Installation Manual

10″ Jumpster

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SHIVVERS

Contents

GENERAL

SHIVVERS MFG. Inc.

Founded in 1968 by brothers Charles and Gerald Shivvers, Shivvers Manufacturing Inc. has been a pioneer in grain drying technology. Starting with the invention of the tapered sweep auger, Shivvers revolutionized the efficiency of grain drying.

Still family-owned, the company continues to prioritize innovation and quality, offering advanced, farmer-focused solutions. From its humble beginnings as a small family business, Shivvers has grown into an industry leader, producing American made products, driven by the same commitment to excellence and hard work that inspired its founders. Today, Shivvers remains dedicated to meeting the evolving needs of modern agriculture.

USE OF THE MANUAL

All Shivvers' products are designed to be safe and reliable when operated and serviced according to instructions.

IT IS ESSENTIAL THAT YOU READ AND UNDERSTAND THIS MANUAL BEFORE OPERATING YOUR EQUIPMENT.

This manual contains the most current information available at the time of publication. We reserve the right to make changes at any time. The assembly steps are accompanied by figures for easy reference.

CONTROL INSPECTION

Each shipment is inspected before leaving the factory. All parts and components are recorded on the packing slip. The quantity of each item is listed for easy verification. Some parts are packaged preassembled for easy installation.

When checking, compare the description, specification, product number and any other useful information.

Please notify us no later than 48 hours after delivery if there are any missing or damaged parts.

The hardware is as important as the major parts. Make sure you have all the parts on hand before you throw away the packages. We cannot be held responsible for the loss of items included in the shipping list.

WARRANTY

SHIVVERS Manufacturing, Inc. warrants its manufactured products to be free from manufacturing defects for a period of 12 months following delivery provided the products are installed in accordance with the instructions and used under normal conditions for their intended purpose. Under this warranty, our obligations shall be limited to the repair or replacement of parts which we recognize as defective. The company is not responsible for the cost of transportation, disassembly, and reassembly of repaired or replaced parts.

In no event shall the warranty cover damage resulting from accidents, negligence, earthquakes, floods, misuse, abuse, lack of maintenance, alterations or other unreasonable use of parts or products.

SAFETY

The health and safety of our customers is important to us. It is therefore important to read this section and pay particular attention to the recommendations and stickers on the equipment. Replace them if they are damaged.

Unqualified personnel must stay out of the work area. This equipment must be installed in accordance with the instructions in this manual and the regulations applicable to your area of operation. The appropriate authorities must be consulted **BEFORE** installation begins.

Pay attention to safety stickers

- Moving parts are a potential hazard. Keep a reasonable distance between these parts and any limbs or clothing when the equipment is connected to its power source.
- Never wear loose, torn or bulky clothing near the equipment.
- Due to the flammable nature of some products, it is recommended to have a fire extinguisher near the equipment. A clean environment is less likely to lead to fire hazards.
- If it is necessary to lift the equipment, **BEFORE** doing so, proper supports must be installed. A hydraulic device is not considered to be a compliant support since it may sink slowly, give way suddenly or be lowered accidentally.
- Electrical equipment must be installed by a qualified electrician. The standards established by your industry must be followed. Shut off and lock out electrical power sources before installing, servicing or repairing electrical equipment.
- **DO NOT** modify or alter the equipment other than as described in this manual. Any modifications can lead to extremely dangerous situations, premature deterioration of your equipment, serious injury and even death. Any tampering will automatically void the warranty.

- Be alert to any of these symbols.

  They alert you to a potential hazard.

  Failure to observe any of these symbols could result in **SERIOUS INJURY or DEATH**

- **BEFORE** undertaking any operation on the equipment, it is imperative to turn the main switch to the OFF position and lock it. Make sure all moving parts are completely stopped.
- Wear the necessary protective equipment such as earmuffs or plugs, hard hat, eye protection and safety shoes. If you are working at heights, be sure to follow the standards for such work.
- If the equipment begins to vibrate abnormally, turn off the power immediately and check the cause. Excessive vibration usually means there is a problem.
- Always keep the machinery area clean and dry. Keep all pieces of equipment in good operating condition. Keep safety guards in place. Periodically check components for wear and tear and tighten hardware. All broken or damages parts must be replaced by original parts.
- It is the responsibility of the owner of the equipment to **ALWAYS** keep this manual accessible to all persons involved in the installation, operation and/or maintenance of this equipment.

INSTALLATION INSTRUCTIONS

Overview

The Shivvers Jumpster auger offers the flexibility you need for grain handling after drying. Jump from the horizontal unload auger to a grain transfer device, whether it is an air transfer, elevator leg, loop, or transfer auger. It is designed with a 10″ unloader and is adjustable to virtually any angle from vertical to horizontal, or from straight away from the drying bin to a 90° angle to the right.

The 10″ Jumpster auger comes in different lengths to accommodate the current grain system and can be modified to accommodate any changes needed to the system.

Jumpster has four sizes:

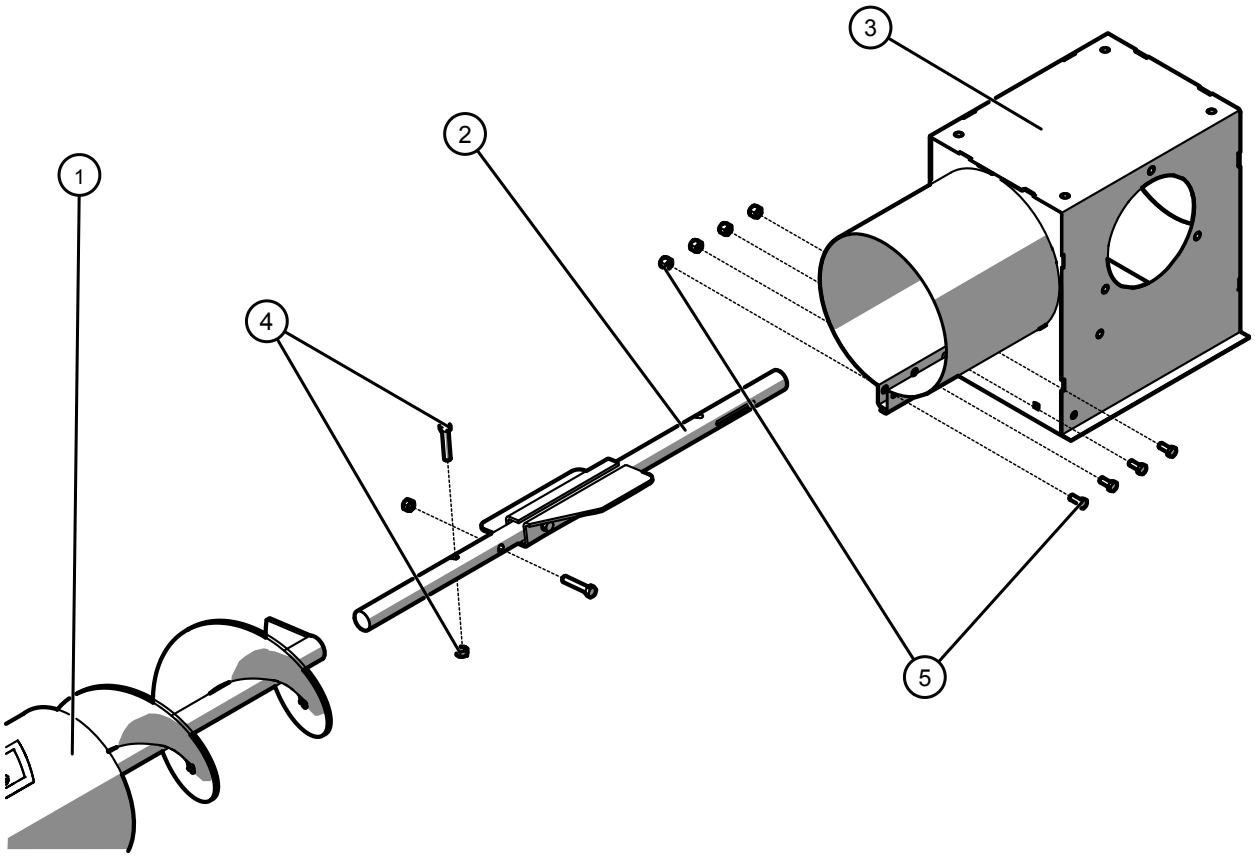
05′ Jumpster 716A-001A
10′ Jumpster 716B-001A
15′ Jumpster 716C-001A
20′ Jumpster 716D-001A

Extensions are available in two sizes:

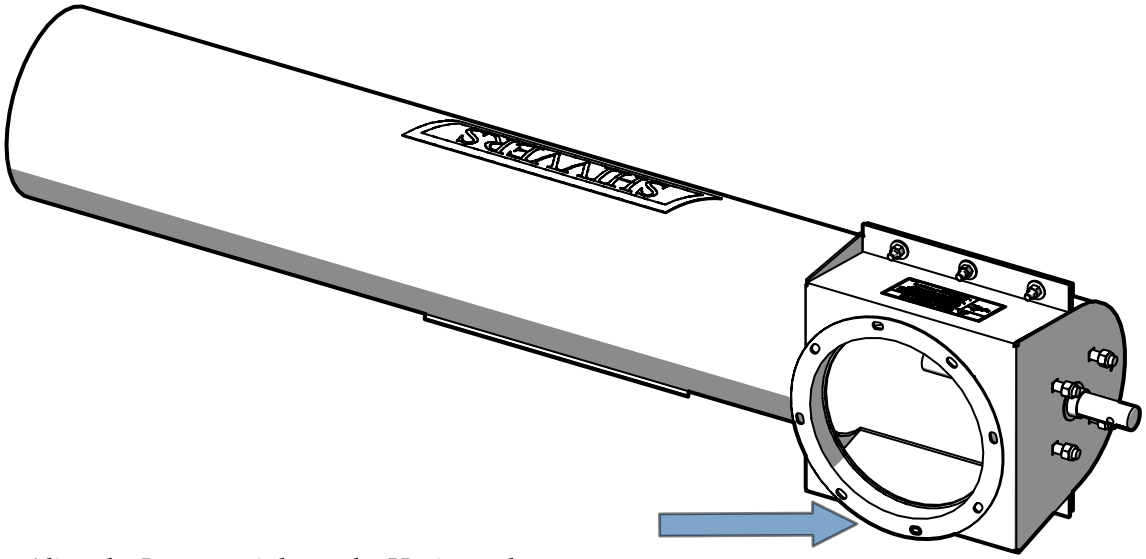
10′ - 716E-001A 10″ x 10′
20′ - 716F-001A 10″ x 20′

Parts List

Item No.	Part No.	Description	QTY.	Part Box/Sack
1	716A-001A 716B 001A 716C 001A 716D 001A	10″ Jumpster 5′ 10″Jumpster 10′ 10″Jumpster 15′ 10″Jumpster 20′	1	N/A
2	702-167A	Flipper Shaft	1	702G-001A
3	715-002W	Discharge Head Weldment 10″	1	715-001A
4	F-1073	3/8″-16X2″	2	Sack 702-123A in Parts Box 702G-001A
	F-1005-03	3/8″ Centerlocking Nut	2	
5	F-1015-28	3/8″ 1 3/4″	4	Sack 672-097A in Parts Box 715-001A
	F-1239	3/8″ Nyloc Nut	4	



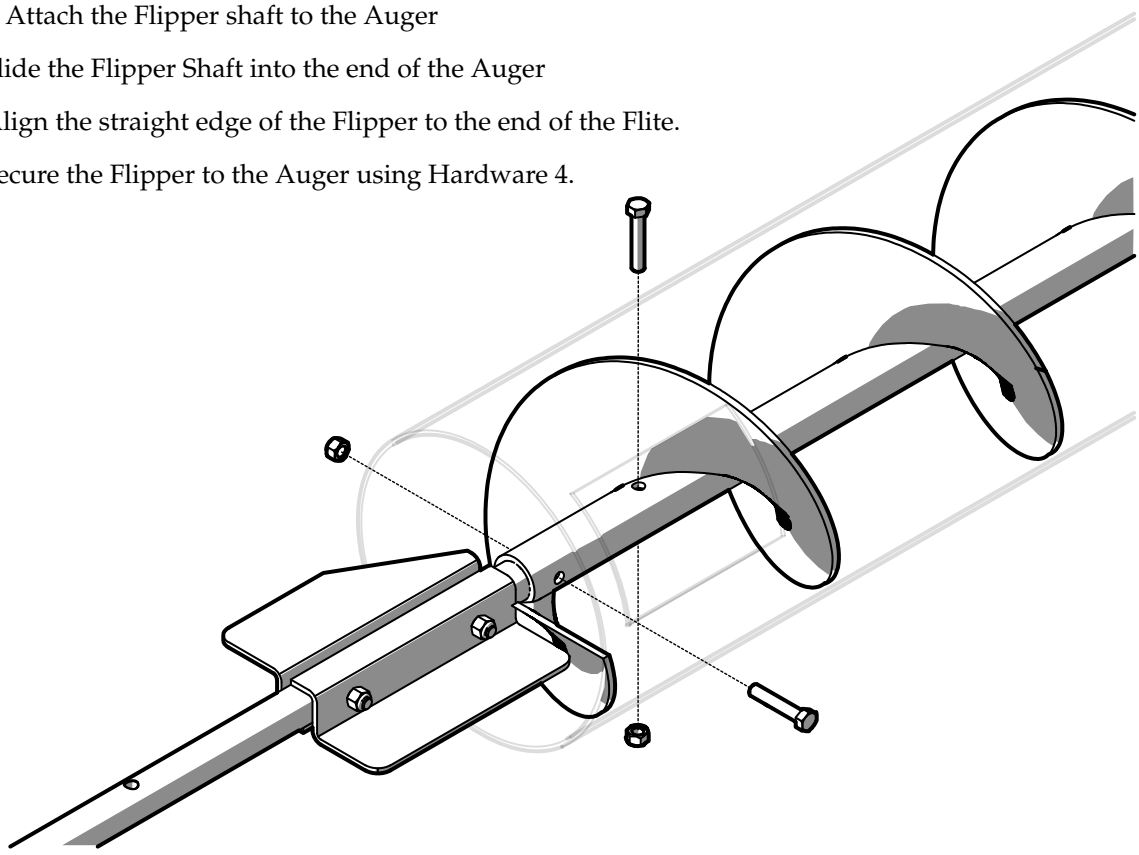
Jumpster Assembly



Step 1: Align the Jumpster inlet to the Horizontal output (Use attachments, if needed.)

