396-7208Y1

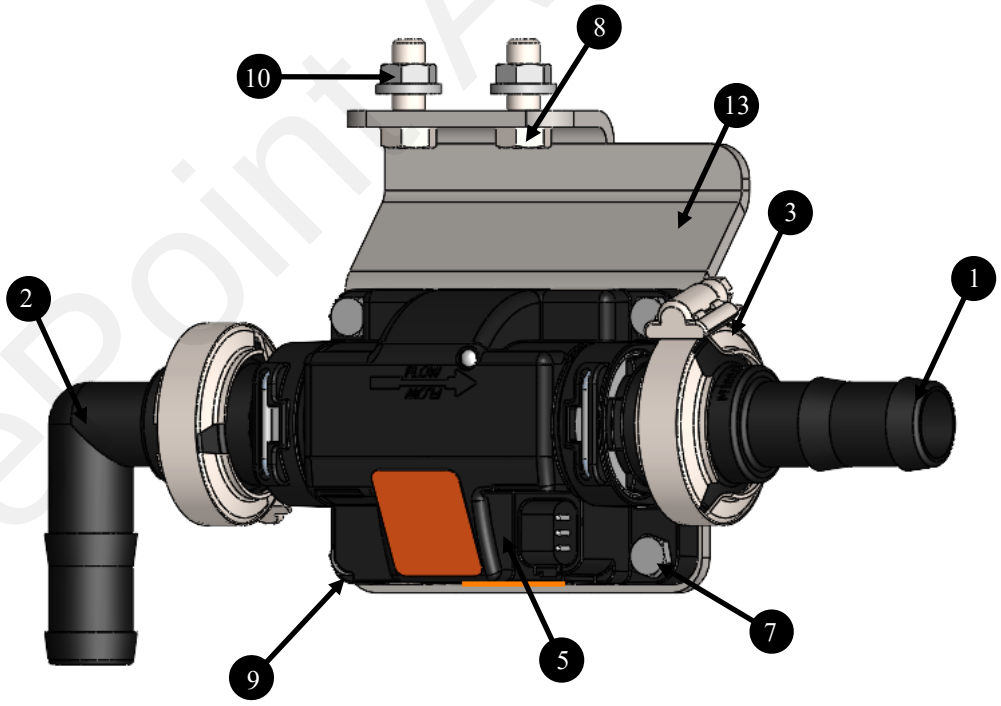
D115 Pump, Orion 3 DN17 Flowmeter Retrofit Kit Instructions

Kit Number:

500-02-2405 : DN17 Orion 3 Flowmeter Retrofit Kit for D115 Pump

Parts List and Exploded View

ITEM #	Part Number	Description	QTY
1	105-100BRB	1" Manifold x 1" HB	1
2	105-100BRBSWP90	1" Manifold X 1" HB, 90 degree sweep	2
3	105-FC100	1" Manifold Clamp	3
4	105-100G-H	1" EPDM Manifold Gasket	3
5	204-01-462034A-DN17	EMag Flowmeter, Orion 3, 1.45—58 GPM, M100 Flange	1
6	280-100-AG200	1" AG200 Bulk	20 in
7	300-040100-SS	1/4" x 1" Hex Head Bolt - SS	4
8	323-060100-SS	3/8" x 1" Hex Head Bolt - SS	2
9	323-04-SS	1/4" Flange Nut - SS	4
10	323-06-SS	3/8" Flange Nut - SS	2
11	350-1608	SS Hose Clamp - Size 16 - 1-1/2" Diameter (fits 1" AG200)	3
12	396-6657Y1	D70 Pump, Orion 3 DN10 Flowmeter Retrofit Kit Instructions	1
13	410-7193Y1-BK	Retrofit Bracket, Orion 3 to D115 Pump	1

