

# MERIDIAN<sup>®</sup>

## ASSEMBLY AND OPERATOR'S MANUAL



### UTILITY AUGER

UA416 • UA616 • UA816 • UA1016



# PRODUCT REGISTRATION FORM



**Attention Dealers:**

You can register products online through the Dealer Login: <http://dealers.meridianmfg.com/login/>

It is mandatory to register your product in order to qualify for future warranties that may arise. Knowingly falsifying information on this form will result in the voiding of the product warranty.

You may scan/photograph this completed form (must be legible), email it to: [register@meridianmfg.com](mailto:register@meridianmfg.com)  
A copy of this form may also be mailed to Meridian Manufacturing Inc.

Buyer's Name _____	Dealer's Name _____
Address _____	Address _____
City, Prov/State _____	City, Prov/State _____
Postal Code/Zip Code _____	Postal Code/Zip Code _____
Phone Number _____	Phone Number _____

**Note:** Registering a product in multiple entry format is only allowed when the product has the same model number and the same dealer, however each serial number must be legibly listed for each unit. Delivery dates for a multiple entry must be within a one month time frame.

Product Information: \_\_\_\_\_

Model Number _____	Serial Number _____
Invoice Date _____	

**Important:** Please send this form to the Meridian Manufacturing Inc. location which built this product being registered. If you require further assistance call you're dealer or the Meridian outlet nearest to your location.

We want to thank you for purchasing a Meridian manufactured product. Whether this is your first Meridian purchase or you have been a customer for years, you are now part of the Meridian community of customers and we appreciate your business.

It is important that you now complete the product registration information and this form indicating you have received delivery. This registration and information is necessary to ensure you have access to warranty and product updates in the event it be required in the future.

Registration can be completed by using this form or visiting your dealer who will complete the form online. You will be given access to the Meridian community and become eligible for updates, special offers and prizes.

Again thank you for choosing Meridian.

I have thoroughly instructed the buyer on the above described equipment. The review included the content of this manual, equipment care, adjustments, safe operation and warranty policy.

Date \_\_\_\_\_ Dealer's Signature \_\_\_\_\_

The above equipment and this manual have been received by me. I have been thoroughly instructed as to care, adjustments, safe operation and applicable warranty policy.

Date \_\_\_\_\_ Buyer's Signature \_\_\_\_\_

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## **Section 1: INTRODUCTION**

Thank you for choosing a Meridian® Utility Auger.

The equipment we design and manufacture meet the exacting standards of the agricultural industry. It will keep your seed moving operation working at optimum efficiency.

Keep this manual for future reference. Call your dealer, distributor or our office if you need assistance, information, additional/replacement copies, or a digital copy of this document.

Information provided herein is of a descriptive nature. Meridian Manufacturing Inc. reserves the right to modify the machinery design and specifications without any preliminary notice.

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## Section 2: SAFETY

3 Big Reasons why safety is important to you:

- Accidents Disable and Kill
- Accidents Cost
- Accidents Can Be Avoided

The Safety Alert Symbol means:

**ATTENTION!  
BECOME ALERT!  
YOUR SAFETY IS INVOLVED!**

The Safety Alert Symbol identifies important safety messages on the auger and in this manual.

The following signal words are used in this manual to express the degree of hazard for areas of personal safety.

When you see the symbol and/or the signal words described below, obey the accompanying message to avoid possible injury or death.



Indicates a hazardous situation that, if not avoided, will result in death or serious injury. This signal word is limited to the most extreme situations. Typically for machine components which, for functional purposes, cannot be guarded.



Indicates a hazardous situation, if not avoided, could result in death or serious injury. This word identifies hazards that are exposed when guards are removed. It may be used to alert against unsafe practices.



Indicates a hazardous situation, if not avoided, could result in minor or moderate injury. It may be used to alert against unsafe practices.



Indicates practices or situations which may result in the malfunction of, or damage to equipment.



Safety instructions (or equivalent) signs indicate specific safety-related instructions or procedures.



## 2.1 SAFETY ORIENTATION

YOU are responsible for the SAFE operation and maintenance of your Meridian® equipment. Be sure that everyone who will operate, maintain or work around it is familiar with the safety, operating and maintenance procedures.

Remember, **YOU** are the key to safety. Good safety practices not only protect you but also the people around you. Make these practices a working part of your safety program. Most accidents can be prevented. Do not risk injury or death by ignoring good safety practices.

- Equipment owners must give operating instructions to operators or employees before allowing them to operate the machine, and then annually thereafter per OSHA (Occupational Safety and Health Administration) regulation 1928.57.
- The most important safety feature on this conveyor is a SAFE operator. It is the operator's responsibility to read and follow ALL Safety and Operating instructions in the manual. Most accidents can be avoided.
- A person who has not read and understood all operating and safety instructions is not qualified to operate the machine. An untrained operator exposes themselves and bystanders to possible serious injury or death. Always be and stay alert to any possible unsafe operating or maintenance procedures or conditions.
- Do not modify the equipment in any way. Unauthorized modification may impair the function and/or safety of the components and systems and could affect the life of the equipment, possibly invalidate the warranty coverage.
- Think SAFETY! Work SAFELY!

## 2.2 GENERAL SAFETY

- Read and understand the operator's manual and all safety signs before operating, maintaining, adjusting, or unplugging the equipment. 
- Have a first-aid kit available for use should the need arise and know how to use it. 
- Have a fire extinguisher available for use should the need arise and know how to use it. 
- Wear appropriate gear. The list includes but not limited to:
  - A Hard hat 
  - Protective shoes with slip resistant soles 
  - Protective goggles, glasses or face shield 
  - Heavy gloves 
  - Protective clothing 
  - Respirator 
- Do not allow long hair, loose fitting clothing or jewelry around the equipment as it can become caught in moving parts.
- Install and secure all guards before starting.
- Establish a Lock-out/Tag-out policy for work site. Be sure all personnel are trained and follow all procedures.
- Lock-out/Tag-out all power sources before entering bin or working around loading/unloading equipment.
- Clear the area of people, especially small children, before starting.
- Review safety related items annually with all personnel who will be using or maintaining the Equipment.

## 2.3 EQUIPMENT SAFETY GUIDELINES

- Safety of the operator and bystanders is one of the main concerns in designing and developing a machine. However, every year many accidents occur which could have been avoided by a few seconds of thought and a more careful approach to handling equipment. You, the operator, can avoid many accidents by observing the following precautions in this section. To avoid personal injury or death, study the following precautions and insist those working with you, or for you, follow them.
- In order to provide a better view, certain photographs or illustrations in this manual may show an assembly with a safety shield removed. However, equipment should never be operated in this condition. Keep all shields in place. If shield removal becomes necessary for repair, replace the shield prior to use.
- Replace any safety sign or instruction sign that is not readable or is missing. See Safety Sign Locations for the locations of such safety signs.
- Never use alcohol or drugs which can hinder alertness or coordination while operating the equipment. Consult your doctor about operating this machine while taking prescription medications.
- Under no circumstances should your children be allowed to work with this equipment. Do not allow persons to operate or assemble this unit until they have read this manual and have developed a thorough understanding of the safety precautions and of how it works. Review the safety instructions with all users annually.
- This equipment is dangerous to children and persons unfamiliar with its operation. The operator should be a responsible, properly trained and physically able person familiar with farm machinery and trained in this equipment's operation. If the elderly are assisting with farm work, their physical limitations need to be recognized and accommodated. Never exceed the limits of a piece of machinery. If its ability to do a job, or to do so safely, is in question - **DO NOT TRY IT!**
- Do not modify the equipment in any way. Unauthorized modifications can result in serious injury or death and may impair the function and life of the equipment.
- In addition to the design and configuration of this implement, including Safety Signs and Safety Equipment, hazard control and accident prevention are dependent upon the awareness, concern, prudence and proper training of personnel involved in the operation, transport, maintenance and storage of the machine. Refer also to Safety message and operation instructions in each of the appropriate sections of the auxiliary equipment and machine manuals. Pay close attentions to the Safety Signs affixed to the auxiliary equipment and the machine.

## 2.4 ASSEMBLY SAFETY

- Follow good shop practices:
  - Keep assembly area clean and dry.
  - Be sure electrical outlets and tools are properly grounded.
  - Use adequate light for the job.
- Provide adequate space for access to all sides of machine.
- Use forklifts, hoists or cranes with sufficient lift capacity to handle the heavy components.
- Use two men to handle the heavy, bulky components.
- Place safety stands under the machine/ components, before working underneath.
- Stay away from overhead obstructions when lifting the assembly. Contact can damage the components, or cause them to fail.
- Tighten all bolts and fasteners to their specified torque before using the unit.
- Testing the assembly, may be necessary when safety shielding is not installed.



Be Alert and be Careful!

## 2.5 SAFETY DECALS

- Keep safety decals clean and legible at all times.
- Replace safety decals that are missing or have become illegible.
- Replaced parts that previously displayed a safety sign should also display the current sign.
- Safety signs are available from your authorized Distributor or Dealer Parts Department or the factory.

### 2.5.1 Safety Decal Application

1. Be sure the application area is clean and dry. Ensure the surrounding temperature is above 10°C (50°F).
  - Remove all dirt, grease, wax from the surface.
  - Clean with a non-ammonia based cleaner.
  - Wipe the clean surface with isopropyl alcohol on paper towel, and allow to dry.
2. Determine the exact position before you remove the backing paper.
3. Peel a small portion of the split backing paper.
4. Align the decal over the specified area. Use a squeegee to carefully press the small portion, with the exposed adhesive backing, into place.
5. Slowly peel back the remaining paper and carefully smooth the rest of the decal into place.
6. Small air pockets can be pierced with a pin and smoothed out using the squeegee, or a piece of sign backing paper.

## 2.6 SAFETY DECAL LOCATION

Safety decals are attached to the equipment in a visible and convenient location for readability. A safe workplace requires that you familiarize yourself with the various hazards described on the decals. You should also be aware of the safety precautions that must be taken to avoid injury, death, or damage.



## 2.7 WORK PREPARATION

- Never operate the Equipment and auxiliary equipment until you have read and completely understand this manual, the auxiliary equipment operator's manual, and each of the safety messages found on the safety signs on the equipment and auxiliary equipment.
- Personal protection equipment including hard hat, safety glasses, safety shoes and gloves are recommended during assembly, installation, operation, adjustment, maintaining, repairing, removal, or moving the implement. Do not allow long hair, loose fitting clothing or jewelry to be around the equipment.
- **PROLONGED EXPOSURE TO LOUD NOISE MAY CAUSE PERMANENT HEARING LOSS!**

The motor or equipment attached can often be noisy enough to cause permanent or partial hearing loss. We recommend that you wear hearing protection on a full-time basis if the noise in the operator's position exceeds 80db. Noise over 85db on a long-term basis can cause severe hearing loss. Noise over 90db adjacent to the operator over a long-term basis may cause permanent, total hearing loss.

**Note:**

Hearing loss from loud noise (from tractors, chain saws, radios and other sources close to the ear) is cumulative over a lifetime without hope of natural recovery.




- Clear area of debris, trash or hidden obstacles that might be hooked or snagged, causing injury, damage or tripping.
- Operate only in daylight or good artificial light.
- Be sure machine is properly anchored, adjusted and in good operating condition.
- Ensure that all safety shields and safety signs are properly installed and in good condition.
- Before starting, give the machine a look over for any loose bolts, worn parts, cracks, leaks, frayed belts and make necessary repairs. Always follow maintenance instructions



## 2.8 LOCK-OUT TAG-OUT SAFETY

- Establish a formal Lock-Out Tag-Out program for you operation.
- Train all operators and service personnel before allowing them to work around the equipment.
- Provide tags at the work site and sign-up sheets to record tag out details.

## 2.9 OPERATING SAFETY

- Make sure that anyone who will be operating the equipment or working on or around the unit read and understand all the operating, maintenance and safety information in the operator's manual. 
- Have another person nearby who can shut down the equipment in case of accident. It is good practice to always work with a second person around the equipment.
- Do not operate with any safety shields removed.
- Secure the intake end to the ground, or build a stable frame to hold the auger, to prevent upending.
- Keep hands, feet and clothing away from the flighting and moving parts. Loose clothing can become entangled in rotating parts and cause serious injury.
- Keep all bystanders, especially children, away from the equipment in use, or when authorized personnel are carrying out maintenance work.
- Establish a Lock-Out/Tag-Out policy for work site. Be sure all personnel are trained in and follow all procedures. Lock-Out/Tag-Out all power sources before servicing the equipment.
- Review safety related items annually with all personnel who will be operating, using or maintaining the equipment.

## 2.10 MAINTENANCE SAFETY

- Good maintenance is your responsibility. Poor maintenance is an invitation to trouble.
- Follow good shop practices.
  - Keep service area clean and dry.
  - Be sure electrical outlets and tools are properly grounded.
  - Use adequate light for job at hand. 
- Review safety related items annually with all personnel who will be operating, using or maintaining the equipment.
- Use personal protection devices such as eye, hand, breathing and hearing protection, when performing any services or maintenance work.
- A fire extinguisher and first aid kit should be kept readily accessible while performing maintenance on this equipment. 
- Periodically tighten all bolts, nuts and screws to ensure the unit is in safe condition.
- Disable the motor/engine before any service and maintenance, so the equipment can not be accidentally turned on.
- Establish a Lock-Out/Tag-Out procedure.
- When completing a maintenance or service function, make sure all safety shields and devices are installed before placing unit in service.



## 2.11 MACHINE INSPECTION

- Check to see that all guards listed in the assembly instructions are in place and secured, and functional.
- Are all fasteners tight?

## 2.12 OPERATOR QUALIFICATIONS

Operation of this transport equipment shall be limited to competent and experienced persons. In addition, anyone who will operate or work around portable equipment must use common sense. In order to be qualified, they must know and meet all other requirements, such as:

- Some regulations specify that no one under the age of 16 may operate power machinery. This includes augers and flight type elevators. It is your responsibility to know what these regulations are in your area or situation.
- Current OSHA regulations state in part: “At the time of initial assignment and at least annually thereafter, the employer will instruct every employee in the safe operation and servicing of all equipment with which the employee is, or will be involved.”
- Unqualified persons are to stay out of the work areas.
- A person who has not read and understood all the operating and safety instructions is not qualified to operate the machine.

## 2.13 DESIGNATED WORK AREA

The work areas shall be marked off with coloured nylon or plastic rope hung by portable barriers to define the designated work areas.

Under no circumstance should persons not involved in the operation be allowed to trespass into the work area.

It shall be the duty of all operators to see that children and/or other persons stay out of the work area! Trespass into the area by anyone not involved in the actual operation, or trespass into a hazard area by anyone, shall result in an immediate shut down by the operator.

Prior to start up and during operation, it shall be the responsibility of the operators to see that the work area has secure footing, is clean and free from all debris, and tools which might cause accidental tripping and/or falling.



## Section 3: ASSEMBLY

### IMPORTANT:

Before starting assembly of your new auger, please read the following instructions carefully and familiarize yourself with all the sub-assemblies and hardware making up the auger.

Arrange all parts for easy access. Carry out assembly in a large open area with a level surface. Always have 2 or more people assembling the equipment. Because of the weight, do not attempt assembly alone.

The following assembly procedure covers all required steps for the utility auger, including those considered to be optional. Instructions which may not apply to your particular auger will be indicated with an arrow

**⚠ WARNING**

**EQUIPMENT DAMAGE HAZARD**  
Do not drop. Damage to equipment or serious personal injury will result.

### 3.1 FLIGHTING AND TUBE EXTENSIONS

When adding an extension to the main, 16' auger tube, follow this procedure:

1. Slide the extension flight shaft into upper flight shaft until flight ends butt together.
  - Twist the flighting spiral so it overlaps.
  - Align the bolt holes.

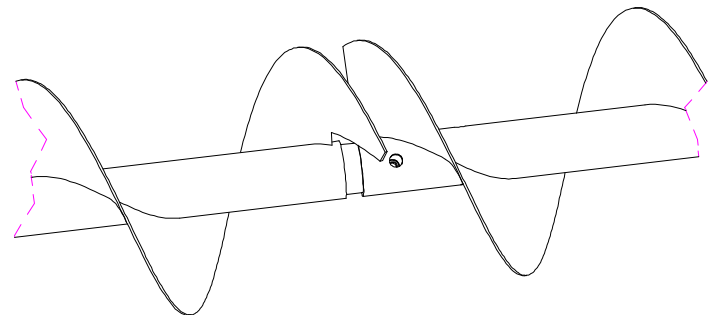


Fig 2 - Twist and overlap flighting

2. Fasten the shafts together with two 5/16" x 2-1/4" hex bolts and locknuts.

**Note:**

Flight shaft connections, as well as flight connection bolts should slide into place easily. Do not force into place.

