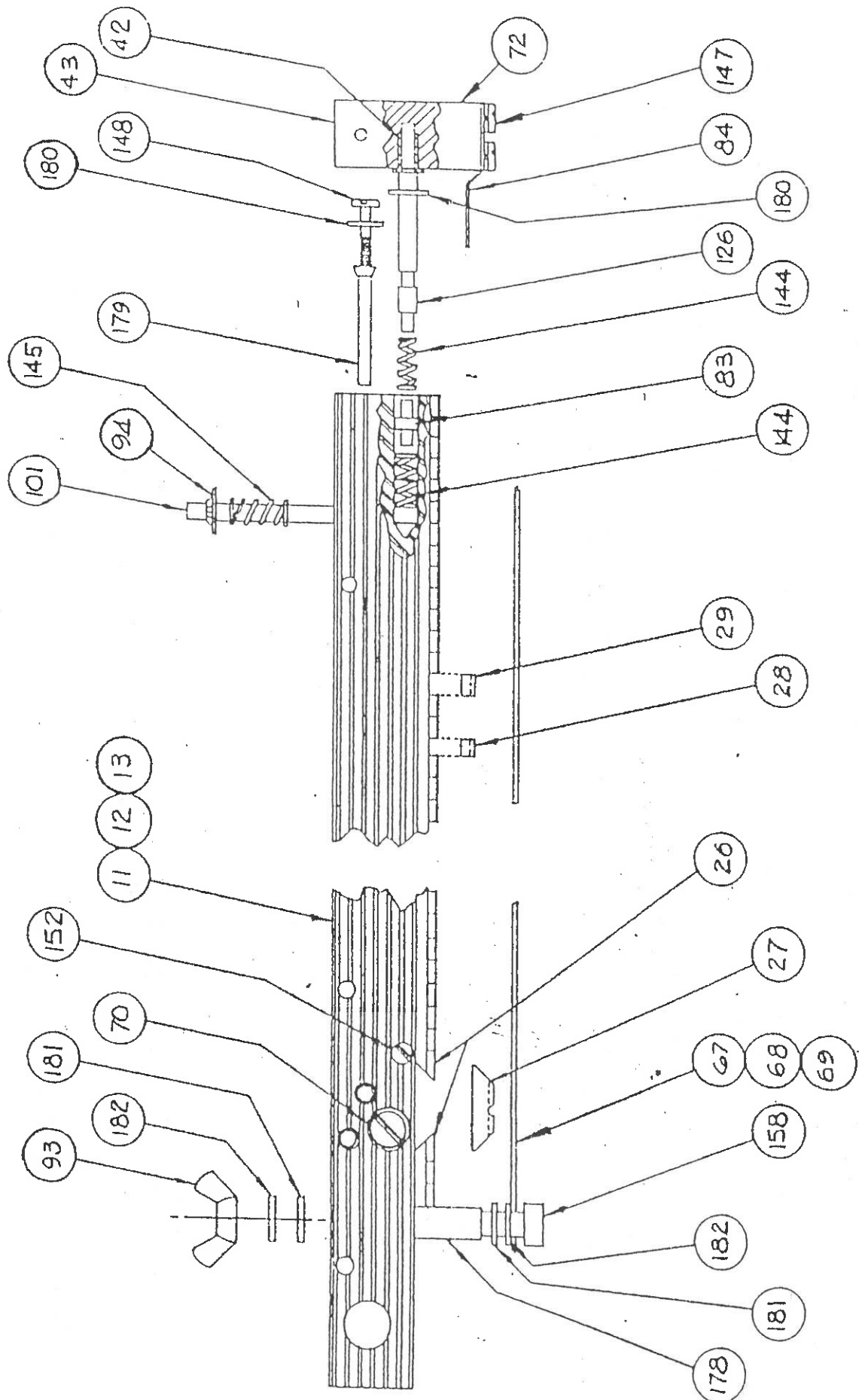


Figure 10.6 Electrode Bar Assembly, Complete, Side (Item 18, 19, 20)
10-12

11. TROUBLESHOOTING CHART

The following troubleshooting chart is provided to aid in determining the source of any operating difficulties which may develop. In performing the tests and checks which follow, carefully inspect for any loose components, broken or loose wires, poor electrical connections, etc. while testing the various switches, controls, relays, transformers, and so on. For checking electrical troubles the use of test equipment such as a neon test light, continuity buzzer, and a small volt ohmmeter is required.

NOTE

While troubleshooting, use caution to avoid danger of electrical shock. When power is not required for checking for the presence or value of voltages used, always disconnect the sealer's power plug from the power source.

Refer to Figure 11.1, 11.2, 11.3, 11.4, or 11.4A, for the location of parts on the electrical chassis, Figures 13.1, 13.2, 13.3, or 13.4 for the electrical schematic diagrams, and to other referenced illustrations or paragraphs listed in the chart which follows.

TROUBLE	PROCEDURE
1. No element heat and no buzzer sound.	<p>a. Check that sealer is plugged in and that power is present at power socket.</p> <p>b. Check element pulse switch adjustment as in paragraph 10.5. Also, press switch by hand - if no click is heard, replace.</p> <p>c. Check fuses F1 & F2.</p> <p>d. Check circuit continuity through normally closed switch contacts of timer TR-1. Timer to be set above zero (0) time on dial.</p> <p>e. Check circuit continuity through normally closed contact CR-2.</p>
2. No element heat, buzzer sound is present.	<p>a. Check for operation of contactor CR-1.</p> <p>b. Check circuit continuity through operated contacts of contactor CR-1. If required, clean or replace contacts as in paragraph 10.6.</p> <p>c. Check Element Compensator setting as in paragraph 7 or 8.</p> <p>d. Check continuity through heat control tap switch S-1.</p> <p>e. Check for voltage present at both secondaries of transformer T-2 as per values shown in chart of Figure 11.5.</p> <p>f. Check for continuity from T2 secondaries through wiring to front and side sealing elements.</p> <p>g. Check for continuity through sealing elements and replace if open circuit.</p>

11. TROUBLESHOOTING CHART (cont'd)

TROUBLE	PROCEDURE
3. Unbalanced heat from front and side sealing elements.	a. Check if two different diameter elements are in use. Replace with same diameter elements.
	b. Check for poor connections to one or the other element.
4. Short element life.	a. Too high heat timer setting. Should be approximately as shown in paragraph 8.1 B.
	b. Check Element Compensator setting as per applicable sub-paragraph of paragraph 7 or 8.
	c. Improper element installation. Check if installed as per paragraph 10.1.
	d. Weak spring at element termination (left end of front element; rear end of side element). If doubtful, replace.
	e. Check if heat sink in firm, flat contact with element. If deformed, straighten or replace heat sink.
5. Weak seals and/or poor film cutoff.	a. Improper setting of heat timer, heat control tap switch, or Element Compensator. Check settings as per paragraphs 7 and 8.
	b. Improper operating technique. Check instructions of paragraph 7 or 8.
	c. Check sealing element cleaning as per paragraph 9.2.
	d. Wavy silicone rubber sealing pad. Replace as per paragraph 10.3.
	e. Sealing pad pressure incorrect. Adjust as per paragraph 10.4.
	f. Hold-down pressure uneven or incorrect on Magna-Lok units. Adjust as per paragraph 10.7.
6. Magnetic hold-down magnets not operating on Magna-Lok sealers (sealing head will not stay down). Sealer operates normally otherwise.	a. Check for 220 volts (nominal) to primary of transformer T-3.
	b. If voltage is present to primary, check for open primary winding of T-3.
	c. Check for 55 (nominal) volts AC output from secondary of transformer T-3.
	d. Check for 55 (nominal) volts DC output from + and - terminals of REC-1. If no DC voltage, replace REC-1.
	e. Check wire circuit continuity to hold-down magnets from REC-1.
	f. Check for circuit continuity through windings of hold-down magnets.
7. Excessive film drag.	a. Check for proper film threading as per paragraph 6.3 and Figure 6.1 or 6.2.
	b. Loosen film roll brake, as per paragraph 6.3 i.
8. Excessive film winding or "spill".	a. Tighten film roll brake, as per paragraph 6.3 i.
9. Excessive film build-up on sealing elements.	a. Clean sealing elements as per paragraph 9.2.
	b. Adjust controls and Element Compensator as per paragraph 7 or 8.
10. Film sticks to sealing elements during high-speed sealing operations.	a. Vary adjustment of controls and Element Compensator slightly from settings of paragraph 7 or 8 and as mentioned in paragraph 9.1.
	b. Clean sealing elements, as per paragraph 9.2.
	c. Check need for sealing pad replacement per paragraph 10.4.