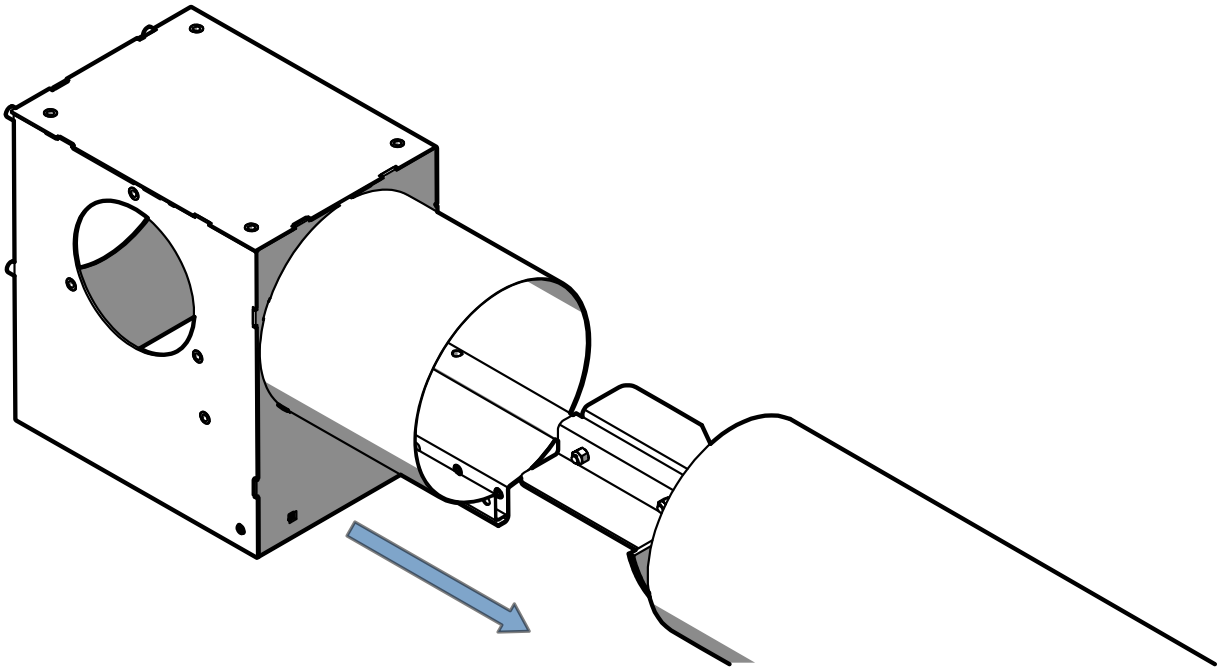
Step 2: Attach the Flipper shaft to the Auger

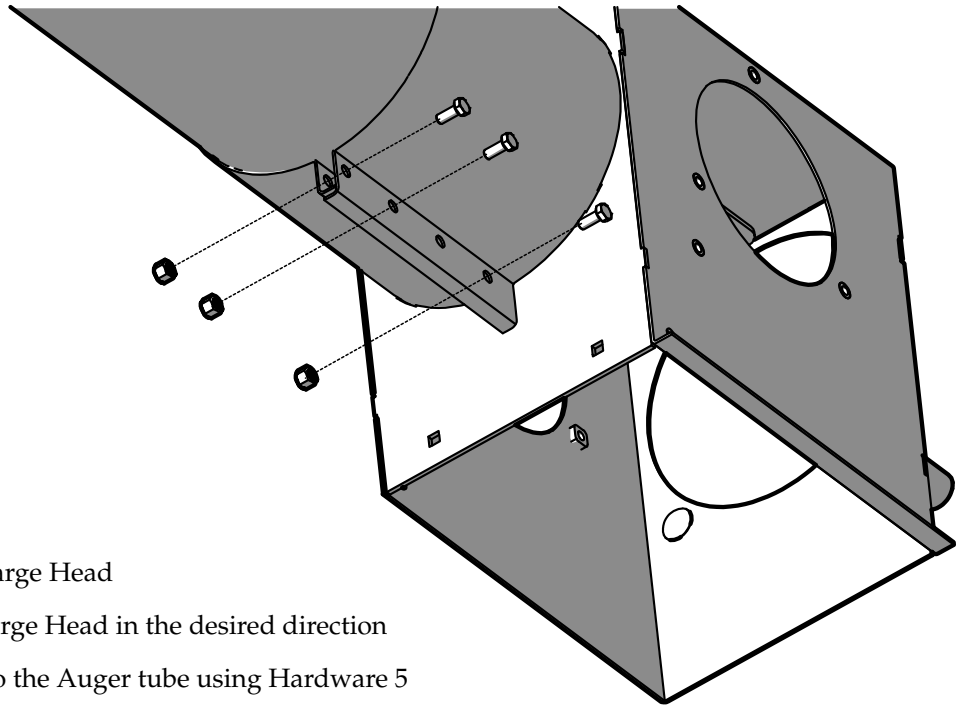
1. Slide the Flipper Shaft into the end of the Auger
2. Align the straight edge of the Flipper to the end of the Flite.
3. Secure the Flipper to the Auger using Hardware 4.



Step 3: Attach the Discharge Head to the Assembly

1. Slide the Discharge Head (3) over the Flipper and Auger.
2. Ensure the Sleeve goes over the Auger Tube.
3. Slide the Discharge Head until it is firmly against the Auger tube.

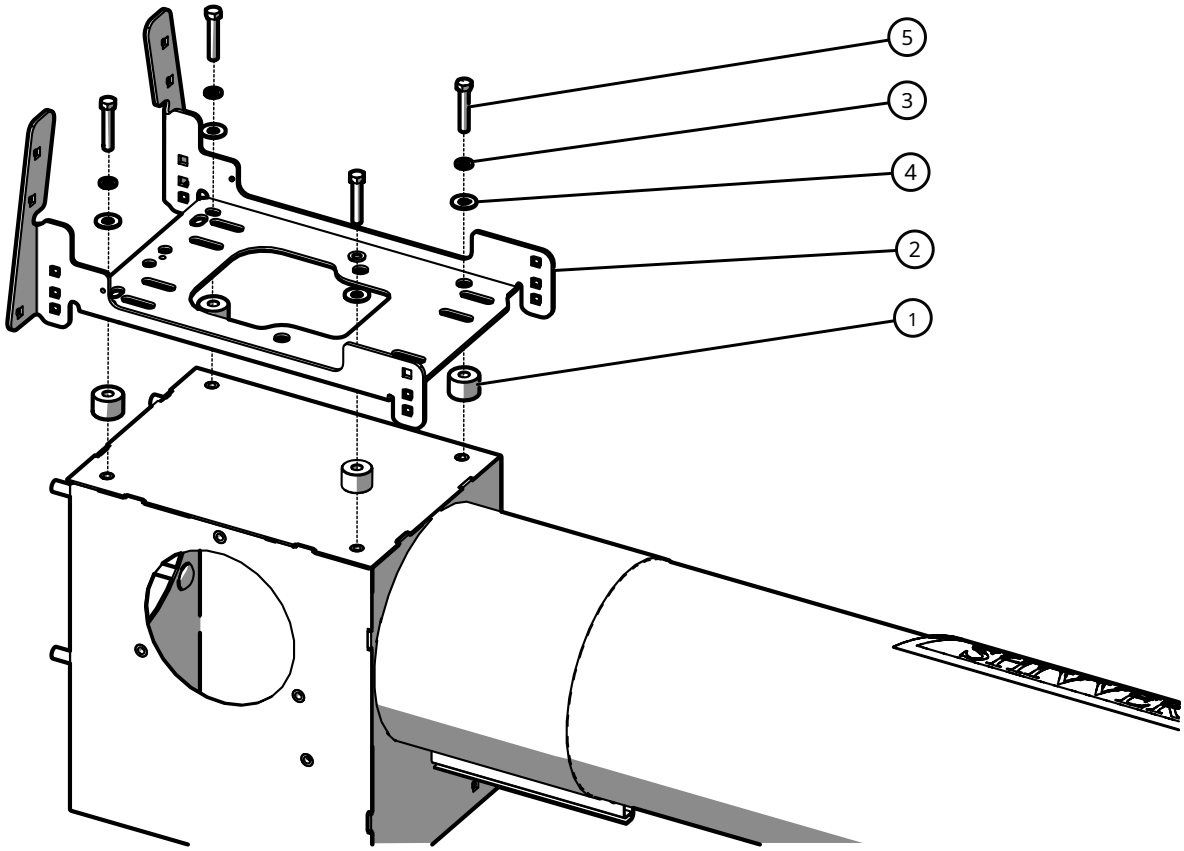




Step 4: Secure the Discharge Head

1. Position the Discharge Head in the desired direction
2. Secure the Sleeve to the Auger tube using Hardware 5

Jumpster Base Bracket Mount



Step 5: Mount the Base Bracket to the Discharge Head as shown.

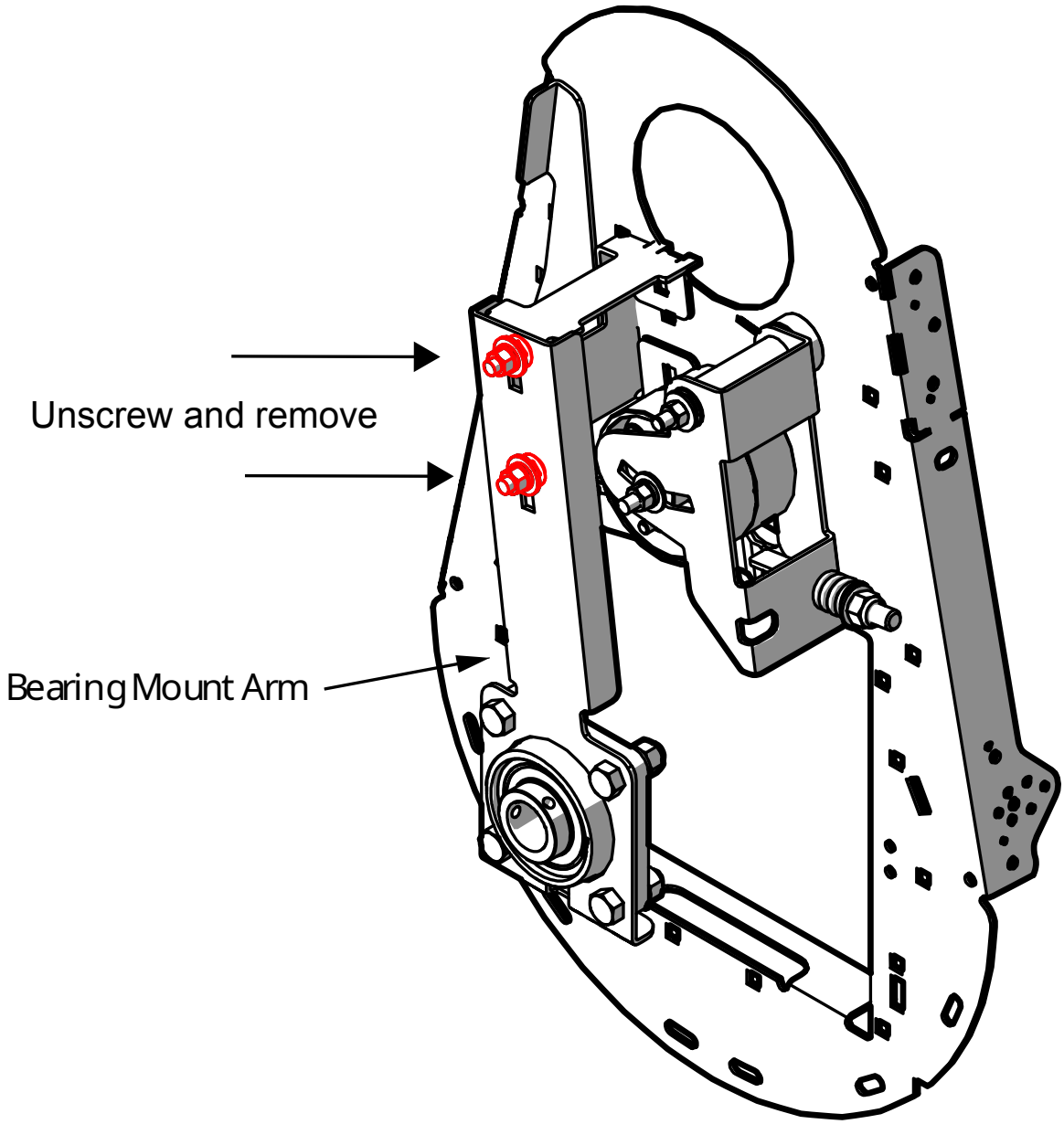
Item No.	Part No.	Description	QTY.	Part Box/Sack
1	702-112P	Spacer, Motor Mount	4	Sack 702-114A (702G-001A)
2	702-106P	CFTA/QRPH: Base Bracket, Jumpster	1	702G-001A
3	F-1019-03	Lockwasher, 3/8 heavy spring	4	Sack 702-114A (702G-001A)
4	F-1009-03	Washer, Flat, Std. Steel 3/8" W series	4	
5	F-1073	Capscrew, HX, 3/8-16 X 2, G5 Heat treated steel, Plated	4	

Jumpster Back Plate Mount

Step 6: Detach the Bearing Mount Arm from the Drive Assembly.

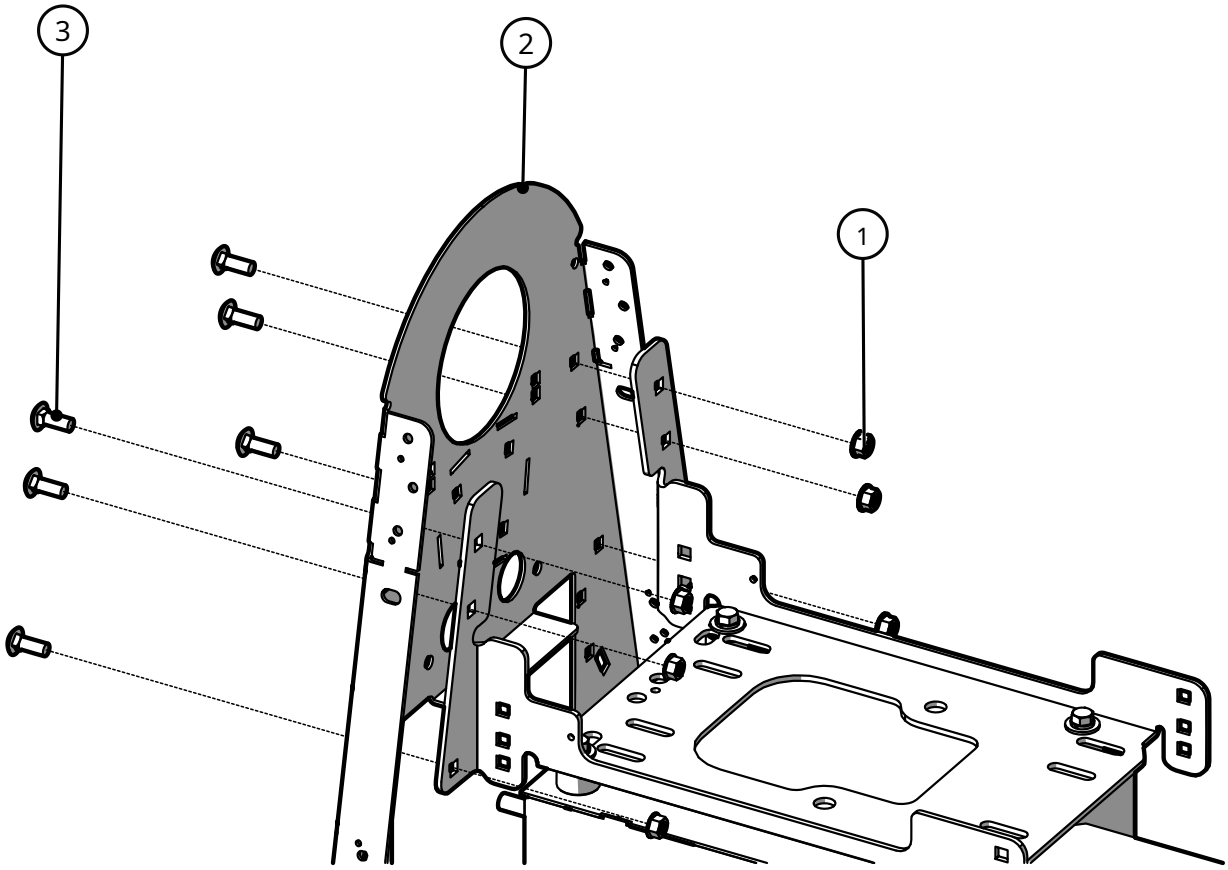
1. Remove the Drive Assembly with belt shield from Box: 702G-001A.
2. Unscrew the Nuts holding the Bearing Mount Arm to the Assembly.

The Bearing Arm Mount will be re-attached to the same mounting holes with the Pulley.



