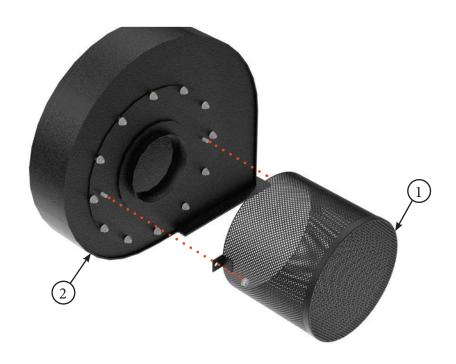
Part Kit #VARIES - Rev 2.0 - AIRGUARD - Blockage Prevention System

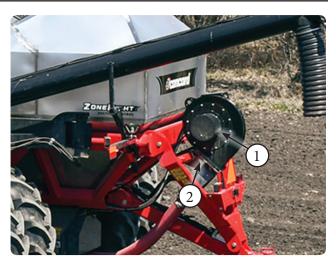
Release Date: 2024-04-03





Title	Airguard Blockage Prevention System Upgrade Instructions	RELEASE DATE	2024-04-03
STEP	1. Remove existing fan screen (Item 1) from the fan housing (Item 2).	REV #	2.0
		PART KIT #	Varies



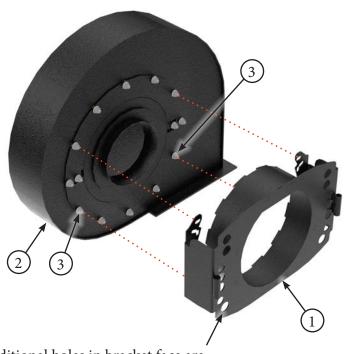




	PARTS LIST			
Item	Part #	Description		
1		Fan Screen		

PARTS LIST				
Item	Part #	Description		
2		Fan Housing		

Title	Airguard Blockage Prevention System Upgrade Instructions	RELEASE DATE	2024-04-03
		REV #	2.0
	bolts and nuts (Item 3). Angle mount bracket in a position that ensures the supplied hydraulic hoses reach the fan motor. Additional holes in bracket face (Item 4) are for easy access with an impact driver. Bracket may look different than shown below.	PART KIT #	Varies



Additional holes in bracket face are for easy access with an impact driver.

Use Kit # 9540 for the following Models:

- 2300
- 2800
- 3400
- 3350



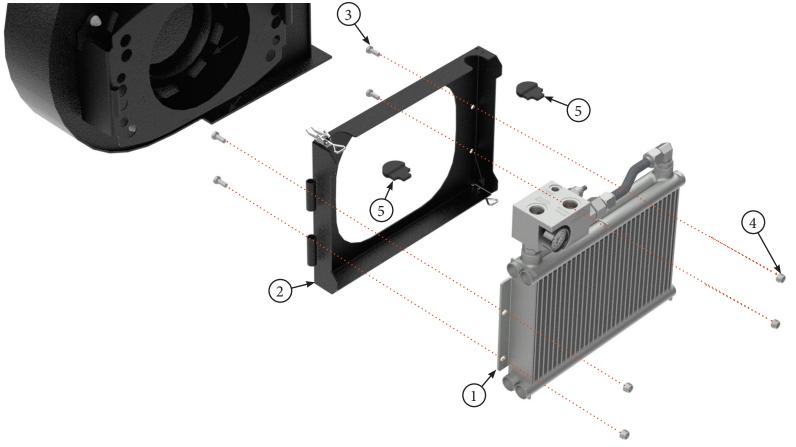
Use Kit # 9520 for the following Models:

- 3800
- 5250



	PARTS LIST			PARTS LIST		
Item	Item Part # Description			Item Part # Description		
1	7556 /or/ 7554	9540 Bracket /or/ 9520 Bracket	3		Existing Hardware	
2		Fan Housing		•	·	

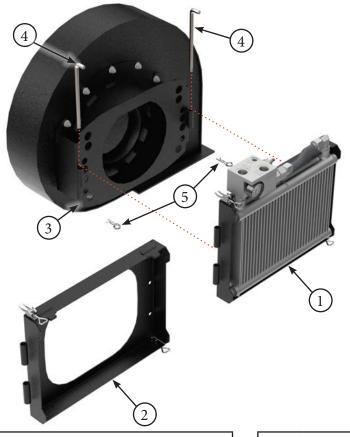
Title	Airguard Blockage Prevention System Upgrade Instructions	RELEASE DATE	2024-04-03
STEP	3. Bolt Oil Cooler/Radiator Assembly (Item 1) to BP System Bracket (Item 2) using	REV #	2.0
	supplied 10mm x 25mm Bolts (Item 3) and 10mm lock nuts (Item 4). If only installing snorkel kit without Radiator, then install plastic plugs (Item 5) onto BP Sytem Bracket (Item 2). This step of the installation may already be completed at the Airguard factory prior to shipping.	PART KIT #	Varies



	PARTS LIST			
Item	Part #	Description		
1	7996	Oil Cooler and Manifold Assembly		
2	7546	Main BP System Bracket		
3	7515	Hex Bolt, 10mm x 25mm Grade 8.8		

PARTS LIST				
Item	Part #	Description		
4	7516	Lock Nut, 10mm Grade 8.8		
5	5 7683 BP System Bracket Plug			

Title	Airguard Blockage Prevention System Upgrade Instructions	RELEASE DATE	2024-04-03
STEP	1	REV #	2.0
	System Main Bracket with Oil Cooler (Item 1) or Main Bracket with Plugs (Item 2) to Fan bracket (Item 3) using supplied pivot pins (Item 4). Secure in place with 3.5mm	PART KIT #	Varies
	cotter pins (Item 5).		

