

# **PowderPro<sup>®</sup> Spray System**

## **Installation Instructions**

### **Heidelberg Quickmaster 46**

**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  
(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

**INSTALLATION NOTE:** These instructions are written to replace the original powder system (Airtech). If the press does not currently have a spray system then disregard any references to the original sprayer. If this PowderPro® spray system is being installed in conjunction with a Accel's Tempest® Hot Air Dryer you need to install the Tempest® first.

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2

Disconnect the electrical power to the press. Remove the NOPS cover and the OPS cover necessary to access the electrical cabinet.

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3

Remove the entire original spray system. No parts from the original sprayer will be used. Remove all of the original wires and cables from their origination source on the press.

**NOTE:** If the press is also equipped with a Tempest® Dryer then skip to step 6.

5

Diagram A

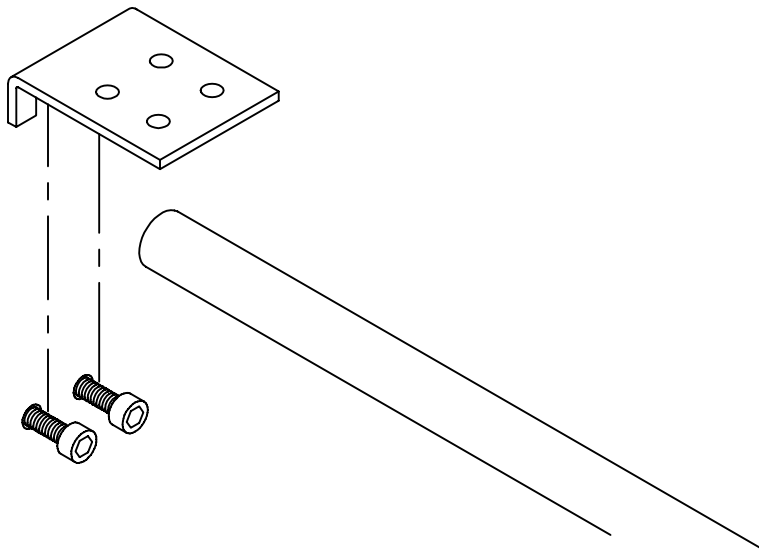


Diagram B

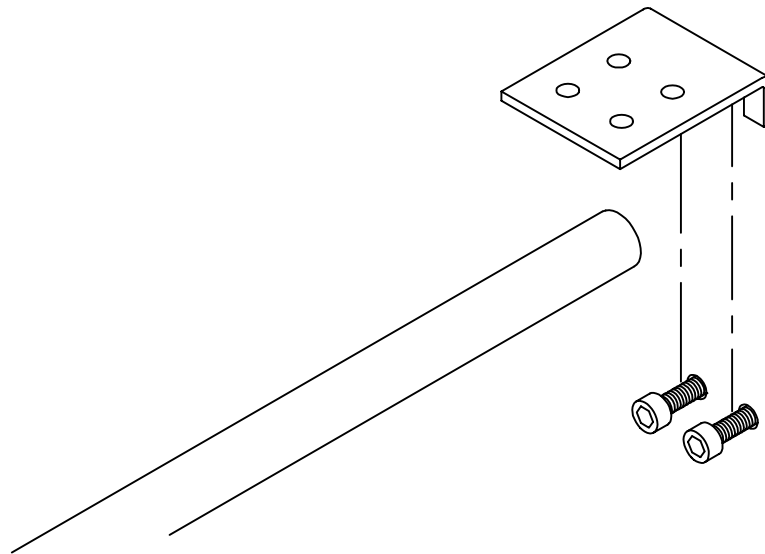
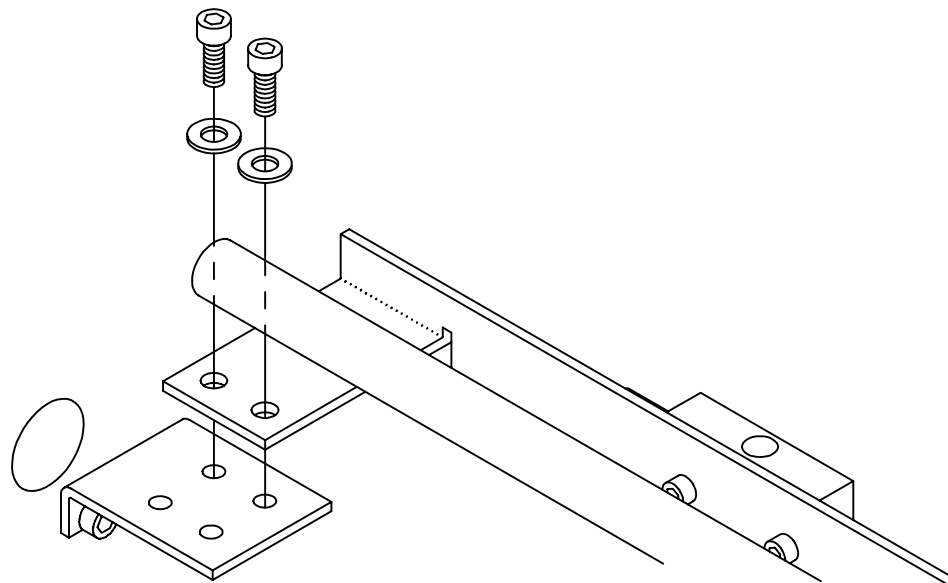


Diagram C



## INSTALLATION

4

Using the provided hardware install the NOPS PowderPro® mounting bracket as shown in diagram A. Start by loosely installing the bolts into the same holes in the frame that the original sprayer brackets used. Slip the brackets over the bolts and tighten.

5

Repeat the above procedure for the OPS PowderPro® mounting bracket as shown in diagram B.

6

Set the PowderPro® spray head assembly on the delivery. Insert the spray hoses through the round hole in the NOPS press frame directly above the mounting bracket installed in step 4. Attach the spray head assembly to the mounting brackets using the provided hardware as shown in diagram C (NOPS shown). Note how the mounting flange portion of the spray head goes under the shaft from the feeder side before it bolts to the mounting brackets. The hoses go over the shaft.

**NOTE: If the press is also equipped with a Tempest® then the PowderPro® spray head bolts to the Tempest® mounting brackets.**

7

Diagram D

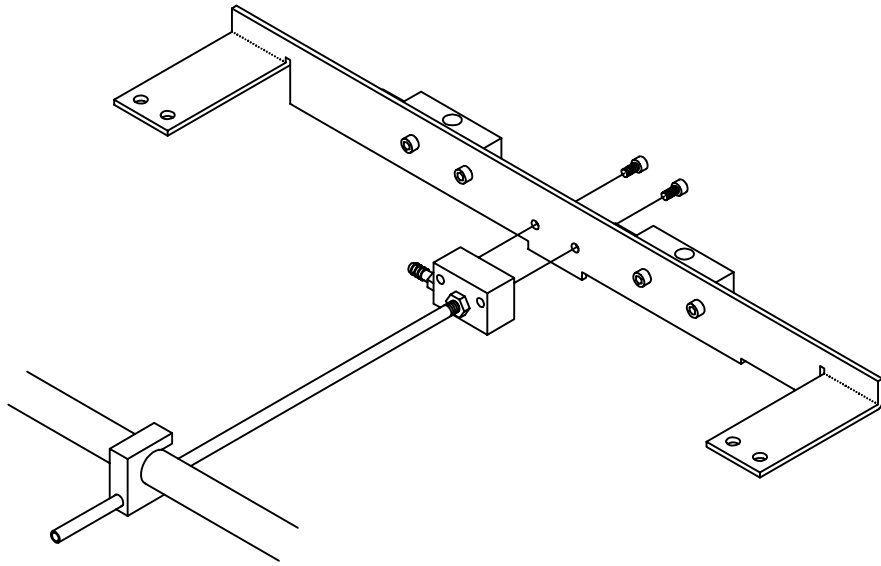
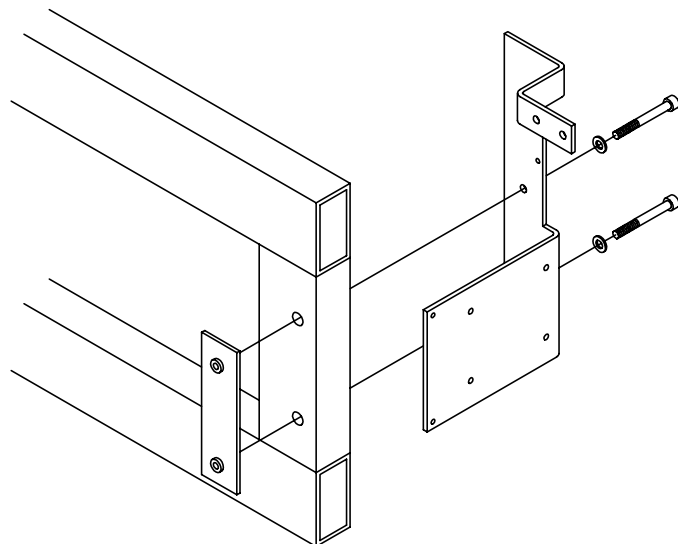


Diagram E



## INSTALLATION

7

Attach the provided blow down bar assembly to the spray head using the provided hardware as shown in diagram D. Loosen the locknut and reposition the tube so that the holes are pointing straight down. Attach the provided clear hose to the fitting on the blow down bar and route it through the same hole in the NOPS frame that the powder spray hoses pass through. Secure the end of the tube to the pile lift shaft using the provided support bracket as shown in diagram D. Secure the hose as necessary within the delivery to prevent any contact with the gripper bars.

