

Adult Turkey Feeder System

Installation & Owner's Manual

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Cumberland

a division of

THE GSI GROUP





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All information, illustrations, photos, and specifications in this manual are based on the latest information available at the time of publication. The right is reserved to make changes at any time without notice.



Safety Guidelines

GENERAL SAFETY STATEMENTS

Thank you for choosing a Cumberland Pan Feeding System. It is designed to give excellent performance and service for many years. Cumberland's principle concern is your safety and the safety of others associated with poultry equipment. We want to keep you as a customer. This manual is to help you understand safe operating procedures and some problems which may be encountered by the operator and other personnel.

As owner and/or operator, it is your responsibility to know what requirements, hazards, and precautions exist and inform all personnel associated with the equipment or in the area. Safety precautions may be required from the personnel. Avoid any alterations to the equipment. Such alterations may produce a very dangerous situation, where serious injury or death may occur. Any alterations to this equipment will nullify any existing product warranty.



SAFETY ALERT SYMBOL

This symbol is used to call your attention to instructions concerning your personal safety. Watch for this symbol; it points out important safety precautions. It means "ATTENTION", "WARNING", "CAUTION", and "DANGER". Read the message that follows and be cautious to the possibility of personal injury or death. If a decal has been damaged or is missing, contact Cumberland for a free replacement decal.



DANGER indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.



WARNING indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.



CAUTION indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.



CAUTION used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, may result in property damage.

The GSI Group Inc. recommends that you contact your local power company and have a representative review your installation to verify that all wiring is compatible with their system and ensure an adequate power supplied to your unit.



Safety Guidelines

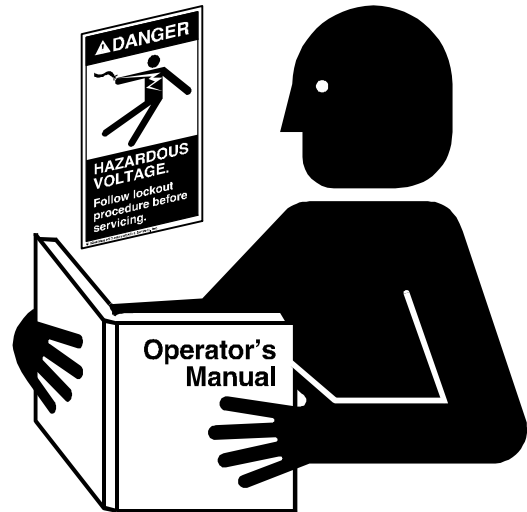
FOLLOW SAFETY INSTRUCTIONS

Carefully read all safety messages in this manual and on your machine safety signs. Keep signs in good condition. Replace missing or damaged safety signs. Be sure new equipment components and repair parts include the current safety signs. Replacement safety signs are available from the manufacturer.

Learn how to operate the machine and how to use controls properly. Do not let anyone operate without instruction.

Keep your machinery in proper working condition. Unauthorized modifications to the machine may impair the function and/or safety and affect machine life.

If you do not understand any part of this manual and need assistance, contact your dealer.



PRACTICE SAFE MAINTENANCE

Understand service procedures before doing work. Keep area clean and dry.

Never lubricate, service, or adjust machine while it is in operation. Keep hands, feet, and clothing from rotating parts.

Keep all parts in good condition and properly installed. Fix damage immediately. Replace worn or broken parts. Remove any build up of grease, oil, or debris.



OPERATE MOTOR PROPERLY

Do not operate electric motor equipped units until motors are properly grounded.

Always disconnect and lock out power source before beginning maintenance.





Safety Guidelines

Electrical Safety:

Provision of an adequate and safe power to the Pan Feeder System unit is essential to your safety. Cumberland/GSI recommends that a competent and qualified electrician undertake all electrical wiring. All wiring is to be installed to the National Standards and Regulations relevant to your Country and Region.

A main breaker should be installed with the Pan Feeder System and is essential for your safety. This should be installed as indicated in the enclosed installation instructions.

Users Manual:

This manual contains information and instructions essential to the safe installation and use of this Pan Feeder System. The manual should be read thoroughly **before** attempting any installation or use of the Pan Feeder System. This manual should be kept with the Pan Feeder System, or in a location where it can be readily accessed. Failure to read this manual and its safety instructions is a misuse of the equipment.

Structural Safety:

Raising and lowering the Pan Feeder System in your poultry house will impose a load on your building. It is essential that you check that your building is able to carry the extra load. Consult a Structural Engineer to check the building strength. Details of the likely weight of your Pan Feeding System are given in the Capacities and Specifications section of this Installation Manual.

Correct Use of Your Pan Feeder System:

The Pan Feeder System is designed solely for the purpose of conveying granular or powdered agricultural feed products for poultry feeding. Use of the system in any other way is a misuse of the system and may endanger your and other persons' safety and health.

In the installation and use of the Pan Feeder System, only genuine Cumberland/GSI parts are to be used. Use of other non-genuine parts is a misuse of the system, and may lead to dangerous situations risking the safety and health of you and others.

This machine is not designed for use in atmospheres where the risk of explosion is foreseen.

Such environments may include enclosed areas of high dusts concentrations, gas vapors and fumes. Use in such an environment is prohibited. If in doubt, contact GSI or your dealer.

Safety Guards:

The Pan Feeder System contains many moving and electrical parts, which can cause serious injury or death if touched. Guards are placed on the machine to protect you. Operating the machine at any time with guards removed or incorrectly fitted is a serious misuse of the machine and endangers you and other people's safety. Guards are removed from this manual for illustration purposes only.

Safety In Handling the Pan Feeding System:

Some edges of the products components are sharp. To prevent injury, any and all necessary personal protective equipment should be worn when handling, installing, or operating this product and any of its components.

Safety in Maintenance:

While the Pan Feeder System is designed to keep maintenance to a minimum, some repairs will be necessary in the course of the life of the machine. Do not attempt any repairs on the machine unless you are competent to do so. Remember that the Pan Feeder system may operate under automatic control and start without warning. Never attempt any work on the Pan Feeder System without first isolating the machine from the power and locking the main breaker so that only you can turn the power back on.

When working on or around the auger, be aware that it may be under tension and may move suddenly when released. Approach the auger using a suitable tool rather than your hands until it is clear that the tension is released and the auger is slack in all places.

Before restarting the Pan Feeder System, ensure that all electrical enclosures are locked closed, and all guards and other safety measures are correctly fitted. If in any doubt, contact your dealer or Cumberland/GSI for assistance.



Safety Guidelines

Dust

Under normal working conditions the Pan Feeder System should create little or no dust hazard. However, some feed materials may create dust when being moved. This may be harmful to your health if inhaled. Seek advice from your feed supplier and use a suitable dust mask where necessary.

Noise:

Tests on this machine have indicated noise levels at a position 1 meter from the drive unit, 1.6 meters above the ground do not exceed 70 dBa, continuous 'A' weighted sound pressure or 63 Pa, instantaneous 'C' weighted sound pressure.

Use Caution in the Operation of this Equipment. The design and manufacture of the Pan Feeding System is directed toward operator safety. However, the very nature of a Pan Feeding System requiring electrical power and possessing moving parts does present a hazard to personnel which cannot be completely safeguarded against without interfering with efficient operation and reasonable access to components.

Continued safe, dependable operation of automatic equipment depends, to a great degree, upon the owner/operator. For a safe and dependable Pan Feeding System, follow the recommendations within this manual and make it a practice to regularly inspect the operation of the unit for any developing problems or unsafe conditions.

READ THESE INSTRUCTIONS BEFORE OPERATION AND SERVICE. SAVE THIS MANUAL FOR FUTURE REFERENCE.

1. Read and understand the operating manual before trying to install or operate the Pan Feeding System.
2. Power supply should be OFF for service of electrical components. Use CAUTION in checking voltage or other procedures requiring power to be ON.
3. Never attempt to operate the Pan Feeding System by jumping or otherwise bypassing any safety devices on the unit.
4. Keep the pan feeding system clean. Do not allow debris to collect around drive unit, control pan, hoppers or boots.
5. Use CAUTION in working around the pan feeding system's moving parts.

The next page is a Safety Sign-Off Sheet provided as an aid to be certain all personnel working with or operating the Pan Feeding System have READ and UNDERSTAND the installation and operation manual. As owner and/or operator, it is your responsibility to know what requirements, hazards and precautions exist and inform all personnel associated with the equipment or in the area.

FOR GUIDANCE OR ASSISTANCE ON ANY ISSUES RELATING TO THE SAFE USE OF YOUR PAN FEEDER SYSTEM, CONTACT THE GSI GROUP AT 217-226-4421 OR FAX US AT 217-226-4420. OUR ADDRESS IS:

**THE GSI GROUP, INC.
1004 EAST ILLINOIS STREET
ASSUMPTION, ILLINOIS 62510**

Safety Decals and Placement



DC-852: The decal shown is located on electrical boxes or enclosures containing electrical components. It alerts the operator of potential injury or death from electrical shock. (Figure 1)



Figure 1



DC-889: The decal shown is located on the electrical box cover and the safety closure assembly. It alerts the operator of injury or death from electrical shock. It also instructs the operator to lockout the power before servicing. (Figure 1-2)

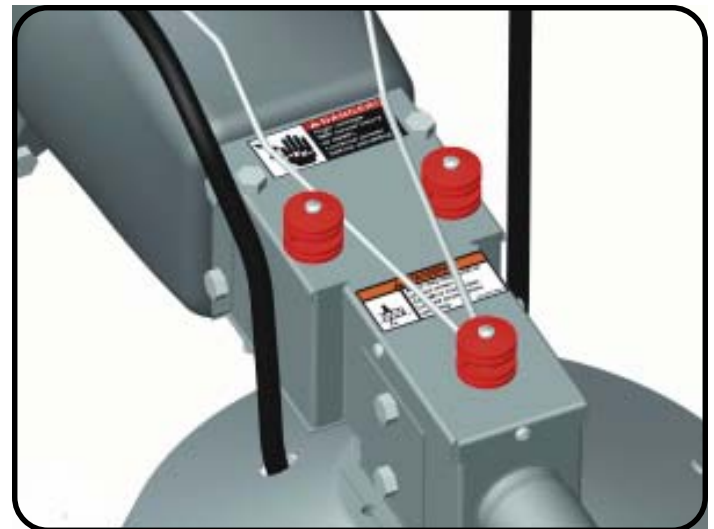
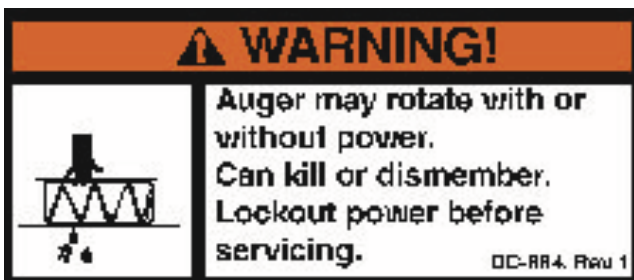


