SWING PIPE

OPERATING INSTRUCTIONS

Swing Pipe Assembly

Your PCE Tractor Mounted Swing Pipe was designed to place the weight of the pipe and the hose it pulls directly over the axle of a four-wheel drive tractor. This design provides immediate benefits for you by making the turning points of the swing pipe the same as the tractor axle, eliminating the requirement to back up on the end-rows. With the swing pipe operating independent of the toolbar, it remains stationary and parallel to the ground when the toolbar is picked up, providing a more stable environment and less stress on the unit and hose.

This PCE Swing Pipe mounts to the tractor's factory bracket holes via two (2) fender Sideplates that accompany the Swing Pipe. With the added ability to pull and carry weight from this secure bracket, larger steel piping is implemented in the flow tube to minimize restrictions and increase efficiency of the entire system.

Warning! Before You Begin

Before operating this Swing Pipe, make sure you are familiar with all procedures involved in safe and effective use of the equipment.

Do Not Stand Behind or Near the Swing Pipe While Operating

- Before operating the Swing Pipe, make sure there are no people in or on this machine. Keep everyone away while operating this machine.
- Never Operate this Swing Pipe if any part is damaged or missing.
- If you need to leave your tractor cab, make sure the tractor and Swing Pipe are secured in place, using appropriate procedures.

John Deere® Models

Mounting Swing Pipe to Tractor

The Puck Tractor Mounted Swing Pipe is manufactured to be compatible with each customer's tractor to best fit their needs. The following pages will illustrate the correct tractor mounting procedures for John Deere® Model tractors.

Mounting Instructions

This section is intended to detail the steps needed for mounting the Swing Pipe to the fender of the tractor. The Sideplates used for John Deere® Model tractors are universal amongst the brand; therefore, all holes present in the Sideplates may or may not be used by each John Deere® Model tractor.

Bolt List						
Item No.	**Part No.**	**Size**	**Type**	**Qty.**	**Use**	**Torque Specifications, lbs dry**
1	A	1" X 4"	Bolt	8	Sideplate Mounting	640
2	B	1"	Lock Washer	8	Sideplate Mounting	640
3	C	1"	Nut	8	Sideplate Mounting	640
4	D	7/8" X 3 1/2"	Bolt	6	Sideplate to Baseplate Mounting	430
5	E	7/8"	Lock Washer	6	Sideplate to Baseplate Mounting	430
6	F	7/8"	Nut	6	Sideplate to Baseplate Mounting	430
4	D	7/8" X 3 1/2"	Bolt	8	Extension Pipe	430
5	E	7/8"	Lock Washer	8	Extension Pipe	430
6	F	7/8"	Nut	8	Extension Pipe	430
4	D	7/8" X 3 1/2"	Bolt	8	Rear End	430
5	E	7/8"	Lock Washer	8	Rear End	430
6	F	7/8"	Nut	8	Rear End	430

Table 1: Bolt List for mounting Tractor Fender Sideplates, Swing Pipe Assembly and Swing Pipe Extension Pipe.

Securing the Swing Pipe Assembly to the Tractor Fender

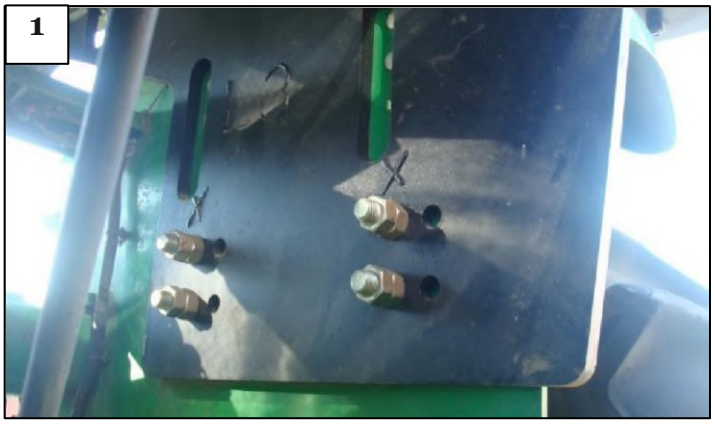
Step 1: Attaching Sideplates

Bolts needed for Sideplate Mounting

Part No.	Item No.	Size	Type	Qty.	Torque Specifications, lbs dry
4	D	1" x 4"	Bolt	8	640
5	E	1"	Lock Washer	8	
6	F	1"	Nut	8	

