

PART KIT INSTALL INSTRUCTIONS

Bourgault Aircarts

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

Release Date: 2024-03-28



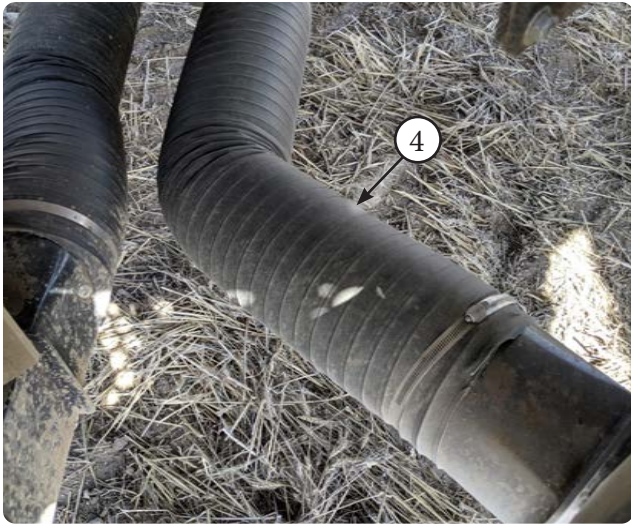
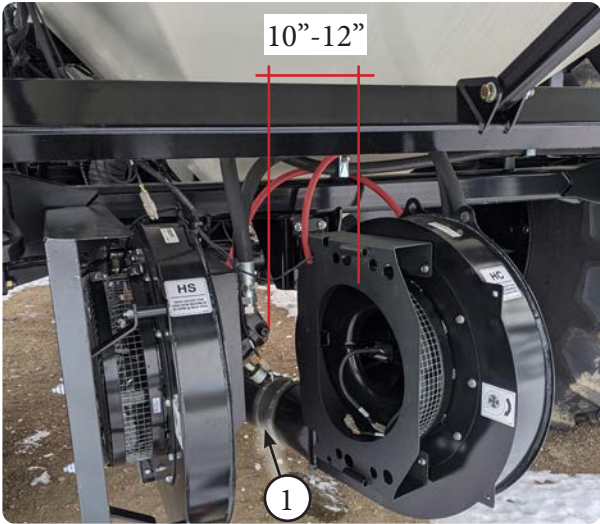
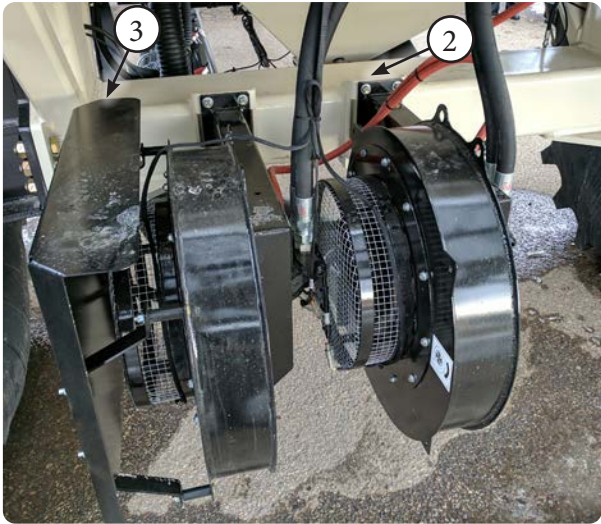

AIRGUARD
SEEDING PRECISION

Title	Airguard Blockage Prevention System Upgrade Instructions	RELEASE DATE	2024-03-28
STEP	1. For installations on both fans with rear hitch, the fan will need to be shifted over for sufficient room to install the BP System. Disconnect flexible outlet hose (Item 1) from the fan outlet on fan #1 and/or fan #2. Loosen the U-Bolts / Bolts (Item 2) that hold the fan mount bracket to the axle. In some cases the U-Bolts / Bolts may need to be removed completely and reinstalled in the new location. Allow for 10-12" of space between the fan motor and the intake screen of the neighboring fan. A 7" flexible hose extension kit (Item 4) will be required when moving fan over. Hose may need to be trimmed to reduce kinking. See pages 3-6 for specific relocation bracket installation instructions. If installation is only on the outside fan, remove deflector shield (Item 3) and skip to page 8.	REV #	2.0
		PART KIT #	Varies

MODEL SPECIFIC CONNECTION WHEN INSTALLING ON
 BOTH FANS WITH REAR HITCH: KIT #7923 or 9070
 6000 Series Tow Behind
 7000 Series Tow Behind
 L9000 Series Tow Between

WARNING: Support fan housing from below with a jack or above with hoist to avoid injury and so no extra stress is put on the hydraulic hose connections

TRIM 7" FLEX HOSE TO REDUCE KINKING OF HOSE



PARTS LIST		
Item	Part #	Description
1	--	Flexible Outlet Hose
2	--	Existing Hardware U-Bolts / Bolts

PARTS LIST		
Item	Part #	Description
3	--	Deflector Screen
4	7923 /or/ 9070	7" Flexible Hose

Title	Airguard Blockage Prevention System Upgrade Instructions	RELEASE DATE	2024-03-28
STEP	2. For Tow Behind installations with no rear hitch, for specific models as per below. Bolt 45 deg bracket (Item 1) to Axle HSS (Item 2) using backing plates (Item 3), 12mm x 130mm Bolts (Item 4) and 12mm Lock Nuts (Item 5) and Flat Washers (Item 6). Unbolt the fan (Item 7) from the Axle HSS (Item 2) and rebolt onto the 45deg bracket (Item 1) using the existing hardware from the Fan.	REV #	2.0
		PART KIT #	Varies

MODEL SPECIFIC CONNECTION WHEN INSTALLING ON INSIDE FAN OR ON BOTH FANS AND NO REAR HITCH: KIT #7945

6000series - Tow Behind
7000series - Tow Behind

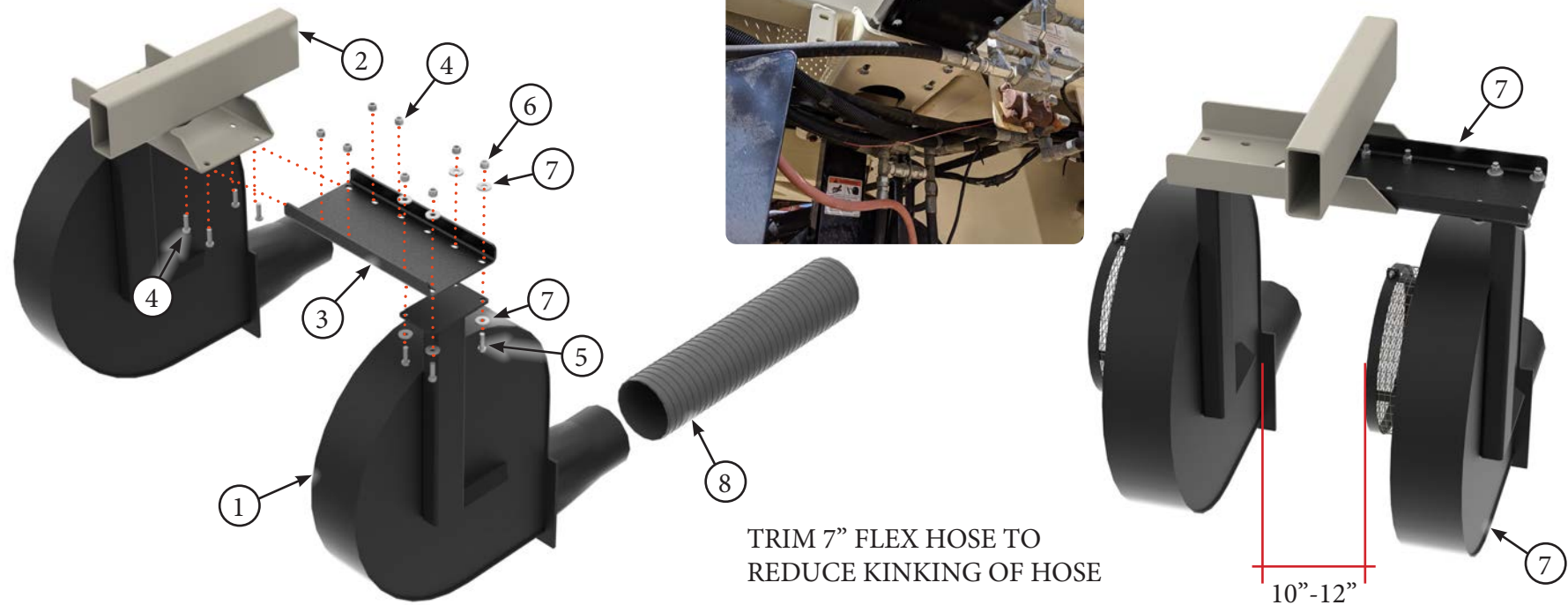


PARTS LIST		
Item	Part #	Description
1	7942	45deg Bracket
2	--	Axle HSS
3	7943	Backing Plate
4	7863	Hex Bolt, 12mm x 130mm

PARTS LIST		
Item	Part #	Description
5	7669	Lock Nut, 12mm
6	7925	Flat Washer, 12mm
7	--	Fan

Title	Airguard Blockage Prevention System Upgrade Instructions	RELEASE DATE	2024-03-28
STEP	3. For L6000 Series tow between installations, for specific models as per below. Remove outside fan (Item 1) from Aircart Frame (Item 2). Bolt extension bracket (Item 3) to Aircart Frame (Item 2) using existing hardware (Item 4). Reattach fan (Item 1) to extension bracket (Item 3) using 12mm x 40mm Bolts (Item 5) and 12mm Lock Nuts (Item 6) and Flat Washers (Item 7). A 7" flexible hose extension kit (Item 8) will be required when moving fan over. Hose may need to be trimmed to reduce kinking.	REV #	2.0
		PART KIT #	Varies

MODEL SPECIFIC CONNECTION WHEN INSTALLING ON
OUTSIDE FAN OR ON BOTH FANS: KIT #7923 & 7924
L6000series - Tow Between

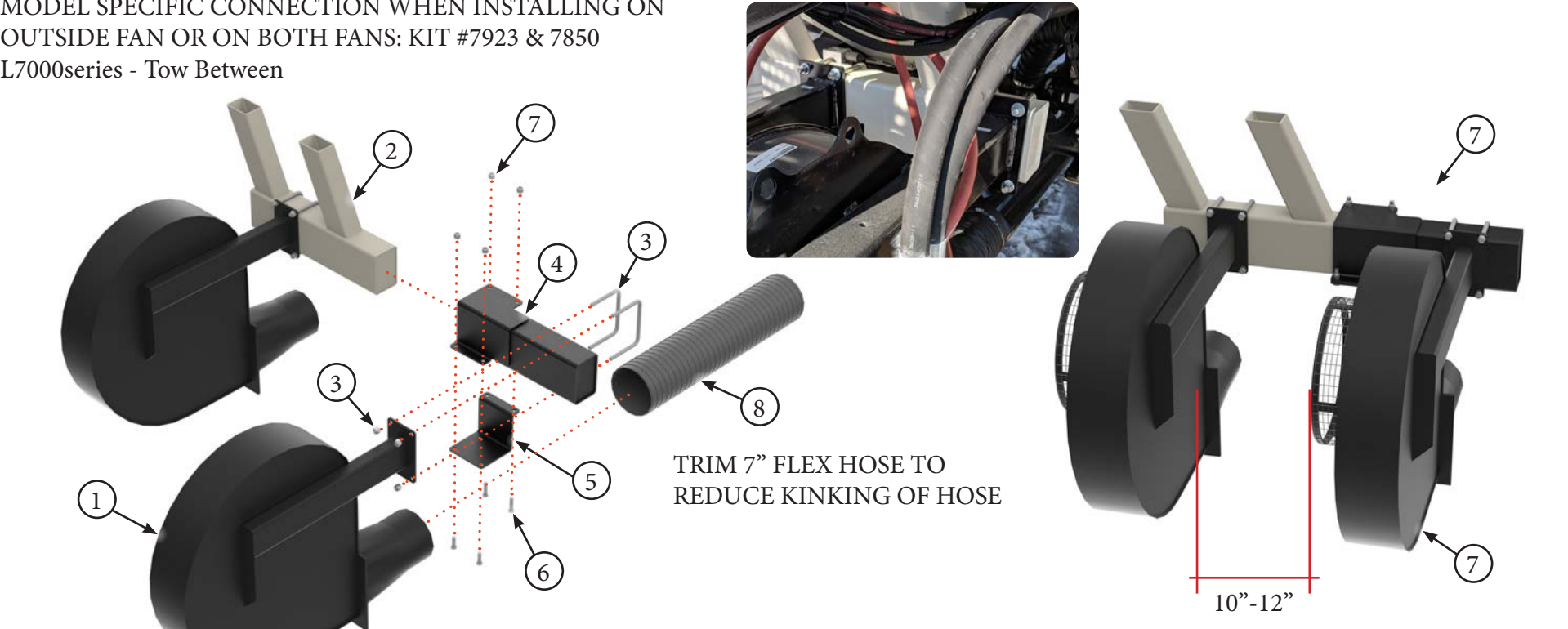


PARTS LIST		
Item	Part #	Description
1	--	Fan
2	--	Aircart Frame
3	7922	Extension Bracket
4	--	Existing Hardware

PARTS LIST		
Item	Part #	Description
5	7671	Hex Bolt, 12mm x 40mm
6	7669	Lock Nut, 12mm
7	7925	Flat Washer, 12mm
8	7923	7" Flexible Hose

Title	Airguard Blockage Prevention System Upgrade Instructions	RELEASE DATE	2024-03-28
STEP	4. For L7000 Series tow between installations, for specific models as per below. Remove outside fan (Item 1) from Aircart Frame (Item 2). Bolt extension bracket (Item 4) to Aircart Frame (Item 2) using bracket plate (Item 5) with 12mm x 40mm Bolts (Item 6) and 12mm Lock Nuts (Item 7). Reattach fan (Item 1) to extension bracket (Item 4) using existing U-bolts and nuts (Item 3). A 7" flexible hose extension kit (Item 8) will be required when moving fan over. Hose may need to be trimmed to reduce kinking.	REV #	2.0
		PART KIT #	Varies

