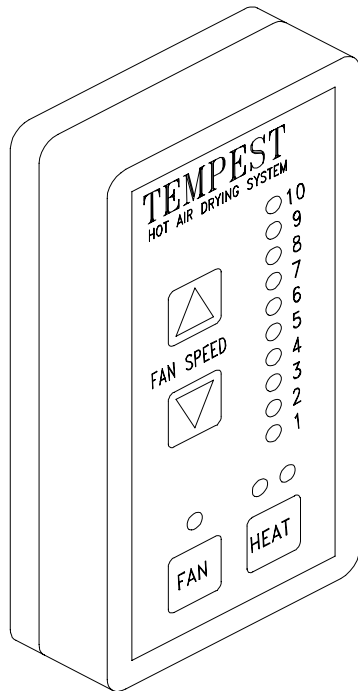


Tempest[®] Hot Air Drying System

Installation Instructions

Ryobi 512



ACCEL  [®]
Graphic Systems

GENERAL INFORMATION

ATTENTION TEMPEST® DRYER OWNER!

Accel Graphic Systems provides parts and service through its authorized distributors and dealers. Therefore, all requests for parts and service should be directed to your local dealer.

The philosophy of Accel Graphic Systems is to continually improve all of its products. Written notices of changes and improvements are sent to Accel Graphic Systems' Dealers.

If the operating characteristics or the appearance of your product differs from those described in this manual, please contact your local Accel Graphic Systems Dealer for updated information and assistance.

Always update your equipment when improvements are made available, especially those related to safety.

YOUR AUTHORIZED TEMPEST® DEALER IS:

THE SERIAL NUMBER OF YOUR TEMPEST® HOT AIR DRYING SYSTEM IS:

CONTROL BOX _____

FAN UNIT _____

TECHNICAL ASSISTANCE

For technical assistance during the installation, please contact:

ACCEL GRAPHIC SYSTEMS
11103 Indian Trail
Dallas, TX 75229
PHONE (972) 484-6808
FAX (800) 365-6510
E-MAIL accel@dallas.net
WEB SITE www.accelgraphicsystems.com

GENERAL INFORMATION

ELECTRICAL REQUIREMENTS 220 VAC 50/60HZ
20 AMP DEDICATED LINE
NEMA L620R RECEPTACLE

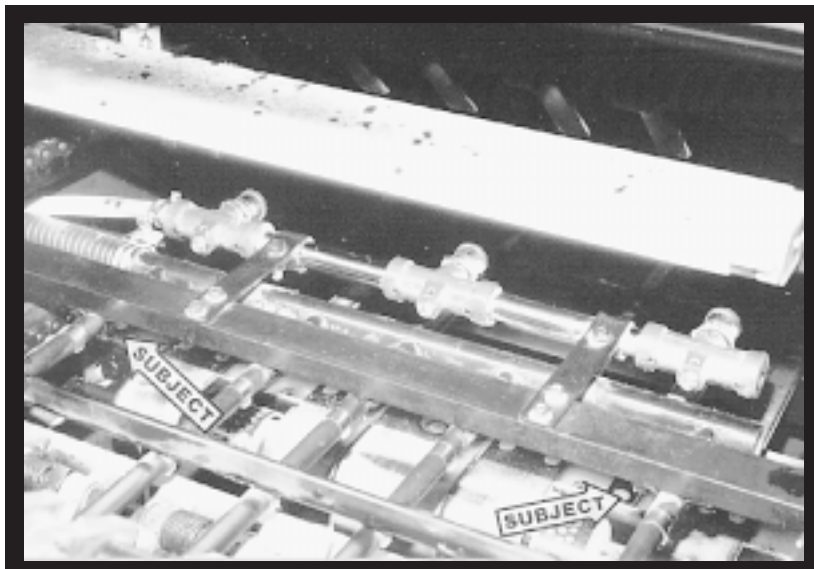
IMPORTANT INFORMATION The use of heat to accelerate drying may require more frequent lubrication and/or use of a high temperature lubricant in the delivery of the press. Please consult your press manufacturer for specific recommendations.

SAFETY INFORMATION The Tempest® Dryer contains high voltage and hot surfaces. Never attempt to service or work on the unit unless the power is shut off and the unit is cool.

Visually inspect the thermistors (triangular shaped objects arranged in a honeycombed pattern on the underside of the unit) weekly. If a thermistor is damaged or cracked, do not operate the dryer. Contact Accel immediately for a replacement part.

The fans should be turned on and set at the lowest speed ("0" on the dial when running just spray powder and no heat. This prevents spray powder from accumulating in the thermistors and housings.

TERMINOLOGY OPS = Operator's Side
NOPS = Non Operator's Side



INSTALLATION

1

Disconnect the power to the press.

2

Remove the NOPS delivery side cover, and the NOPS side cover below the #2 head.

3

Loosen the bolts (subject arrows) securing the blow down bar to the tie bar in the delivery and slide the bar toward the delivery as far as it will go. Tighten the bolts.