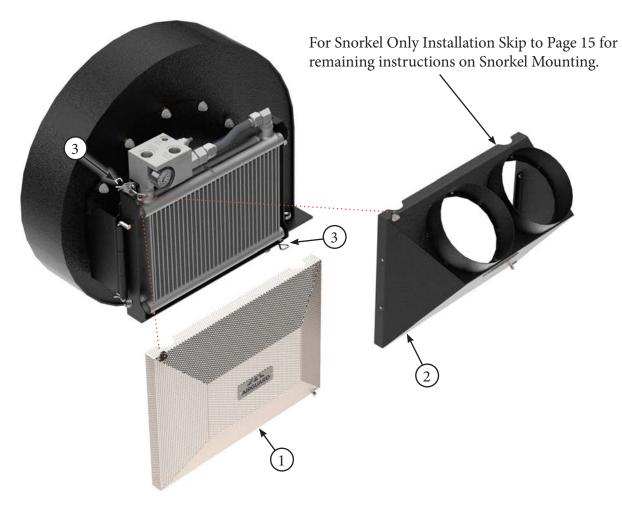


Remove Packaging material and discard, prior to install.

	PARTS LIST			
Item	Part #	Description		
1		BP System Main Bracket with Oil Cooler		
2		BP System Main Bracket with Plugs for Snorkel Only Install		
3		Fan Bracket		

PARTS LIST				
Item	Part #	Description		
4	7502	Pivot Pin For BP Systems		
5	7513	3.5mm Cotter Pin		

Title	Airguard Blockage Prevention System Upgrade Instructions	RELEASE DATE	2024-04-03
STEP			2.0
	latches (Item 3).	PART KIT #	Varies



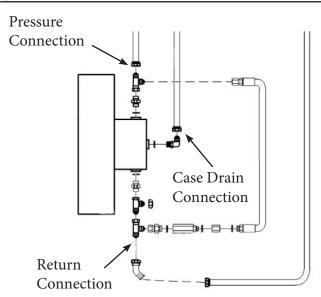
PARTS LIST		
Item	Part #	Description
1	7568	Mesh Screen
2	7977	Snorkel Housing

PARTS LIST		
Item Part # Descri		Description
3		Overcenter Latch

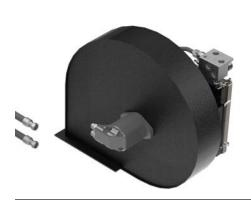
Title	Airguard Blockage Prevention System Upgrade Instructions	RELEASE DATE	2024-04-03
STEP	6. Identify the model of aircart that the Airguard Blockage Prevention System is being	REV #	2.0
	installed on. For models with external check valves, the connections must be made	PART KIT #	Varies
	on the tractor side of the hydraulic circuit as shown below.		varies

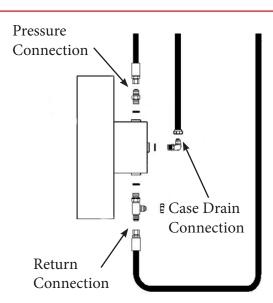
# **Installation with External Check Valve:**



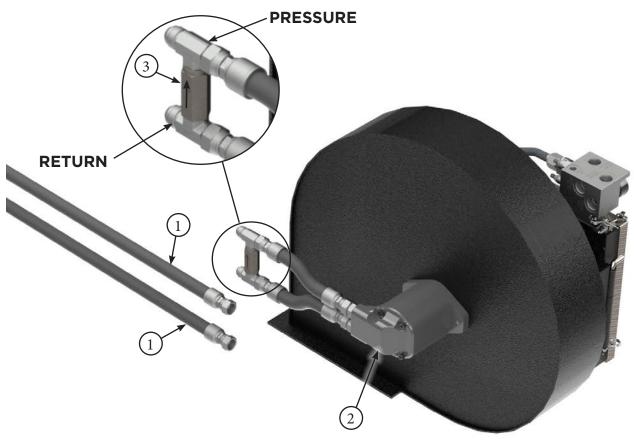


**Installation with Internal Check Valve:** 





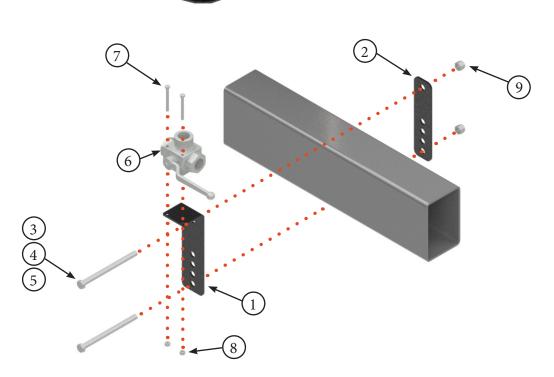
Title	Airguard Blockage Prevention System Upgrade Instructions	RELEASE DATE	2024-04-03
STEP	7. Remove factory hoses (Item 1) from side of fan motor (Item 2). Remove the hos-	REV #	2.0
	es (Item 1) on the tractor side of the external check valve, as shown below. Identify which hose is the pressure side of the circuit. On newer models there is a shut off valve on the pressure side of the circuit. The external check valve will have a directional arrow that always points to the pressure side. If you do not have an external check valve you will attach directly to the fan motor.		Varies



PARTS LIST		
Item	Item Part # Description	
1		Existing Hose from Tractor to Fan Motor
2		Hydraulic Motor

	PARTS LIST		
Item	Part #	Description	
3		External Check Valve	

Title	Airguard Bypass Kit Instructions	RELEASE DATE	2024-04-03
STEP	8. Mount valve on bracket, using 6mm x 60mm bolts (Item 7) and 6mm lock nuts	REV #	2.0
	Use 12mm x 110mm-160mm bolts (Item 3, 4 or 5) and 12mm lock nuts (Item 9) for	PART KIT #	Varies
	bottom connection. Bracket is designed to fit HSS Beams 3"-5" x 3"-10" in vertical or horizontal mount positions.		