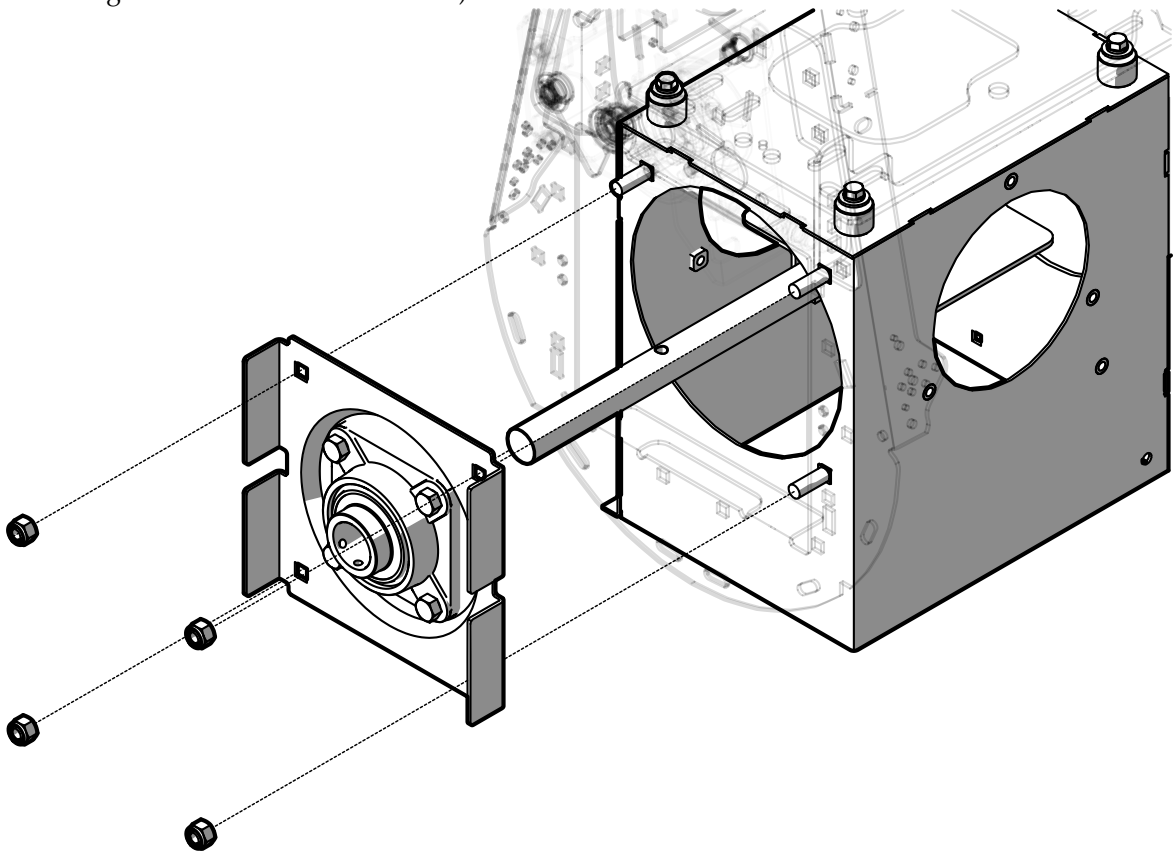
Step 7: Attach the QRPH Back Plate (Drive Assembly) to the QRPH Base Bracket using Hardware 1 & 3.

The Drive Assembly comes assembled with Hinges, Latch Kit and Belt Shield. **They may be omitted in some illustrations for clarity.**

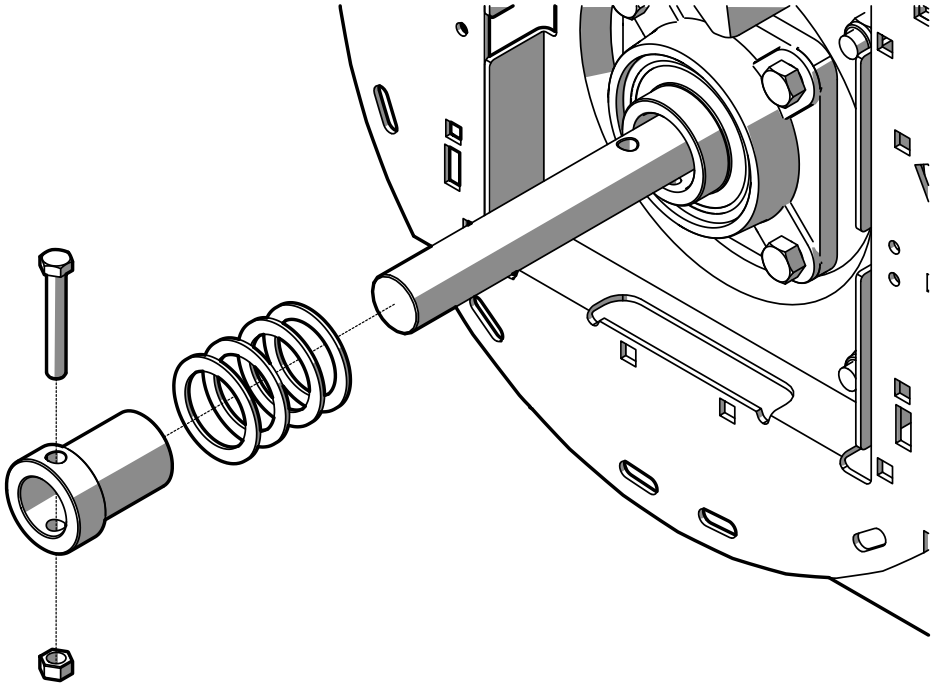


Item No.	Part No.	Description	QTY.	Part Box/Sack
1	F-1233	Flange Nut, 3/8-16 Hex, Serrated	6	Sack 702-113A
2	702-110P	CFTA/QRPH: Belt Drive Back Plate (702G)	1	
3	F-1274	Carriage Bolt, 3/8-16 X 1”LG GR5 Plated, Grade 5	6	Sack 702-113A

Step 8: Install the Bearing Assembly to the bolts on the Discharge Head using hardware from the Sack 702-123A in Box 702G-001A.
(Make sure the grease zerk is faced to the left.)



Step 9: Install bushing on the shaft. Use washers as needed to make sure it is tight against the bearing.
(Use hardware from the Sack 702-123A in Box 702G-001A)



Motor Mount

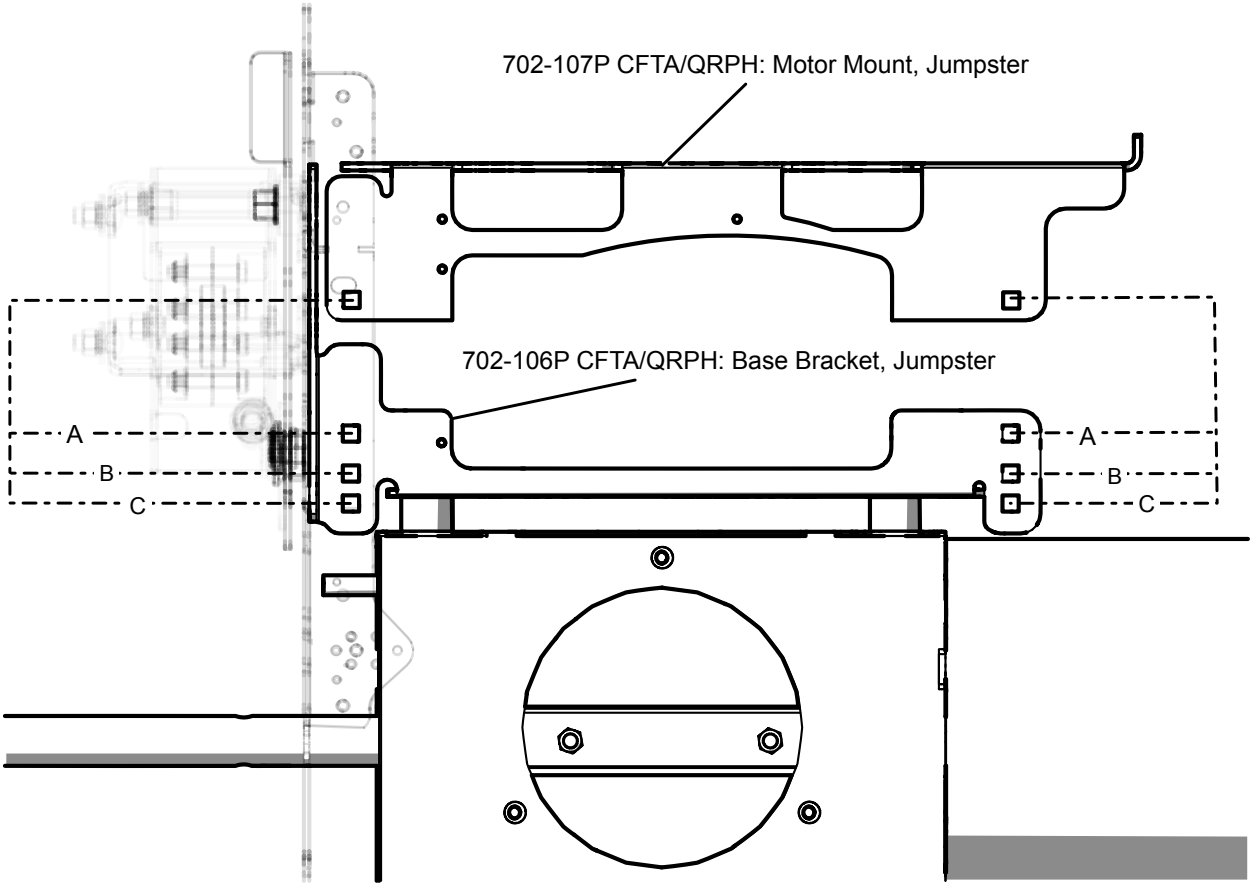
Step 10: Use the guide below to determine the motor mount holes to use.

1. Determine the required Motor Rating for the intended use of the Jumpster.

Jumpster Diameter, INCHES	10
Auger Speed, RPM	456

Incline Angle	0 Degrees						
Length, FT	10	15	20	30	40	50	60
Motor, HP	3	5	7.5	10	12.5 1P / 15 3P	15	20
Incline Angle	25 Degrees						
Length, FT	10	15	20	30	40	50	60
Motor, HP	5	7.5	10	12.5 1P / 15 3P	20	20	25
Incline Angle	35 Degrees						
Length, FT	10	15	20	30	40	50	60
Motor, HP	5	7.5	10	12.5 1P / 15 3P	20	25	25
Incline Angle	45 Degrees						
Length, FT	10	15	20	30	40	50	60
Motor, HP	5	7.5	10	12.5 1P / 15 3P	20	25	25
Incline Angle	90 Degrees						
Length, FT	10	15	20	30	40	50	60
Motor, HP	5	5	7.5	10	15	20	20

2. Determine the appropriate mounting holes to used based on the motor specifications.
3. Attach the Motor Mount to the Base Bracket using hardware F-1274 and F-1011-03 from sack 702-114A.

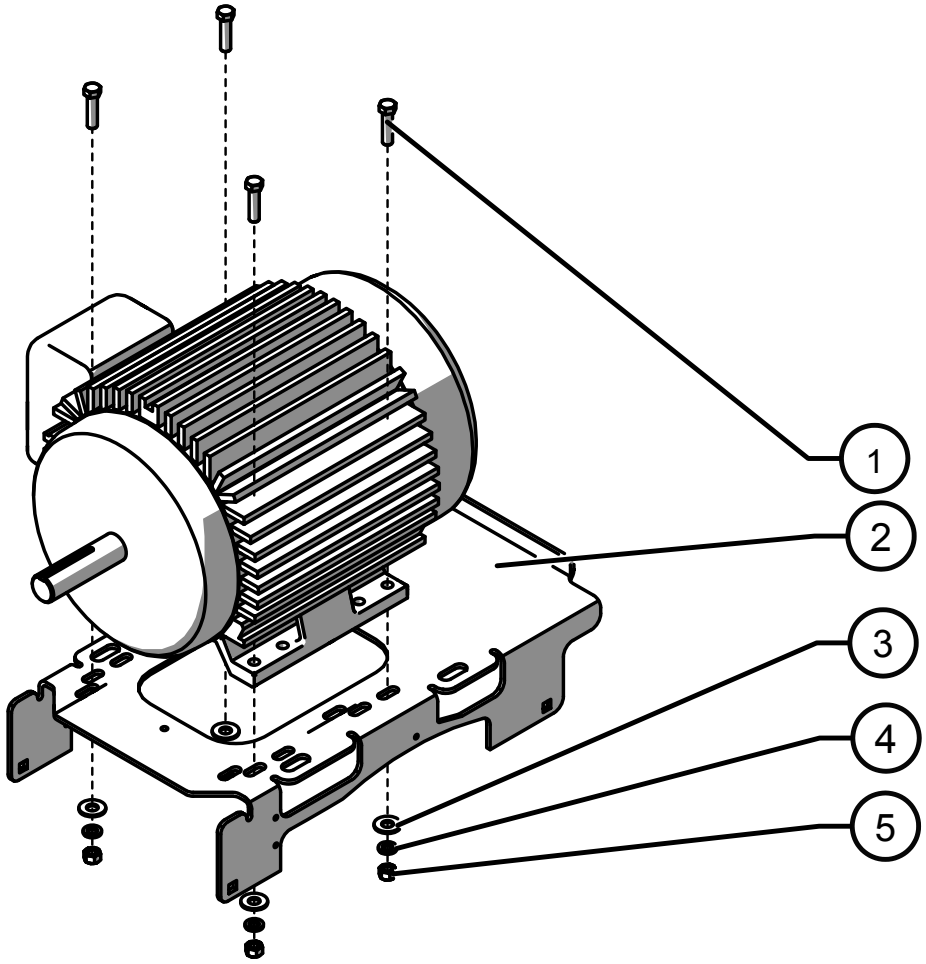


Single Phase			
Motor, HP	Motor Shaft Centerline	Motor Frame	Mount Setting
5	5.25	215T	B
7-1/2	5.25	213T	B
10	5.25	215T	B
12-1/2	5.25	215T	B
Three Phase			
5	4.5	184T	A
7-1/2	5.25	213T	B
10	5.25	215T	B
15	6.25	254T	C
20	6.25	256T	C

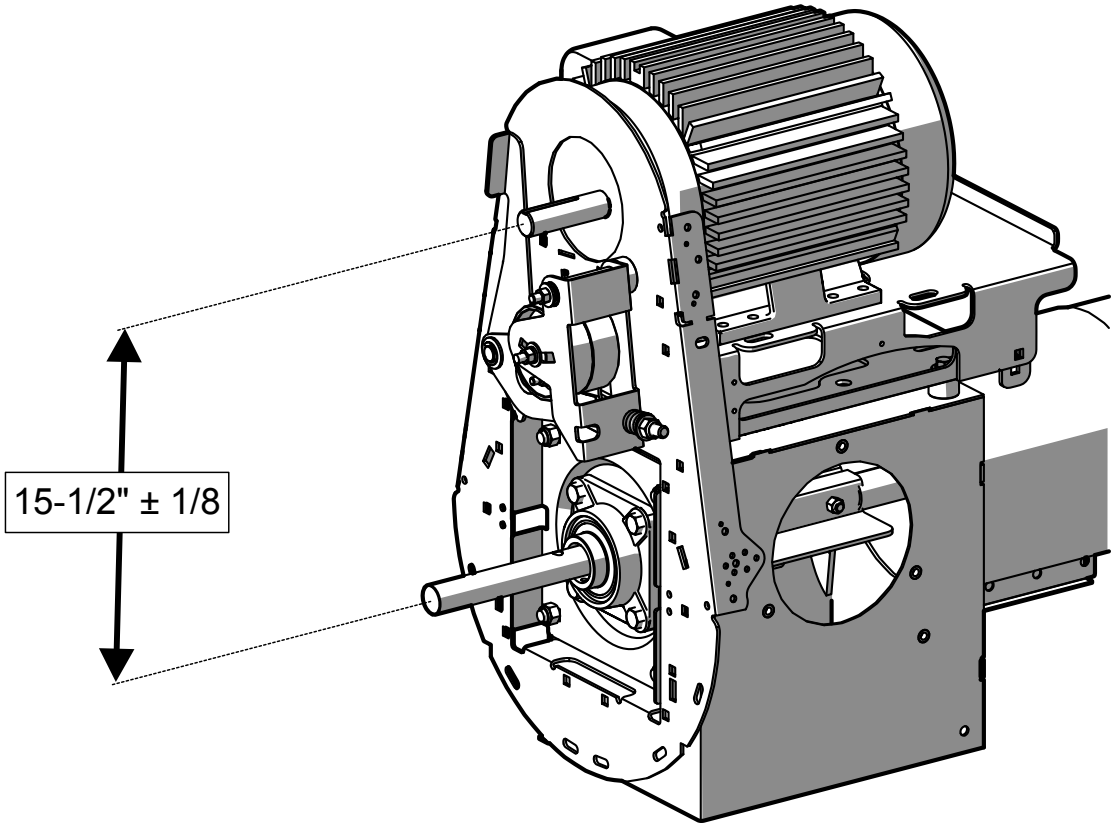
4. Mount the Motor to the Motor Mount using hardware from sack 702-114A.

   Use a winch or lift to align the motor to the mount holes.

