

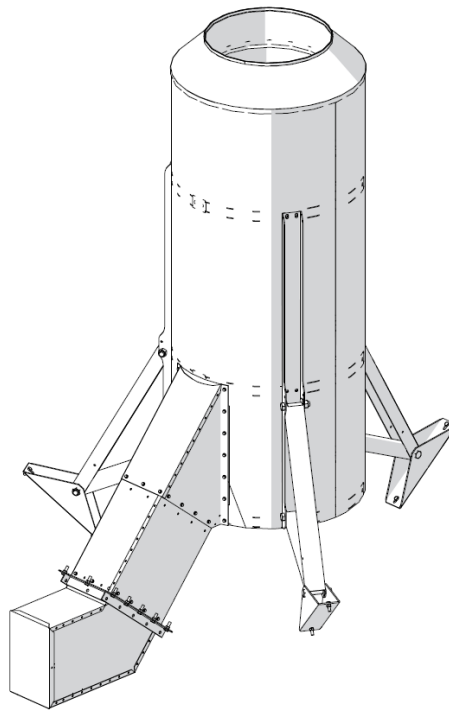


Rocket Aeration Duct System

6000/7000/8000/CR 8000 Series Installation Manual

This manual applies to:

6000/7000/8000/CR 8000 Series



Read this manual before using product. Failure to follow instructions and safety precautions can result in serious injury, death, or property damage. Keep manual for future reference.

Part Number: RNA-2664 R1

Revised: February 2025

Original Instructions

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1. Introduction

Before assembling, please read this manual. Familiarize yourself with the process and the necessary precautions for efficient and safe assembly of this AGI Rocket Aeration Duct System.

Everyone present at the assembly site is required to be familiar with all safety precautions.

Keep this manual available for frequent reference and review it with new personnel. Call your local distributor or dealer if you need assistance or additional information.

General Description

The AGI Rocket Aeration Duct System allows you to harvest in damp conditions, maintain stored grain in peak condition, and reduce the likelihood of mould growth and insect infestations.

With proper care during and after installation, your aeration system will provide you with many years of trouble-free service.

Intended Use

The rocket aeration duct system is intended for use as listed below and described throughout this manual. Use in any other way is considered contrary to the intended use and is not covered by the warranty.

- The Rocket may be safely used with grains of all types.
- Do not use with fertilizer.

Refer also to [Section 5. – Specifications on page 19](#).

2. Safety

2.1. Safety Alert Symbol and Signal Words



This safety alert symbol indicates important safety messages in this manual. When you see this symbol, be alert to the possibility of injury or death, carefully read the message that follows, and inform others.

Signal Words: Note the use of the signal words **DANGER**, **WARNING**, **CAUTION**, and **NOTICE** with the safety messages. The appropriate signal word for each message has been selected using the definitions below as a guideline.



Indicates an imminently hazardous situation that, if not avoided, will result in serious injury or death.

Indicates a hazardous situation that, if not avoided, could result in serious injury or death.



Indicates a hazardous situation that, if not avoided, may result in minor or moderate injury.



Indicates a potentially hazardous situation that, if not avoided, may result in property damage.

2.2. General Safety Information

Read and understand all safety instructions, safety decals, and manuals and follow them when assembling the equipment.

- Only experienced personnel who are familiar with this type of assembly and installation should perform this work. Untrained assemblers/installers expose themselves and bystanders to possible serious injury or death.
- Do not modify the rocket aeration duct system in any way or deviate from the instructions in this manual without written permission from the manufacturer. Unauthorized modification or methods may impair the function and/or safety. Any unauthorized modification will void the warranty.
- Follow a health and safety program for your worksite. Contact your local occupational health and safety organization for information.
- Contact your local representative or AGI if you need assistance or additional information.
- Always follow applicable local codes and regulations.



2.3. Personal Protective Equipment

The following Personal Protective Equipment (PPE) should be worn when assembling the equipment.

- **Safety Glasses**



Wear safety glasses at all times to protect eyes from debris.

- **Work Gloves**



Wear work gloves to protect your hands from sharp and rough edges.

- **Steel-Toe Boots**



Wear steel-toe boots to protect feet from falling debris.

- **Hard Hat**



Wear a hard hat to help protect your head.

2.4. Safety Equipment

The following safety equipment should be kept on site.

- **Fire Extinguisher**



Provide a fire extinguisher for use in case of an accident. Store in a highly visible and accessible place.

- **First-Aid Kit**



Have a properly-stocked first-aid kit available for use should the need arise, and know how to use it.

3. Installation

3.1. Installation Safety

- Do not take chances with safety. The components can be large, heavy, and hard to handle. Always use the proper tools, rated lifting equipment, and lifting points for the job.
- Always have two or more people installing the rocket aeration duct system.
- Make sure you have sufficient lighting for the work area.
- Tighten all fasteners according to their specifications. Do not replace or substitute bolts, nuts, or other hardware that is of lesser quality than the hardware supplied by the manufacturer.

3.2. Check the Shipment

Inspect the rocket aeration duct system and accessories on receipt to ensure that all items have arrived and that none are damaged.

Report missing or damaged parts immediately to ensure that proper credit is received from AGI or your distributor/dealer, and to ensure that any missing parts can be shipped quickly to avoid holding up the installation.

Important

Do not use damaged components.

3.3. Required Tools

- | | |
|---|--|
| • SAE wrench and ratchet set (9/16") | • Level |
| • Electric drill with drill bits (7/16") | • Tin snips |
| • Marker | • Silicone |
| • Torch or grinder with cutting wheel | • Winching device with appropriate load rating |
| • Impact driver or drill with 3/8" driver bit | • Laser pointer or straight edge |

3.4. Location Requirements

All models of the AGI Rocket are designed to be installed in the center of hopper-bottom bins with the rocket center aligned with the center of hopper cone. To ensure structural integrity and proper airflow, the bin must be level and the rocket installed completely vertical.