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8

Route both the spray hoses and blow down hose on the outside of the press frame so that when the side cover is reinstalled the hoses will pass through the notch in the bottom of delivery section of the cover. Use the provided tie-wraps to secure the hoses as necessary to clear any moving parts.

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9

Using the provided hardware install the control box/pump mounting bracket to the press as shown in diagram E using the same holes in the press frame that the original sprayer used.

9

Diagram F

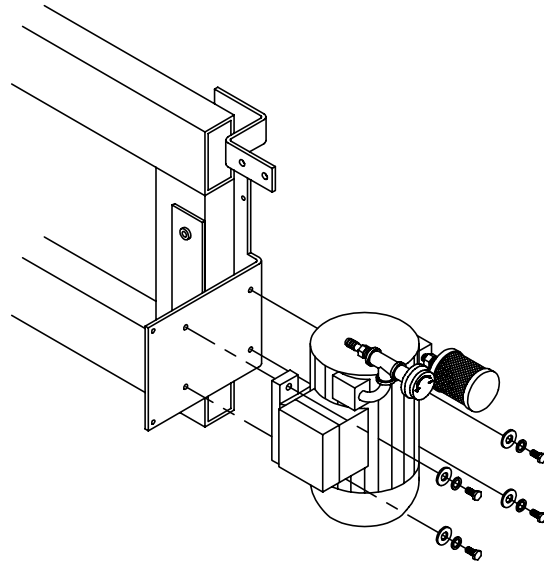
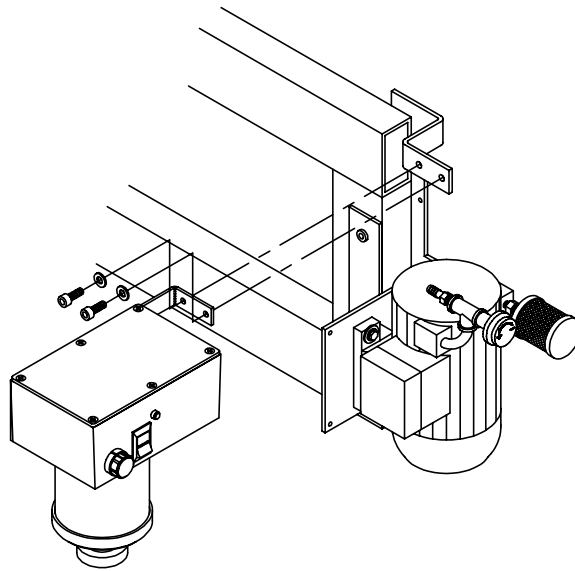


Diagram G



## INSTALLATION

**10**

Mount the supplied pump to the mounting bracket installed in the previous step using the provided hardware as shown in diagram F.

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**11**

Attach the PowderPro® control box to the mounting bracket using the provided hardware as shown in diagram G.

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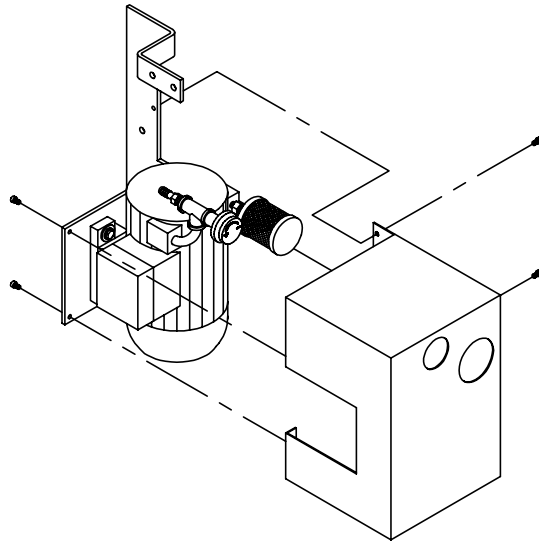
**12**

Connect the short hose coming out of the bottom of the PowderPro® control box to the barbed fitting on the pump.

**11**

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Diagram H



## INSTALLATION

**13**

Plug the cable from the pump into the appropriate mating receptacle coming out of the PowderPro® control box.

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**14**

Attach the pump cover to the mounting bracket using the provided hardware as shown in diagram H.

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**15**

Plug the provided short two conductor cable into the appropriate mating receptacle coming out of the PowderPro® control box. Route this cable along with the spray hoses up to the X15 terminal block on the NOPS. Secure the red wire into the X15-2 terminal and the black wire to the X15-1 terminal. Secure the cable to the hoses with the provided tie-wraps.



## INSTALLATION

**16**

Plug the provided long three conductor cable into the appropriate mating receptacle coming out of the bottom of the PowderPro® control box. Route the cable along with the other cable and down through the bottom of the press to the OPS and into the press electrical cabinet. Locate the X1 terminal strip on the HVK printed circuit board. Insert the white wire into position 17, and the black wire into position 22 on the terminal strip. Insert the red wire (ground) into an open position on the yellow terminal block on the same circuit board. Secure the cable as necessary with the provided tie-wraps.

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**17**

Briefly restore the power to the press. Select the “on” position of the switch on the PowderPro® control box. Activate “special function 4” on the press. At this point the pump should be on and the indicator light on the PowderPro® control box should be illuminated. When the indicator light is on the solenoid in the PowderPro® control box will be activated. If the light is not on then reverse the wires that were attached to the X15 terminal block in a previous step. If the pump does not come on then check the connections in the press electrical cabinet.

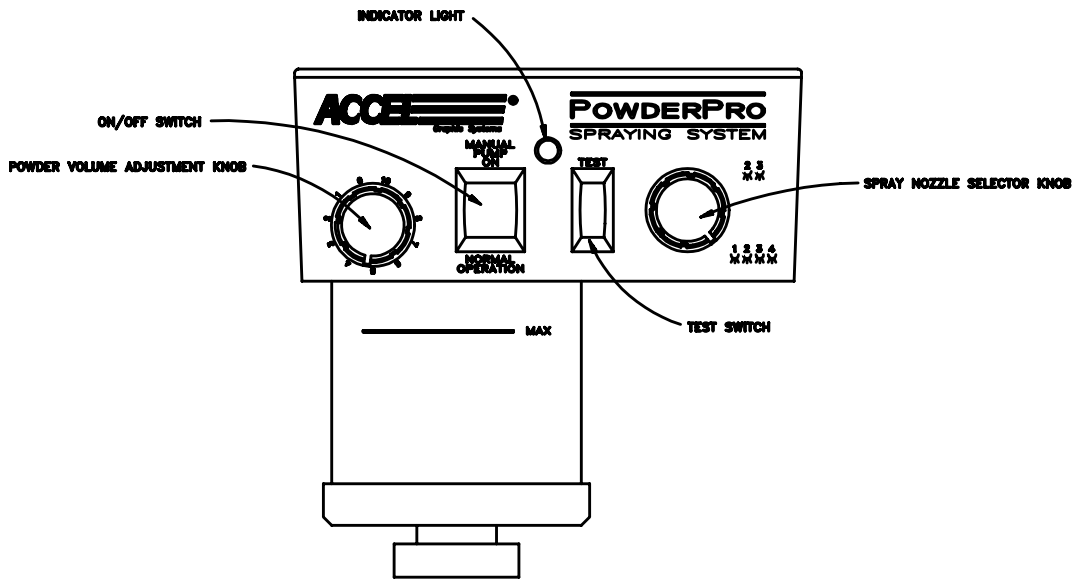
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**18**

Replace the covers on the press. Be careful with the hoses and cables which must pass through the notch in the bottom of the delivery section of the NOPS cover. Use the provided stick on zip-tie mount to secure the cables to the press near the hole for easier cover reinstallation.

**15**

# OPERATION & 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 & 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.