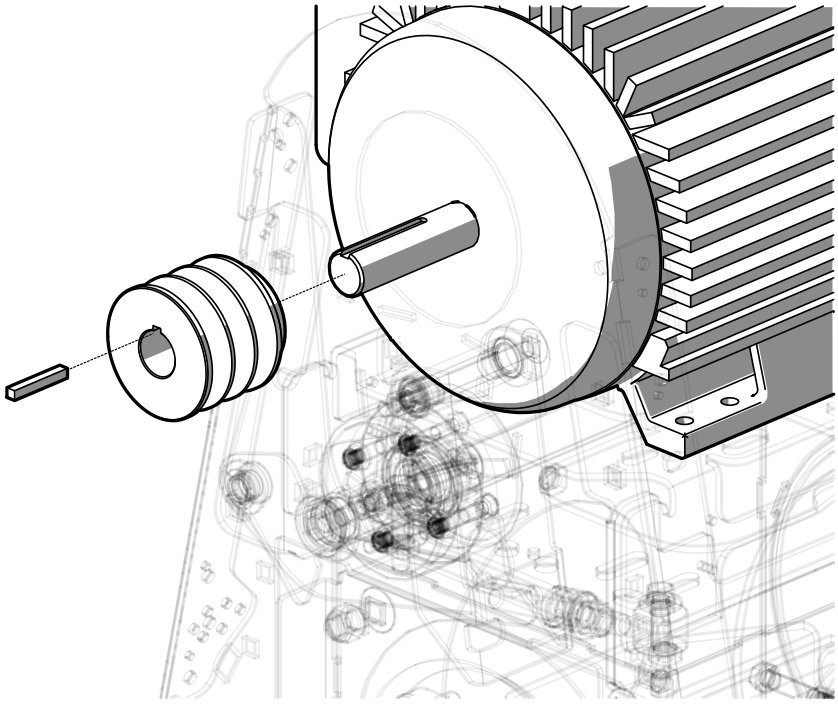
   Ensure that the center to center distance between the Motor Shaft and the Auger Shaft is $15 - 1/2'' \pm 1/8''$.



Item No.	Part No.	Description	QTY.	Part Box/Sack
1	F-1015-27	Capscrew, HX, 3/8-16×1-1/2″	4	702-114A
2	702-107P	CFTA/QRPH: Motor mount, Jumpster	1	-
3	F-1009-03	Washer, Flat, STD. Steel, 3/8″ W Series	4	702-114A
4	F-1019-03	Lockwasher, 3/8 Heavyspring, yellow plated	4	
5	F-1011-03	Hex Nut, 3/8-16 UNC-2B Yellow Plated	4	

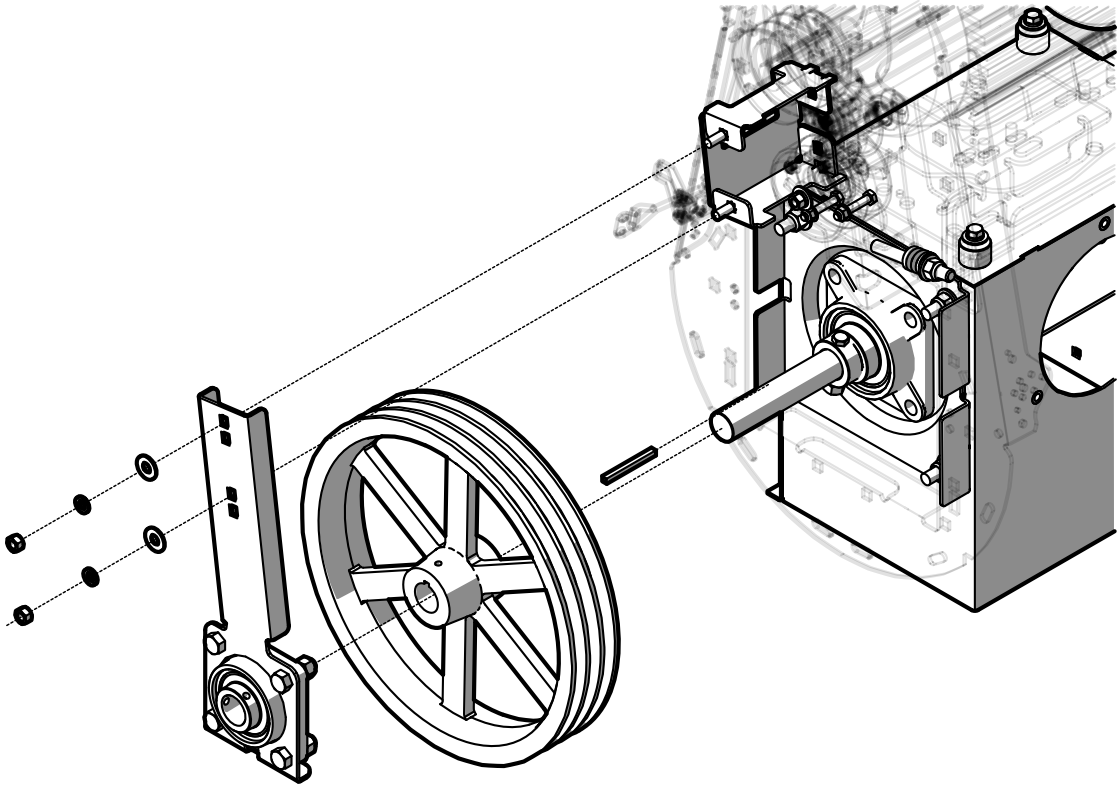


5. Install a 4", 3 Groove AB Pulley onto the motor shaft. (Use Anti-seize to prevent seizing)



Step 11: Install the 15″ 3 Groove AB Aluminium Pulley.

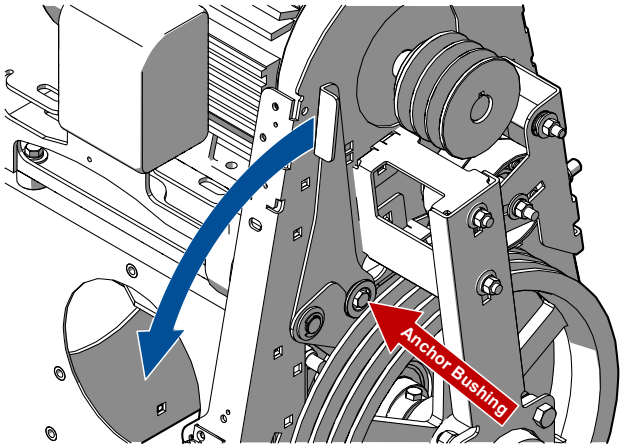
1. Install 1/4″ × 1/4″ × 2-3/4″ Key onto the Flipper Shaft.
2. Slide the Pulley onto the Shaft, ensuring the long end of the hub faces outwards.



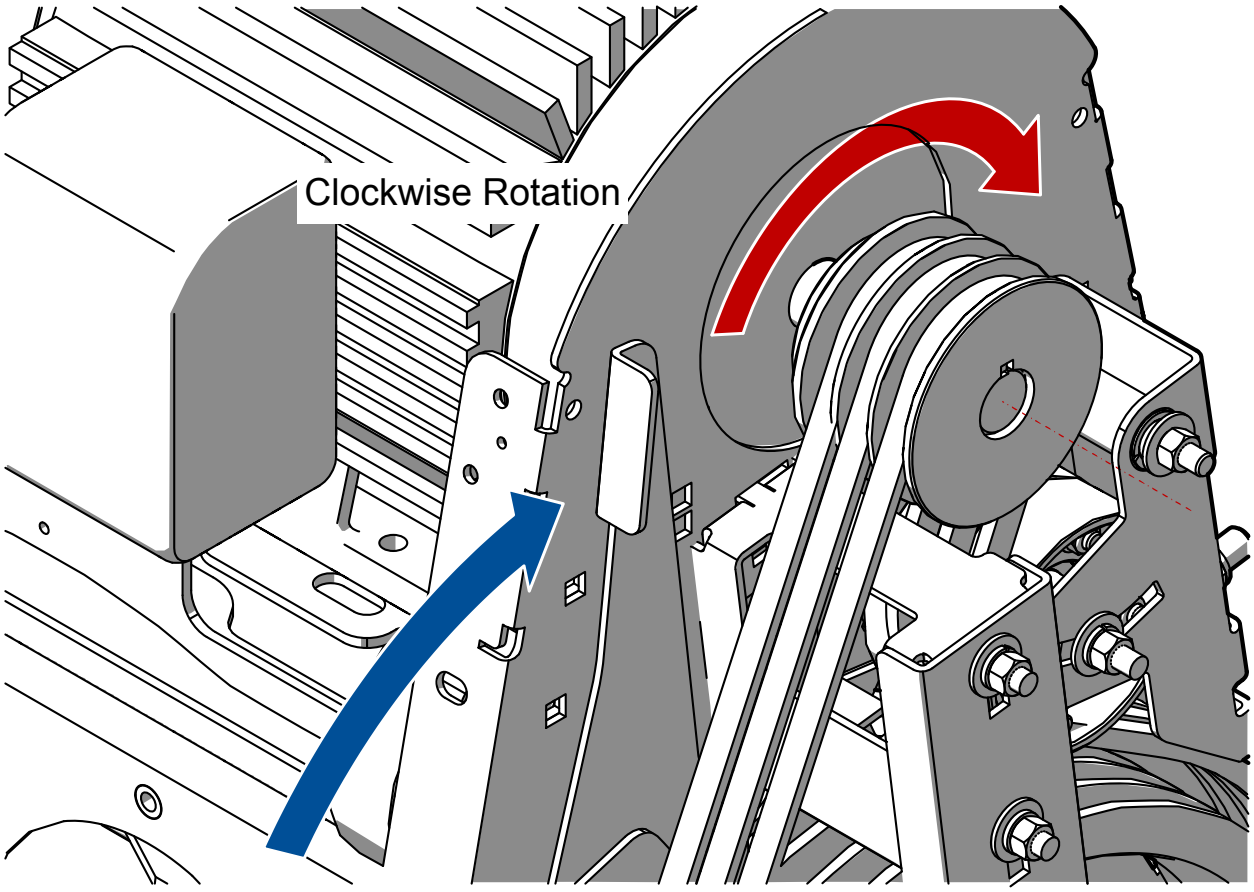
3. Slide the Bearing Mount Arm after the pulley.
   If needed, use a Drift Pin in the Upper Hole to align the Bearing to the Flipper Shaft.
4. Align the pulleys with 1-1/8″ to 1-1/4″ between the back plate and the back of the pulleys. Leave setscrews loose until belts are installed.

Step 12: Install V-Belts.

1. Pull down the Tensioning Linkage.



2. Install the 3 BX-62 V-Belts around the Pulleys.
3. Adjust Pulleys such that the belts are aligned straight.
4. Adjust the Idler Pulley and Tensioning linkage to tighten the V-Belts.
   If necessary, re-adjust the position and linkage to provide the necessary clearance.
5. Apply Grease to the Tensioning Linkage, where it contacts the Anchor Bushing (Straight short Arrow, Page 13), to prevent wear.
6. Push the Tensioning Linkage back into position.

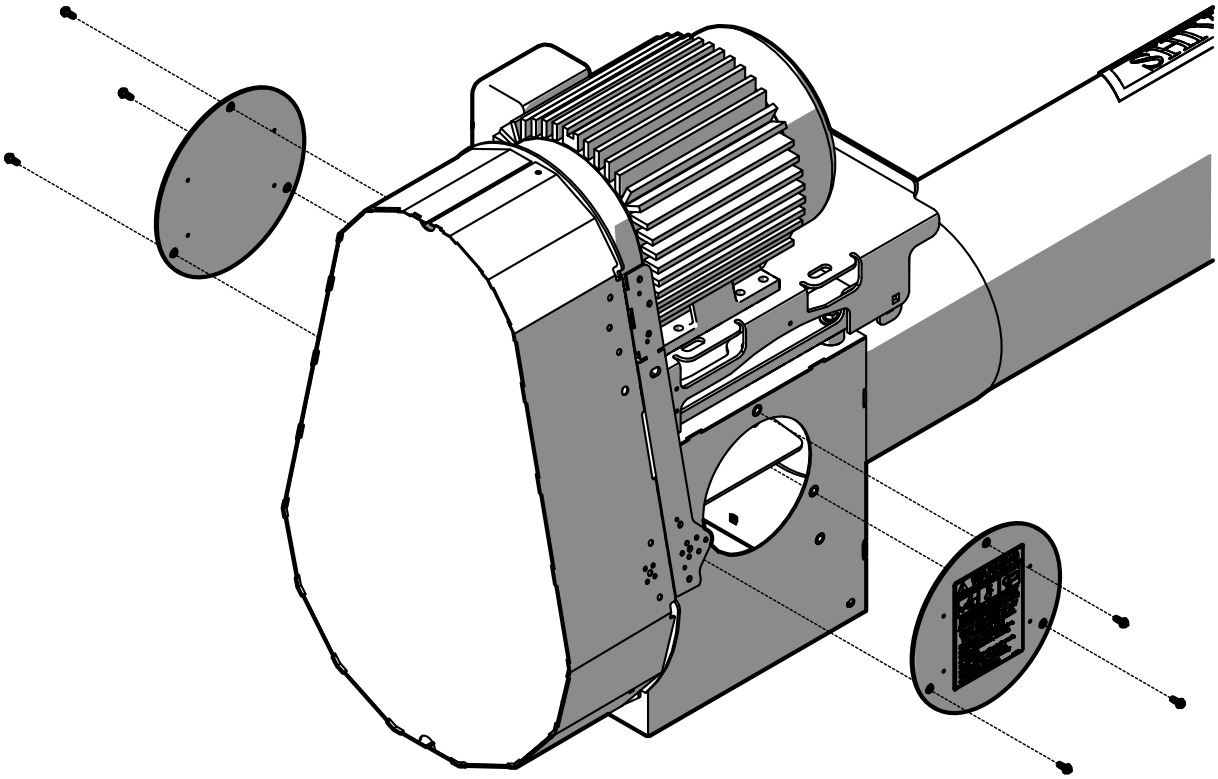


Step 13: Verify Clockwise Rotation of the Motor.

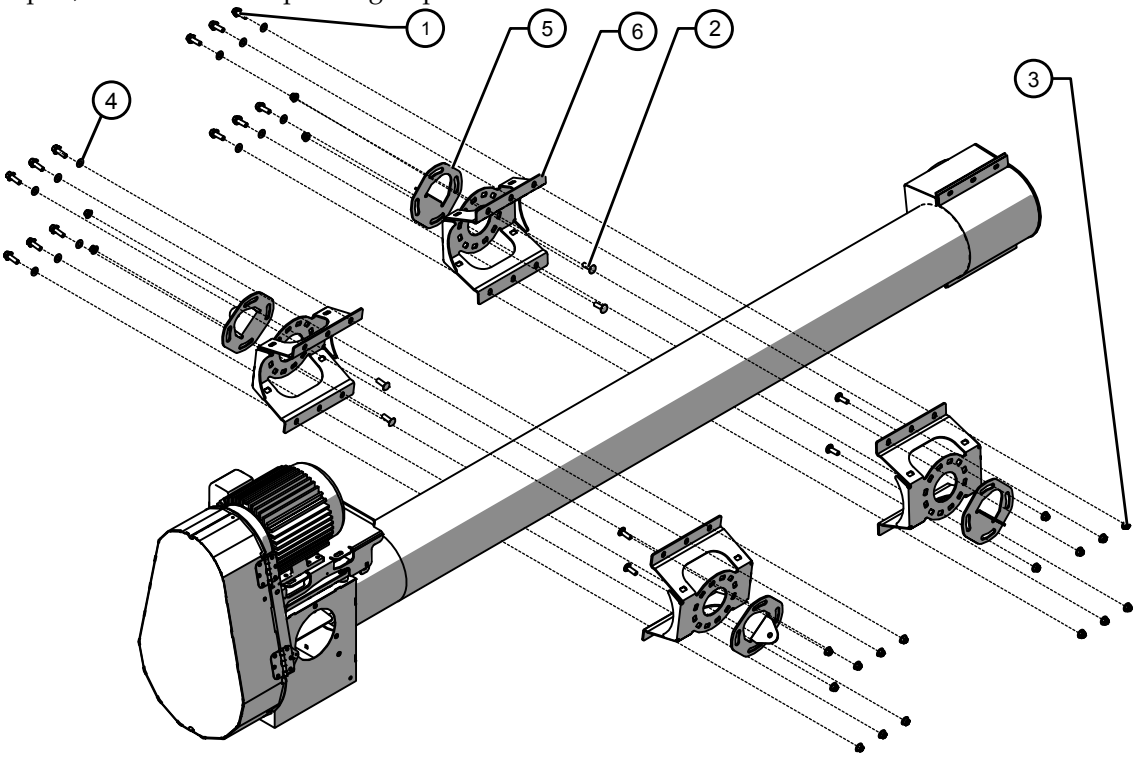
1. Connect Electrical Wiring according to the Motor configuration.
   All wiring is to be done by a Licensed Electrician
2. Turn the motor **ON and OFF quickly** and check the rotation.

