BAUMANN

Packaging Systems Pty. Ltd.

POSI 200

Top and Bottom Labelling System

IP-66

Owner's Manual

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POSI 200

In-line Labeling System

Congratulations on your POSI 200 In-line Labeling System purchase. This in-line labeler is designed to give you years of trouble-free operation.

Please read this owner's manual to gain the maximum benefits of your labeler and its different components.

A note about cleaning: Given all the various ways equipment is used in different environments, we recommend the owner consult sanitation experts on how to properly clean each piece of machinery in their plant and to do bacterial testing to insure that the equipment is cleaned properly.

General

This owner's manual contains information pertinent to your POSI 200. Basic instructions and maintenance information is provided. Please read carefully. Failure to do so could result in bodily injury and/or damage to the equipment.

Receiving Problems: As in all cases, before signing the bill of lading, be sure all items have been received as listed and there is no damage in shipment. If needed, a claim must be made immediately to the local truck line office and noted on the bill of lading.

Please fill in the information from the bill of lading and the product identification tag.

Model No. _____

Serial No. _____

Ship Date: _____

Owner: _____

Location: _____

Specifications

Construction: Stainless steel, Delrin, and 6061 aluminum construction

Weight (approximate):
Labeling head only: 55-lbs.

Electrical:
208-240 VAC, 50/60 Hertz, single phase, 1.0 amp, per head

NOTE: Power must be maintained at all times to the labeler control, even when the labeler is turned off. This is to maintain power to an internal, thermostat controlled heater to reduce condensation in the electronics. It is recommended that a separate power drop be made to the labeler. It is internally fused to 4A.

Maximum Roll Weights:
15-lbs. – Standard-Torque Motors
20-lbs. – High-Torque Motors

SAFETY

Personal Safety

The procedures and guidelines herein must be followed precisely to avoid problems that can result in property damage, personal injury, or death. If you have any questions related to this information, please contact Ultravac Services Inc. at (800) 777-5624.

⚠ DANGER Hazardous voltage.
Disconnect and lockout power before servicing machine or cleaning. Do not open control panel unless power has been disconnected and locked out at risk of electric shock hazard.

⚠ WARNING

Read and understand owner's manual before using this machine. Failure to follow operating instructions could result in personal injury or damage to equipment.

⚠ WARNING Moving parts. Pinch point hazard.
Do not put hands into machine while running. Ensure that the conveyor is not operating prior to freeing product or handling conveyor. Conveyor creates pinch point and draw in hazards.

⚠ WARNING

A heater is located in the labeler controller to control moisture. Power from the electrical service to the controller must be ON at all times. The POWER and CONVEYOR switches on the controller control power to the labeler and conveyor only.

⚠ WARNING

Cover the controller, printer, and printer keypad during cleaning activities to prevent moisture from entering the equipment's electronics.

⚠ CAUTION Hot surfaces. Do not touch.
To avoid possible skin burns disconnect and lockout power. Allow surfaces to cool before servicing or cleaning.

⚠ CAUTION Cleaning agents.
Do not get the cleaning agents in eyes, on skin, or on clothing. Always wear rubber gloves, goggles, and protective clothing when contact is likely. Consult product manufacturer for specific details.

Signal words used in classification of potential hazards are defined as follows:

DANGER**:** Indicates an imminently hazardous situation, which, if not avoided, may result in death or serious injury.

WARNING**:** Indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury.

CAUTION**:** Indicates a potentially hazardous situation, which, if not avoided, may result in minor or moderate injury. Caution also indicates actions that may cause property damage.

General Safety Guidelines

Obvious safety guidelines should be observed.

- Be sure to unplug the power cable to the label dispensing head before any maintenance work is performed. Turning off the power switch will not remove all voltage internally.

- Never go near the machine with loose hair, clothes, bracelets, chains, rings, ties, etc. to avoid the chance that they may become tangled in the moving parts of the machine.

- As a consequence, the operator shall wear suitable clothes for the working environment and the situation he/she is in.

- If service is necessary, contact Ultravac Services or a qualified service agency.

Installation Guidelines

- It is the owner's responsibility to ensure that the PosiTack™ II In-line Labeling System installation conforms to all local, state, and national codes and regulations.

- For safe operation, the label dispensing head must be kept clean. A thorough weekly cleaning schedule is recommended with a basic daily cleanup procedure. See Section 4, MAINTENANCE, for additional details on cleaning your label dispensing head.

- Never make any additions or modifications to the PosiTack™ II In-line Labeling System without contacting Ultravac Services. This will void the warranty and could adversely affect the safety or operation of your label dispensing head.

- DO NOT attempt to operate your PosiTack™ II In-line Labeling System without reading and understanding this entire owner's manual. Any questions should be directed to Ultravac Services.

Installation Checklist

This checklist may also be found in the Adjustments Guide, (p/n 810539).

- Move the labeler to the desired location.
- Ensure power is available at the desired location. Power requirements are 220 Volt, Single Phase, 5 Amp service.
- Level the labeler front to back, then side to side. Use the leveling feet to ensure the labeler will no long roll on its casters.
- Ensure the POWER and CONVEYOR switches are in the OFF position.
- Connect the power cable first to the labeler, then to the electrical service.

⚠ WARNING

A heater is located in the labeler controller to control moisture. Power from the electrical service to the controller must be ON at all times. The POWER and CONVEYOR switches on the controller control power to the labeler and conveyor only.

⚠ WARNING

Cover the controller, printer, and printer keypad during cleaning activities to prevent moisture from entering the equipment's electronics.

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STARTUP

Installation

The installation of the PosiTack™ II In-line Labeling System should be performed by a Ultravac Services technician or qualified OEM technician. If you are installing the PosiTack™ II In-line Labeling System, contact Ultravac Services at (800) 777-5624 for telephone assistance.

NOTE: 220 VAC POWER MUST BE MAINTAINED CONTINUOUSLY TO THE LABELER IN HARSH ENVIRONMENTS.

Power must be maintained at all times to the label dispensing head control, even when the label dispensing head is turned off. This is to maintain power to an internal, thermostat controlled heater to reduce condensation in the electronics. It is recommended that a separate power drop be made to the label dispensing head. It is internally fused to 4A.

Model Identification

BAUMANN PACKAGING SYSTEMS PTY.LTD.

www.baumann-industries.com

Model No. NL-D11-C11-143-610 Serial No. 1023

(1) Orientation	
HL	Head Left-Hand (Left-to-Right Motion)
HR	Head Right-Hand (Right-to-Left Motion)
NL	Inline Left-Hand (Left-to-Right Motion)
NR	Inline Right-Hand (Right-to-Left Motion)

(2) Configuration	
A	1 Top Head
B	1 Bottom Head
C	2 Top Heads
D	1 Top/1 Bottom Heads
E	2 Top/1 Bottom Heads
F	3 Top (400)
G	1 Top/1 Side (400)
H	1 Side (400)
J	2 Side (400)
K	1 Top / 2 Side (400)

(3) Label Width	
1	150
2	200
3	300
4	200T/150B
5	150T/200B

(4) Unwind	
1	Standard
2	Jumbo

(5) Applicator	
A	None
B	Brush
C	Roller
D	--

(6) Motor	
0	Std-Torque
1	High-Torque
2	Servo

(7) Label Scanner	
1	Std Style
2	Clear Label
3	Mech. Clear
4	Clear T/Std B
5	Std T/Clear B
6	Mech. T/Std B
7	Std T/Mech. B

(8) Conveyor	
0	None
1	Posi 200
2	Posi 300
3	Posi 400
4	Posi 100 (Alum)
5	Posi 200 w/Ext
6	Posi 300 w/Ext

(9) Guide Style	
1	Curved
2	1" Flat 'T'
3	2" Flat 'T'
4	Flat Stainless
5	Delrin Brkt Nolu
6	--

(10) Product Scanner	
0	None
1	Optex (Standard)
2	Optex (Post Mount)
3	Through Beam (Inline Standard)
4	Capacitive
5	Vertical Reflective
6	Vertical UltraSonic

(11) Controls	
1	110V
3	220 V

(12) Printers	
10	None
11	Markem SmartDate 5 Top
12	Markem SmartDate 3i Top
13	Open Date Hot Stamp Top
14	CCI Recip. Ink Top
15	Markem SmartDate 5 Bottom
16	Markem SmartDate 3i Bottom
17	Open Date Hot Stamp Bottom
18	CCI Recip Ink Bottom
19	Markem SmartDate 5 Top/Bottom
20	Markem SmartDate 3i Top/Bottom
21	Open Date Hot Stamp Top/Bottom
22	CCI Recip. Ink Top/ Bottom
23	Bracket Top Only
24	Bracket Bottom Only
25	Bracket Top / Bottom

(13) Special	
S	Option

Checklists

This checklist may also be found in the Adjustments Guide, (p/n 810539).

Startup

- Ensure the POWER and CONVEYOR switches are in the OFF position.
- POWER check.
- Turn the POWER switch to the ON position. A RED screen appears and the touch screen version number is displayed.
- After the labeler controller power up is complete, a GREEN screen will appear.

NOTE: The labeler uses a package sensor. It is located over the gap in the conveyor, or directly over the conveyor. Each time the product sensor is interrupted and the conveyor switch is OFF, the controller will generate a FAULT condition. The FAULT light will turn ON and the touch screen will turn RED stating "NO ENCODER SIGNAL." No encoder signal means the conveyor belt is not moving. The EXIT button is in the lower right corner of the touch screen. When the EXIT button is pressed, the FAULT is reset. The FAULT light turns OFF and the touch screen returns to GREEN.

Printer

NOTE: When a printer is installed the labeler will wait until the printer is operational before the touch screen will change to GREEN. Different printers have different power up times. The Markem printer is currently the printer that takes the longest to power up. This printer takes approximately three to five minutes for power up. When the printer is finished, the touch screen will turn GREEN.

Checklists

Label Sensors

Check the following sensors:

- Top label sensor LEDs (yellow and green on without labels)
- Bottom label sensor LEDs (two yellow on without labels)
- Top focused laser package sensor LED (green on)
- Bottom focused laser package sensor LED (green on)

1. Place your hand under the sensor and a RED dot appears on your hand.
2. A yellow LED on the sensor is ON when your hand is under the sensor and OFF when removed.

Conveyor

- Check the encoder by moving the conveyor belt by hand. In one direction a plus "+" will appear on the touch screen. In the opposite direction a minus "-" will appear. When the conveyor is not moving there will be no indicators (plus or minus) appearing on the touch screen.

Pre-Run

- Make sure label rollers and peel bar are free of labels or debris, clean as necessary.
- Make sure tension roller is locked down.
- Make sure label brake arms are down.
- Make sure label reel is tightened against label roll.
- Make sure dancer operation stops label roll from unwinding.
- Verify threading, particularly in peel bar area and label sensor area.

OPERATION

Operation Instructions

1. Upon power up, the PosiTack™ II In-line will go to the MAIN menu (see page 3.12). While in this screen, the label dispensing head will be in RUN or STOP mode depending on how the PosiTack™ was powered down.
2. From power up, the PosiTack™ II In-line will operate with the parameters that were last active at power down. Individual parameters may then be changed or a new set of parameters can be loaded from memory (see CHANGING PROGRAMS screen, page 3.13).
3. This owner's manual section is organized by screens. Each section details actions that can be performed from the operating screens.
4. To set up the PosiTack™ for a new label and application, the following steps must be performed:
   - Thread the label roll into the label dispensing head, see pages 3.3-3.4. Ensure tension roller is engaged.
   - Perform a label sensor sensitivity adjustment, see page 3.5-3.6.
   - Perform a label measuring run, see page 3.14.
   - Set each of the parameters (see page 3.14) and return to the RUNNING screen.

Adjustment Instructions

1. Adjust the label head and peel bar angle using the illustrations on the next pages to position the peel bar.

2. The label peel distance is adjusted in the control (see page 3.14). In general, the Peel distance should be set to peel the label 2 to 4mm beyond the peel bar edge.

3. In general, to achieve the best label placement accuracy, the peel edge should be positioned as close to the product as possible, without touching it.

4. Also, the product sensors, which trigger the label dispensing head, should be positioned as close to the desired label position as possible, and OFST1 and OFST2 offset parameters kept to a minimum. These parameters should be used for fine adjustments of registration only, as they add to the minimum spacing required between packages. This decreases the amount of error caused by the product moving slightly between trigger and label placement starting.

Top Head Adjustment

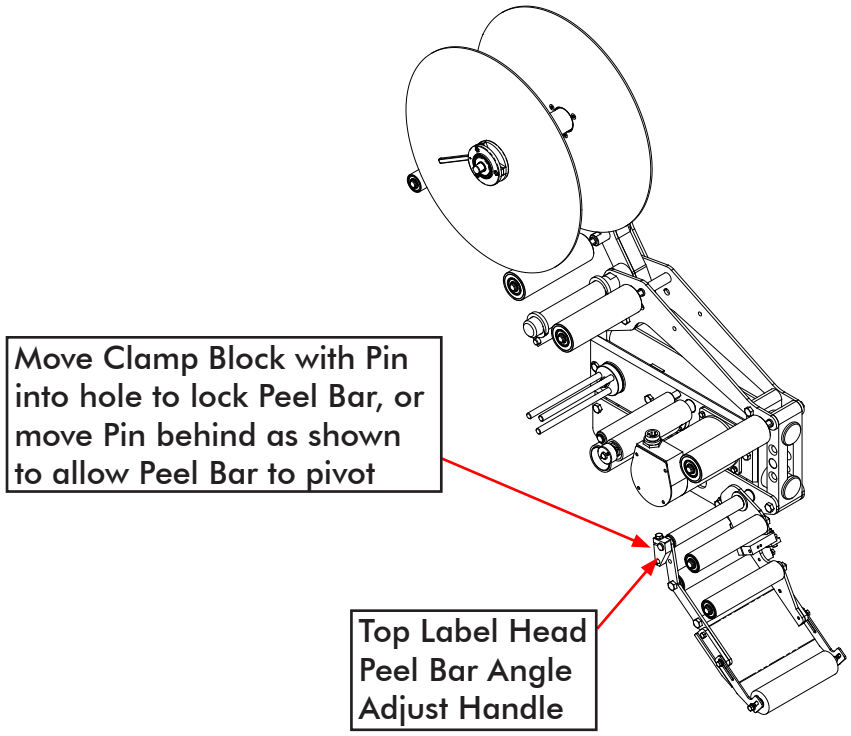


Figure 3.0

Bottom Head Adjustment

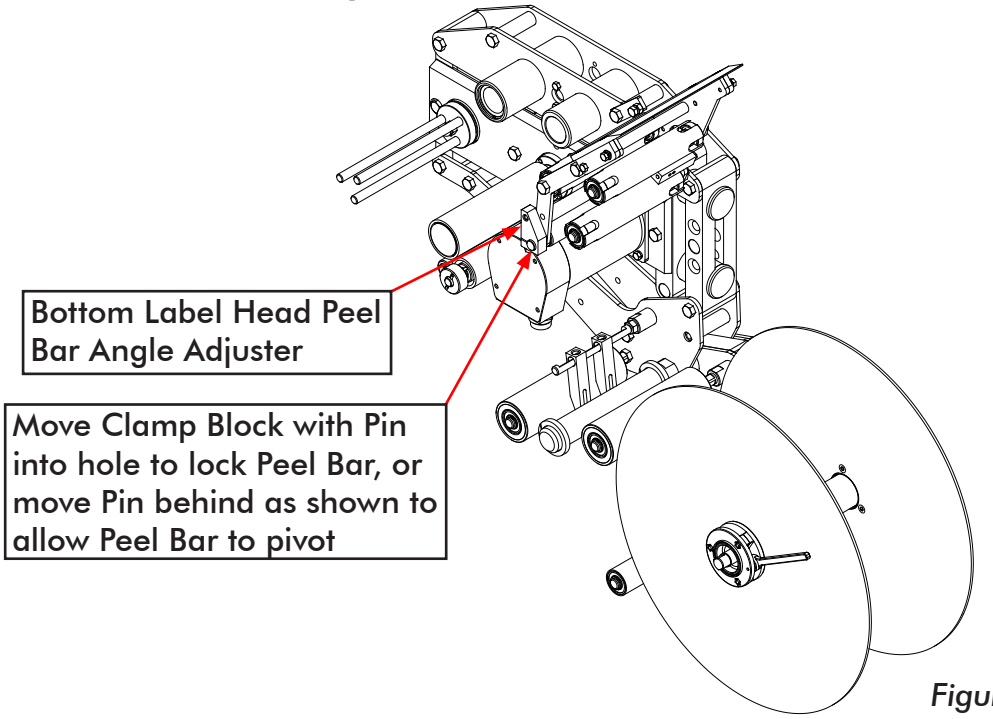


Figure 3.1

Top Head Threading

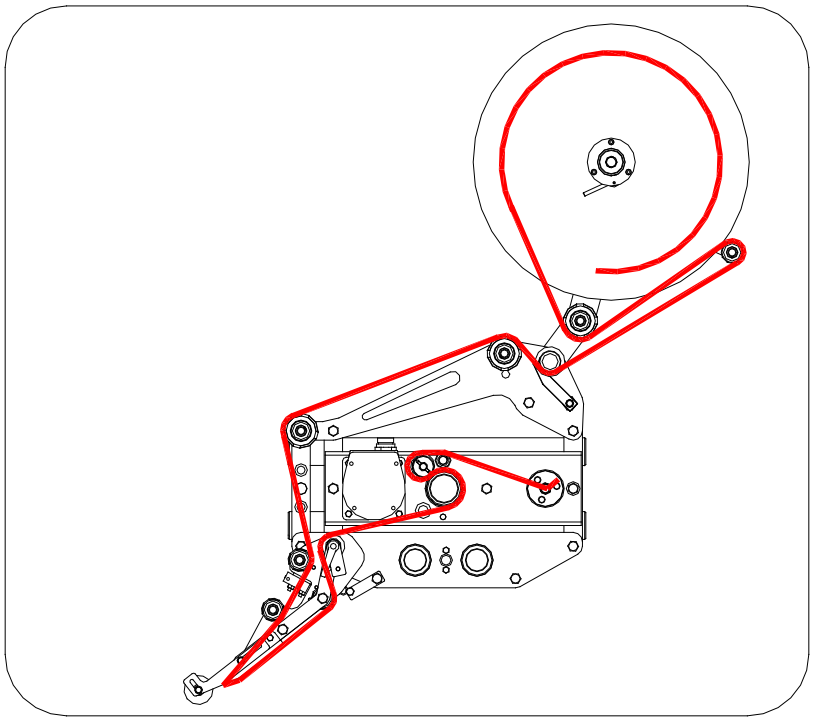


Figure 3.2

Left-Hand (above)
Right-Hand (below)

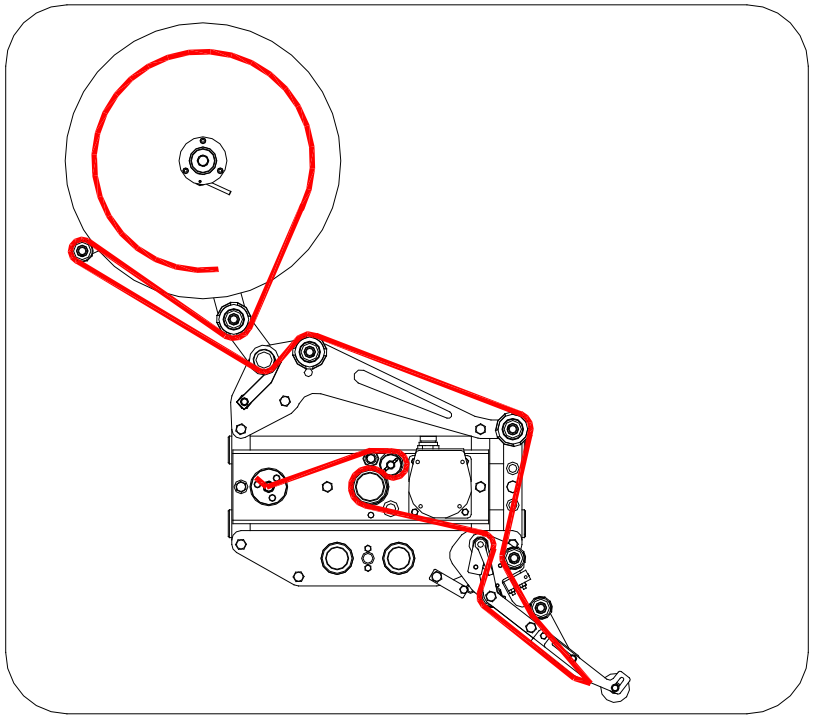


Figure 3.3

Bottom Head Threading

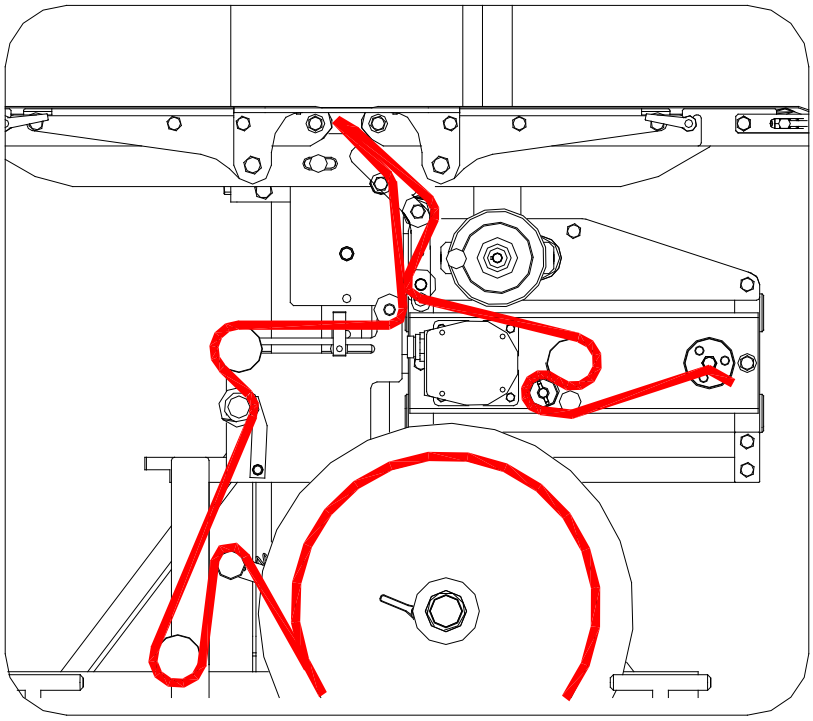


Figure 3.4

Left-Hand (above)
Right-Hand (below)

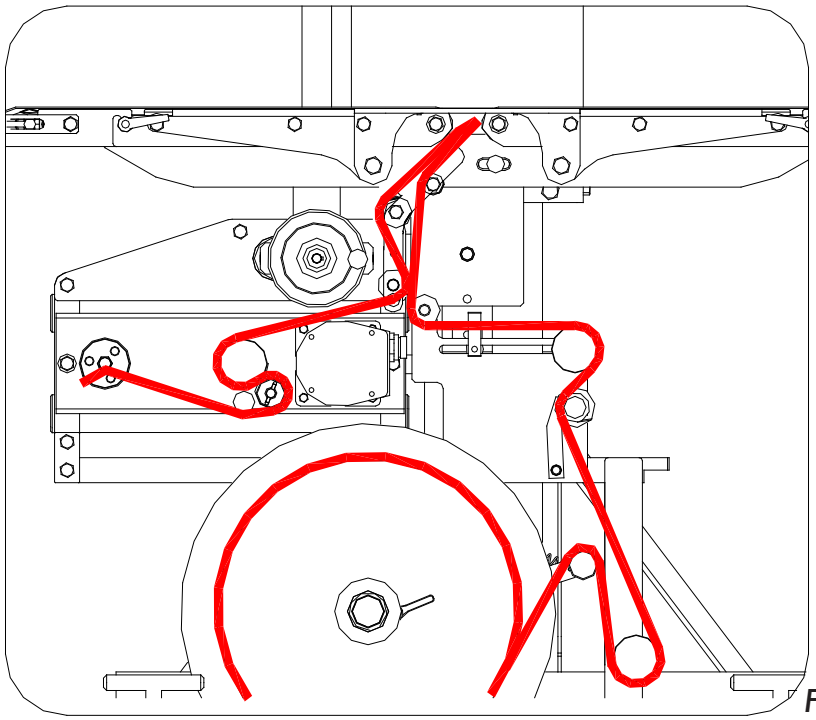


Figure 3.5

SICK Label Sensor Setup

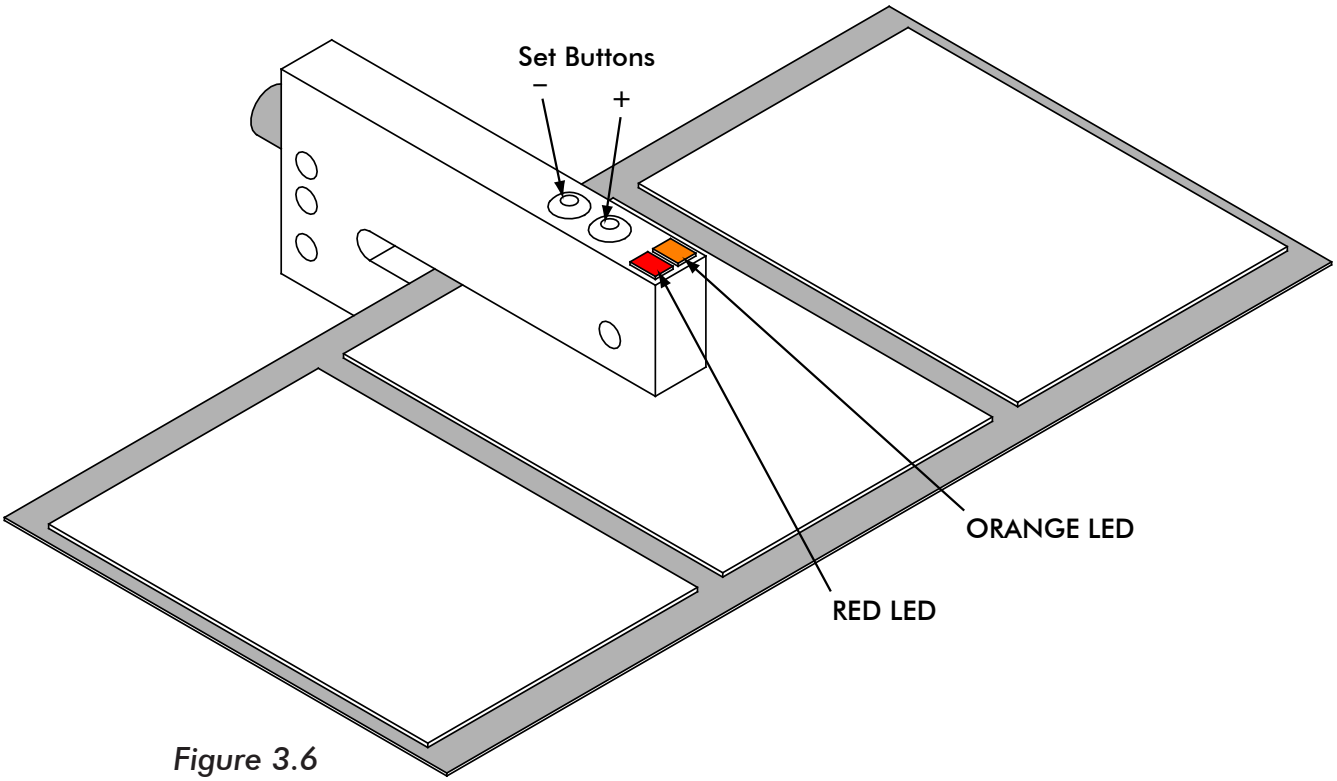


Figure 3.6

1. Power up machine.
2. Place backing paper only into the sensor slot.
3. Press and hold the "-" set button until the RED LED flashes and the ORANGE LED turns OFF.
4. Press and hold the "+" set button until the RED LED flashes and hold until the ORANGE LED just turns ON.
5. Release the "+" set button.
6. Test the sensor by passing the label gap in and out of the sensor, the ORANGE LED should only turn ON in the gap and off as the label is passed through the sensor.
7. Sensor is ready for operation.

Locking/Unlocking

If the set buttons are pressed for three seconds and released, the sensor will become locked and the RED LED will remain illuminated. To unlock the sensor, press the set buttons for three seconds and the RED LED should turn off.

Reversing Logic

If the set buttons are pressed for six seconds and released, the sensor will reverse logic and the ORANGE LED will remain illuminated over labels instead of over the backing paper. To change the logic back to the correct state, press the set buttons for six seconds and the ORANGE LED should only illuminate over the backing paper.

Laser Product Sensor Setup

1. Assemble the laser product sensor kit (p/n 815126) as seen in Section 6.
2. Install the laser product sensor assembly on the peel bar assembly using the bolt from the side of the peel bar, as see below.
3. Adjust beam position between conveyor belts as shown; make sure the beam does not hit lower labels or bottom peel bar if using a bottom labeler.
4. Adjust beam gain using the gain potentiometer, to detect object approximately 12-in. below the conveyor belt surface (see picture). Also set the light/dark (marked L/D) switch to detect either the leading package edge or trailing package edge, whichever is appropriate.

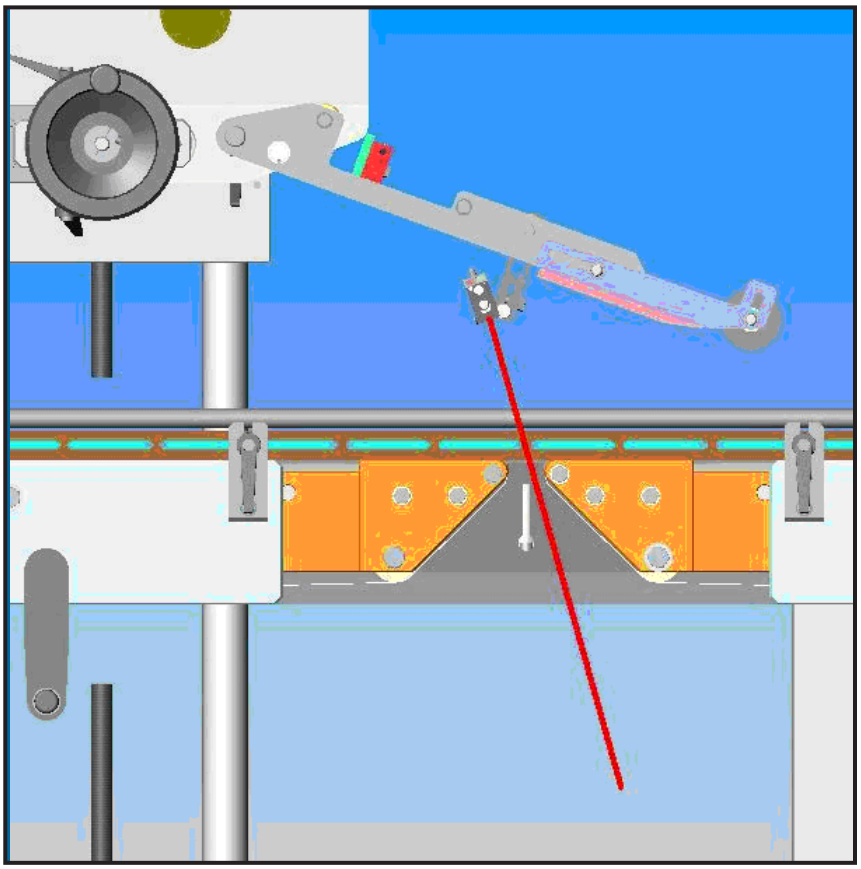


Figure 3.8

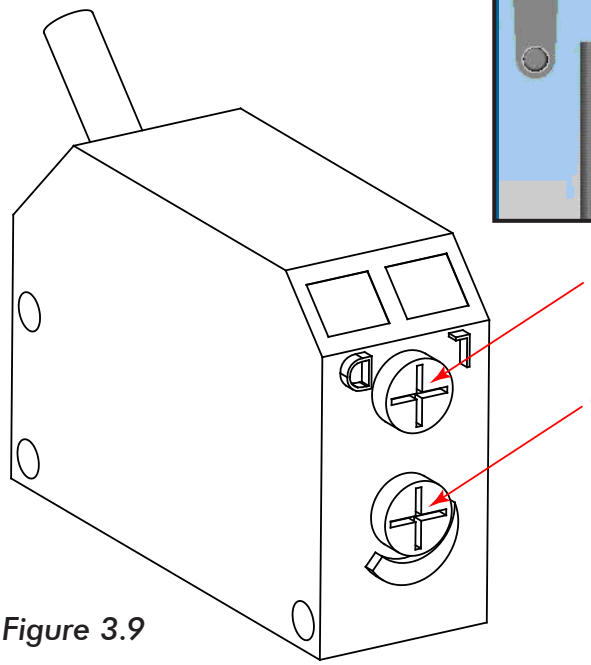


Figure 3.9

Capacitive Sensor

1. Make sure the sensor is mounted and connected to the labeler and power is turned ON.
2. Sensor should be mounted at a maximum of 1-in. (25.4mm) above the product.
3. The sensor is now ready for use.
4. The GREEN LED should constantly be illuminated.
5. As the product passes underneath the sensor the ORANGE LED is illuminated.
6. After the product passes the sensor the ORANGE LED will turn OFF.
7. Sensor may be adjusted for sensitivity with the screw adjustment located on the backside of the sensor. This will not allow you to move the sensor farther away from the product.

NOTE: The sensor should operate with a wide variety of products and rarely require readjustment.

Figure 3.10

Blue UltraSonic Sensor

1. In the Labeler Maintenance Screen, check to make sure that on the Product Sensor Logic Screen, the product sensors are running in “Lo to Hi” mode.

Once the sensors are running in the correct mode, in the system, you can begin to reset the actual sensor.