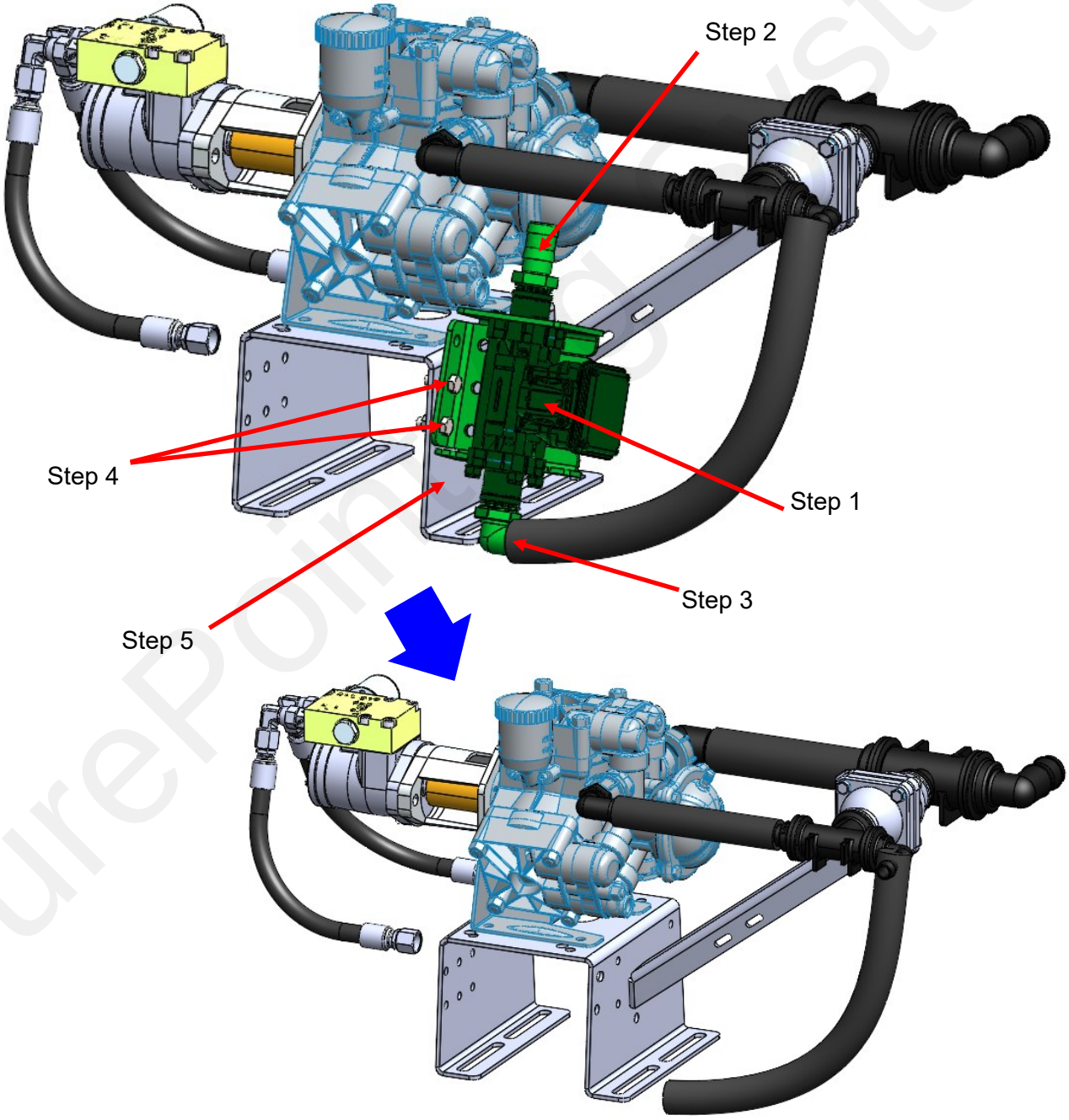


Parts List and Exploded View

ITEM #	Part Number	Description	QTY
1	204-01-462034	EMag Flowmeter. Orion 3, 1.45-58 GPM, T3F	1
2	120-M100T3M	M100 to T3M for DN17 Meter	2
3	124-01-G11058-V	Viton O-Ring for T3 fittings	2
4	124-02-010003	T3 Fork	2
5	398-20-6856Y1	Decal, EMAG (Orion 3) Flowmeter 1.5-58 GPM	1