5

DIAGRAM A

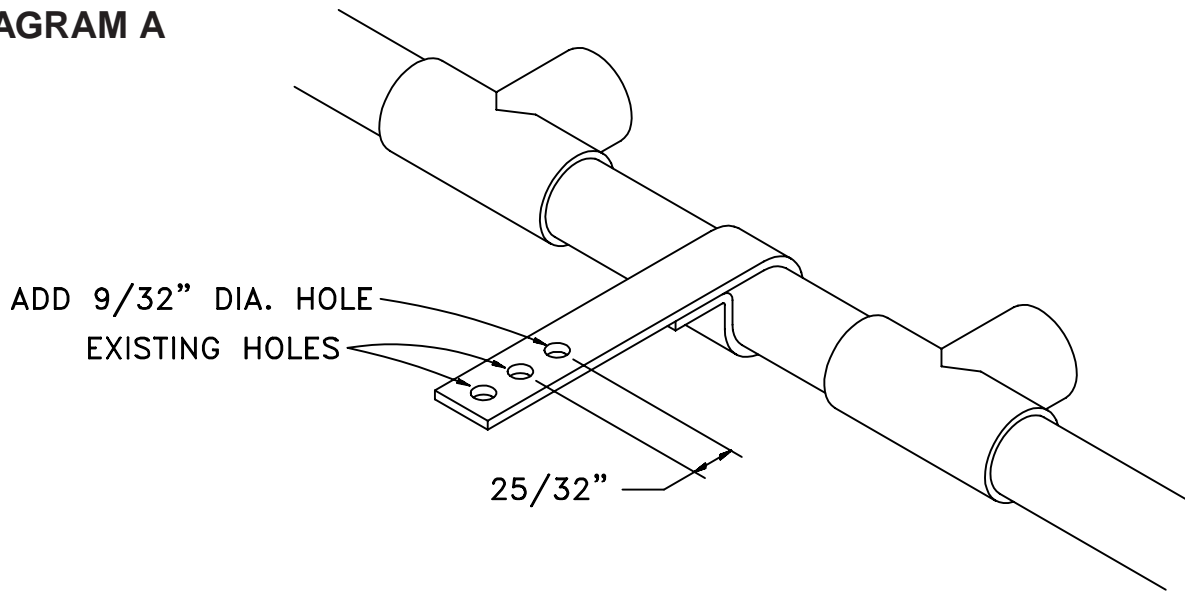


DIAGRAM B

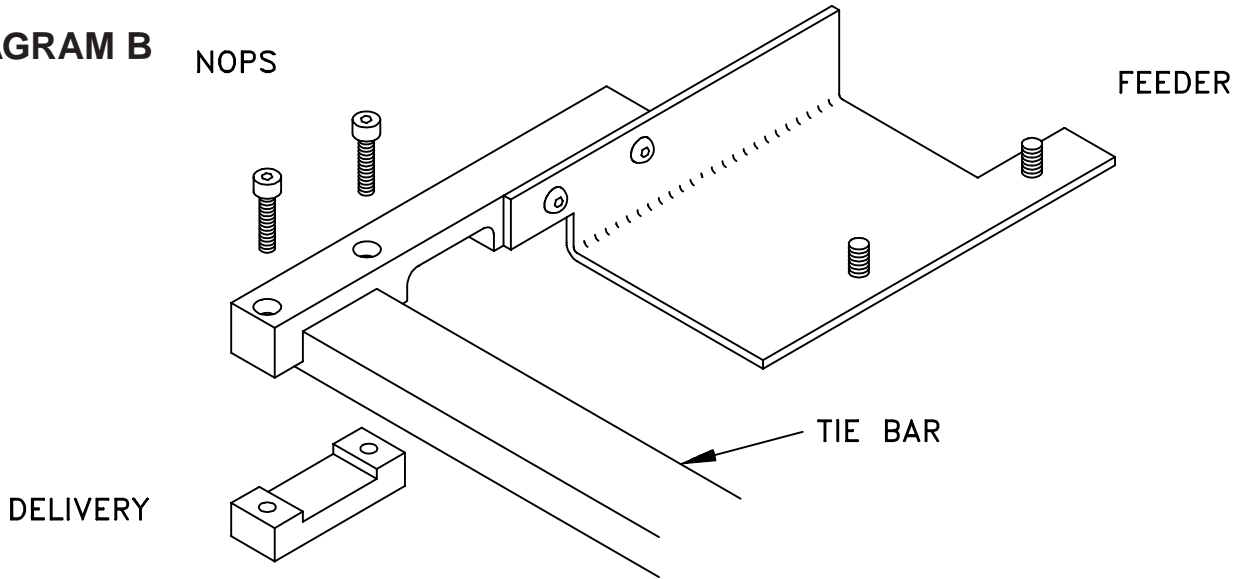
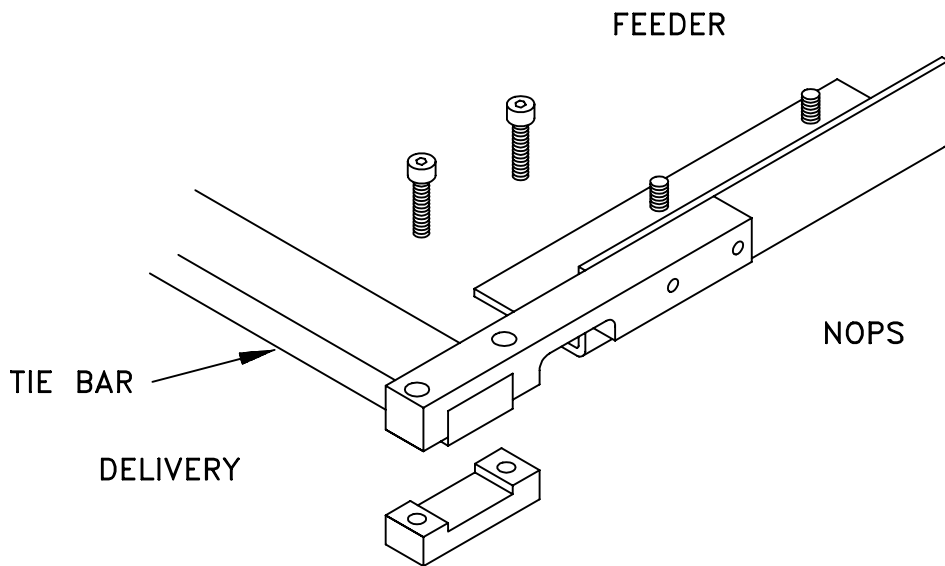


DIAGRAM C



INSTALLATION

4

Remove the powder spray bar from the press. Drill a 9/32" dia. hole in the spray bar mounting bracket as shown in the diagram. Reinstall the spray bar using the new hole to position the bar closer to the feeder end of the press.

5

Attach the NOPS dryer mounting bracket assembly to the tie bar (the same bar that the powder sprayer attaches to) as shown in the diagram. Slide the bracket up against the NOPS press frame before tightening the bolts.

6

Repeat the previous procedure for the OPS mounting frame assembly. Make sure the bracket is all the way up against the OPS press frame before tightening the bolts.

