

# PART KIT INSTALL INSTRUCTIONS

Morris Aircarts

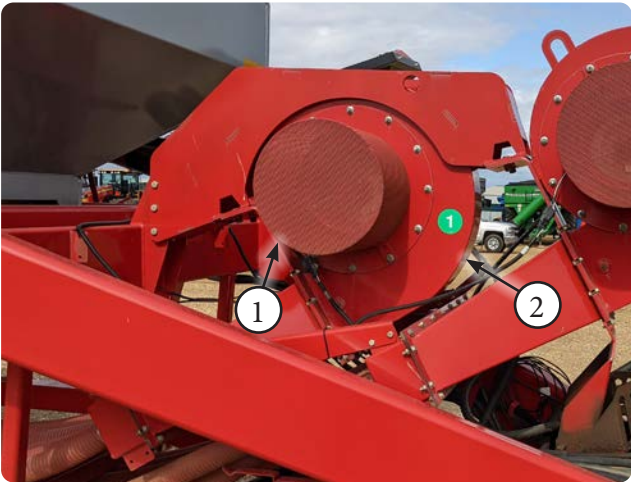
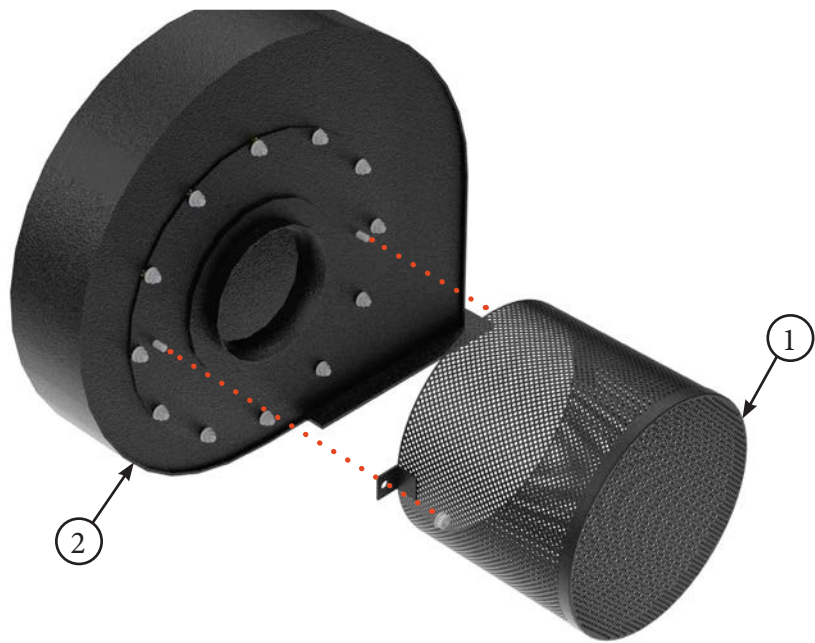
Part Kit #VARIES - Rev 1.0 - AIRGUARD - Blockage Prevention System

Release Date: 2023-03-01



  
**AIRGUARD**  
SEEDING PRECISION

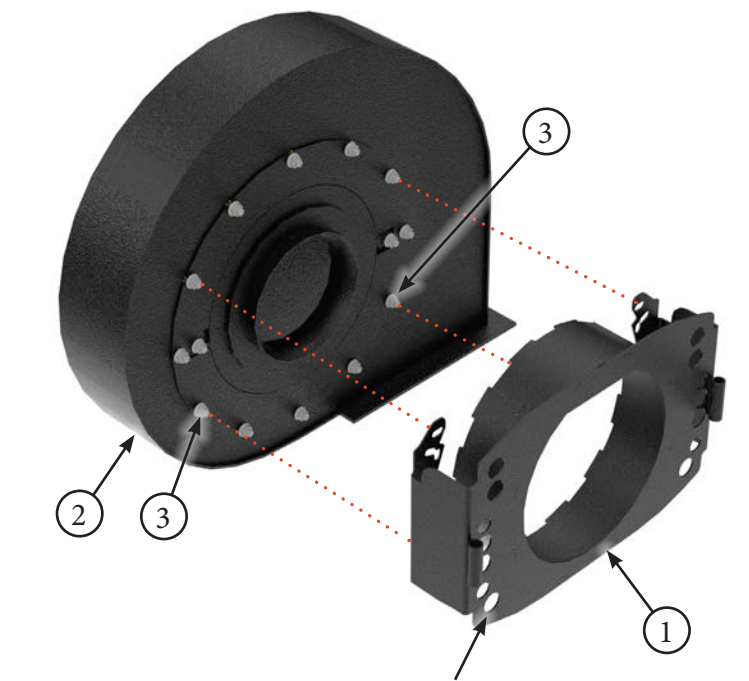
Title	Airguard Blockage Prevention System Upgrade Instructions	RELEASE DATE	2023-03-01
STEP	1. Remove existing fan screen (Item 1) from the fan housing (Item 2).	REV #	1.0
		PART KIT #	Varies



PARTS LIST		
Item	Part #	Description
1	--	N28190 Fan Screen /or/ N37821 Fan Screen

PARTS LIST		
Item	Part #	Description
2	--	N28190 Fan Housing /or/ N37821 Fan Housing

Title	Airguard Blockage Prevention System Upgrade Instructions	RELEASE DATE	2023-03-01
STEP	2. Install supplied mounting bracket (Item 1) to fan housing (Item 2) using existing 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.	REV #	1.0
		PART KIT #	Varies

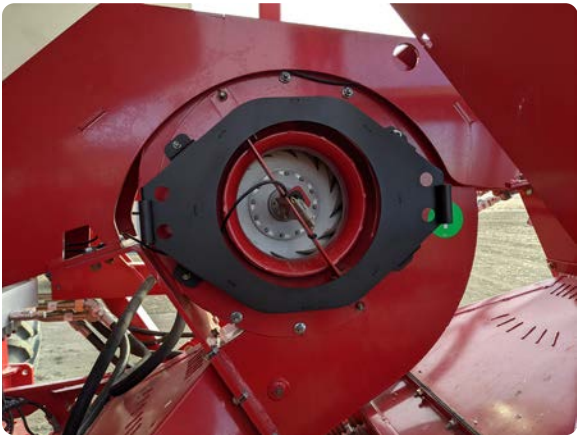


Additional holes in bracket face are for easy access with an impact driver.

- Use Kit # 9540 for the following Models:
- 6000 Series
  - 7000 Series
  - 9s Series
  - CX8105



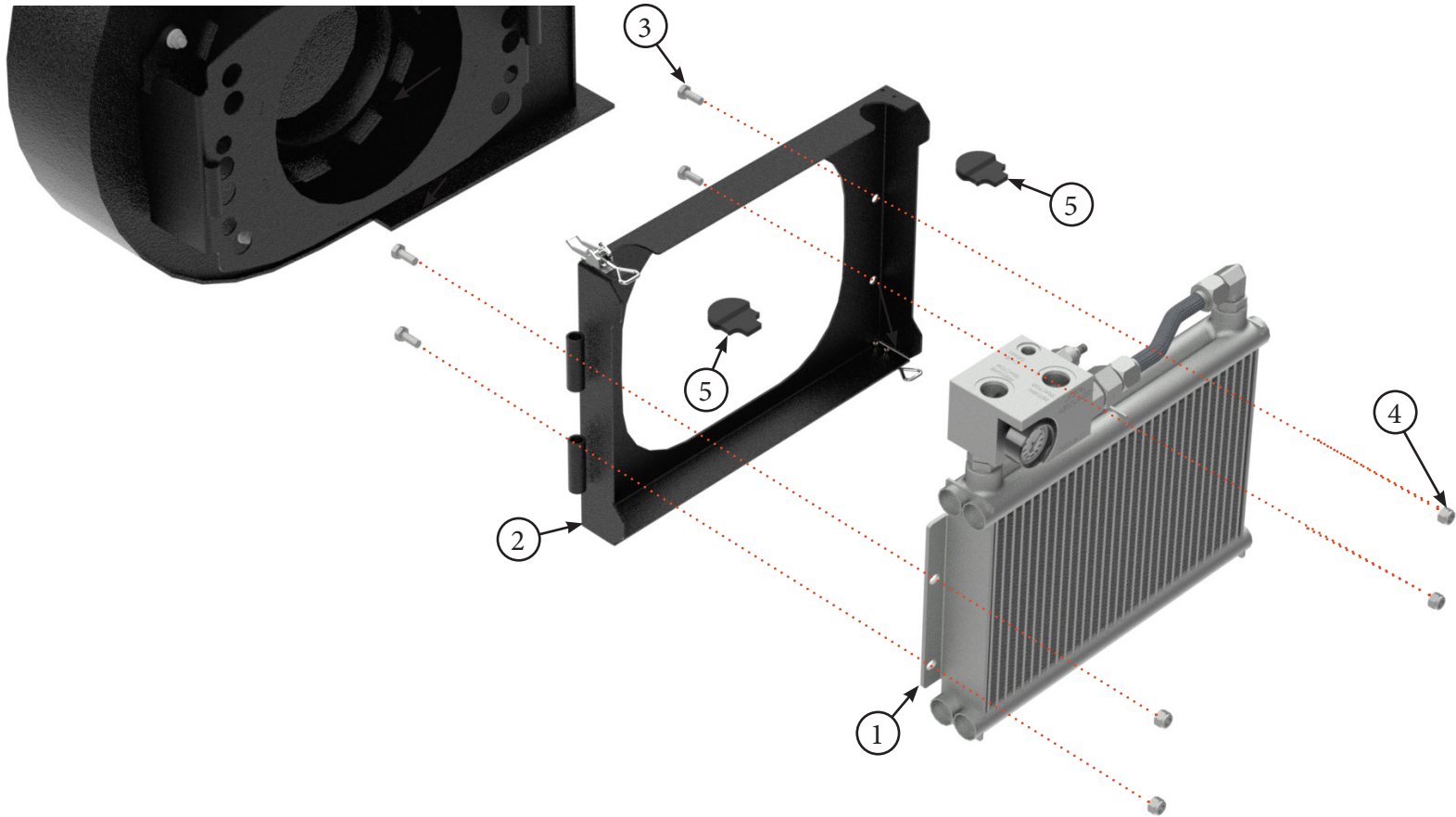
- Use Kit # 9630 for the following Models:
- 8 Series
  - 9365, 9445, 9450, 9535, 9550, 9650, 9800
  - 91000



