

PowderPro[®] Spray System

Installation Instructions

Hamada C248

ACCEL  [®]
Graphic Systems

GENERAL INFORMATION

**ATTENTION
POWDERPRO®
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 POWDERPRO® DEALER IS:

**THE SERIAL NUMBER OF YOUR
POWDERPRO® IS:**

For technical assistance, please contact:

ACCEL GRAPHIC SYSTEMS
11103 Indian Trail
Dallas, TX 75229
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E-MAIL accel@dallas.net
WEB SITE www.accelgraphicsystems.com

PowderPro® is covered by U.S. Patents Pending

INSTALLATION

1

Attention:

If this PowderPro® is being installed inconjunction with a Tempest® dryer you must first install the Tempest®.

Disconnect the electrical power to the press.

2

Remove the NOPS delivery side cover and upper & lower NOPS press covers.

3

Remove original spray system from the press including the spray heads, hoses, distribution block, hopper and solenoid. Save the bolts used to secure the spray heads to the tie bar and the bolts that attach the hopper mounting bracket to the press frame. Connect the hose from the pump directly to the blow down adjustment valve. Use the provided closed end splice connectors to terminate the original solenoid wires.

NOTE:

If this PowderPro® is being installed inconjunction with a Tempest® then some of the original parts have already been removed.

5

Diagram A

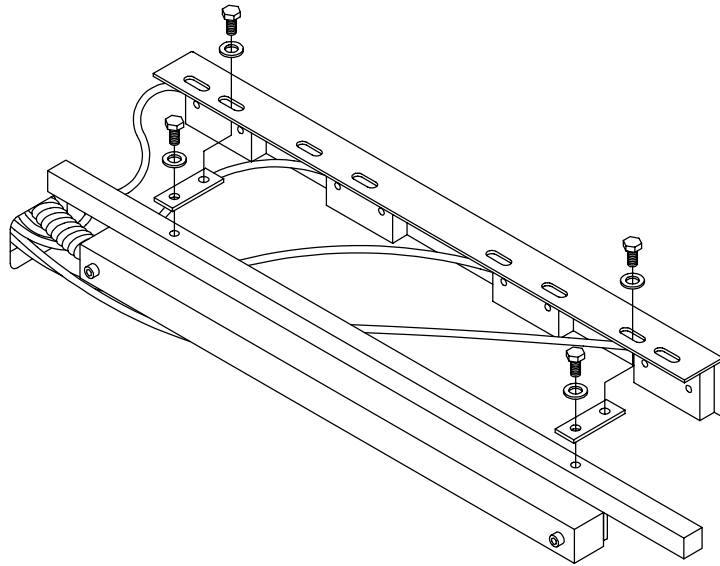


Diagram B

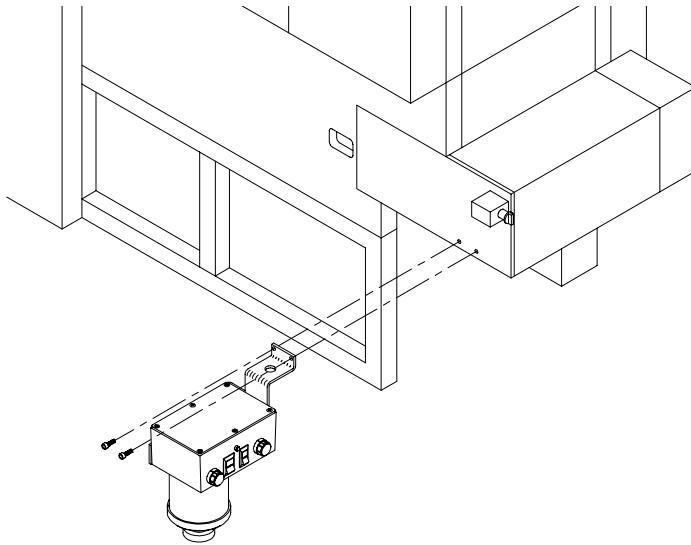
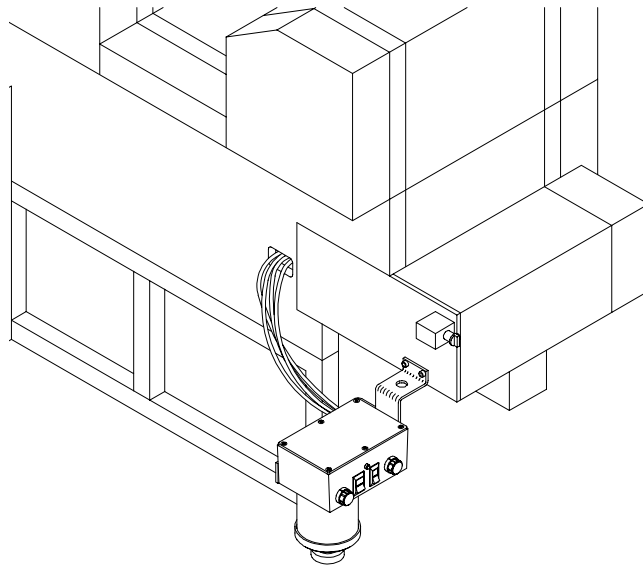


Diagram C



INSTALLATION

4

Install the new PowderPro® spray bar to the feeder side of the tie bar using the original bolts and supplied flat washers as shown in Diagram A. Route the hoses under the tie bar and through the same hole in the NOPS press that the original hoses went through as shown in Diagram A. It is easier to insert the hoses through the hole before securing the spray bar to the tie bar. Be careful not to pinch the hoses between the spray block and the tie bar. Use the provided tie wraps to secure the hoses away from beneath the static eliminator and any moving parts in the delivery.

NOTE: If the press is also equipped with a Tempest® dryer then the spray head assembly mounts on the dryer unit.

5

Install the PowderPro® control box using the same bolts and tapped holes that secured the original powder hopper as shown in Diagram B.

6

Attach the hoses from the spray heads installed in step 3 to the tubes coming out of the side of the PowderPro® control box as shown in Diagram C. Make sure that the hoses with black tape on the ends are attached to the lower two tubes coming out of the control box. When the side covers to the press are reinstalled the tubes go through the same slot in the end of the lower cover, that the hard pipe went through, on the factory sprayer. Keep this in mind if you trim the hose length.

7

Diagram D

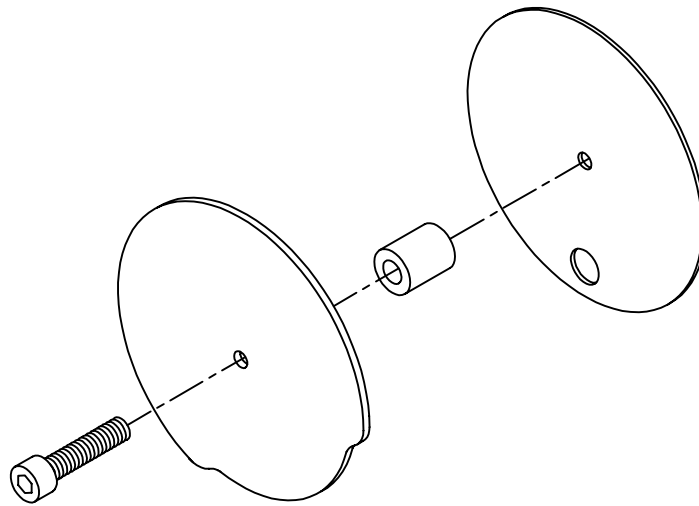


Diagram E

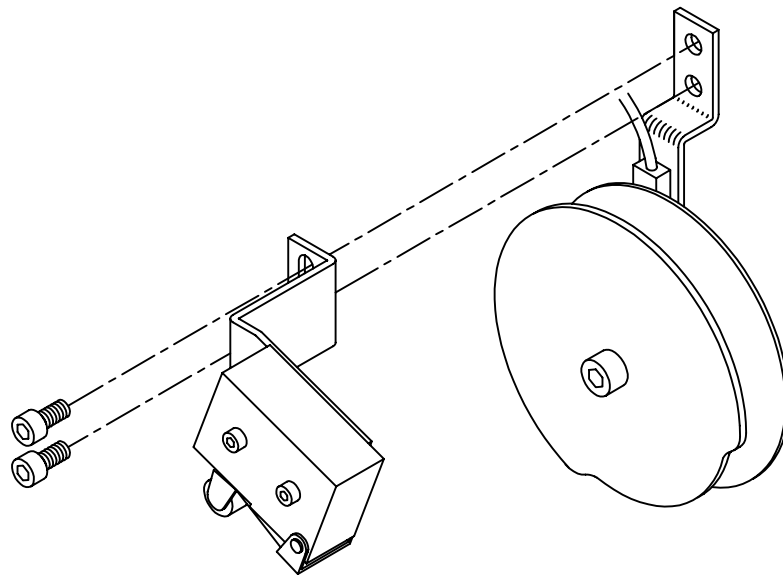
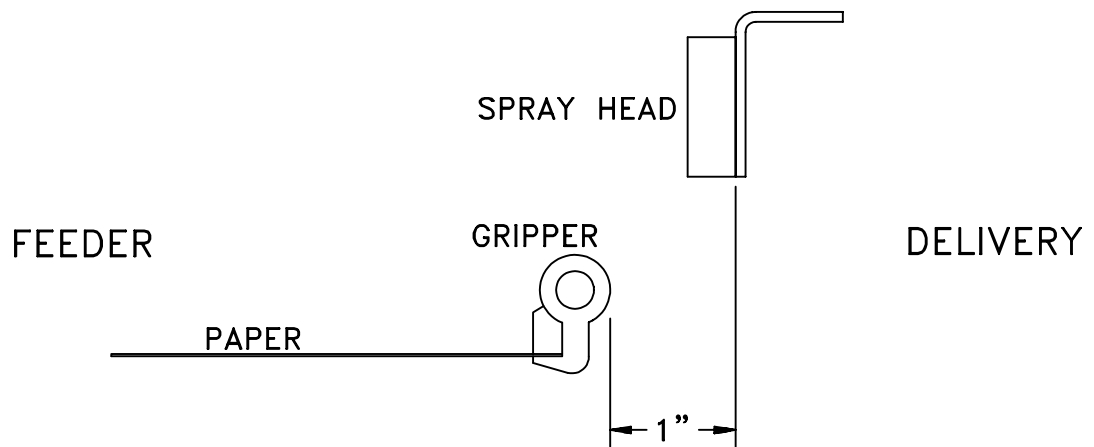


Diagram F



INSTALLATION

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Locate the timing wheel on the NOPS. Briefly restore the power to the press. Rotate the press until the hole in the wheel is at the six o'clock position (straight down). Disconnect the power to the press. With the hole in this position it will be easier to reinstall the wheel in the correct position. Remove the bolt that secures the timing wheel to the delivery cylinder shaft. Using the provided longer bolt attach the provided cam and spacer to the press as shown in diagram D.

8

Remove the two bolts that secure the upper sensor mounting bracket to the press frame. Using the supplied longer bolts attach the provided switch mounting bracket (with the switch already attached) to the press as shown in diagram E.

9

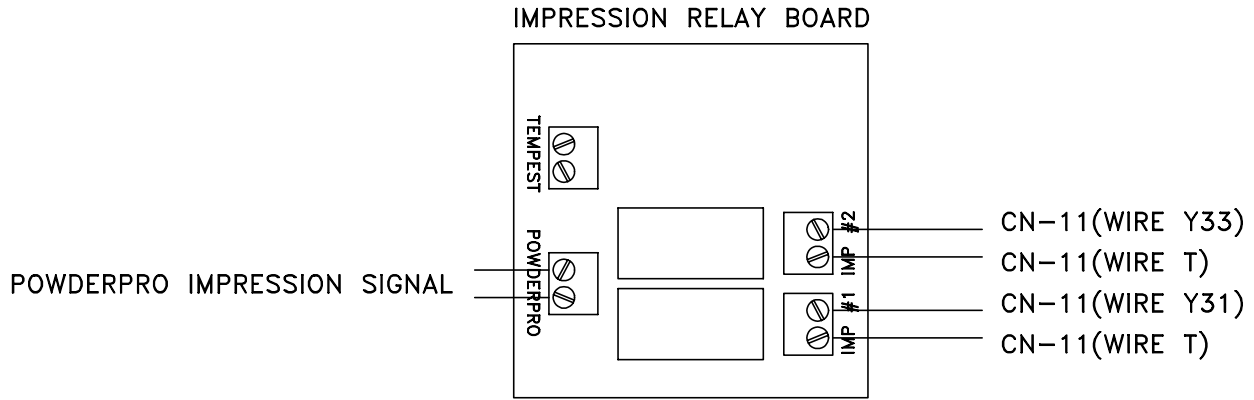
Briefly restore the power to the press. Rotate the press forward until one of the grippers is about 1" (30° as indicated on degree wheel) away from going under the new spray nozzle in the delivery as shown in diagram F. Loosen the bolt securing the new cam and rotate it counterclockwise until it just engages the switch, listening for the "click" noise indicating that the switch is closed. **Be very careful not to disturb the position of the factory timing wheel when rotating the cam.** Tighten the bolt to lock the cam in position. Disconnect the power to the press.

