



**LOKPRINT™**

# **Industrial Apparel Label Station**

**Operation / Maintenance  
And Parts List**



**AVERY DENNISON**

**Manual Edition 5.0**

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Manual Part Number 221398

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# Warranty Information

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## Warranty Policy

Avery Dennison Retail Information Systems, In-Plant Printing Solutions provides the following warranty policy.

### Scope

Warranties against defects from workmanship for equipment and parts manufactured and sold from Sayre, PA. Includes time and material except as otherwise noted below.

### Time

- New equipment and parts: 6 months
- Refurbished equipment and parts: 90 days
- Warranty period starts when equipment ships from selling location.

### General Conditions

Avery Dennison extends warranty coverage under the following conditions.

- Equipment and parts will perform within published specifications. Promised or implied statements by any Avery Dennison employee or representative will not be deemed to vary the terms of the warranty.
- Equipment and parts must be installed and operated according to recommended procedures and operating conditions.
- Consumable elements are not covered. Consumable elements are those that show normal wear from typical equipment usage including, without limitation, printheads, knives, rollers in contact with the web, and sonic units. Avery Dennison reserves the right to determine which elements are defined as “consumable.”
- No customer maintenance may be performed except as directed by qualified Avery Dennison personnel.
- Equipment and parts damaged by negligence or abuse are not covered.
- Avery Dennison US reserves the right in its sole discretion to incorporate any modifications or improvements in the machine system and machine specifications which it considers necessary but does not assume any obligation to make said changes in equipment previously sold.

### Equipment Purchased In US and Shipped In US

- Avery Dennison US covers warranty for equipment and parts installed and operated in the Americas (United States, Canada, Mexico, Central America, Caribbean Region, and South America excluding Brazil).
- Outside the US, the local Avery Dennison office is responsible for equipment and parts warranty. Customers must ensure coverage during machine purchase.

- Equipment purchased and exported to regions outside local Avery Dennison office coverage are not covered by warranty. The purchasing agent must acquire a service contract from the Avery Dennison office where the equipment or parts are operated to ensure machine coverage. For example, if an agent purchases a printer in the US, exports to Brazil, and then needs warranty coverage, Avery Dennison Brazil has no obligation to provide warranty coverage. The agent must purchase services from Avery Dennison Brazil.

THE WARRANTIES PROVIDED HEREIN ARE EXCLUSIVE AND ARE IN LIEU OF ANY IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OTHER WARRANTY OF QUALITY OR PERFORMANCE, WHETHER EXPRESS OR IMPLIED. EXCEPT THE WARRANTY OF TITLE, IN NO EVENT SHALL AVERY DENNISON BE LIABLE FOR ANY INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES, EVEN IF AVERY DENNISON HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

## **Service**

When ordering machines and supplies in the U.S.A., reference all correspondence to the address below.

AVERY DENNISON Corporation

One Wilcox Street

Sayre, PA 18840

Call: 1-800-967-2927 or (570) 888-6641

Fax: (570) 888-5230

For spare parts, requests for service or technical support, contact

AVERY DENNISON Corporation

One Wilcox Street

Sayre, PA 18840

Call: 1-800-967-2927 or (570) 888-6641

Fax: (570) 888-5230

**For parts and service in other countries, please contact your local AVERY DENNISON supplier.**

# 1. Operation

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## 1.1 Theory of Operation

The LOKPRINT™ was designed to receive printed labels from a 636B, Dye Sublimate the string of labels, and feed a Finishing Station for ultrasonic cutting. The LOKPRINT™ is equipped with two heat controllers, one to control the temperature of the heater platen and the other to monitor the previous controller for a guaranteed sublimation temperature. The printer that will feed the LOKPRINT™ will not operate until the heater platen comes to a temperature of 400 deg F (205 deg C). The LOKPRINT™ is threaded in the “up” position. When the printer starts, the fabric will drop down over the heater platen and begin sublimation. Likewise when the machine comes to a stop, or there is a loss of power, the machine will lift the fabric off the heater. This controlled operation leads to maximum label sublimation and very little waste.

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## 1.2 Description of Operation

### 1.2.1 Hands free operation

Once the LOKPRINT™ has been threaded, very little operator input is necessary. The controllers monitor the temperature and designate the start, and the feed printer designates the time of operation. Be sure to lower the Plexiglas cover before operation to reduce the risk of burns.

### 1.2.2 Temperature Controller

Two digital heat controllers are located inside the front cover. The left hand controller controls the heat for the heater platen, and the right hand controller monitors the process, thus creating a safety factor to see that all labels have been sublimated between 400 deg F (205 deg C) and 410 deg F (210 deg C).

The controllers are unique and can not be interchanged. They are custom programmed differently for each side.

Left Pyrometer Part number 221119

Right Pyrometer Part number 221120

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## 1.3 Recommended Spare Parts

The following spare parts are recommended for each facility that has a machine:

Spare Parts Kit **220010 115V/230V** contains the following parts.

Part #	Description	Qty
101102	Thermocouple (30")	2
101103	Heat Element 110V (200W)	4
224048	Spring, Fabric lift, Music wire	1
241149	Static, Anti-Static glove	2
351102	Printhead, 6X6, 300DPI	1
358018	1/5P 40T Timing belt	1
371131	Ink out sensor harness	1
375026	Roller, Alt	1
375030	Roller molded, Alt	1
514090	Assembly, Tape idler roller	1
921122	Fuse, 5.0A 250V TD 1/4 X 1 1/4	1
921167	Fuse, 10A, 1/4" X 1 1/4"	2
921168	Fuse, 10A, 5 X 20mm	2
990444	M3 X 14mm Cap screw	2
990688	Fuse, 2.5A 250V SB 5x20mm	2
990754	Fuse, 1.0A 250V F.A. 5 x 20mm	2
990765	Fuse, 4.0A 250V Time delay	2
991106	Spring, Extension	2
991113	Drive, Timing belt, 54T X 1/4"	1

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## 1.4 Set-up of the Machine

When initially installing the Machine, the following items must be accomplished:

- Locate the template under the feet on the right hand side of the printer, then lay the feet of the LOKPRINT™ in the remaining holes, this provides the proper spacing needed for operation.
- **CHECK THE POWER SOURCE VOLTAGE FIRST.** Check to make sure the machine has been configured for the correct line voltage (see section 1.4.1 Main Fuse Configuration). If the power available is subject to power surges, a surge suppresser must be placed in the incoming power line. The power consumption is ~1000 watts. Connect the power cord to a grounded 115 or 230 volt AC electric outlet of sufficient power.



## 1.4.1 Main Fuse Configuration

The main fuse(s) on the LOKPRINT™ are located inside the AC power entry receptacle. The entry has a fuse drawer that holds the fuse(s) and selects the appropriate line voltage. If the number in the window **DOES NOT** match the AC line intended to be supplied to the LOKPRINT™, **DO NOT** plug the power cord in. Reconfigure as follows:

- 1) Using a flat blade screwdriver, open the AC entry by lifting the tab just above the voltage indicator window.
- 2) Remove the red fuse drawer.
- 3) Remove all fuses and the fuse jumper if it is present.
- 4) Insert into the fuse drawer the correct number and style of fuses and fuse jumper for your application.