Table 2: Bolts for Mounting Sideplates

1. Secure Sideplates (Figure 1) to each side of the tractor fender
2. Dry fit a bolt in the tractor holes prior to installation to ensure whether or not paint needs to be removed to ensure proper fit in following steps
3. Lift one Sideplate to inside of tractor fender • Each Sideplate is marked with an "L" or "R" indicating fender side
    - "L" and "R" sides are based off sitting inside the tractor position
    - The long end on the top of the side plate will face backwards
4. Bolts should be inserted from the wheel side of the fender to ensure they do not interfere with wheels
5. Secure Sideplate to fender using (4) 1" x 4" bolts with (4) 1" Lock Washers and (4) 1" Nuts (Table 2)
    - Securely fasten (4) bolts on each side of plate
    - Torque: 640 lbs dry
6. Ensure exact same mounting hole sets are used for each side plate
7. Repeat for second Sideplate on opposite side of fender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Step 2: Mounting Main Tractor Mounted Swing Pipe Assembly

Caution! Do Not Lift Main Tractor Mounted Swing Pipe Assembly from Top Double 90˚

The Main Tractor Mounted Swing Pipe Assembly is designed with safe lifting points located on the Top Plate. Lifting the Main Tractor Mounted Swing Pipe Assembly by the Top Double 90˚ can cause major damage to the unit, or result in serious injury or death. Bolts needed for Mounting Main Swing Pipe

Part No.	Item No.	Size	Type	Qty.	Torque Specifications, lbs dry
4	D	7/8" X 3 1/2"	Bolt	6	430
5	E	7/8"	Lock Washer	6	
6	F	7/8"	Nut	6	

Table 3: Bolts for Mounting Swing Pipe

The Top Plate under the Top Double 90˚ comes equipped with the holes used for securing chains during the mounting and dismounting processes. These holes are positioned to maximize safe lifting and eliminate the potential of damage to the unit while mounting or dismounting when used the correct way.

1. Loosely wrap hydraulic hoses that attach to tractor around closest side brace (Figure 2)
2. Secure spacer blocks on bottom (4) corners of Base Plate so hydraulic hose is not damaged (Figure 3)

3. Attach chain to Top Plate under Top Double 90˚
   - Run chain down through first hole and back up through second hole
   - Watch flowmeter so it does not get wrapped/broken off from the chain
   - Connect chain in a loop above Top Double 90˚
   - Run chain underneath safety block on cylinder
   - Connect to hook above Top Double 90˚
   - Ensure unit is level

4. Slowly lift unit off the ground and towards the tractor fender
   - Have an extra person to help guide the arm off the unit, and prevent rapid movement

5. Lift Main Tractor Mounted Swing Pipe Assembly over top of tractor fender where Sideplates are secured
6. Slowly lower Main Tractor Mounted Swing Pipe Assembly onto top of Sideplates
   - Line up innermost (3) bolt holes with top of Sideplates
7. Secure Main Tractor Mounted Swing Pipe Assembly using (6) 7/8" x 3 1/2" bolts and (6) 7/8" nuts and lock washers
   - Torque: 430 lbs dry

Step 3: Mounting Extension Pipe

Bolts needed for Extension Pipe Mounting

Part No.	Item No.	Size	Type	Qty.	Torque Specifications, lbs dry
4	D	7/8" X 3 1/2"	Bolt	8	430
5	E	7/8"	Lock Washer	8	
6	F	7/8"	Nut	8	