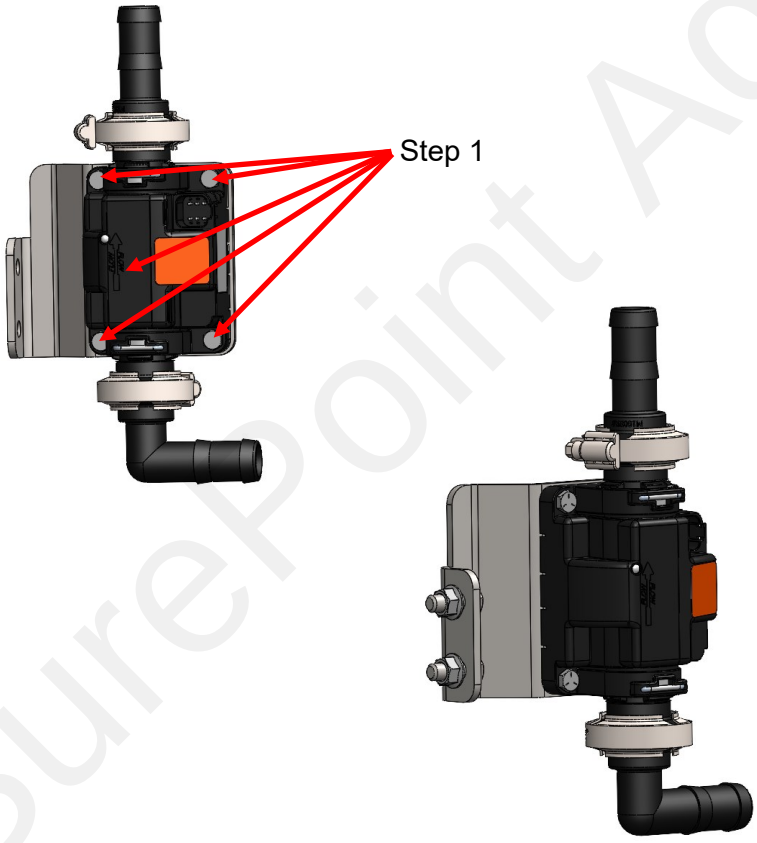
Step by Step Instructions
Old Flowmeter Removal

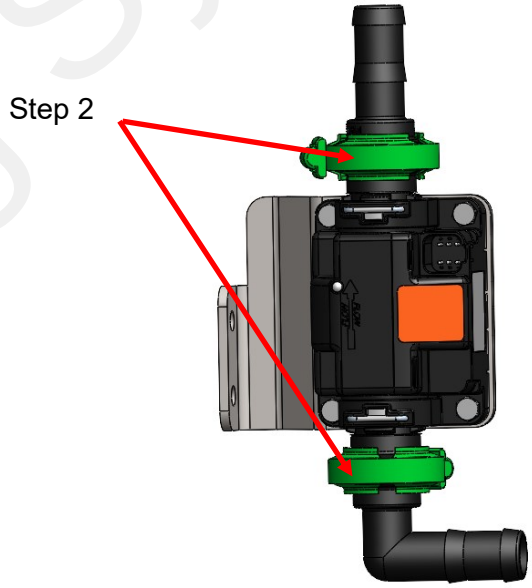
1. Disconnect harness from flowmeter electrical connection point.
2. Detach hose from flowmeter outlet. Hose and hose-clamp will be reused if possible.
3. Detach hose from flowmeter inlet elbow. Hose will remain connected to pump.
4. Remove 2x 3/8” hex bolts holding flowmeter bracket to pump base.
5. Remove and discard flowmeter/bracket assembly.