NOTE: All of the hydraulic connections in Steps 8 to 16 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	7274	3 Way Valve - 3/4"	
7	7735	HEX BOLT, 6mm x 60mm GRADE 8.8	
8	7736	LOCK NUT, 6mm, GRADE 8.8	
9	7669	LOCK NUT, 12mm, GRADE 8.8	

Title	Airguard Bypass Kit Instructions	RELEASE DATE	2024-04-03
	9. Attach the fan return line (Item 2) to the common port on the valve (Item 5) using	REV #	2.0
	hydraulic hose from Blockage Prevention System (Item 3) and adapters (Item 1 & 4) to make the connection.	PART KIT #	Varies

MODEL SPECIFIC CONNECTION

# MODEL SPECIFIC CONNECTION Aircart Models: with 5/8" IIC Pressure

with 5/8" JIC Pressure Hose Connections

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





8	NOTE: All of the hydraulic connections in Step 8 to 16 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	7254	Fitting - Straight - 3/4" JIC M - 3/4" NPT M
2		Fan Return Line
3	9016	BPS Hydraulic Hose - 60"
4	7539	Fitting - Elbow - 3/4" JIC M - 3/4" JIC F
5	7274	3 Way Valve - 3/4"

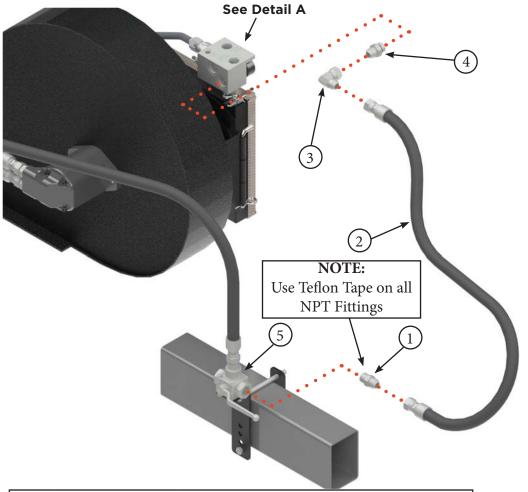
PARTS LIST		
Item	Part #	Description
6	7539	Fitting - Elbow - 3/4" JIC M - 3/4" JIC F
7	7226	Fitting - Straight - 3/4" JIC M - 5/8" JIC F
8	7588	Fitting - Straight - 3/4" JIC M - 3/4" ORFS F

NOTE:

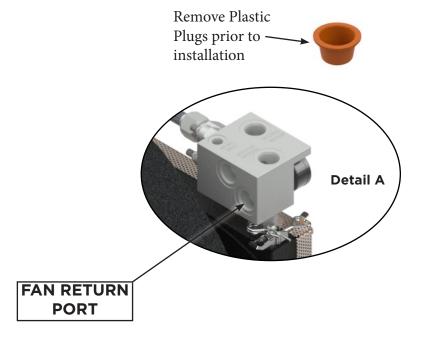
Use Teflon

Tape on all NPT Fittings

Title	Airguard Bypass Kit Instructions	RELEASE DATE	2024-04-03
		REV #	2.0
	Blockage Prevention System manifold. Use adapters (1, 3 & 4) to make the connections.	PART KIT #	Varies



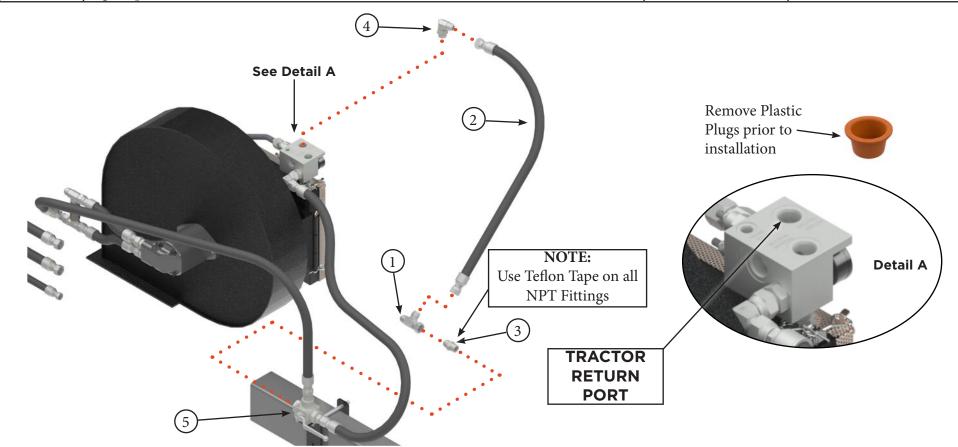
NOTE: All of the hydraulic connections in Step 8 to 16 should only be hand tightened until all hoses and fittings are installed. Some connections may need to be rotated in order to install other components.



PARTS LIST		PARTS LIST
Item	m Part # Description	
1	7254	Fitting - Straight - 3/4" JIC M - 3/4" NPT M
2	2         9016         BPS Hydraulic Hose - 60"           3         7506         Fiting - Elbow - 3/4" JIC Male - 3/4" ORB Male	
3		

PARTS LIST			
Item	Part #	Description	
4	7543	Fitting - Straight - 3/4" JIC Male - 3/4" ORB Male	
5 7274		3 Way Valve - 3/4"	

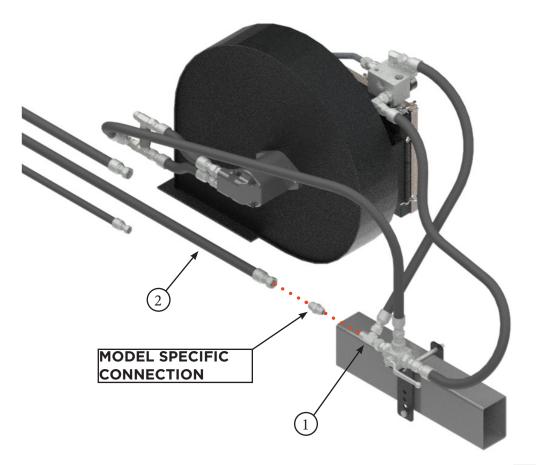
Title	Airguard Bypass Kit Instructions	RELEASE DATE	2024-04-03
	11. Attach Tee-fitting (Item 1) to left port on bypass valve (Item 5) using adapter (Item	REV #	2.0
	3). Attach supplied hose (Item 2) from Tee-fitting (Item 1) to tractor return port using adapter (Item 4).	PART KIT #	Varies



	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	
4	7506	Fiting - Elbow - 3/4" JIC Male - 3/4" ORB Male	
5	7274	3 Way Valve - 3/4"	

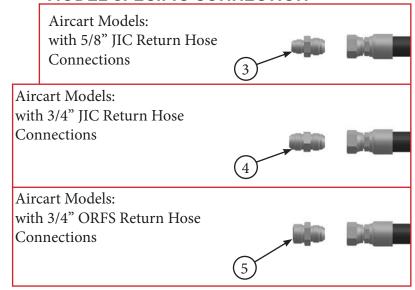
NOTE: All of the hydraulic connections in Step 8 to 16 should only be hand tightened until all hoses and fittings are installed. Some connections may need to be rotated in order to install other components.

