

PART KIT INSTALL INSTRUCTIONS

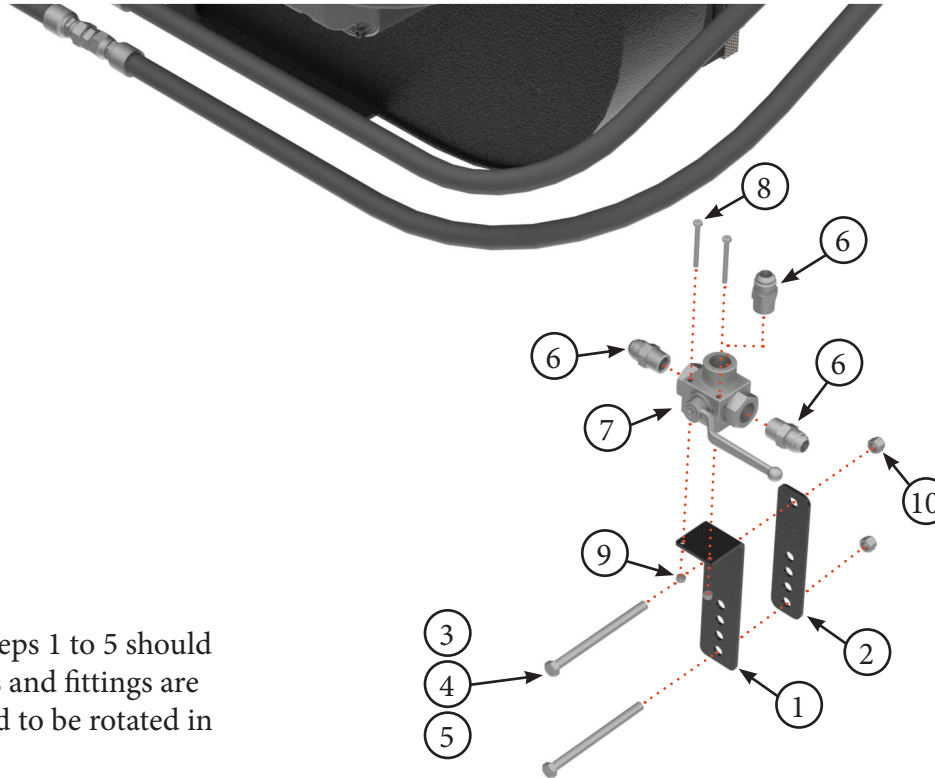
Bypass Valve

Part Kit #VARIES - Rev 2.0 - AIRGUARD - Bypass Kit for Blockage Prevention System

Release Date: 2024-04-11



Title	Airguard Bypass Kit Instructions	RELEASE DATE	2024-04-11
STEP	1. Mount valve on bracket, using 6mm x 60mm bolts (Item 8) and 6mm lock nuts (Item 9) for top connection. Attach mount bracket (Item 1 & 2) to aircart HSS frame. Use 12mm x 110mm-160mm bolts (Item 3, 4 or 5) and 12mm lock nuts (Item 10) for bottom connection. Bracket is designed to fit HSS Beams 3"-5" x 3"-10" in vertical or horizontal mount positions.	REV #	2.0
		PART KIT #	Varies

