

# PowderPro<sup>®</sup> Spray System

## Installation Instructions

Hamada E47

**ACCEL**  <sup>®</sup>  
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:**

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

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For technical assistance, please contact:

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

**PowderPro® is covered by U.S. Patents Pending**



# INSTALLATION

**1**

Turn the main power to the press OFF.

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**2**

Remove the NOPS delivery side cover, the NOPS cover below the print head (next to the delivery cover), and the OPS cover just below the handwheel.

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**3**

Remove the original powder spray system from the press including the spray heads, hoses, hopper and solenoid. Use two of the provided closed end splice connectors to terminate the ends of the wires that went to the solenoid.

**5**

Diagram A

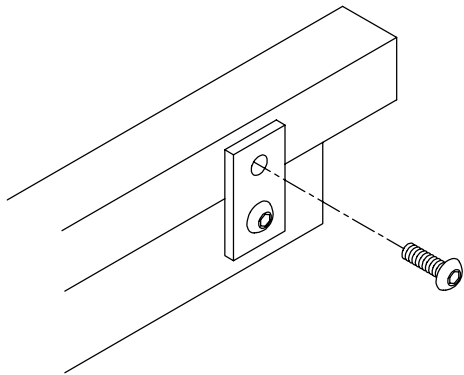


Diagram B

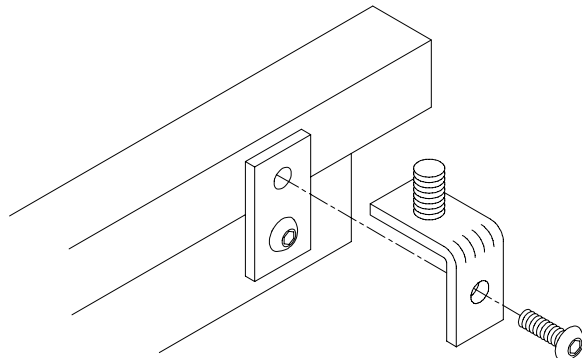


Diagram C

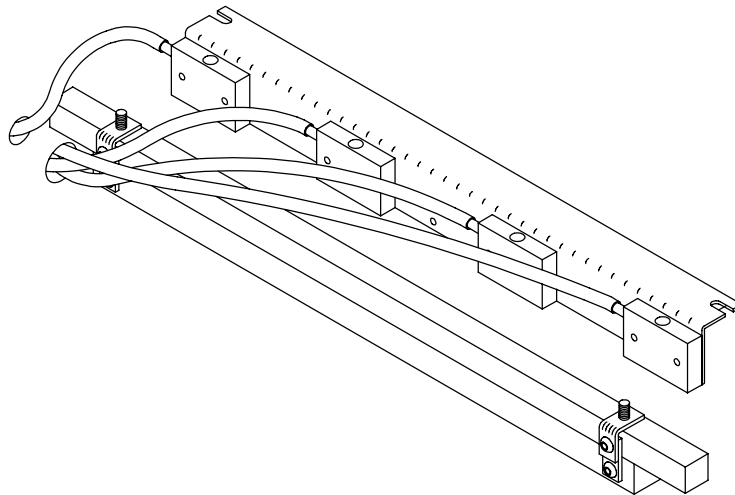
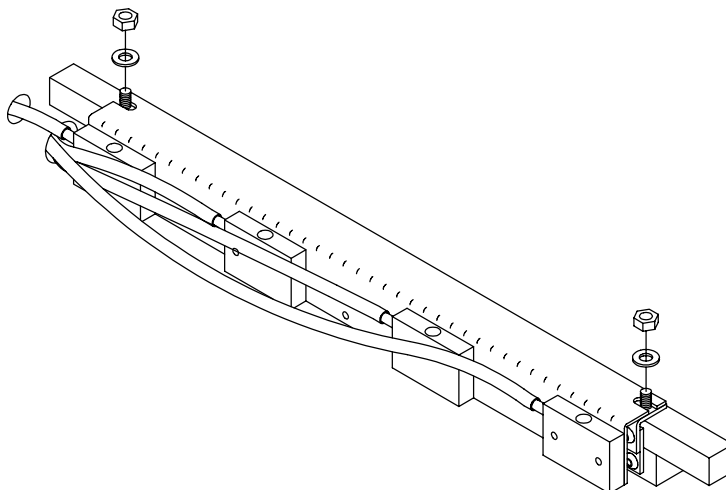


Diagram D



## INSTALLATION

**4**

Remove the upper screw from the OPS static eliminator mounting bracket as shown in Diagram A. Using the provided longer screw attach the PowderPro spray bar mounting bracket as shown in Diagram B. Repeat this procedure for the NOPS mounting bracket.

**5**

Install the new Powder Pro spray bar by first inserting the hose for the outside spray nozzle on the NOPS, through the small hole in the frame next to the tie bar that the spray head attaches to, as shown in Diagram C. The other three hoses will go through the hole under the tie bar. Pull the hoses through the holes until you can place the spray head onto the mounting brackets installed in the previous step. Be very careful not to kink the hoses as you pull them through the frame.

**6**

Using the provided hardware secure the spray head to the mounting brackets as shown in Diagram D.

**7**

Diagram E

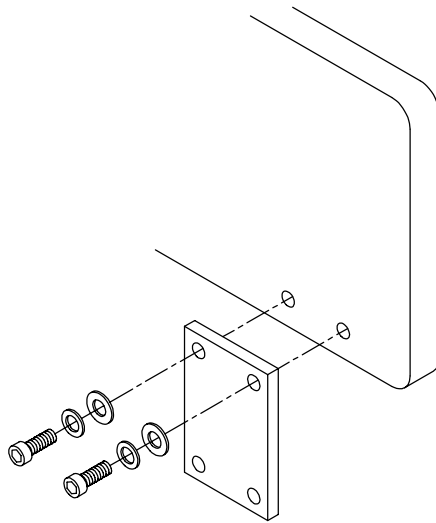


Diagram F

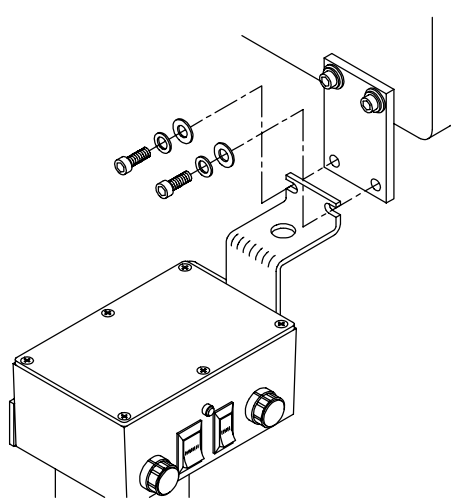
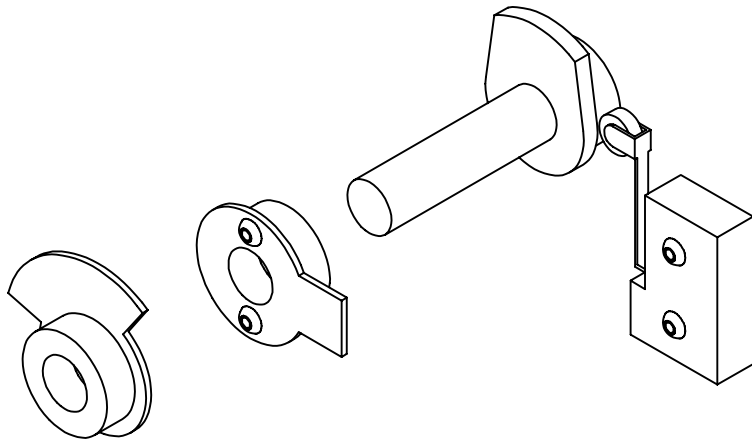


Diagram G



## INSTALLATION

7

Using the provided hardware attach the mounting plate to the frame where the original hopper assembly attached as shown in Diagram E.

8

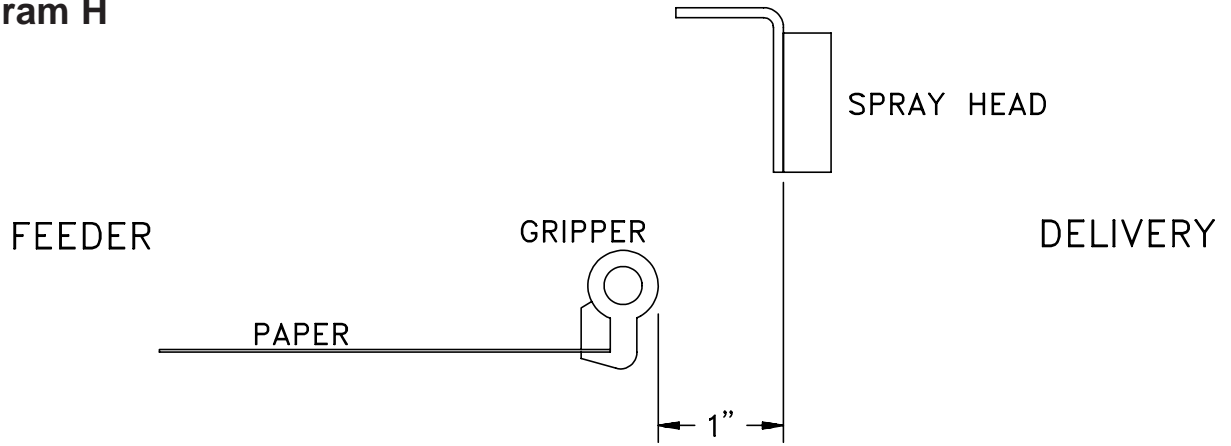
Using the provided hardware attach the PowderPro control box assembly to the mounting plate as shown in Diagram F.

