



360 DASH™

INSTALLATION INSTRUCTIONS
JOHN DEERE MAXEMERGE WITH MINI HOPPER AND
PRECISION PLANTING SPEEDTUBE



360YIELDCENTER.COM

FOR QUESTIONS PLEASE CONTACT OUR
PRODUCT SUPPORT TEAM AT 309-300-3120

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INSTALLATION INSTRUCTIONS

JD MAXEMERGE WITH MINI HOPPER



BEFORE YOU BEGIN

RECOMMENDED TOOLS



Phillips Screwdriver

7/16" Wrench

1/2" Wrench

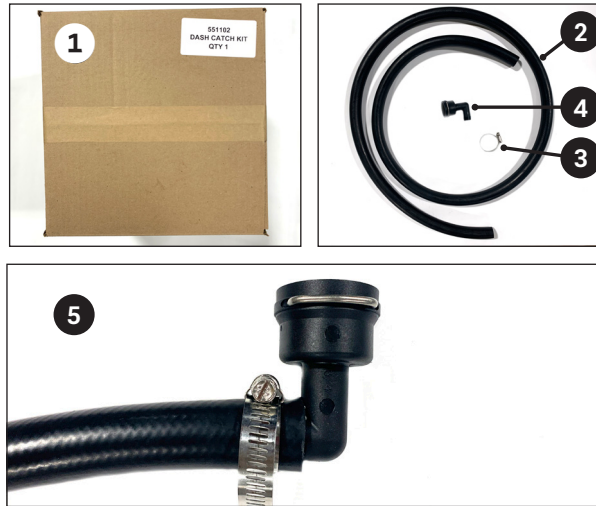
9/16" Wrench

1/4" Nut Driver

5/16" Nut Driver

STEP 1

INSTALL SYSTEM KIT (551100)



Locate the DASH Catch Test Kit (pn: 551102) **1**.

Remove the 3/4" EPDM hose **2**, the hose clamp **3** and the 3/4" hose fitting **4**.

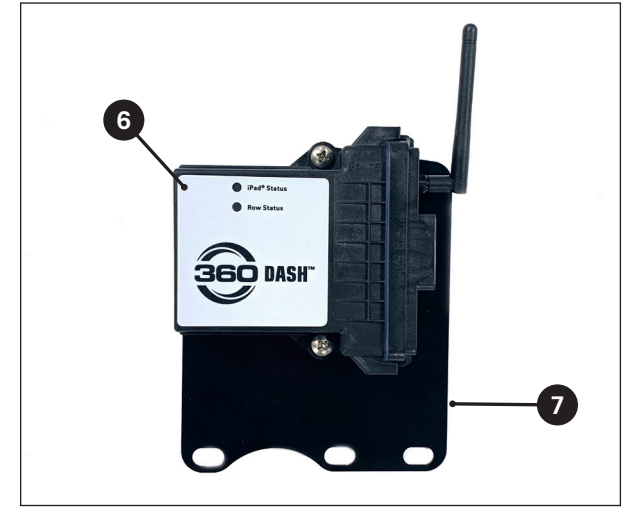
NOTE: The use of a lubricant such as WD-40 on the hose barb may make the following step easier.

5 Place the hose clamp about 6 inches down the hose and press the hose barb fitting into the hose. Slide the hose clamp up toward the end of the hose where the hose clamp is covering the hose and the hose barb fitting (about 1/2" from the end of the hose). Tight the clamp with a 5/16" nut driver.

Keep the hose assembly with the graduated pitcher and the remaining hose fitting parts. Set these parts aside to be used when setting up the iPad app.

STEP 1 CONTINUED

INSTALL SYSTEM KIT (551100)



Locate the 1/4" machine screws, 1/4" washers, 1/4" Nylock nuts, the DASH hub (pn: 550950) **6** and the DASH hub bracket **7**.