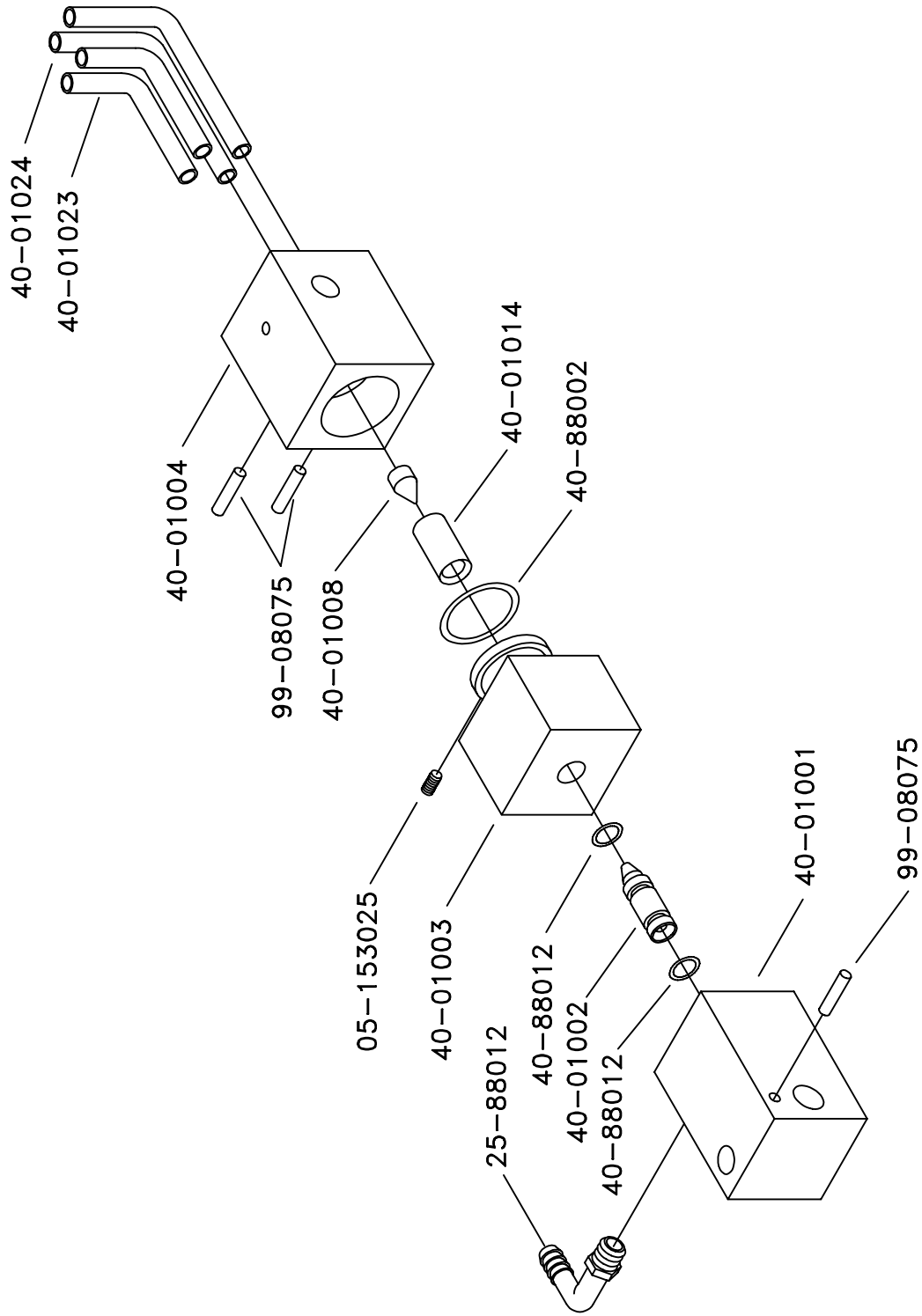
## **OPERATION & MAINTENANCE**

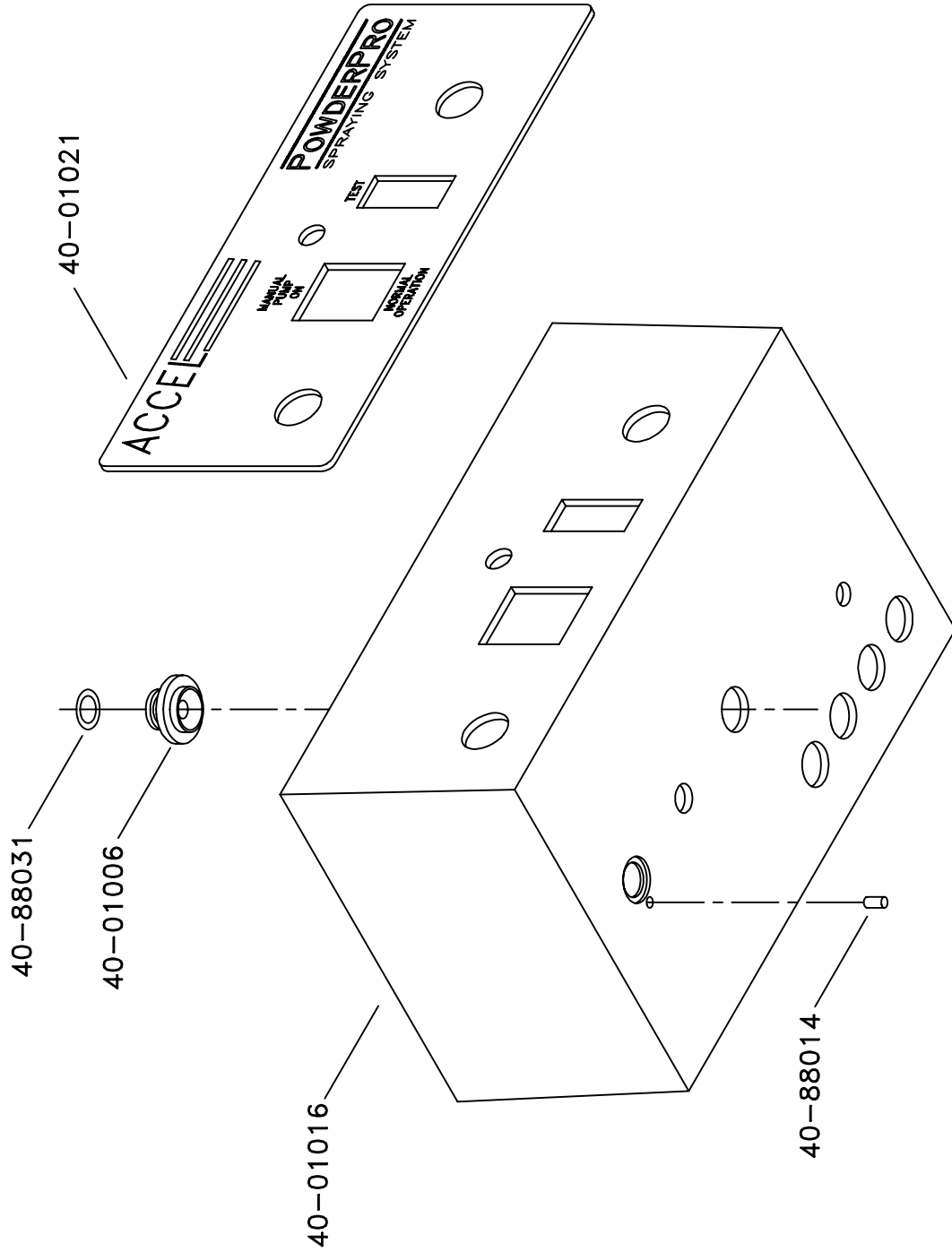
### **MAINTENANCE**

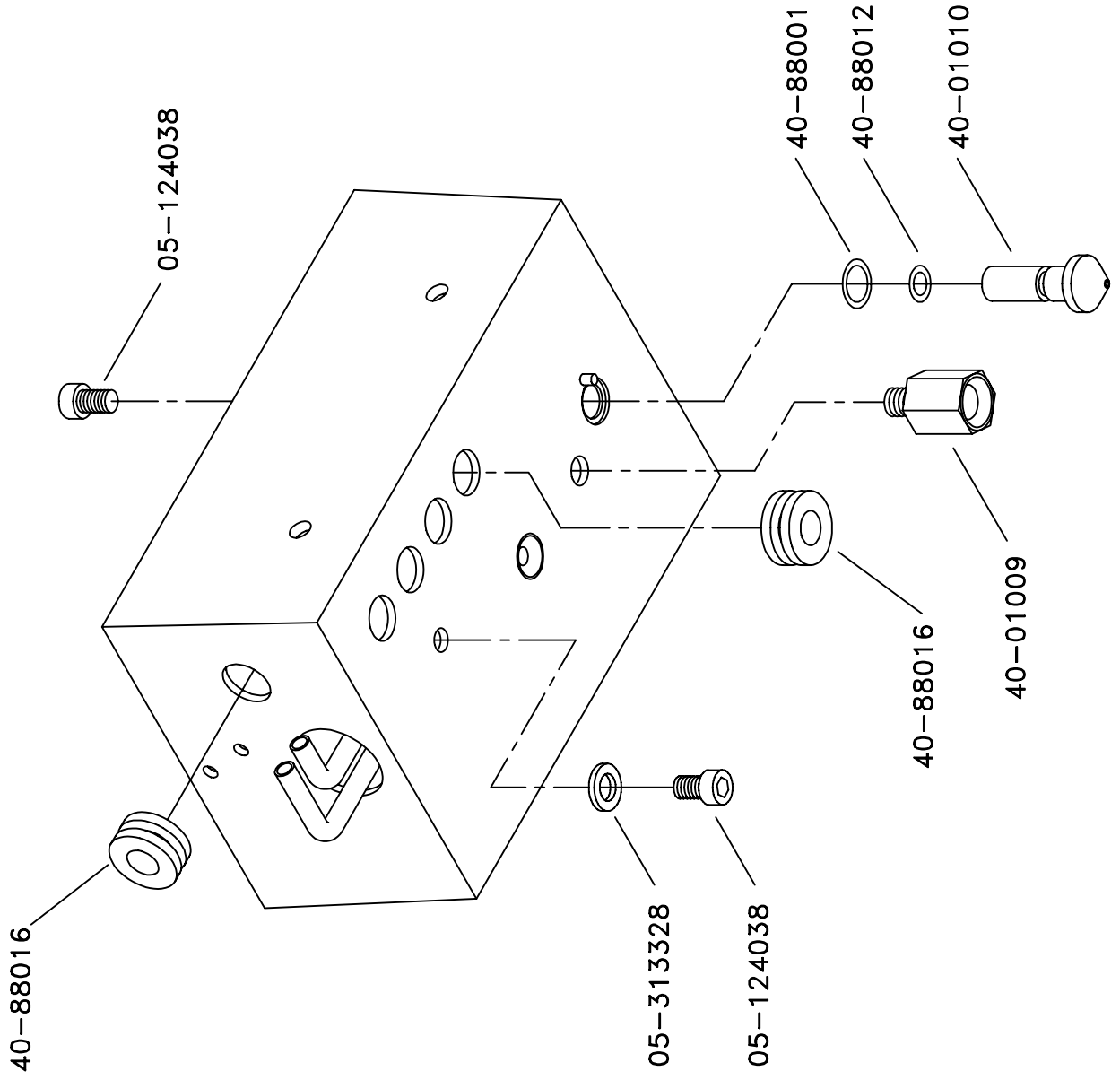
1. Clean the filter on the pump once a week, blowing it clean with compressed air.
2. Remove powder that may accumulate on the bottom of the spray nozzles daily.
3. Never use solvents containing oil when cleaning any part of the sprayer.
4. Use compressed air only if your compressor is equipped with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