NOTICE

Standard AGI Rockets are not to be used on hopper slopes more than 40° from the horizontal. For hoppers with slopes steeper than 40°, refer to the Specifications section in this manual before installation.

3.5. Installation Procedures

For 6000 6' Only (on existing bins):

1. Unbolt and remove air inlet on rocket if required to fit through existing manhole. Repeat for legs if required.
2. Once inside, replace legs, assemble in the installed position as shown in the diagram in [Section 4.1.1 – 6000 Series Components on page 14](#).
3. Replace air inlet and apply silicone around inlet. Bolt back in place.

For all Rockets:

1. Attach feet to legs with 3/4" x 4" bolts and 3/4" locknuts as shown in [Figure 2 on page 10](#).
2. Unfold legs by removing the three 3/16" x 4" bolts and lowering legs to assembled position as shown in [Figure 1 on page 9](#).
3. Place 3/4" x 4" bolt through top lug on vertical leg and top of diagonal leg brace. Repeat for all legs. Tighten all bolts (three per leg).
4. Secure straight duct to air inlet with eleven #14 x 3/4" tek screws on 6000/ 7000 rockets or fourteen #14 x 3/4" tek screws on 8000 rockets as shown in [Figure 3 on page 11](#).
5. Center rocket in bin over hopper unload chute. Use a level to ensure rocket sits true to both the horizontal and the vertical.

Figure 1. Lowering Legs to Assembled Position

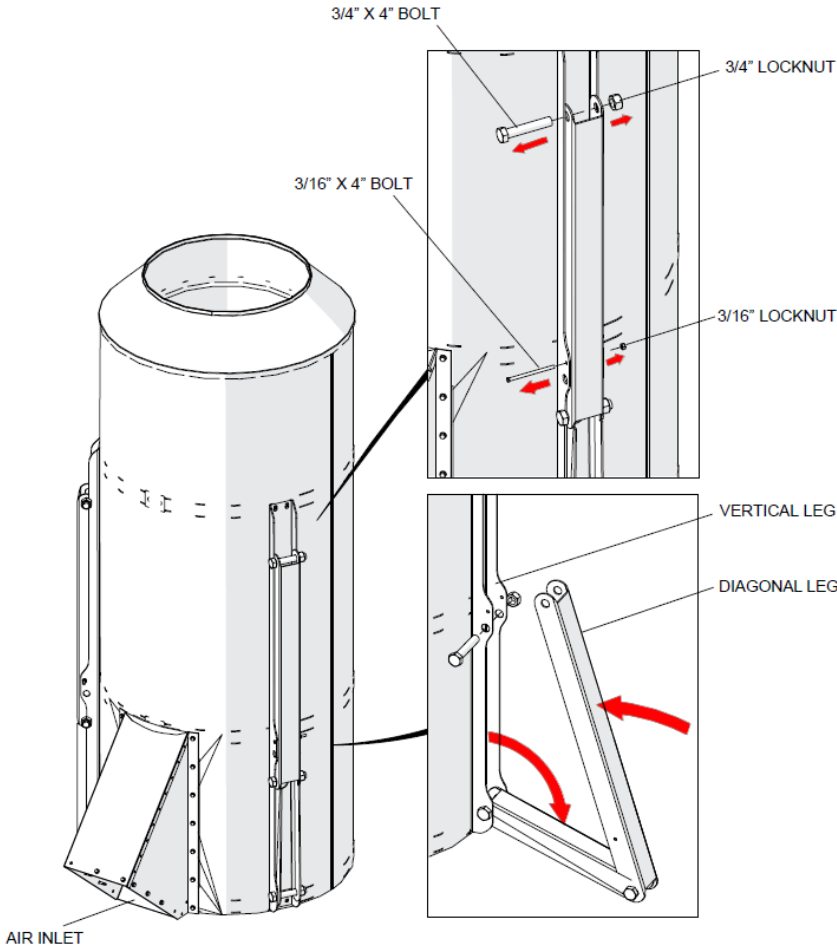
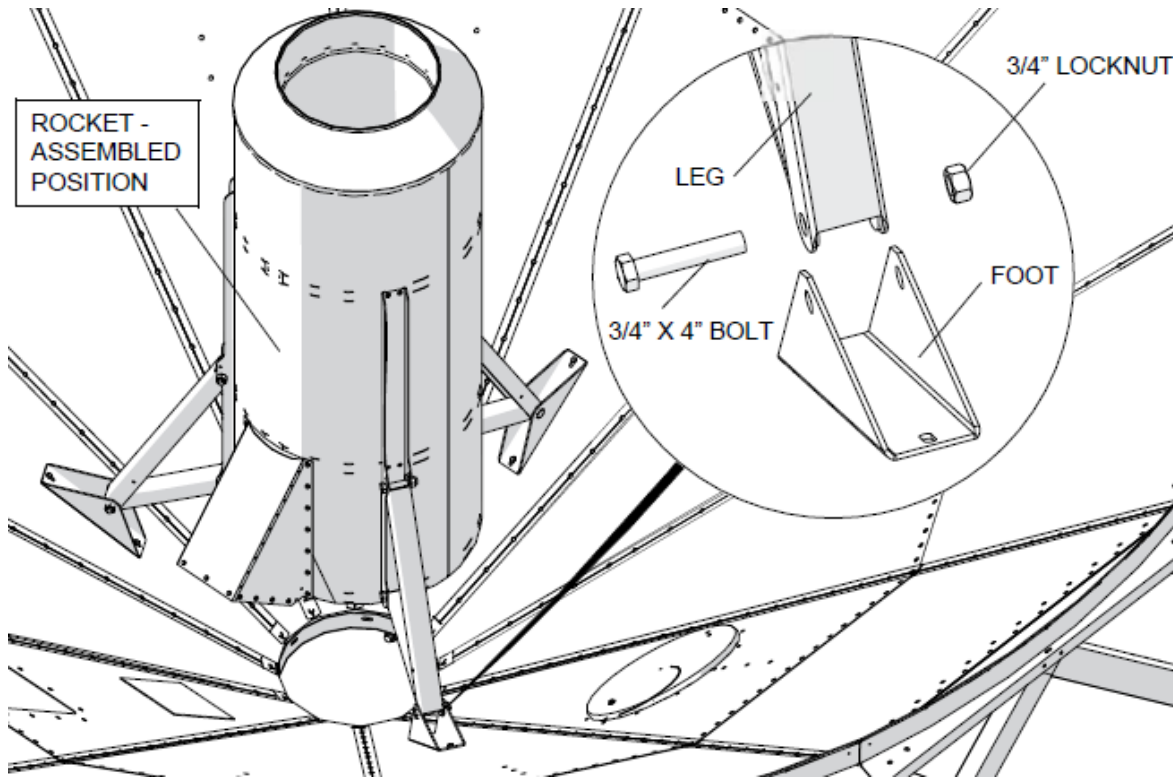