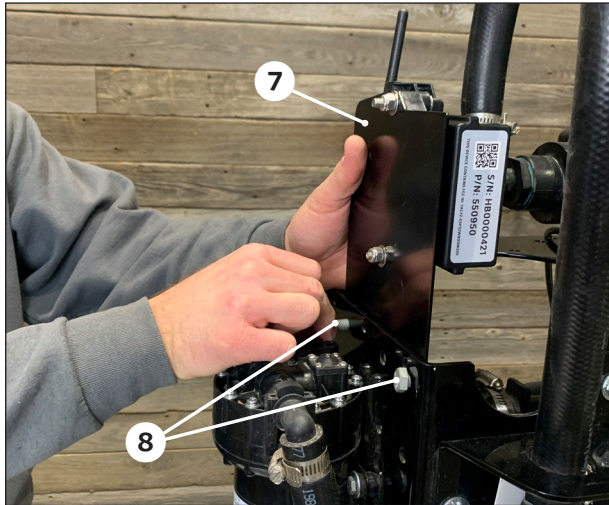
Using a Phillips screwdriver and a 7/16" wrench or ratchet, attach the DASH hub to the mounting bracket ensuring it is oriented as shown in the picture above.

INSTALLATION INSTRUCTIONS

JD MAXEMERGE WITH MINI HOPPER



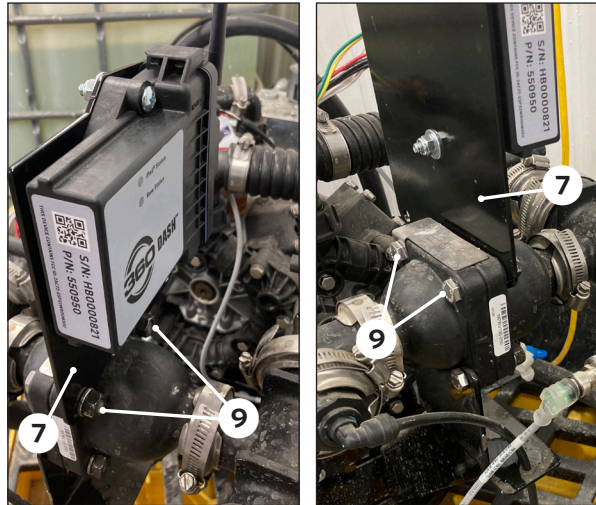
STEP 1 CONTINUED INSTALL SYSTEM KIT (551100)



ELECTRIC PUMP OPTION

If you purchased the electric pump option from AgXcel, take the $\frac{3}{8}$ " bolts, $\frac{3}{8}$ " washers, and $\frac{3}{8}$ " flange nuts (8) and attach the DASH hub bracket (7) to the AgXcel pump tower using a $\frac{9}{16}$ " wrench and ratchet.

STEP 1 CONTINUED INSTALL SYSTEM KIT (551100)



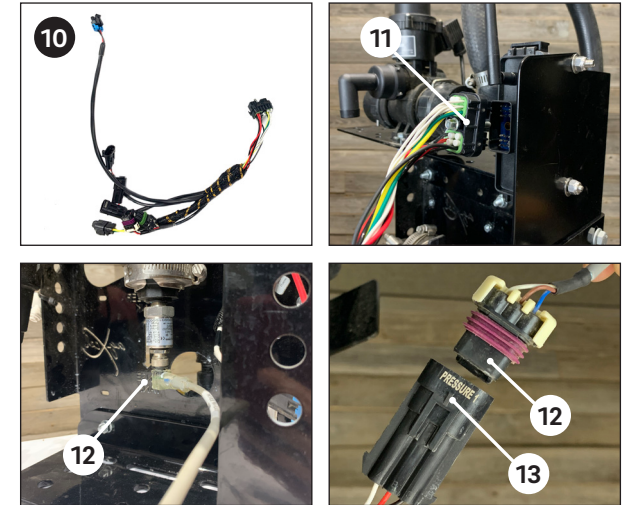
HYDRAULIC PUMP OPTION

If you purchased the hydraulic pump option from AgXcel, you do not need the $\frac{3}{8}$ " hardware from the box.