Figure 2



DC-884: The decal shown is located on the cover assembly. It alerts the operator of death or dismemberment from coming into contact with a moving auger. It also instructs the operator to lockout the power before servicing. (Figure 2)

Safety Decals and Placement



DC-992: The decal shown is located on both ends of the boot assembly and under the safety closure assembly. It alerts the operator to keep clear of moving parts. It also instructs the operator to disconnect and lockout the power before servicing. (Figure 3-4)



Figure 3

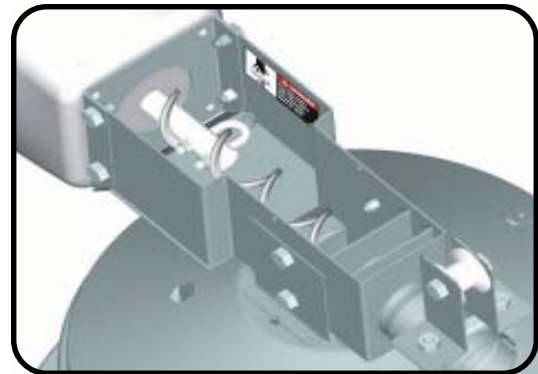


Figure 4



DC-993: The decal shown is located on the hopper. It alerts the operator of serious injury from coming into contact with a moving auger. It also instructs the operator to disconnect and lockout the power before servicing. (Figure 5)



Figure 5



Capacities and Specifications

Drive Unit

DRIVE UNIT	DESCRIPTION	MOTOR	MOTOR RPM	GEAR BOX	RATIO	OUTPUT RPM	WEIGHT
07099366-50	1/2HP 110/220V 1P 50HZ	FLX-4760	1425	00404048	4.8:1	297	37.6 lb (17.1kg)
07098924-50	1/2HP 110/220V 1P 50HZ	FLX-4760	1425	07098809	3.91:1	364	37.4 lb (17.4kg)
07100643-50	1/2HP 110/220V 1P 50HZ	FLX-4760	1425	FLX-2931	27.1:1	53	34.7 lb (17.1kg)
07097744-60	1/2HP 110/220V 1P 60HZ	FLX-4764	1725	00404048	4.8:1	359	37.6 lb (17.1kg)
07099366-60	1/2HP 110/220V 1P 60HZ	FLX-4764	1725	00404048	4.8:1	359	37.6 lb (17.1kg)
07101557-60	1/2HP 110/220V 1P 60HZ	FLX-4764	1725	07101480	6.9:1	250	37.4 lb (17.4kg)
07100643-60	1/2HP 110/220V 1P 60HZ	FLX-4764	1725	FLX-2931	27.1:1	64	37.4 lb (17.4kg)
07099341	1/2HP 190/380V 3P 50/60HZ	FLX-3522	1725/1425	00404048	4.8:1	359/297	36.8 lb (16.7kg)
07099625	1/2HP 190/380V 3P 50/60HZ	FLX-3522	1725/1425	00404048	4.8:1	359/297	36.7 lb (16.6kg)
07099263	1/2HP 190/380V 3P 50/60HZ	FLX-3522	1725/1425	07098809	3.91:1	441/365	36.7 lb (16.6kg)
07099627	1/2HP 190/380V 3P 50/60HZ	FLX-3522	1725/1425	07098809	3.91:1	441/365	36.9 lb (16.7kg)
07100662	1/2HP 190/380V 3P 50/60HZ	FLX-3522	1725/1425	FLX-4099	20.5:1	84/70	34.1 lb (15.5kg)
07098423	1/3HP 110/220V 1P 50HZ	FLX-4759	1425	07098809	3.91:1	364	36.2 lb (16.4kg)
07097374-60	1/3HP 110/220V 1P 60HZ	FLX-4763	1725	00404048	4.8:1	359	36.2 lb (16.4kg)
07100055	1/3HP 110/220V 1P 60HZ	FLX-4763	1725	00404048	4.8:1	359	36.2 lb (16.4kg)
07101481-60	1/3HP 110/220V 1P 60HZ	FLX-4763	1725	07101480	6.9:1	250	36.2 lb (16.4kg)
07099340	1/3HP 190/380V 3P 50/60HZ	FLX-3521	1725/1425	00404048	4.8:1	359/297	33.4 lb (15.1kg)
07098422	1/3HP 190/380V 3P 50/60HZ	FLX-3521	1725/1425	07098809	3.91:1	441/365	33.4 lb (15.1kg)
07099967	1/3HP 190/380V 3P 50/60HZ	FLX-3521	1725/1425	FLX-2931	27.1:1	64/53	31.7 lb (14.4kg)
07099968	1/3HP 190/380V 3P 50/60HZ	FLX-3521	1725/1425	FLX-4099	20.5:1	84/70	32.0 lb (14.5kg)
07097965-60	3/4HP 110/220V 1P 60HZ	FLX-4765	1725	00404048	4.8:1	359	50.1 lb (22.7kg)
07098894	3/4HP 110/220V 1P 60HZ	07098893	3450	00404048	4.8:1	719	43.1 lb (19.5kg)
07099342	3/4HP 190/380V 3P 50/60HZ	FLX-3523	1725/1425	00404048	4.8:1	359/297	41.5 lb (18.8kg)
07099298	3/4HP 190/380V 3P 50/60HZ	FLX-3523	1725/1425	07098809	3.91:1	441/365	41.4 lb (18.8kg)
07099247	3/4HP 230/460V 3P 50HZ	07099248	2850	07098809	3.91:1	729	35.9 lb (16.3kg)
07100693	3/4HP 230/460V 3P 60HZ	07100692	3500	00404048	4.8:1	729	30.9 lb (14.1kg)

Pan Assembly

Part No.	Description	Weight
07098705	Adult Turkey Feeder Assy. - Steel Pan	13.4 lb (6.1kg)
07099914	Adult Turkey Feeder Assy. - Intermediate Pan	12.6 lb (5.8kg)
07099915	Adult Turkey Feeder Assy. - Plastic Pan	10.8 lb (4.9kg)
C2000065	Adult Turkey Feeder Control Pan. - Steel Pan	20.9 lb (9.5kg)
C2000065I	Adult Turkey Feeder Control Pan. - Intermediate Pan	20.1 lb (9.1kg)
C2000065P	Adult Turkey Feeder Control Pan. - Plastic Pan	18.3 lb (8.3kg)

Tubing

Part No.	Length	Weight	Hole Qty.
C2100002	9 ft (2.74m)	13.4 lb (6.1kg)	4
07091690	10 ft (3.05m)	12.6 lb (5.8kg)	1
07091691	10 ft (3.05m)	12.6 lb (5.8kg)	2
07091692	10 ft (3.05m)	12.6 lb (5.8kg)	2 (SPACED F/3-20)
07091894	10 ft (3.05m)	12.6 lb (5.8kg)	3
C2100001	10 ft (3.05m)	12.6 lb (5.8kg)	4
C2000046	10 ft (3.05m)	12.6 lb (5.8kg)	5
07101336	12 ft (3.65m)	10.8 lb (4.9kg)	3

Boot Assembly

Part No.	Description	Weight
07098257	ATF Single Boot	11.7 lb (5.3kg)
07098258	ATF Double Boot	19.6 lb (8.9kg)

Hopper

Capacity	Max. Dimensions	Weight
120 lb (54kg)	21.7" x 18" x 18"	22.0 lb (10.0kg)
200 lb (91kg)	32.5" x 18" x 18"	31.0 lb (14.1kg)
300 lb (136kg)	32.5" x 24" x 24"	41.9 lb (19.0kg)
400 lb (182kg)	42.5" x 24" x 24"	58.3 lb (26.5kg)

Auger

O.D.	Pitch	Weight/Ft.
1.438 in (36.5mm)	2 in (50.8mm)	.33 lb (.15kg)

Pan Feeder Assembly

1. Attach one (1) pan pivot support and three (3) pan supports to the shield using the rivets supplied. Orient the pivot support at the same location for all pans. See Figure 1.



Figure 1

2. Assemble the feed level tube to the feed level ring as shown in Figure 2. Position the ring in the third hole from the bottom. Note that the dimple on the feed level tube is at the top of the assembly for steel and plastic pans. The dimple on the feed level tube is at the bottom of the assembly for intermediate pans.

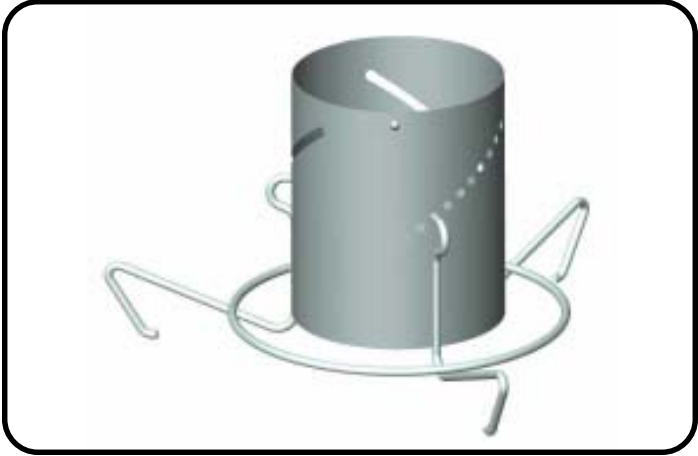


Figure 2

3. Insert two (2) shield supports into the slots on the drop tube weldment assembly. Slide drop tube into the feed level ring assembly as shown in Figure 3.

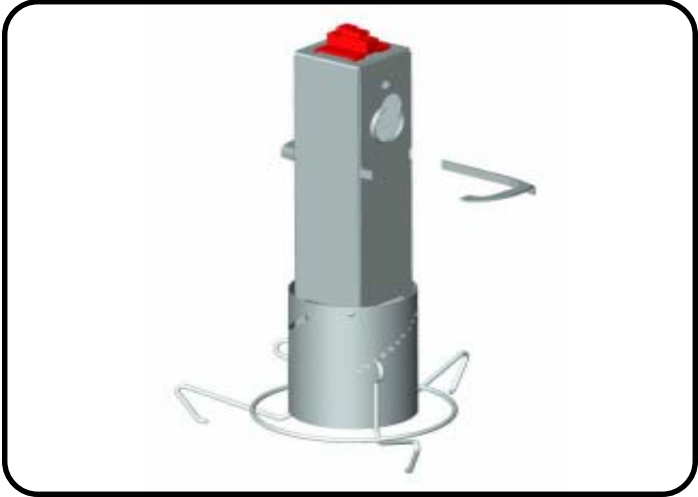


Figure 3



Pan Feeder Assembly

4. Attach the feed pan to the shield assembly by inserting the pivot support into the slot on the pan as shown in Figure 4.



Figure 4

5. Orient the feed pan and pan shield as shown in Figure 5 and insert the drop tube assembly and feed level assembly into the square hole.