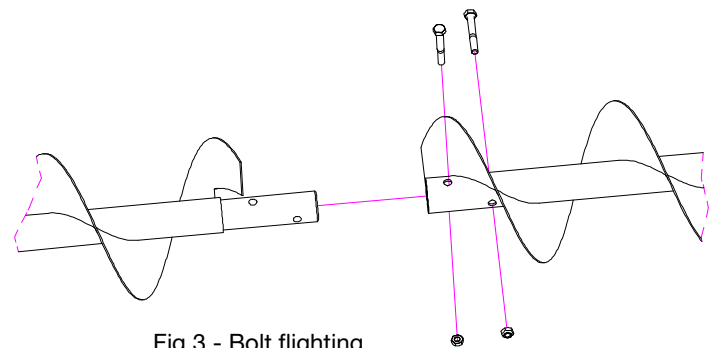


Fig 3 - Bolt flighting

3. Slide the tube extension over the flighting.
4. Fasten the tubes together with eight 1/2" x 1-1/4" hex bolts, washers and locknuts.
5. For additional extensions, repeat steps 1 to 4.

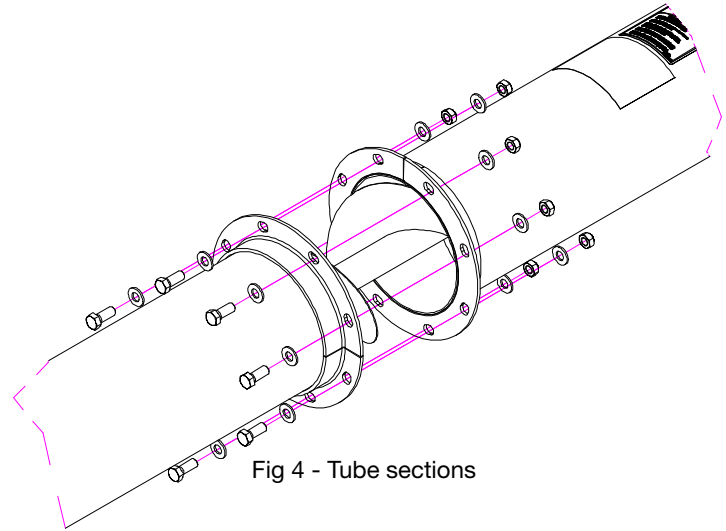


Fig 4 - Tube sections

### 3.2 INTAKE SAFETY GUARD

Attach the intake safety guard to lower end of auger tube with four 1/2" x 1-1/4" hex bolts, washers and locknuts.

**Note:**

Safety Guard may not include weld nuts.

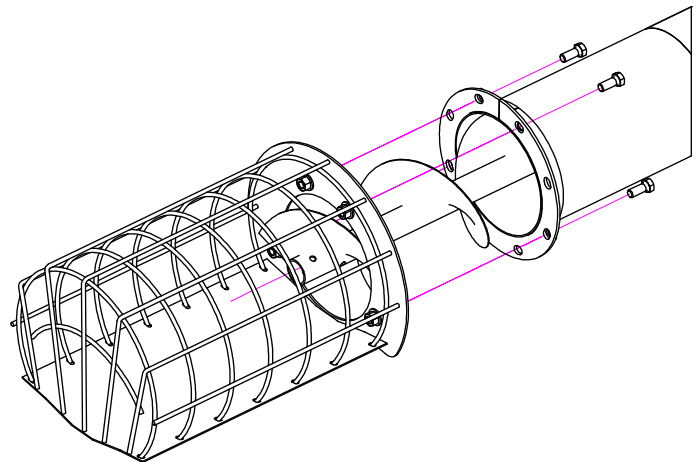


Fig 5 - Intake safety guard shown with weld nuts

### 3.3 HEAD DRIVE ASSEMBLY

1. Remove dirt and paint from upper end of flight shaft.
2. Fit the bearing flange over the flight shaft.
3. Fasten to bearing with 5/16" x 1" carriage bolts.
4. Slide double groove pulley onto the flight shaft with the hub facing away from the auger.
  - Refer to Table 1 on page 3-5 for proper pulley size.
5. Place the hub over the flight shaft.
  - DO NOT tighten set screws at this time.
6. Align groove in the pulley, hub and shaft.
  - Work 1/4" x 2" key stock into groove.
7. Tighten the set screws in the hub.

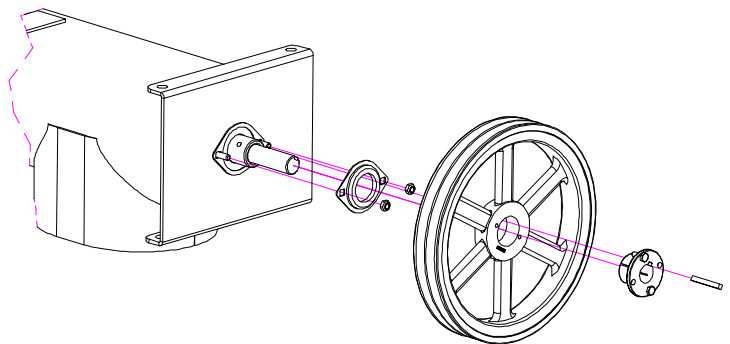


Fig 6 - Head drive assembly

### 3.4 MOTOR MOUNT

1. Install both motor mount brackets into place.
  - Place the longer, Motor Mount Bracket Tube End, at the top.
  - Use two 1/2" x 1-1/4" hex bolts, flat washers and locknuts.
  - Tighten securely.
  
2. Place the shorter, Motor Mount Bracket onto the bracket welded to one side.
  - Use two 3/8" x 1-1/4" hex bolts, flat washers and locknuts.
  - Tighten securely.
  
3. Place a 5/8" x 6" hex bolt through the available hole in Motor Mount Bracket Tube End.
  - Thread one hex nut onto the bolt.
  - Insert the bolt from the bottom of the bracket.
  - Secure with another hex nuts, on top of the bracket.
  - Leave the bolt loose to allow for later adjustment (it will be referred to as the Adjustment Bolt).

**Note:**

The adjustment bolt is used to adjust belt tension (Section 5.2).

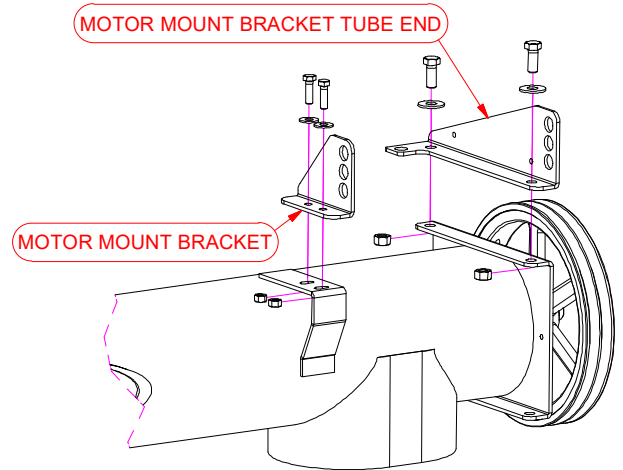


Fig 7 - Motor mount brackets

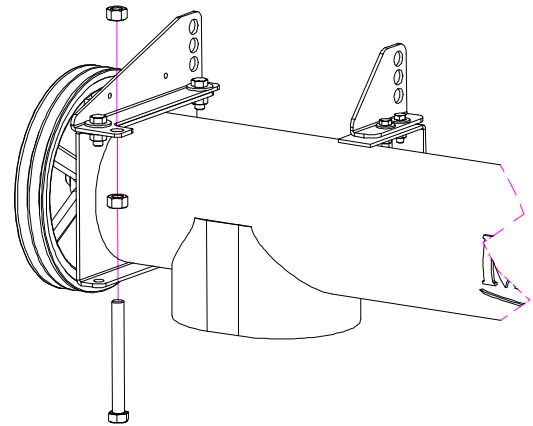


Fig 8 - Motor mount adjustment bolt

4. Fit the one end of the Motor Mount Assembly into place, between the two mount brackets.
  
5. Insert the Pin Rod from the top end.
  - There are three sets of holes to choose from, depending on what motor height required.

**Note:**

The choice between the three sets of holes in the mount brackets will affect the belt tension (Section 5.2).

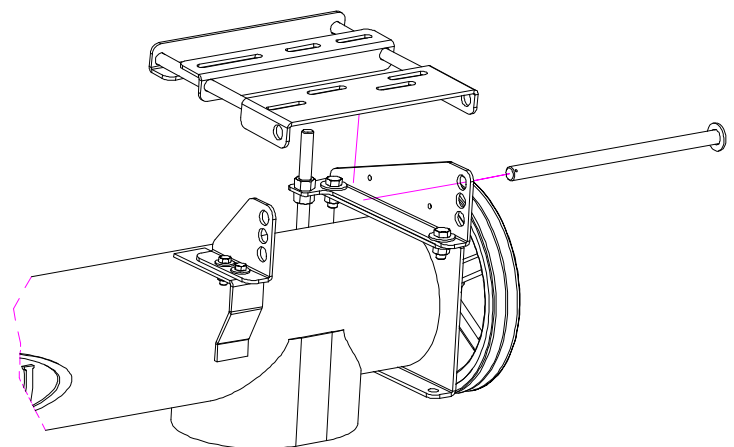


Fig 9 - Motor mount

6. Secure the rod with a 1/8" x 1-1/2" cotter pin.

### 3.5 PULLEY GUARD

**Note:**

Install pulley guards after the pulleys have been aligned and tensioned.

**Note:**

Electric motor and V-belts not shown.

1. Join the left side and right side Pulley Guards.
  - Fasten with 1/4" x 1/2" hex bolts and washer locknuts.
  - Fasten the short Pulley Guard Bracket along the top with self tapping hex bolts.

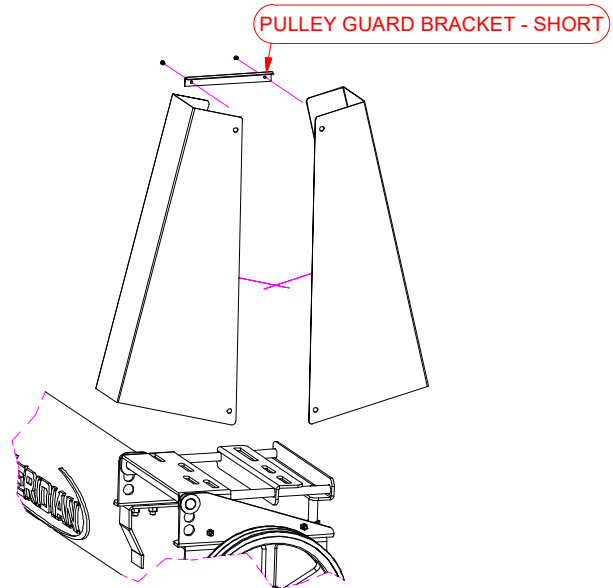


Fig 10 - Join pulley guard

2. Lower the Pulley Guard over the pulley and into place.

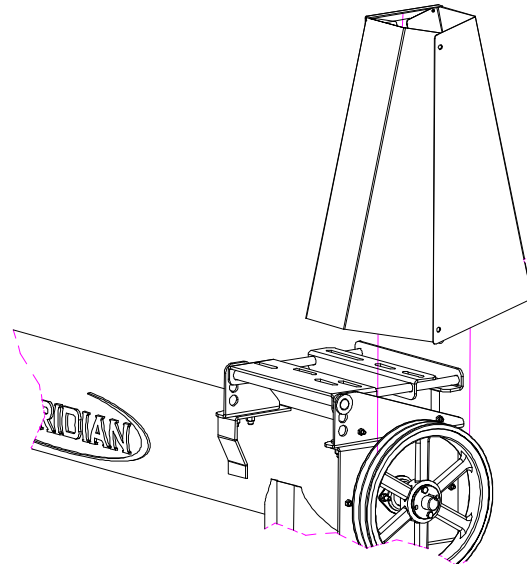


Fig 11 - Lower guard over pulley

3. Bolt the top end of the guard to the Motor Mount Bracket Tube End.
  - Use 1/4" x 1/2" hex bolts and washer locknuts.
4. Bolt the bottom end of the guard to the Base Plate Head End.
  - Use 1/4" x 1/2" hex bolts and washer locknuts.
5. Fasten the long Pulley Guard Bracket along the bottom with 1/4" x 1/2" hex bolts and washer locknuts.

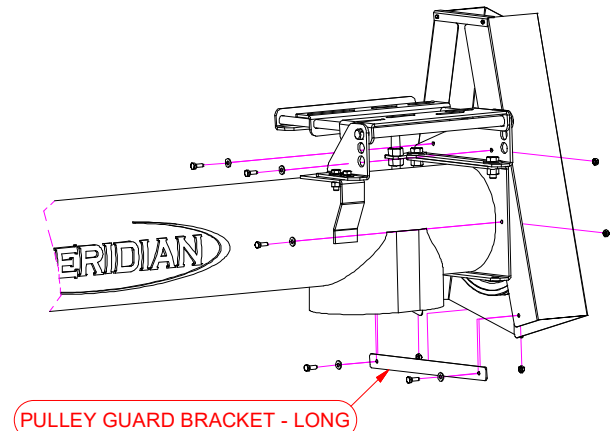


Fig 12 - Fasten pulley guard

### 3.6 ELECTRIC MOTOR INSTALLATION AND ALIGNMENT

**IMPORTANT:**

When using an electric motor:

- The motor and controls should be installed by a qualified electrician in accordance with all local and national codes.
- Incorporate a magnetic starter to protect the motor.
- The motor must have a manual reset button.
- Locate reset and starter controls so that the operator has full view of the entire operation.
- Locate main power disconnect switch within reach from ground level to permit ready access in case of an emergency.
- A main power disconnect switch capable of being locked (in the off position only) must be provided.

Table 1 - Pulley Sizes / Combinations\*

Utility Auger Size	Recommended Sizes		
	Auger Pulley	Motor Pulley	Flight Speed (rpm)
6" Utility	12"	3½"	510
		4"	583
8" Utility	12"	¾"	474
		3½"	510
10" Utility	12"	¾"	474
		3½"	510

To determine flight speed (rpm):  
 Divide the speed (rpm) of the motor by the outside diameter of the large auger pulley, then multiply by the outside diameter of the small motor pulley.  
 Example:  $(1750 / 12) \times 3.5 = 510$  rpm

\* Speed calculated using a 1750 rpm electric motor.

**Note:**

If a slower flight speed is desired, install a smaller motor pulley.

Table 2 - Horsepower Requirements\*\*

Length	6"	8"	10"
16 - 21'	1½ - 2	3	3 - 5
26 - 31'	3	5	5 - 7½
36 - 41'	3 - 5	5 - 7½	7½ - 10
46 - 51'	5	7½ - 10	10 - 15
56 - 61'	7½	10	15 - 20

\*\* Approximate electric motor horsepower requirements under normal conditions.

**Note:**

Moving a full tube of high moisture grain, will require additional horsepower.

1. Place the electric motors onto motor mount and bolt down.
  - Refer to Table 2 for the proper horsepower requirements.
2. Move the motor on the mount, so the motor shaft is parallel to and centred on tube.
  - Adjust and tighten the bolts.
3. Slide drive pulley onto motor shaft.
  - See Table 1 for suggested sizes.
  - Insert the appropriate size of square key.

**Note:**

Do not tighten set screws until belts are aligned.

4. Align the two pulleys with a straight edge.
5. Place the belts onto the pulleys.
  - Adjust the 6" adjustment bolt on the motor mount bracket until the belts have the proper tension.

Calculate the tension (see Figure 13):

- Measure the length of span between pulleys.
- Allow 1/64" of deflection per inch of span.

**Note:**

There are three sets of holes on the motor mount brackets, so the motor mount can be installed at different heights. If the proper tension can not be achieved, try a different height.

**Note:**

The correct operating tension is the lowest tension at which the belts will not slip under peak load conditions.

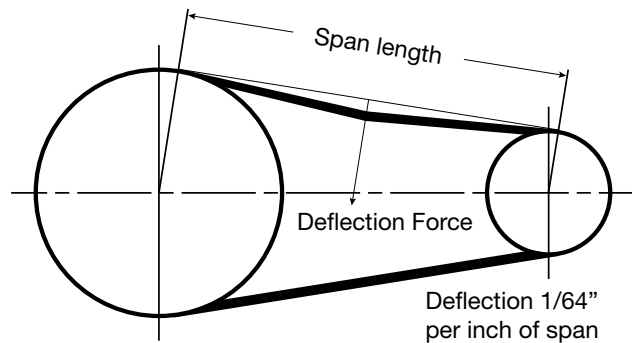


Fig 13 - Tension calculation

6. Once belts are aligned and under tension, lock the hex nuts on the 6" adjustment bolt and tighten pulley set screws.

**IMPORTANT:**

Once all bolts and set screws are tightened, re-check alignment. Proper alignment will prolong belt life.

### 3.7 SWIVEL MOUNT ASSEMBLY (OPTIONAL)

1. Attach the tube clamps with two 5/16" x 3/4" bolts, washers, hex nuts.
2. Attach the Swivel Bracket to bottom tube clamp
  - Use one 7/16" x 1" bolt and hex nut.
3. Attach the Box Plate to the bottom of the Swivel Bracket
  - Use one 7/16" x 1" bolt and hex nut.
4. Insert a 7/16" x 4-1/2" bolt into the Box Plate.
5. Add a hex nut to the bolt before pushing it through the second hole in the plate.
6. Push the bolt all the way through the Box Plate.
  - Use another hex nut to tighten the bolt in place.