**** THE PRESSURE SPIKE VALVE IS UNDER SPRING FORCE. DO NOT REMOVE ALL FOUR NUTS ****

Using a $\frac{9}{16}$ " wrench and ratchet, remove the top two nuts from the pressure spike valve (9). Install the DASH hub bracket (7) on the bolts and reinstall the nuts.

STEP 1 CONTINUED INSTALL SYSTEM KIT (551100)



The DASH hub harness (10) has a mating connector for each connector on the pump tower.

Take the DASH hub harness (pn: 550819) and install the large rectangular connector (11) onto the DASH hub using a $\frac{1}{4}$ " nut driver.

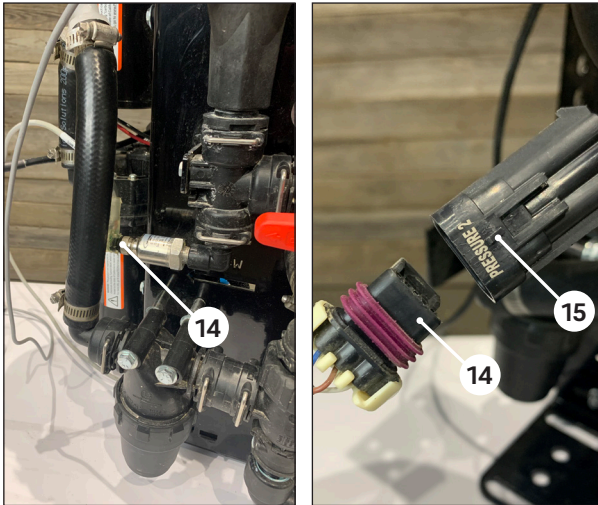
The pump tower has two pressure sensors. The pressure sensor on the suction side of the pump (12) must be connected to the hub harness connector labeled "PRESSURE 1" (13).

INSTALLATION INSTRUCTIONS

JD MAXEMERGE WITH MINI HOPPER

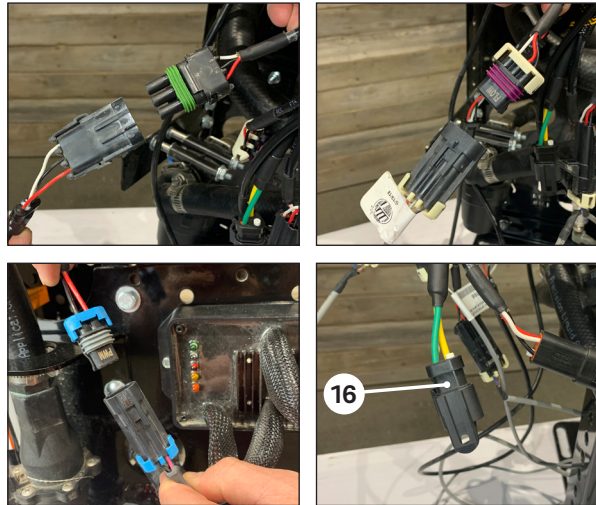


STEP 1 CONTINUED INSTALL SYSTEM KIT (551100)



The pressure sensor on the outlet side of the pump ¹⁴ must be connected to the hub harness connector labeled "PRESSURE 2" ¹⁵.

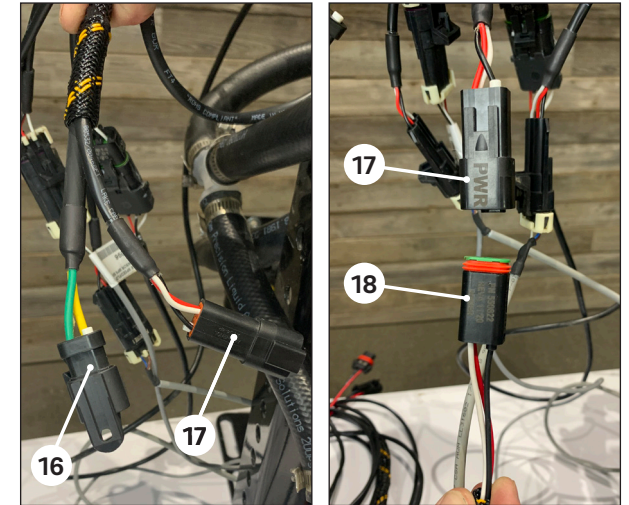
STEP 1 CONTINUED INSTALL SYSTEM KIT (551100)