7

DIAGRAM D

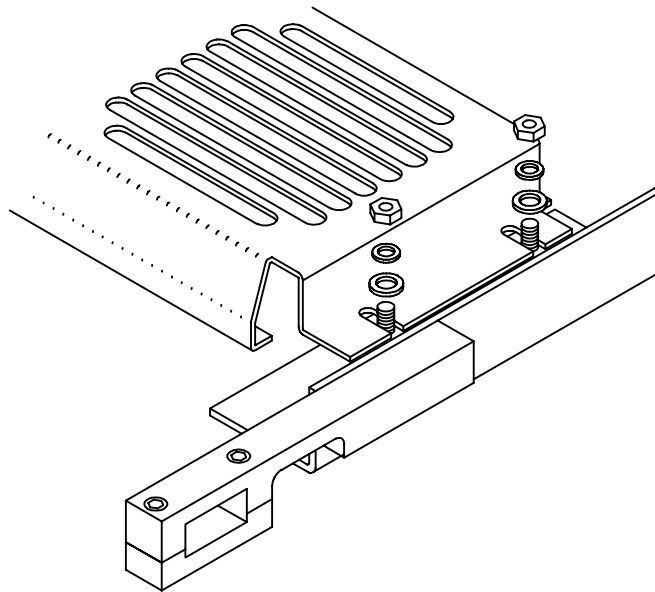
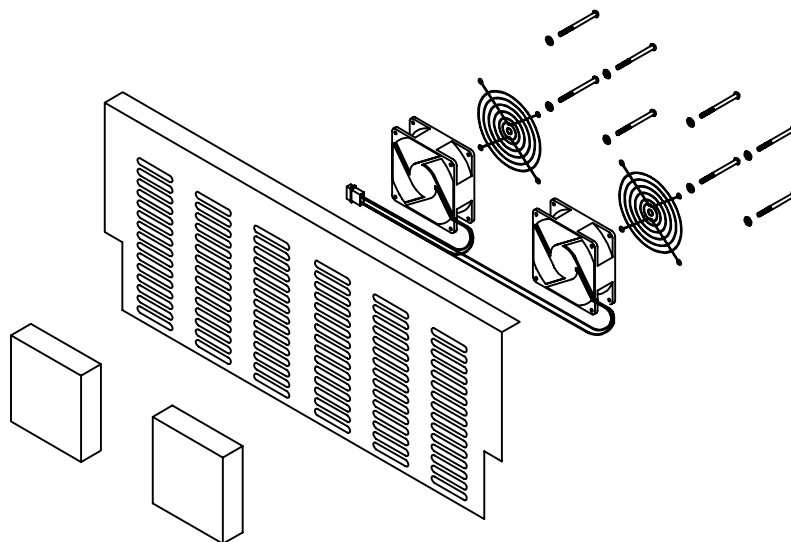


DIAGRAM E



INSTALLATION

7

Set the dryer on the mounting brackets with the cable exiting the dryer on the NOPS. Run the large black cable through the same hole in the press frame as the blow down and powder spray hoses.

8

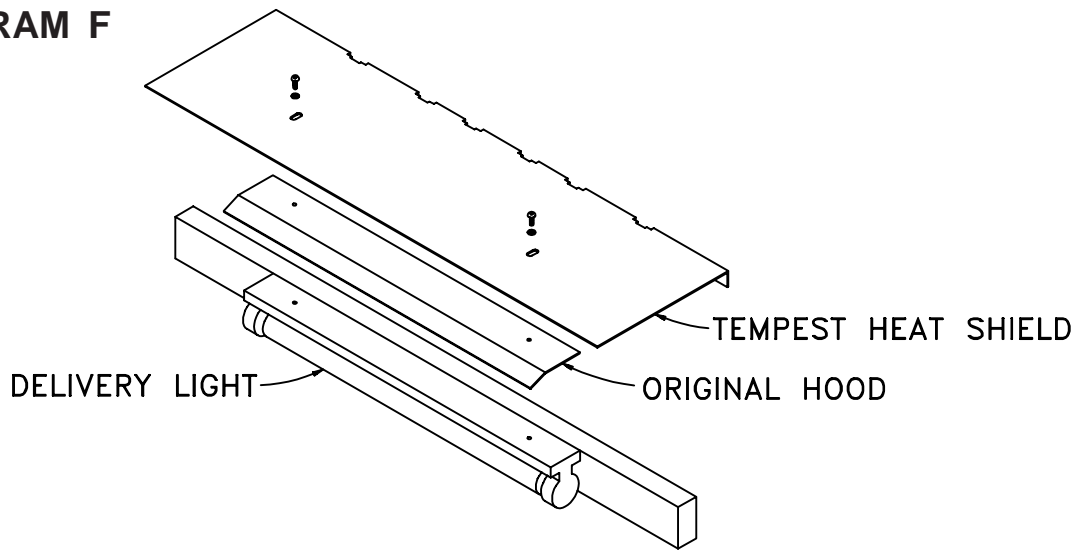
Secure the dryer to the mounting brackets using the provided nuts, lockwashers, and flat washers as shown in the diagram (OPS shown). Briefly restore the power to the press. Rotate the press and check the clearance between the dryer and grippers.

9

Mount the provided exhaust fans to the inside of the guard on the end of the delivery using the provided hardware, fan guards, and deflectors (see diagram). When installing the fans make sure that the air flow direction arrows on the fans are pointing out of the press. Remove the two screws that attach the light deflector to the light.

9

DIAGRAM F



INSTALLATION

10

Set the provided heat shield on top of the light deflector with the slots towards the delivery wheel. Using the supplied longer screws and flat washers secure the heat shield to the light deflector.

11

Locate the MC18 plug on the lower circuit board in the electrical box below the main control panel . Attach the provided t-tap connectors to wire no.'s 10 & S1 on this plug.

12

Find a suitable location for the main Tempest® electrical box on the NOPS of the press. Route the exhaust fan cable into the delivery and connect it to the exhaust fan installed in Step 11. Route the impression signal cable through the press to the OPS side and into the press electrical box. Connect the wires in this cable to the T-tap connectors installed in Step 11. Use the provided tie-wraps to secure the cables as necessary to clear any moving parts of the press.

11

INSTALLATION

13

Remove the cover from the main Tempest® electrical box and insert the dryer cable through the strain relief on the bottom of the box. Remove the twelve position connector (only six positions are numbered) from the board and insert the wires into the connector by matching the numbered tags on the wires to the matching position on the connector. Secure the ground wire to the stud on the inside of the box. Replace the connector on the board and tighten the strain relief. Replace the cover on the box.

14

Attach the Tempest® remote control unit to the press where it is convenient for the operator. This unit is held on the press with the magnetic tape on the bottom of the remote.

15

Use the provided tie wraps to secure all loose cables. Replace all covers and guards.

13

OPERATION & MAINTENANCE

HOW DRYING IS ACCELERATED WITH TEMPEST®

Tempest® creates a two step drying process when used with oil base inks. These steps are:

1. Skinning the surface of the ink with the initial blast of hot air to prevent set off .
- 2.. Accelerating the final drying process approximately 20°F over the cold stack temperature in the feeder. Heat accelerates the drying process, called oxidation and reduction, of oil based inks.