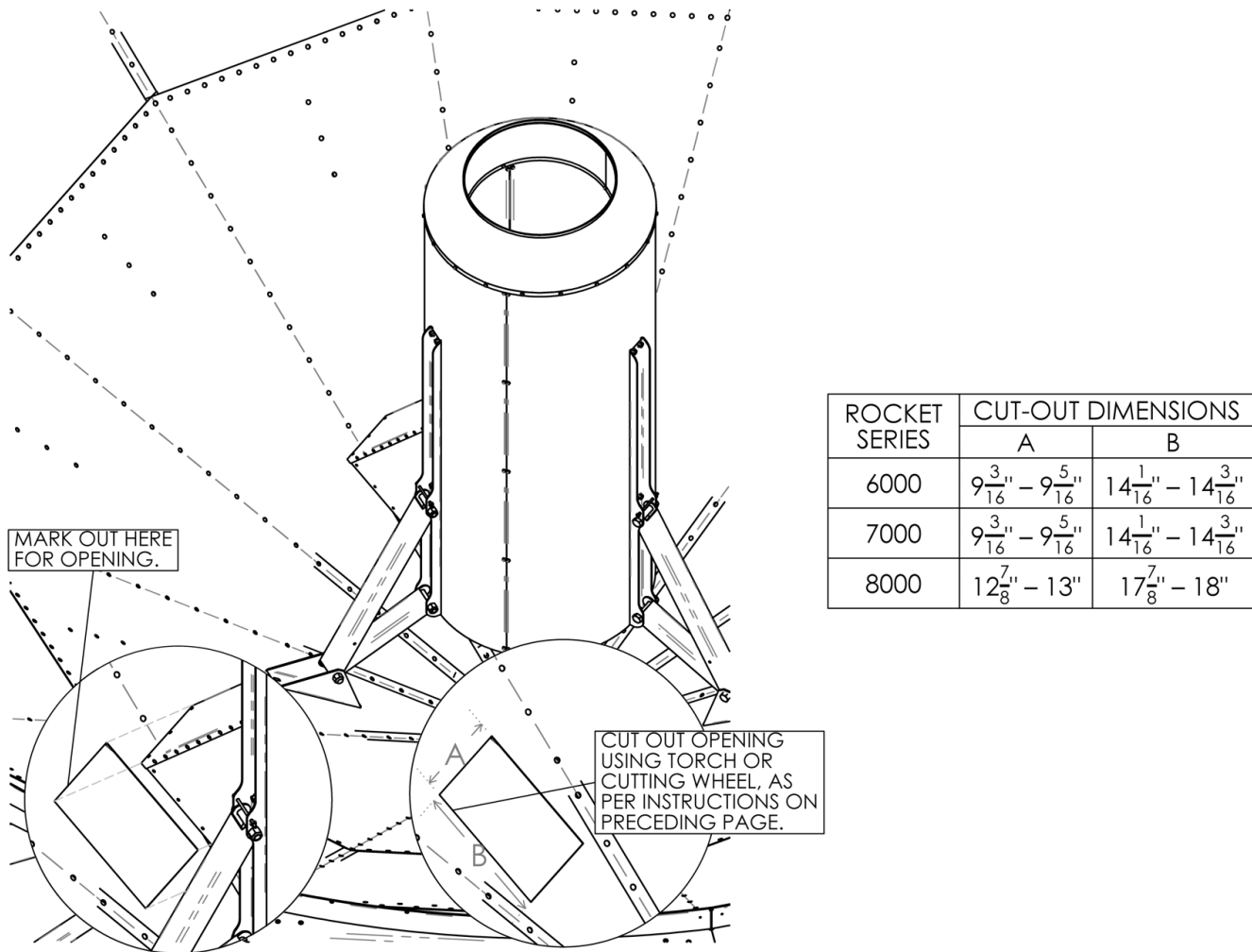
Figure 2. Attach Feet to Legs

6. Use a laser pointer or the straight-edge along the side, top, and bottom of the air inlet to reach the hopper cone and mark the outline on the hopper cone for the inlet opening.
7. Cut an inlet opening in hopper cone using a cutting torch or wheel.

CAUTION Wear protective eye wear while cutting opening in hopper cone.

