Thermopatch

User manual

DP-2000-T

ATTENTION!

All persons involved in installation, commissioning, operation, maintenance and repair of this product should be made available to these instructions.

thermopatch.com

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Introduction

Dear User,
Welcome to the growing group of Thermopatch users. Your purchase has been manufactured with the utmost care to ensure that you benefit as long as possible from your Thermopatch product.

The products by Thermopatch are designed with special attention to your convenience. Should you discover any fault or damage upon receipt of this product, please contact your local Thermopatch vendor.
The manual has been prepared in accordance with NEN 5509 and in conformity with the Machinery Directive 2006/42/EC.
This user manual is intended not only for all users of the machine, but also for those who install and maintain the DP-2000-T. The goal is to familiarize you with the operation, to provide for safe working instructions and guidelines for periodical maintenance.

ATTENTION!

In order to make safe and optimal use of the NL-15 R/ SQR, it is important to take note of - and understand the contents of this manual.

Contents

1. General description

The DECO-PRINT Model DP2000T machine is shipped with the printing platen assembly (hard rubber) installed onto the machine. The printing plate is not included and must be ordered separately.

The machine cannot be used for direct printing without a printing plate installed into the machine.

New features on this machine include:

• A transfer sensor used to precisely align each transfer on the sealing platen as the transfer moves through the machine.

• An adjustable laser target dot to assist the operator in positioning the garment for print / transfer.

The DECO-PRINT Model DP2000T machine prints the customer's logo or text directly onto the garment using the hard rubber platen, "C" tape, and a printing plate (not included). The printing plate is ordered separately in one of three configurations.

1. With the customer's logo,
2. With a plate with tracks, or
3. With a combination of a logo and tracks for individual lettering.

1.1 DELIVERY

ACCESSORIES INCLUDED:

• 45658 — Sealing kit. Use for sealing labels, mending materials and applying hot paper transfers

• 46780 — (3) Separator discs. Used between different colored ribbon rolls (C-TAPE) on supply side.

• 46007 — Plate holder.

• 47312 — the Standard (SAE) Tool Kit (after January 2015)

• 47309 — 1.5 M of 6 mm tubing (after May 2015)

• 47310 — 6 mm OD Connection (after May 2015)

If one of these articles should be missing or faulty, please contact your Thermopatch supplier.

1.2 CONDITIONS OF WARRANTY

Thermopatch points to its warranty and product liability conditions as laid down in our general conditions. These can be obtained at your Thermopatch supplier.

2. Intended use

The DECO-PRINT model DP2000T prints a permanent mark directly onto most natural or synthetic fabrics by means of a printing plate, briefly striking the inked ribbon against the material to be marked. The machine is an air operated machine that uses a foot pedal, (included), to initiate the printing cycle.

WARNING!

Any use other than described above can be dangerous and cause damage and thus qualifies as 'misuse' which excludes Thermopatch bv from any liability.

3. Specifications

3.1 SPECIFICATIONS OF THE DP-2000-T

Electrical Requirements:	5 Amps @ 110 VAC 50/60 HZ Or 2,5 Amps @ 220 VAC, 50/60 HZ
Operating Air Pressure:	25 PSI (1,8 BAR) Minimum to 70 PSI (4,8 BAR) Maximum 1,3 CFM (0,6 Liters/sec)
Dwell Time Setting:	0,1 Seconds to 99,9 Seconds
Heat Range:	200°-500°F (93° - 260°C)
Maximum Print Area:	4-3/4" wide x 3-3/4" deep
Transfer Advance (Roll)	Sensor controlled stop is adjustable from 7 ½" to13 ½"from the centerline of the platen
Ribbon Advance:	0,1" to 6,0" (2,5mm to 152mm)
Ink Ribbon Width:	4, 3, 2, and 1 inch (102, 76, 51, and 25 mm)
Multiple colors and widths	any combinations up to 4" total width
Opening Height: (Between Printing Plate and Platen)	5,0" (127 mm)
Clearance: (From Back of Platen to Machine)	1-3/4" (44 mm)
Weight:	115 lbs. 52 kg.

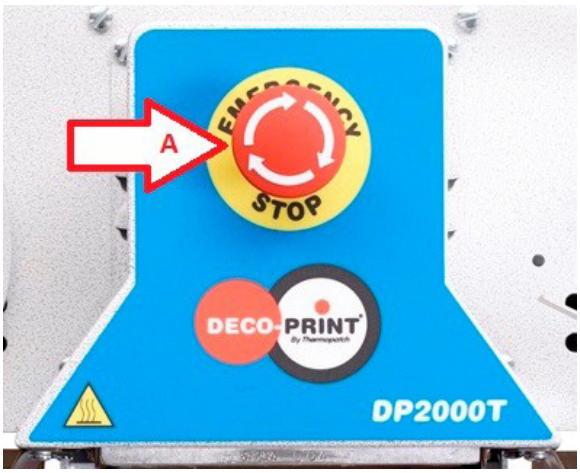
Temperature:	500°F (260°C)
Transfer time:	2,0 seconds
Label seal time:	12,0 seconds
Printing time:	0,5 seconds
Air Pressure:	50 PSI (3,5 BAR)
Transfer (Roll) Advance:	5,0in (126-128mm)
Ribbon Advance:	5,0 in (126-128 mm)
Ink Ribbon Width:	4, 3, 2, and 1 inch (102, 76, 51, and 25 mm)
Multiple colors and widths	any combinations up to 4" total width
Opening Height: (Between Printing Plate and Platen)	5,0" (127 mm)
Clearance: (From Back of Platen to Machine)	1-3/4" (44 mm)
Weight:	115 lbs. 52 kg.

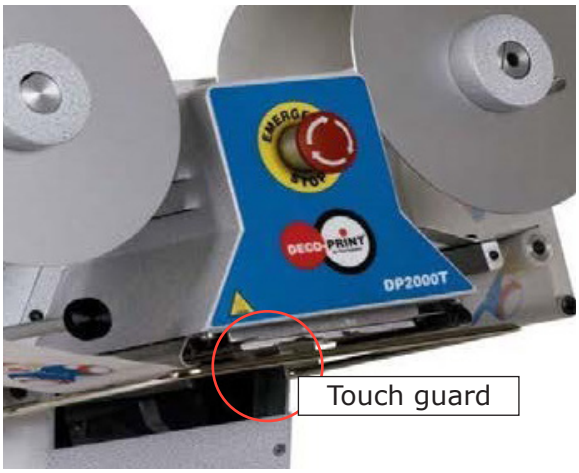
4. Safety measures and warnings

4.1 SAFETY

Each DECO-PRINT machine is equipped with a Safety Guard feature for the protection of the operator. The Safety Guard is activated in two ways:

1. The metal bar senses the touch of your hand.
2. There are switches that sense any obstruction.





Once the safety guard is activated, the downward movement of the print will be interrupted and the "CLEAR" button must be pressed before the next print cycle. If an obstruction is met before this point, the power print cycle will not occur.

ectrical power cord must always be plugged into a properly grounded outlet.

Safety warnings:

- THE USE OF POWER STRIPS AND EXTENTION CORDS IS NOT RECOMMENDED
- CAUTION: PRESSURE READING ON AIR GAUGE MUST NOT EXCEED 100 PSI (7.0 BAR)
- CAUTION: THE PRINTING HEAD AND PLATE MAY REACH TEMPERATURES AS HIGH AS 550°F (288°C) DURING NORMAL OPERATION. ALWAYS KEEP HANDS CLEAR OF THE PRINTING HEAD WHEN OPERATING MACHINE.
- IF POWER IS ON, DO NOT LEAVE MACHINE UNATTENDED. IF A LOSS OF AIR PRESSURE OCCURS, AND IF A GARMENT IS RESTING ON THE PLATEN, THE HEAD CAN LOWER AND COULD CAUSE A FIRE. A CHECK VALVE IS BUILT INTO THE MACHINE TO PREVENT THIS, BUT WITH A LOSS OF AIR PRESSURE, THE HEAD WILL COME DOWN AT SOME POINT.
- WARNING: BEFORE OPERATING THE MACHINE, MAKE SURE ALL COVERS ARE IN PLACE, AND KEEP LOOSE JEWELRY AND CLOTHING CLEAR OF THE MACHINE DURING OPERATION.
- BEFORE SERVICING THE MACHINE, UNPLUG THE ELECTRICAL CORD, DISCONNECT THE AIR SUPPLY, AND LET THE PRINTING HEAD COOL DOWN TO ROOM TEMPERATURE
- CLEAN MACHINE PARTS WITH NON-FLAMMABLE CLEANING FLUIDS ONLY.

Warning symbols

△WARNING!
HOT SURFACE

△WARNING!
ELECTRIC TENSION

ATTENTION!

Make sure you are informed about the contents of this manual before starting to work with the DP-2000-T. This ensures an optimal and safe use of the machine.

ATTENTION!

Always turn the power off (unplug it) when you need to carry out maintenance work or when cleaning the machine.

ATTENTION!

In case of emergency, press the emergency stop button!

ATTENTION!

Take care that there is enough space around the machine. Cables and connections must not get pinched. Although the heat radiation of the press is low, there should be enough space for cooling down.

ATTENTION!

Avoid contact with the heating element.

ATTENTION!

Pull the fabrics tight around the press pad and ensure that your hands are away from the sealing pad before operating the machine.

5.0 Transport and storage

5.1 Transport

When the machine needs to be moved, Thermopatch advises to use the original packaging. The machine has to be lifted by the screw that is fixing the swiveling arm and the handle on the front of the machine.

5.2 Storage

When the machine needs to be stored, Thermopatch advises to use the original packaging. The machine should be stored on a pallet, off the floor, in dry conditions.

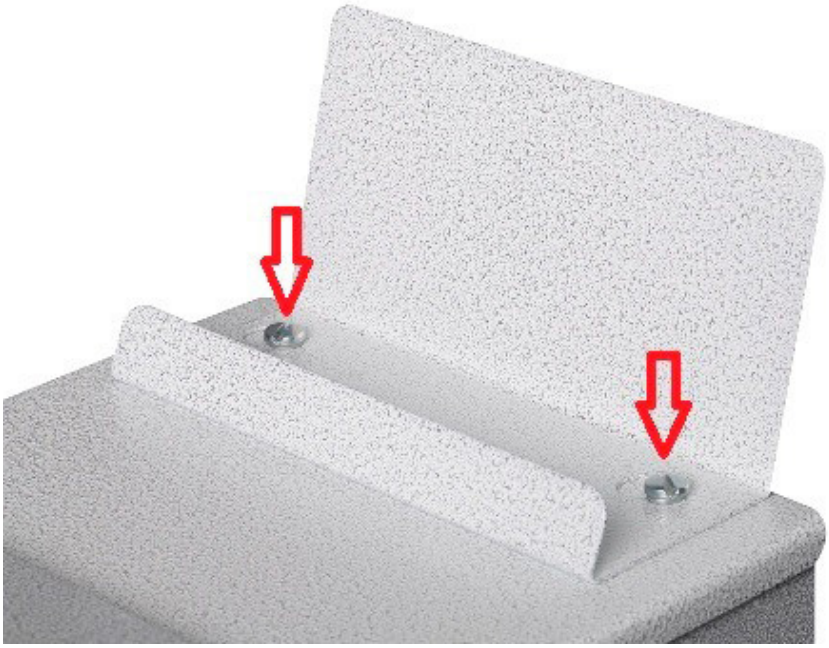
6.0 Operating instructions

6.1 Setting up the DP-2000-T

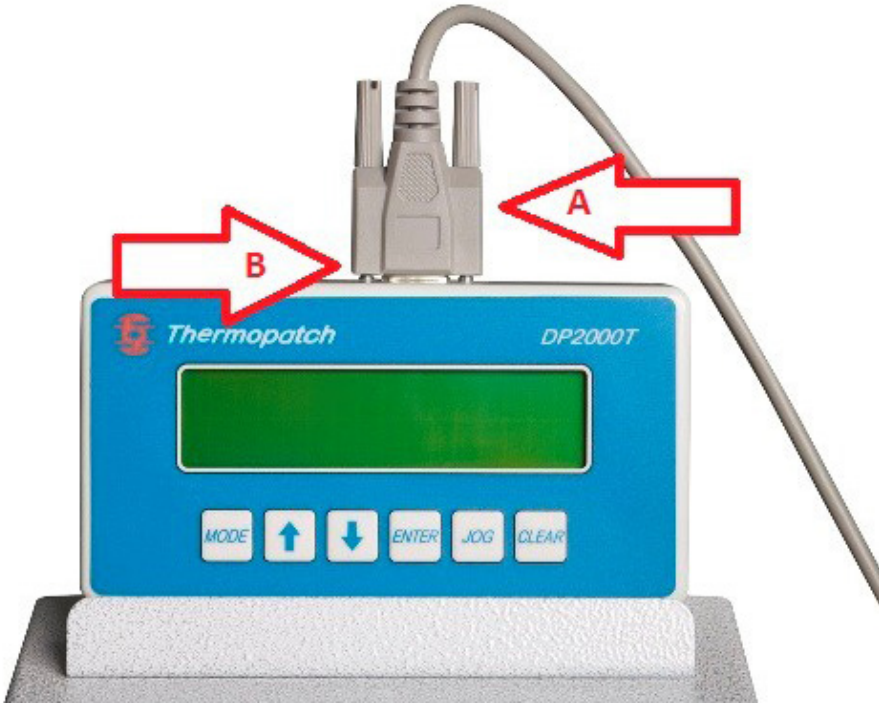
Step 1

Refer to Figure 1

Loosen the two screws on the top of the case in the back and install the control box bracket, Item 4.

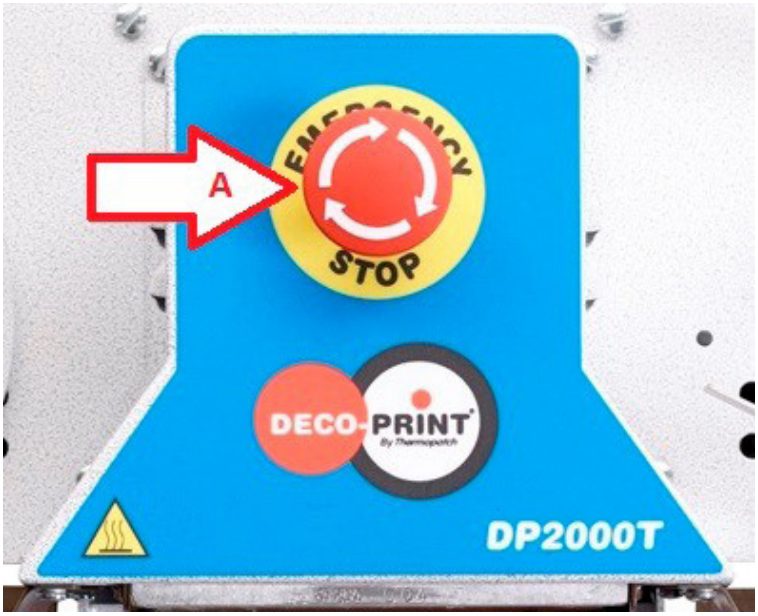


Plug one side of the display cable, Item A, into the control box, Item B, connector.