9

Locate the spray timing cam on the NOPS end of the delivery cylinder shaft. The spray cam is the one behind the two other cams on the shaft as shown in Diagram G. Use liquid paper to mark the position of the two outside cams relative to the shaft. Remove all three cams. Install the new spray timing cam provided. Do not replace the two outside cams at this point. Cut the cable going to the spray timing switch. Remove the switch and replace it with the new one provided. Use one of the provided closed end splice connectors to terminate the end of the original cable removed from the switch.

9

Diagram H



## INSTALLATION

10

Rotate the press forward until one of the grippers is about 1" away from going under the spray head as shown in Diagram H. Rotate the new cam counterclockwise until it just engages the switch, listening for the "click" noise indicating that the switch is closed. Lock the cam to the shaft in this position. Replace the outside two cams paying attention to the location marks made before they were removed.

11

**NOTE: If the press was previously equipped with a Tempest® Hot Air Drying System then it may already have the relay installed in this step. Please verify and, if so, skip to step 12.**

Locate the blanket to impression solenoid below and to the right of the handwheel on the OPS. Attach the provided T-tap splice connectors to each of the two wires going into the solenoid. Use alcohol or press wash to clean an area on the press frame below the solenoid. Remove the backing from the two-sided tape attached to the bottom of the provided 200 VAC relay and attach the relay to the press. Connect the supplied short two-conductor cable assembly to position A & B on the relay and to the T-tap connectors.

12

Connect the supplied cable assembly to the four position connector on the cable coming out of the PowderPro® control box. Route the shorter of the two cables in this assembly to the spray timing switch installed in a previous step. Route the longer cable to the OPS and connect it to positions 4 & 7 on the relay installed in the previous step. Use the provided tie-wraps to secure all of the cables as necessary.

11



## INSTALLATION

**13**

Connect the hoses coming from the spray bar to the tubes coming out the end of the PowderPro control box. Make sure that the black hoses go to the lower two tubes coming out of the control box. When the covers to the press are reinstalled the hoses will exit from the underside of the delivery side cover.

**14**

Place the provided pump on the floor at the NOPS of the press. Connect the cable on the pump to the remaining connector on the PowderPro® control box. Connect the hose from the pump to the fitting on the control box.

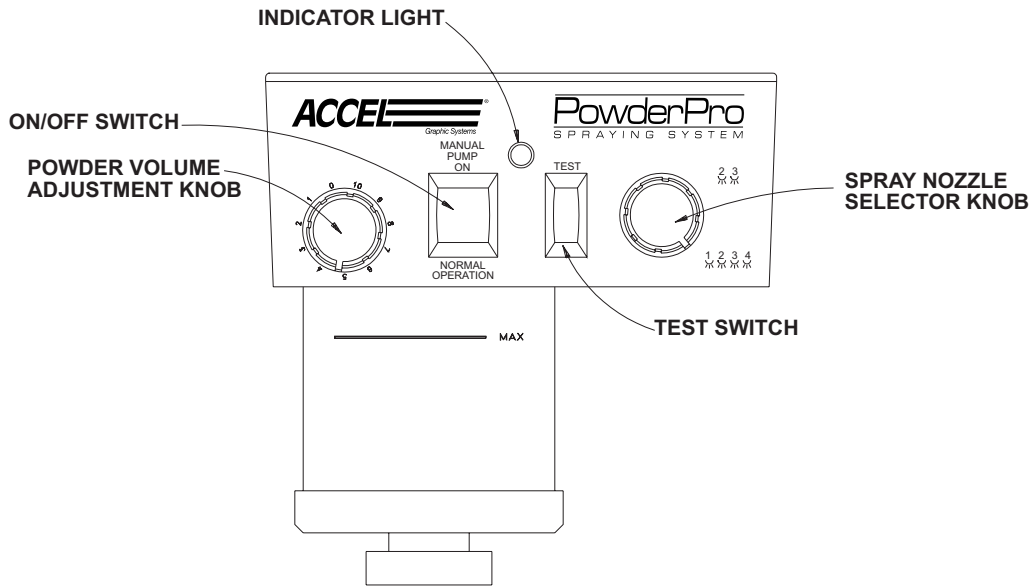
**15**

Replace all covers and guards that were removed from the press.

Plug the PowderPro® power cord into a standard 110 VAC wall plug. The unit will draw a maximum of 3 amps.