PARTS LIST		
Item	Part #	Description
1	7556 /or/ 9026	9540 Bracket /or/ 9630 Bracket
2	--	Fan Housing

PARTS LIST		
Item	Part #	Description
3	--	Existing Hardware

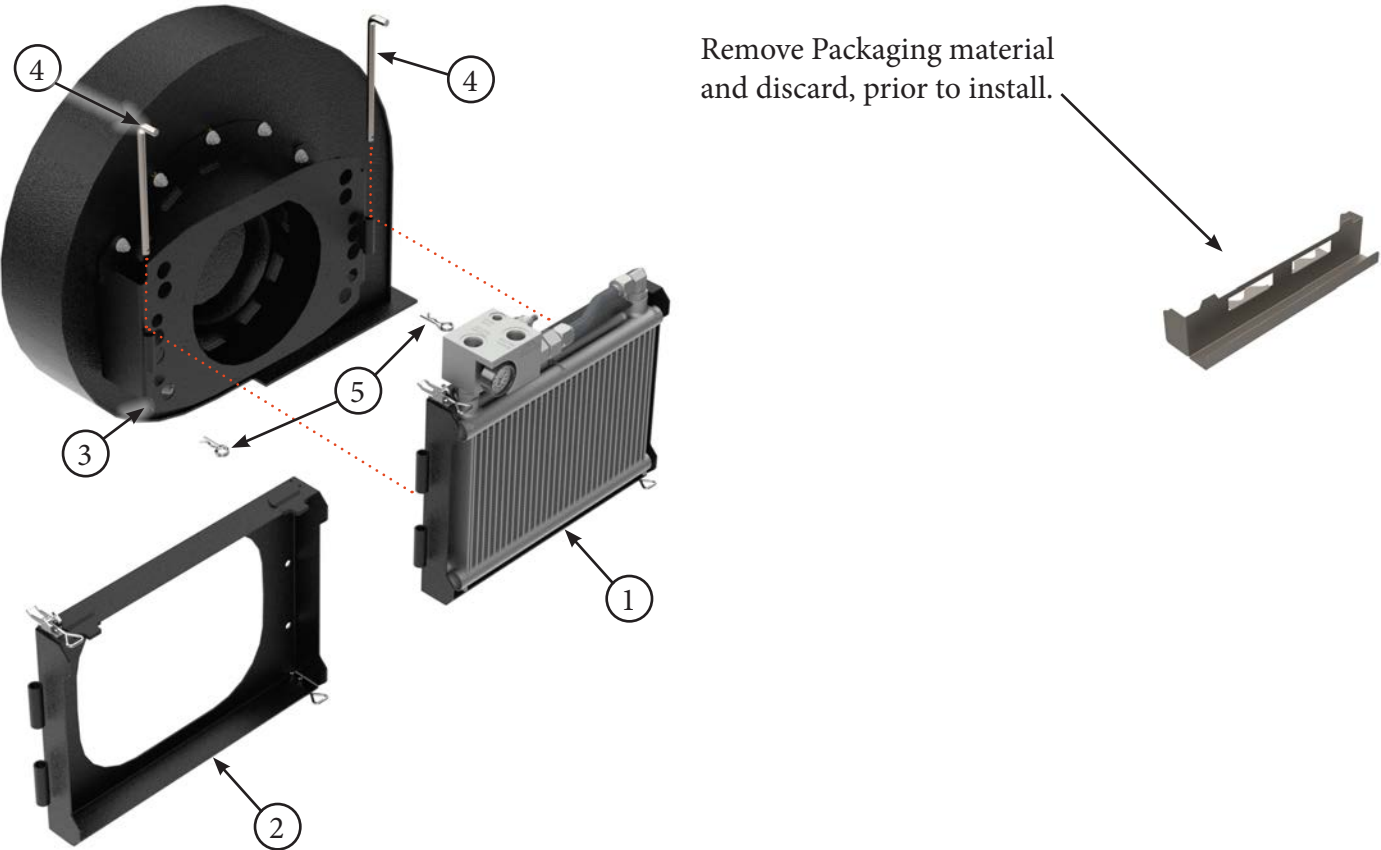
Title	Airguard Blockage Prevention System Upgrade Instructions	RELEASE DATE	2023-03-01
STEP	3. Bolt Oil Cooler/Radiator Assembly (Item 1) to BP System Bracket (Item 2) using supplied 10mm x 25mm Bolts (Item 3) and 10mm lock nuts (Item 4). If only installing snorkel kit without Radiator, then install 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.	REV #	1.0
		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	7683	BP System Bracket Plug

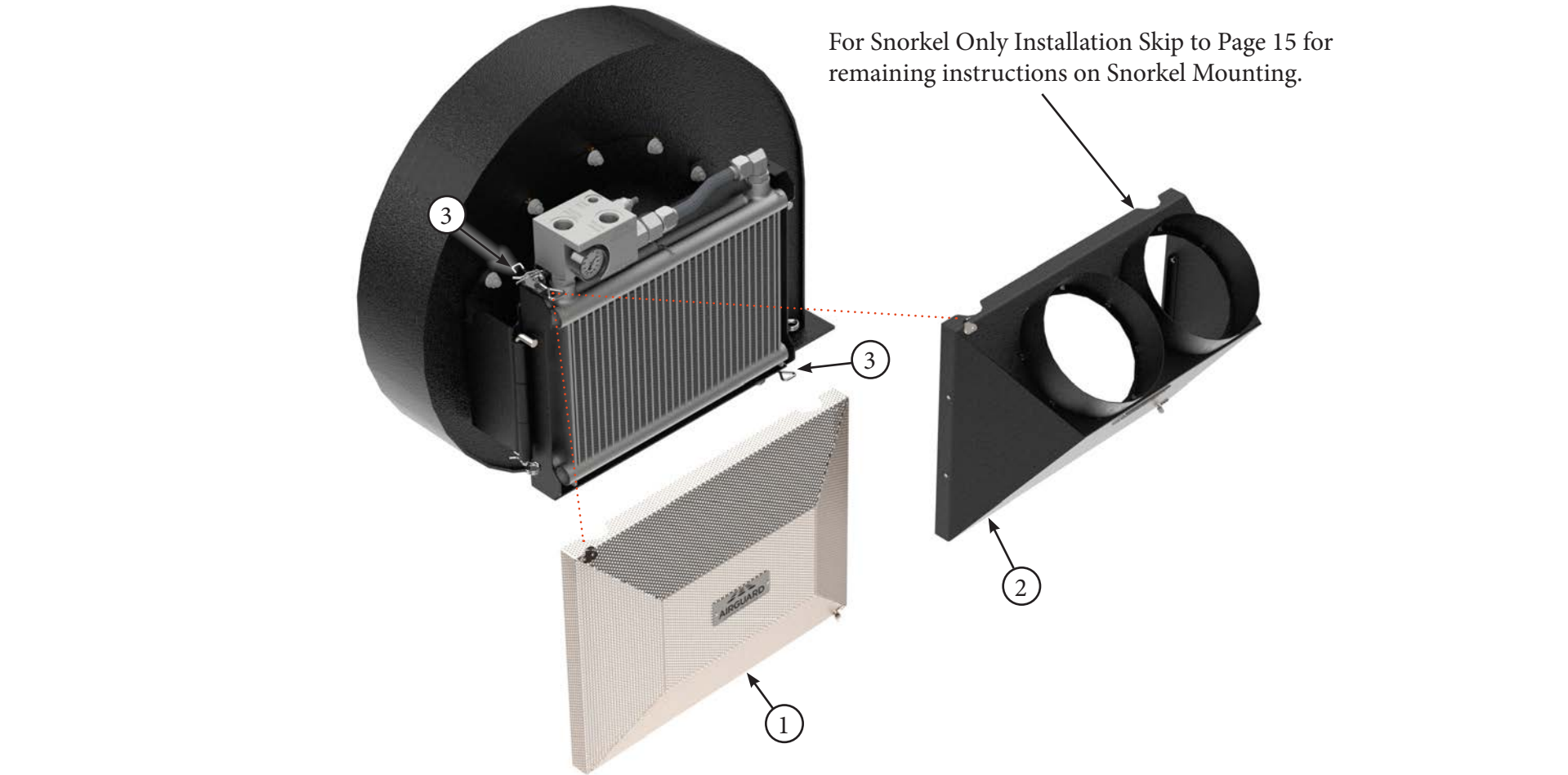
Title	Airguard Blockage Prevention System Upgrade Instructions	RELEASE DATE	2023-03-01
STEP	4. Remove the packaging materials prior to the assembly of these brackets. Mount BP System Main Bracket with Oil Cooler (Item 1) or Main Bracket with Plugs (Item 2) to Fan bracket (Item 3) using supplied pivot pins (Item 4). Secure in place with 3.5mm cotter pins (Item 5).	REV #	1.0
		PART KIT #	Varies



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	2023-03-01
STEP	5. Attach Mesh Screen (Item 1) or Snorkel Housing (Item 2) to front of BPS using latches (Item 3).	REV #	1.0
		PART KIT #	Varies



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

PARTS LIST		
Item	Part #	Description
3	--	Overcenter Latch

<b>Title</b>	Airguard Blockage Prevention System Upgrade Instructions	<b>RELEASE DATE</b>	2023-03-01
<b>STEP</b>	6. Identify the model of aircart that the Airguard Blockage Prevention System is being installed on. For models with external check valves, the connections must be made on the tractor side of the hydraulic circuit as shown below.	<b>REV #</b>	1.0
		<b>PART KIT #</b>	Varies