Important

Make a cut outside the marked line to help keep the opening as clean as possible. For 6000 and 7000 rockets, make sure that the hole size is at least 9-3/16" x 14-1/16" and is no larger than 9-5/16" x 14-3/16". For 8000 rockets, make sure the size of the hole is at least 12-7/8" x 17-7/8" and no larger than 13" x 18".

Figure 3. (7000 Model Shown) Secure Straight Duct to Air Inlet

8. Slide the straight duct (narrow-end first) through the cut hole in the hopper and into the air inlet. Attach the straight duct to the air inlet using #14 x $\frac{3}{4}"$ TEKS screws.

Note

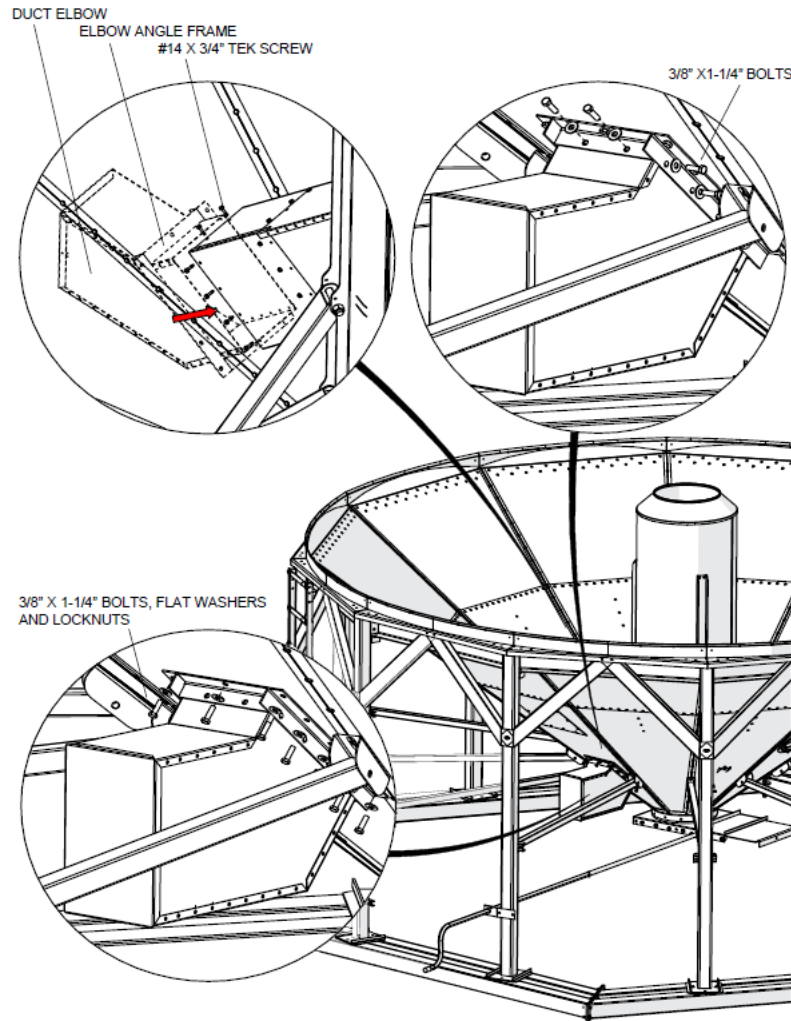
- For 6000 and 7000 rockets, use four screws on the sides and three screws on top.
- For 8000 rockets, use five screws on the side and four on top.

9. Install duct elbow as follows (see [Figure 4 on page 12](#)):

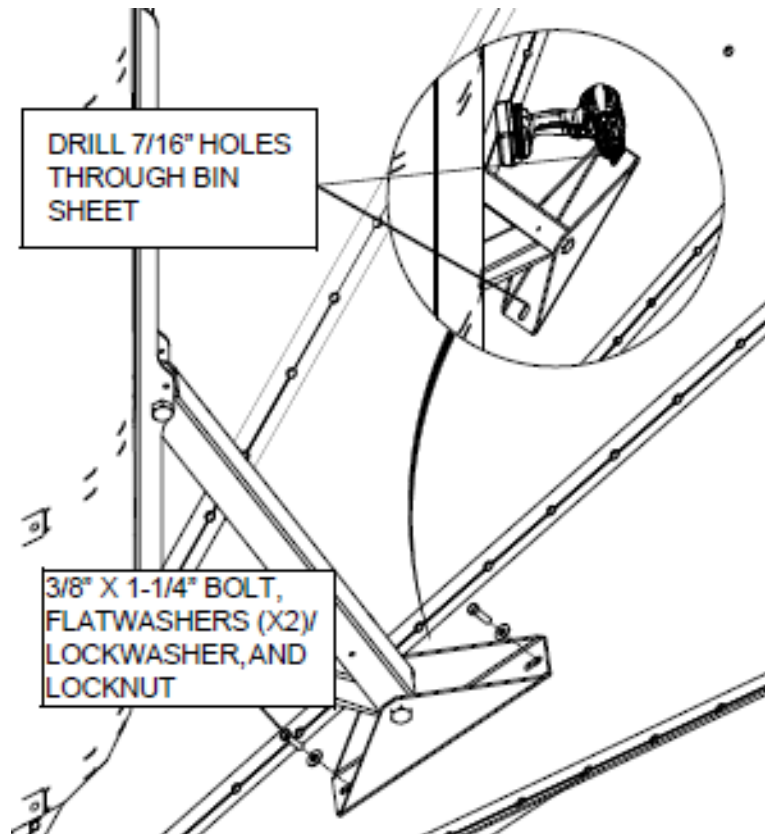
- Place elbow angle frame on the straight duct. Ensure that the flat side of the duct angle frame faces inward towards the hopper cone.
- Insert duct elbow into the straight duct until it reaches the rivets on the inside of the straight duct. Ensure that the long edge of elbow is parallel to the ground. Support elbow in this position.
- Move elbow angle frame up duct elbow until it lays flush against the hopper cone. Mark the location of all holes:
 - 16 holes on 8000, 12 holes on 6000/7000 through elbow angle frame and hopper cone.
 - 16 holes on 8000, 12 holes on 6000/7000 through elbow angle frame, straight duct, and duct elbow.
- Pre-drill all marked holes with a $\frac{3}{16}"$ drill bit, then drill out with a $\frac{7}{16}"$ drill bit.