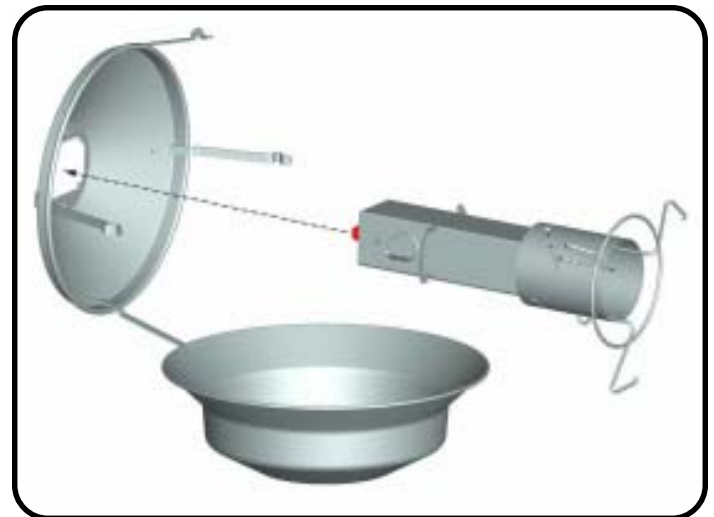


Figure 5

6. Rotate the pan shield 90° and begin locking the pan supports under the lip of the feed pan. To prevent the supports from being distorted, begin by locking one of the pan supports next to the pivot support and work around sequentially.



Figure 6

Auger Tube Assembly



Be careful, there may be sharp edges that can cut while assembling the feedline. Wear protective clothing and gloves.

1. Slide the turkey pan assembly onto the auger tube as shown in Figure 1. Position the drop tube so that the walls are inside the slots on the turkey tube ribs. Rotate the auger tube until the hole is facing down into the drop tube. Orient all pivot supports identically and repeat this step for each hole on the auger tube.

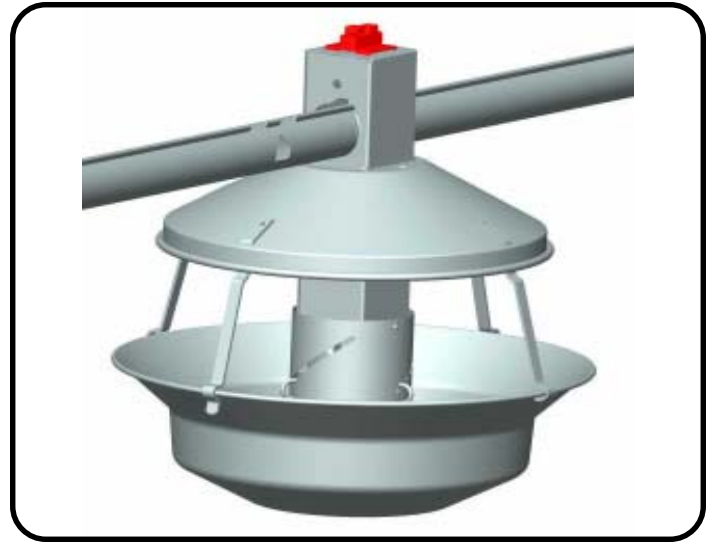


Figure 1

2. Lay out auger tube and pan feeder assemblies in the approximate area of installation. Note that all belled ends must be positioned toward the hopper end of the line.



Figure 2

3. Begin assembly at the boot end of the feed line and connect all auger tubes together. Use a U-clamp at each union as seen in Figure 2, and include an insulator assembly at the boot and every 20 foot (6.1m) interval as seen in Figure 3. For tubes sections other than 10 feet (3.0m) long, place insulators at every other union. Note: Do not over tighten U-clamps. Doing so may dent or distort auger tube.

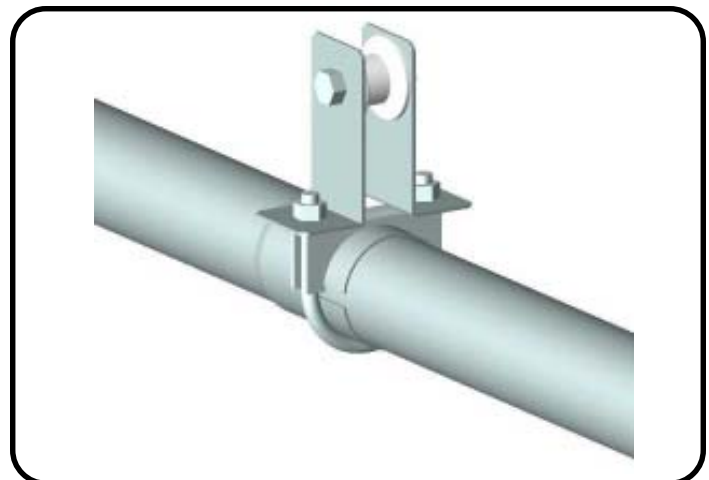


Figure 3



Drive Unit Assembly

1. Assemble the drive unit and control unit with the four (4) bolts supplied. There may be some assembly to the control unit required. Refer to the pan feeder assembly for instructions.

2. Remove the vent plug at the top of the gearbox and fill with six (6) ounces of lubricant that is provided (or as specified below).

* Use Standard Oil of Ohio Factolube #2 or equivalent. Gearup 90, Mobilube E.P. 80-90 or a good automobile differential oil S.A.E. 90.

3. Place the end of the last tube section into the outlet tube on the control unit. Secure with the supplied U-bolt and insulator assembly as shown in Figure 1.

4. Wire the control pan to power source with the schematic shown in Figure 2.

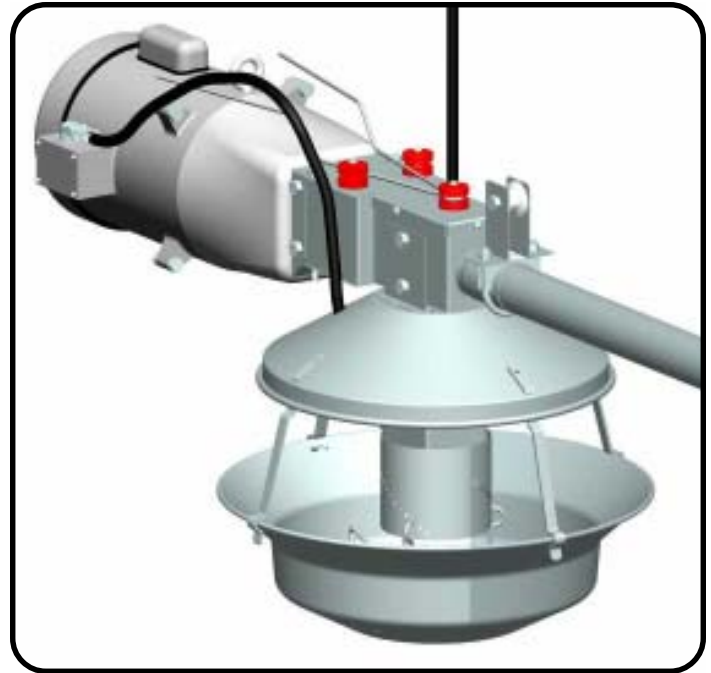


Figure 1

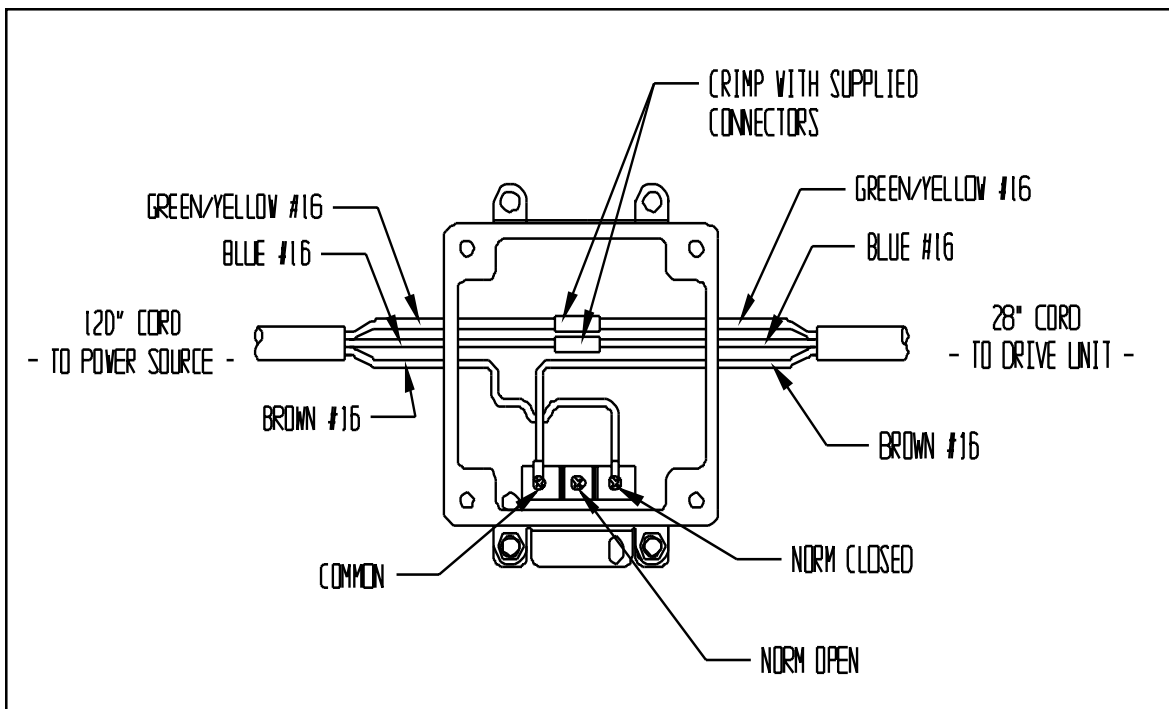


Figure 2



Boot/Auger Assembly and Installation

1. Attach the boot to the last section of the feeder line with the supplied U-bolt and insulator assembly as shown in Figure 1. Make certain the boot is oriented level or parallel to the ground.

2. Auger installation is done at the boot end of the feed line. Begin by removing the bearing cap, outlet/inlet tube, bearing, and idler shaft from the boot as shown in Figure 2. Remove the top cover from the control pan assembly.

3. Using constant care and inspection, push the auger through the boot and into the auger tube. Two people should be used for this operation. One should feed the auger into the tube while the other carefully uncoils the auger to prevent any distortion. To minimize resistance when installing long lengths of auger, rotate the auger while pushing it into the tube.



NOTE: Watch carefully for wires, tags, metal clips and especially for kinks and bends. If the auger is bent or kinked, it must be straightened prior to installation. Failure to do this may result in excessive auger tube wear.

4. In the event of a bend or kink, try to straighten the auger by hand, or if necessary, use locking pliers. If the auger still cannot be straightened, remove the bent section by cutting on both sides of the bend. A hacksaw or bolt cutters can be used to cut the auger. See instruction # 9 for instructions for brazing and reconnecting the auger.