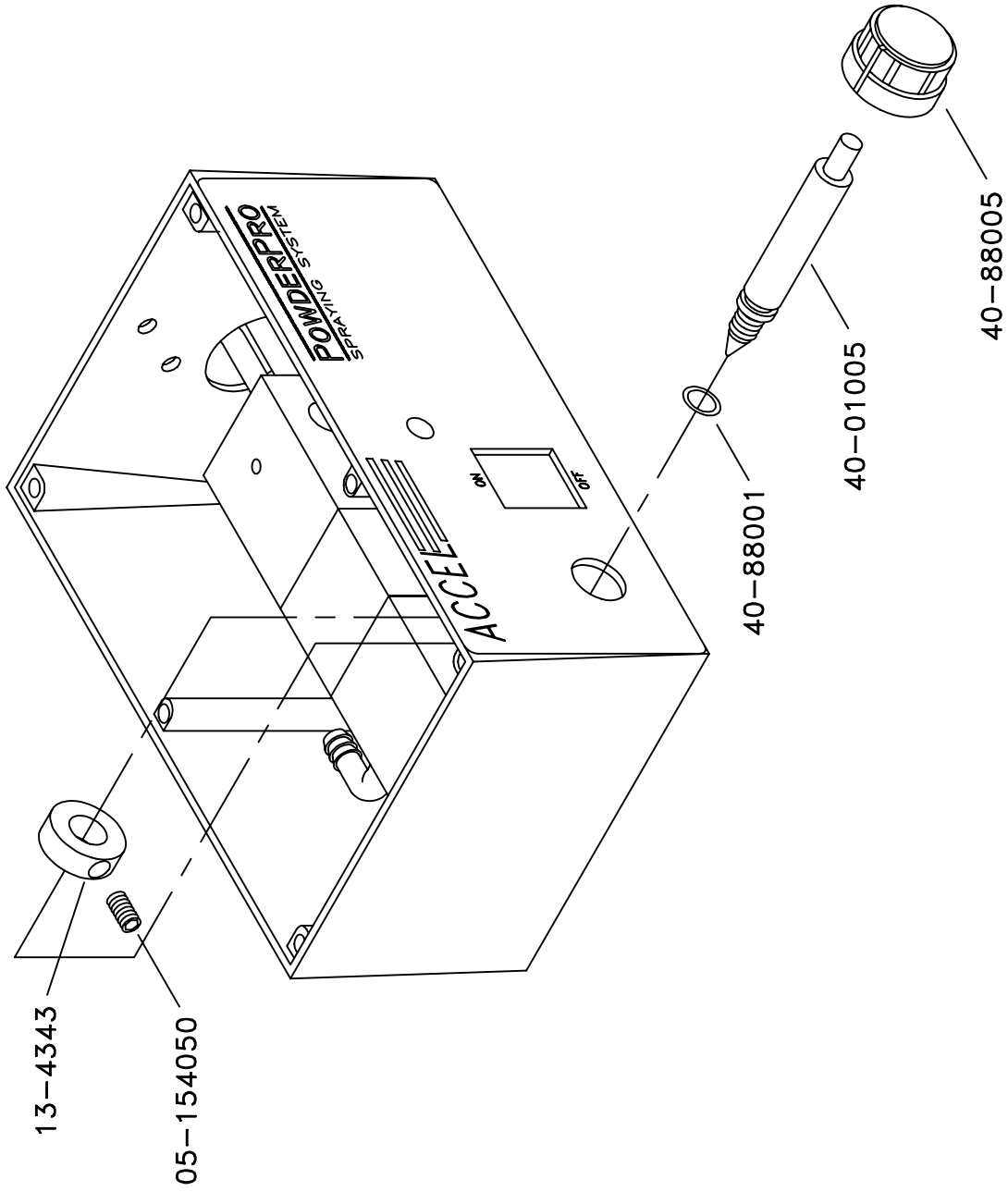
### **OPERATION**

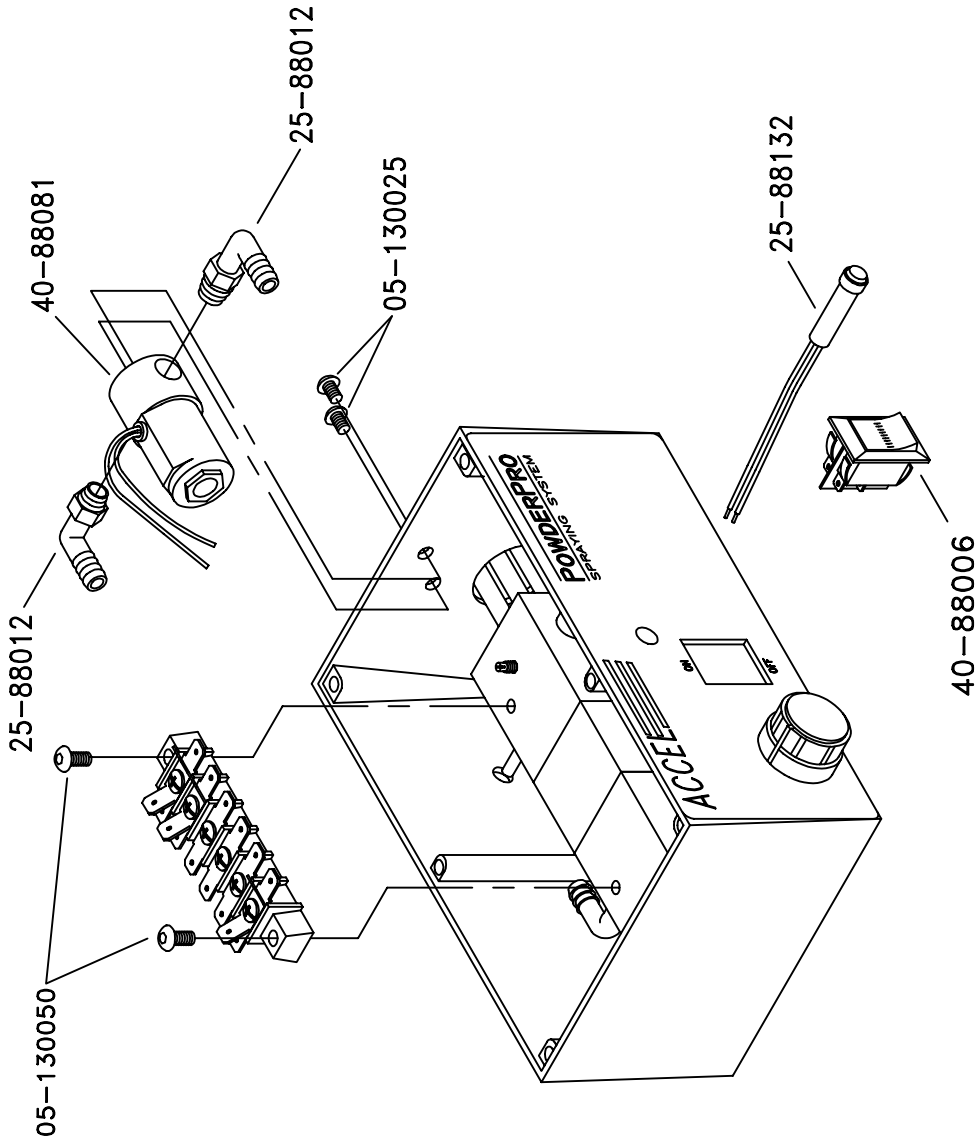
1. Fill the powder hopper with an intermediate grain (20-25) powder (available from Accel) up to the "MAX" line on the hopper.
2. Place the On\Off switch to the "Normal Operation" position.
3. Consider the sheet width and if necessary change the spray nozzle selector knob. When switching from four to 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