Step by Step Instructions
Pre-Assembly– Flowmeter/Bracket

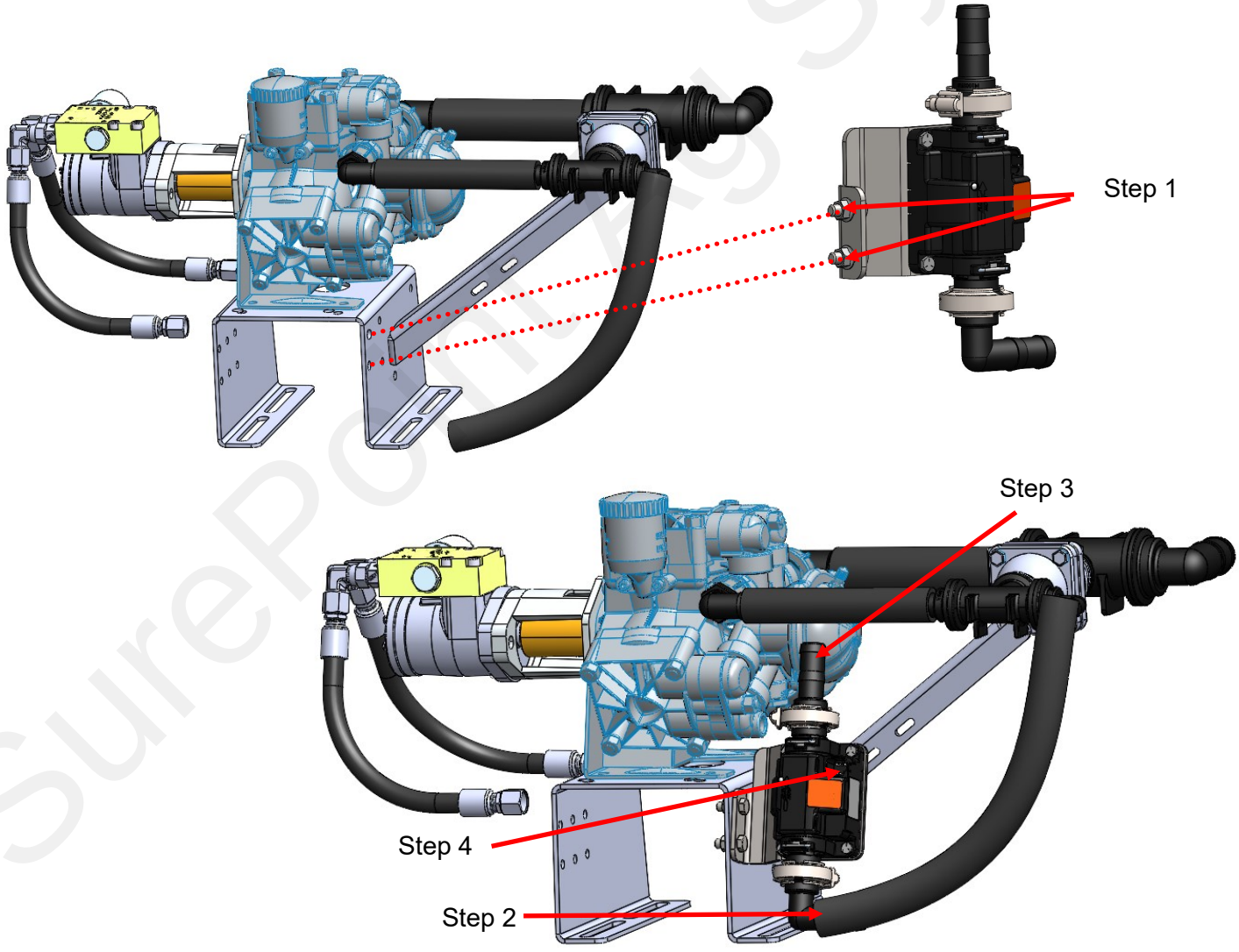
1. Attach new flowmeter assembly [204-01-462032A-DN17] to new bracket [410-7193Y1-BK], using four bolts [300-040100-SS — 1/4" x 1” Hex Head Bolt - SS] and nuts [323-04-SS — 1/4" Flange Nut - SS].
   Ensure Flowmeter flow direction arrow is pointing up.
2. Position 1” gasket [105-100G-H — 1" EPDM Manifold Gasket], and 1” hose barb fittings [105-100BRB — 1" Manifold x 1" HB] & [105-100BRB90 — 1" Manifold X 1" Barb, 90 degree elbow] on the flowmeters inlet and outlet flanges, loosely secure with manifold clamp [105-FC100 — 1" Manifold Clamp] .
3. Full flowmeter and bracket assembly is ready to assemble on to existing pump.