**YOU ARE NOW READY TO MAKE FINAL ADJUSTMENTS.**

# 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.

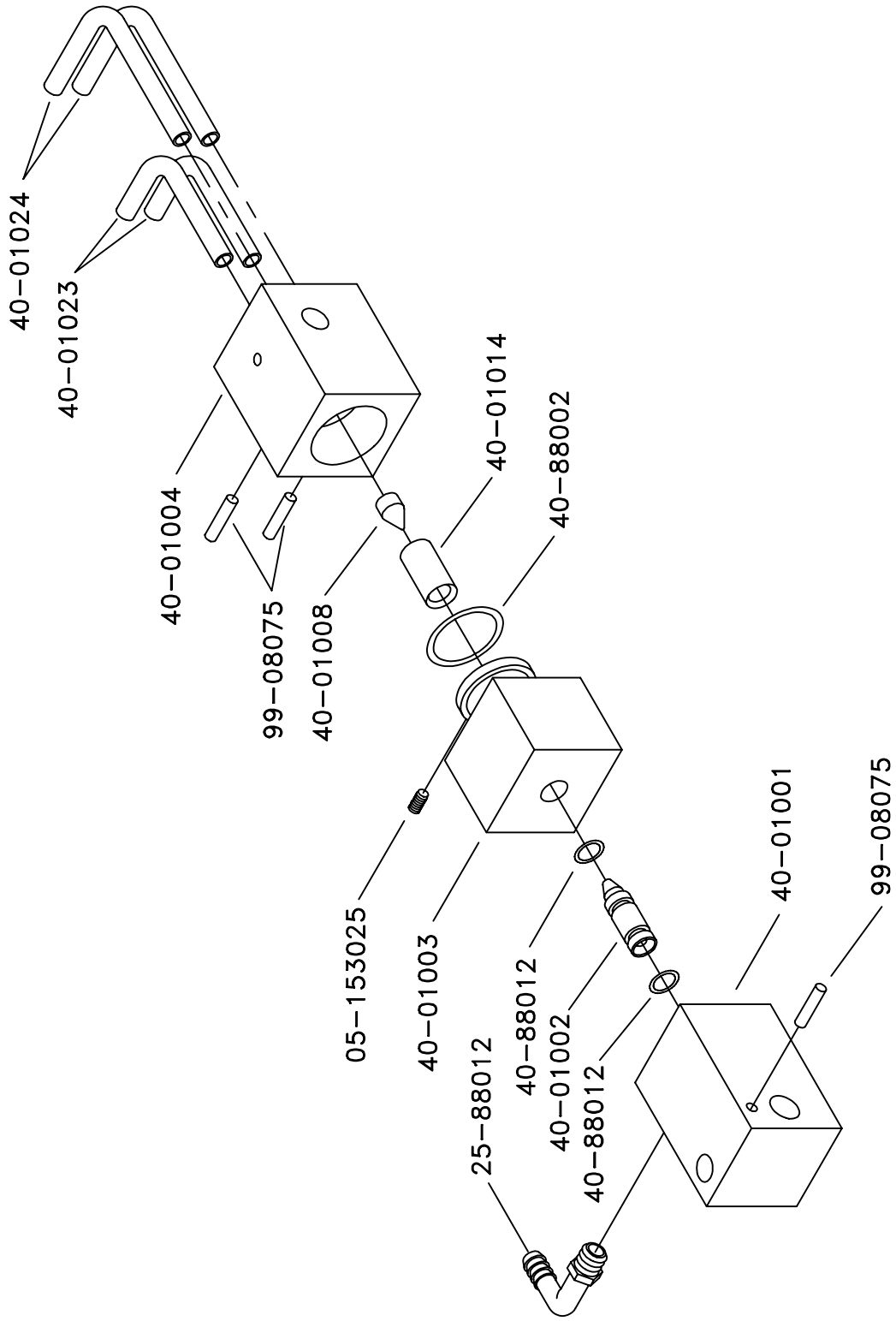
# OPERATION AND MAINTENANCE

## MAINTENANCE

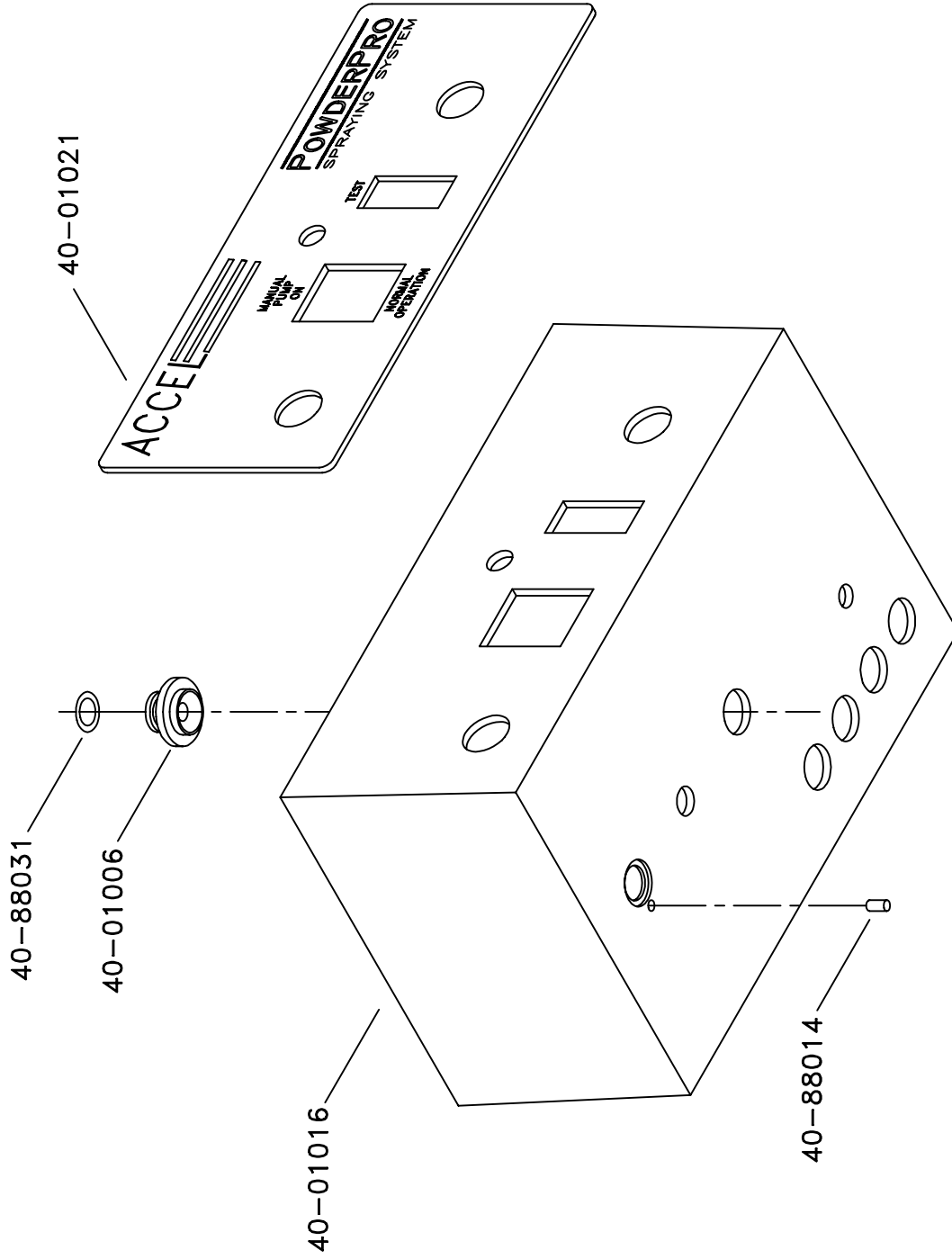
1. Clean the filter on the pump once a week, blowing it clean with compressed air.
2. Remove powder that may accumulate on the bottom of the spray nozzles daily.
3. Never use solvents containing oil when cleaning any part of the sprayer.
4. Use compressed air only if your compressor is equipped with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