Title	Airguard Bypass Kit Instructions	RELEASE DATE	2024-04-03
STEP	line (Item 2) to the hypass valve tee (Item 1)	REV #	2.0
		PART KIT #	Varies



NOTE: All of the hydraulic connections in Step 8 to 16 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.

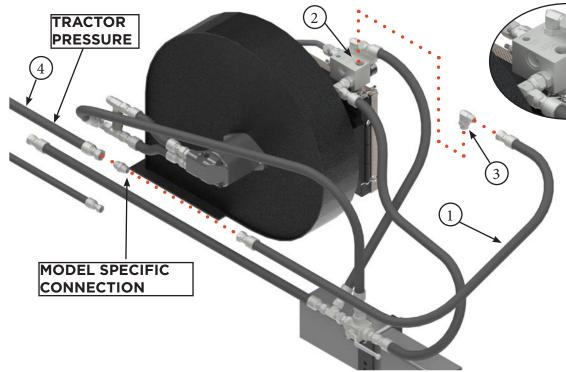
#### **MODEL SPECIFIC CONNECTION**



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

	PARTS LIST		
Item Part # Description			
3	7242	Fitting - Straight - 5/8" JIC M - 3/4" JIC M	
4	7538	Fitting - Straight - 3/4" JIC M - 3/4" JIC M	
5	7209	Fitting - Straight - 3/4" JIC M - 3/4" ORFS M	

Title	Airguard Blockage Prevention System Upgrade Instructions	RELEASE DATE	2024-04-03
STEP	13. Hoses may be routed to suit your specific aircart installation. Install supplied 3/4" R		2.0
	hydraulic hose (Item 1) to the "TRACTOR PRESSURE" port of the radiator block (Item 2), using adapter (Item 3) to make the connection. Use model specific connection as per instructions below to attach the other end of the hose to the factory pres-	PART KIT #	Varies
	sure line (Item 4) that was removed from the fan motor.		



NOTE: All of the hydraulic connections in Step 8 to 16 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		Description	
1	9016	BPS 3/4" Hydraulic Hose - 60"	
2	"TRACTOR PRESSURE" Port - BP System Mani		
3	3 7506 Fiting - Elbow - 3/4" JIC Male - 3/4" ORB Male 4 Tractor Supply (Pressure) Hydraulic Hose		
4			

	Aircart Models: with 5/8" JIC Pressure Hose Connections	5	N.
	cart Models:		
witł	n 3/4" JIC Pressure Hose		
Cor	nnections		400
		6	
Air	cart Models:		
witł	n 3/4" ORFS Pressure Hose	mles	Post Time
Cor	nnections	THE RESERVE	
		7	

PARTS LIST

Fitting - Straight - 5/8" JIC M - 3/4" JIC M

Fitting - Straight - 3/4" JIC M - 3/4" JIC M

Fitting - Straight - 3/4" JIC M - 3/4" ORFS M

Description

Remove Plastic

Plugs prior to -

installation

TRACTOR

PORT

PRESSURE

MODEL SPECIFIC CONNECTION

Part #

7242 7538

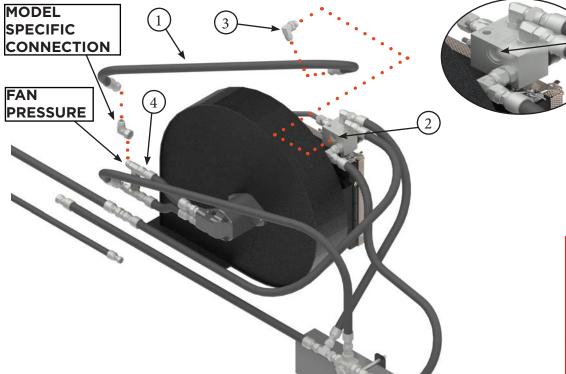
7209

Item

5

6

Title	Airguard Blockage Prevention System Upgrade Instructions	RELEASE DATE	2024-04-03
STEP		REV #	2.0
	radiator block (Item 2) using adapter (Item 3). Use model specific connection as per instuctions below to attach the other end of the hose to the factory fan pressure line/	PART KIT #	Varies
	port (Item 4) coming from the fan motor.		



FAN PRESSURE PORT Remove Plastic Plugs prior to installation



#### **MODEL SPECIFIC CONNECTION**

Aircart Models: with 5/8" JIC 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	9016	BPS 3/4" Hydraulic Hose - 60"	
2		"FAN PRESSURE" Port - BP System Manifold	
3	7506	Fiting - Elbow - 3/4" JIC Male - 3/4" ORB Male	
4		Fan Supply (Pressure) Hydraulic Hose	

Step 8 to 16 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	
5	7539	Fitting - Elbow - 3/4" JIC M - 3/4" JIC F	
6	7226	Fitting - Straight - 3/4" JIC M - 5/8" JIC F	
7	7588	Fitting - Straight - 3/4" JIC M - 3/4" ORFS F	

NOTE: All of the hydraulic connections in

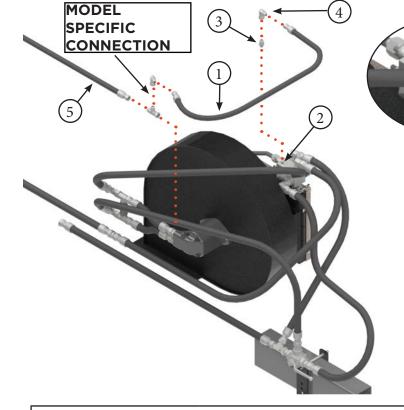
Title	Airguard Blockage Prevention System Upgrade Instructions	RELEASE DATE	2024-04-03
STEP	15. Install supplied 1/2" hydraulic hose (Item 1) to the "CASE DRAIN" port of the	REV #	2.0
	radiator block (Item 2) using adapters (Item 3 & 4). and to the fan motor case drain line (Item 5). Use model specific connection as per instructions below to attach the other end of the hose to the factory fan case drain line/port (Item 5) coming from the fan motor.	PART KIT #	Varies