2. Check to make sure that on the top of the sensor, the status light is solid yellow. When you move your hand under the sensor the status light should switch to green, and back to yellow. If the status light is solid green, and switches to yellow, follow the steps outlined below. Otherwise skip to the next section.

Changing the Sensor Status:
Press and Hold the button on the sensor cord, the light on the sensor will begin flashing, keep holding the button until the light changes to yellow then release the button. The light will flash rapidly and then change to solid yellow.

Adjusting the Sensors Detection Zone:
Press and Hold the button on the sensor cord for 3-4 Seconds and release the button, the light on top of the sensor will begin flashing green. Push the button on the sensor cord twice rapidly. This will automatically calibrate the sensors detection zone.

Note: For optimal results the sensor should be between 1” and 2” away from the top of the package when performing the above process.

Yellow Banner Retroreflective Sensor

1. In the Labeler Maintenance Screen, check to make sure that on the Product Sensor Logic Screen, the product sensors are running in the desired mode. (Lo to Hi or Hi to Lo.)

Once the sensors are running in the desired mode, in the system, you can begin to setup the actual sensor.

The yellow retroreflective sensor can be used in multiple applications, the two most common are "Look Across" where the sensor is positioned such that the beam looks across the labeler conveyor at a reflective strip, the second is when the sensor is used as a "Look Down" sensor, wherein the sensor is positioned looking straight down over the conveyor at a reflective strip installed in the center of the conveyor belt. In either case the sensor is setup in the same manner.

Aligning the Sensor:
Carefully align the sensor such that the red reflective beam is centered on the reflective strip. The sensor should be positioned as close to parallel with the reflective strip as possible, and centered on the reflective strip as much as possible for best results.

Adjusting the Sensors Gain:
The yellow retroreflective sensor has an easy to adjust potentiometer built onto it. Using a small flat tip screwdriver you can turn the potentiometer clockwise to increase the sensors output gain. Adjusting the sensors gain is helpful when trying to adjust for smaller packages, and/or for instances where the distance between the sensor and reflector are increased. A higher gain will allow the sensor to detect at longer distances, but decreases the sensors ability to detect smaller objects.

Controls Operation

The POSI 200 In-line controls can be configured four (4) different ways depending upon the machine order. The configurations are listed below:

1. One label head only, no conveyor
2. Two label heads, no conveyor
3. One label head and conveyor control
4. Two label heads and conveyor control

Units configured as label head only have must be set to fixed speed, see page 3.21.

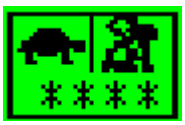
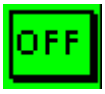
Units configured as label head and conveyor controls have speed matching built into the control.

Other options include the following:

- Reciprocating Ink Printer
- Hot Stamp Printer
- Thermal Transfer Printer
- Low Label Warning System
- Clear Label Detection
- Servo Motor Operation
- Infeed Product Guides

Main Menu Screen

This is the power up screen for a triple label head operation. The primary parameters for the label head operation are displayed:

 PadLock:	Allows the user to enter the Security Screen.
 Wrench:	Allows the user to enter the Maintenance Screen.
 File Icon:	Allows the user to change the recipe programs. The current values are automatically saved under the program number displayed.
 Turtle/Rabbit:	Allows the user to change the speed number to set the conveyor speed in millimeters/second. This only applies if the system is fitted with a conveyor and if the label heads are being operated with the speed following mode turned off.
 Label Head:	Allows the user to change to labeler parameter screens and set parameters for each label head.
 Test:	Allows the user to execute a test dispense of each label head. Note: If the speed following option is on, the encoder must be moving to dispense, otherwise, a label fault will occur.
 Off/On:	Allows the user to turn each label head ON or OFF, individually.
+/-:	The "+" next to each label head will appear when a moving encoder signal is being received. The "-" indicates the encoder is turning the wrong direction, see maintenance section to change the direction. If nothing is indicated here, the system is not receiving an encoder signal.

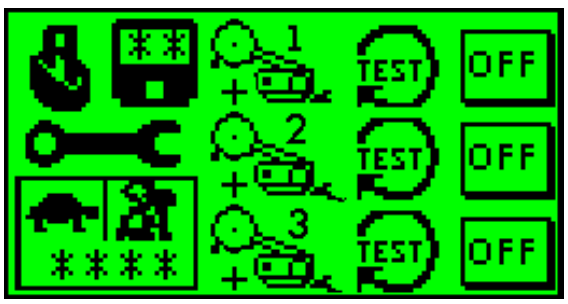
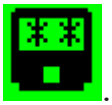


Figure 3.11

Load programs: Begin by pressing the file icon  . This allows the operator to load by program number or program name.

Note: Up to 26 different programs can be saved.

Search by Name:	Allows the user to search for a program by name along with the program number.

Figure 3.12

Select the program by touching the name or number.

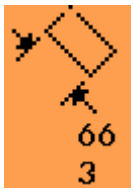
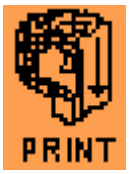
Figure 3.13

Once the program has been selected the screen will automatically return to the Current Program (above) screen. If the program names requires editting, touch the name to display the alpha keypad. Press the down arrow key to display characters N through Z.

Note: Maximum 10 character display.

Figure 3.14

Label Head Screen, Page 1

 Measure:	Allows the system to automatically measure the label and gap. **Note:** The proper label length must be entered.
 Measure:	Allows the user to manually enter the label length and gap, by pressing the value displayed below the icon.
 Peel Icon:	Allows the user to adjust the peel distance by pressing the value displayed below the icon.
 Registration:	Allows the user to adjust the registration distance by pressing the value displayed below the icon.
 Print:	Allows the user to change screens to the PRINTER SET UP screen for each individual label head.
#1:	Shows the user which label head parameters are being changed.
Down Arrow:	Allows the user to change to the Label Head Screen #2.
Up Arrow:	Allows the user to change to the Main Menu Screen.

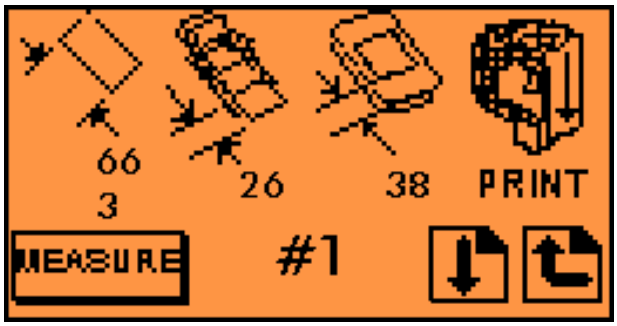
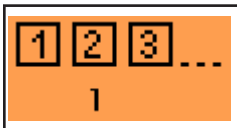
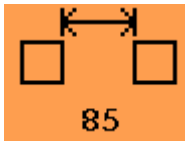


Figure 3.15

Label Head Screen, Page 2

 Dispense:	Allows the user to change the number labels dispensed per signal. This is adjusted by pressing the value displayed below the icon. **Note:** The default value is 1.
 Distance:	Allows the user to change the distance between labels dispensed per signal. This is adjusted by pressing the value displayed below the icon.
 Skip Signal:	Allows the user to turn the skip signal ON or OFF by pressing the icon. The skip signal will skip every other signal.

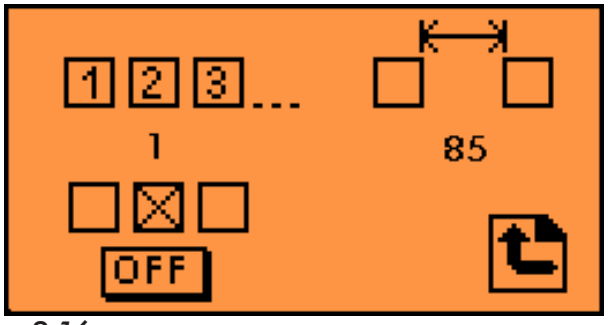


Figure 3.16

Security Screen

To access the level 1 maintenance screens, enter the password shown below.

If the operator is required to have limited security access to change parameters, turn this option ON. This will only allow saved programs to be loaded unless the password is entered.

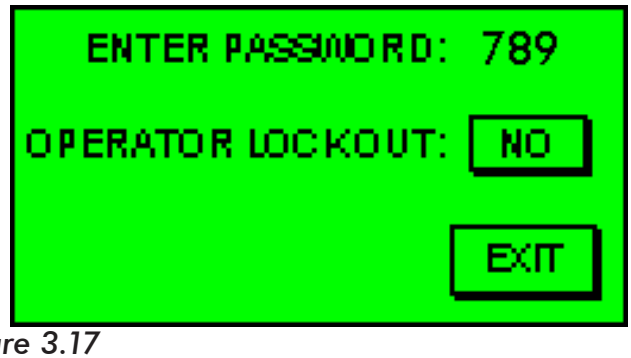


Figure 3.17

Labeler Fault Screens

This screen will be displayed if the label fault count was reached without a signal being received from the label sensor. This indicates label reel is empty or material is torn, label motor stalling, or hardware failure. See maintenance section for troubleshooting guide for hardware failure.

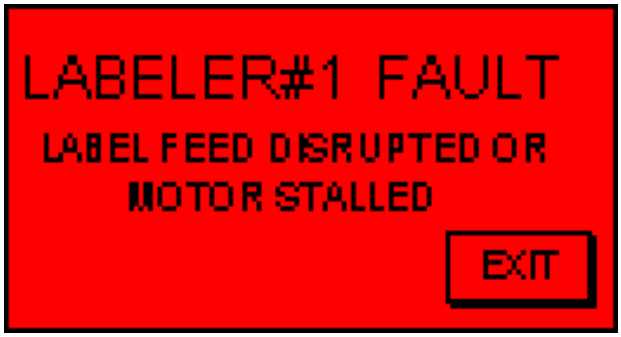


Figure 3.18

Maintenance Screen #1

Figure 3.24

This screen allows for testing the operation of the outputs for troubleshooting purposes.

Maintenance Screen #2

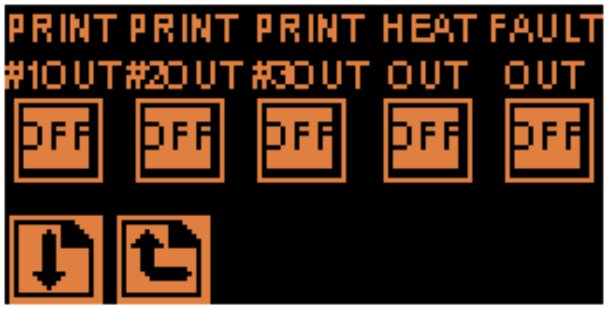


Figure 3.25

This screen allows for testing the operation of the outputs for troubleshooting purposes.

Maintenance Screen #3

Figure 3.26

This screen allows for testing the operation of the outputs for troubleshooting purposes.

Level 1 Maintenance: Screen #4

Figure 3.21

Prod Sens Logic:	This is set to either LEADING or TRAILING, which will change the product sensor detection between leading edge to trailing edge for each label head individually.

Maintenance Screen #5

Figure 3.23

Label Fault Count:	This sets the number of attempts to register a label before a system fault occurs. Note: The default value is 5.
# of Prod Sensors:	This sets the number of product detection sensors to be used. This value is set to either (1) to trigger all label heads from one sensor or it is set to the number of label heads to trigger the heads from individual sensors. Note: The default value is 2.
Power Up Run:	This sets whether the system will have the label heads turned ON during power up or OFF during power up.
Change Password:	Enter new password if desired. Note: The default value is 789.

Maintenance Screen #6:

Conveyor Inverter:	This is set to ON or OFF. This sets the primary mode of operation, either speed following with an encoder, or fixed speed without an encoder. Note: The default value is ON
Tamp Set Up:	This sets the number of product detection sensors to be used. This value is set to either (1) to trigger all label heads from one sensor or it is set to the number of label heads to trigger the heads from individual sensors.
Config Password:	This allows the input of the Level 2 Maintenance password. This password is reserved for factory certified technicians.
Enter Config	Once the Level 2 Password has been entered, press this to access Level 2 Maintenance Screens.

NOTE:

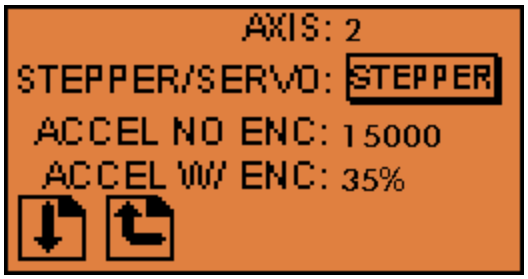
Level 2 Maintenance is restricted to UltraSource Service Technicians. These screens allow editing of parameters that in the course of normal operation will never require changes, however to allow flexibility and application specific “tweaking” are left editable from the touchscreen by, or under the direct supervision of, a factory certified technician.

Level 2 Maintenance:

Note:

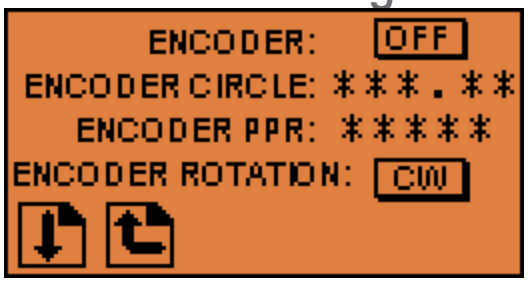
Level 2 Maintenance is restricted to UltraSource Service Technicians. These screens allow editing of parameters that in the course of normal operation will never require changes, however to allow flexibility and application specific "tweaking" are left editable from the Touchscreen by, or under the direct supervision of, a factory certified technician.

Level 2 Maintenance: Accel Management



Axis:	This is set for the number of label heads being controlled. NOTE: This also requires the appropriate motion controller card. P/N 869 426 for single stepper axis card; P/N 869 427 for dual stepper axis card; P/N 869 428 for triple stepper axis card.
Stepper/Servo:	This is set to motor/drive type for either a stepper motor or servo motor. NOTE: The servo motion cards are P/N 869 430 for single servo card; and P/N 869 431 for dual servo card. Note: The default value is stepper.
Accel No Enc:	The acceleration rate for operation in the non-speed following mode without an encoder. The is set in mm/sec^2. Note: The default value is 15000.
Accel w/ ENC:	The acceleration rate for operation in the SPEED FOLLOWING mode with encoder. This is set to a percentage of the label length. (Example: The smaller the percentage, the more rapid the acceleration.) Maximum value is 99% and minimum value is 10%. Note: The default value is 35%.

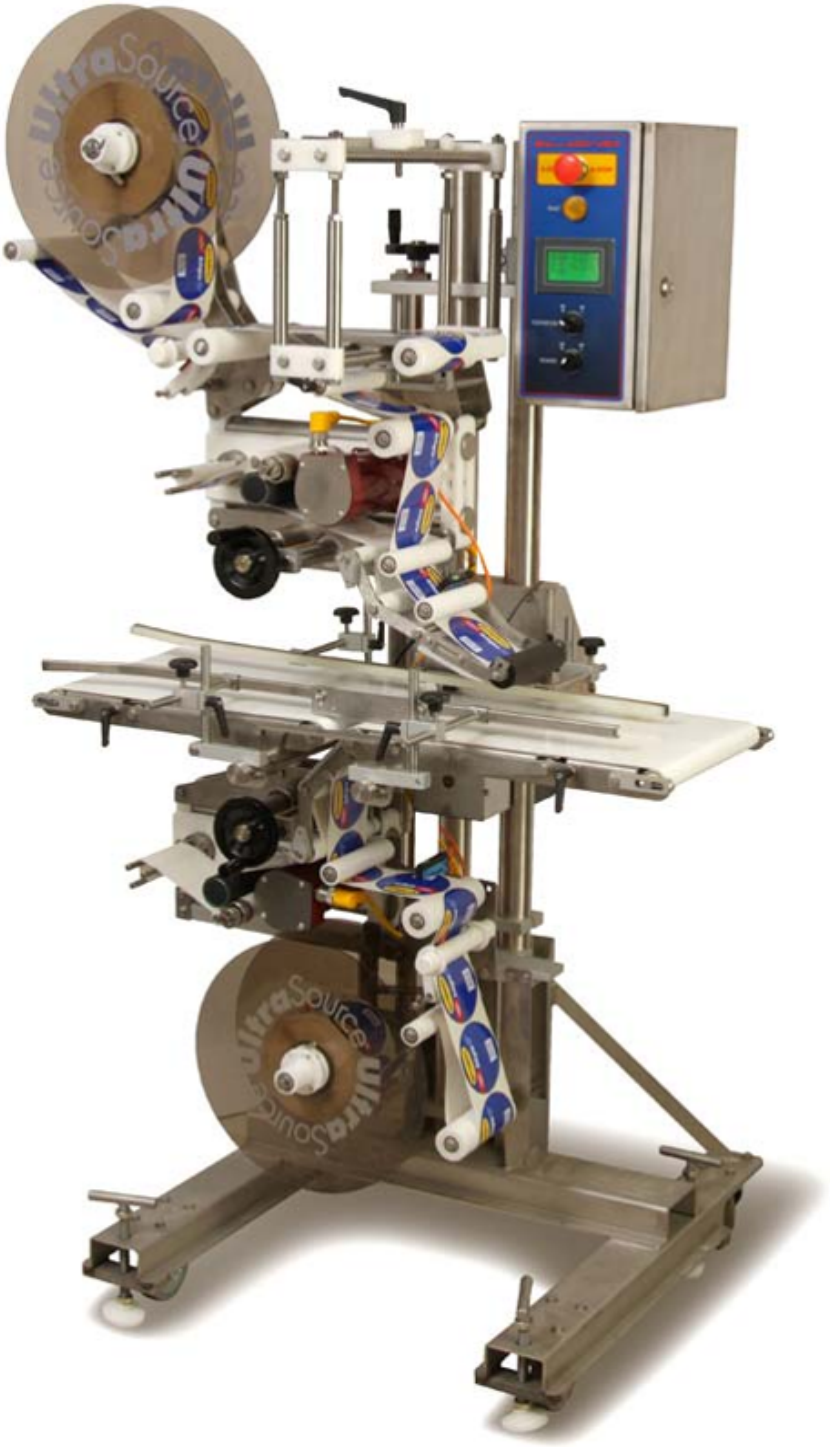
Level 2 Maintenance: Encoder Management



Encoder:	This is set to ON or OFF. This sets the primary mode of operation, either speed following with an encoder, or fixed speed without an encoder. Note: The default value is ON.
Encoder Circle:	This must be set to the conveyor distance traveled with one revolution of the encoder. Note: The default value is 120.00
Encoder PPR:	This must be set to the PULSES PER REVOLUTION of the encoder. This is usually marked on the encoder. Note: The default value is 06000.
Encoder Rotation:	This is set to CW (clockwise) or CCW (counterclockwise). To check for proper rotation, return to the main menu and look for either the "+" or "-" indicator by the label head while the encoder is moving, the "+" indicator means the parameter is correct, the "-" indicator requires this parameter to be changed. Note: The default value is CW.

Level 2 Maintenance: Inverter / Fault Management

Inverter Ratio:	This is set to the maximum linear conveyor speed in millimeters per second at 60Hz (full speed) operation of the inverter. Adjust until the conveyor belt speed matches the speed setting on the main screen. This sets all subsequent speed parameters based on a 0-10VDC output of the controller to the inverter. Note: The default value is 1250.
Maximum Speed	This is the maximum speed at which the conveyor can be set, from the run screen. The labeler itself is capable of running up to approx 1200mm/sec. Note: The default value is 1000.
Conveyor Stop on Fault	This determines whether to stop the conveyor movement when a fault occurs, or to allow the conveyor to continue to run despite a fault condition. Note: The default value is NO.


UltraSource
UltraSource

MAINTENANCE

Prior to Cleaning

Every environment and application is different; therefore, UltraSource LLC cannot provide cleaning instructions to guarantee microbiological sanitation. UltraSource requests that the owner of this machine consult with sanitation experts to review the unit working in their particular environment to develop a robust cleaning schedule and methodology, followed by bacterial testing to ensure satisfactory cleaning procedures are followed.

NOTE: Use a detergent/sanitizer that will not degrade stainless steel or plastic. The label dispensing head may be rinsed using a low pressure spray only. The control cabinet should be wiped clean and no water spray should be directed toward it.

⚠ CAUTION *Cleaning agents.*
Do not get the cleaning agents in eyes, on skin, or on clothing. Always wear rubber gloves, goggles, and protective clothing when contact is likely. Consult product manufacturer for specific details.

Troubleshooting

Location	Problem	Indications	Remedy
Common Fault	Labeler displays: "EEFR" in upper right corner		
	PLC card not functioning		Check for yellow LED "ON" indicating PLC operation
	Loose communication cable		Check communication cable connection
Display	Labeler does not display anything on screen	220VAC disconnected	Check 220VAC input.
		Main control power fuse blown	Replace fuse
		24VDC power supply fuse blown	
		24VDC power supply failed	Replace power supply
		24VDC power supply connection loose	Check connections on power supply pins and PWB
		Touchscreen failed	Replace touchscreen
Fault General	Labeler displays: "LABEL HEAD #? FAULT" and YELLOW fault light is "ON"	A stepper motor has stalled	Clean any residual glue from peel bar and brakes. Lower speed and/or acceleration of motors
		Labeler roll backing paper has torn	Rethread labeler and check brake and photo-eye for obstruction of backing paper
		Labeler tension roller open	Close tension roller
		Label roll is empty	Refill labeler
		CW or CCW not set correctly	Verify "+" is displayed on main screen when conveyor is moving. See page 24
		Label scanner is not functioning or does not see labels correctly	Reset, refer to page 12
		Accelerate or speed not set correctly	Peel over too small
Drive Power	Open motor phase	LEDs flashing in pattern of 1 GREEN + 6 RED	Check motor cable and motor connector on drive
			Check motor impedance

Troubleshooting

Location	Problem	Indications	Remedy
Drive Power (continued)	Drive power GREEN LED is not consistently flashing	The drive is not receiving adequate DC voltage	Verify the VDC+ and VDC- connections. Voltage 55VDC minimum, 62VDC average, 75VDC maximum
		Drive power cable screw terminals are loose	Tighten screws
	Motor disabled	GREEN LED is constantly ON	Check I/O wiring and verify from PWB
	Motor stalled	LEDs flashing in pattern of 2 GREEN + 1 RED	Reduce speed, check for mechanical obstruction
	Drive over temp	LEDs flashing in pattern of 1 GREEN + 3 RED	Verify adequate heat sink compound behind drives
			Verify ambient temperature is less than 80°F
	High voltage	LEDs flashing in pattern of 1 GREEN + 4 RED	Check incoming AC voltage, maximum is 248VAC. Reduce voltage
			If AC is less than 248VAC, then check 75V power supply
	Low voltage	LEDs flashing in pattern of 2 GREEN + 4 RED	Check incoming AC voltage, minimum is 200VAC. Increase AC voltage
			If AC is less than 200VAC, then check 75V power supply
	Over current	LEDs flashing in pattern of 1 GREEN + 5 RED	Check stepper motor and cable for shorts
	Motor Ohms	LEDs flashing in pattern of 2 GREEN + 5 RED	Check for balanced A/B phase impedance in stepper motor
			Check motor cable

Troubleshooting

Location	Problem	Indications	Remedy
Labels Stopping	Label gaps missed or runaway labels	Label sensor out of adjustment	Set label sensor, see page 12
		Label speed set too high	Decrease label speed parameter or increase acceleration parameter (call Ultravac Services)
Motor Torque	There is little or no holding torque; the GREEN LED is flashing	The motor selected resistors are improper for motor	Confirm proper drive resistors with table, see page 41
		Low AC line voltage	Verify incoming Line Voltage is minimum 208VAC and maximum of 264VAC
		Drive failure	Replace drive
Motor Operation	Motor does not move with drive power GREEN LED consistently flashing	Motor circuit or motor has short or open circuit	Disconnect power from the labeler and motor wiring from the drive (A+, A-, B+, B-). Check continuity across A phase and B phase (maximum of 1.0 ohms for large motor and 5.0 ohms for small motor). Check for isolation between phases and to ground
		Step/DIR signal not being sent from controller	Check output on Step/DIR lines. Should see 0-5VOC voltage fluctuation during move attempt
	Motor jerking	Bad motor windings	Verify A and B loop as described above. Replace motor if necessary
Power	Stepper drives power GREEN LEDs are "OFF" and the 75VDC power supply GREEN LED is "OFF"	No 220VAC power	Verify AC power, 208VAC minimum and 264VAC maximum
		Power supply has had a thermal shut down	Measure temperature at heat sink (60°C maximum)
		75VDC power supply damaged	Replace power supply
	Stepper drives power GREEN LEDs are "OFF" and the 75VDC power supply GREEN LED is "ON"	Short or open circuit in drive cabling or motor	Check drive cabling and then cycle AC power
		Power supply experienced an over voltage condition	Cycle AC power

Troubleshooting- Inverter Fault Codes

Fault Code	Name	Causes	Remedy
InFE	Internal CPU	Internal Microprocessor Fault	Turn the machine off and back on again. If persists then contact Ultravac Services.
OCF	Overcurrent	Parameters in the Motor Control menu drC are not correct. Inertia or load too high. Mechanical Locking	Check the ground connection, motor cable and insulation. If persists contact Ultravac Services
SCF1	Motor Short Circuit	Short-circuit grounding at the drive output. Ground fault during run state. Signifigant current leakage to ground.	Check all cables and ground connections to the motor and inverter. If persists contact Ultravac Services.
SCF3	Ground Short Circuit		
SOF	Overspeed	Instability. Overspeed link	Check the motor and motor connections. If issue persists contact Ultravac Services.
tnF	Auto-tuning	Motor not connected. Phase loss on motor.	Check motor connections. If issue persists contact Ultravac services.
LFF1	All Current Loss	Loss of current.	Check terminal connections.
OHF	Drive overheat	Drive temperature is too high.	Check the motor load and electrical connections. If issue persists contact Ultravac Services.
OPF1	1 output Phase Loss	Loss of 1 phase at drive.	Check motor connections and electrical terminals.
OPF2	3 Output Phase Loss	Loss of 3 phase at drive.	Check motor connections and electrical terminals.
O5F	Main Over-voltage	Line Voltage too High	Check line voltage.
PHF	Phase Loss - Input	Drive incorrectly supplied or blown fuse.	Check drive and fuses.
U5F	Under-voltage	Line supply to low.	Check electrical connection.

Maintenance Log

A maintenance log is a journal of all maintenance performed. Each entry includes a date, maintenance performed (details about the type of work done), and technician (who performed the maintenance). The maintenance log is also a place where a schedule is kept for further maintenance.

A maintenance log will clearly show oil changes, daily inspections, Teflon® tape replacement, and so on. A master copy has been provided on page 4.6, please create a copy and store in the back of this owner's manual.

Service Log

A service log is a journal of all service work performed. Each entry includes a date, service provided (details about the type of service), and technician (who performed the service).

A service log will clearly show training provided, frequent wear items, and so on. A master copy has been provided on page 4.7, please create a copy and store in the back of this owner's manual.

Maintenance Log

Date	Maintenance Performed	Technician

Service Log

Date	Service Provided	Technician

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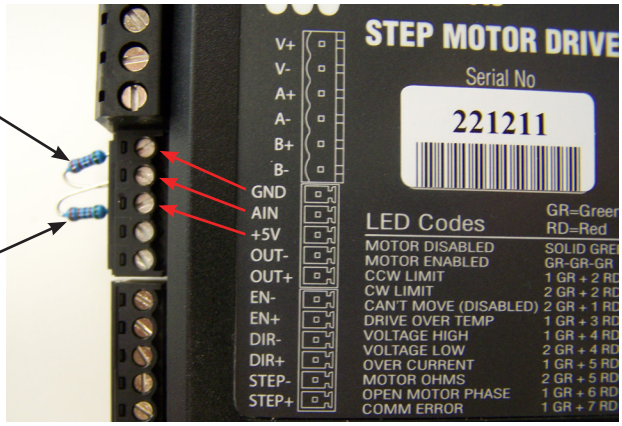
SCHEMATICS

Stepper Drive Resistor Locations

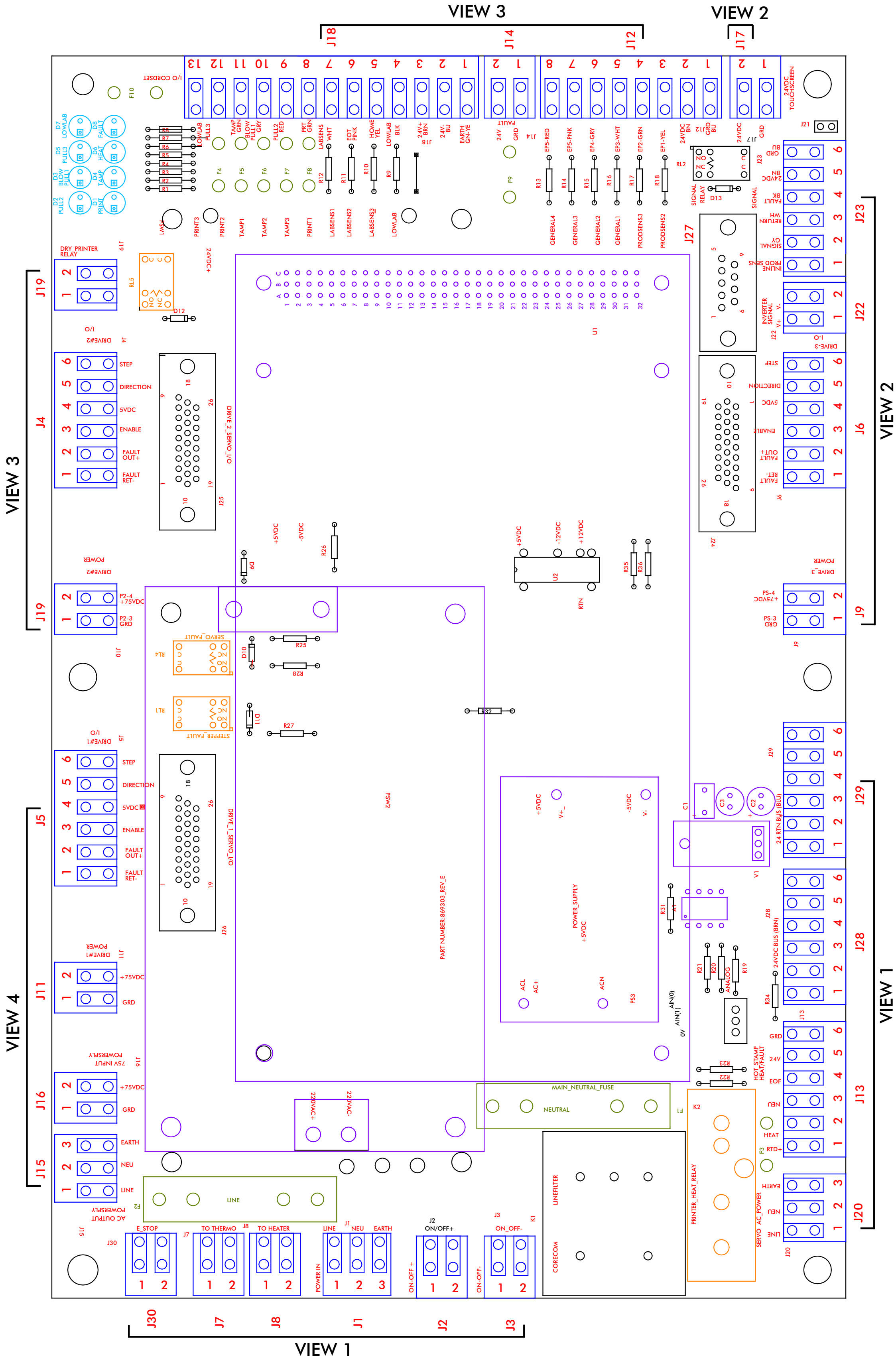
Motor Assembly Part No.	R1 Value in Ohms (UltraSource Part No.)	R2 Value in Ohms (UltraSource Part No.)
895 020 Super-Torque (White Motor Body)	40.2Ω (869 401)	357Ω (869 415)
895 022 High-Torque (Burgundy Motor Body	80.6Ω (869 402)	324Ω (869 414)
895 023 Low-Torque (Black Motor Body	121Ω (869 403)	280Ω (869 413)

Connect the drive appropriate resistors (R1 and R2) to the designated pin terminal. Resistor 1 will connect to GND and AIN pin terminals. Resistor 2 will connect to AIN and +5V pin terminals. See the diagram to the right R1 and R2 will share the AIN pin terminal.