MODEL SPECIFIC CONNECTION WHEN INSTALLING ON
OUTSIDE FAN OR ON BOTH FANS: KIT #7923 & 7850
L7000series - Tow Between

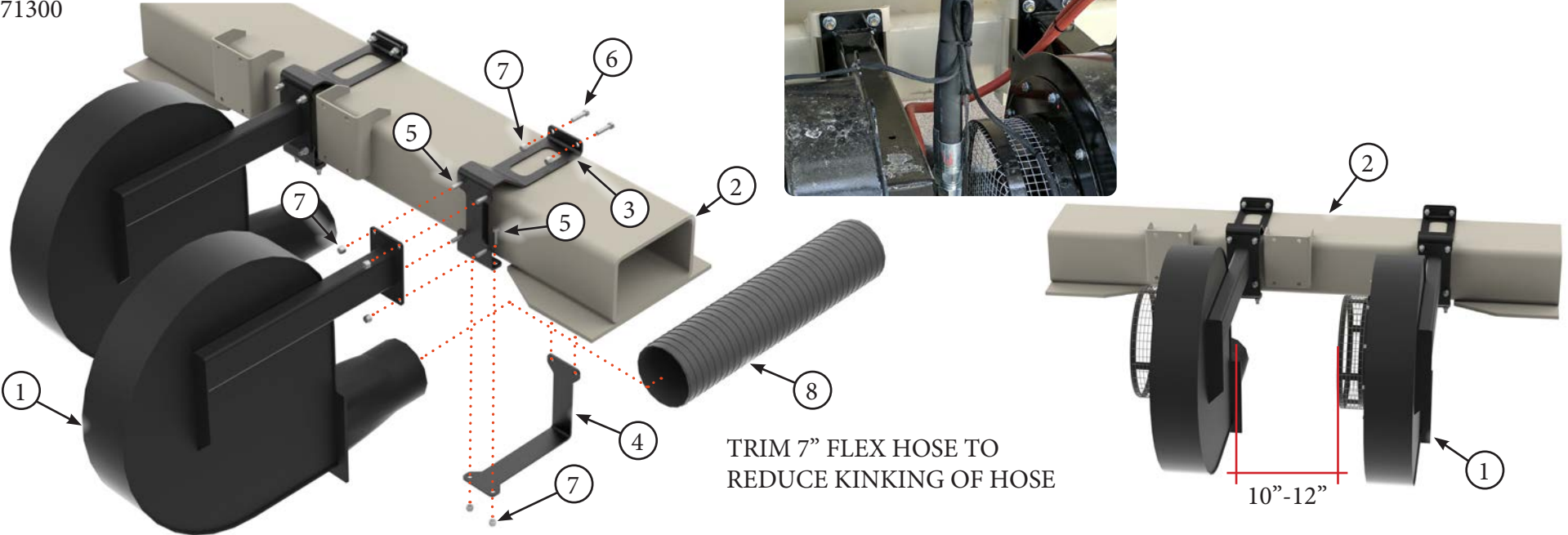


PARTS LIST		
Item	Part #	Description
1	--	Fan
2	--	Aircart Frame
3	--	Existing Hardware
4	7845	Extension Bracket

PARTS LIST		
Item	Part #	Description
5	7846	Extension Bracket Plate
6	7671	Hex Bolt, 12mm x 40mm
7	7669	Lock Nut, 12mm
8	7923	7" Flexible Hose

Title	Airguard Blockage Prevention System Upgrade Instructions	RELEASE DATE	2024-03-28
STEP	5. For 71300 Series Aircart installations with rear hitch, remove inside fan (Item 1) from axle HSS (Item 2). Bolt fan bracket (Item 3) to Axle HSS (Item 2) using bracket plate (Item 4) with 12mm x 40mm Bolts (Item 5), 12mm x 50mm Bolts (Item 6) and 12mm Lock Nuts (Item 7). Reattach fan (Item 1) to fan bracket (Item 3) using 12mm x 40mm bolts (Item 5) and 12mm Lock Nuts (Item 7). A 7" flexible hose extension kit (Item 8) will be required when moving fan over. Hose may need to be trimmed to reduce kinking. When rear hitch is present, both fans must be moved over with fan brackets.	REV #	2.0
		PART KIT #	Varies

MODEL SPECIFIC CONNECTION WHEN INSTALLING ON INSIDE FAN OR ON BOTH FANS WITH REAR HITCH : KIT #7923 & 7670 71300

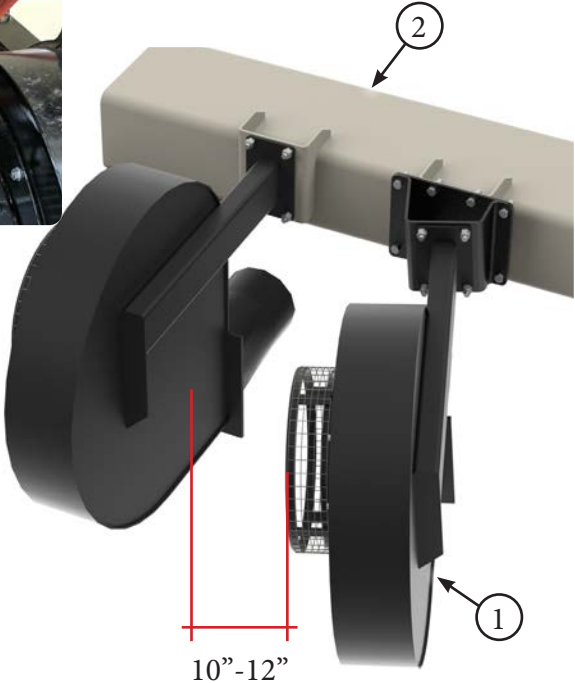
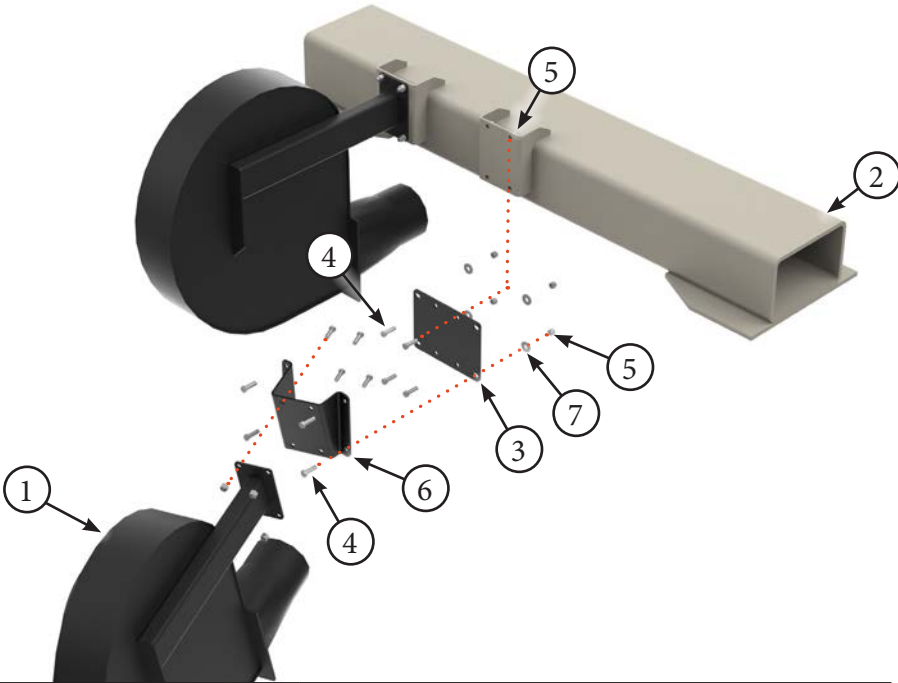


PARTS LIST		
Item	Part #	Description
1	--	Fan
2	--	Aircart Frame
3	7665	Fan Bracket
4	7668	Bracket Plate

PARTS LIST		
Item	Part #	Description
5	7672	Hex Bolt, 12mm x 50mm
6	7671	Hex Bolt, 12mm x 40mm
7	7669	Lock Nut, 12mm
8	7923	7" Flexible Hose

Title	Airguard Blockage Prevention System Upgrade Instructions	RELEASE DATE	2024-03-28
STEP	6. For 71300 Series Aircart installations with no rear hitch, remove inside fan (Item 1) from axle HSS (Item 2). Bolt fan bracket plate (Item 3) to Axle HSS (Item 2) using 12mm x 40mm Bolts (Item 4) and 12mm Lock Nuts (Item 5). Mount Angle Bracket (Item 6) to fan bracket plate (Item 3) using 12mm x 40mm Bolts (Item 4), 12mm washers (Item 7) and 12mm Lock Nuts (Item 5). Reattach fan (Item 1) to Angle bracket (Item 6) using existing hardware.	REV #	2.0
		PART KIT #	Varies

MODEL SPECIFIC CONNECTION WHEN INSTALLING ON INSIDE FAN OR ON BOTH FANS AND NO REAR HITCH : KIT #9075
71300



PARTS LIST		
Item	Part #	Description
1	--	Fan
2	--	Aircart Axle HSS
3	9074	Fan Bracket Plate
4	7671	Hex Bolt, 12mm x 40mm

PARTS LIST		
Item	Part #	Description
5	7669	Lock Nut, 12mm
6	--	Angle Bracket
7	7925	Flat Washer, 12mm

Title	Airguard Blockage Prevention System Upgrade Instructions	RELEASE DATE	2024-03-28
STEP	7. For HC, HS and HP Fans with screen cages, remove existing fan screen (Item 1) from the fan housing (Item 2) by removing the outer flatbar ring (Item 3). Screen material (Item 1) must be cut to free sensor plug.	REV #	2.0
		PART KIT #	Varies

MODEL SPECIFIC CONNECTION:
FANS WITH FIXED SCREEN CAGES

- HC Fans
- HS Fans
- HP Fans

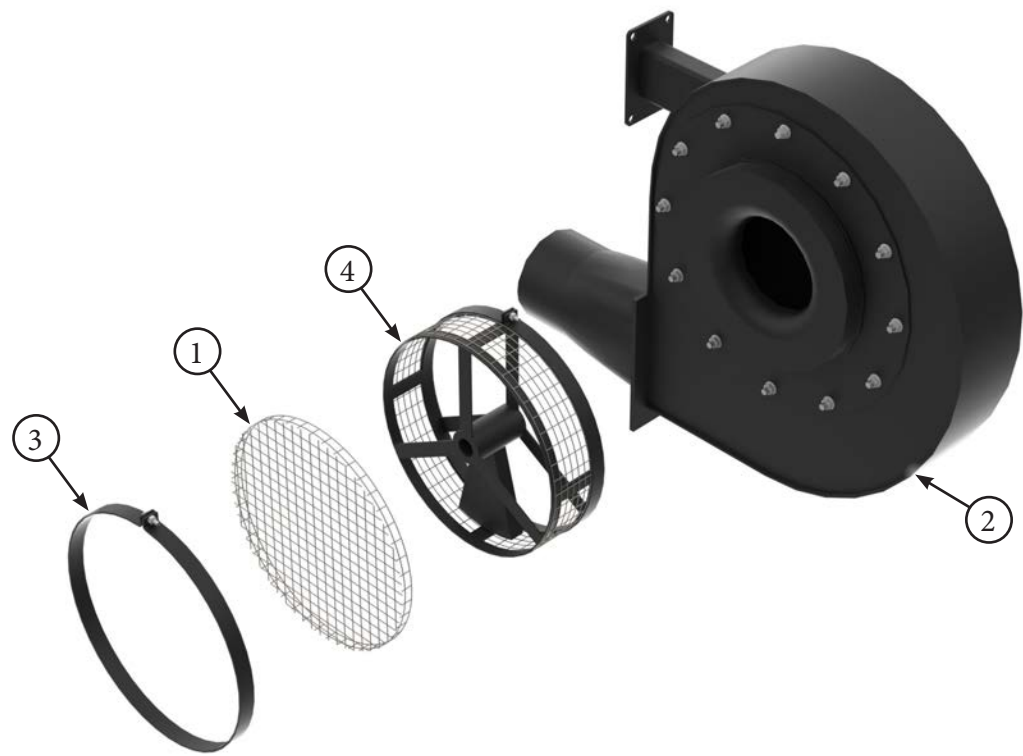


PARTS LIST		
Item	Part #	Description
1	--	Fan Screen
2	--	Fan Housing

PARTS LIST		
Item	Part #	Description
3	--	Outer Flat Bar Ring

Title	Airguard Blockage Prevention System Upgrade Instructions	RELEASE DATE	2024-03-28
STEP	8. For HC, HS and HP Fans with spinner screens, remove existing fan screen (Item 1) from the fan housing (Item 2) by removing the outer flatbar ring (Item 3). Remove existing fan spinner screen assembly parts (Item 4) from the fan housing (Item 2). All spinner parts including center shaft should be removed. Screen material (Item 1) must be cut to free sensor plug.	REV #	2.0
		PART KIT #	Varies

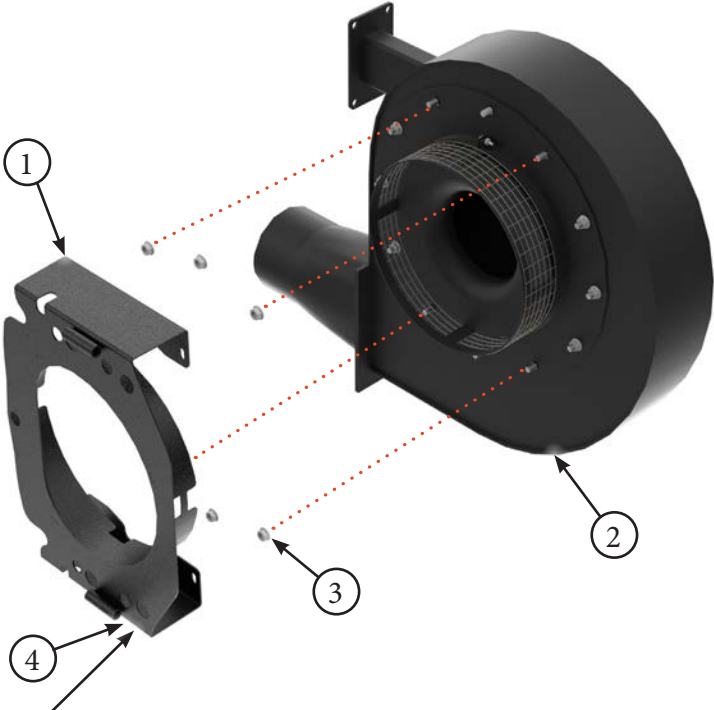
MODEL SPECIFIC CONNECTION:
FANS WITH SPINNER SCREEN CAGES
HC Fans
HS Fans
HP Fans