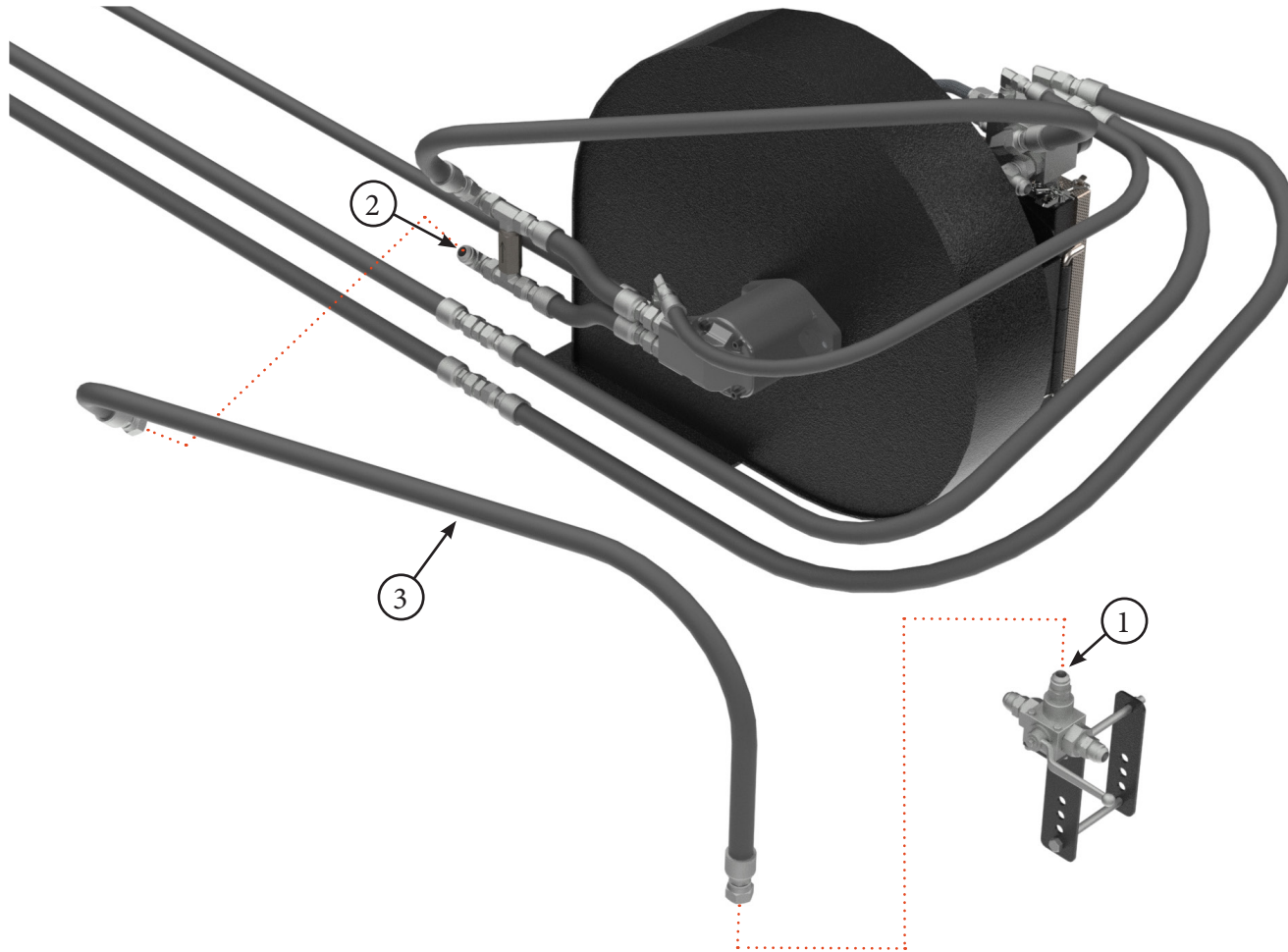


All of the hydraulic connections in Steps 1 to 5 should only be hand tightened until all hoses and fittings are installed. Some connections may need to be rotated in order to install other components.