NOTE: All of the hydraulic connections in Step 8 to 16 should only be hand tightened

until all hoses and fittings are

may need to be rotated in order to install other components.

installed. Some connections

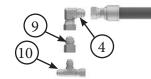


FAN CASE DRAIN PORT Remove Plastic Plugs prior to installation



#### MODEL SPECIFIC CONNECTION

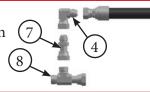
Aircart Models: with 3/8" JIC Case Drain Hose Connections



Aircart Models: with 1/2" JIC Case Drain Hose Connections



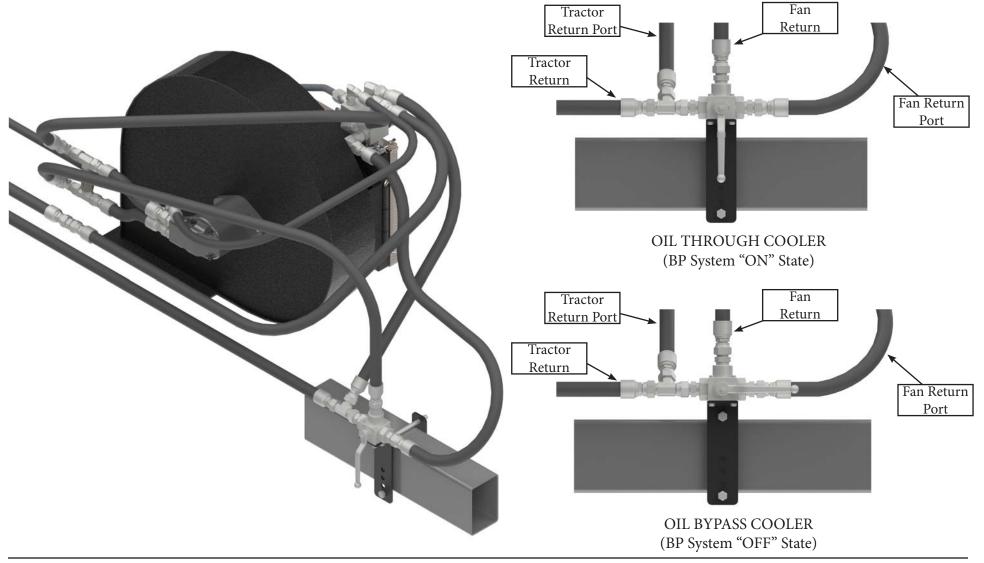
Aircart Models: with 1/2" ORFS Case Drain Hose Connections



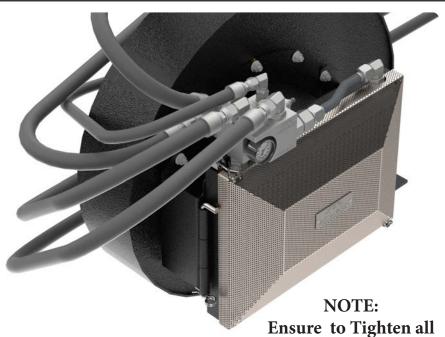
	PARTS LIST		
Item	Part #	Description	
1	7267	BPS 1/2" Hydraulic Hose - 60"	
2		"FAN CASE DRAIN" Port - BP System Manifold	
3	7264	Fitting - Straight - 1/2" JIC Male - 3/8" ORB Male	
4	7686	Fiting - Elbow - 1/2" JIC M - 1/2" JIC F	
5		Fan Case Drain Hydraulic Hose	

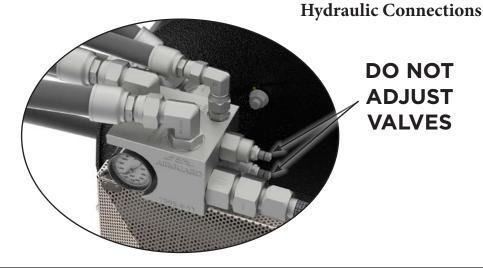
	PARTS LIST		
Item	Part #	Description	
6	7263	Fitting - Tee - 1/2" JIC M - M - F	
7	7265	Fitting - Straight - 1/2" JIC M - 1/2" ORFS F	
8	7266	Fitting - Tee - 1/2" ORFS M - M - F	
9	7294	Fitting - Straight - 1/2" JIC M - 3/8" JIC F	
10	7293	Fitting - Tee - 3/8" ORFS M - M - F	

Title	Airguard Bypass Kit Instructions	RELEASE DATE	2024-04-03
STEP	16. This shows the complete installation. It is recommended to put the valve in the	REV #	2.0
	off position when starting up for the first time and also at the beginning of the season to ensure that all air pockets are removed prior to operation. It also gives a chance for the oil to warm up prior to using the BP System. Valve can be slowly opened on startup to remove all air pockets.	PART KIT #	Varies



Title	Airguard Blockage Prevention System Upgrade Instructions	RELEASE DATE	2024-04-03
	17. Complete the hydraulic installation by ensuring that all connections made in Step	REV #	2.0
	8 to 13 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.	PART KIT #	Varies





DO NOT **ADJUST VALVES** 

# WARNING:

- Check for contaminants in oil. Dirty oil makes for plugged valves and can cause issues with over pressurizing the radiator core.
- Start tractor and warm oil prior to starting up fan. This should be done anytime the fan circuit is started up.
- Engage fan hydraulics at low flow rate and low fan RPM and slowly increase.
- Bleed hydraulic lines of air for stable oil flow.
- Check pressures at radiator gauge. If pressure is higher than normal, steps must be taken to reduce return line pressure.
- Call Airguard if you have any questions. 1-604-744-0070

Title	Airguard Blockage Prevention System Upgrade Instructions RELE		2024-04-03
STEP	18. 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 <a href="https://www.airguardproducts.com/contact">www.airguardproducts.com/contact</a> or visit us at <a href="https://www.airguardproducts.com/productsupport">www.airguardproducts.com/contact</a> or visit us at <a href="https://www.airguardproducts.com/productsupport">www.airguardproducts.com/productsupport</a>.