Table 4: Bolts for Mounting Extension Pipe

1. Lift Extension Pipe up to end of Main Tractor Mounted Swing Pipe Assembly
2. Carefully butt Extension Pipe up to end of Main Tractor Mounted Swing Pipe Assembly
    - Gussets are positioned on top and bottom
    - Flange is positioned towards main Swing Pipe unit
    - Line up bolt holes
3. Place hydraulic hose connection bracket in upper two bolt holes as you install the bolts
4. Tighten bolts in a star skipping (3) bolt holes until each bolt is snug. Tighten all bolts to proper torque
    - Torque: 430 lbs dry
5. Seal flange with silicone or flange gasket
    - RV Silicone is acceptable

Step 4: Mounting Rear End

Bolts needed for Rear End Mounting

Part No.	Item No.	Size	Type	Qty.	Torque Specifications, lbs dry
3	D	7/8" X 3 1/2"	Bolt	8	430
5	E	7/8"	Lock Washer	8	
6	F	7/8"	Nut	8	

Lift Rear End up to end of Extension Pipe

1. Seal flange with silicone or flange gasket
    - RV Silicone is acceptable
2. Carefully butt Rear End up to end of Main Tractor Mounted Swing Pipe Assembly
    - Gussets are positioned on top and bottom
    - Flange is positioned towards main Swing Pipe unit
    - Line up bolt holes
3. Snug bolts in a star skipping (3) bolt holes until each bolt is snug. Tighten all bolts to proper torque
    - Torque: 430 lbs dry
4. Locate the pig shooter gate extension hose
    - Plug into pioneer tip at the flange where the extension pipe mounts to the main swing arm
    - Run hose through loops to rear end of swing arm
    - Attach hydraulic hose to pig shooter gate

Case IH® Models

Mounting Swing Pipe to Tractor

The Puck Tractor Mounted Swing Pipe is manufactured to be compatible with each customer's tractor to best fit their needs. The following pages will illustrate the correct tractor mounting procedures for Case IH® Model tractor.

Mounting Instructions

This section is intended to detail the steps needed for mounting the Swing Pipe to the fender of the tractor. The Base Plate in this section is intended for use on Case IH ® Model tractors, therefore, all parts present in the Base Plate may or may not be used by each Case IH® model tractor. In addition, due to variations in Case IH® tractor fenders, holes may need to be manually added to fender to accommodate Sideplates.

Bolt List						
Item No.	**Part No.**	**Size**	**Type**	**Qty.**	**Use**	**Torque Specifications, lbs dry**
1	A	1" X 4"	Bolt	5	Sideplate Mounting	640
2	B	1"	Lock Washer	5	Sideplate Mounting	640
3	C	1"	Nut	5	Sideplate Mounting	640
4	D	7/8" X 3 1/2"	Bolt	6	Sideplate to Baseplate Mounting	430
5	E	7/8"	Lock Washer	6	Sideplate to Baseplate Mounting	430
6	F	7/8"	Nut	6	Sideplate to Baseplate Mounting	430
4	D	7/8" X 3 1/2"	Bolt	8	Extension Pipe	430
5	E	7/8"	Lock Washer	8	Extension Pipe	430
6	F	7/8"	Nut	8	Extension Pipe	430
4	D	7/8" X 3 1/2"	Bolt	8	Rear End	430
5	E	7/8"	Lock Washer	8	Rear End	430
6	F	7/8"	Nut	8	Rear End	430

Table 6: Bolt List for mounting Tractor Fender Sideplates, Swing Pipe Assembly and Swing Pipe Extension Pipe.