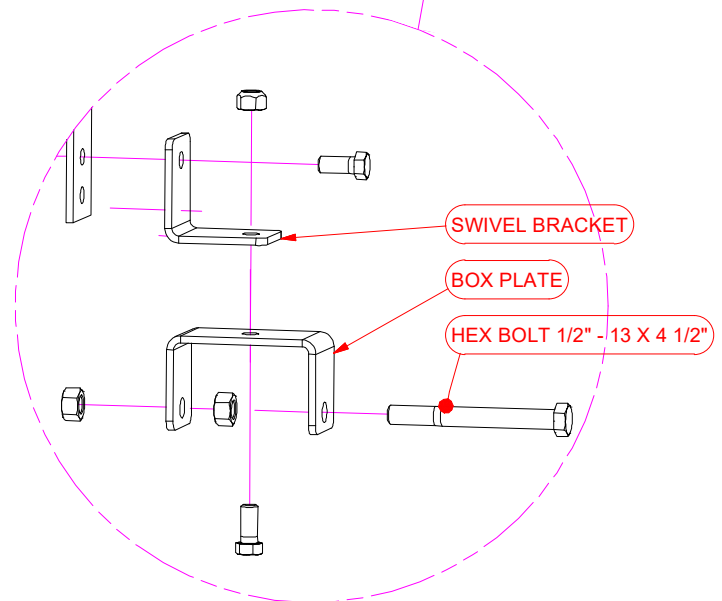
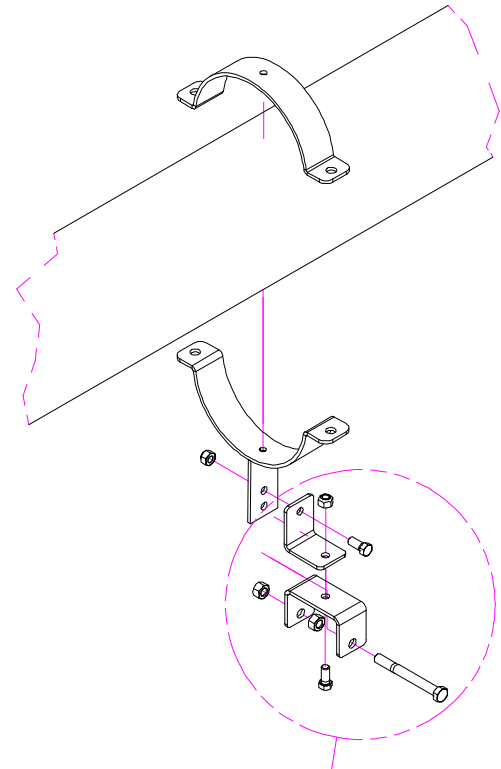


Fig 14 - Swivel mount kit

**IMPORTANT:**

Meridian Manufacturing Inc. supplies the above items as part of this option. The end user is responsible for what this equipment is mounted to.

### 3.8 SITE INSTALLATION PROCEDURES

**⚠ DANGER**

**ELECTROCUTION HAZARD**

Keep equipment away from overhead power lines and obstructions. Machine is not insulated and electrocution may occur without direct contact.

Failure to keep away will result in serious injury or death.

Site installation procedures for any utility auger will vary depending on auger length, location, and intended use. Because of these variables, the following instructions are meant to be used as a guide only.

It is the installer's responsibility to ensure that the auger is properly braced and/or supported before operating, with the primary concern being on safety.

As a general rule, we suggest the following:

1. Check that all bolts are tightened as per instructions.
2. Ensure that all safety devices are in place and secure.
3. Use a safe lifting device such as a front-end loader or forklift to raise and position the auger, ensuring that the entire area in line of travel is clear of any obstructions or electrical wires.

Once auger is in position, we recommend the following:

4. Where possible, secure both the intake and discharge ends of the auger to prevent upending or upsetting from factors such as high wind, vibration, or grain weight shift.
5. If the auger is used in a free standing position, it must be braced and/or supported to prevent upending or upsetting from factors such as high wind, vibration, or grain weight shift.
6. Ensure that On/Off switches are conveniently located for the operator, and marked in case of emergency.

**⚠ CAUTION**

**ANCHORING HAZARD**

Operating a utility auger that is not properly anchored or secured is unsafe. To do so will result in damage to equipment and/or personal injury.

**Note:**

Longer utility augers may require trussing or additional bracing. The owner of the equipment and the installer are responsible for the quality and safety of any cable truss systems.



## Section 4: OPERATION

### DANGER

- Before continuing, ensure you have read and understand the contents of this manual.
- Keep away from rotating auger flighting.
- Do not remove or modify auger flighting guards, keep in good working order.
- Do not operate the auger without all guards, doors, and covers in place.
- Never touch the auger flighting. Use a stick or other tool to remove an obstruction or clean out.
- Shut off, lock out power to adjust, service, or clean

### 4.1 NEW AUGER START-UP AND BREAK-IN

Meridian Manufacturing Inc. recommends that before you start moving grain with your new auger that you should do the following:

1. Run the grain auger without adding grain to the intake for approximately five minutes.
2. Slowly add grain to intake of auger.
3. Continue to add grain slowly until approximately 1000 bushels (28 tonnes) has been run through the grain auger. This will “shine up” the flighting and the tube.
4. The operator should be attentive to any unusual vibrations or noises.
  - Find the source.
  - Turn off and LOCK-OUT the power source.
  - Adjust the auger until it runs smoothly.

### 4.2 OLD AUGER START-UP

Meridian Manufacturing Inc. recommends that before moving grain with your used auger, you should do the following:

1. Be sure all guards and shields are in place, securely fastened and fully operational.
2. Check that the equipment is in operating condition.
3. Grease all fittings which need lubrication.
4. Start electric motor, then feed grain into auger.

**⚠ CAUTION**

- Observe work area restrictions.
- Keep all safety guards and shields in place.
- Make certain everyone is clear before operating or moving the machine.
- Keep hands, feet and clothing away from all rotating/moving parts.
- Lock out power sources to adjust, service or clean.

**4.3 OPERATING THE AUGER**

1. When operating the auger, always work with a second person in a position to monitor the operation and initiate a shutdown in case of emergency.
2. Monitor the auger during operation for abnormal noises or vibrations.
3. Shut off the power and Lock-Out before making adjustments, servicing, or clearing the machine.

**4.4 NORMAL SHUT-DOWN**

1. Decrease grain input until auger is clear.
2. Make sure that the hopper and auger are empty before stopping unit.
3. Before the operator leaves the work area, the power source shall be locked out.

**4.5 EMERGENCY SHUT-DOWN**

1. In an emergency situation - shut down the auger, and lock out the power source.
2. Address the emergency situation.

**4.6 RESTART AFTER EMERGENCY STOP**

When the auger is shut down inadvertently or in an emergency, the tube will still be full of grain.

Clear as much grain from the hopper and auger as possible using a piece of wood, vacuum cleaner or other tool. **Do not use your hands!**

**⚠ WARNING**

**AUGER HAZARD**

Never reach into auger with your hands or feet.

3. Never attempt to start the auger full.

**NOTICE**

**FULL LOAD HAZARD**

Starting the auger under full load may result in damage to unit. Be sure there is no blockage.

**Note:**

Starting the auger under load may result in damage to the auger. Such damage is considered abuse of the equipment.

4. When as much grain has been removed, reconnect power source and run to remove the rest of the grain.
5. Once the auger is running empty, and no abnormal noises or vibrations are encountered, continue to operate normally.

## Section 5: SERVICE AND MAINTENANCE

### **DANGER**

- Do not service or lubricate while the auger is running.
- Always Lock-Out the power source.

### 5.1 PULLEY ALIGNMENT

**Note:**

The bearings are pre-lubricated and do not require further lubrication.

1. Ensure the motor shaft is parallel to and centred on the tube.
2. Use a straight edge to align the drive and flight pulleys.

## 5.2 BELT TENSION

1. Adjust the 6" adjustment bolt on the motor mount bracket until the belts have the proper tension.

Calculate the tension (see Figure 15):

- Measure the length of span between pulleys.
- Allow 1/64" of deflection per inch of span.

**Note:**

There are three sets of holes on the motor mount brackets, so the motor mount can be installed at different heights. If the proper tension can not be achieved, try a different height.

**Note:**

The correct operating tension is the lowest tension at which the belts will not slip under peak load conditions.

2. Once belts are aligned and under tension, lock the hex nuts on the 6" adjustment bolt and tighten pulley set screws.

**IMPORTANT:**

Once all bolts and set screws are tightened, re-check alignment. Proper alignment will prolong belt life.

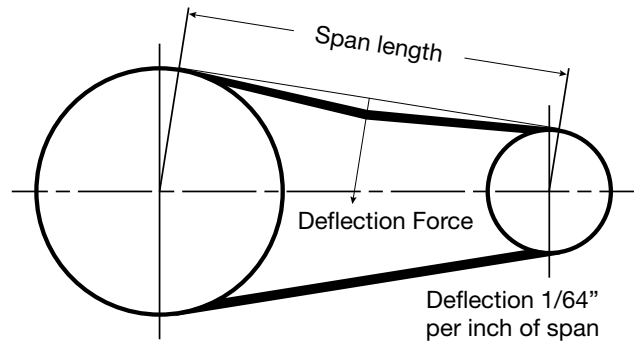


Fig 15 - Tension calculation

## Section 6: TROUBLESHOOTING

This section contains a list of common problems, causes and offers quick solutions to those issues. If problems are confronted which are difficult to solve, even after having read through this section, please contact your authorized dealer, distributor or Meridian manufacturing Inc.

***Problem***

Possible Cause	Remedy
----------------	--------

*Excessive noise or vibration\**

Flighting peeled back due to plugging	Inspect spout end of auger for flight condition. Remove and replace flight sections as necessary.
Bent flighting sections	Support auger and remove all flight sections. Check for straightness of flighting and flighting stubs by rolling across flat concrete section. Straighten flighting or replace as necessary. Take care not to bend flighting when reinstalling.
Obstruction in tube	Visually inspect for cloth or trash wrapped around flighting, or buildup of gum from oily crops such as flax or canola.

*Drive belt(s) jumping off pulley(s)*

Motor misaligned	Ensure drive and driven pulleys are correctly aligned.
Belt(s) mismatched	Check Assembly Section for correct belt size(s) and, when more than one, only replace in pairs.
Belt tension inadequate	Maintain correct tension as per assembly section.
Using a lower horsepower motor than recommended	See Assembly Section for recommended motor sizes.

*Premature wear on auger tubes*

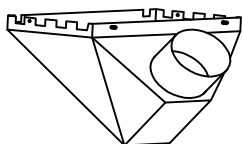
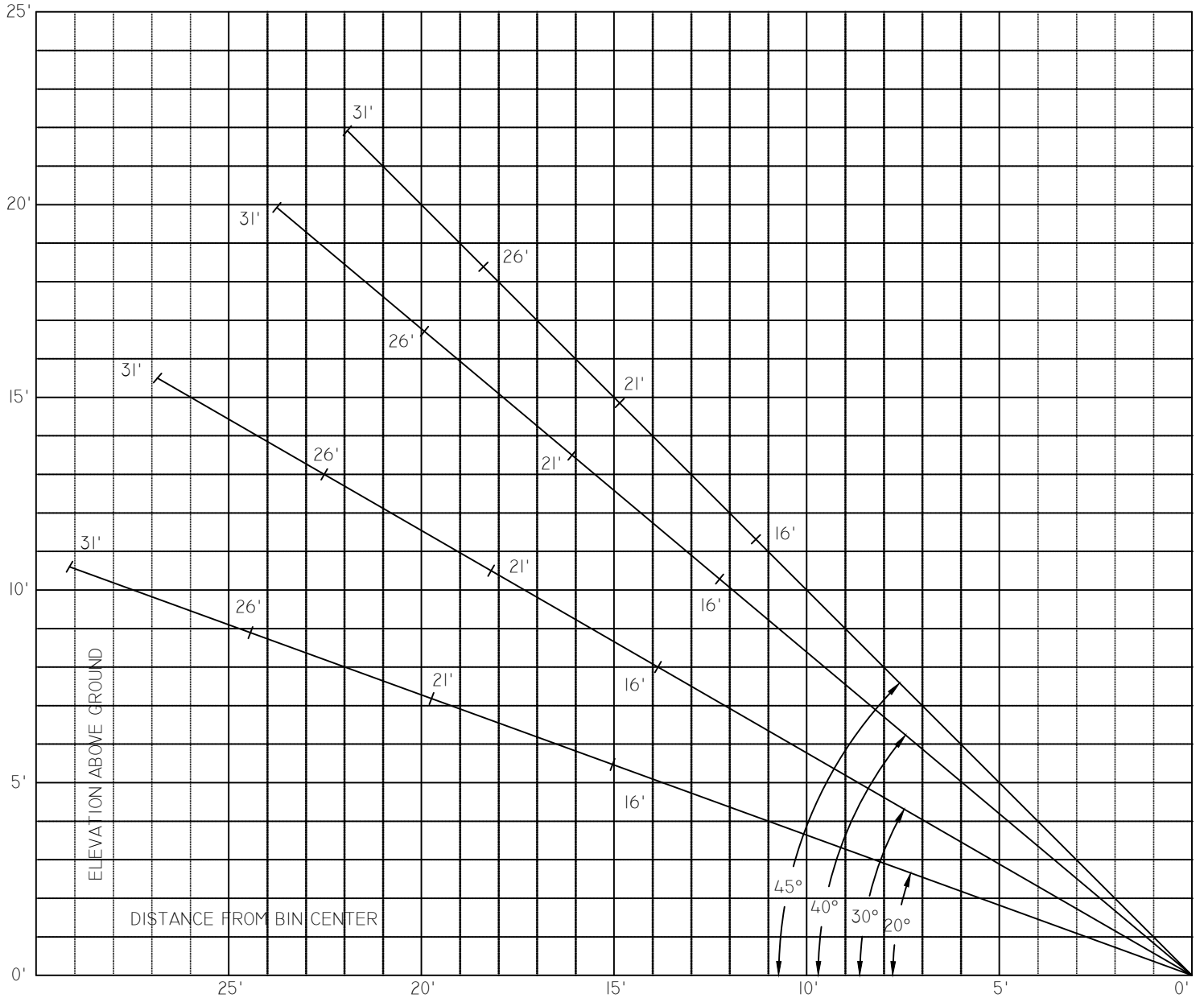
Auger being run at low capacity or empty for extended period of time	Frequently occurs on farms using grain wagons. Auger should not be left unattended when filling bins.
Bent flighting	
Flighting allowed to wear beyond normal point of replacement	When flighting becomes razor-thin at intake, replacement is critical. Since flight material is double thickness at welded lap joints, high spots on flight occur and can accelerate spot tube wear.

\* Remember to follow proper break-in procedures, refer to Section 4.1. The auger may run rough until the tube is polished. If noise is extreme from the outset or continuous after several loads of grain are fed, continue with troubleshooting.