PARTS LIST		
Item	Part #	Description
1	7733	Bypass Valve Mount Plate
2	7734	Bypass Valve Mount Back Plate
3	7862	HEX BOLT, 12 mm x 110mm, GRADE 8.8
4	7863	HEX BOLT, 12 mm x 130mm, GRADE 8.8
5	7864	HEX BOLT, 12 mm x 160mm, GRADE 8.8

PARTS LIST		
Item	Part #	Description
6	7254	Fitting - Straight - 3/4" JIC M - 3/4" NPT M
7	7274	3 Way Valve - 3/4"
8	7735	HEX BOLT, 6mm x 60mm GRADE 8.8
9	7736	LOCK NUT, 6mm, GRADE 8.8
10	7669	LOCK NUT, 12mm, GRADE 8.8

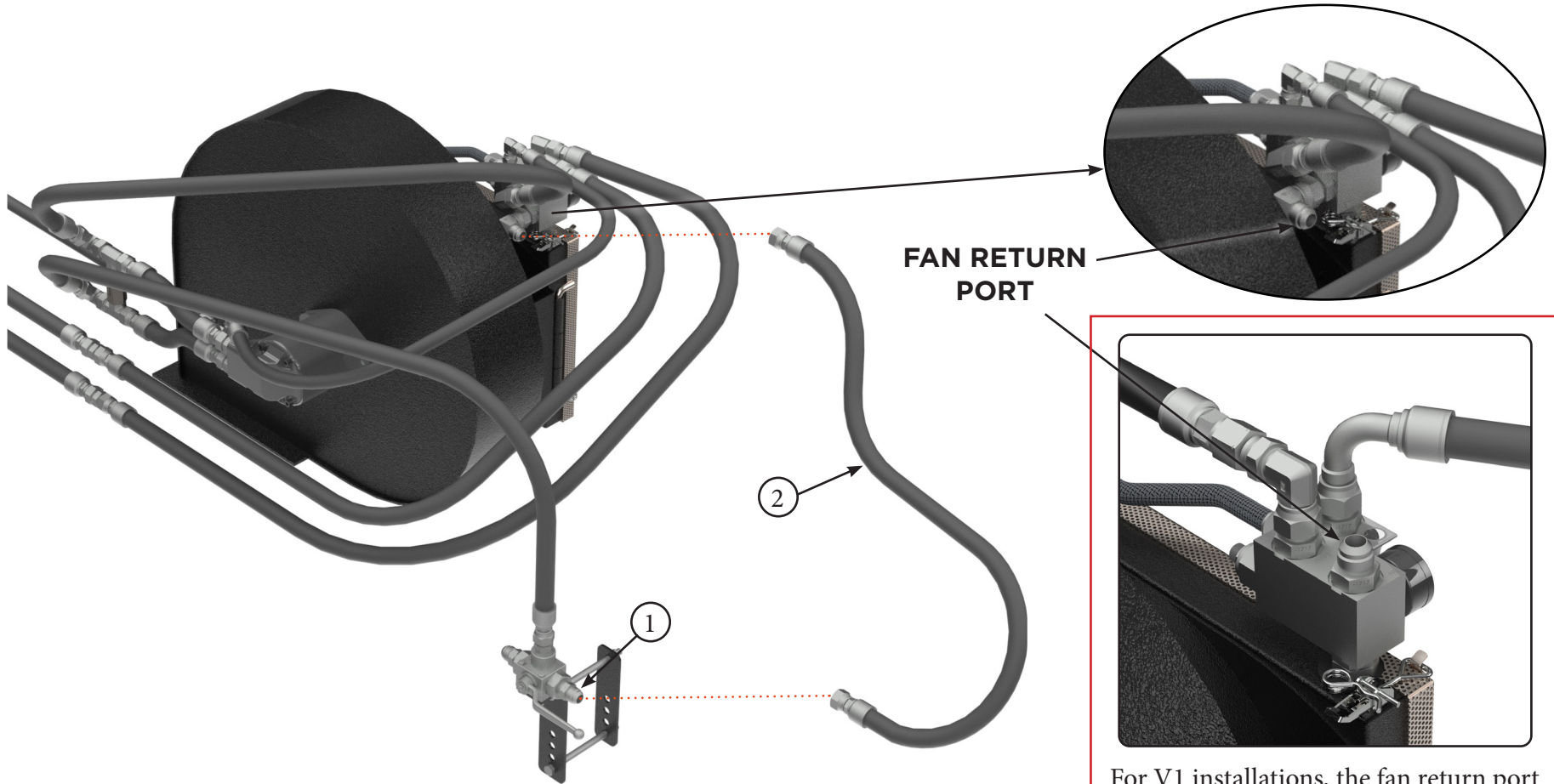
Title	Airguard Bypass Kit Instructions	RELEASE DATE	2024-04-11
STEP	2. Attach the fan return line (Item 2) to the common port on the valve (Item 1) using hydraulic hose from Blockage Prevention System (Item 3).	REV #	2.0
		PART KIT #	Varies