NOTE: Check the position of the press timing wheel as follows.

1. Rotate the press forward until the degree wheel on the OPS indicates 0°.
2. The light on the sensor should just turn off as the degree wheel comes up on 0°.
3. If the light on the sensor is still on, or if it turned off way before 0°, then loosen the bolt securing the timing wheel and rotate it counterclockwise until the hole in the wheel passes the sensor (light on) and the light just turns off. Lock the wheel in place.

9

Diagram G



INSTALLATION

10

Note: If the press is already equipped with a Tempest® dryer and the impression board is already present, skip to step 11.

Remove the cover from the electrical cabinet. Locate the CN11 connector on the upper left side of the printed circuit board. Attach the provided t-tap connectors to wire no.'s Y31 and T (no. 1 impression solenoid) and wires Y33 and T (no. 2 impression solenoid). The T wires are all common so it does not matter which T wires that the t-tap connectors are attached. Insert the ends of the two cable assemblies attached to the provided impression relay circuit board into the t-tap connectors, one cable to Y31 and T and the other cable to Y33 and T. Remove the backing from the two-sided tape on the bottom of the board and secure it to the inside of the cabinet. See diagram G.

11

Plug the provided cable assembly into the four pin connector coming out of the PowderPro® control box. Route the shorter of the two cables in this assembly to the switch installed in step 9. Route the other cable into the electrical cabinet and to the impression board installed in the previous step. Insert the wires into the J6 connector (also labeled "PowderPro®") on the board.

12

Set the provided pump on the floor of the NOPS. Connect the cable coming out of the pump to the three pin connector coming out of the PowderPro® control box. Connect the air supply hose to the barbed reducer fitting on the hose coming out of the control box.

11

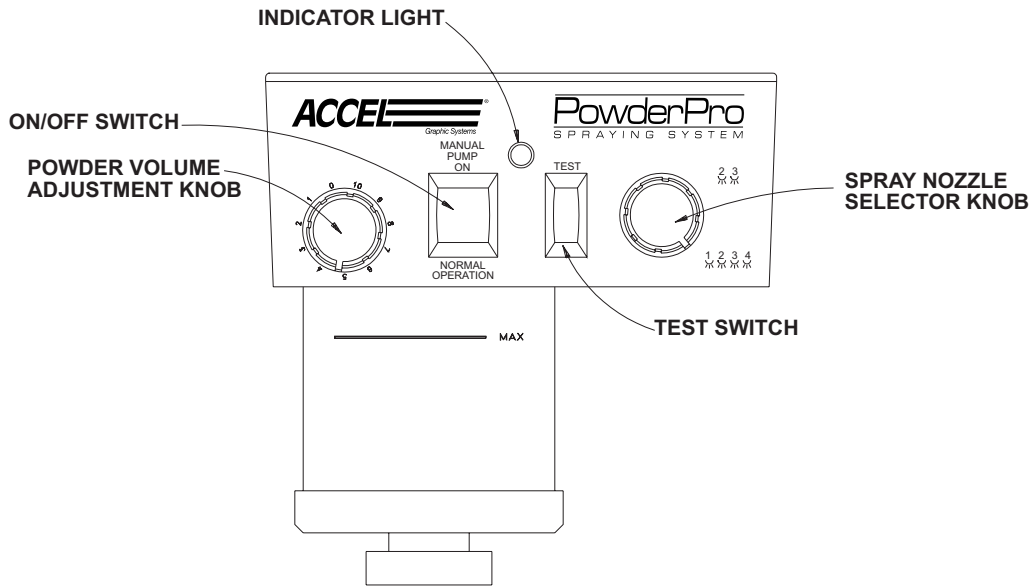
INSTALLATION

13

Plug the PowderPro® power cord into a standard 115 VAC wall receptacle.

This completes the installation of the PowderPro® spray system. Continue on to the next section for proper set-up, operation and maintenance procedures.

OPERATION AND MAINTENANCE



POWDER PRO® CONTROLS

VOLUME ADJUSTMENT KNOB

Adjusts the amount of spray powder with "0" the minimum and "10" the maximum.

ON/OFF SWITCH

When switched to "Manual Pump On" the pump comes on for setting spray powder volume. When switched to the "Normal Operation" position, the system is armed and sprays only when the press goes on impression. Center position is off

INDICATOR LIGHT

This light is illuminated only when the unit is actually spraying. The light goes on and off as sheets pass under the spray nozzles.

TEST SWITCH

Use this switch for setting powder volume when not printing. With the "On/Off" switch set at "Manual Pump On", push the test switch to visually see the amount of powder being sprayed, adjust as desired with volume adjustment knob.

NOZZLE SELECTOR KNOB

This knob lets you control which spray nozzles are being used. For maximum width sheets set the selector to the lower position. This setting sprays all four nozzles. For narrow sheets (generally 11" wide or less) set the selector to the upper position. This setting sprays only the center two nozzles.

OPERATION AND MAINTENANCE

PUMP ADJUSTMENT

Powder volume range is adjusted by the outlet pressure of the pump. Locate the adjustment knob on the pump near the outlet hose. Loosen the locking knob and turn the adjustment knob clockwise to increase the pressure for more powder. Turn the knob counter clockwise to decrease pressure for less powder. Set the correct pump pressure as follows:

1. Turn the pump on by switching the large switch on the PowderPro® control box to the "Manual Pump On" position.
2. Set the nozzle selector knob on the PowderPro® control box to "4".
3. Set the powder volume adjustment knob to "10".
4. Hold the "Test" switch "On" while looking at the spray nozzles in the delivery.
5. Have someone slowly adjust the pressure on the pump until the powder is barely visible. A powder setting of "10" with visible powder in the delivery is more than enough powder. Consequently, a setting of "5" results in no visible powder but sufficient powder for most jobs.

If powder is visible at the "5" setting than too much powder is being sprayed. Return to step 3 and reset the pump.

6. Tighten the locking knob on the pump adjustment.

INITIAL SETTINGS

The initial setting for the powder volume adjustment on an average job is "5". If more powder is required than is available at a setting of "10" you need to adjust the pump. If less powder is required than is available at a setting of "0" you also have to adjust the pump. So that you have a wide range of powder volume adjustment available for different jobs you want your "normal" setting for average jobs to be somewhere in the range from "4" to "6," otherwise you need to adjust the pump.