In general, dryers, including infrared, do not work well with rubber or acrylic-based inks. These inks should be avoided when maximum results are desired.

HOW TEMPEST® WORKS

1. When voltage is applied to the thermistors (triangular shaped objects arranged in a honeycomb pattern), the thermistors begin to heat. (Thermistors are coated semiconductors.)
2. Thermistors heat to a predetermined temperature, in this case about 400°F, and remain at that temperature. This is known as autostabilization.
3. The fans blow air down towards and through the thermistors, creating a flow of hot air to the sheet.
4. Drying of the ink occurs in the two step process as described above.

No dryer totally eliminates the need for spray powder. There may be some jobs, for example a heavy solid on a high gloss sheet, where powder is required. Overall, Tempest® should reduce your spray powder usage significantly, leaving you with a better printed product and cleaner working environment.

OPERATION & MAINTENANCE

TEMPEST® OPERATION

NORMAL OPERATION

Pressing the HEAT switch will illuminate both the green and yellow LEDs on the remote control unit. The green LED indicates that the fans (both dryer and exhaust fans if so equipped) are running while the yellow LED indicates that the dryer is armed and the heat will come on automatically when the press goes on impression. When the press does go on impression, the red LED will illuminate indicating that the heat is on. Pressing the heat button again will disarm the heat mode but the fans will continue to run. To turn the unit OFF press the FAN switch at any time.

FAN ONLY OPERATION

To operate only the fans, press the FAN switch. The green LED will illuminate and the fans will come on (both the dryer and exhaust fans if so equipped). The heat mode of the dryer is not armed and will not come on with impression. To turn the fans OFF press the FAN switch again.

FAN SPEED CONTROL

To adjust the fan to a higher setting, press the up arrow on the remote control unit. To decrease the fan speed press the down arrow on the remote. The fans will automatically go to the minimum speed setting for a few seconds when the press goes on impression and then they return to the previous setting. This reduction in fan speed allows the dryer to heat up more quickly.

OPERATION & MAINTENANCE

INITIAL SETTINGS

Try running Tempest® with the fan speed at "4" with the switch on "HEAT". After about 1" of paper stacked in the delivery, insert the thermometer into the center of the stack. Allow the thermometer to stabilize. It should be in the 95 - 105°F range. If the temperature is below that, **increase the fan speed** slightly. If the temperature is above that, **decrease the fan speed** slightly.

FACTORS THAT EFFECT DRYING

1. Speed of the press.
2. Amount of ink coverage and color.
3. Type of stock being printed.

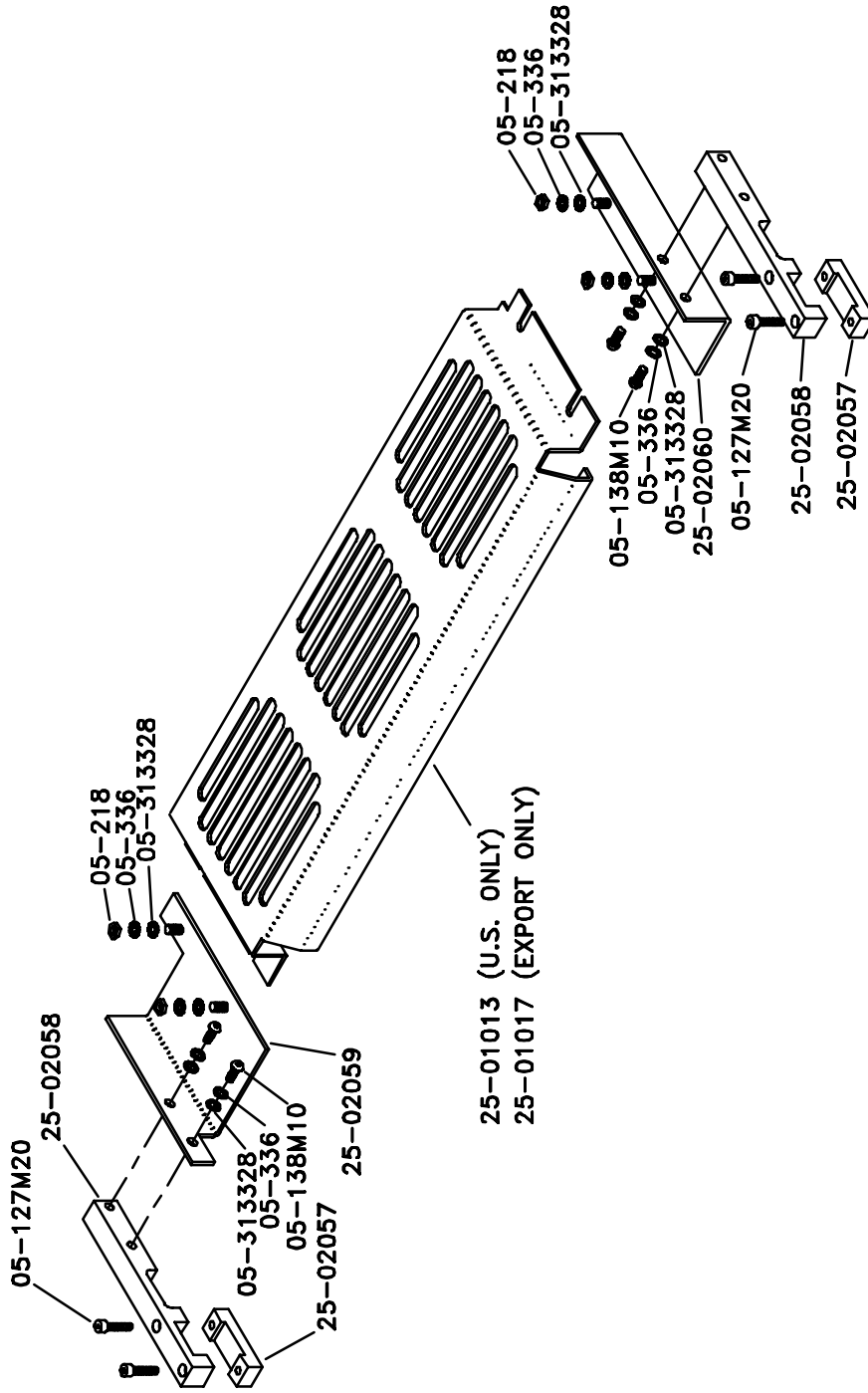
In time and with practice you will learn which settings are best for your particular shop.