   MAKE SURE NO ONE IS NEAR THE PULLEYS
3. While the Pulleys are rotating, verify that the V-Belts are aligned.
   (Make adjustments, only after **Turning OFF** the motor, if necessary.)
4. Tighten Setscrews to secure the pulleys.
5. Close and fasten the Belt Guard securely with its Latch.

Step 14: Attach Power Head Plates to the Discharge Head. Use Hardware F-1231 from Sack 672-097A.



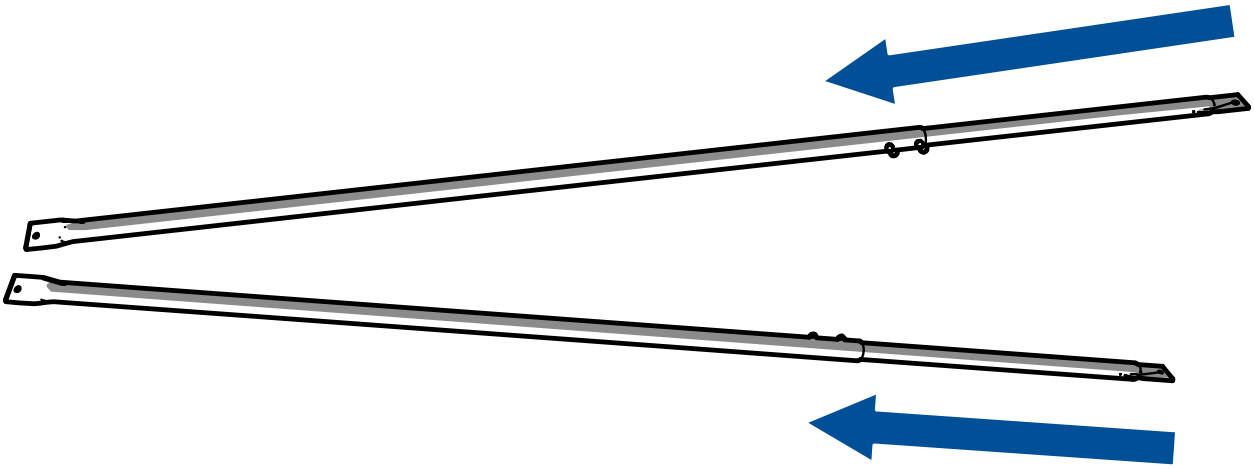
Step 15 A: Prepare the Jumpster Brace Leg Kits. (See Step 15 B for Vertical Bipod)
The steps below are for Jumpsters requiring 2 Support Leg Kits. For Jumpsters only requiring the Lower Bipod, follow the corresponding steps.



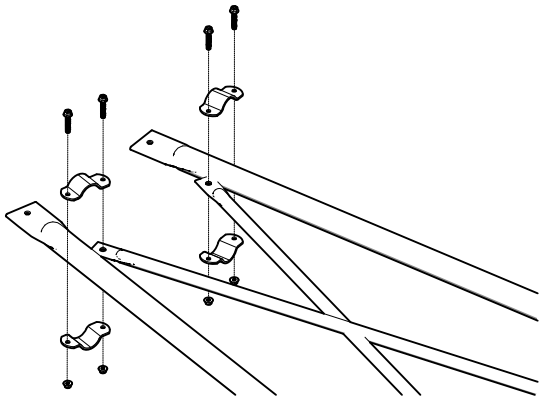
Leg Kit Assembly

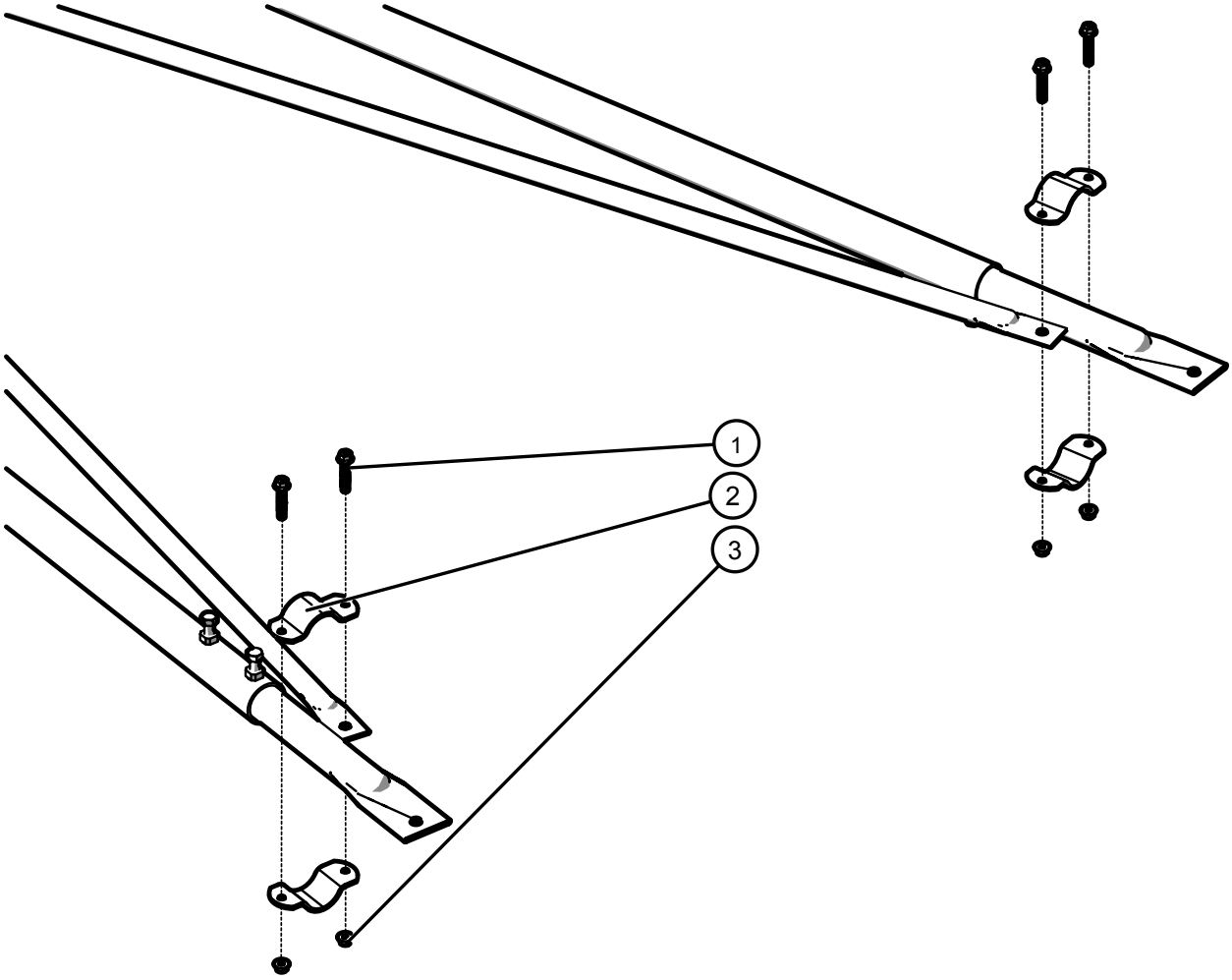
Item No.	Part No.	Description	QTY.
1	F-2140 (L)	HFCS: 1/2-13×1-1/2″	6
	F-1526 (U)	HHCS: 1/2-13×1-1/2″	6
2	F-1965	Carriage Bolt: 1/2-13×1-1/2″	8×2
3	F-2152	Nyloc Nut: 1/2-13	14×2
4	F-1009-05	Flat Washer: 1/2″	8×2
5	273-087P	Base (Foot)	2×2
6	715-012P	Support Bracket: 10″	2×2

1. Attach the 10″ Support Brackets on the Jumpster as shown in previous image. Tighten loosely to allow movement.
2. Slide the Lower Leg Tubes into the Upper Leg tubes, making 2 sets of Upper and Lower Leg Tubes.



3. Attach the Tube Clamps with the Cross Tubes onto the Leg tubes as shown in the images.



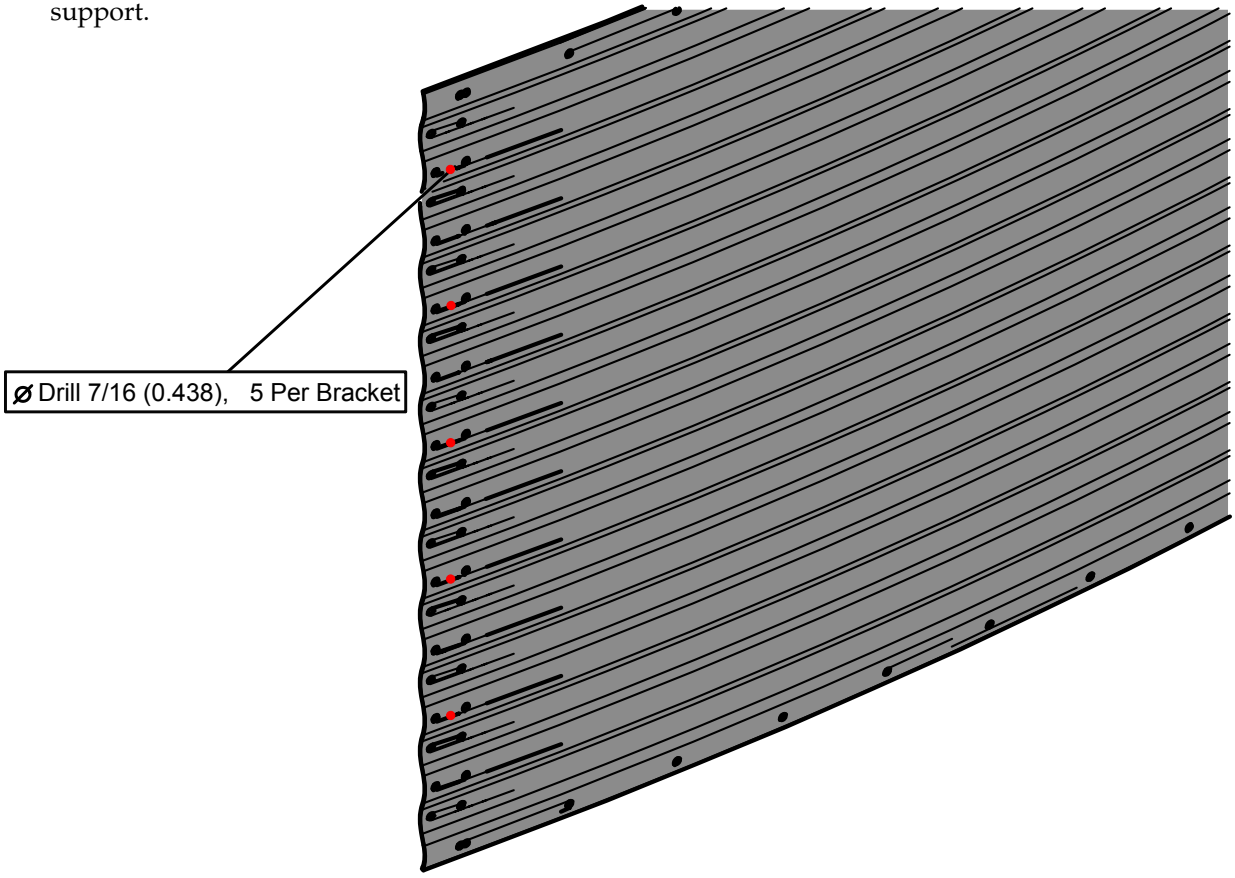


Item No.	Part No.	Description	QTY.
1	F-2055 (Lower Bipod)	HFHCS: 3/8-16 × 2″	8
	F-1015-28 (Upper Bipod)	Capscrew 3/8-16×1-3/4	8
2	273-050P	Leg Tube Clamp	8×2
3	F-2151	Nyloc Nut, HF: 3/8-16	8×2

4. Repeat Step 2 and 3 for the Upper Bipod.

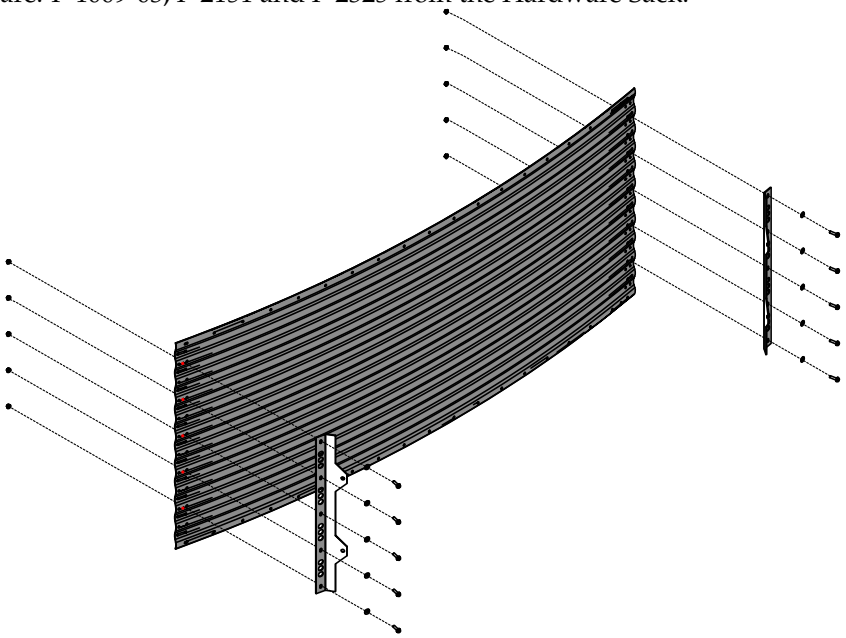
5. Drill five 7/16" (0.438) Holes at the seams of the Bin Panel, at the desired position for mounting the upper bipod.

   Ensure that the holes are at the seams, between the columns of bolts, to ensure maximum structural support.