PARTS LIST		
Item	Part #	Description
1	7254	Fitting - Straight - 3/4" JIC M - 3/4" NPT M
2	----	Fan Return Line
3	9016	BPS Hydraulic Hose - 60"

All of the hydraulic connections in Steps 1 to 5 should only be hand tightened until all hoses and fittings are installed. Some connections may need to be rotated in order to install other components.

Title	Airguard Bypass Kit Instructions	RELEASE DATE	2024-04-11
STEP	3. Attach supplied hose (Item 2) from right valve port (Item 1) to fan return port on Blockage Prevention System manifold.	REV #	2.0
		PART KIT #	Varies



FAN RETURN PORT

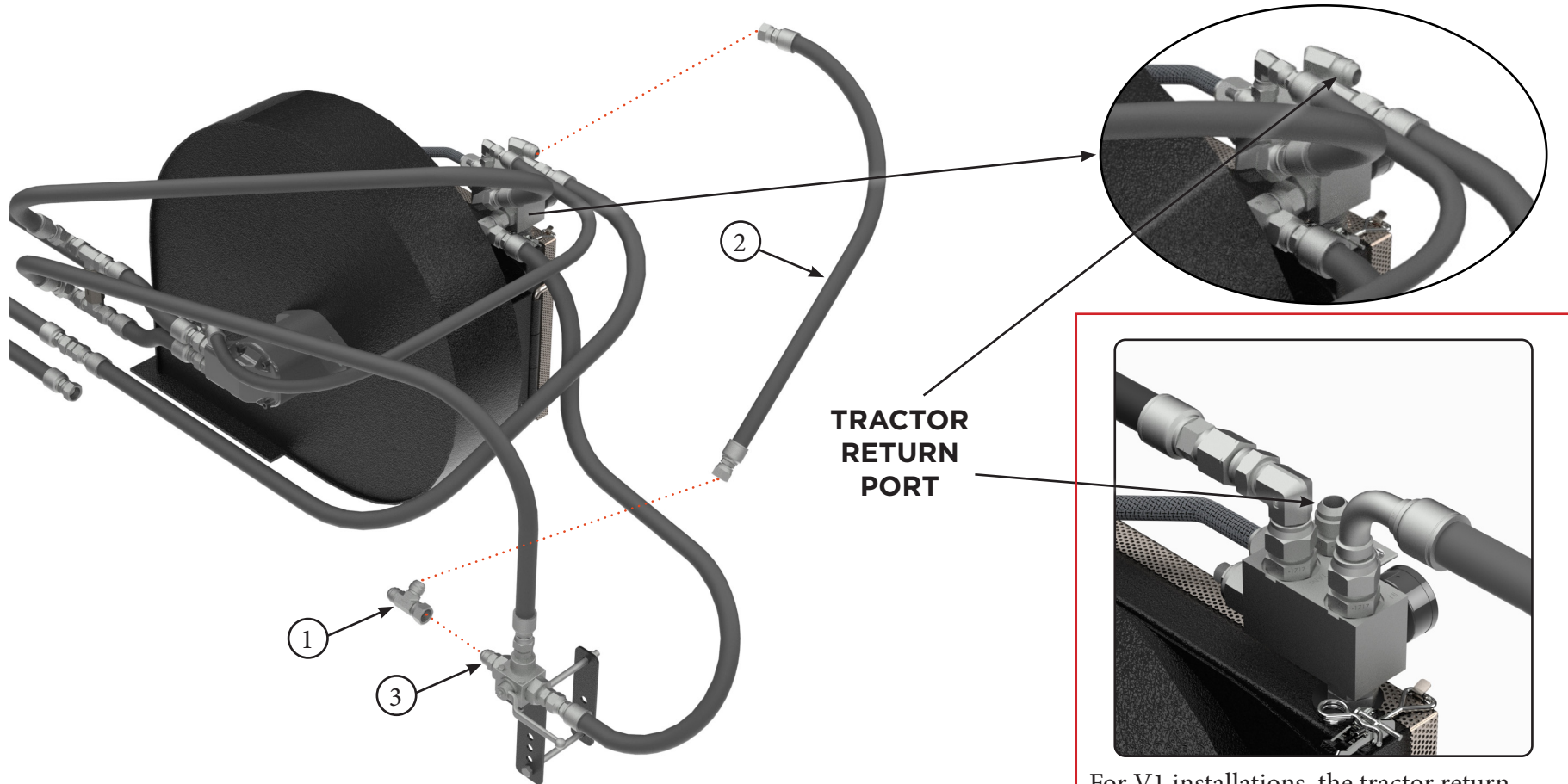


For V1 installations, the fan return port is labelled as “IN” on the manifold.