#### Installation with External Check Valve:

##### Aircart Models:

6000 Series

7000 Series

8 Series

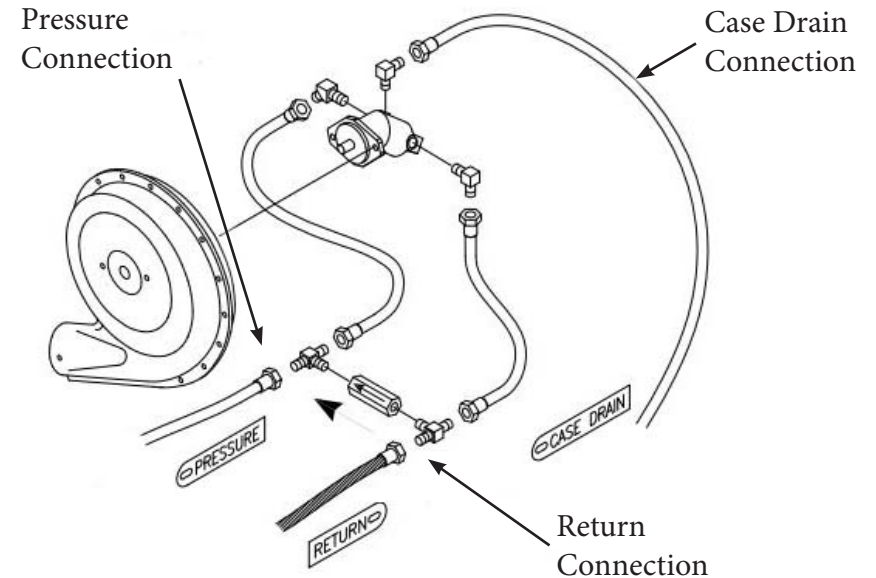
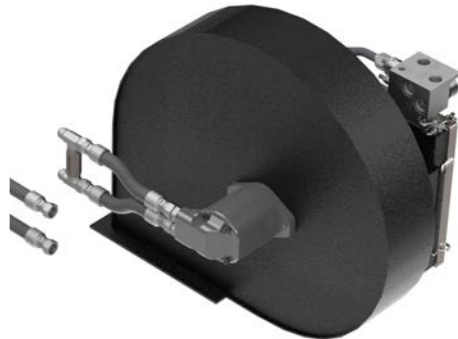
9s Series

CX8105

9365, 9445, 9450,

9535, 9550, 9650

(Prior to March 2014)



#### Installation with Internal Check Valve:

##### Aircart Models:

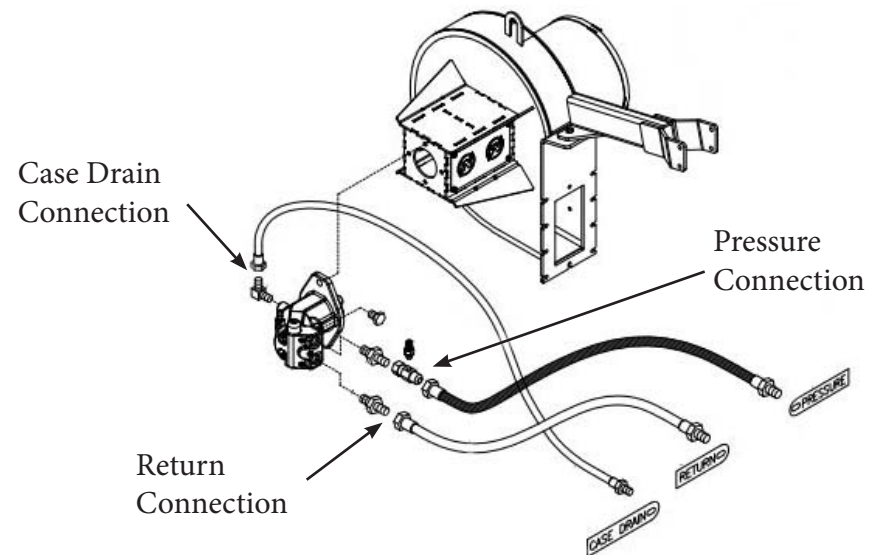
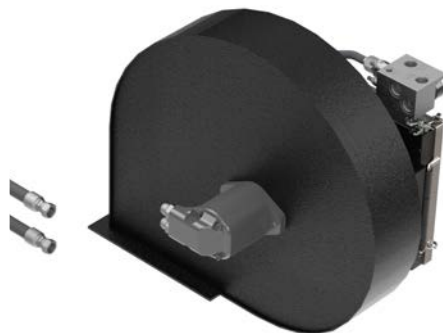
9365, 9445, 9450, 9535,

9550, 9650

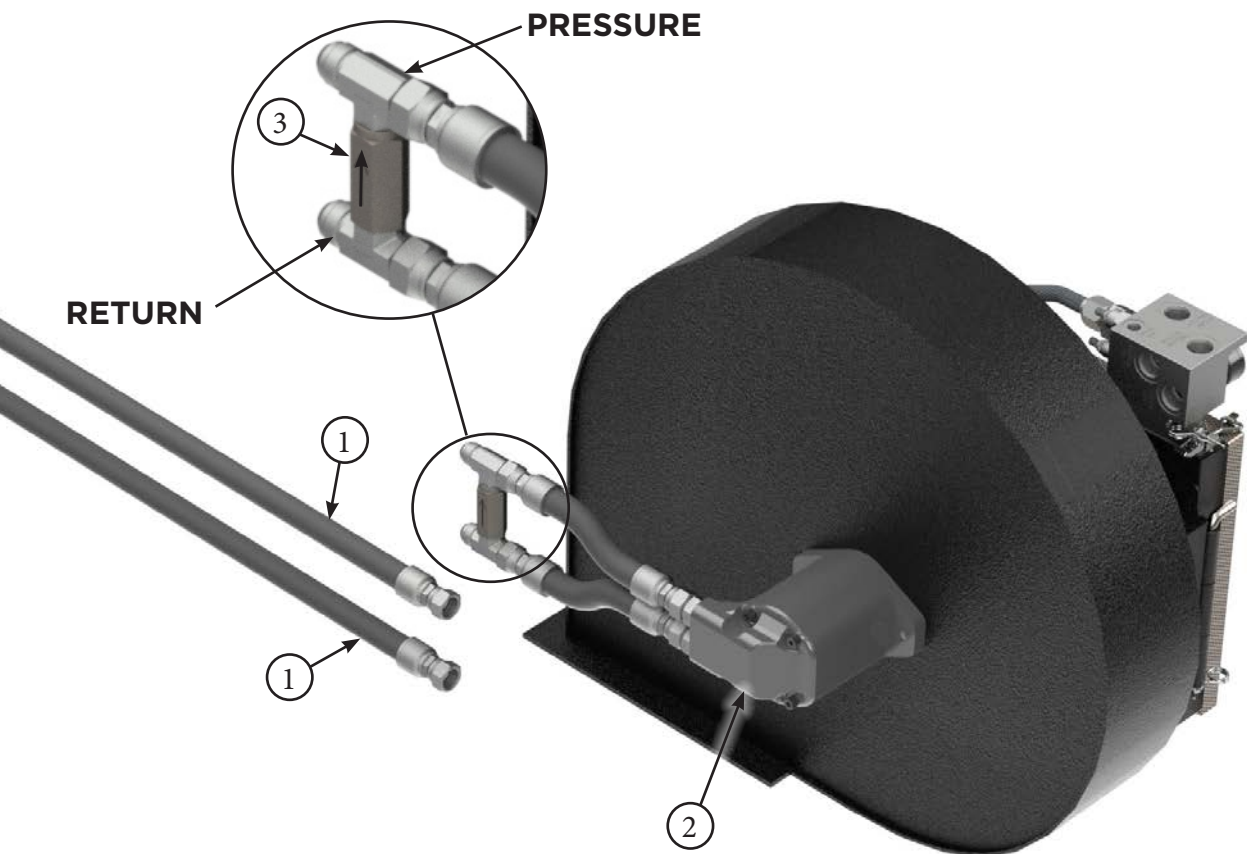
(March 2014 to present)

9800

91000



Title	Airguard Blockage Prevention System Upgrade Instructions	RELEASE DATE	2023-03-01
STEP	7. Remove factory hoses (Item 1) from side of fan motor (Item 2). Remove the hoses (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.	REV #	1.0
		PART KIT #	Varies



PARTS LIST		
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 Blockage Prevention System Upgrade Instructions	RELEASE DATE	2023-03-01
STEP	8. Hoses may be routed to suit your specific aircart installation. Install supplied 3/4" 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 pressure line (Item 4) that was removed from the fan motor.	REV #	1.0
		PART KIT #	Varies

**TRACTOR PRESSURE**

**MODEL SPECIFIC CONNECTION**

**TRACTOR PRESSURE PORT**

**MODEL SPECIFIC CONNECTION**

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

5

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

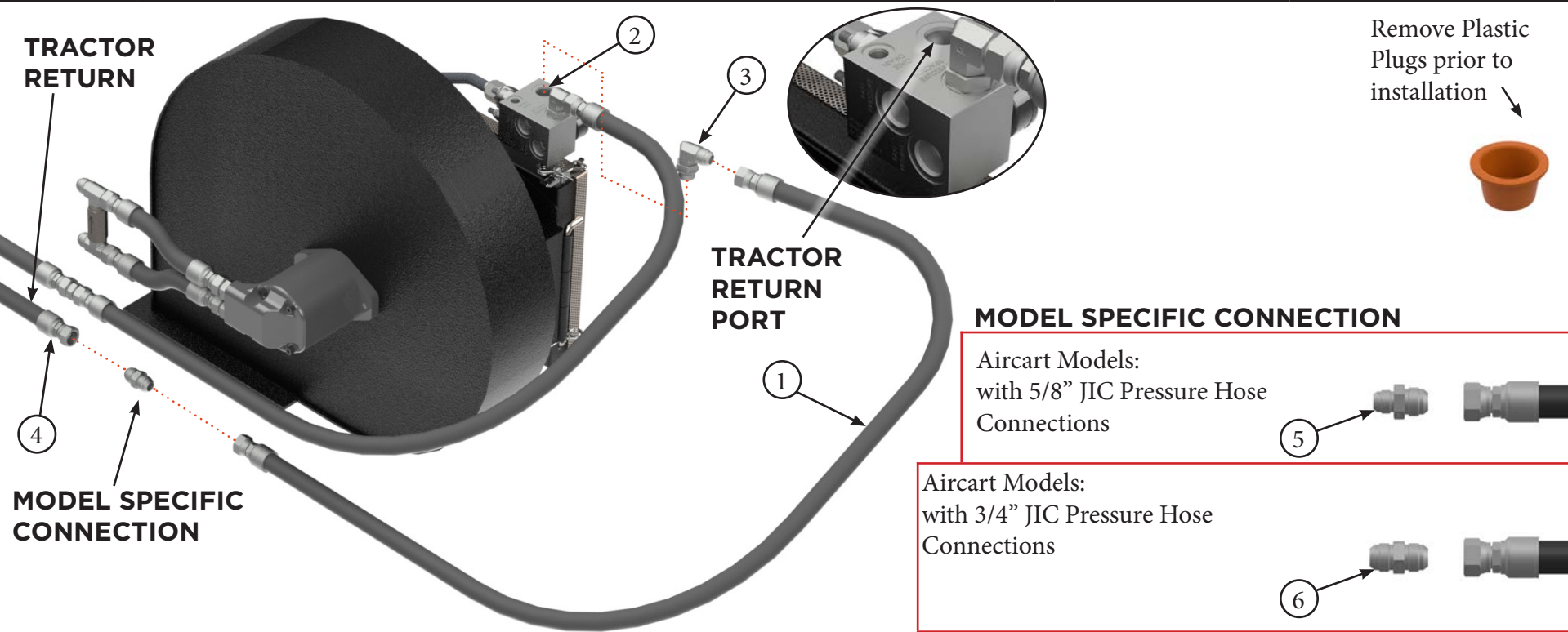
6

All of the hydraulic connections in Step 8 to 12 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	9016	BPS 3/4" Hydraulic Hose - 60"
2	--	"TRACTOR PRESSURE" Port - BP System Manifold
3	7506	Fiting - Elbow - 3/4" JIC Male - 3/4" ORB Male