Securing the Swing Pipe Assembly to the Tractor Fender

Step 1: Attaching Sideplates

Bolts needed for Sideplate Mounting

Part No.	Item No.	Size	Type	Qty.	Torque Specifications, lbs dry
4	D	7/8”	Bolt	5	430
5	E	7/8”	Lock Washer	5	
6	F	7/8”	Nut	5	

Table 7: Bolts for Mounting Sideplates

1. Some Case IH® tractors will require holes to be drilled in the fender sideplates, and possibly in the Swing Arm sideplates, to accommodate your tractor.
2. Some Case IH ® tractors have fuel tanks inside the rear fenders. Please be aware of where you are drilling.
3. Secure Sideplates (Figure 4) to each side of the tractor fender
4. Drill appropriate holes in sides of fender to accommodate Sideplate.
5. Lift one Sideplate to inside of tractor fender • Each Sideplate is marked with an “L” or “R” indicating fender side
    - “L” and “R” sides are based off sitting inside the tractor position
    - Long Side, indicated in (Figure 14, Part A) will face away from tractor
6. Secure Sideplate to fender using (5) 7/8” bolts with

   (5) 7/8” Lock Washers and (5) 7/8” Nuts
    - Securely fasten (5) bolts on each side of plate
    - Torque: 430 lbs dry
7. Ensure exact same mounting hole sets are used for each side plate
8. Repeat for second Sideplate on opposite side of fender

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Step 2: Mounting Main Tractor Mounted Swing Pipe Assembly

Caution! Do Not Lift Main Tractor Mounted Swing Pipe Assembly from Top Double 90˚

The Main Tractor Mounted Swing Pipe Assembly is designed with safe lifting points located on the Top Plate. Lifting the Main Tractor Mounted Swing Pipe Assembly by the Top Double 90˚ can cause major damage to the unit, or result in serious injury or death. Bolts needed for Mounting Main Swing Pipe

Part No.	Item No.	Size	Type	Qty.	Torque Specifications, lbs dry
4	D	7/8" X 3 1/2"	Bolt	6	430
5	E	7/8"	Lock Washer	6	
6	F	7/8"	Nut	6	

Table 8: Bolts for Mounting Swing Pipe

The Top Plate under the Top Double 90˚ comes equipped with the holes used for securing chains during the mounting and dismounting processes. These holes are positioned to maximize safe lifting and eliminate the potential of damage to the unit while mounting or dismounting when used the correct way.

1. Loosely wrap hydraulic hoses that attach to tractor around closest side brace (Figure 5)
2. Secure spacer blocks on bottom (4) corners of Base Plate so hydraulic hose is not damaged (Figure 6)

5

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3. Attach chain to Top Plate under Top Double 90˚
   - Run chain down through first hole and back up through second hole
   - Watch flowmeter so it does not get wrapped/broken off from the chain
   - Connect chain in a loop above Top Double 90˚
   - Run chain underneath safety block on cylinder
   - Connect to hook above Top Double 90˚
   - Ensure unit is level

4. Slowly lift unit off the ground and towards the tractor fender
   - Have an extra person to help guide the arm off the unit, and prevent rapid movement

5. Lift Main Tractor Mounted Swing Pipe Assembly over top of tractor fender where Sideplates are secured.
6. Slowly lower Main Tractor Mounted Swing Pipe Assembly onto top of Sideplates
   - Line up innermost (3) bolt holes with top of Sideplates
7. Secure Main Tractor Mounted Swing Pipe Assembly using (3) 7/8" x 3 1/2" bolts and (3) 7/8" nuts and lock washers
   - Torque: 430 lbs dry

Step 3: Mounting Extension Pipe

Bolts needed for Extension Pipe Mounting

Part No.	Item No.	Size	Type	Qty.	Torque Specifications, lbs dry
4	D	7/8" X 3 1/2"	Bolt	8	430
5	E	7/8"	Lock Washer	8	
6	F	7/8"	Lock	8	

Table 9: Bolts for Mounting Extension Pipe

1. Lift Extension Pipe up to end of Main Tractor Mounted Swing Pipe Assembly
2. Carefully butt Extension Pipe up to end of Main Tractor Mounted Swing Pipe Assembly
    - Gussets are positioned on top and bottom
    - Flange is positioned towards main Swing Pipe unit
    - Line up bolt holes
3. Place hydraulic hose connection bracket in upper two bolt holes as you install the bolts
4. Tighten bolts in a star skipping (3) bolt holes until each bolt is snug. Tighten all bolts to proper torque
    - Torque: 430 lbs dry
5. Seal flange with silicone or flange gasket
    - RV Silicone is acceptable