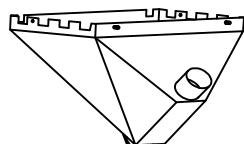
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# Section 7: REFERENCE

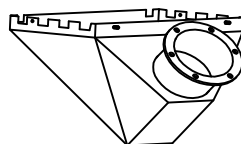
## 7.1 AUGER BOOT SELECTION CHART



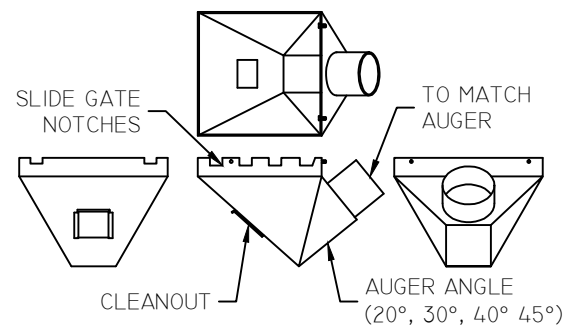
LOOSE FIT BOOT



FLEX BOOT  
W/ BEARING & SHAFT



FLANGED BOOT



### 7.2 UA616 PARTS

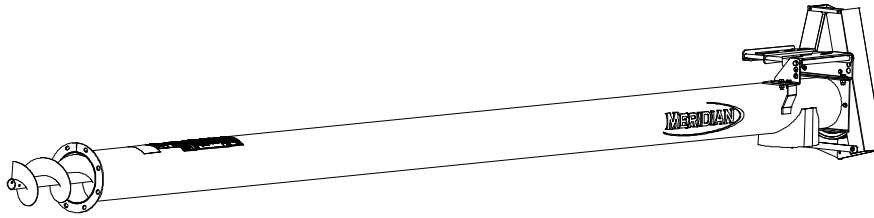


Table 3 - Part No: UA616 Title: Tube Discharge

ITEM	PART #	DESCRIPTION	QTY
1	vbelt - B44	V-BELT - B44	2
2	650406208	PIN ROD ASSEMBLY	1
3	650406200	TUBE DISCHARGE - UA616	1
4	650406199	FLIGHT MAIN TUBE - UA616	1
5	650406178	MOTOR MOUNT ASSEMBLY	1
6	650121438	PULLEY GUARD BRACKET	1
7	650121388	MOTOR MOUNT BRACKET	1
8	650121298	MOTOR MOUNT BRACKET TUBE END	1
9	650121297	PULLEY GUARD BRACKET	1
10	650121296	PULLEY GUARD	1
11	650121295	PULLEY GUARD	1
12	1624070001	CONE LOCK NUT - 1/4"-20 UNC - ZINC PLTD	6
13	1624050001	CONE LOCK NUT - 5/16"-18 UNC - ZINC PLTD	2
14	1617070004	U.S.S. FLAT WASHER - 3/8" - ZINC PLTD	2
15	1617010002	U.S.S. FLAT WASHER - 1/2" - BLACK	2
16	1613070002	S.A.E FLAT WASHER - 1/4" - ZINC PLTD	6
17	1609070007	HEX NUT - 5/8"-11 UNC - ZINC PLTD - GRADE 5	2
18	1609070005	HEX NUT - 1/2"-13 UNC - ZINC PLTD - GRADE 5	2
19	1609070003	HEX NUT - 3/8"-16 UNC - ZINC PLTD - GRADE 5	1
20	1603070379	CARRIAGE BOLT - 5/16"-18 UNC X 1" - ZINC PLTD - GRADE 5	2
21	1602070246	HEX BOLT - 1/2"-13 X 1 1/4" UNC - ZINC PLTD - GRADE 5	2
22	1602070126	HEX BOLT - 3/8"-16 X 1 1/4" UNC - ZINC PLTD - GRADE 5	1
23	1602070035	HEX BOLT - 5/8"-1 X 6" UNC - ZINC PLTD GRADE 5 - FULL THREAD	1
24	1602070004	HEX BOLT - 1/4"-20 X 3/4" UNC - ZINC PLTD - GRADE 5	6
25	12-1000-0136	BEARING FLANGE - 2-BOLT STEEL	2
26	12-1000-0135	BEARING- 1" ID X52mm NTNAS205 C/W INNER RING & SET SCREW	1
27	11-2300-0020	KEY STOCK - 1/4" SQ x 2"	1
28	11-1600-0009	DOUBLE GROVE - 12.0" OD - 2BK120H	1
29	11-1500-0003	HUB - H 1"	1
30	-	HEX BOLT SELF TAPPING - #8-32 UNC X 1/4" - ZINC PLTD - GRADE 5	2
31	13000003685-00	DECAL "MERIDIAN"	2
32	13000001657-00	DECAL - ROTATING FLIGHTING	1
33	13000001656-00	DECAL - ELECTROCUTION HAZARD	1
34	13000001655-00	DECAL - UPENDING HAZARD	1
35	13000001654-00	DECAL - SMALL WARNING	1
36	13000001653-00	DECAL - LARGE CAUTION	1





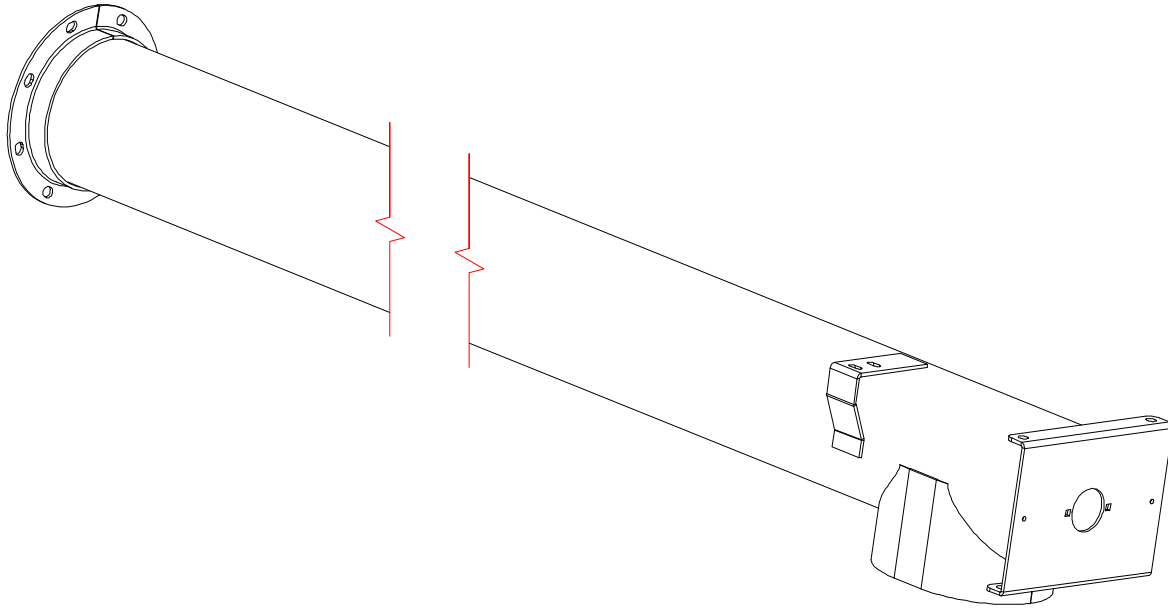


Table 4 - Part No: UA616 Title: Tube Discharge

ITEM	PART #	DESCRIPTION	QTY
1	650406200	TUBE DISCHARGE - UA616	1

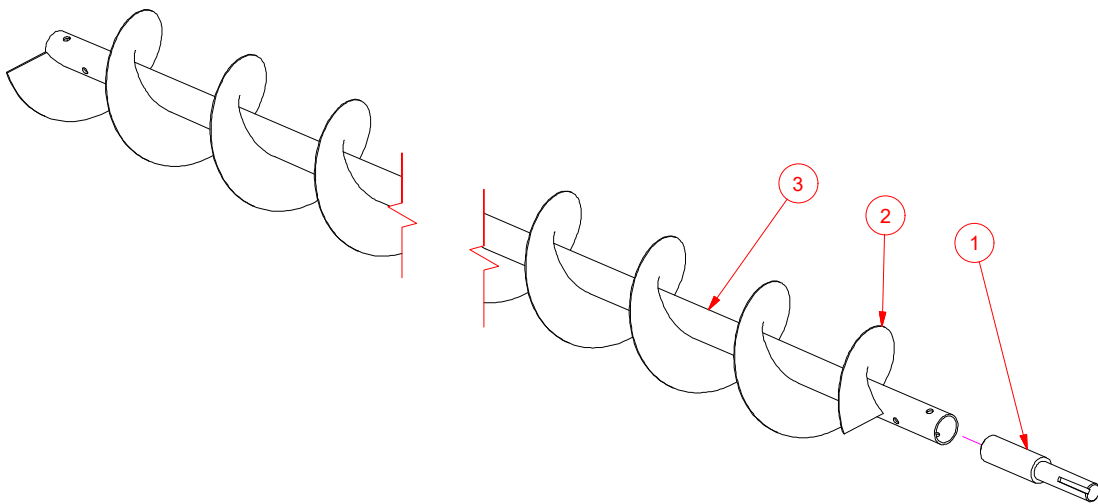


Table 5 - Part No: 650406199 Title: Flight Main Tube - UA616

ITEM	PART #	DESCRIPTION	QTY
1	650121367	SHAFT - 1" X 8	1
2	650121366	HELIX 16' - UA616	1
3	650121365	TUBE- CORE - FLIGHT TROUGH - UA616	1

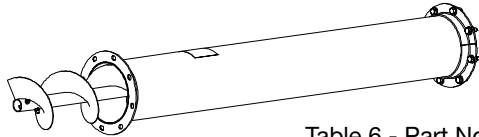


Table 6 - Part No: UX605 Title: Tube Extension 5'

ITEM	PART #	DESCRIPTION	QTY
1	650406202	TUBE ASSEMBLY	1
2	650406201	FLIGHT ASSEMBLY - UX605	1
3	1624050001	CONE LOCK NUT - 5/16"-18 UNC - ZINC PLTD	2
4	1617070004	U.S.S. FLAT WASHER - 3/8" - ZINC PLTD	12
5	1602070124	HEX BOLT - 3/8"-16 X 1" UNC - ZINC PLTD - GRADE 5	6
6	1602070069	HEX BOLT - 5/16"-18 X 1 1/2" UNC - ZINC PLTD - GRADE 5	2
7	1518000004	CONE LOCK NUT - 3/8"-16 UNC - ZINC PLTD	6
8	13000001657-00	DECAL - ROTATING FLIGHTING	1

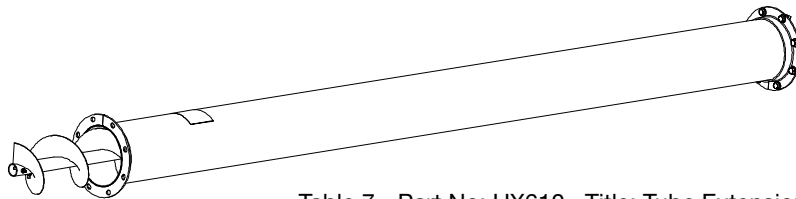


Table 7 - Part No: UX610 Title: Tube Extension 10'

ITEM	PART #	DESCRIPTION	QTY
1	650406205	FLIGHT ASSEMBLY - UX610	1
2	650406203	TUBE ASSEMBLY	1
3	1624050001	CONE LOCK NUT - 5/16"-18 UNC - ZINC PLTD	2
4	1617070004	U.S.S. FLAT WASHER - 3/8" - ZINC PLTD	12
5	1602070124	HEX BOLT - 3/8"-16 X 1" UNC - ZINC PLTD - GRADE 5	6
6	1602070069	HEX BOLT - 5/16"-18 X 1 1/2" UNC - ZINC PLTD - GRADE 5	2
7	1518000004	CONE LOCK NUT - 3/8"-16 UNC - ZINC PLTD	6
8	13000001657-00	DECAL - ROTATING FLIGHTING	1

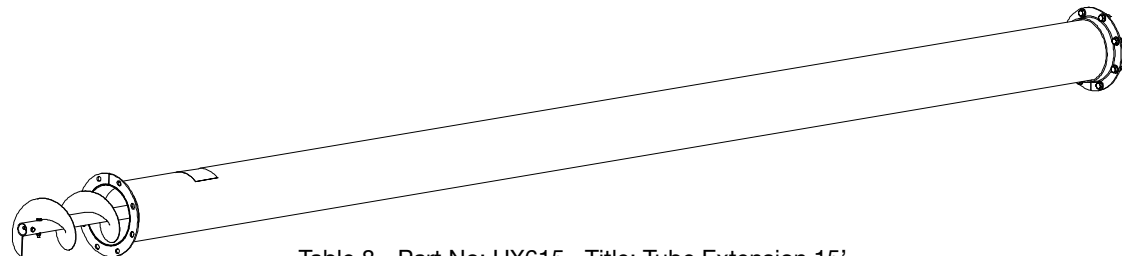


Table 8 - Part No: UX615 Title: Tube Extension 15'

ITEM	PART #	DESCRIPTION	QTY
1	650406207	FLIGHT ASSEMBLY - UX615	1
2	650406206	TUBE ASSEMBLY - UX615	1
3	1624050001	CONE LOCK NUT - 5/16"-18 UNC - ZINC PLTD	2
4	1617070004	U.S.S. FLAT WASHER - 3/8" - ZINC PLTD	12
5	1602070124	HEX BOLT - 3/8"-16 X 1" UNC - ZINC PLTD - GRADE 5	6
6	1602070069	HEX BOLT - 5/16"-18 X 1 1/2" UNC - ZINC PLTD - GRADE 5	2
7	1518000004	CONE LOCK NUT - 3/8"-16 UNC - ZINC PLTD	6
8	13000001657-00	DECAL - ROTATING FLIGHTING	1

### 7.3 UA816 PARTS

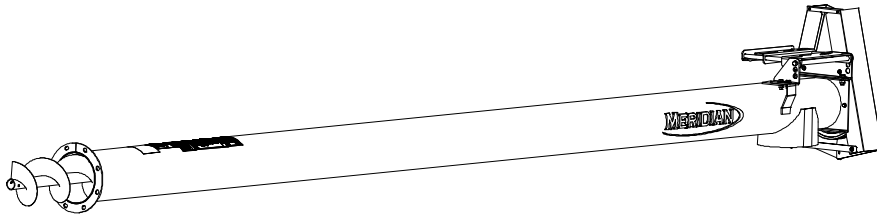
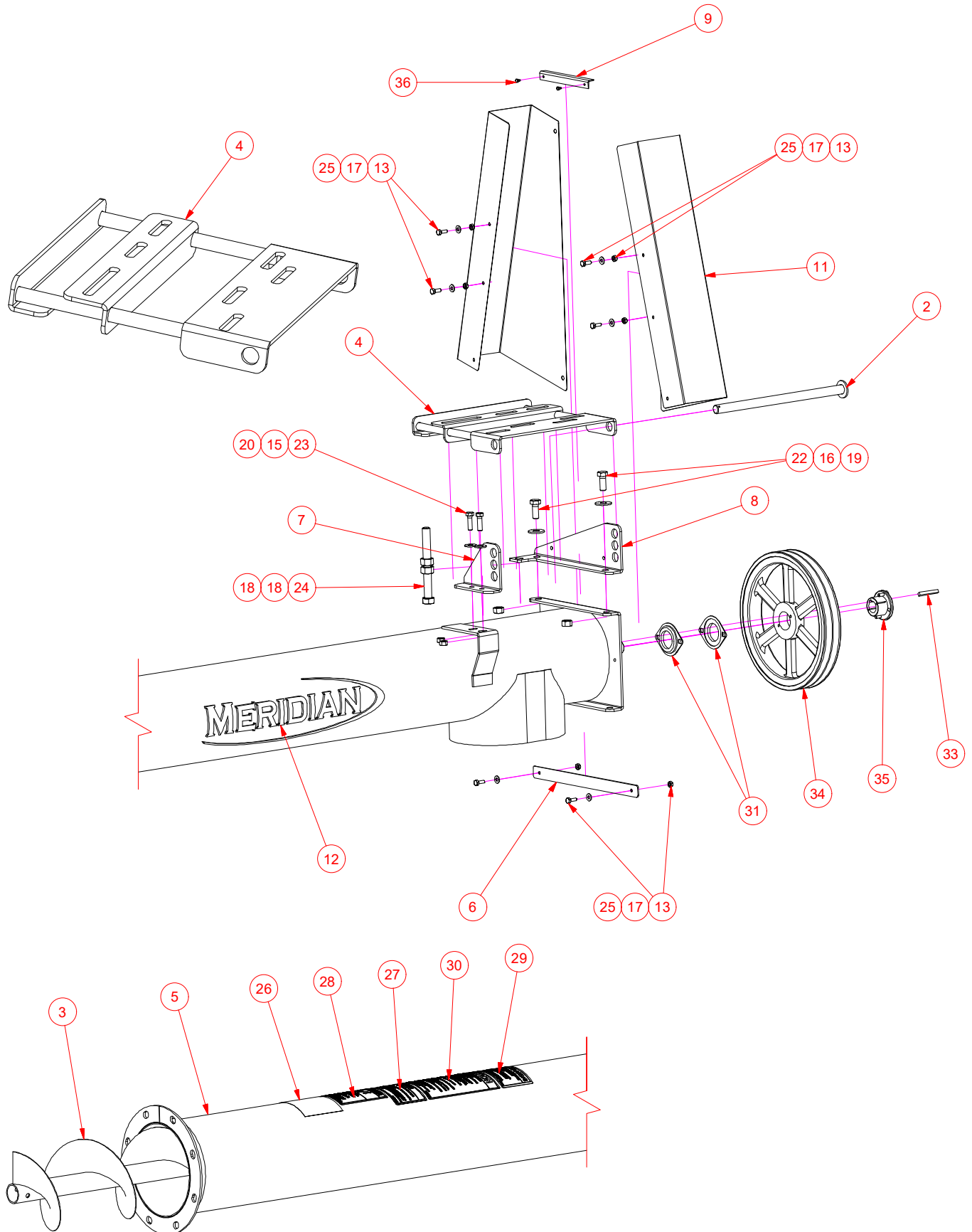