PARTS LIST		
Item	Part #	Description
4	--	Tractor Supply (Pressure) Hydraulic Hose
5	7242	Fitting - Straight - 5/8" JIC M - 3/4" JIC M
6	7538	Fitting - Straight - 3/4" JIC M - 3/4" JIC M

<b>Title</b>	Airguard Blockage Prevention System Upgrade Instructions	<b>RELEASE DATE</b>	2023-03-01
<b>STEP</b>	9. Install supplied 3/4" hydraulic hose (Item 1) to the "TRACTOR RETURN" port of the radiator block (Item 2) using adapter (Item 3). Use model specific connection as per instructions below to attach the other end of the hose to the factory pressure line (Item 4) that was removed from the fan motor.	<b>REV #</b>	1.0
		<b>PART KIT #</b>	Varies



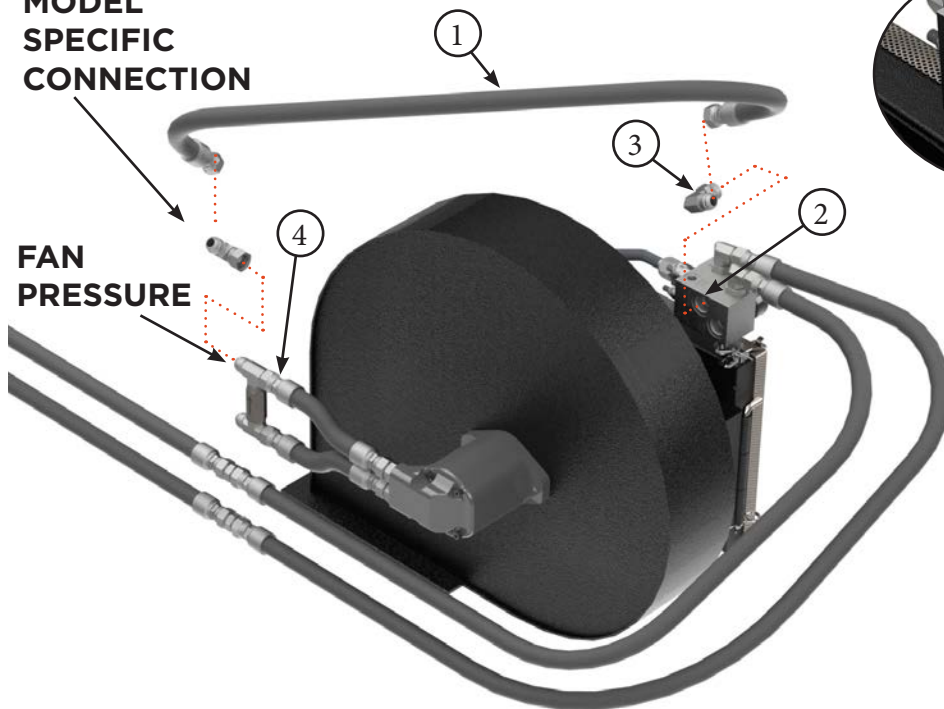
All of the hydraulic connections in Step 8 to 12 should only be hand tightened until all hoses and fittings are installed. Some connections may need to be rotated in order to install other components.

PARTS LIST		
Item	Part #	Description
1	9016	BPS 3/4" Hydraulic Hose - 60"
2	--	"TRACTOR RETURN" Port - BP System Manifold
3	7506	Fiting - Elbow - 3/4" JIC Male - 3/4" ORB Male

PARTS LIST		
Item	Part #	Description
4	--	Tractor Return Hydraulic Hose
5	7242	Fitting - Straight - 5/8" JIC M - 3/4" JIC M
6	7538	Fitting - Straight - 3/4" JIC M - 3/4" JIC M

<b>Title</b>	Airguard Blockage Prevention System Upgrade Instructions	<b>RELEASE DATE</b>	2023-03-01
<b>STEP</b>	10. Install supplied 3/4" hydraulic hose (Item 1) to the "FAN PRESSURE" port of the radiator block (Item 2) using adapter (Item 3). Use model specific connection as per instructions below to attach the other end of the hose to the factory fan pressure line/ port (Item 4) coming from the fan motor.	<b>REV #</b>	1.0
		<b>PART KIT #</b>	Varies

### MODEL SPECIFIC CONNECTION



All of the hydraulic connections in Step 8 to 12 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.

Remove Plastic Plugs prior to installation



### FAN PRESSURE PORT

### MODEL SPECIFIC CONNECTION

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



Aircart Models:  
with 3/4" JIC 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

PARTS LIST		
Item	Part #	Description
4	--	Fan Supply (Pressure) Hydraulic Hose
5	7539	Fitting - Elbow - 3/4" JIC M - 3/4" JIC F
6	7226	Fitting - Straight - 3/4" JIC M - 5/8" JIC F

Title	Airguard Blockage Prevention System Upgrade Instructions	RELEASE DATE	2023-03-01
STEP	11. Install supplied 3/4" hydraulic hose (Item 1) to the "FAN RETURN" port of the radiator block (Item 2) using adapters (Item 3 & 5). Use model specific connection as per instructions below to attach the other end of the hose to the factory fan return line/ port (Item 4) coming from the fan motor.	REV #	1.0
		PART KIT #	Varies

**MODEL SPECIFIC CONNECTION**

**FAN RETURN**

**FAN RETURN PORT**

All of the hydraulic connections in Step 8 to 12 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.

Remove Plastic Plugs prior to installation

**MODEL SPECIFIC CONNECTION**

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

5

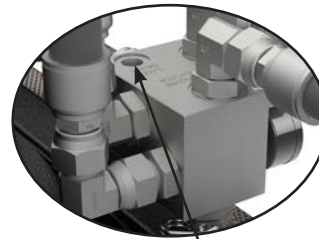
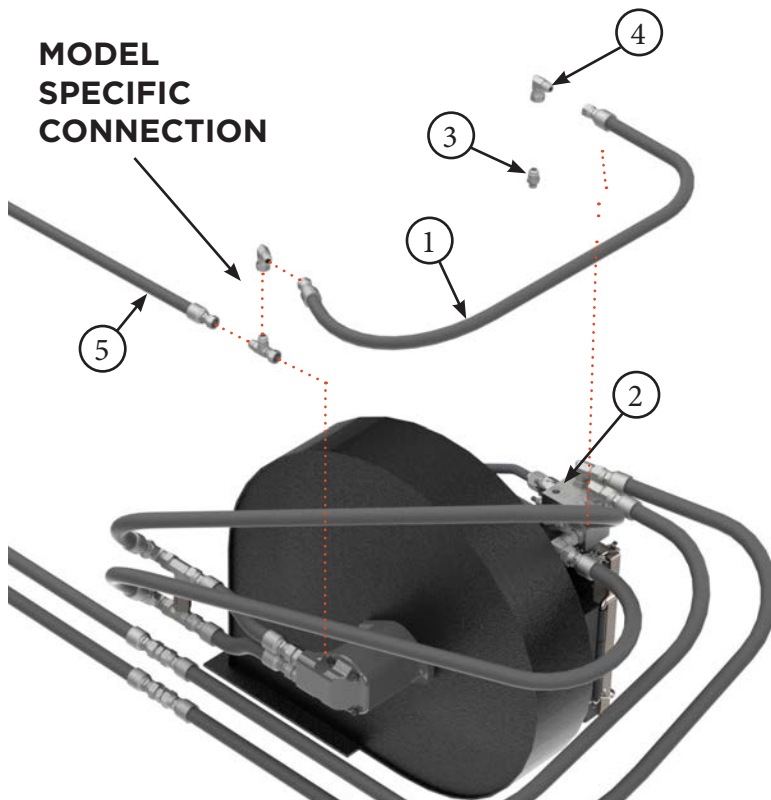
Aircart Models:  
with 3/4" JIC Pressure Hose Connections

6

PARTS LIST		
Item	Part #	Description
1	9016	BPS 3/4" Hydraulic Hose - 60"
2	--	"FAN RETURN" Port - BP System Manifold
3	7543	Fitting - Straight - 3/4" JIC Male - 3/4" ORB Male

PARTS LIST		
Item	Part #	Description
4	--	Fan Return Hydraulic Hose
5	7539	Fitting - Elbow - 3/4" JIC M - 3/4" JIC F
6	7226	Fitting - Straight - 3/4" JIC M - 5/8" JIC F

<b>Title</b>	Airguard Blockage Prevention System Upgrade Instructions	<b>RELEASE DATE</b>	2023-03-01
<b>STEP</b>	12. Install supplied 1/2" hydraulic hose (Item 1) to the "CASE DRAIN" port of the 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.	<b>REV #</b>	1.0
		<b>PART KIT #</b>	Varies



**FAN CASE DRAIN PORT**

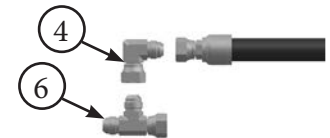
All of the hydraulic connections in Step 8 to 12 should only be hand tightened until all hoses and fittings are installed. Some connections may need to be rotated in order to install other components.