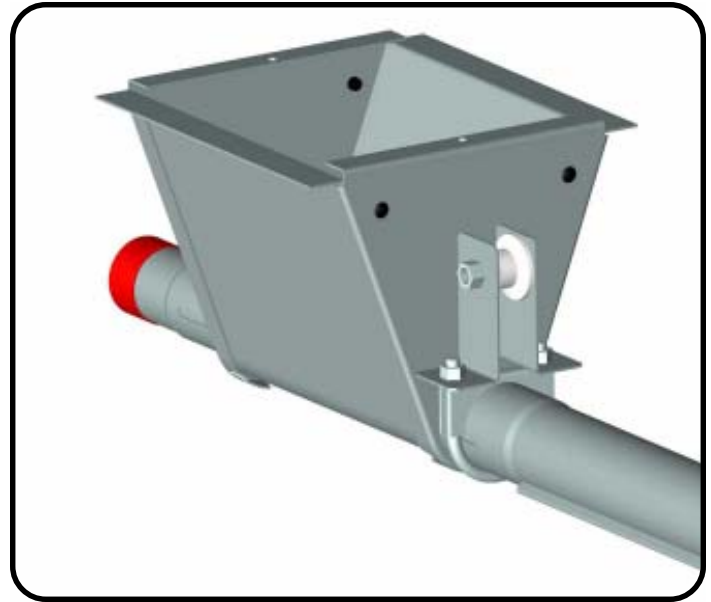


Figure 1

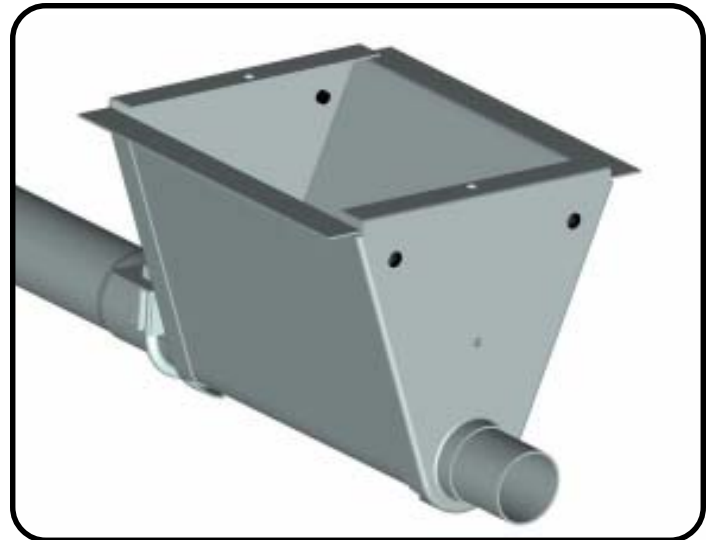


Figure 2



Boot/Auger Assembly and Installation

5. Loosen the U-bolt on the gearbox shaft and thread the auger through the U-bolt to within 1/2 inch (13mm) of the rear drive wall as shown in Figure 3. Tighten the U-bolt securely.

6. Refer to Figure 4. The amount of stretch required (X) is calculated as 7.5 inches per 100 feet of auger (19cm per 30m). Pull the auger from the boot end of the feed line until all of the slack is removed. Mark the auger at the edge of the boot inlet tube (#1). Pull the auger out the required distance (X) and mark it at the edge of the boot inlet tube (#2). Pull the auger out an additional 8 inches (20.3cm) and secure tightly with locking pliers. The pliers will be pulled into the boot and hold the auger at that point. Cut the auger at mark #2.

7. With the pliers still in place, insert the idler shaft assembly into the auger and thread the auger through the U-bolt as shown in Figure 5. Make certain that the idler assembly is threaded up to the bearing washer.



Use caution when releasing tension on the auger. If the auger is released too rapidly, it can injure the operator.

8. Tighten the U-bolt securely, slowly release the tension on the auger. The auger will retract up to the feed line tube and align the idler shaft into place. Care must be taken to prevent damage to the bearing. Re-attach the outlet/inlet tube and bearing cover. Secure the outlet/inlet tube with the supplied U-bolt.

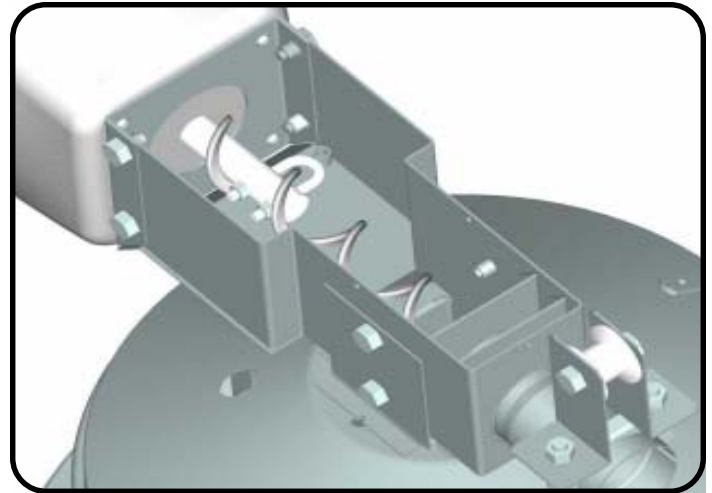


Figure 3

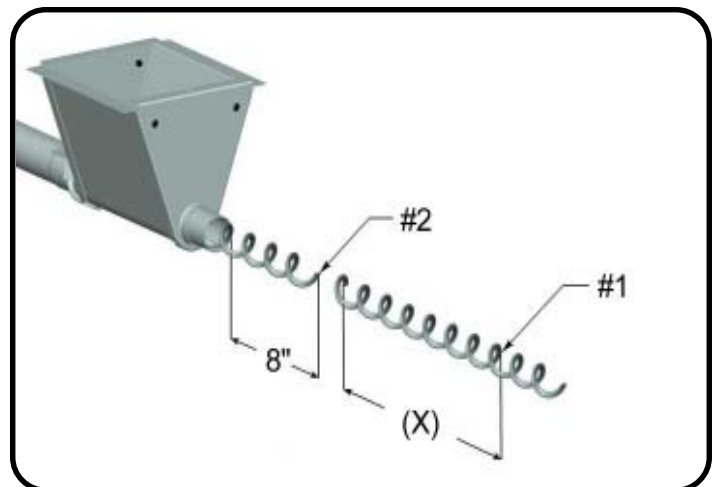


Figure 4

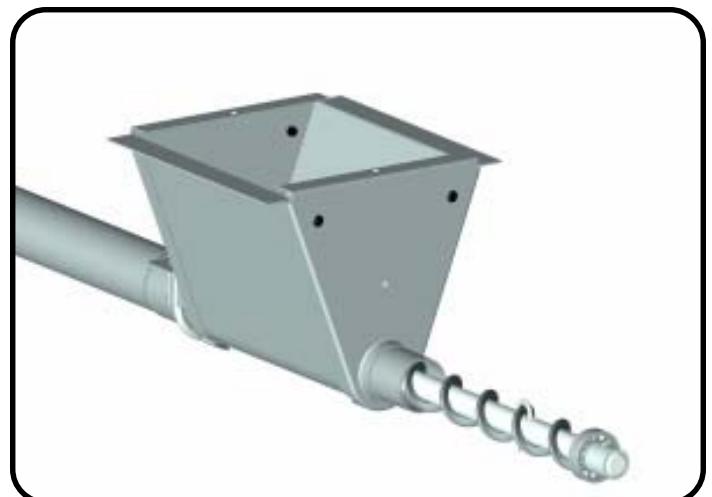


Figure 5

Boot/Auger Assembly and Installation

9. If necessary, the auger may be lengthened or repaired by brazing two sections of auger together. Weld surfaces should be 1/2-3/4 inches (13mm-19mm) long and the auger ends should be filed and cleaned. Use a bronze, flux coated rod and low heat to prevent the auger from warping. Clamp the auger in a bevel or V-groove to keep the auger sections aligned. See Figure 6 for auger alignment.



NOTE: The auger must not be overlapped. This will cause a narrow flight spacing and will hamper feed flow.

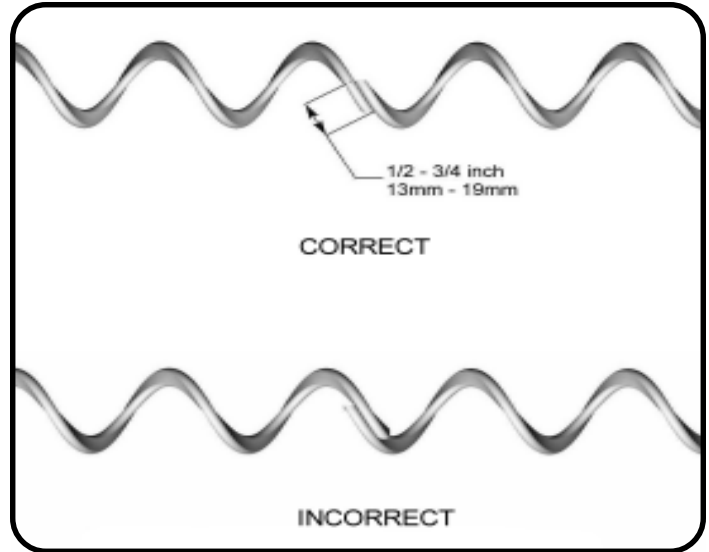


Figure 6

10. Allow the auger to air cool. Rapid cooling will cause hardening and the auger will become brittle. Grind off all rough edges. Auger must be smooth to prevent feed build up.



Use caution when releasing tension on the auger. If the auger is released too rapidly, it can injure the operator.



Shocker Wire Installation

1. Double wrap the shocker wire around the first insulator at the boot end of the feed line and secure with the cable sleeves provided.
2. Thread the shocker wire through the hanger and insulators on top of the drop tubes as shown in figure 1.
3. Attach the wire tension spring to the next insulator and loop the shocker wire through the spring eyelet. Pull the shocker wire with enough force to stretch the spring 3/4 - 1 inch (19.1mm-25.4mm). Secure the shocker wire with the supplied cable sleeve as shown in Figure 2. Cut the wire with enough excess to use as a jumper to carry current to the next section of shocker wire. This is done by running the excess wire through the center of the spring, over the insulator and connecting it to the next section of shocker wire with the supplied cable sleeve.
4. Repeat instructions 1 through 3 until the shocker wire is connected from the boot to the control unit.
5. Use the two (2) AZUMA nuts and bolts to connect a jumper wire from the last section of shocker wire to the anti-roost guard as shown in Figure 3. This jumper wire is in close proximity to metal parts so an insulated, 12 guage, single strand wire must be used.
6. After the shocker wire has been installed to the entire feed line, connect the circuit between the shocker wire and shocker electrical control unit. (See the wiring instructions included with the shocker electrical control unit)



NOTE: Make certain that the jumper wires do not come into contact with any metal parts (auger tube, insulator brackets, etc.)