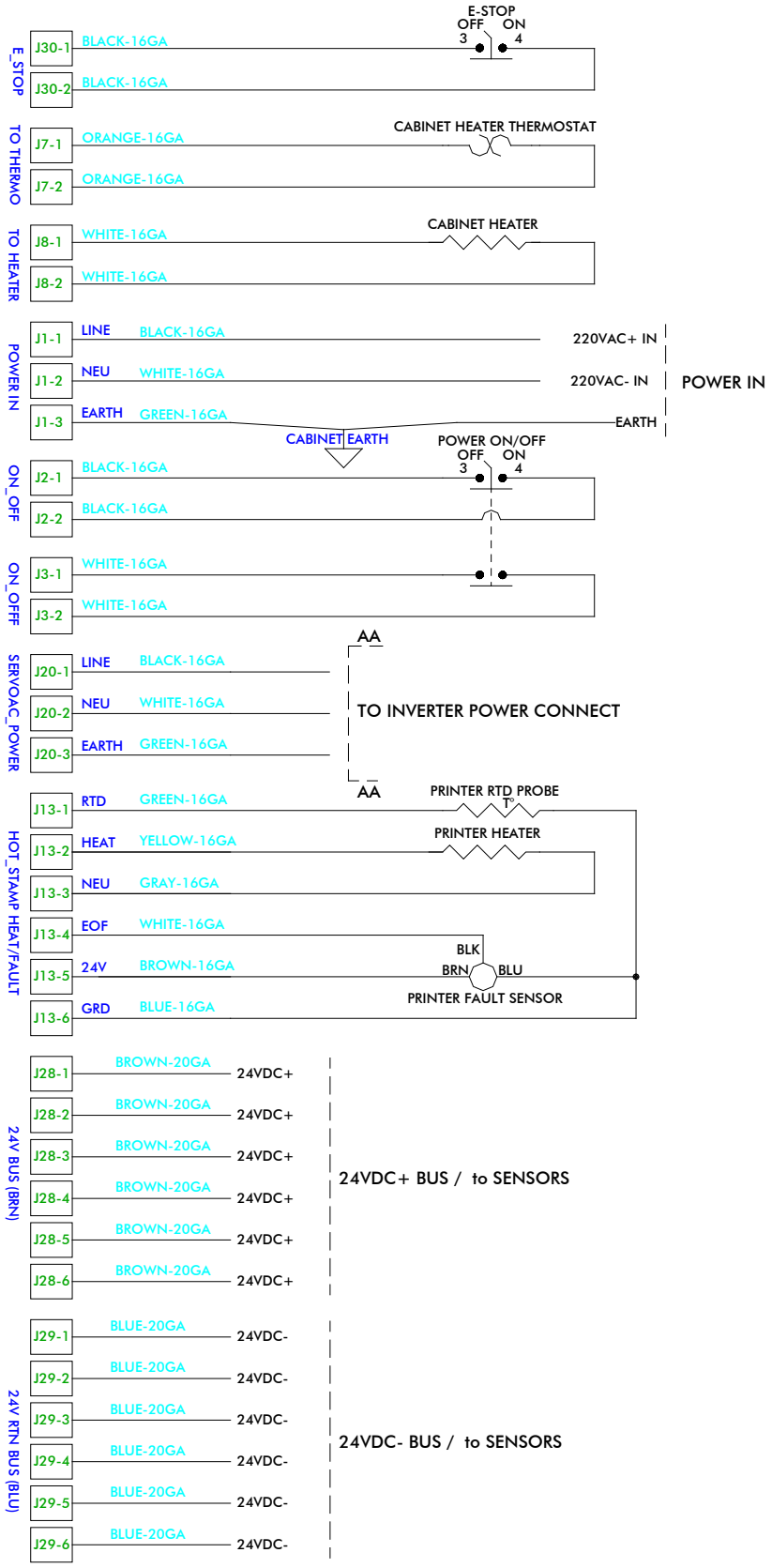
NOTE: These resistors will load the appropriate motor parameters into the drive.



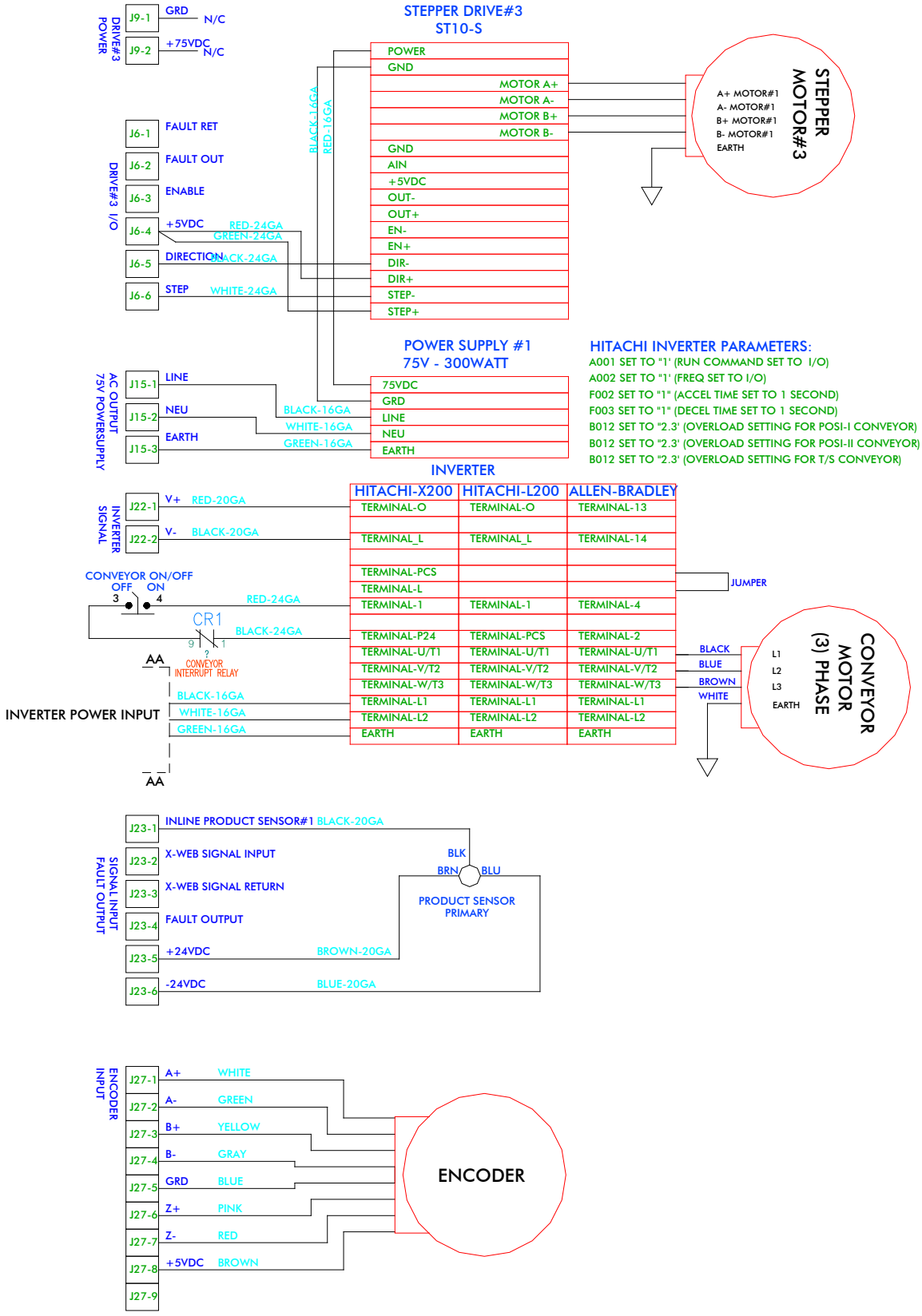
Printed Circuit Board Layout



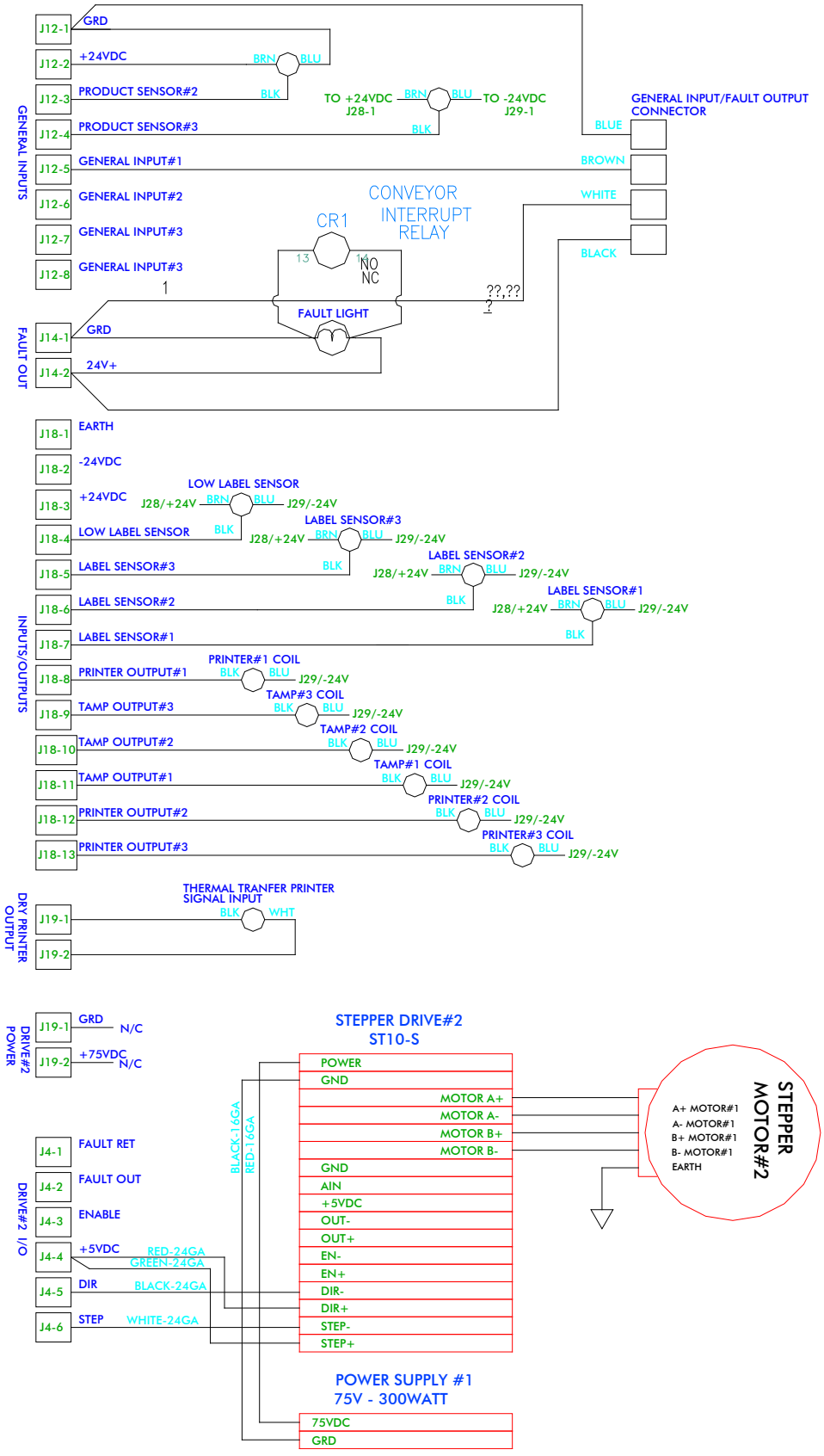
Inter-connect, View 1, Stepper Motor



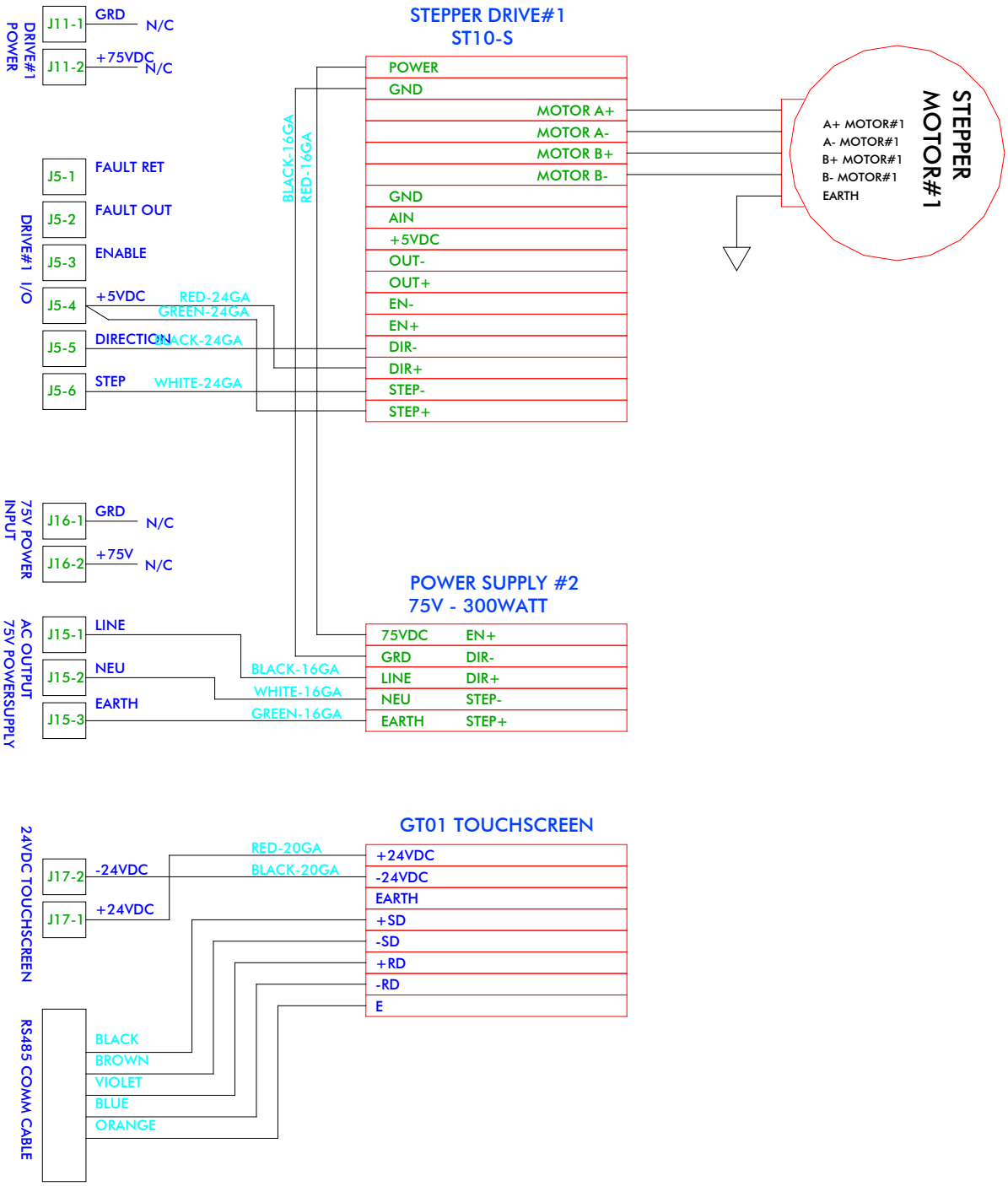
Inter-connect, View 2, Stepper Motor



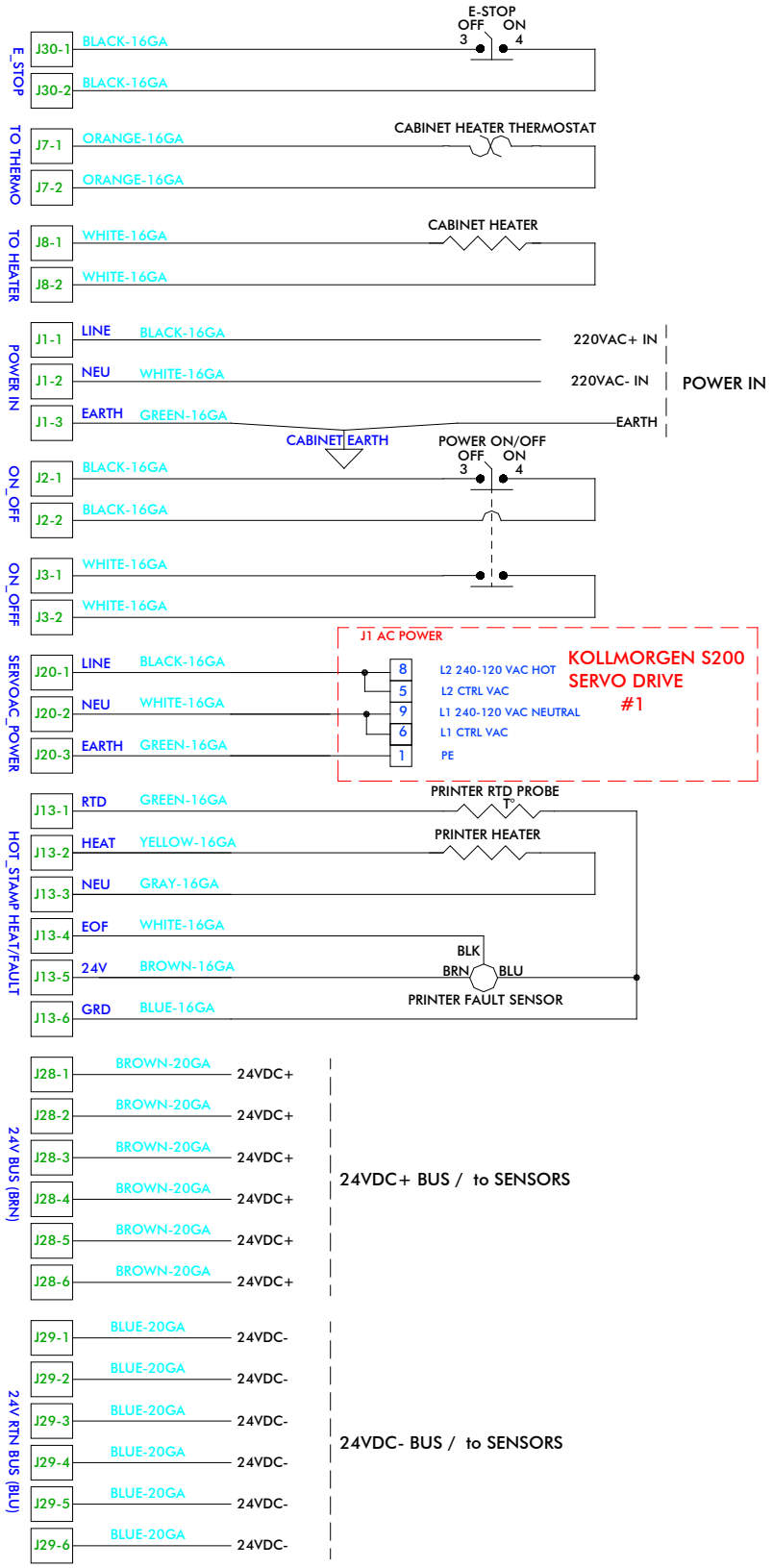
Inter-connect, View 3, Stepper Motor



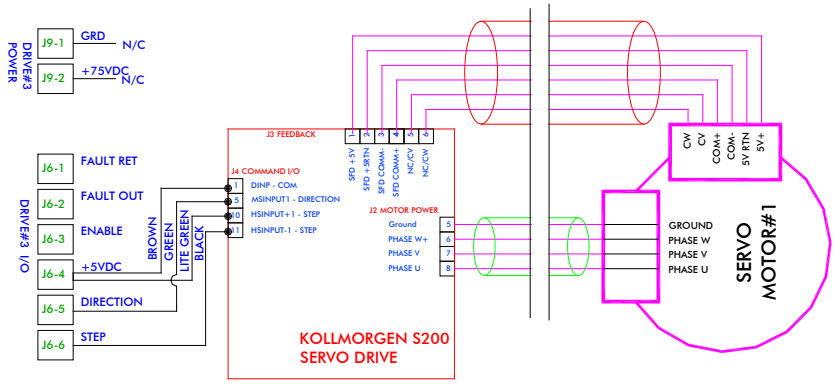
Inter-connect, View 4, Stepper Motor



Inter-connect, View 1, Servo Motor



Inter-connect, View 2, Servo Motor

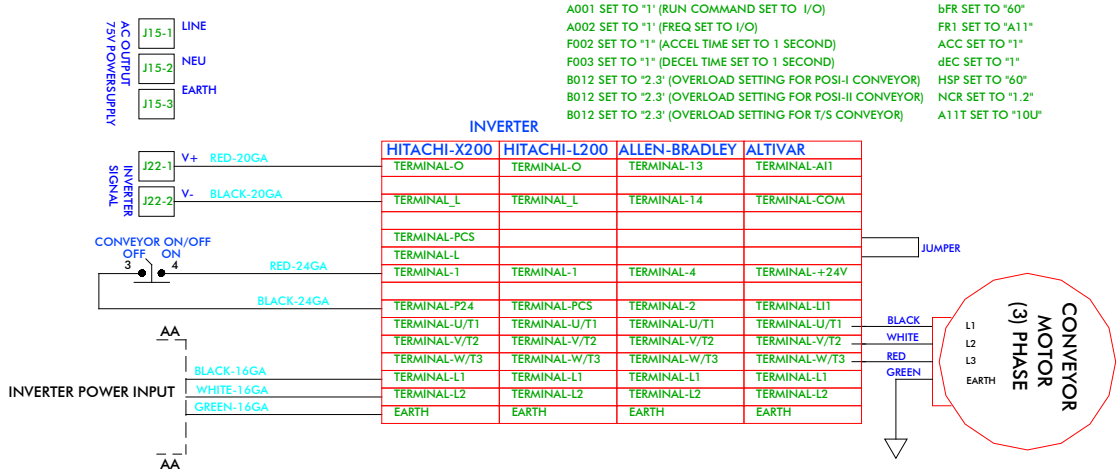


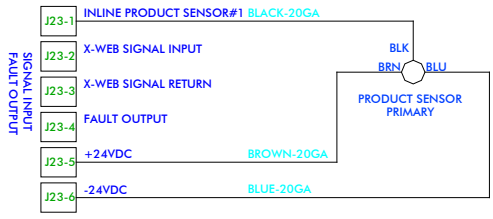
HITACHI INVERTER PARAMETERS:

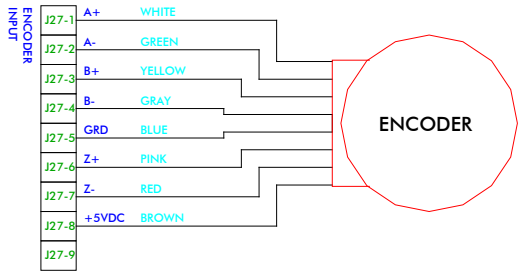
A001 SET TO "1" (RUN COMMAND SET TO I/O)
A002 SET TO "1" (FREQ SET TO I/O)
F002 SET TO "1" (ACCEL TIME SET TO 1 SECOND)
F003 SET TO "1" (DECEL TIME SET TO 1 SECOND)
B012 SET TO "2.3" (OVERLOAD SETTING FOR POSI-I CONVEYOR)
B012 SET TO "2.3" (OVERLOAD SETTING FOR POSI-II CONVEYOR)
B012 SET TO "2.3" (OVERLOAD SETTING FOR T/S CONVEYOR)

ALTIVAR INVERTER PARAMETERS:

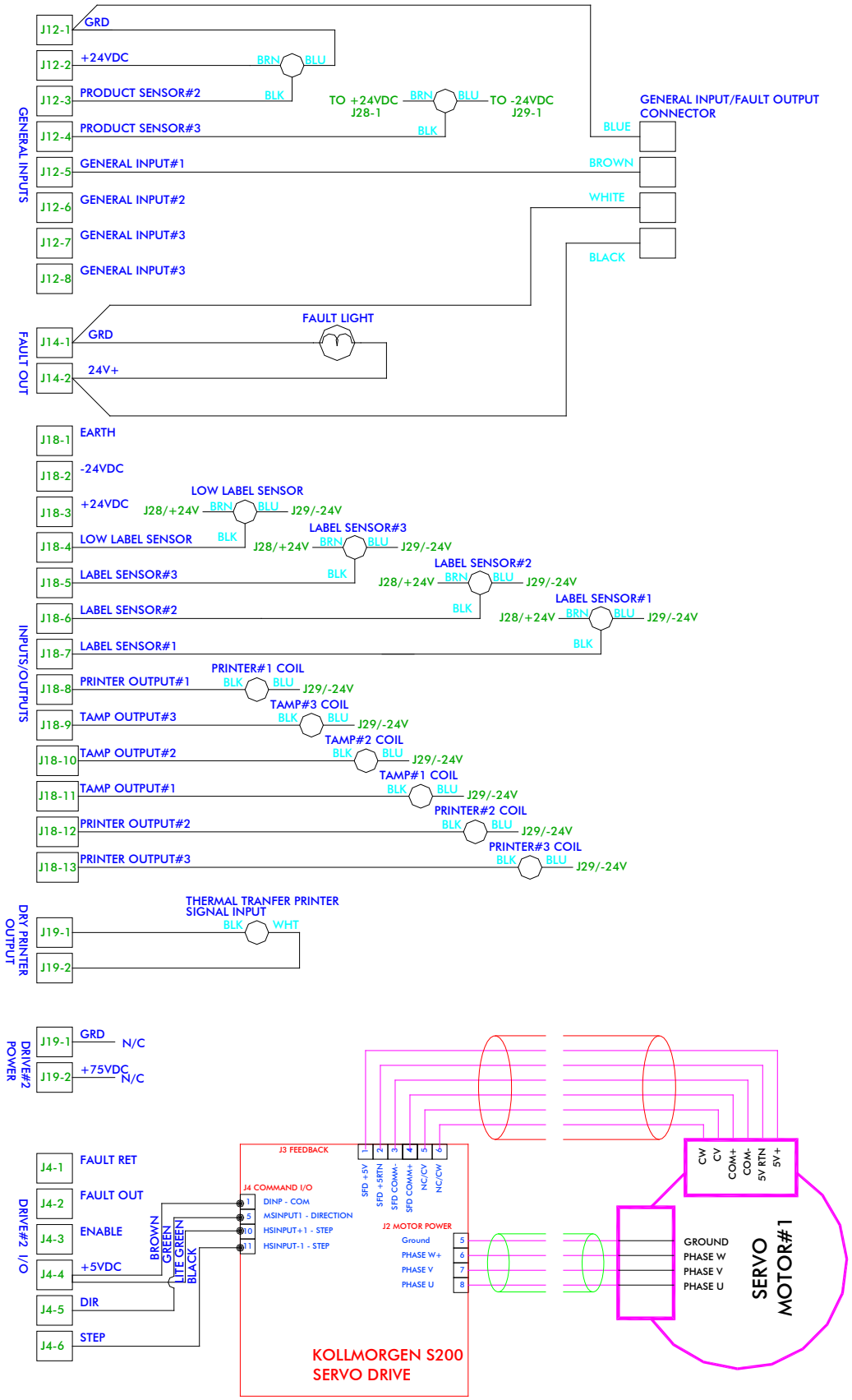
bFR SET TO "60"
FR1 SET TO "A11"
ACC SET TO "1"
dEC SET TO "1"
HSP SET TO "60"
NCR SET TO "1.2"
A11T SET TO "10U"



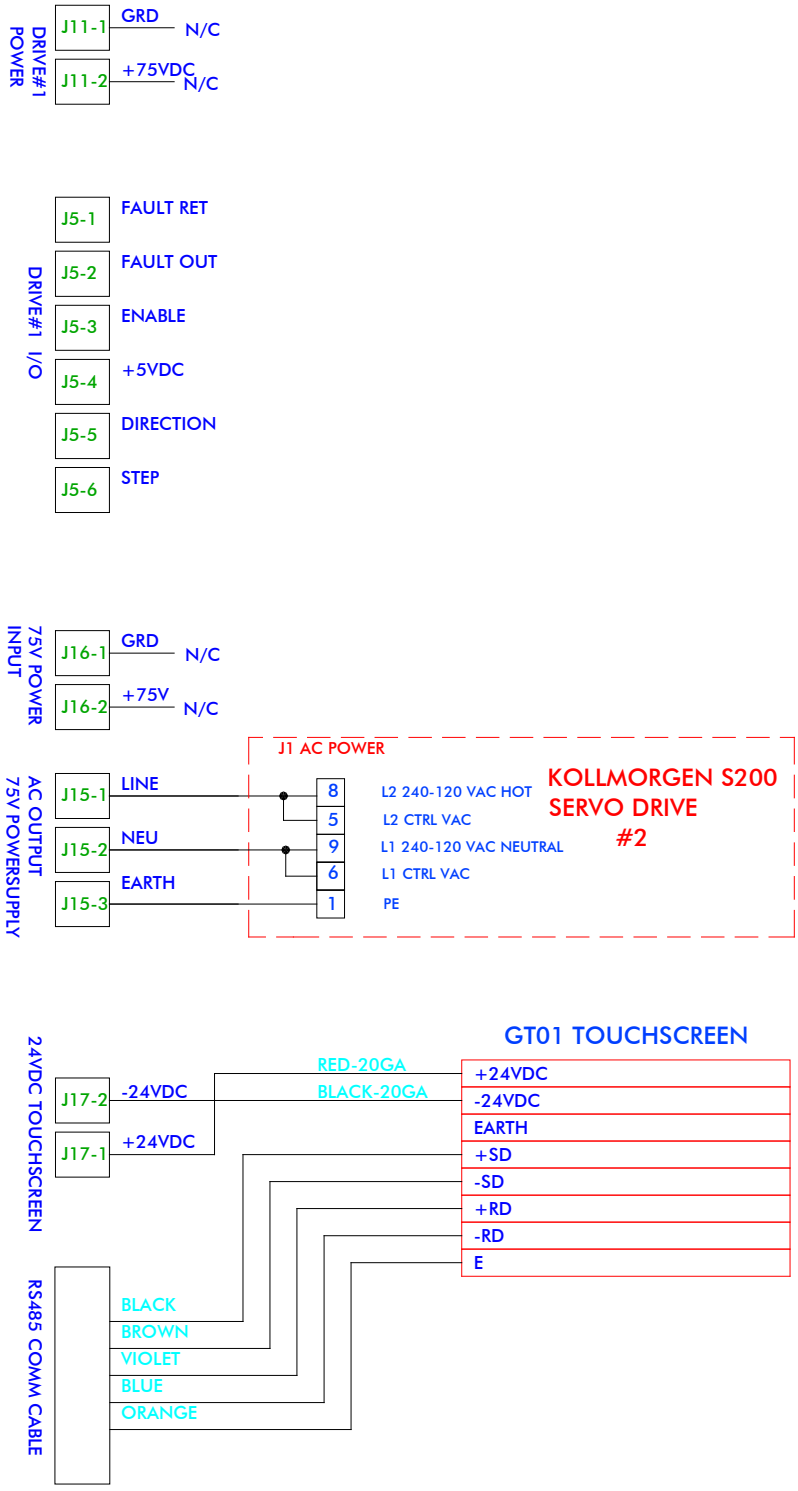




Inter-connect, View 3, Servo Motor



Inter-connect, View 4, Servo Motor



PARTS

Recommended Spare Parts

Qty.		Description
1 ea	869405	Switch, Power On/Off and Body Assembly
2 ea	860546	Fuse MDA 4 Amp
1 ea	865007	Spring Set for Take-up Unit
1 ea	866015	Bearing for Gear Box Main Shaft
1 ea	866016	Ball Bearing
1 ea	866022	Bearing for Tension Roller
1 ea	866023	Spring, Right-Hand for Left-Hand Drive Head Tension Roller
1 ea	866024	Spring, Left-Hand for Right-Hand Drive Head Tension Roller
2 ea	866048	Bearing for Dispense Roller
2 ea	866064	Bearing for Dispense Roller
1 ea	866065	Unwind Brake Strip
1 ea	866070	Drag Level Arm
1 ea	866071	Spring Compression for Drag Arm
1 ea	866121	Spring for Dancing Arm
1 ea	866123	Take-Up Pressure Plate Disc
1 ea	866125	Take-Up Clutch Disc
1 ea	866128	Spring Torsion, Left-Hand
1 ea	866134	Bearing, One-Way for Take-Up
1 ea	866438	Bushing for Take-Up Clutch Assembly
1 ea	866440	Bushing for Take-Up Clutch Assembly
1 ea	866445	Take-Up Clutch Disc - TFE
1 ea	866519	Relay for Output
1 ea	866561	Belt for Drive Head Motor
1 ea	866621	Gear for Drive Head, #2, 32T
1 ea	866624	Gear for Clutch, #2, 30T
1 ea	866625	Gear for Clutch, #1, 44T
1 ea	866626	Gear for Drive Head, #1, 18T
2 ea	866801	Retaining Ring, External 12mm
2 ea	866805	Retaining Ring, External 17mm
1 ea	869514	Drive for Stepper Motors
2 ea	868374	Fuse for Control Cabinet, 3 Amp
1 ea	890008	Timing Belt for Take-Up Unit
1 ea	869342	Label Sensor, Lueze, 2mm
1 ea	869451	Encoder with Wheel, 12-ft. Cable

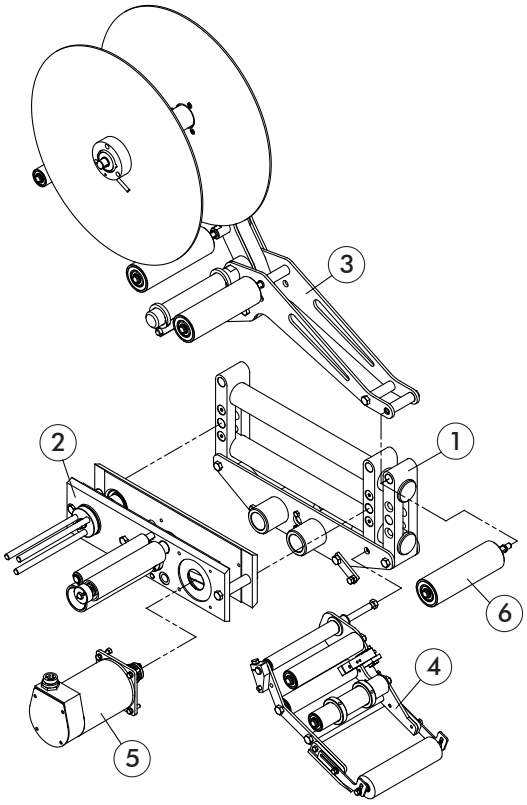
Cable Part Numbers

UltraSource Part No.	Description
810158	Conveyor Motor Cable
868101	Main Power Cable
868108	Fault/Control Output Cable
868103	Hot Stamp Printer Heat Cable
810158	Stepper Motor Cable
810161	Label Sensor and Product Sensor Connectors
868108	Product Sensor Cable, Capacitive Proximity Style
810264	Product Sensor Connector

Top Labeler

Parts List and Diagram

Item No.	Label Width		Description
1	ALL	815007	Chassis Assembly, Gantry Head, Right-Hand
	ALL	815035	Chassis Assembly, Gantry Head, Left-Hand
2	150	815037	Drive Unit, Right-Hand
	200	815054	Drive Unit, Right-Hand
	150	815038	Drive Unit, Left-Hand
	200	815070	Drive Unit, Left-Hand
3	150	895000	Unwind, Right-Hand, Position B
	200	895002	Unwind, Right-Hand, Position B
	150	895001	Unwind, Left-Hand, Position B
	200	895003	Unwind, Left-Hand, Position B
4	150	815009	Peel Bar Swing Assembly, Right-Hand
	200	815053	Peel Bar Swing Assembly, Right-Hand
	150	815010	Peel Bar Swing Assembly, Left-Hand
	200	815069	Peel Bar Swing Assembly, Left-Hand
5			Motor Assembly
6	150	895010	Idler Roller Assembly, 2-in.
	200	895011	Idler Roller Assembly, 2-in.