**Configuration Number One:** Line voltage between the range of  
100 - 132 VAC @ 50 - 60Hz

- 1) Install one 921122 - 5.0A 250V TD 1/4 X 1 1/4 Fuse
  - 2) Install one Fuse Jumper
- See Figure FUSE1

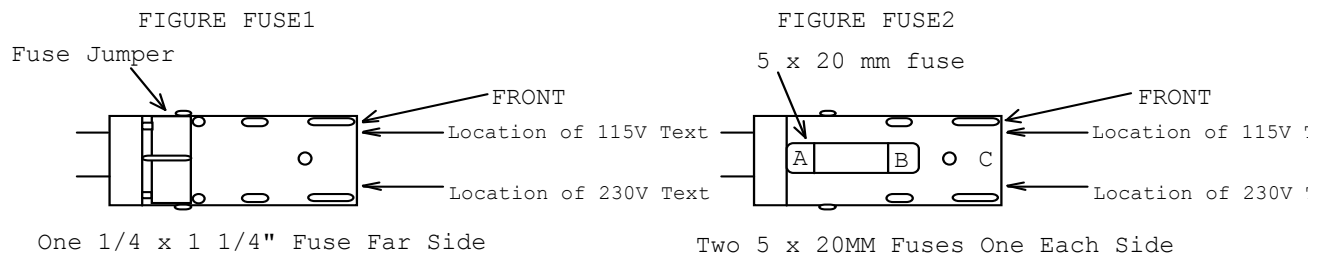
**Configuration Number Two:** Line voltage between the range of  
180 - 240VAC @ 50 - 60Hz

- 1) Install two 990688 - 2.5A 250V TD 5X20mm Fuses

**NOTE: The fuse jumper must be removed to install both 5 x 20mm fuses.**

**The fuses must be between points A and B as shown not B and C.**

See Figure FUSE2



- 5) Reinsert the fuse drawer into the AC entry with the desired voltage up.
- 6) Close the AC entry and verify the correct voltage is now visible.

### 1.4.2 Internal Fuse Configuration

FUSE	115VAC	230VAC
F1	4.0A 250V TD 990765	2.0A 250VAC TD 990759
F2	4.0A 250V TD 990765	2.0A 250VAC TD 990759
F3	1.0A 250V FA 990754	1.0A 250V FA 990754
F4	1.0A 250V FA 990754	1.0A 250V FA 990754

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## 1.5 Heater Caution and Care

### 1.5.1 Caution

The heater platen is pre-set to a temperature of 410 deg. F (210 deg C), extra care and caution should be taken when threading the machine while the heaters are on. Any maintenance or cleaning should be done after the machine has been turned off and allowed time for cool down.

### 1.5.2. Care

The heater platen should be kept clean and smooth for proper label sublimation. If the heater develops a build up, it should be cleaned using alcohol and a clean dry cloth. The heater surface is anodized aluminum and can be cleaned with cleaning pads similar to those used for cleaning Teflon® pans. If the buildup is excessive, a razor blade may be used to remove the residue. Use caution to prevent damage to the surface of the platen.

**NOTE:** Cleaning should only be done with the heaters off and cooled.

# 2. Troubleshooting

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## 2.1 Troubleshooting Mechanical

### 2.1.1 Tape Contact

If the tape fails to make proper contact with the heater platen, stop the printer. This will save on unsublimated labels. Check to see if the flag sensor is adjusted properly to signal when the rollers are in the lowest possible position.

### 2.1.2 Tape Release

The Tape Rollers should release and swing to the “up” position when there is a halt in the printing sequence or if the power has been cut from either machine. If the Tape Rollers fail to bring the tape to the highest possible position, check to see if the Lift Spring is in position. The spring may wear with excessive use. Remove the tape from the rollers and test by holding down the Tape rollers and letting them rise up into position.

### 2.1.3 Feed Roller

The Feed Rollers have two springs that supply even tension for tracking. If the tracking of the tape fails, check to see if one of the springs may have come unattached, and reattach. The feed rollers are also equipped with a hand knob used to thread the machine. This knob should turn freely with very little resistance. If resistance occurs, check to see if the bearings need to be greased. Also check to see that the timing belt tension is not excessive.

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## 2.2 Troubleshooting Electrical

### 2.2.1 Defective Heater Elements

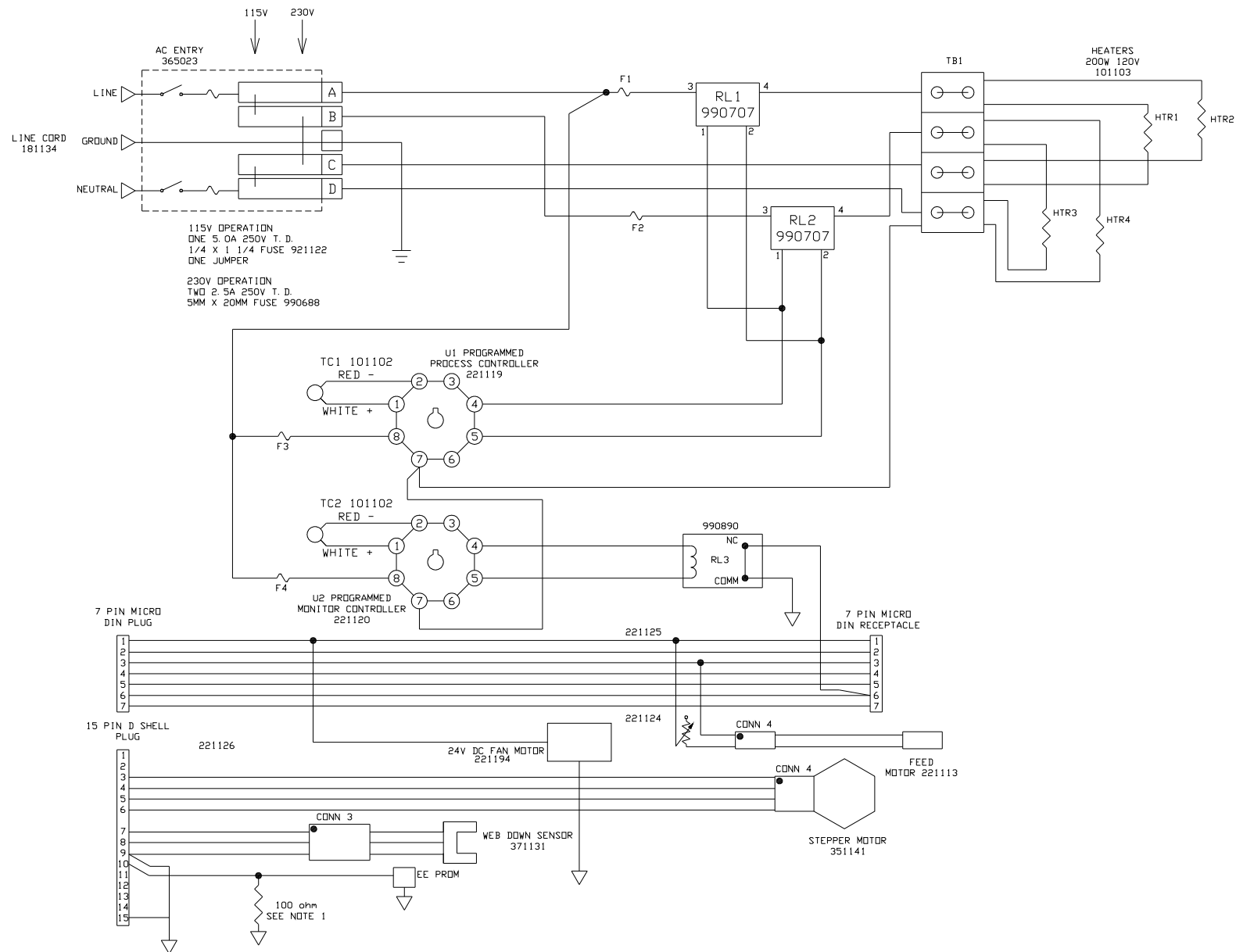
**If the heater elements are suspect**, due to improper heating, the probable cause is that one of the heaters is burned out. The heater connections can be found on the terminal block in the back of the cabinet. A multimeter can be used to test the heaters. Each heater should read 300 ohms or lower (depending on model), a discontinuity means that the heater is burned out. (Refer to the schematic for correct connections)