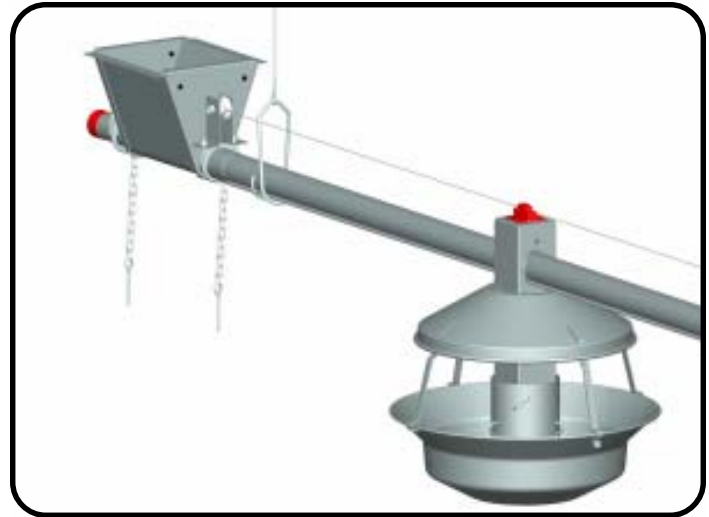


Figure 1

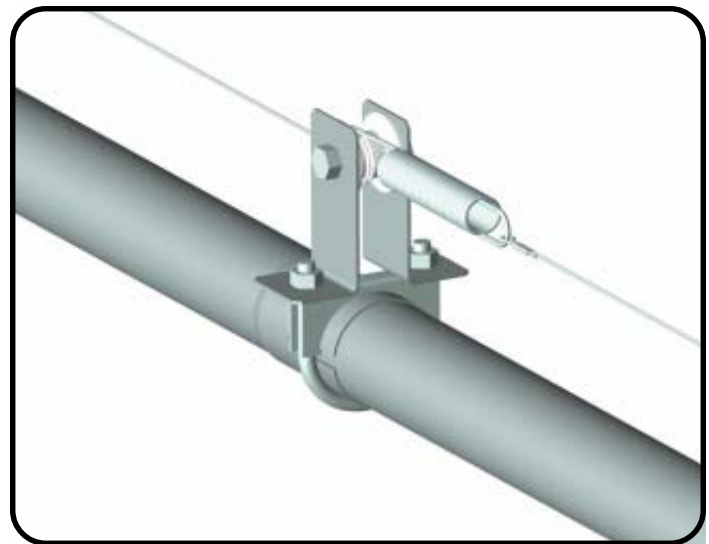


Figure 2

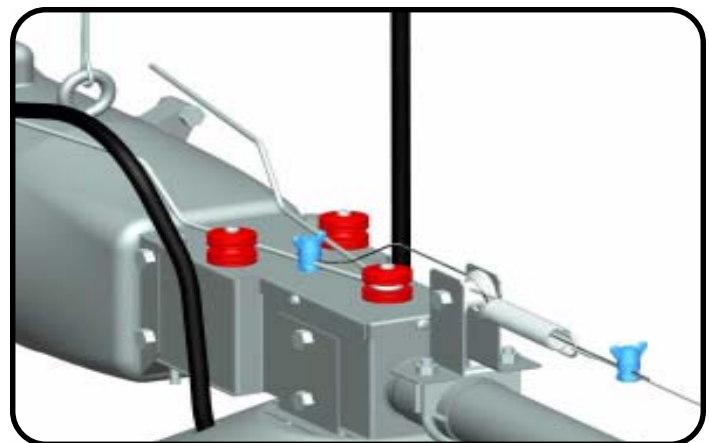


Figure 3



Hopper Installation

1. Refer to the instructions included with the hopper for assembly instructions.
2. Slide the assembled hopper onto the top of the boot and secure with the pin assemblies supplied with the boot assembly. See Figure 1.
3. For feed types that may bridge up inside the hopper or boot assembly, an agitator ball is provided. The agitator ball simply rests on the auger inside the boot as shown in Figure 2.

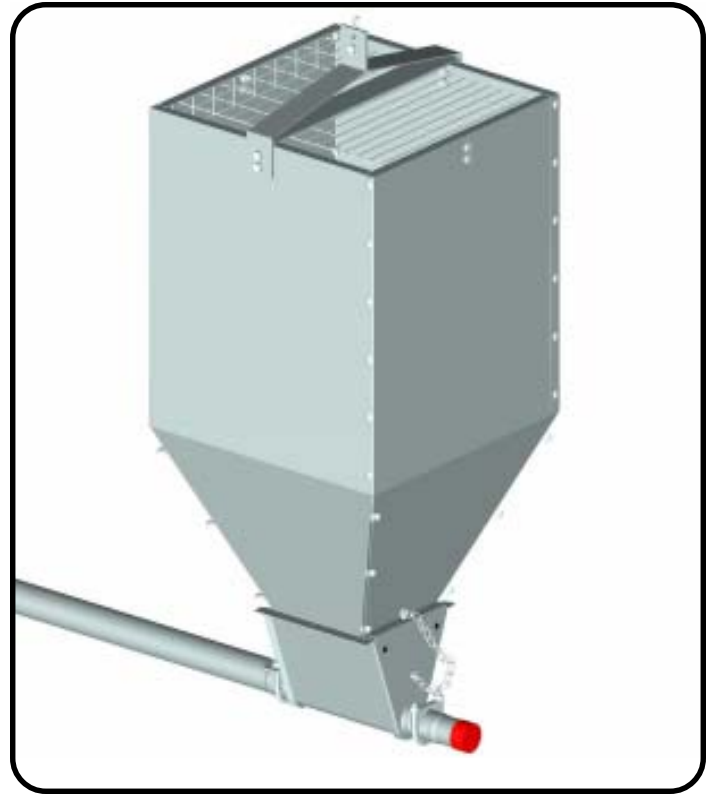


Figure 1

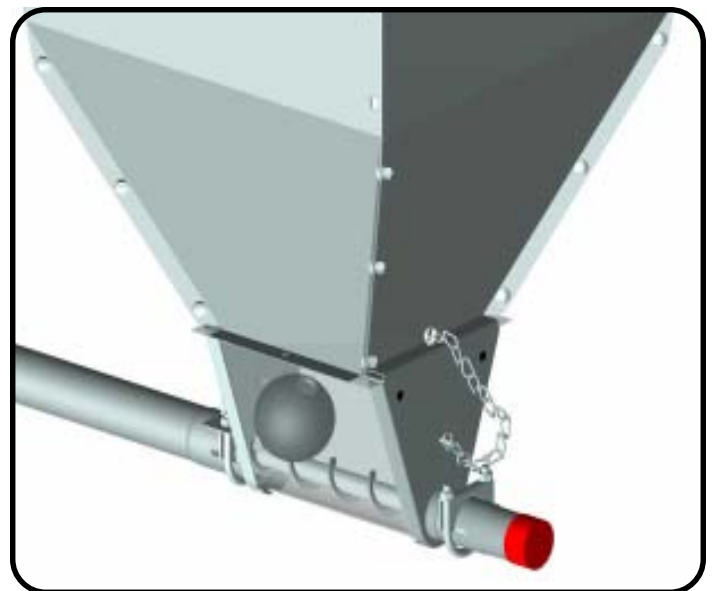


Figure 2



Cable/Winch Installation



NOTE: The winch system should be carefully planned to keep cables clear of building components, trusses, electrical wiring, and gas and water lines.

1. Once the feed line location is determined, mark a straight line on the ceiling or rafters the full length of the feed line. Use a string or chalk line to mark the line. Center the line directly over the location of the feeder line location.
2. Screw one hook directly above the hopper location point and another, 1 foot (0.3m) away as shown in Figure 1.
3. Screw one hook directly above the location for the motor eye bolt and another 3 feet (0.9m) away as shown in Figure 1.

4. Begin at one end and screw hooks into the ceiling supports every 8 feet (2.4m) for cable drops. For metal frame installations, it may be necessary to fabricate supports to install drops at the recommended spacing.



NOTE: The opening of the screw hooks must be opposite the direction the cable travels when the feed line is raised. If the distance raised is greater than the distance between drop spacings, stagger the hooks 3 inches (76.2mm) to each side of the line to prevent the cable clamps from being wound into the pulleys.

5. Attach a 2 X 8 inch (50.8mm X 203mm) board to the ceiling at the center of the feeder line. The board must be parallel to the feeder line and must span at least three rafters.

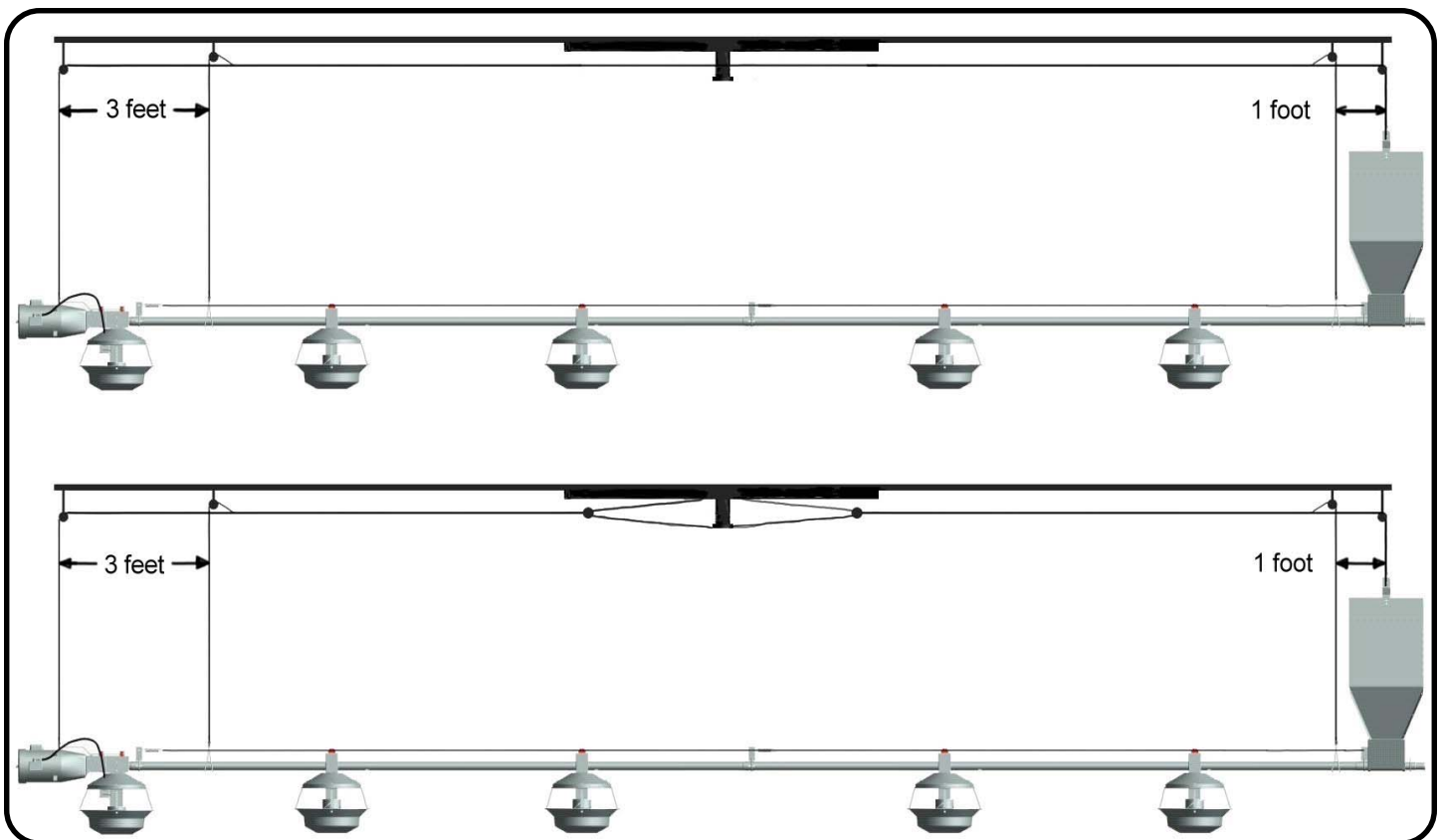


Figure 1



Cable/Winch Installation

6. Attach the winch to the board at the center of the feed line location.

7. For systems shorter than 360 feet (91.4m), use direct pulleys, as shown in the top view of Figure 1. For systems longer than 360 feet (91.4m), use double reduction pulleys, as shown in the bottom view of Figure 1. String the cable through the cable hole on the winch drum and extend the winch cable the full length of the feeder line.