KEYS TO REMEMBER

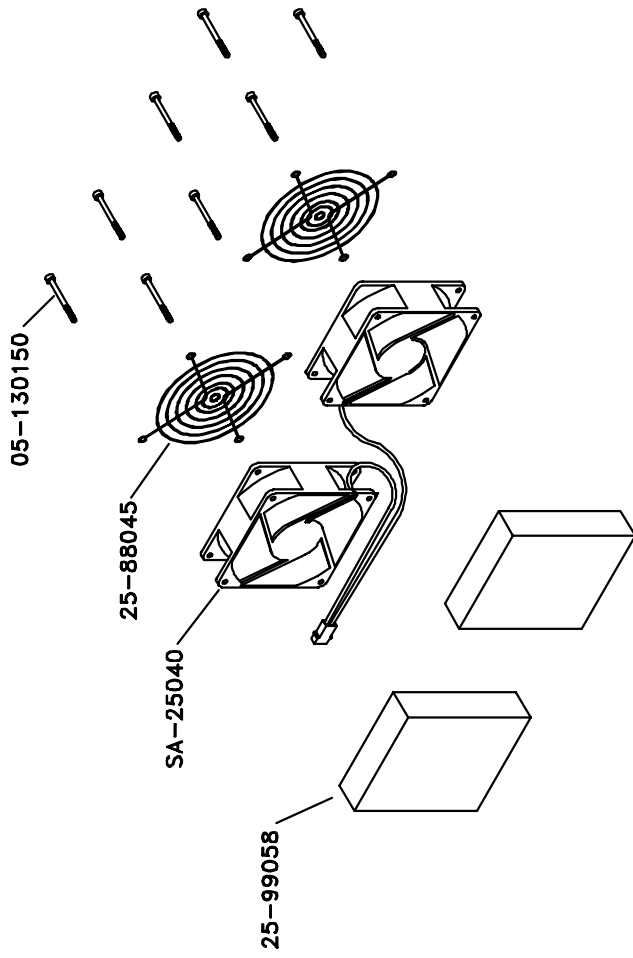
1. The Tempest® takes about 12 sheets to come up to full power. The dryer remains on as long as paper is being fed. It does not cycle like an infrared dryer.
2. The pile temperature should be between 95 - 105°F for optimum drying.
3. Use of spray powder only when absolutely necessary. A little spray powder goes a long way. Use it sparingly.
4. Inspect the Tempest® weekly.

MAINTENANCE

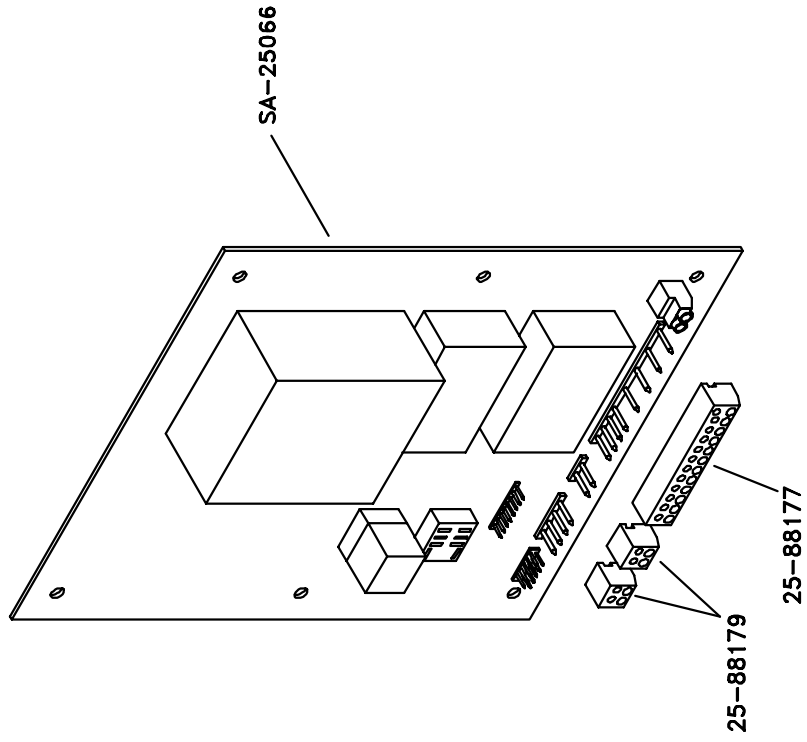
1. Inspect the dryer weekly. If the thermistors are cracked or have been damaged, do not operate the dryer. Call Accel immediately.
2. Never squirt cleaning solvents, water or any other liquids into the dryer. This may damage electrical components.
3. Any spray powder that accumulates in the dryer should be vacuumed out, not blown out.
4. Make sure all heat shields and guards are in place before operating the dryer or printing press.