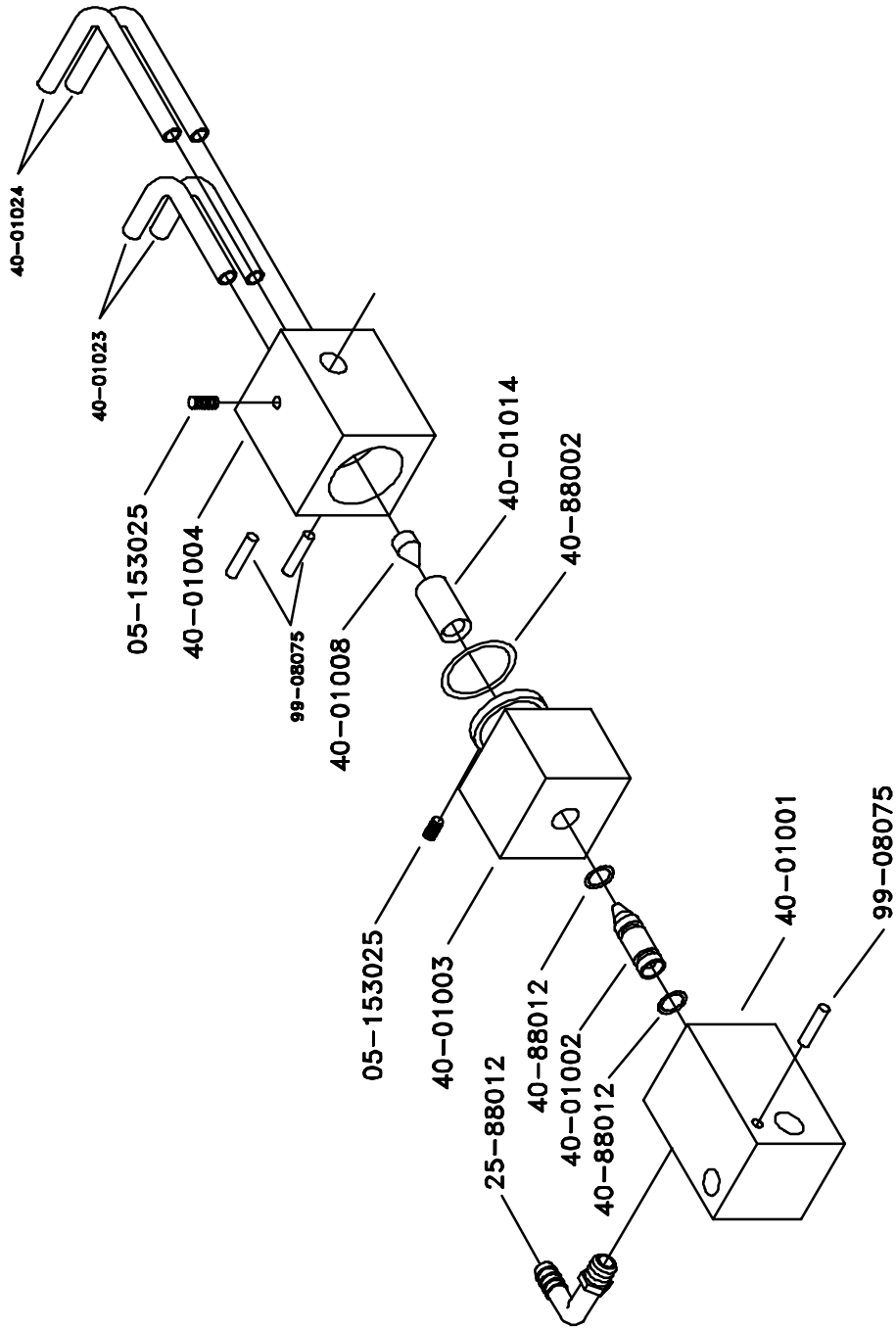
OPERATION AND MAINTENANCE

MAINTENANCE

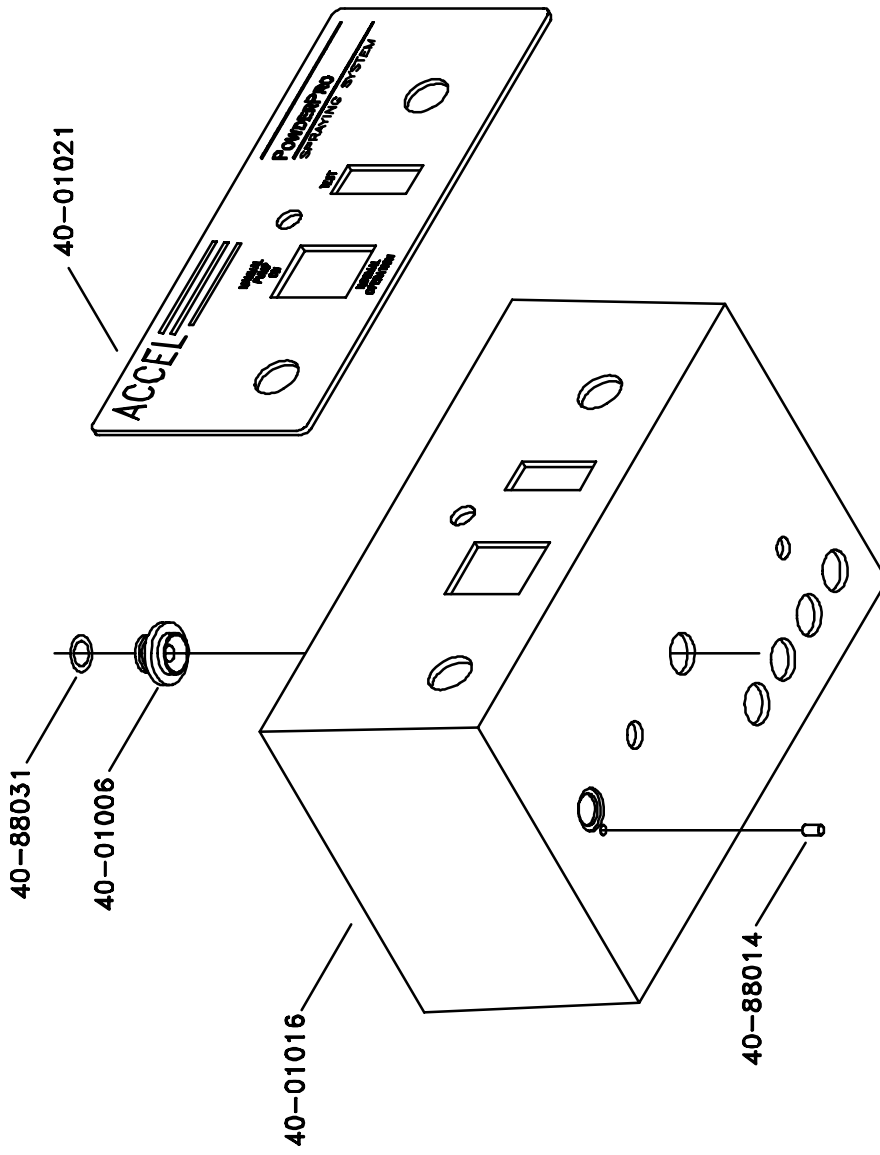
1. Clean the filter on the pump once a week, blowing it clean with compressed air.
2. Remove powder that may accumulate on the bottom of the spray nozzles daily.
3. Never use solvents containing oil when cleaning any part of the sprayer.
4. Use compressed air only if your compressor is equipped with a proper in-line dryer. Otherwise, use canned air. Moisture in the sprayer affects its performance.

OPERATION

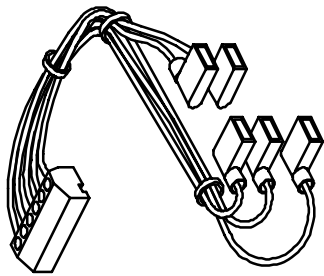
1. Fill the powder hopper with an intermediate grain (20-25) powder (available from Accel) up to the "MAX" line on the hopper.
2. Place the original On\Off switch to the "On" position.
3. Consider the sheet width and if necessary change the spray nozzle selector knob. When switching from four to two nozzles reduce the total amount of powder being sprayed by turning the powder volume adjustment knob to a lower number.
4. The spray length is automatically controlled by the press.
5. Adjust the powder volume adjustment knob if necessary.
6. The sprayer operates automatically when the press goes on impression and a sheet is present under the spray nozzles



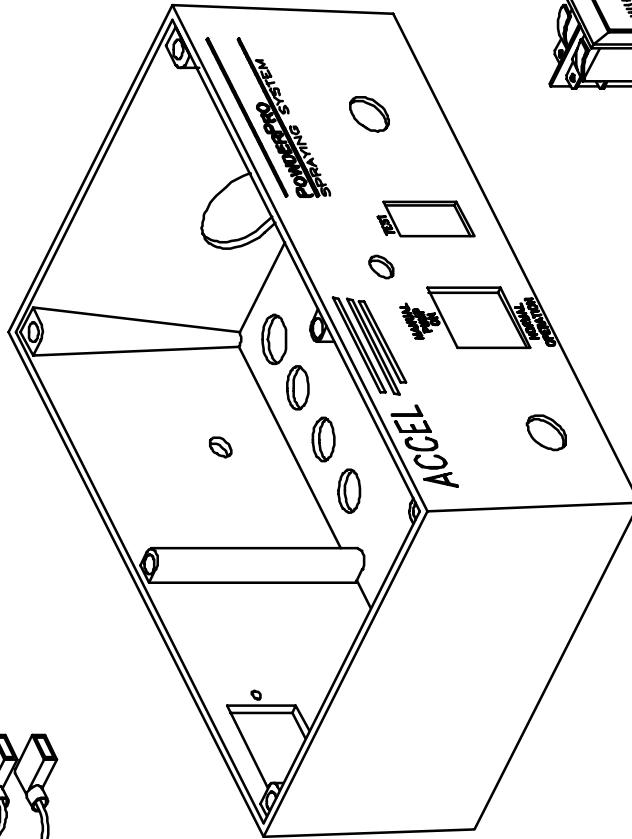
248P01, 9-1-98



248P02, 9-1-98



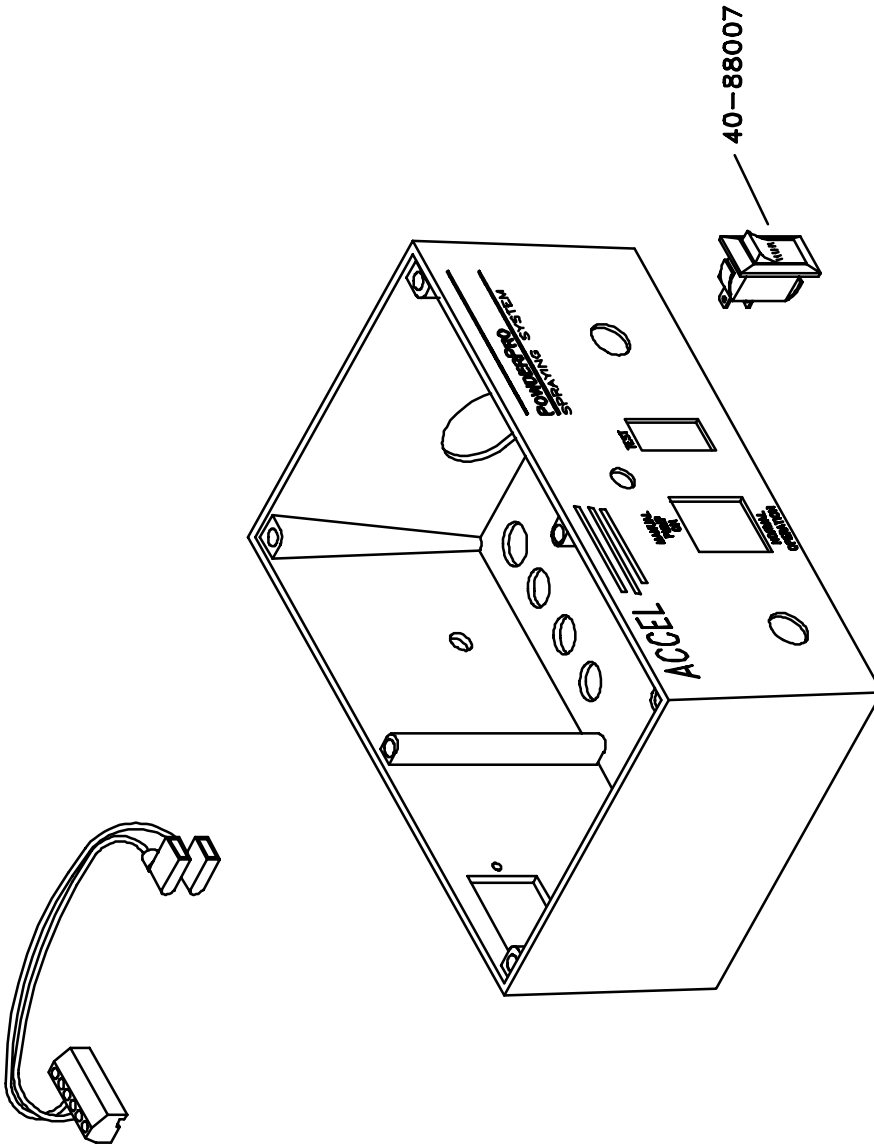
| WIRE COLOR | SWITCH POSITION NO. |
|------------|---------------------|
| RED | 12 |
| ORANGE | 11 |
| BLUE | 13 |
| WHITE | 24 |
| BLACK | 26 |