All other connectors are unique and will have only one mating connector on the hub harness. Locate and connect all remaining connectors on the pump tower components.

NOTE: The connector labeled "CAN" ¹⁶ is not used at this time and the factory installed cap should remain installed.

STEP 1 CONTINUED INSTALL SYSTEM KIT (551100)



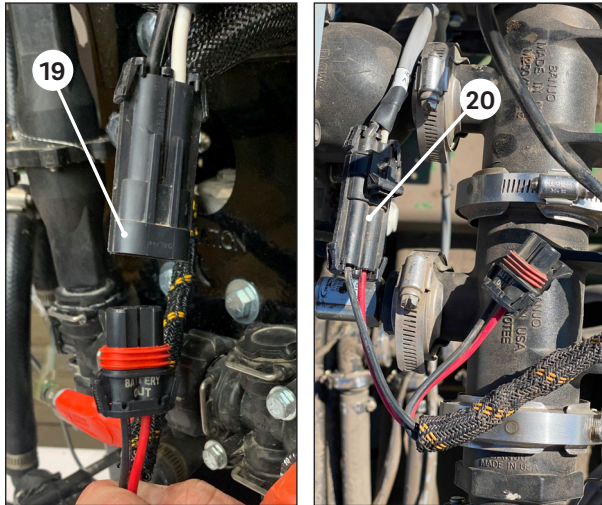
On the power harness (pn550822), locate the 4 position plug labeled "PWR" ¹⁸. Find the mating connector on the DASH hub harness ¹⁷ and connect the two.

INSTALLATION INSTRUCTIONS

JD MAXEMERGE WITH MINI HOPPER



STEP 1 CONTINUED INSTALL SYSTEM KIT (551100)



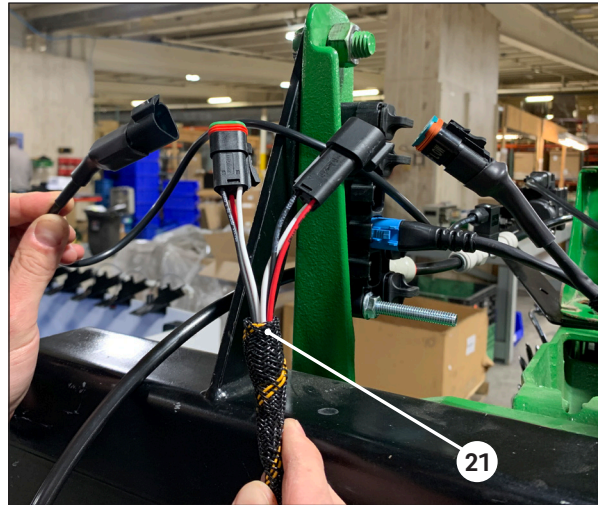
The DASH hub power harness has two branches of jacketed cable. The shorter branch (about 24 inches long) has a 2 position plug and a 2 position receptacle and this is how the hub gets battery power.

NOTE: The jacketed cable with large gauge wire supplied by AgXcel must be routed to the batteries on the tractor. Do not connect this harness to the batteries on the planter.

If you purchased the **electric pump** option from AgXcel, these connectors will split the battery power harness into the electric pump controller **19**.