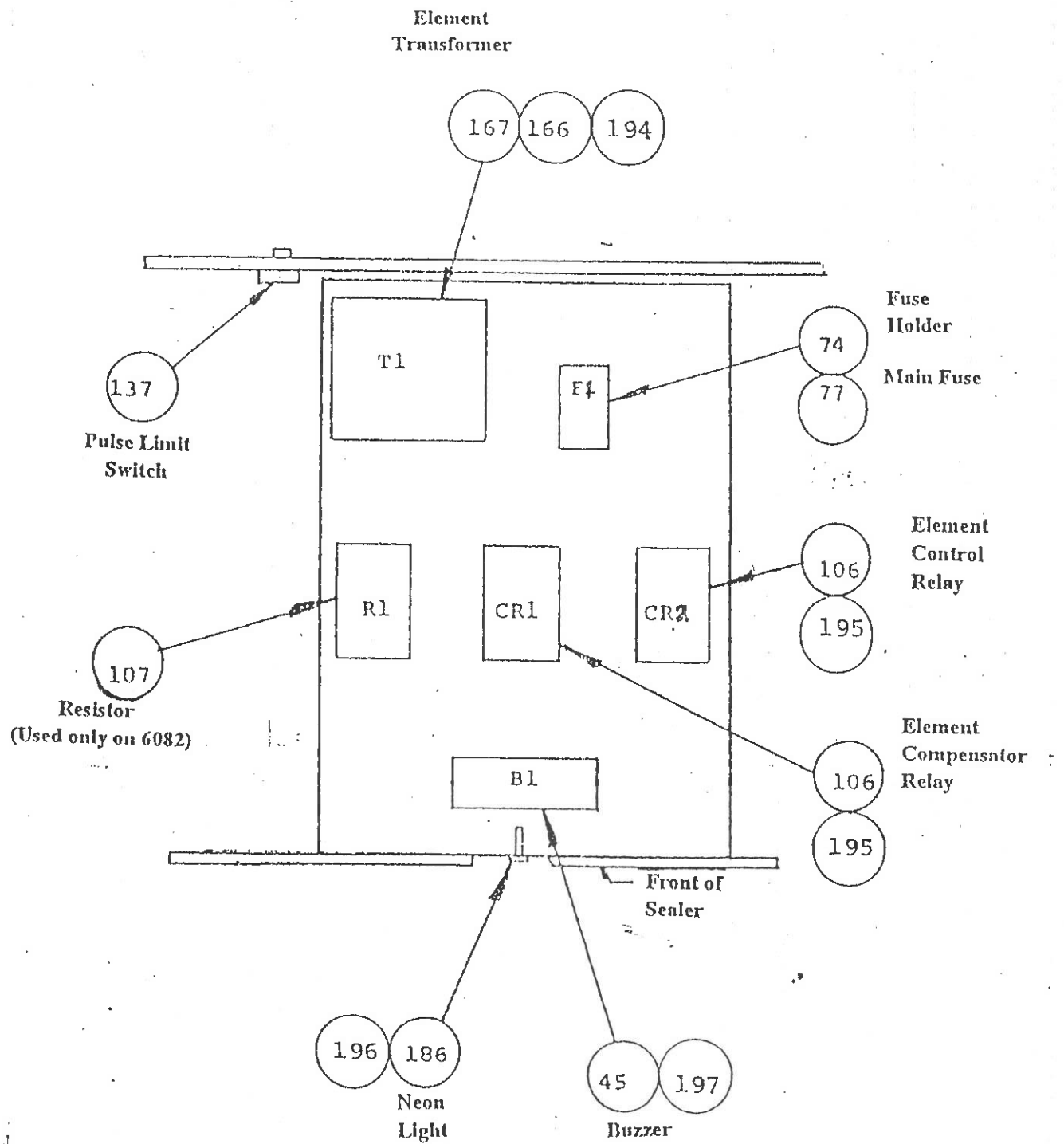


Figure 11.1 Parts Location, Electrical Chassis
Models 6081, 6082, 6001

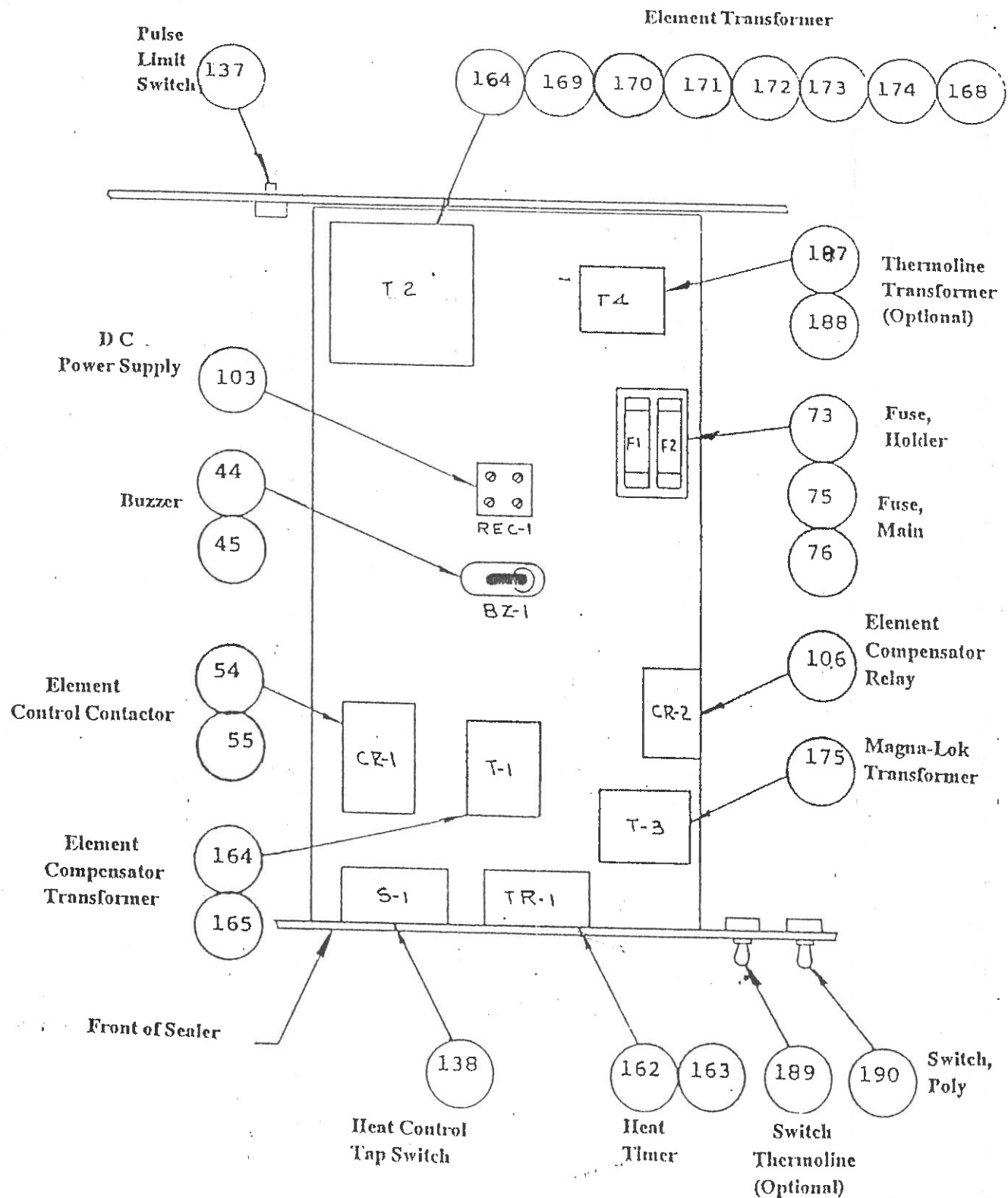


Figure 11.3 Parts Location, Electrical Chassis
Model 6300 Series

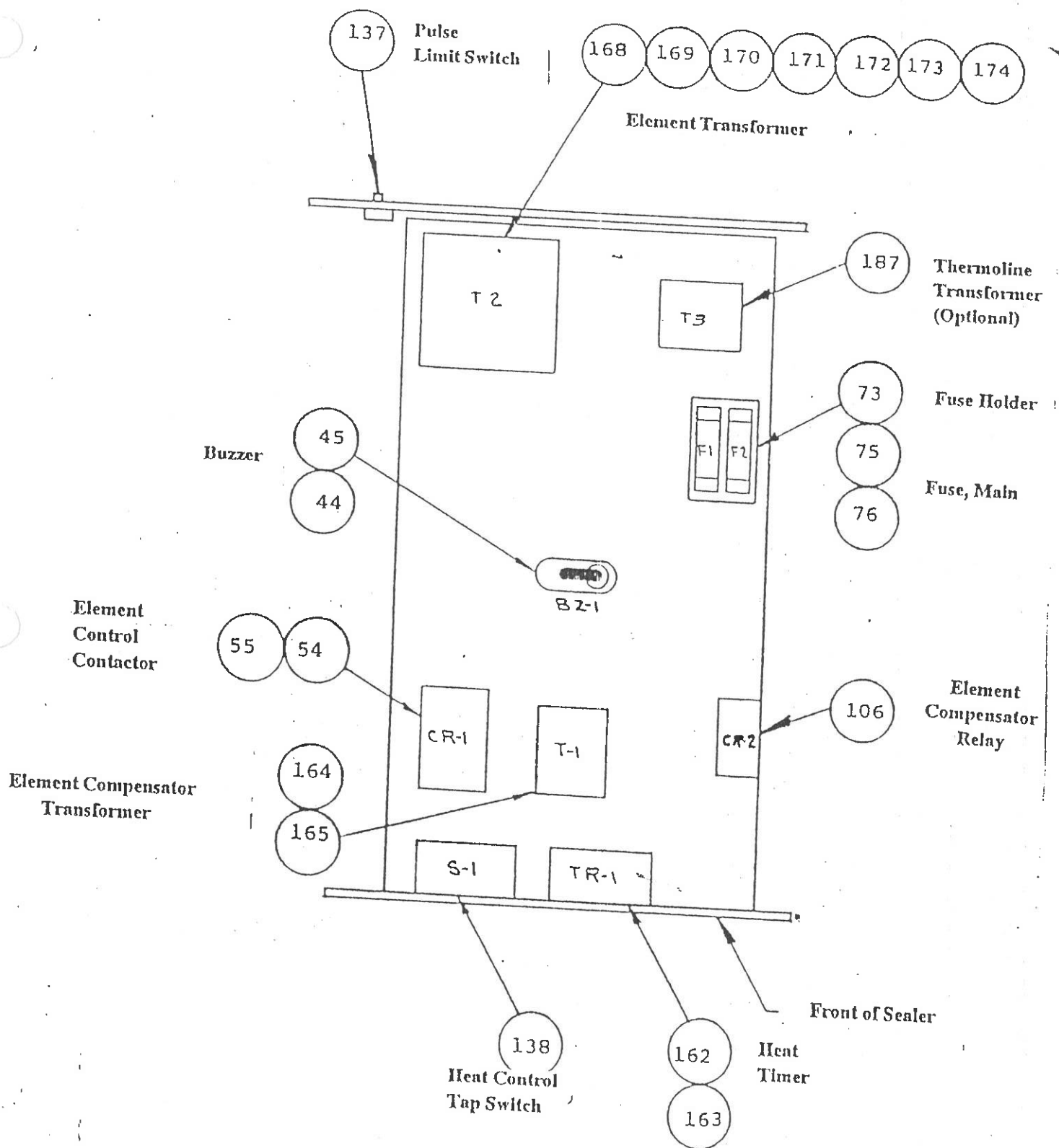


Figure 11.2 Parts Locations, Electrical Chassis
Model 6100 Series

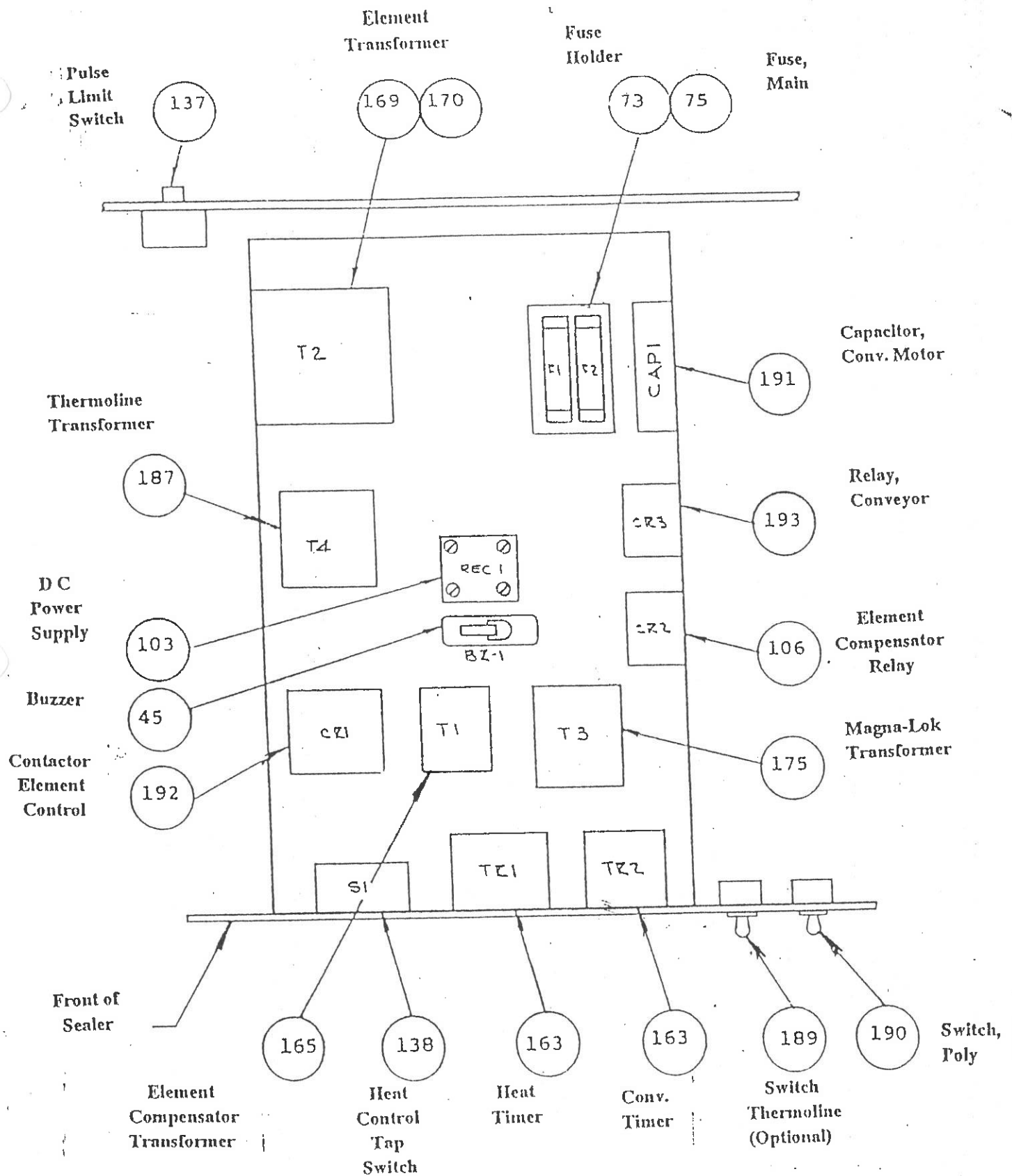


Figure 11.4 Parts Location, Electrical Chassis
Models 6401 and 6402

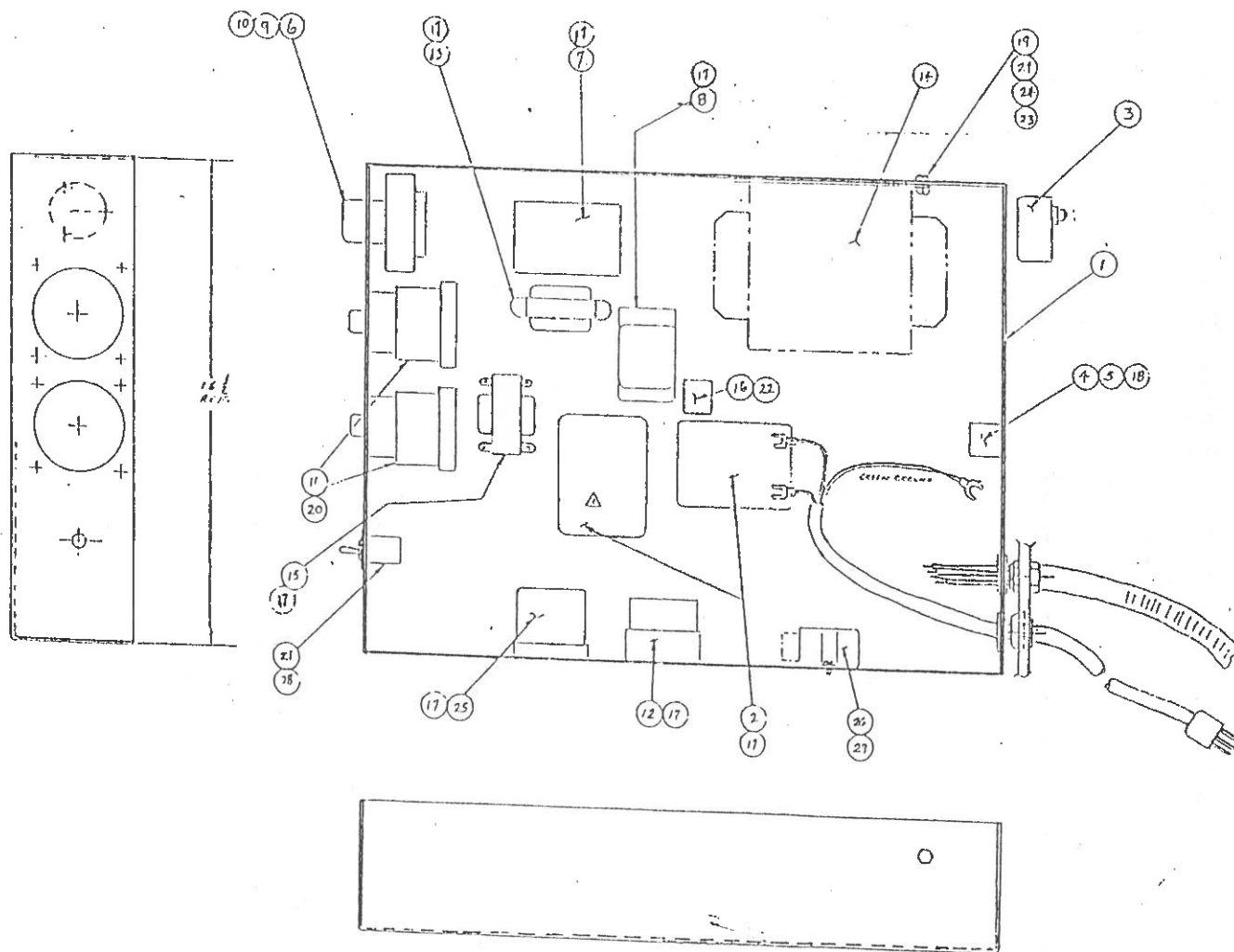


Figure 11.4A Parts Location, Electrical Chassis
Model 6400A Series

L-SEALER MODEL	T-1 TRANSFORMER PART NUMBER	SEALING ELEMENT SECONDARY VOLTAGES:	
		SIDE	FRONT
6081	TR-3207	28	24
6082	TR-3208	28	40
6001	TR-6011	16	20

L-SEALER MODEL	MAGNA-LOK MODEL	T-2 TRANSFORMER PART NUMBER	SEALING ELEMENT SECONDARY VOLTAGES:	
			SIDE	FRONT
6100	6300/6400	TR-0710	30	28
6101	6301/6401	TR-1125	44	35
6102	6302/6402	TR-1112	44	62
6103	6303/6403	TR-1113	44	88
6104	6304/6404	MS-0395	44	166
6113	6313/6413	TR-1301	66	88
6114	6314/6414	B-2635-900	69	161

Figure 11.5 Chart Secondary Voltages From Element Transformer.

WELDOTRON CORPORATION

Replacement Parts List

6000, 6100, 6300, 6400, 6400A, Series Sealers:

The replacement Parts List on the pages which follow has been prepared to assist in the ordering and stocking of parts needed for normal replacement purposes.

When ordering parts, state the part number, part description, and machine model number, on which the part is to be used. Specify the quantity desired, when needed, and desired shipping method.