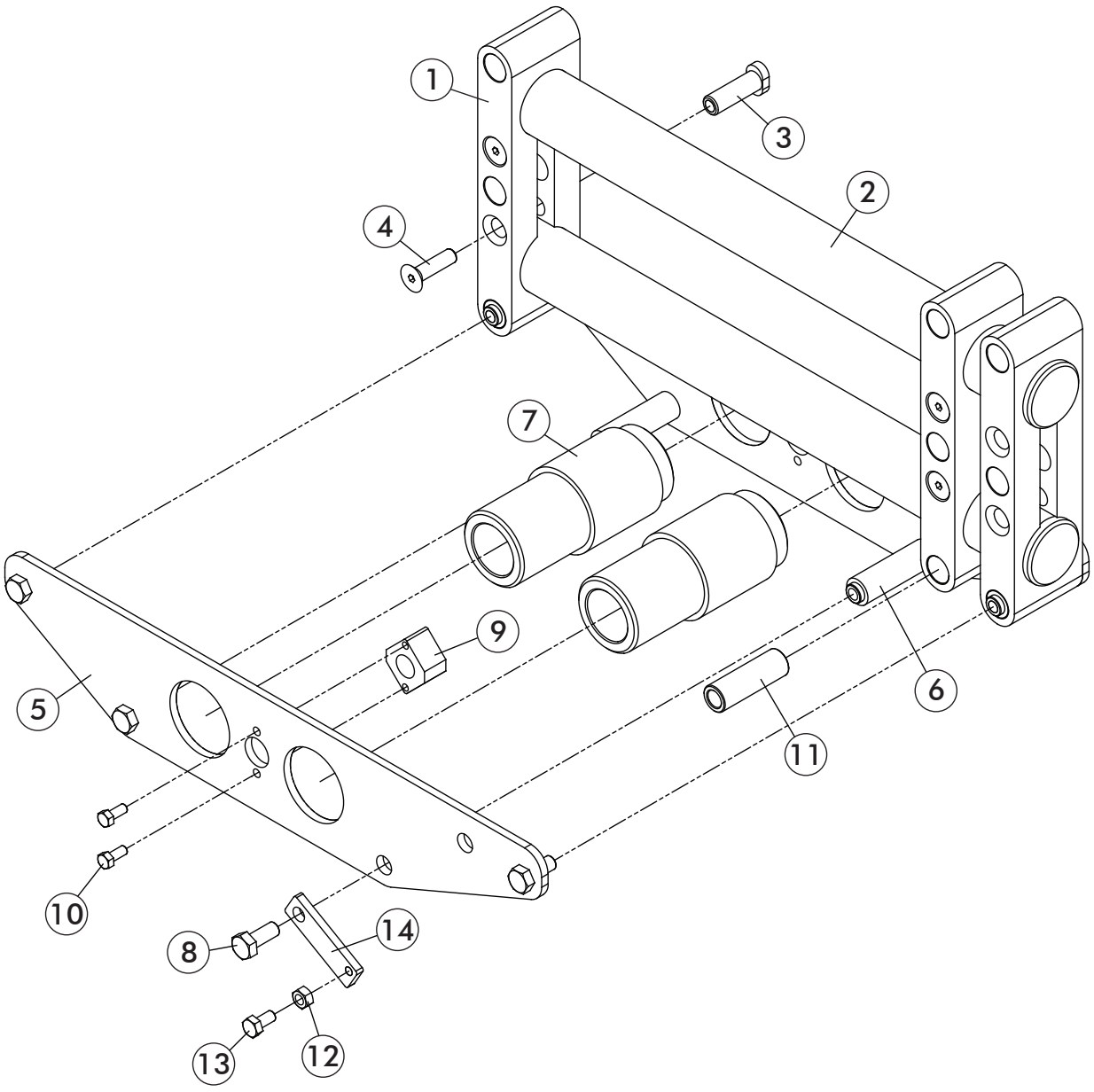
Chassis, Gantry Head

Parts List

Item No.		Description
1	890000	Chassis Tube Block
2	810336	Chassis Tube Assembly, Gantry
3	890549	Slot Head Female Threaded Fastener
4	890550	Screw, M8x30 Flat Socket Head
5	810337	Mount Plate, Gantry Head
6	890003	Tapped Insert for Drive Head
7	810338	Bearing Tube, Gantry Head Support
8	810107	Bolt, M8x20 Hex Head
9	810383	Nut, Thread Block
10	810102	Bolt, M5x12 Hex Head
11	890541	Sleeve Insert
12	866765	Nut, M6-1.0 Hex
13	810142	Bolt, M6x12 Hex Head
14	810340	Bar, Spring Adjustment

Chassis, Gantry Head

Diagram



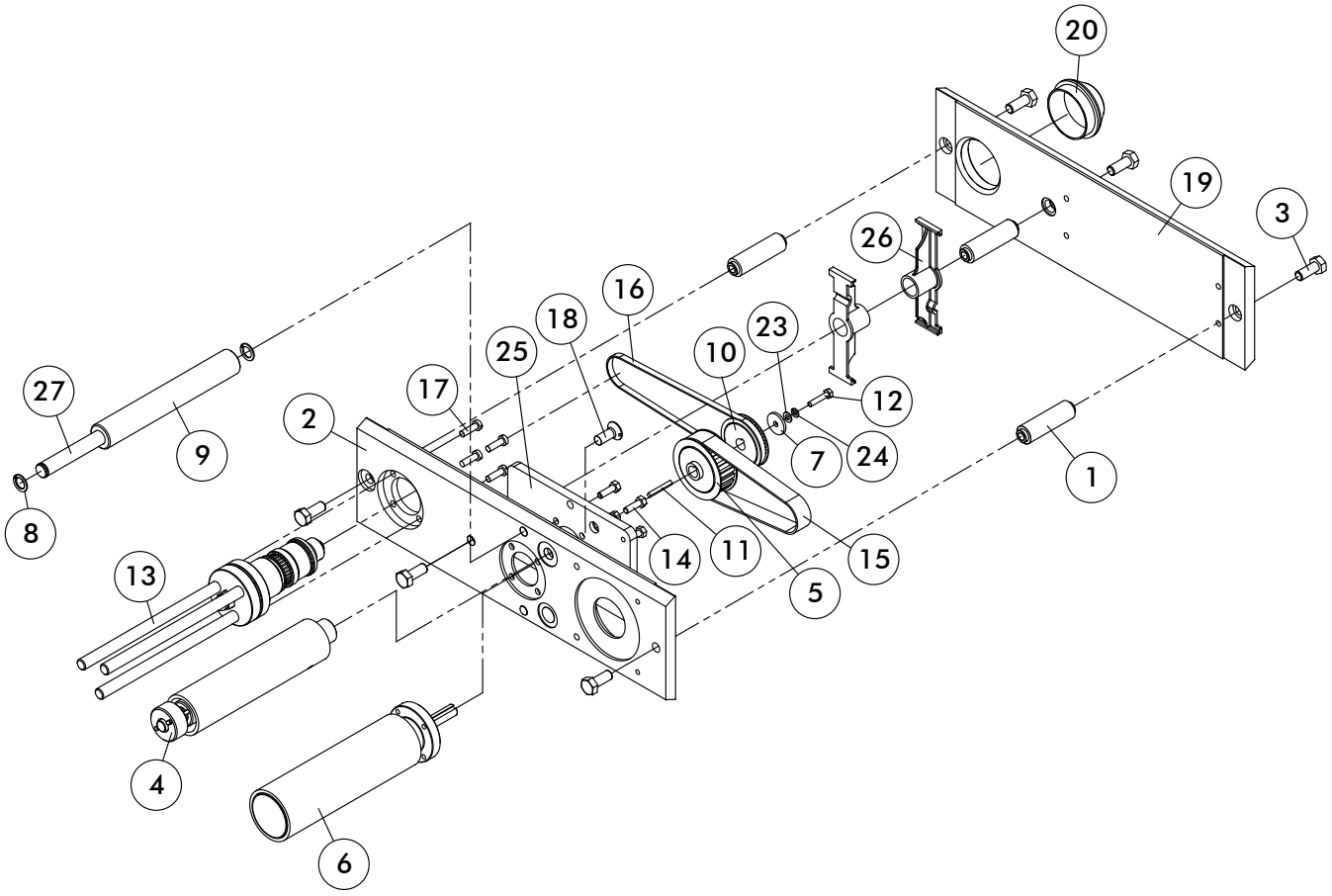
Drive Unit, Right-Hand

Parts List

Item No.	Label Width		Description
1	ALL	890003	Tapped Insert for Drive Head
2	ALL	890007	Drive Head Front Plate
3	ALL	810107	Bolt, M8x20 Hex Head
4	150	865031	Tension Roller Assembly
	200	866046	Tension Roller Assembly
5	ALL	866621	Timing Pulley for Drive Head, 32T
6	150	865025	Rubber Drive Roller Assembly
	200	865026	Rubber Drive Roller Assembly
7	ALL	866628	Gearbox Head Washer
8	ALL	866801	Retaining Ring, External 12mm
9	150	866401	Backing Paper Roller
	200	866402	Backing Paper Roller
10	ALL	866625	Timing Pulley for Clutch Assembly, 44T
11	ALL	866810	Key, 3x3x25
12	ALL	810100	Bolt, M4x20 Hex Head
13	150	865011	Take-Up Unit Assembly
	200	865012	Take-Up Unit Assembly
14	ALL	810178	Bolt, M5x16 Hex Head
15	ALL	866561	Timing Belt for Drive Motor
16	ALL	890008	Timing Belt for Take-Up Unit
17	ALL	890009	Screw, M5x16 Slotted Cheesehead
18	ALL	868599	Screw, M8x20 Slotted Flathead
19	ALL	890011	Drive Head Back Plate
20	ALL	890012	Take-Up Guard
23	ALL	866772	Washer, 4mm Flat
24	ALL	866783	Washer, 4mm Split
25	ALL	890443	Steel Insert for Drive Plate
26	ALL	890444	Spacer for Drive Head Plate
27	150	866469	Idler Roller Shaft
	200	866470	Idler Roller Shaft

Drive Unit, Right-Hand

Diagram



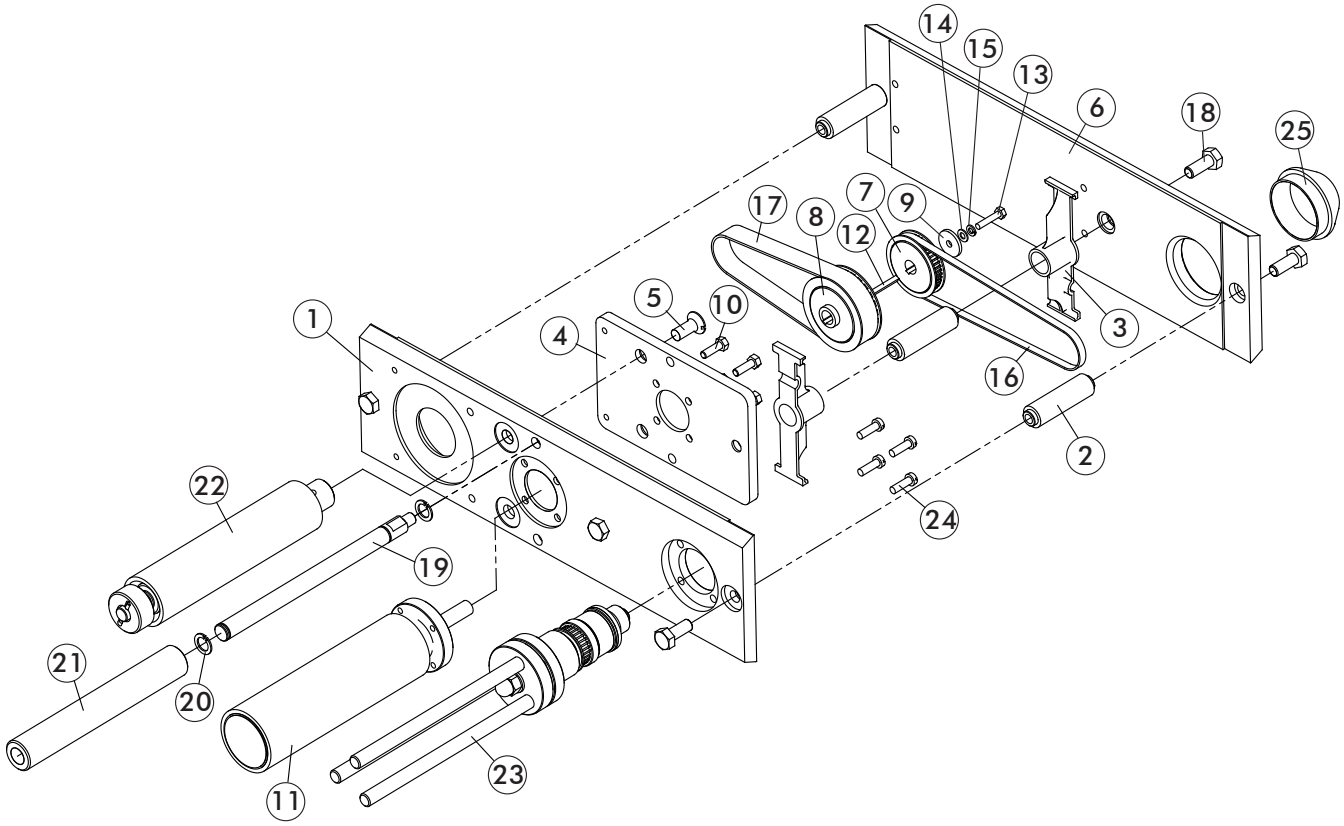
Drive Unit, Left-Hand

Parts List

Item No.	Label Width		Description
1	ALL	890007	Drive Head Front Plate
2	ALL	890003	Tapped Insert for Drive Head
3	ALL	890444	Spacer for Drive Head Plate
4	ALL	890443	Steel Insert for Drive Plate
5	ALL	868599	Screw, M8x20 Slotted Flathead
6	ALL	890011	Drive Head Back Plate
7	ALL	866625	Timing Pulley for Clutch Assembly, 44T
8	ALL	866 621	Timing Pulley for Drive Head, 32T
9	ALL	866628	Gearbox Head Washer
10	ALL	810178	Bolt, M5x16 Hex Head
11	150	865025	Rubber Drive Roller Assembly
	200	865026	Rubber Drive Roller Assembly
12	ALL	866810	Key, 3x3x25
13	ALL	810100	Bolt, M4x20 Hex Head
14	ALL	866772	Washer, 4mm Flat
15	ALL	866783	Washer, 4mm Split
16	ALL	890008	Timing Belt for Take-Up Unit
17	ALL	866561	Timing Belt for Drive Motor
18	ALL	810107	Bolt, M8x20 Hex Head
19	150	866469	Idler Roller Shaft
	200	866470	Idler Roller Shaft
20	ALL	866801	Retaining Ring, External 12mm
21	150	866401	Backing Paper Roller
	200	866402	Backing Paper Roller
22	150	865035	Tension Roller Assembly, Left-Hand
	200	865036	Tension Roller Assembly, Left-Hand
23	150	865041	Take-Up Unit Assembly, Left-Hand
	200	865042	Take-Up Unit Assembly, Left-Hand
24	ALL	890009	Screw, M5x16 Slotted Cheesehead
25	ALL	890012	Take-Up Guard
26	ALL	890719	Ground Strap (Not Shown)

Drive Unit, Left-Hand

Diagram



Label Tower

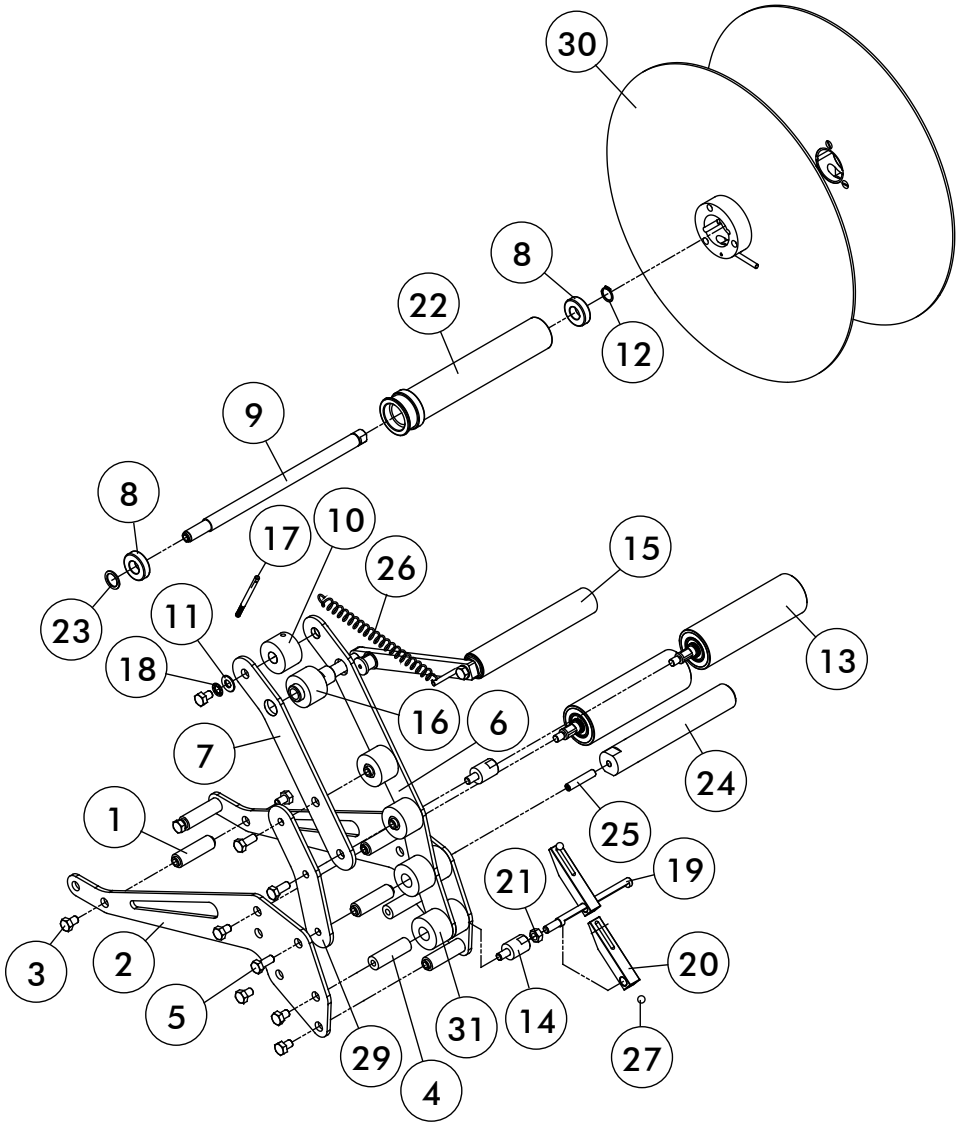
Parts List

Item No.	Label Width		Description
1	ALL	890003	Tapped Insert for Drive Head
2	ALL	890013	Unwind Mount Plate
3	ALL	860287	Screw, M8x12 Hex Head
4	ALL	890116	Tapped Insert for Drive Head
5	ALL	810107	Bolt, M8x20 Hex Head
6	ALL	890172	Unwind Arm Plate (Long)
7	ALL	890018	Unwind Arm Plate
8	ALL	866064	Ball Bearing 32x15x9
9	150	890023	Axle for Main Dispense Roller
	200	890361	Axle for Main Dispense Roller
10	ALL	890024	Spacer, Main Dispense Roller Mount
11	ALL	866792	Washer, M8 Large OD
12	ALL	866802	Retaining Ring, External 15mm
13	150	895010	Idler Roller Assembly, 2-in. Nominal
	200	895011	Idler Roller Assembly, 2-in. Nominal
14	ALL	890017	Shaft Extension, Adapter
15	150	895004	Dancer Arm Assembly
	200	895005	Dancer Arm Assembly
16	ALL	890025	Bearing Spacer, Dancer Arm
17	ALL	890424	Spring Mount Spindle
18	ALL	866779	Washer, 8mm Star
19	150	866113	Pivot Shaft for Brake Arm, 110mm
	200	866115	Pivot Shaft for Brake Arm, 200mm
20	ALL	866070	Drag Level Arm
21	ALL	866766	Nut, M8-1.25 Hex
22	150	890102	Main Dispense Roller
	200	890382	Main Dispense Roller
23	ALL	890104	Unwind Shaft Spacer
24	150	890105	Unwind Brake Bar
	200	890383	Unwind Brake Bar
25	ALL	866824	Screw, M8x40 Socket Set
26	ALL	866121	Dancer Arm Spring
27	ALL	866797	8mm Diameter Ball
29	ALL	890427	Unwind Stiffening Plate

Label Tower

Diagram

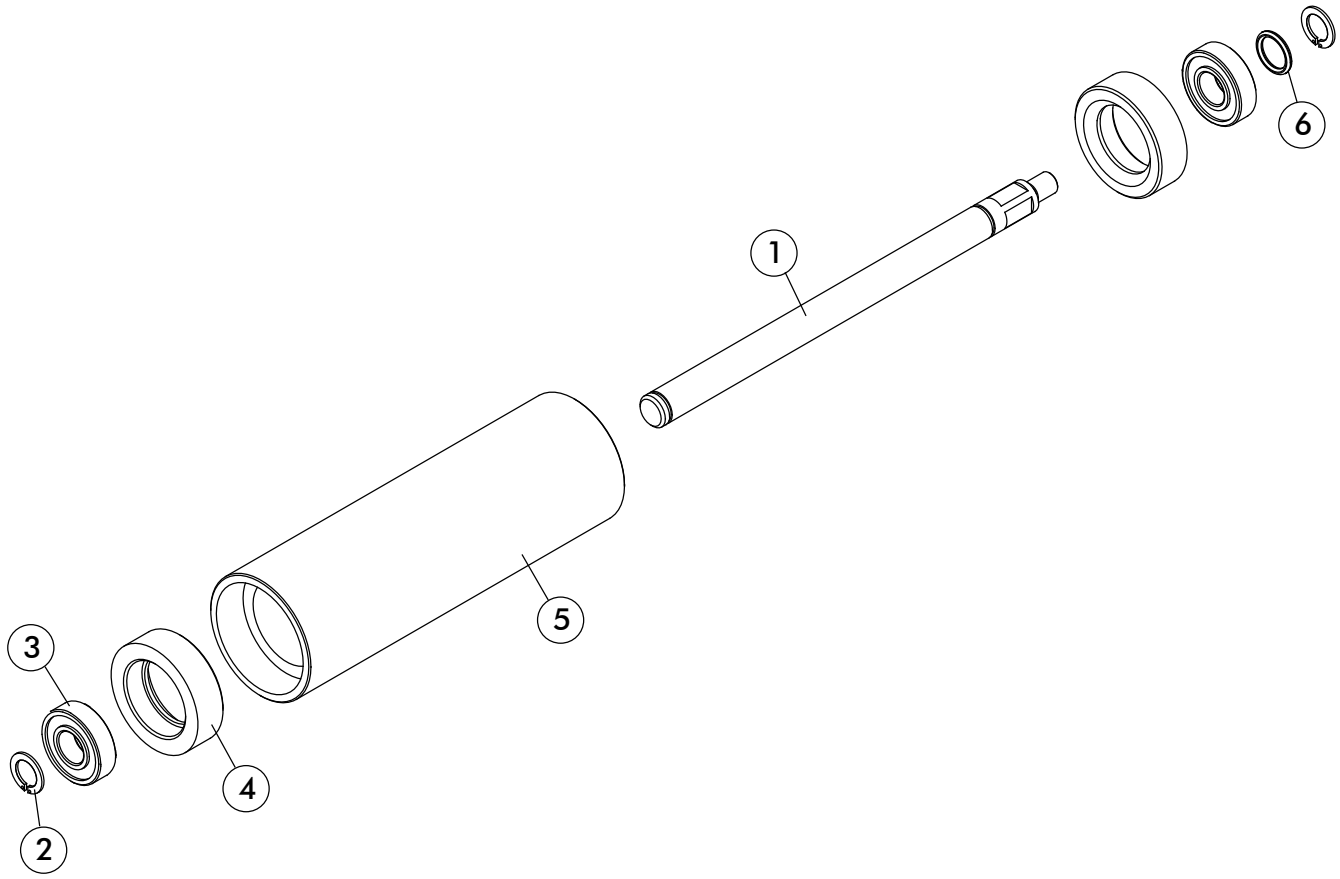
Item No.	Label Width		Description
30	ALL	865004	Label Reel with Hub Coupling (for 14-in. Disc)
	OR	869135	Label Reel with Hub Coupling (for 18-in. Disc)
31	ALL	890801	Spacer for Unwind Neck
32	ALL	868694	Pad, Drag Lever Arm (Not Shown)



Roller, 2-in. Nominal

Parts List and Diagram

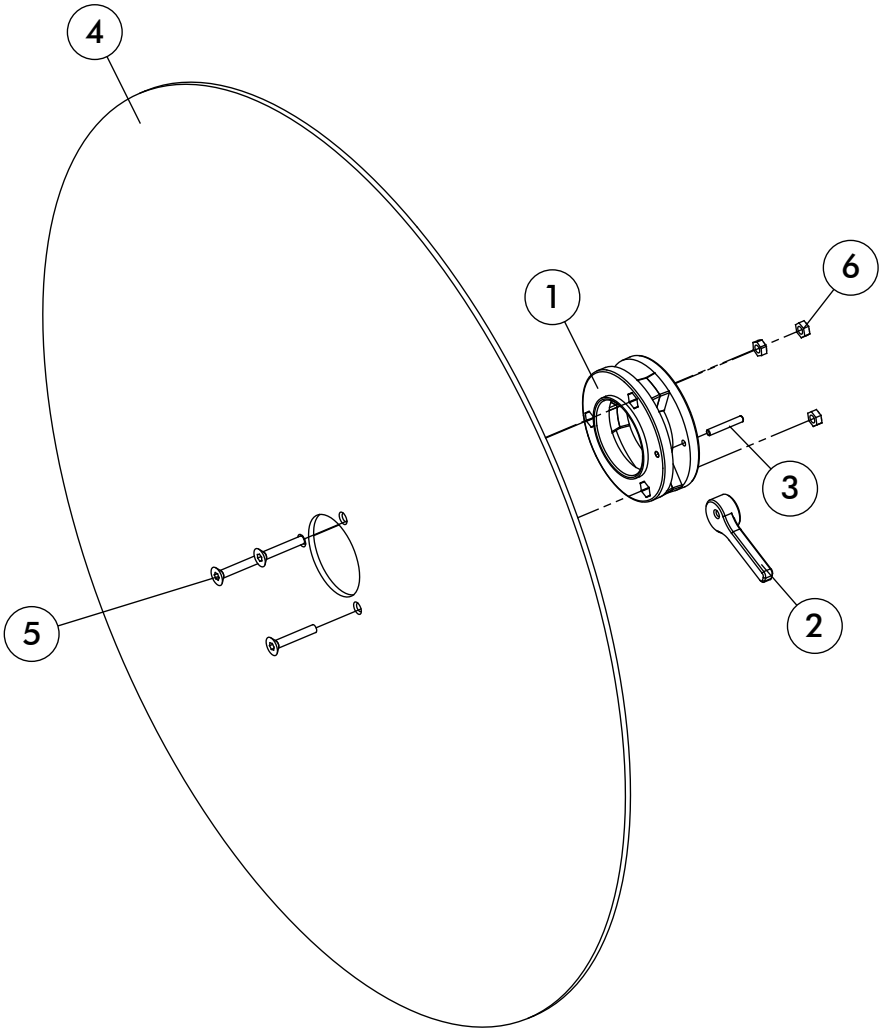
Item No.	Label Width		Description
1	150	890021	Axle, Drive Head Roller
	200	890360	Axle, Drive Head Roller
2	ALL	866801	Retaining Ring, External, 12mm
3	ALL	866048	Bearing Ball, 28x12x8
4	ALL	890020	Hub for 2-in. Idler Roller
5	150	890019	Idler Roller, 2-in. OD Nominal
	200	890359	Idler Roller, 2-in. OD Nominal
6	ALL	890729	O-Ring Spacer for Idler Roller



Label Reel

Parts List and Diagram

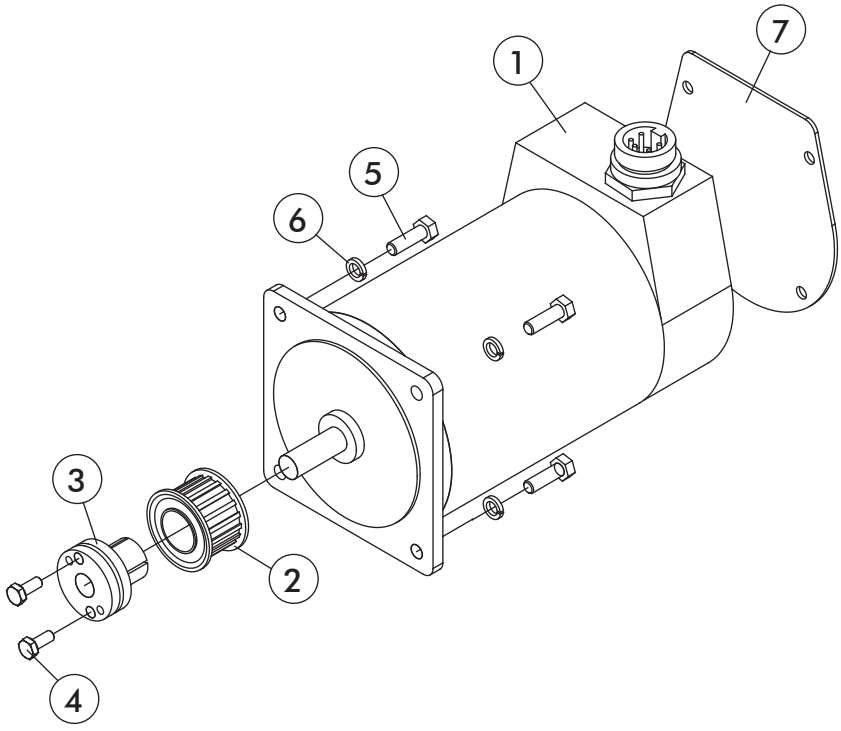
Item No.		Description
	865004	Complete, Label Reel with Hub Coupling (for 14-in. Disc)
	869135	Complete, Label Reel with Hub Coupling (for 18-in. Disc)
1	890774	Label Roll Locking Hub, Molded
2	869345	Cam Arm, Unwind Disc
3	866700	Dowel Pin, SS, 3mm x 20mm
4	866116	Unwind Label Roller Disc (14-in.)
	867141	Unwind Label Roller Disc (18-in.)
5	866708	Screw, M4x20 Slotted Flat Head
6	866763	Nut, 5mm Hex



Label Drive Stepper Motor

Parts List and Diagram

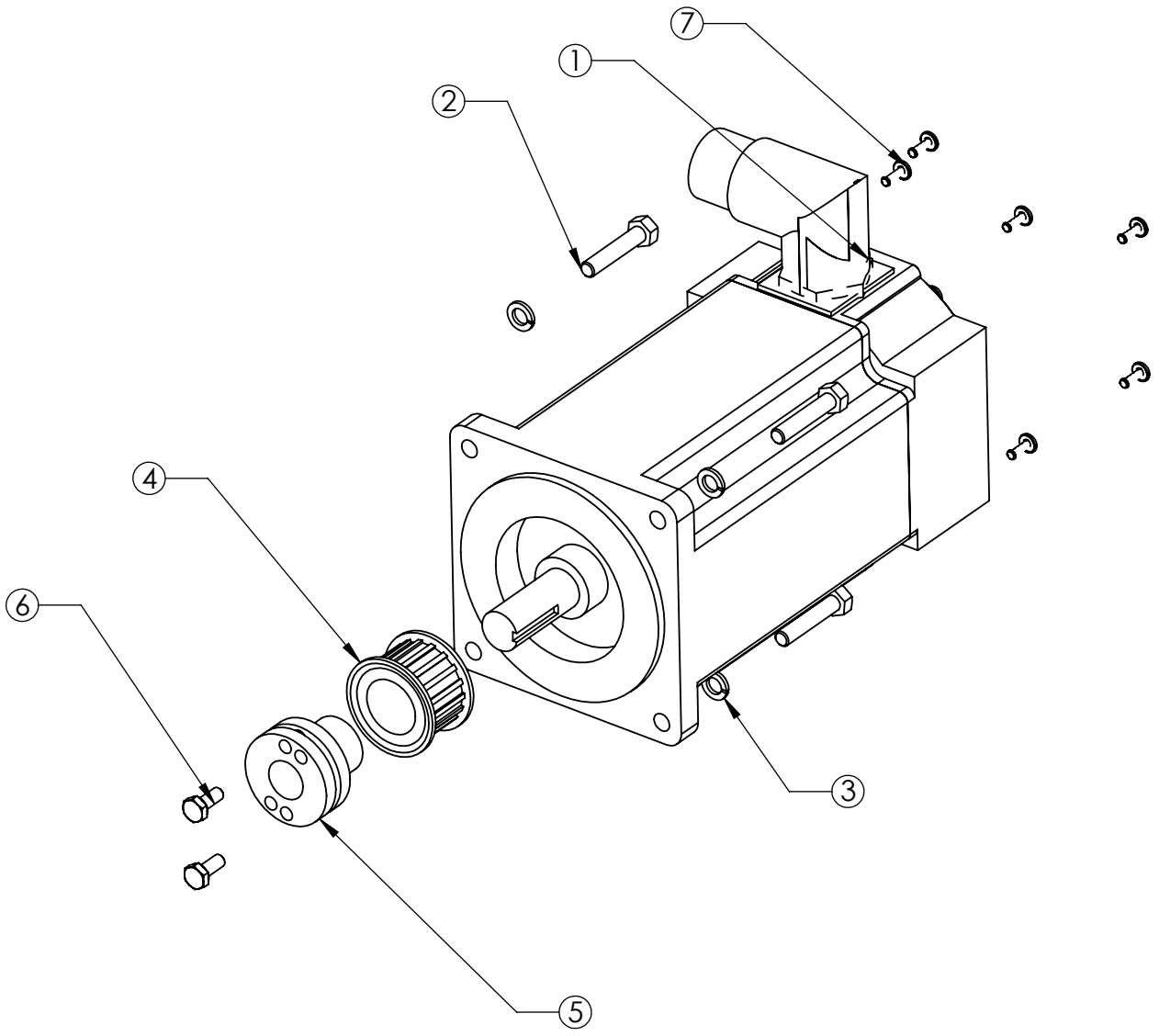
Item No.	Label Width	Web Width		Description
1	ALL	ALL	891985	Red Stepper Motor, High-Torque Applications
		ALL	891446	Black Stepper Motor, Standard-Torque Applications
2	ALL	ALL	866626	Timing Belt Pulley, 18T
3	ALL	ALL	866399	Shaft Lock Clamp (3/8)
4	ALL	ALL	800350	Screw, M4-0.7x10 Hex Head
5	ALL	ALL	890440	Bolt, M5x16 SS Hex Head
6	ALL	ALL	860260	Washer, M5 Split
7	ALL	ALL	890583	Motor End Cover Plate
8	ALL	ALL	895022	Complete High-Torque Motor Assembly
	ALL	ALL	895023	Complete Standard-Torque Motor Assembly