8. Tighten the set screw on the winch.

9. Turn the winch drum one full revolution while guiding the cable against the flange at the bottom of the winch drum. The cable must not wrap over itself on the drum, but should lay as closely as possible to each previous wrap.

10. Attach 1.75 inch (44.5mm) nylon pulleys to each hook and attach hangers to the feed line directly below each pulley.

11. Beginning at the winch and working toward the end of the feed line, thread the 1/8 inch (3.2mm) cable through each pulley and attach to the 3/16 inch (4.8mm) winch cable with the 1/8 x 3/16 inch (3.2mm x 4.8mm) cable clamps. The drop cable should be secured 6 inches (152.4mm) from the pulley.

12. Cut the drop cables with enough excess to account for lengths from the winch cable, through the tube hanger, and to the cable adjusting clip. The adjusting clip should be located 6 inches (152.4mm) above the tube hanger to eliminate any restrictions when the feed line is raised.

13. Use the winch cable to drop down to the hopper and the eye bolt on the motor. If there is not enough excess, follow instruction 11 and use the 1/8 inch (3.2mm) cable.



NOTE: Check all drop cables before raising the feed line. There must be cables on every pulley, at 8 foot (2.4m) intervals to prevent stress on the feeder tubes.

14. Raise the feed line and level the line with the cable adjustment clips.



NOTE: The feed line must hang straight and reasonably level to prevent damage or unnecessary wear. Excess drop cables should be trimmed to prevent a ground fault of the shocker system.



Cable/Winch Installation

15. Drops that are located so close to the winch that they will wrap onto the drum when the feed line is raised must be connected to the winch cable by means of a “throwback” installation, as shown in Figure 2.

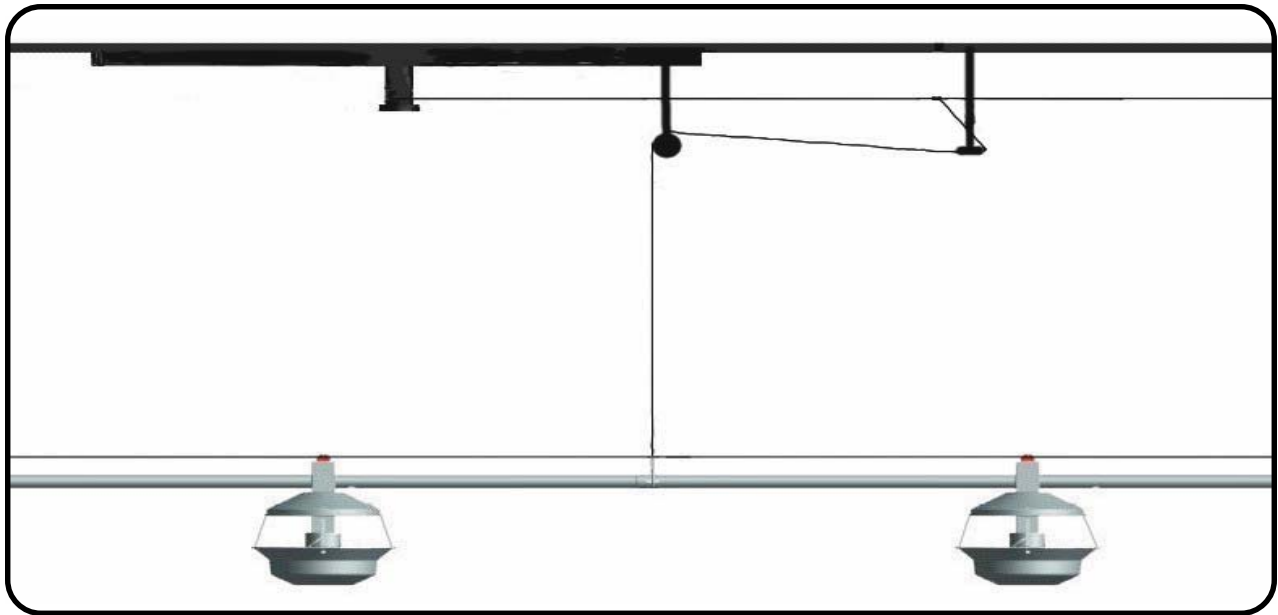


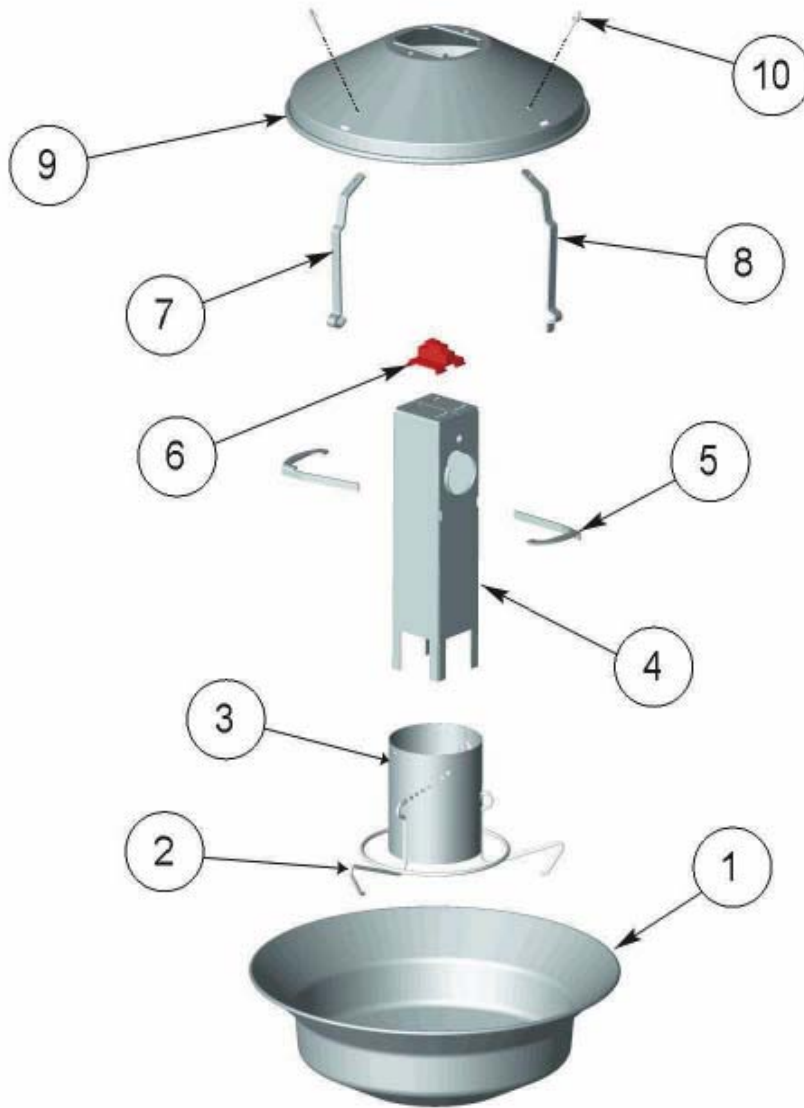
Figure 2



Troubleshooting Guide

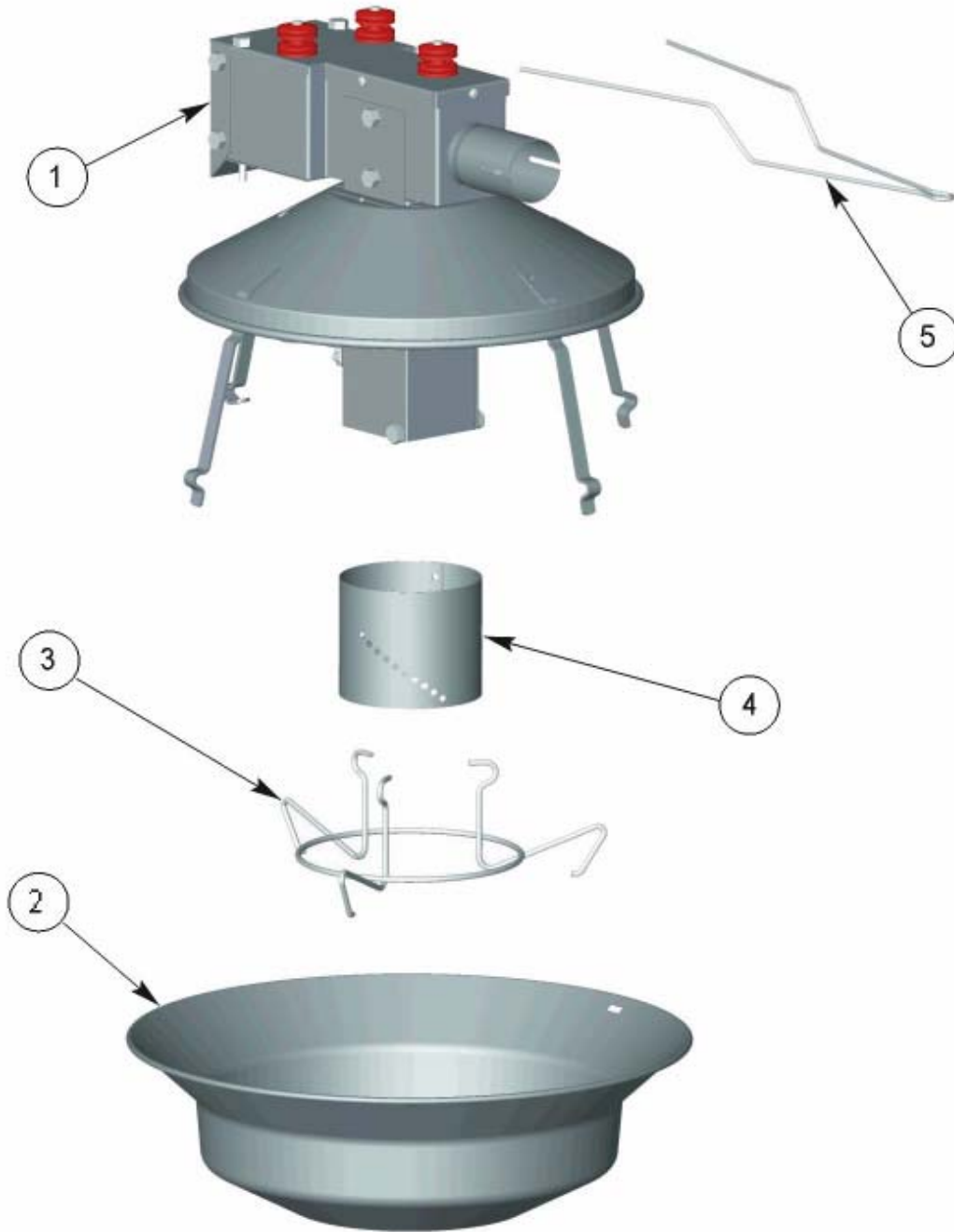
Problem	Possible Cause	Corrective Action
Motor overloaded	<p>New auger will cause excessive pull until it is polished by running feed through the line several times.</p> <p>Inadequate power from power supply</p> <p>Object caught in auger</p>	<p>Cycle feed through the feeder line slowly to polish the auger.</p> <p>Check line voltage. Check wire size.</p> <p>Check the hopper and boot outlet holes. Remove obstruction.</p>
Feeder will not run	<p>No power to the circuit line.</p> <p>Reset button popped out on motor signaling motor overload.</p> <p>Control pan switch is defective or out of alignment.</p>	<p>Check for burned out fuse or tripped circuit breaker. Determine that motors are plugged in.</p> <p>Refer to Motor overload corrective action</p> <p>Adjust switch, replace if defective.</p>
Auger runs erratically	<p>Bad bearing in boot assembly.</p> <p>Incorrect stretch in auger.</p> <p>Obstruction in auger.</p>	<p>Replace bearing.</p> <p>Refer to Auger Installation on pages 16-18.</p> <p>Check the hopper and boot outlet holes. Remove obstruction.</p>
Feeder is excessively noisy (abnormal wear on boot or auger tube)	<p>Bent auger.</p> <p>Bad weld in auger.</p> <p>Distorted or bent auger tube.</p>	<p>Remove auger. Find kink and straighten. Refer to pages 16-18.</p> <p>Remove auger. File weld to smooth surface. Refer to pages 16-18.</p> <p>Remove and replace tube.</p>
Not enough feed delivered to pans	<p>Feed bridged in hopper.</p> <p>Feed level control switch is out of adjustment.</p>	<p>Install agitator ball.</p> <p>Adjust for proper operation. Refer to feed level control switch instructions.</p>