Remove Plastic Plugs prior to installation

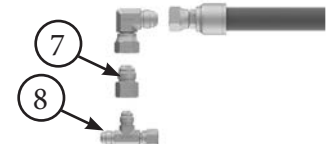


### MODEL SPECIFIC CONNECTION

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



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

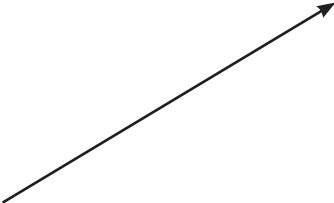


PARTS LIST		
Item	Part #	Description
1	7267	BPS 1/2" Hydraulic Hose - 60"
2	--	"FAN CASE DRAIN" Port - BP System Manifold
3	7264	Fitting - Straight - 1/2" JIC Male - 3/8" ORB Male
4	7686	Fiting - Elbow - 1/2" JIC M - 1/2" JIC F

PARTS LIST		
Item	Part #	Description
5	--	Fan Case Drain Hydraulic Hose
6	7263	Fitting - Tee - 1/2" JIC M - M - F
7	7294	Fitting - Straight - 1/2" JIC M - 3/8" JIC F
8	7293	Fitting - Tee - 3/8" JIC M - M - F

Title	Airguard Blockage Prevention System Upgrade Instructions	RELEASE DATE	2023-03-01
STEP	13. If you have purchased a bypass kit for your BP System, please refer to the bypass kit owners manual for connection instructions.	REV #	1.0
		PART KIT #	Varies

**BYPASS KIT  
INSTRUCTION  
MANUAL**



**PART KIT INSTALL INSTRUCTIONS**

**Bypass Valve**

Part Kit #VARIES - Rev 1.0 - AIRGUARD - Bypass Kit for Blockage Prevention System

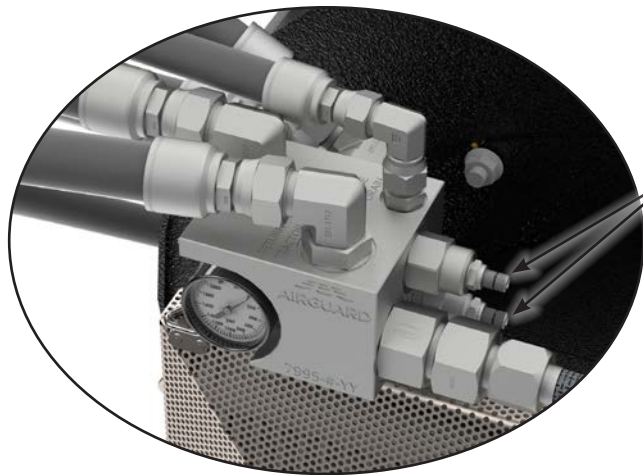
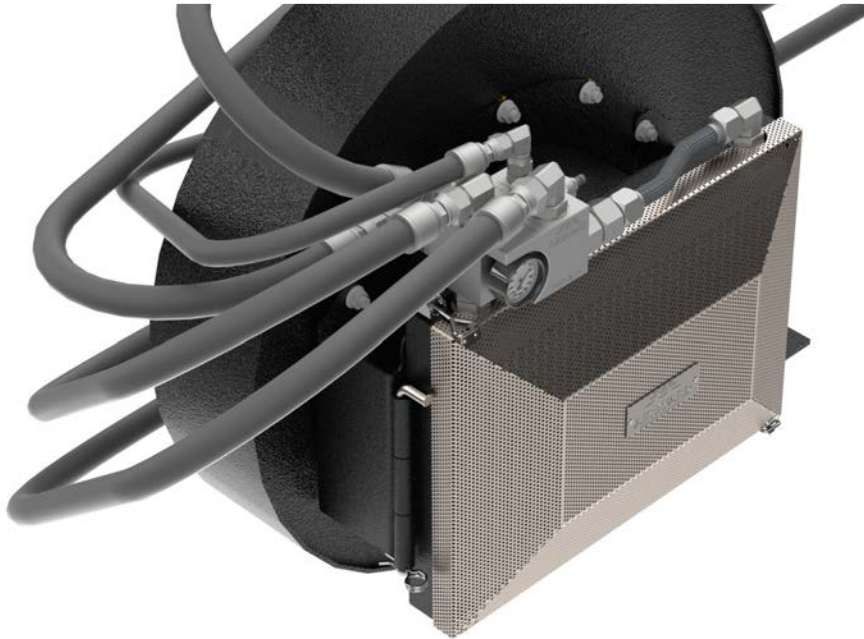
Release Date: 2023-03-01



PARTS LIST		
Item	Part #	Description
1	--	--

PARTS LIST		
Item	Part #	Description
2	--	--

<b>Title</b>	Airguard Blockage Prevention System Upgrade Instructions	<b>RELEASE DATE</b>	2023-03-01
<b>STEP</b>	14. Complete the hydraulic installation by ensuring that all connections made in Step 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.	<b>REV #</b>	1.0
		<b>PART KIT #</b>	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	RELEASE DATE	2023-03-01
STEP	15. Start up operating procedure.	REV #	1.0
		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](http://www.airguardproducts.com/contact) or visit us at [www.airguardproducts.com/productsupport](http://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.

<b>Title</b>	Airguard Blockage Prevention System Upgrade Instructions	<b>RELEASE DATE</b>	2023-03-01
<b>STEP</b>	16. There are three ways to mount the Snorkel Kit. It can be mounted directly to the catwalk (Page 18), to the railing (Page 19), or using the model-specific Snorkel Mounting Kit (Pages 20-25).	<b>REV #</b>	1.0
		<b>PART KIT #</b>	Varies

**CATWALK**



**RAILING**

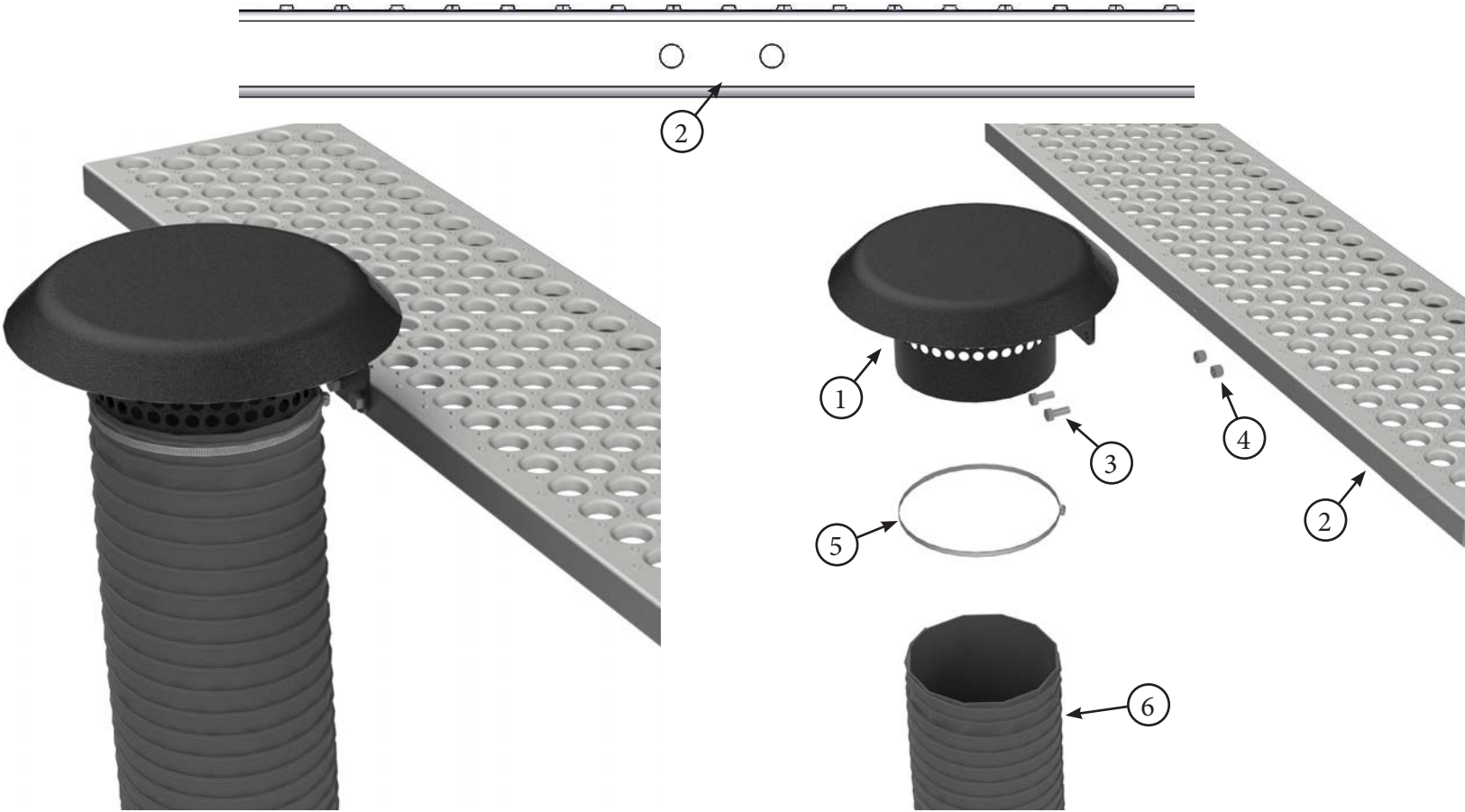


**SNORKEL MOUNTING KIT**



# THREE SNORKEL MOUNTING OPTIONS

Title	Airguard Blockage Prevention System Upgrade Instructions	RELEASE DATE	2023-03-01
STEP	17. <b>Catwalk Installation:</b> Drill two 7/16” holes in your catwalk (Item 2) 1-3/4” apart. Using the two bolts (Item 3) and lock nuts (Item 4) provided, bolt the top Snorkel Inlet Assembly (Item 1) directly to the catwalk. Use the bridge clamp (Item 5) to attach 8” flexible hose (Item 6) to top Snorkel Inlet (Item 1).	REV #	1.0
		PART KIT #	Varies