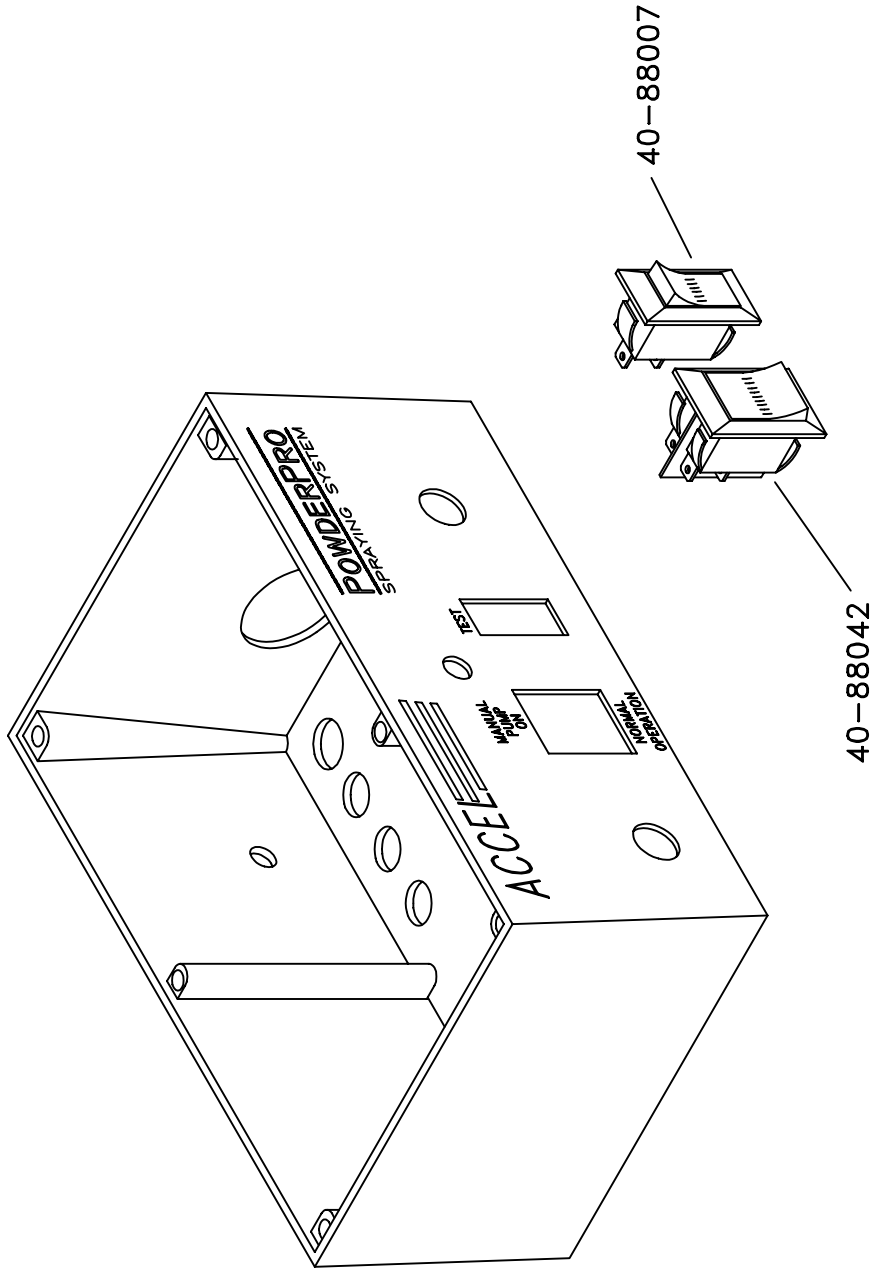
## OPERATION

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

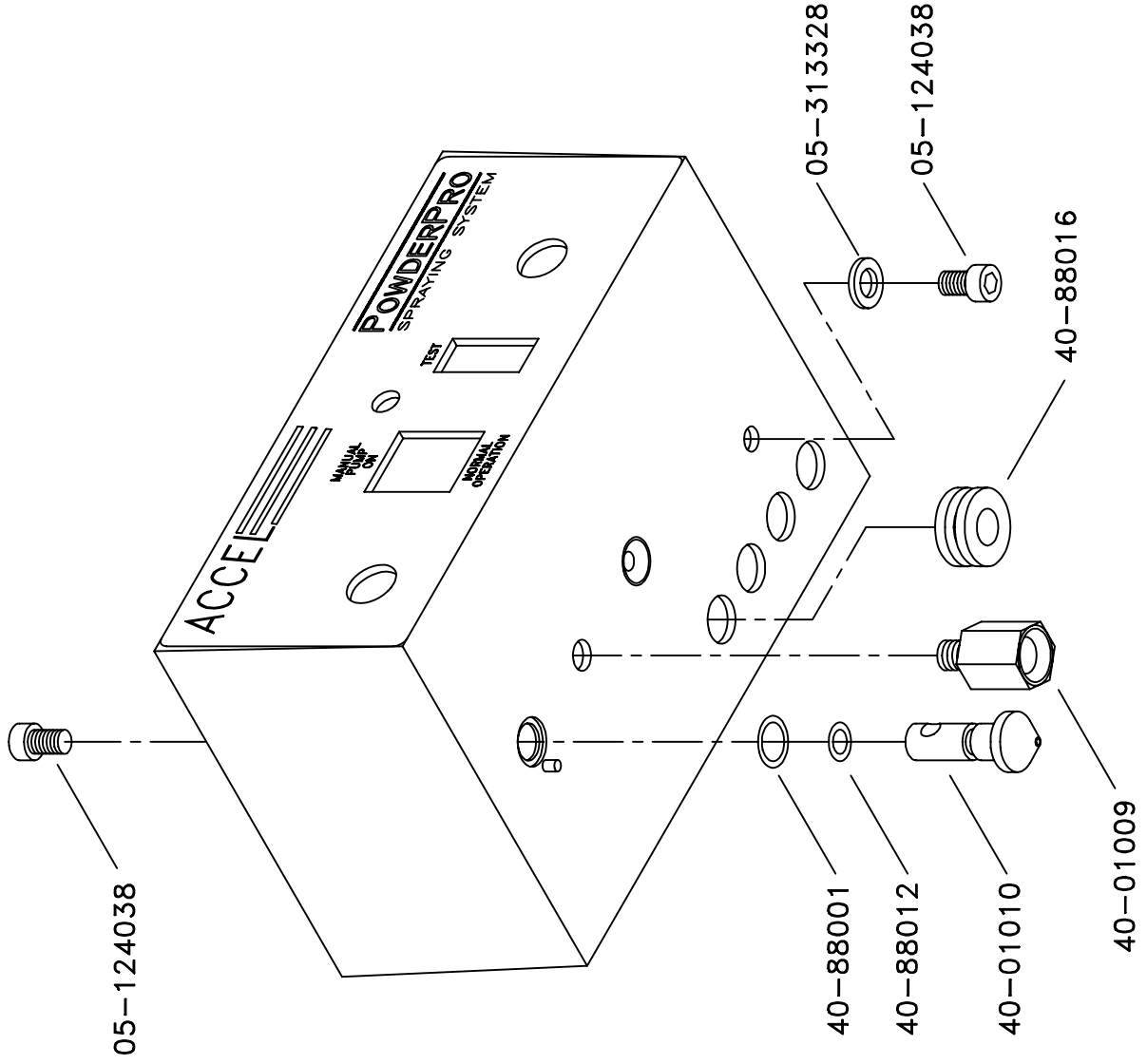


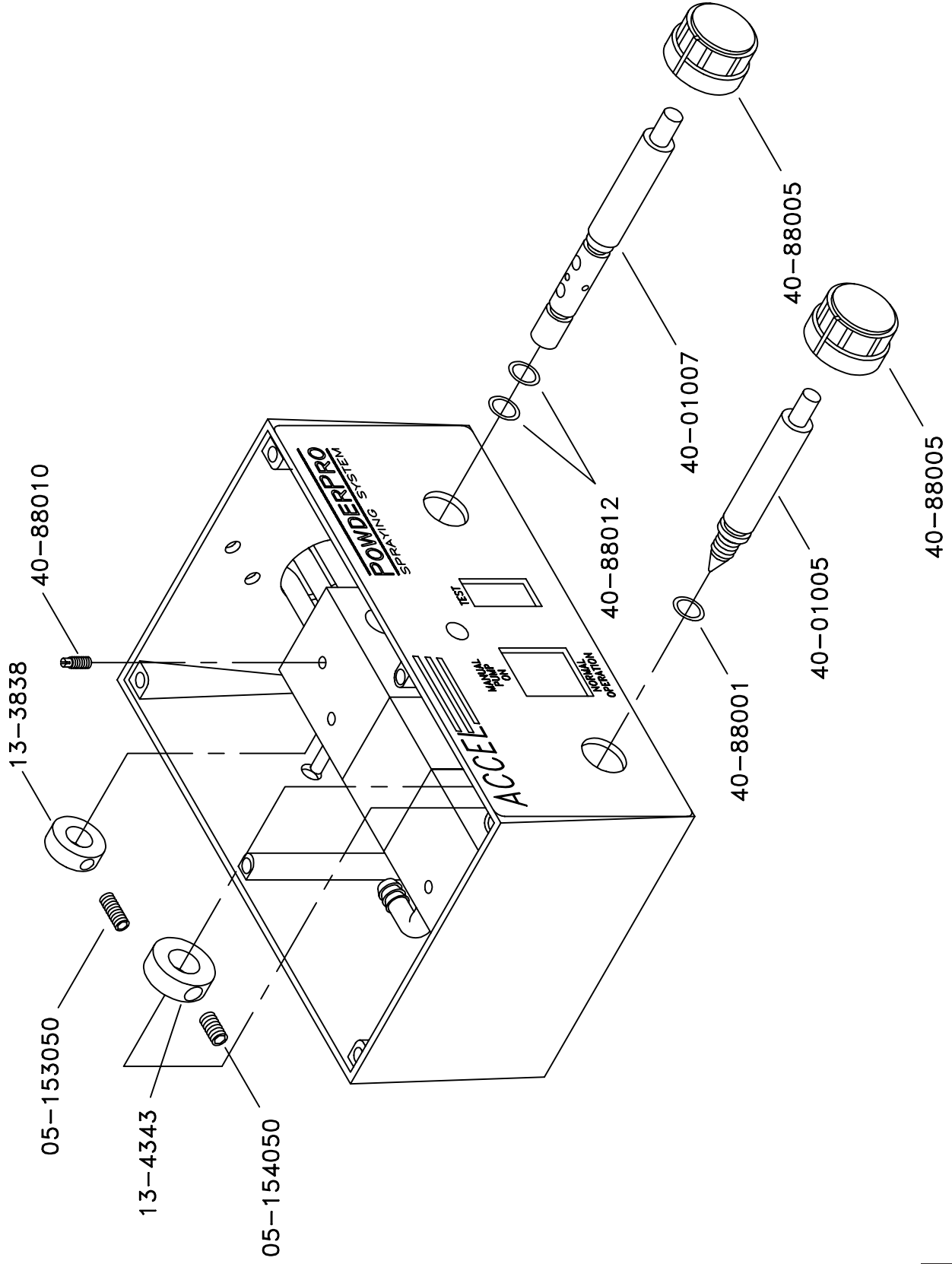
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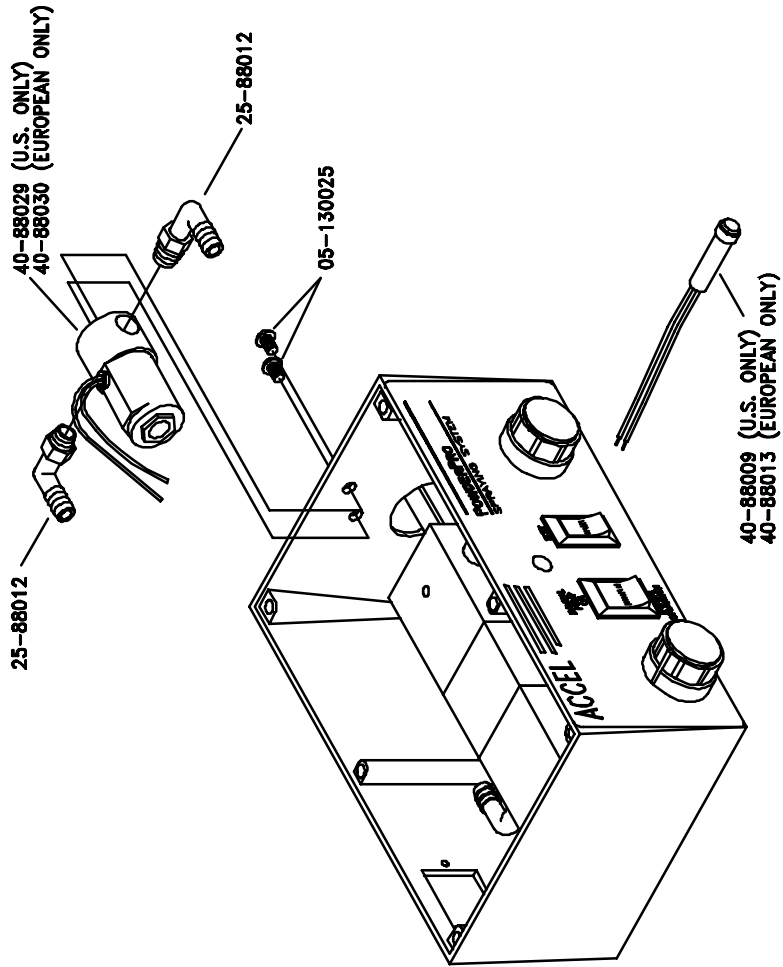