Adult Turkey Feeder Assembly



Item	Part No.	Description
	07098705	ATF ASSY, STEEL PAN
	07099914	ATF ASSY, INTERMEDIATE PAN
	07099915	ATF ASSY, PLASTIC PAN
1	07097736	ATF PAN, STEEL
2	07091688	ATF FEED LEVEL RING ASSY
3	07091707	ATF FEED LEVEL TUBE ASSY. TALL
4	C2000020	ATF DROP TUBE WELDMENT
5	07097728	ATF PAN SHIELD SUPPORT
6	07097816	ATF DROP TUBE INSULATOR
7	07097832	ATF PAN PIVOT SUPPORT
8	07097831	ATF PAN SUPPORT
9	07097968	ATF PAN SHIELD
10	S-7270	RIVET 3/16x11/32 ALUM DRIVE
N/S	00404108	ATF INTERMEDIATE PAN
N/S	07099174	ATF PLASTIC PAN

Adult Turkey Control Pan Assembly



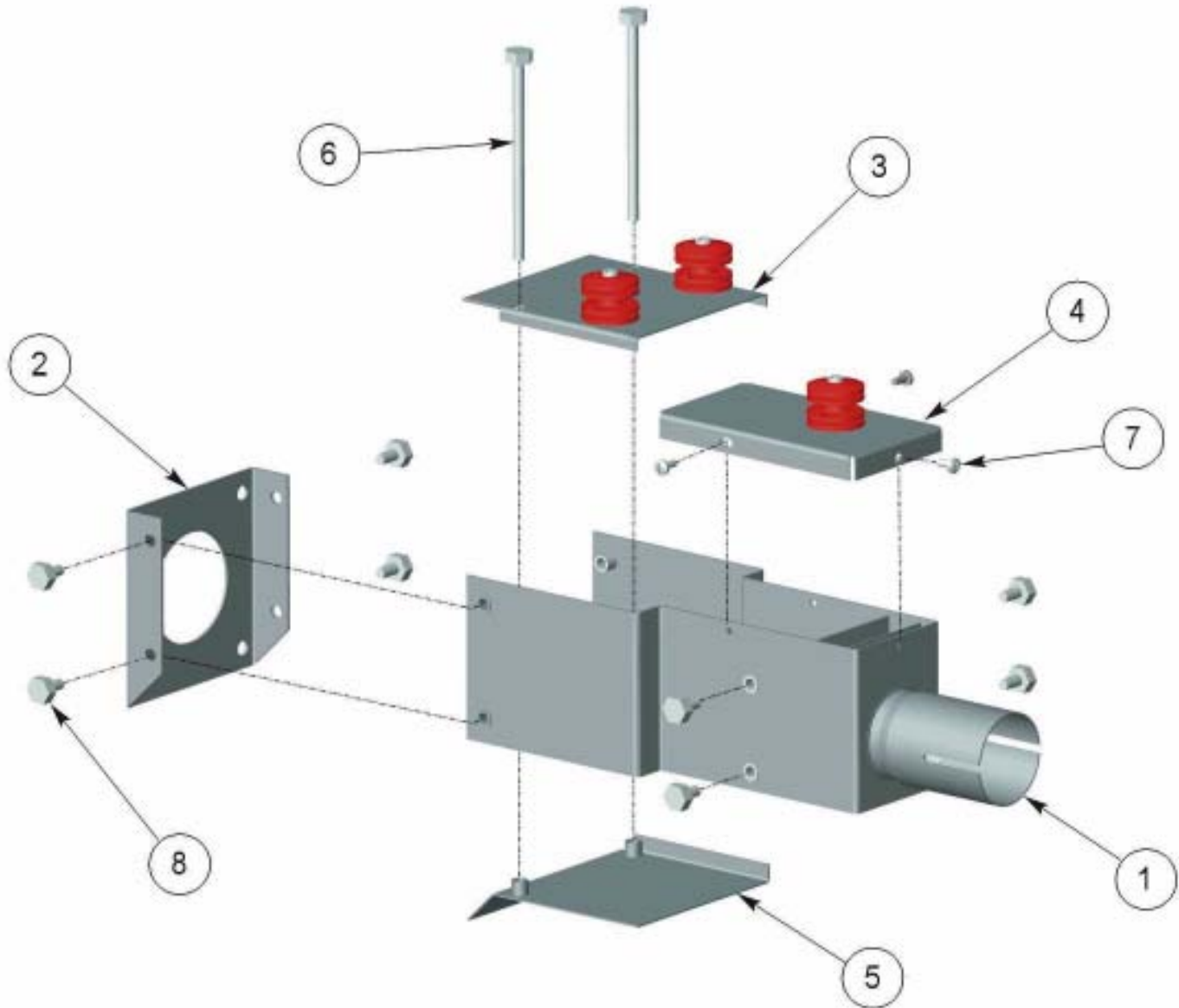
Item	Part No.	Description
	C2000065	ATF CONTROL PAN, STEEL PAN
	C2000065I	ATF CONTROL PAN, INTERMEDIATE PAN
	C2000065P	ATF CONTROL PAN, PLASTIC PAN
1	C2000088	ATF DRIVE UNIT UPPER ASSY
2	07097736	ATF PAN, STEEL
3	07091688	ATF FEED LEVEL RING ASSY
4	07091777	ATF FEED LEVEL TUBE ASSY SHORT
5	07097341	ANTI ROOST GUARD CONTROL UNITS
N/S	00404108	ATF INTERMEDIATE PAN
N/S	07099174	ATF PLASTIC PAN

Drive Unit Upper Assembly



Item	Part No.	Description
	C2000088	ATF DRIVE UNIT UPPER ASSY
1	C2000093	ATF CTRL UNIT HEAD ASSY
2	C2000091	ATF DROP TUBE/ELEC BOX ASSY
3	C2000090	ATF SHIELD/SUPPORT ASSY
4	S-8970	BOLT HHCS 1/4-20x1/2 ZN GR5