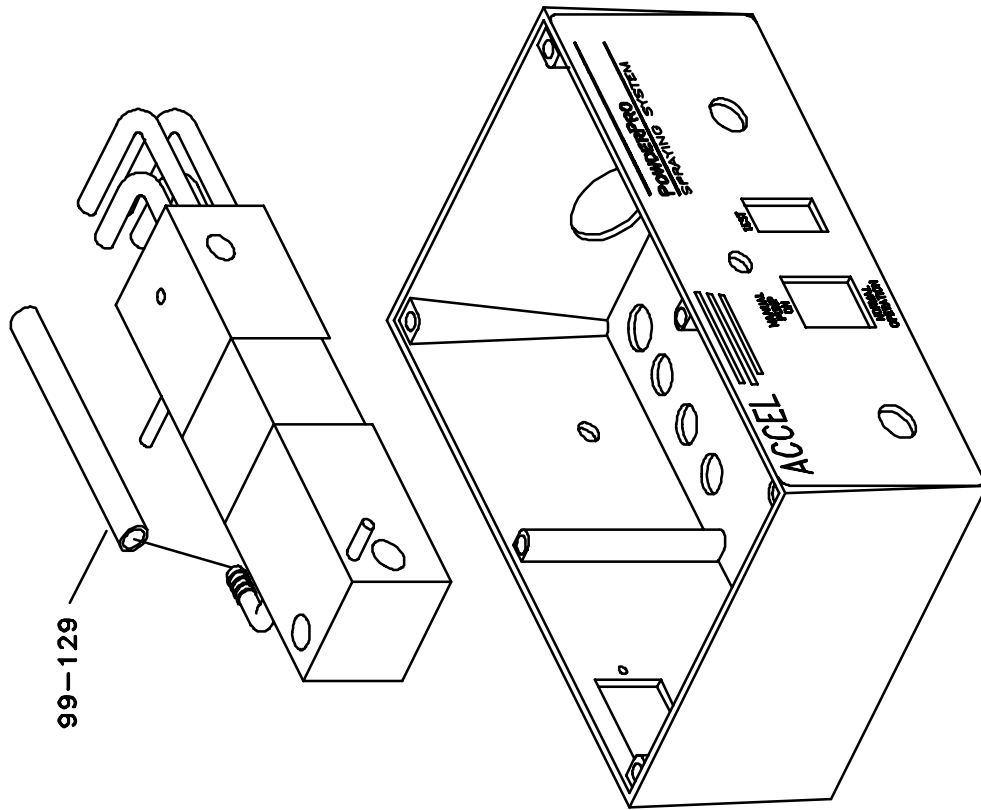
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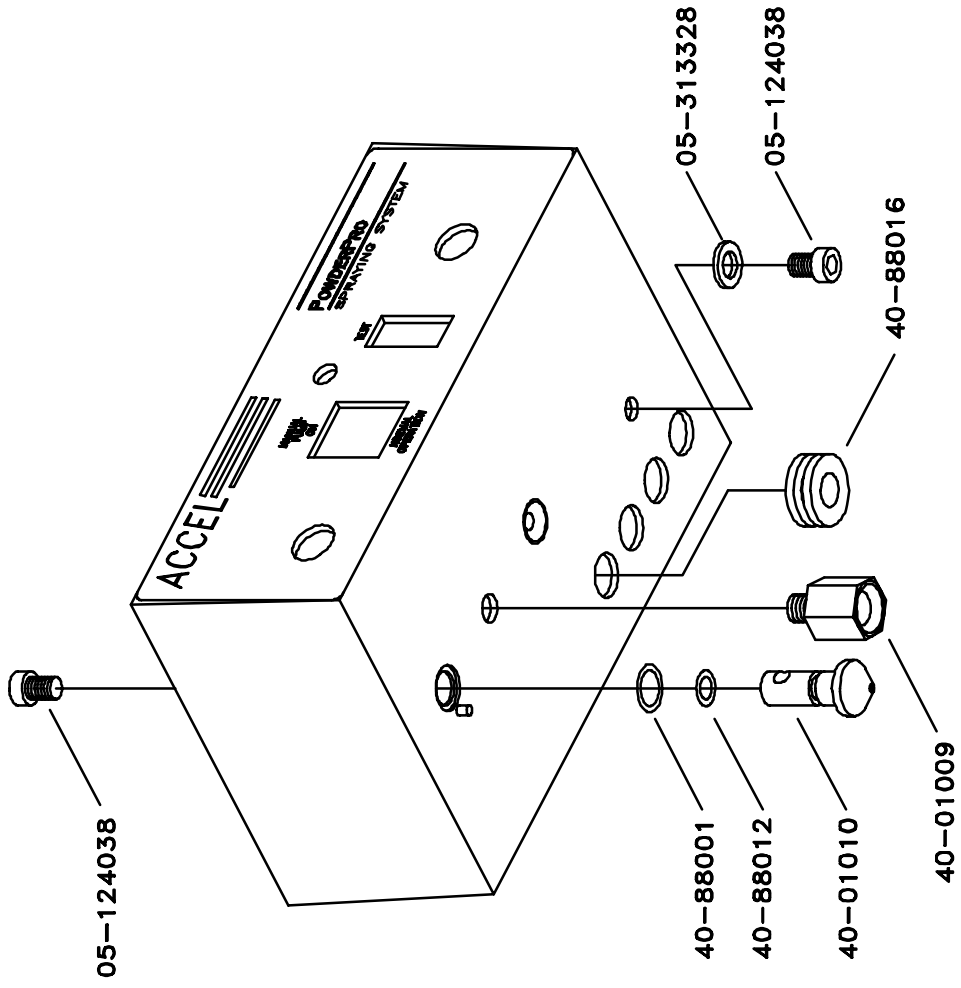
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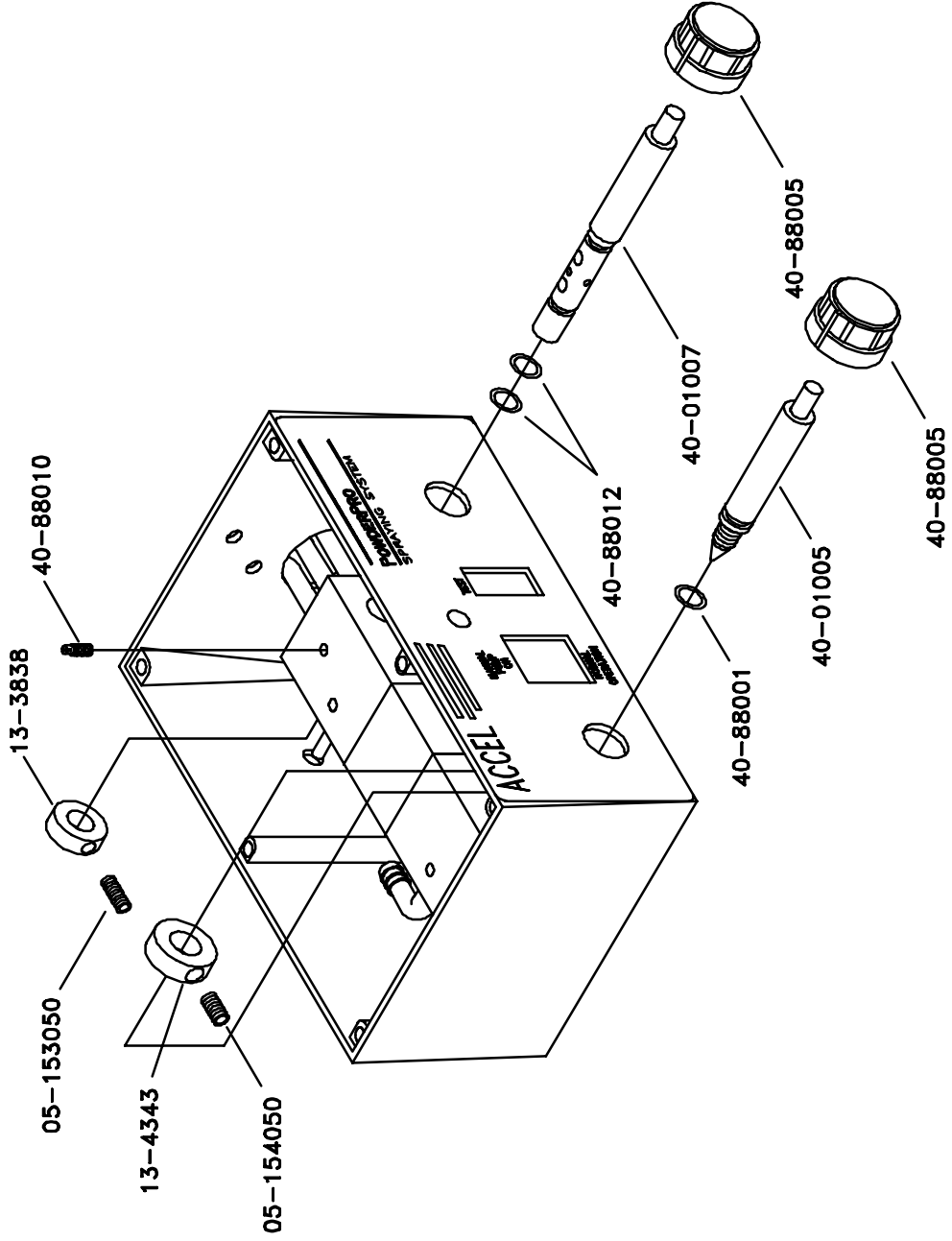
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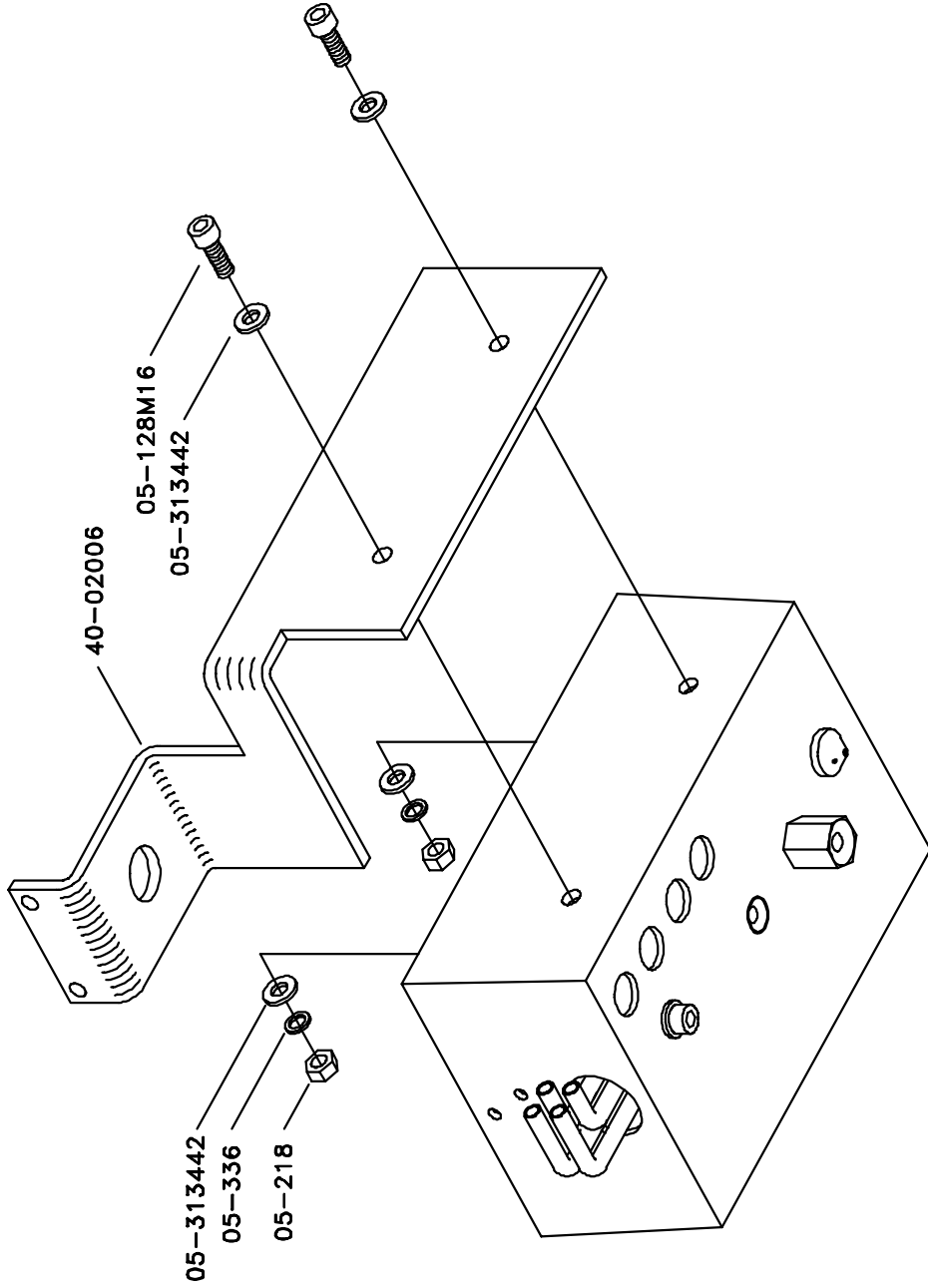
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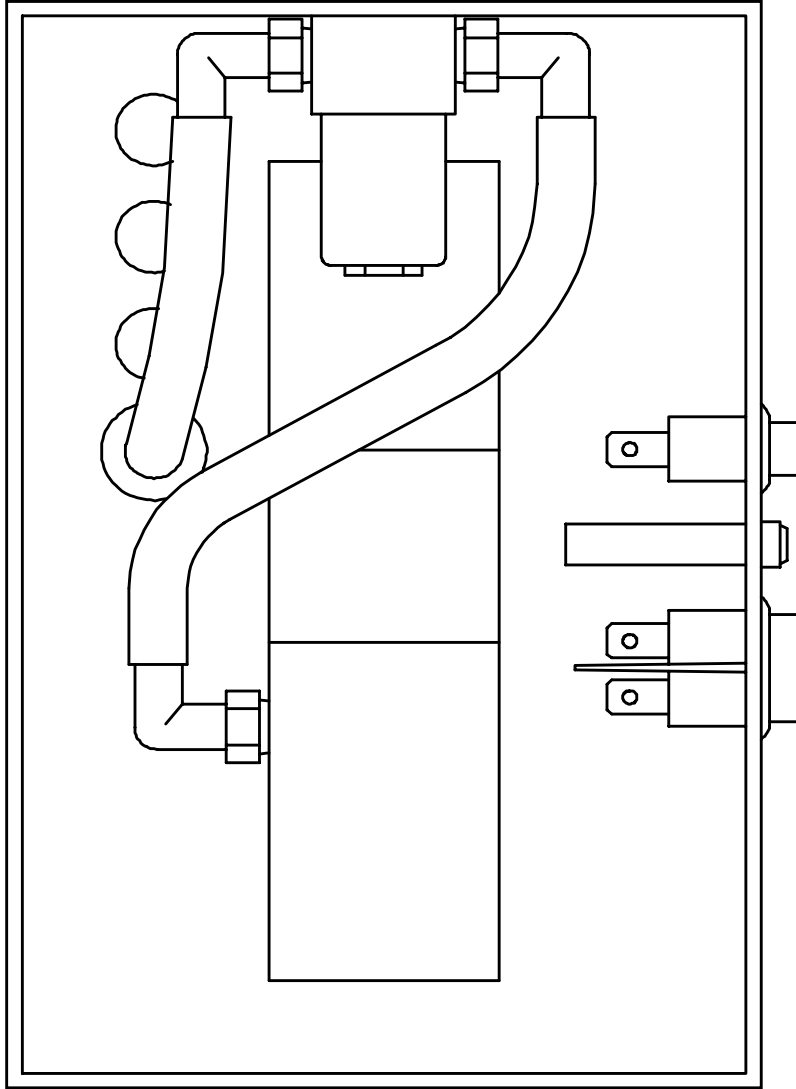
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248P07, 9-1-98