- e. Slide angle frame back onto the straight duct. Slide duct elbow back into the straight duct. Ensure that the long edge of elbow is parallel to the ground.
- f. Fasten elbow angle frame to hopper cone (16 places on 8000, 12 places on 6000/7000) and to elbow (16 places on 8000, 12 places on 6000/7000) with $3/8"$ x $1-1/4"$ bolts, flatwashers/lockwashers and nuts, as shown in [Figure 4 on page 12](#).

Figure 4. (7000 Model Shown) Install the Duct Elbow



10. If desired, trim off any protruding portion of the straight duct outside the duct angle frame.
11. Using the holes in the rocket feet as a guide, drill $7/16"$ holes in the hopper cone. Attach rocket feet to hopper cone with $3/8"$ x $1-1/4"$ bolts, flatwashers, and nuts. See [Figure 5 on page 13](#).

Figure 5. Drill Holes in the Hopper Cone

4. Appendix

4.1. 6000/7000/7000 HD/ 8000/8000 CR/8000HD Series Parts List

4.1.1 6000 Series Components

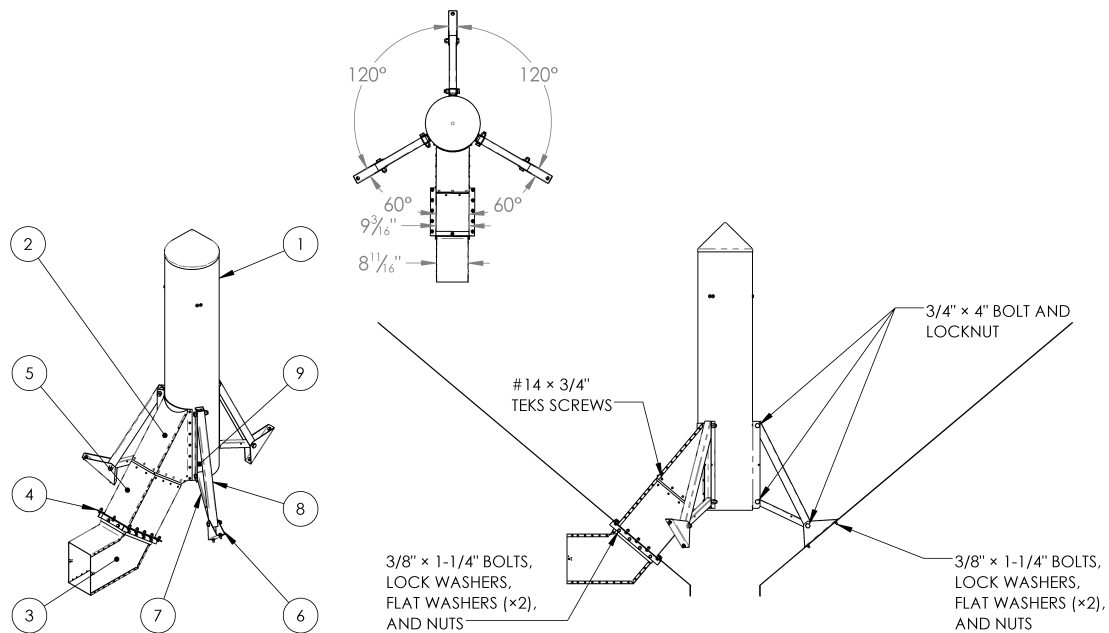


Table 1. 6000 Series Components

Item	Part Number	Description	Quantity
1	-	6000 Rocket Body Diameter 6'	1
2	RUA-5027	6000 Inlet (9" X 14")	1
3	RZA-7230	9" X 14" Elbow w/ Weather Cap	1
4	RXA-5224	9" X 14" Elbow Angle Frame	1
5	RZA-7732	Rectangular Duct Section	1
6	RXF-2362	Rocket Foot	3
7	RXA-4031	Rocket Leg, Lower	3
8	RXA-4033	Rocket Leg, Upper	3
9	RXA-4035	Rocket Channel	3