Label Drive Servo Motor

Parts List and Diagram

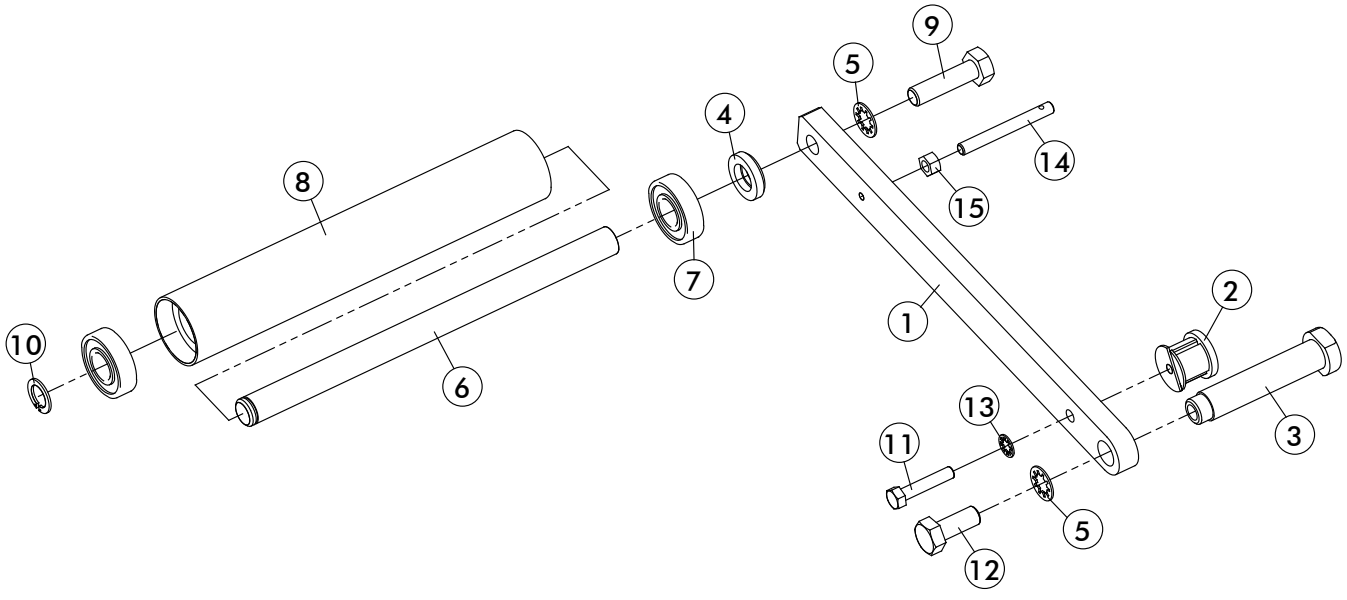
Item No.	Label Width	Web Width		Description
1	ALL	ALL	869320	Servo Motor
2	ALL	ALL	810104	Screw, M5 x 25 Hex Head
3	ALL	ALL	860260	Washer, M5 Split Lock
4	ALL	ALL	869741	Pulley, Timing Belt 18 Tooth
5	ALL	ALL	869742	Taper Lock, ETP 1/2"
6	ALL	ALL	800350	Screw, M4 X 10 Pan Head
7	ALL	ALL	866829	Screw M3 x 5MM



Dancer Arm, Top Head

Parts List and Diagram

Item No.	Label Width		Description
1	ALL	890027	Dancer Arm (for 14-in. Disc)
	OR	890560	Dancer Arm (for 18-in. Disc)
2	ALL	866053	Brake Band Mount
3	ALL	890026	Axle for Dancer Arm
4	ALL	866471	Dancer Arm Washer
5	ALL	866779	Washer, 8mm Star
6	150	890028	Dancer Arm Roller Shaft
	200	890362	Dancer Arm Roller Shaft
7	ALL	866048	Bearing Ball, 28x12x8
8	150	890029	Dancer Roller
	200	890363	Dancer Roller
9	ALL	810108	Bolt, M8x30 Hex Head
10	ALL	866801	Retaining Ring, External 12mm
11	ALL	810104	Screw, M5-0.8x25 Hex Head
12	ALL	810107	Bolt, M8x20 Hex Head
13	ALL	866778	Washer, 5mm Star
14	ALL	866061	Spring Mount Spindle



Peel Bar, Top Head

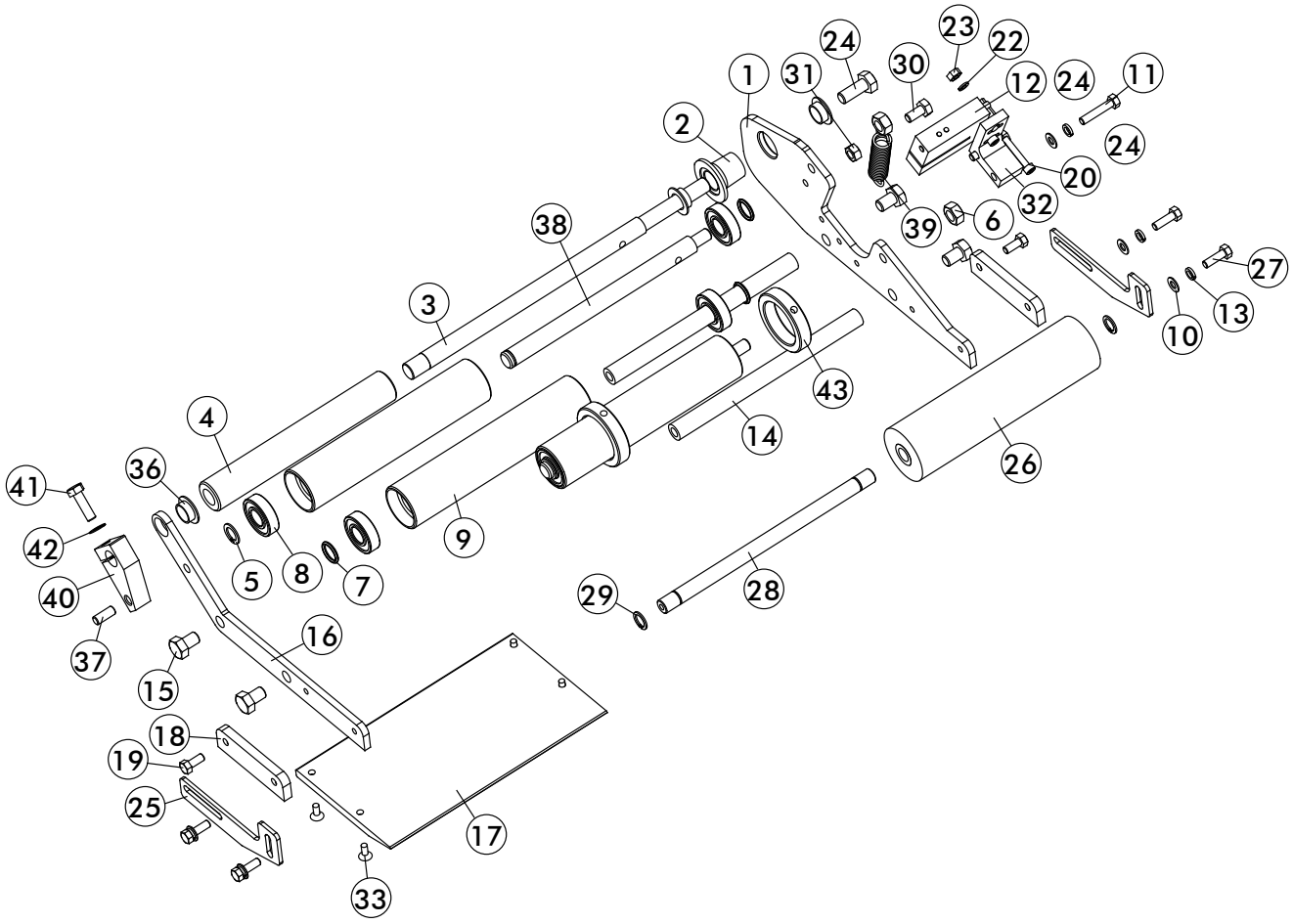
Parts List

Item No.	Label Width		Description
1	ALL	810341	Pivot Plate
2	ALL	810342	Pivot Bearing Boss
3	150	810343	Axle
	200	810359	Axle
4	150	866401	Backing Paper Roller
	200	866402	Backing Paper Roller
5	ALL	866801	Retaining Ring, External 12mm
6	ALL	866766	Nut, M8-1.25 Hex
7	ALL	890729	O-Ring for Idler Roller
8	ALL	866048	Ball Bearing
9	150	890080	Roller, Small OD
	200	890381	Roller, Small OD
10	ALL	866773	Washer, 5mm Flat
11	ALL	810104	Screw, M5-0.8x25 Hex Head
12	ALL	869342	Label Sensor, 2mm Gap
13	ALL	860260	Washer, M5 Split
14	150	810344	Shaft, Cross Pivot Assembly
	200	810344	Shaft, Cross Pivot Assembly
15	ALL	860287	Screw, M8x12 Hex Head
16	ALL	810345	Plate, Front, Peel Bar Assembly
17	150	810346	Peel Plate
	200	810361	Peel Plate
18	ALL	810347	Tap Bar, Peel Bar Mount
19	ALL	810102	Bolt, M5x12 Hex Head
20	ALL	866827	Bolt, M4x25 Hex Head
22	ALL	866783	Washer, 4mm Split
23	ALL	866763	Nut, 4mm Hex
24	ALL	810107	Bolt, M8x20 Hex Head
25	ALL	810348	Roller Arm
26	150	810046	Roller Black Foam, 40mm OD
	200	810409	Roller Black Foam, 40mm OD
27	ALL	810178	Bolt, M5x16 Hex Head
28	150	810349	Roller Shaft, Foam Roller
	200	810408	Roller Shaft, Foam Roller

Peel Bar, Top Head

Diagram

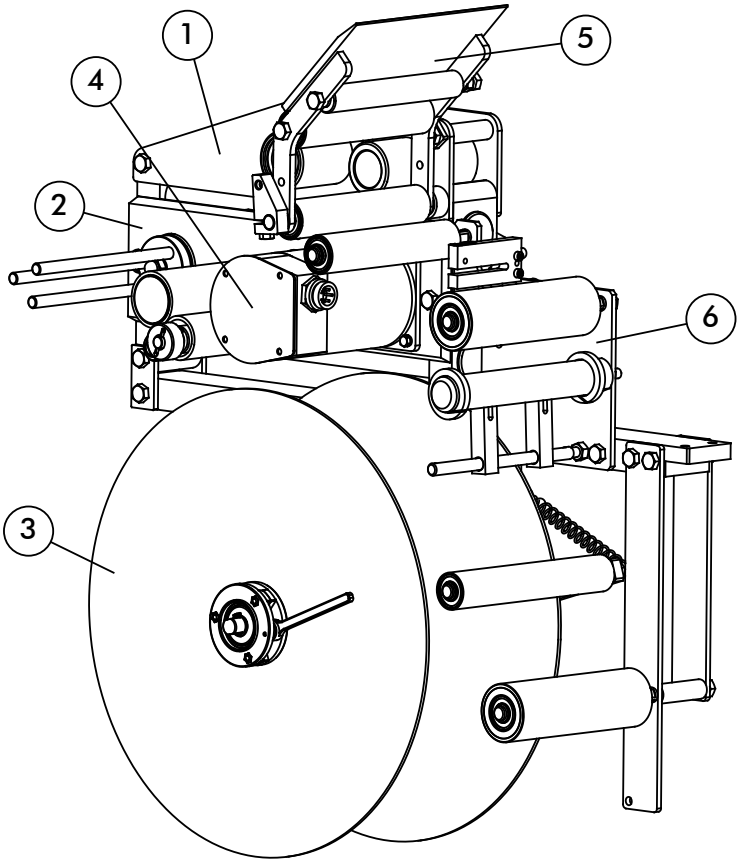
Item No.	Label Width		Description
29	ALL	866800	Retaining Ring, External 10mm
30	ALL	810142	Bolt, M6x12 Hex Head
31	ALL	866765	Nut, M6-1.0 Hex
32	ALL	810351	Sensor Mount Block
33	ALL	866756	Screw, M4x10 Socket Flathead
36	ALL	810354	Flange Bearing, 12x4
37	ALL	810353	Dowel, 6x16
38	ALL	890673	Axle, Drive Head Roller
39	ALL	810350	Extension Spring
40	ALL	810370	Stop Block, Pivot Assembly
41	ALL	810143	Bolt, M6x25 Hex Head
42	ALL	866784	Washer, 6mm Split
43	ALL	810433	Guide Ring, 1.25-in.



Bottom Labeler

Parts List and Diagram

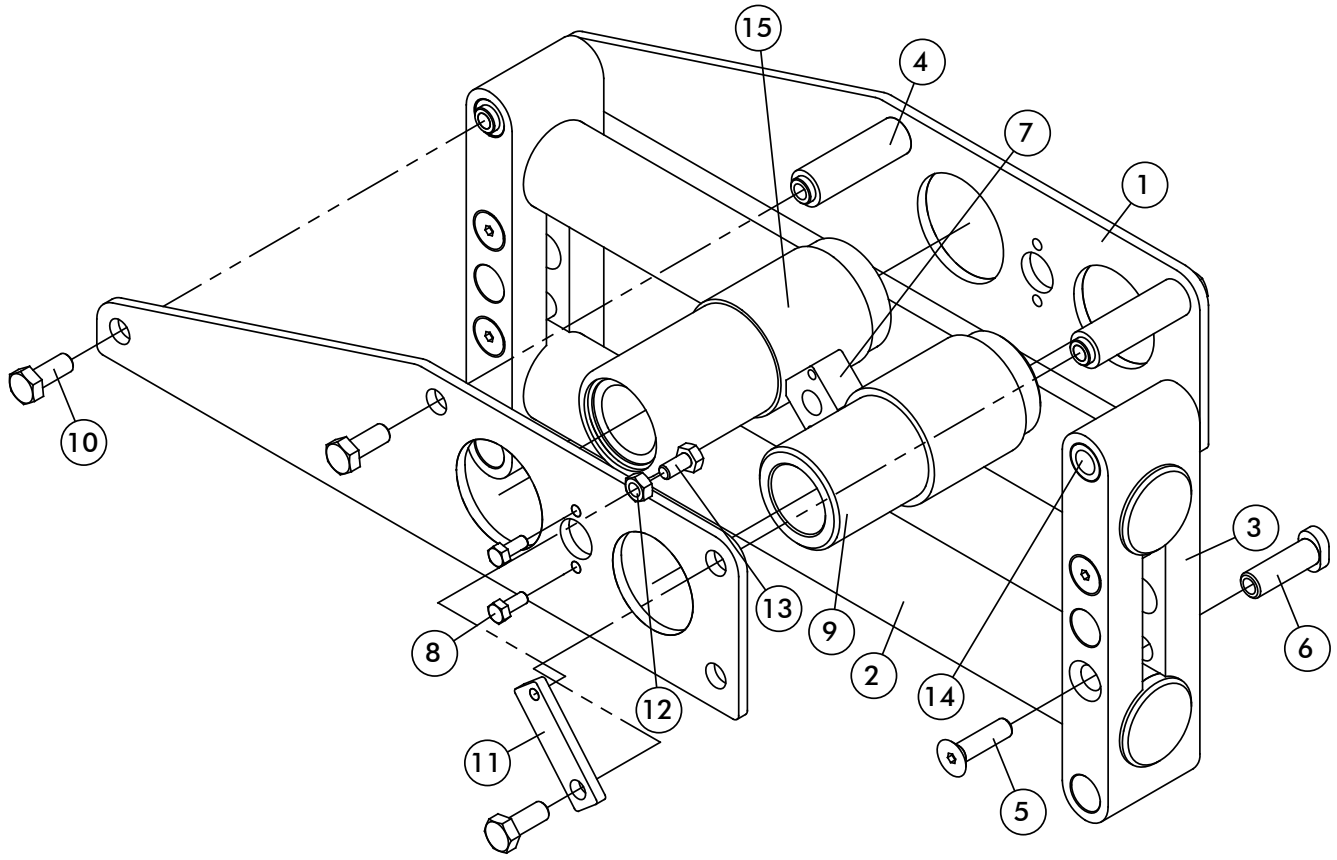
Item No.	Label Width		Description
1	ALL	815173	Head Chassis, Bottom
2	ALL	815038	Drive Head Arm, Left-Hand
	ALL	815037	Drive Head Arm, Right-Hand
3	150	815176	Unwind, Bottom, Left-Hand
	150	815177	Unwind, Bottom, Right-Hand
4	ALL	895022	Motor Assembly, High-Torque
5	150	815174	Peel Assembly, Left-Hand
	150	815175	Peel Assembly, Right-Hand
6	150	815178	Roller Kit, Left-hand
	150	815179	Roller Kit, Right-Hand



Bottom Chassis

Parts List and Diagram

Item No.		Description
1	810490	Mount Plate, Gantry
2	815172	Chassis Tube Assembly
3	890000	Chassis Tube Block
4	890003	Tapped Insert for Drive Head
5	890550	Screw, M8x30 Flat Socket Head
6	890549	Slot Head Female Threaded Fastener
7	810383	Nut, Gantry Adjustment
8	810102	Bolt, M5x12 Head Head
9	810338	Bearing Tube, Gantry Head Support
10	810107	Bolt, M8x20 Hex Head
11	810340	Bar, Spring Adjustment
12	866765	Nut, M6-1.0 Hex
13	810142	Bolt, M6x12 Hex Head
14	890078	Mounting Sleeve for Tamp Unit
15	895464	Bearing Tube Assembly



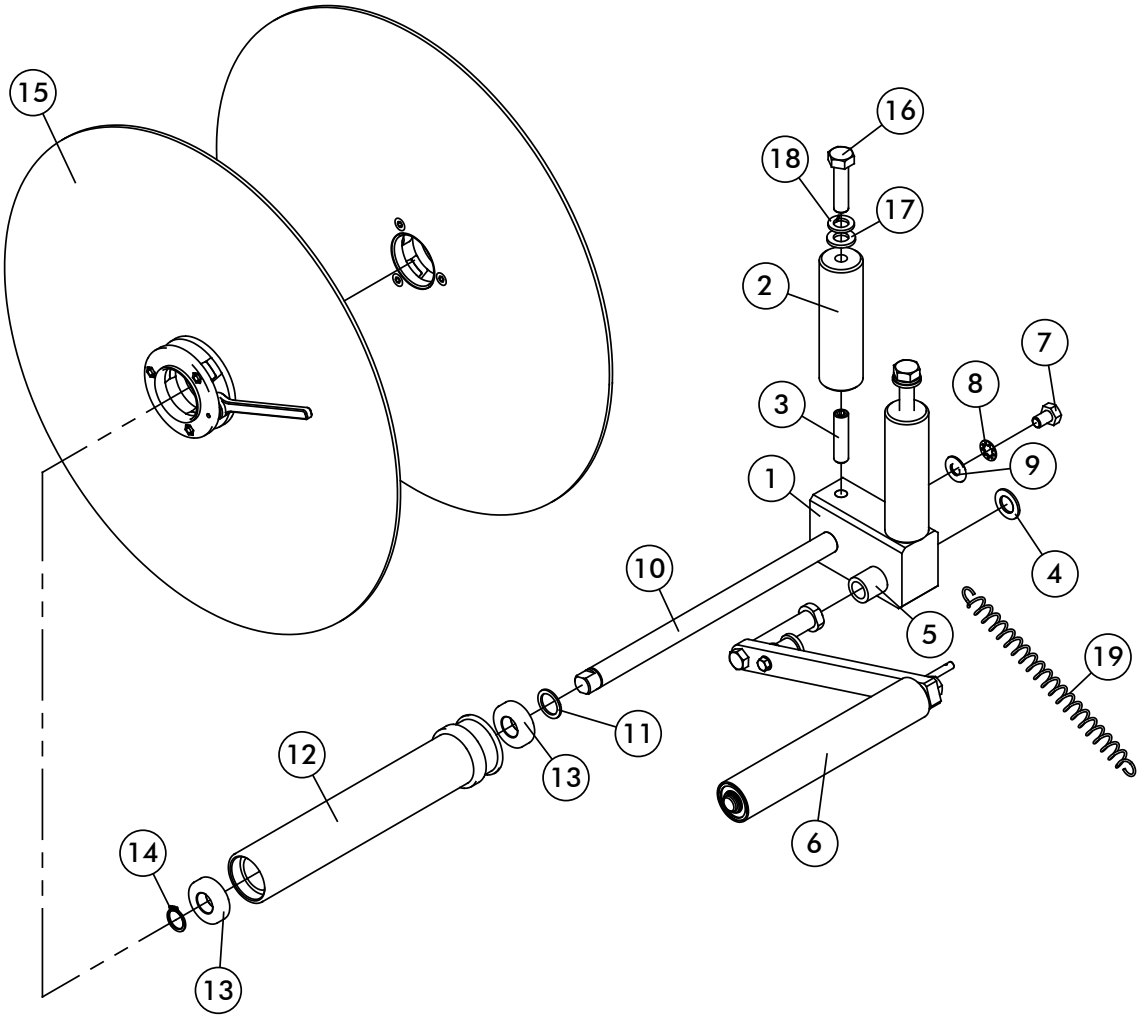
Bottom Unwind

Parts List

Item No.	Label Width		Description
	150	815176	Bottom Unwind, Left-Hand, Complete
	150	815177	Bottom Unwind, Right-Hand, Complete
1	ALL	810509	Unwind Block Mount
2	ALL	810508	Unwind Spacer Post
3	ALL	867009	Set Screw, M10x40 Socket
4	ALL	810495	Washer, Thrust
5	ALL	810510	Spacer, Unwind Dance
6	150	895004	Dancer Arm Assembly
	200	895005	Dancer Arm Assembly
7	ALL	860287	Screw, M8x12 Hex Head
8	ALL	866779	Washer, 8mm Star
9	ALL	866792	Washer, M8 Large OD
10	150	890023	Axle for Main Dispense Roller
	200	890361	Axle for Main Dispense Roller
11	ALL	890104	Unwind Shaft Spacer
12	150	890102	Main Dispense Roller
	200	890382	Main Dispense Roller
13	ALL	866064	Bearing, 32x15x9
14	ALL	866802	Retaining Ring, External, 15mm
15	ALL	865004	Label Reel with Hub, Complete
16	ALL	810112	Bolt, M10x40 Hex Head
17	ALL	866776	Washer, 10mm Flat
18	ALL	866785	Washer, 10mm Lock
19	ALL	866121	Spring, Dancer Arm

Bottom Unwind

Diagram



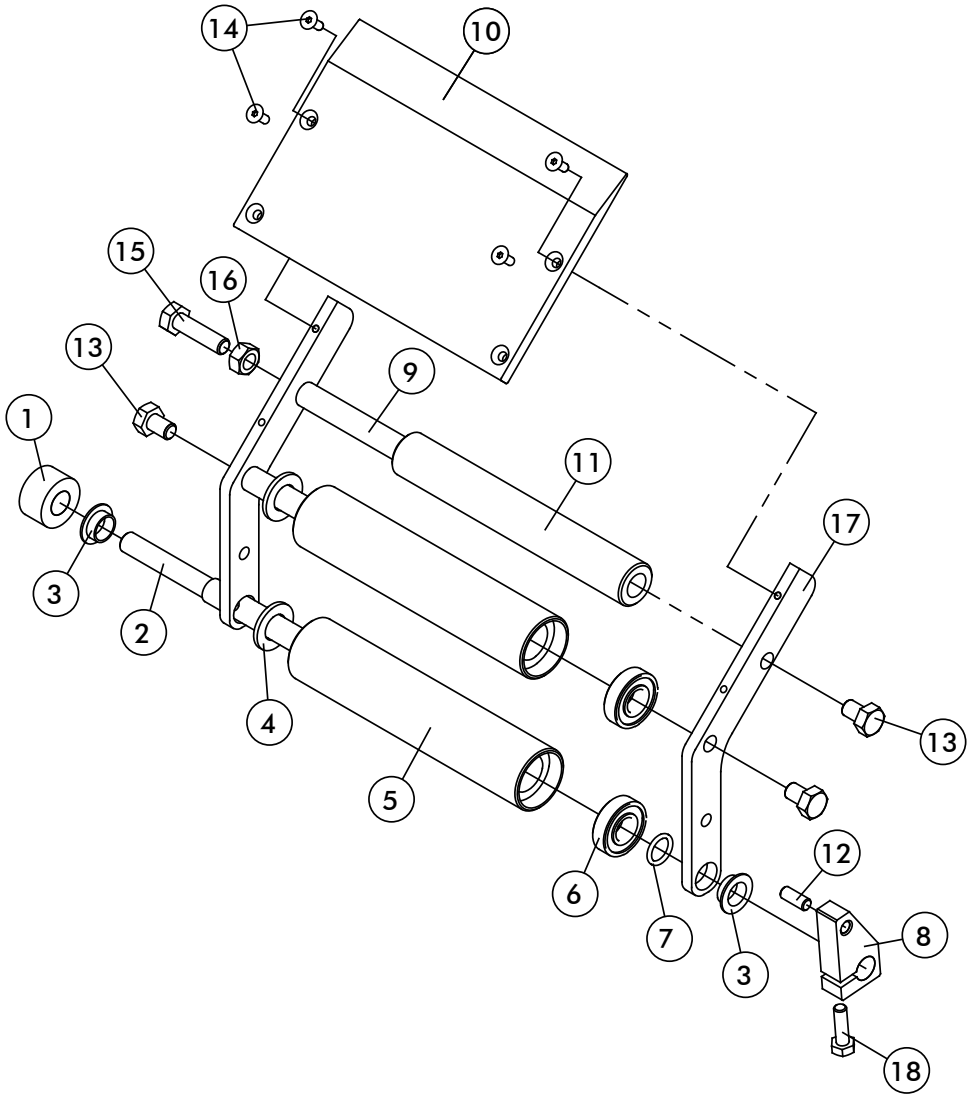
Bottom Peel Assembly

Parts List

Item No.	Label Width		Description
	150	815174	Bottom Peel Assembly, Left-Hand, Complete
	150	815175	Bottom Peel Assembly, Right-Hand, Complete
1	ALL	810492	Peel Assembly Spacer
2	ALL	810343	Shaft, Pivot Assembly Mount
3	ALL	810354	Flange Bearing, 12x4
4	ALL	866777	Washer, 12mm Flat
5	150	890080	Roller, Small OD
	200	890381	Roller, Small OD
6	ALL	866048	Bearing, 28x12x8
7	ALL	890729	O-Ring
8	ALL	810370	Stop Block, Pivot Assembly
9	ALL	810344	Shaft, Cross Pivot Assembly
10	150	810038	Peel Plate
	200	810179	Peel Plate
11	ALL	866401	Backing Paper Roller
12	ALL	810353	Dowel, 6x16 Long
13	ALL	860287	Screw, M8x12 Hex Head
14	ALL	866756	Screw, M4x10 Flat Socket Head
15	ALL	810108	Bolt, M8x30 Hex Head
16	ALL	866766	Nut, M8 Hex
17	ALL	810491	Pivot Arm
18	ALL	810143	Bolt, M6x20 Hex Head

Bottom Peel Assembly

Diagram



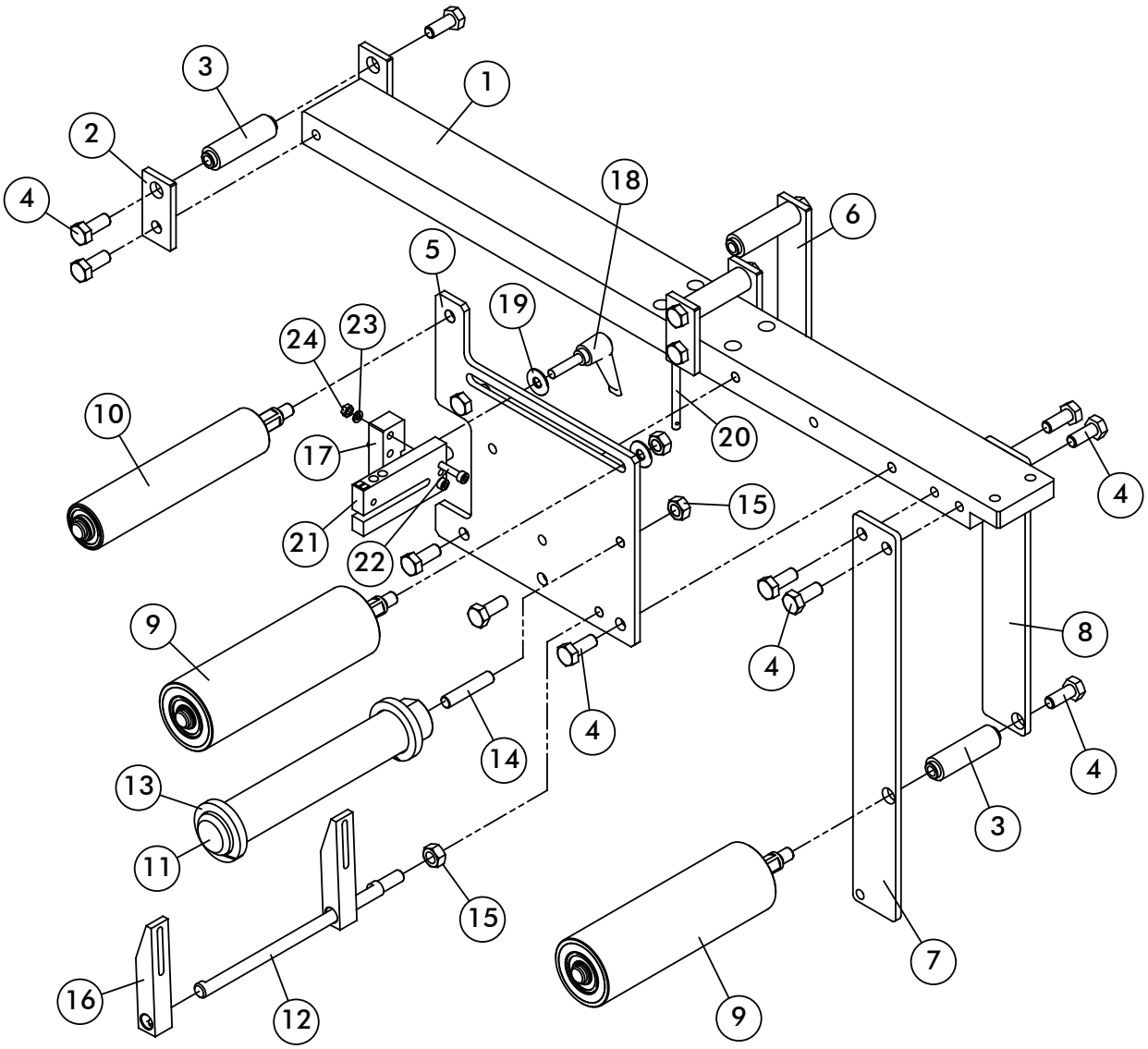
Roller Kit

Parts List

Item No.	Label Width		Description
	150	815178	Roller Kit, Left-Hand, Complete
	150	815179	Roller Kit, Right-Hand, Complete
1	ALL	810494	Bottom Unwind Beam
2	ALL	810496	Gantry/Beam Attachment Plate
3	ALL	890003	Tapped Insert for Drive Head
4	ALL	810107	Bolt, M8x20 Hex Head
5	ALL	810498	Roller Slot Plate
6	ALL	810497	Bottom Back Strap
7	ALL	810499	Roller Plate, Front
8	ALL	810506	Roller Plate, Rear
9	150	895010	Idler Roller Assembly, 2-in.
	200	895011	Idler Roller Assembly, 2-in.
10	150	895012	Idler Roller Assembly, 1.25-in
	200	895013	Idler Roller Assembly, 1.25-in.
11	150	890105	Unwind Brake Bar
	200	890383	Unwind Brake Bar
12	150	866114	Brake Pivot Shaft
	200	866115	Brake Pivot Shaft
13	ALL	866069	Guide Ring
14	ALL	866824	Set Screw, M8x40 Socket
15	ALL	866766	Nut, M8 Hex
16	ALL	866070	Drag Level Arm
17	ALL	810507	Sensor Slide Block
18	ALL	810057	Handle
19	ALL	866793	Washer, M6 Large OD
20	ALL	890424	Spring Mount Spindle
21	ALL	869396	SICK Film Scanner
22	ALL	866725	Screw, M4x30 Socket Head
23	ALL	866783	Washer, 4mm Split
24	ALL	866763	Nut, 5mm Hex