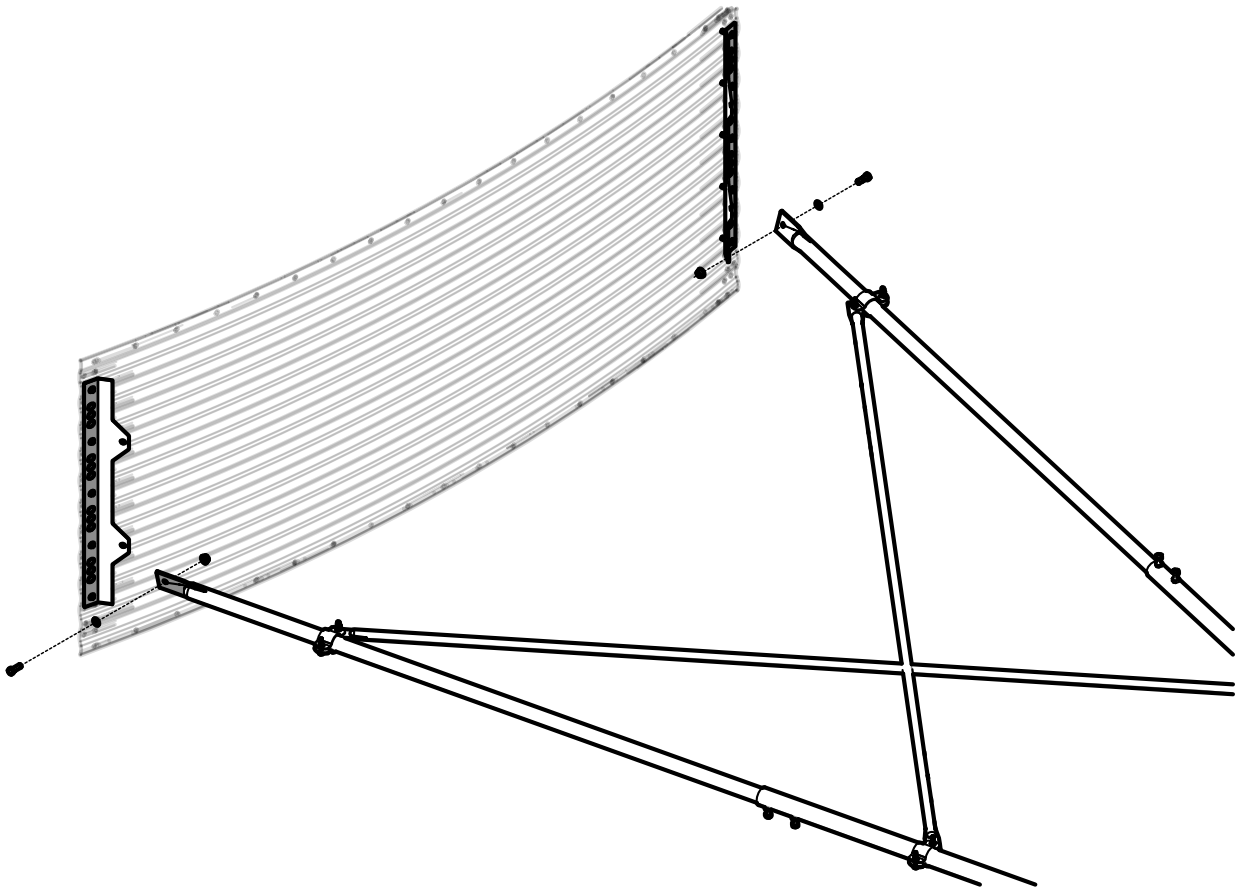


6. Mount the Angle Brackets to the Bin at the Seams of the Corrugated sheets.

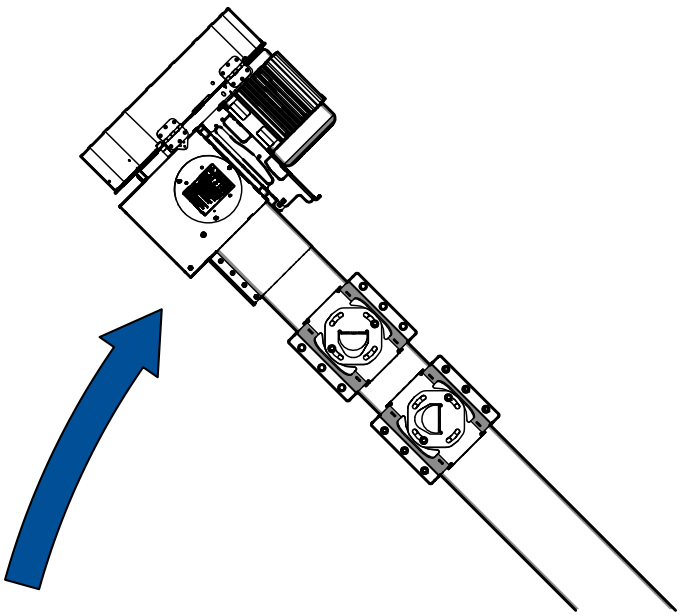
   Use Hardware: F-1009-03, F-2151 and F-2325 from the Hardware Sack.



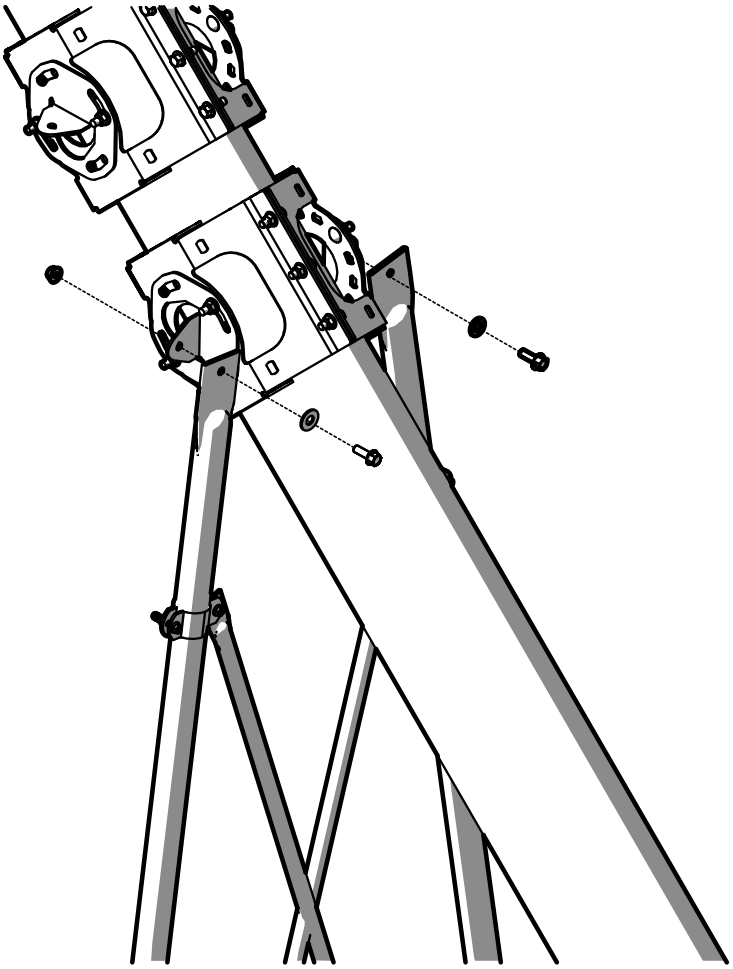
7. Attach the lower legs of the upper bipod to the angle brackets. Leave the nuts slightly loose to allow the upper bipod to swivel into position.



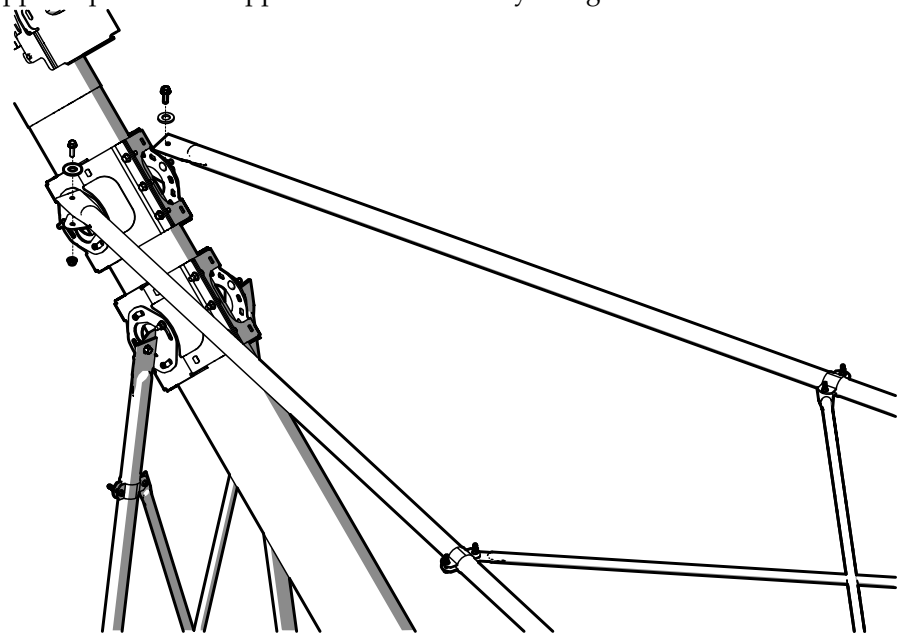
8. Raise the Jumpster to the desired position.



9. Attach the Lower legs to the Support Bracket Assembly using F-2140 from the Hardware sack and tighten slightly.



10. Attach Upper Bipod to the Support Bracket Assembly using Hardware.



11. Tighten the Set Screws on the Upper Legs of the Bipods, Tube Clamps and Support brackets to secure the Jumpster in the desired position.

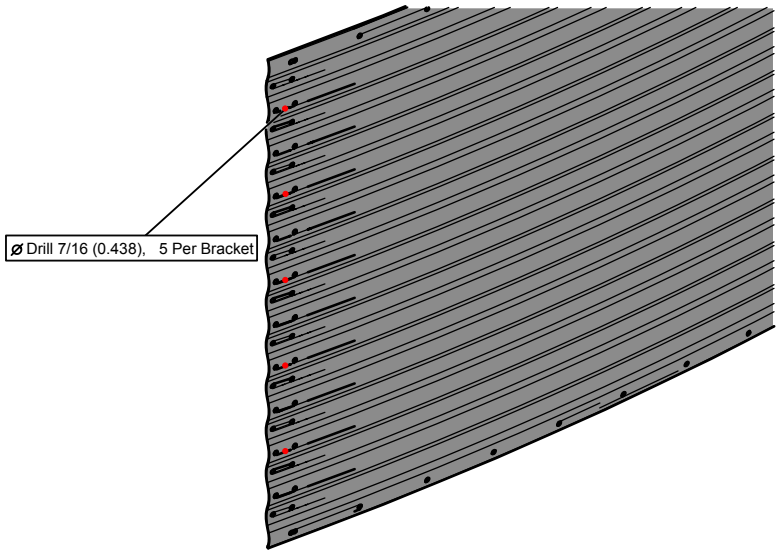
Step 15 B:
For Jumpsters 10ft or shorter, we recommend using one Vertical Bipod Kit. Jumpsters 15 ft or Longer, we recommend using 2 Kits.

1. Attach the Support Brackets on the Jumpster. (Use the image for Step 15 A.1 as reference).

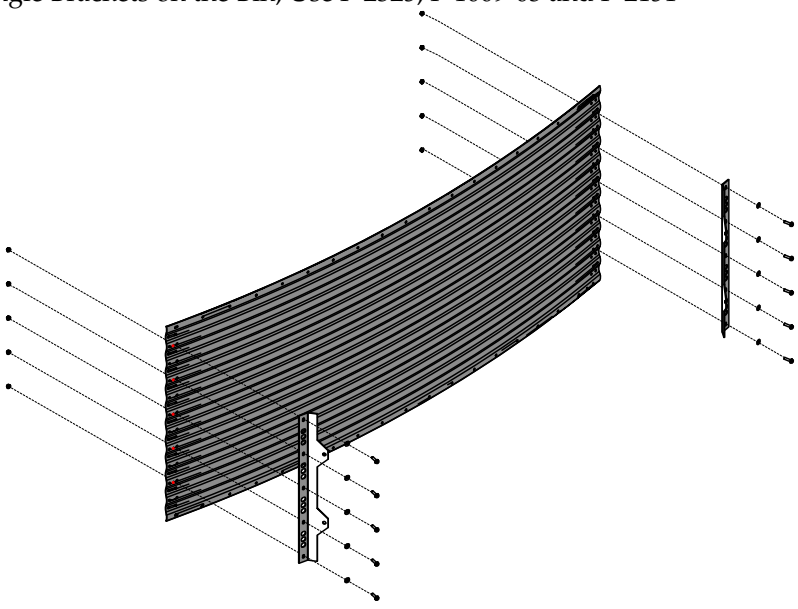
   Use hardware F-2140, F-1009-03, and F-2152 from the Vertical Bipod Hardware Sack. Ensure a washer is placed on both the bolt and nut during assembly.

2. Attach the Base on either side of the Support Bracket Using F-1965, F-1009-05 and F-2152 from the Hardware Sack.

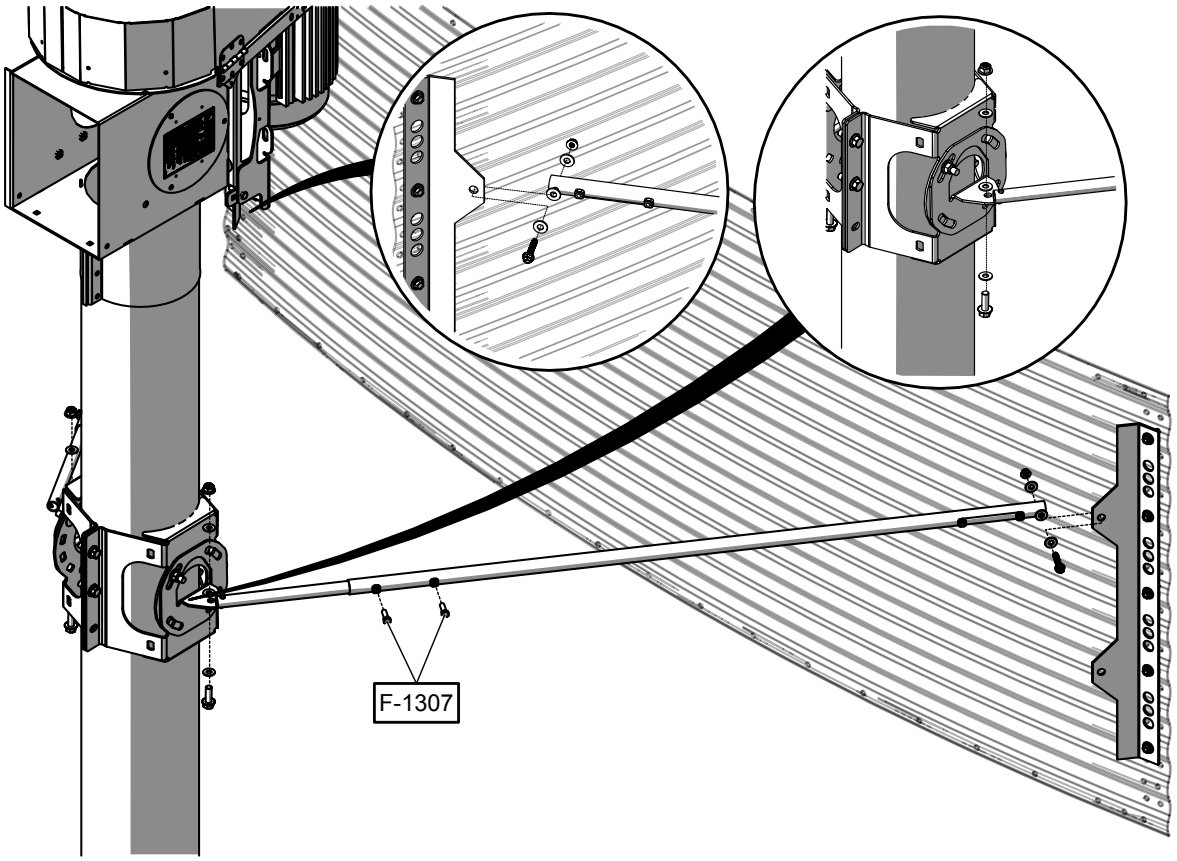
3. Drill the Mounting Holes on the Bin. Ensure the holes are placed on the seam for every Angle Bracket.



4. Mount the Angle Brackets on the Bin, Use F-2325, F-1009-03 and F-2151



5. Slide the Inside Support Leg into the Outer Support Leg. (275D - 002W / 275D - 004P)



6. Use F-2055, F-1009-03 and F-2151 from Hardware Sack to secure the Inside support Leg to the Angle Bracket.

   Ensure that Washers are placed as shown in the image.