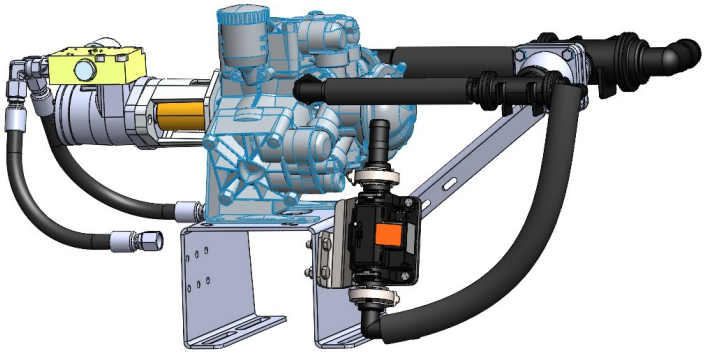
Step by Step Instructions Assembly– Flowmeter/Bracket to Pump

1. Attach the new flowmeter/bracket pre-assembly to pump base, using 2 bolts [300-060100-SS — BOLT, HEX HEAD, 3/8-16 x 1, STAINLESS STEEL] and nuts [323-06-SS — NUT, SERRATED FLANGE, 3/8-16, STAINLESS STEEL]. New flowmeter bracket will attach to pump base using same 2 holes in pump base that the old bracket was attached to. Flowmeter must be installed at a slant so that outlet hose can shoot the gap between the pump hoses.
2. Reattach 1” hose to hose barb elbow on inlet flange of new flowmeter, using hose clamp. Existing hose may require some shortening.
3. Reattach flowmeter outlet hose to flowmeter hose barb using hose clamp.
4. Using supplied harness adapter connect “flowmeter-labeled” harness lead to 6-pin connection point on new flowmeter.
5. Update flowmeter calibration number in controller settings (see next page).



D115 Electromagnetic Flowmeter Update Part Info Sheet

1.45 - 58 GPM Orion 3 DN17 Flowmeter P/N *204-01-462034A-DN17*



6-Pin Deutsch connector

Use adapter 201-5954Y1 to connect to 3-pin AMP Superseal harness.

OR Alternate adapter 201-6647Y1 to connect to 3-pin MP Shroud

Controller- Flow Cals are listed in Pulses per Gallon unless noted	DN17 1.45-58 GPM Flow Cal Number	**DN107 1.45-58 GPM Flow Cal Number with Divide by 8 Cable**
Sentinel	2063	258
Commander	4126	516
Commander II	4126	516
John Deere	2063	258
Ag Leader	2063	258
Trimble	2063	258
Raven	2063	258
Topcon	2063	258
Case (ECU) Pulses per 10 Liters	Requires Divide by 8 Cable	681
Case (UCM) Pulses per Liter	545	68