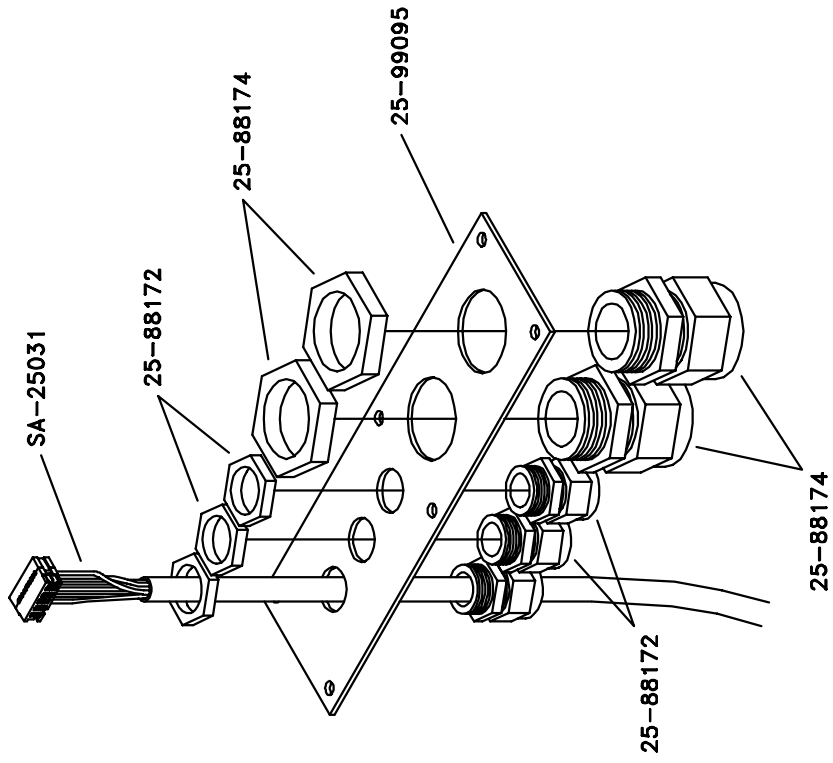
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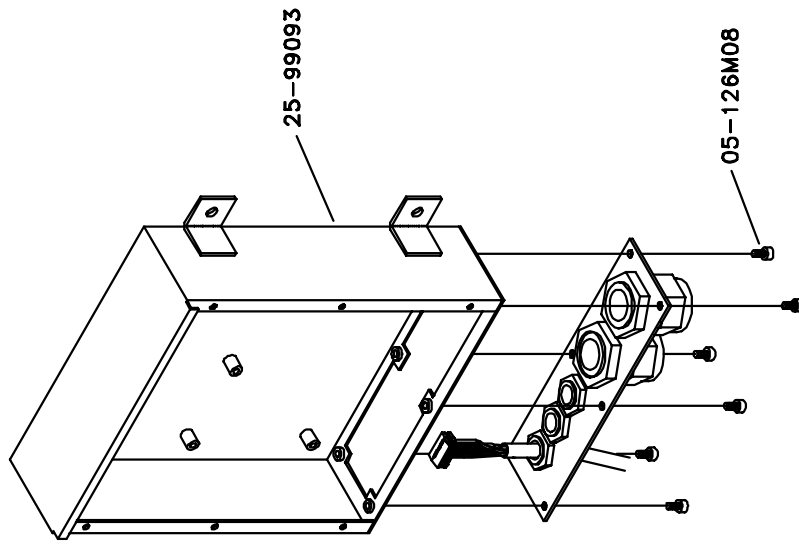
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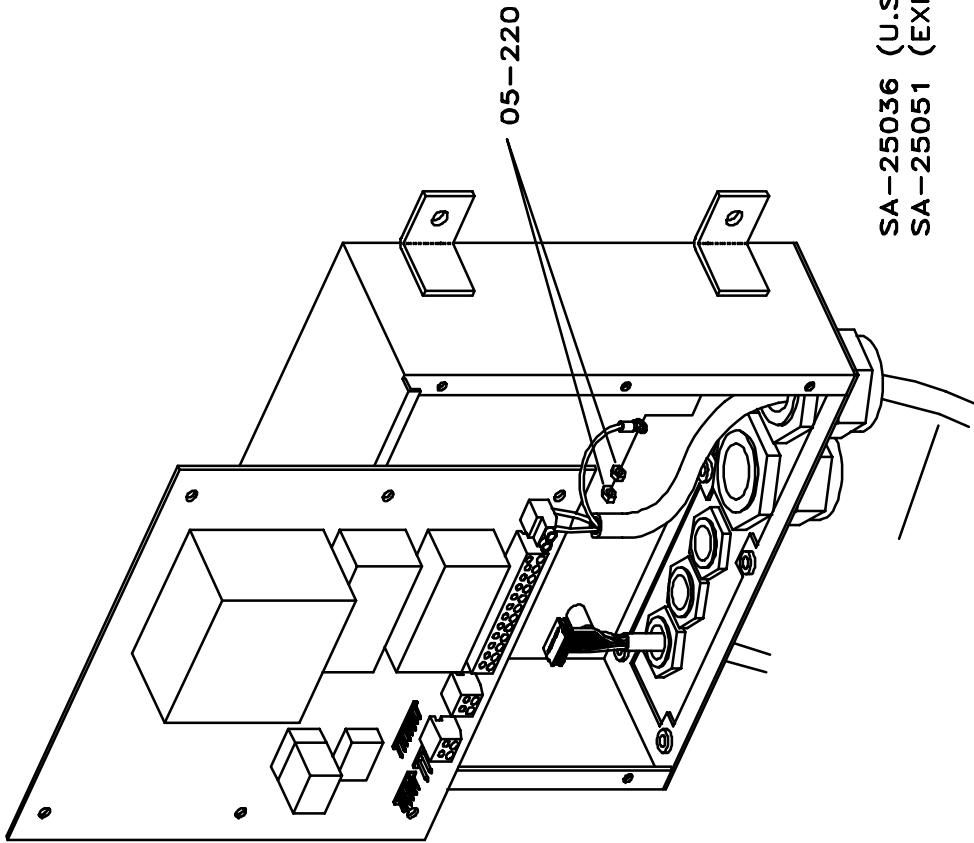
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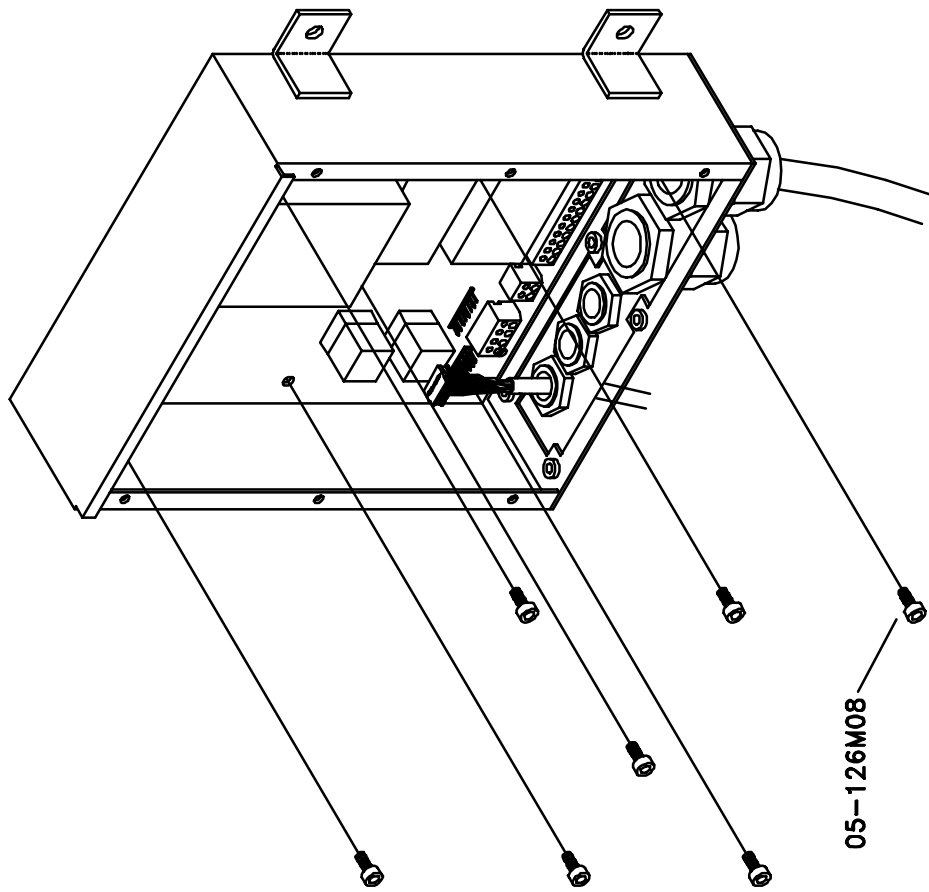