Step 4: Mounting Rear End

Bolts needed for Rear End Mounting

Part No.	Item No.	Size	Type	Qty.	Torque Specifications, lbs dry
4	D	7/8" X 3 1/2"	Bolt	8	430
5	E	7/8"	Lock Washer	8	
6	F	7/8"	Nut	8	

Table 10: Bolts for Mounting Rear End

1. Lift Rear End up to end of Extension Pipe
2. Carefully butt Rear End up to end of Main Tractor Mounted Swing Pipe Assembly
    - Gussets are positioned on top and bottom
    - Flange is positioned towards main Swing Pipe unit
    - Line up bolt holes
3. Snug bolts in a star skipping (3) bolt holes until each bolt is snug. Tighten all bolts to proper torque
    - Torque: 430 lbs dry
4. Seal flange with silicone or flange gasket
    - RV Silicone is acceptable

Wiring Krohne® Monitoring Equipment to Tractor

Your Tractor Mounted Swing Pipe comes equipped with (1) Optiflux 4000 and (1) IFC 100 meter from Krohne® for measuring and recording performance in the field. The Optiflux 4000 is an electromagnetic meter with 8 - 24 VDC power, and the IFC 100 serves as the power supply and signal converter.

Warning! Before You Begin

Ensure all power is shut off before you begin the wiring process. Electric shock could result in serious injury.

- Wiring must match in Electronics AND Flow Tube
- Eliminate Quick Connects and Splices
- Wiring to 1, 2, 3 MUST BE shielded completely from inside of the Optiflux 4000 head to inside of the IFC 100 head, and completely free of splices, nicks, or any risk of interference
- Wiring to 7 and 8 DO NOT need to be shielded

Accessing Wiring Panel

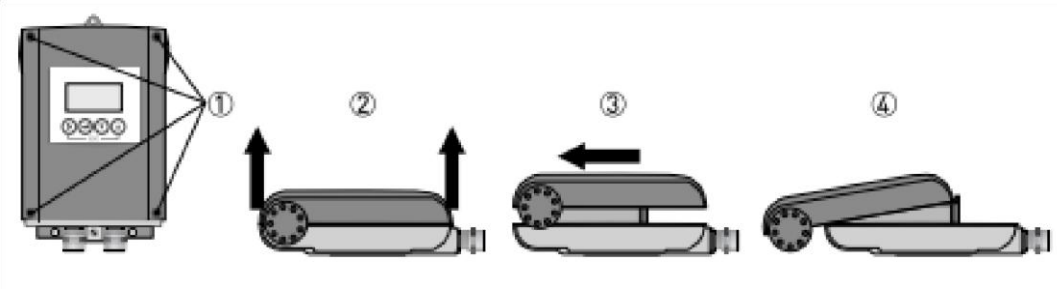


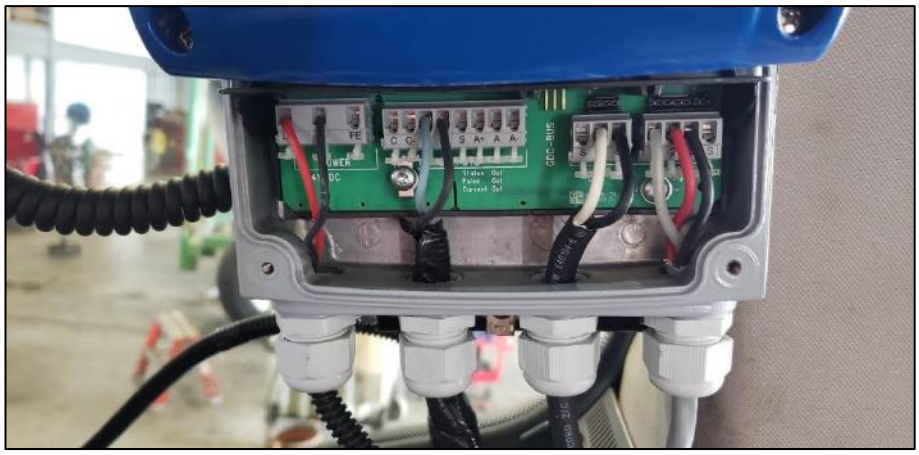
Figure 30: Screw locations and housing cover opening on Krohne® Flowmeter

Reference Figure 30 for illustrations.