ITEM NO.	PART NO.	DESCRIPTION	USED ON
1	C-E60-137-1	Angle, Front Pressure	6081 6101 6301 6401 6401A
2	C-E60-137-2	Angle, Front Pressure	6082 6102 6302 6402 6402A
3	C-E60-137-3	Angle, Front Pressure	6103 6303 6313
4	C-E60-137-4	Angle, Front Pressure	6100 6300
5	C-6300-213-1	Angle, Side Pressure	6100 6300
6	C-6300-213-2	Angle, Side Pressure	6081 6082 6101 6102 6103 6301 6302 6303 6401 6401A 6402 6402A

ITEM NO.	PART NO.	DESCRIPTION	USED ON
7	C-6300-213-3	Angle, Side Pressure	6313
8			
9			
10			
11	D-E60A-405-1	Bar, Electrode, Side, Stripped	6100 6300
12	D-E60A-405-2	Bar, Electrode, Side, Stripped	6081 6082 6101 6102 6103 6301 6302 6303
13	D-E60A-405-3	Bar, Electrode, Side, Stripped	6113 6313
14	D-E60A-404-1	Bar, Electrode, Front, Stripped	6100 6300
15	D-E60A-404-2	Bar, Electrode, Front, Stripped	6081 6101 6301
16	D-E60A-404-3	Bar, Electrode, Front, Stripped	6082 6102 6302
17	D-E60A-404-4	Bar, Electrode, Front, Stripped	6103 6113 6303
18	6100-9005	Bar, Electrode, Side, Complete	6100 6300

ITEM NO.	PART NO.	DESCRIPTION	USED ON
19	6100-9006	Bar, Electrode, Side, Complete	6081 6082 6101 6102 6103 6301 6302 6303 6401 6401A 6402 6402A
20	6100-9007	Bar, Electrode, Side, Complete	6113 6313
21	6100-9008	Bar, Electrode, Front, Complete	6100 6300
22	6100-9009	Bar, Electrode, Front, Complete	6081 6101 6301 6401 6401A
23	6100-9010	Bar, Electrode, Front, Complete	6082 6102 6302 6402 6402A
24	6100-9011	Bar, Electrode, Front, Complete	6103 6113 6303 6313
25	E60A-403-A	Bar, Outfeed	6100 6300
26	BD-0746	Bead, Ceramic, 15deg Level	All
27	BD-1720	Bead, Ceramic, Crossover	All
28	BD-0630A	Bead, Ceramic	All
29	BD-2257	Bead, Ceramic, .250" long	All

ITEM NO.	PART NO.	DESCRIPTION	USED ON
30	BL-3503 BL-19996	Belt, Endless 16" x 39 1/2 Belt, Endless	6401 6401A
31	BL-3504 BL-20058	Belt, Endless 16" x 62 1/4 Belt, Endless	6402 6402A
32	BL-2572 BL-19590	Belt, Timing Belt, Timing	6401 6401A
33	BL-1921 BL-19590	Belt, Timing Belt, Timing	6402 6402A
34			
35	B-6300-201	Bracket, Compensator	All Except 6100 6300
36	B-6300-222	Bracket, Compensator	6100 6300
37	B-6300-210	Bracket, Magnet, Support	All 6300 6400 Series
38	B-E60A-410	Bracket, Adj. Pulse Switch	All
39	B-E60-188	Bracket, Front Electrical	6103 6113 6303 6313
40	HA-0458	Brush, Brass, Element Cleaning	All
41	BU-1154	Bushing 5/8 I.D. Nylon	All
42	BU-2285	Bushing, Nylon	All
43	B-6300-206	Block, Terminal 15	All
44	BZ-0002	Buzzer, 110V	6100
45	BZ-0306	Buzzer, 220V	All Except 6100

ITEM NO.	PART NO.	DESCRIPTION	USED ON
46	BU-2350	Bushing, Nylon	All
47	E-E60-406-1	Casting, Outfeed Head	6081 6082 6101 6102 6103 6301 6302 6303 6401 6401A 6402 6402A
48	E-E60-406-2	Casting, Outfeed Head	6113 6313
49	D-E60-125S-1	Casting, Hinges	6100 6300
50	D-E60-125-1	Casting, Hinges	All Except 6100 6300
51	CL-1153	Collar, 7/8" Shaft	All
52	CB-0256	Cord, Line	All Except 6100 6300
53	FG-1118	Connector	All
54	CX-4157	Contacto, CR-1 (110V)	6100 6300
55	CX-4156	Contacto, CR-1, (220V)	All Except 6100 6300
57	B-E60-73	Core, Film Roll, Adjustable	All 6100 6300 6400 Series

ITEM NO.	PART NO.	DESCRIPTION	USED ON
58	C-E60-157	Core, Film Roll, Brake	All 6100 6300 6400 Series
59	B-6300-230	Cam, Back Stop	All 6300 6400 Series
60	C-E60-156	Adj. Film Core Assembly	6081 6082
61	6100-9013	Film Shaft Assembly	6101 6102 6103 6301 6302 6303 6401 6401A 6402 6402A
62	6200-9014	Film Shaft Assembly	6113 6313
63	C-WE0926	Electrode Wire, Front	6100 6300
64	A-WE0926	Electrode Wire, Front	6081 6101 6301 6401 6401A
65	B-WE0926	Electrode Wire, Front	6082 6102 6302 6402 6402A
66	D-WE0926	Electrode, Wire, Front	6103 6113 6303 6313

ITEM NO.	PART NO.	DESCRIPTION	USED ON
67	C-WE0926	Electrode Wire, Side	6100 6300
68	A-WE0926	Electrode Wire, Side	6081 6082 6101 6102 6103 6301 6302 6303 6401 6401A 6402 6402A
69	B-WE0926	Electrode Wire, Side	6113 6313
70	1521-007 5800-612	KNURLED NUT Element, Hold Down	All
71	6300-9015	Element Termination Assy Complete, Front Bar	All
72	6300-9017	Element Termination Assy Complete, Side Bar	All
73	FZ-0983	Fuse Holder, Double	All
74	FZ-2601	Fuse Holder, Single	All
75	FZ-0379	Fuse, F1, F2	All Except 6000 6100 6300
76	FZ-0061	Fuse, F1, F2	6100 6300
77	FZ-1658	Fuse, F1	6081 6082
78	D-6300-004-1	Film Unwind Assembly	6300

ITEM NO.	PART NO.	DESCRIPTION	USED ON
79	D-6300-004-2	Film Unwind Assembly	6301 6302 6303 6401 6401A 6402 6402A
80	D-6300-004-3	Film Unwind Assembly	6313
81	D-E60-07	Film Unwind Assembly	All 6100 Series
82	D-E60-75	Film Unwind Assembly	6081 6082
83	E-58-235	Guide	All
84	E60-144P1	Heat Sink, Side Element	All
85	E60-144P2	Heat Sink, Front Element	All
86	IS-2628	Insulator, Compensator	6100 6300
87	IS-2629	Insulator, Compensator	All Except 6100 6300
88	MP-2651	Laminate Strip for Electrode Bar, 3ft. Strip Thermoline	All
89	MP-2215	Magnet	All 6300 6400 Series
90	MR-2763	Motor	6401 6402 6401A 6402A
	MR-20059	Motor	
91	NT-1374	Nut, Wing	All

ITEM NO.	PART NO.	DESCRIPTION	USED ON
92	NT-1138	Nut, Wing	All
93	NT-1435	Nut, Wing	All
94	NT-1671	Nut, Pal.	All
95	RU-1683	Pad, Silicone Sponge (Sold per foot only)	All
96	BG-0685	Pillow Block	All
97	PN-2414	Pin, Roll, Upper Magnet	All
98	PN-0278	Pin, Roll, 3/16" Dia. 1" long	All
99	PN-2119	Pin, Roll	All
100	PN-2014	Pin, Roll	All
101	B-5800-615	Pin, Lock, Front Bar	All
102	A-6300-209	Pin, Lock, Side Bar	All
103	TB-4097	Power Supply, DC, Rec. 1	All 6300 6400 Series
104	B-6400-107 6400-111	Pulley, Driving Roller	6401 6402 6401A 6402A
105	B-6400-108 PY19332	Pulley, Motor	6401 6402 6401A 6402A
106	SW-1123	Relay, 24V Compensator Circuit	All
107	RE-3209	Resistor, Variable	6082
108	RG-2750	Ring, Retaining 7/8" Shaft	6401 6402
109	RG-0534	Ring, Retaining 1/2" Shaft	6401 6402

ITEM NO.	PART NO.	DESCRIPTION	USED ON
110	RG-0823	Ring, Retaining 3/8"	6401
	RG-1950		6402
			6401A
			6402A
111	RG-2711	Ring, Retaining 1 1/8" Housing	6401
	BG-0809		6402
			6401A
			6402A
112	B-6300-401-1	Rod, Film Spreader	6300
113	B-6300-401-2	Rod, Film Spreader	6301
			6302
			6303
			6401
			6401A
			6402
			6402A
114	B-6300-401-3	Rod, Film Spreader	6313
115	C-E60-159-3	Rod, Film Spreader	6100
116	C-E60-159-1	Rod, Film Spreader	6081
			6082
			6101
			6102
			6103
117	C-E60-159-2	Rod, Film Spreader	6113
118	B-6400-105	Roller, Driving	6401
	6401-1006		6402
			6401A
			6402A
119	B-6400-114	Roller, Idler	6401
	6401-1007		6402
			6401A
			6402A
120	C-E60-127-4	Shaft, Hinge	6100
			6300

ITEM NO.	PART NO.	DESCRIPTION	USED ON
121	C-E60-127-1	Shaft, Hinge	6081 6101 6301
122	C-E60-127-2	Shaft, Hinge	6082 6102 6302 6402 6402A
123	C-E60-127-3	Shaft, Hinge	6103 6113 6303 6313
124	B-6300-204-1	Shaft, Lock, Front	6100 6300
125	B-6300-204-2	Shaft, Lock, Front	All Except 6100 6300
126	B-5800-616-1	Shaft, Lock	All
127	B-E60-155-3	Shaft, Film Roll	6100 6300
128	B-E60-155-2	Shaft, Film Roll	6113 6313
129	B-E60-0215	Shaft, Film Roll	6081 6082
	B-E60-155-1	Shaft, Film Roll	6101 6102 6103 6301 6302 6303 6401 6401A 6402 6402A

ITEM NO.	PART NO.	DESCRIPTION	USED ON
130	B-6400-106 6401-1005	Shaft, Driving Roller	6401 6402 6401A 6402A
131	B-E60-146	Shim, Sealing Head	All
132	FG-2058	Screw, Plug	6313
133	SS-1169	Screw, Thumb 3/8-16 x 2 1/2"lg	All
134	B-6300-231	Stop, Strap	6300 Series
135	A-6300-211	Support, Top Magnet	All 6300 6400 Series Except 6303 6313
136	B-6300-223	Support, Top Magnet	6303 6313
137	SW-0202	Switch, Limit, Pulse (LS-1)	All
138	RH-1102	Switch, Tap, Heat Control	All
139	SG-1143	Spring, Torsion	All
140	SS-1171	Stop, Bumper	All 6100 6300 6400 Series
141	SV-2349	Sleeve, Nylon	All
142	SV-1132	Sleeve, Nylon, Headed	All
143	SG-2410	Spring, Compression, Termination Lock, Six Bar	All
144	SG-1988	Spring, Element Compression	All
145	SG-1987	Spring, Compression, Termination Lock, Front Bar	All