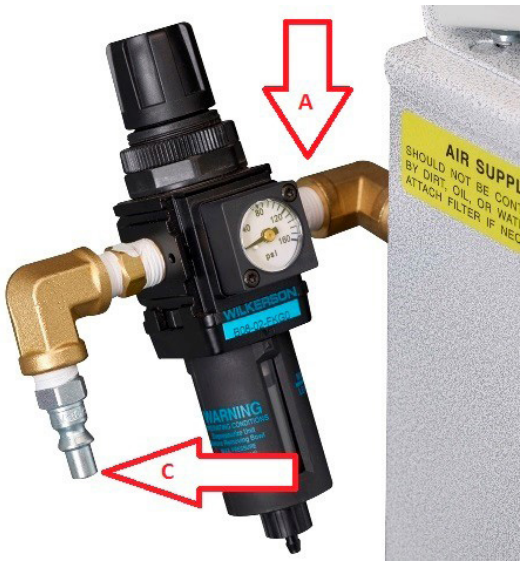


Plug the other end of the display cable, Item C, into the connector on the side of the machine.

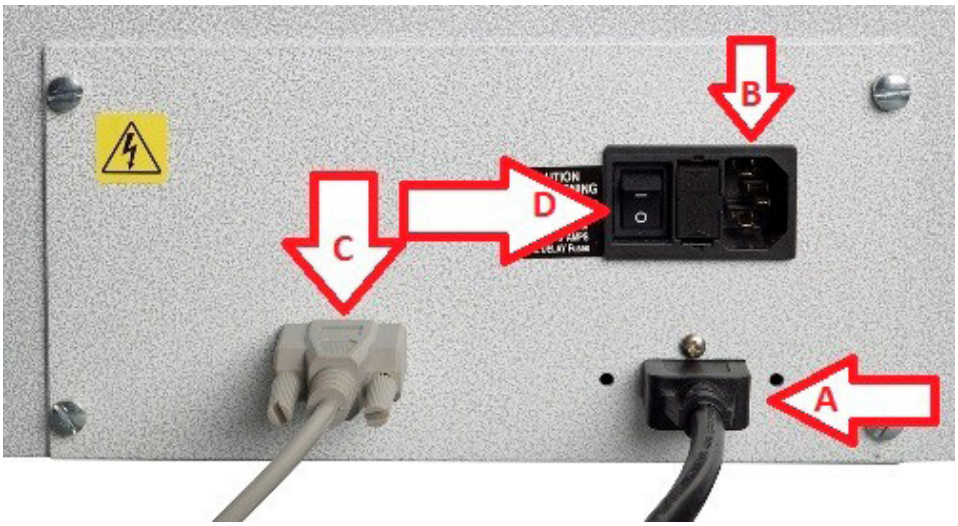
Step 2
Turn the "Emergency Stop" switch, Item A, in the direction of the arrow to make sure it is out.



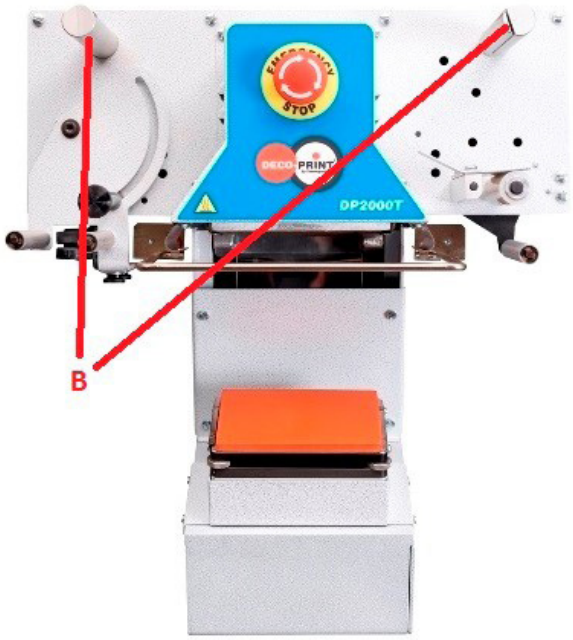
Step 3
Refer to Figure 5
Attach the air filter/regulator, with fittings to the bulkhead fitting, Item A, on the back of the machine. Orient as shown with the gauge facing forward. Connect the air supply to the male hose adaptor, Item C.



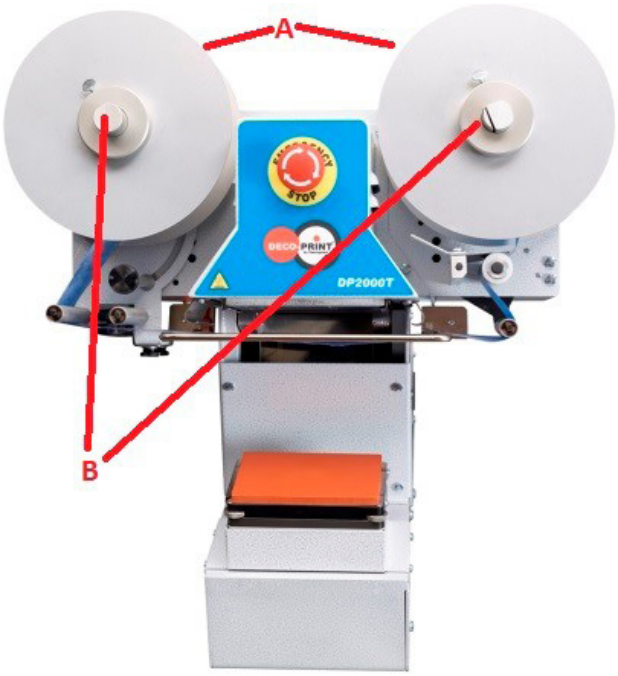
Step 4
Refer to Figure 6. This is the Electrical Enclosure Assembly, found on the right side of your machine
Connect the foot pedal plug into the FOOTSWITCH Plug, Item A.
Connect the power line cord to power entry module, Item B, and to the power outlet. Turn on the machine by pressing the on/off switch, Item D.
Item C depicts the display cable plugged in, previously discussed in connection on page 11.



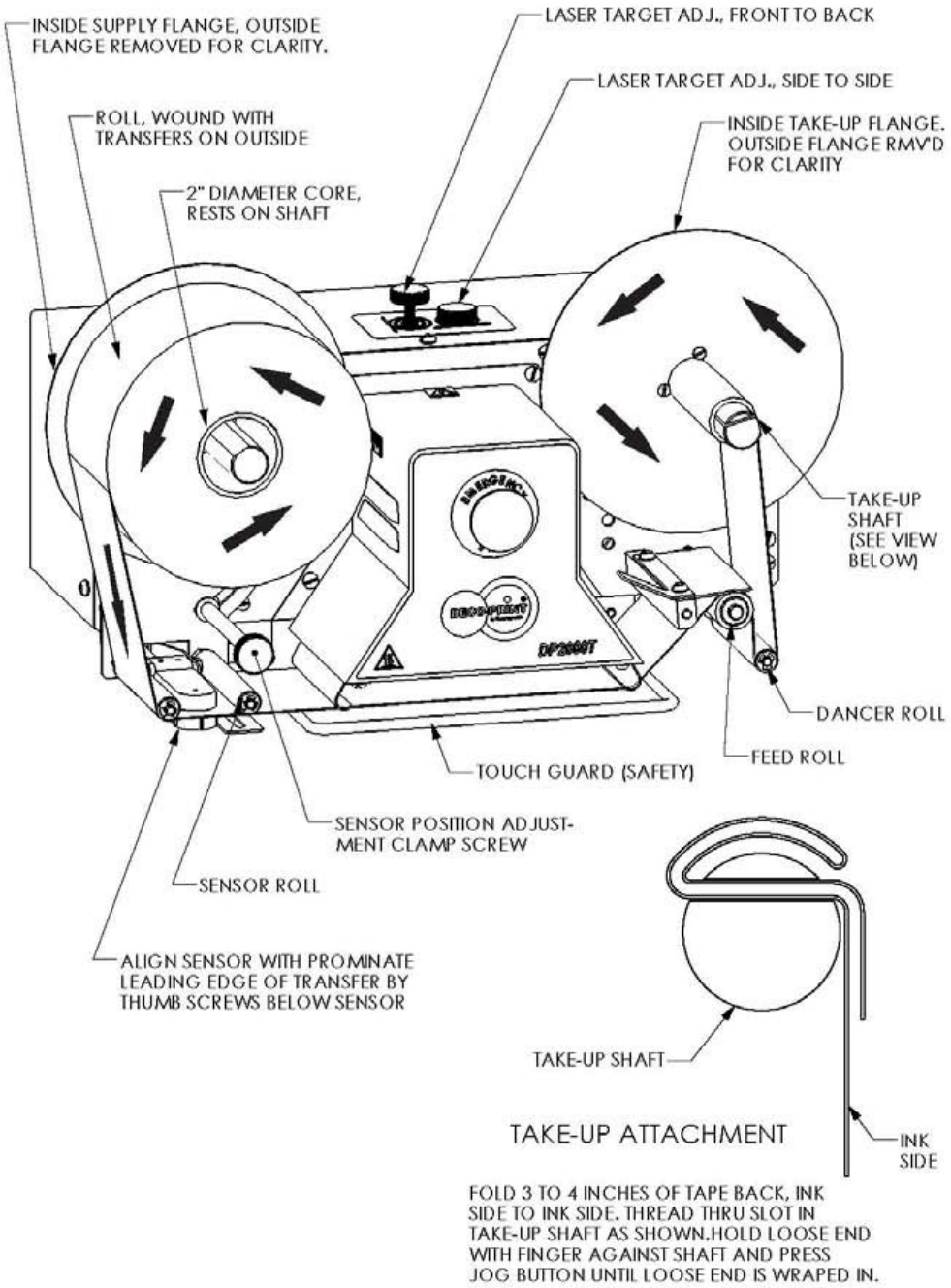
Step 5
Refer to below:



Place flange assemblies, Item A, on supply and take-up shafts, Item B.



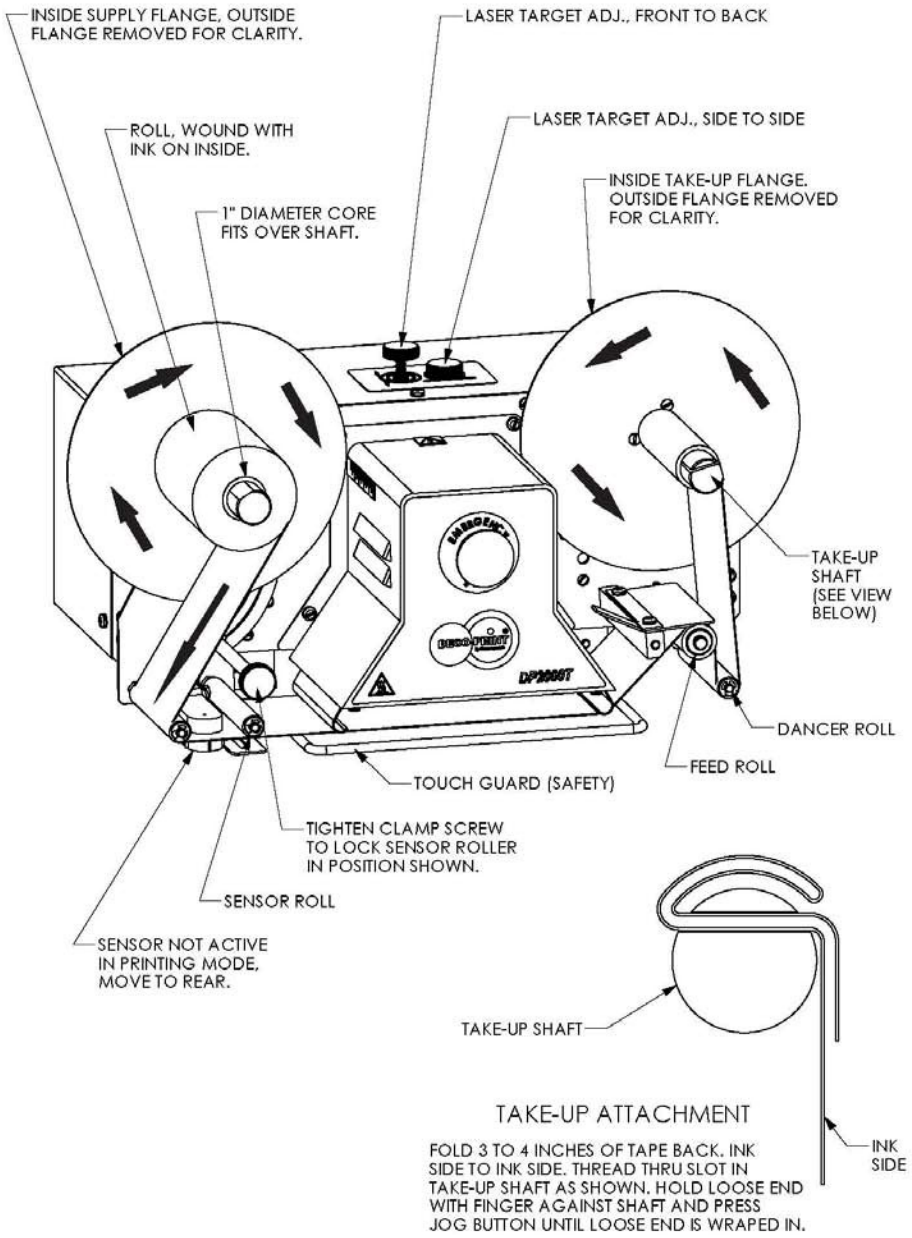
TRANSFER ROLL THREADING



TAKE-UP ATTACHMENT

FOLD 3 TO 4 INCHES OF TAPE BACK, INK SIDE TO INK SIDE. THREAD THRU SLOT IN TAKE-UP SHAFT AS SHOWN.HOLD LOOSE END WITH FINGER AGAINST SHAFT AND PRESS JOG BUTTON UNTIL LOOSE END IS WRAPED IN.

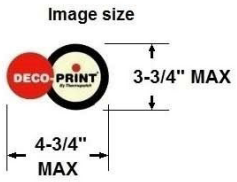
RIBBON ROLL THREADING (C- TAPE)



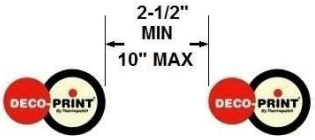
TAKE-UP ATTACHMENT

FOLD 3 TO 4 INCHES OF TAPE BACK. INK SIDE TO INK SIDE. THREAD THRU SLOT IN TAKE-UP SHAFT AS SHOWN. HOLD LOOSE END WITH FINGER AGAINST SHAFT AND PRESS JOG BUTTON UNTIL LOOSE END IS WRAPED IN.