PARTS LIST		
Item	Part #	Description
1	--	Fan Screen Spinner Assembly
2	--	Fan Housing

PARTS LIST		
Item	Part #	Description
3	--	Fan Screen

Title	Airguard Blockage Prevention System Upgrade Instructions	RELEASE DATE	2024-03-28
STEP	9. 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. For Kit #9640, bracket will need to be bolted together using supplied hardware and plates. Bracket may look different than shown below.	REV #	2.0
		PART KIT #	Varies






Use Kit # 9510 for the following Models:
 4000series
 5000series
 6000series HS & HC Fans
 7000series HS & HC Fans
 8000series HS & HC Fans
 9000series HS & HC Fans

Use Kit # 9610 for the following Models with screen spinners:
 7000series HP Fans
 8000series HP Fans
 9000series HP Fans

Use Kit # 9640 for the following Models with Screens attached to fan housing:
 7000series HP Fans
 8000series HP Fans
 9000series HP Fans

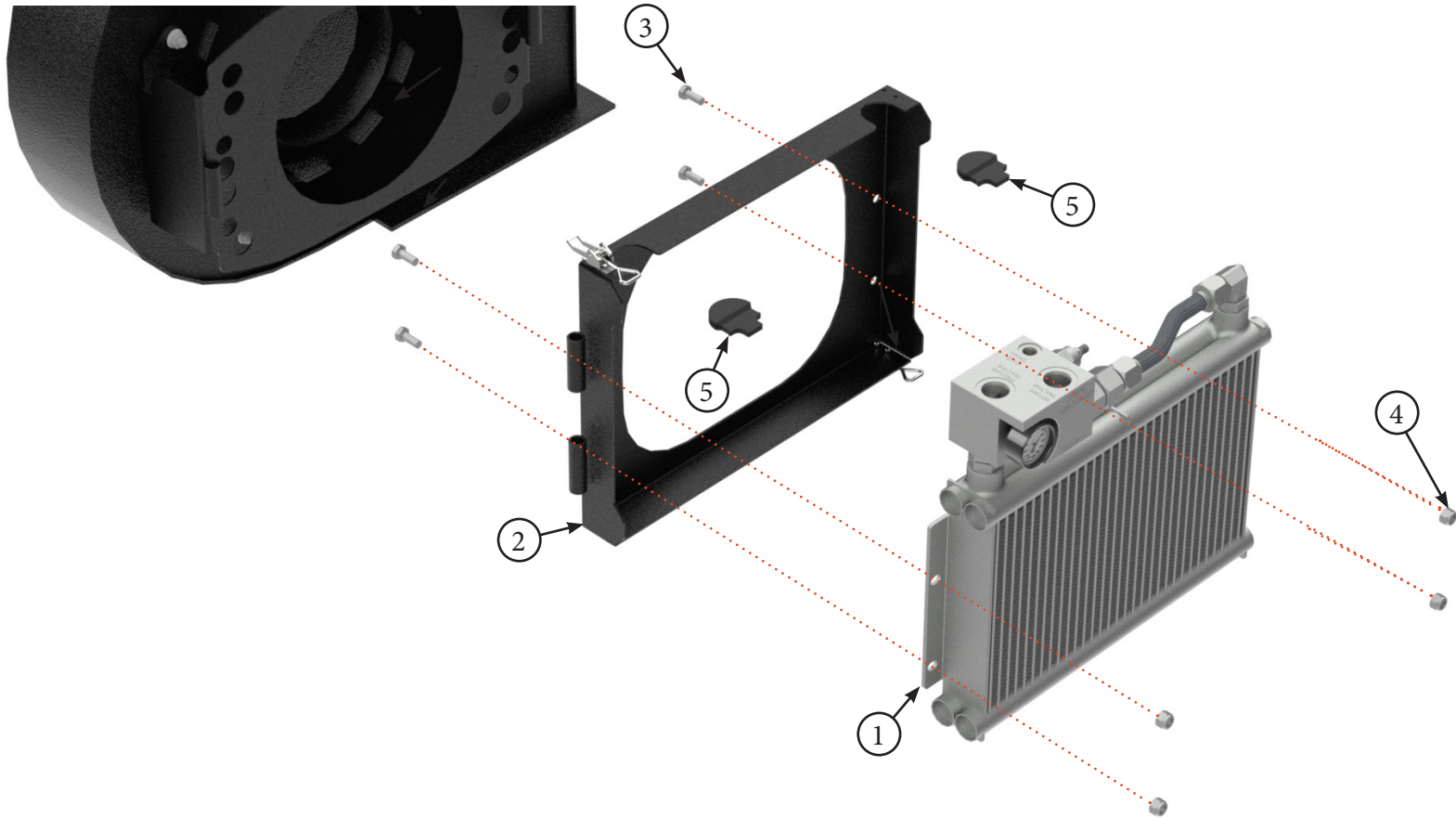
Bolt Bracket together with plates, using 1/4" x 3/4" Bolts and 1/4" Nuts.

PARTS LIST		
Item	Part #	Description
1	7553 / or / 9019	REM RT Fan Bracket / or / Tsunami Blower Bracket
2	--	REM Fan Housing / or / Tsunami Blower Housing

PARTS LIST		
Item	Part #	Description
3	--	Existing Hardware

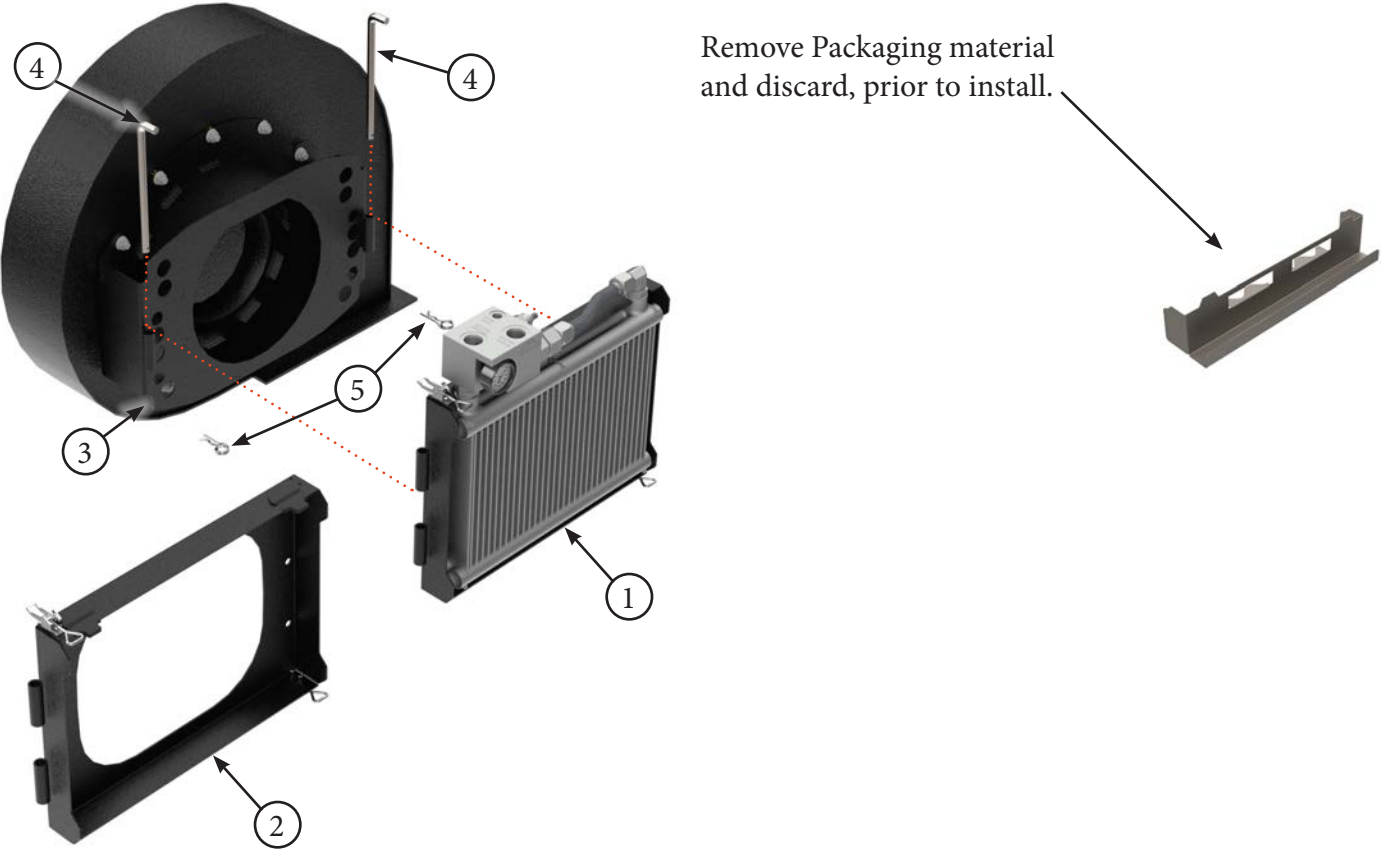
Title	Airguard Blockage Prevention System Upgrade Instructions	RELEASE DATE	2024-03-28
STEP	10. Bolt Oil Cooler/Radiator Assembly (Item 1) to BP System Bracket (Item 2) using supplied 10mm x 25mm Bolts (Item 3) and 10mm lock nuts (Item 4). If only installing snorkel kit without Radiator, then install 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 #	2.0
		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

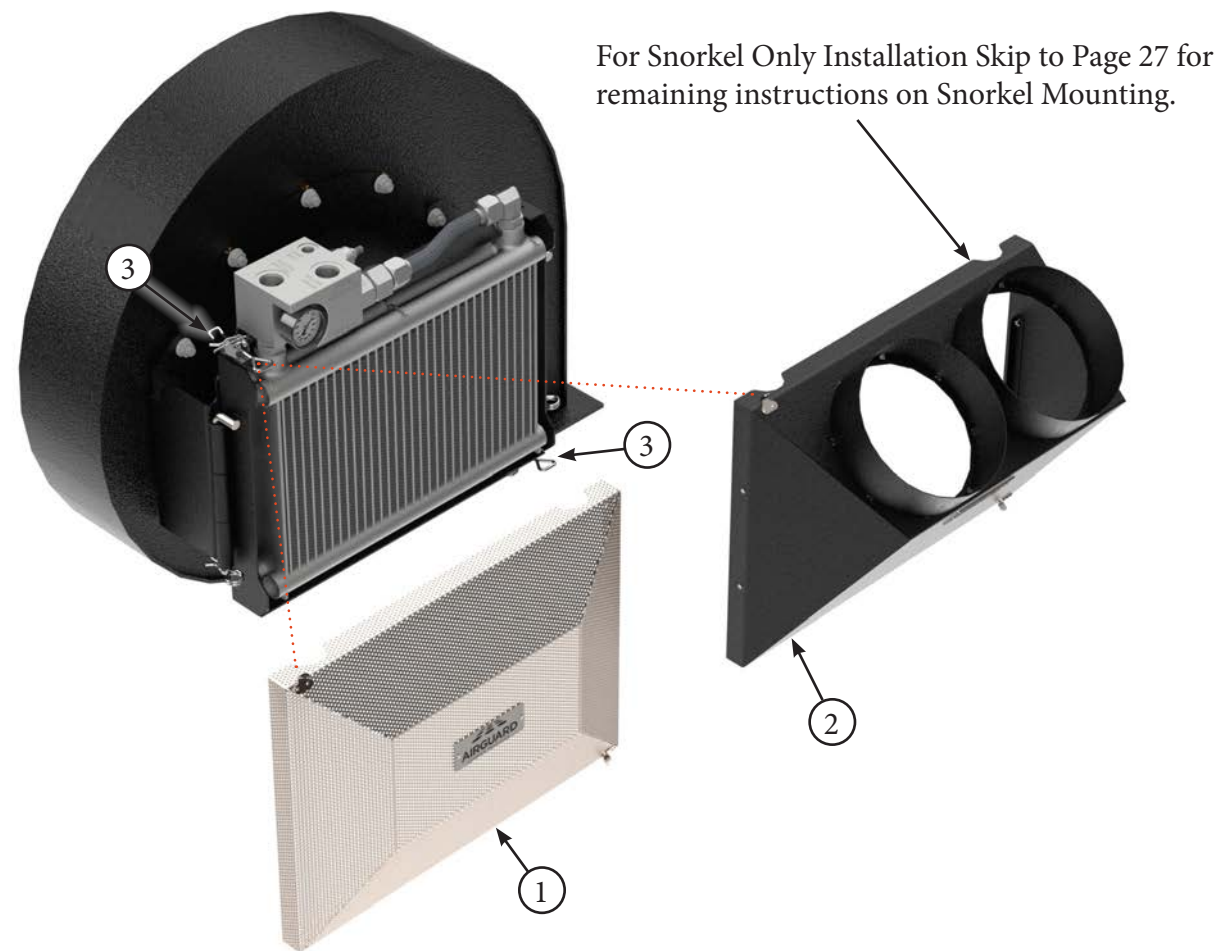
Title	Airguard Blockage Prevention System Upgrade Instructions	RELEASE DATE	2024-03-28
STEP	11. Remove the plastic packaging materials prior to the assembly of these brackets. Mount BP System Main Bracket with Oil Cooler (Item 1) or Main Bracket with Plugs (Item 2) to Fan bracket (Item 3) using supplied pivot pins (Item 4). Secure in place with 3.5mm cotter pins (Item 5).	REV #	2.0
		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	--	REM RT Fan Bracket / or / Tsunami Blower 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	2024-03-28
STEP	12. Attach Mesh Screen (Item 1) or Snorkel Housing (Item 2) to front of BPS using latches (Item 3).	REV #	2.0
		PART KIT #	Varies