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.

Title	Airguard Blockage Prevention System Upgrade Instructions	RELEASE DATE	2024-04-03
STEP		REV #	2.0
	the catwalk (Page 21), to the railing (Page 22), or using the model-specific Snorkel Mounting Kit (Pages 23-26).	PART KIT #	Varies

**CATWALK** 

**RAILING** 

**SNORKEL MOUNTING KIT** 

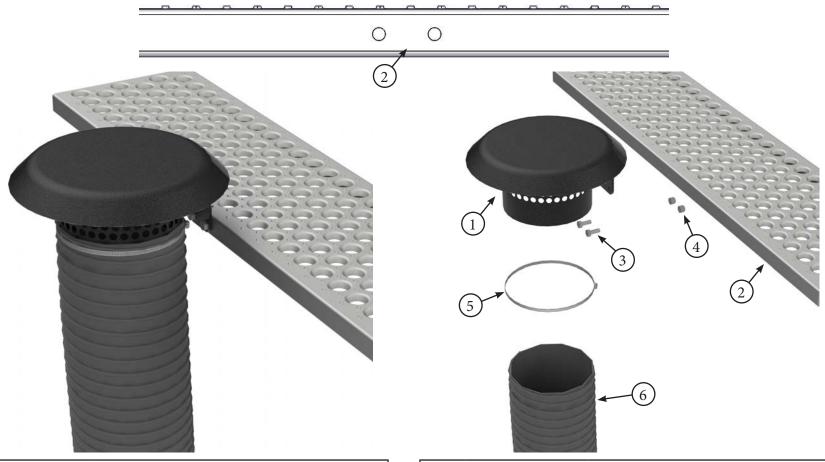






# THREE SNORKEL MOUNTING OPTIONS

Title	Airguard Blockage Prevention System Upgrade Instructions	RELEASE DATE	2024-04-03
STEP	20. <b>Catwalk Installation:</b> Drill two 7/16" holes in your catwalk (Item 2) 1-3/4"	REV #	2.0
	kel Inlet Assembly (Item 1) directly to the catwalk. Use the bridge clamp (Item 5) to	PART KIT #	Varies
	attach 8" flexible hose (Item 6) to top Snorkel Inlet (Item 1).		



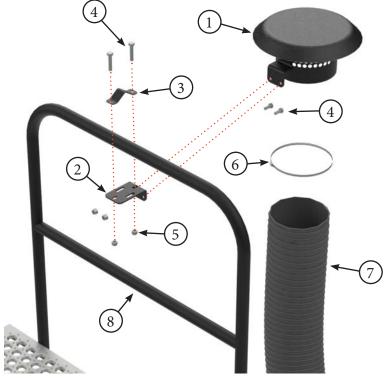
	PARTS LIST		
Item	Part #	Description	
1	7576	Top Snorkel Inlet Assembly	
2		Catwalk	
3	7515	Hex Bolt, 10mm x 25mm GRADE 8.8	

PARTS LIST		
Item	Part #	Description
4	7516	Lock Nut, 10mm GRADE 8.8
5	7578	Bridge Clamp, 8"
6	7572	Flexible Snorkel Hose - 8"

Title	Airguard Blockage Prevention System Upgrade Instructions	RELEASE DATE	2024-04-03
STEP	21. <b>Railing Installation:</b> Using two of the bolts (Item 4) and lock nuts (Item 5) pro-	REV #	2.0
	vided, hand-tighten the Snorkel Inlet 90deg mount plate (Item 2) and the railing plate (Item 3) around the railing (Item 8). Next, bolt the top Snorkel Inlet assembly (Item 1) to te mount plate (Item 2). Straighten so that the assembly is perpendicular to the railing, then fully tighten. Last, use the bridge clamp (Item 6) to attach 8" flexible hose (Item 7) to top Snorkel Inlet (Item 1).		Varies

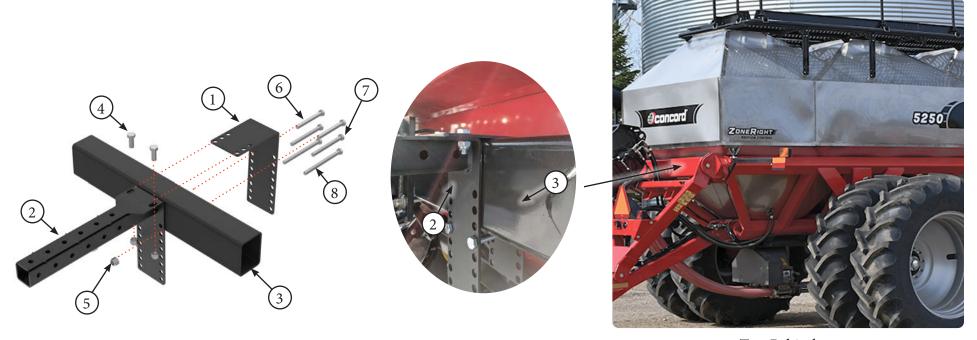


	PARTS LIST		
Item	Part #	Description	
1	7576	Top Snorkel Inlet Assembly	
2	7593	Snorkel Inlet 90deg Mount Plate	
3	7989	Railing Plate	
4	7991	HEX BOLT, 10mm x 50mm GRADE 8.8	



	PARTS LIST		
Item	Part #	Description	
5	7516	Lock Nut, 10mm	
6	7578	Bridge Clamp, 8"	
7	7572	Flexible Snorkel Hose - 8"	
8		Railing	

