

PART KIT INSTALL INSTRUCTIONS

Montag Aircarts

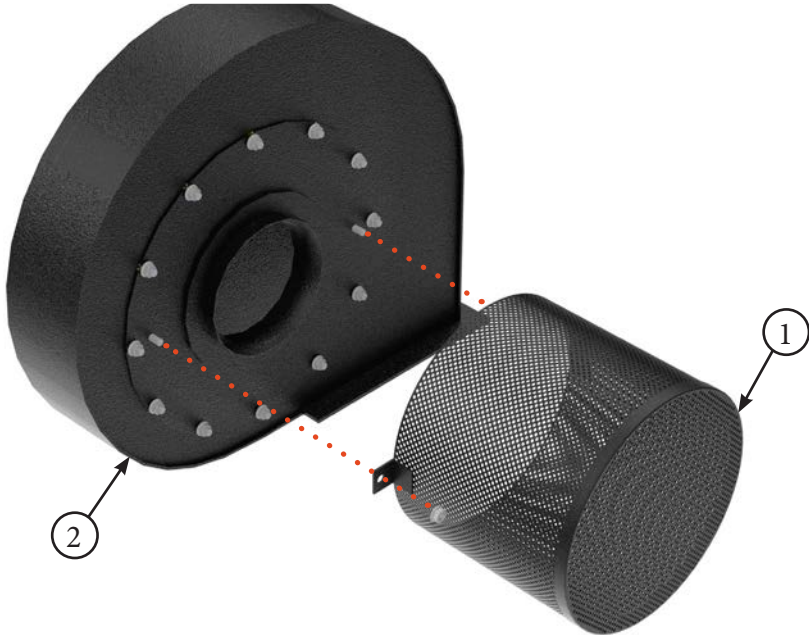


Part Kit #VARIES - Rev 1.0 - AIRGUARD - Blockage Prevention System

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). Some models have screens that are welded in place and do not need to be removed. | REV # | 1.0 |
| | | PART KIT # | Varies |

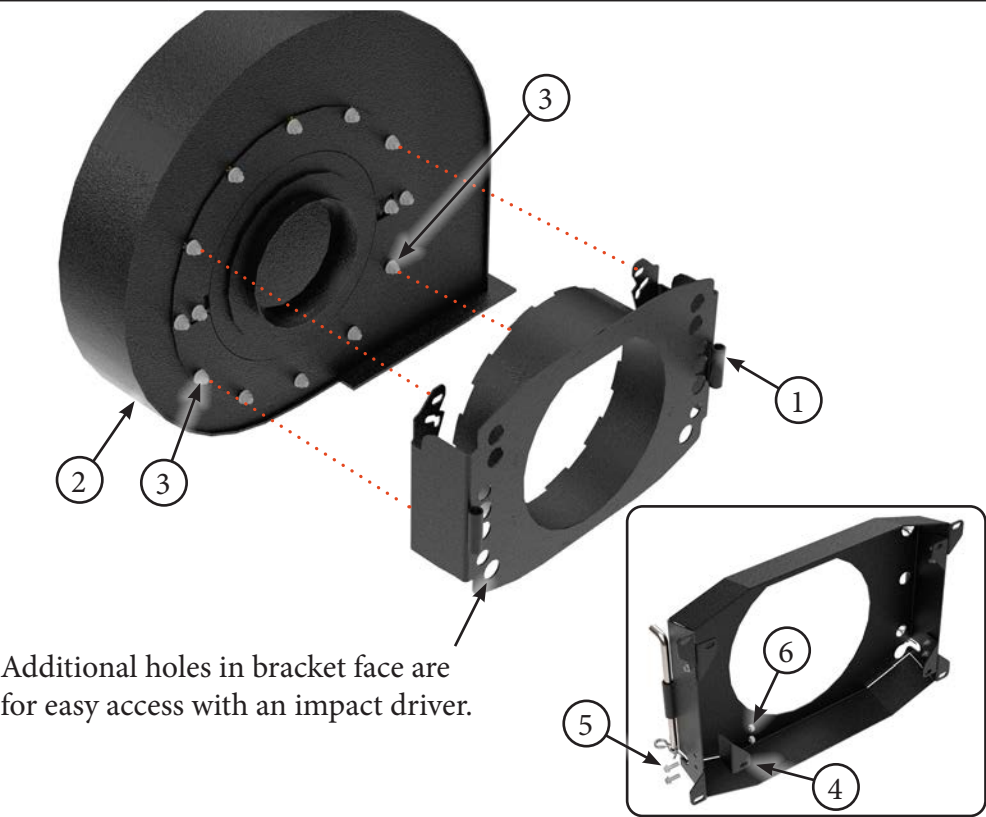




Screen is welded and does not need to be removed

| 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 | 2023-03-01 |
| STEP | 2. Install supplied fan mounting bracket (Item 1) to fan housing (Item 2) using existing bolts and nuts (Item 3). For smaller stainless fan installations, small tabs (Item 4) will need to be installed on the inside of the bracket (Item 1) with 1/4" x 3/4" Bolts (Item 5) and 1/4" Lock Nuts (Item 6). 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 |



| PARTS LIST | | |
|------------|--------|----------------------|
| Item | Part # | Description |
| 1 | 7643 | Fan Mounting Bracket |
| 2 | -- | Fan Housing |
| 3 | -- | Existing Hardware |

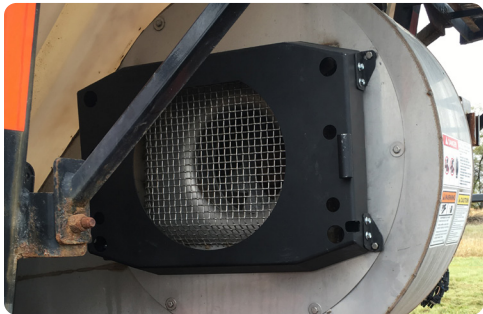
Use Kit # 9670 for the following Models:

- 8" Crary fans



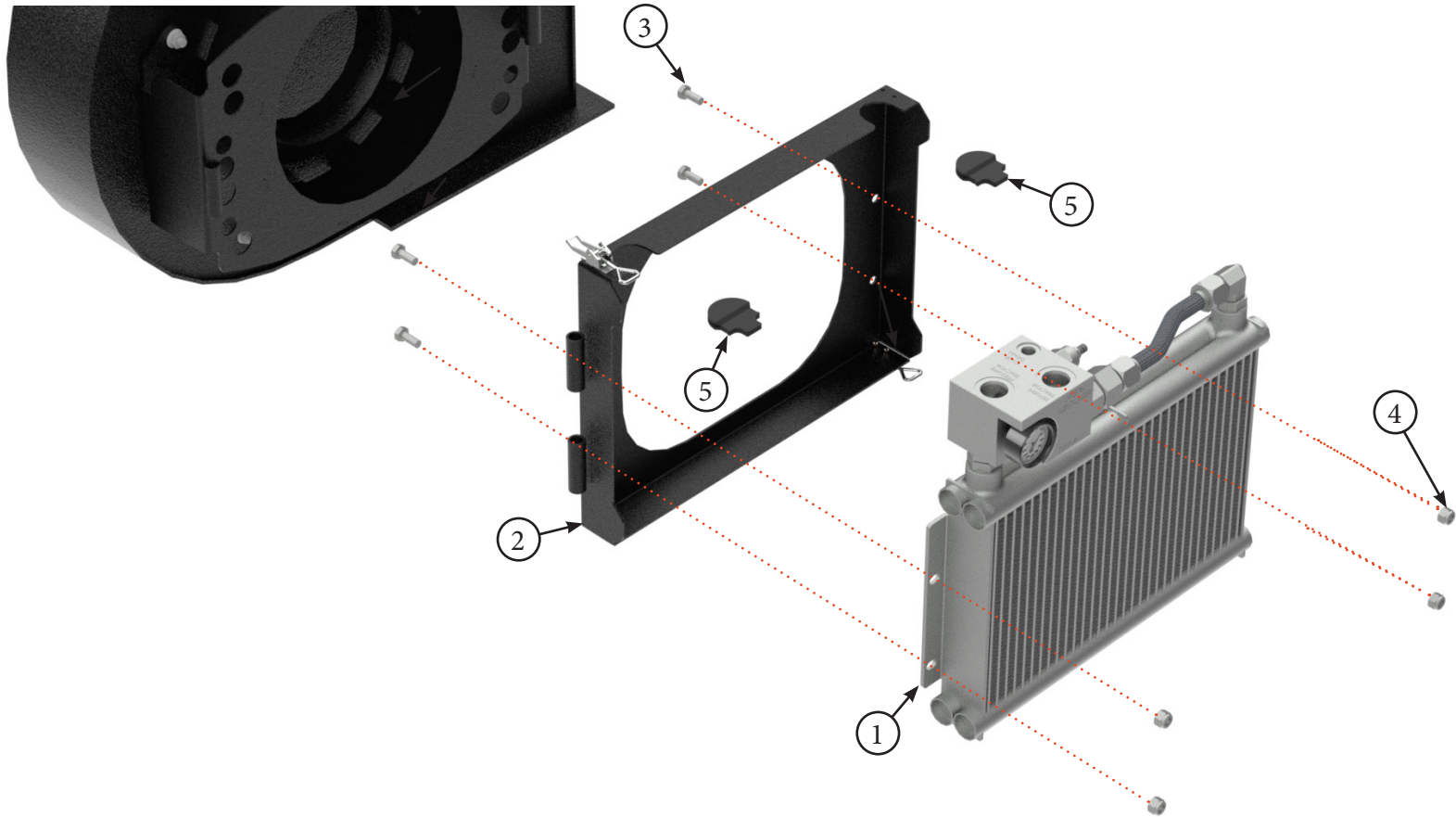
Use Kit # 9580 for the following Models:

- Carts with welded stainless fans



| PARTS LIST | | |
|------------|-------------|----------------------------------|
| Item | Part # | Description |
| 4 | 7645 / 7646 | Left and Right Small Tab Bracket |
| 5 | 7614 | Hex Bolt, 1/4" x 3/4" |
| 6 | 7615 | Lock Nut, 1/4" |

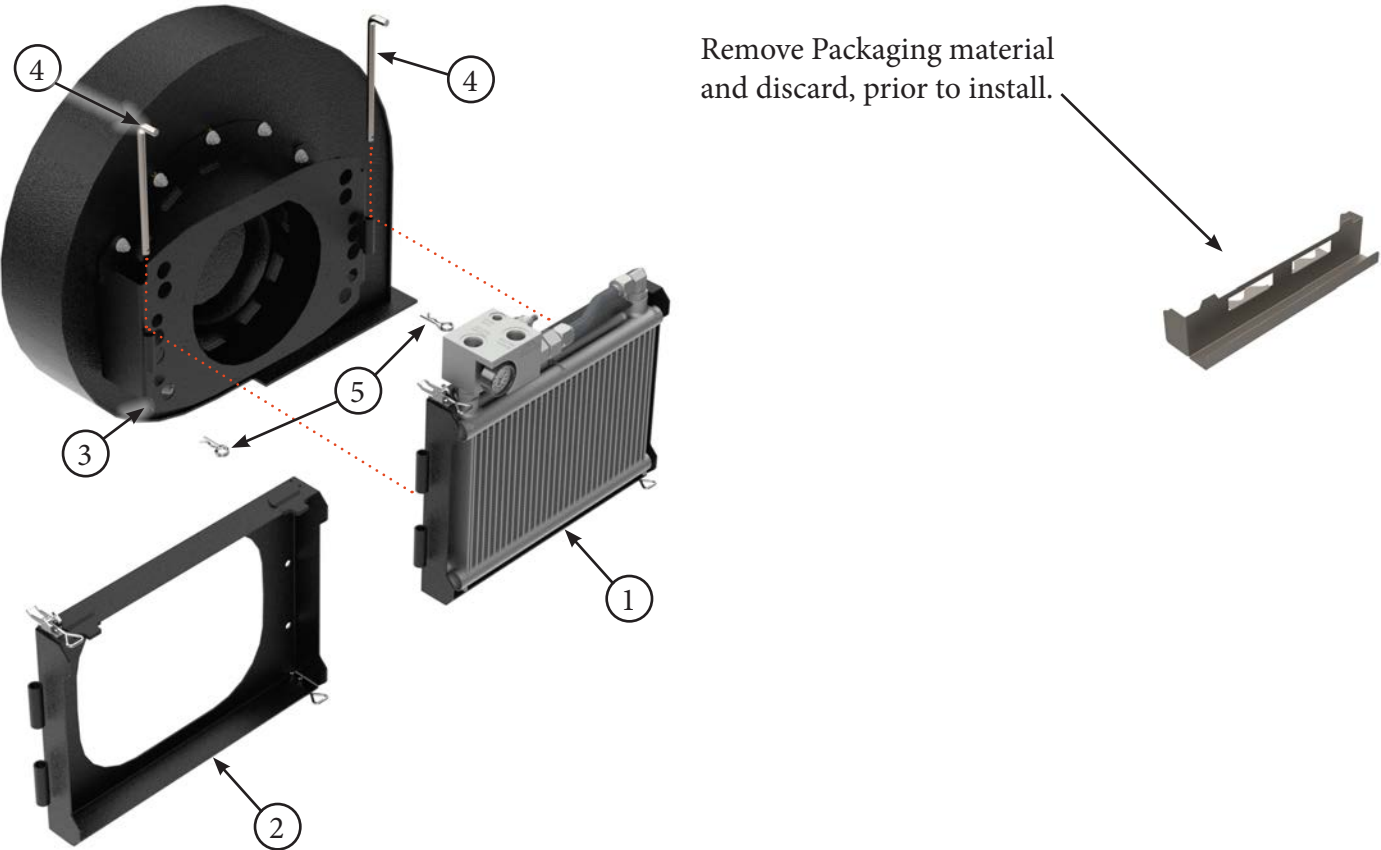
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| Title | Airguard Blockage Prevention System Upgrade Instructions | RELEASE DATE | 2023-03-01 |
| STEP | 3. Bolt Oil Cooler/Radiator Assembly (Item 1) to BP System Bracket (Item 2) using supplied 10mm x 25mm Bolts (Item 3) and 10mm lock nuts (Item 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 |

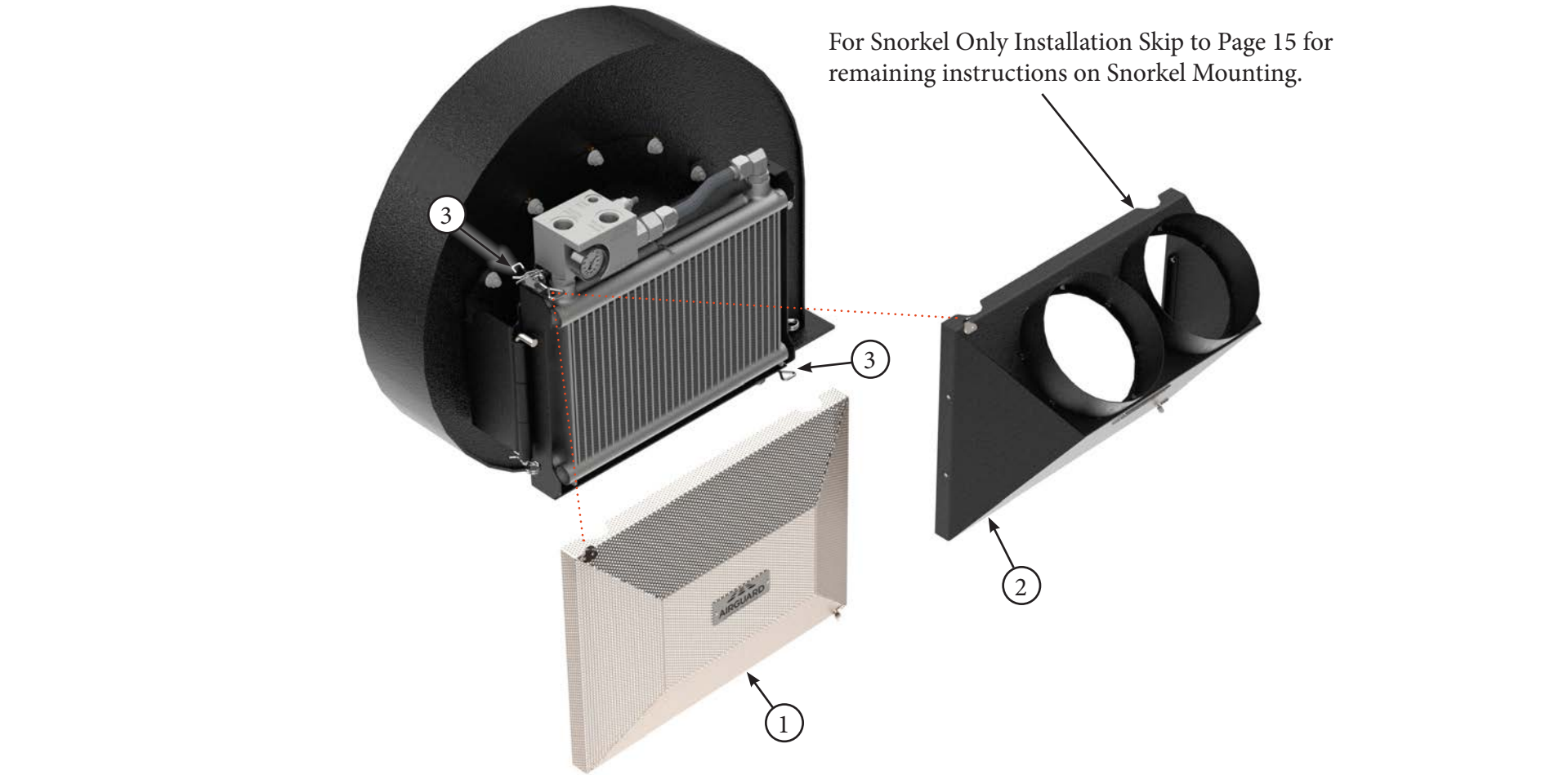
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| Title | Airguard Blockage Prevention System Upgrade Instructions | RELEASE DATE | 2023-03-01 |
| STEP | 4. Remove the packaging materials prior to the assembly of these brackets. Mount BP System Main Bracket with Oil Cooler (Item 1) or Main Bracket 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 |