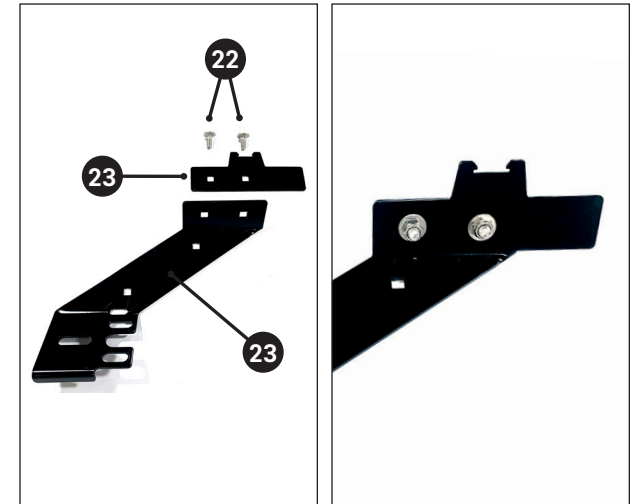
If you purchased the **hydraulic pump** option from AgXcel, the plug from the battery power harness will plug into the 2 position receptacle on the hub power harness **20**.

STEP 1 CONTINUED INSTALL SYSTEM KIT (551100)



The longer branch (about 20 feet long) is how the hub gets switched key power. This branch should be routed to the nearest row. The end of this branch has a 3 position plug and a 3 position receptacle to split the flow meter connection on that row **21**. The row harness and flow meter harness will be installed in a later step. There may be excessive cable length for the hub connections. A couple zip ties can be used to organize the excess cable.

STEP 2 ASSEMBLE BRACKET



For each row, take two 5/16" carriage bolts **22**, two 5/16" washers, two 5/16" Nylock nuts, a universal DASH bracket **23** and a JD MaxEmerge with mini hopper bracket **24**. Assemble the two brackets according to the picture using a 1/2" wrench or ratchet. Repeat for all remaining rows.

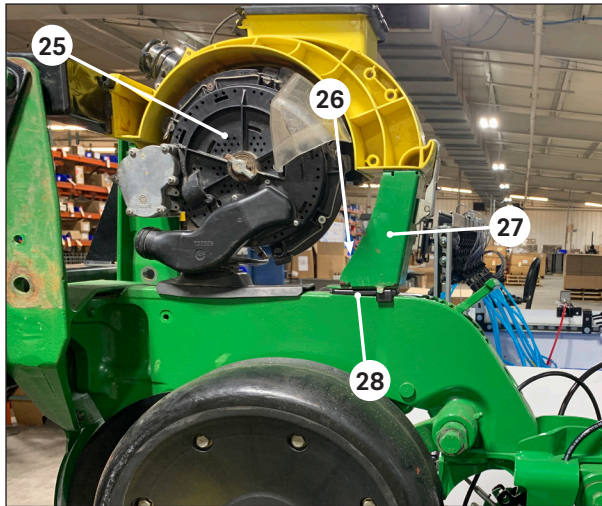
INSTALLATION INSTRUCTIONS

JD MAXEMERGE WITH MINI HOPPER



STEP 3

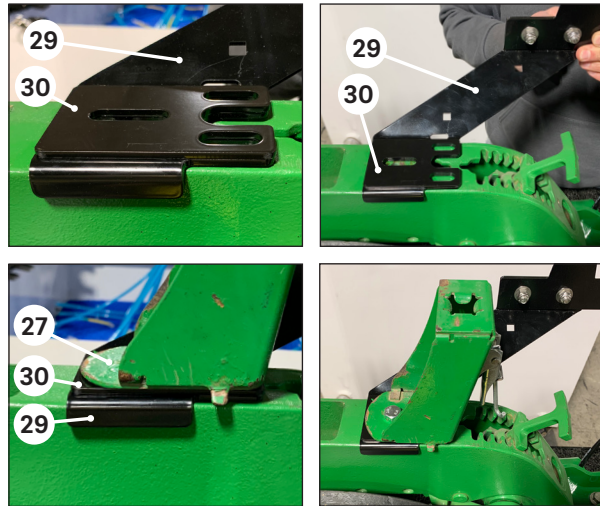
INSTALL BRACKET



Remove the Precision Vset meter **25** and set it aside. Remove the $\frac{3}{8}$ " bolt **26** holding the meter post **27** to the row unit casting with a $\frac{9}{16}$ " wrench or ratchet. The meter post will be reinstalled, but the plastic spacer **28** under the meter post can be discarded.