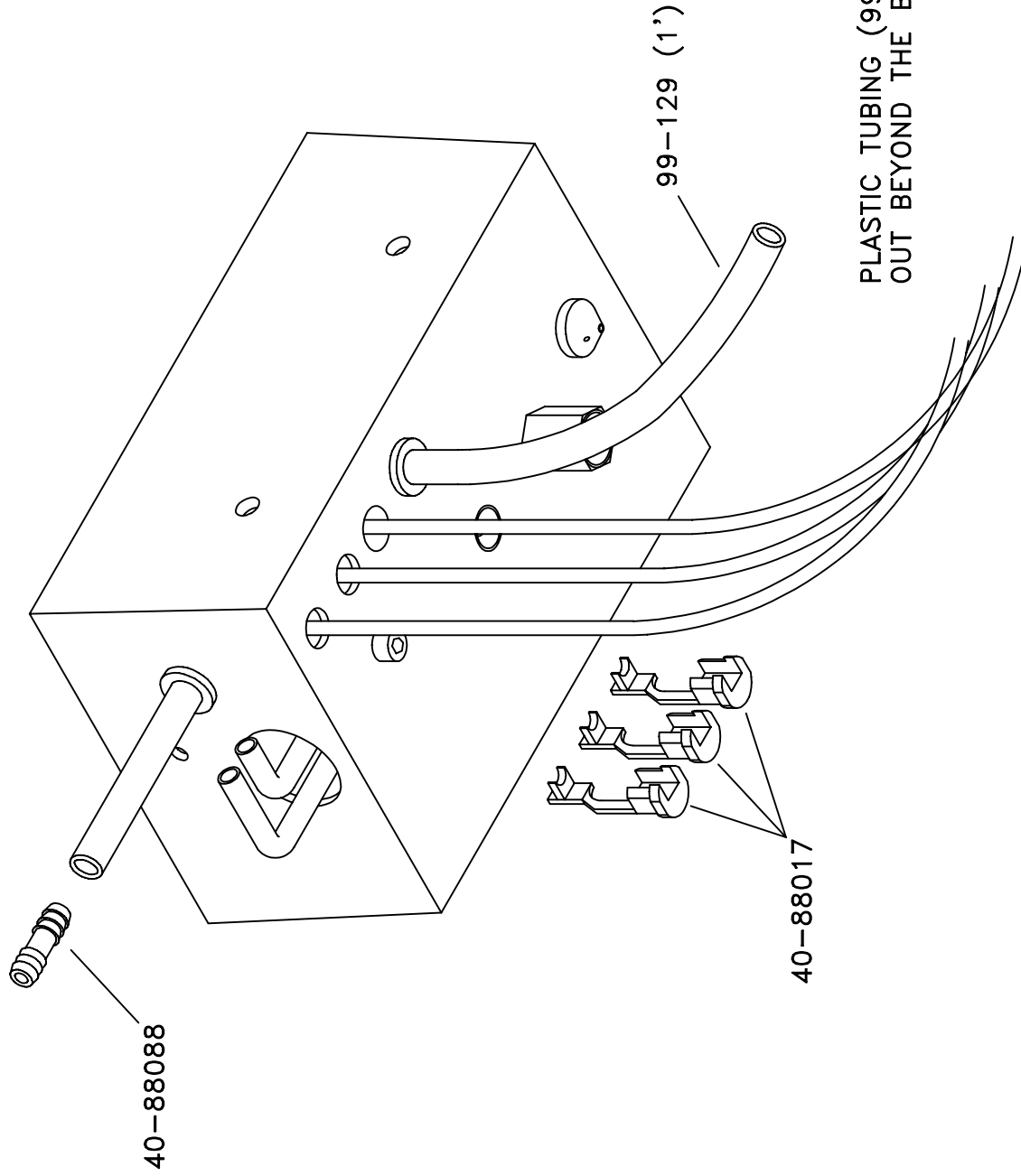




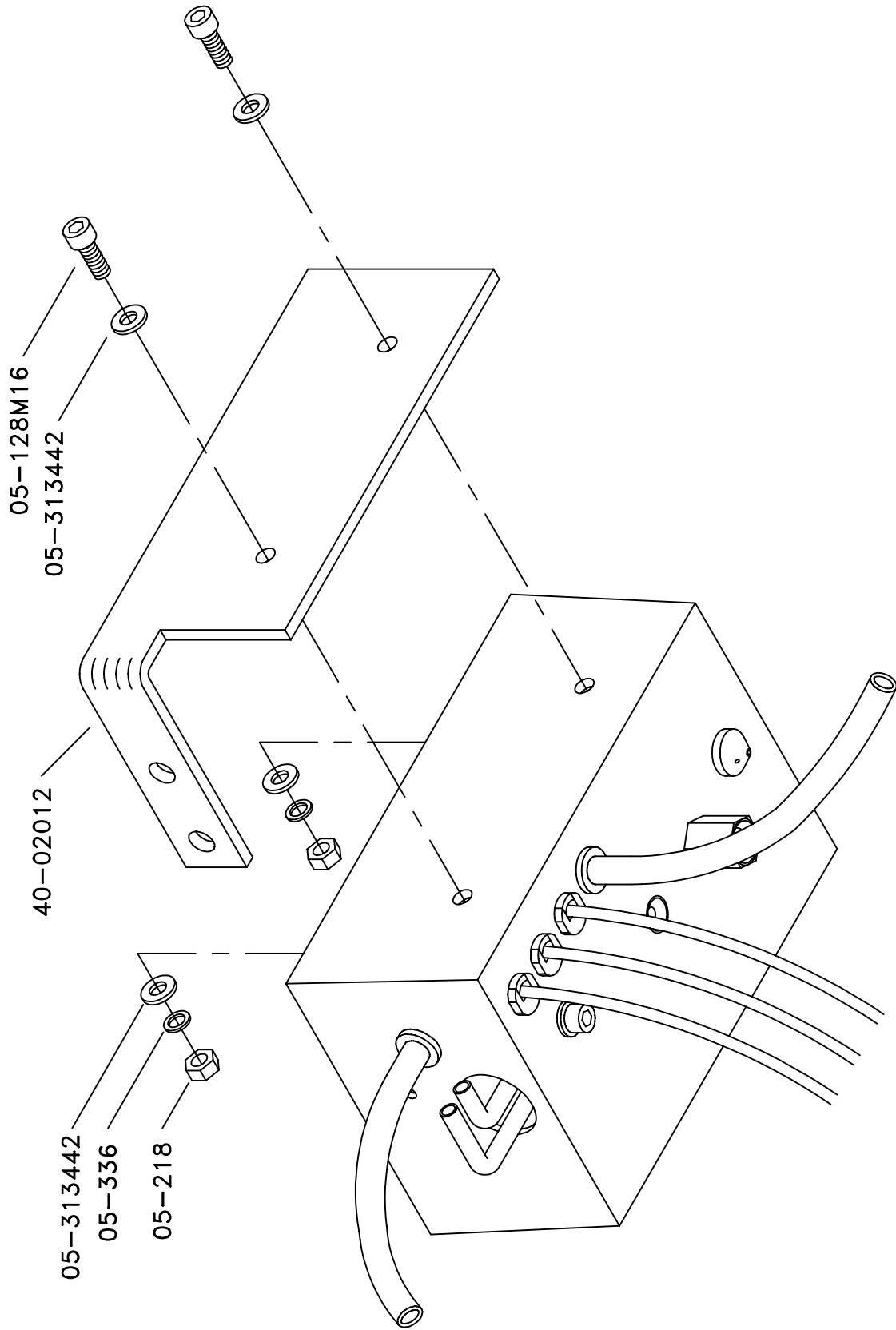


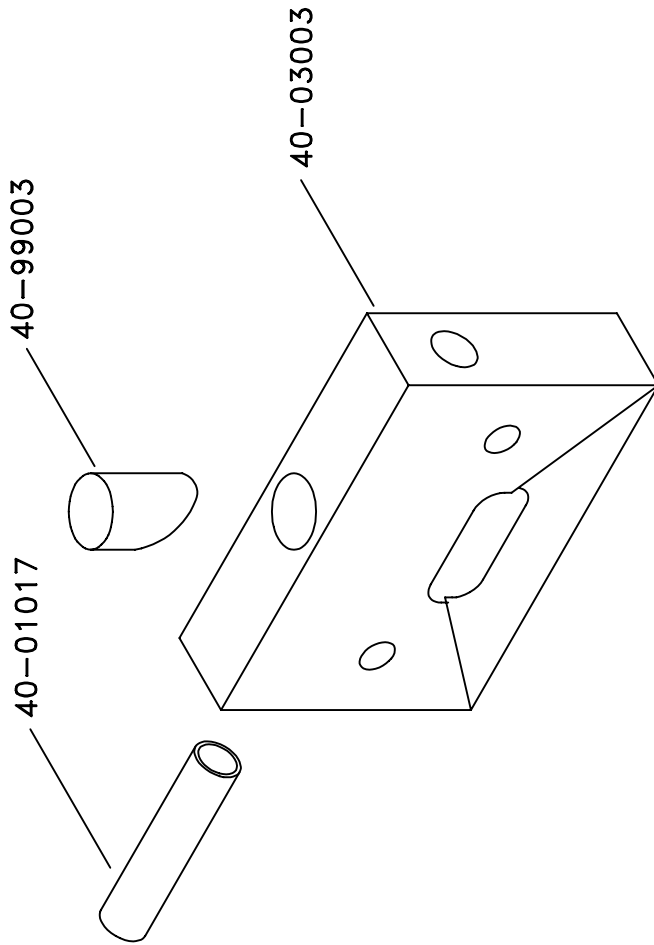


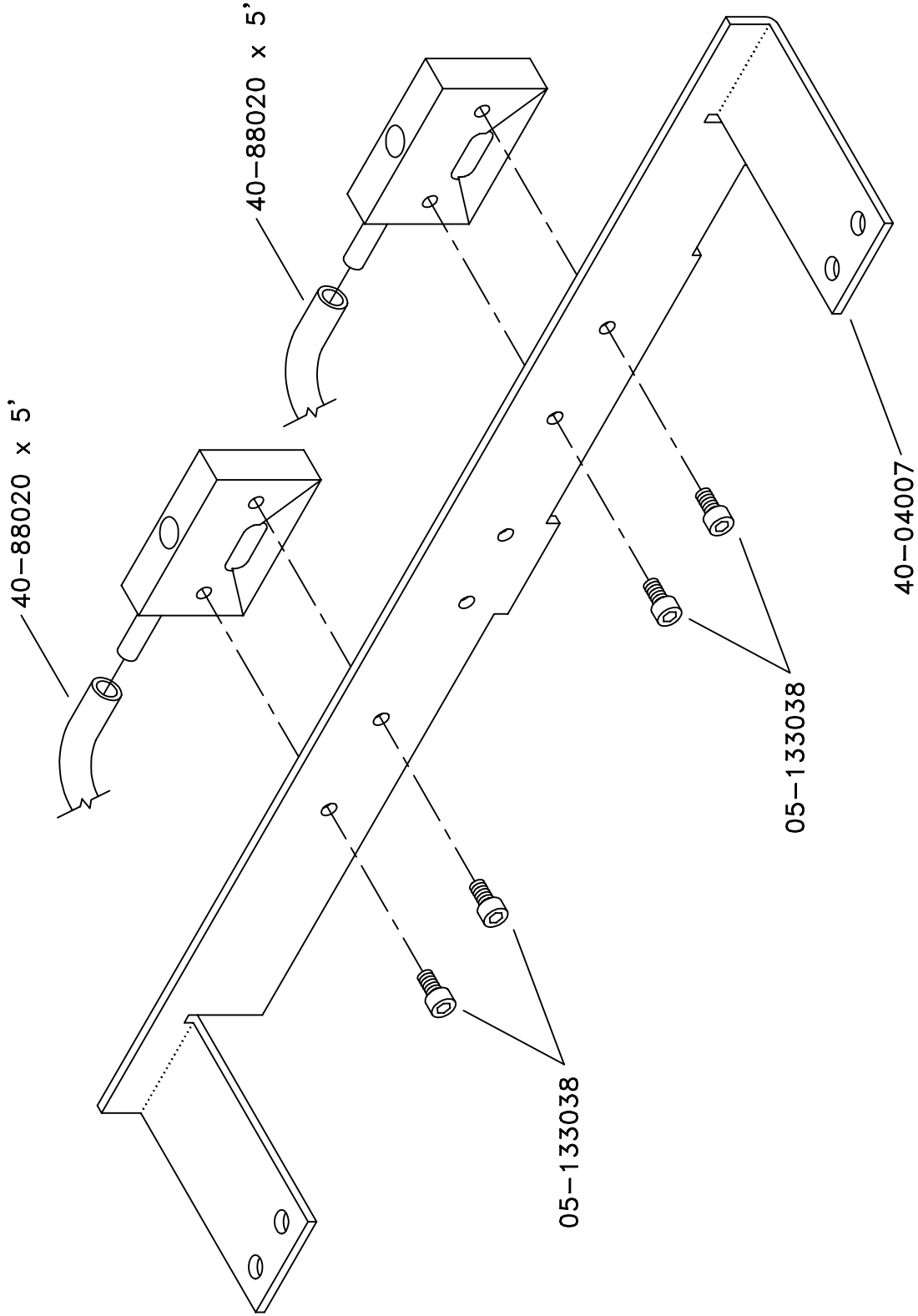