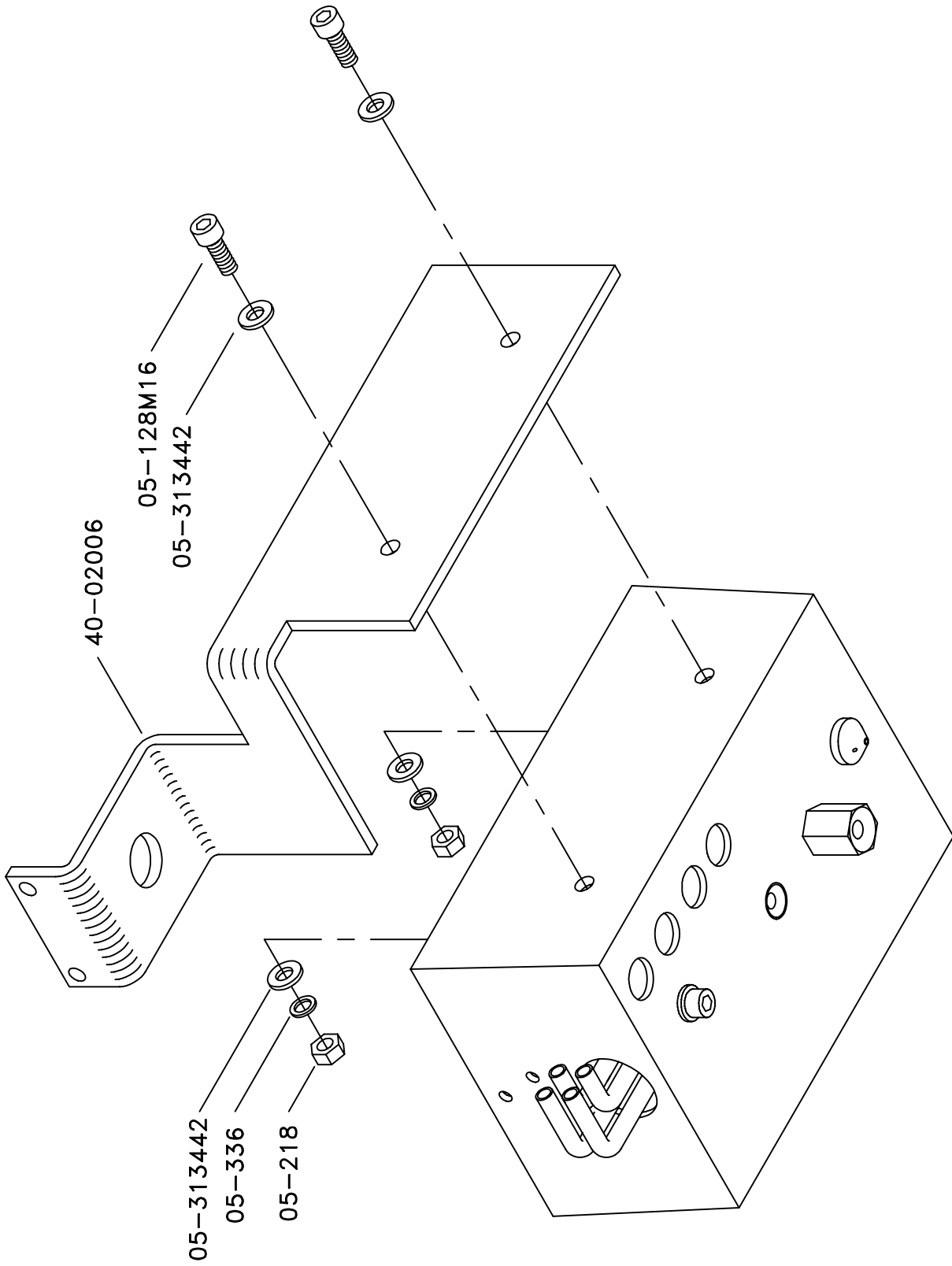
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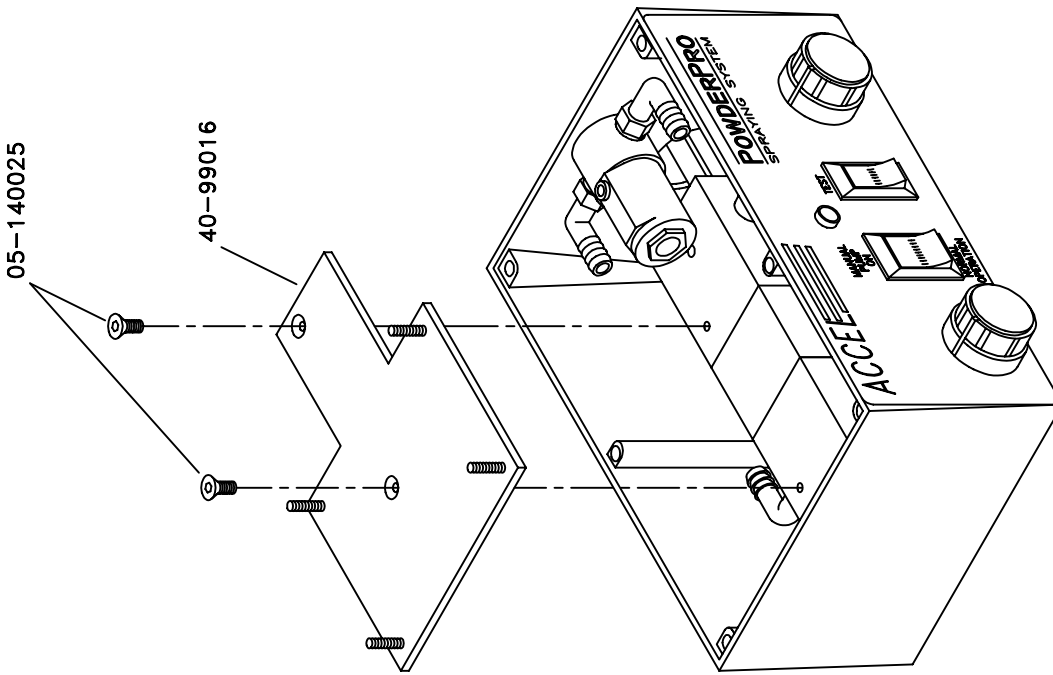