ITEM NO.	PART NO.	DESCRIPTION	USED ON
146	SS-2112	Screw Socket Hd. Cap.	All
147	SS-1732	Screw, Heat Sink	All
148	SS-2013	Screw, Bind Hd. #10-32 x 2 1/2"lg	All
149	SS-1813	Screw, Bind Hd. #8-32 X 3/8"lg	All
150	SS-0343	Screw, Bind Hd. #10-32 x 3/4"lg	All
151	SS-1190	Screw, Thumb #10-32 x 1 1/2"lg	All
152	SS-2098	Screw, Button Hd. #8-32 x 1/2"lg	All
153	B-6300-232	Support Block	All 6300 Series
154	SS-1225	Screw, Soc. Hd. Cap #5/16-18 x 3/4" long	All
155	TL-0752	Terminal Contact Section	All
156	TL-0753	Terminal End Section	All
157	WE-3468	Teflon Coated Element Wire/ft	All
158	B-6300-207	Tie, Post, Terminal Lock	All
159	6100-9021	Teflon Fiberglass Fabric .003 Thick, sq yd	All machines w/ Thermoline feature
160	TA-0366	Tape, Fiberglass Teflon 1/2"x.010x10yds Pressure Sensitive	All
161	TA-0467	Tape, Fiberglass Teflon 2" x .003" x 10yds	All
162	TM-3916	Timer, Heat, TR-1 (110 Volt)	6100 6300
163	TM-3915	Timer, Heat, TR-1 (220 Volt) (Also TR-2 on 6400)	All Except (110V) 6100 6300

ITEM NO.	PART NO.	DESCRIPTION	USED ON
164	TR-0722	Transformer, Element Comp. (T2)	6100 6300
165	TR-0949	Transformer, Element Comp	All Except 6100 6300
166	TR-3207	Transformer, Element Comp. (T1)	6081
167	TR-3208	Transformer, Element Comp. (T1)	6082
168	TR-0710	Transformer, Element Pulse (T2)	6100 6300
169	TR-13558	Transformer, Element Pulse (T1)	6101 6301 6401 6401A
170	TR-13558	Transformer, Element Pulse (T1)	6102 6302 6402 6402A
171	TR-1113	Transformer, Element Pulse (T1)	6103 6303
172	TR-1632	Transformer, Element Pulse (T1)	
173	TR-1302	Transformer, Element Pulse (T1)	
174	TR-1301	Transformer, Element Pulse (T1)	6113 6313
175	TR-2344	Transformer, Magna-Lok Power (T3)	
176	B-6400-055	Tray Pivot, Right	6401 6401A 6402 6402A
177	B-6400-056	Tray Pivot, Left	6401 6401A 6402 6402A

ITEM NO.	PART NO.	DESCRIPTION	USED ON
178	SV-2349	Tubing, Insulating, Front Termination, Side Bar .252" I.D.	All
179	1521-029 SV-2350	Tubing, Insulating .194" I.D.	All
180	WA-2348	Washer, Nylon .195" I.D.	All
181	WA-2347	Washer, Nylon .255" I.D.	All
182	WA-2346	Washer, Flat	All
183	WA-1003	Washer, Lock, Split #10	All
184	WA-0692	Washer, Flat #8	All 6300 6400 Series
185	WA-2749	Washer, Spacer	6401 6401A 6402 6402A
186	LT-0606	Neon Light	6081 6082
187	TR-2648	Transformer, Thermoline	6100 Series
188	TR-2747	Transformer, Thermoline	6303 6313*
189	SW-2145	Switch, Thermo/Impulse	All 6300 6400 Series
190	SW-1240	Switch, Poly	All 6300 6400 Series
191	CC-3512	Capacitor, Conveyor Motor	6401 6401A 6402 6402A

* Machines with Optional Thermoline Feature only.

ITEM NO.	PART NO.	DESCRIPTION	USED ON
192	CX-2471	Contactor, Element Control	6401 6401A 6402 6402A
193	SW-1195	Relay, Conveyor	6401 6401A 6402 6402A
194	TR-6011	Transformer	6001
195	SW-10303	Relay, Power	6001
196	LT-0699	Light	6001
197	BZ-0002	Buzzer	6001

PART NO: 64000803
 DESCRIPTION: MOUNT CHASSIS COMPONENTS

REV:04 03/08/94
 ACT: ROUTE: 1

ITEM	P/N	DESCRIPTION	QTY	U/M	RV	ACT	ND
1	E600149P1A	SUB CHASSIS WELDMENT	1.0	EA	01		
2	FZ0983	FUSE HOLDER, 250V, 30A	2.0	EA			
3	SW0202	SWITCH	1.0	EA			
4	TL0752	TERMINAL BLOCK	5.0	EA			
5	TL0753	MOUNT END	1.0	EA			
6	RH1102	TAP SWITCH, 6POS, 10-32-3/8 BND HD	1.0	EA			
7	CX4156	CONTACTOR, 2POLE, 25AMP, 208/ 240V	1.0	EA			
8	BZ0306A	BUZZER MC 220V AC W/COVER	1.0	EA			
9	KB1100	KNOB, 1 DIA	1.0	EA			
10	KB1101	KNOB	1.0	EA			
11	TM3915	TIMER, 220V, .25 TO 5.0 SEC	2.0	EA			
12	SW1123	RELAY, 24V AC, 25A DPDT	1.0	EA			
13	TR0949	TRANSFORMER	1.0	EA			
14	TR13558	XFMR, 220/360V, 6TAPS, PR 35V	1.0	EA			
15	TR2344	XFMR, 110/220V. SPLIT PRI. 55V. @ VA. SEC	1.0	EA			
16	TB7025	RECTIFIER	1.0	EA			
17	SS0335	AAG, 8-32X0.500 LG SCR BIND HD MS PL	18.0	EA			
18	SS1411	ACG, 8-32X0.375LG SCR BD HD MS 316/304SST	2.0	EA			
19	SS0080	AAG, 0.250-20X0.750LG SCR HD BD MACH SST	4.0	EA			
20	SS1732	ABG, 6-32X0.250 LG SCR BIND HD MACH	9.0	EA			
21	NT0627	AAA, 0.250-20 NUT HEX CAD	4.0	EA			
22	SS0244	AAG, 6-32X1.000 LG SCR BIND HD MACH CP	1.0	EA			
23	WA0918	ABB, 0.250 WASHER LOCK INTL	1.0	EA			
24	WA1739	ACB, 0.250 LOCK WASHER SST	4.0	EA			
25	SW1195	SWITCH, 25A 230V AC COIL	1.0	EA			
27	SW1240	SWITCH TOGGLE DPDT	1.0	EA			
28	LB6733	LABEL POLYETHYLENE NORMA	1.0	EA			