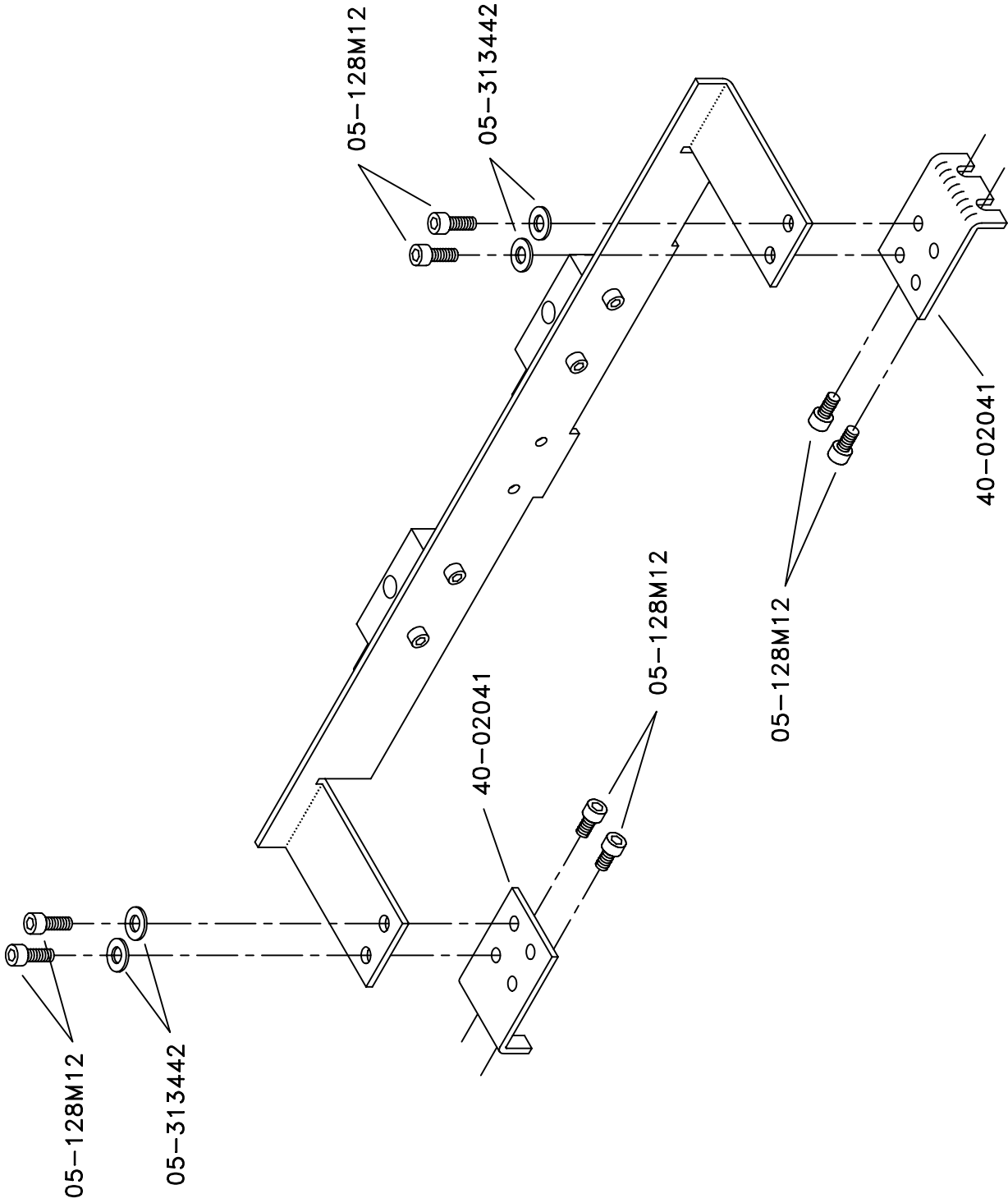


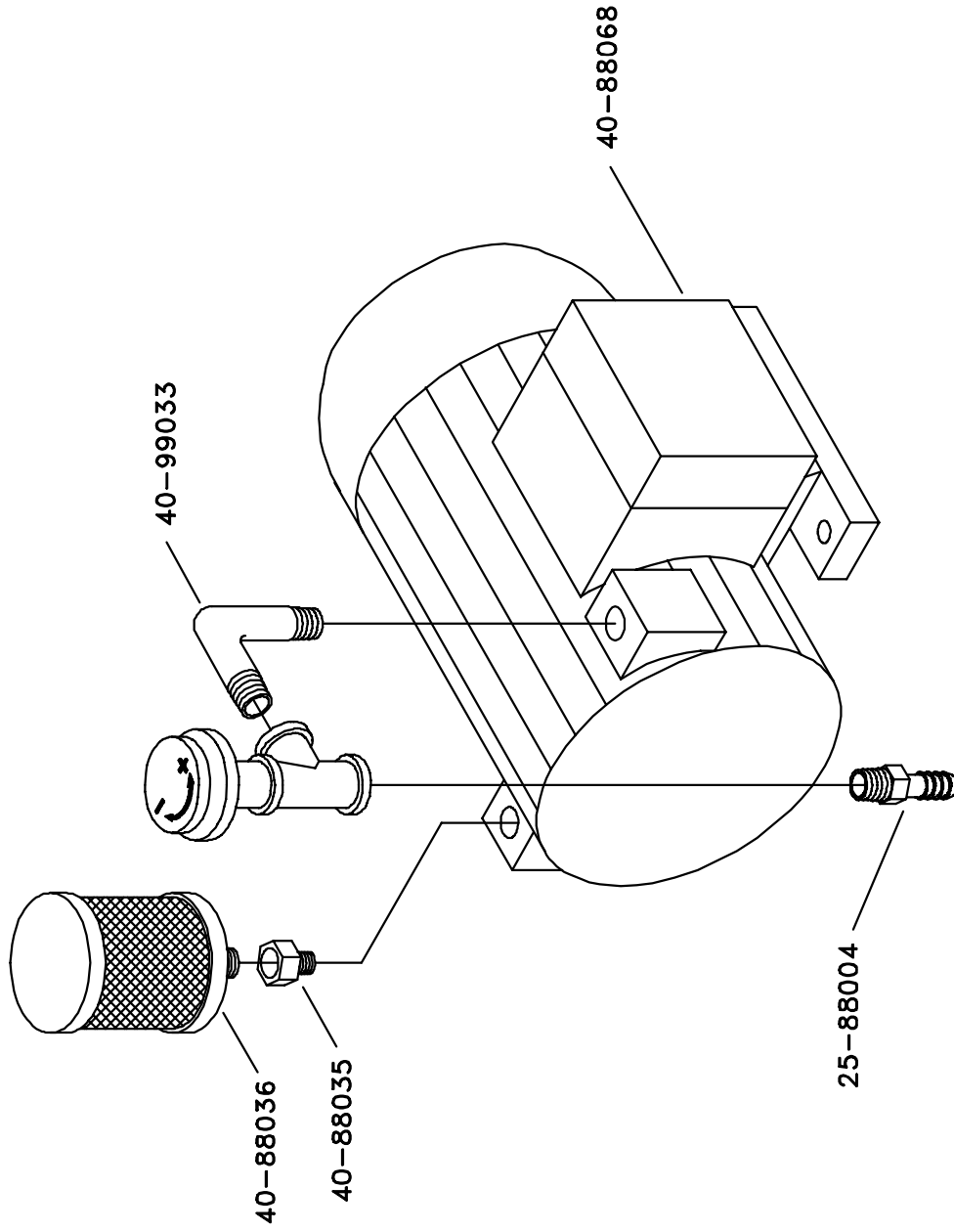
PLASTIC TUBING (99-129) MUST EXTEND OUT BEYOND THE BOX 1'.