1. Loosen the (4) four screws with a suitable tool.
2. Lift the housing at the top and bottom at the same time.
3. Slide the housing cover upwards.
4. The housing cover is guided and held by the inside hinge.

Optiflux 4000 Meter

To wire the Krohne® monitoring equipment to your tractor, you will use the ports on the right side depicted on next page.



Flowtube

- Inputs ⟶ Two Strand 16 ga unshielded
- Power = 7
- White Wire
- Ground = 8
- Black Wire
- Outputs ⟶ Three Strand 16 ga shielded
- Ground = 1
- Clear Wire
- Signal = 2
- Red Wire
- Signal = 3
- Black Wire

IFC 100 Electronic Meter

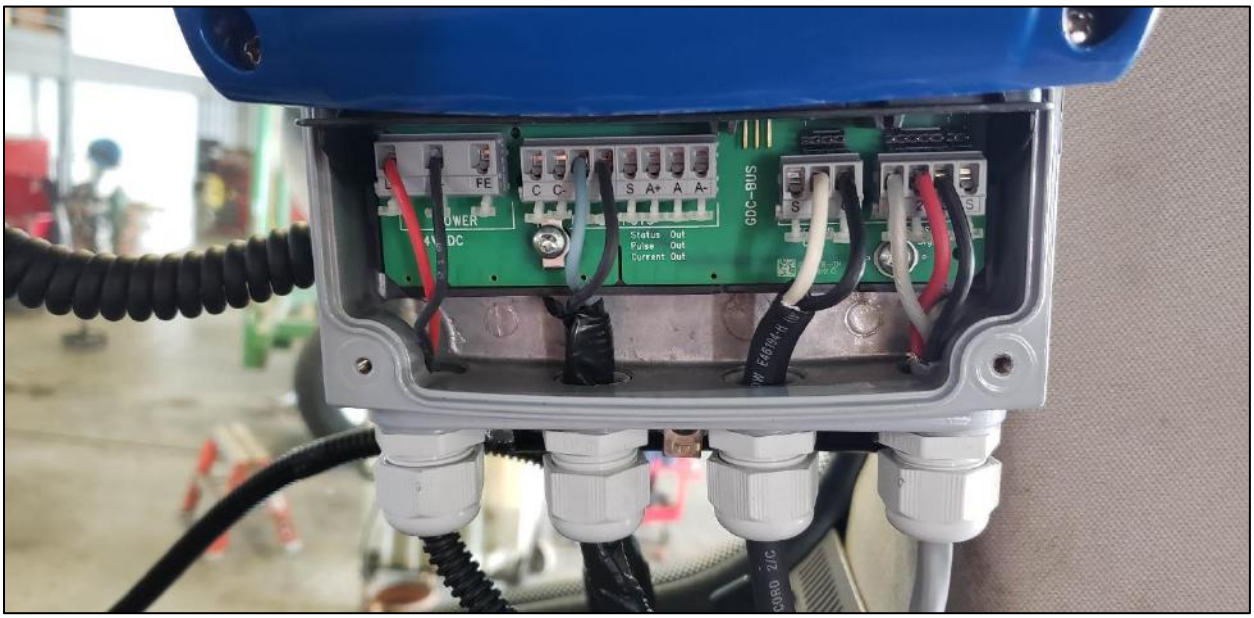
1. Signal Converter and Power Supply
    - Inputs
    - Power - 8 to 24 VDC
    - Ground
    - Outputs
    - Pulse - Signal to 3rd Part Controller = D
    - Current - Operations = C
    - 4 - 20 ma - Ranged Scale = A

Third (3rd) Party Controller

Wire colors MAY vary. Wiring MUST match on BOTH sides of the system or it will not function correctly. To wire the controller to communication with your system, you will use the ports depicted on the left side.