7. Raise the Jumpster to the Vertical position.

8. Use F-2055, F-1009-03 and F-2151 to secure the Outside Support Leg to the Feet on the Support Bracket.

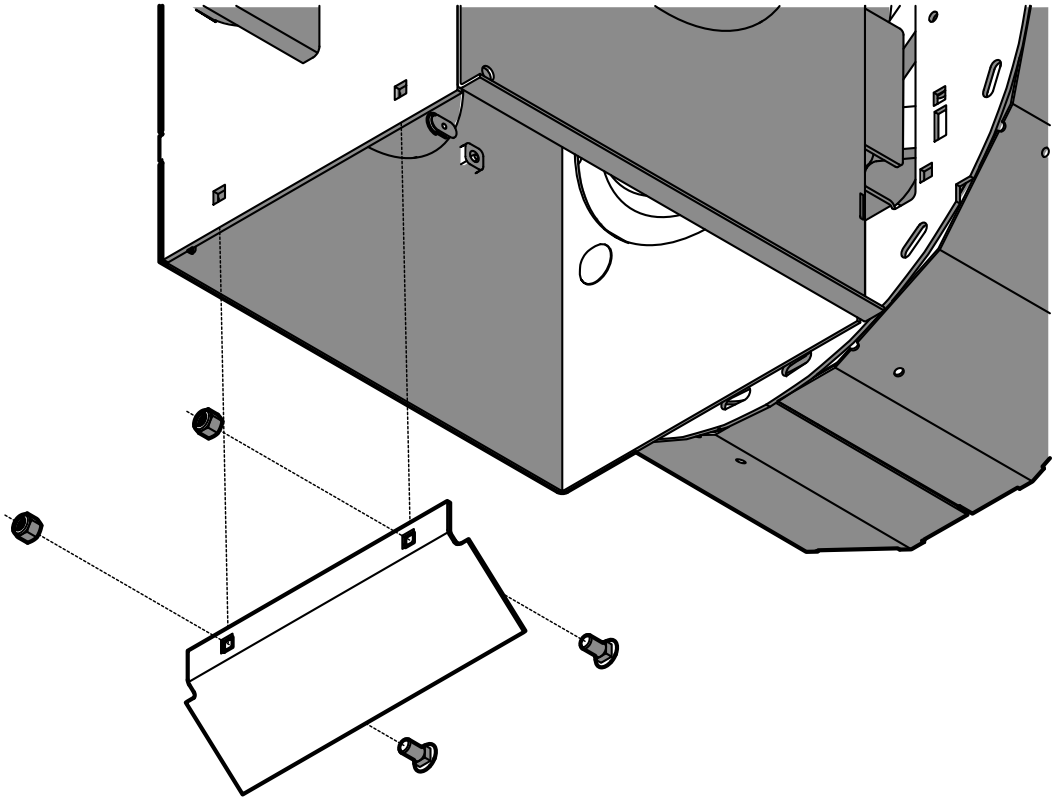
9. Insert and Tighten the setscrews in the Outer Support Leg. (F-1307)

For Jumpster 15′ or longer, repeat the steps with the second kit.

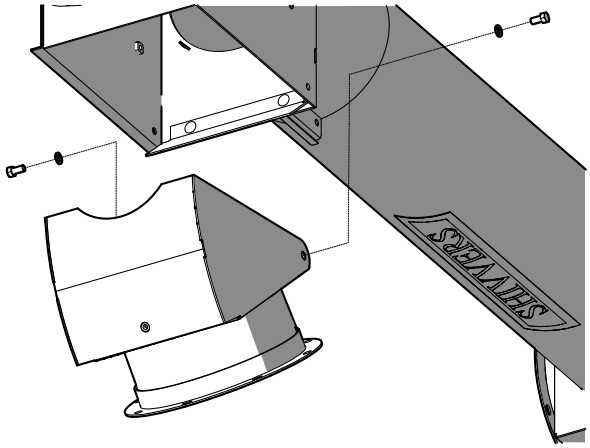
Tilt Spout Attachment

Step 16: Attach the Tilt Spout Weldment to the Discharge Head

1. Attach the Inner Angle to the Discharge Head using hardware.
   (2 Sets of F-1008-23 and F-1239 from Sack 702-114A)

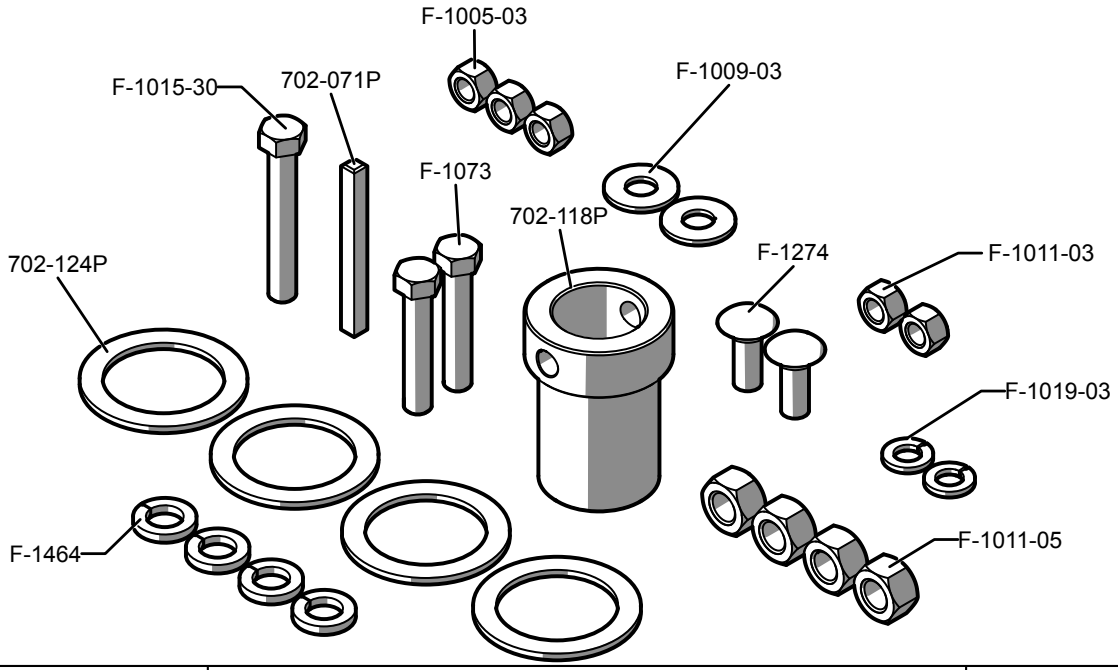


2. Mount the Tilt Spout Weldment using Hardware F-1015-23, F-1019-03 and F-1239 from Sack 702-114A on either side and screw on loosely.
3. Adjust the Tilt Spout to the angle you want the grain to be discharged.
4. Tighten Hardware to secure parts in the position.



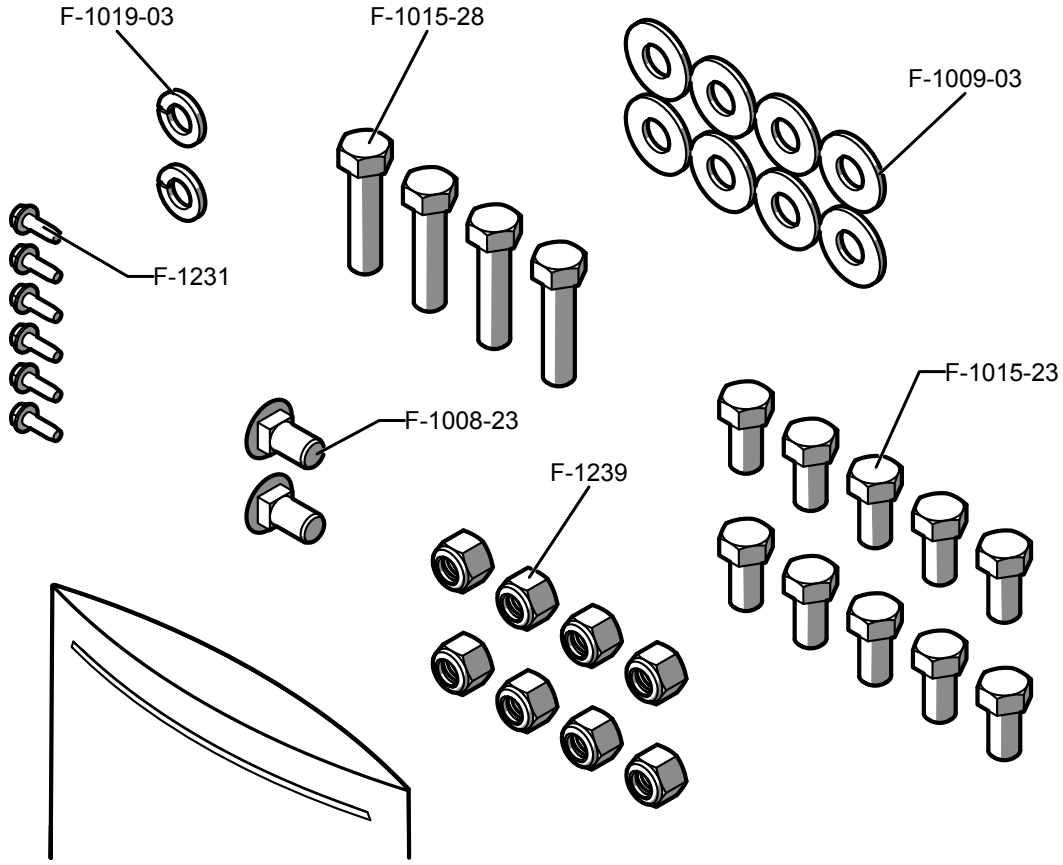
HARDWARE SACKS

Hardware Sack 702-123A, Flipper Hardware, Jumpster



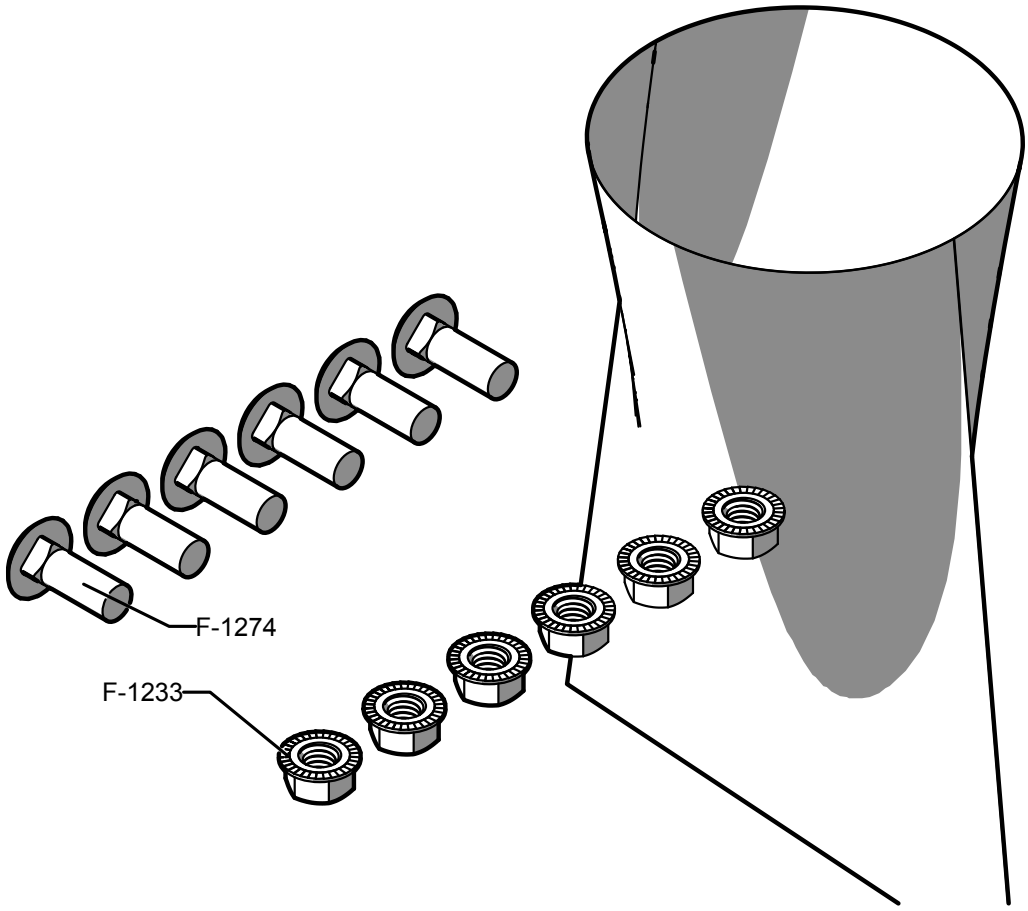
Part No.	Description	QTY.
F-1005-03	3/8-16 Hex Nut	3
702-071P	Key, 1/4×1/4×2.75″	1
F-1015-30	3/8-16×2-1/2″ Capscrew, HX	1
702-124P	Washer	4
F-1464	Lockwasher, 1/2″	4
F-1011-05	1/2-13 Hex Nut	4
F-1019-03	3/8″ Lockwasher	2
F-1011-03	3/8-16 Hex Nut	2
F-1274	3/8-16×1″ Carriage Bolt	2
F-1009-03	3/8″ Flat Washer	2
702-118P	Flipper Shaft Bushing	1
F-1073	3/8-16×2″ Capscrew, HX	2

Hardware Sack 672-097A, Discharge Head, Jumpster



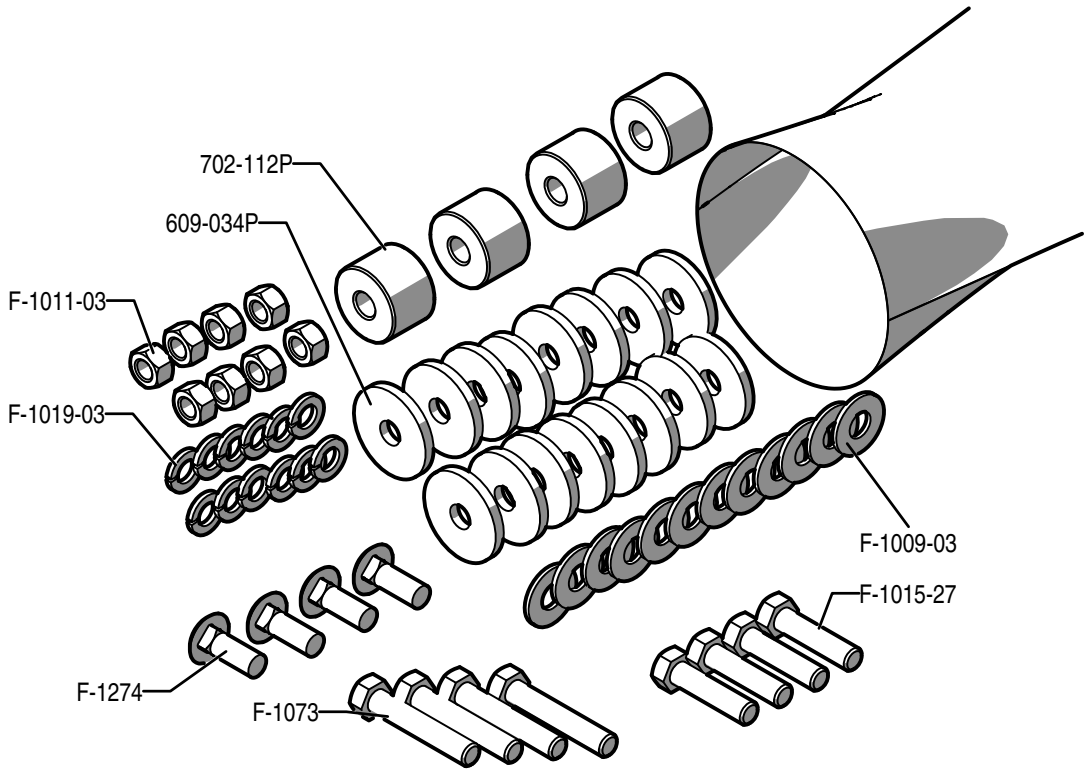
Part No.	Description	QTY.
F-1015-28	3/8-16×1-3/4″ Capscrew, HX	4
F-1019-03	3/8″ Lockwasher	2
F-1231	#8 Sheet Metal Screw, 1/2″, Self Drilling	6
F-1008-03	3/8-16×3/4″ Carriage Bolt	2
F-1239	3/8-16 Nyloc Nut, HX	8
F-1015-23	3/8-16×3/4″ Capscrew, HX	10
F-1009-03	3/8″ Flat Washer	12

Hardware Sack 702-113A - Base Bracket Mount, Jumpster/QRPH



Part No.	Description	QTY.
F-1274	3/8-16×1" Carraige Bolt	6
F-1233	3/8-16 Flange Nut, HX, Serrated	6