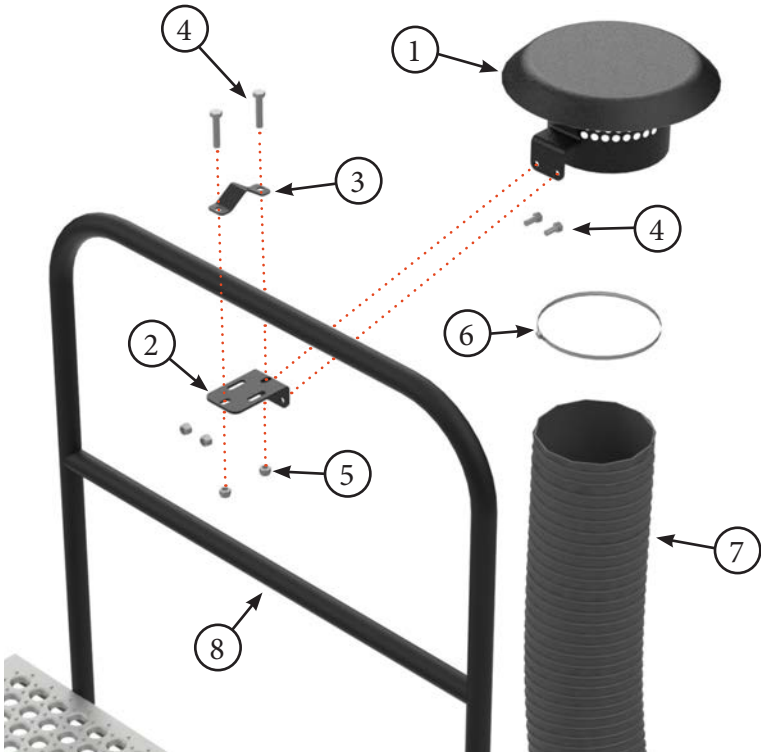
PARTS LIST		
Item	Part #	Description
1	7576	Top Snorkel Inlet Assembly
2	----	Catwalk
3	7515	Hex Bolt, 10mm x 25mm GRADE 8.8

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	2023-03-01
STEP	18. <b>Railing Installation:</b> Using two of the bolts (Item 4) and lock nuts (Item 5) provided, 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 the 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).	REV #	1.0
		PART KIT #	Varies



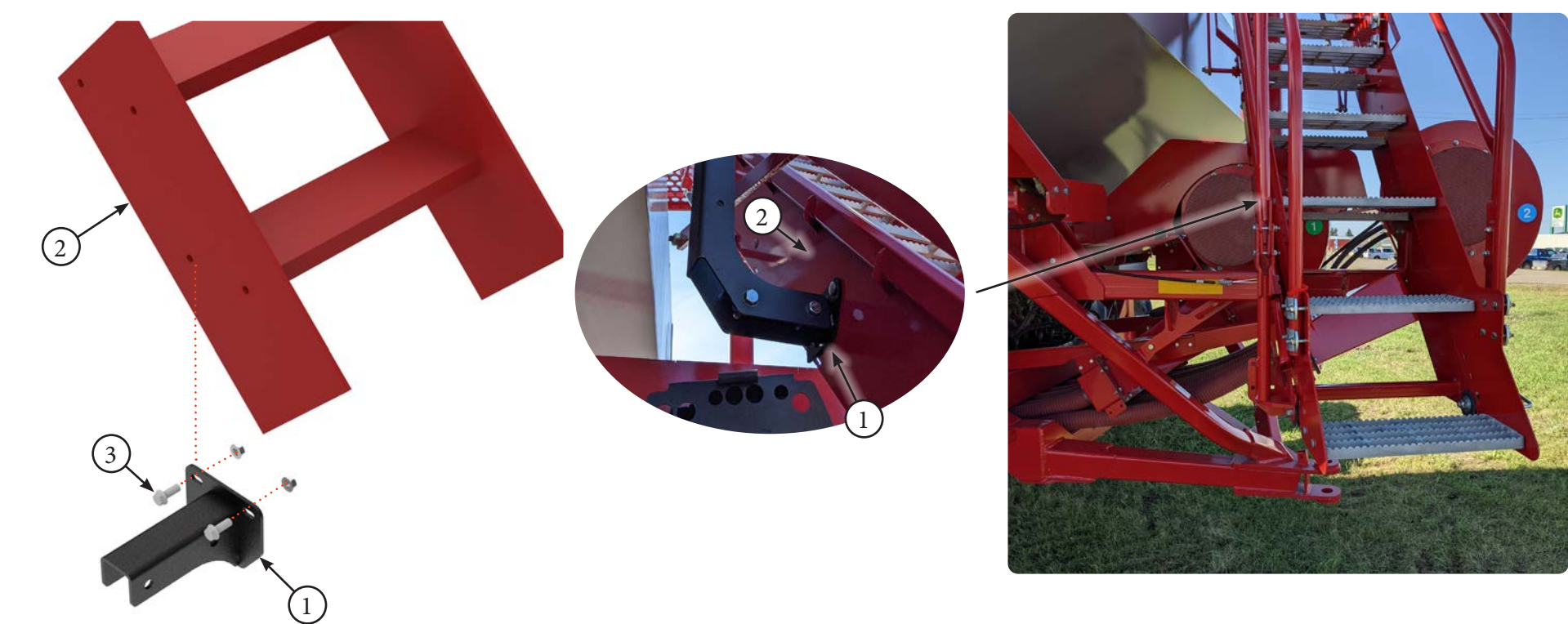
PARTS LIST		
Item	Part #	Description
1	7576	Top Snorkel Inlet Assembly
2	7593	Snorkel Inlet 90deg Mount Plate
3	7989	Railing Plate
4	7991	HEX BOLT, 10mm x 50mm GRADE 8.8



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	2023-03-01
STEP	19. For Tow Behind Aircarts with fans at the rear. Install the bracket (Item 1) onto Aircart Stair Stringer (Item 2) using existing stair tread hardware (Item 3).	REV #	1.0
		PART KIT #	Varies

MODEL SPECIFIC CONNECTION - KIT 9005:  
Tow Behind with fans at the rear of the Aircart

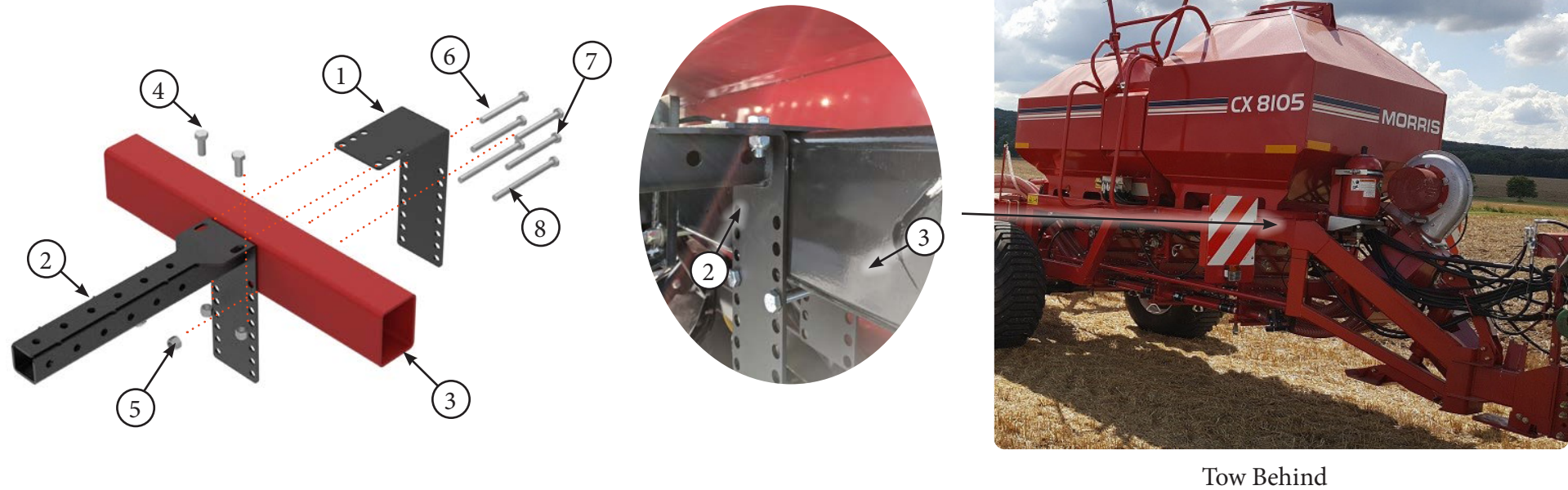


PARTS LIST		
Item	Part #	Description
1	7955	John Deere Snorkel Mount Bracket Assembly
2	--	Stair Stringer

PARTS LIST		
Item	Part #	Description
3	--	Existing stair tread hardware

Title	Airguard Blockage Prevention System Upgrade Instructions	RELEASE DATE	2023-01-01
STEP	20. For installations where fans are at the front of the aircart. Install the brackets (Item 1 & 2) onto Aircart HSS Frame (Item 3) using supplied 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 horizontal mount positions.	REV #	1.0
		PART KIT #	Varies

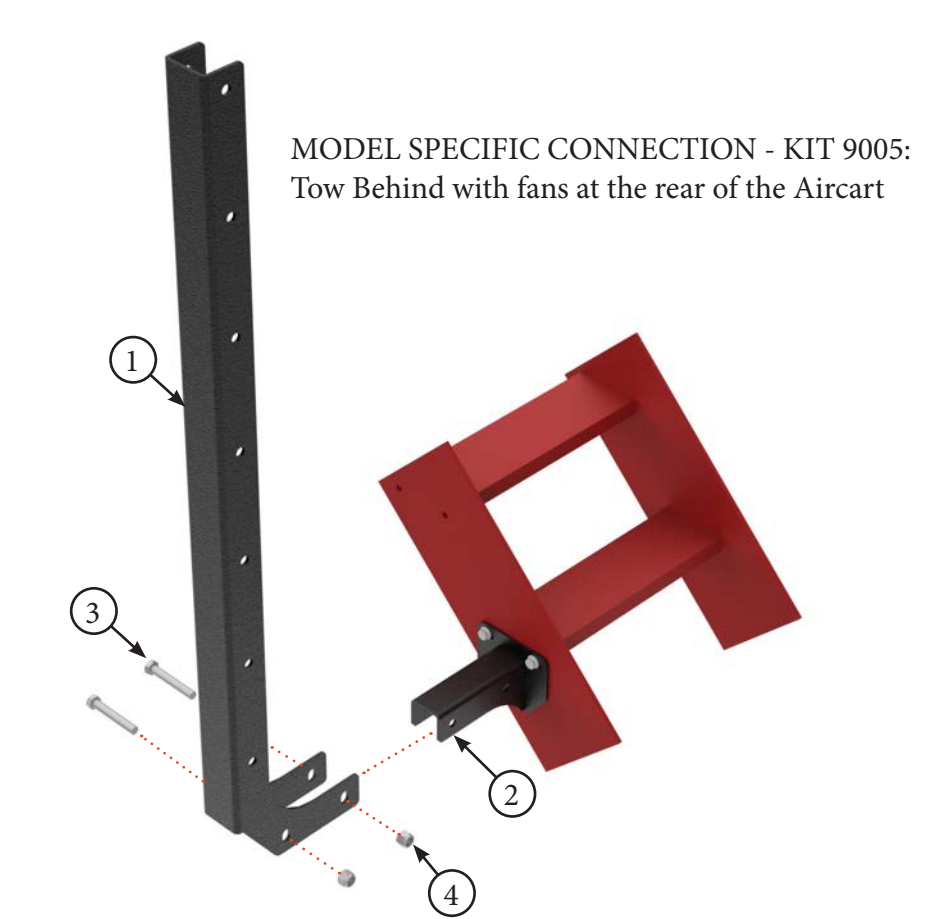
MODEL SPECIFIC CONNECTION - KIT 7860:  
 Tow Between  
 Tow Behind with fans at the front of the Aircart