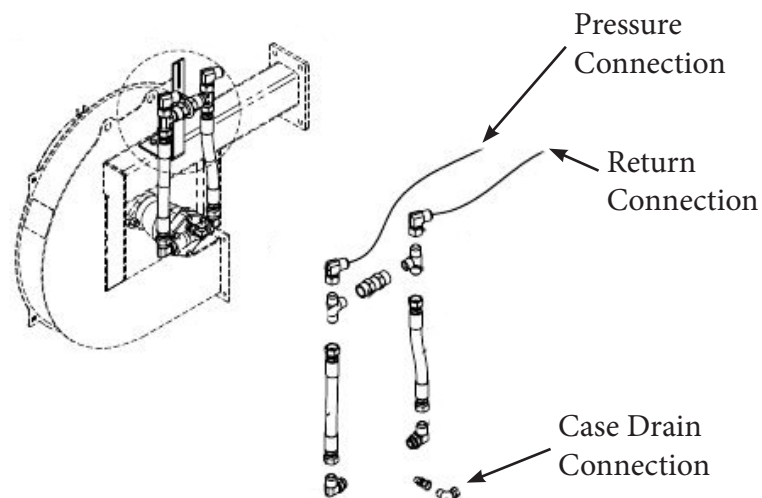
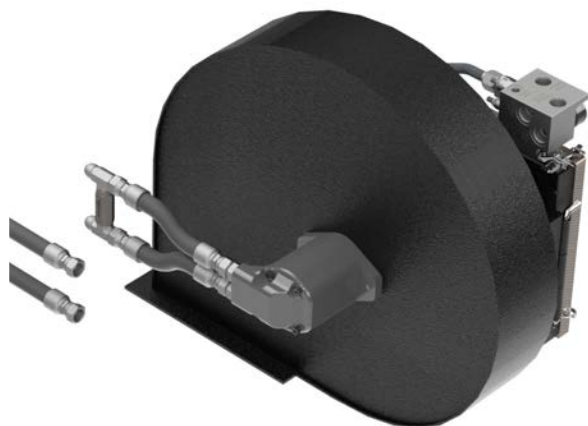


PARTS LIST		
Item	Part #	Description
1	7568	Mesh Screen
2	7977	Snorkel Housing

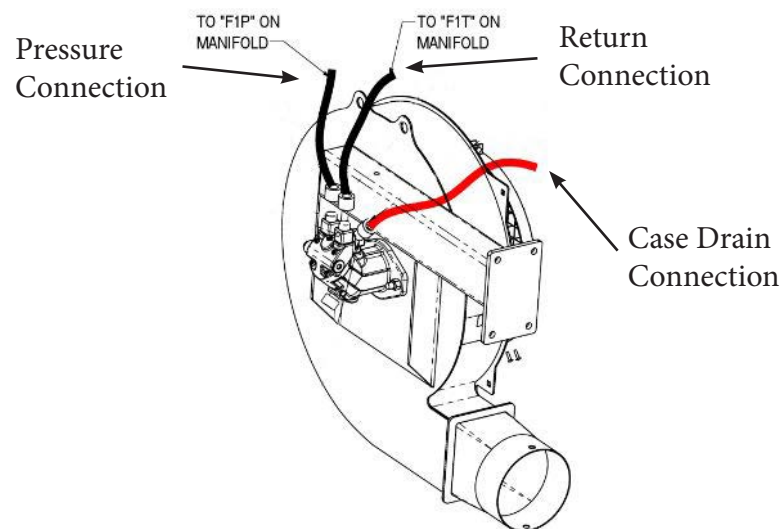
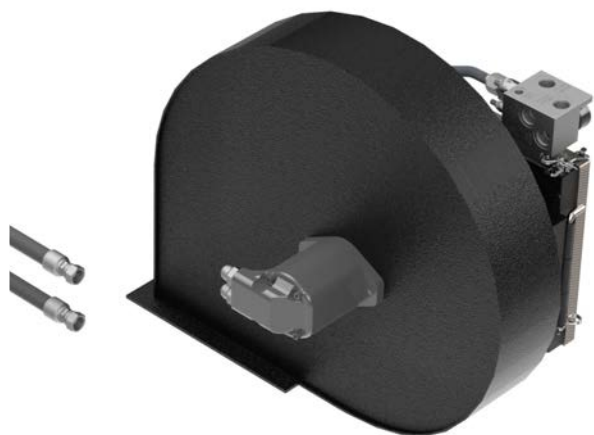
PARTS LIST		
Item	Part #	Description
3	--	Overcenter Latch

Title	Airguard Blockage Prevention System Upgrade Instructions	RELEASE DATE	2024-03-28
STEP	13. 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.	REV #	2.0
		PART KIT #	Varies

Installation with External Check Valve:

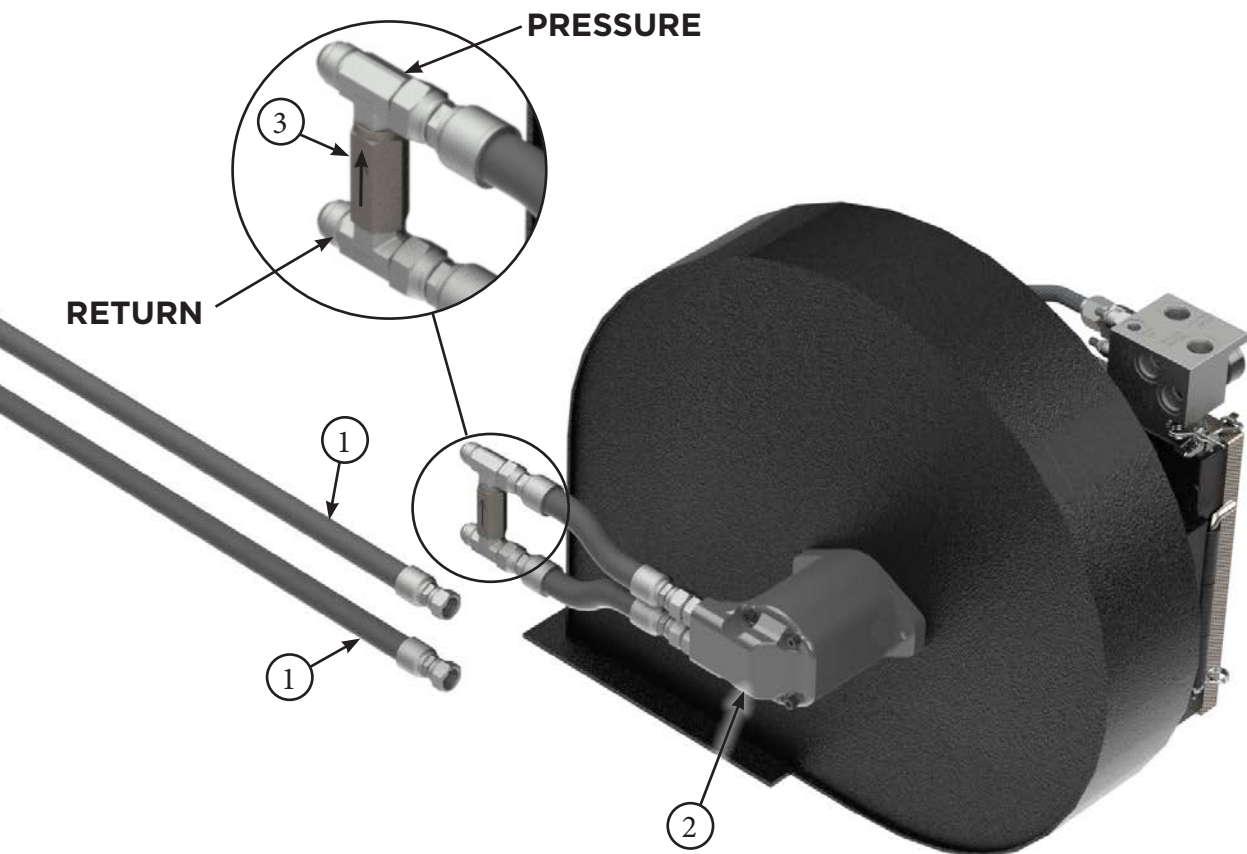


Installation with Internal Check Valve:



Note: The illustrations on the following pages will show the external check valve. If using the internal check valve, plumb directly to the fan motor.

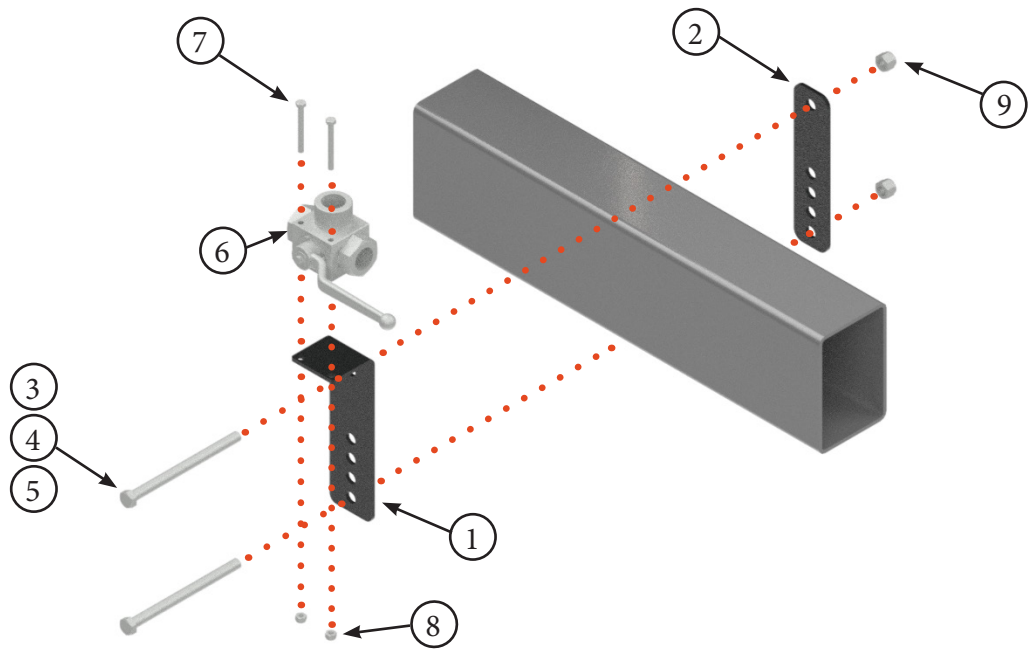
Title	Airguard Blockage Prevention System Upgrade Instructions	RELEASE DATE	2024-03-28
STEP	14. Remove factory hoses (Item 1) from side of fan motor (Item 2). Remove the hoses (Item 1) on the tractor side of the external check valve, as shown below. Identify which hose is the pressure side of the circuit. 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 #	2.0
		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 Bypass Kit Instructions	RELEASE DATE	2024-03-28
STEP	15. Mount valve on bracket, using 6mm x 60mm bolts (Item 7) and 6mm lock nuts (Item 8) 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 9) 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



NOTE: All of the hydraulic connections in Steps 15 to 23 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.

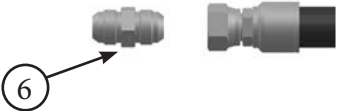
PARTS LIST		
Item	Part #	Description
1	7733	Bypass Valve Mount Plate
2	7734	Bypass Valve Mount Back Plate
3	7862	HEX BOLT, 12 mm x 110mm, GRADE 8.8
4	7863	HEX BOLT, 12 mm x 130mm, GRADE 8.8
5	7864	HEX BOLT, 12 mm x 160mm, GRADE 8.8

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	2024-03-28
STEP	16. Attach the fan return line (Item 2) to the common port on the valve (Item 5) using hydraulic hose from Blockage Prevention System (Item 3) and adapters (Item 1 & 4) to make the connection.	REV #	2.0
		PART KIT #	Varies


MODEL SPECIFIC CONNECTION

Aircart Models: With 3/4" JIC Return Hose Connections



6

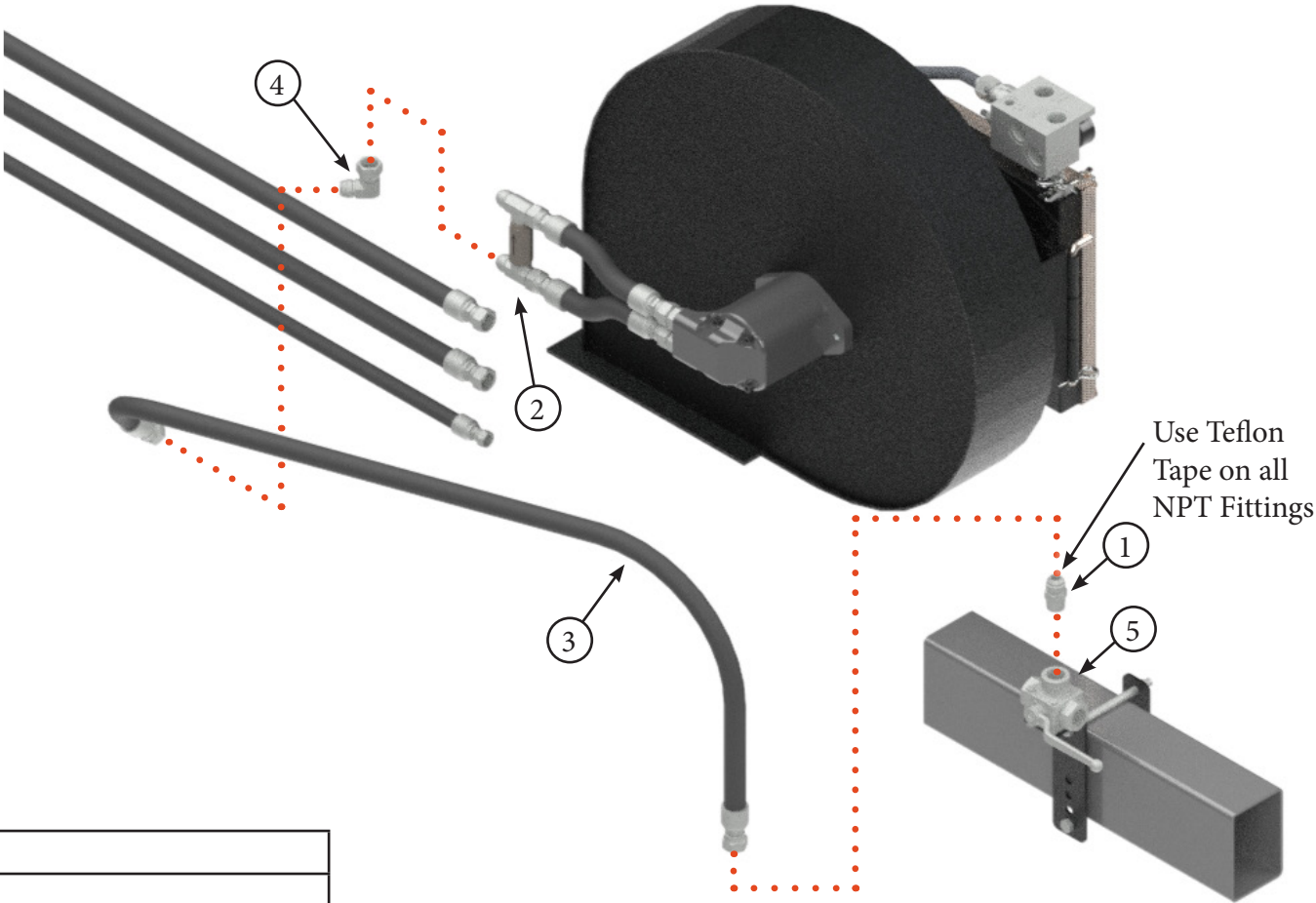
Aircart Models: With 1" JIC Return Hose Connections