### 2.2.2 Defective Thermocouple

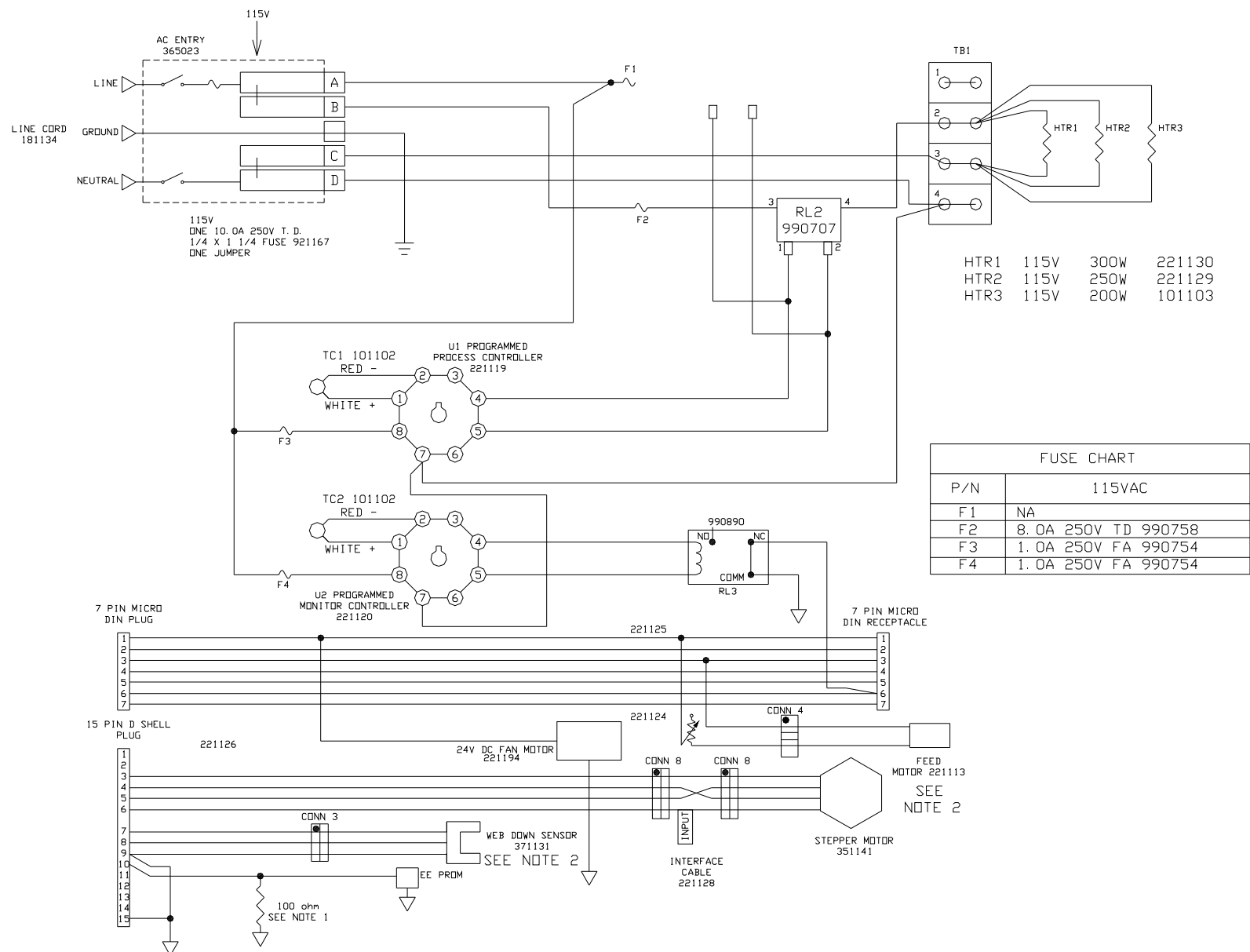
The thermocouple wire is defective when the heaters are overheating and the digital read-out on the FUJI Temperature Controller is reading room temperature.