Greenstar®

1. Signal ——— Blue 966 Wire = D
   - Output
2. Power ⟶ Red 062 Wire = L+
3. Ground ⟶ Black 010 Wire =L-
4. Ground ⟶ Black 950 Wire = D-



For other 3rd party controllers, contact your controller representative.

If you experience an issue concerning wiring the unit to your tractor and/or controller, please contact PCE directly for assistance.

For further instructions, maintenance and troubleshooting information, consult the Krohne® and/or GreenStar® Manuals.

Hooking Up and Initial Setup

1. Ensure that all tractor hydraulics are in the neutral position, and not activated. Route hydraulic hoses to desired ports on your tractor, and hook up ensuring they are properly seated.
2. Puck swing pipes require a case drain line to be hooked up to the tractor. Consult your tractor's Operator's Manual to locate the case drain port. If the case drain port does not have a hookup compatible with your Puck swing pipe, consult your tractor dealer to obtain the proper fitting. Failure to properly plumb the case drain line will result in swing pipe failure.
3. Test hydraulic system
    a. Ensure that all objects and persons are completely clear of the area of the applicator, as well as the complete range of swing of the swing arm
    b. Remove any locking mechanisms (if equipped)
    c. Test each hydraulic function individually. Note that equipment new from the factory may have air trapped in hydraulic system, and may move erratically. Cycle hydraulics until movement is controlled.
    d. Some Puck swing pipes are configured with separate hydraulics for your pig shooter gate, and others combine the main gate and the pig shooter gate on the same hydraulic loop. If you have separate hydraulic hoses and a stainless-steel pig shooter gate, they are separate. If there is only one set of gate hoses and a brass pig shooter gate, they are plumbed together.
    e. If your pig shooter gate is plumbed with your main gate, the following settings are possible
        i. Powering the valve controlling the gates open will cause both gates to open.
        ii. Powering the valve controlling the gates to close will close the main gate, but will not cause the pig shooter gate to move.
        iii. Floating the valve controlling the gates will cause the pig shooter gate to close, and the main gate to remain in its current position.
    f. Brass gates are opened with a hydraulic cylinder, and close with a spring. They will open when given a command to open, and close automatically when there is a lack of hydraulic pressure to keep them open. Stainless steel gates must be powered in both directions.
4. Set the upper limit on your 3-point to prevent the swing pipe from colliding with your applicator in the up position.
    a. Retract the hydraulic cylinder on your swing pipe to orient the swing pipe directly behind the tractor.
    b. Raise the 3-point of your tractor until the upper most point of the applicator (likely the distributor motor) is 8" to 12" below the swing pipe.
    c. Follow the Operator's Manual for your tractor to set the high limit to this location.
    d. Raise and lower your 3-point a couple times to ensure the setting is as desired.
5. Hook up hose from the swing pipe to the applicator. (If your applicator is not equipped with a Puck Z-Pipe, please arrange your own method for transporting liquid from the swing pipe to the applicator).
    a. Locate an 8" coupler set, a short piece of 8" lay flat hose, associated clamps, and a tape measure.
    b. Install coupler ends, one on the applicator Z-Pipe inlet, and the other on the swing pipe outlet.
    c. Raise the applicator to the fully up position (with the 3-point limit set).
    d. With the Z-pipe on the storage stand, rotate the inlet joint so that the inlet is pointing directly at the outlet of the swing pipe.
    e. Using tape measure, measure how long your hose will need to be, from the far side of your coupler collar on the Z-pipe side to the far side of the coupler collar on the swing pipe side.
    f. Add 4 inches, and cut your short hose at this length.
    g. Remove coupler ends from the swing pipe and Z-pipe and install on the hose.

h. Install your new hose between the Z-pipe and swing pipe
i. Raise and lower your applicator to test. If properly sized, your Z-pipe should lower close to, or slightly touch the storage stand with the applicator fully up, and should not come close to over-centering with applicator fully down. If too long, the hose will be prone to kinking off flow when you raise up on the end rows. If too short, the Z-pipe will be in danger of over centering into your tractor when the applicator is lowered in the field.
j. If necessary, re-cut your hose and test again until proper fit is found.

