Lonza ICM Technical Bulletin	Model
Subject: Overflow Level Switch Failure Replacement	Pulsar 45, 140 and 500

Background and Purpose

The original level switches (79689) provided with the unit were made from Polypropylene (PP). While PP has been used successfully in the past for many components of our feeders, it has not performed adequately in the level switch application.
The new material for the level switch is PVDF. This material (used to manufacture the nozzles) has proven very resistant to degradation when subjected to the chlorinated environment of the feeders. The purpose of this document is to identify if the feeder has the original PP switch or the new PVDF switch **(Lonza Part# 79840)** and provide direction for the replacement of the level switch.

Switch Identification and Replacement Procedure

Identification:

Note: The label tag on the switch is the most positive way to identify the switch type. If the model of the switch is legible, proceed to "Replacement" section below if the switch is "M8700". If the model number on the switch is "M9700" there is no need to replace the switch. If there is no tag or it is illegible, refer to steps below for switch identification.

1.) If a feeder was produced in 2013-2014 it has the PP level switch unless it has been replaced and the new switch was ordered after June 2015. Refer to **Figure 1** that shows the feeder serial number for a feeder produced in 2015 (first numbers in the serial number). If produced in 2013-2014 the serial number would start with a "13" or "14" respectively.

2.) Feeders produced in 2015 have mostly the old PP switches with the following exceptions:
A.) P45, P140 and P500's shipped out from Lonza after 9/15
B.) P45 with serial numbers above 120 and higher (15 GNP1 120)
C.) P140 with serial numbers 058 and higher (15 GNP2 058)

3.) The PP and PVDF switches have a different part number and color**. Refer to Figure 2**. The New PVDF switch at the left has the part number **M9700-12248** and is off-white. The older PP switch has part number **M8700-11352** and is more natural White.

Replacement:

Note: It will be necessary to remove the wires of the old switch from the spring clamp terminal block and install the wires of the new switch. This process will require a specific tool to actuate the release mechanism.The tool is a 2.5 x 0.4 mm flat blade screwdriver.

Step1.) Remove the switch from the body by first clipping the wire ties that hold the cable for the switch in place as shown in Figure 3.
Step 2.) Unscrew (counterclockwise) the switch from the base in the front of the feeder Figure 4.
Step 3.) Tape the wires from the new switch to the body of the old switch as shown in Figure 5.
Step 4.) Remove the J-box from the feeder body by loosening the screws as shown in Figure 6.
Step 5.) Fish the wires of the new switch through the body by pulling the old switch wires through the grommet on the back of the feeder.