# Electrical Schematics

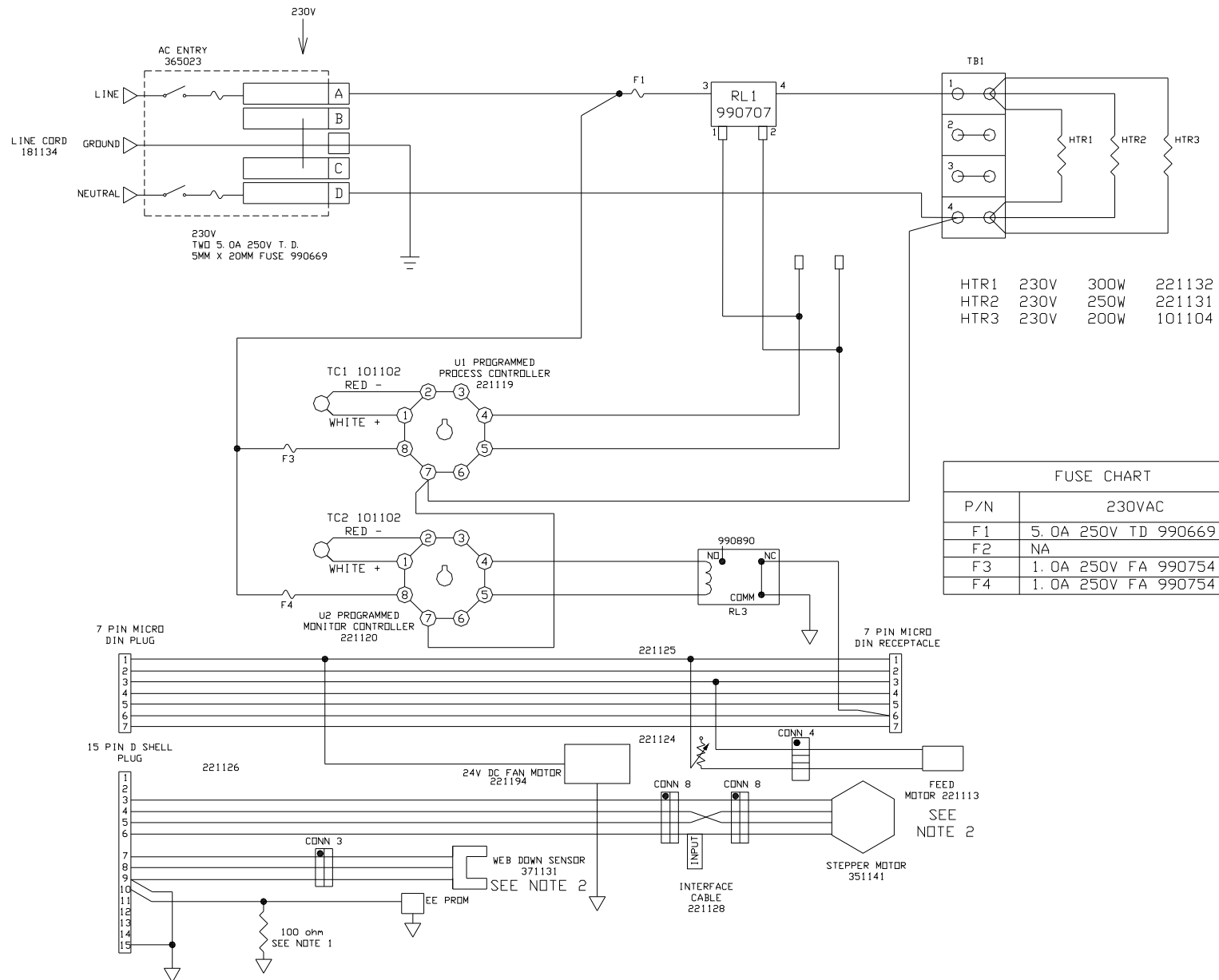
# 115 / 230 Volt Schematic



# Optional Heater - 115 Volt Schematic



# Optional Heater - 230 Volt Schematic

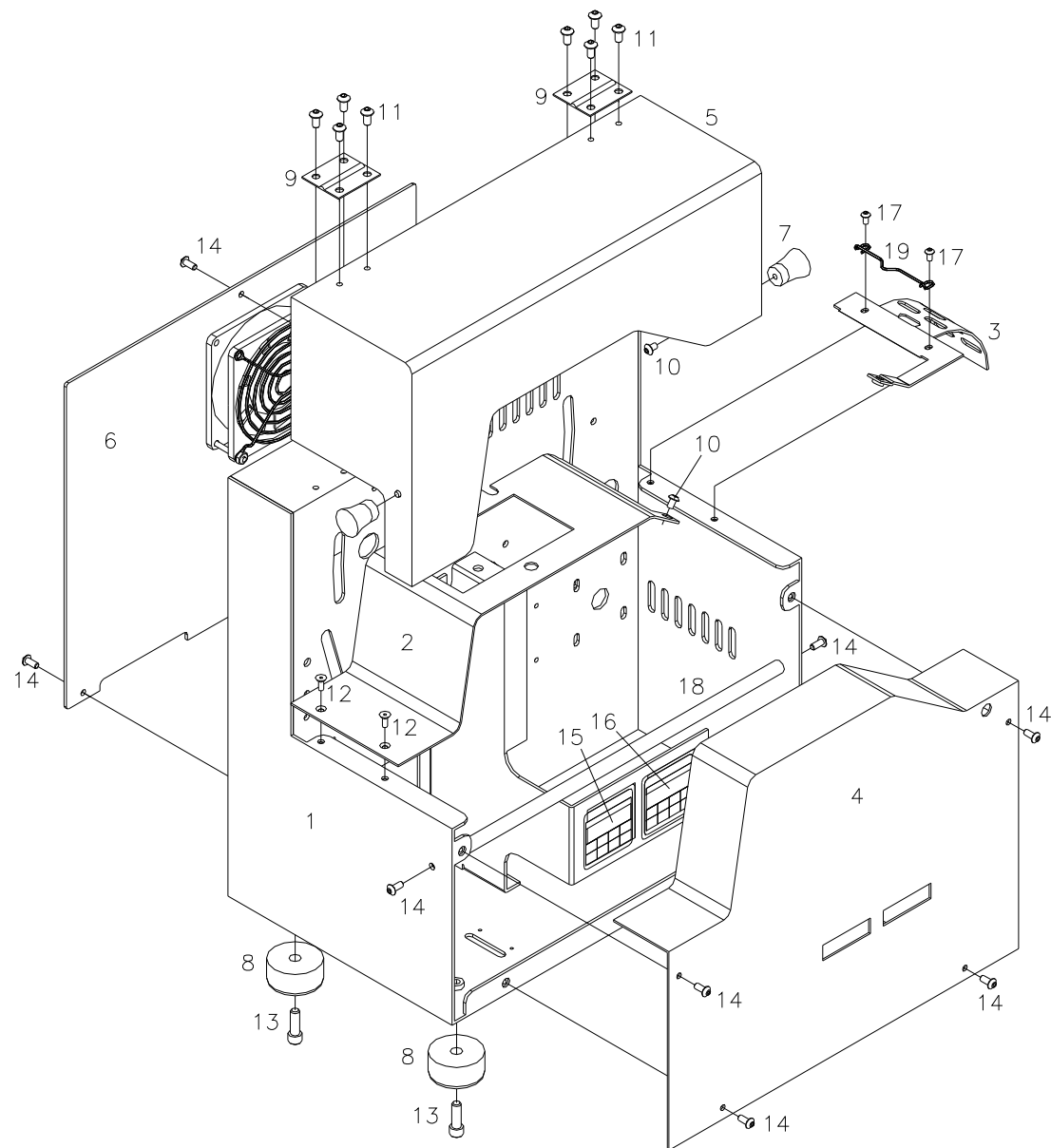






# Mechanical Assembly Drawings

## Cover Assembly

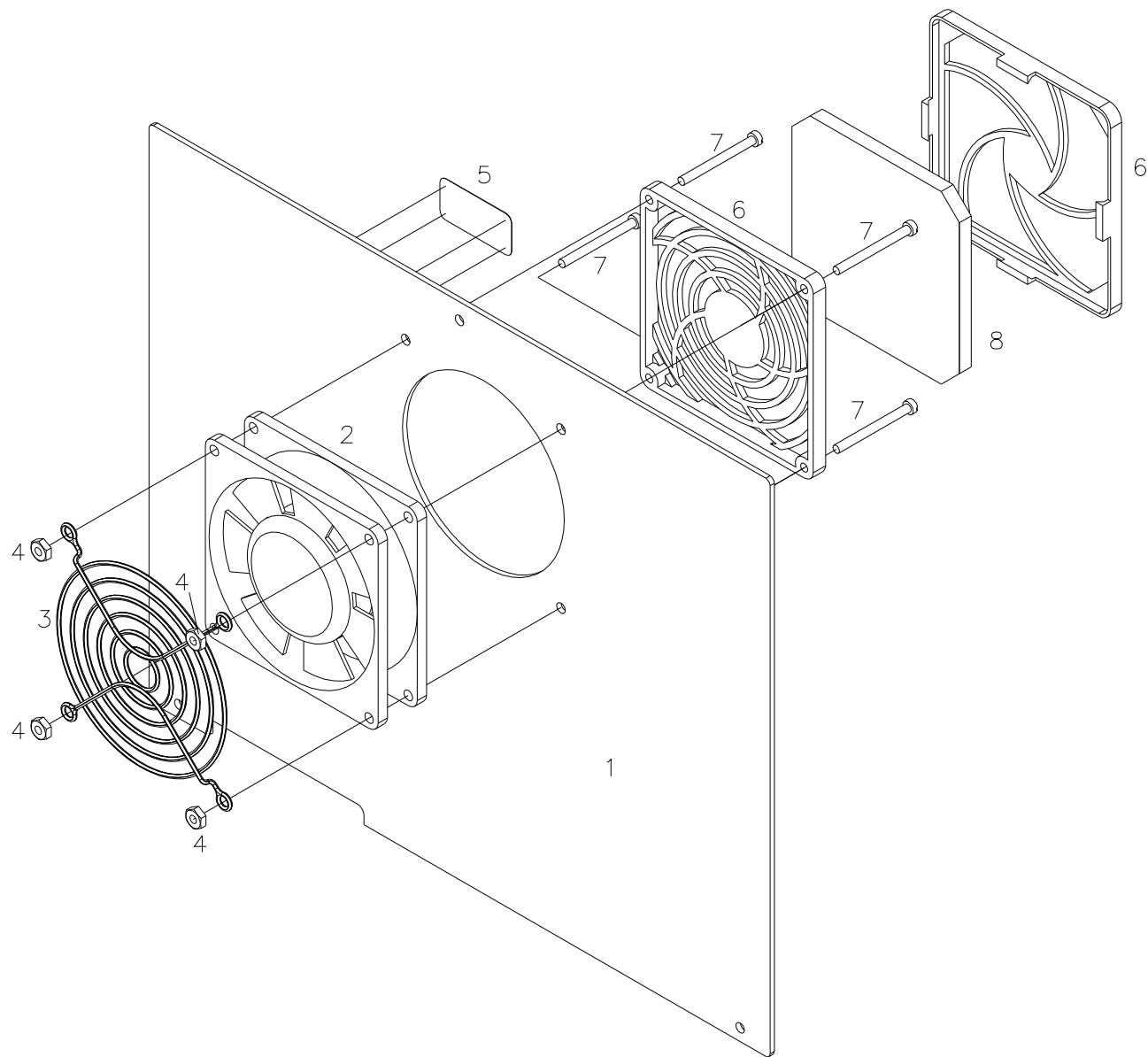


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## Cover Parts List

Item	Part #	Description	Qty
1	221021	Frame Brace Assembly	1
2	221002	Heat Deflector	1
3	221014	Feed Tray	1
4	221003	Front Cover	1
5	221017	Front Access Cover	1
6	221090	Assembly, Back Cover With Fan	1
7	421206	Knob	2
8	341210	Rubber Foot	5
9	224051	Hinge, Access Cover	2
10	990066	8-32 x 1/4" Button Head Screw	3
11	990090	10-32 x 3/8" Button Head Screw	8
12	990029	6-32 x 1/4" Flat Head Screw	2
13	990120	1/4-20 x 1/2" Cap Screw	4
14	990065	8-32 x 3/8" Button Head Screw	9
15	221119P	Pyrometer	1
16	221120P	Pyrometer	1
17	990019	6-32 x 1/4" Button Head Screw	2
18	221013	Tie Bar	1
19	224079	Wire, Stripper	1