Table 9 - Part No: UA816 Title: Tube Discharge

ITEM	PART #	DESCRIPTION	QTY
1	vbelt - B44	V-BELT - B44	2
2	650406208	PIN ROD ASSEMBLY	1
3	650406185	FLIGHT MAIN TUBE - UA816	1
4	650406178	MOTOR MOUNT ASSEMBLY	1
5	650406174	TUBE DISCHARGE - UA816	1
6	650121438	PULLEY GUARD BRACKET	1
7	650121299	MOTOR MOUNT BRACKET	1
8	650121298	MOTOR MOUNT BRACKET TUBE END	1
9	650121297	PULLEY GUARD BRACKET	1
10	650121296	PULLEY GUARD	1
11	650121295	PULLEY GUARD	1
12	20035	DECAL MMI 19" WHITE	2
13	1624070001	CONE LOCK NUT - 1/4"-20 UNC - ZINC PLTD	6
14	1624050001	CONE LOCK NUT - 5/16"-18 UNC - ZINC PLTD	2
15	1617070004	U.S.S. FLAT WASHER - 3/8" - ZINC PLTD	2
16	1617010002	U.S.S. FLAT WASHER - 1/2" - BLACK	2
17	1613070002	S.A.E FLAT WASHER - 1/4" - ZINC PLTD	6
18	1609070007	HEX NUT - 5/8"-11 UNC - ZINC PLTD - GRADE 5	2
19	1609070005	HEX NUT - 1/2"-13 UNC - ZINC PLTD - GRADE 5	2
20	1609070003	HEX NUT - 3/8"-16 UNC - ZINC PLTD - GRADE 5	2
21	1603070379	CARRIAGE BOLT - 5/16"-18 UNC X 1" - ZINC PLTD - GRADE 5	2
22	1602070246	HEX BOLT - 1/2"-13 X 1 1/4" UNC - ZINC PLTD - GRADE 5	2
23	1602070126	HEX BOLT - 3/8"-16 X 1 1/4" UNC - ZINC PLTD - GRADE 5	2
24	1602070035	HEX BOLT - 5/8"-11 X 6" UNC - ZINC PLTD - GRADE 5 - FULL THREAD	1
25	1602070004	HEX BOLT - 1/4"-20 X 3/4" UNC - ZINC PLTD - GRADE 5	6
26	13000001657-00	DECAL "ROTATING FLIGHTING"	1
27	13000001656-00	DECAL - ELECTROCUTION HAZARD	1
28	13000001655-00	DECAL UPENDING HAZARD	1
29	13000001654-00	DECAL - SMALL WARNING	1
30	13000001653-00	DECAL - LARGE CAUTION	1
31	12-1000-0136	BEARING FLANGE - 2-BOLT STEEL	2
32	12-1000-0135	BEARING- 1" ID X52mm NTNAS205 C/W INNER RING & SET SCREW	1
33	11-2300-0020	KEY STOCK - 1/4" SQ x 2"	1
34	11-1600-0009	DOUBLE GROVE - 12.0" OD - 2BK120H	1
35	11-1500-0003	HUB - H 1"	1
36	-	HEX BOLT SELF TAPPING - #8-32 UNC X 1/4" - ZINC PLTD - GRADE 5	2



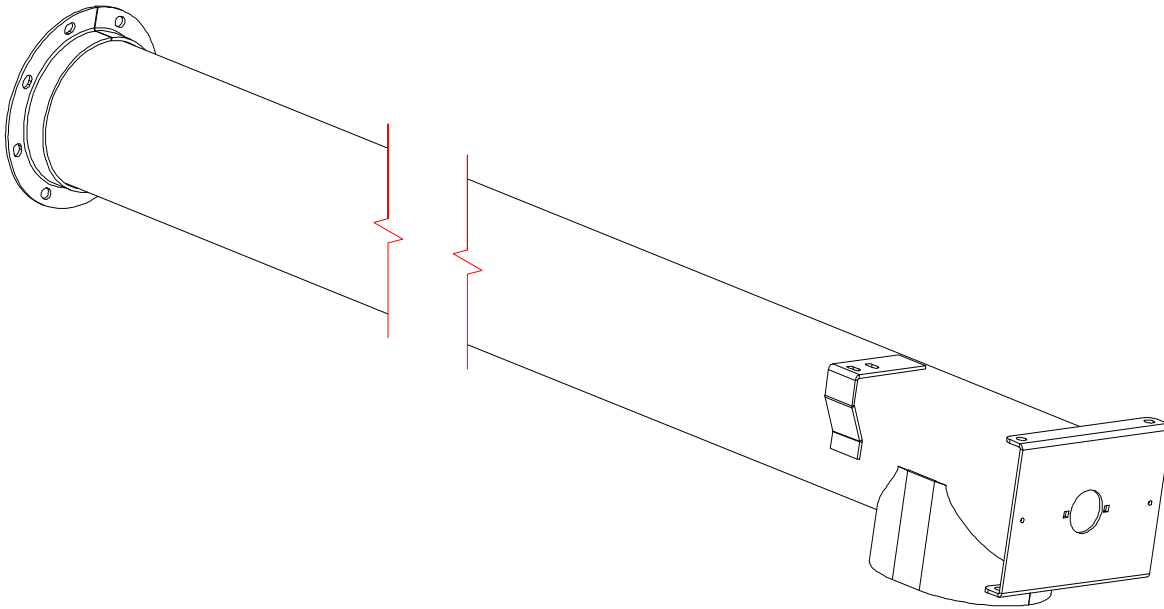


Table 10 - Part No: UA816 Title: Tube Discharge

ITEM	PART #	DESCRIPTION	QTY
3	650406174	TUBE DISCHARGE - UA816	1

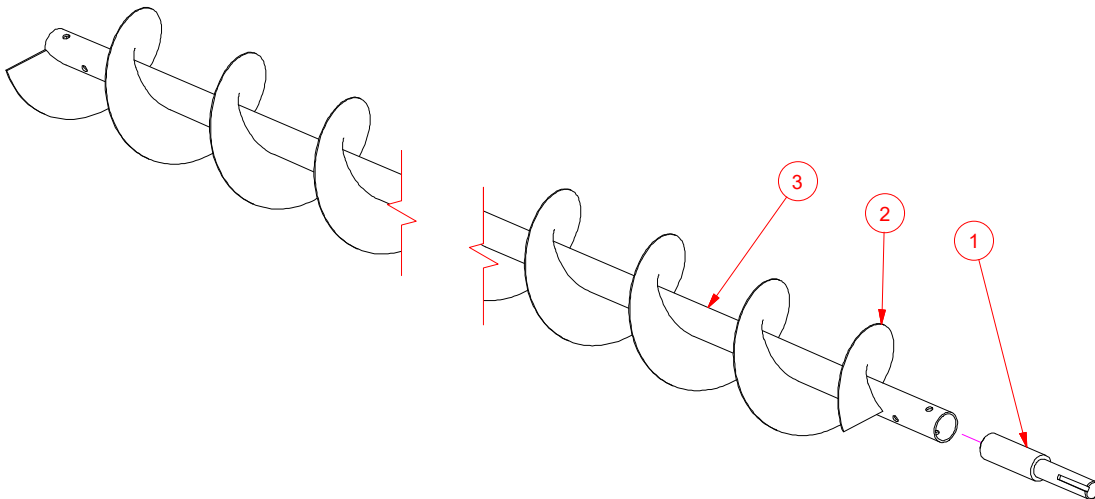


Table 11 - Part No: 650406185 Title: Flight Main Tube - UA816

ITEM	PART #	DESCRIPTION	QTY
1	650121290	SHAFT - 1 7/16 X 8	1
2	650121289	HELIX 16' - UA816	1
3	650121288	TUBE- CORE - FLIGHT TROUGH - UA816	1

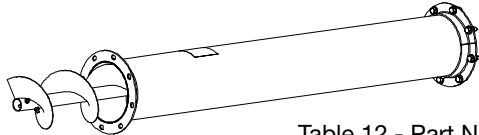


Table 12 - Part No: UX805 Title: Tube Extension 5'

ITEM	PART #	DESCRIPTION	QTY
1	650406186	TUBE ASSEMBLY	1
2	650406175	FLIGHT ASSEMBLY - UX805	1
3	1624070003	CONE LOCK NUT - 1/2"-13 UNC - ZINC PLTD	8
4	1624050001	CONE LOCK NUT - 5/16"-18 UNC - ZINC PLTD	2
5	1613070006	S.A.E. FLAT WASHER - 1/2" - ZINC PLTD	16
6	1602070246	HEX BOLT - 1/2"-13 X 1 1/4" UNC - ZINC PLTD - GRADE 5	8
7	1602070072	HEX BOLT - 5/16"-18 X 2 1/4" UNC - ZINC PLTD - GRADE 5	2
8	13000001657-00	DECAL "ROTATING FLIGHTING"	1



Table 13 - Part No: UX810 Title: Tube Extension 10'

ITEM	PART #	DESCRIPTION	QTY
1	650406187	TUBE ASSEMBLY - UX810	1
2	650406176	FLIGHT ASSEMBLY - UX810	1
3	1624070003	CONE LOCK NUT - 1/2"-13 UNC - ZINC PLTD	8
4	1624050001	CONE LOCK NUT - 5/16"-18 UNC - ZINC PLTD	2
5	1613070006	S.A.E. FLAT WASHER - 1/2" - ZINC PLTD	16
6	1602070246	HEX BOLT - 1/2"-13 X 1 1/4" UNC - ZINC PLTD - GRADE 5	8
7	1602070072	HEX BOLT - 5/16"-18 X 2 1/4" UNC - ZINC PLTD - GRADE 5	2
8	13000001657-00	DECAL "ROTATING FLIGHTING"	1

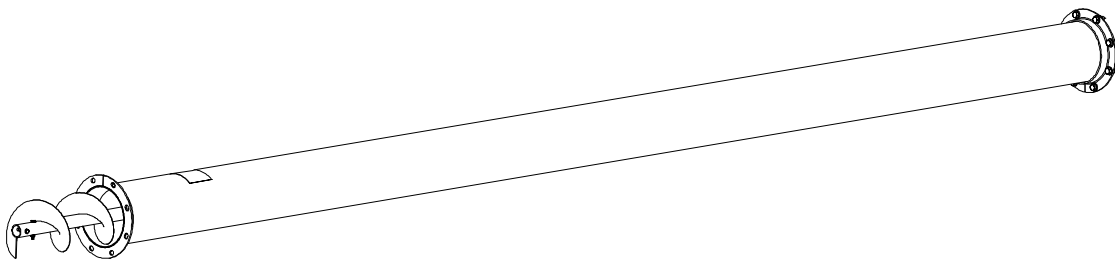


Table 14 - Part No: UX815 Title: Tube Extension 15'

ITEM	PART #	DESCRIPTION	QTY
1	650406188	TUBE ASSEMBLY - UX815	1
2	650406177	FLIGHT ASSEMBLY - UX815	1
3	1624070003	CONE LOCK NUT - 1/2"-13 UNC - ZINC PLTD	8
4	1624050001	CONE LOCK NUT - 5/16"-18 UNC - ZINC PLTD	2
5	1613070006	S.A.E. FLAT WASHER - 1/2" - ZINC PLTD	16
6	1602070246	HEX BOLT - 1/2"-13 X 1 1/4" UNC - ZINC PLTD - GRADE 5	8
7	1602070072	HEX BOLT - 5/16"-18 X 2 1/4" UNC - ZINC PLTD - GRADE 5	2
8	13000001657-00	DECAL "ROTATING FLIGHTING"	1

### 7.4 UA1016 PARTS

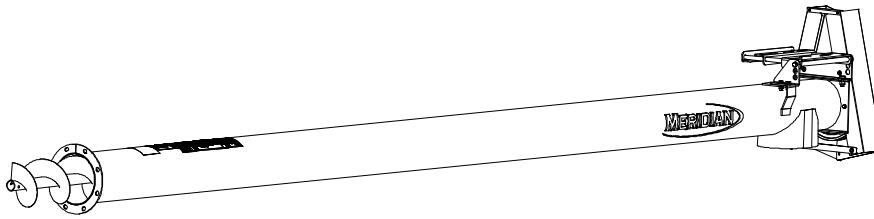
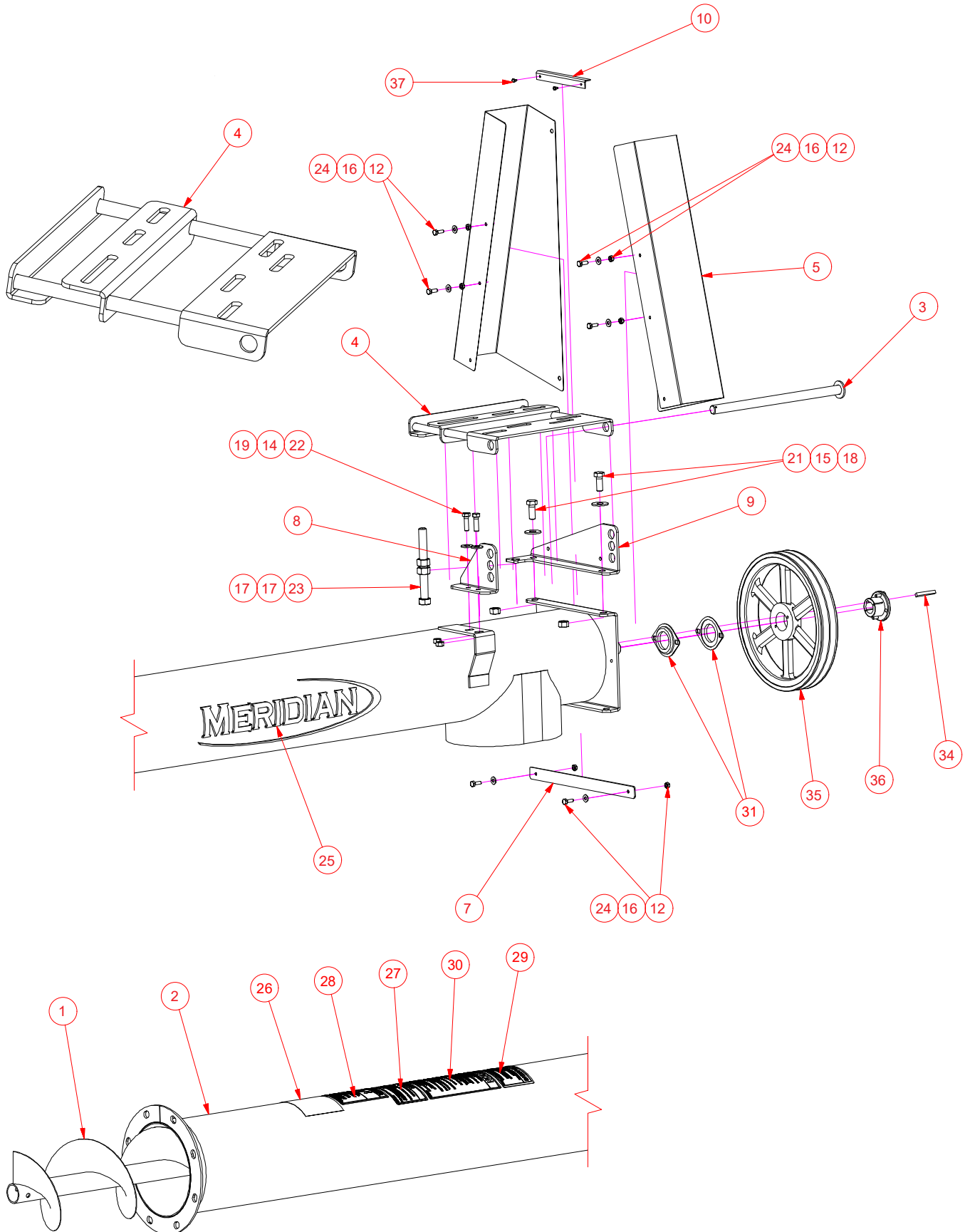


Table 15 - Part No: UA1016 Title: Tube Discharge

ITEM	PART #	DESCRIPTION	QTY
1	650406225	FLIGHT MAIN TUBE - UA1016	1
2	650406224	TUBE - 14GA x 10D x 15'2"L	1
3	650406208	PIN ROD ASSEMBLY	1
4	650406178	MOTOR MOUNT ASSEMBLY	1
5	650121449	PULLEY GUARD	1
6	650121448	PULLEY GUARD	1
7	650121438	PULLEY GUARD BRACKET	1
8	650121299	MOTOR MOUNT BRACKET	1
9	650121298	MOTOR MOUNT BRACKET TUBE END	1
10	650121297	PULLEY GUARD BRACKET	1
12	1624070001	CONE LOCK NUT - 1/4"-20 UNC - ZINC PLTD	6
13	1624050001	CONE LOCK NUT - 5/16"-18 UNC - ZINC PLTD	2
14	1617070004	U.S.S. FLAT WASHER - 3/8" - ZINC PLTD	2
15	1617010002	U.S.S. FLAT WASHER - 1/2" - BLACK	2
16	1613070002	S.A.E. FLAT WASHER - 1/4" - ZINC PLTD	6
17	1609070007	HEX NUT - 5/8"-11 UNC - ZINC PLTD - GRADE 5	2
18	1609070005	HEX NUT - 1/2"-13 UNC - ZINC PLTD - GRADE 5	2
19	1609070003	HEX NUT - 3/8"-16 UNC - ZINC PLTD - GRADE 5	2
20	1603070379	CARRIAGE BOLT - 5/16"-18 UNC X 1" - ZINC PLTD - GRADE 5	2
21	1602070246	HEX BOLT - 1/2"-13 X 1 1/4" UNC - ZINC PLTD - GRADE 5	2
22	1602070126	HEX BOLT - 3/8"-16 X 1 1/4" UNC - ZINC PLTD - GRADE 5	2
23	1602070035	HEX BOLT - 5/8"-11 X 6" UNC - ZINC PLTD - GRADE 5 - FULL THREAD	1
24	1602070004	HEX BOLT - 1/4"-20 X 3/4" UNC - ZINC PLTD - GRADE 5	6
25	13000003685-00	DECAL "MERIDIAN"	2
26	13000001657-00	DECAL - ROTATING FLIGHTING	1
27	13000001656-00	DECAL - ELECTROCUTION HAZARD	1
28	13000001655-00	DECAL - UPENDING HAZARD	1
29	13000001654-00	DECAL - SMALL WARNING	1
30	13000001653-00	DECAL - LARGE CAUTION	1
31	12-1000-0136	BEARING FLANGE - 2-BOLT STEEL	2
32	12-1000-0135	BEARING- 1" ID X52mm NTNAS205 C/W INNER RING & SET SCREW	1
33	1118000124	V-BELT - B44	2
34	11-2300-0020	KEY STOCK - 1/4" SQ x 2"	1
35	11-1600-0009	DOUBLE GROVE - 12.0" OD - 2BK120H	1
36	11-1500-0003	HUB - H 1"	1
37	-	HEX BOLT SELF TAPPING - #8-32 UNC x 1/4" - ZINC PLTD - GRADE 5	2