Roller Kit

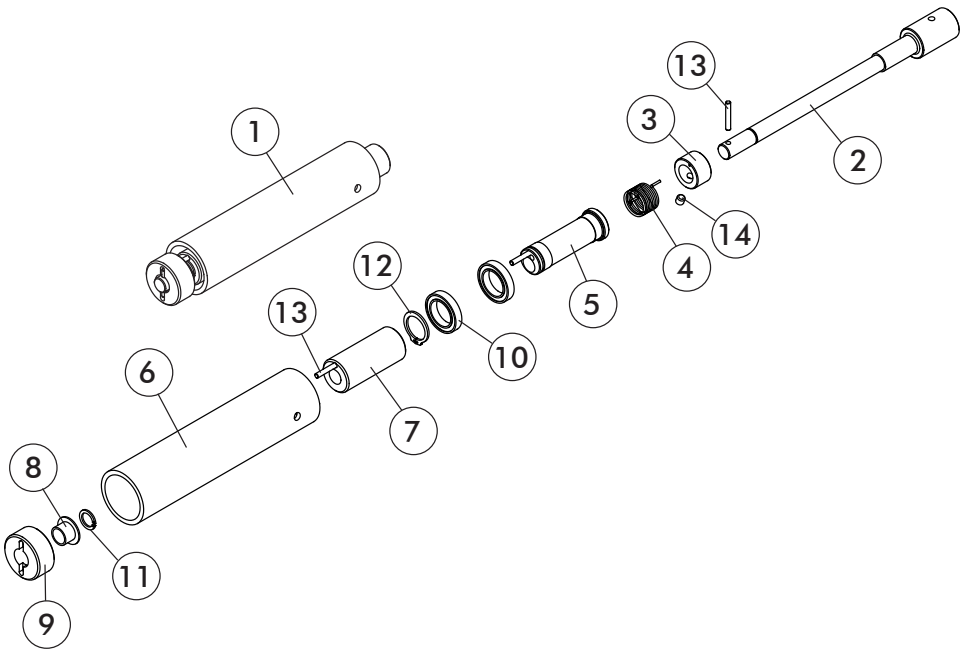
Diagram



Tension Roller

Parts List and Diagram

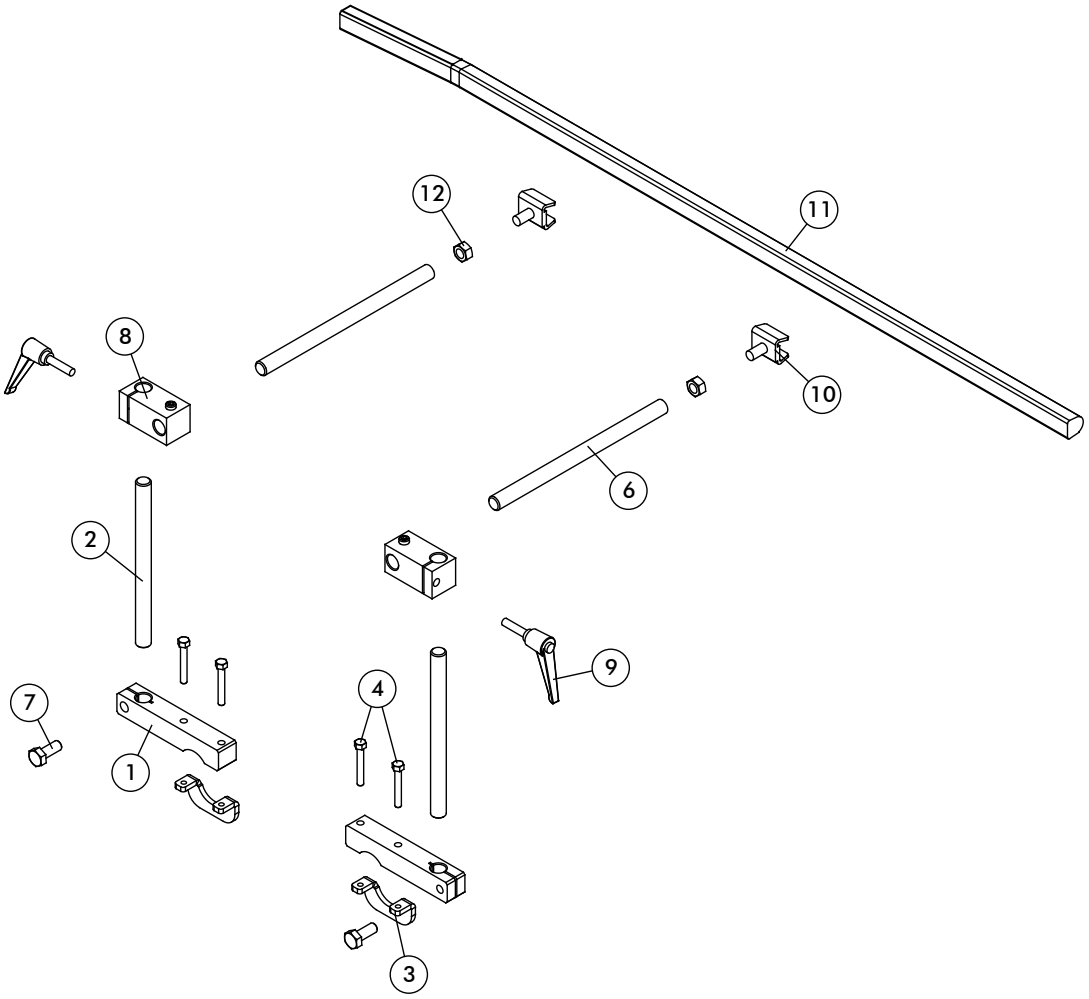
Item No.	Label Width		Description
1	150	865031	Tension Roller Assembly for (PR/FR)
	150	865035	Tension Roller Assembly for (PL/FL)
	200	865032	Tension Roller Assembly for (PR/FR)
	200	865036	Tension Roller Assembly for (PL/FL)
2	150	866037	Primary Shaft for Tension Roller
	200	866038	Primary Shaft for Tension Roller
3	ALL	866274	Torsion Spring Set Collar
4	ALL	866023	Torsion Spring for Left-Hand Labeler (PL/FL)
	ALL	866024	Torsion Spring for Right-Hand Labeler (PR/FR)
5	150	866040	Tension Roller Cam
	200	866041	Tension Roller Cam
6	150	866045	Knurled Tension Roller
	200	866046	Knurled Tension Roller
7	ALL	866047	Internal Camshaft Extension
8	ALL	866020	Garloc Bushing
9	ALL	866019	Knurled Catch Knob
10	ALL	866022	Bearing
11	ALL	866800	Retaining Ring, External 10mm
12	ALL	866805	Retaining Ring, External 17mm
13	ALL	866700	Dowel 3x20



Guide Rail

Parts List and Diagram

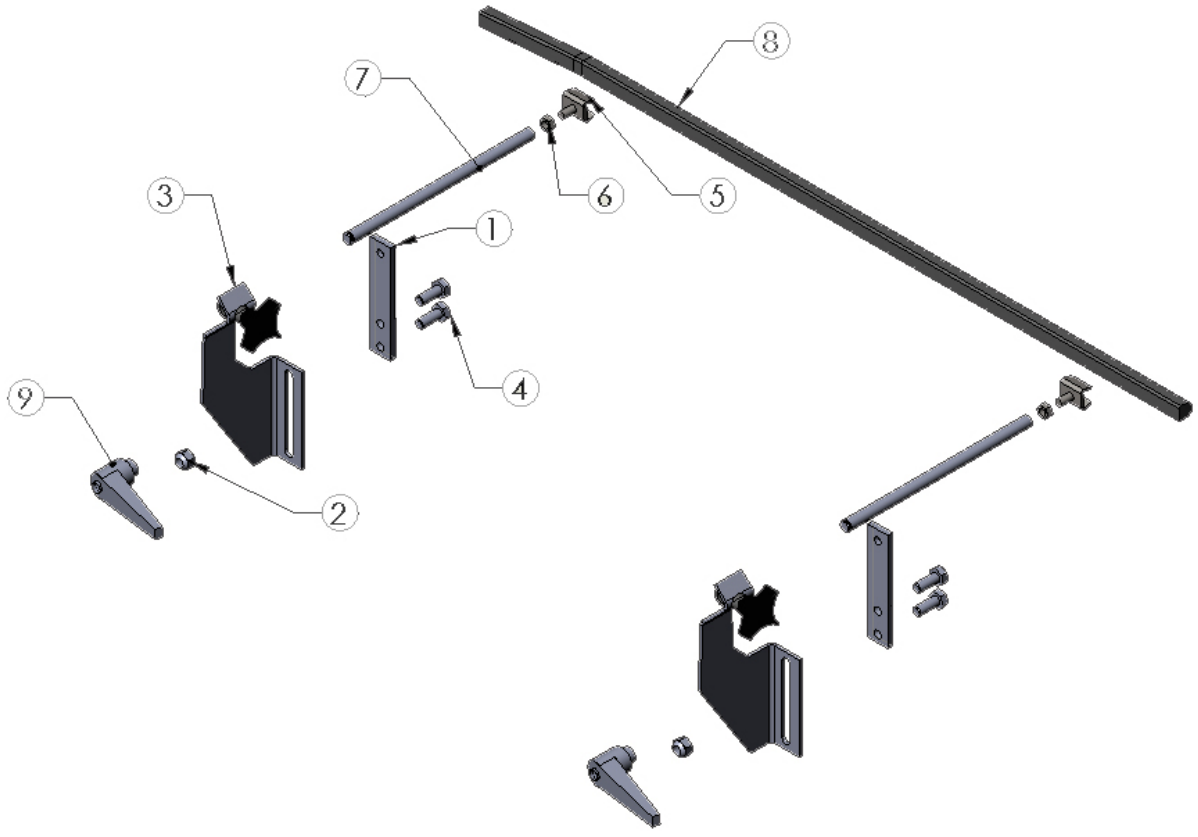
Item No.		Description
	815222	Guide Rail, Complete
1	810596	Mount Block
2	810648	Rod, Vertical
3	810597	Clamp
4	860296	Bolt, M6x25 Hex Head
5	866820	Set Screw, M8x10 Socket
6	810647	Shaft
7	810107	Bolt, M8x20 Hex Head
8	810594	Clamp Block
9	810057	Handle
10	810595	Rail Clip
11	810649	Guide Rail
12	866766	Nut, M8 Hex



Guide Rail

Parts List and Diagram

Item No.		Description
	815233	Guide Rail Kit, Complete
1	869625	Guide Rail Bracket, Posi 2
2	860269	Hex Nut, M10
3	869624	Guide Rail Bracket, Nolu, SS
4	810109	Bolt, M10x25 Hex Head
5	810595	Clip, Guide Rail, Nolu
6	866766	Hex Nut, M8
7	890362	Shaft, 200mm
8	810649	Guide Rail, Express Inline
9	869601	Handle M10



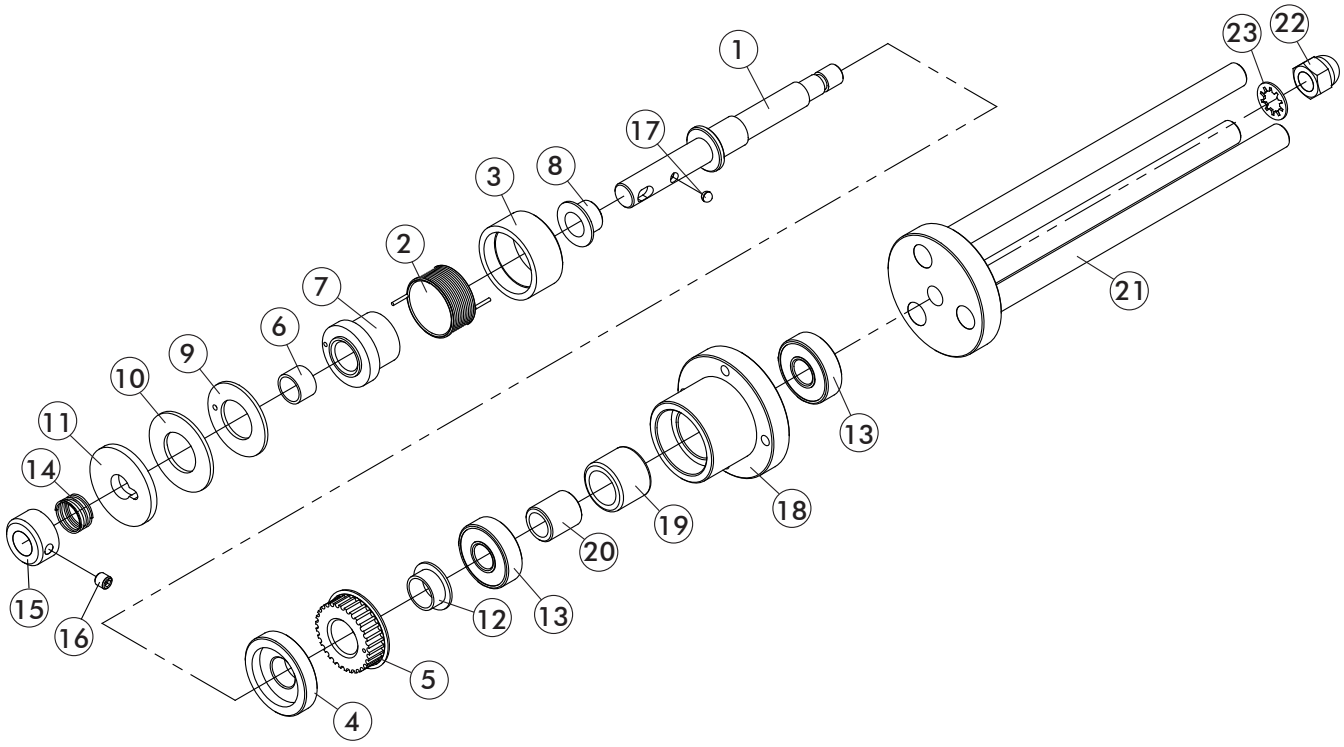
Take-Up Unit

Parts List

Item No.	Label Width		Description
1	ALL	866131	Take-Up Roller Shaft
2	ALL	866128	Torsion Spring, Left-Hand
	ALL	866127	Torsion Spring, Right-Hand
3	ALL	866124	Take-Up Spring Housing
4	ALL	866132	Take-Up Pulley Insert
5	ALL	866624	Gear for Clutch, No. 2, 30T
6	ALL	866438	Bushing Clutch Assembly
7	ALL	866444	Take-Up Spring Housing
8	ALL	866439	Bushing, Plastic 10x12x9
9	ALL	866445	Clutch Disc - TFE
10	ALL	866125	Take-Up Clutch Disc
11	ALL	866123	Pressure Plate Disc
12	ALL	866440	Bushing for Clutch Assembly
13	ALL	866016	Bearing
14	ALL	865007	Spring, Compression
15	ALL	866120	Set Collar
16	ALL	866817	Setscrew, M5-0.8x5
17	ALL	866796	4mm Ball for Clutch
18	ALL	866130	Bearing Flange
19	ALL	866134	One-Way Bearing
20	ALL	866135	Bearing, Inner Race
21	150	865015	Take-Up Hub Assembly
	200	865016	Take-Up Hub Assembly
	300	868859	Take-Up Hub Assembly
22	ALL	866769	Nut, 8mm Dome Hex
23	ALL	866779	Washer, 8mm Star
24	150	865011	Take-Up Unit Complete, Right-Hand
	200	865012	Take-Up Unit Complete, Right-Hand
	150	865041	Take-Up Unit Complete, Left-Hand
	200	865042	Take-Up Unit Complete, Left-Hand

Take-Up Unit

Diagram



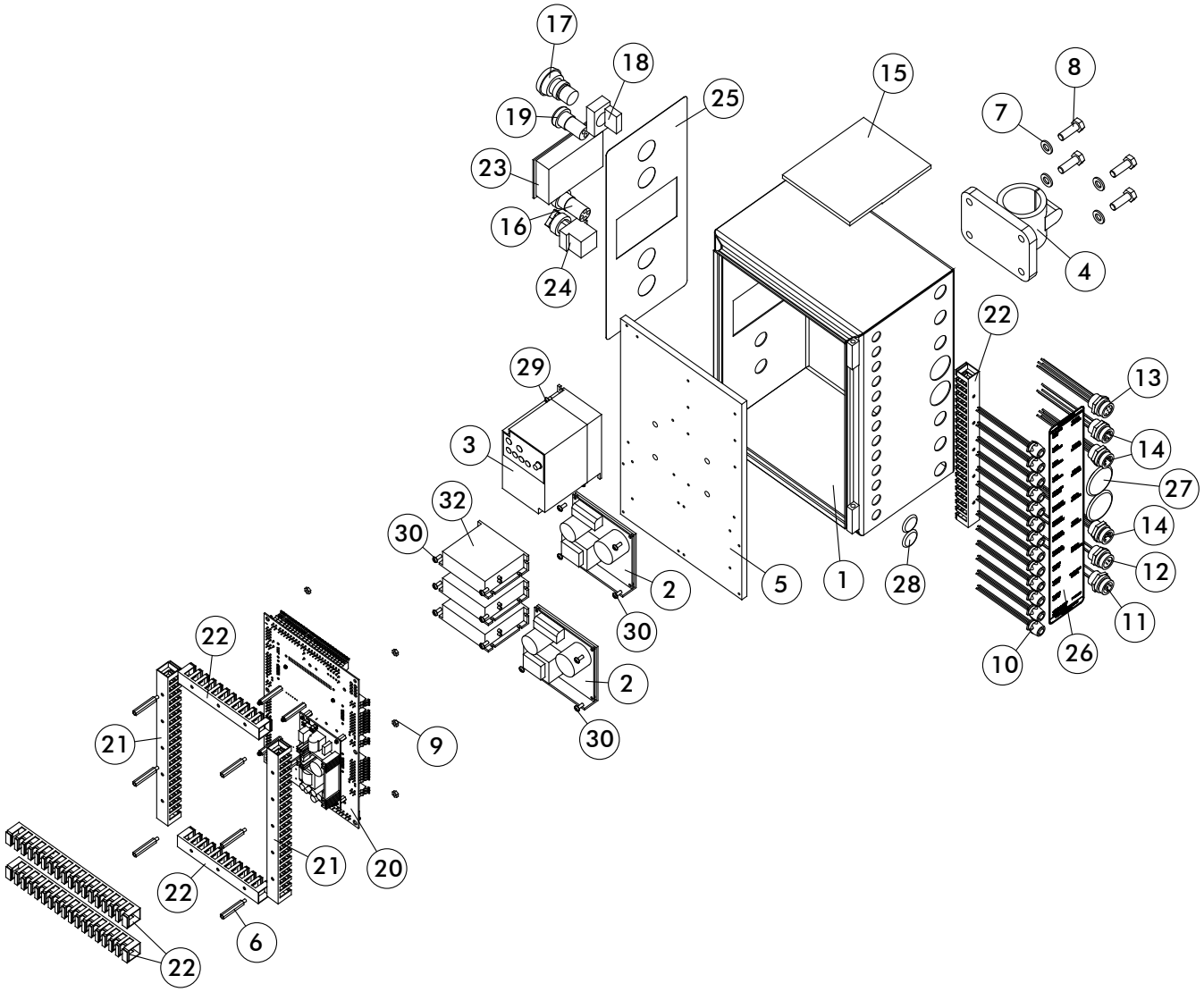
Control Cabinet

Parts List

Item No.		Description
1	869392	Enclosure
2	868118	Power Supply, 75V OP
3	869393	Inverter, Hitachi L200
4	866600	Flange Clamp
5	869395	Heat Sink
6	868126	Stand Off, M4x50
7	866776	Washer, 10mm Flat
8	860483	Bolt, M10x30 Hex Head
9	860281	Nut, 4mm Lock
10	868811	Cable, Bulkhead, 4, Female, Euro
11	868102	Cable, Bulkhead, 3, Female, Mini
12	810160	Cable, Field Connection, 3, Male, Euro
13	868104	Cable, Bulkhead, 6, Female, Mini
14	890131	Connector, Bulkhead, 5, Male, Mini
15	868384	Heater/Thermostat
16	869405	Switch, Power, ON/OFF Body Assembly
17	810006	E-Stop, Operator
18	810008	E-Stop, Switch Block
19	860321	Light, 24VDC, Orange
20	869303	PCB Assembly
21	869316	Wire Duct
22	869319	Wire Duct
23	869513	Touchscreen
24	869405	Switch
25	869398	Decal, Matrix™ Front
26	869399	Decal, Matrix™ Rear
27	869385	Plug, 1.5-in. Flush
28	810514	Plug, 5/8-in. Flush
29	866713	Screw, M4x6 Pan Head
30	866714	Screw, M4x10 Pan Head
31	869514	Stepper Drive
*	869530	Servo Drive (Not Shown)
*	869336	Servo Motor Cable (Not Shown)
*	869400	Servo Mount Bracket (Not Shown)

Control Cabinet

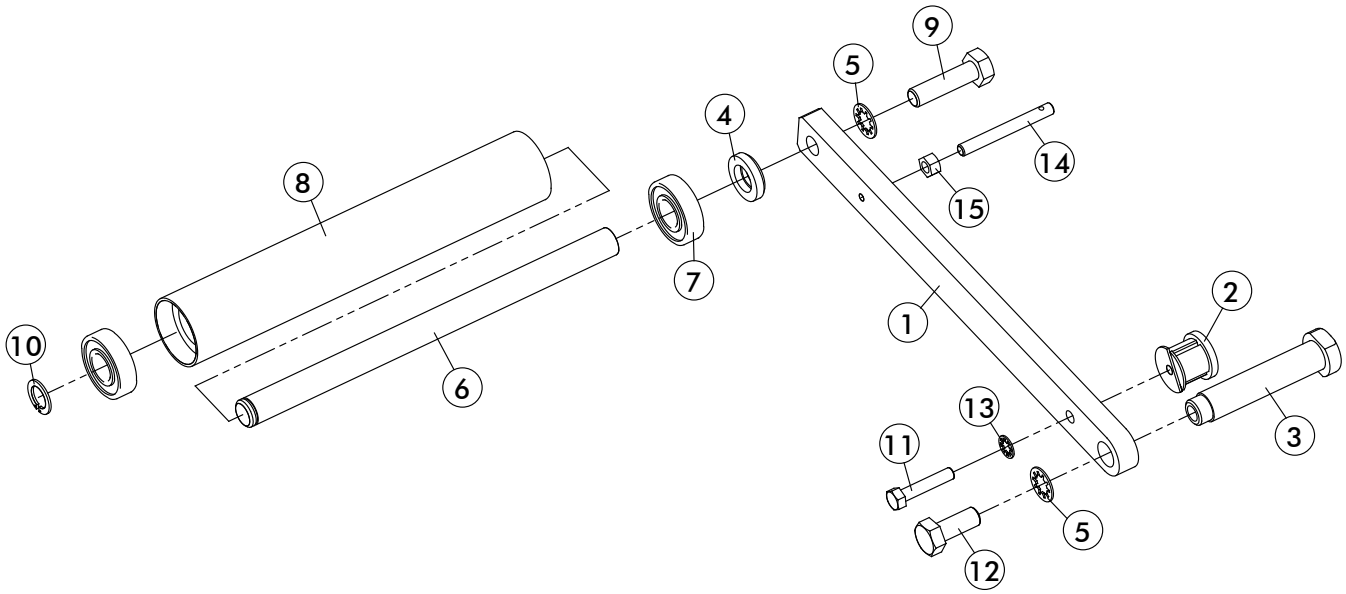
Diagram



Dancer Arm, Bottom Head

Parts List and Diagram

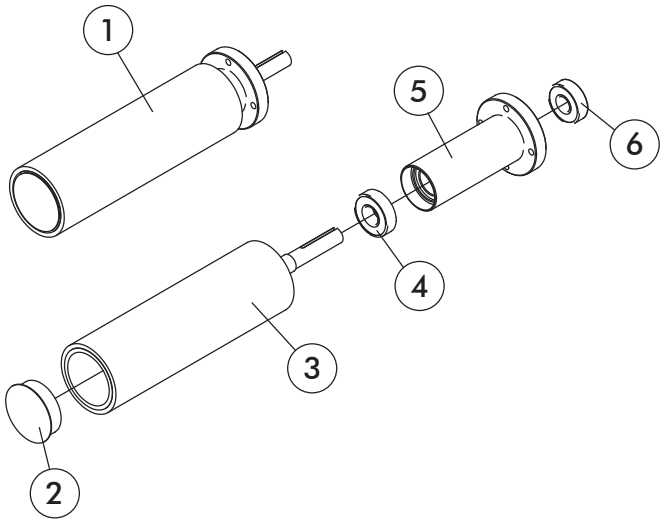
Item No.	Label Width		Description
1	ALL	810358	Dancer Arm - Bottom (14-in. Disc)
	ALL	890560	Dancer Arm - Bottom (18-in. Disc)
2	ALL	866053	Brake Band Mount
3	ALL	890026	Axle for Dancer Arm
4	ALL	866471	Dancer Arm Washer
5	ALL	866779	Washer, 8mm Split
6	150	890028	Dancer Arm Roller Shaft
	200	890362	Dancer Arm Roller Shaft
7	ALL	866048	Ball Bearing
8	150	890029	Dancer Roller
	200	890363	Dancer Roller
9	ALL	810108	Bolt, M8x30 Hex Head
10	ALL	866801	Retaining Ring, External 12mm
11	ALL	810104	Screw, M5-0.8x25 Hex Head
12	ALL	810107	Bolt, M8x20 Hex Head
13	ALL	866778	Washer, 5mm Star
14	ALL	866061	Spring Mount Spindle



Drive Roller

Parts List and Diagram

Item No.	Label Width		Description
1	150	865025	Rubber Roller Assembly
	200	865026	Rubber Roller Assembly
2	ALL	866035	End Cap
3	150	865021	Rubber Roller
	200	865022	Rubber Roller
4	ALL	866015	Bearing
5	ALL	866030	Bearing Flange for Rubber Roller
6	ALL	866016	Bearing



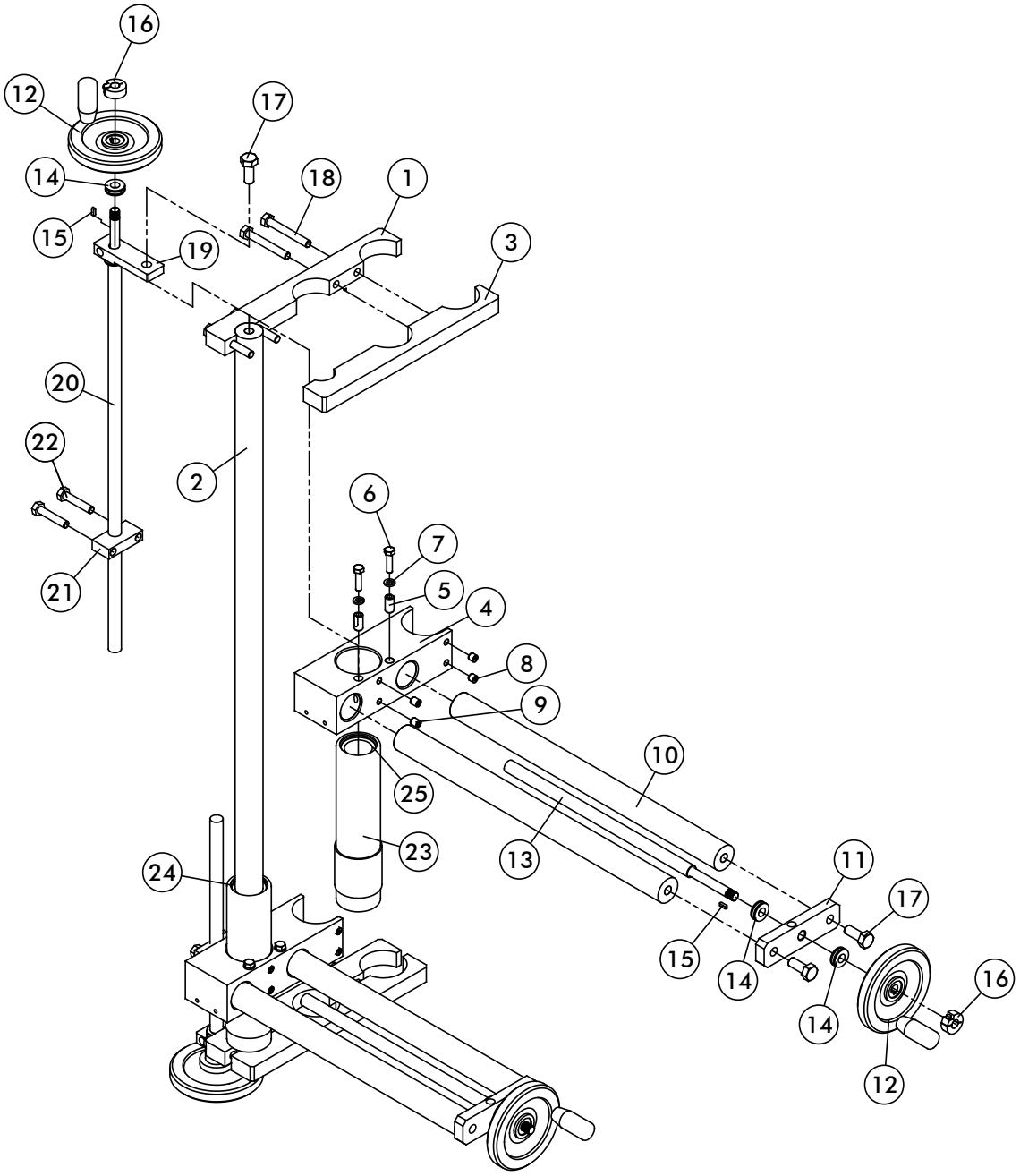
Gantry, Top

Parts List

Item No.		Description
	815201	Gantry, Top/Bottom, Left to Right
	815202	Gantry, Top/Bottom, Right to Left
1	810373	Tube Clamp
2	810547	Shaft, 30mm x 950mm
3	810372	Tube Clamp, Tapped
4	810371	Shaft Block
5	890434	Cam Lock, Chassis Tubes
6	810105	Bolt, M6x25 Hex Head
7	866784	Washer, 6mm Split
8	810378	Set Screw, M8 with Nylon Tip
9	866820	Set Screw, M8x10 Socket
10	810004	Shaft, 30mm x 400mm
11	810374	End Shaft Bracket, Horizontal
12	810027	Handle, Horizontal and Vertical Adjustment
13	810377	Acme Screw Rod
14	810379	Thrust Bearing, M10
15	866809	Key, 3x3x10
16	810380	Threaded Clamp Collar, M10
17	810109	Bolt, M10x25 Hex Head
18	867629	Bolt, M8x60 Hex Head
19	810375	Crank Bar
20	810535	Acme Screw Rod, Long
21	810376	Acme Nut Block
22	890504	Bolt, M8x40 Hex Head
23	890032	Carriage Bearing Tube
24	866387	Linear Ball Bushing
25	866807	Retaining Ring, 40mm, Internal