## Air Filter Assembly

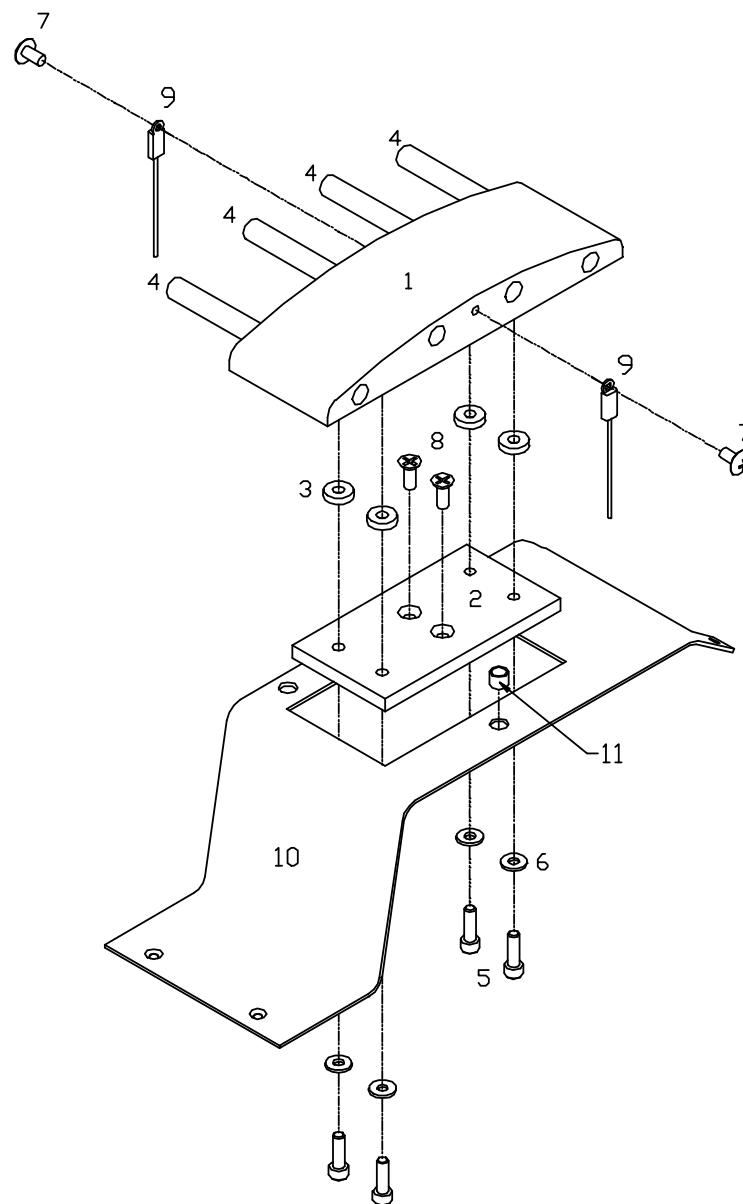


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## Air Filter Parts List

Item	Part #	Description	Qty
1	221004	Back Cover	1
2	221194	Fan Motor Harnessed	1
3	281105	Guard, Finger	1
4	989987	6-32 E-S Nut	4
5	221200	Filter Label	1
6	991133	Assembly, Filter Guard	1
7	990033	6-32 x 1 ½ Fill. Head Screw	4
8	221024	Filter, Lokprint	1

## Heater Assembly

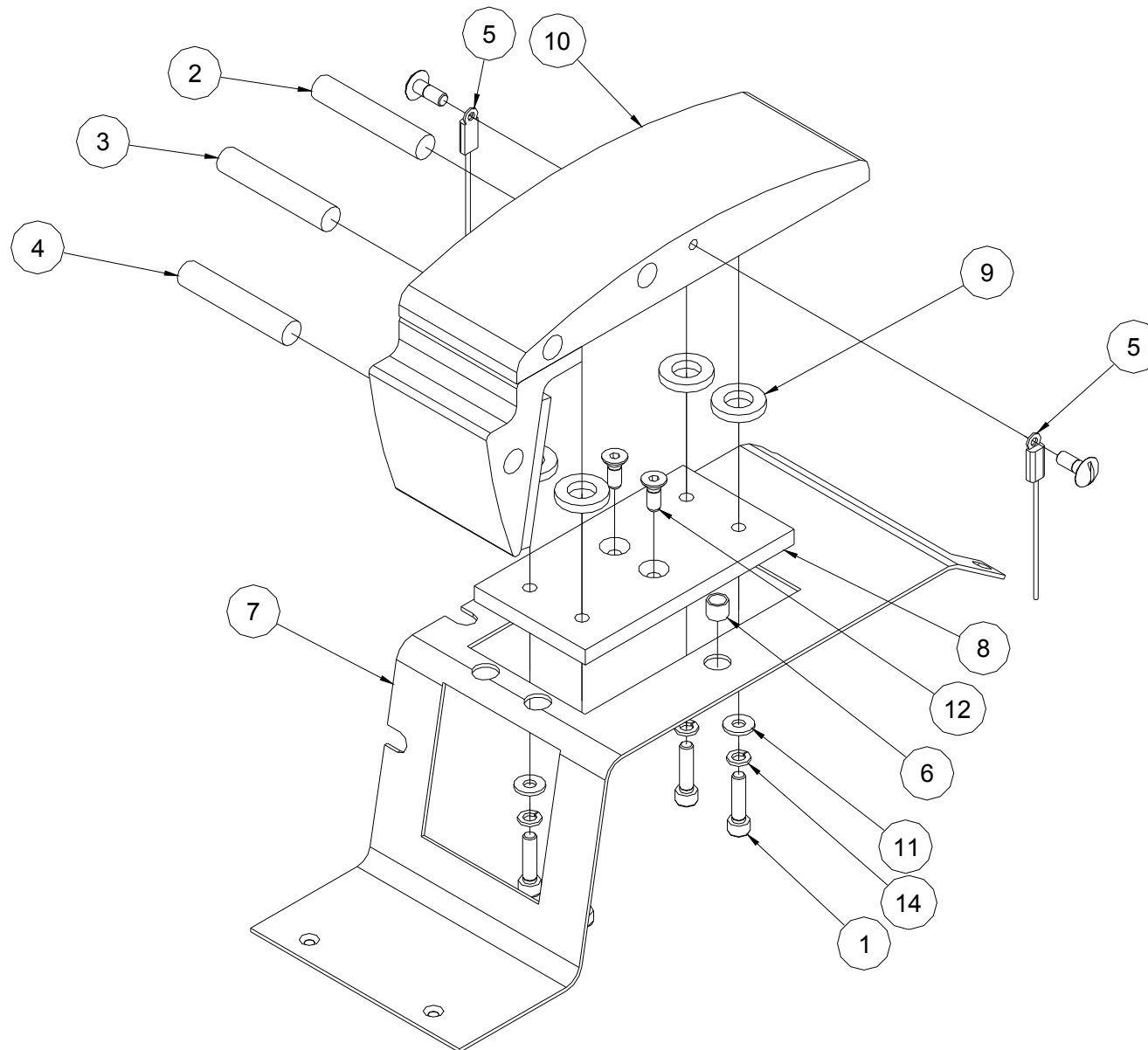


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## Heater Parts List

Item	Part #	Description	Qty
1	221008	Heater Block	1
2	221007	Heater Base	1
3	365030	Spacer	4
4	101103	Heat Element	4
5	990083	10-32 x ¾" Cap Screw	4
6	990067	#8 Washer	4
7	990108	10-32 x ½" Truss Head Screw	2
8	990196	10-32 x ½" Flat Head Screw	2
9	101102	Thermocouple	2
10	221002	Heat Deflector	1
11	191116	Insulated Bushing	4