7

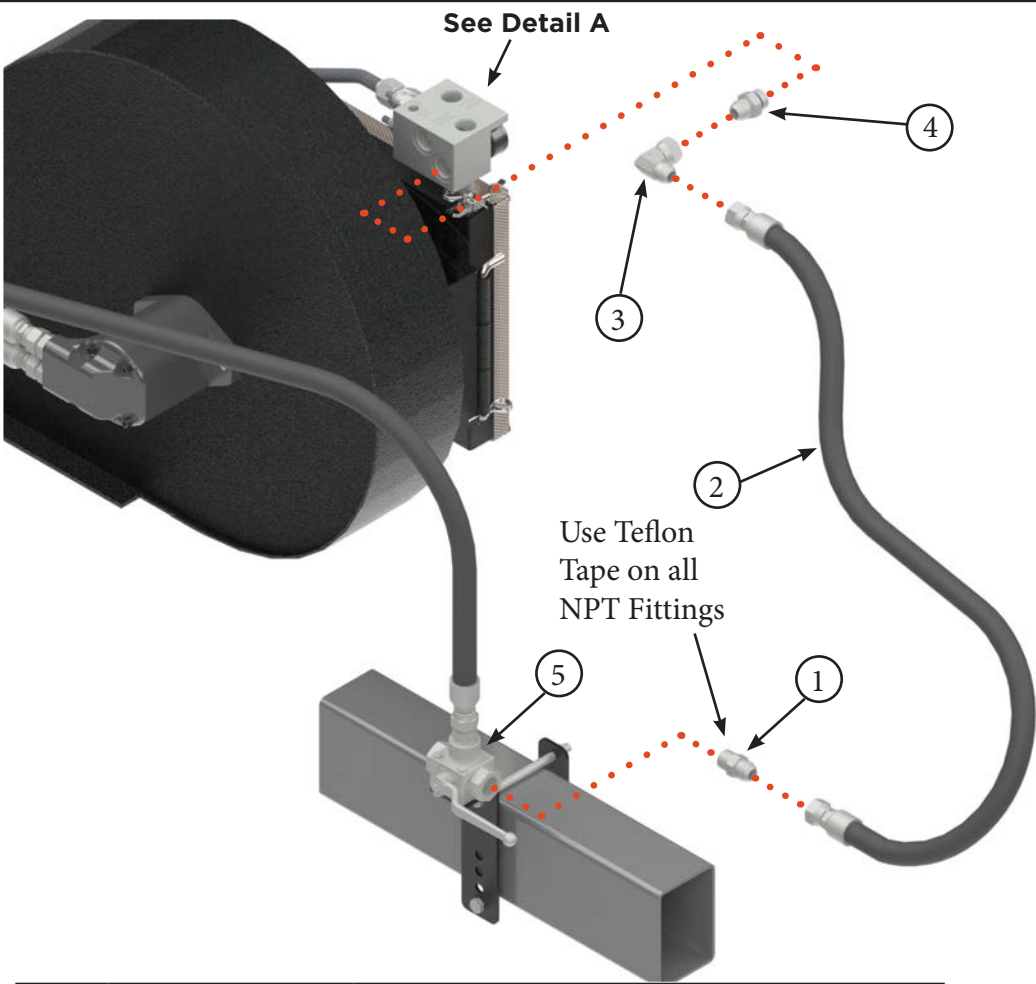
NOTE: All of the hydraulic connections in Step 15 to 23 should only be hand tightened until all hoses and fittings are installed. Some connections may need to be rotated in order to install other components.

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"

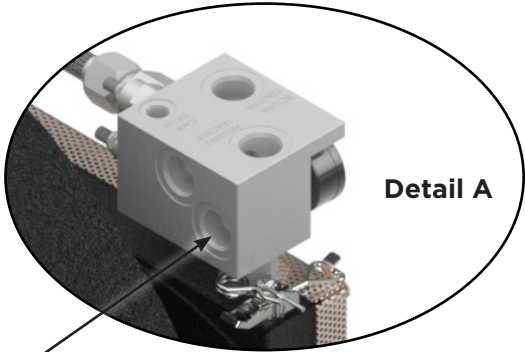
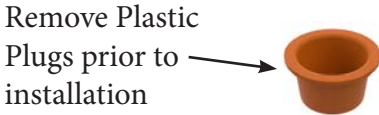


PARTS LIST		
Item	Part #	Description
6	7538	Fitting - Straight - 3/4" JIC M - 3/4" JIC M
7	7237	Fitting - Straight - 1" JIC M - 3/4" JIC M

Title	Airguard Bypass Kit Instructions	RELEASE DATE	2024-03-28
STEP	17. Attach supplied hose (Item 2) from right valve port (Item 5) to fan return port on Blockage Prevention System manifold. Use adapters (1, 3 & 4) to make the connections.	REV #	2.0
		PART KIT #	Varies



NOTE: All of the hydraulic connections in Step 15 to 23 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.

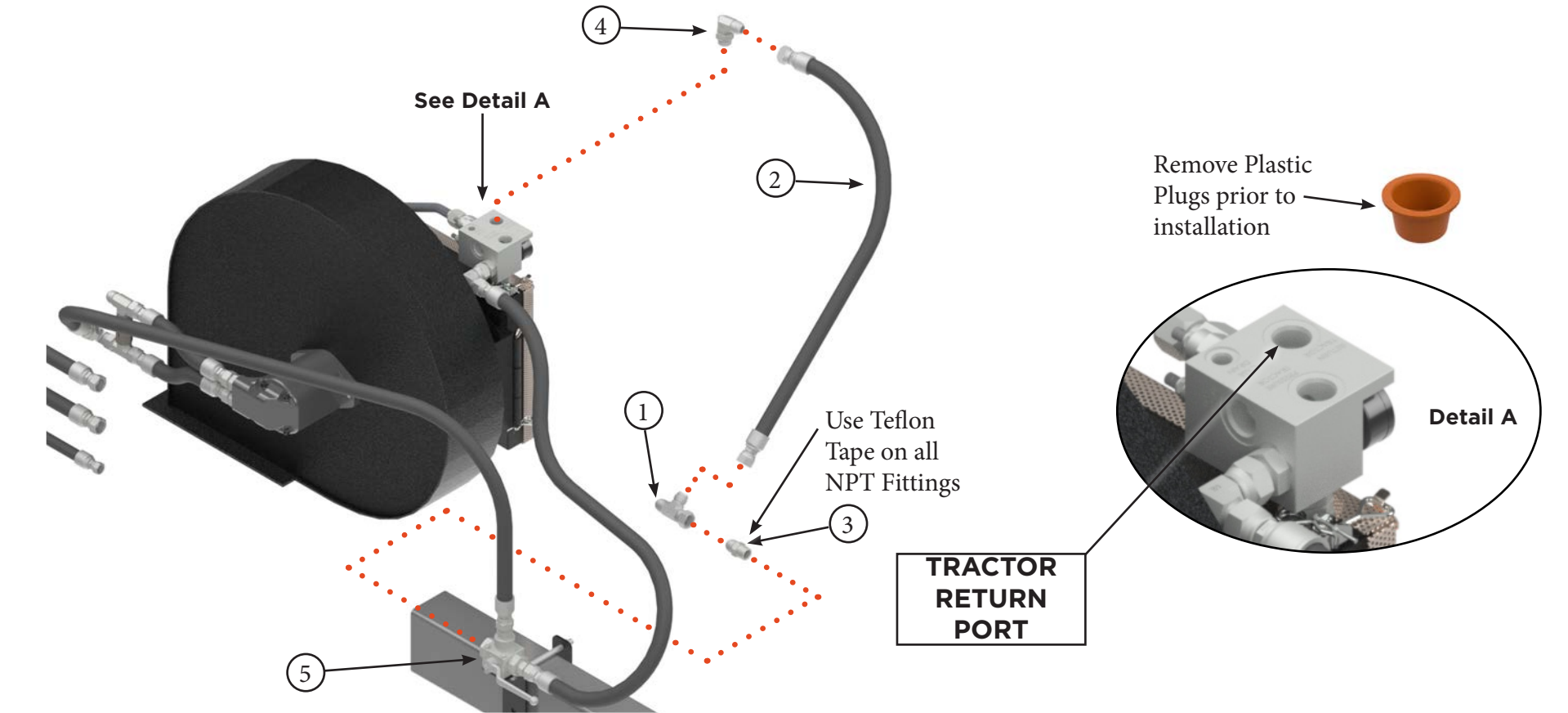


FAN RETURN
PORT

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

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	2024-03-28
STEP	18. Attach Tee-fitting (Item 1) to left port on bypass valve (Item 5) using adapter (Item 3). Attach supplied hose (Item 2) from Tee-fitting (Item 1) to tractor return port using adapter (Item 4).	REV #	2.0
		PART KIT #	Varies

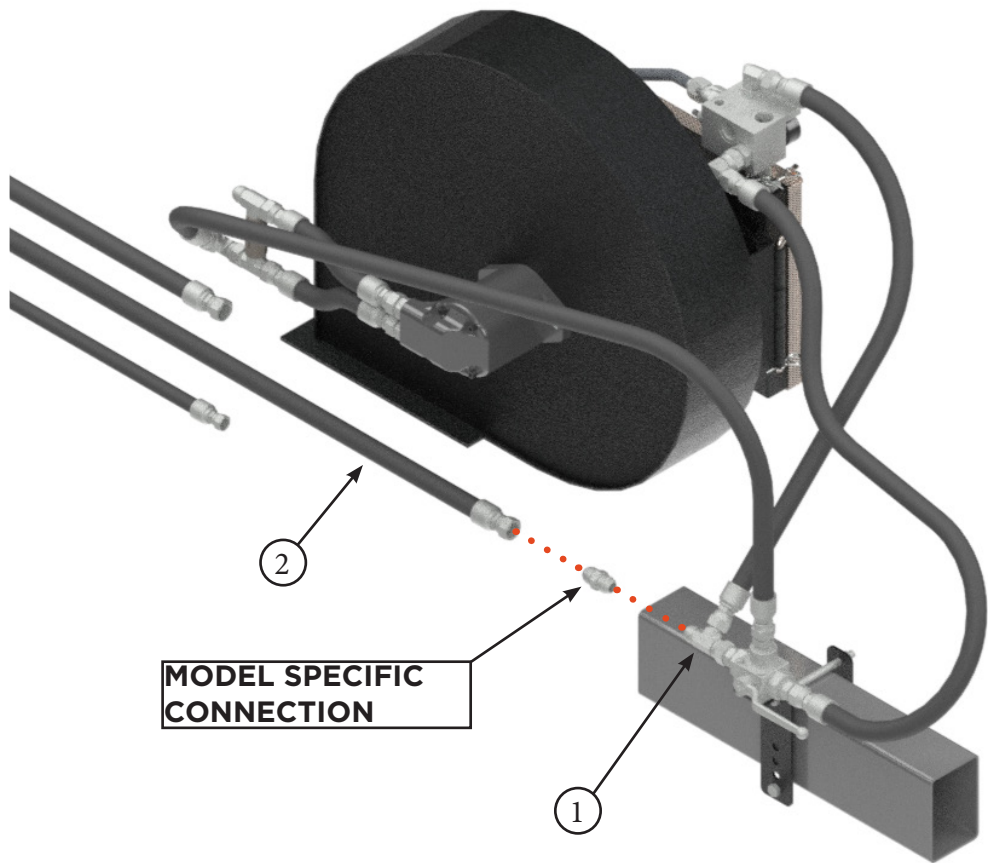


PARTS LIST		
Item	Part #	Description
1	7551	Fitting - Tee - 3/4" JIC M - 3/4" JIC M - 3/4" JIC F Swivel
2	----	Tractor Return Hydraulic Hose
3	7254	Fitting - Straight - 3/4" JIC M - 3/4" NPT M
4	7506	Fiting - Elbow - 3/4" JIC Male - 3/4" ORB Male
5	7274	3 Way Valve - 3/4"

NOTE: All of the hydraulic connections in Step 15 to 23 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	2024-03-28
STEP	19. Use model specific connection as per instructions below to attach the tractor return line (Item 2) to the bypass valve tee (Item 1).	REV #	2.0
		PART KIT #	Varies

NOTE: All of the hydraulic connections in Step 15 to 23 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 3/4" JIC Return Hose
Connections