PARTS LIST		
Item	Part #	Description
1	7254	Fitting - Straight - 3/4” JIC M - 3/4” NPT M
2	9016	BPS Hydraulic Hose - 60”

All of the hydraulic connections in Steps 1 to 5 should only be hand tightened until all hoses and fittings are installed. Some connections may need to be rotated in order to install other components.

Title	Airguard Bypass Kit Instructions	RELEASE DATE	2024-04-11
STEP	4. Attach Tee-fitting (Item 1) to left port on bypass valve (Item 3). Attach tractor return line (Item 2) to Tee-fitting (Item 1).	REV #	2.0
		PART KIT #	Varies



**TRACTOR
RETURN
PORT**

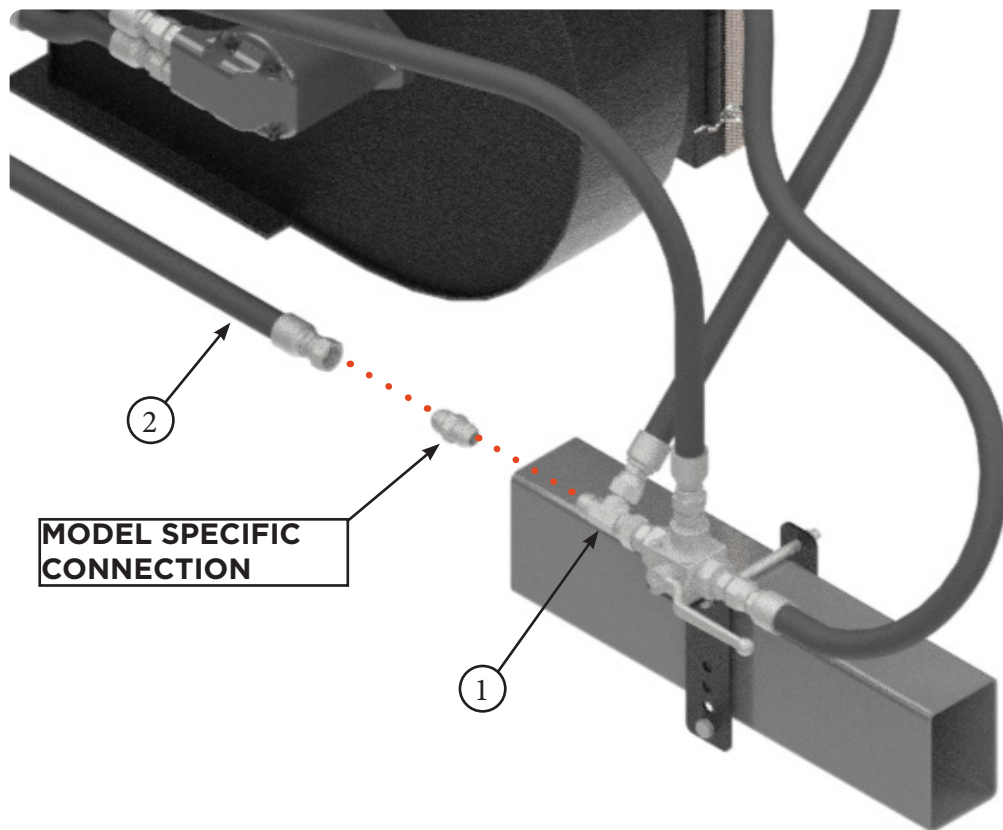
For V1 installations, the tractor return port is labelled as “OUT” on the manifold.