## Optional Heater Assembly





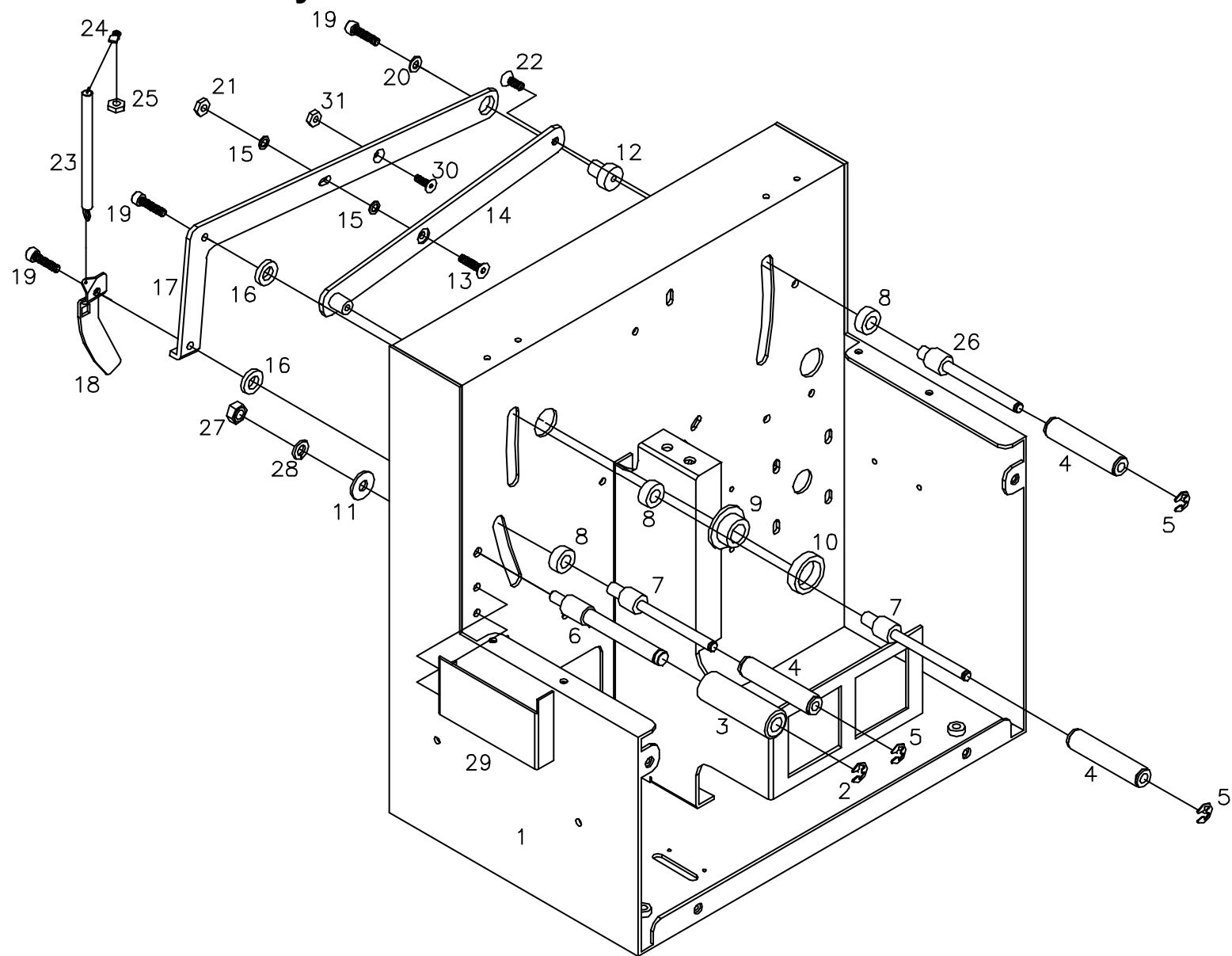
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## Optional Heater Parts List

ITEM	PART NO.	Description	QTY
1	991040	10-32 x 3/4 Cap screw (ss)	4
2*	101103	Heat element 120v 200 Watt	1
3**	221129	Heat element 120v 250 Watt	1
4***	221130	Heat element 120v 300 Watt	1
5	101102	Thermocouple	2
6	191116	Insulated bushing	1
7	221016	Heat deflector	1
8	221007	Heater base	1
9	365030	Spacer	4
10	221091	Heater block assy	1
11	990067	Washer, #8 SAE	4
12	990196	10-32 x 1/2 Flat head screw	2
13	990108	10-32 x 1/2 Truss head screw	2
14	990728	Washer, #10 Lock	4

\*Item 2 – Use Part No. 101104 for 240V Machine  
\*\*Item 3 – Use Part No. 221131 for 240V Machine  
\*\*\*Item 4 – Use Part No. 221132 for 240V Machine

## Tape Feed Assembly



## Tape Feed Parts Lists

Item	Part #	Description	Qty
1	221021	Frame, Brace Ass'y	1
2	990325	3/16" "E" Ring	1
3	143018	Pick-up Roller	1
4	224039	Roller Ass'y	3
5	990326	1/4" "E" Ring	3
6	224016	Shaft, Pick-up Roller	1
7	224014	Shaft, Fabric Lift Long	2
8	224012	Spacer, Front	3
9	224055	Pivot Bushing	1
10	224057	Collar Bushing Lock	1
11	990167	1/4" SAE Washer	1
12	224008	Stand-off Pivot	1
13	224062	Pin, Lever Pivot	1
14	224059	Driven Swing Arm Ass'y	1
15	991013	Nylon Washer	2
16	224009	Spacer Swing Arm Rear	2

Item	Part #	Description	Qty
17	224074	Bracket Swing Arm	1
18	224071	Bracket Sensor Flag	1
19	990081	10-32 x 1/2" Cap Screw	3
20	990144	#10 Washer	1
21	990104	10-32 ES Nut	1
22	990196	10-32 x 1/2" Flat Head Screw	1
23	224048	Fabric Lift Spring	1
24	990736	Female Terminal	1
25	990103	10-32 Hex Nut	1
26	224015	Shaft Fabric Lift Short	1
27	990146	1/4-20 Hex Nut	1
28	990145	1/4" Lock Washer	1
29	224027	Web Guard Plate	1
30	990056	8-32 x 1/2" Flat Head Screw	1
31	990069	8-32 Hex Nut	1