DP2000T transfer size specifications



Space between images

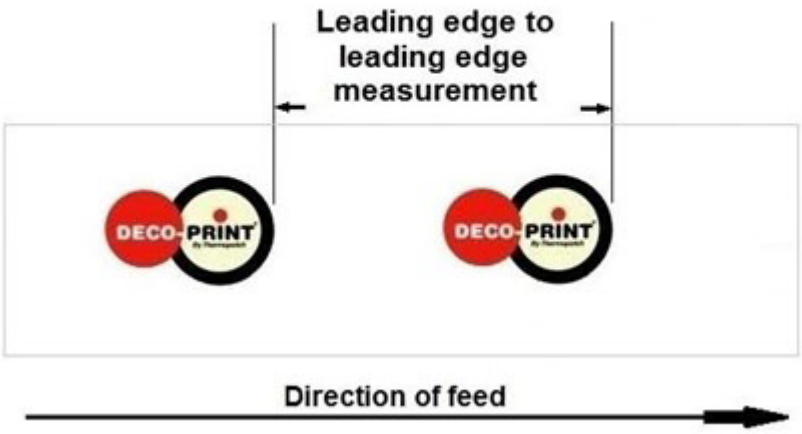


6.2 DP2000T TRANSFER SETUP

1. Select the transfer for use and measure the distance from the leading edge of one image to the leading edge of the next transfer as shown.

A special platen is required if this measurement is less than 2-1/2 inches (64 mm)

Feed length measurement

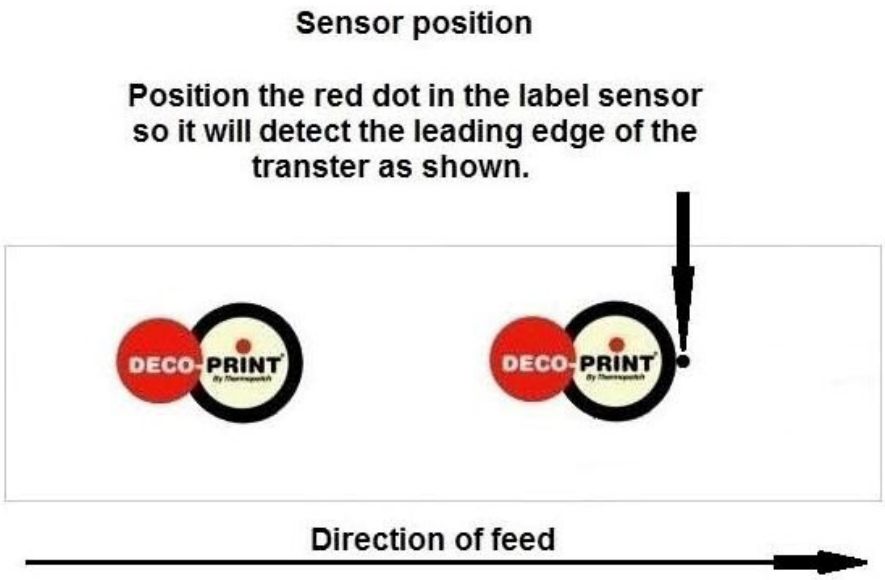


2. Install the transfers onto the machine.
3. Use the JOG button to feed the transfer image until the image is in the center of the sealing platen.
4. Press the MENU button.
5. Press the ENTER button until the display reads " SET FEED LENGTH: ".
6. Subtract 2 tenths of an inch, (5 mm) from the transfer measurement in step 1 and use the UP or DOWN ARROW button to enter this number into the machine. Example – The transfer measures 3 inches, (76 mm) from leading edge to leading edge. Subtract 2 tenths of an inch, (5 mm) from 3 inches. The number entered into the machine should be 2.8 inches, (71 mm).

7. Press the ENTER button until the display reads "PATTERN MARKER: ". Use the UP or DOWN ARROW button to select YES.
8. Press the MENU button to exit the menu.
9. Loosen the clamp screw, move the transfer sensor onto the space between the transfer images and tighten the clamp screw.
10. Press the TRANSLUCENT button and hold it until the lights on the sensor stop blinking.

NOTE: If green and red output lights are on and an * is displayed on the control box, push both (normal) and (translucent) buttons simultaneously. This procedure inverts the output to the correct status, green light on.

11. Loosen the clamp screw and move the transfer sensor towards the leading edge of the transfer image closest to the sealing iron. When the edge of the image is detected by the transfer sensor, an asterisk (*) will appear on the display next to the feed length. When you see the asterisk (*), on the display, tighten the clamp screw. Test the machine. The transfer image should be centered on the sealing platen. If the image is moving after each cycle, re-adjust the position of the transfer sensor. If the image is not centered, repeat the setup procedure.

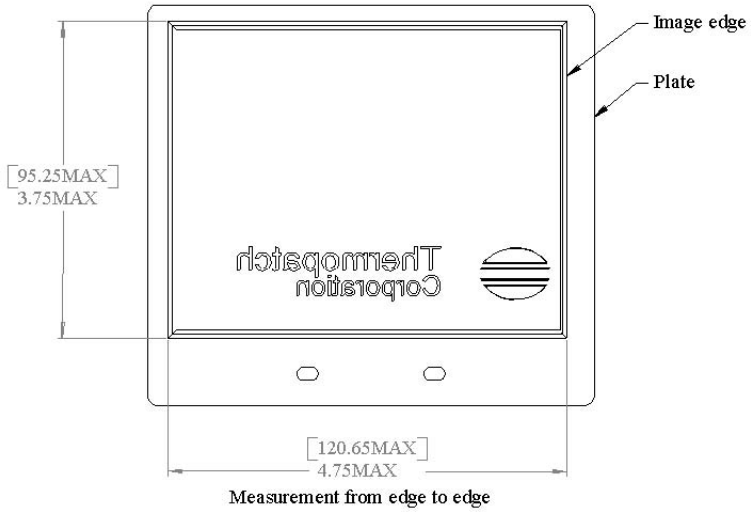


Ribbon Tape Setup Feed Adjustment

The first step is to adjust the feed. This feed value advances the tape after printing to the amount of the entered value, to set up for the next print. Using the control box, the user adjusts and controls the distance that the machine feeds.

Caution: tape tension may cause less feed length than what the display indicates. (See page 24) for adjusting tape feed length. (See page 22, step 3) for adjusting tape tension.

The distance between the left and right edges of the plate image determines the value for the amount of feed. Measure this distance and add .2 to .4 inches (5.1 mm to 10.2 mm) to it; this will give you your feed length.



The feed length on the controller box needs to be changed to the measurement taken. We will use 5.2 inches (132 mm) as an example of a measurement.

6.3 ADJUSTING THE PRINTING PRESSURE AND PLATEN HEIGHT PRINTING PRESSURE

Printing pressure is preset at the factory to 50 PSI. The printing pressure range is from 25 PSI (1.8 BAR) minimum to 70 PSI (4.8 BAR) maximum. NEVER EXCEED 70 PSI. In general, the larger the printing area, the higher the pressure required. The air regulator is located outside, at the rear of the machine. At the top of the regulator is a black knob. Pull upward to change the current setting. Turn the knob clockwise to increase the air pressure or counterclockwise to decrease the air pressure. After pressing down on the foot pedal and then releasing, check the air gauge reading. Readjust if necessary, then activate the foot pedal and release again for a new gauge reading. To lock in a setting, push the black knob down into its original position.

Printing Platen Adjustment

Occasionally, it may be necessary to increase the pressure on one corner or side of the printing platen in order to make it print better in that area. This might be true where an engraved design has a denser area in one corner. To adjust, locate the appropriate thumb screws below the rubber platen. Looking from the top, turn the screw counterclockwise to increase the pressure. NOTE: The platen is level when all screws are turned clockwise and the platen is put in its lowest position.

Setup for 2, or More Ribbons

1. Multiple ribbons of different colors are threaded the same as a single ribbon shown in Figure 10 — Ribbon Roll Threading.

a. The rolls must be separated by a thin disc, to prevent interaction, when they are different outside diameters. Three discs are provided in the Optional Printing Kit, and are to be used on the unwind, or supply shaft.

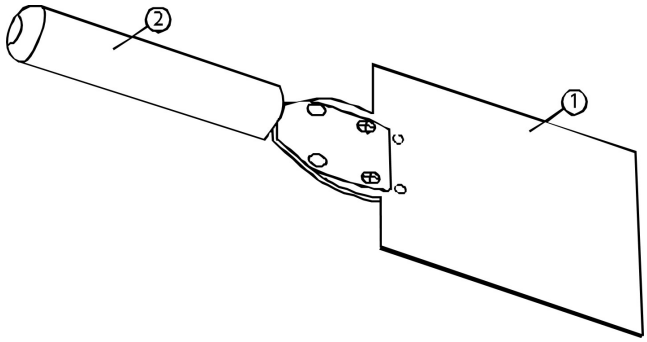
2. Place one roll on shaft followed by a disc and push to rear. Repeat this procedure for each roll added. No disc is required after the last roll added. Replace the supply flange and clamp collar. If a single ribbon is used, push the three thin separator discs to the rear, against the supply flange or remove from machine for storage.

3. Usually the outer clamp collar can be adjusted to minimize endplay of the roll, because of the drag from the roll insert on the shaft. If the roll turns freely on the shaft, push the clamp collar in to create drag on the roll. Too much drag may cause the ribbon to break or the motor to stall. Do not stall motor.

4. Thread the tape through the machine: Refer to Figure 10 for a visual aid.

- Unroll approximately two feet of tape off the roll.
- Feed the tape under the sensor roller, under the heating iron, up and around the feed roller, down under the dancer roll, and up to the take-up shaft.
- Attach to take-up shaft as shown in Figure 10.
- Press the JOG button until the tape is taut through the machine.

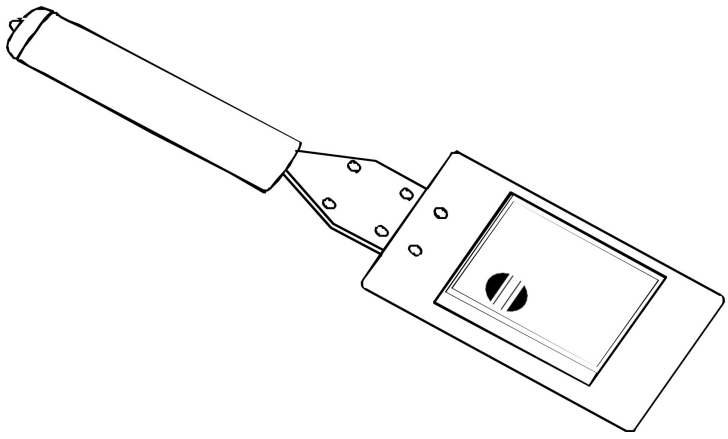
INSERTING THE PRINTING PLATE



The above drawing shows a DP2000T Printing Plate (Item 1) (CUSTOM PART) and a Printing Plate Holder (Item2) P/N (46007). The Printing Plate Holder is provided for installation and removal of the Printing Plate.

- With the artwork facing down on the Printing Plate, apply a downward force just enough to slide the Printing Plate Holder forward. This locks the Printing Plate into place.
- Insert the plate into the plate mounting brackets on either side of the iron.
- Slide the plate in fully.
- Apply the same downward force and slide the Printing Plate Holder away from the machine.

To remove the Printing Plate from the machine, just reverse the process. The Printing Plate is extremely HOT so caution must be taken when removing and placing it on a heat protective surface. Avoid any side to side motion of the Plate Holder while inserting or withdrawing Print Plates. This motion tends to bend side guides and loosen heater mounting screws.



Note: If you bump the touch guard, press the CLEAR button on the controller box to reset.

Choosing The Platen

Be sure to use the proper platen. Use the hard rubber platens for printing, and the soft rubber platen for heat sealing and dry ink transfers. There should be a distance of at least 1/8” to 1/4” between the printed image and the outer edge of the platen.

Testing The Transfer Roll Feed Set-Up

Run the machine through a few cycles holding a scrap cloth in place over the platen. Check to see if the machine is properly feeding the transfer tape, enough to position the next transfer in the correct position. The transfer image target position is controlled by the location of the sensor when it stops the following transfer. To change this position, move sensor roll arm and retighten clamp screw.

The machine is ready for operation.

Testing the Ribbon Feed Roll Set-Up

Run the machine through a few cycles holding a scrap cloth in place over the platen. Check to see if the machine is properly feeding the tape, enough to clear for the next print. There should be a gap of 1/4" or more between the printed images on the used tape.

If there is less than 1/4", increase the feed value slightly. If there is more than 1/4", decrease the value slightly to reduce waste.

Correcting Take-Up Problems

Check that the used ribbon or transfer tape on the take-up shaft is not trying to fold over on the flange. If it is, the take-up flanges can be moved to the front or back of the machine to compensate. If this tracking problem continues, check for the following causes:

1. Not enough tape tension. Push in on the outer supply flange and tighten the thumb screw to produce more drag. A slack tape will tend to creep down the slope of the feed roll, since it is feeding in the up position.

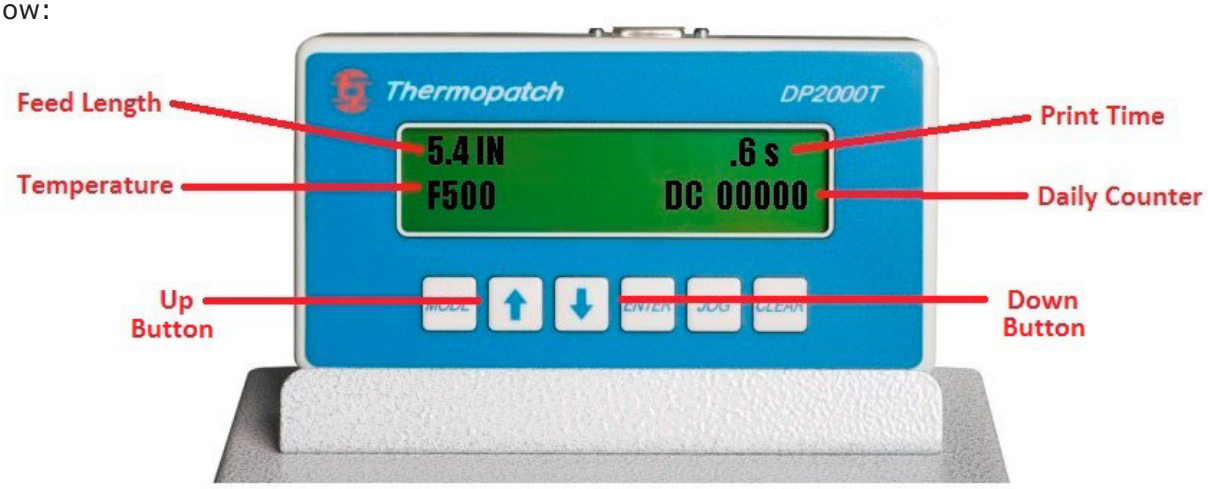
2. The dancer or sensor roll being out of alignment. These rolls must be parallel, both horizontal and vertical with feed roll. The brackets these rolls are mounted to could become bent during shipment or by being bumped. Usually they can be bent and gauged by eye to the correct position.