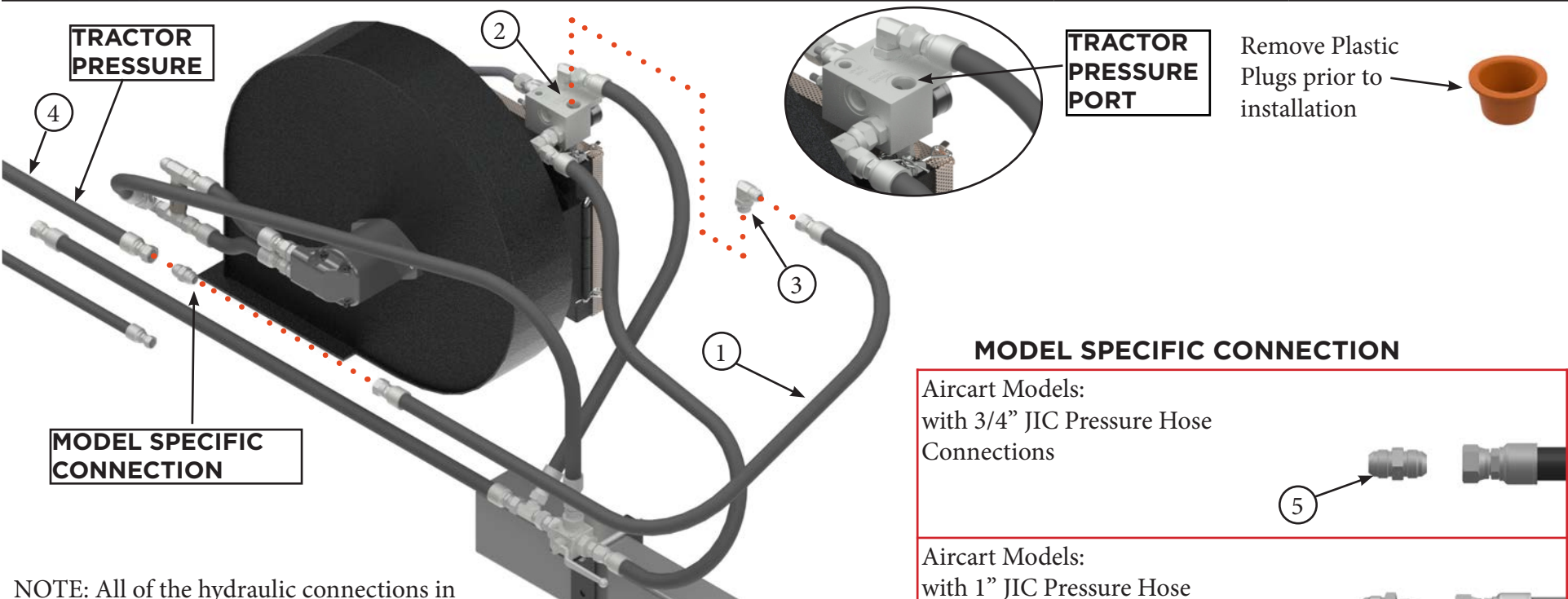
Aircart Models:
with 1" JIC Return Hose
Connections



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

PARTS LIST		
Item	Part #	Description
3	7538	Fitting - Straight - 3/4" JIC M - 3/4" JIC M
4	7237	Fitting - Straight - 1" JIC M - 3/4" JIC M

Title	Airguard Blockage Prevention System Upgrade Instructions	RELEASE DATE	2024-03-28
STEP	20. 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 #	2.0
		PART KIT #	Varies



NOTE: All of the hydraulic connections in Step 15 to 23 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
4	--	Tractor Supply (Pressure) Hydraulic Hose

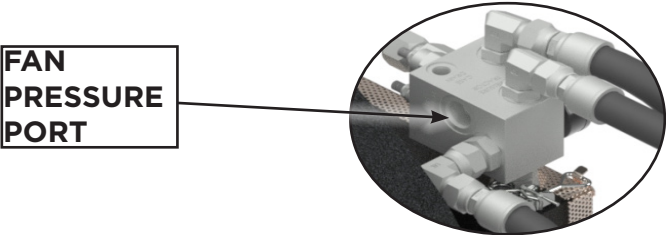
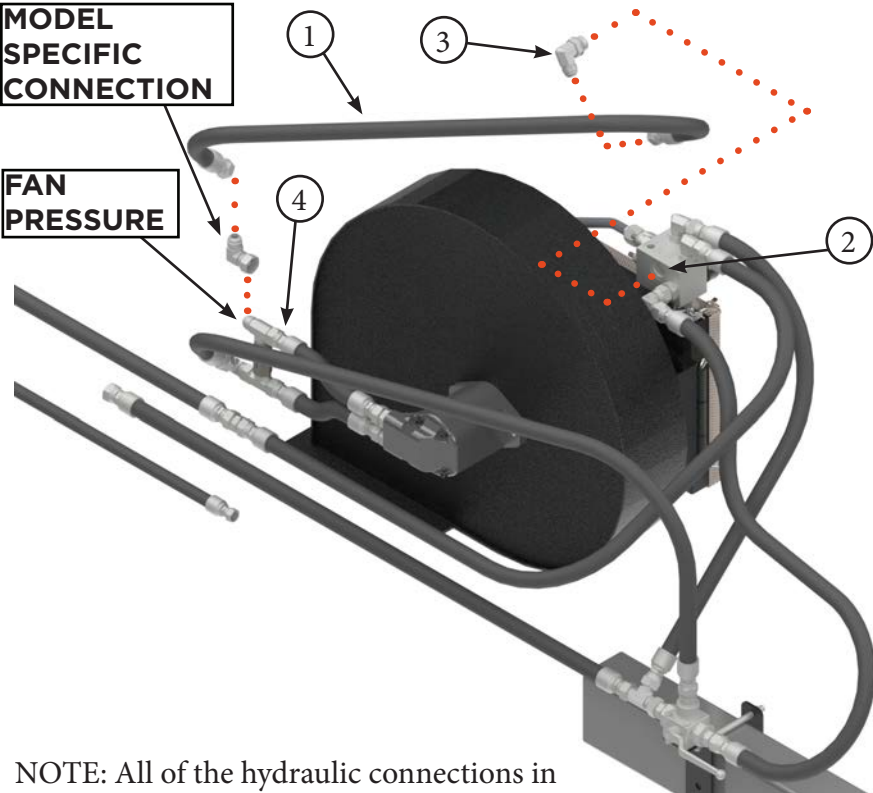
MODEL SPECIFIC CONNECTION

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


Aircart Models:
with 1" JIC Pressure Hose
Connections

PARTS LIST		
Item	Part #	Description
5	7538	Fitting - Straight - 3/4" JIC M - 3/4" JIC M
6	7237	Fitting - Straight - 1" JIC M - 3/4" JIC M

Title	Airguard Blockage Prevention System Upgrade Instructions	RELEASE DATE	2024-03-28
STEP	21. 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.	REV #	2.0
		PART KIT #	Varies




Remove Plastic
Plugs prior to
installation




NOTE: All of the hydraulic connections in Step 15 to 23 should only be hand tightened until all hoses and fittings are installed. Some connections may need to be rotated in order to install other compo-

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

MODEL SPECIFIC CONNECTION

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


Aircart Models:
with 1" JIC Pressure Hose Connections


PARTS LIST		
Item	Part #	Description
5	7238	Fitting - Straight - 1" JIC F - 3/4" JIC M

Title	Airguard Blockage Prevention System Upgrade Instructions	RELEASE DATE	2024-03-28
STEP	22. 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.	REV #	2.0
		PART KIT #	Varies

MODEL SPECIFIC CONNECTION

FAN CASE DRAIN PORT

Remove Plastic Plugs prior to installation

NOTE: All of the hydraulic connections in Step 15 to 23 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.

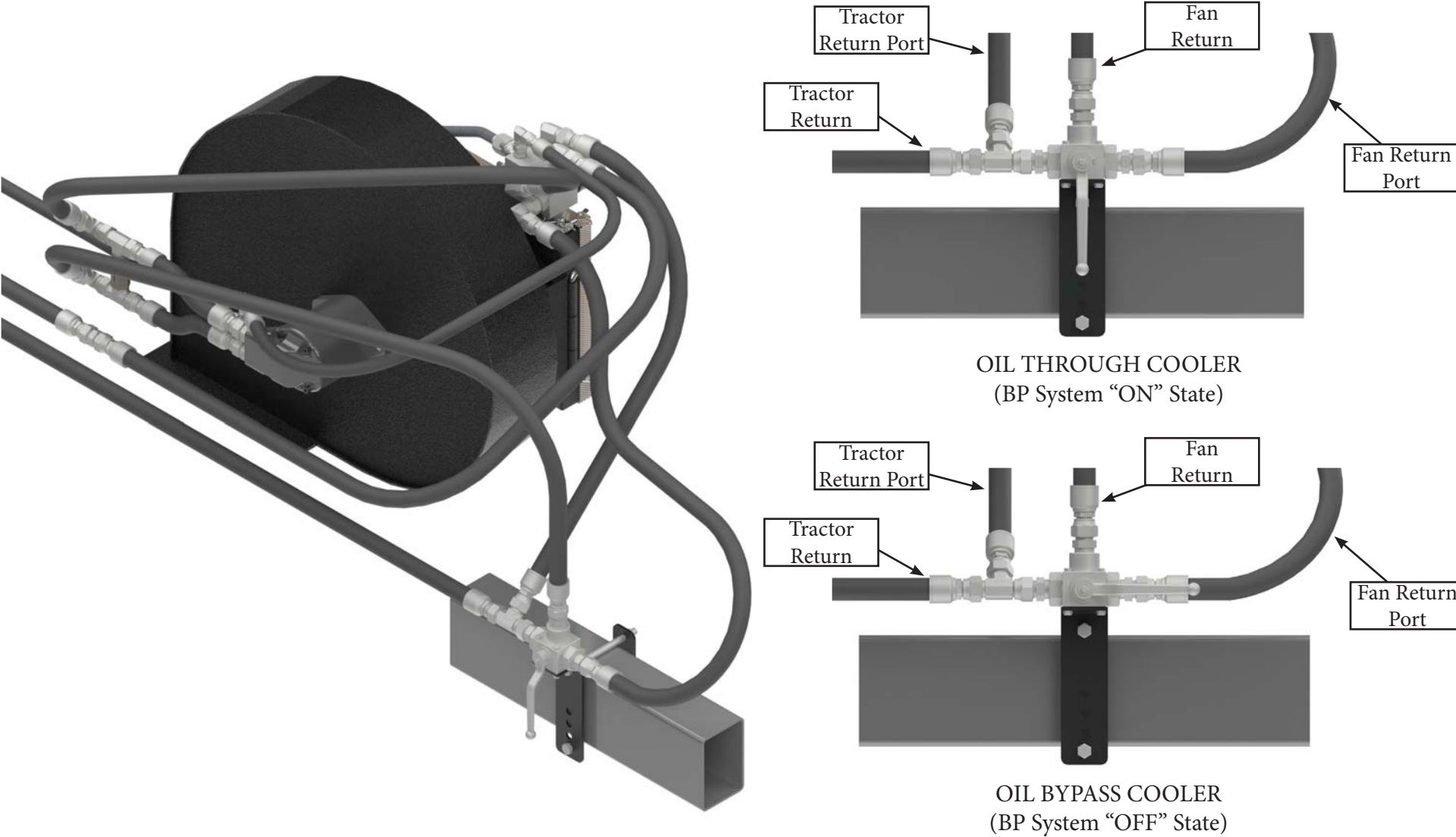
MODEL SPECIFIC CONNECTION

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

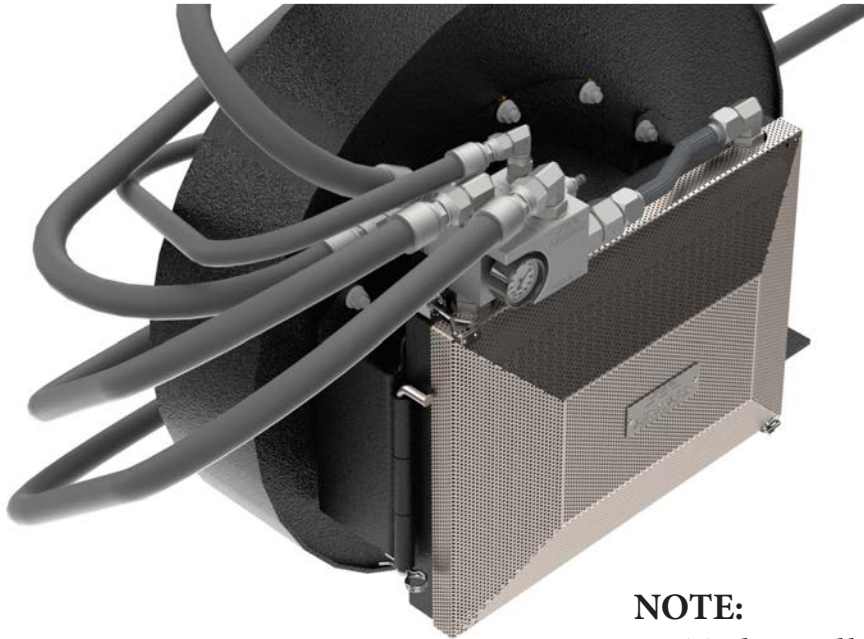
PARTS LIST		
Item	Part #	Description
1	7267	BPS 1/2" Hydraulic Hose - 60"
2	--	"FAN CASE DRAIN" Port - BP System Manifold
3	7264	Fitting - Straight - 1/2" JIC Male - 3/8" ORB Male
4	7686	Fiting - Elbow - 1/2" JIC M - 1/2" JIC F
5	--	Fan Case Drain Hydraulic Hose

PARTS LIST		
Item	Part #	Description
6	7263	Fitting - Tee - 1/2" JIC M - M - F

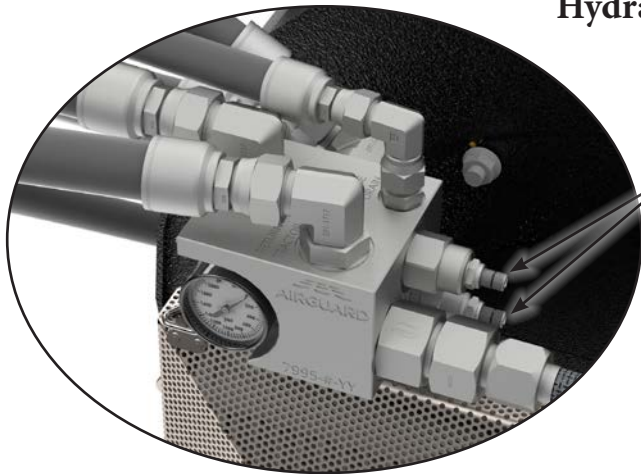
Title	Airguard Bypass Kit Instructions	RELEASE DATE	2024-03-28
STEP	23. This shows the complete installation. It is recommended to put the valve in the off position when starting up for the first time and also at the beginning of the season to ensure that all air pockets are removed prior to operation. 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.	REV #	2.0
		PART KIT #	Varies



Title	Airguard Blockage Prevention System Upgrade Instructions	RELEASE DATE	2024-03-28
STEP	24. Complete the hydraulic installation by ensuring that all connections made in Step 15 to 23 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



NOTE:
**Ensure to Tighten all
Hydraulic Connections**



**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	2024-03-28
STEP	25. 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. For troubleshooting and preventative maintenance, see pages 37-38.