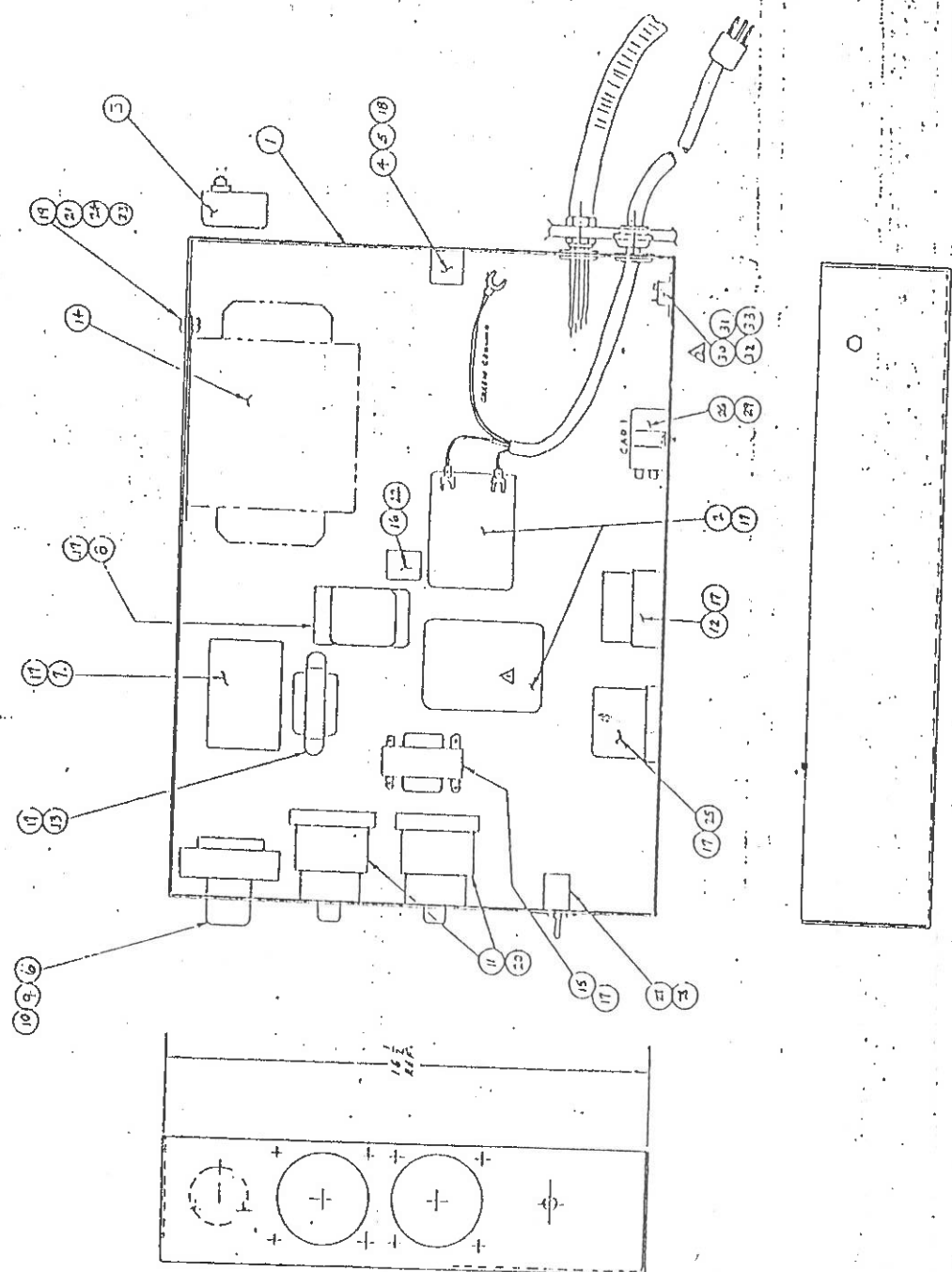
PART NO: 64000803

DESCRIPTION: MOUNT CHASSIS COMPONENTS

REV:04 03/08/94

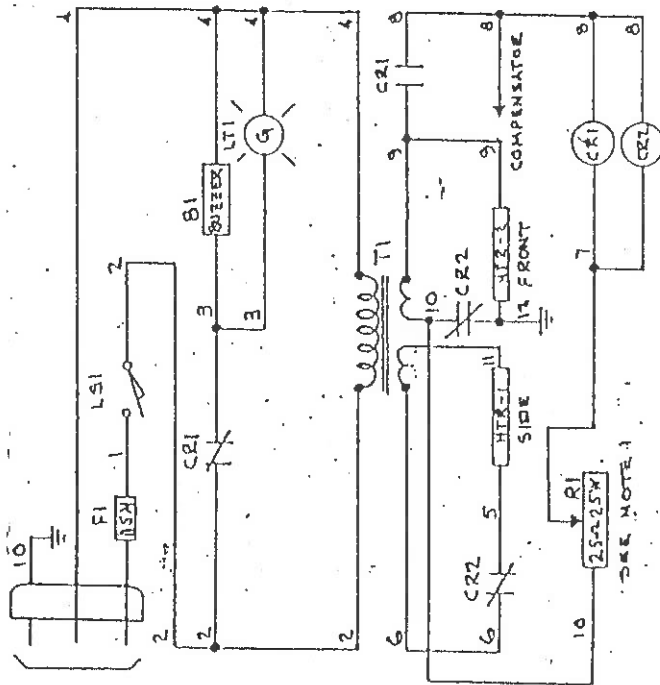
ACT: ROUTE: 1

ITEM	P/N	DESCRIPTION	QTY	U/M	RV	ACT	MD
29	BT1930	BRACKET (OVAL)	1.0	EA	01		
30	PG1662	PLUG,FEMALE,4 TERM, PANEL MOUNT	1.0	EA			
31	SS1321	AAB,6-32X0.375 LG SCREW RD HD MACH CP	2.0	EA			
32	WA2228	AAB,6 WASHER LOCK CP	2.0	EA			
33	NT0198	AAA,6-32 NUT HEX CAD PL	2.0	EA			
9000	DWG64000803	DWG,MNT CHASSIS COMPONENTS	1.0	EA	02		D



PROJECT NO. 101-12-171		DATE 10/1/63	
DESIGNED BY J. J. HARRIS		CHECKED BY J. J. HARRIS	
DRAWN BY J. J. HARRIS		APPROVED BY J. J. HARRIS	
TITLE ELECTRICAL		SUBJECT UNIT	
PROJECT NO. 101-12-171		DATE 10/1/63	
DESIGNED BY J. J. HARRIS		CHECKED BY J. J. HARRIS	
DRAWN BY J. J. HARRIS		APPROVED BY J. J. HARRIS	
PROJECT NO. 101-12-171		DATE 10/1/63	
DESIGNED BY J. J. HARRIS		CHECKED BY J. J. HARRIS	
DRAWN BY J. J. HARRIS		APPROVED BY J. J. HARRIS	

101-12-171
ELECTRICAL
UNIT



LAST WIRE NO. USED #10

1. SET RESISTOR TO GET 24 TO 27 VOLTS ACROSS RELAY COILS CR1 & CR2
2. MODEL 6081 16" LONG X 20" SIDE
3. MODEL 6082 28" LONG X 20" SIDE

CONFIDENTIAL

This drawing contains proprietary information restricted to WELDOTRON manufacture ONLY. Any duplication of this material unless authorized in writing subject to prosecution.

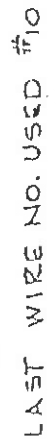
WELDOTRON CODE NO.	ITEM	DESCRIPTION	REQD
BZ0306	B1	BUEEER 230V COIL	1
SW1123	CR1	RELAY 1N.C. CONTACT 24V COIL	1
SW1123	CR2	RELAY 1N.C. CONTACT 24V. COIL	1
FZ-1685	F1	FUSE 15A 250V	1
SW0202	LS1	LIMIT SWITCH	1
LT 606	LT1	NEON LIGHT	1
P5-0688	P1	PLUG	1
RE3209	R1	RESISTOR (VARIABLE) USED ON MODEL 6081	1
	T1	TRANSFORMER (SEE TABLE)	1
	HTZ1	HEATER (20G OIA HEATER WIRE) SEE NOTE 3	1
	HTZ1	HEATER 20" L.G. (03G OIA HEATER WIRE)	1

MODEL	TOTAL LENGTH HTZ1 & HTZ2	TRANSFORMER SECONDARY VOLTAGE
6081	36"	
6082	48"	
	(T1) TRANSFORMER	
6081	TR-6011	32V, 40V
6082	TR-6012	56V, 40V

4	ADDITION OF RESISTOR R2 608	15879/3/79
3	SEE ECO* 1533	5/13/79
2	SEE ECO 882	10/25/79
1	ADDED TAP INFO. RESISTOR INFO. PART NO. 6081	5/11/69
SYN.	DESCRIPTION	ECO NO. DATE/ST

REVISIONS	
DATE	DESCRIPTION
10/25/79	ADDED TAP INFO. RESISTOR INFO. PART NO. 6081
5/13/79	SEE ECO* 1533
5/11/69	SEE ECO 882
SCHEMATIC ECONOMY "L" SEALEZ	
WELDOTRON CORPORATION NEWARK, N.J.	
SCALE	DATE
1/4"	10/25/79
UNLASS SPECIFIED	ANGLE
2.000	2.000
4	4

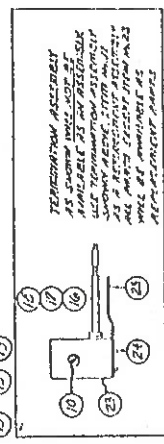
PART NO. MODEL NO. NEXT ASSEMBLY



- CONFIDENTIAL

This Drawing contains proprietary information restricted to WELGTRON manufacturing ONLY. Any duplication of this material unless authorized in writing subject to prosecution.

[illegible]

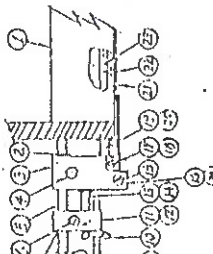


1105 - 0019	1178	1178	1178
0008 - 0019	1182	1182	1182
0100 - 0019	1205	1205	1205
2005 - 0025	1222	1222	1222
0025 - 0029	1242	1242	1242
1005 - 0029	1262	1262	1262
8005 - 0012	1282	1282	1282
0005 - 0029	1302	1302	1302
2000 - 0029	1320	1320	1320
2000 - 0029	1340	1340	1340

FRONT ELEVATION
NOSE: 2100, 2200, 2400
6101, 2102, 2103, 6104
2081, 2082
2091, 2202, 2203
2401, 2402

[illegible]

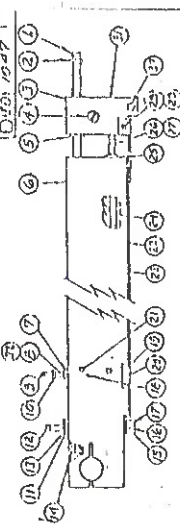
7	719	4791-96-1-0000	1	1	719	4791-96-1-0000	1
7	718	4791-96-1-0000	1	1	718	4791-96-1-0000	1
7	717	4791-96-1-0000	1	1	717	4791-96-1-0000	1
7	716	4791-96-1-0000	1	1	716	4791-96-1-0000	1
7	715	4791-96-1-0000	1	1	715	4791-96-1-0000	1
7	714	4791-96-1-0000	1	1	714	4791-96-1-0000	1
7	713	4791-96-1-0000	1	1	713	4791-96-1-0000	1
7	712	4791-96-1-0000	1	1	712	4791-96-1-0000	1
7	711	4791-96-1-0000	1	1	711	4791-96-1-0000	1
7	710	4791-96-1-0000	1	1	710	4791-96-1-0000	1
7	709	4791-96-1-0000	1	1	709	4791-96-1-0000	1
7	708	4791-96-1-0000	1	1	708	4791-96-1-0000	1
7	707	4791-96-1-0000	1	1	707	4791-96-1-0000	1
7	706	4791-96-1-0000	1	1	706	4791-96-1-0000	1
7	705	4791-96-1-0000	1	1	705	4791-96-1-0000	1
7	704	4791-96-1-0000	1	1	704	4791-96-1-0000	1
7	703	4791-96-1-0000	1	1	703	4791-96-1-0000	1
7	702	4791-96-1-0000	1	1	702	4791-96-1-0000	1
7	701	4791-96-1-0000	1	1	701	4791-96-1-0000	1
7	700	4791-96-1-0000	1	1	700	4791-96-1-0000	1
7	699	4791-96-1-0000	1	1	699	4791-96-1-0000	1
7	698	4791-96-1-0000	1	1	698	4791-96-1-0000	1
7	697	4791-96-1-0000	1	1	697	4791-96-1-0000	1
7	696	4791-96-1-0000	1	1	696	4791-96-1-0000	1
7	695	4791-96-1-0000	1	1	695	4791-96-1-0000	1
7	694	4791-96-1-0000	1	1	694	4791-96-1-0000	1
7	693	4791-96-1-0000	1	1	693	4791-96-1-0000	1
7	692	4791-96-1-0000	1	1	692	4791-96-1-0000	1
7	691	4791-96-1-0000	1	1	691	4791-96-1-0000	1
7	690	4791-96-1-0000	1	1	690	4791-96-1-0000	1
7	689	4791-96-1-0000	1	1	689	4791-96-1-0000	1
7	688	4791-96-1-0000	1	1	688	4791-96-1-0000	1
7	687	4791-96-1-0000	1	1	687	4791-96-1-0000	1
7	686	4791-96-1-0000	1	1	686	4791-96-1-0000	1
7	685	4791-96-1-0000	1	1	685	4791-96-1-0000	1
7	684	4791-96-1-0000	1	1	684	4791-96-1-0000	1
7	683	4791-96-1-0000	1	1	683	4791-96-1-0000	1
7	682	4791-96-1-0000	1	1	682	4791-96-1-0000	1
7	681	4791-96-1-0000	1	1	681	4791-96-1-0000	1
7	680	4791-96-1-0000	1	1	680	4791-96-1-0000	1
7	679	4791-96-1-0000	1	1	679	4791-96-1-0000	1
7	678	4791-96-1-0000	1	1	678	4791-96-1-0000	1
7	677	4791-96-1-0000	1	1	677	4791-96-1-0000	1
7	676	4791-96-1-0000	1	1	676	4791-96-1-0000	1