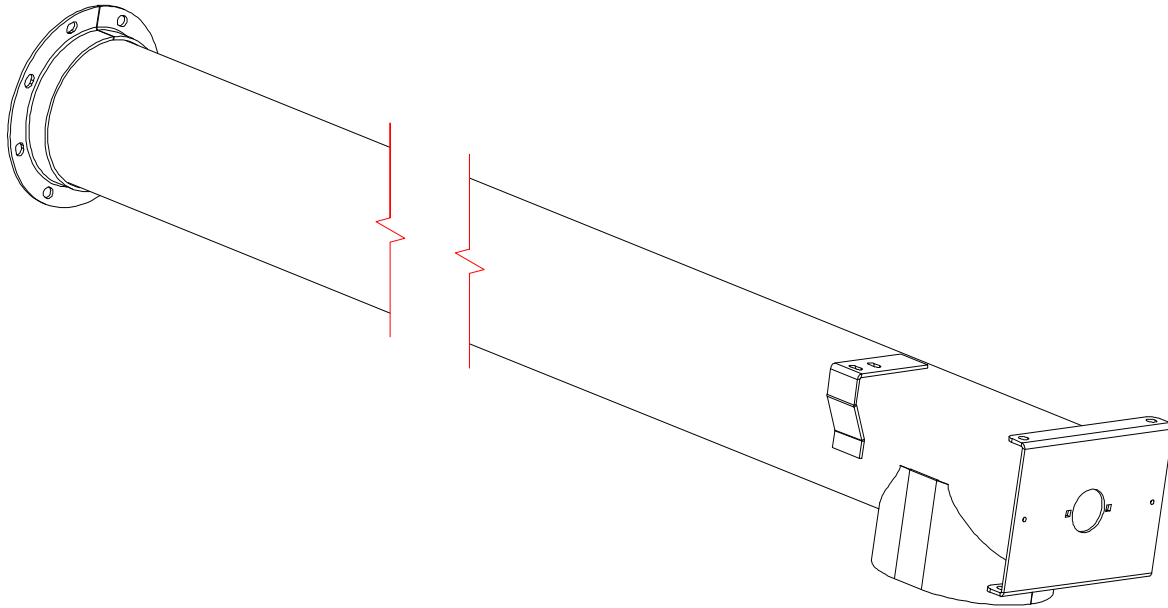


Table 16 - Part No: UA1016 Title: Tube Discharge

ITEM	PART #	DESCRIPTION	QTY
1	650406224	Tube - 14GA X 10D X 15' 2"L	1

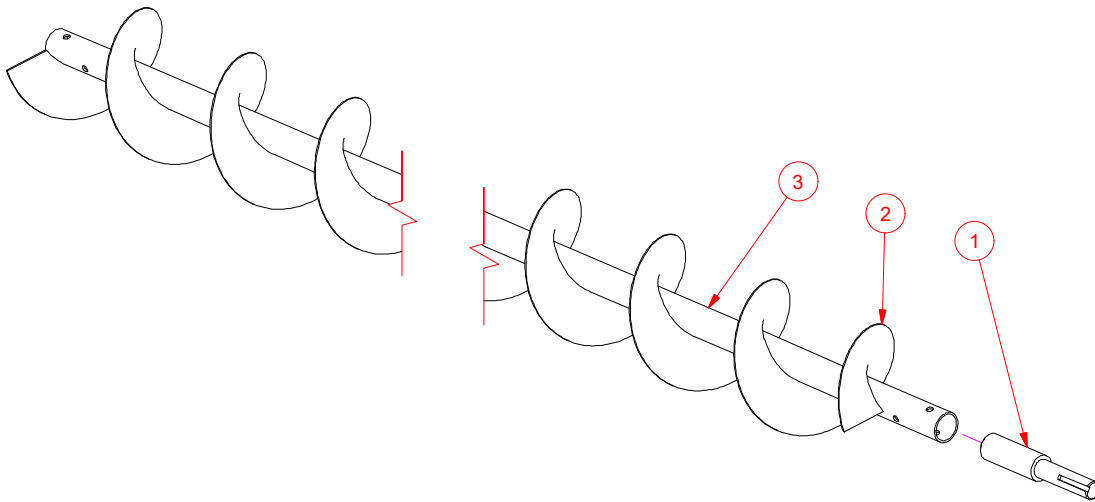


Table 17 - Part No: 650406225 Title: Flight Main Tube - UA1016

ITEM	PART #	DESCRIPTION	QTY
1	650121444	SHAFT - 1 3/4 X 8	1
2	650121443	HELIX 16' - UA1016	1
3	650121442	TUBE- CORE - FLIGHT TROUGH - UA1016	1

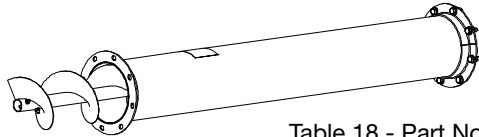


Table 18 - Part No: UX1005 Title: Tube Extension 5'

ITEM	PART #	DESCRIPTION	QTY
1	650406231	FLIGHT ASSEMBLY - UX1005	1
2	650406230	TUBE ASSEMBLY - UX1005	1
3	1624070003	CONE LOCK NUT - 1/2"-13 UNC - ZINC PLTD	8
4	1624050001	CONE LOCK NUT - 5/16"-18 UNC - ZINC PLTD	2
5	1613070006	S.A.E. FLAT WASHER - 1/2" - ZINC PLTD	16
6	1602070246	HEX BOLT - 1/2"-13 X 1 1/4" UNC - ZINC PLTD - GRADE 5	8
7	1602070017	HEX BOLT - 5/16"-18 X 2 1/2" UNC - ZINC PLTD - GRADE 5	2
8	13000001657-00	DECAL "ROTATING FLIGHTING"	1

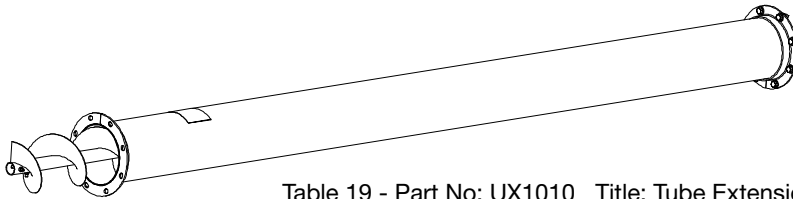


Table 19 - Part No: UX1010 Title: Tube Extension 10'

ITEM	PART #	DESCRIPTION	QTY
1	650406229	FLIGHT ASSEMBLY - UX1010	1
2	650406228	TUBE ASSEMBLY - UX1010	1
3	1624070003	CONE LOCK NUT - 1/2"-13 UNC - ZINC PLTD	8
4	1624050001	CONE LOCK NUT - 5/16"-18 UNC - ZINC PLTD	2
5	1613070006	S.A.E. FLAT WASHER - 1/2" - ZINC PLTD	16
6	1602070246	HEX BOLT - 1/2"-13 X 1 1/4" UNC - ZINC PLTD - GRADE 5	8
7	1602070017	HEX BOLT - 5/16"-18 X 2 1/2" UNC - ZINC PLTD - GRADE 5	2
8	13000001657-00	DECAL "ROTATING FLIGHTING"	1

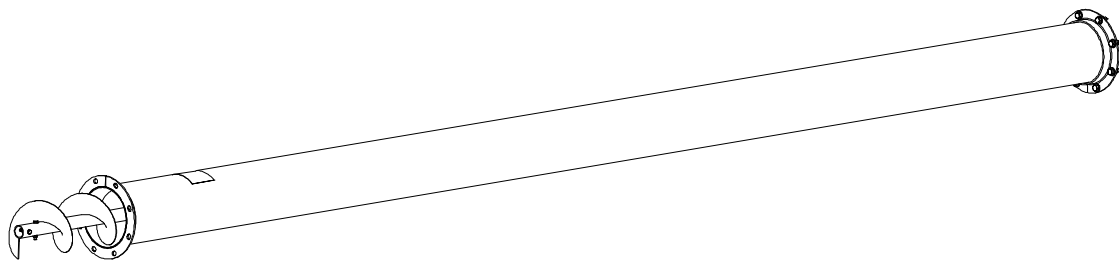
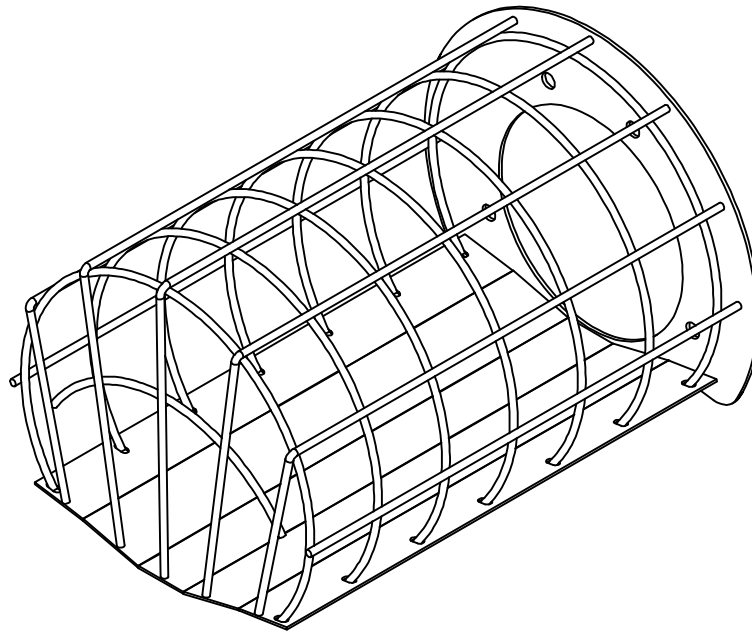


Table 20 - Part No: UX1015 Title: Tube Extension 15'

ITEM	PART #	DESCRIPTION	QTY
1	650406227	FLIGHT ASSEMBLY - UX1015	1
2	650406226	TUBE ASSEMBLY - UX1015	1
3	1624070003	CONE LOCK NUT - 1/2"-13 UNC - ZINC PLTD	8
4	1624050001	CONE LOCK NUT - 5/16"-18 UNC - ZINC PLTD	2
5	1613070006	S.A.E. FLAT WASHER - 1/2" - ZINC PLTD	16
6	1602070246	HEX BOLT - 1/2"-13 X 1 1/4" UNC - ZINC PLTD - GRADE 5	8
7	1602070017	HEX BOLT - 5/16"-18 X 2 1/2" UNC - ZINC PLTD - GRADE 5	2
8	13000001657-00	DECAL "ROTATING FLIGHTING"	1



Part No: 650406223 Title: Safety Guard - UA 10"

Part No: 650406217 Title: Safety Guard - UA 6"

Part No: 650406216 Title: Safety Guard - UA 8"

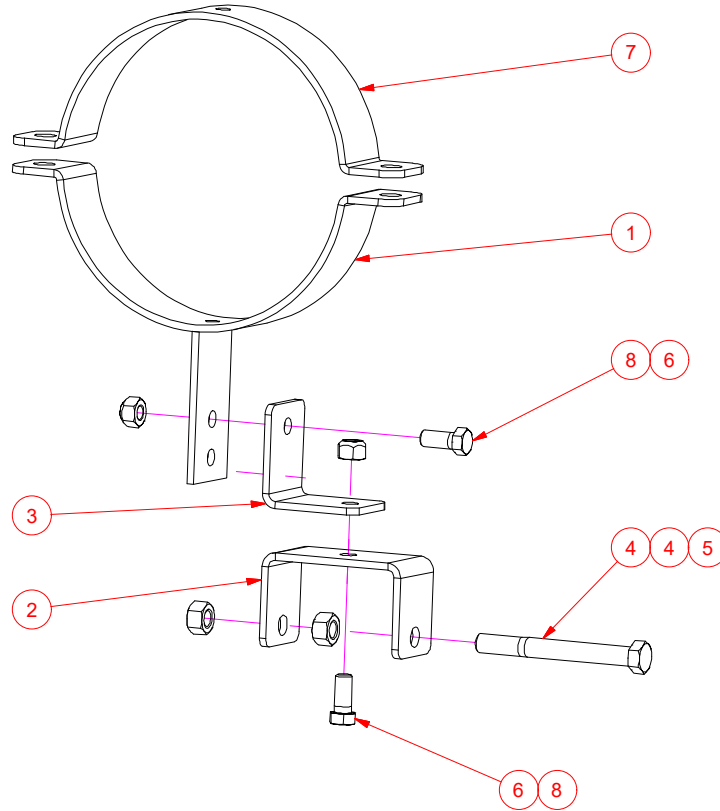
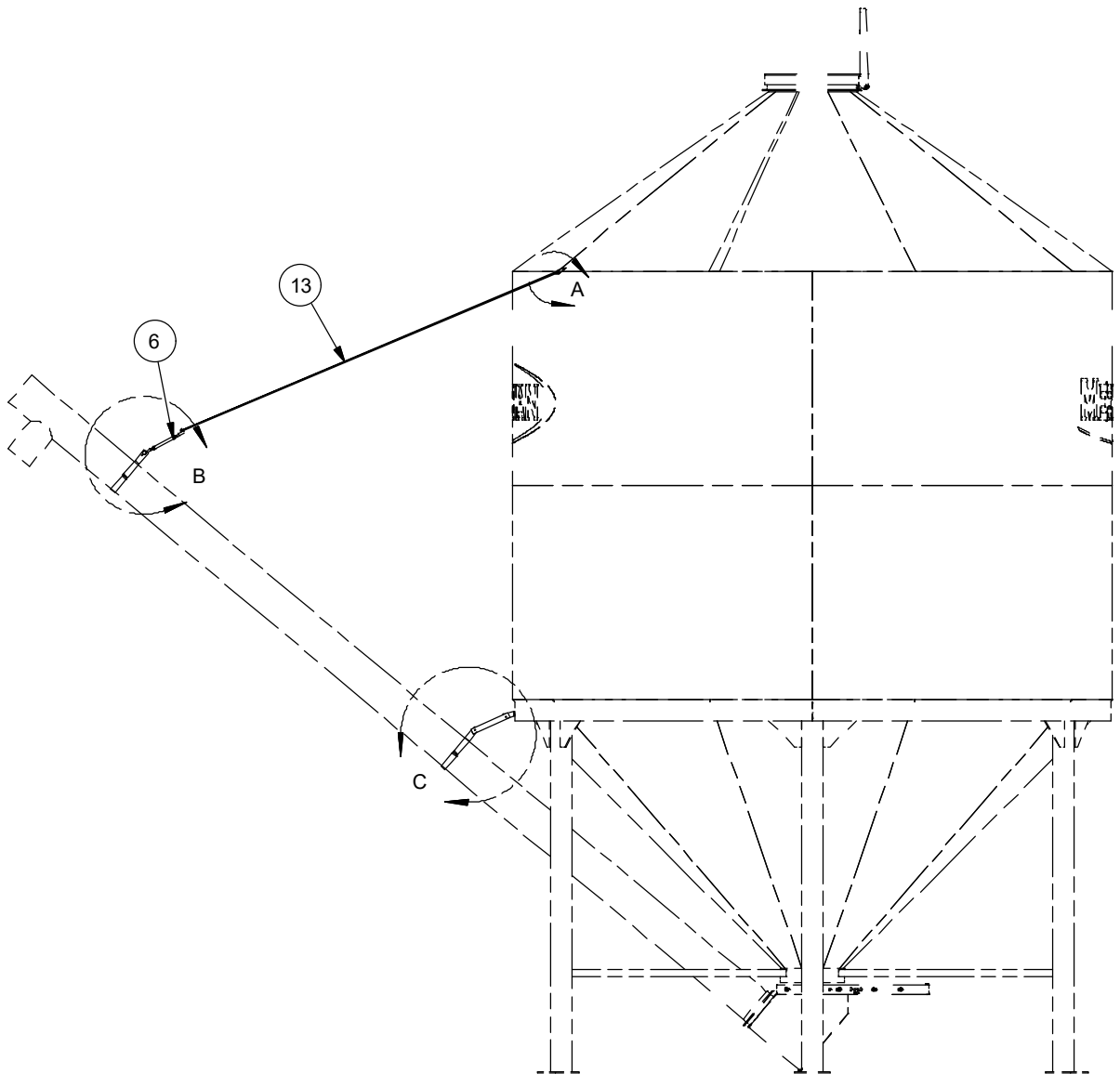
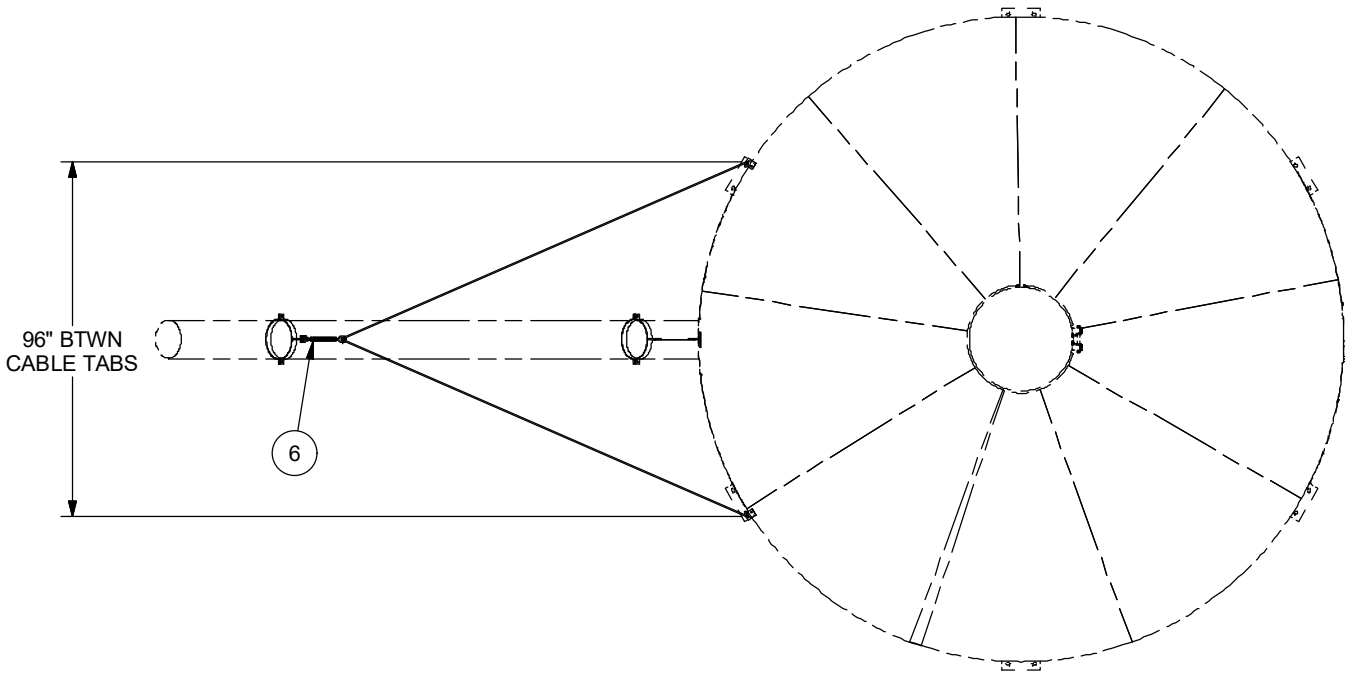