Now you're ready to operate! Follow the same warm up procedure you do every day and go seed. We highly recommend you follow these steps at the beginning of each future season, to ensure the continuation of successful operations. After the freeze and thaw of winter and spring seasons we want to eliminate any air pockets or leaks that could be caused by the settling of the oil in the hydraulic system.

Title	Airguard Blockage Prevention System Upgrade Instructions	RELEASE DATE	2024-03-28
STEP	26. There are three ways to mount the Snorkel Kit. It can be mounted directly to the catwalk (Page 28), to the railing (Page 29), or using the model-specific Snorkel Mounting Kit (Pages 30-33).	REV #	2.0
		PART KIT #	Varies

CATWALK



RAILING

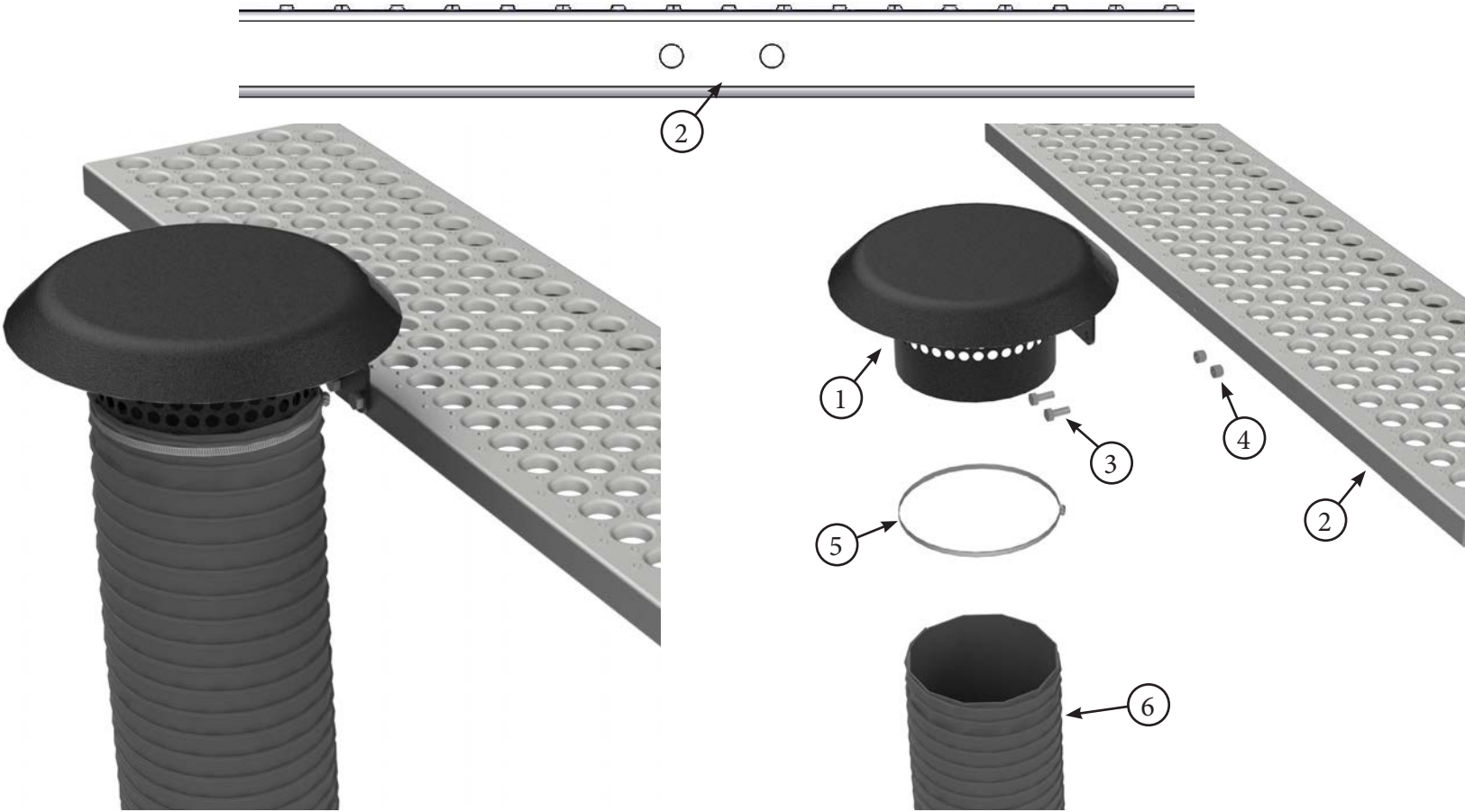


SNORKEL MOUNTING KIT



THREE SNORKEL MOUNTING OPTIONS

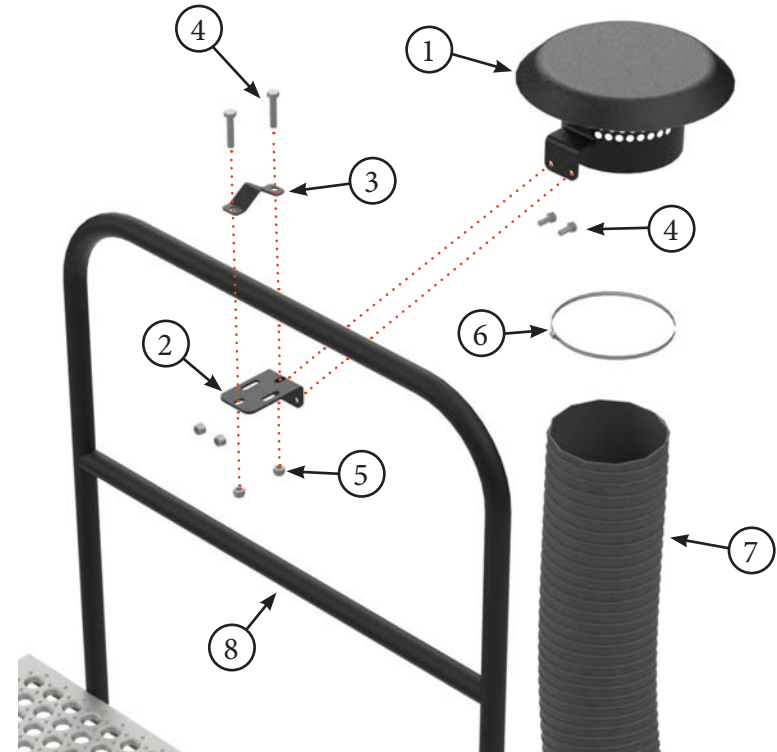
Title	Airguard Blockage Prevention System Upgrade Instructions	RELEASE DATE	2024-03-28
STEP	27. Catwalk Installation: Drill two 7/16” holes in your catwalk (Item 2) 1-3/4” apart. Using the two bolts (Item 3) and lock nuts (Item 4) provided, bolt the top Snorkel Inlet Assembly (Item 1) directly to the catwalk. Use the bridge clamp (Item 5) to attach 8” flexible hose (Item 6) to top Snorkel Inlet (Item 1).	REV #	2.0
		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	2024-03-28
STEP	28. Railing Installation: 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 #	2.0
		PART KIT #	Varies

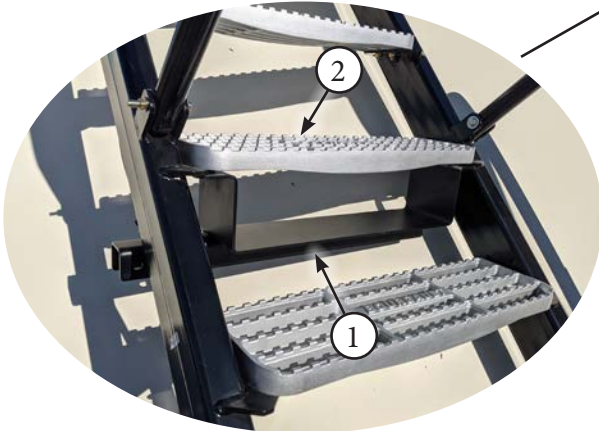
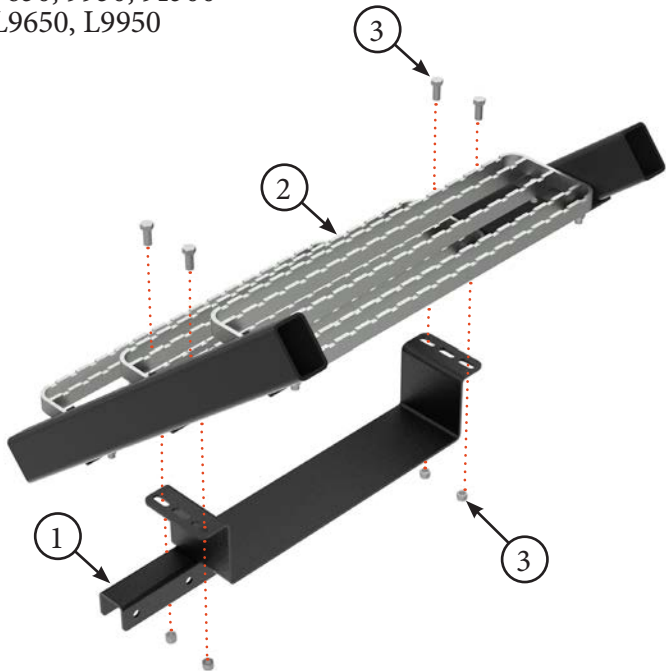


PARTS LIST		
Item	Part #	Description
1	7576	Top Snorkel Inlet Assembly
2	7593	Snorkel Inlet 90deg Mount Plate
3	7989	Railing Plate
4	7991	HEX BOLT, 10mm x 50mm GRADE 8.8

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	2024-03-28
STEP	29. For snorkel mount on specific aircarts as per below. Install the bracket (Item 1) onto the Aircart Stair Tread (Item 2) using existing stair tread hardware (Item 3).	REV #	2.0
		PART KIT #	Varies

MODEL SPECIFIC CONNECTION - KIT 9000:
 7550, 7700, 7950, 71300
 L7550, L7701, L7800
 8350, 8450, 8550
 L8350, L8450, L8550
 9650, 9950, 91300
 L9650, L9950

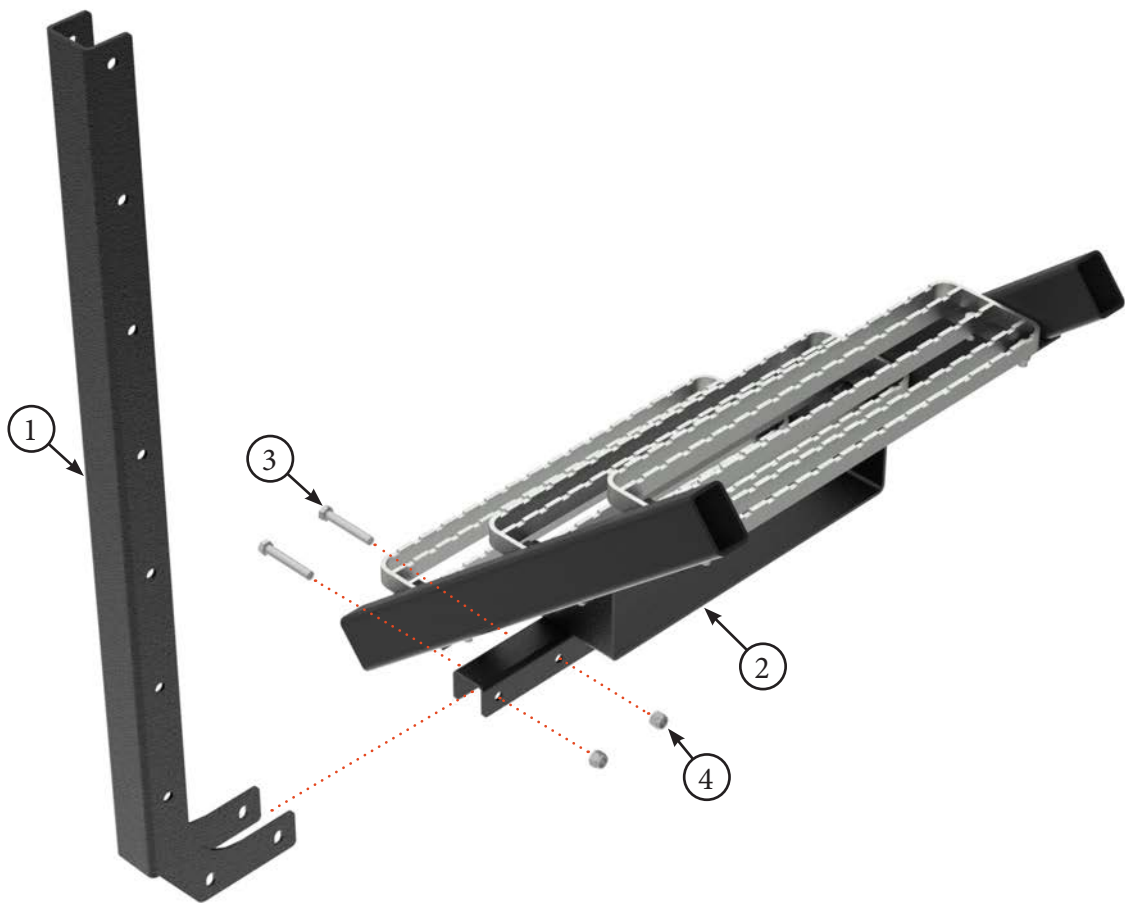


PARTS LIST		
Item	Part #	Description
1	9001	Bourgault Snorkel Mount Bracket
2	--	Stair Tread

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

Title	Airguard Blockage Prevention System Upgrade Instructions	RELEASE DATE	2024-03-28
STEP	30. Mount Outer Vertical Channel (Item 1) to Bracket (Item 2) using supplied 12mm x 80mm Bolts (Item 3) and 12mm lock nuts (Item 4).	REV #	2.0
		PART KIT #	Varies

MODEL SPECIFIC CONNECTION - KIT 9000:
7550, 7700, 7950, 71300
L7550, L7701, L7800
8350, 8450, 8550
L8350, L8450, L8550
9650, 9950, 91300
L9650, L9950