[illegible]

CONFIDENTIAL

[illegible]

TIME	NUMERATOR	DENOMINATOR	PERCENTAGE	TIME
1	1	1	100.00	1
2	2	2	100.00	2
3	3	3	100.00	3
4	4	4	100.00	4
5	5	5	100.00	5
6	6	6	100.00	6
7	7	7	100.00	7
8	8	8	100.00	8
9	9	9	100.00	9
10	10	10	100.00	10
11	11	11	100.00	11
12	12	12	100.00	12
13	13	13	100.00	13
14	14	14	100.00	14
15	15	15	100.00	15
16	16	16	100.00	16
17	17	17	100.00	17
18	18	18	100.00	18
19	19	19	100.00	19
20	20	20	100.00	20
21	21	21	100.00	21
22	22	22	100.00	22
23	23	23	100.00	23
24	24	24	100.00	24
25	25	25	100.00	25
26	26	26	100.00	26
27	27	27	100.00	27
28	28	28	100.00	28
29	29	29	100.00	29
30	30	30	100.00	30
31	31	31	100.00	31
32	32	32	100.00	32
33	33	33	100.00	33
34	34	34	100.00	34
35	35	35	100.00	35
36	36	36	100.00	36
37	37	37	100.00	37
38	38	38	100.00	38
39	39	39	100.00	39
40	40	40	100.00	40
41	41	41	100.00	41
42	42	42	100.00	42
43	43	43	100.00	43
44	44	44	100.00	44
45	45	45	100.00	45
46	46	46	100.00	46
47	47	47	100.00	47
48	48	48	100.00	48
49	49	49	100.00	49
50	50	50	100.00	50
51	51	51	100.00	51
52	52	52	100.00	52
53	53	53	100.00	53
54	54	54	100.00	54
55	55	55	100.00	55
56	56	56	100.00	56
57	57	57	100.00	57
58	58	58	100.00	58
59	59	59	100.00	59
60	60	60	100.00	60
61	61	61	100.00	61
62	62	62	100.00	62
63	63	63	100.00	63
64	64	64	100.00	64
65	65	65	100.00	65
66	66	66	100.00	66
67	67	67	100.00	67
68	68	68	100.00	68
69	69	69	100.00	69
70	70	70	100.00	70
71	71	71	100.00	71
72	72	72	100.00	72
73	73	73	100.00	73
74	74	74	100.00	74
75	75	75	100.00	75
76	76	76	100.00	76
77	77	77	100.00	77
78	78	78	100.00	78
79	79	79	100.00	79
80	80	80	100.00	80
81	81	81	100.00	81
82	82	82	100.00	82
83	83	83	100.00	83
84	84	84	100.00	84
85	85	85	100.00	85
86	86	86	100.00	86
87	87	87	100.00	87
88	88	88	100.00	88
89	89	89	100.00	89
90	90	90	100.00	90
91	91	91	100.00	91
92	92	92	100.00	92
93	93	93	100.00	93
94	94	94	100.00	94
95	95	95	100.00	95
96	96	96	100.00	96
97	97	97	100.00	97
98	98	98	100.00	98
99	99	99	100.00	99
100	100	100	100.00	100

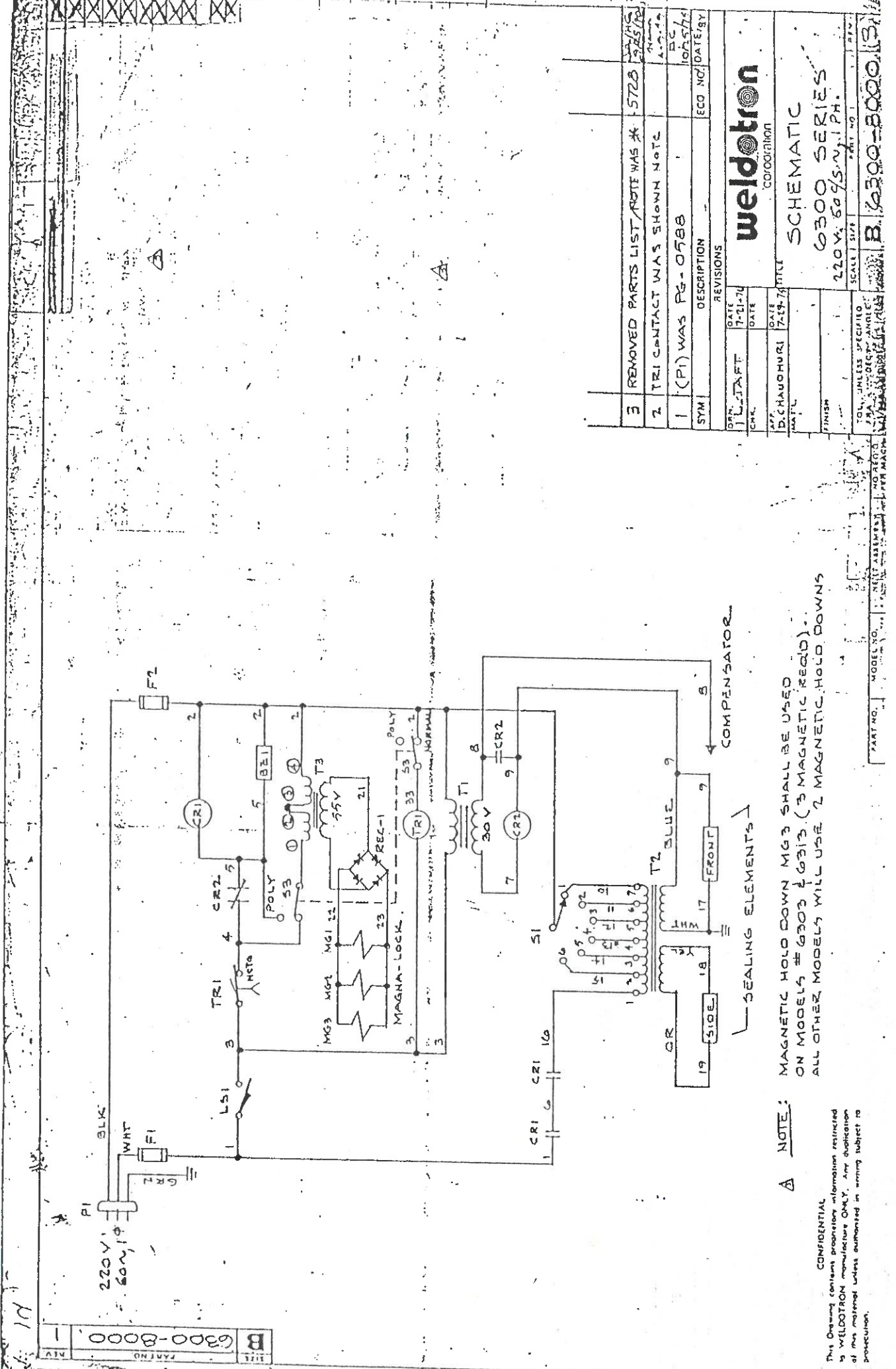


COMPLETED PER AS JANUARY 1956
MODEL No. PART No.
1-12 PC 175-300
120 PC 1-10 PC 175-300
120 PC 1-10 PC 175-300

SIOF ELECTRODE BAR
MODEL'S: L-12, L-20, L-28, L-

[illegible]