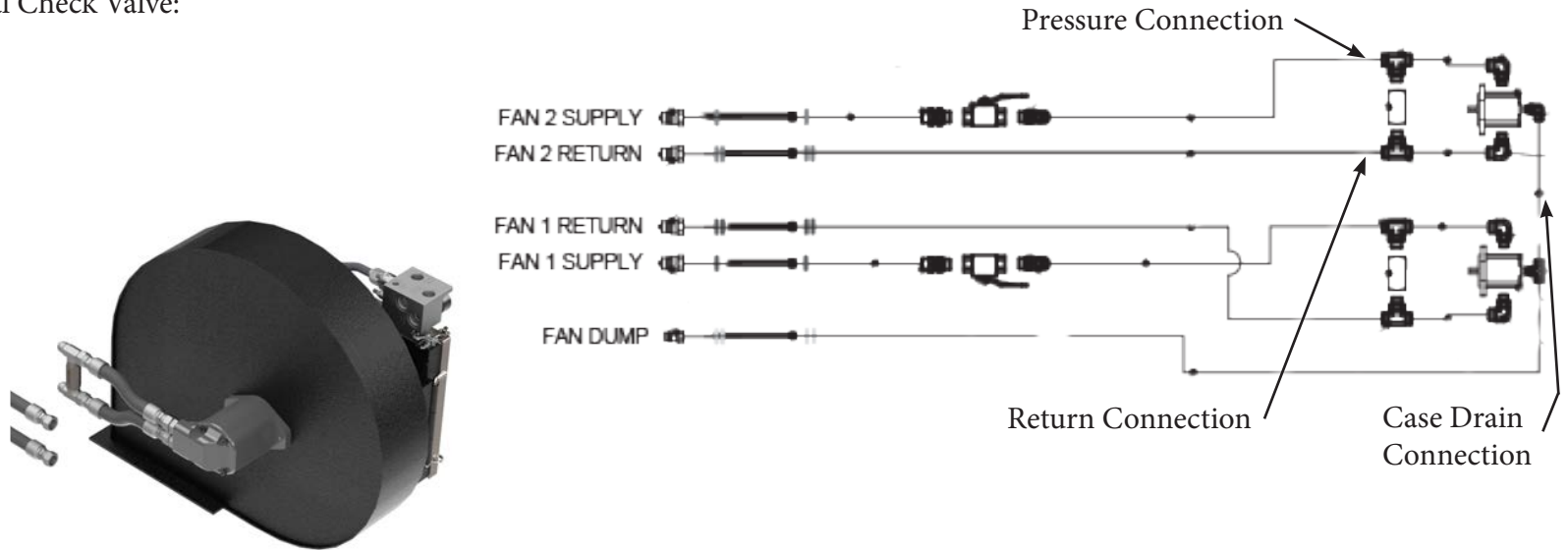


| PARTS LIST | | |
|------------|--------|-----------------|
| Item | Part # | Description |
| 1 | 7568 | Mesh Screen |
| 2 | 7977 | Snorkel Housing |

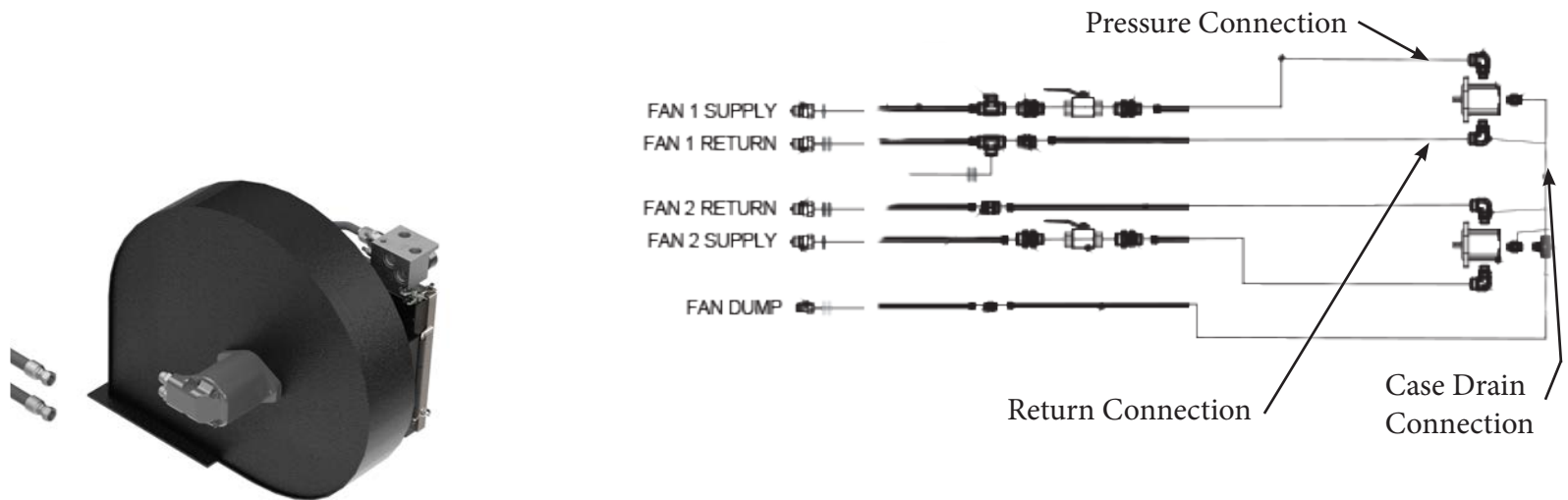
| PARTS LIST | | |
|------------|--------|------------------|
| Item | Part # | Description |
| 3 | -- | Overcenter Latch |

| | | | |
|--------------|---|---------------------|------------|
| Title | Airguard Blockage Prevention System Upgrade Instructions | RELEASE DATE | 2023-03-01 |
| STEP | 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. | REV # | 1.0 |
| | | PART KIT # | Varies |

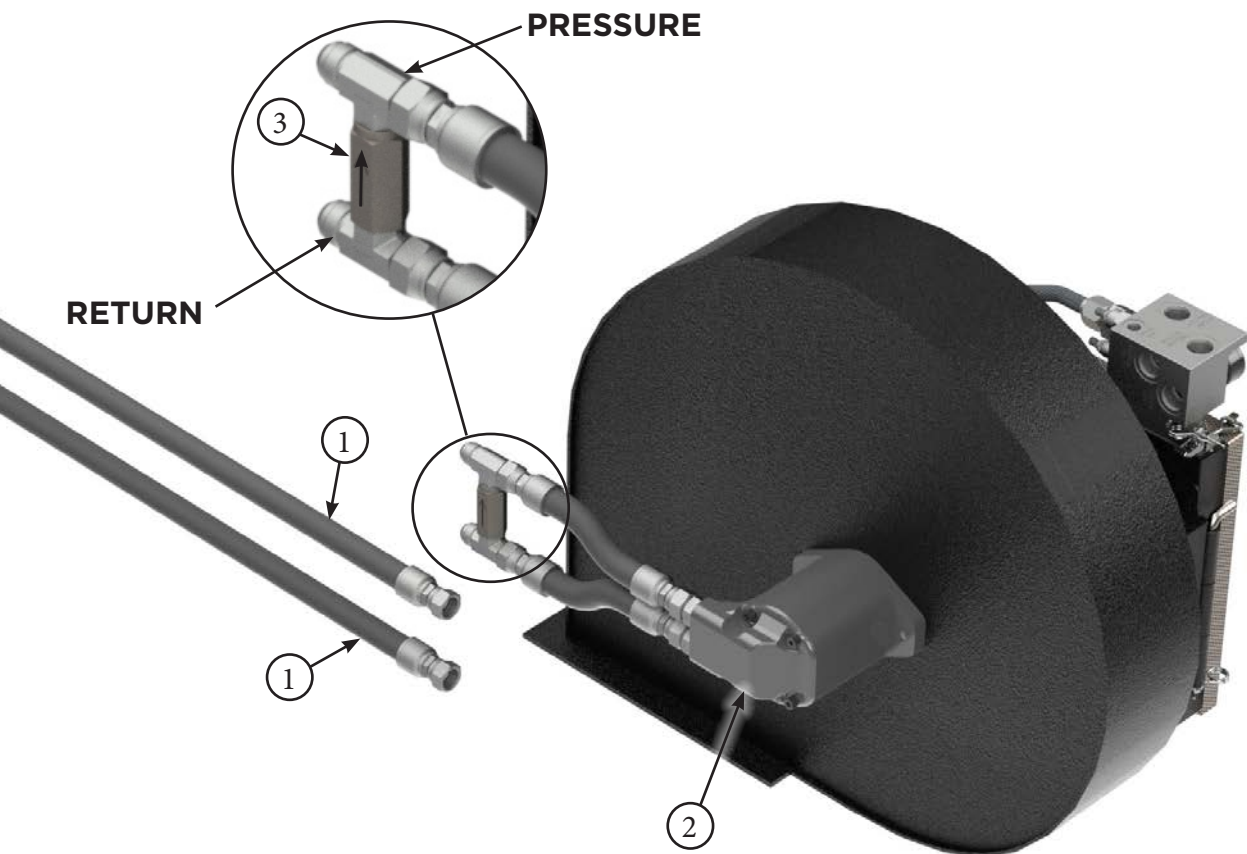
Installation with External Check Valve:



Installation with Internal Check Valve:



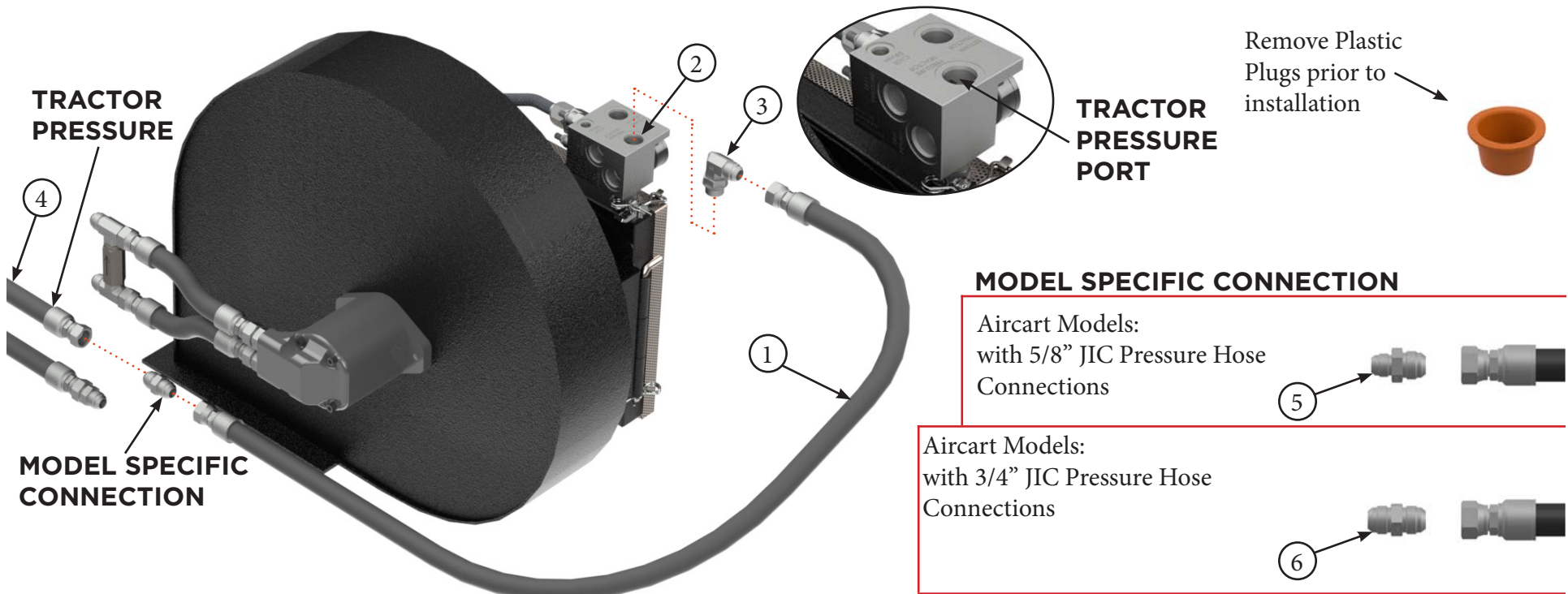
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| Title | Airguard Blockage Prevention System Upgrade Instructions | RELEASE DATE | 2023-03-01 |
| STEP | 7. Remove factory hoses (Item 1) from side of fan motor (Item 2). Remove the hoses (Item 1) on the tractor side of the external check valve, as 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 |

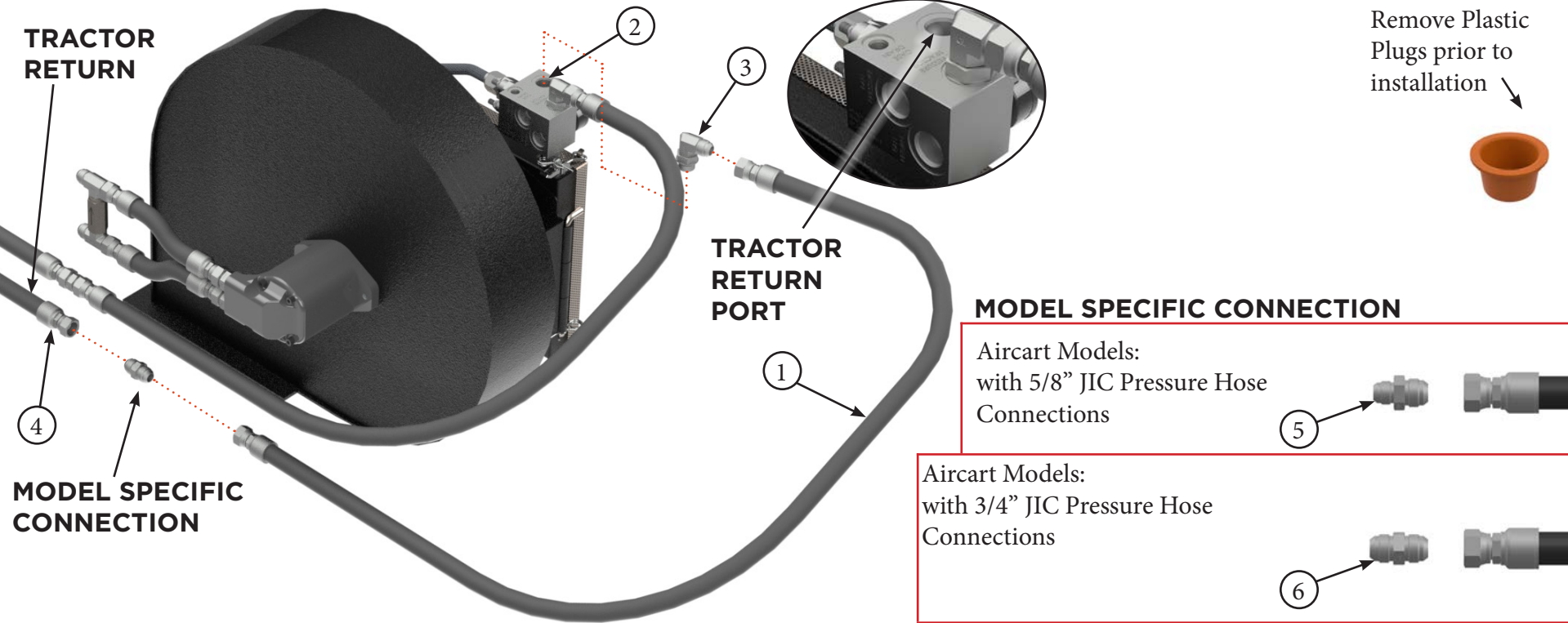


All of the hydraulic connections in Step 8 to 12 should only be hand tightened until all hoses and fittings are installed. Some connections may need to be rotated in order to install other components.

| PARTS LIST | | |
|------------|--------|---|
| Item | Part # | Description |
| 1 | 9016 | BPS 3/4" Hydraulic Hose - 60" |
| 2 | -- | "TRACTOR PRESSURE" Port - BP System Manifold |
| 3 | 7506 | Fitting - 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 |

| | | | |
|--------------|---|---------------------|------------|
| Title | Airguard Blockage Prevention System Upgrade Instructions | RELEASE DATE | 2023-03-01 |
| STEP | 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. | REV # | 1.0 |
| | | PART KIT # | Varies |