Make sure the used end of the ribbon is attached as shown in Figure 10. If the ink side of the ribbon is touching the take-up shaft or it's slot, or if tape tension is excessive the slot will close in and the used roll will be difficult to remove.

The machine is ready for operation.

6.4 CONTROL BOX

The Deco-Print machine features a digital control box, with six control buttons, shown below:



The display on the control box in normal running mode shows:

Feed Length * Print Time * (means sensor is sensing stop position on transfer)

Temperature Daily Counter

Press the UP or DOWN button once to change the Daily Counter (DC) to Continuous Counter (CC).

NOTE: The software version number will appear when machine is turned on.

To zero the Daily Counter (DC), press the UP and DOWN buttons simultaneously while the Daily

Counter (DC) is displayed.

The Mode button switches the display to menu mode with 2 selections:

- **MACHINE SETUP**
- **JOB SETUP**

The MACHINE SETUP menu is used to set:

1. Display language (English, Nederlands, Italanio, Deutsch, Francais, Espanol)
2. Temperature scale (Fahenheit, Celcius)
3. Feed length (Inches, Millimeters)
4. Counter mode (Daily, Continuous)

The JOB SETUP menu is used to set:

1. Temperature
2. Feed length
3. Print or Seal time
4. Seal only option
5. Pattern marker option

Press the ENTER button to cycle through the menu options when in menu mode. The UP and DOWN arrow buttons increase or decrease the settings.

The JOG button advances the tape.

Note: Once the Touch Guard is activated, you must press CLEAR before the machine can print.

6.5 MACHINE SETUP

Press MODE to show choice of JOB SETUP or MACHINE SETUP. Press UP or DOWN button to select MACHINE SETUP.

1. Press ENTER and select language. Press UP or DOWN button to select ENGLISH.

2. Press ENTER and choose the temperature scale. Press UP or DOWN button to select FAHRENHEIT.

3. Press ENTER and select feed length unit. Press UP or DOWN button to select INCH.

4. Press and choose the counter, DC or CC. Press UP or DOWN button to select DC (daily counter).

Press Enter to save the last setting. JOB SETUP: To run Transfer Roll

Press MODE and select JOB SETUP with UP or DOWN button.

Press ENTER and set temperature at 500 degrees F, or to suit, with UP or DOWN button.

Press ENTER and set Feed Length at 4 inches by pressing UP or DOWN button

Press ENTER and set Print Time at 2 seconds by pressing UP or DOWN button.

Press ENTER and set Seal Only to NO, with the UP or DOWN button.

Press ENTER and set Pattern Marker to YES with the UP or DOWN button.

Press ENTER to save the last setting.

If the Job is using Ribbon (C-Tape), set Pattern Marker to NO. Leave Seal Only set to NO. Change temperature, feed length, and time to suit.

If the JOB is to seal individual labels, patches, or transfers, set Pattern Marker to NO. Set Seal Only to

YES, this will disable the roll feed. Set temperature, time, and pressure to suit. Press ENTER Button after each selection to save the settings.

The machine will automatically exit the menu mode if none of the buttons are pressed within 5 seconds.

7. Troubleshooting

Before referring to the information below, check for proper set-up and operation as outlined in "DP2000T Setup".

Solutions are listed with the most probable ones listed first.

Some procedures may require completion by a person with some mechanical and electrical skill. Call Customer Service for assistance or to order replacement parts.

Problem	Possible Cause	Solution
Display is blank	Machine is unplugged or outlet has no power	Check
	Emergency stop activated	Check
	Electrical power switch or light not "ON" or is defective	Check/Replace
	Loose or broken wires or connectors	Check/Repair
No heat	Machine is unplugged or outlet has no power	Check
	Electrical power switch is not "ON" or is defective	Check/Replace
	Temperature reading is incorrect	Replace
	Print Head heat is defective	Replace
	Heat sensor is defective	Replace
	Defective temperature control	Replace
	Loose or broken wires or connectors	Check/Repair
	High limit thermostat is defective	Replace
High or low heat	Heat sensor is defective	Replace
	Defective temperature controller	Replace
	Temperature reading is incorrect	Adjust
	Loose or bad connectors	Check/Repair
	Short between sensor wires (high heat only)	Check/Repair
Print pressure drops or fluctuates (on air (gauge) or hisses	Leak in air supply hose	Repair/Replace
	Dust is lodged in the air lines, regulator, or solenoid air valves	Disassemble and clean

Print head will not descend	Touch guard activated Temperature not ready Solenoid air valve not shifting Air supply not connected Foot switch is unplugged or bad Leak or restriction in air line or connections	Press Clear Wait Replace Check Check/Replace Check/Repair
Print head too slow or fast	Flow control(s) adjustment is incorrect Mechanical blocking	See pg.39 item 14 Check & Correct
Timed print cycle does not activate	Garment or cloth is too thick Leak in hose or connections Defective microswitch Mechanical binding	Check Repair/Replace Replace Check & Correct
Print Head does not rise to the open position	Air solenoid valve not shifting Leak or restriction in air line connections Mechanical binding	Check/Replace Check/Repair Check & Correct
Overall print is too light	Air pressure is too low Temperature is too low Time setting is too low	See pg 19 See pg 23 See pg 23
Parts of design are not printed	In ribbon feed not working properly Rubber print platen is dirty or worn In ribbon to properly guided left to right Overlap of printed impressions in used ink ribbon Ink ribbon not wide enough One corner of rubber platen needs adjustment	Check threading per pg 15 Clean or replace Check ink ribbon threading Adjust longer, see pg 24 Use wider ribbon See pg 22
Center of "O", "A", etc is filled with ink; imprint is unclear	Temperature is too low Time setting is too low Engraved plate is dirty Pressure incorrect	See pg 23 See pg 23 Clean Clean & Correct
When type slugs are used, print is unclear	Type slugs are dirty Deformed type slugs caused by high heat Pressure incorrect	Clean Adjust heat per pg 20; replace slugs Check & Correct
Ink marks on back side of garment	Ink build-up on rubber platen	Clean Platen. See pg 45
Emergency stop push button will not operate	Push button is defective	Replace, see pg 38

7.1 OPERATIONAL MESSAGES

On power-up, machine identification and version number will momentarily appear on the LCD display. The temperature wait message shown at the main display will be replaced by the continuous count or the daily count when the temperature is within 15 degrees Fahrenheit or 7 degrees Celsius of the set point temperature. The operator can change options during the warm-up period.

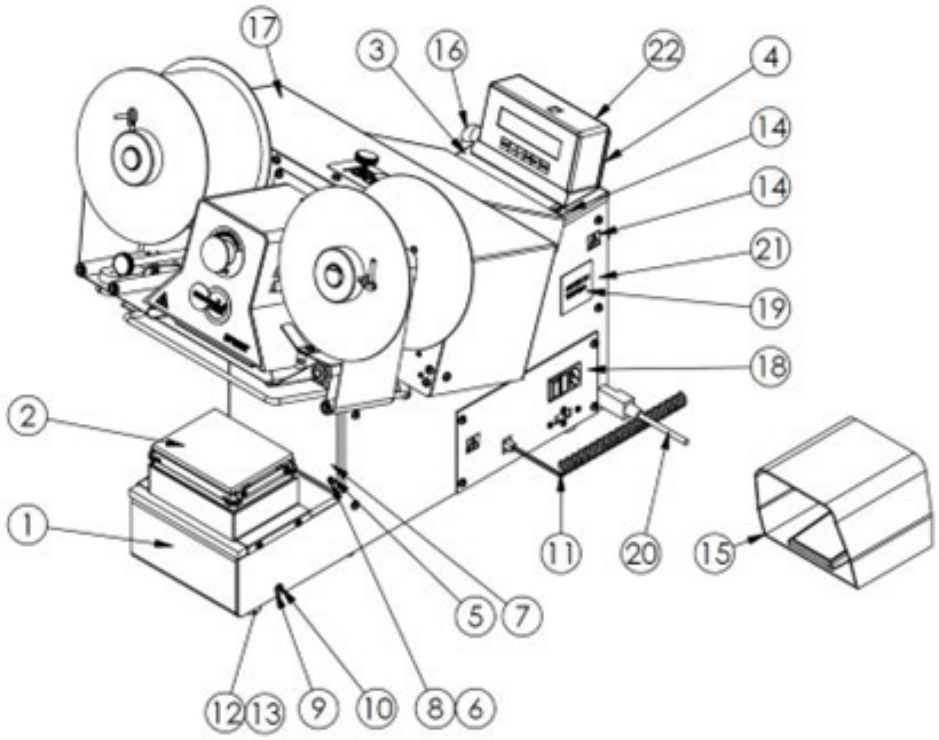
Temperature Controller Messages

The temperature controller will be interrogated and if a fault is detected one of the following messages will appear:

Line 1	Meaning/Response
Heater Failure Logic board	Temperature control board is either bad or unplugged
Heater Failure Heat Sensor	Temperature sensor is either bad or disconnected
Heater Failure Slow heat rise	Heater is bad or disconnected; or temperature sensor is bad, disconnected, or shorted
Heater Failure High temperature	Relay is bad or shorted; temperature sensor is bad or shorted; or bad connections
Heater failure Unknown	Contact Thermopatch
Seal Switch ERR Display when touch guard is activated.	This indicates the seal down switch was not activated During a seal cycle if the top platen did not come down Check seal down switch and wiring
TOUCH GUARD FAULT	This indicates the guard was hit. Press the CLEAR Button.

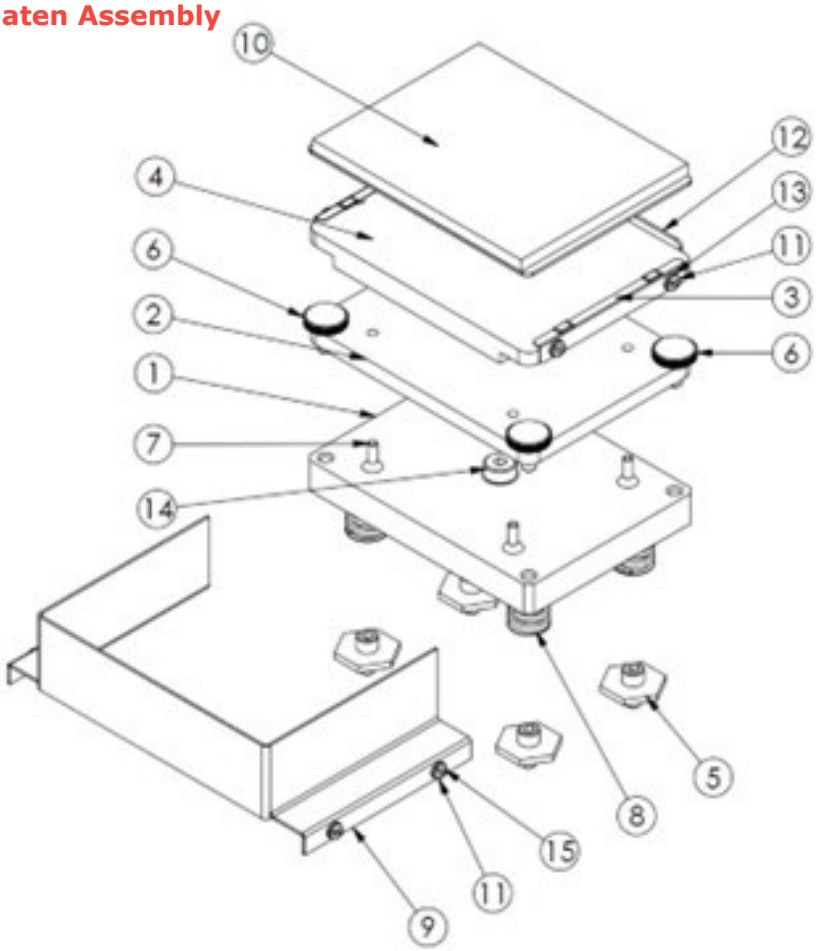
8. parts indentification and location

Drawing 01 DP-2000-T Machine Assembly



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	46876	CASE WELDMENT	1
2	PLATEN ASSEMBLY	SEE PAGE 33	1
3	46882	COVER, TOP REAR	1
4	46788	BRACKET, CONTROL BOX	1
5	21021-06-C	NO. 8 SPLIT LOCKWASHER	8
6	21028-36	HEX STANDOFF #8-32	4
7	45678	COVER, CASE FRONT	1
8	21058-05-F	PHS 8-32 X 3/8 LG	4
9	21021-07-C	NO. 10 Spring	11
10	21061-02-E	BUTTON HD 10-32 X 3/8 LG	11
11	20220-37	SHIELDED SERIAL CABLE	1
12	21028-38	RUBBER BUMPER	4
13	21060-04-H	BHS 10-32 X 5/16 LG	4
14	45426	LABEL, HIGH VOLTAGE	2
15	43025	FOOT SWITCH W/GUARD	1
16	PNEUMATICS	SEE PAGE 44	2
17	HEAD ASSY	SEE PAGE 37	11
18	ELECTRONICS MODULE	SEE PAGE 46	
19	44771	LABEL – MADE IN USA	1
20	20080-70	CORD – LINE 110V IEC CONN	1
21	46879	PLATE, R.H. SIDE	1
22	47149	LCD CONTROL MODULE	1

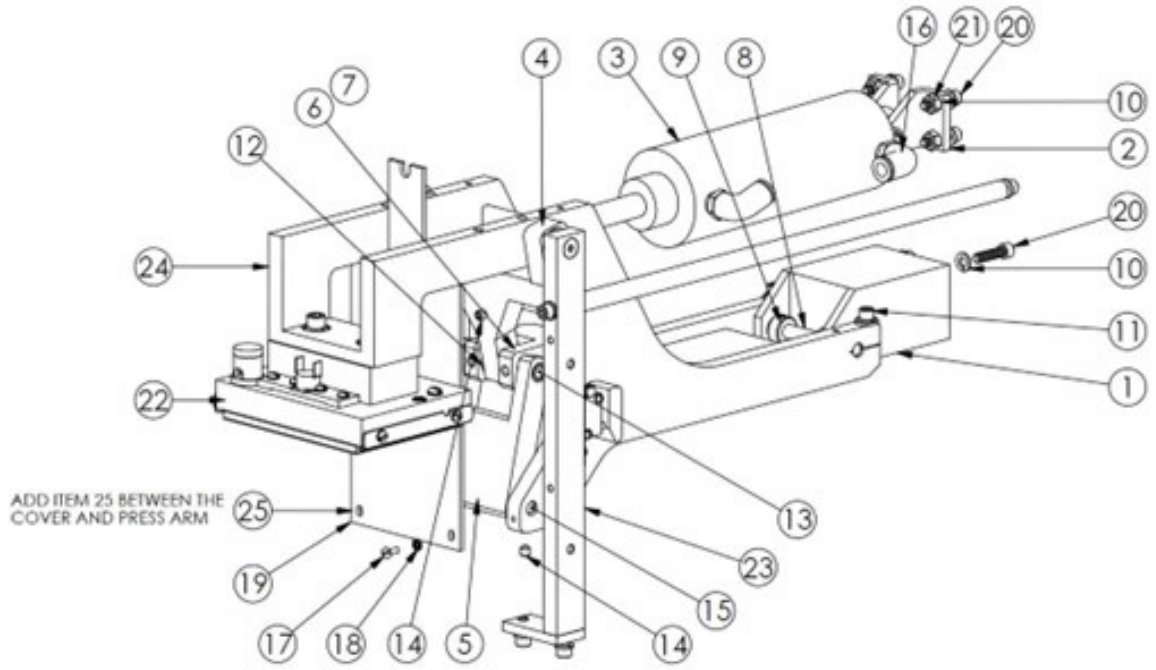
Drawing 02 Platen Assembly



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	45587	PLATEN BLOCK	1
2	45619	RETAINER, PLATEN HOLDER	1
3	45582	PLATEN HOLDER GUIDE WELDMENT	2
4	45621	PLATEN HOLDER	1
5	45642	SCREW ASSY	4
6	21029-32	THUMB SCREW 1/4-20 X 3/4 LG X 3/4 HD	4
7	21062-03-D	FLAT SOC HD SCR 8-32 X 1/2	4
8	24075-26	SPRING - COMPRESSION	4
9	46833	COVER, PLATEN BASE	1
10	45637	HARD RUBBER PLATEN	2
11	21069-03-E	PHS 6-32 X 1/4 LG SS	4
12	45620	STOP, PLATEN HOLDER	1
13	21021-05-C	# 6 SPLIT LOCKWASHER	8
14	21006-06-C	SHLD SCR 3/8 X 1 1/4 LG	1
15	21061-01-B	BUTTON HD SCR 6-32 X ¼”	4