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466	467	468	469	470	471	472	473	474	475	476	477	478	479	480	481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	496	497	498	499	500	501	502	503	504	505	506	507	508	509	510	511	512	513	514	515	516	517	518	519	520	521	522	523	524	525	526	527	528	529	530	531	532	533	534	535	536	537	538	539	540	541	542	543	544	545	546	547	548	549	550	551	552	553	554	555	556	557	558	559	560	561	562	563	564	565	566	567	568	569	570	571	572	573	574	575	576	577	578	579	580	581	582	583	584	585	586	587	588	589	590	591	592	593	594	595	596	597	598	599	600	601	602	603	604	605	606	607	608	609	610	611	612	613	614	615	616	617	618	619	620	621	622	623	624	625	626	627	628	629	630	631	632	633	634	635	636	637	638	639	640	641	642	643	644	645	646	647	648	649	650	651	652	653	654	655	656	657	658	659	660	661	662	663	664	665	666	667	668	669	670	671	672	673	674	675	676	677	678	679	680	681	682	683	684	685	686	687	688	689	690	691	692	693	694	695	696	697	698	699	700	701	702	703	704	705	706	707	708	709	710	711	712	713	714	715	716	717	718	719	720	721	722	723	724	725	726	727	728	729	730	731	732	733	734	735	736	737	738	739	740	741	742	743	744	745	746	747	748	749	750	751	752	753	754	755	756	757	758	759	760	761	762	763	764	765	766	767	768	769	770	771	772	773	774	775	776	777	778	779	780	781	782	783	784	785	786	787	788	789	790	791	792	793	794	795	796	797	798	799	800	801	802	803	804	805	806	807	808	809	810	811	812	813	814	815	816	817	818	819	820	821	822	823	824	825	826	827	828	829	830	831	832	833	834	835	836	837	838	839	840	841	842	843	844	845	846	847	848	849	850	851	852	853	854	855	856	857	858	859	860	861	862	863	864	865	866	867	868	869	870	871	872	873	874	875	876	877	878	879	880	881	882	883	884	885	886	887	888	889	890	891	892	893	894	895	896	897	898	899	900	901	902	903	904	905	906	907	908	909	910	911	912	913	914	915	916	917	918	919	920	921	922	923	924	925	926	927	928	929	930	931	932	933	934	935	936	937	938	939	940	941	942	943	944	945	946	947	948	949	950	951	952	953	954	955	956	957	958	959	960	961	962	963	964	965	966	967	968	969	970	971	972	973	974	975	976	977	978	979	980	981	982	983	984	985	986	987	988	989	990	991	992	993	994	995	996	997	998	999	1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011	1012	1013	1014	1015	1016	1017	1018	1019	1020	1021	1022	1023	1024	1025	1026	1027	1028	1029	1030	1031	1032	1033	1034	1035	1036	1037	1038	1039	1040	1041	1042	1043	1044	1045	1046	1047	1048	1049	1050	1051	1052	1053	1054	1055	1056	1057	1058	1059	1060	1061	1062	1063	1064	1065	1066	1067	1068	1069	1070	1071	1072	1073	1074	1075	1076	1077	1078	1079	1080	1081	1082	1083	1084	1085	1086	1087	1088	1089	1090	1091	1092	1093	1094	1095	1096	1097	1098	1099	1100	1101	1102	1103	1104	1105	1106	1107	1108	1109	1110	1111	1112	1113	1114	1115	1116	1117	1118	1119	1120	1121	1122	1123	1124	1125	1126	1127	1128	1129	1130	1131	1132	1133	1134	1135	1136	1137	1138	1139	1140	1141	1142	1143	1144	1145	1146	1147	1148	1149	1150	1151	1152	1153	1154	1155	1156	1157	1158	1159	1160	1161	1162	1163	1164	1165	1166	1167	1168	1169	1170	1171	1172	1173	1174	1175	1176	1177	1178	1179	1180	1181	1182	1183	1184	1185	1186	1187	1188	1189	1190	1191	1192	1193	1194	1195	1196	1197	1198	1199	1200	1201	1202	1203	1204	1205	1206	1207	1208	1209	1210	1211	1212	1213	1214	1215	1216	1217	1218	1219	1220	1221	1222	1223	1224	1225	1226	1227	1228	1229	1230	1231	1232	1233	1234	1235	1236	1237	1238	1239	1240	1241	1242	1243	1244	1245	1246	1247	1248	1249	1250	1251	1252	1253	1254	1255	1256	1257	1258	1259	1260	1261	1262	1263	1264	1265	1266	1267	1268	1269	1270	1271	1272	1273	1274	1275	1276	1277	1278	1279	1280	1281	1282	1283	1284	1285	1286	1287	1288	1289	1290	1291	1292	1293	1294	1295	1296	1297	1298	1299	1300	1301	1302	1303	1304	1305	1306	1307	1308	1309	1310	1311	1312	1313	1314	1315	1316	1317	1318	1319	1320	1321	1322	1323	1324	1325	1326	1327	1328	1329	1330	1331	1332	1333	1334	1335	1336	1337	1338	1339	1340	1341	1342	1343	1344	1345	1346	1347	1348	1349	1350	1351	1352	1353	1354	1355	1356	1357	1358	1359	1360	1361	1362	1363	1364	1365	1366	1367	1368	1369	1370	1371	1372	1373	1374	1375	1376	1377	1378	1379	1380	1381	1382	1383	1384	1385	1386	1387	1388	1389	1390	1391	1392	1393	1394	1395	1396	1397	1398	1399	1400	1401	1402	1403	1404	1405	1406	1407	1408	1409	1410	1411	1412	1413	1414	1415	1416	1417	1418	1419	1420	1421	1422	1423	1424	1425	1426	1427	1428	1429	1430	1431	1432	1433	1434	1435	1436	1437	1438	1439	1440	1441	1442	1443	1444	1445	1446	1447	1448	1449	1450	1451	1452	1453	1454	1455	1456	1457	1458	1459	1460	1461	1462	1463	1464	1465	1466	1467	1468	1469	1470	1471	1472	1473	1474	1475	1476	1477	1478	1479	1480	1481	1482	1483	1484	1485	1486	1487	1488	1489	1490	1491	1492	1493	1494	1495	1496	1497	1498	149
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	-----



NOTE: MAGNETIC HOLD DOWN MG3 SHALL BE USED ON MODELS #6303 & 6313. (3 MAGNETIC REQ'D). ALL OTHER MODELS WILL USE 2 MAGNETIC HOLD DOWNS

REV	DESCRIPTION	DATE	BY	CHKD	DATE
3	REMOVED PARTS LIST NOTE WAS # 5728	7-21-70	WJS		
2	TRI CONTACT WAS SHOWN NOTE				
1	(P1) WAS PG-0588				
SYM	DESCRIPTION	ECO NO	DATE/8Y		
REV	DATE	BY	CHKD	DATE	
1	7-21-70	WJS			
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					
33					
34					
35					
36					
37					
38					
39					
40					
41					
42					
43					
44					
45					
46					
47					
48					
49					
50					
51					
52					
53					
54					
55					
56					
57					
58					
59					
60					
61					
62					
63					
64					
65					
66					
67					
68					
69					
70					
71					
72					
73					
74					
75					
76					
77					
78					
79					
80					
81					
82					
83					
84					
85					
86					
87					
88					
89					
90					
91					
92					
93					
94					
95					
96					
97					
98					
99					
100					

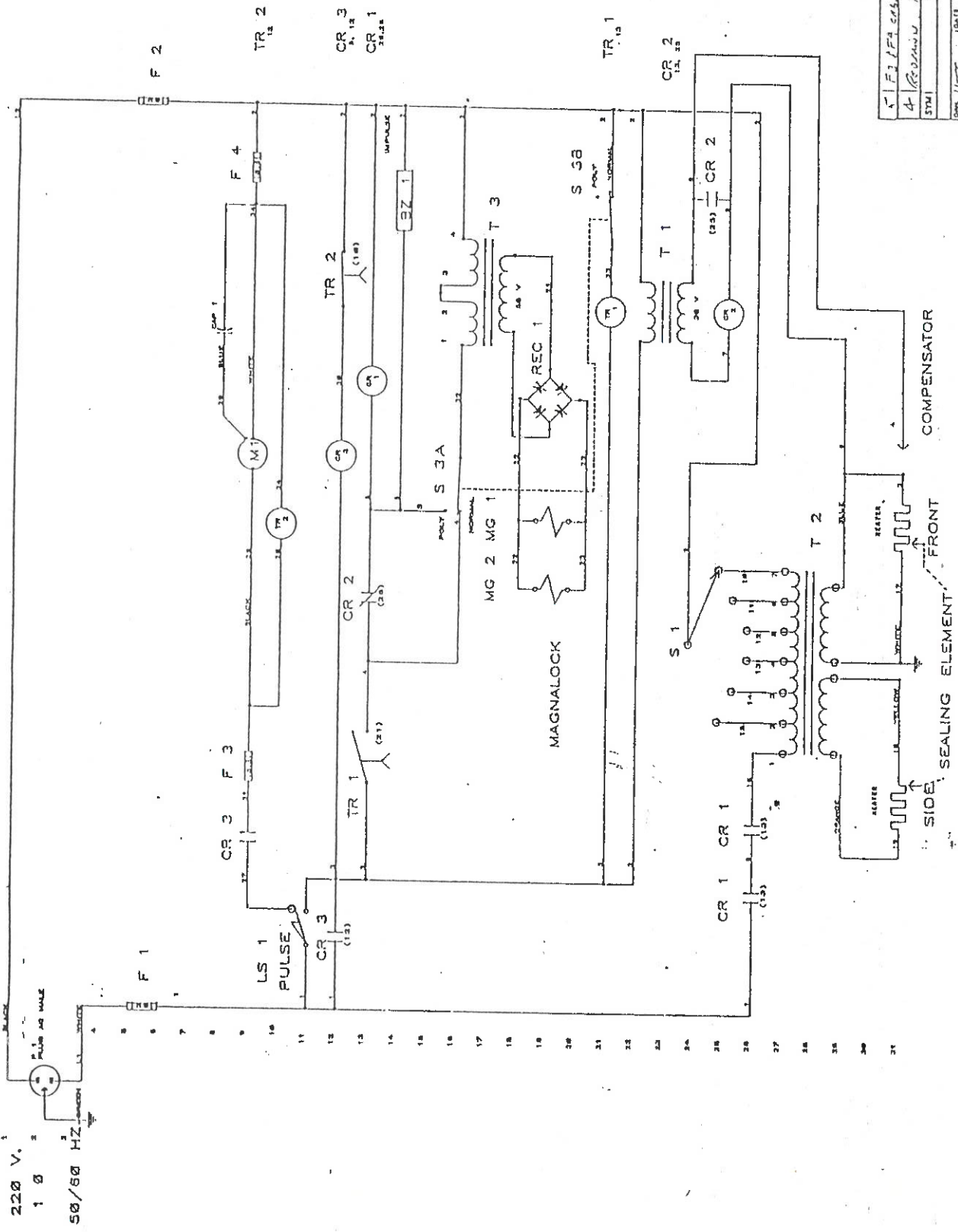
weldotron
CORPORATION

SCHEMATIC
6300 SERIES
220V, 60Hz, 1PH.
SCALE: 1/8" = 1"

CONFIDENTIAL
This Drawing contains proprietary information restricted to WELDOTRON Corporation ONLY. Any duplication of this material without authorization in writing subject to prosecution.

PARTS LIST
NON-ENCLOSURE

ITEM NO.	NO. REQ.



FILE: 64008000
21 DECEMBER 1990

1	F3 LF4 600, 700, 800, 900, 1000	59021	12/21/90	WJ
4	REVISED FOR 64008000	59021	12/21/90	WJ
REV	DESCRIPTION	ECO NO.	DATE	BY
REVISIONS				
welded on				
DATE	12/21/90	TITLE		
CHK	DATE	DESCRIPTION		
APP	DATE	SCHEMATIC		
DATE		6400 SERIES		
		220V, 1 ϕ 50/60 HZ.		
FINISH		SHEET 1 OF 1		
TOTAL SHEETS REQUIRED		PARTS		REV
PA	DEC	6400-8000		5
THRU	2100			