Table 21 - Title: Swivel Mount Kit Utility Auger  
 Part No: 650506909 - 6"  
 Part No: 650506908 - 8"  
 Part No: 650506910 - 10"

ITEM	PART #	DESCRIPTION	QTY
1	650406222	AUGER CLAMP UPPER RING SUPPORT 10"	1
1	650406221	AUGER CLAMP UPPER RING SUPPORT 6"	1
1	650406220	AUGER CLAMP UPPER RING SUPPORT 8"	1
2	650121427	BOX PLATE	1
3	650121426	SWIVEL BRACKET	1
4	1609070005	HEX NUT - 1/2"-13 UNC - ZINC PLTD - GRADE 5	2
5	1602070260	HEX BOLT - 1/2"-13 X 4 1/2" UNC - ZINC PLTD - GRADE 5	1
6	1602070022	HEX BOLT - 7/16"-14 X 1" UNC - ZINC PLTD - GRADE 5	2
7	101090	6" TUBE CLAMP - TYPE 2	1
7	101086	8" TUBE CLAMP - TYPE 2	1
7	101078	10" TUBE CLAMP - TYPE 2	1
8	-	CONE LOCK NUT - 7/16"-14 UNC - ZINC PLTD	2



ITEM	QTY	MASS	PART #	DESCRIPTION
1	2	Various	SEE BELOW	LOWER AUGER CLAMP
2	2	Various	SEE BELOW	AUGER CLAMP UPPER RING SUPPORT
3	1	0.516 lbmass	26304	AUGER T-BRACKET ASSEM
4	1	0.902 lbmass	20311	AUGER RING SUPPORT EXTENSION
5	2	0.306 lbmass	26303	AUGER CABLE TAB
6	1	0.219 lbmass	18623	6 X 1/2 JAW & EYE TURNBUCKLE
7	4			1/4" SELF-TAPPING SCREWS
8	2			5/16" SELF-THREADING BOLTS
9	4			3/8" X 2" BOLTS
10	4	0.000 lbmass	18675	CABLE CLAMPS
11	2			3/8" X 1" BOLTS
12	6			3/8" NUTS
13	40'	0.000 lbmass	18622	1/4" AIRCRAFT CABLE

Part # 35204 Title: Auger Mounting Kit 10"

ITEM	QTY	MASS	PART #	DESCRIPTION
1	2	1.453 lbmass	26308	10" LOWER AUGER CLAMP
2	2	1.757 lbmass	20308	AUGER CLAMP UPPER RING SUPPORT 10"

Part # 35203 Title: Auger Mounting Kit 8"

ITEM	QTY	MASS	PART #	DESCRIPTION
1	2	1.203 lbmass	26307	8" LOWER AUGER CLAMP
2	2	1.506 lbmass	20306	AUGER CLAMP UPPER RING SUPPORT 8"

Part # 35201 Title: Auger Mounting Kit 6"

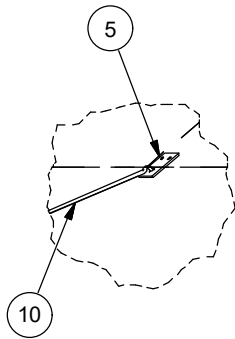
ITEM	QTY	MASS	PART #	DESCRIPTION
1	2	0.952 lbmass	26306	6" LOWER AUGER CLAMP
2	2	1.256 lbmass	20302	AUGER CLAMP UPPER RING SUPPORT 6"

Part # 35200 Title: Auger Mounting Kit 4"

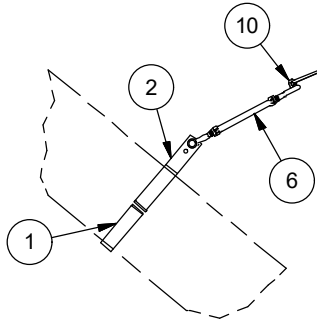
ITEM	QTY	MASS	PART #	DESCRIPTION
1	2	0.703 lbmass	26305	4" LOWER AUGER CLAMP
2	2	1.006 lbmass	20300	AUGER CLAMP UPPER RING SUPPORT 4"

### INSTALLATION INSTRUCTIONS

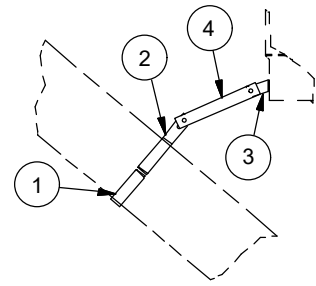
- Mount item# 4 to bottom ring of tank using  $\frac{5}{16}$ " self-threading bolts.
- Mount auger cable tabs 48" from either side of item#4 on the eave of the roof using  $\frac{1}{4}$ " self tapping screws.
- Mount auger clamps on auger as per drawing using  $\frac{3}{8}$ " x 2" bolts and nuts.
  - Top support clamp just below downspout of auger.
  - Bottom support clamp as per detail C with flat bar extension using  $\frac{3}{8}$ " x 1" bolts and nuts.
- Attach cables by running cable through turnbuckle, loosen turnbuckle and bolt to flat bar on top auger clamp. Run cable ends through auger tabs taking up any slack and use supplied cable clamps to fasten. Tighten turnbuckle for cable tension.




DETAIL A

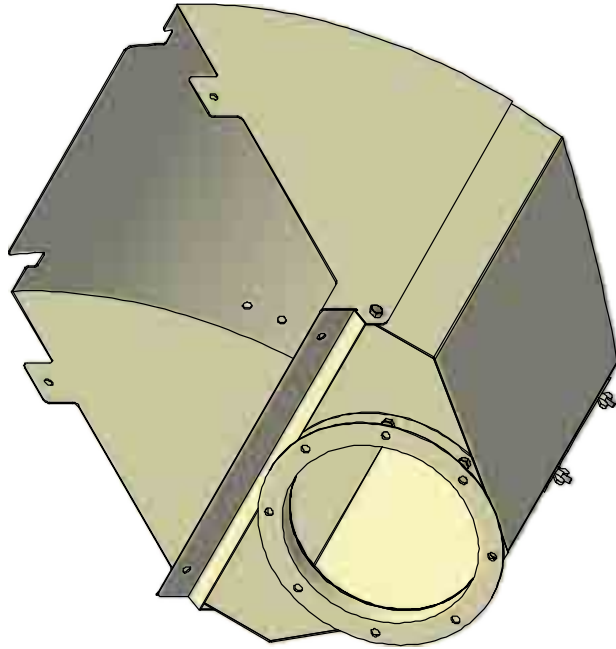
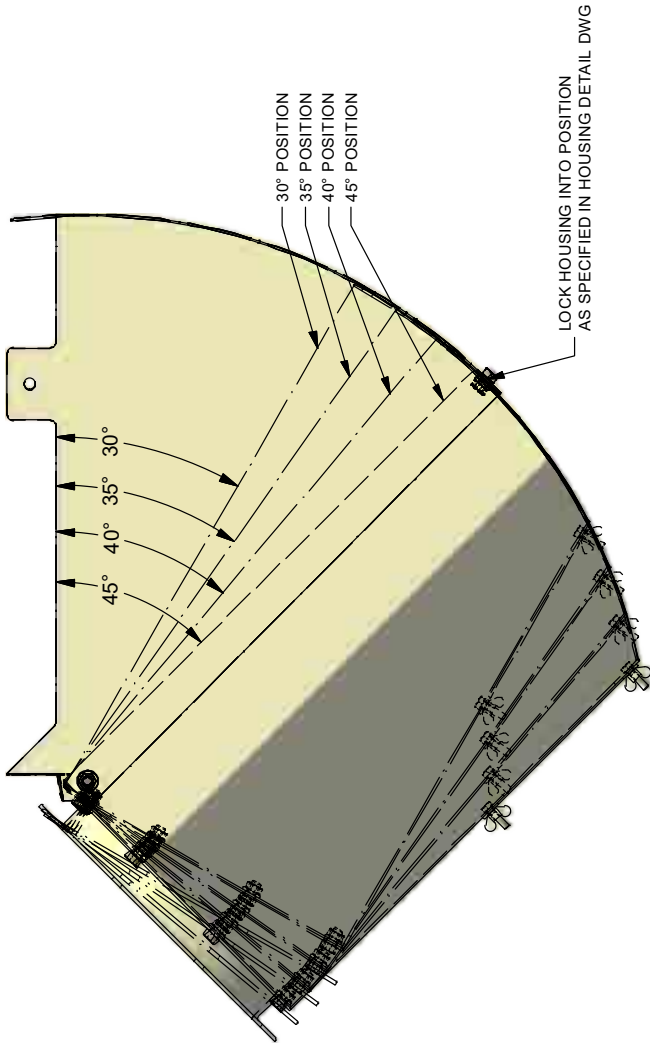


DETAIL B



DETAIL C

 <a href="http://www.meridianmfg.com">www.meridianmfg.com</a>			THIS DRAWING IS THE EXCLUSIVE PROPERTY OF MERIDIAN MANUFACTURING GROUP AND MAY NOT BE DUPLICATED BY ANY MEANS WITHOUT THE SPECIFIC PERMISSION FROM AN AUTHORITY OF MERIDIAN MANUFACTURING GROUP		
			PROJECT NAME: AUGER MOUNTING KIT		MATERIAL: PART WEIGHT: 12.19 lbmass
DRAWN BY: VN	DRAWN BY DATE: 2011-02-04	SHEET SIZE: B		PART DESCRIPTION: AUGER MOUNTING KIT	
CHECKED BY: ADD	CHECKED BY DATE:	SCALE: A	REV:	PART/DRAWING NUMBER: VARIOUS	



REV	DESCRIPTION	DATE	DESIGNER
C	CHANGED HARDWARE - ECO 854	02/26/2013	GML

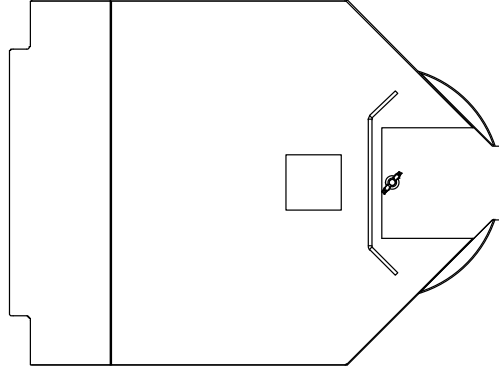
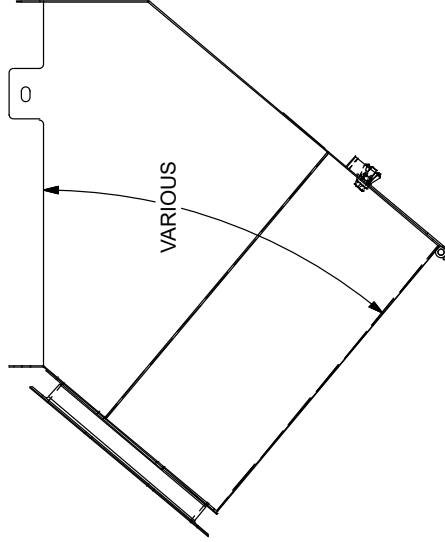
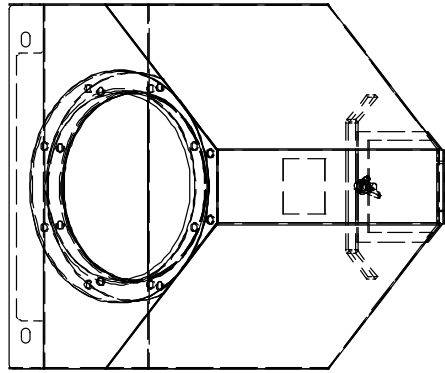
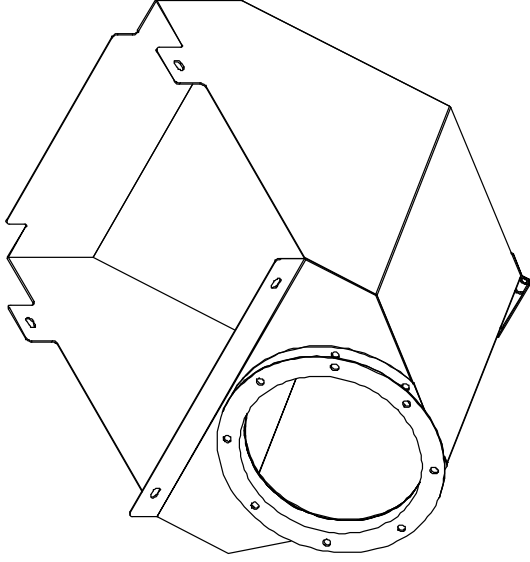
REV	DESCRIPTION	DATE	DESIGNER
C	CHANGED HARDWARE - ECO 854	02/26/2013	GML

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 PROJECT NAME: \_\_\_\_\_ MATERIAL: \_\_\_\_\_  
 COMMON BIN PARTS PART WEIGHT: N/A  
 PART DESCRIPTION: \_\_\_\_\_ PART NUMBER: \_\_\_\_\_  
 UNIVERSAL GRAIN BOOT W/ 10" FLANGE  
 UNIVERSAL GRAIN BOOT W/ 8" FLANGE  
 UNIVERSAL GRAIN BOOT W/ 6" FLANGE

**MERIDIAN**  
 MANUFACTURING GROUP  
 www.meridianmfg.com  
 DRAWN BY: BP DRAWN BY DATE: 2010-02-11 SHEET SIZE: A - SIZE  
 CHECKED BY: GML CHECKED BY DATE: \_\_\_\_\_ SCALE: REV: C