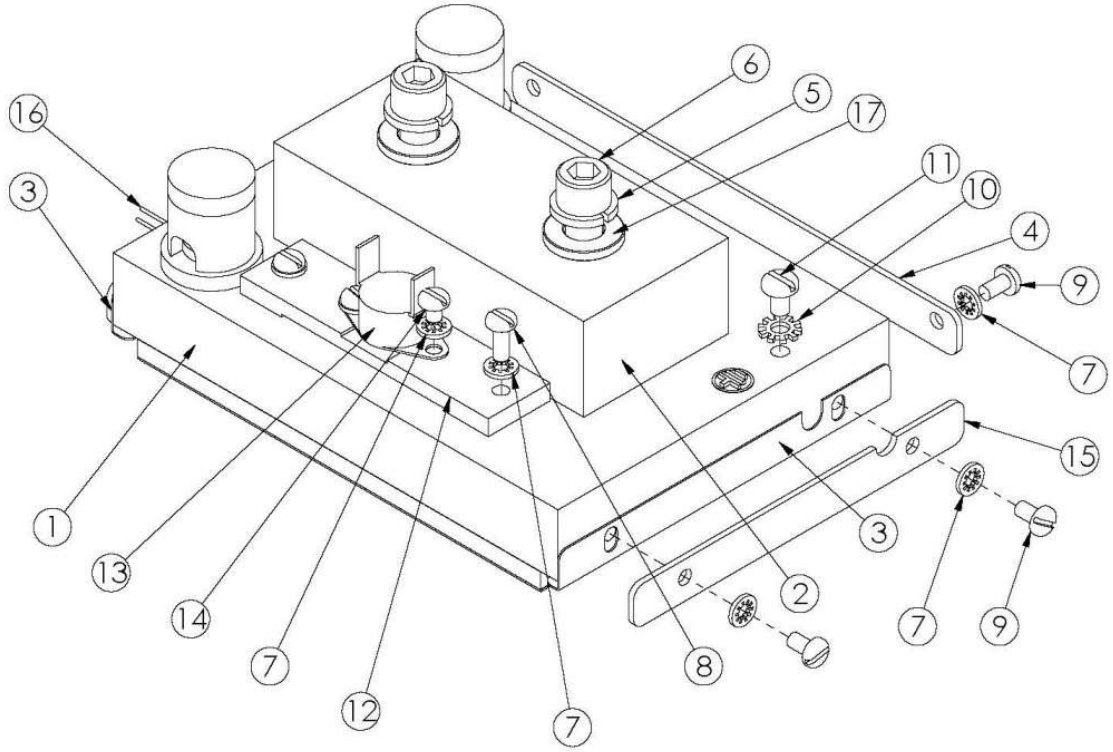
Note 1:
If the machine is set up for printing, use print platen (45637)
If the machine is set up for transfers, use sealing pad assembly (46009)

Drawing 03 Press Arm Assembly



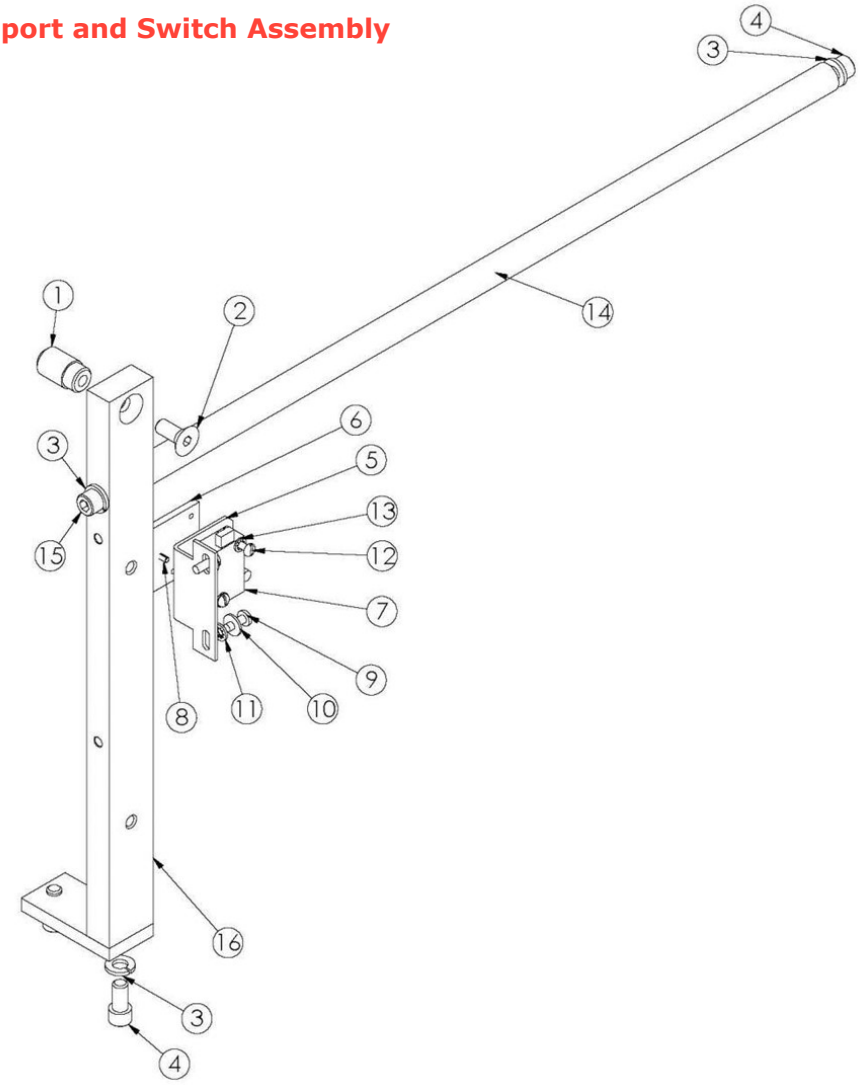
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	45591	ARM SUPPORT ASSY	1
2	22010-57	PIVOT MOUNT BRKTS (BIMBA)	1
3	22010-56	AIR CYLINDER, 2 1/2 BORE 3 1/2 STROKE	1
4	45578	UPPER LINK ASSY	1
5	46055	LOWER LINK ASSY	1
6	45589	CLEVIS, SEALING CYLINDER	1
7	21051-20-C	NUT, HEX JAM 1/2-20	1
8	45593	SHAFT, PRESS ARM	1
9	24016-22	SET SCREW COLLAR 3/8 BORE	2
10	21021-09-C	LOCKWASHER - SPLIT 1/4	10
11	21011-04-H	SET SCR 8 X 32 X 3/16	2
12	21022-12	THRUST WASHER 3/8 I.D.X3/4O.D.X.06TK	2
13	45573	SHAFT, CENTER LINK PIVOT	1
14	21011-05-L	SET SCW - CUP 1/4-20 X 1/4 LG	4
15	45583	SHAFT, LOWER LINK PIVOT	1
16	22015-34	ELBOW - 1/4 MPT X 3/8 TUBE	2
17	21029-48	BUT HD 8 X 32 X 3/8	2
18	21021-06-C	NO. 8 SPLIT LOCKWASHER	2
19	46937	COVER, FRONT	1
20	21063-08-K	SHCS 1/4-20 X 1.0 LG	8
21	21051-11-A	HEX NUT 1/4 - 20	4
22	HEATER ASSY	SEE PAGE 35	
23	SUPPORT/SWITCH ASSY	SEE PAGE 36	
24	46947	PRESS ARM MACHINING	1
25	21023-23	NO. 8 FLAT LOCKWASHER	2

Drawing 04 Heater Assembly



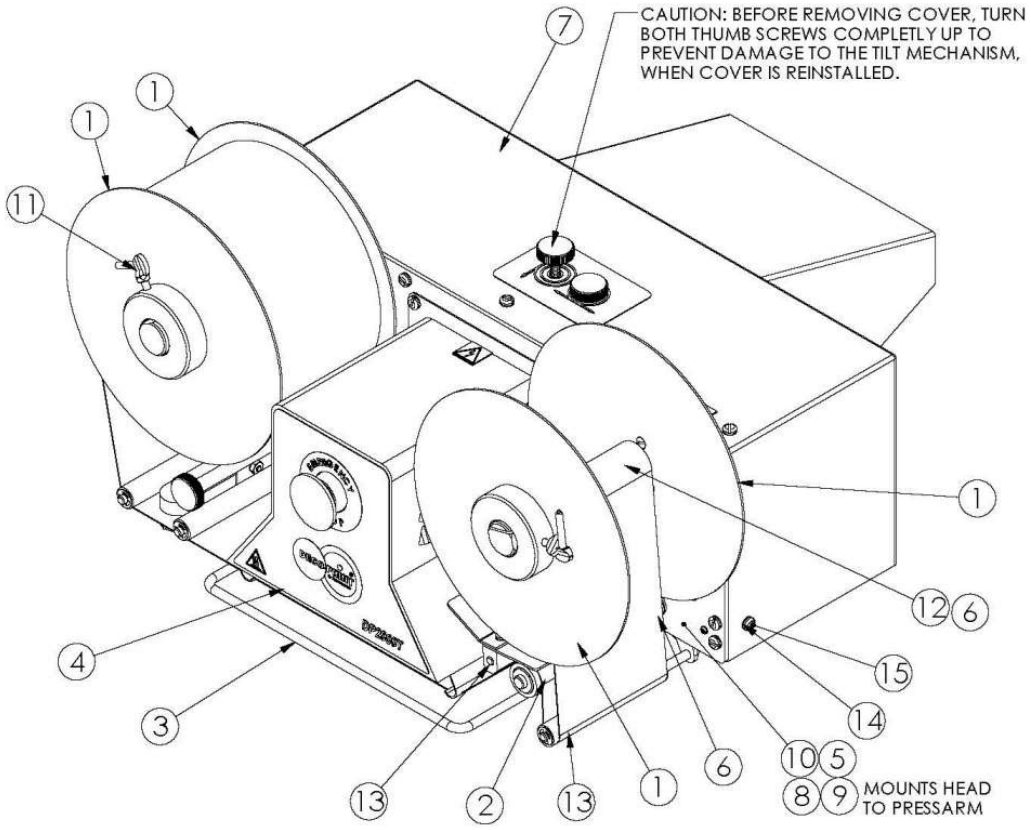
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1*	45585	SEALING IRON MACHINING 110V	1
2	45579	ISOLATOR BLOCK	1
3	45849	GUIDE WELDMENT,	2
4	45643	STOP, PRINTING PLATE	1
5	21021-10-C	LOCKWASHER #5/16 SPLIT	2
6	21050-192	SHCS 5/16-18 X 2.0 LG S.S.	2
7	21021-06-C	NO. 8 SPLIT LOCKWASHER	10
8	21069-05-E	PHS 6-32 X 3/8 LG SS	2
9	21069-03-E	PHS 6-32 X 1/4 LG SS	6
10	21021-06-B	LOCKWASHER - EXT NO. 8	1
11	21069-03-F	PHS 8-32 X 1/4 LG SS	1
12	45451	ADAPTER, HIGH LIMIT	1
13	20018-24	THERMOSTAT- HI LIMIT	1
14	21069-02-E	PHS 6-32 X 3/16 LG SS	2
15	46942	PLATE, PRINT GUIDE SUPPORT	2
16	46904	TEMPERATURE SENSOR ASSY	1
17	21023-03	5/16 FLAT WASHER	2

Drawing 05 Support and Switch Assembly



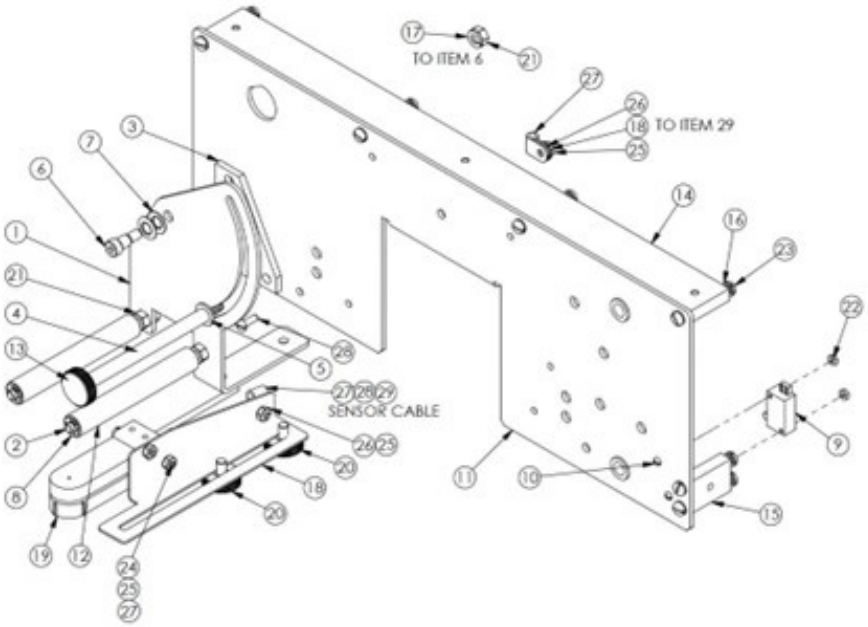
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	45576	STUD, PIVOT	1
2	21062-05-G	FHSCS 1/4 - 20 X 3/4 LG	1
3	21021-09-C	LOCKWASHER - SPLIT 1/4	4
4	21061-03-F	BUT HD SCR 1/4 X 20 X 1/2	3
5	45613	BRACKET, SEAL SWITCH	1
6	45712	NUT PLATE, SEAL SWITCH	1
7	20055-73	SWITCH - MICRO	1
8	21033-03-C	SPRING PIN, 1/8 X 3/8 LG	1
9	21029-48	BUT HD 8 X 32 X 3/8	2
10	21021-06-C	NO. 8 SPLIT LOCKWASHER	2
11	21023-22	WASHER - FLAT NO. 6	2
12	21057-08-C	RHS 4-40 X 5/8 LG	2
13	21021-03-A	NO. 4 LOCKWASHER, INTERNAL TOOTH #4, ZINC PLATED	2
14	46940	ROD, SUPPORT	1
15	21011-04-H	SET SCR 8 X 32 X 3/16	1
16	46946	SUPPORT, WELD & MACHING R.H.	1