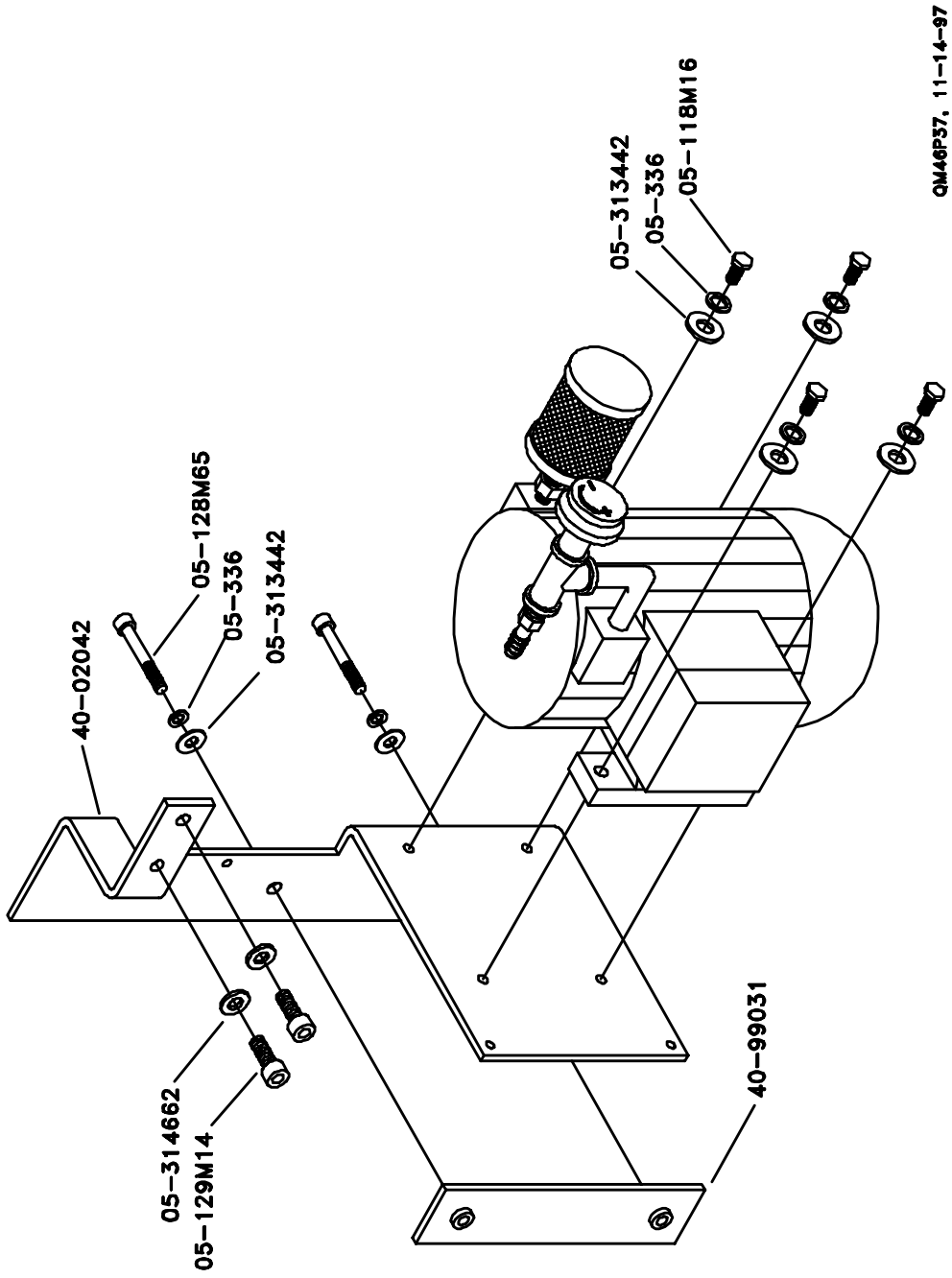




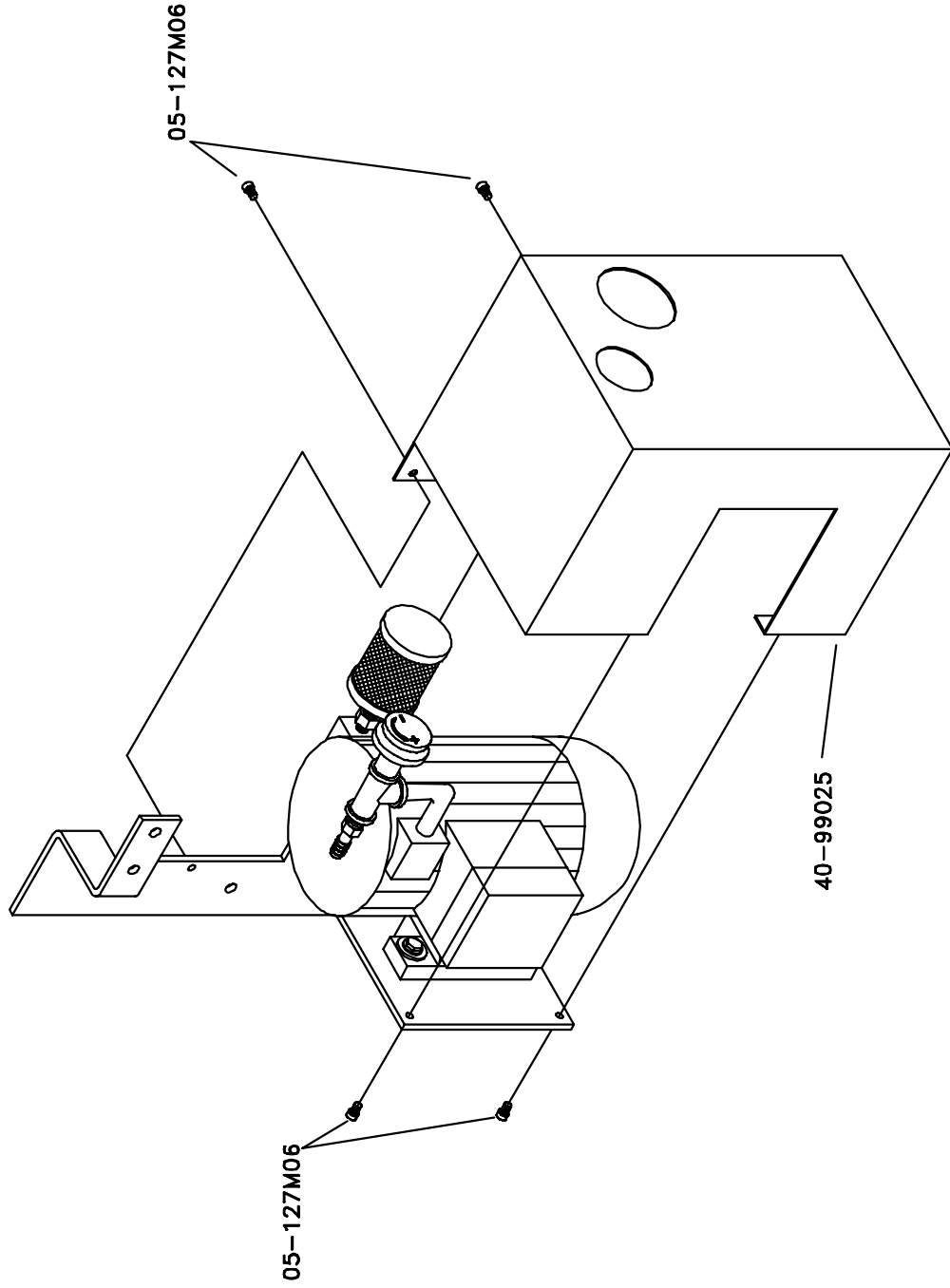




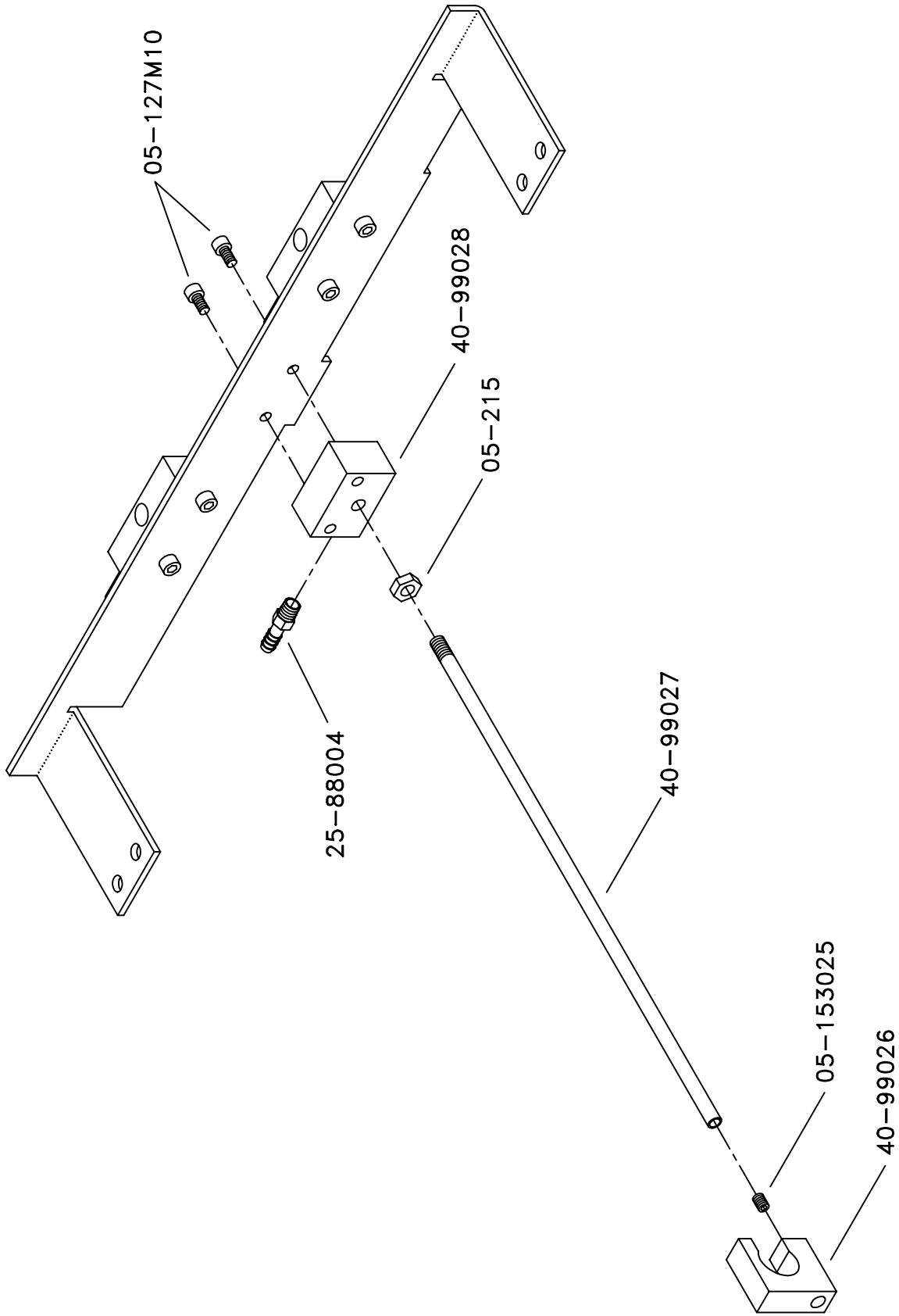
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