## 28 • Mechanical Assembly Drawings

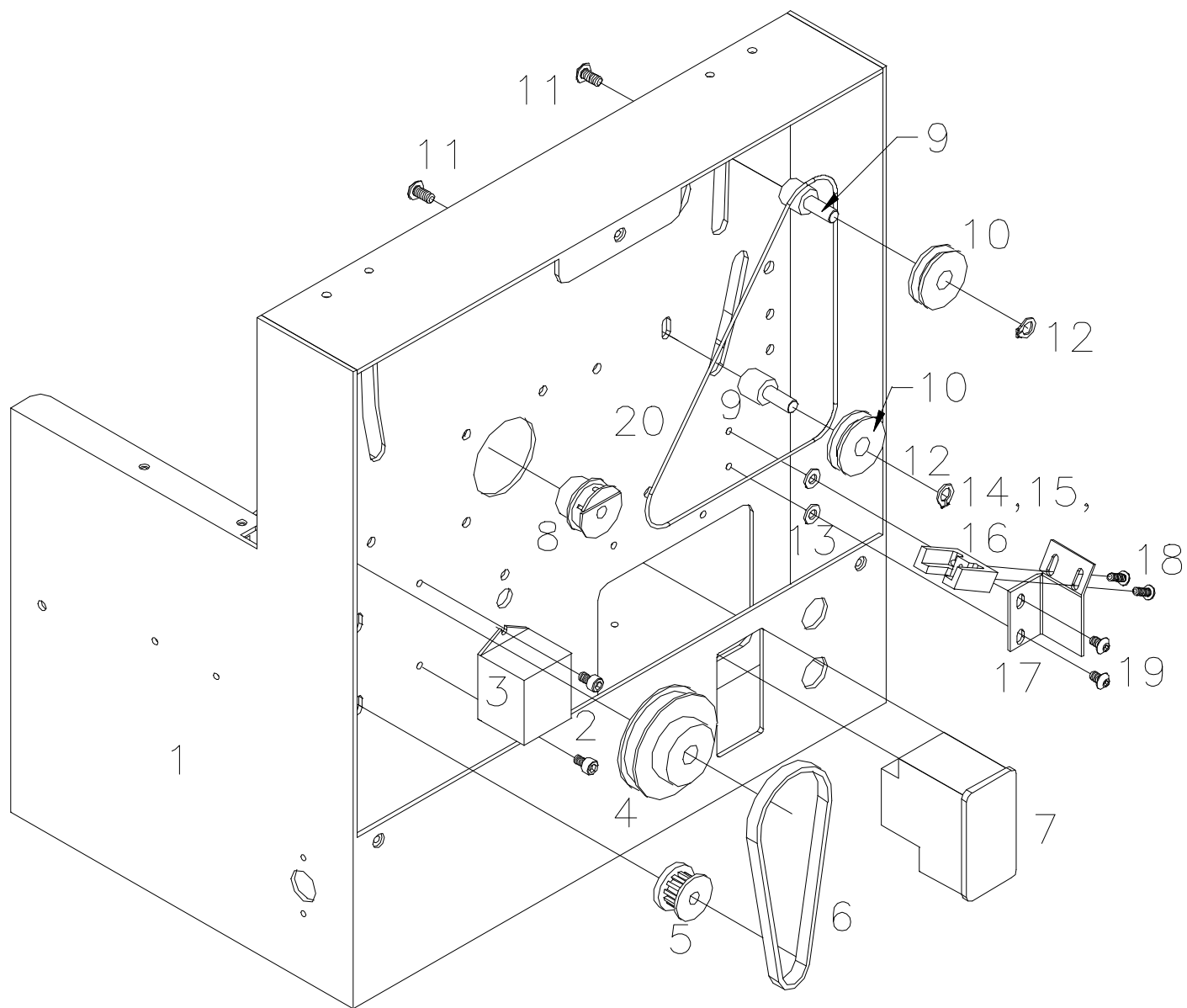


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## Feed Parts List

Item	Part #	Description	Qty
1	105023	Impression Adj. Knob	1
2	224078	Shaft, Turn Knob	1
3	990456	8-32 x 1/2" F. H. Screw	4
4	224032	Front Mount Plate Ass'y	1
5	224080	Front Pressure Arm Ass'y	1
6	990344	1/4 x 1/2" Shoulder Screw	2
7	991106	Spring Feed Pressure	2
8	224030	Feed Base Ass'y	1
9	224035	Feed Roller Ass'y	1
10	224036	Driven Roller Ass'y	1
11	990058	8-32 x 1/4" Set Screw	1
12	224031	Rear Mount Plate	1
13	221023	Bracket, Feed Tray Plate	1
14	990019	6-32 x 1/4" Button Head Screw	1
15	990057	8-32 x 1/8" Sk Hd Set Screw	1
16	224081	Rear Pressure Arm Ass'y	1
	224090	Feed Ass'y (complete)	