Drawing 06 Head Assembly



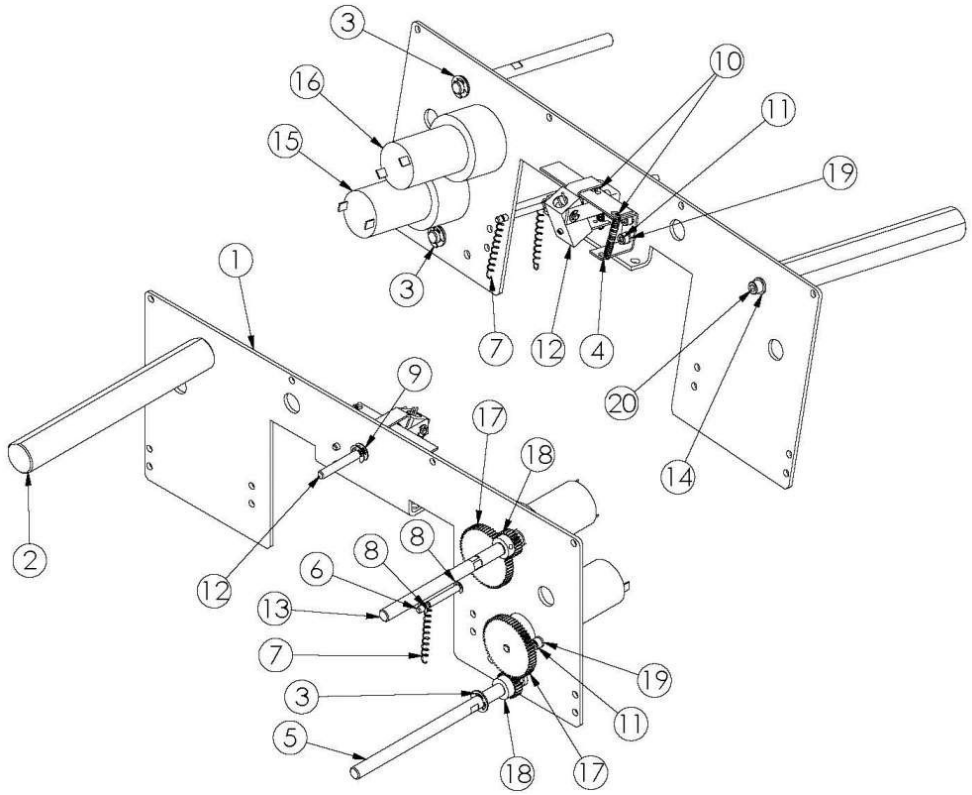
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	46893	FLANGE ASSY	4
2	46916	DRIVE ROLL ASSY	1
3	TOUCH GUARD ASSY	SEE PAGE 42	1
4	COVER ASSY, HEATER	SEE PAGE 43	1
5	REAR PLATE ASSY	SEE PAGE 39	1
6	21011-04-K	SET SCREW 10-32 X 3/16 LG	4
7	COVER ASSY, HEAD	SEE PAGE 5-13	1
8	21063-05-K	SHCS 1/4 - 20 X 5/8 LG	4
9	21021-09-C	LOCKWASHER - SPLIT 1/4	4
10	FRONT PLATE ASSEM	SEE PAGE 38	1
11	21065-05-D	THUMB SCREW 10-32 X 1" W/ NYLON TIP	4
12	46895	SHAFT, TAKE UP	1
13	DANCER ROLL ASSY	SEE PAGE 41	1
14	21021-07-C	NO. 10 SPLIT LOCKWASHER	11
15	21060-05-H	BINDER HD 10-32 X 3/8 LG	11

Drawing 07 Front Plate Assembly



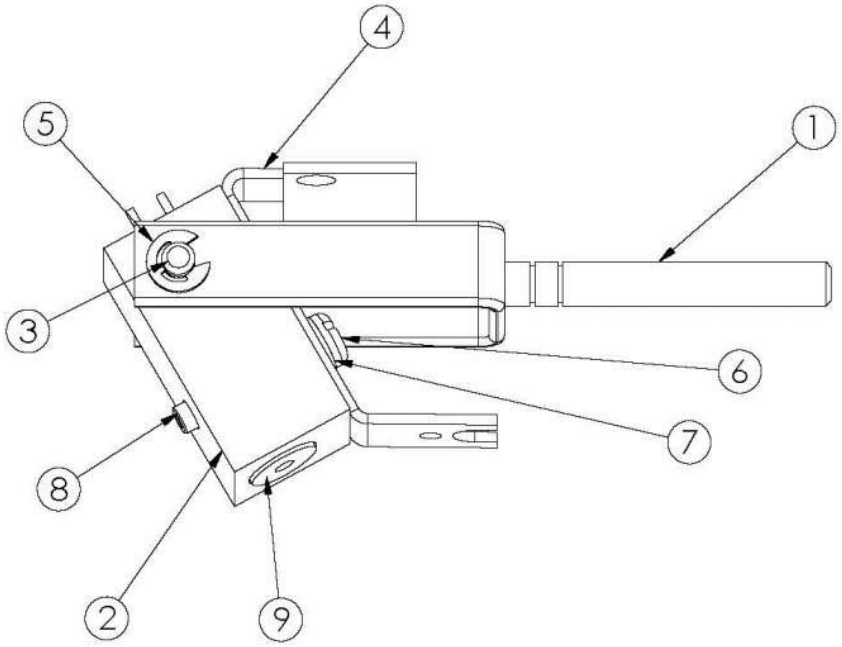
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	46899	BRACKET, SENSOR	1
2	46900	SHAFT, SENSOR ROLL	2
3	46901	PLATE, SENSOR BRACKET SPACER	1
4	46902	SPACER, CLAMP SCREW	1
5	21023-02	WASHER, FLAT 1/4	1
6	21006-01-B	SHOULDER SCREW 5/16 X 3/8 LG	1
7	21050-232	BELLEVILLE DISC SPRING .317 X .625 X .042	2
8	D-9702	E-RING 1/4	4
9	20055-73	SWITCH - MICRO	1
10	21057-08-C	RD HD 4 X 40 X 5/8	2
11	46885	PLATE, FRONT	1
12	46939	ROLLER, IDLER	2
13	46941	THUMB SCREW ASSY 1/4-20 X 5"LG	1
14	46943	SPACER, MACHINE HEAD PLATES	1
15	46921	SPACER, HEAD PLATE	2
16	21021-07-C	NO. 10 SPLIT LOCKWASHER	16
17	21021-09-C	LOCKWASHER - SPLIT 1/4	1
18	46903	BRACKET, SENSOR ADJ.	1
19	46944	SENSOR ASSEMBLY	1
20	21023-02	WASHER, FLAT 1/4	2
21	21051-11-A	HEX NUT 1/4 - 20	5
22	21051-03-A	NO.4-40UNC HEX NUT, ZINC PLATED	2
23	21060-05-H	BINDER HD 10-32 X 3/8 LG	16
24	21058-13-F	PHS - 8-32 X 1 1/4 LG	2
25	21021-06-C	NO. 8 SPLIT LOCKWASHER	4
26	21051-07-A	HEX NUT - NO. 8-32	4
27	D-1453-1	CLAMP - 3/16 CABLE	2
28	21058-07-F	PHS 8-32 X 1/2 LG	2
29	21023-23	WASHER - FLAT NO. 8	2

Drawing 08 Rear Plate Assembly



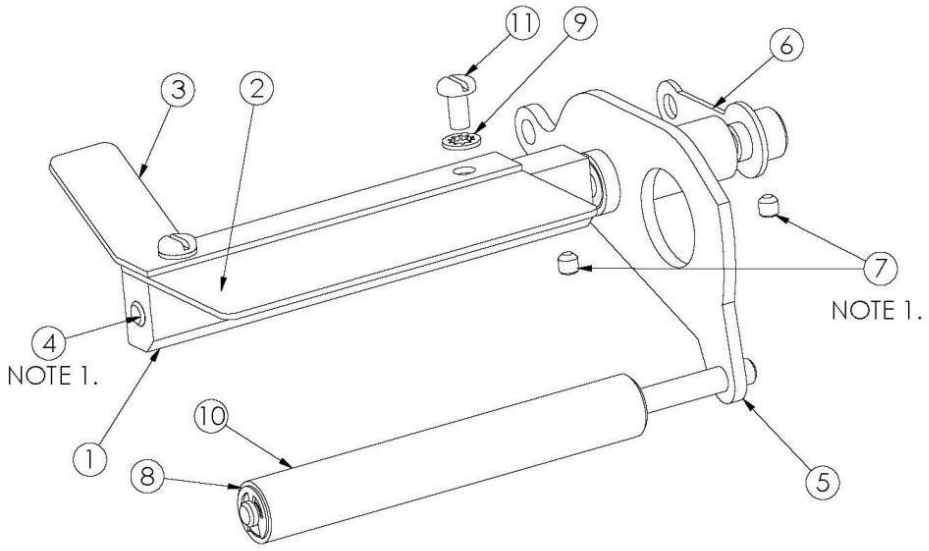
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	46886	PLATE, REAR	1
2	46778	SHAFT, UNWIND	1
3	D-9705	E-RING 3/8	3
4	46936	BRACKET, LASER SPRING	1
5	46915	SHAFT, DRIVE ROLL	1
6	46919	PIN, DRIVE ROLL SPRING	1
7	DF-7180	SPRING - EXT LE-029C-4	2
8	D-9701	E-RING 3/16	2
9	D-9702	E-RING 1/4	2
10	24080-36	SPRING - EXT LE-031C-1	2
11	21063-03-J	SHCS - 10-32 X 3/8 LONG	6
12	LASER ASSY	SEE PAGE 40	1
1	DANCER ROLL ASSY	SEE PAGE 41	1
13	46881	SHAFT, TAKE-UP DRIVE	1
14	21021-09-C	LOCKWASHER - SPLIT 1/4	1
15	46892	MOTOR ASSY, CAPSTAN	1
16	46891	MOTOR ASSY, TAKE-UP	1
17	24035-26	GEAR, 60T 32DP 1/4 BORE	2
18	24035-27	GEAR, 24T 3/8 BORE MODIFIED	2
19	21021-07-C	LOCKWASHER - SPLIT NO. 10	6
20	21061-03-F	BUT HD SCR 1/4 X 20 X 1/2	1

Drawing 09 Laser Assembly



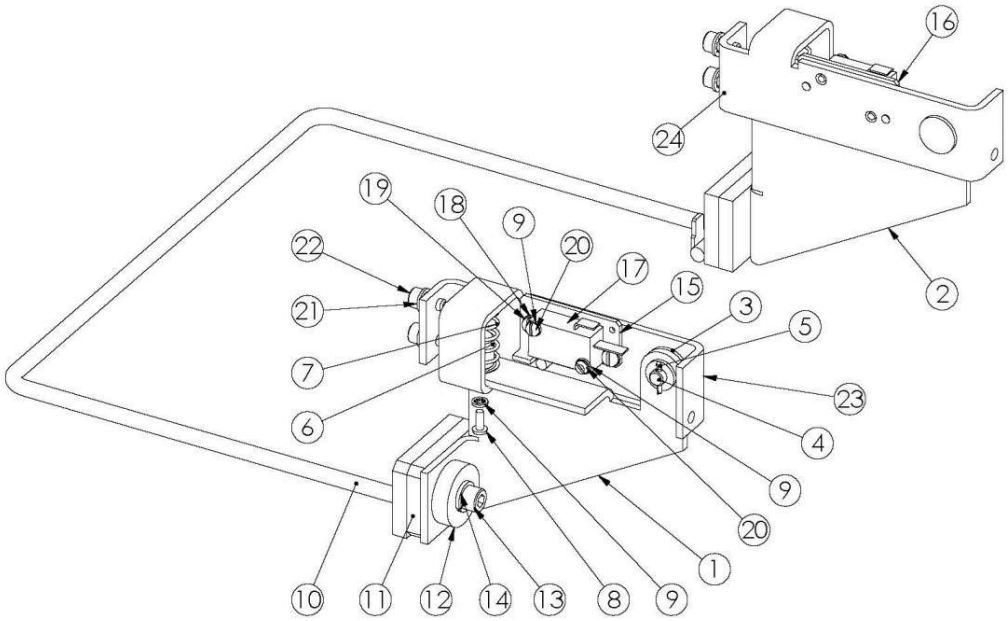
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	46922	YOKE, LASER	1
2	46934	PIVOT BLOCK, LASER	1
3	46933	PIN, LASER BLOCK	1
4	46935	BRACKET, LASER BLOCK	1
5	D-9701	E-RING 3/16	2
6	21058-03-F	PHS 8 - 32 X 1/4 LG	2
7	21021-06-C	NO. 8 SPLIT LOCKWASHER	2
8	21011-04-H	SET SCREW 8-32 X 3/16 LG	1
9	46896	LASER LIGHT ASSY	1

Drawing 10 Dancer Roller Assembly



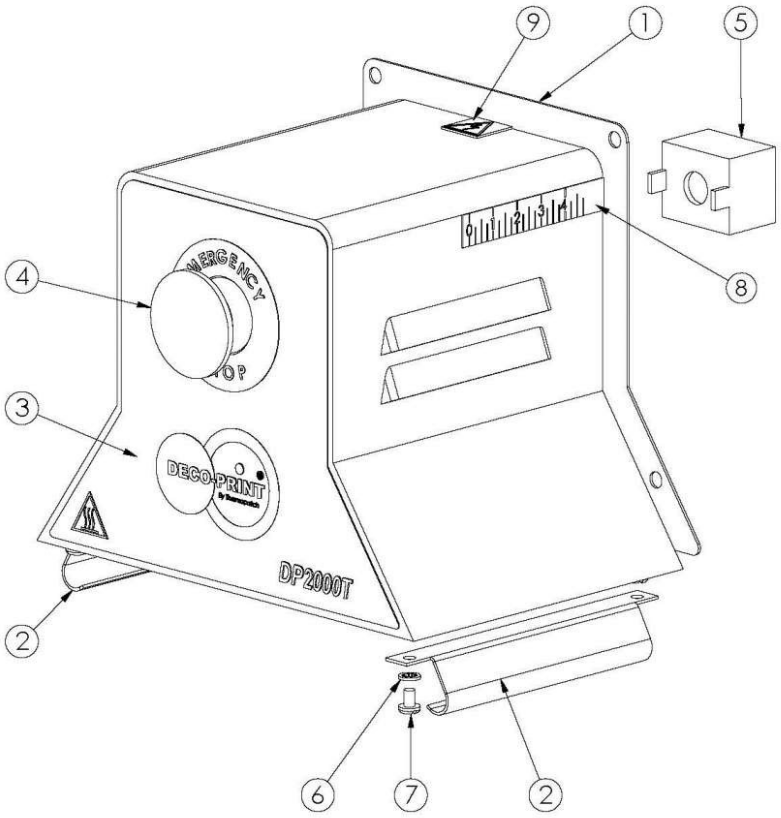
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	46912	BLOCK, LEAF SPRING	1
2	46914	LEAF SPRING	1
3	46913	HANDLE, SPRING	1
4	46909	SHAFT, PIVOT	1
5	46905	DANCER ROLL ARM	1
6	46910	ARM ASSY, SPRING	1
7	21011-04-K	SET SCREW 10-32 X 3/16 LG	2
8	D-9702	E-RING 1/4	2
9	21021-07-C	NO. 10 SPLIT LOCKWASHER	2
10	46939	ROLLER, IDLER	1
11	21060-05-H	BINDER HD 10-32 X 3/8 LG	2