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Pulsar Serial Number

Figure 1

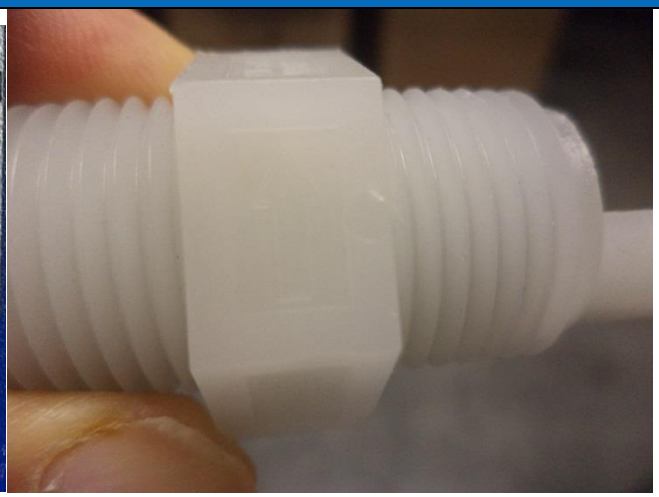

Figure 1A

Level Switch Identification

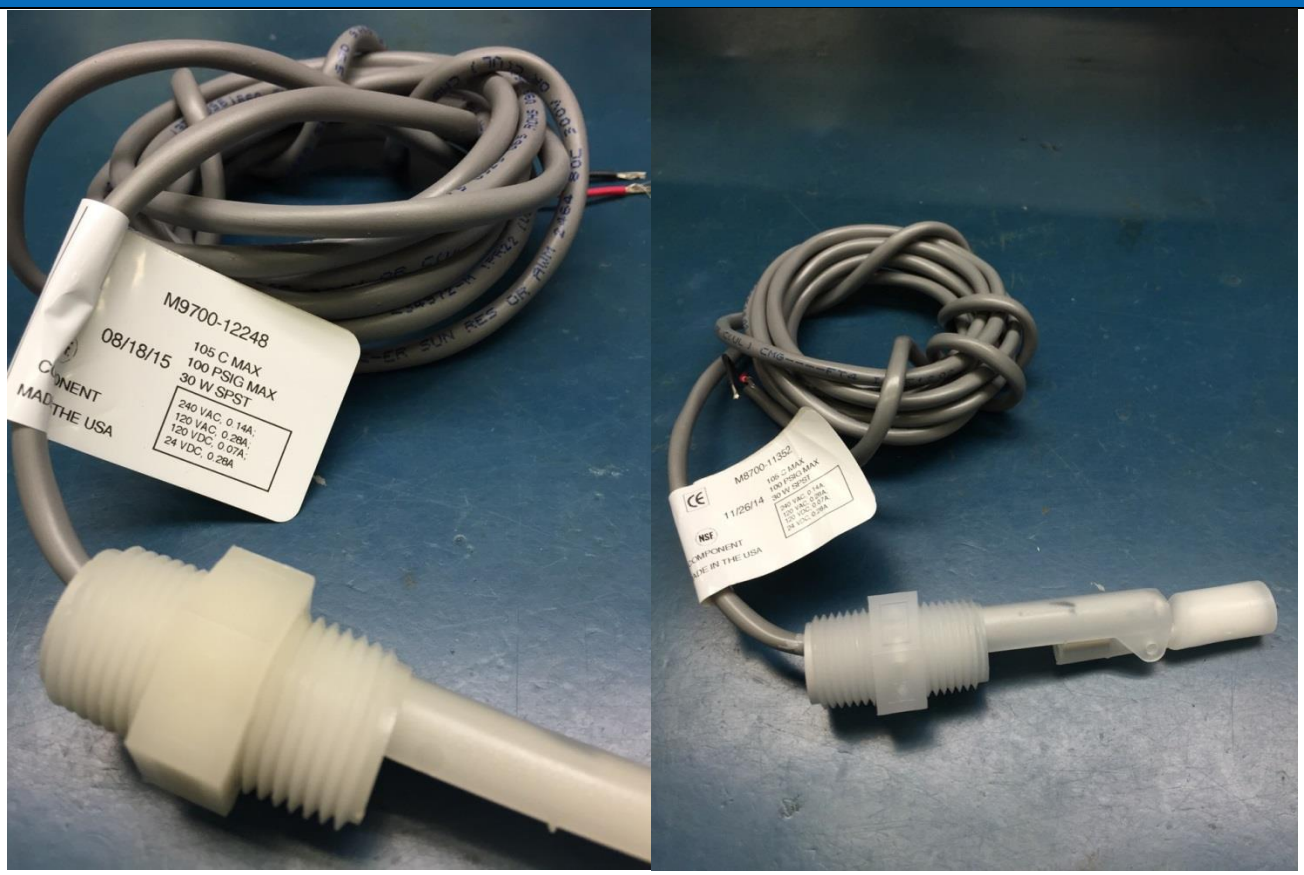

Figure 2

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Removing Old Level Switch

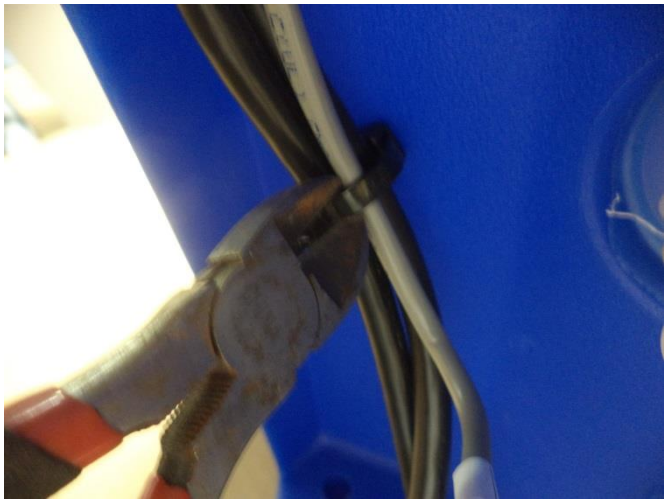

Figure 3

Fiqure 4

Installing New Level Switch

Figure 5

Fiqure 6

Step 6.) Loosen the strain relief (on the back of J-Box) for the level switch wire.
Step 7.) Use the 2mm screwdriver to remove the wires for the old switch (Figure 7).
Step 8.) Remove the old wire from the strain relief and install the wire for the new switch through the strain relief.
Step 9.) Use the 2mm screwdriver to install the red/black wires in the terminal block (Figure 7).
Step 10.) Replace the J-box on the feeder base and use wire ties to secure cable (Figure 6).
Sep 11.) Install new switch in base and orientate so float drops away from the switch. The arrow on the switch body should be pointing “Up” (Figure 1A).