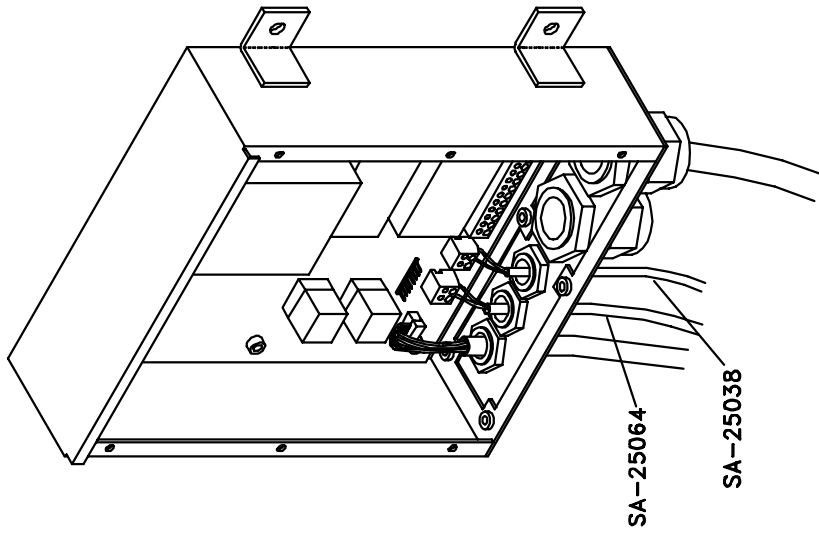
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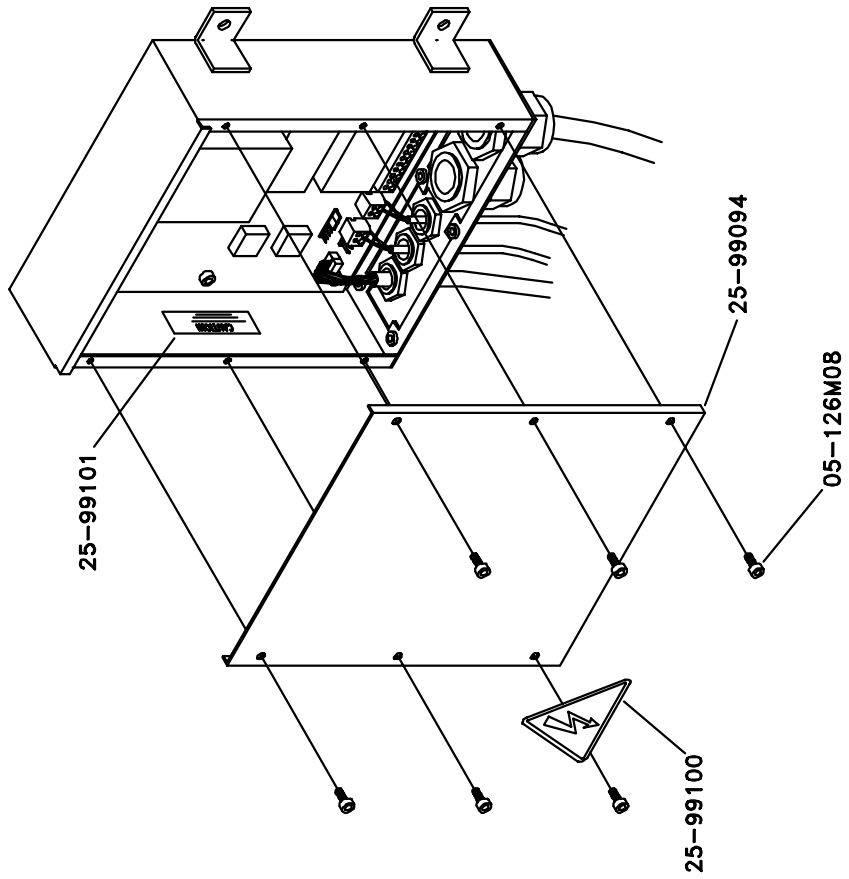
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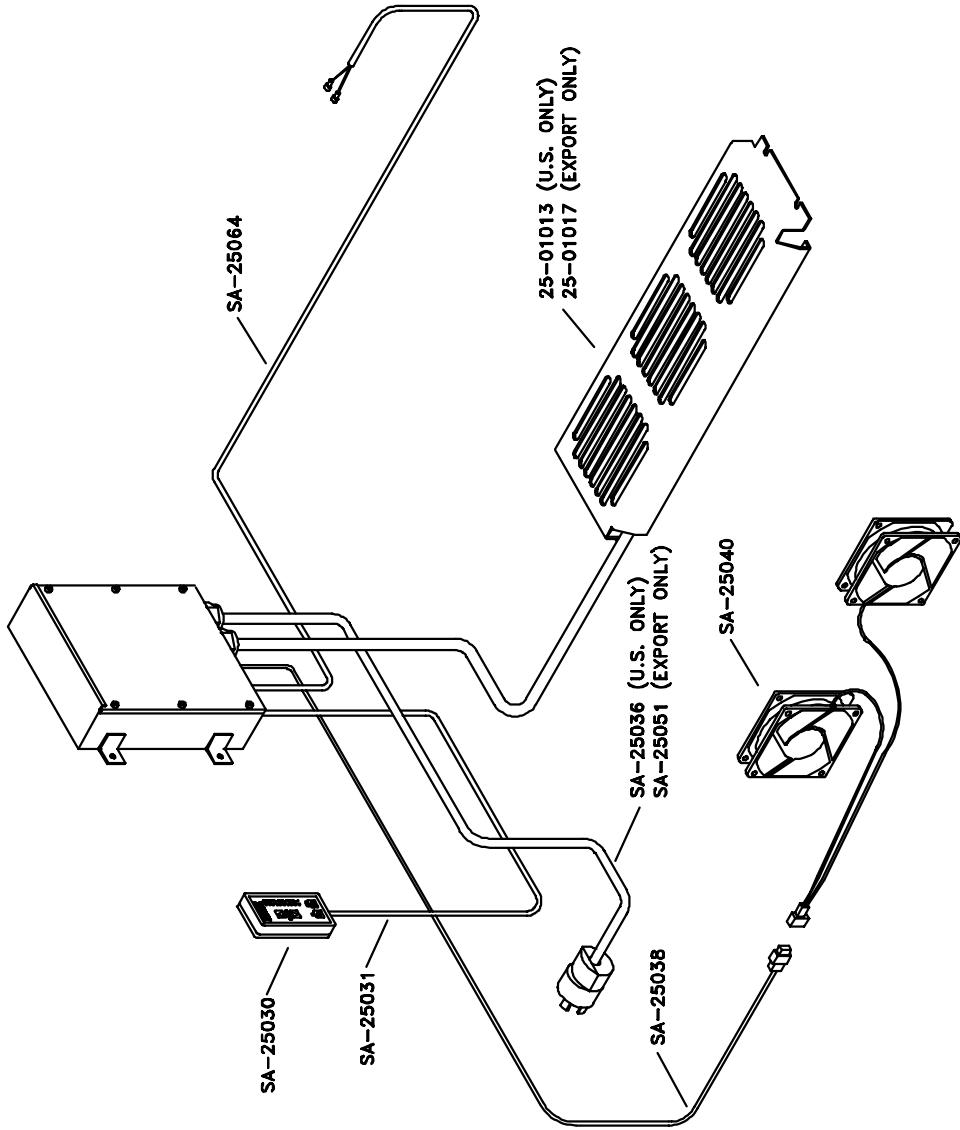