4.1.2 7000 Series Components

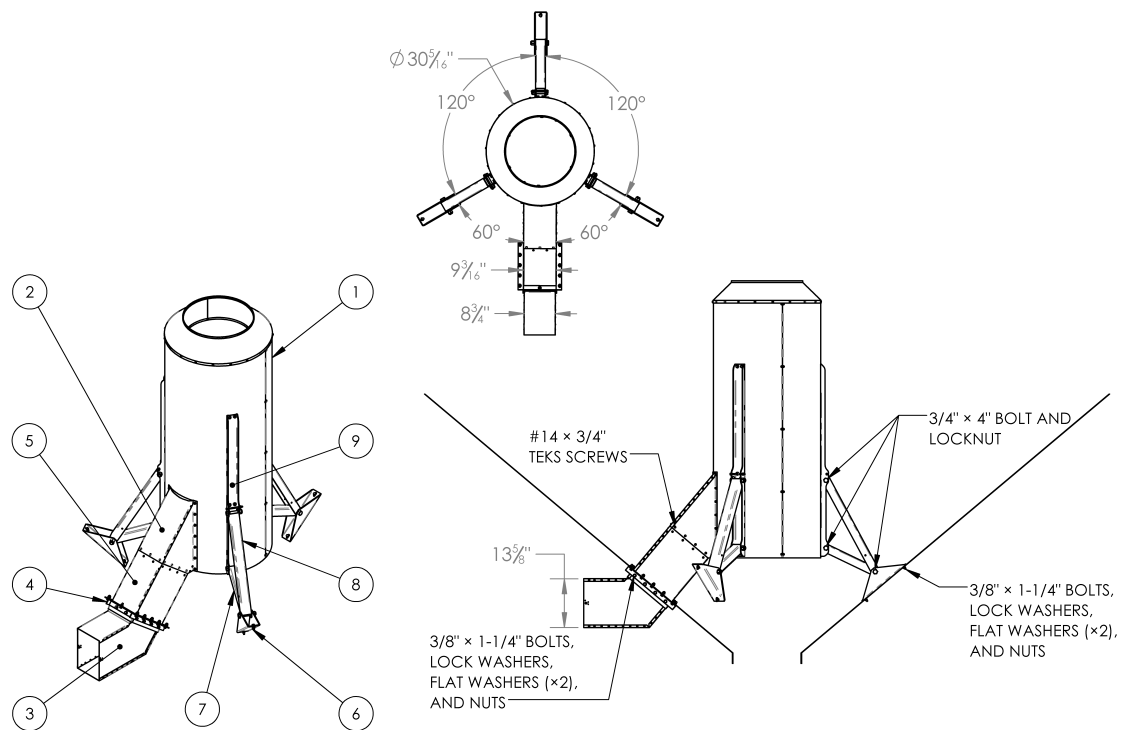


Table 2. 7000 Series Components

Item	Part Number	Description	Quantity
1	-	7000 Rocket Body 30" Diameter (4', 6', or 8')	1
2	RUB-5035	7000 Inlet (9" X 14")	1
3	RZA-7230	9" X 14" Elbow w/ Weather Cap	1
4	RXA-5224	9" X 14" Elbow Angle Frame	1
5	RZA-7732	Rectangular Duct Section	1
6	RXA-1240	Rocket Foot	3
7	RXB-2857	Rocket Leg Lower	3
8	RXB-2858	Rocket Leg Upper	3
9	RXB-2859	Rocket Channel 4'	3
9	RXB-2860	Rocket Channel 6'	3
9	RXB-2861	Rocket Channel 8'	3

4.1.3 7000 HD Series Components

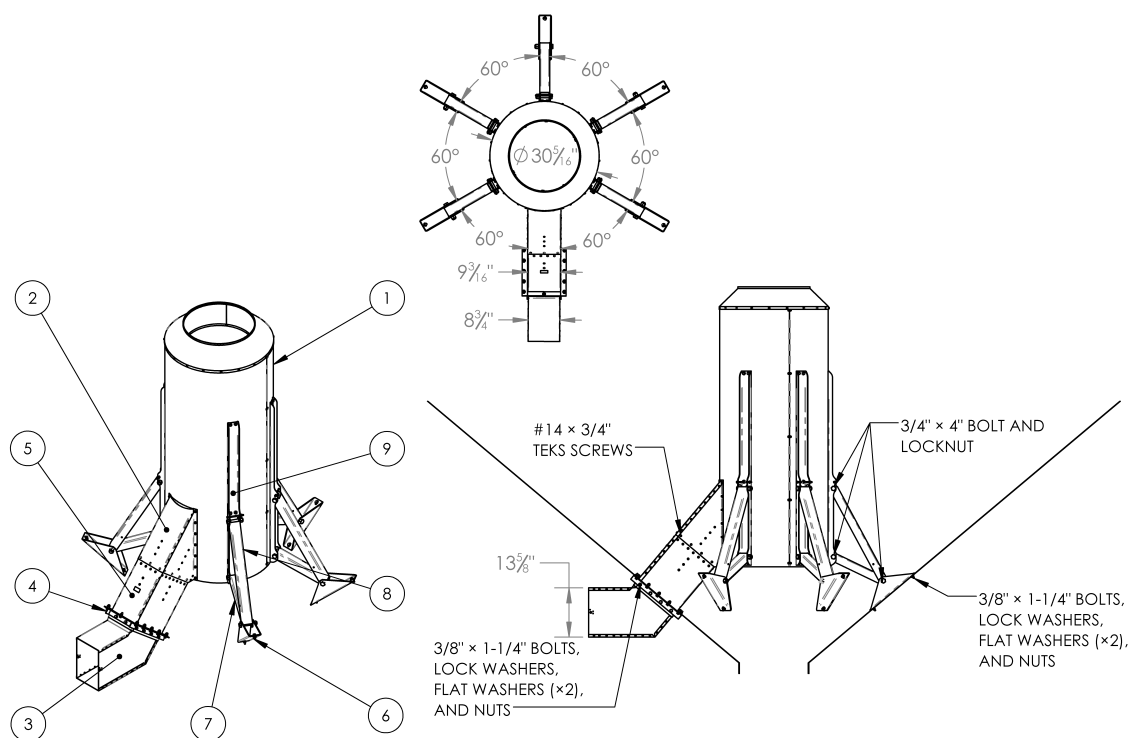


Table 3. 7000 HD Series Components

Item	Part Number	Description	Quantity
1	-	7000 HD Rocket Body 30" Diameter 6'	1
2	RUB-5240	7000 HD Inlet (9" X 14")	1
3	RZA-7230	9" X 14" Elbow w/ Weather Cap	1
4	RXA-5224	9" X 14" Elbow Angle Frame	1
5	RZB-7727	7000 HD Rectangular Duct Section	1
6	RXA-1240	Rocket Foot	5
7	RXB-2857	Rocket Leg Lower	5
8	RXB-2858	Rocket Leg Upper	5
9	RXB-2859	Rocket Channel 4'	5
9	RXB-2860	Rocket Channel 6'	3
9	RXB-2861	Rocket Channel 8'	3