Gantry, Top

Diagram



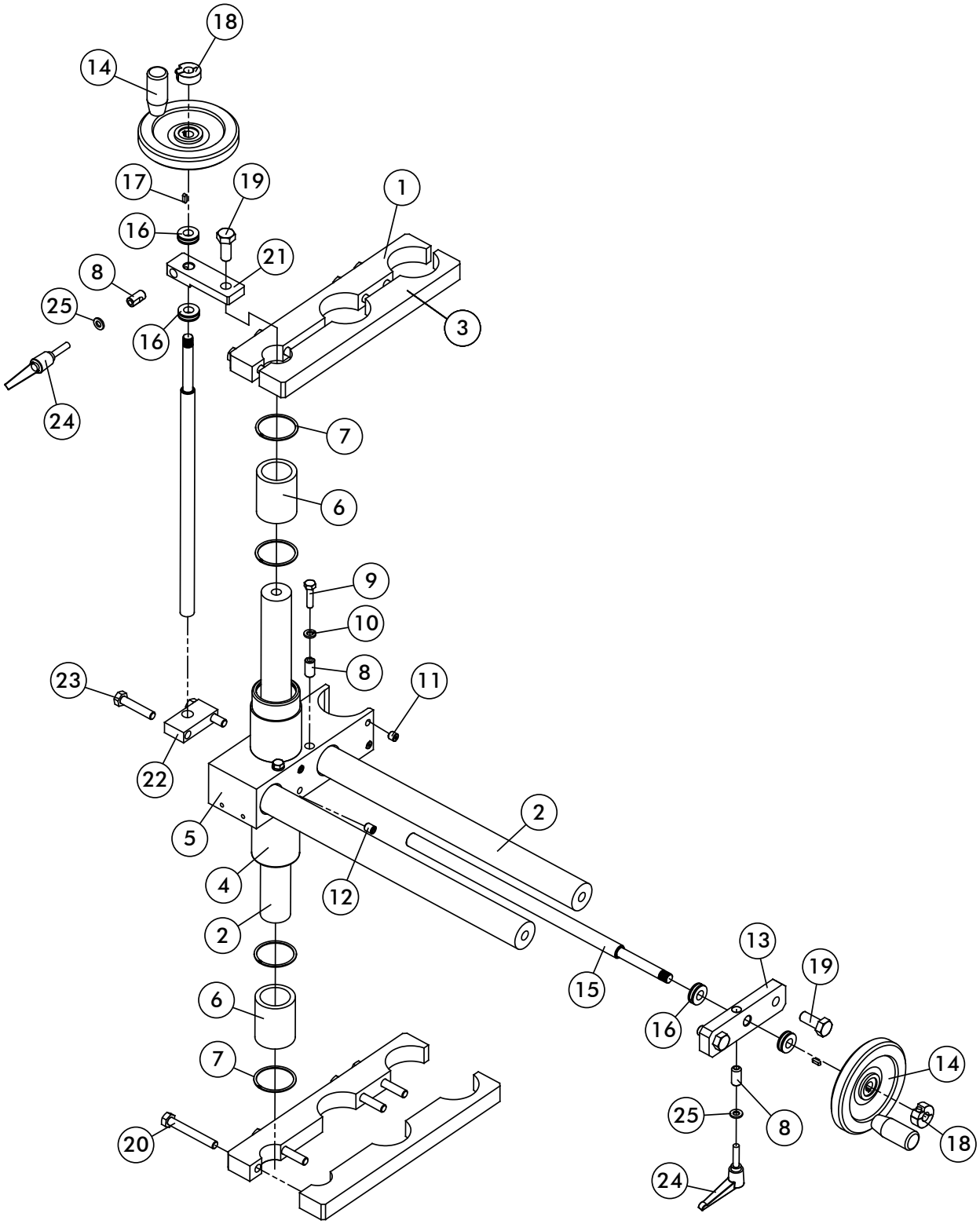
Gantry, Top Only

Parts List

Item No.		Description
	815 228	Gantry, Top Only, Left to Right
	815 229	Gantry, Top Only, Right to Left
1	810 373	Tube Clamp
2	810 004	Shaft, 30mm x 400mm
3	810 372	Tube Clamp, Tapped
4	890 032	Carriage Bearing Tube
5	810 371	Shaft Block
6	866 387	Linear Ball Bushing
7	866 807	Retaining Ring, 40mm, Internal
8	890 434	Cam Lock, Chassis Tubes
9	810 105	Bolt, M6x25 Hex Head
10	866 784	Washer, 6mm Split
11	810 378	Set Screw, M8 with Nylon Tip
12	866 820	Set Screw, M8x10 Socket
13	810 374	End Shaft Bracket, Horizontal
14	810 027	Handle, Horizontal and Vertical Adjustment
15	810 377	Acme Screw Rod
16	810 379	Thrust Bearing Assembly, M10
17	866 809	Key, 3x3x10
18	810 380	Threaded Clamp Collar, M10
19	810 109	Bolt, M10x25 Hex Head
20	867 629	Bolt, M8x60 Hex Head
21	810 375	Crank Bar
22	810 376	Acme Nut Block
23	890 504	Bolt, M8x40 Hex Head
24	810 057	Handle
25	866 774	Washer, 6mm Flat

Gantry, Top Only

Diagram



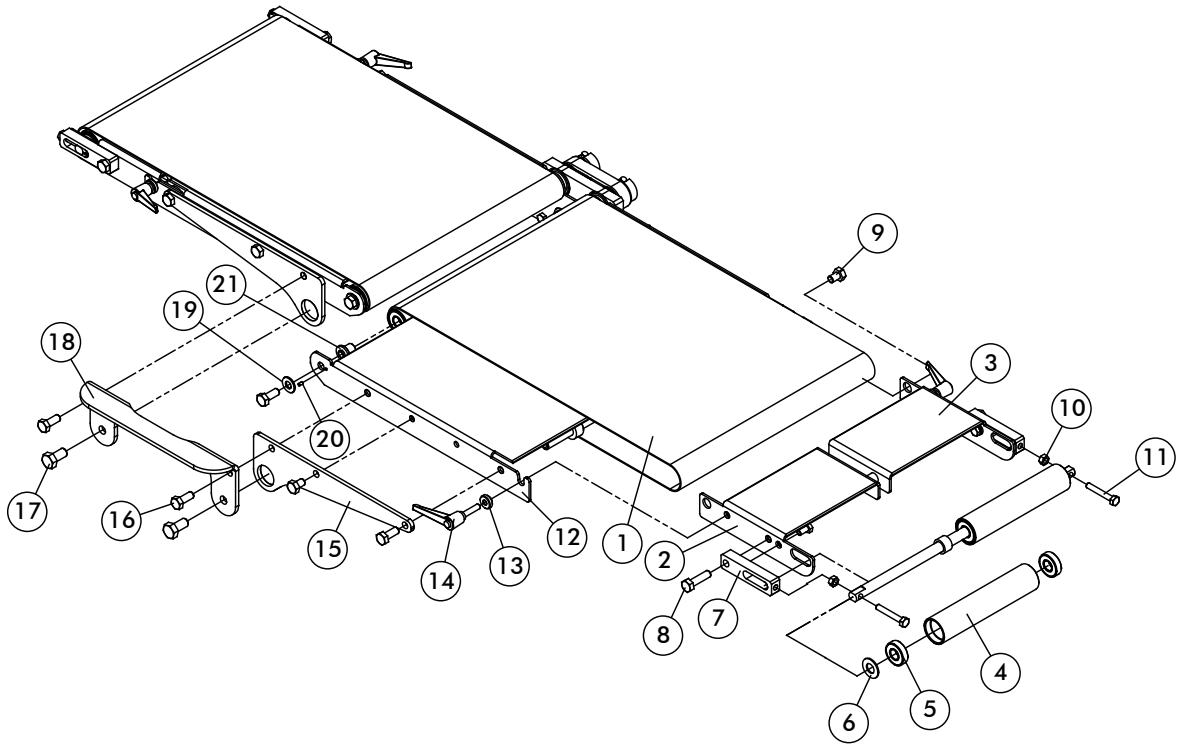
Conveyor

Parts List

Item No.		Description
1	810 475	Conveyor Belt, with V-guide
2	810 461	Conveyor Bed, Short, Right
3	810 460	Conveyor Bed, Left, Short
4	810 472	Pulley for Conv. Belt, Driven End
5	866 015	Bearing for Gear Box Main Shaft
6	810 480	Thrust Washer, 12mm
7	810 474	Take-up Blocks
8	810 108	Bolt, M8x30 Hex Head
9	860 287	Bolt, M8x12 Hex Head
10	866 765	Nut, 6mm Hex
11	867 004	Bolt, M6x40 Hex Head
12	810 456	Conveyor Bed - Front, Right Side
13	810 477	Disc, Pivot Handle
14	810 057	Handle
15	810 459	Conveyor Stabilizer Plate
16	810 107	Bolt, M8x20 Hex Head
17	889 581	Bolt, M10x20 Hex Head
18	810 519	Conveyor Side Bridge
19	866 792	Washer, 8mm Large OD
20	866 816	Set Screw, M3x5 Socket
21	810 458	Stub Shaft For Drive Roller

Conveyor

Diagram



Conveyor Drive

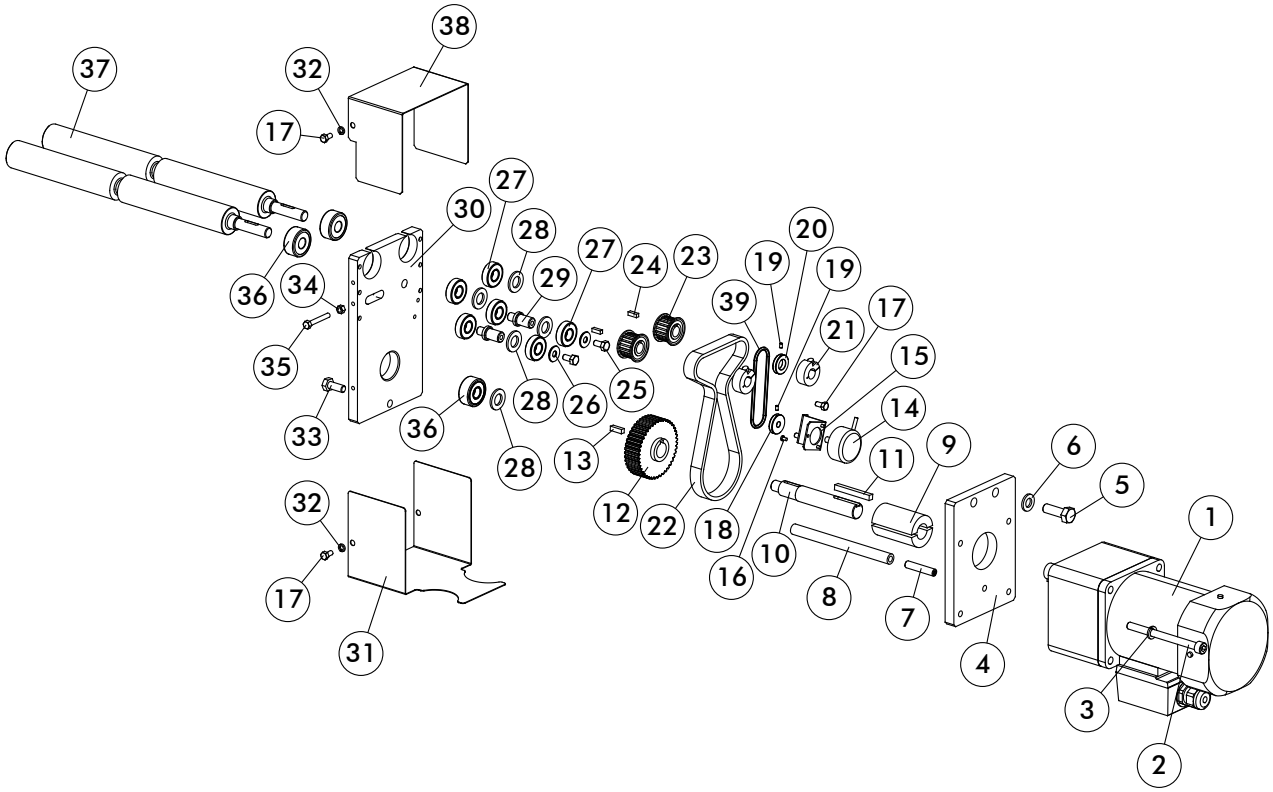
Parts List

Item No.		Description
1	810 550	Gearmotor, Induction, 1/4-Hp, 3P, 220V
2	866 741	Screw, M8x100 Socket Head
3	860 290	Washer, 8mm Split
4	810 469	Motor Mount Plate
5	860 483	Bolt, M10x30 Hex Head
6	866 776	Washer, 10mm Flat
7	866 824	Screw, M8x 40 Socket Set
8	810 540	Shaft, Motor Mount Support
9	869 442	Shaft Coupling, 18-18, Two Piece
10	810 464	Motor Drive Shaft, Coupled
11	869 519	Key, 6x6x50
12	866 623	Gear for Gear Box
13	869 518	Key, 5x5x16
14	869 450	Encoder, 5-ft. Cable
15	810 468	Encoder Mount Bracket
16	866 710	Screw, M3x5 Slotted Panhead
17	810 101	Bolt, M5x10 Hex Head
18	810 536	Encoder Pulley, 1/4 Bore
19	866 816	Set Screw, M3x5 Socket
20	810 537	Encoder Pulley, 12mm Bore
21	869 440	Clamp Collar, 12mm, 1 Piece
22	810 466	Timing Belt
23	810 465	Pulley, Timing, 18 Tooth,
24	869 517	Key, 4x4x12
25	810 142	Bolt, M6x12 Hex Head
26	866 793	Washer, 6mm Large OD
27	866 015	Bearing for Gear Box Main Shaft
28	866 777	Washer, 12mm Flat
29	810 463	Drive Stud, Take Up
30	810 470	Bearing Mount Plate
31	810 479	Guard, Conveyor Drive, Bottom
32	860 260	Washer, 5mm Spring Lock

Conveyor Drive

Diagram

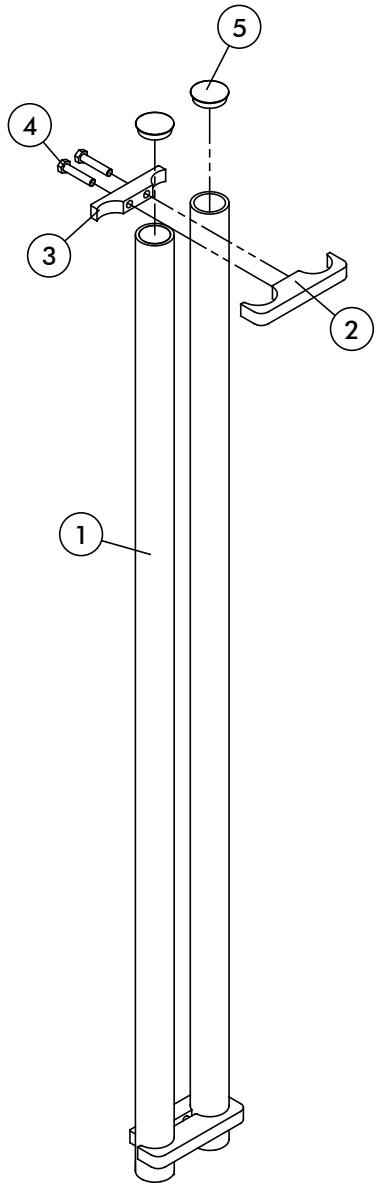
Item No.		Description
33	810 107	Bolt, M8x20 Hex Head
34	866 764	Nut, 5mm Hex
35	860 296	Bolt, M5x35 Hex Head
36	890 970	Bearing, 12x32x14, Self Align, Sealed
37	810 462	Drive Roller, Main, Conveyor
38	810 478	Guard, Conveyor Drive, Top
39	810 548	Oring Belt, Encoder



Tube Assembly

Parts List and Diagram

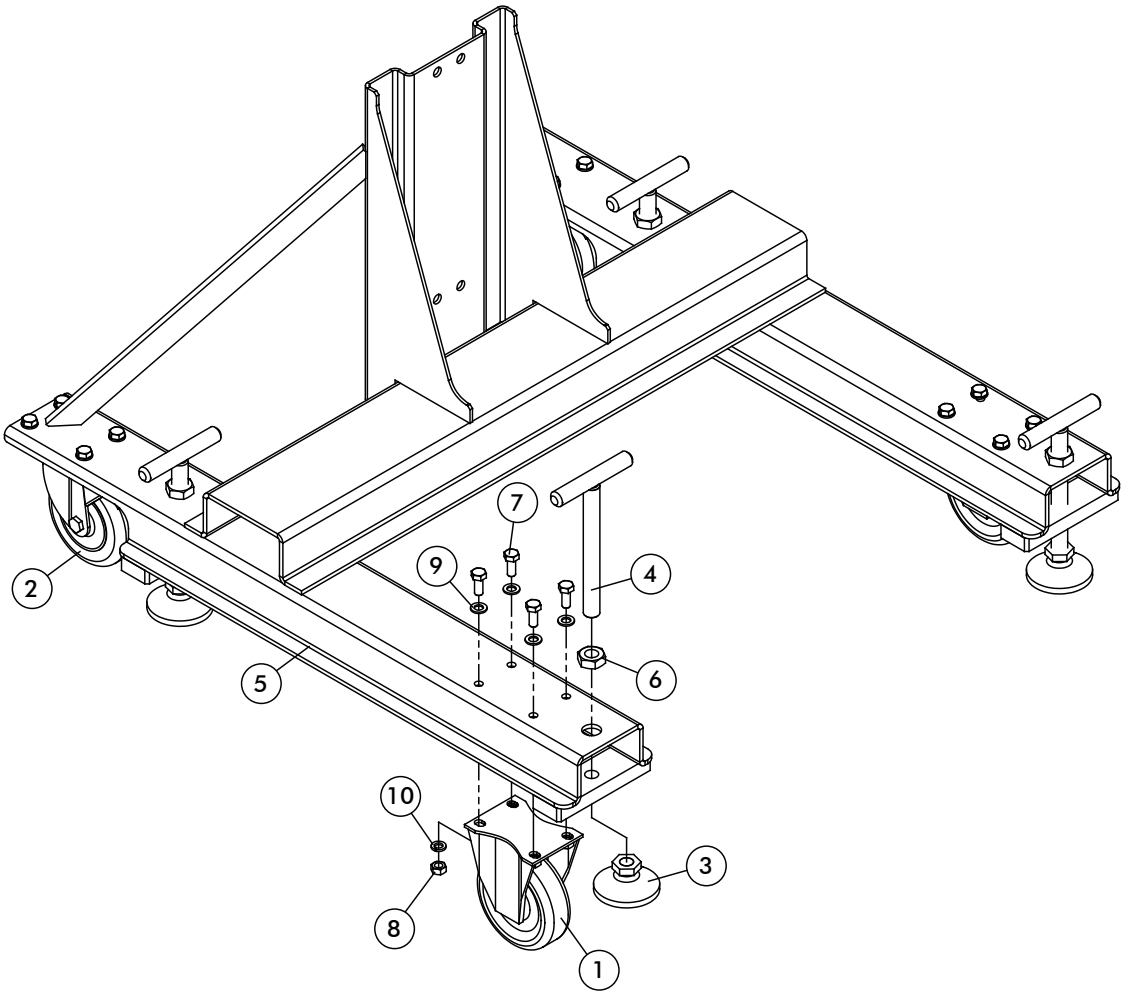
Item No.		Description
	815 200	Tube Assembly, Complete
1	867 834	Tubing, Stainless Steel
2	810 381	Tube Clamp 'A'
3	810 382	Tube Clamp 'B'
4	810 113	Screw, M10x50 Hex Head
5	E108	Tube End Cap



Mobile Base Assembly

Parts List and Diagram

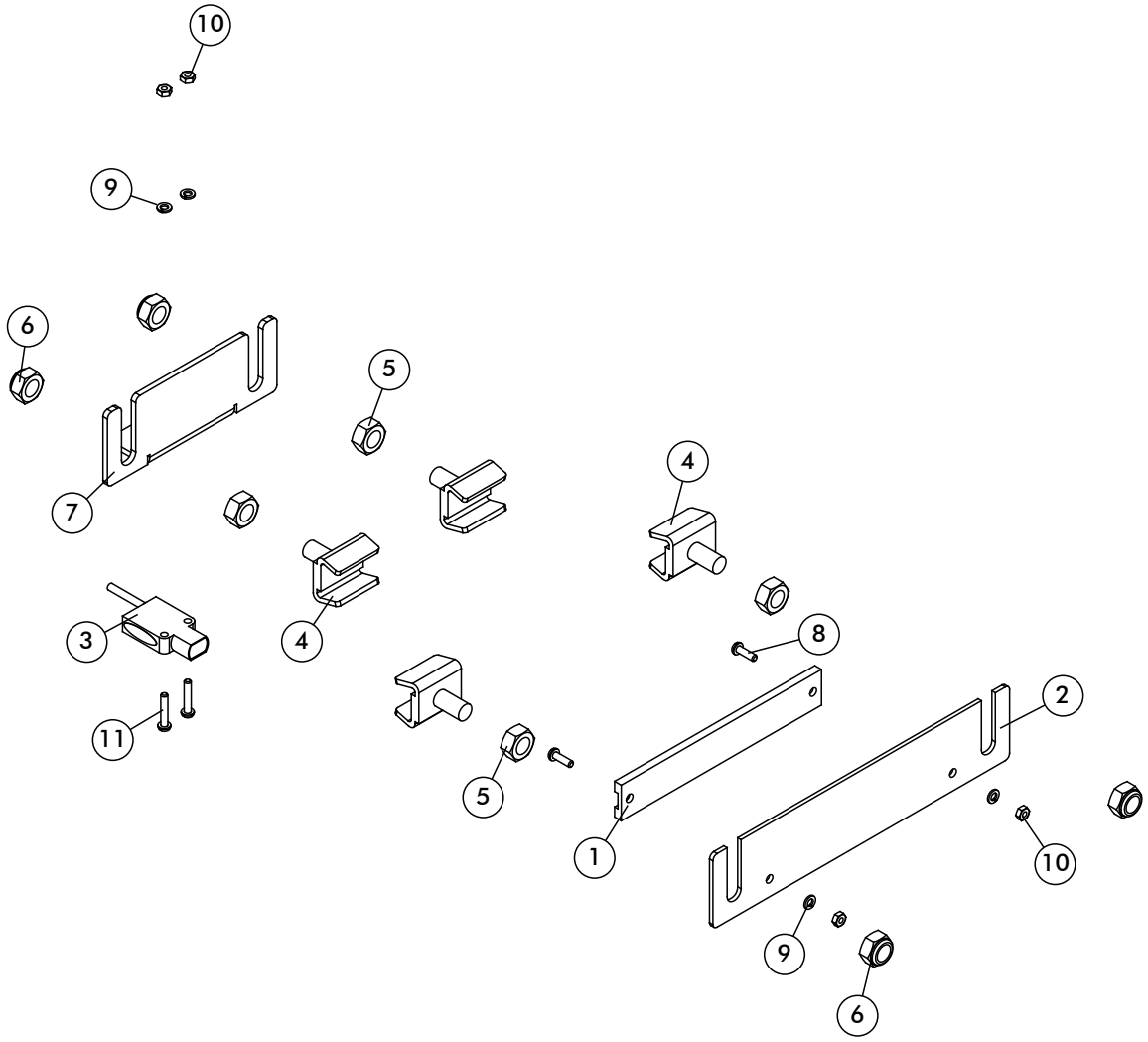
Item No.		Description
1	860 048	Caster, Rigid
2	840 121	Caster, Swivel/Lock
3	810 295	Leveling Foot
4	810 485	Leveling Rod
5	815 155	Base Weldment
6	869 446	Nut, M16-2.0
7	810 107	Bolt, M8x20 Hex Head
8	866 766	Nut, M8-1.25 Hex
9	866 775	Washer, 8mm Flat
10	860 290	Washer, 8mm Lock



Product Sensor

Parts List and Diagram

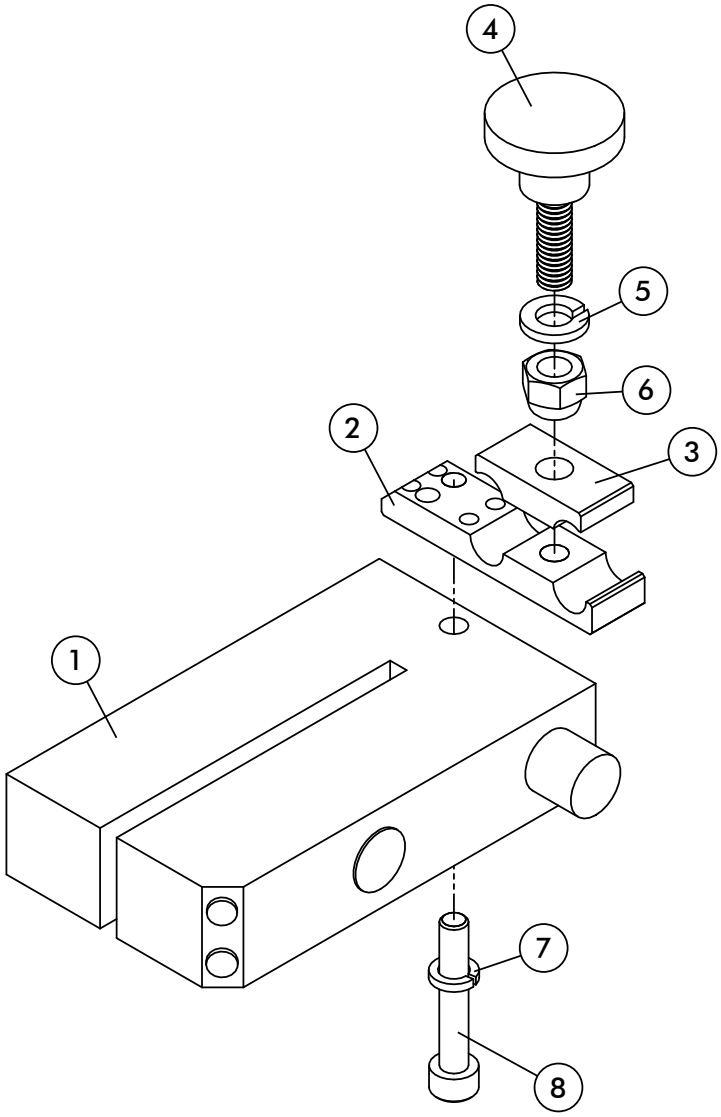
Item No.		Description
	815 230	Kit, Product Sensor
1	810 014	Reflector
2	869 621	Sensor Bracket
3	810 015	Product Sensor
4	810 595	Rail Clip
5	866 766	Nut, M8-1.25 Hex
6	867 181	Nut, M8 Nylon Lock
7	869 620	Sensor Bracket
8	866 711	Screw, M3x10 Slotted Pan Head
9	866 782	Washer, 3mm Split
10	866 768	Nut, M3 Hex
11	860 393	Screw, M3x12 Slotted Pan Head



Clear Label Detector (Option)

Parts List

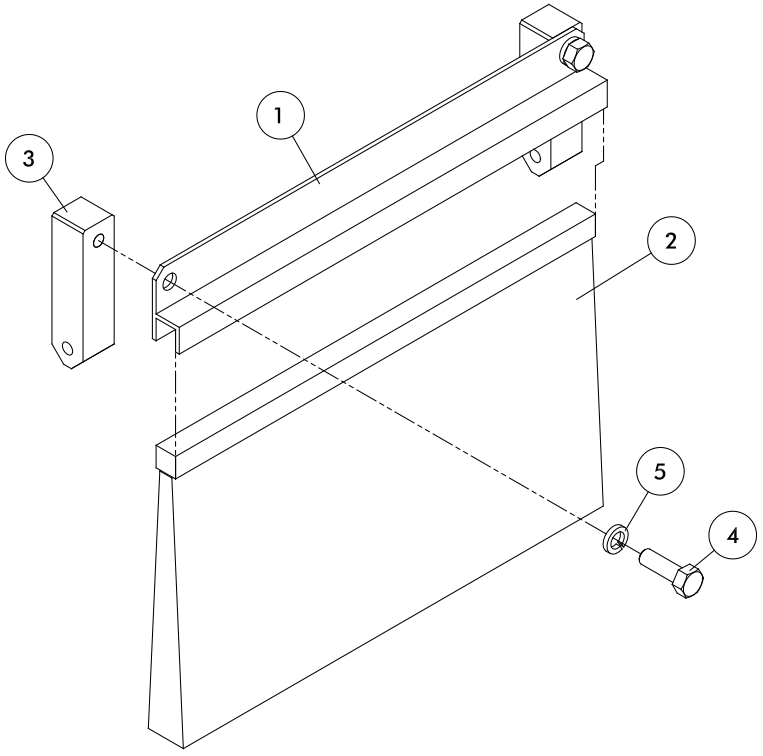
Item No.		Description
	869 501	Clear Label Detector (Optional), Complete
1	869 499	Sensor, Leuze Clear Label
2	869 500	Sensor Bracket, Modified For Clear Label
3	890 878	Sensor Bracket, Leuze Cap
4	890 258	Thumb Screw
5	866 784	Washer, 6mm Split
6	860 293	Nut, 6mm Nylon Lock
7	860 260	Washer, 5mm Spring Lock, SS
8	866 738	Screw, M5x30 Socket Head, SS
9	869 503	Cable (Not Shown)



Brush Applicator (Option)

Parts List and Diagram

Item No.	Label Width		Description
1	150	890 481	Brush Holder
	200	890 482	Brush Holder
2	150	890 484	Brush
	200	890 485	Brush
3	ALL	890 487	Brush Bracket Bar
4	ALL	810 178	Screw, M5x16 Hex Head
5	ALL	860 260	Washer, M5 Spring Lock



REFERENCE MANUALS

Date Code Printer

Included within POSI 200 owner's manual is an installation and operating manual for the date code printer equipped with this labeling system.

For Replacement Parts
sales&baumann-industries.com

Printer Safety

- Read these instructions carefully. Follow all warnings and instructions marked on the printer.
- Always disconnect the printhead cables from the label dispensing head control box and from the label dispensing head chassis before cleaning or servicing the printer.
- Never operate the printhead unless it is installed in the mounting frame supplied. Maintain a maximum of 4mm gap between the printer and the print base.
- Never insert objects into the printer through any openings or gaps as they may touch dangerous voltage points or short circuit parts that could result in fire or electrical shock.
- Ensure the printhead connections cable is fully secured on both ends. Poor connection results in the printhead not being earth grounded properly.
- Use the cable supplied with the printer. The construction is a flex-type cable to accommodate the label dispensing head movement. Be sure that the cables are not walked on or are rubbing against anything during label dispensing head motion.
- Do not attempt to service this product. Opening or removing guards may expose dangerous voltage, cause burns, and pose other risks. Refer all servicing to qualified personnel.
- Do not operate this printer in areas where explosive gases or substances are present.
- Under normal working conditions the printer is very hot. Take precaution when removing the type holder as it can easily burn the worker. The yellow warning sign on the type holder access door indicates a danger. Grip the door at the side to open. Only hold the type holder by its plastic handle. Place the type holder on a metal or non-combustible surface to cool. Never touch the metal type holder parts unless they have been out of the printer for a minimum of 20 minutes.

⚠ CAUTION *Hot surfaces. Do not touch.*
To avoid possible skin burns, disconnect and lockout power. Allow surfaces to cool before servicing or cleaning.

Disconnect the printhead from electrical and air supplies and refer servicing to qualified personnel under the following conditions:

a. If the power cable is damaged or frayed.

b. If the printer does not operate normally when the operating instructions are followed. Adjust only those controls covered by these instructions. Improper adjustment may result in damage.

Printer Threading and Adjustment

Magazine Removal

To remove the foil magazine: Slide the catch away from the type holder access door and hold in place. Using the two handles, withdraw the magazine. If the labeler is cycled while the cassette is off; the labeler will fault with a PRINTER ERROR fault and the yellow light will come on. Press F1 to clear the fault.

Foil Threading

1. Fit an empty foil core tube onto the rewind mandrel.
2. Disengage pinch drive from roller.
3. Remove label from new roll of foil.
4. Fit new roll of foil onto take-off mandrel (note the unwind direction as shown on specific laminated threading diagram).
5. Thread foil around all rollers as shown on the threading diagram. **Note:** The gloss side of the foil should face inward throughout the foil path.
6. Attach foil end to empty core on rewind mandrel, gloss side facing inward.
7. Wind foil a few turns to track and tension it.
8. Engage pinch drive roller.

Re-Fitting Foil Magazine

Hold the magazine by the two handles, slide it on the locating pins and push to lock in place.

Fitting Type/Die Holder

NEVER ASSUME THAT A TYPE HOLDER IS COLD. Only pick up a type holder by its handle. Ensure the face of the magnetic catch is clean, open the red type holder access door, align the type holder within the two side locators and slide in until the magnet catches on the end plate. Close the door.

⚠ CAUTION *Hot surfaces. Do not touch.*
To avoid possible skin burns, disconnect and lockout power. Allow surfaces to cool before servicing or cleaning.

Foil Feed Adjusting Screw

This knob adjusts the amount of foil used per print. It is located toward the rear of the printer body adjacent to the air tubing entry points. Turning the knob in reduces the foil index distance. Turning the knob out increases the foil index distance. Be sure to fully tighten the locking nut after adjustment.

Printer Threading and Adjustment

Print Orientation

To rotate the print 90°: Loosen the printhead handle until it can be rotated. Orient the printhead as needed and retighten printhead handle.

Printhead Temperature Adjustment

The temperature control is located inside the label dispensing head control cabinet. The control is set to 160°C at the factory. To adjust the temperature, the label dispensing head control cabinet door must be opened. The temperature control is located on the right side of cabinet and can be adjusted by turning the circular knob on the face of the control.

Air Flow Controls

The air flow control is on the valve body mounted on the printer frame. It regulates the speed at which the printhead travels up and down. **Note:** It is very important that the print ram extends completely during each print cycle and the ram fully returns before the next print cycle begins. Turning the adjustment screws in will slow down the ram speed. For higher speed operation, the flow controls for both the forward and return strokes must be increased. The pressure regulator on the label dispensing head, which controls the printer valve pressure, should be set to 6 Bar or 90 p.s.i.

Printhead Leveling

The printhead height over the substrate is adjusted using the four 10mm vertical threaded shafts on the printer bracket top corners. **Adjusting the printer height:** First adjust the height so that the printer does not contact the substrate during cycling. Then adjust each corner of the bracket downward until the printer begins to print on the label surface. Slowly adjust the printer downward until print quality is achieved. If the print leaves an impression into the label backing paper, the printhead is adjusted too low. If the print is dark on one side and light on the other, then the printhead must be adjusted downward on the side that is light.

Printer Screen #1

 Printer:	Allows the user to turn the printer signal ON or OFF for each label head.
 Dwell:	Allows the user to adjust the printer ON timer by pressing the value displayed below the icon. This time is in milliseconds.
 Wait:	Allows the user to adjust the printer wait timer by pressing the displayed value below the icon. This time is in milliseconds.
Down Arrow:	Allows the user to change to the Printer Screen #2.

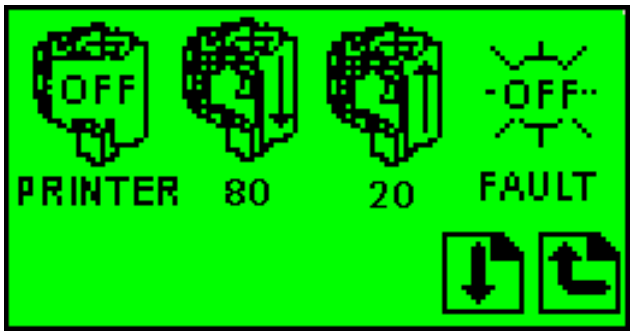


Figure 7.0

Printer Screen #2

This controls the temperature of the hot stamp heater to be turned ON or OFF, temperature set point and display of actual temperature. This screen is only used for HOT STAMP Printers, not required for INK stamp or Thermal Transfer printer.