STEP 3 CONTINUED

INSTALL BRACKET



Install the DASH bracket assembly **29** and provided metal spacer **30** on the row unit such that the bracket extends back and to the right.

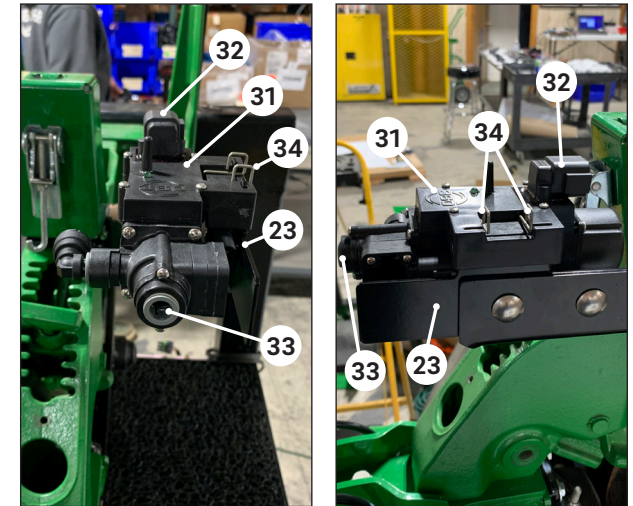
Reinstall the meter post **27** and, using the $\frac{9}{16}$ " wrench or ratchet, secure with the $\frac{3}{8}$ " bolt that was previously removed.

NOTE: The Precision Vset meter will be reinstalled following the installation of the row harness and plumbing components.

Repeat the bracket installation on the remaining rows.

STEP 4

INSTALL VALVE



Install one 360 DASH valve **31** onto each universal DASH bracket **23**. The valve will be installed to the left of the bracket with the electrical connector facing **32** the planter bar and the $\frac{3}{8}$ " push-to-connect outlet **33** facing away from the planter. Verify the wire clips **34** are fully spread under the bracket tabs.

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360 DASH ROW KIT INSTALLATION INSTRUCTIONS FOR ROW KITS WITH 360 TURBINE

*If you are using the **360 Turbine** complete your installation using the steps labeled "#A" on page 9.*



If you are using Precision Planting FlowSense complete your installation using the remaining steps labeled "#B" on page 11.

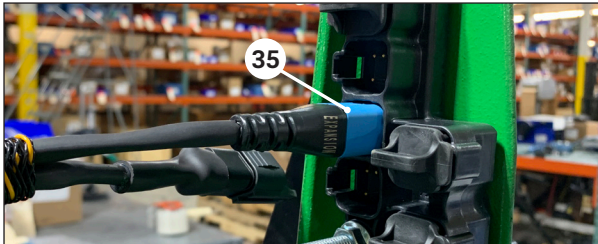
INSTALLATION INSTRUCTIONS

ROW KIT WITH 360 TURBINE



STEP 5A

INSTALL ROW HARNESS



The row harness (pn: 550818) has two 6 position plugs. The connectors are color coded and labeled.