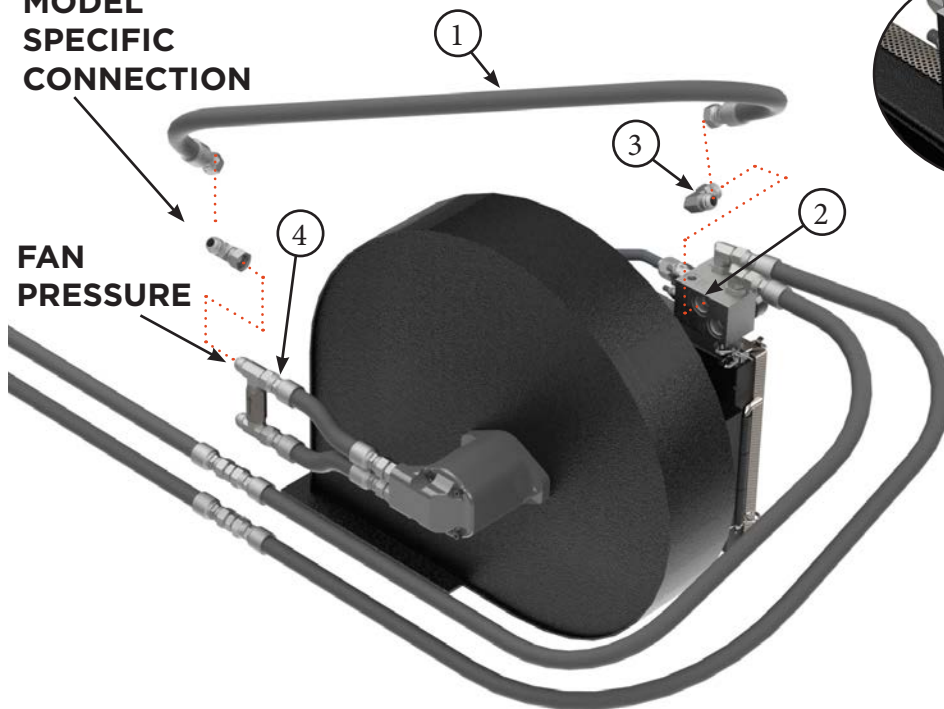
All of the hydraulic connections in Step 8 to 12 should only be hand tightened until all hoses and fittings are installed. Some connections may need to be rotated in order to install other components.

| 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 |

| | | | |
|--------------|--|---------------------|------------|
| Title | Airguard Blockage Prevention System Upgrade Instructions | RELEASE DATE | 2023-03-01 |
| STEP | 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. | REV # | 1.0 |
| | | PART KIT # | Varies |

MODEL SPECIFIC CONNECTION



FAN PRESSURE 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



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 |

| | | | |
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| 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

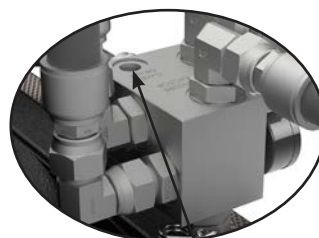
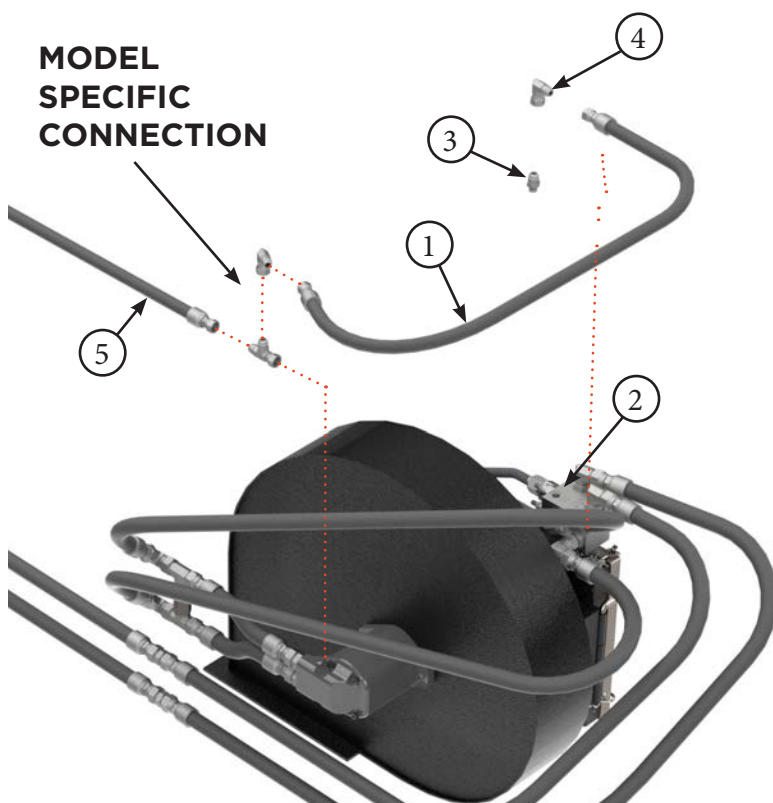
Aircart Models:
with 3/4" JIC Pressure Hose Connections

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 |

| | | | |
|--------------|---|---------------------|------------|
| Title | Airguard Blockage Prevention System Upgrade Instructions | RELEASE DATE | 2023-03-01 |
| STEP | 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. | REV # | 1.0 |
| | | PART KIT # | Varies |



FAN CASE DRAIN PORT

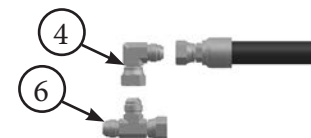
All of the hydraulic connections in Step 8 to 12 should only be hand tightened until all hoses and fittings are installed. Some connections may need to be rotated in order to install other components.

Remove Plastic Plugs prior to installation

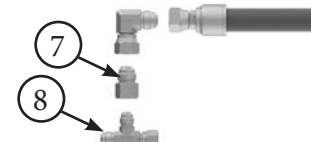


MODEL SPECIFIC CONNECTION

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



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

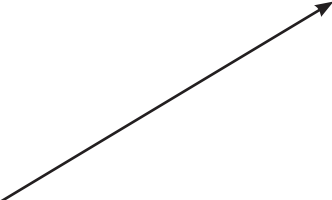


| PARTS LIST | | |
|------------|--------|--|
| Item | Part # | Description |
| 1 | 7267 | BPS 1/2" Hydraulic Hose - 60" |
| 2 | -- | "FAN CASE DRAIN" Port - BP System Manifold |
| 3 | 7264 | Fitting - Straight - 1/2" JIC Male - 3/8" ORB Male |
| 4 | 7686 | Fiting - Elbow - 1/2" JIC M - 1/2" JIC F |

| 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 |

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| 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

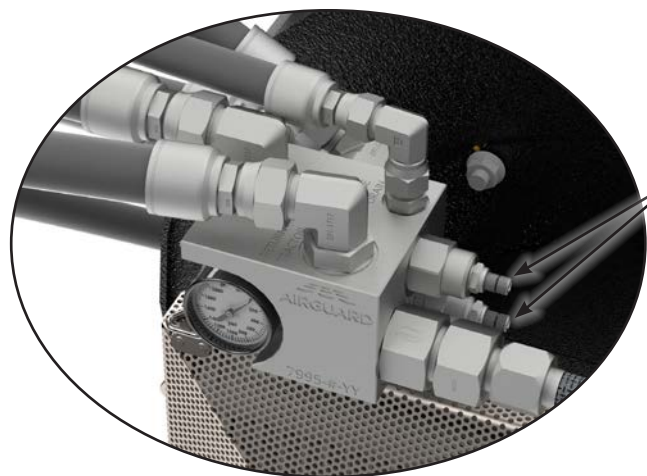
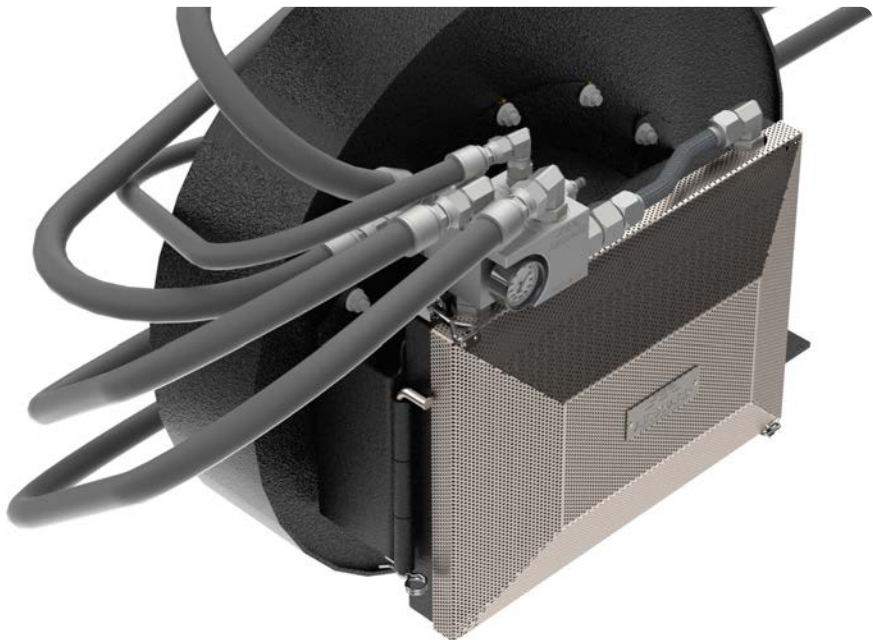
Release Date: 2023-03-01



| PARTS LIST | | |
|------------|--------|-------------|
| Item | Part # | Description |
| 1 | -- | -- |

| PARTS LIST | | |
|------------|--------|-------------|
| Item | Part # | Description |
| 2 | -- | -- |

| | | | |
|--------------|--|---------------------|------------|
| Title | Airguard Blockage Prevention System Upgrade Instructions | RELEASE DATE | 2023-03-01 |
| STEP | 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. | REV # | 1.0 |
| | | 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

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| 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 or visit us at www.airguardproducts.com/productsupport.