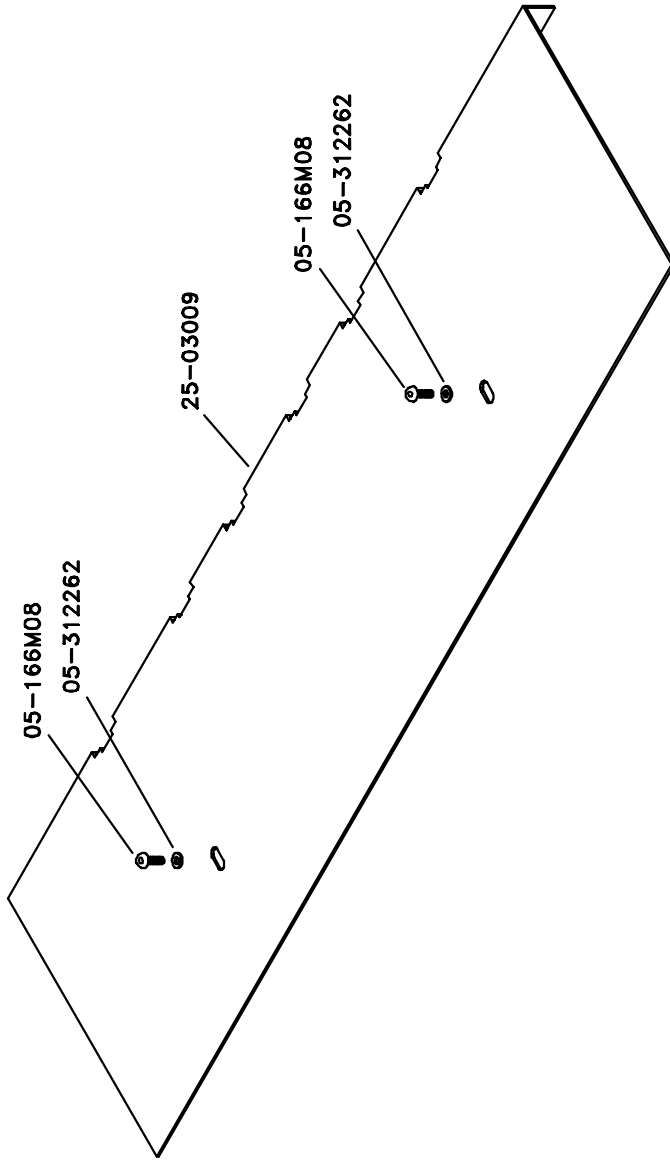


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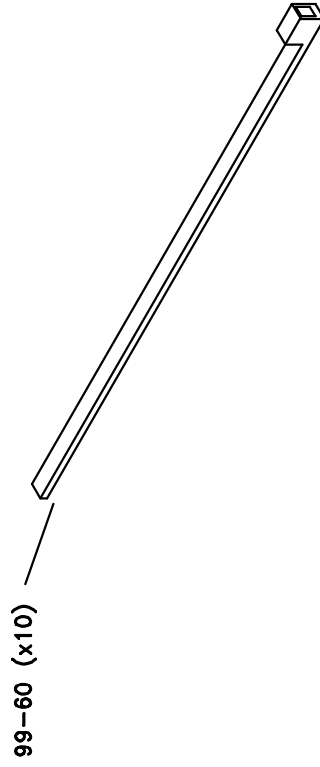
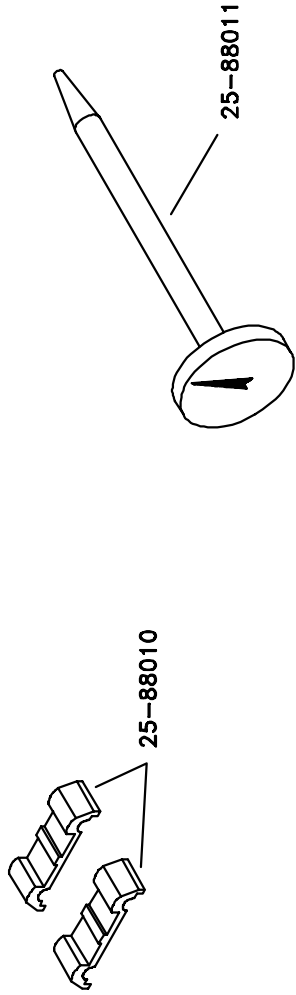


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