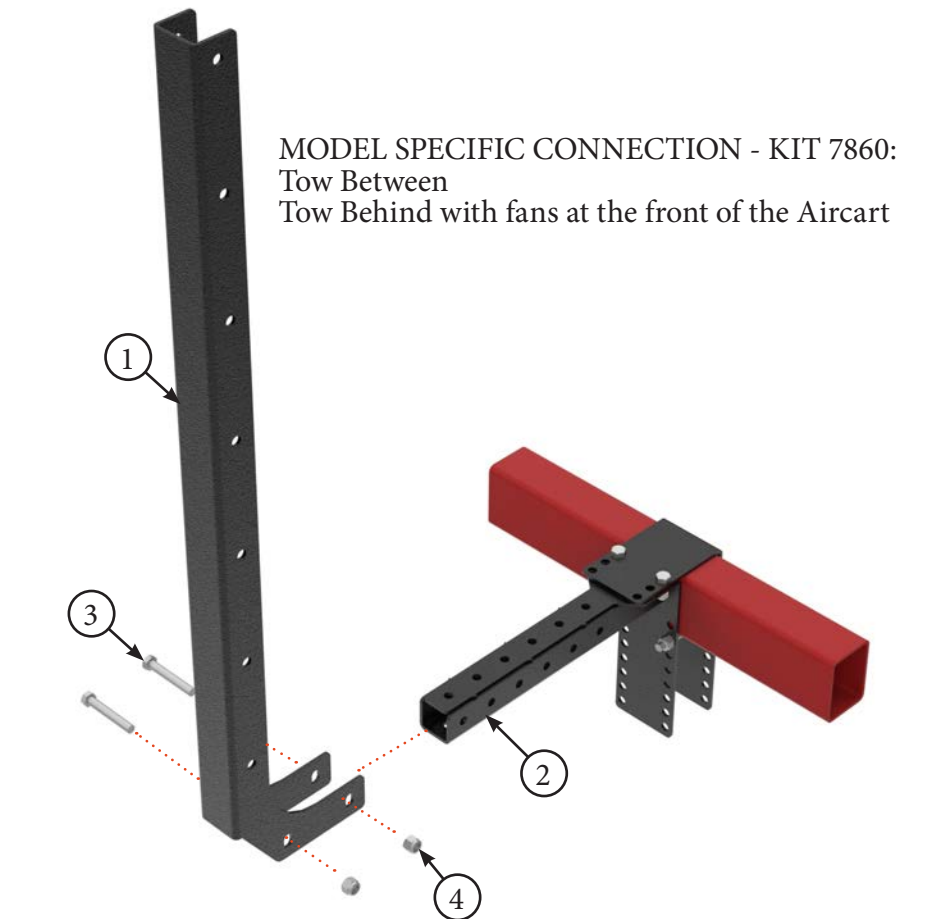
PARTS LIST		
Item	Part #	Description
1	7869	Adjustable HSS Backing Plate
2	7873	Adjustable HSS Bracket Assembly
3	--	Aircart HSS Frame
4	7861	Hex Bolt, 12mm x 30mm

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	2023-03-01
STEP	21. Mount outer vertical channel (Item 1) to Mount Bracket (Item 2) using supplied 12mm x 80mm Bolts (Item 3) and 12mm lock nuts (Item 4). For installations where fans are at the front of the Aircart, the vertical channel (Item 1) can be installed in either direction depending on where there is room to fit the snorkel kit.	REV #	1.0
		PART KIT #	Varies

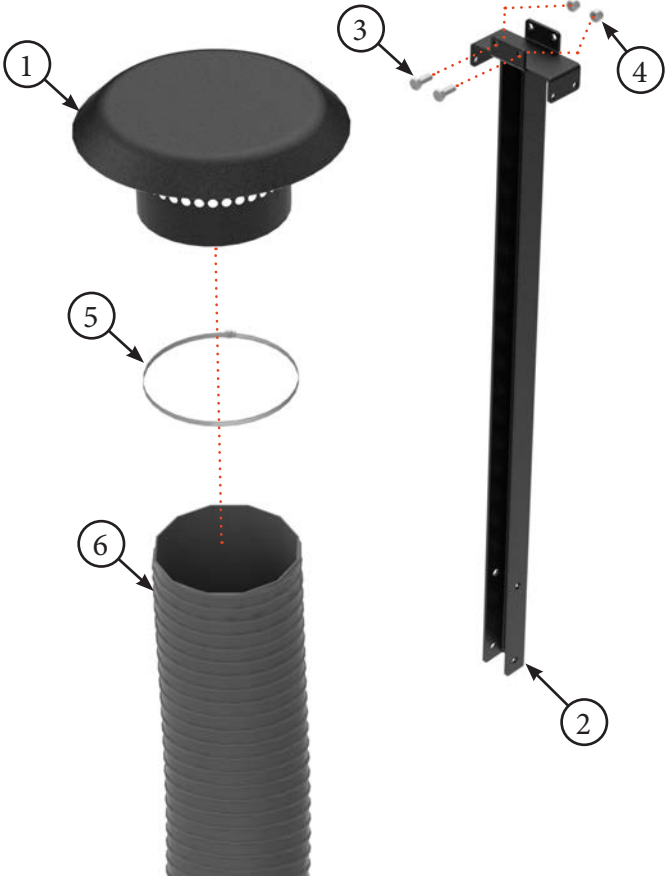


PARTS LIST		
Item	Part #	Description
1	7865	Outer Vertical Channel
2	--	Mount Bracket



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

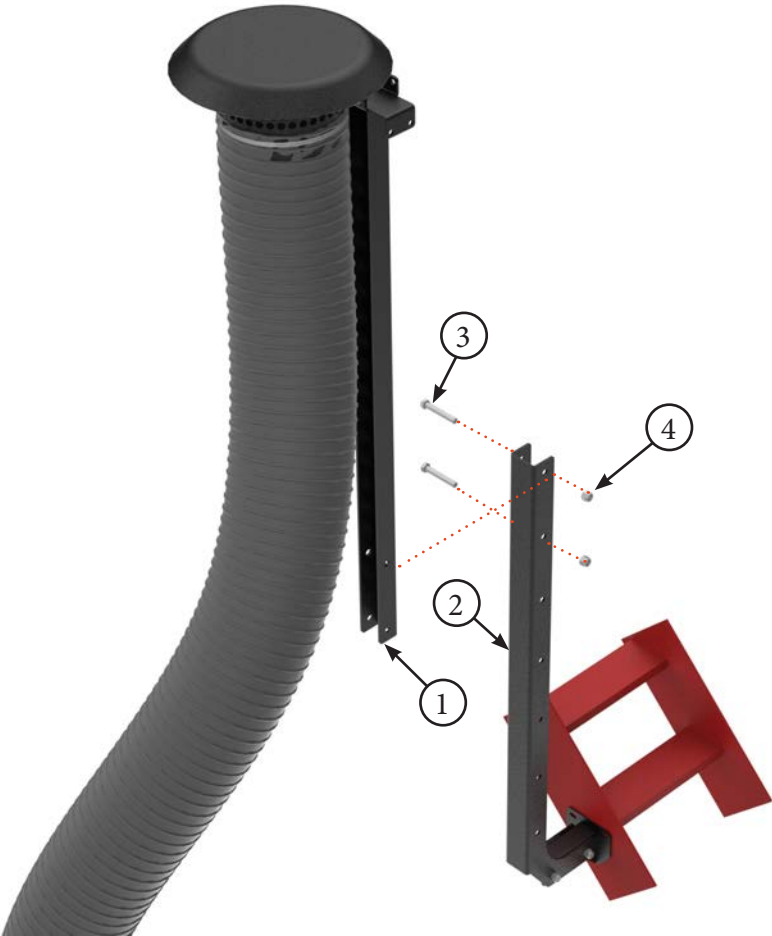
Title	Airguard Blockage Prevention System Upgrade Instructions	RELEASE DATE	2023-03-01
STEP	22. Attach air intakes (Item 1) to upper vertical channel (Item 2) using supplied 10mm x 25mm Bolts (Item 3) and 10mm lock nuts (Item 4). A maximum of 4 intakes can be mounted. Use bridge clamp (Item 5) to attach 8" flex hose (Item 6) to air intake (Item 1).	REV #	1.0
		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"