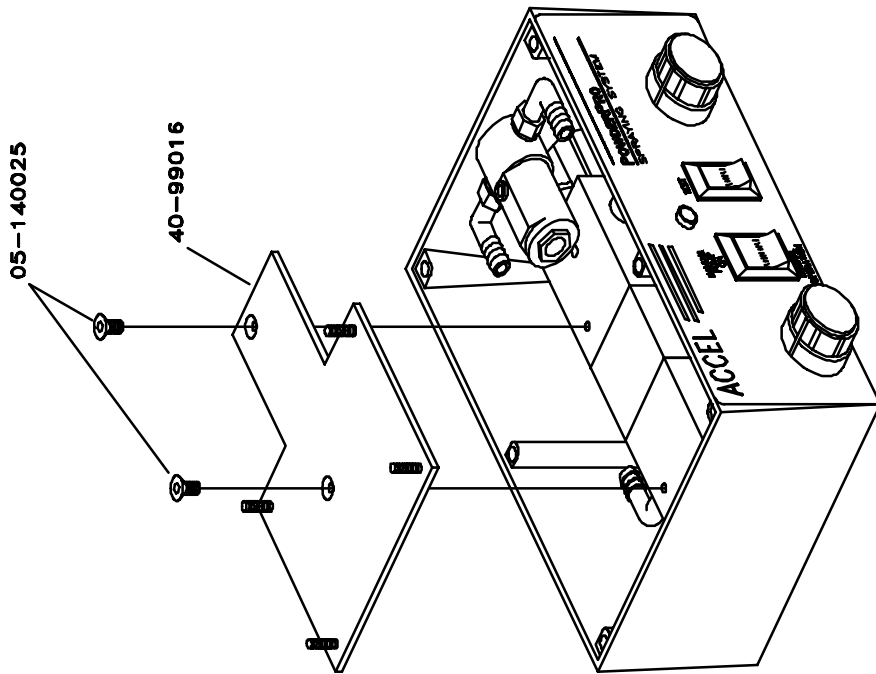


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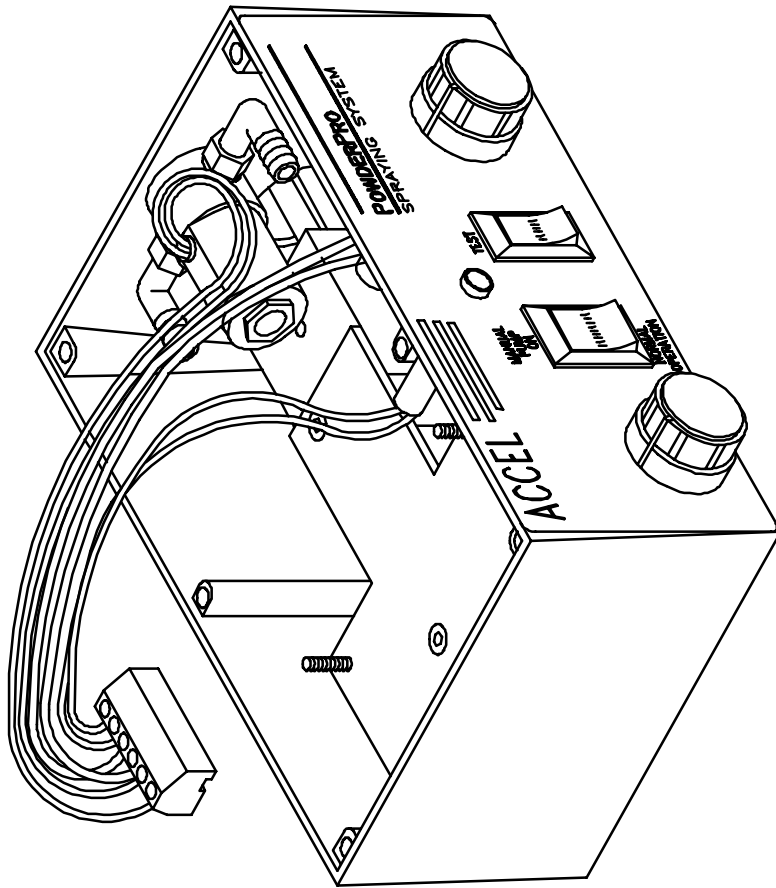


2' 99-129 HOSE 1/4x3/8

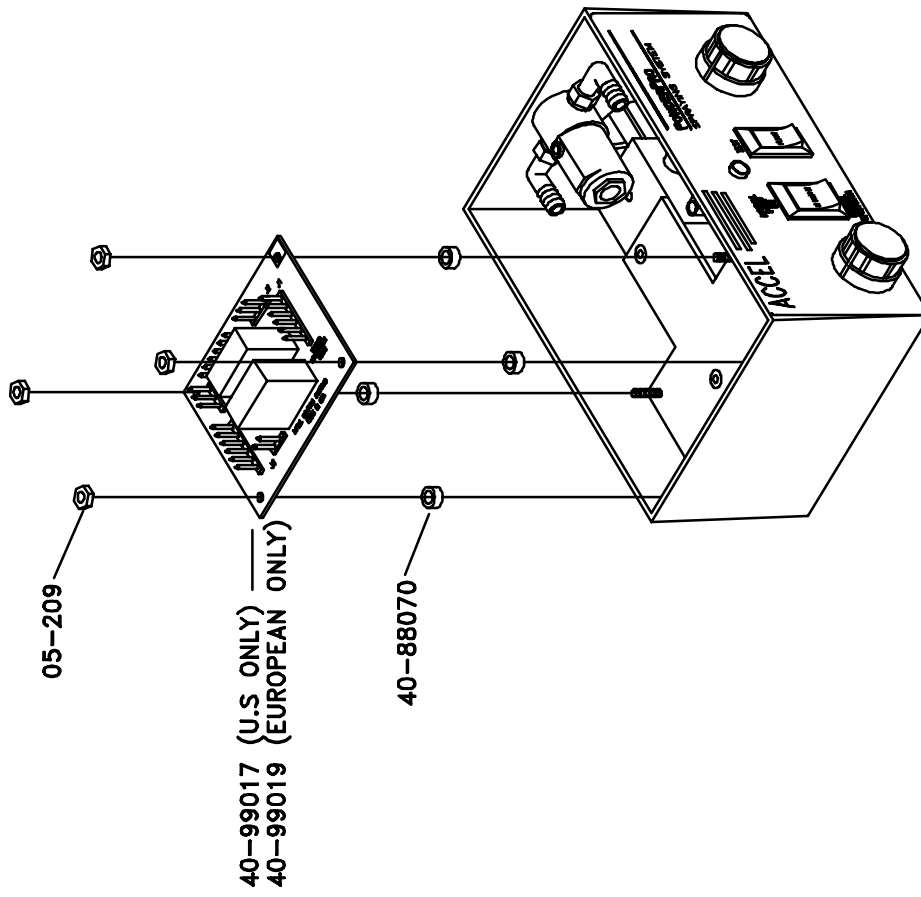
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248P11, 9-1-98

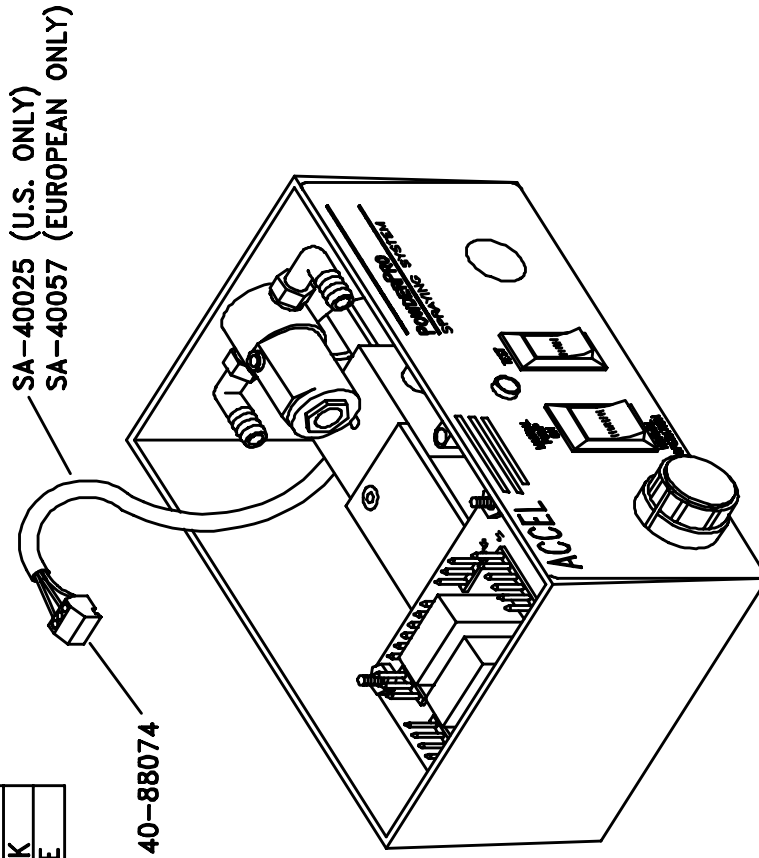


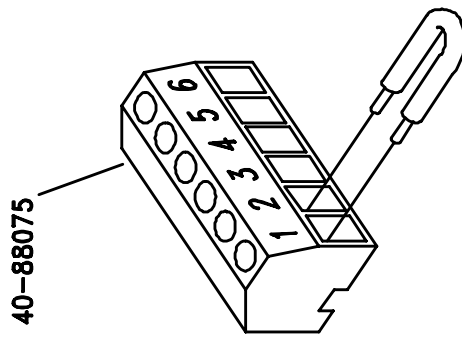
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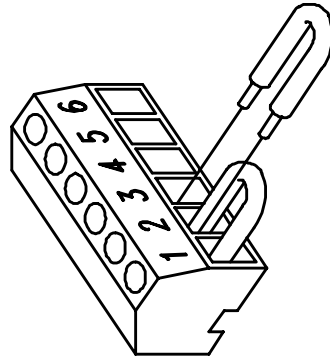
| 3 POSITION CONNECTOR | |
|----------------------|------------|
| POSITION NO. | WIRE COLOR |
| 1 | GREEN |
| 2 | BLACK |
| 3 | WHITE |