Operating in the field

1. Hook up the drag hose to the end of the swing pipe using a clamp designed and intended for this purpose
2. Prior to accepting flow to the tractor, understand the operation of your swing pipe. There are 4 potential settings for the valve in your tractor that controls the main cylinder on your swing pipe. Consult your tractor Operator's Manual to understand how to activate these settings.
3. Always be sure that the complete swing radius of the swing pipe is clear of objects and people prior to activating hydraulics.
    a. Cylinder Neutral
        i. Your valve in the neutral position will cause the main cylinder to remain in whatever position it was most recently commanded to.
    b. Cylinder Float
        i. Floating your cylinder is a critical part of correctly operating your swing pipe.
        ii. As you pull hose through the field, you want your swing pipe to be able to trail behind you as it needs to. Activating float on the valve controlling your main cylinder will allow the swing pipe to trail properly.
        iii. You will have this valve in float for a majority of the time when operating your swing pipe.
        iv. Puck swing pipes have a hydraulic relief in place so that if you forget to place your cylinder in float, it will protect itself. However, this is not for operation, it is a safeguard. Relying on this relief will lead to damage to either the hose or the swing pipe itself.
    c. Cylinder Retract
        i. Retracting your main cylinder will attempt to move the swing pipe directly behind your tractor
        ii. Retracting your cylinder may be used in the following situations
            1. During road travel, retracting your cylinder causes it to trail behind you.
            2. After a turn around, once you are back in line for your pull you may want to briefly retract your cylinder to line your hose back up behind you so it does not 'cuff' over as you begin your pull.
    d. Cylinder Extend
        i. Extending your main cylinder will cause the swing pipe to swing to the side, in whichever direction it can do so most freely.
4. As flow is approaching the tractor, ensure that your swing pipe is in float.
5. It may be necessary to open the pig shooter gate when receiving the initial burst of flow, so that the very heavy initial plug coming through the system does not enter your distribution system
6. Once consistent flow has arrived, close your pig shooter gate and move through the field on your first pass, matching your ground speed to what is necessary for the flow rate you are receiving.
7. When making turn arounds, raise your applicator out of the ground.

8. Ensure that you never use the bumpers on your swing pipe to pull hose during a turnaround, as this will cause swing pipe failure. Back up if necessary, to prevent pulling hose in this manner.

Shooting the Pig

1. When shooting the pig, it is important to receive the pig with a minimum of 100 yards (approximately a half piece) of straight hose behind your tractor, and your swing pipe directly behind you. Failure to do so can cause a very dangerous situation for the equipment, as well as the operator of the tractor, as approaching air will cause erratic movement of the hose.
2. As the pig approaches, the flow rate measured in your tractor cab will increase quickly. When this happens, open your pig shooter gate and prepare to receive the pig.
3. Once the pig has arrived, close the pig shooter gate on the swingarm to trap the air in the hose.
4. With the air trapped in the hose, straighten out the hose as much as possible to allow it to be more easily picked up by the person rolling hose.
5. If the air compressor has not already been shut down, ensure that is done now.
6. Once you are in the location where the hose will be unhooked, re-open the pig shooter gate to exhaust all the air from the system. Do not exit the cab of the tractor until all air has exhausted and the hose lays flat in the field.
7. Prior to unhooking the hose, ensure that your swing pipe is no longer in float so that unhooking the coupler doesn't cause the swing pipe to swing freely.
8. Exit the tractor and unhook the hose from the swing pipe.
9. Upon getting back in the tractor, open all gates on the applicator and swing pipe to ensure that fluid is drained from the system.

Revision History

Revision Number	Date	Equipment Line	Comments
1	5/10/2019	Swing Pipes	Initial