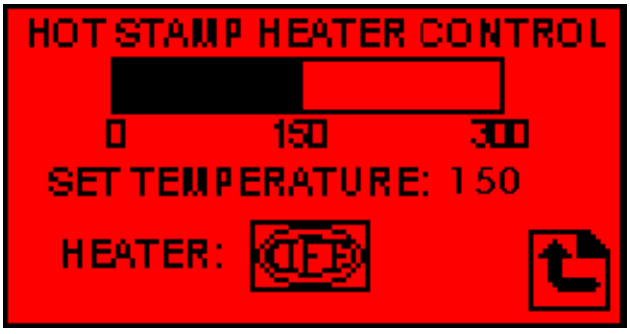
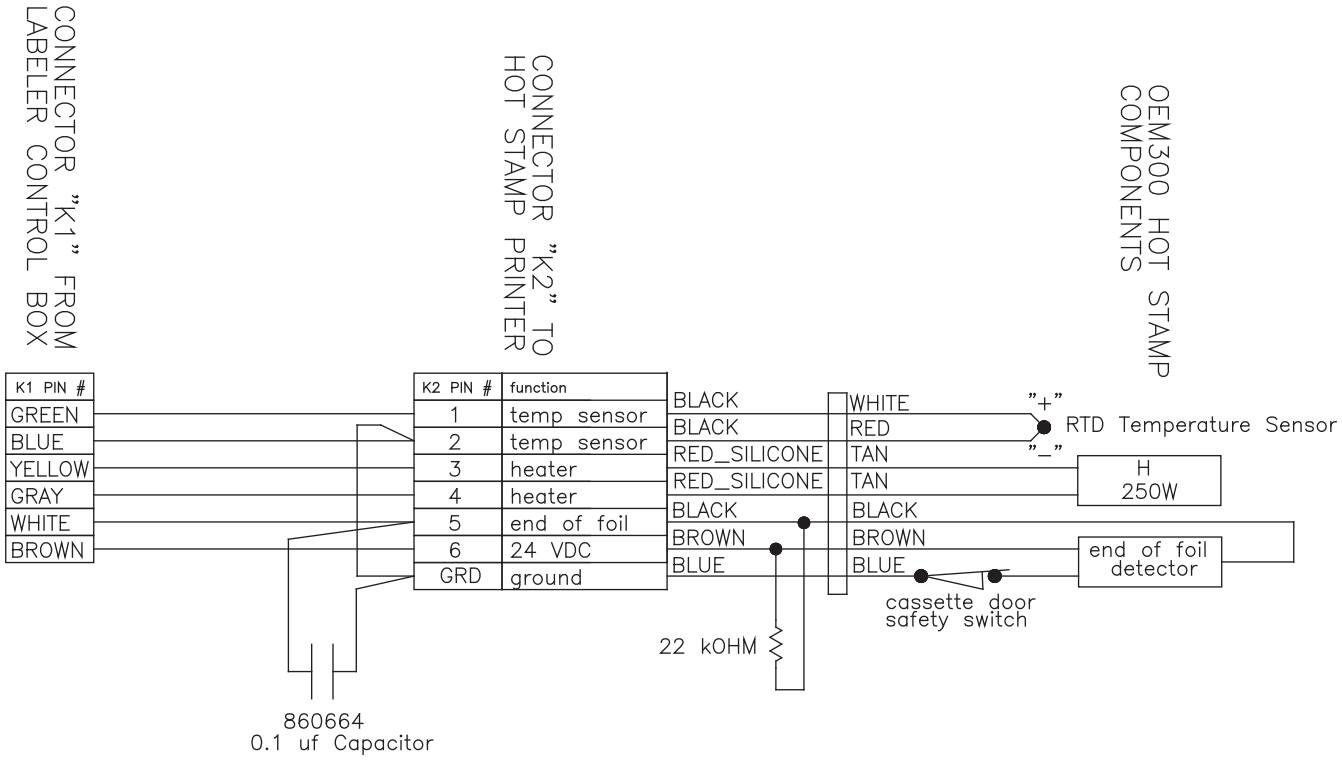


Figure 7.1

OEM300 Hot Foil Printer Spare Parts

Part No.		Description
HUB620203	857054	Rewind Hub Assembly
GUI620040	857272	Foil Guide
DRI620049	857001	Drive Belt
BRA620051	857273	Brake Strap
SPI620147	857088	Hub Spindle
BEA521505	857202	Clutch Bearing
DRI620149	857203	Drive Boss
HEA501506	857003	OEM300 Cartridge Heater
THE500502	857123	Thermistor Probe
SWI395011	857274	Safety Microswitch
ALA395018	857005	OEM300 End of Foil Optical Sensor
CPC290500	857275	Plug-In Printer Control Card
SEA620209	857006	OEM300 Seal Kit
SPR620217	857000	OEM300 Printer Spring Kit
	866961	Temperature Controller
	866962	Temperature Sensor (RTD)

OEM300 Cable Schematic



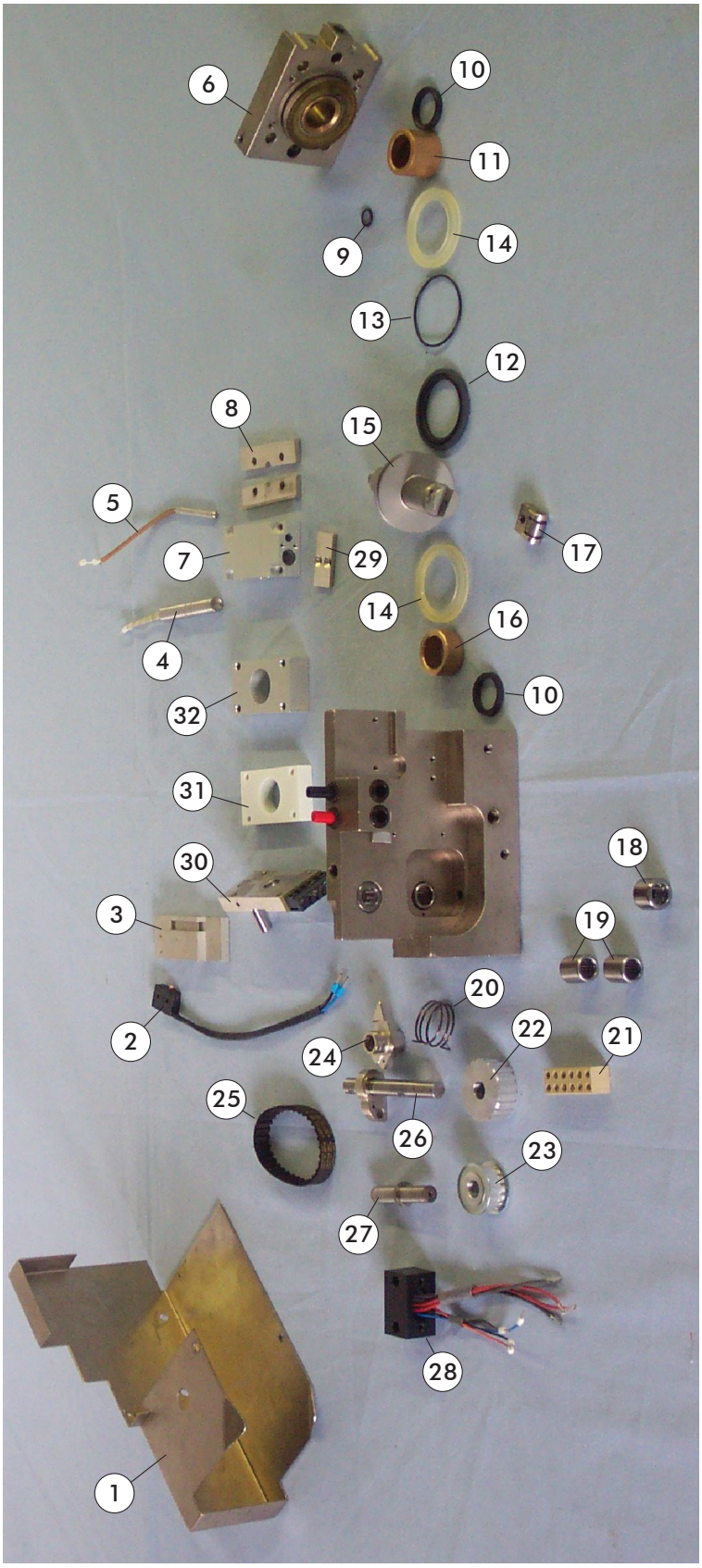
OEM300 Hot Foil Printer, Internal

Parts List

Item No.	Part No.		Description
1	COV620034	857133	Cover
2	SWI395010	857004	Microswitch
3	SUP620031	857266	Support, Microswitch
4	HEA501506	857003	Cartridge Heater
5	THE500503	857130	Thermistor Probe
6	CAP620195	857249	Bottom Cap Assembly
7	HEA120013	857036	Heater Block
8	SID120014	857018	Slide Locator
9	O-R512030	857267	O-Ring
10	SEA512038	857139	Rod Seal
11	BEA522016	857008	Bearing
12	SEA512036	857168	Piston Seal
13	OR512005	857115	O-Ring
14	DAM120074	857114	Cylinder Damper
15	PIS620020	857037	Piston
16	BEA620040	857007	Bearing
17	FOR620208	857011	Fork End Roller
18	BEA521001	857081	Needle Bearing
19	BEA520018	857085	Needle Bearing
20	SPR530033	857013	Torsion Spring
21	CON398108	857033	Plug
22	PUL620033	857201	Timing Pulley
23	PUL620030	857156	Timing Pulley
24	CAM620025	857268	Cam
25	BEL522512	857019	Timing Belt
26	SPI620024	857101	Spindle
27	SPI620029	857079	Drive Spindle
28	PLU399415	857269	Wired Plug
29	KEE120030	857017	Keeper Plate
30	PLA620026	857025	Mounting Plate
31	INS129514	857270	Insulator Plate, 10mm Thick
32	PAC190028	857028	Data Box Packing

OEM300 Hot Foil Printer, Internal

Diagram



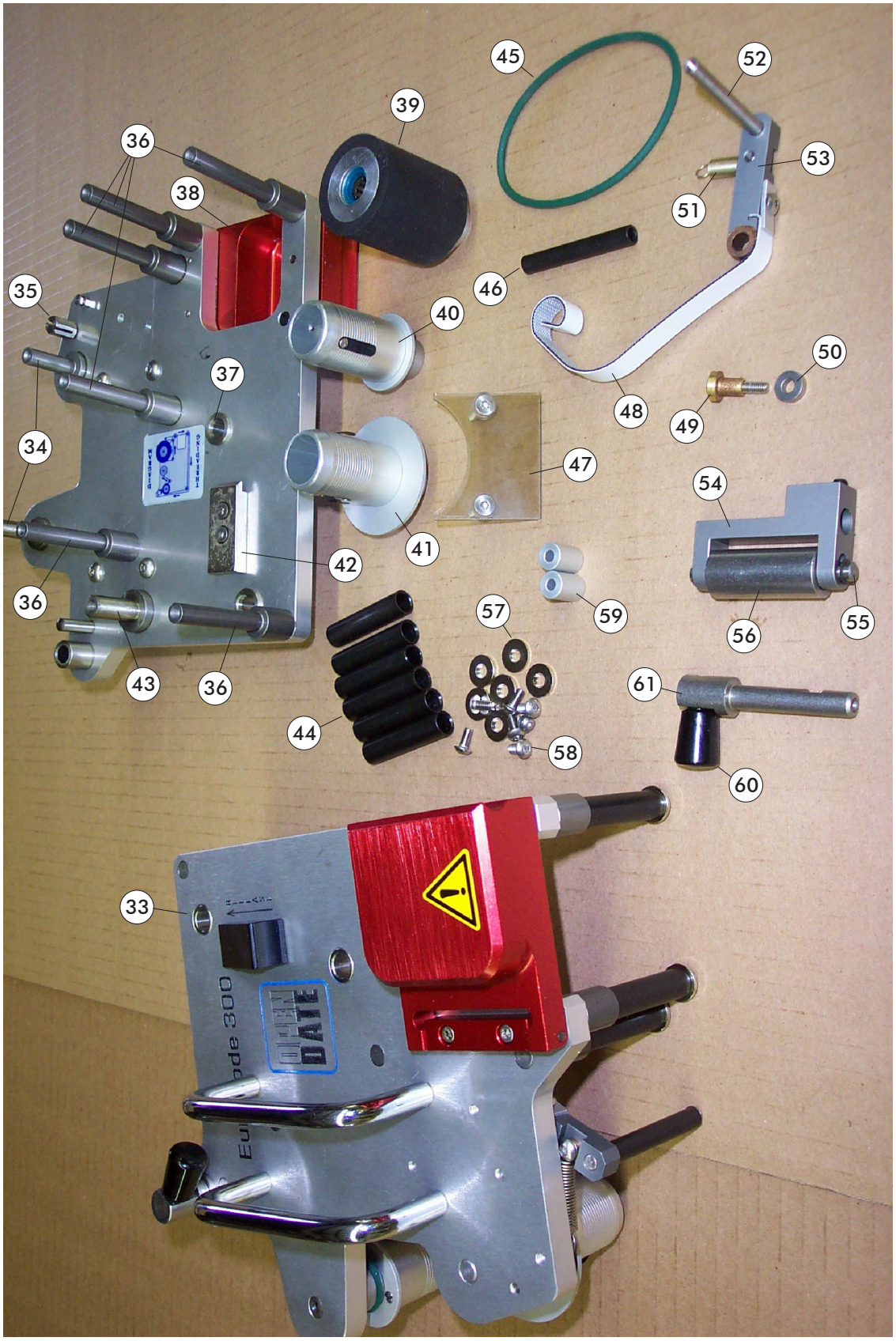
OEM300 Hot Foil Printer, External

Parts List

Item No.	Part No.		Description
33	THU620127	857015	Release Button
34	SPI620003	857054	Hub Spindle
35	ANC190006	857127	Anchor
36	SPI620005	857069	Roller Spindle
37	BUS190008	857064	Bushing
38	DOO620203	857170	Door Assembly
39	DRI620204	857009	Drive Roller Assembly
40	HUB620203	857053	Rewind Hub Assembly
41	HUB620201	857055	Take-Off Hub Assembly
42	LOC620129	857196	Locking Plate
43	SPI620007	857078	Drive Roller Spindle
44	ROL620018	857051	Idler Roller
45	DRI620048	857271	Drive Belt, 180
46	ROL620009	857063	Roller
47	GUI620006	857129	Foil Guide
48	BRA620038	857002	Brake Strap
49	BUS190012	857047	Bushing
50	SPA120042	857108	Spacer
51	SPR530018	857146	Spring
52	DAN620008	857045	Dancing Bar
53	ARM62001	857049	Dancing Arm
54	YOK620012	857191	Yoke
55	SPI620015	857031	Pinch Roller Spindle
56	PIN620205	857030	Pinch Roller Assembly
57	WAS120035	857126	Washer
58		857125	Screw, M3x6 Button Head
59	SUP1290024	85 089	Support
60	HAN530502	857070	Handle
61	SPI620013	857111	Spindle

OEM300 Hot Foil Printer, External

Diagram



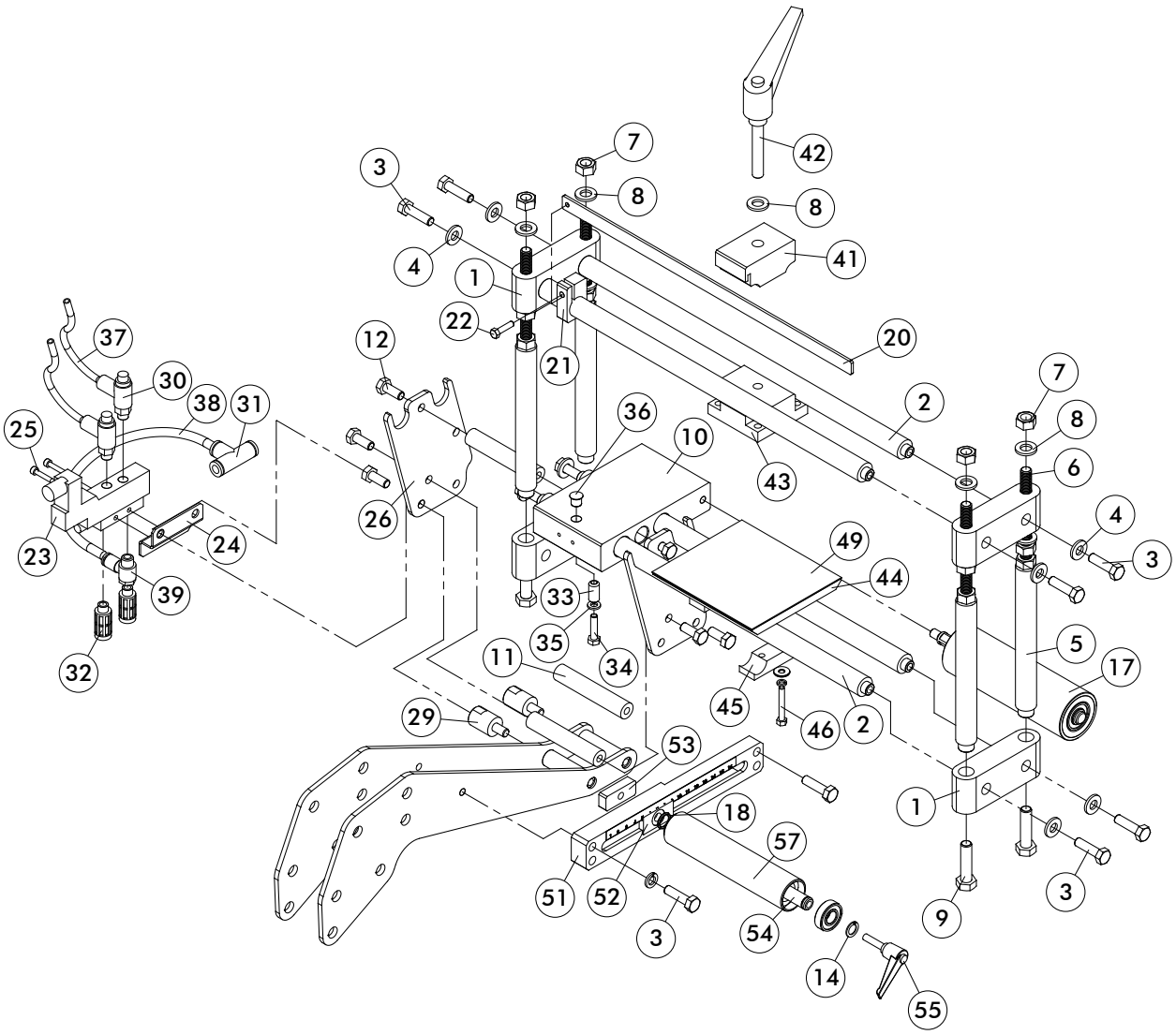
Printer Bracket Assembly

Parts List

Item No.		Description
1	890410	Printer Post Block, Lower
2	890413	Printer Horizontal Rack Shaft
3	810108	Bolt, M8x30 Hex Head
4	866775	Washer, 8mm Flat
5	890412	Printer Vertical Rack Post
6	866981	Hot Stamp Vertical Screw
7	866767	Nut, M10 Hex
8	866776	Washer, 10mm Flat
9	810112	Bolt, M10x40 Hex Head
10	890416	Main Printer Mount Block
11	890403	Tapped Insert for Drive Head
12	810107	Bolt, M8x20 Hex Head
13	890021	Axle, Drive Head Roller, 150mm
	890533	Axle, Drive Head Roller, 200mm
14	866801	Retaining Ring, External, 12mm
15	866048	Ball Bearing
16	890020	Hub for 2-in. Idler Roller
17	890019	Idler Roller, 1 7/8-in. OD
18	890729	O-Ring, Silicone
19	890452	Printer Mount Adaptor
20	890293	Scale Bar
21	890420	Printer Scale Mount
22	810103	Bolt, M5x20 Hex Head
23	866582	Valve Assembly, Single
24	890414	Printer Valve Bracket
25	866827	Screw, M4x25 Socket Head
26	890402	Printer Mount Plate
27	890013	Unwind Mount Plate
28	890003	Tapped Insert
29	890017	Shaft Extension
30	866566	Fitting, Flow Control, 1/8 x 6
31	866253	T-Fitting, 8mm
32	866247	Silencer, 1/8
33	890434	Cam Lock, Chassis Tubes
34	810105	Bolt, M6x25 Hex Head

Printer Bracket Assembly

Diagram



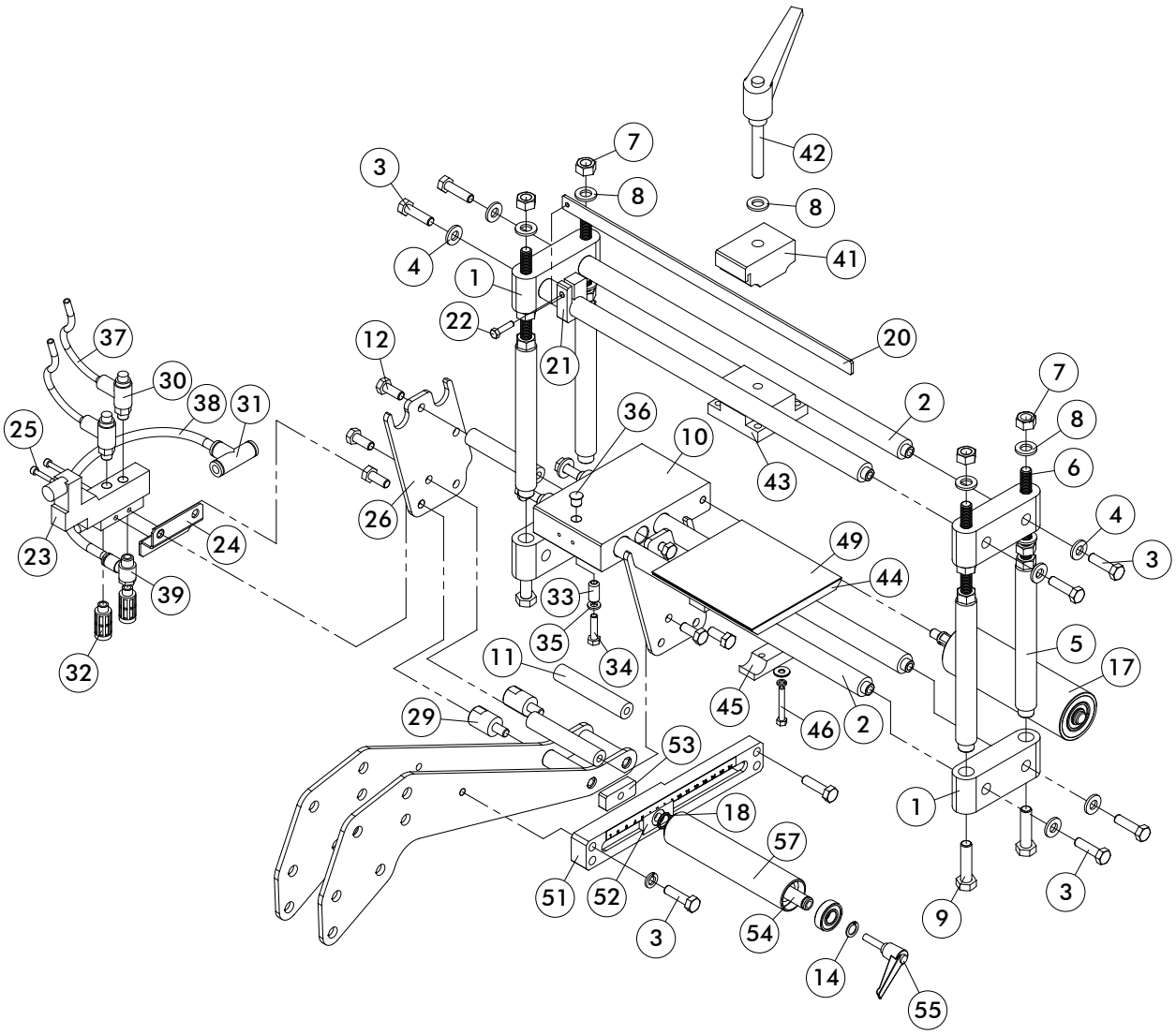
Printer Bracket Assembly

Parts List

Item No.		Description
35	866 784	Washer, 6mm Split
36	E103	Plug, 3/8
37	866 575	Tubing, 6 Pun
38	866 576	Tubing, 8 Pun
39	866 251	Fitting, 90°, 1/8x6
40	860 665	Printer Mount Adaptor
41	890 913	Printer Mount Cap
42	866 601	Handle
43	890 417	Printer Mount Adaptor
44	890 874	HS Contact Pad Plate
45	890 876	HS Platten Support
46	860 296	Bolt, M5x35 Hex Head
47	866 791	Washer, 5mm Large OD
48	860 260	Washer, 5mm Split
49	890 875	HS Contact Pad
50	860 290	Washer, 8mm Lock
51	890 948	Printer Adjustment Bar
52	890 929	Roller Lock, Front
53	890 930	Roller Lock, Back
54	890 954	Shaft, Printer Adjustment
55	810 057	Handle
56	890 432	Scale Rule
57	890 080	Roller, Small OD, 150mm Long
	890 686	Roller, Small OD, 200mm Long

Printer Bracket Assembly

Diagram



Troubleshooting, Printer

Problem	Indicators	Remedy
Printer does not cycle and LED on printer valve DIN connector is "OFF" and 24VDC relay LED is dim or "OFF"	Printer is turned off	Turn printer on.
	Relay has failed or is not connected	Check relay connections first then replace relay.
	Loose connection on relay input to stepper drive #1	Check connections.
Printer does not cycle and LED on printer valve DIN connector is "OFF" and 24VDC relay LED is "ON"	Loose connection between relay output and printer valve connector	Check connections.
Printer does not cycle and LED on printer valve DIN connector is "ON"	Line pressure is low	Restore system pressure.
	Valve or valve coil has failed	Replace valve.
Printer fault indicator comes "ON"	Ribbon is empty	Replace ribbon.
	End of foil photoeye has failed	Replace photoeye.
	Cassette is loose or type holder door is open	Replace cassette and close type holder door.
	Switches on the cassette and type holder door have failed	Replace failed switches.
Print quality is poor	Insufficient foil pull or air pressure	Restore line pressure and flow.
	Printer not level with base	Readjust printer frame.
	Temperature too high or low	Adjust temperature by using controller inside the labeler control cabinet.
	Dirty, worn, or damaged dies or type	Replace type.
	Damaged or out of position print base rubber	Adjust bottom base rubber block to a new position.
	Printing foil not compatible with substrate	Contact foil manufacturer.
	Label moving before printhead is clear	Increase print wait time.
	Print dwell too low	Increase print dwell time.

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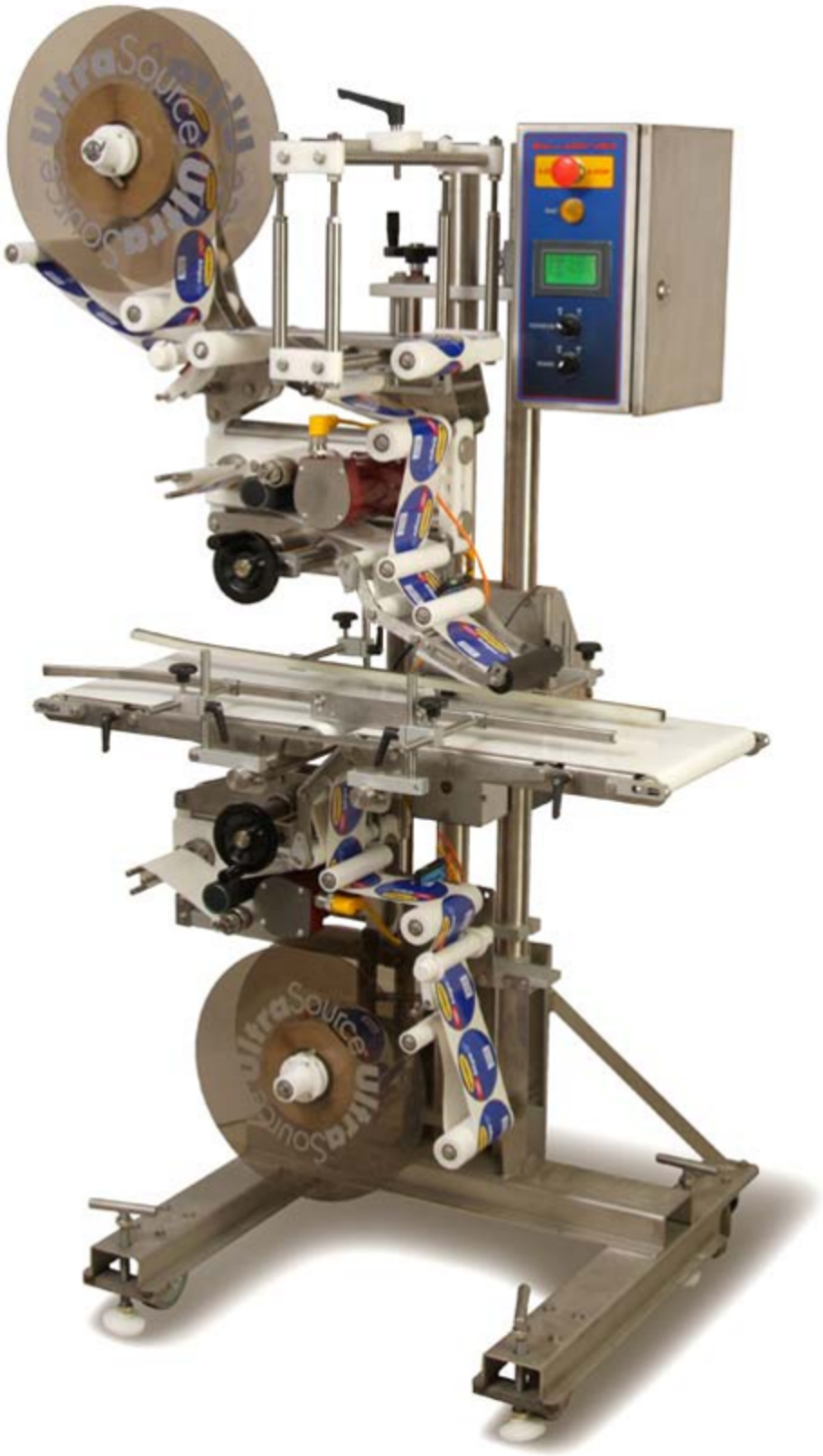
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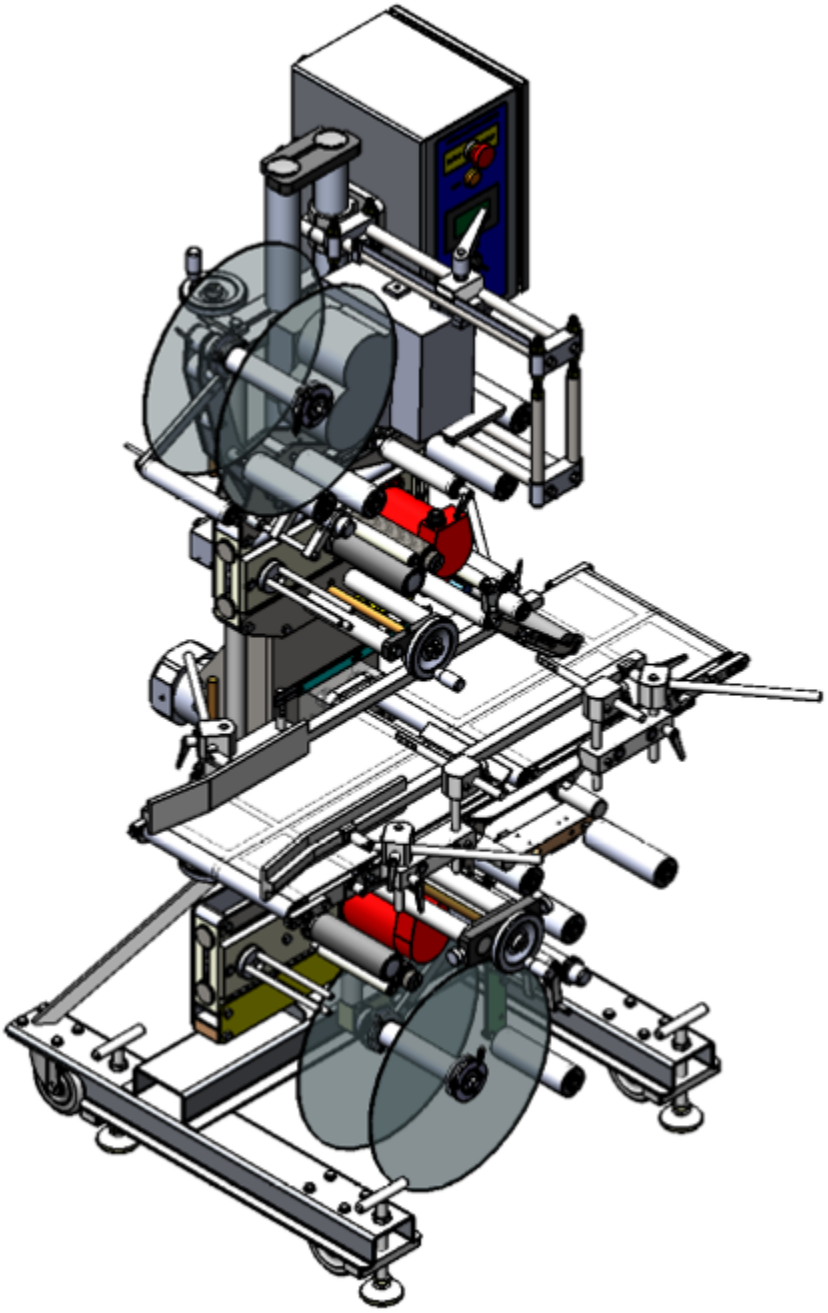

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