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

| | | | |
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| Title | Airguard Blockage Prevention System Upgrade Instructions | RELEASE DATE | 2023-03-01 |
| STEP | 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 20-23). | REV # | 1.0 |
| | | PART KIT # | Varies |

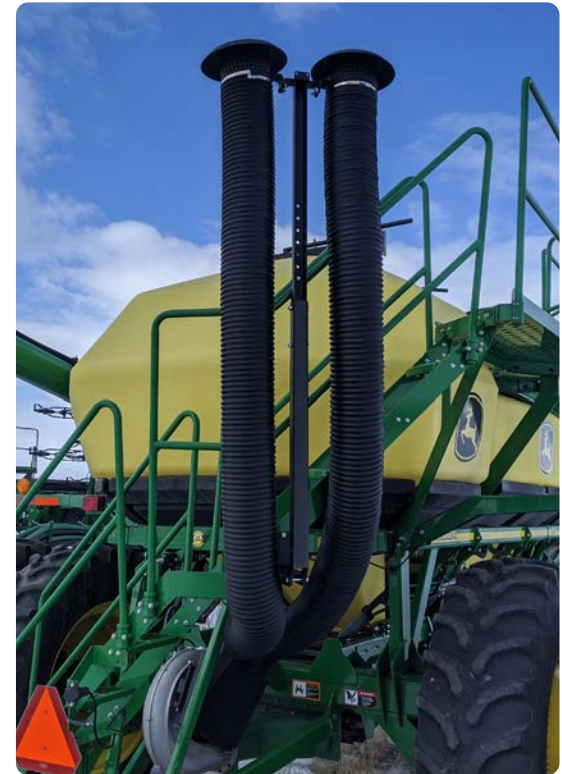
CATWALK



RAILING

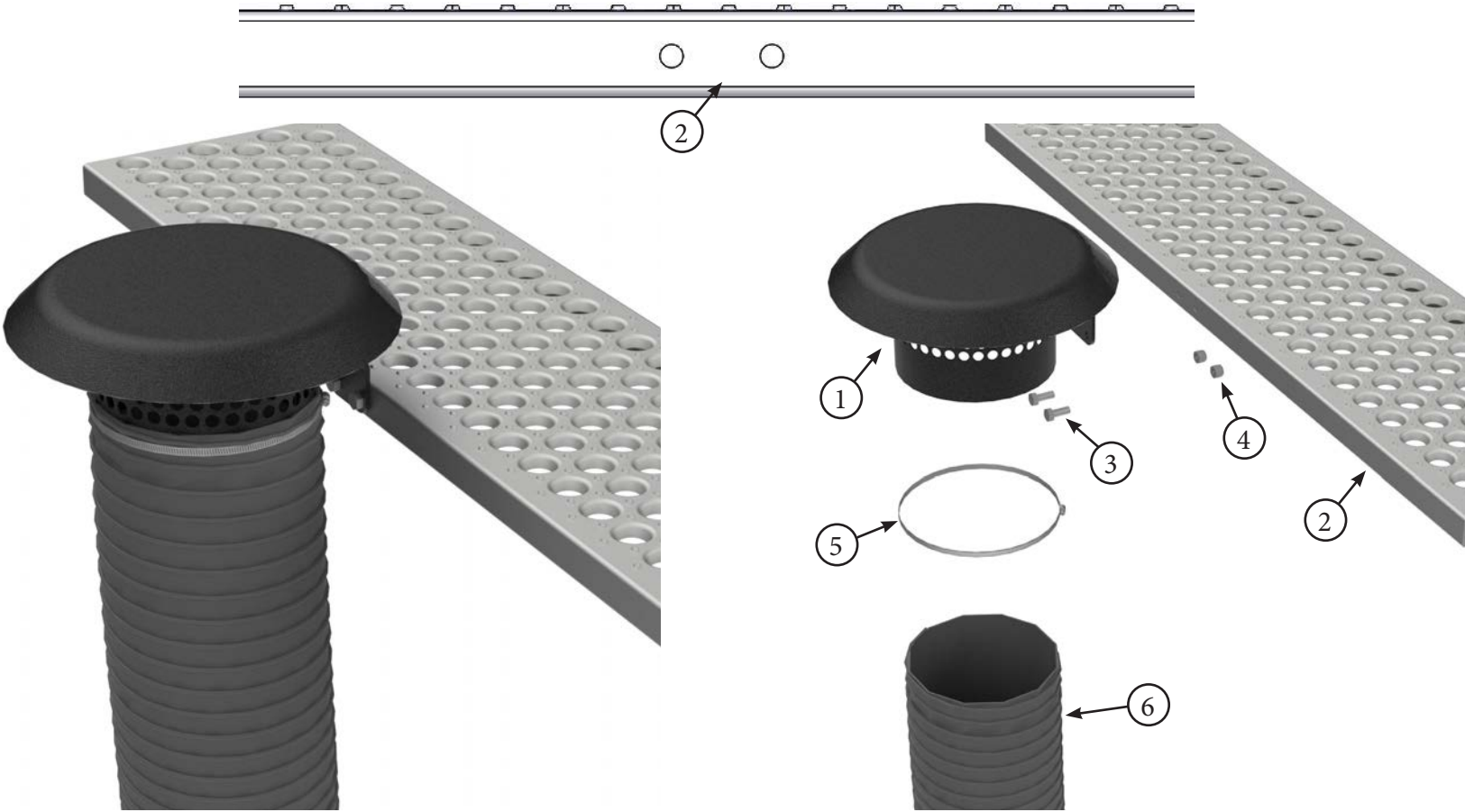


SNORKEL MOUNTING KIT



THREE SNORKEL MOUNTING OPTIONS

| | | | |
|-------|--|--------------|------------|
| Title | Airguard Blockage Prevention System Upgrade Instructions | RELEASE DATE | 2023-03-01 |
| STEP | 17. 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 # | 1.0 |
| | | PART KIT # | Varies |



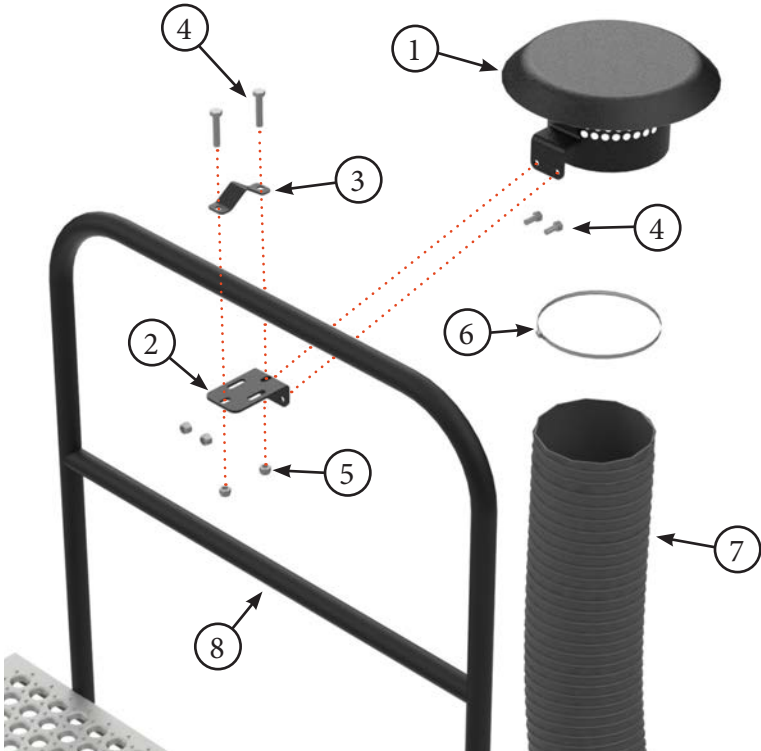
| PARTS LIST | | |
|------------|--------|---------------------------------|
| Item | Part # | Description |
| 1 | 7576 | Top Snorkel Inlet Assembly |
| 2 | ---- | Catwalk |
| 3 | 7515 | Hex Bolt, 10mm x 25mm GRADE 8.8 |

| 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. 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 # | 1.0 |
| | | PART KIT # | Varies |