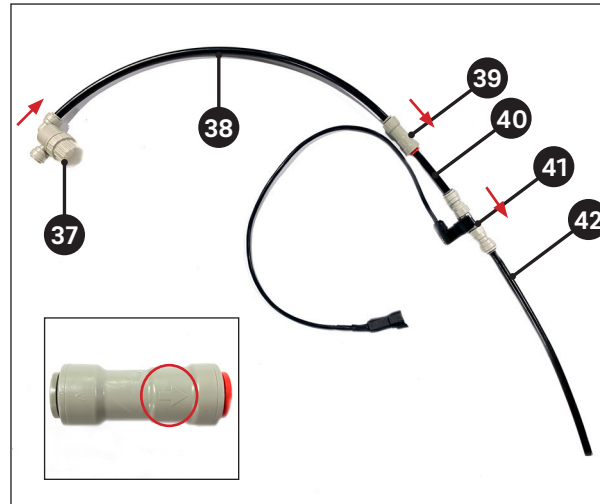
Plug the blue connector labeled EXPANSION 35 into an open port on the Precision CAN expansion module. This connector is keyed so that it cannot be plugged into the DASH valve.

NOTE: The flowmeter connector will be used in a later step.

Route the 6 position plug labeled DASH 36 and black jacketed cable along the side of the row unit and insert the plug into the connector on the DASH valve.

STEP 6A

ASSEMBLE PLUMBING



NOTE: These parts can be pre assembled on the workbench to make install easier.

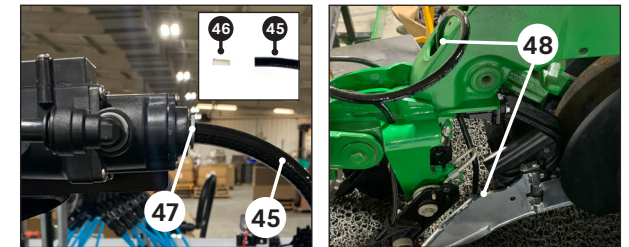
NOTE: The flow meter, check valve, and strainer must be installed in the correct orientation and correct order for proper operation. For each of these components there is an arrow indicating the direction of flow. The arrows should all point toward the DASH valve when installed correctly.

Locate and connect the following (in this order):

Strainer 37, 20" piece of black tubing 38, check valve 39, 4" piece of black tubing 40, flow meter 41 and 12" of black tubing 42.

STEP 7A

INSTALL PLUMBING PARTS



Take the plumbing assembly and push the open end of the 12" tubing 42 into the inlet elbow 3/8" push-to-connect fitting of the valve 43.

Plug in the flow meter connector 44 to the open 3 position plug on the row harness.

Locate the 36" piece of 3/8" OD soft tube 45 and push the plastic tube support 46 into the end of the tube. Insert the tube into the outlet push-to-connect fitting on the valve 47.

Route the outlet tube down to the applicator and install 48. Installation will vary based on type of applicator used.

NOTE: The outlet tube may be cut down to limit the excess tube but be careful to avoid pinch points when routing the tube.

Complete the plumbing install on the remaining rows.

Reinstall the vSet meter assembly on each row and secure the plumbing and wiring components to the row unit as needed.



360 DASH ROW KIT INSTALLATION INSTRUCTIONS FOR ROW KITS WITH FLOWSENSE

*If you are using **Precision Planting FlowSense** complete your installation using the remaining steps labeled "#B" on page 10.*



*If you are using the **360 Turbine** your installation should be complete at this time.*

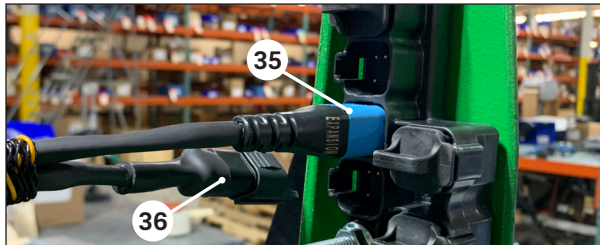
INSTALLATION INSTRUCTIONS

ROW KIT WITH FLOWSENSE



STEP 5B

INSTALL ROW HARNESS



The row harness (pn: 550818) has two 6 position plugs. The connectors are color coded and labeled.