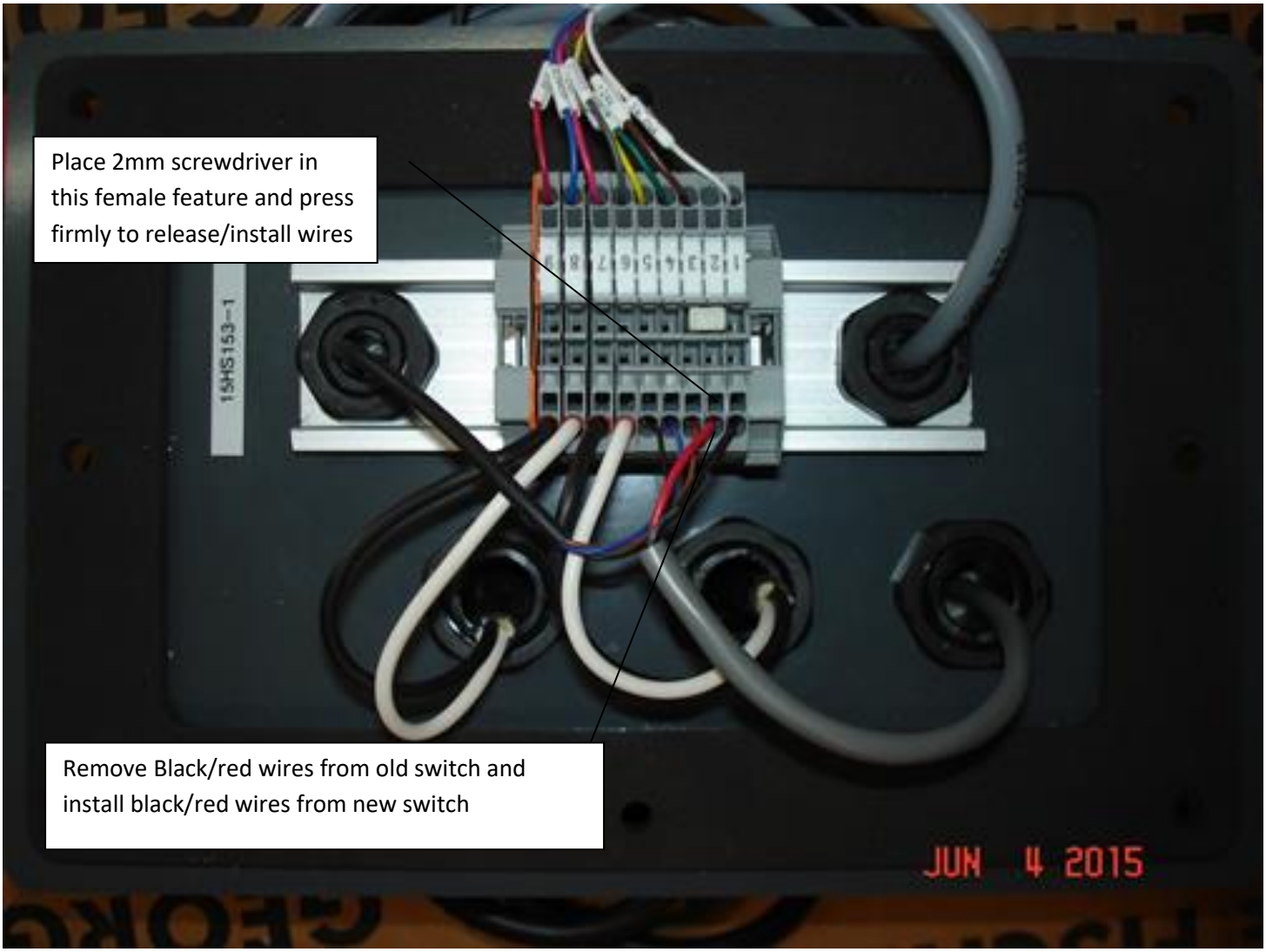

Figure 7