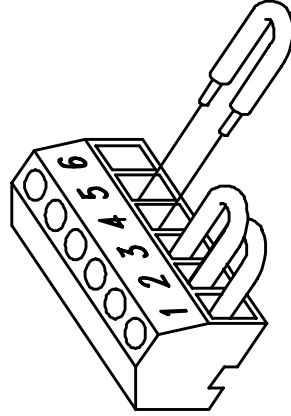


40-88075

1-2

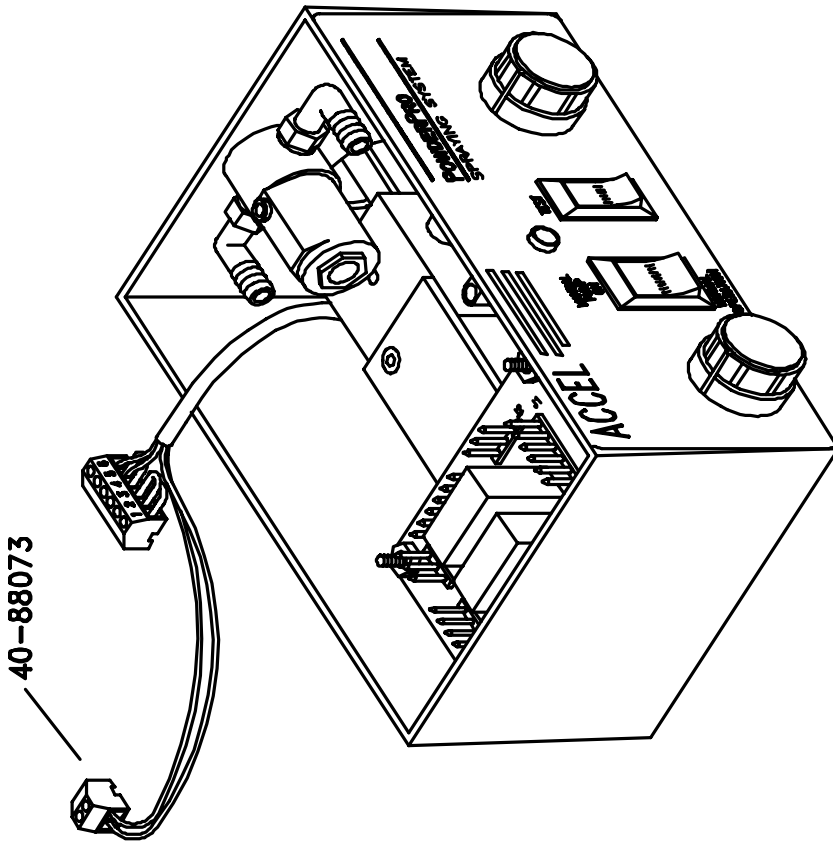


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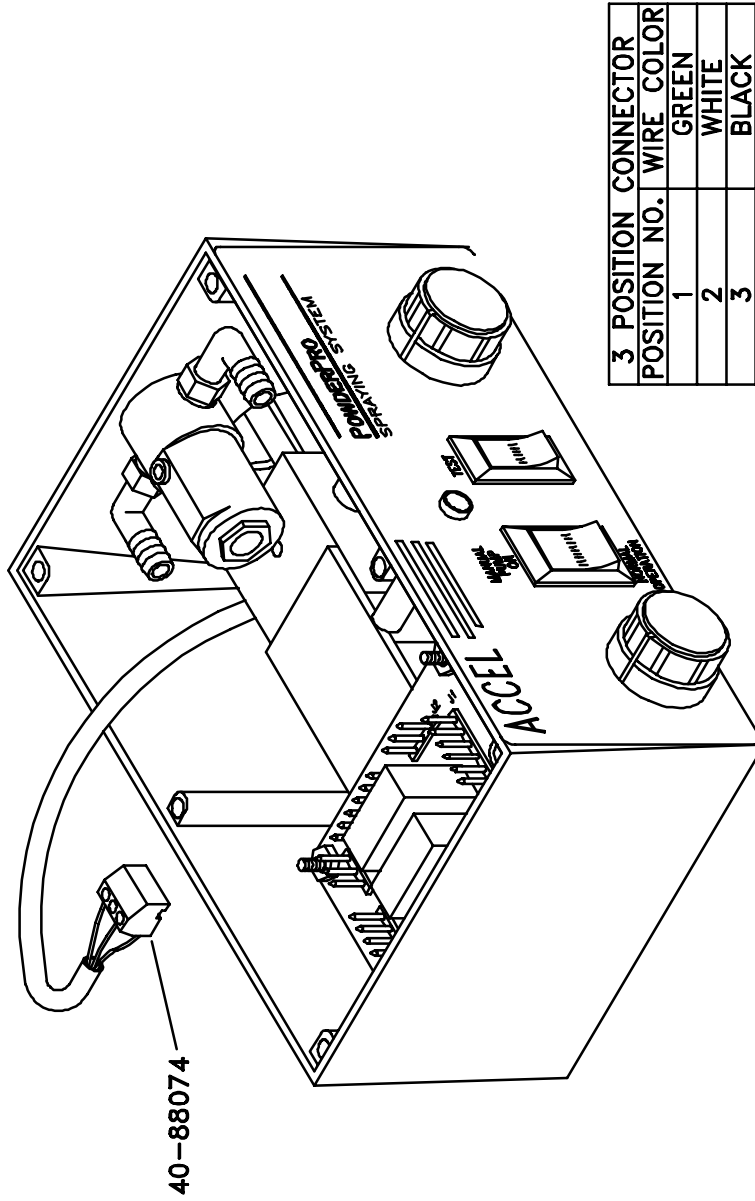


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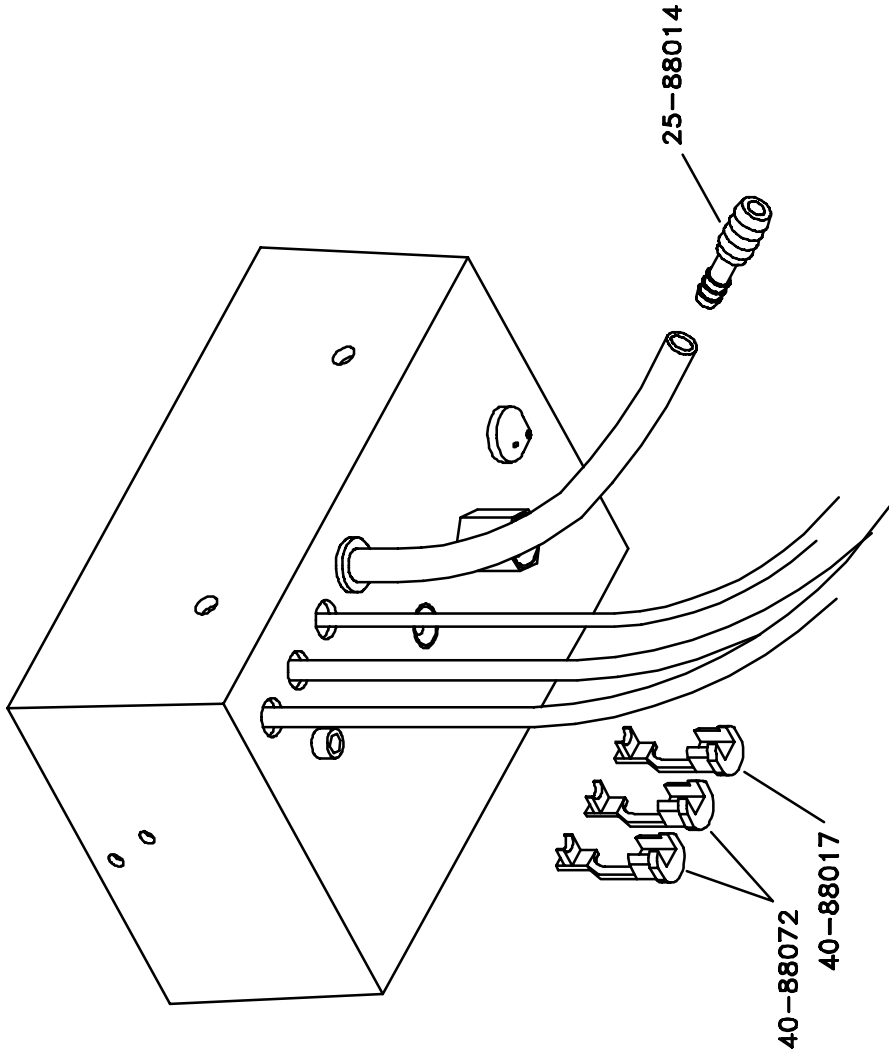
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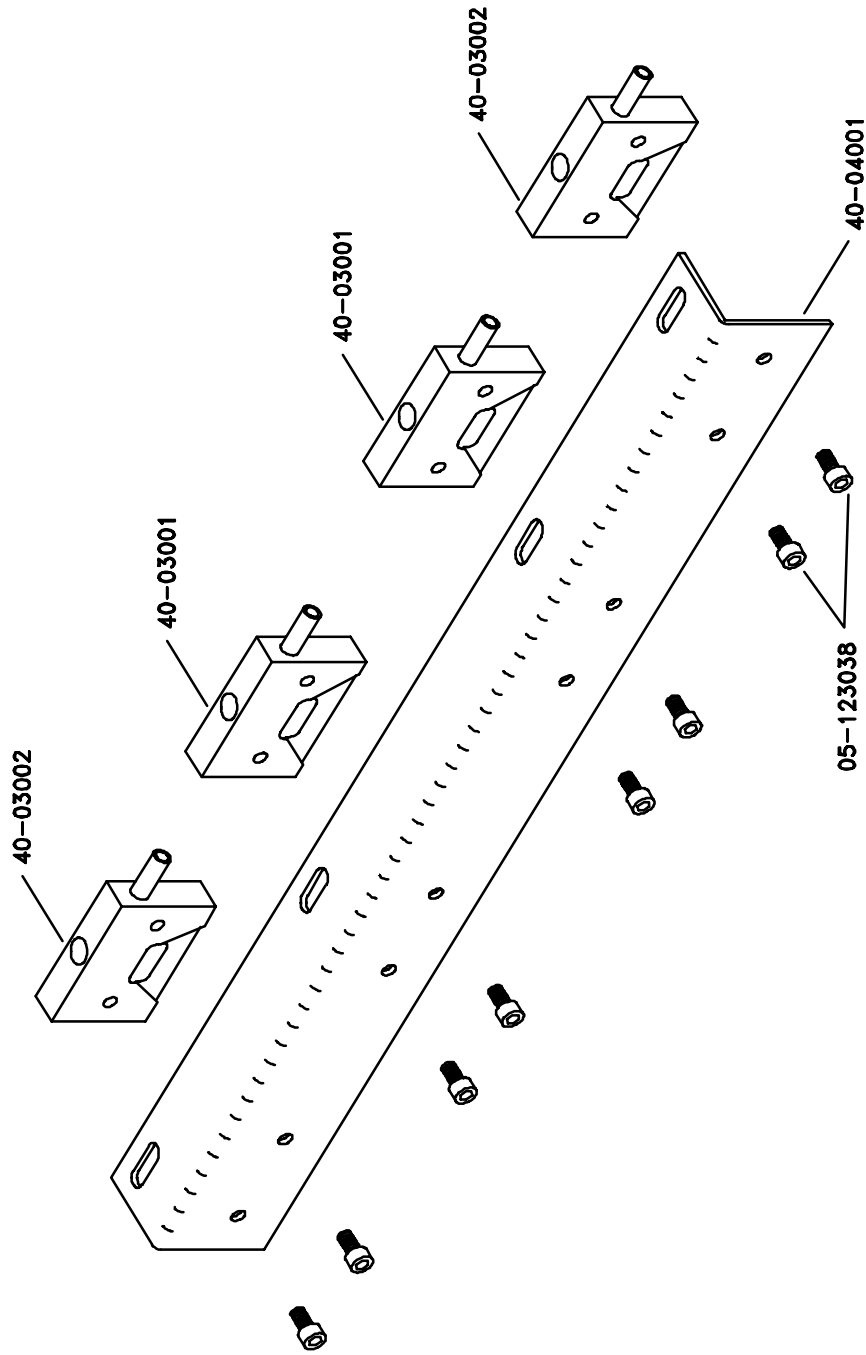
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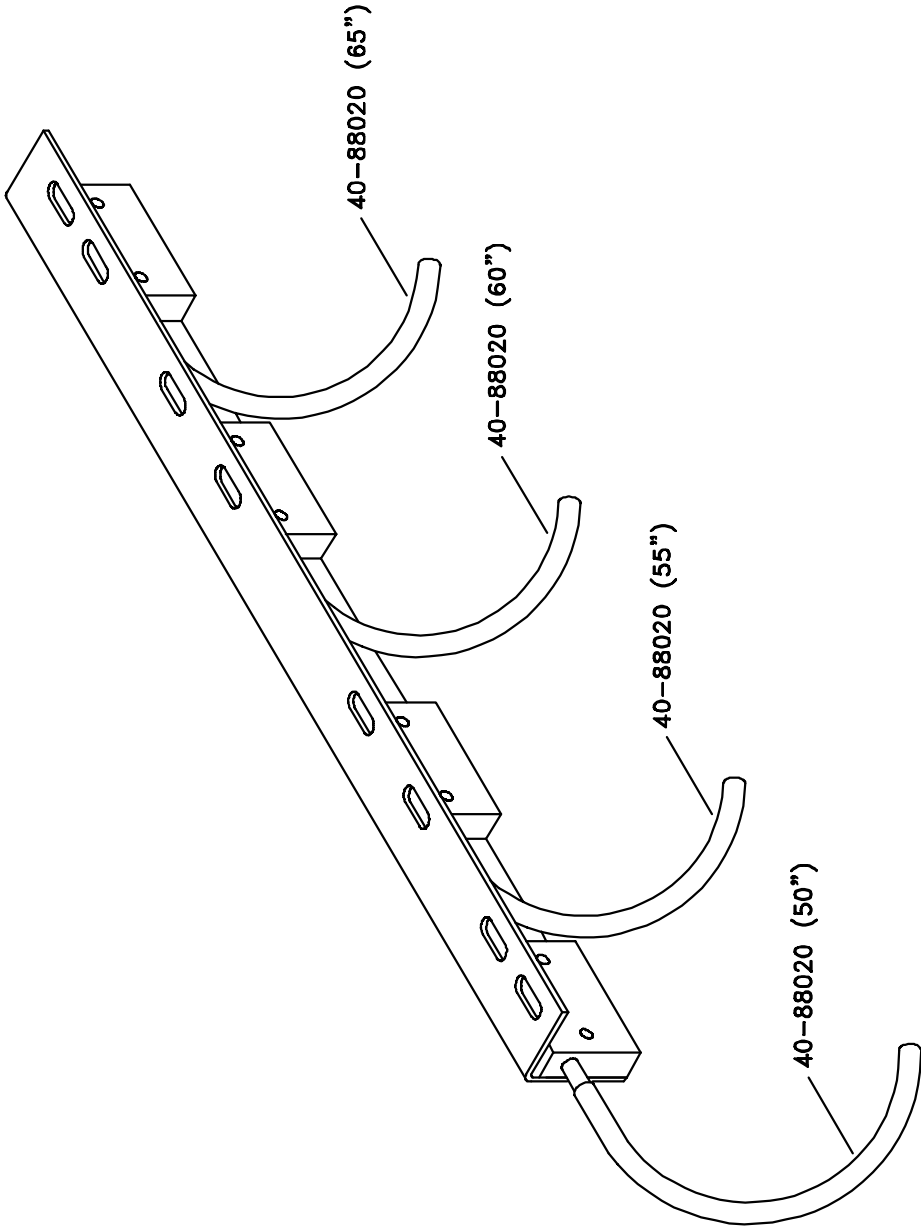
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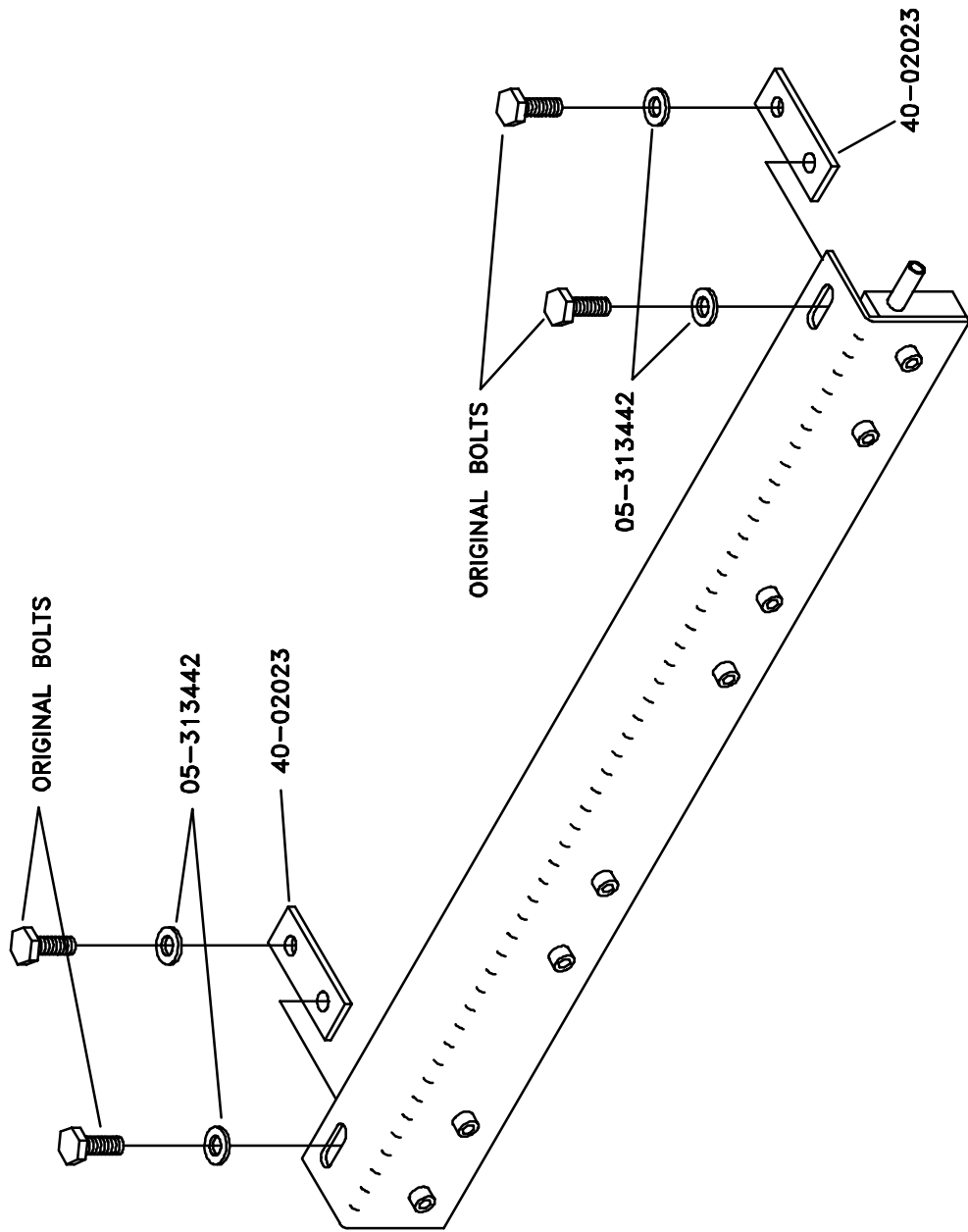
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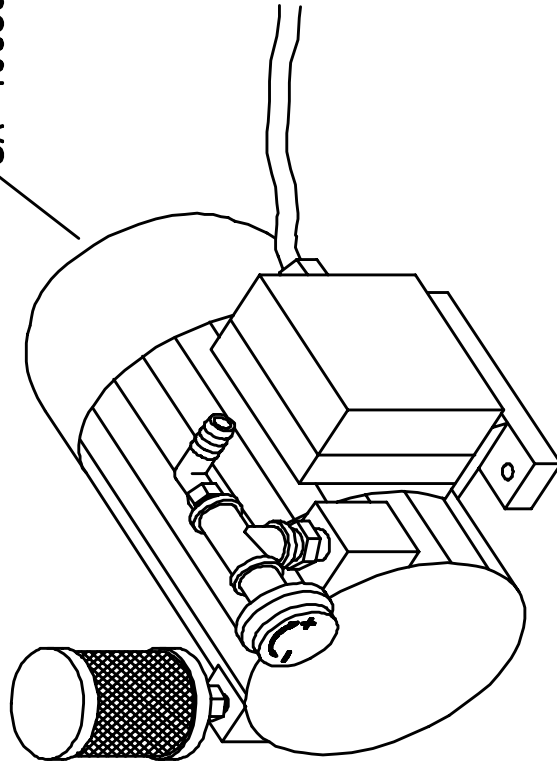