Drawing 11 Touch Guard Assembly



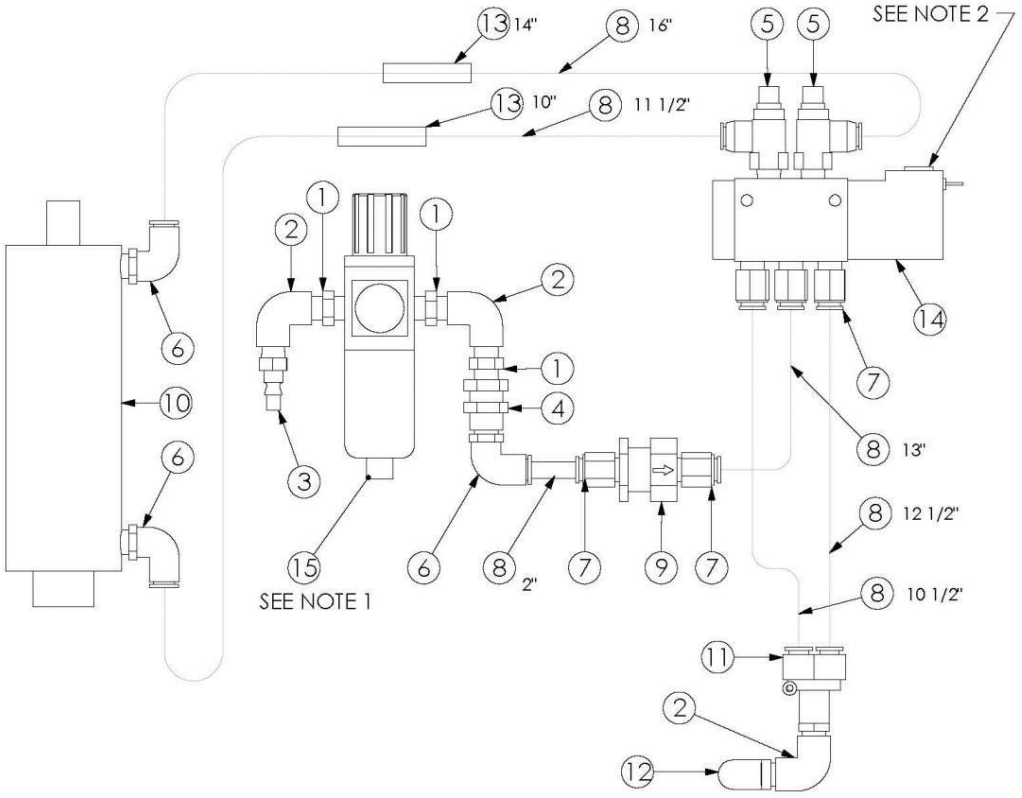
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	46053	SPRING BRKT, R.H.	1
2	46054	SPRING BRKT, L.H.	1
3	21022-12	THRUST WASHER 3/8 I.D.X3/4O.D.X.06TK	2
4	46056	PIN, SHOULDER	2
5	21050-111	COTTER PIN 1/16 X 1/2 LG	2
6	45612	SPRING RETAINER	2
7	24075-39	SPRING, COMPRESSION	2
8	21060-04-C	BHS 4-40 X 5/16 LG	2
9	21021-03-C	NO. 4 SPLIT LOCKWASHER	6
10	45606	TOUCH GUARD WELDMENT	1
11	45605	SPACER, TOUCH GUARD	2
12	45604	INSULATOR, TOUCH GUARD	2
13	21063-08-K	SHCS 1/4-20 X 1.0 LG	2
14	21021-09-C	1/4 SPLIT LOCKWASHER	2
15	45657	PLATE, R.H. SWITCH MTG	1
16	45658	PLATE, L.H. SWITCH MTG	1
17	20056-23	SWITCH - MICRO	2
18	21021-06-C	NO. 8 SPLIT LOCKWASHER	4
19	21058-03-E	PHS 6 - 32 X 1/4 LG	4
20	21057-08-C	RHS 4-40 X 5/8 LG	4
21	21021-07-C	NO. 10 SPLIT LOCKWASHER	4
22	21063-03-J	SHCS - 10-32 X 3/8 LONG	4
23	46948	BRACKET, R.H. GUARD SWITCH	1
24	46949	BRACKET, L.H. GUARD SWITCH	1

Drawing 12 Heater Cover Assembly



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	46884	COVER, HEATER	1
2	45597	TAPE GUIDE	2
3	46938	LABEL, DP2000T FRONT	1
4	20055-75	STOP SWITCH ACTUATOR	1
5	20056-28	CONTACT BLOCK, E-STOP	1
6	21021-06-C	NO. 8 SPLIT LOCKWASHER	4
7	21069-03-F	PHS 8-32 X 1/4 LG SS	4
8	46880	SCALE, 4" TAPE WIDTH	2
9	45426	LABEL, HIGH VOLTAGE	1

Drawing 13 Pneumatic Diagram

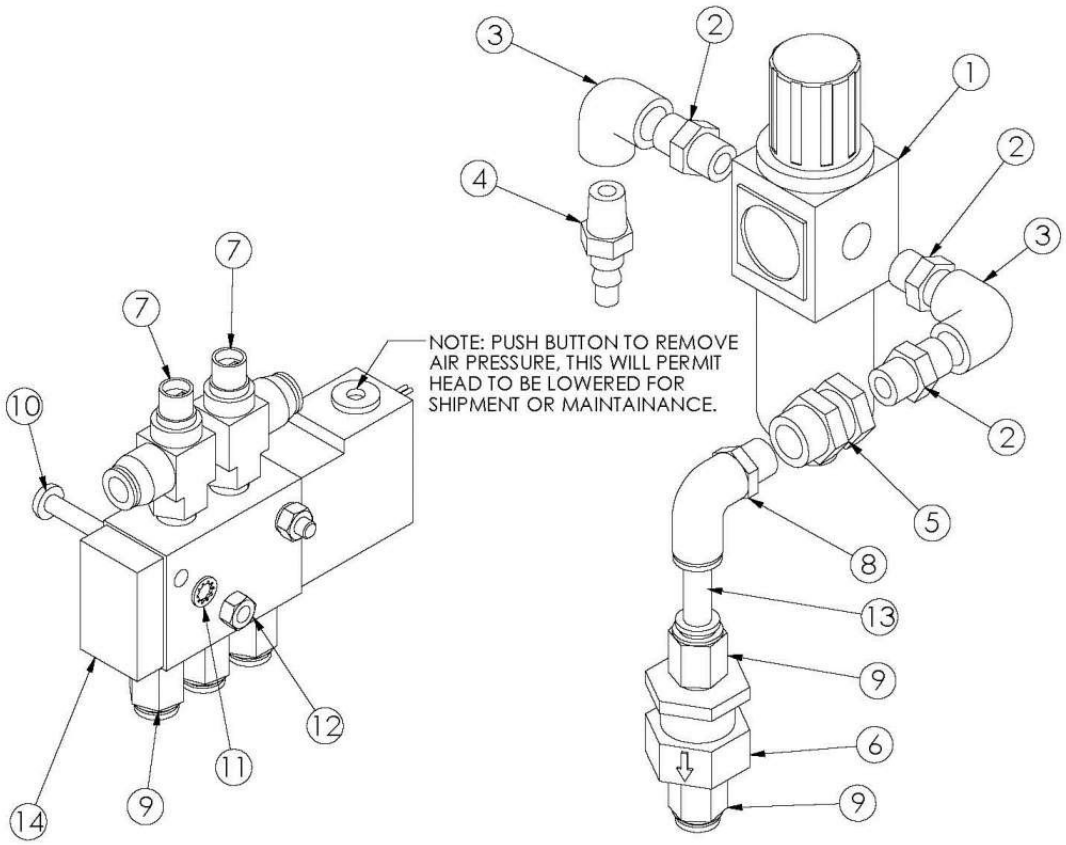


ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	DH-6786	NIPPLE - HEX 1/4 NPT	3
2	DH-6761	ELBOW - 90 DEG 1/4 NPT	3
3	DH-6797	ADAPTER - MALE HOSE 1/4 MNPT	1
4	22030-38	FITTING - BULKHEAD 1/4 NPT	1
5	22046-09	AIR FLOW CONTROL RT ANGLE 1/4 NPT	2
6	22015-34	ELBOW - 1/4 MPT X 3/8 TUBE	3
7	22005-45	CONN - 1/4 MPT X 3/8 TUBE	5
8	22030-09	POLY-FLOW 3/8 O.D X 1/4 I.D.	65.5"
9	22045-89	VALVE - IN LINE CHECK 1/4 NPT	1
10	22010-56	AIR CYLINDER, 2 1/2 BORE 3 1/2 STROKE	1
11	22030-53	BRANCH WYE 1/4 MPT X 3/8 TUBE	1
12	22045-84	MUFFLER 1/4 MPT	1
13	20081-57	VARGLAS SLEEVING 7/16	24"
14	46898	AIR SOLENOID W/CONNECTOR	1
15	22045-91	AIR FILTER/REGULATOR & GAUGE	1

NOTE 1: FOR A 220V MACHINE, USE 22045-94 REGULATOR 0-10 BARS

NOTE 2: PUSH BUTTON TO REMOVE AIR PRESSURE, THIS WILL PERMIT HEAD TO BE LOWERED FOR SHIPMENT OR MAINTENANCE

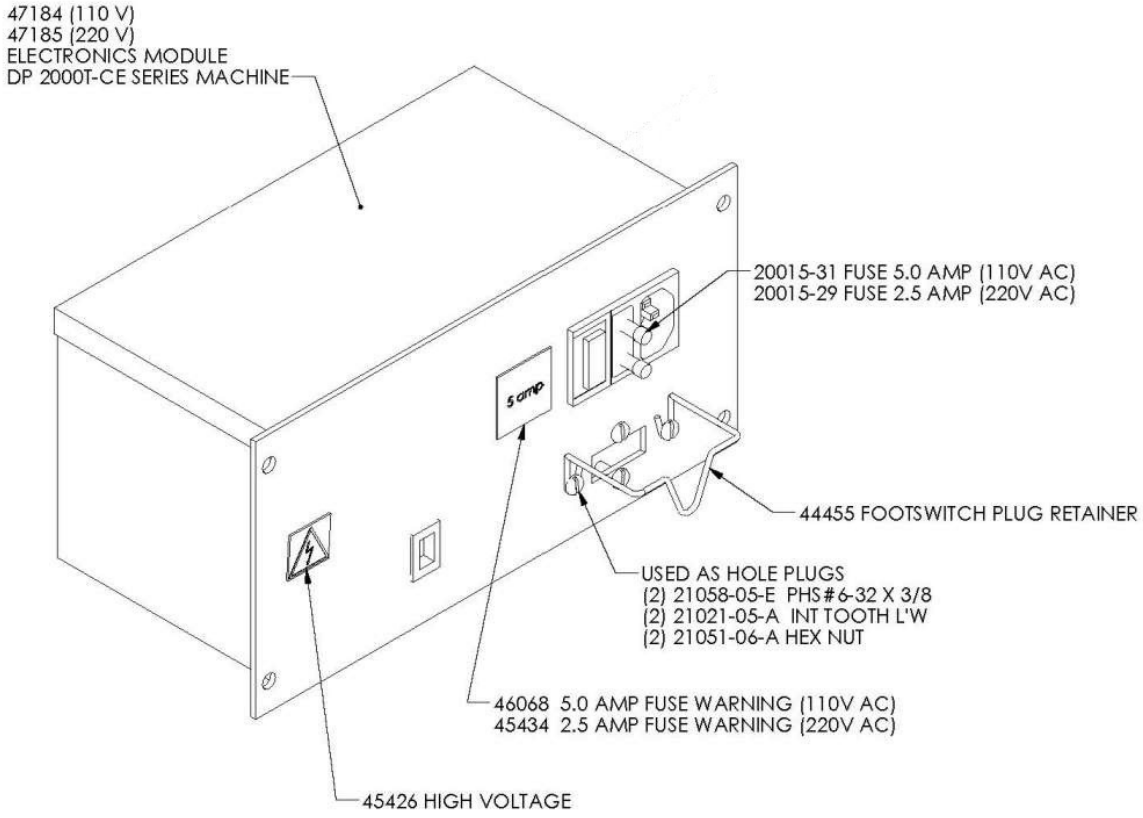
Drawing 14 Valve and Regulator Assembly



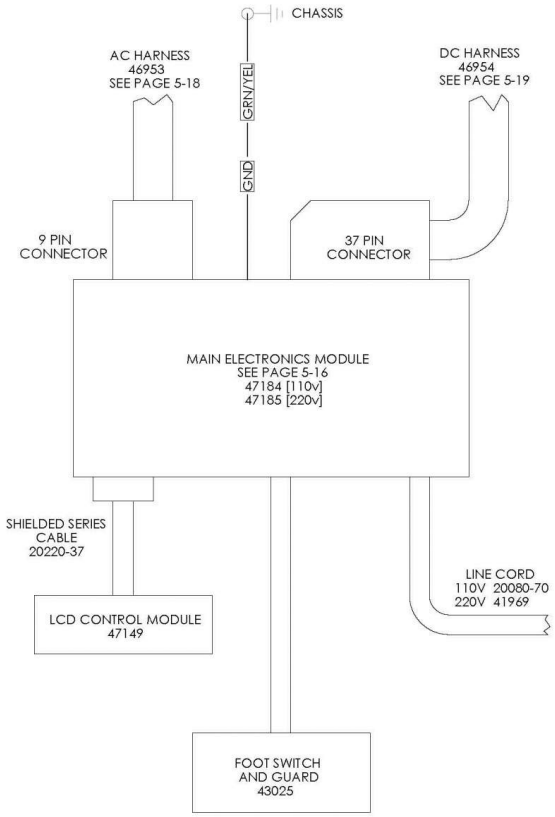
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	22045-91	AIR REGULATOR/FILTER/GAUGE 0-150 PSI	1
2	DH-6786	NIPPLE - HEX 1/4 NPT	3
3	DH-6761	ELBOW - 90 DEG 1/4 NPT	2
4	DH-6797	ADAPTER - MALE HOSE 1/4 MNPT	1
5	22030-38	FITTING - BULKHEAD 1/4	1
6	22045-89	VALVE - IN LINE CHECK 1/4 NPT	1
7	22046-09	AIR FLOW CONTROL RT ANGLE 1/4 NPT	2
8	22015-34	ELBOW - 1/4 MPT X 3/8 TUBE	1
9	22005-45	CONN - 1/4 MPT X 3/8 TUBE	5
10	21058-15-I	PAN HEAD SCREW 1/4-20 X 1 3/4	2
11	21021-09-C	1/4 SPLIT LOCKWASHER	2
12	21051-11-A	HEX NUT 1/4 - 20	2
13	TUBE, 2.0 LONG	POLY-FLOW 3/8 O.D X 1/4 I.D.	1
14	46898	AIR SOLENOID ASSY W/CONNECTOR	1