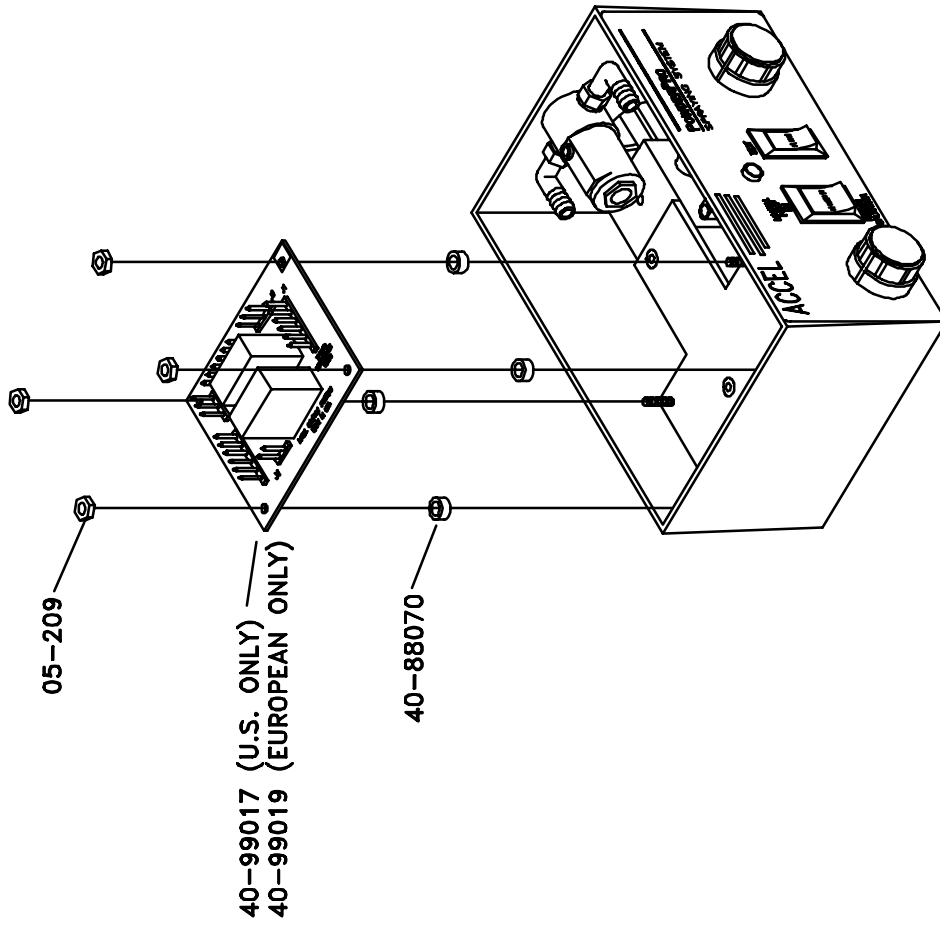


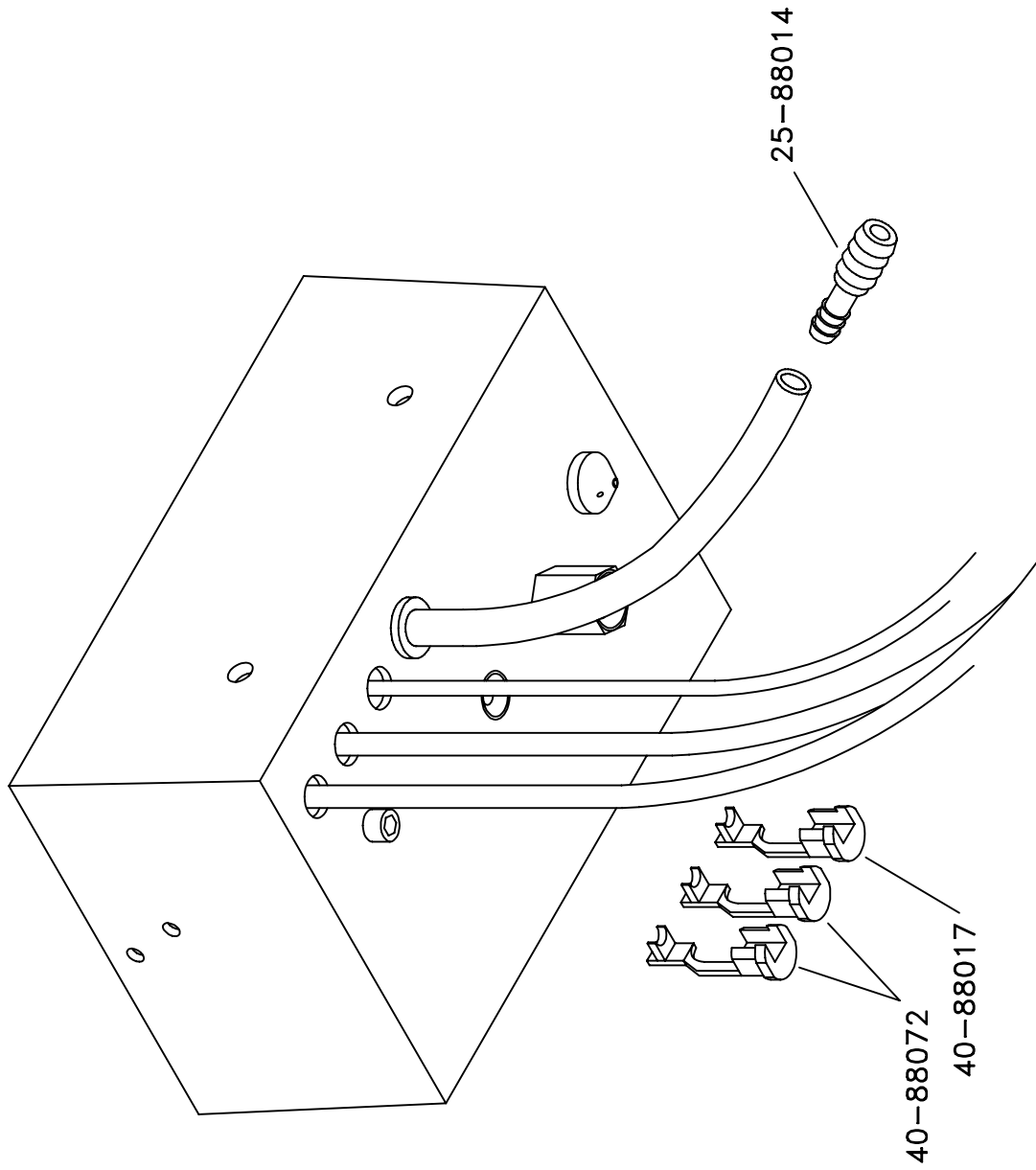


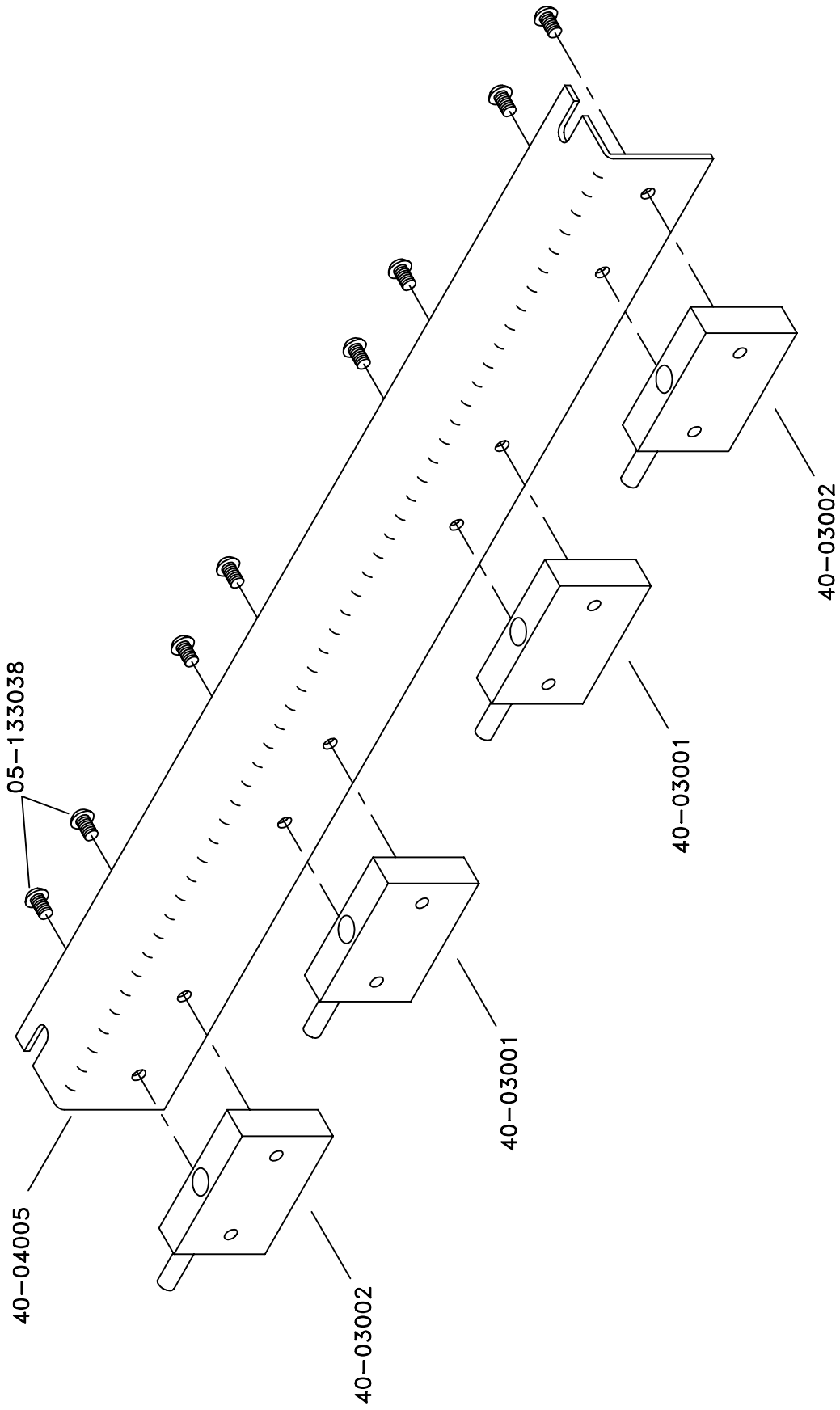
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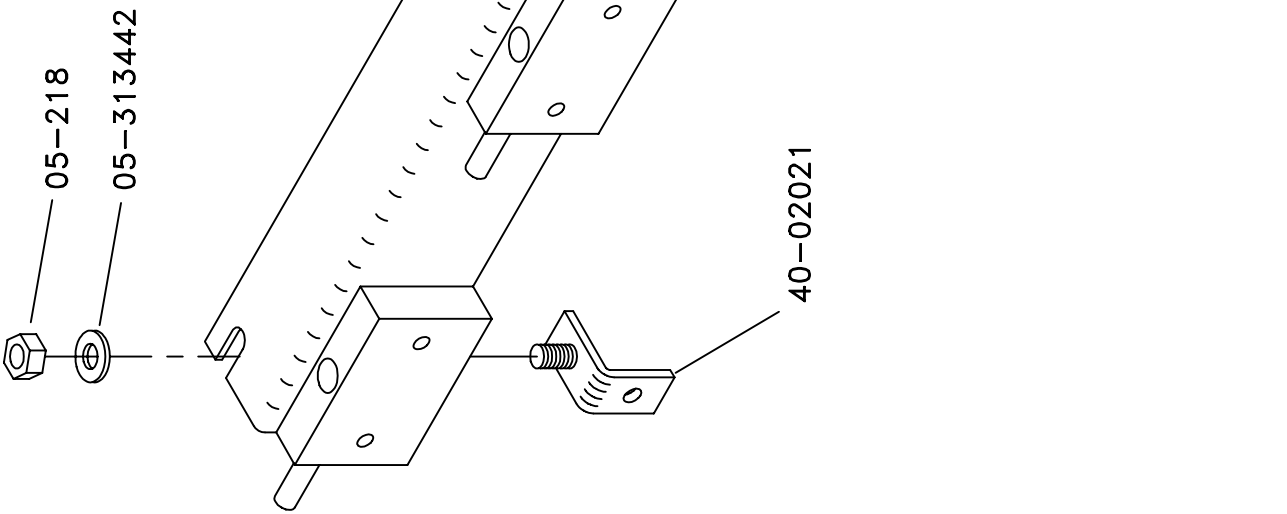