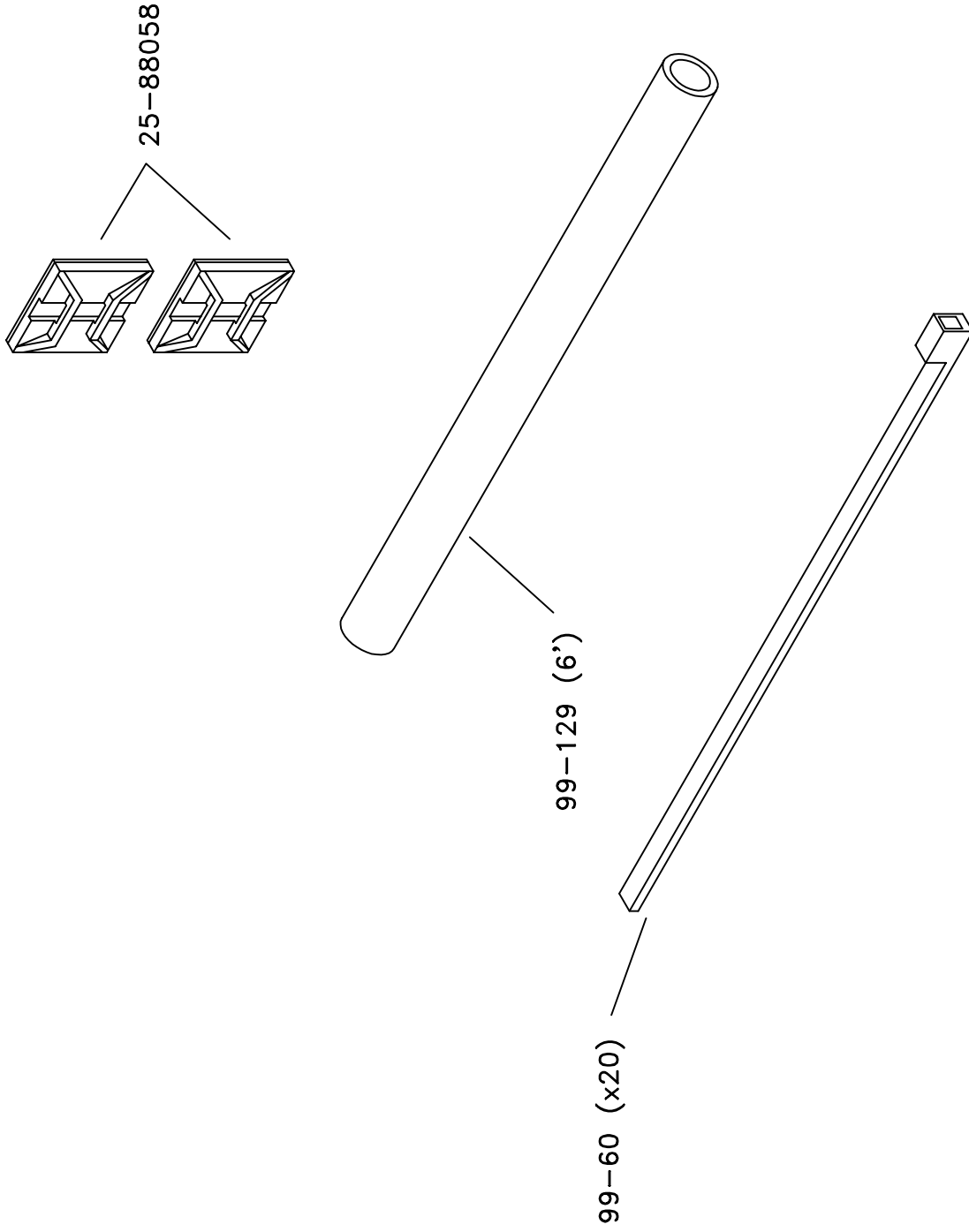
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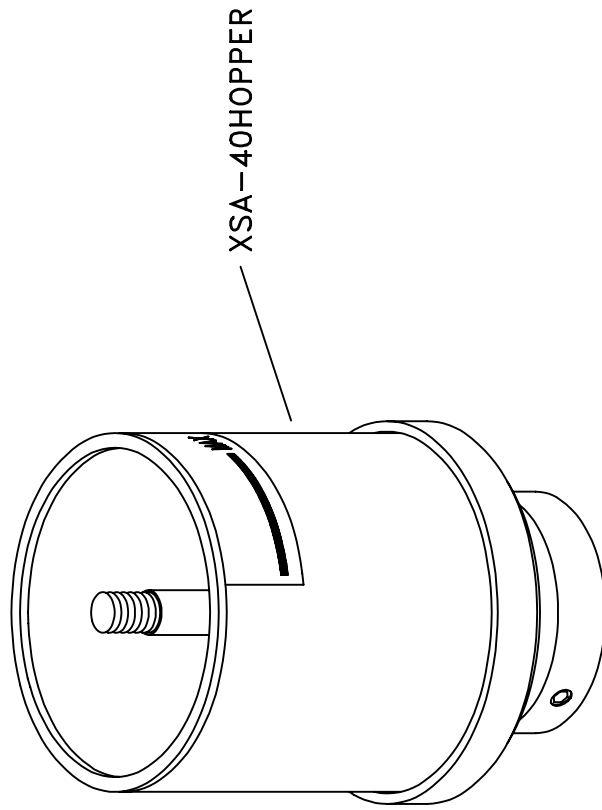


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