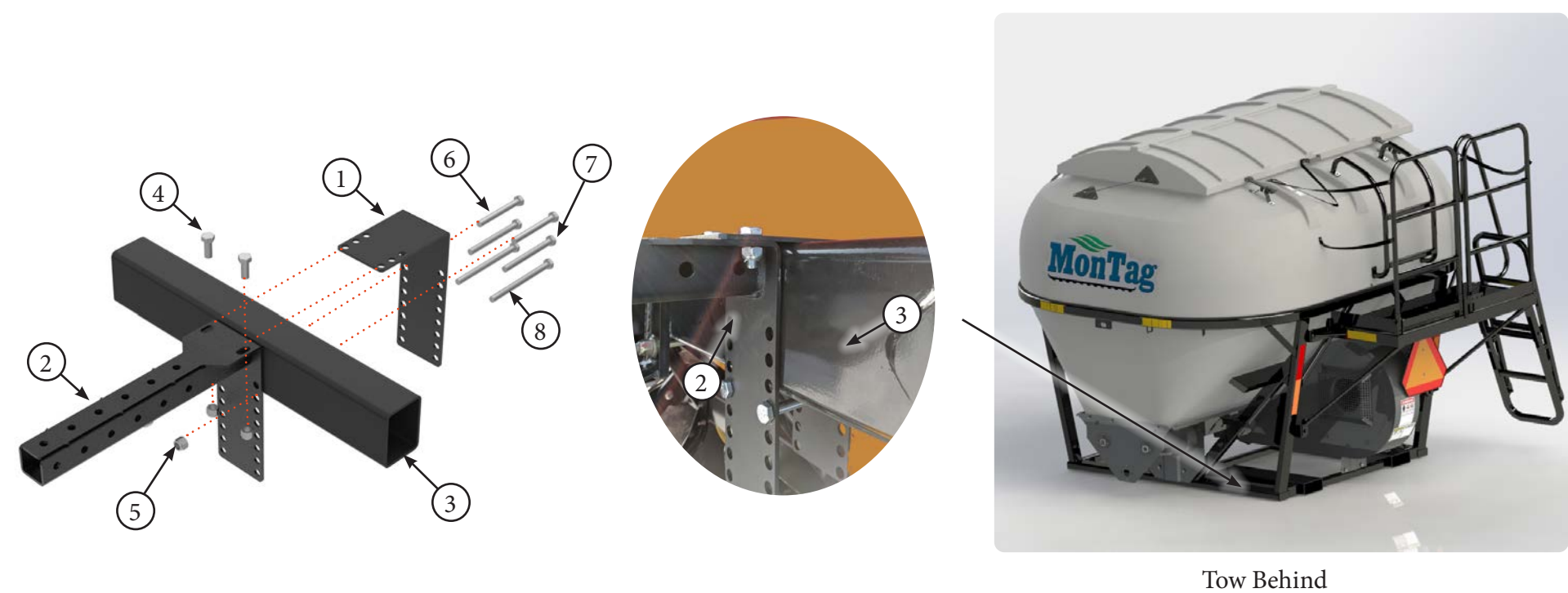


| PARTS LIST | | |
|------------|--------|---------------------------------|
| Item | Part # | Description |
| 1 | 7576 | Top Snorkel Inlet Assembly |
| 2 | 7593 | Snorkel Inlet 90deg Mount Plate |
| 3 | 7989 | Railing Plate |
| 4 | 7991 | HEX BOLT, 10mm x 50mm GRADE 8.8 |



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

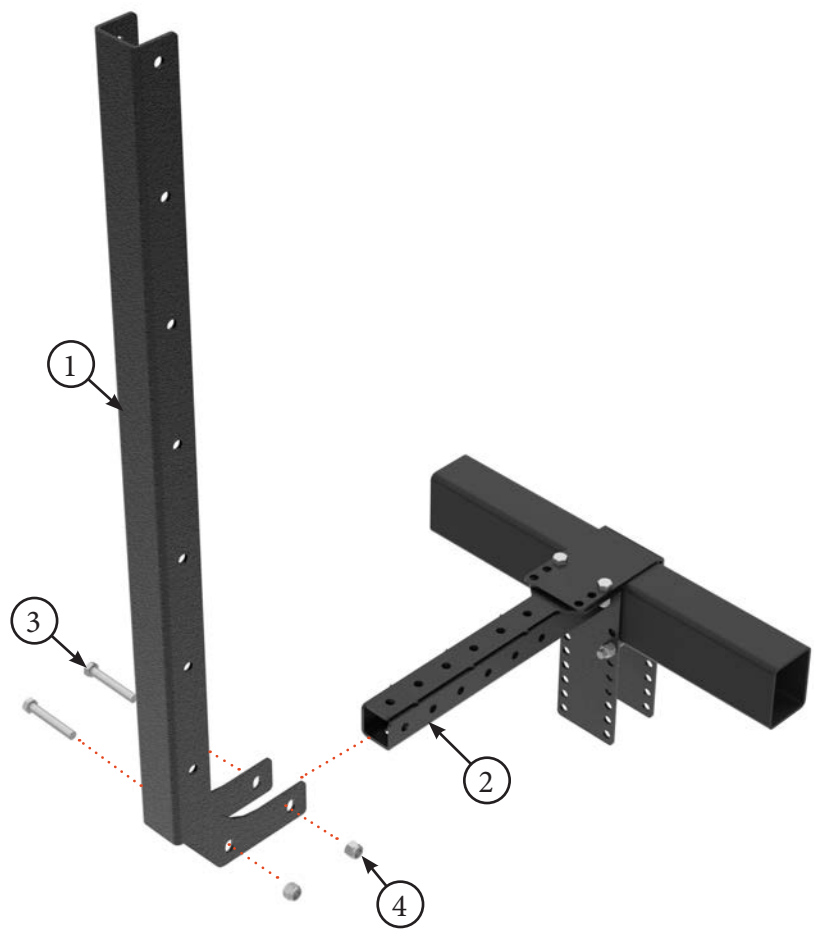
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|-------|---|--------------|------------|
| Title | Airguard Blockage Prevention System Upgrade Instructions | RELEASE DATE | 2023-01-01 |
| STEP | 19. Install the brackets (Item 1 & 2) onto Aircart HSS Frame (Item 3) using supplied hardware. Use 12mm 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 |



| 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 |

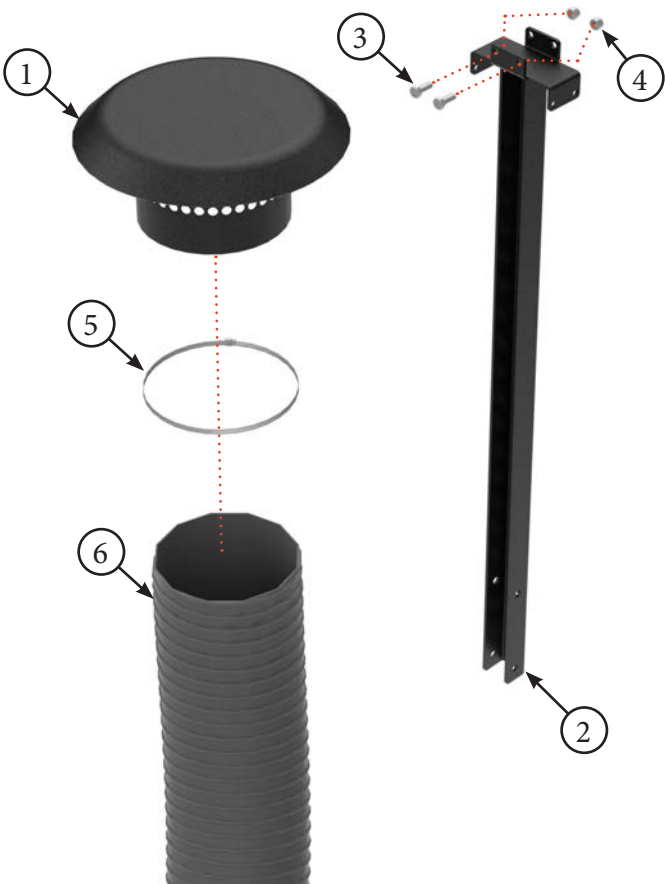
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| Title | Airguard Blockage Prevention System Upgrade Instructions | RELEASE DATE | 2023-03-01 |
| STEP | 20. Mount outer vertical channel (Item 1) to Mount Bracket (Item 2) using supplied 12mm x 80mm Bolts (Item 3) and 12mm lock nuts (Item 4). For C650 and C850 Aircart installations, 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 |