Title	Airguard Blockage Prevention System Upgrade Instructions	RELEASE DATE	2024-04-03
STEP	22. Install the brackets (Item 1 & 2) onto Aircart HSS Frame (Item 3) using supplied	REV #	2.0
	hardware. Use 12mm x 30mm (Item 4) and 12mm lock nuts (Item 5) for top connection. Use 12mm x 110mm-160mm (Item 6, 7 or 8) and 12mm lock nuts (Item 5) for bottom connection. Bracket is designed to fit HSS Beams 3"-5" x 3"-10" in vertical or horizonal mount positions.	PART KIT #	Varies

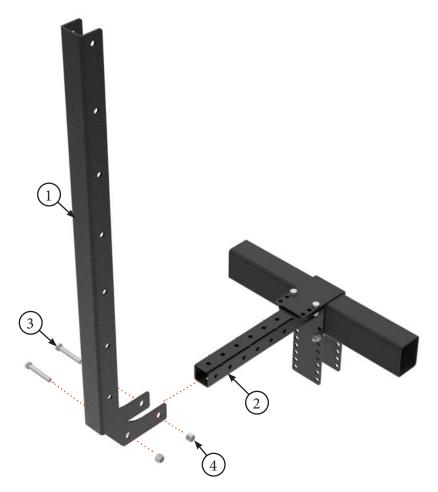


Tow Behind

	PARTS LIST		
Item	Part #	Description	
1	7869	Adjustable HSS Backing Plate	
2	7873	Adjustable HSS Bracket Assembly	
3		Aircart HSS Frame	
4	7861	Hex Bolt, 12mm x 30mm	

PARTS LIST		
Item	Part #	Description
5	7669	Lock Nut, 12mm
6	7862	Hex Bolt, 12mm x 110mm
7	7863	Hex Bolt, 12mm x 130mm
8	7864	Hex Bolt, 12mm x 160mm

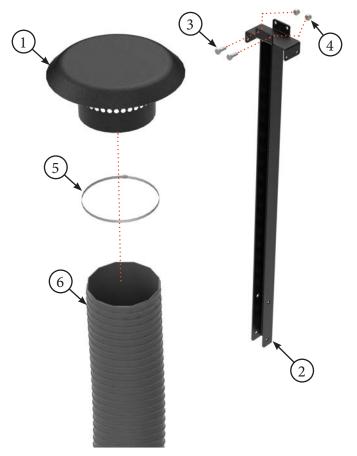
Title	Airguard Blockage Prevention System Upgrade Instructions	RELEASE DATE	2024-04-03
STEP	12mm v 80mm Bolts (Item 3) and 12mm lock nuts (Item 4)	REV #	2.0
		PART KIT #	Varies



PARTS LIST		
Item	Part #	Description
1	7865	Outer Vertical Channel
2		Mount Bracket

PARTS LIST		
Item	Part #	Description
3	7859	Hex Bolt, 12mm x 80mm
4	7669	Lock Nut, 12mm

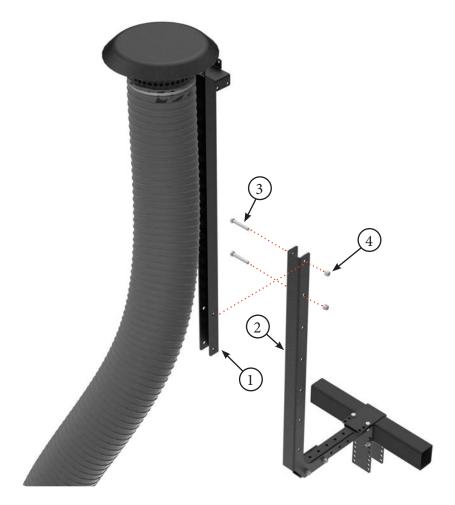
Title	Airguard Blockage Prevention System Upgrade Instructions	RELEASE DATE	2024-04-03
STEP	24. Attach air intakes (Item 1) to upper vertical channel (Item 2) using supplied 10mm	REV #	2.0
	x 25mm Bolts (Item 3) and 10mm lock nuts (Item 4). A maximum of 4 intakes can be mounted. Use bridge clamp (Item 5) to attach 8" flex hose (Item 6) to air intake (Item 1).	PART KIT #	Varies



PARTS LIST		
Item	Part #	Description
1	7576	Air Intake Bracket
2	7868	Upper Vertical Channel
3	7515	Hex Bolt, 10mm x 25mm

PARTS LIST			
Item	Part #	Description	
4	7516	Lock Nut, 10mm	
5	7578	Bridge Clamp, 8"	
6	7572	Flexible Snorkel Hose - 8"	

Title	Airguard Blockage Prevention System Upgrade Instructions	RELEASE DATE	2024-04-03
STEP	25. Determine desired height of air intakes and secure upper vertical channel (Item 1)		2.0
	to lower vertical channel (Item 2) at that location. Use supplied 12mm x 80mm Bolts (Item 3) and 12mm lock nuts (Item 4).	PART KIT #	Varies



PARTS LIST			
Item Part # Description		Description	
1	7868	Upper Vertical Channel	
2	2 7865 Lower Vertical Channel		

PARTS LIST			
Item Part # Description		Description	
3	7859	Hex Bolt, 12mm x 80mm	
4 7669 Lock Nut, 12mm			

Title	Airguard Blockage Prevention System Upgrade Instructions	RELEASE DATE	2024-04-03
			2.0
	3). Zip tie 8" flex hoses to reduce wear and ensure tidy installation. Trim 8" hose length to suit.	PART KIT #	Varies