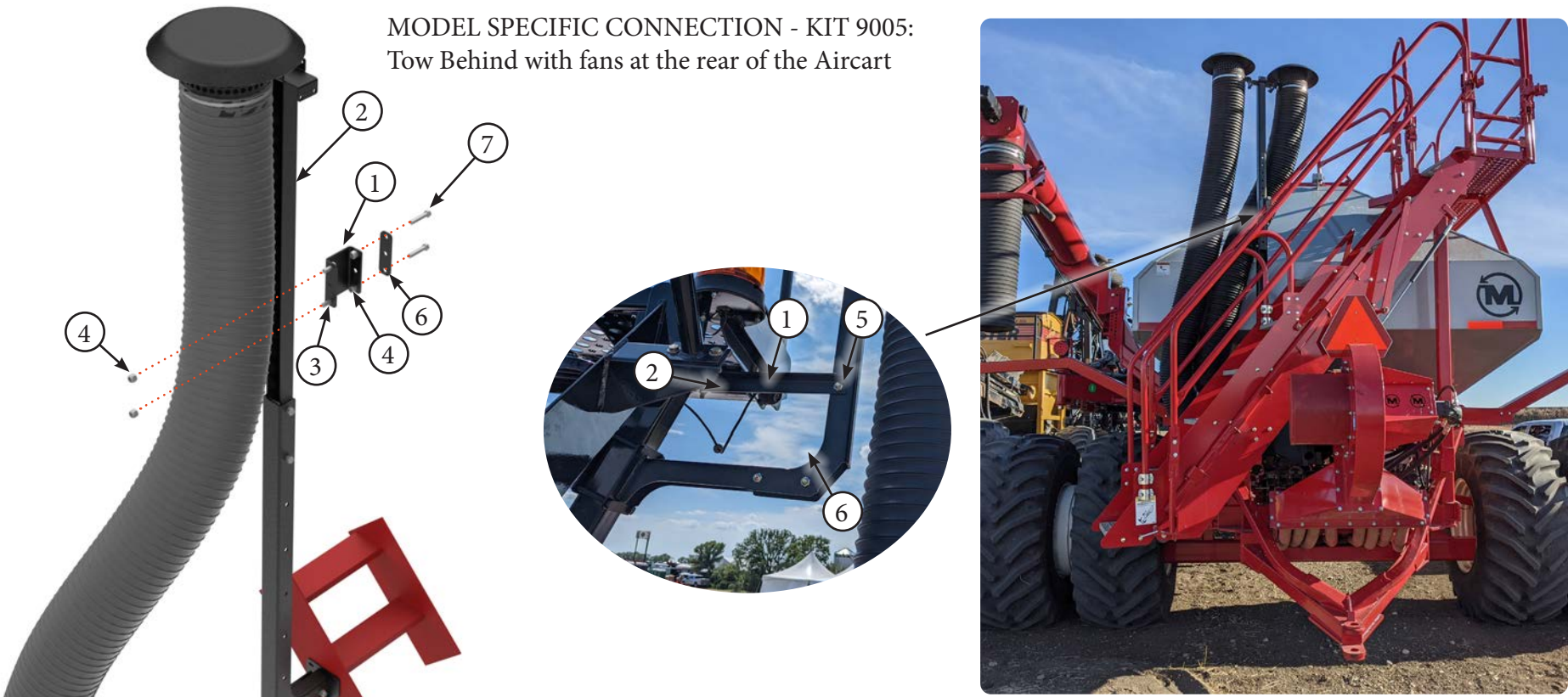
Title	Airguard Blockage Prevention System Upgrade Instructions	RELEASE DATE	2023-03-01
STEP	23. Determine desired height of air intakes and secure upper vertical channel (Item 1) to lower vertical channel (Item 2) at that location. Use supplied 12mm x 80mm Bolts (Item 3) and 12mm lock nuts (Item 4).	REV #	1.0
		PART KIT #	Varies



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

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

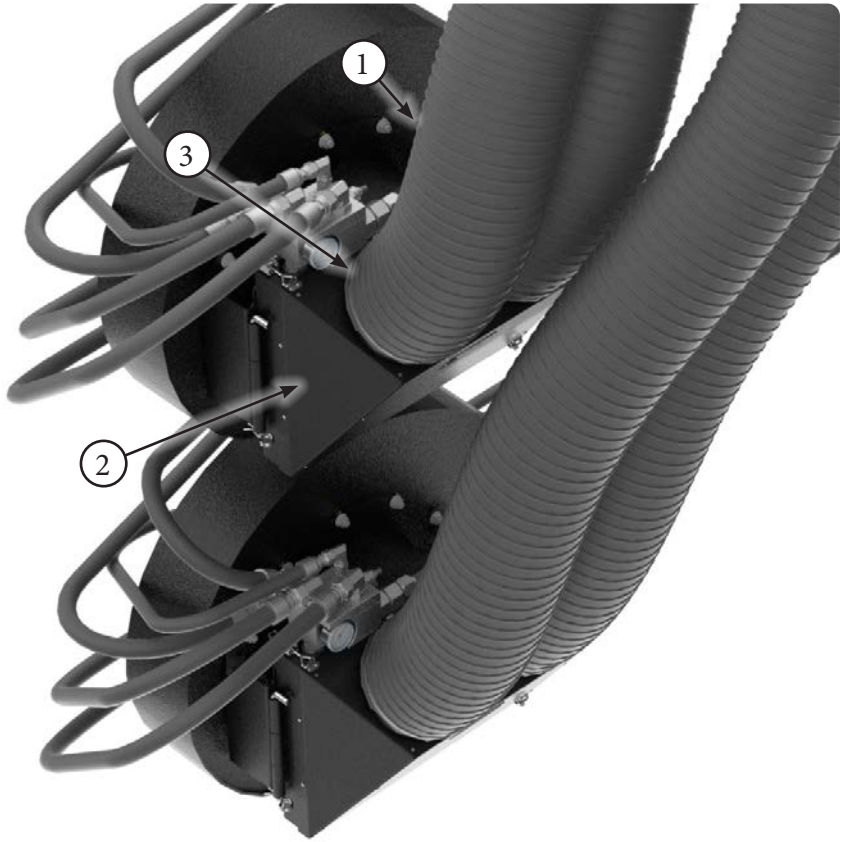
Title	Airguard Blockage Prevention System Upgrade Instructions	RELEASE DATE	2023-03-01
STEP	24. For Tow Behind models with fans mounted at the rear. Mount stabilizer bracket (Item 1) to upper vertical channel (Item 2) using supplied 12mm x 30mm Bolts (Item 3) and 12mm lock nuts (Item 4). Attach stabilizer bracket (Item 1) to catwalk railing (Item 5) using backing plate (Item 6) and supplied 12mm x 60mm Bolts (Item 7) and 12mm lock nuts (Item 4).	REV #	1.0
		PART KIT #	Varies



PARTS LIST		
Item	Part #	Description
1	9018	Railing Spacer
2	7868	Upper Vertical Channel
3	7861	Hex Bolt, 12mm x 30mm
4	7669	Lock Nut, 12mm

PARTS LIST		
Item	Part #	Description
5	--	Catwalk Railing
6	7959	Railing Mount Plate
7	7961	Hex Bolt, 12mm x 60mm

Title	Airguard Blockage Prevention System Upgrade Instructions	RELEASE DATE	2023-03-01
STEP	25. Attach 8” flex hose (Item 1) to snorkel housing (Item 2) using bridge clamp (Item 3). Zip tie 8” flex hoses to reduce wear and ensure tidy installation.	REV #	1.0
		PART KIT #	Varies

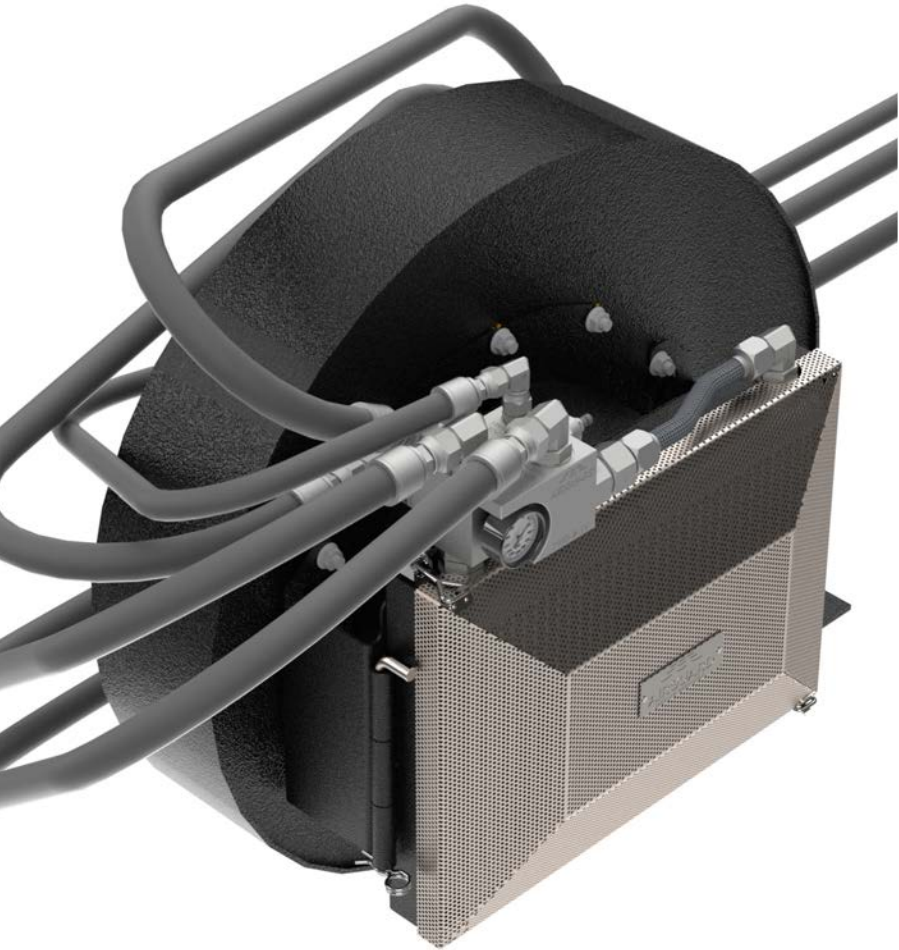


PARTS LIST		
Item	Part #	Description
1	7977	Snorkel Housing
2	7578	Bridge Clamp, 8”

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

Title	Airguard Blockage Prevention System Upgrade Instructions	RELEASE DATE	2023-03-01
STEP	Installation is Completed. Ensure all hydraulic connections and bolts are tightened.	REV #	1.0
		PART KIT #	Varies

COMPLETED INSTALLATION WITH NO SNORKEL



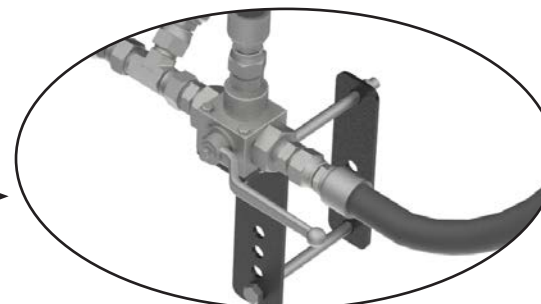
COMPLETED INSTALLATION WITH SNORKELS



<b>Title</b>	Airguard Blockage Prevention System Upgrade Instructions	<b>RELEASE DATE</b>	2023-03-01
<b>STEP</b>	Troubleshooting and preventative maintenance.	<b>REV #</b>	1.0
		<b>PART KIT #</b>	Varies

## PREVENTATIVE MAINTENANCE

1. Ensure that the startup procedure on page 16 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. 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
Cannot get fan speed up to normal levels	Pressure/flow is too low at tractor	Increase pressure/flow

<b>Title</b>	Airguard Blockage Prevention System Upgrade Instructions	<b>RELEASE DATE</b>	2023-03-01
<b>STEP</b>	Frequently asked questions.	<b>REV #</b>	1.0
		<b>PART KIT #</b>	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 resistance and 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.