Hardware Sack 702-114A - Motor Mount, Jumpster/QRPH

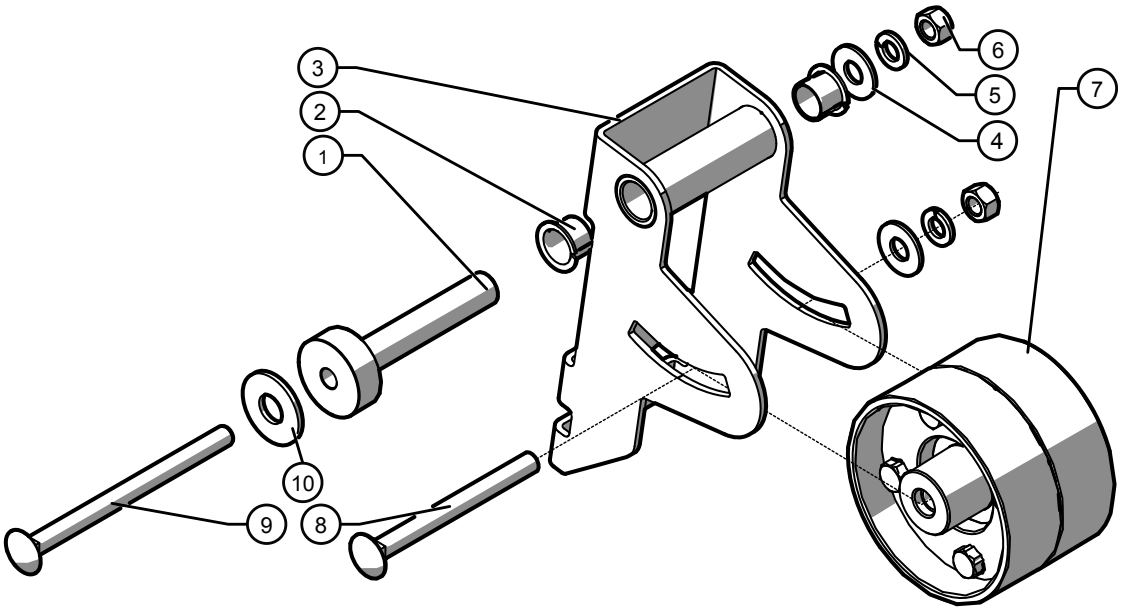


Part No.	Description	QTY.
702-112P	Spacer, Motor Mount	4
609-034P	Spindle Spacer Washer	16
F-1011-03	3/8-16 Hex Nut	8
F-1019-03	3/8" Lockwasher	12
F-1274	3/8-16×1" Carraige Bolt	4
F-1073	3/8-16×2"Capscrew, HX	4
F-1015-27	3/8-16×1-1/2 Capscrew, HX	4
F-1009-03	3/8" Flat Washer	12

EXPLODED VIEWS: Sub-Assemblies

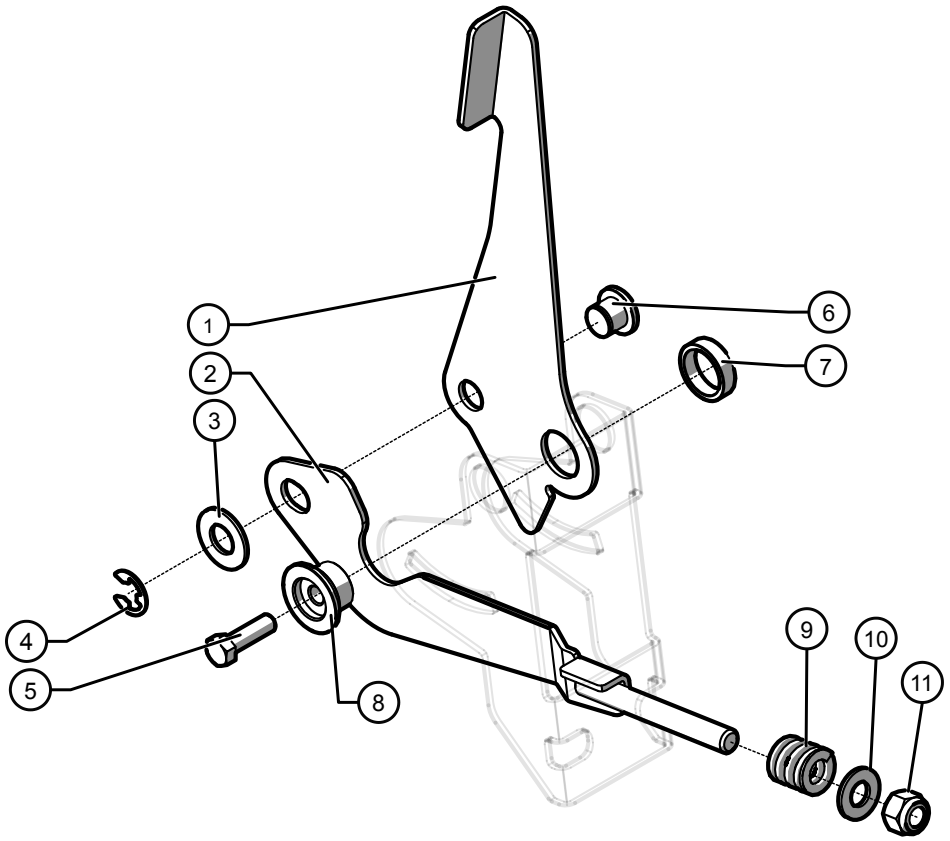
Quick Release Power Head

Idler Pulley



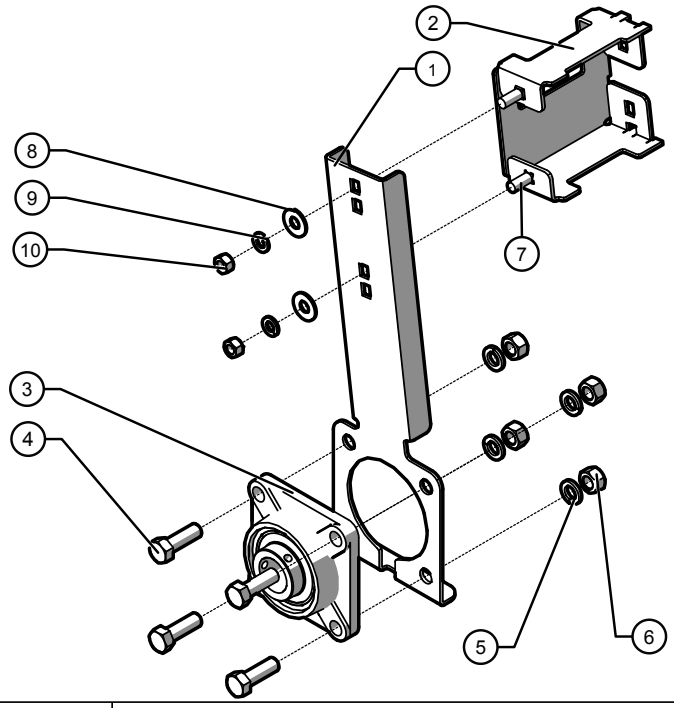
Item No.	Part No.	Description	QTY.
1	702-024P	QRPH: Idler Arm Pintle	1
2	D-3730	DU Flange Bushing	2
3	702-021W	QRPH: Idler Arm Weldment	1
4	F-1009-03	3/8″ Flat Washer	1
5	F-1019-03	3/8″ Lockwasher	1
6	F-1011-03	3/8-16 Hex Nut	1
7	702-147A	Flat Idler Pulley/ Bearing Assembly	1
8	F-2094	3/8-16×4″ Carriage Bolt	1
9	F-2107	3/8-16×5″ Carriage Bolt	1
10	F-1009-05	1/2″ Flat Washer	1

Tensioning Arm



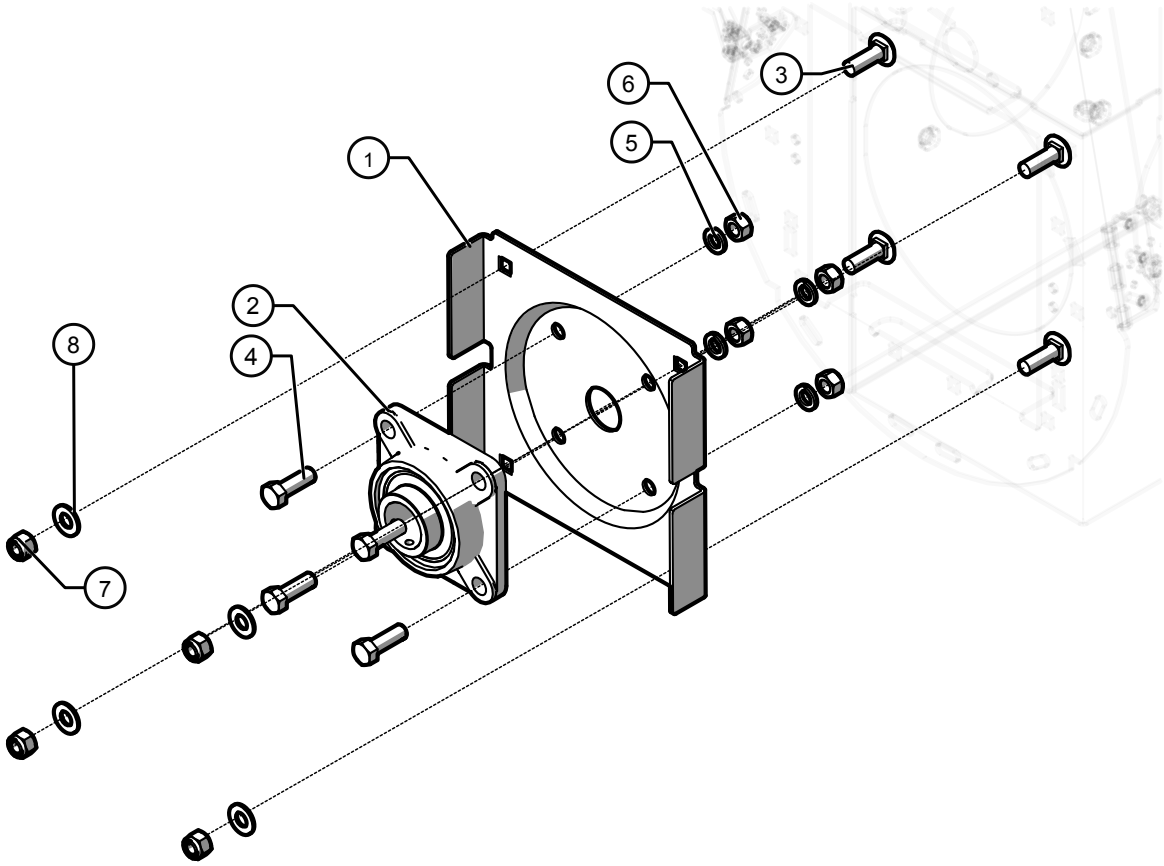
Item No.	Part No.	Description	QTY.
1	702-029P	QRPH: Tensioning Arm	1
2	702-016W	QRPH: Tensioning Linkage	1
3	F-1940	5/8 Flat Washer	1
4	F-1595	E-Ring	1
5	F-1307	3/8-16×1-1/4″ Capscrew	1
6	702-033P	QRPH: Tensioning Arm Pin	1
7	702-034P	QRPH: Tensioning Arm pivot Bushing	1
8	702-035P	QRPH: Tensioning Arm Pivot	1
9	H-2702	Die Spring, 1″OD×1/2″ID×1″L	1
10	F-1009-05	1/2″ Flat Washer	1
11	F-1378	1/2″ Nyloc nut	1

Bearing Mount Arm



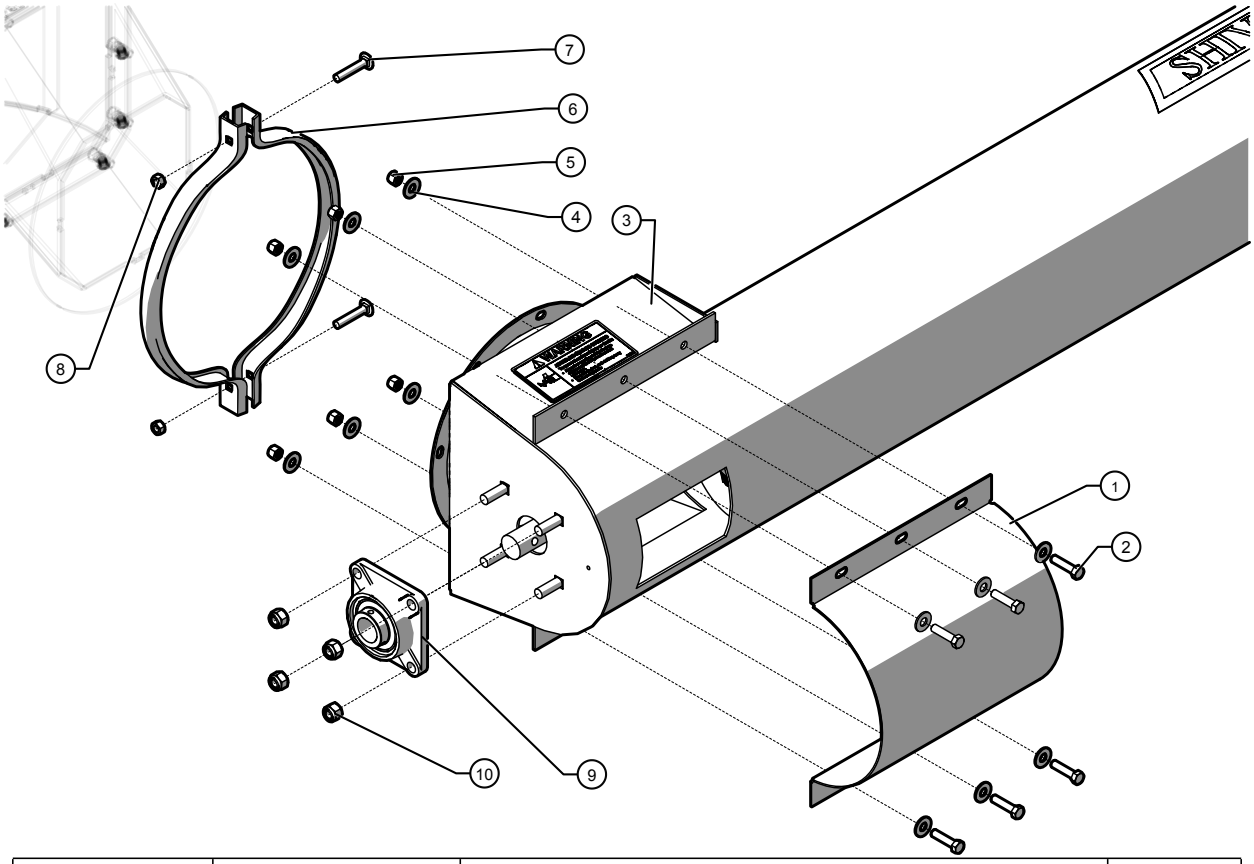
Item No.	Part No.	Description	QTY.
1	702-115P	QRPH: Bearing Mount Arm	1
2	702-121P	Bearing Mount Bracket	1
3	D-2002-02	Bearing, 4-Hole Flange 1-1/4 ID	1
4	F-1526	1/2-13×1-1/2" Capscrew	4
5	F-1464	1/2" Lockwasher	4
6	F-1011-05	Hex Nut, 1/2-13	4
7	F-1274	3/8-16×1" Carriage Bolt	2
8	F-1009-03	3/8" Flat Washer	2
9	F-1019-03	3/8" Lockwasher	2
10	F-1011-03	3/8-16 Hex Nut	2

Bearing Plate



Item No.	Part No.	Description	QTY.
1	702-129P	Bearing Adapter	1
2	D-3786	Bearing, 4-Bolt Flange, 1-5/8 ID	1
3	-	Discharge Head Bolts	4
4	F-1526	1/2-13×1-1/2" Capscrew	4
5	F-1464	1/2" Lockwasher	4
6	F-1011-05	1/2-13 Hex Nut	4
7	F-1378	1/2" Nyloc nut	4
8	F-1464	1/2" Lockwasher	4

Auger



Item No.	Part No.	Description	QTY.
1	716A-006P	10” Half Band	1
2	F-1394	3/8-16NC×1” 199 HHCS Bolts	6
3	716A-003W	Basic 10” Tube Weldment	1
4	F-1009-03	Flat Washer, 3/8”	12
5	F-1239	Locknut, Hex 3/8-16 W/Nyloc	6
6	H-2530	10” Clamp Band	2
7	-	H-2530 Bolt	2
8	-	H-2530 Nut	2
9	D-2002-02	Bearing, 4-Hole Flange, 1-1/4 Bore	1
10	F-1378	1/2” Locknut W/Nyloc	4