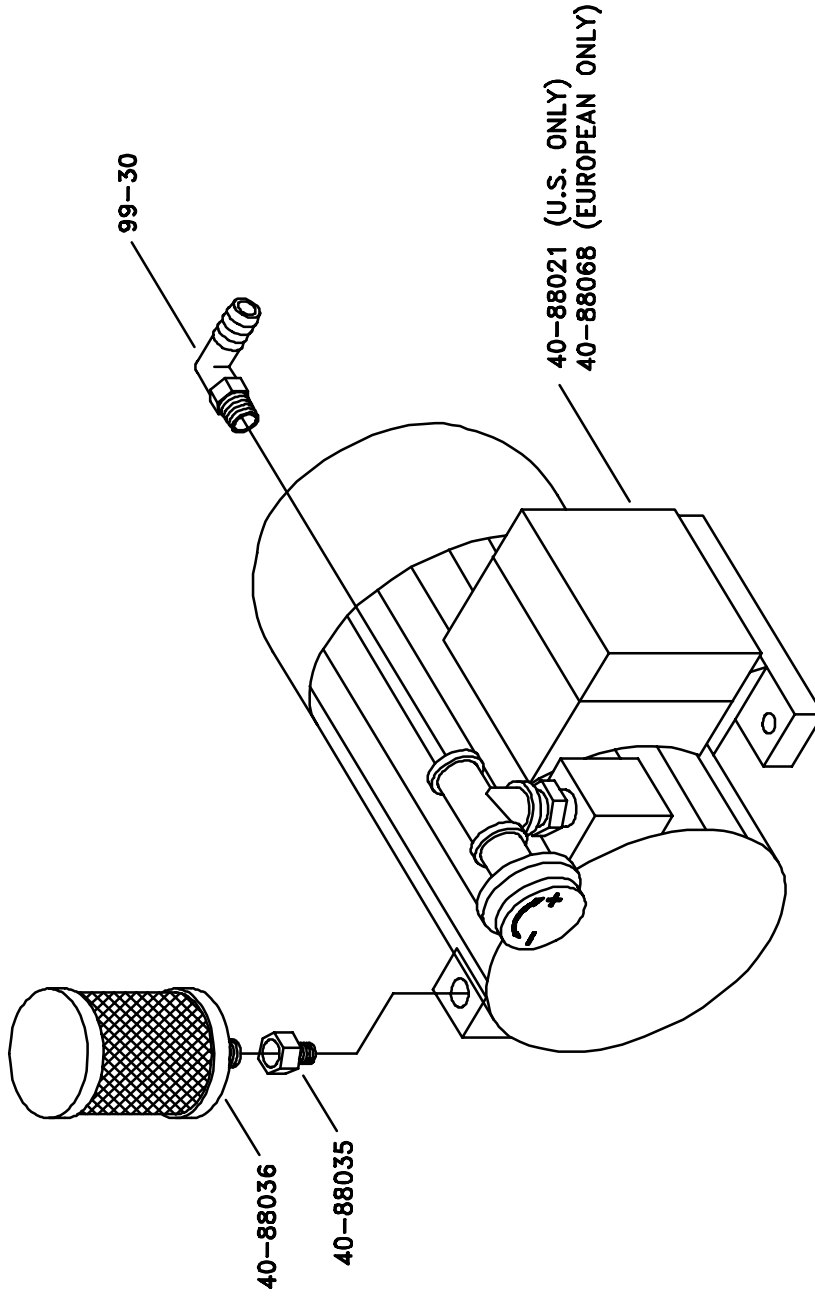




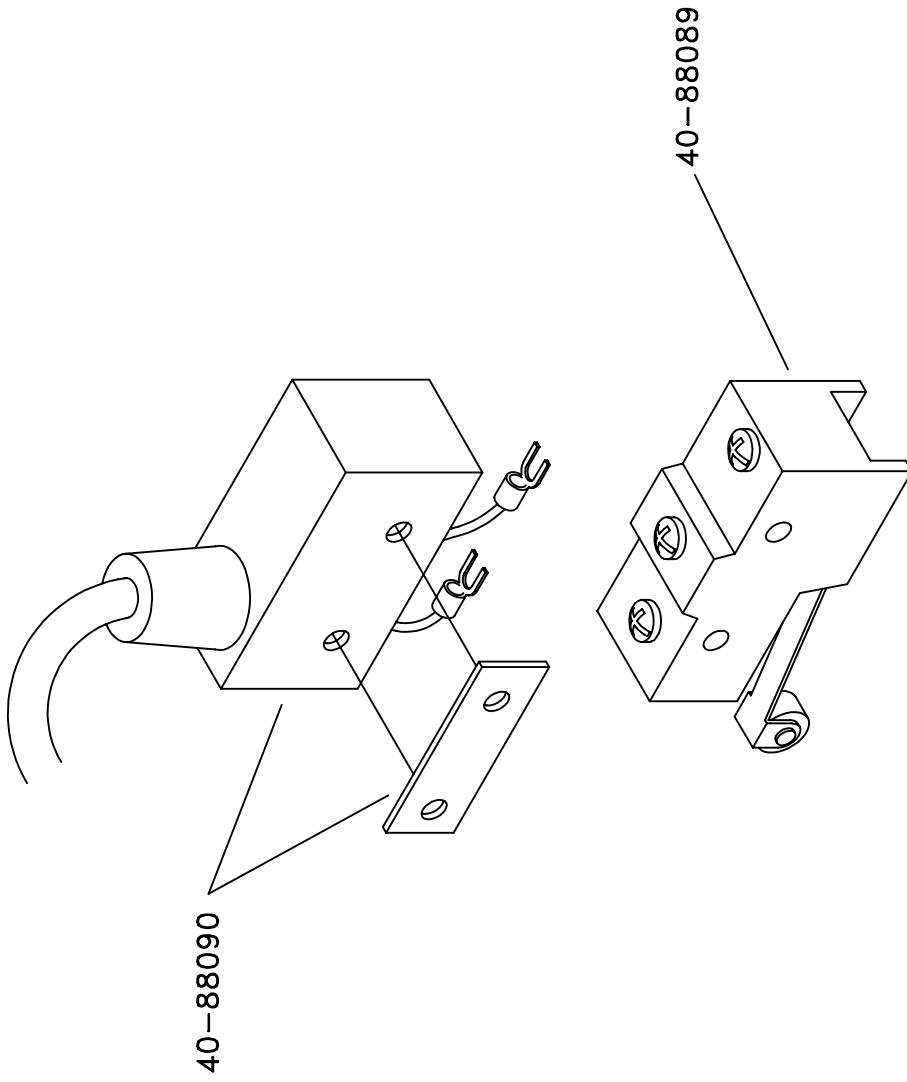


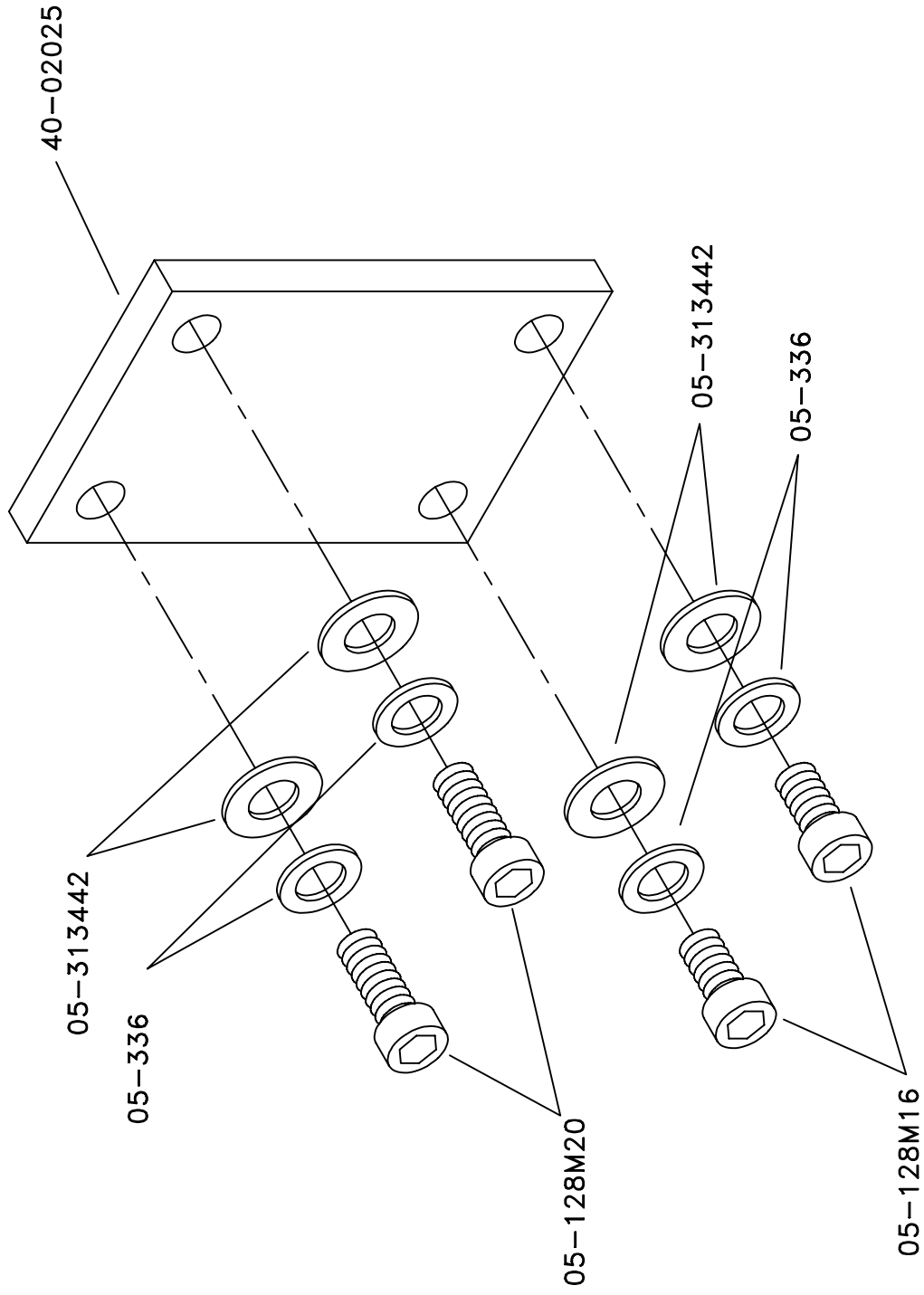
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