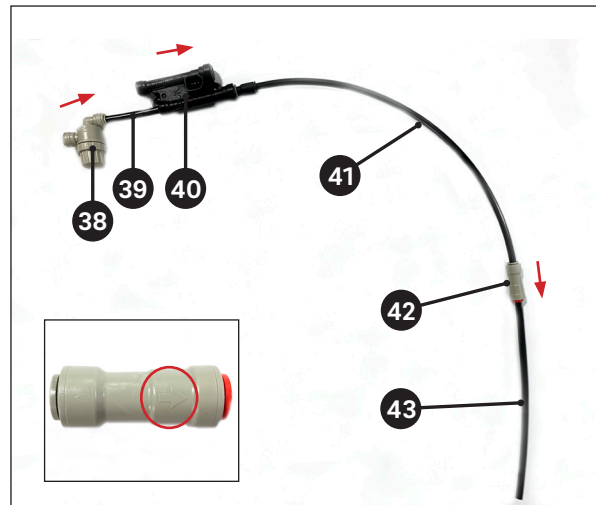
Plug the blue connector labeled EXPANSION **35** into an open port on the Precision CAN expansion module. This connector is keyed so that it cannot be plugged into the DASH valve.

NOTE: The flowmeter connector **36 will not be used and the factory installed cap should remain installed.**

Route the 6 position plug labeled DASH **37** and black jacketed cable along the side of the row unit and insert the plug into the connector on the DASH valve.

STEP 6B

ASSEMBLE PLUMBING



NOTE: This installation may vary depending on the location of the Precision FlowSense module.

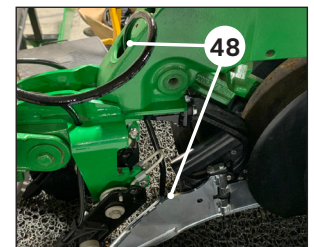
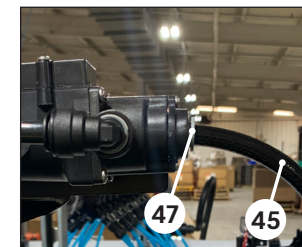
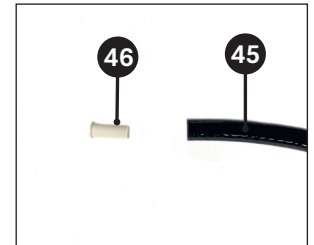
NOTE: The flow meter, check valve, and strainer must be installed in the correct orientation for proper operation. For each of these components there is an arrow indicating the direction of flow. The arrows should all point toward the DASH valve when installed correctly.

Locate and connect the following (in this order): Strainer **38**, 4" piece of black tubing **39**, FlowSense flow meter **40**, 20" piece of black tubing **41**, check valve **42**, and 12" piece of black tubing **43**.

The strainer should be installed prior to the Precision FlowSense. The check valve should be installed between the strainer and the flow meter, but if the flow meter is too far away the check valve can be installed between the flow meter and DASH valve. This plumbing subassembly process can be duplicated for the remaining rows.

STEP 7B

INSTALL PLUMBING



Take the plumbing assembly and push the open end of the tubing **43** into the inlet elbow 3/8" push-to-connect fitting of the valve **44**.

Locate the 36" piece of 3/8" OD soft tube **45** and push the plastic tube support **46** into the end of the tube. Insert the tube into the outlet push-to-connect fitting on the valve **47**.

Route the outlet tube down to the applicator and install **48**. Installation will vary based on type of applicator used.

NOTE: The outlet tube may be cut down to limit the excess tube but be careful to avoid pinch points when routing the tube.

Complete the plumbing install on the remaining rows. Reinstall the Precision Vset meter assembly on each row and secure the plumbing and wiring components to the row unit as needed.

INSTALLATION INSTRUCTIONS

STORAGE SUGGESTIONS



INSTALLATION COMPLETE



STORAGE SUGGESTIONS

Proper maintenance and storage will ensure the 360 DASH valves operate properly the following year.

We recommend flushing the system with water for five minutes after all starter has been removed from the system.

Also, remember to properly winterize the system or remove the 360 DASH row components to prevent freeze damage.