4.1.4 8000 Series Components

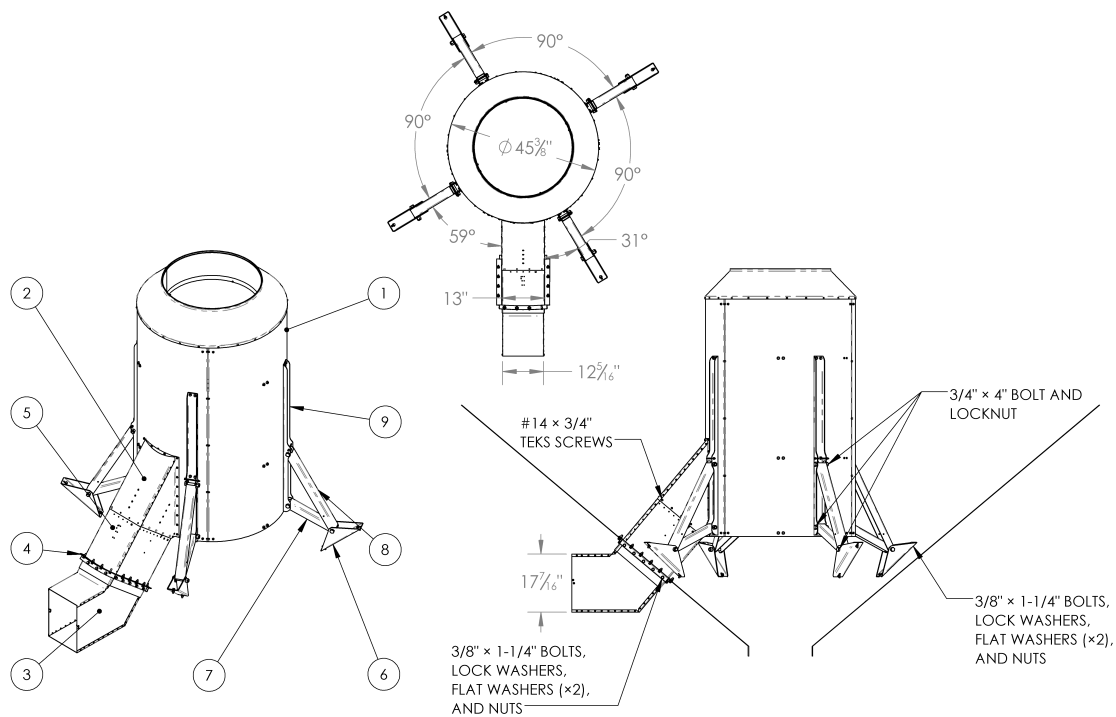


Table 4. 8000 Series Components

Item	Part Number	Description	Quantity
1	-	8000 Rocket Body 45" Diameter (4', 6', or 8')	1
2	RUC-5280	8000 Inlet (12" X 17")	1
3	RZC-7308	12" X 17" Elbow w/ Weather Cap	1
4	RXC-5225	12" X 17" Elbow Angle Frame (curved)	1
5	RZC-7729	Rectangular Duct Section	1
6	RXA-1240	Rocket Foot	4
7	RXA-2857	Rocket Leg Lower	4
8	RXA-2858	Rocket Leg Upper	4
9	RXB-2859	Rocket Channel 4'	4
9	RXB-2860	Rocket Channel 6'	4
9	RXB-2861	Rocket Channel 8'	4