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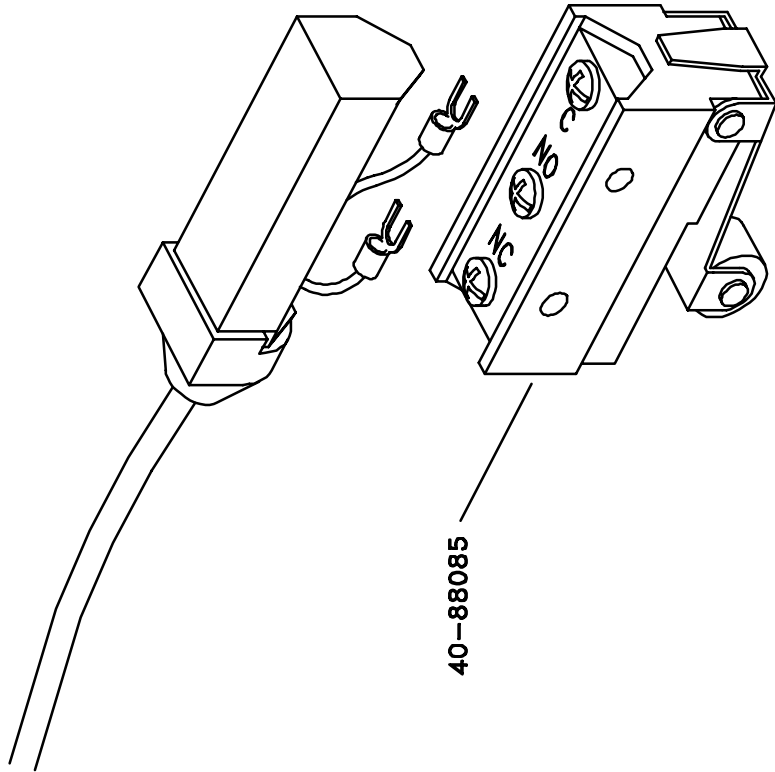


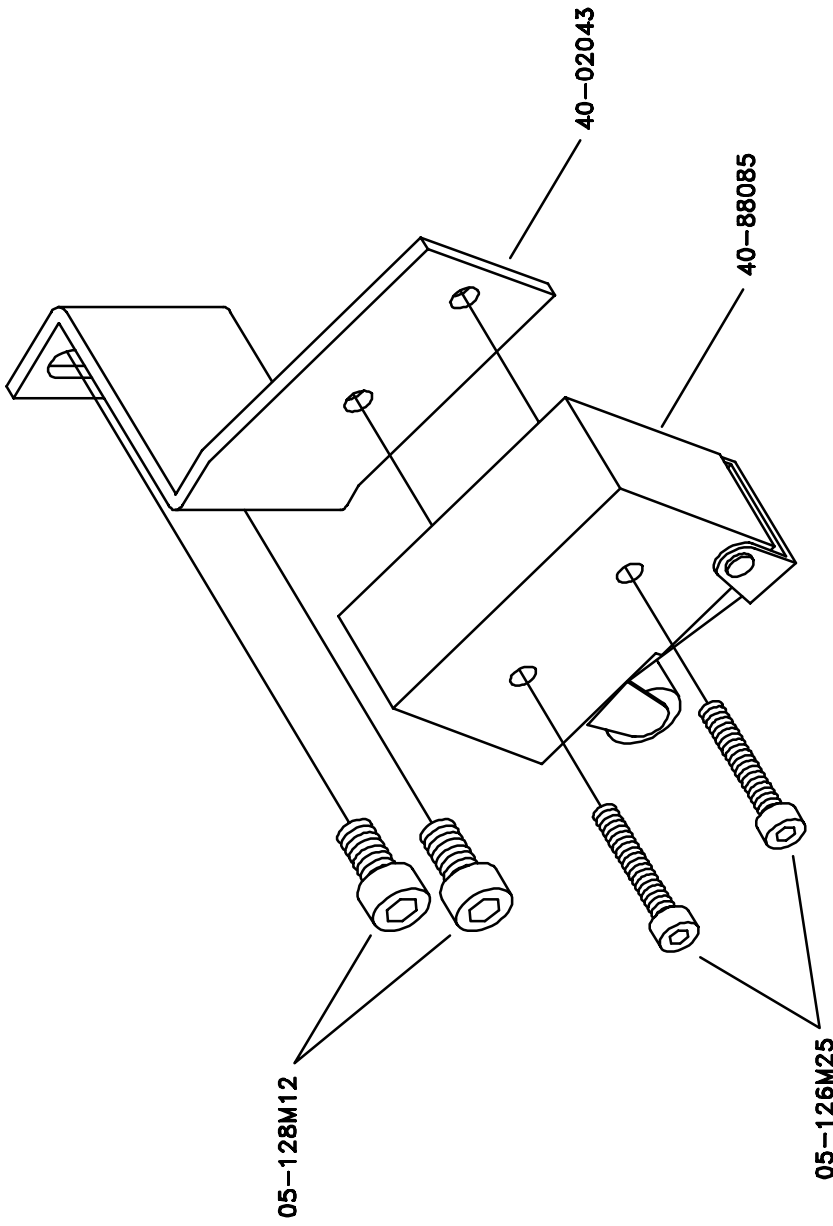
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SA-40038 (EUROPEAN ONLY)
SA-40030 (U.S. ONLY)