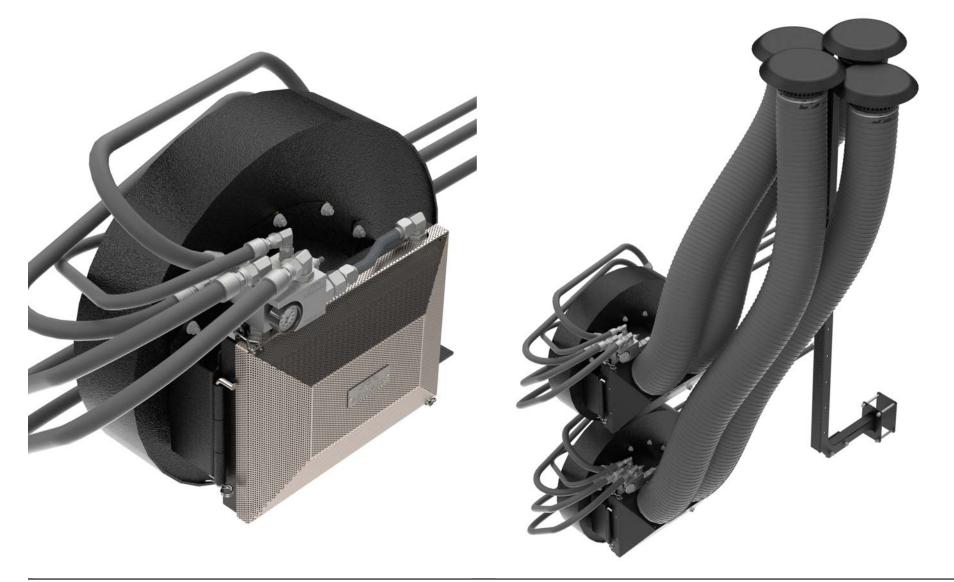
PARTS LIST			
Item	Part #	Description	
1	7977	Snorkel Housing	
2	7578	Bridge Clamp, 8"	

PARTS LIST			
Item Part # Description			
3 7572 Flexible Snorkel Hose - 8"			

Title	Airguard Blockage Prevention System Upgrade Instructions	RELEASE DATE	2024-04-03
STEP	Installation is Completed. Ensure all hydraulic connections and bolts are tightened.	REV #	2.0
		PART KIT #	Varies

## COMPLETED INSTALLATION WITH NO SNORKEL

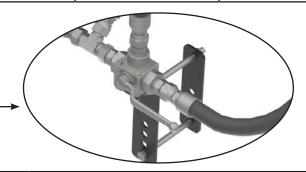
## COMPLETED INSTALLATION WITH SNORKELS



Title	Airguard Blockage Prevention System Upgrade Instructions	RELEASE DATE	2024-04-03
STEP	Troubleshooting and preventative maintenance.	REV #	2.0
		PART KIT #	Varies

### PREVENTATIVE MAINTENANCE

- 1. Ensure that the startup procedure on page 19 is performed every morning before seeding begins.
- 2. Take extra precautions when seeding in cold weather.
- 3. It is recommended that a bypass valve is purchased to allow-for quicker startup.



# **TROUBLESHOOTING**

Trouble	Probable Cause	Remedy
Fluctuating pressures on pressure gauges and strange noises coming from fan motor.	High return line pressure	The logic cartridge on the BP System is set to 750psi. Any value close to or above that will cause fluctuations and issues with fan speed, this is acting as it is designed. Reduce return line pressure to fix this problem.
	Faulty quick disconnect couplers	Replace quick disconnect couplers, inspect ball valve to ensure proper working order
	Restriction in return line due to small fitting	Replace fitting with a larger one
	Logic cartridge is contaminated	Clean or replace the logic cartridge as needed
Fan won't run	High return line pressure	The logic cartridge on the BP System is set to 750psi. Any value close to or above that will cause fluctuations and issues with fan speed. Reduce return line pressure to fix this problem.
	Quick couplers are disconnected	Ensure that quick couplers are connected properly
	Logic cartridge is contaminated	Clean or replace the logic cartridge as needed
	Logic cartridge is faulty	Replace the logic cartridge
	Hoses are hooked up incorrectly	Consult owner's manual to see proper installation of hoses

Title	Airguard Blockage Prevention System Upgrade Instructions	RELEASE DATE	2024-04-03
STEP	Frequently asked questions.	REV #	2.0
		PART KIT #	Varies

#### FREQUENTLY ASKED QUESTIONS

Q: Why can't I operate my Blockage Prevention System without warming up my tractor first?

A: Tractor motors and seeding equipment are built to withstand fast startups; an aluminum radiator is not. On a cold day at 10% oil flow, your return pressure could be at 500psi on our Blockage Prevention System. If you were to do a fast startup in cold conditions, you could have a radiator fail. Pressures could dramatically spike beyond the capacity of our 2400psi rated aluminum core.

Q: Will the Blockage Prevention System cause dramatic pressure drops in my oil flow?

**A:** While the BPS will cause a slight pressure drop (approximately 400 RPM or less), the drop in oil flow is negated because of the warm air being transferred from the oil into the airstream. This allows the internal product to flow more efficiently. The reason for the slight pressure drop is that the oil has to pass through the orifices of the radiator, which are smaller than the hoses used prior to the installation of the Blockage Prevention System.

**Q:** Does the Blockage Prevention System actually work?

A: We can honestly say that it does. The hotter the oil is in the hydraulic lines, the more heat the Blockage Prevention System can extract out of that oil. Since the mechanism is mounted on the face of the fan housing, the fan is pulling air through the fins of the radiator while the air cart is pressurizing up to operate. The hot oil, running through the radiator, acts like a furnace and changes the air temperature on the inside face of the radiator. That air is then pulled into the air cart stream and is pushed out towards the openers, where the seed is placed into the furrow. Warmer air holds more moisture. Humidity will stay in a vapor state when it is drawn in and will be less likely to turn into a liquid while the air and all the hoses and internal components are physically warmer. This allows the product to flow through with less resistanc eand minimizes buildup of dusty fertilizer internally. Seed and fertilizer will be delivered to the discharge outlets without problems.

**Q:** What is the purpose of the new bypass valve?

**A:** The new bypass valve upgrade kit allows you to heat up your oil before engaging your Blockage Prevention System. You can also choose whether or not to use your BPS in the heat of the day.

Q: What pressure should the pressure gauge read on the Blockage Prevention System?

**A:** 300-600psi is an acceptable pressure range when operating. The gauge reads the pressure of the oil going through the radiator, on the return side of the fan motor.

**Q:** Do I need to reset the relief valves on the V2 Blockage Prevention System?

A: No you do not. The valves are preset to 750psi and 850psi. If they do get changed or altered, please contact Airguard in order to have them reset.