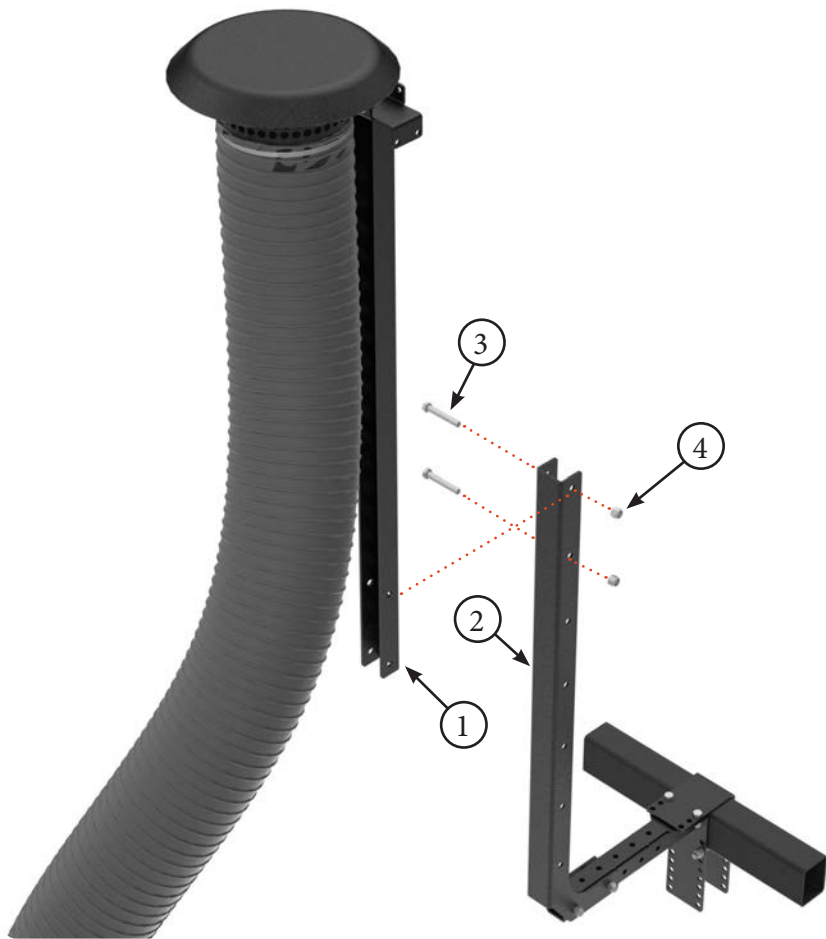
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|-------|--|--------------|------------|
| Title | Airguard Blockage Prevention System Upgrade Instructions | RELEASE DATE | 2023-03-01 |
| STEP | 21. Attach air intakes (Item 1) to upper vertical channel (Item 2) using supplied 10mm x 25mm Bolts (Item 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" |

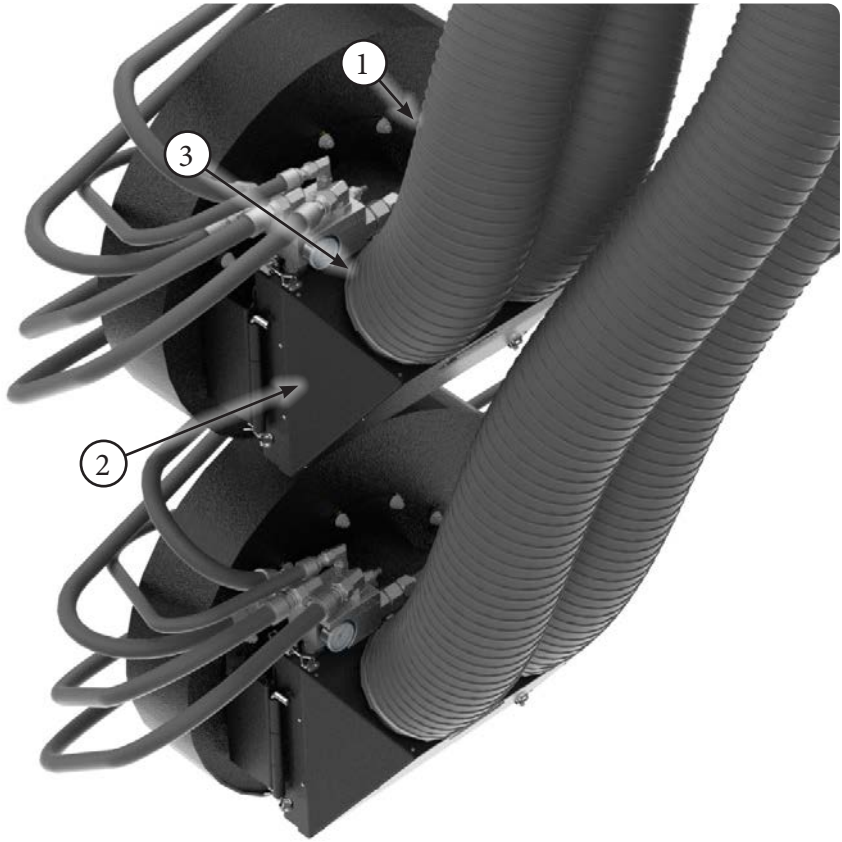
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| Title | Airguard Blockage Prevention System Upgrade Instructions | RELEASE DATE | 2023-03-01 |
| STEP | 22. Determine desired height of air intakes and secure upper vertical channel (Item 1) to lower vertical channel (Item 2) at that location. Use 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 | 23. 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 |

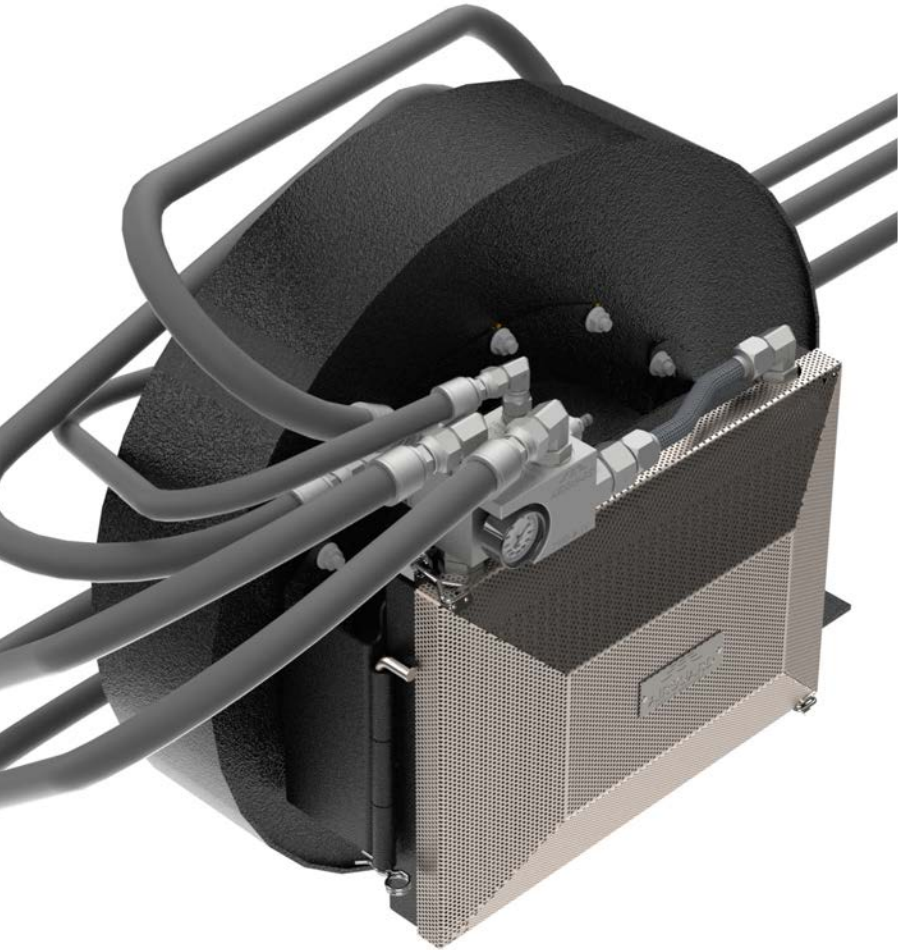


| PARTS LIST | | |
|------------|--------|------------------|
| Item | Part # | Description |
| 1 | 7977 | Snorkel Housing |
| 2 | 7578 | Bridge Clamp, 8” |

| 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



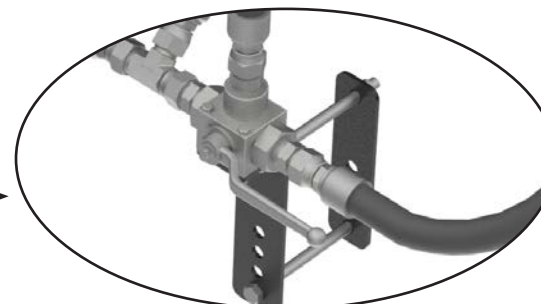
COMPLETED INSTALLATION WITH SNORKELS



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

| | | | |
|--------------|--|---------------------|------------|
| Title | Airguard Blockage Prevention System Upgrade Instructions | RELEASE DATE | 2023-03-01 |
| STEP | Frequently asked questions. | REV # | 1.0 |
| | | 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.