PARTS LIST		
Item	Part #	Description
1	7551	Fitting - Tee - 3/4" JIC M - 3/4" JIC M - 3/4" JIC F Swivel
2	----	Tractor Return Hydraulic Hose
3	7254	Fitting - Straight - 3/4" JIC M - 3/4" NPT M

All of the hydraulic connections in Steps 1 to 5 should only be hand tightened until all hoses and fittings are installed. Some connections may need to be rotated in order to install other components.

Title	Airguard Bypass Kit Instructions	RELEASE DATE	2024-04-11
STEP	5. Attach tractor return line (Item 2) to Tee-fitting (Item 1).	REV #	2.0
		PART KIT #	Varies

NOTE: All of the hydraulic connections in Step 9 to 17 should only be hand tightened until all hoses and fittings are installed. Some connections may need to be rotated in order to install other components.

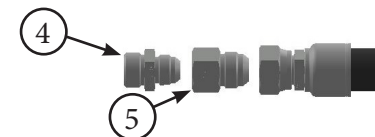


MODEL SPECIFIC CONNECTION

Aircart Models:
with 5/8" JIC Pressure Hose
Connections



Aircart Models:
with 5/8" ORFS Pressure
Hose Connections



Aircart Models:
with 3/4" JIC Pressure Hose
Connections



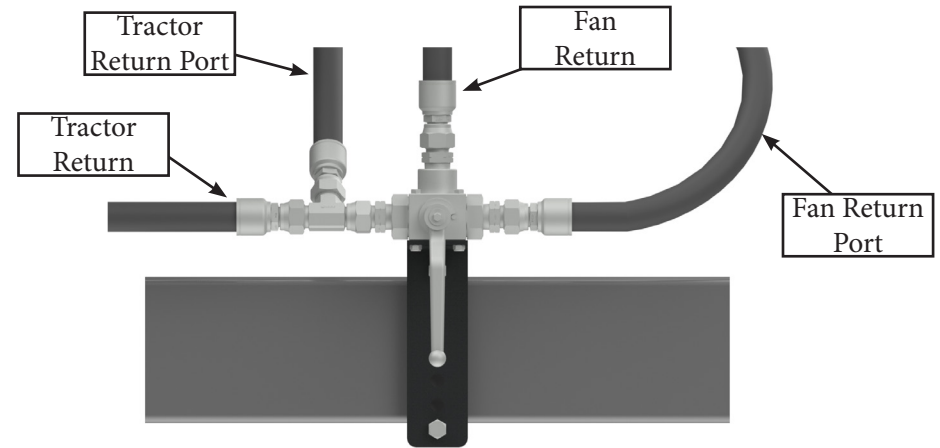
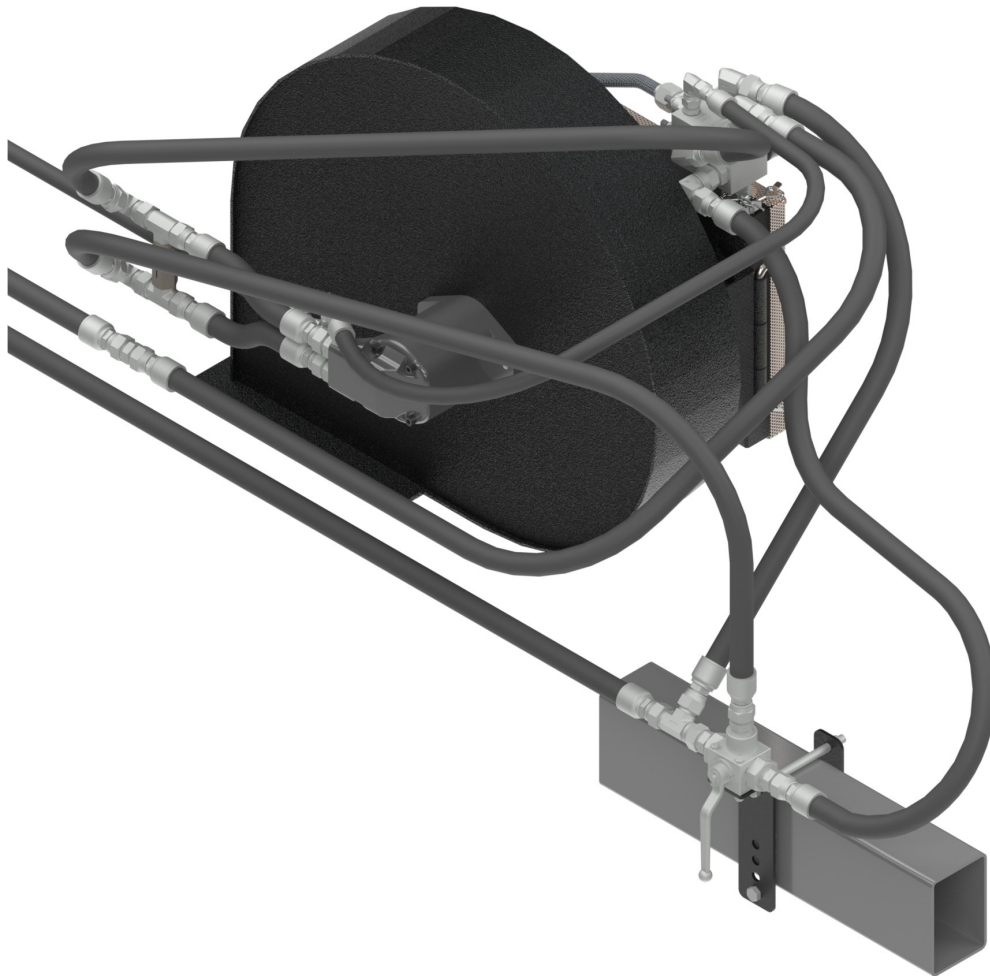
Aircart Models:
with 3/4" ORFS Pressure Hose
Connections



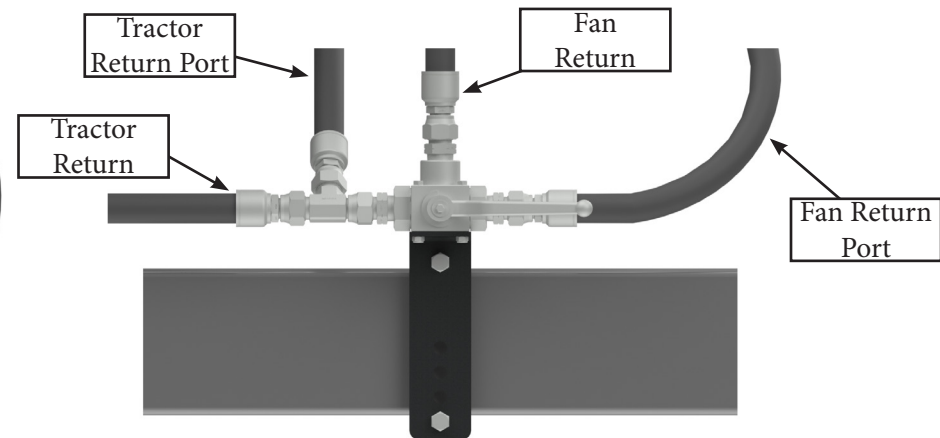
PARTS LIST		
Item	Part #	Description
1	7551	Fitting - Tee - 3/4" JIC M - 3/4" JIC M - 3/4" JIC F Swivel
2	----	Tractor Return Line
3	7242	Fitting - Straight - 5/8" JIC M - 3/4" JIC M