NOTE 1: FOR A 220V MACHINE, USE 22045-94 REGULATOR 0-10 BARS
NOTE 2: SEE DRAWING 13, FOR COMPLETE PNEUMATIC DIAGRAM

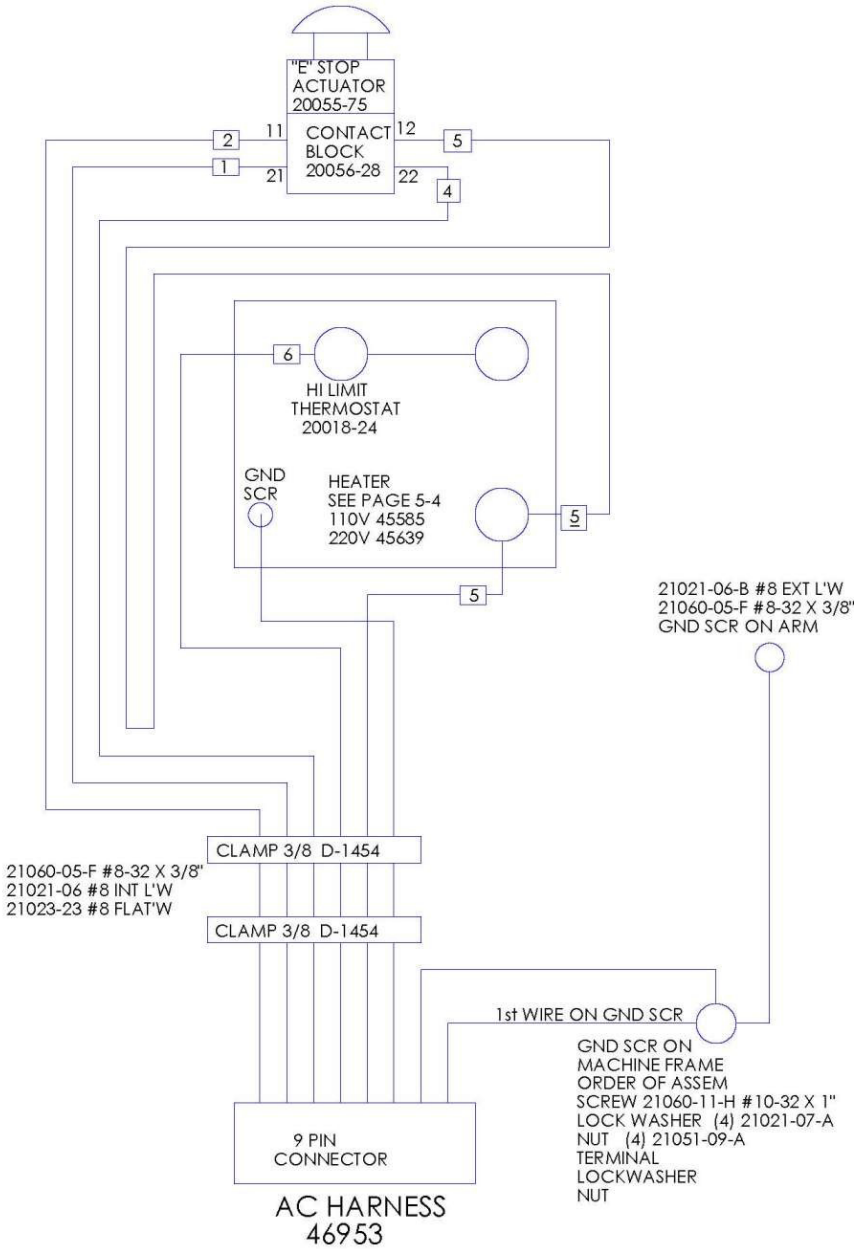
Drawing 15 Electronics Module



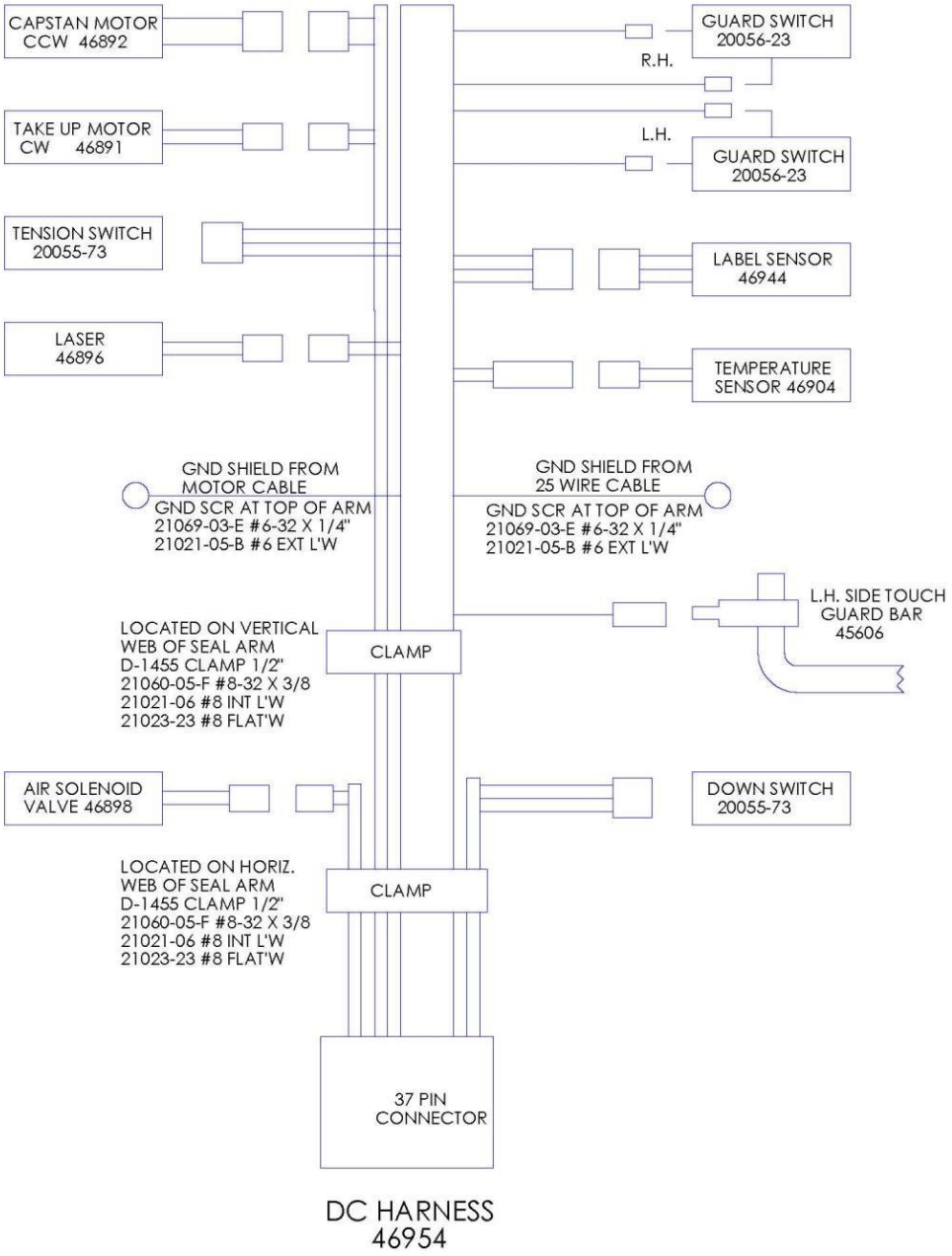
Drawing 16 Main Electronics Module



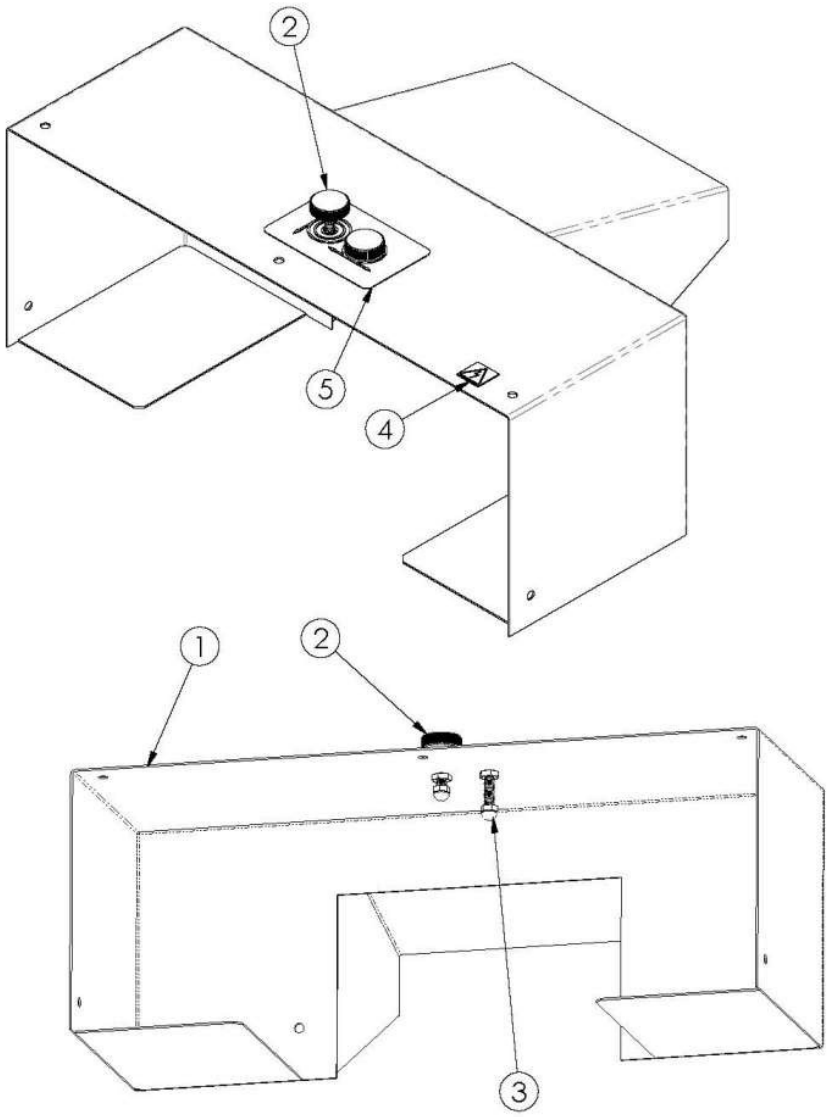
Drawing 17 AC Harness



Drawing 18 DC Harness



Drawing 19 Head Cover Assembly



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	46883	COVER, HEAD	1
2	21029-60	THUMB SCREW, 1" DIA KN'D HD, 1/4x20x1-1/4 LG	2
3	D-7212	ACORN HEX NUT 1/4-20	2
4	45426	LABEL, HIGH VOLTAGE	1
5	46945	LABEL, LASER TARGET	1

9. Maintenance

Rubber Print Platen
Clean often by wiping with a soft, clean rag. Replace the pad when it becomes worn. To replace pad, slide old pad assembly out of the lower platen, and install a new assembly.

Compressed Air Supply
Maintain a filtered air supply. Check air filter daily. Drain by pushing up on button at bottom of filter bowl.

General
Keep inside of machine free of foreign material, including lint.

Teflon/Fiberglass Shield (Used for Heat Sealing)

Clean often by wiping with a soft, clean rag. A non-flammable cleaner such as "EZ-Off", part no. DH-6873, may be used according to the manufacturer's instructions.

Never use a flammable solvent or abrasive cleaner on this surface.

10. Declarations of conformity

CE

We,
Thermopatch B.V.
Draaibrugweg 14
1332 AD Almere
Netherlands

Declare under our own responsability that the heat sealing machine:
Thermopatch DP-2000-T Deco-Print,

which this declaration refers to, is in accordance with the conditions of the following Directive(s):

2014/30/EU (emc directive)
2006/42/EG (machinery directive)

Netherlands, Almere, 01-06-2022

Jan Bausch,
Director

UK CA

We,
Thermopatch BV
Draaibrugweg 14
1332 Almere
The Netherlands

declare that the DoC is issued under our sole responsibility and belongs to the following product:

Thermopatch DP-2000-T Deco-Print, which this declaration refers to, is in accordance with the conditions of the following guidelines:

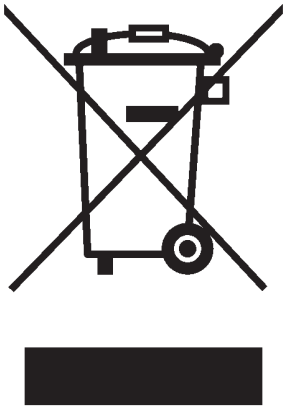
- Electromagnetic Compatibility Regulations (EMC) 2016
- Electrical Equipment (Safety) Regulations (LVD) 2016
- Supply of Machinery (Safety) Regulations 2008

The Netherlands, Almere, 01-06-2022

Jan Bausch,
Director

11. End of lifecycle

Choose to dispose of the machine responsibly when it has reached its end of life.
Electrical machinery, accessories and packaging should be recycled as much as possible in an environmentally responsible manner.
- Dismantle the machine groups: steel parts / pneumatic components / electrical components
- These can be separated and returned for recycling.



ATTENTION!

Always dispose according to current and locally applied guidelines for health and safety and disposal requirements.

12. Disclaimer

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Thermopatch B.V., its subsidiaries, the directors, employees and agents cannot be held liable for the use and reliance of the opinions and findings in this document.
For any warranty Thermopatch B.V. refers to its general terms and conditions.

We can confirm that the machines we supply conform to CE when in standard configuration. Using sealing pads of any format other than the standard supplied with the machine may render the CE declaration invalid.

Thermopatch accepts no responsibility for any damage or injury that may result from possible non-conformity.

Choosing an alternative configuration other than the standard is at the customer's own responsibility.

Thermopatch

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