4.1.5 8000 HD/CR Series Components

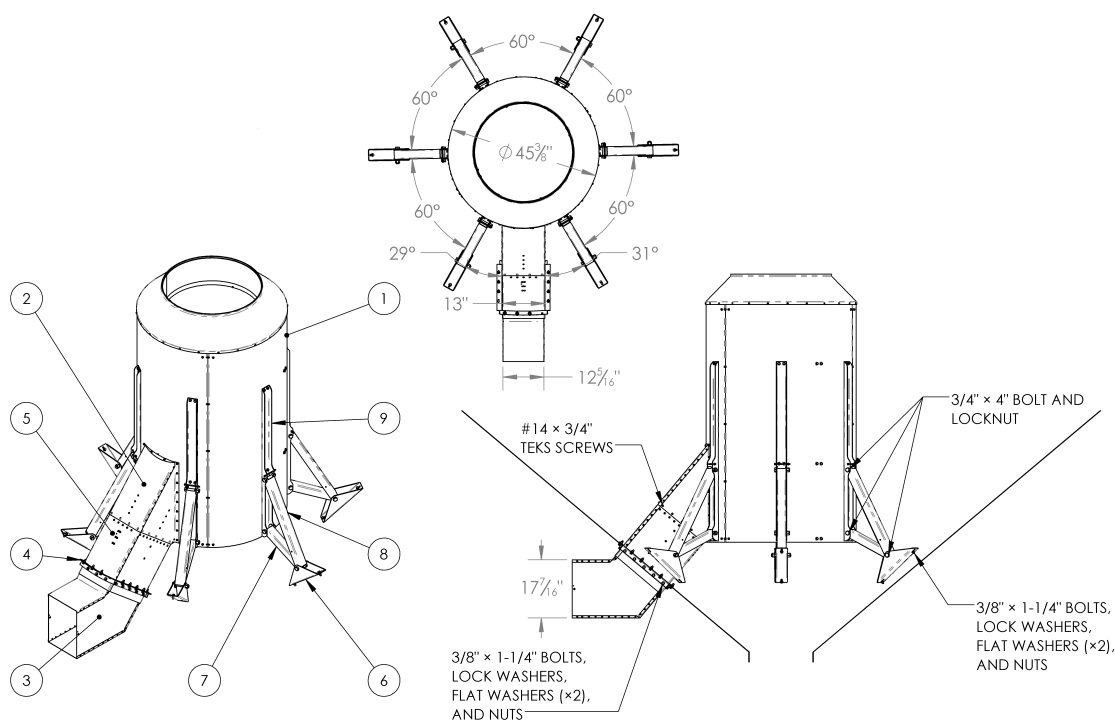


Table 5. 8000 HD/CR Series Components

Item	Part Number	Description	Quantity
1	-	8000 HD/CR Rocket Body 45" Diameter (4', 6', or 8')	1
2	RUC-5239	8000 HD/CR Inlet (12" X 17")	1
3	RZC-7308	12" X 17" Elbow w/ Weather Cap	1
4	RXC-5225	12" X 17" Elbow Angle Frame (curved)	1
5	RZC-7730	Reinforced Rectangular Duct Section	1
6	RXA-1240	Rocket Foot	6
7	RXB-2857	Rocket Leg Lower	6
8	RXB-2858	Rocket Leg Upper	6
9	RXB-2859	Rocket Channel 4'	6
9	RXB-2860	Rocket Channel 6'	6
9	RXB-2861	Rocket Channel 8'	6

5. Specifications

Hopper Aeration Systems — Rockets ¹											
Part Number	Description	Louvered Area (ft ²)	Contact Area (ft ²) ²	Airflow Capacity (CFM) ³	Duct Diameter (inches)	Supplied Legs	Air Inlet Size (inches)	Bin Diameter (max.)	Bin Wall Height (max.)	Hopper Angle (max.)	Weight (lbs)
GGR-8736	6000 6' Rocket	20	22	2372	15"	3	9 x 14	14'	16'	40°	226
GGR-8737	7000 4' Rocket	45	36	3362	30"	3	9 x 14	19'	30'	40°	358
GGR-8738	7000 6' Rocket	69	50	4781	30"	3	9 x 14	19'	30'	40°	356
GGR-8750	7000-6' HD Rocket	69	50	4781	30"	5	9 x 14	19'	33'	45°	392
GGR-8739	7000 8' Rocket	93	64	6170	30"	3	9 x 14	19'	22'	40°	428
GGR-8740	8000 4' Rocket	67	59	5514	45"	4	12 x 17	24'	30'	40°	473
GGR-8741	8000 6' Rocket	105	80	7671	45"	4	12 x 17	24'	30'	40°	700
GGR-8742	8000 8' Rocket	142	102	9783	45"	4	12 x 17	24'	22'	40°	839
GGR-8745	8000 8' HD Rocket	142	102	9783	45"	6	12 x 17	27'	33'	40°	938
GGR-8743	8000 4' Commercial ⁴	67	59	5514	45"	6	12 x 17	27'	40'	45°	611
GGR-8744	8000 6' Commercial ⁴	105	80	7671	45"	6	12 x 17	24'/27'	40'/33'	45°	691

Table Notes:

- Specifications are for farm use in aeration or natural air drying applications with one or two duty cycles per year. For use in other applications, contact the factory for recommendations (wet holding bins, high product turns etc.)
- Contact area is the area in which the duct makes contact with the grain and can effectively distribute air to the grain mass.
- Airflow capacity is calculated at 1000 cfm/sq. ft. open area.
- Commercial Rockets are recommended for use when: storing pulse crops, in taller bins, steeper cones, higher product turns.

6. Warranty

AG GROWTH INTERNATIONAL INC. – FORM OF LIMITED WARRANTY

Ag Growth International Inc. (“AGI”) warrants that the goods and/or services being supplied (the “Goods”) will be free from defects in materials and workmanship under normal conditions, use, service, and maintenance, for a period of twelve (12) months from the date of first operation of the Goods, but in no event more than eighteen (18) months from the date of delivery of the Goods to the end-user (the “Warranty Term”). If the Goods are being used for rental purposes, the Warranty Term for the subject Goods shall be limited to 90 days.

Subject to AGI’s sole discretion, if the Goods, or a component thereof, are found to have a default in materials and/or workmanship within the Warranty Term, AGI will, at its own option and expense, repair or replace the subject Goods or refund the purchase price for the applicable Goods. Any warranty related expenses incurred on behalf of or by the end-user without the prior written consent of AGI shall be the sole responsibility of the end-user. Expenses relating to travel, customs or import duties and tariffs, equipment rental, and any costs associated with accessing the Goods are the sole responsibility of the customer. Warranty shall be void in the event the Goods are returned or disposed of without the written consent of AGI.

The customer shall not assert a claim that the Goods are defective unless the customer gives written notice to AGI of such defect within forty-eight (48) hours of discovering such defect. In the event of a warranty claim, the customer must complete any and all information required by AGI in order to properly assess or investigate the claim. AGI shall be given a reasonable opportunity to inspect and test the Goods in question. Failure by the customer to notify AGI of such claim within 48 hours shall operate as a waiver of any and all such claims by the customer.

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AGI is a leading provider of equipment solutions for agriculture bulk commodities including seed, fertilizer, grain, and feed systems with a growing platform in providing equipment and solutions for food processing facilities. AGI has manufacturing facilities in Canada, the United States, the United Kingdom, Brazil, South Africa, India and Italy and distributes its products globally.



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Please include the part number listed on the cover page in your message.