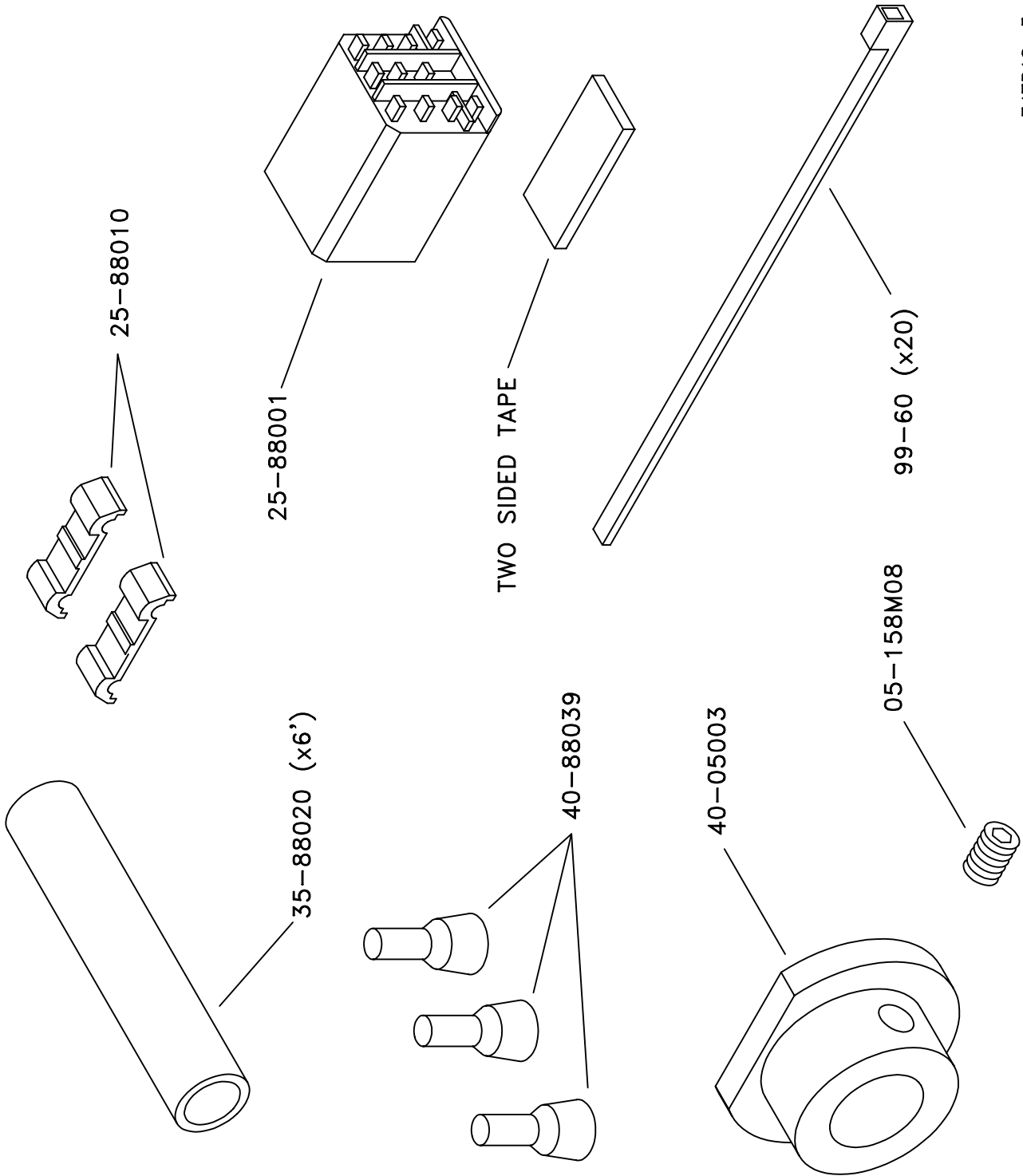


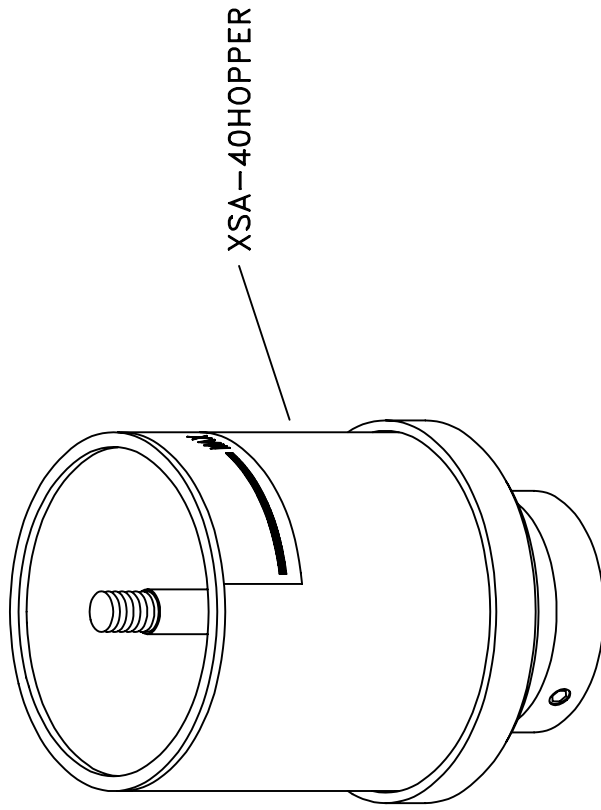


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