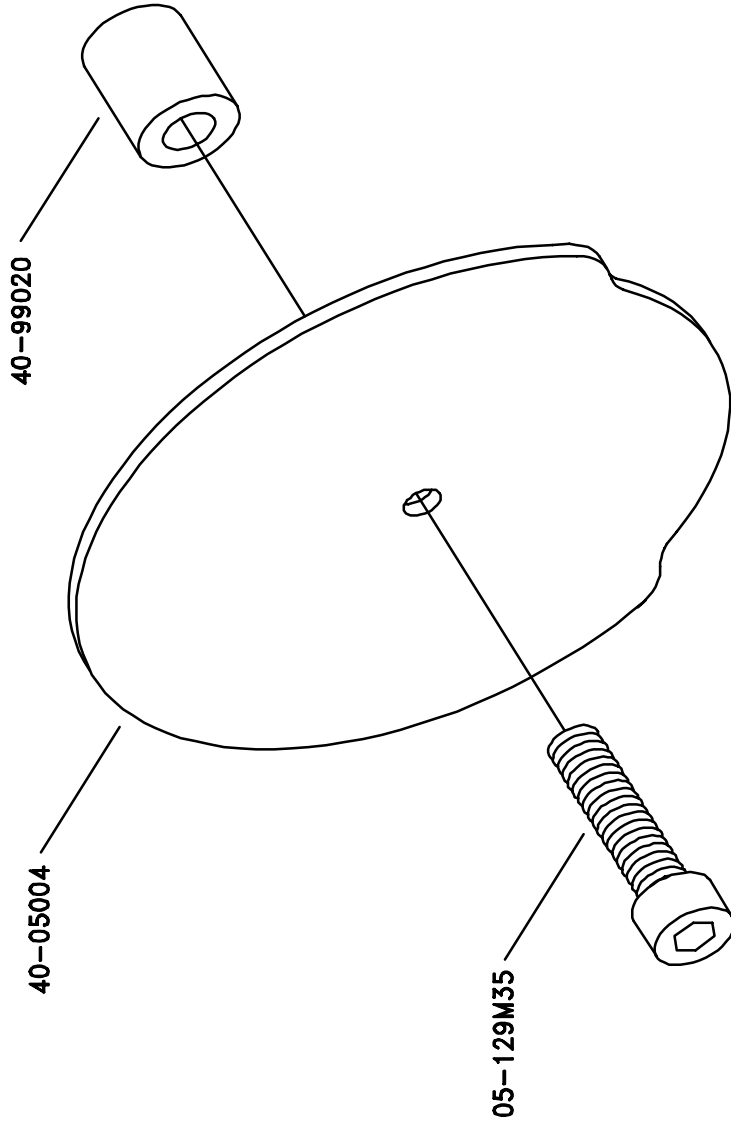


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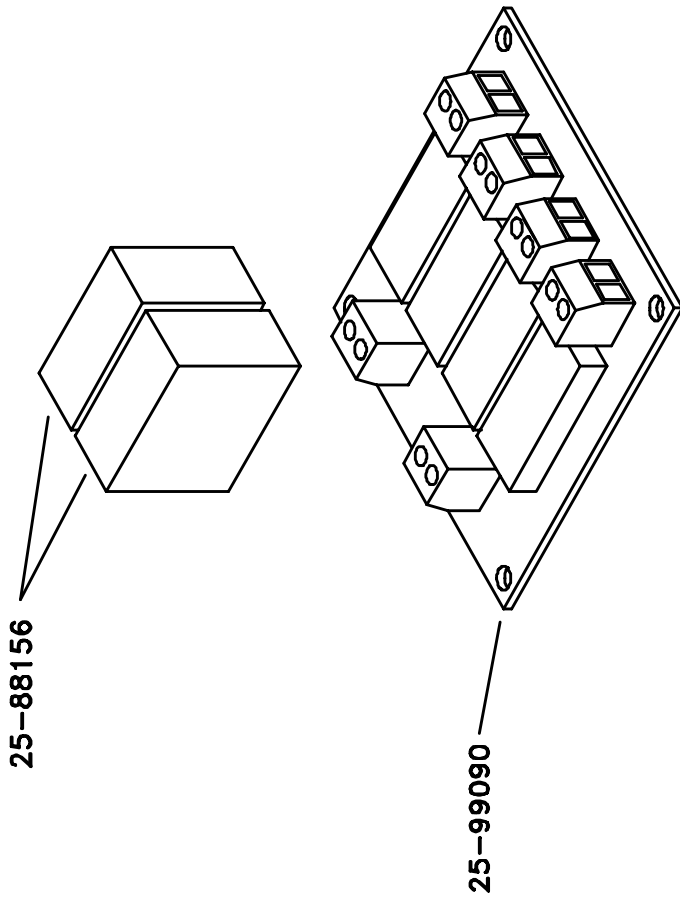




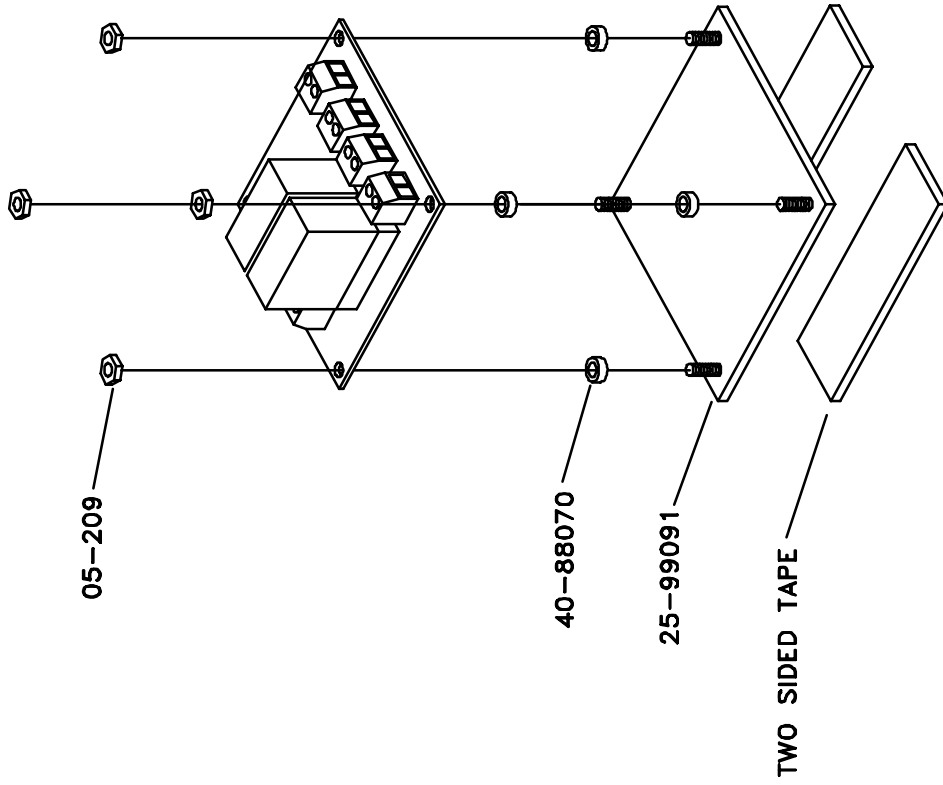
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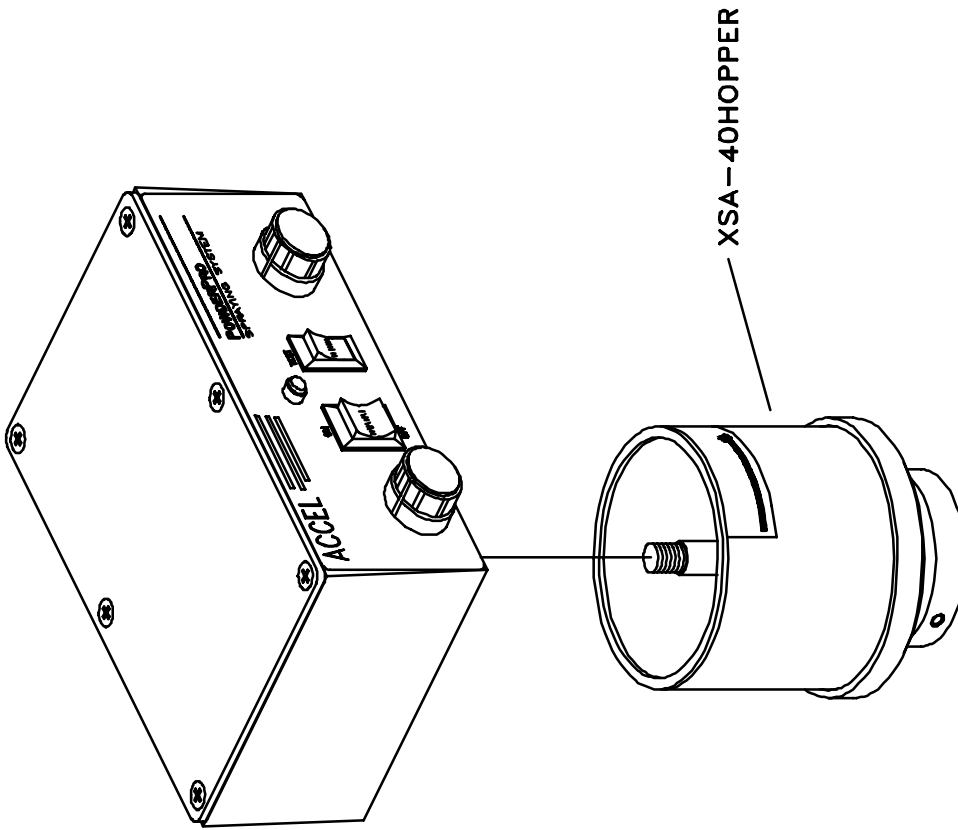
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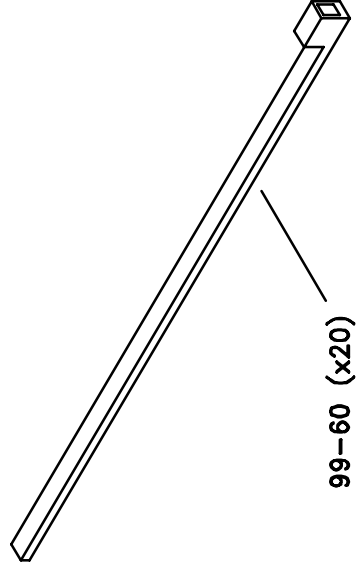
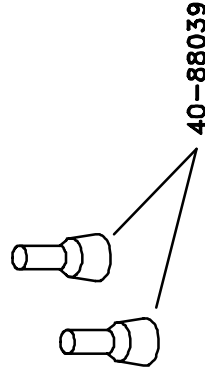
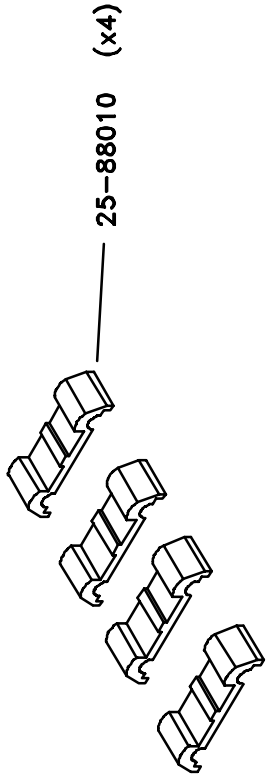
248P26, 9-1-98



248P27, 9-1-98



248P28, 9-1-98



248P29, 9-1-98

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