PARTS LIST		
Item	Part #	Description
4	7231	Fitting - Straight - 5/8" ORFS M - 5/8" JIC M
5	7226	Fitting - 5/8" JIC F - 3/4" JIC M
6	7538	Fitting - Straight - 3/4" JIC M - 3/4" JIC M
7	7209	Fitting - Straight - 3/4" JIC M - 3/4" ORFS M

Title	Airguard Bypass Kit Instructions	RELEASE DATE	2024-04-11
STEP	6. Complete the hydraulic installation by ensuring that all connections made in Steps 1 to 5 are tightened. Position/Routing of hydraulic hoses may vary to suit each specific machine installation. Zip tie hoses to reduce wear and ensure tidy installation.	REV #	2.0
		PART KIT #	Varies



OIL THROUGH COOLER
(BP System On State)



OIL BYPASS COOLER
(BP System off State)

Title	Airguard Blockage Prevention System Upgrade Instructions	RELEASE DATE	2024-04-11
STEP	7. Start up operating procedure.	REV #	2.0
		PART KIT #	Varies

----- WARNING -----

Start up procedure is critical to reduce pressure spikes.

START UP PROCEDURE:

After you have installed the Airguard Blockage Prevention System it's critical that you start the Aircart fans very slowly. You're introducing an air pocket that must be moved slowly to the tractor while you prime the hydraulic lines with oil. This process is a good way to make sure your fittings are sealed and secure.

1. Get your oil warmed to 80-100 deg F. If your oil is cold, the viscosity is very high and it will not move through the internal components easily. By warming the oil first, everything will operate as it should.
2. Initiate your fans with 500 Fan RPM at 25% oil flow (or 10% of your max fan speed). If everything looks good, the pressure is just starting to register on the Airguard pressure gauge. If all your fittings are holding their seal, continue to the next step. If your fan is NOT moving, that's okay. The oil is circulating.
Operate this way for 5 minutes.

NOTE: If there is a pressure spike at this low oil flow rate, there is potential for an air lock. Disconnect the end fitting on the Return Line at the SCV and drain off some oil to release the pressure. Reconnect the end fitting and repeat Step 2.

3. Run 1000 Fan RPM at 45% oil flow (or 35% of your max fan speed). Operate for 5 seconds.
4. Run 2000 Fan RPM at 65% oil flow (or 75% of your max fan speed). Operate for 5 seconds.
5. Run 3500 Fan RPM at 85% oil flow (or 100% of your max fan speed). Operate for 3-5 minutes.
6. Take time to ensure that your conveyor or auger is working properly in conjunction with your Airguard kit. Turn your fan RPM down to 50% oil flow and engage the conveyor/auger. If everything is operating as it should, you have successfully installed your Airguard Blockage Prevention System kit. If there are any questions or concerns about the operations, call your AIRGUARD Sales Representative using contact information found at www.airguardproducts.com/contact or visit us at www.airguardproducts.com/productsupport.

Now you're ready to operate! Follow the same warm up procedure you do every day and go seed. This is a procedure that we highly recommend at the beginning of each future season, to ensure the continuation of successful operations. It is a critical step in the introduction of new machinery to your farm operation. After the freeze and thaw of seasons we want to eliminate any air pockets or leaks that could slow preparations.