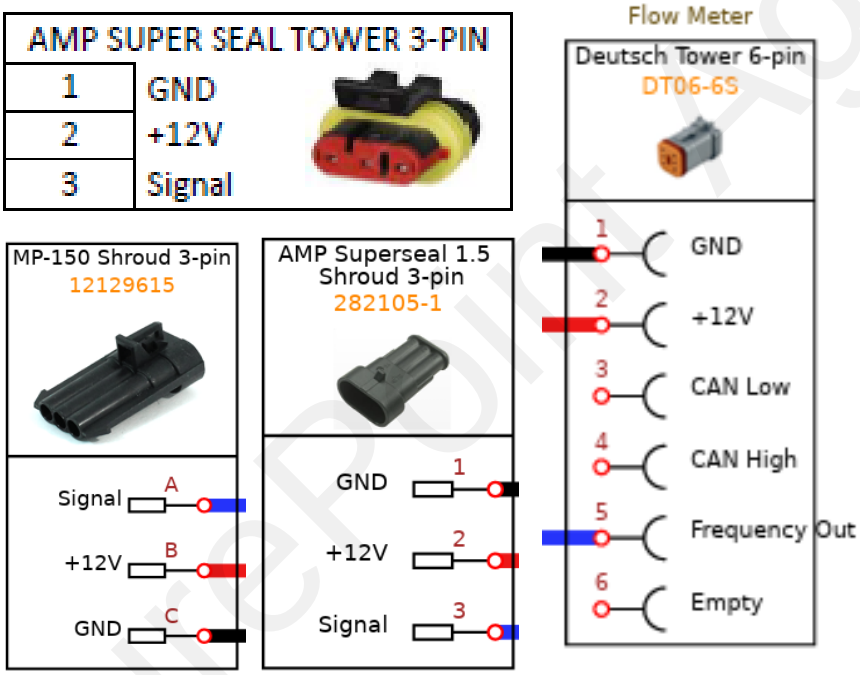
Orion 3 Flowmeter will need to adapt from the 6-Pin Deutsch to the flowmeter plug on the harness. These adapters are listed on page 2.

The "Divide by 8" adapter harness must be used in applications where the controller will not accept the required flow cal number. The "Divide by 8" adapters listed on the next page could be on your system and will need to use the above flow cal number associated with your controller.

D70 Electromagnetic Flowmeter Update Part Info Sheet

1.45 - 58 GPM Orion 3 DN17 Emag Flowmeter P/N *204-01-462034A-DN17*

Adapter Part Number	Description	Uses
201-5954Y1	3-Pin AMP Superseal Shroud to 6-Pin Deutsch Tower	Pump final cable to Orion 3 Flowmeter
201-6647Y1	3-Pin MP Shroud to 6-Pin Deutsch Tower	Pump final cable to Orion 3 Flowmeter used on Commander II and E-Mag Flowmeter with Blue Sticker and White Lettering.
Divide by 8 Adapters	**The "Divide by 8" adapter harness must be used in applications where the controller will not accept the required flow cal number.**	**Could be on your existing system and will need to use correct flow cal from chart on previous page.**
201-14226	3-Pin MP Shroud to 3-Pin MP Tower with divide by 8	Multiple Controllers
201-17842	3-Pin MP Shroud to 3-Pin AMP Superseal Tower with divide by 8	Multiple Controllers
201-19849	3-Pin AMP Superseal Shroud to 3-Pin AMP Superseal Tower with divide by 8	Used commonly with Case Planter with ECU



Adapter Harness Connections Shown to the Left.

201-14226 -Shown with divide by 8 module circled.

SurePoint recommends you perform a catch test to verify the system is properly installed and configured. Adjust the flow cal as needed based on accurate catch tests with the actual product or

Warning!!!

-Before doing any welding on the implement, unplug the cable to the flowmeter, or damage to the flowmeter may result.

-Do not power wash the flowmeter. High pressure spray directed at the back edge of the face plate or at the wire connector may allow water into the flowmeter electronics.