## Drive Assembly

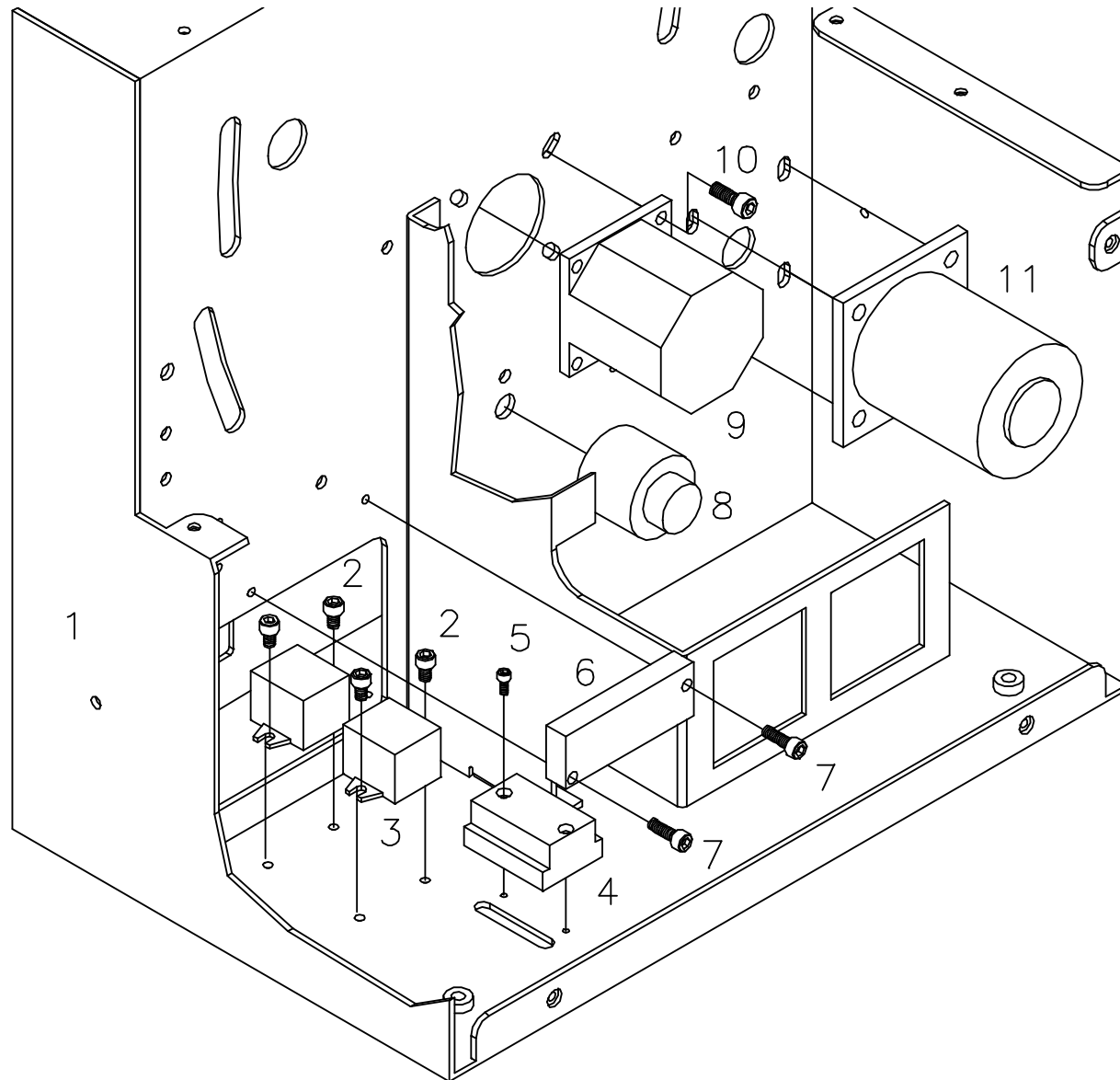


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## Drive Parts List

Item	Part #	Description	Qty
1	221021	Frame Brace Ass'y	1
2	990050	8-32 x 1/4" Cap Screw	2
3	990890	Mechanical Relay	1
4	112004	Pulley 28T	1
5	991112	Pulley 14T	1
6	991113	Timing Belt 54T	1
7	365023	Power Entry Module	1
8	224069	Drive, Capstan	1
9	224068	Shaft, Idler Pulley	2
10	224073	Drive, Idler Pulley	2
11	990090	10-32 x 3/8" Button Head Screw	2
12	990262	1/4" Snap Ring	2
13	990469	.031" Nylon Washer	2
14	358024	Jam Sensor Bracket	1
15	371131	Jam Sensor Harnessed	1
16	989997	2-56 x 3/8" Cap Screw	1
17	224072	Bracket, Sensor Stop	1
18	990020	6-32 x 3/8" Button Head Screw	2
19	990066	8-32 x 1/4" Button Head Screw	2
20	221089K	Kit, Cable Drive, LKP	1

## Electrical Components



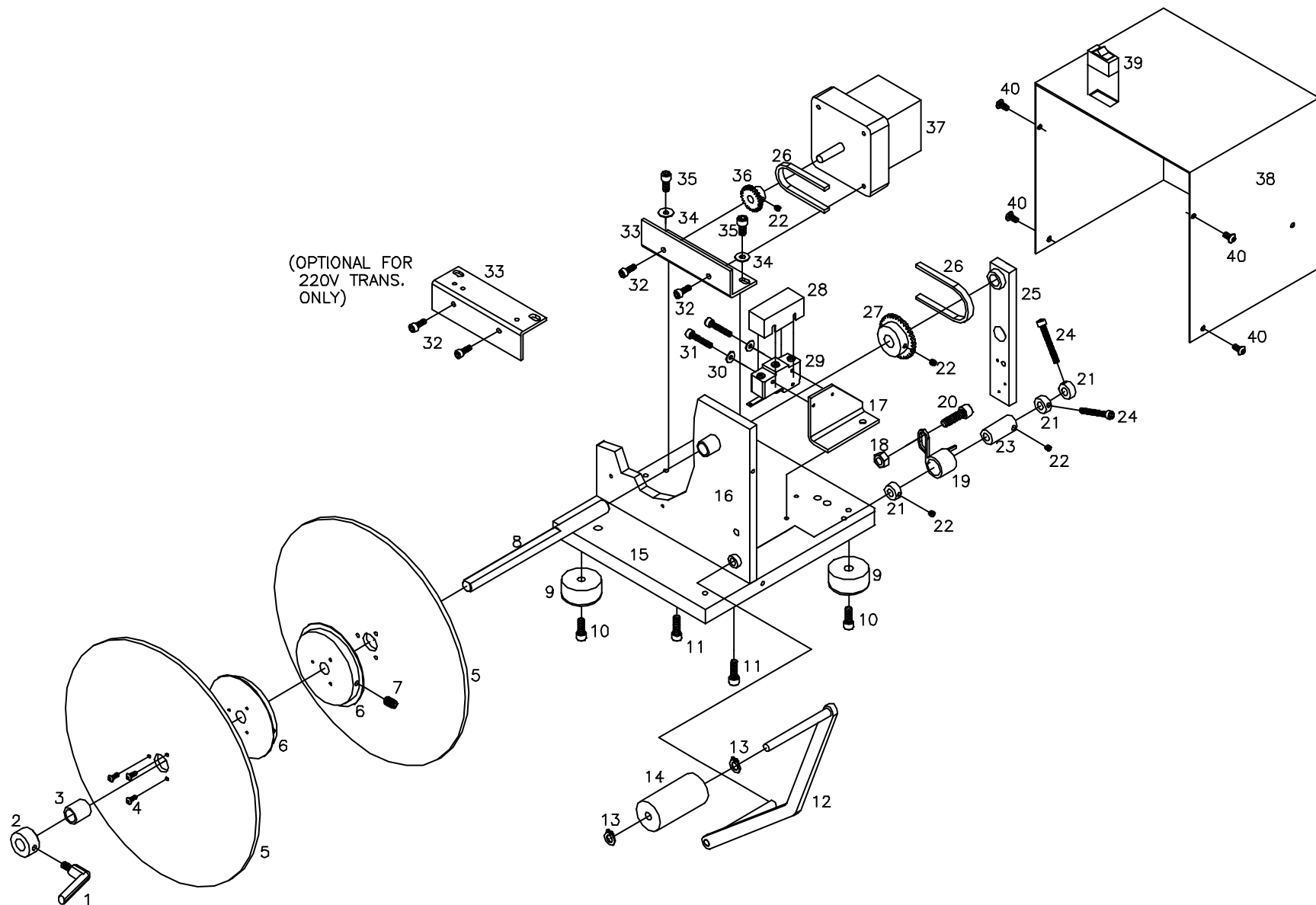


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## Electrical Components Parts List

Item	Part #	Description	Qty
1	221021	Frame Base Ass'y	1
2	990050	8-32 x 1/4" Cap Screw	4
3	990707	Solid State Relay	2
4	990667	Fuse Block	1
5	990006	4-40 x 1/4" Cap Screw	2
6	990768	Terminal Block and Cover	1
7	990044	8-32 x 3/4" Button Head Screw	2
8	221124	Rheostat, 25 OHM	1
9	351141	Stepper Motor	1
10	990081	10-32 x 1/2" Cap Screw	3
11	221113	Feed Motor	1

# Rewind Assembly Components



## Rewind Parts List

Item	Part #	Description	Qty
1	112009	Rewind Lock Knob	1
2	111006	Pressure Collar	1
3	111017	Pressure Collar Spring	1
4	990020	6-32 x 3/8" Button Head Screw	6
5	111031	Disc, 10" Rewind	2
6	111033	Hub, 3" Core Insert	2
7	990176	5/16-18 x 1/2" Set Screw	1
8	111005	Rewind Shaft	1
9	341210	Feet, 1 1/2" Dia.	4
10	990121	1/4-20 x 5/8" Cap Screw	4
11	990122	1/4-20 x 3/4" Cap Screw	3
12	111003	Dancer Arm	1
13	990263	5/16" Snap Ring	2
14	112038	Roller	1
15	111018	Rewind Base Plate	1
16	111001	Face Plate	1
17	111008	Micro Bracket	1
18	990183	5/16-18 Hex Nut	1
19	111015	Dancer Spring	1
20	990171	5/16-18 x 1" Cap Screw	1
21	990372	5/16" Collar	3
22	990094	10-32 x 3/16" Set Screw	4

Item	Part #	Description	Qty
23	111002	Torsion Collar	1
24	990085	10-23 x 1 1/4" Cap Screw	2
25	506005	Foil Drive Post	1
26	111009	Roller Chain	1
27	204049	25-20 x 1/2" Sprocket	1
28	921110	Micro Enclosure Cover	1
29	921131	Rewind Motor Micro Switch	1
30	990037	#6 Washer	2
31	990084	10-32 x 1" Cap Screw	2
32	990081	10-32 x 1/2" Cap Screw	2
33	111011	Rewind Motor Mount	1
34	990144	#10 Flat Washer	2
35	990120	1/4-20 x 1/2" Cap Screw	2
36	111016	25-15 x 5/16" Sprocket	1
37	111007	Rewind Motor	1
38	111013	Rewind Cover	1
39	990760 990761	110V Heat Switch 250V Heat Switch	1
40	990090	10-32 x 3/8" Button Head Screws	5
	921136	Transformer (Not Shown)	1
	110021	Lokprint Rewind 110V	
	110022	Lokprint Rewind 220V	