PART #	DESCRIPTION
44842	6" AUGER BOOT 55DEG. FLANGE
44734	10" AUGER BOOT 45DEG. FLANGE
44725	10" AUGER BOOT 40DEG. FLANGE
44641	10" AUGER BOOT 35DEG. FLANGE
44590	10" AUGER BOOT 30DEG. FLANGE
44542	8" AUGER BOOT 45DEG. FLANGE
44541	8" AUGER BOOT 40DEG. FLANGE
44514	8" AUGER BOOT 35DEG. FLANGE
44513	8" AUGER BOOT 30DEG. FLANGE
44470	6" AUGER BOOT 45DEG. FLANGE
44450	6" AUGER BOOT 40DEG. FLANGE
44415	6" AUGER BOOT 35DEG. FLANGE
44414	6" AUGER BOOT 30DEG. FLANGE



REV	DESCRIPTION	DATE	DESIGNER
A			JMF

<b>MERIDIAN</b> MANUFACTURING GROUP <a href="http://www.meridianmg.com">www.meridianmg.com</a>		SHEET SIZE: A - SIZE
DRAWN BY: JMF	DRAWN BY DATE: 2012-04-03	SCALE: REV: A
CHECKED BY: ADD		PART/DRAWING NUMBER: AUGER BOOT W/ FLANGE
PROJECT NAME: COMMON BIN PARTS		
MATERIAL: PART WEIGHT: N/A		

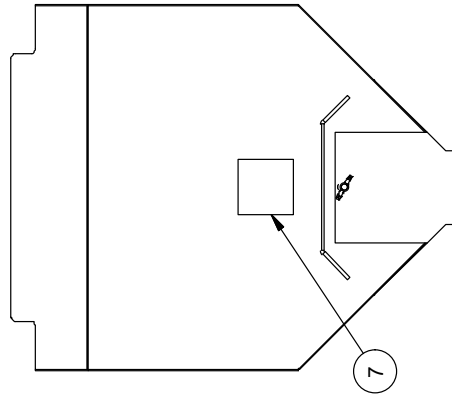
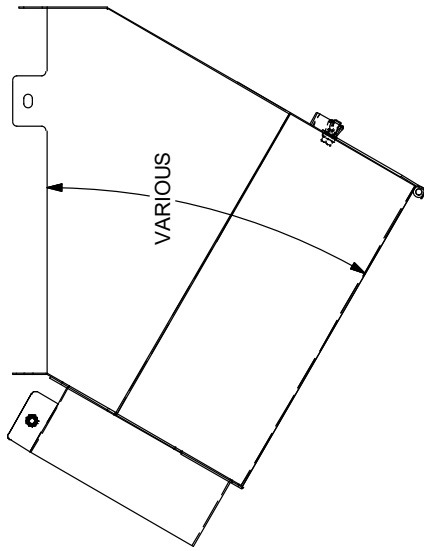
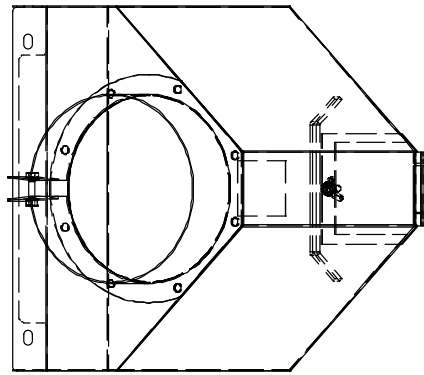
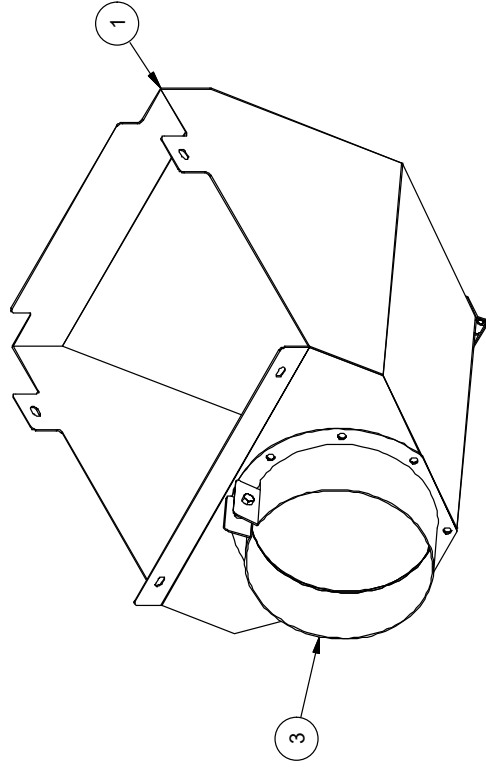
REVISION HISTORY	DESCRIPTION	DATE	DESIGNER
REV	DESCRIPTION	DATE	DESIGNER
A			JMF

Tolerances unless otherwise specified:  
 .XX = ± 0.03  
 .X = ± 0.1  
 .XX = ± 0.03  
 .XXX = ± 0.01  
 < = ± 0.5°  
 Dimensions and tolerances shall be interpreted in accordance with ASME Y14.5-2009.

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ITEM	QTY	MASS	PART #	DESCRIPTION
1	1	30.842 lbmass	35041	AUGER BOOT HOUSING
3	1	3.613 lbmass	35033	UNI GRAIN BOOT CLAMP ASSY
7	1	0.026 lbmass	19962	WARNING DECAL AUGER

PART #	DESCRIPTION
45303	ADAPTOR AUGER BOOT CT. (FEED)
44843	6" AUGER BOOT 55DEG. CLAMP
44836	10" AUGER BOOT 45DEG. CLAMP
44833	10" AUGER BOOT 40DEG. CLAMP
44832	10" AUGER BOOT 35DEG. CLAMP
44735	10" AUGER BOOT 30DEG. CLAMP
44571	8" AUGER BOOT 45DEG. CLAMP
44570	8" AUGER BOOT 40DEG. CLAMP
44552	8" AUGER BOOT 35DEG. CLAMP
44551	8" AUGER BOOT 30DEG. CLAMP
44512	6" AUGER BOOT 45DEG. CLAMP
44490	6" AUGER BOOT 40DEG. CLAMP
44482	6" AUGER BOOT 35DEG. CLAMP
44471	6" AUGER BOOT 30DEG. CLAMP
44413	4" AUGER BOOT 45DEG. CLAMP
44412	4" AUGER BOOT 40DEG. CLAMP
44390	4" AUGER BOOT 35DEG. CLAMP
44371	4" AUGER BOOT 30DEG. CLAMP



REV	DESCRIPTION	DATE	DESIGNER
A			JMF

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PROJECT NAME:	MATERIAL:
COMMON BIN PARTS	PART WEIGHT: N/A
PART DESCRIPTION:	PART/DRAWING NUMBER:
AUGER BOOT W/ CLAMP	VARIOUS

Tolerances unless otherwise specified:

XX = ± 0.03	Symbol
.X = ± 0.1	Tolerance
.XX = ± 0.005	⊕ = ± 0.005
.XXX = ± 0.01	⊙ = 0.015
∠ = ± 0.5°	⊥ = 0.015

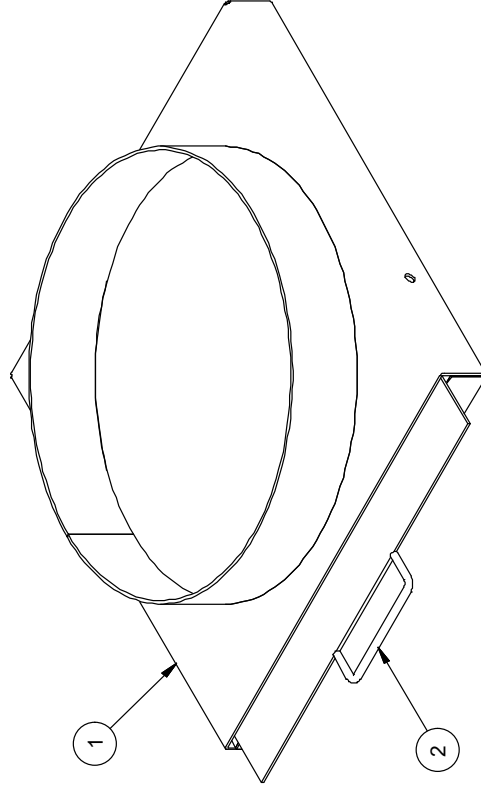
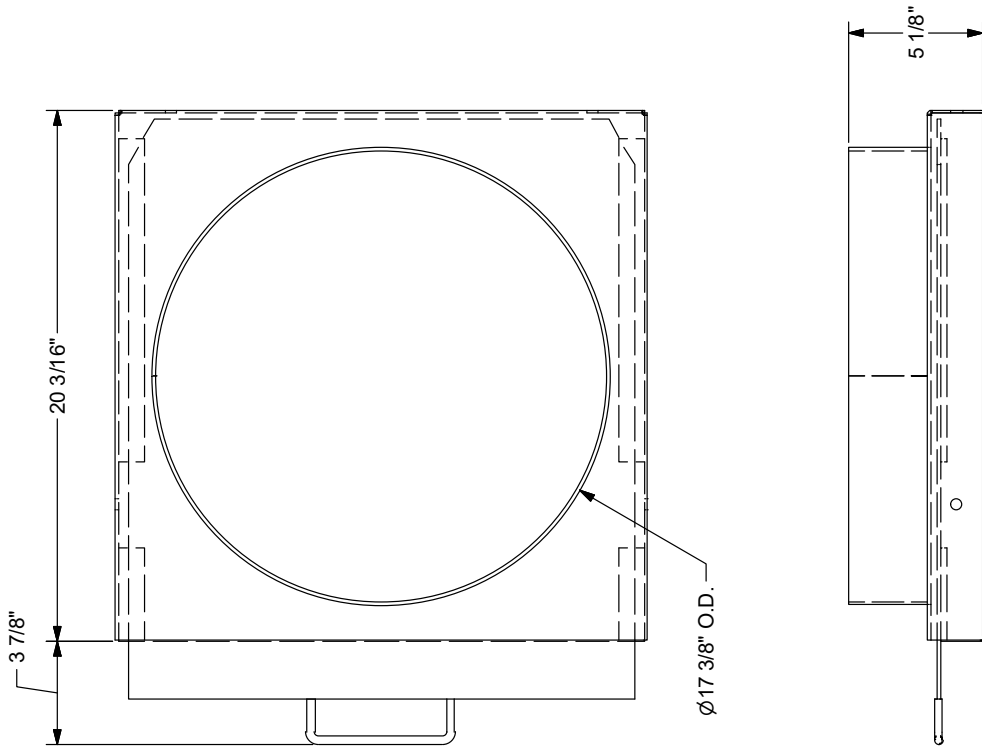
Dimensions and tolerances shall be interpreted in accordance with ASME Y14.5-2009.

**MERIDIAN**  
MANUFACTURING GROUP  
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DRAWN BY: JMF    DRAWN BY DATE: 2012-04-03    SHEET SIZE: A - SIZE

CHECKED BY: ADD    CHECKED BY DATE:    SCALE: REV: A

ITEM	QTY	MASS	PART #	DESCRIPTION
1	1	17.625 lbmass	33448	ADAPTER FRAME ASSEMBLY
2	1	16.286 lbmass	33447	ADAPTER SLIDEPLATE ASSEMBLY



REV	DESCRIPTION	DATE	DESIGNER
A			DS

REVISION HISTORY	
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PROJECT NAME:	MATERIAL:
COMMON BIN PARTS	PART WEIGHT: 33.91 lbmass
PART DESCRIPTION:	PART/DRAWING NUMBER:
ADAPTER FEED-AUGER BOOT	45303

<b>MERIDIAN</b> MANUFACTURING GROUP <a href="http://www.meridianmg.com">www.meridianmg.com</a>	
DRAWN BY: DS	SHEET SIZE: A - SIZE
CHECKED BY: BP	SCALE: REV: A
DRAWN BY DATE: 2013-04-05	CHECKED BY DATE: 2013-04-05

# LIMITED WARRANTY STATEMENT

1. Meridian Manufacturing Inc warrants each new Meridian Manufacturing Inc product (the "Goods") to be free from defects in material and workmanship under normal use and service for a period of one (1) year or ninety (90) days in the case of commercial use, from the shipment date from the Meridian dealer (FCA).
2. Meridian warrants replacement parts and components either manufactured or sold by, will be free from defects in materials or workmanship under normal use and service for thirty (30) days from the shipment date from the Meridian dealer (FCA), or the remainder of the original warranty period on the Goods, whichever is longer.
3. This warranty does not apply to:
  - a. to any merchandise or components thereof, which in the sole and unfettered opinion of Meridian, have been subject to misuse, unauthorized modifications, alteration, accident, negligence, product abuse or lack of required maintenance.
  - b. if repairs have been made with parts or by persons other than those parts or persons approved by Meridian.
  - c. to parts and accessories not manufactured by Meridian including, but not limited to, engines, batteries, tires, belts, PTO shafts or other trade accessories. Such parts shall be covered by the warranty given by the actual manufacturer, if any.
  - d. to failure of parts; or failure of parts to perform due to wear under normal or excessive service conditions; or to failure due to use by the Purchaser for purposes other than originally intended at time of manufacture, including without limitation using the Goods for mixing fertilizer, etc.; or used in excess of the built specifications.
  - e. to Goods used in areas exposed to corrosive or aggressive conditions including, but not limited to, salt water from either inside or outside the Goods.
  - f. to failures or defects arising out of damage during shipment or during storage.
  - g. to materials replaced or repaired under this warranty, except to the extent of the remainder of the applicable warranty.
4. The obligation of Meridian under this warranty shall not arise unless Meridian is notified and this warranty is presented together with a written statement specifying the claim or defect within thirty (30) days after the failure is first detected or made known to the Purchaser and within: (i) one (1) year, or ninety (90) days in the case of commercial use; or (ii) thirty (30) days in the case of replacement parts and components manufactured by Meridian; from the shipment date from the Meridian dealer (FCA). Meridian in its sole and unfettered discretion shall determine if the claim is valid and whether correction of the defect or failure shall be made by repair or replacement of the materials.
5. Title to any replaced materials Meridian wishes to have pass to it, shall pass to Meridian.
6. The obligation of Meridian hereunder extends only to the original Purchaser or Buyer to whom the Goods were initially sold. This warranty shall not be subject to any assignment or transfer without the written consent of Meridian.
7. The purchaser acknowledges that it has made its own independent decision to approve the use of the Goods and also the specific fabrication and construction procedures utilized to complete the Goods, and has satisfied itself as to the suitability of these products for its use.

8. This warranty is subject to the following limitations, provisions and conditions:
  - a. Meridian shall have no liability hereunder for any claims, including field re-work.
  - b. Meridian shall not be liable for any incidental loss or damage, however caused, including, without limitation, normal wear and tear.
  - c. Meridian makes no express or implied warranties of any nature whatsoever except for such express warranties as set out herein. The warranty provided herein is in lieu of and excludes all other warranties, guarantees or conditions pertaining to the Goods, written or oral, statutory, express or implied, (except the warranty as to title) including any warranty as to the merchantability or fitness for any particular purpose. Meridian expressly disclaims all other representations, conditions or warranties, expressed or implied, statutory or otherwise and any representations, warranties or conditions that may arise from a course of dealing or usage of trade. The warranty provided herein shall constitute Meridian's sole obligation and liability and the Purchaser's sole remedy for breach of warranty. No other warranty has been made by any employee, agent, or representative of Meridian and any statements contained in any other printed material of Meridian is expressly excluded herefrom. Meridian shall not be responsible for any warranty offered by the Purchaser to its customers with respect to the Goods and the Purchaser shall indemnify Meridian with respect to same if any of those customers makes a claim against Meridian relating to any such warranty.
  - d. Subject to Meridian's obligations contained in paragraphs 1 and 2 herein, none of Meridian, its officers, directors, servants or agents shall be liable, or responsible for any loss or damage (including strict liability and liability for loss or damage due to items which the manufacturing processes are designed to identify) whether such loss or damage is caused by negligence in any manner whatsoever (including gross negligence, error, misrepresentation, misstatement, imprudence, lack of skill or lack of judgement).
9. The sole financial obligation of Meridian under this warranty shall be limited to the repair or replacement of the Goods as originally supplied and in no event shall they exceed the original cost of the Goods supplied.
10. Meridian shall not have any obligation under any warranty herein until all accounts have been paid in full by the Purchaser.

Register your product at: [www.meridianmfg.com](http://www.meridianmfg.com)  
For warranty information send an email to: [warranty@meridianmfg.com](mailto:warranty@meridianmfg.com)

## **WARRANTY REQUEST PROCEDURE**

- Should you find any factory defects, please advise your dealer immediately.
- The dealer will supply you, the customer, with a warranty claim form and/or direct you to Meridian's customer service representative.
- Warranty claims must be completed with ALL required information in order it to be accepted. Send photographs of the entire piece of equipment, and of the specific area of concern.
- Once the warranty claim has been received by Meridian, our customer service rep. will contact you. Warranty repair work will only be performed by Meridian or an approved representative of Meridian. No warranty work completed prior to approval by Meridian will be honored. Failure to follow procedure may affect any or all of this warranty.
- All warranty claims will be dealt with at the discretion of the Meridian Manufacturing Inc. representative.



(800) 665-7259 | [www.meridianmfg.com](http://www.meridianmfg.com) | [augers@meridianmfg.com](mailto:augers@meridianmfg.com)