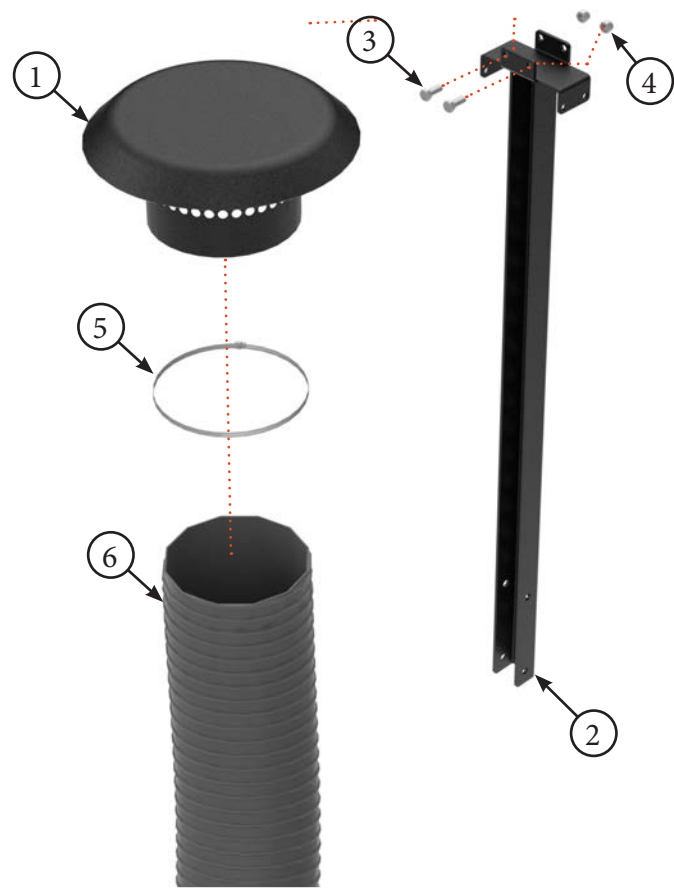


PARTS LIST		
Item	Part #	Description
1	7865	Outer Vertical Channel
2	9001	Bourgault Snorkel Mount Bracket

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	2024-03-28
STEP	31. 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 #	2.0
		PART KIT #	Varies

MODEL SPECIFIC CONNECTION - KIT 9000:
7550, 7700, 7950, 71300
L7550, L7701, L7800
8350, 8450, 8550
L8350, L8450, L8550
9650, 9950, 91300
L9650, L9950

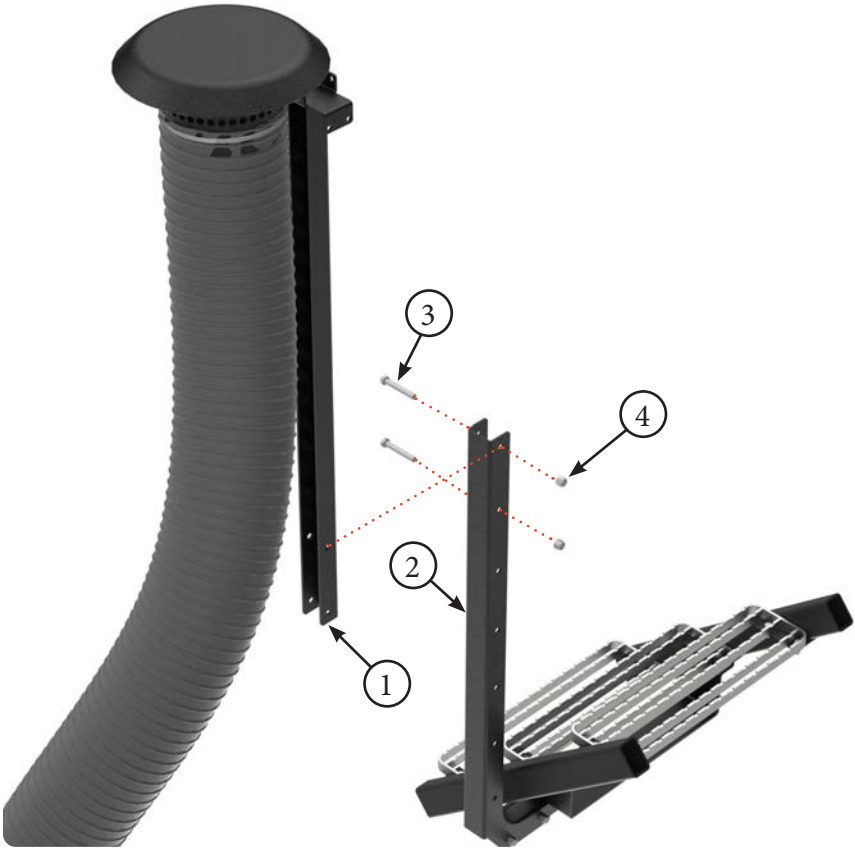


PARTS LIST		
Item	Part #	Description
1	7576	Air Intake Bracket
2	7868	Upper Vertical Channel
3	7515	Hex Bolt, 10mm x 25mm

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	2024-03-28
STEP	32. 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 #	2.0
		PART KIT #	Varies

MODEL SPECIFIC CONNECTION - KIT 9000:
7550, 7700, 7950, 71300
L7550, L7701, L7800
8350, 8450, 8550
L8350, L8450, L8550
9650, 9950, 91300
L9650, L9950

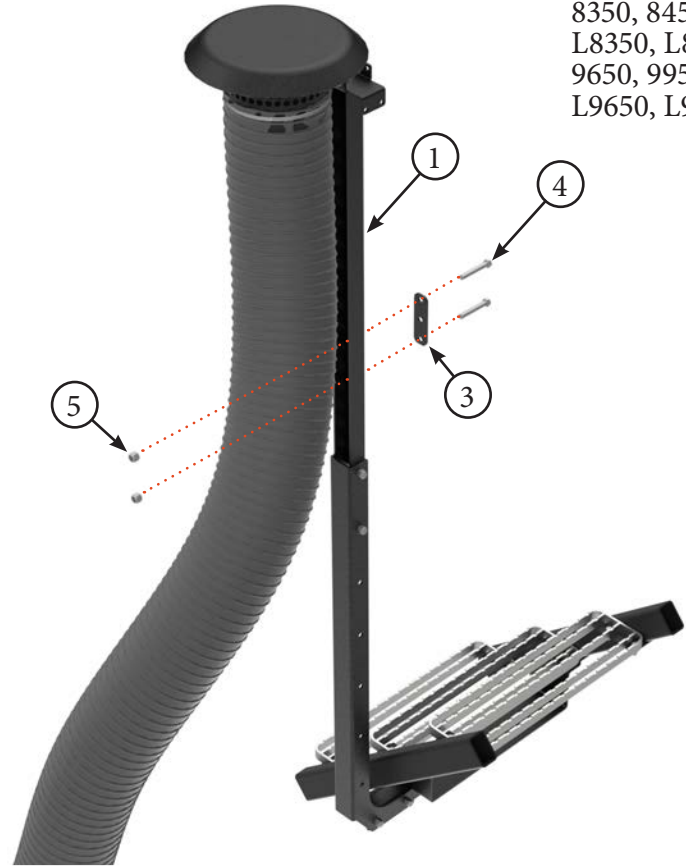


PARTS LIST		
Item	Part #	Description
1	7868	Upper Vertical Channel
2	7865	Outer Vertical Channel

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	2024-03-28
STEP	33. Attach stabilizer bracket (Item 1) to catwalk railing (Item 2) using railing mount plate (Item 3) and supplied 12mm x 80mm Bolts (Item 4) and 12mm lock nuts (Item 5).	REV #	2.0
		PART KIT #	Varies

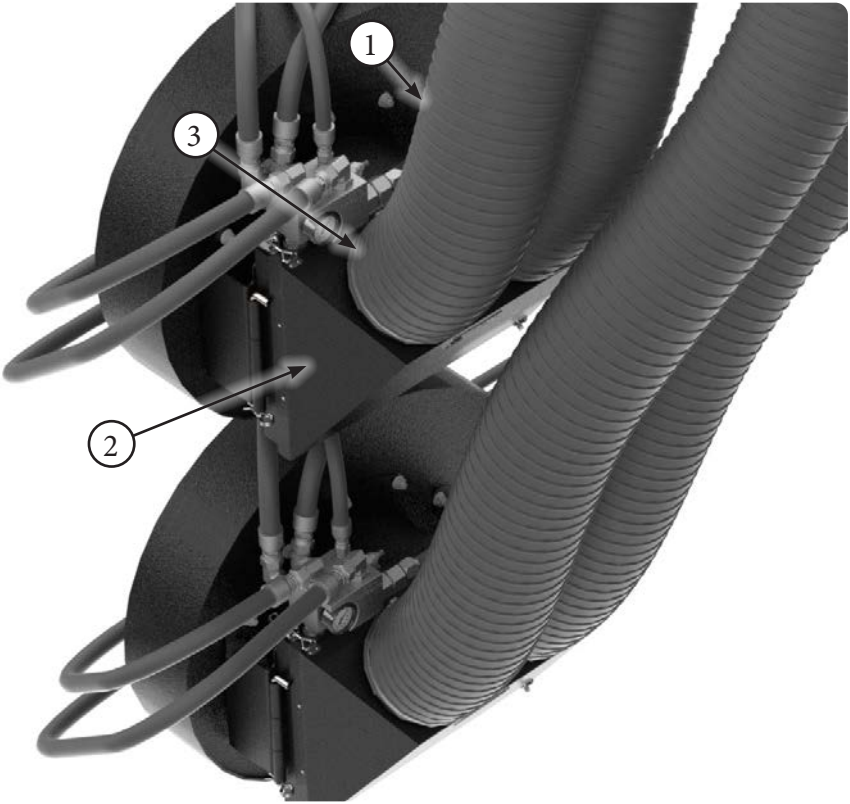
MODEL SPECIFIC CONNECTION - KIT 9000:
7550, 7700, 7950, 71300
L7550, L7701, L7800
8350, 8450, 8550
L8350, L8450, L8550
9650, 9950, 91300
L9650, L9950



PARTS LIST		
Item	Part #	Description
1	7868	Upper Vertical Channel
2	--	Catwalk Railing
3	7959	Railing Mount Plate

PARTS LIST		
Item	Part #	Description
4	7859	Hex Bolt, 12mm x 80mm
5	7669	Lock Nut, 12mm

Title	Airguard Blockage Prevention System Upgrade Instructions	RELEASE DATE	2024-03-28
STEP	34. 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. Trim 8” hose length to suit.	REV #	2.0
		PART KIT #	Varies

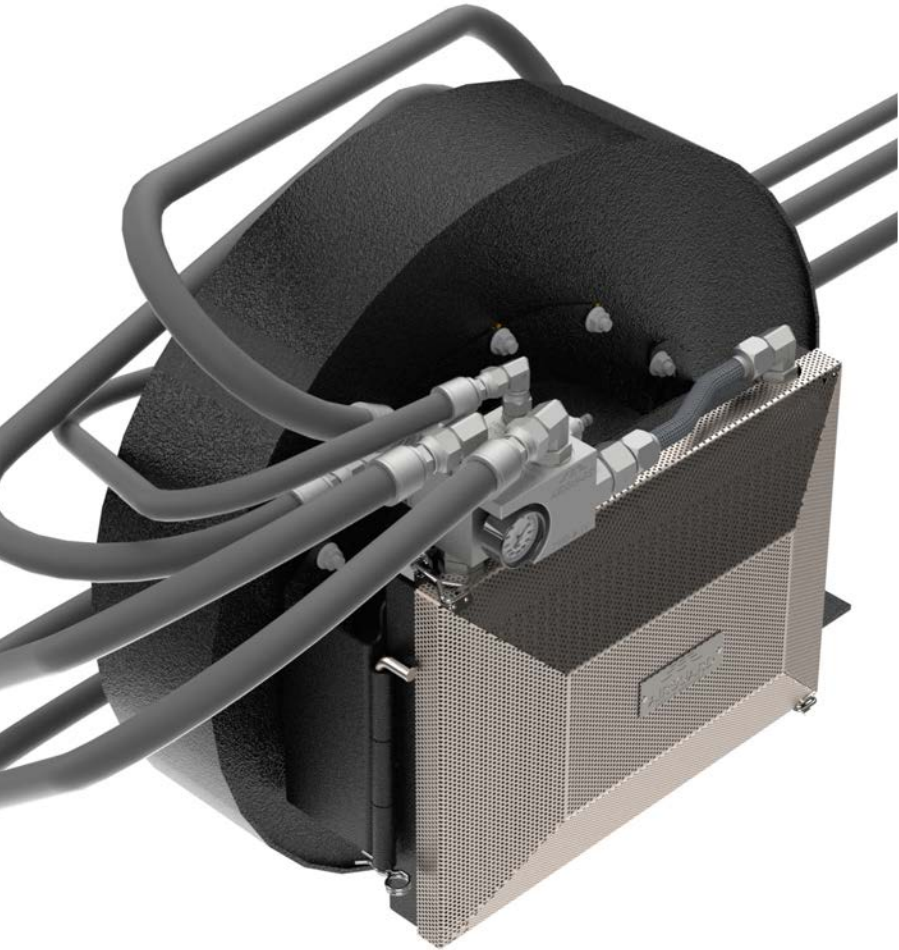


PARTS LIST		
Item	Part #	Description
1	7977	Snorkel Housing
2	7578	Bridge Clamp, 8”

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

Title	Airguard Blockage Prevention System Upgrade Instructions	RELEASE DATE	2024-03-28
STEP	Installation is Completed. Ensure all hydraulic connections and bolts are tightened.	REV #	2.0
		PART KIT #	Varies

COMPLETED INSTALLATION WITH NO SNORKEL



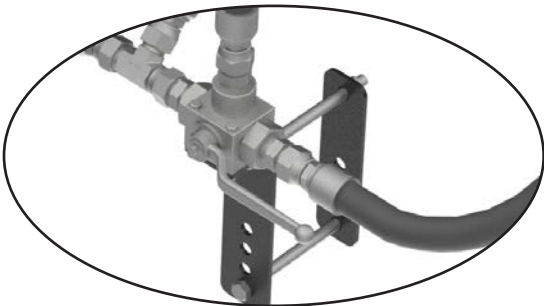
COMPLETED INSTALLATION WITH SNORKELS



Title	Airguard Blockage Prevention System Upgrade Instructions	RELEASE DATE	2024-03-28
STEP	Troubleshooting and preventative maintenance.	REV #	2.0
		PART KIT #	Varies

PREVENTATIVE MAINTENANCE

1. Ensure that the startup procedure on page 26 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, which is acting as intended. 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	2024-03-28
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 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.