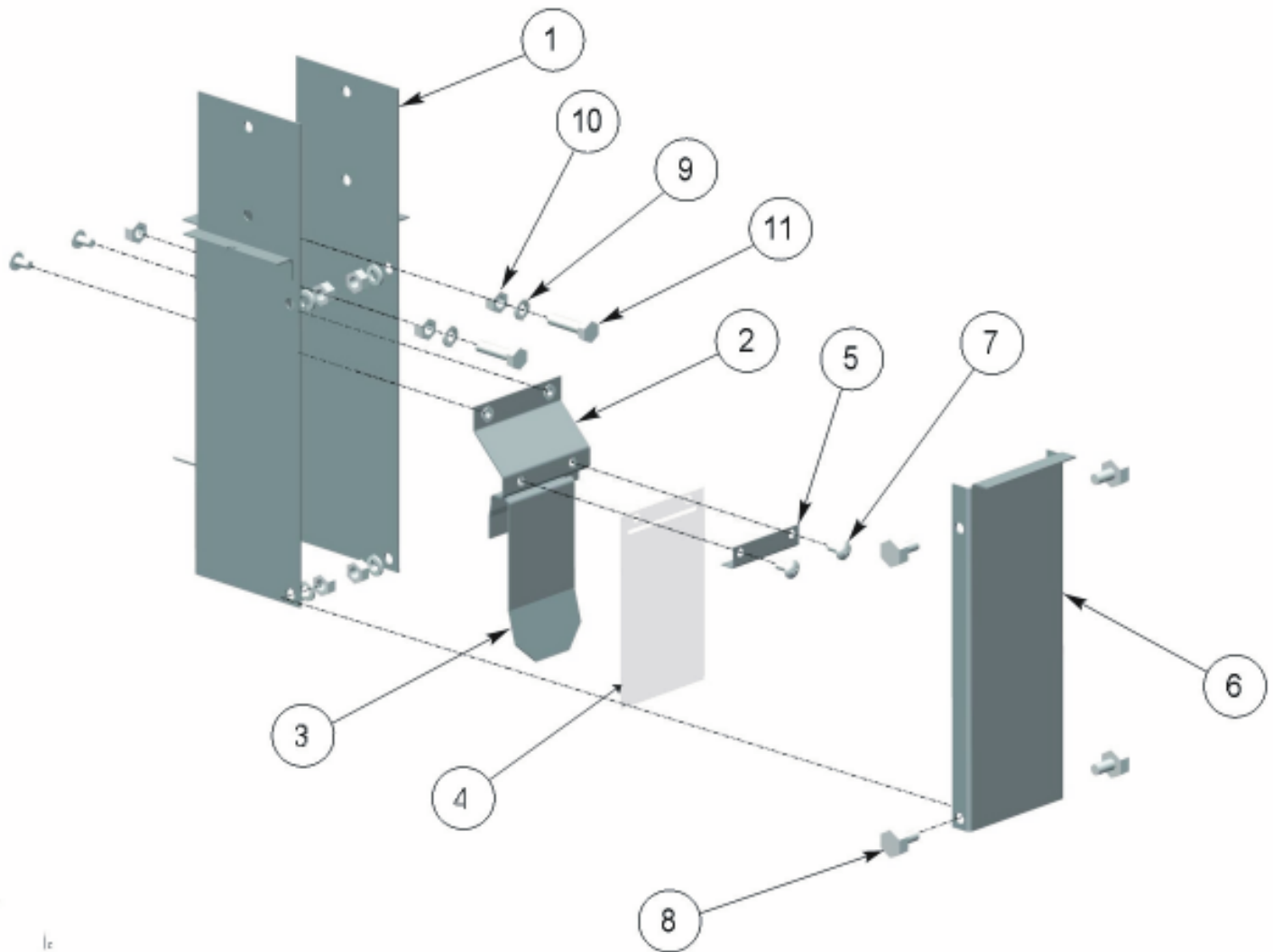
Control Unit Head Assembly



Item	Part No.	Description
	C2000093	ATF CTRL UNIT HEAD ASSY
1	07091660	BODY WELD ASSY
2	07091666	ANCHOR PLATE
3	07091678	SAFETY CLOSURE ASSY
4	07091698	COVER ASSY
5	07091705	BOTTOM PLATE ASSY
6	S-7115	BOLT HHCS 1/4-20x4-1/2 ZN GR2
7	S-7468	SCREW SMSAB #8x3/8 HWH ZN
8	S-8970	BOLT HHCS 1/4-20x1/2 ZN GR5



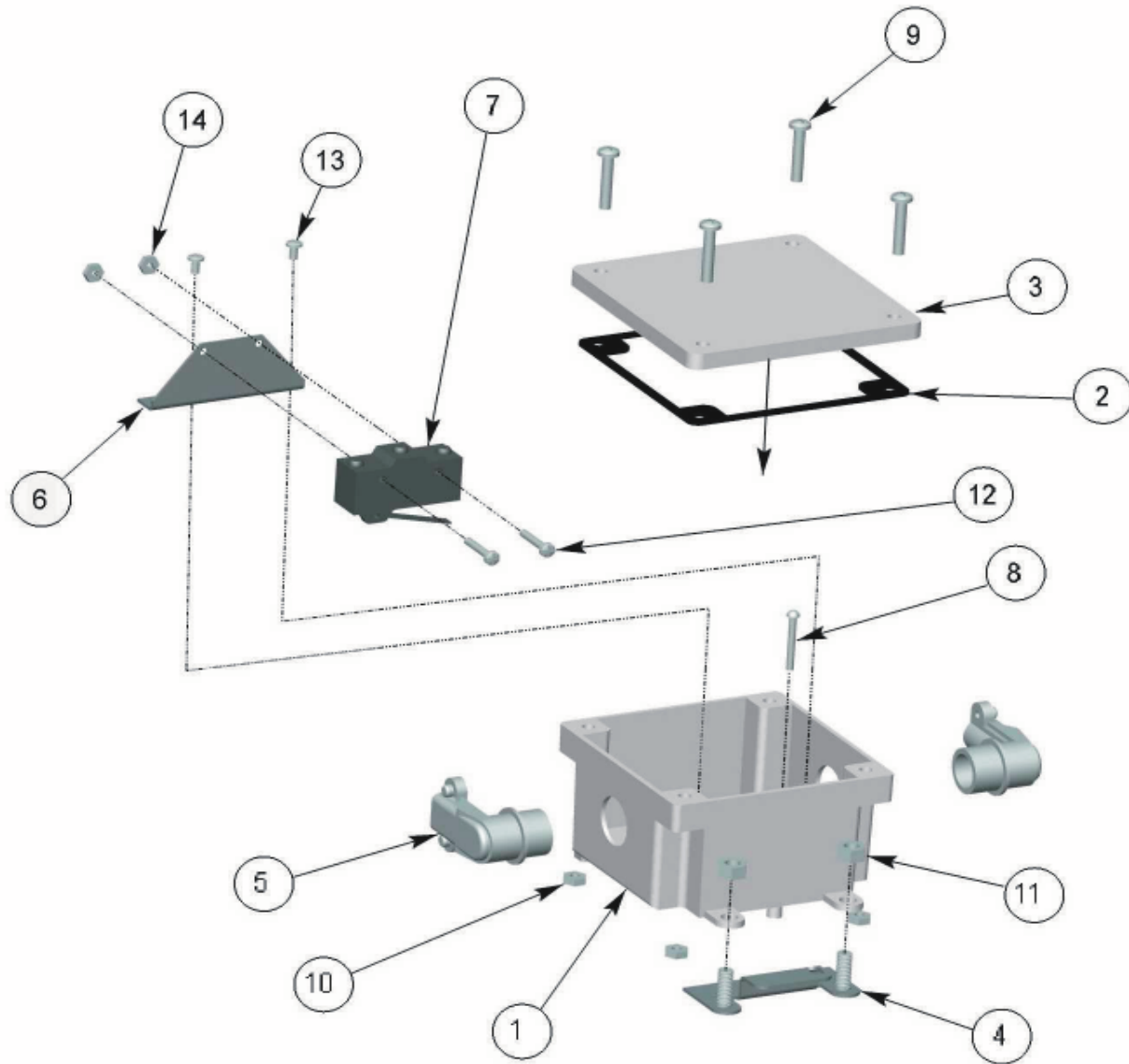
Drop Tube Assembly



Item	Part No.	Description
	C2000092	ATF DROP TUBE ASSY
1	C2000066	ATF DROP TUBE WELDMENT & STUD
2	C2000067	ATF PADDLE GUARD/HANGER ASSY
3	C2000058	ATF CONTROL PAN PADDLE
4	C2000063	ATF PADDLE COVER, F/CTL PAN
5	C2000062	ATF RETAINER PLATE, F/CTL PAN
6	C2000061	ATF DROP TUBE WALL, F/CTL PAN
7	S-7139	SCREW MS #10-24x3/8 HWH ZN GR2
8	S-8970	BOLT HHCS 1/4-20x1/2 ZN GR5
9	S-2041	WASHER LOCK SPLIT 1/4 MED ZN
10	S-1102	NUT HEX 1/4-20 ZN GR2
11	S-6998	BOLT HHCS 1/4-20x1 ZN GR5



Electrical Box/Switch Assembly

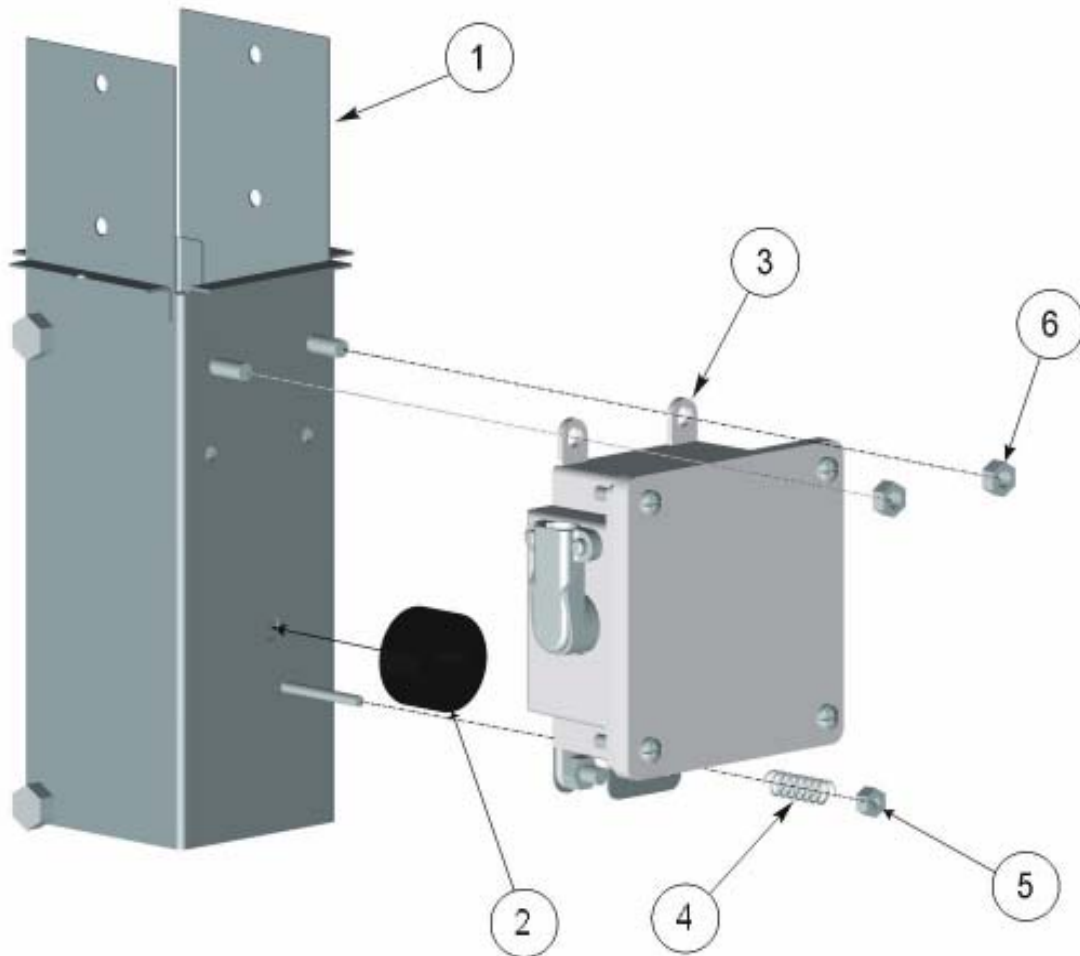


Item	Part No.	Description
	C2000071	ATF ELECTRICAL BOX ASSY
1	C2000068	ATF CTL PAN, ELECTRICAL BOX
2	FLX-2690	GASKET, 4 X 4 X .090 PVC LID
3	FLX-2689	ELECTRICAL BOX LID
4	C2200005	ELEC. BOX W/ STNDOFF HOLE
5	00402602	CONNECTOR 3/8" 90DEG (GRN FIED)
6	AP-2289	SWITCH BRACKET
7	S-8297	SWITCH 20A MICRO BA-2RV-A2
8	S-8298	RIVET SOLID 1/8 X 1 LONG
9	S-7377	SCREW MS #10-24x1 RHP ZN GR2
10	S-849	NUT HEX #10-24 ZN GR2
11	S-1102	NUT HEX 1/4-20 ZN GR2
12	S-7319	SCREW MS #6-32x7/8 RHS ZN GR2
13	S-8183	SCREW SMS #6-32x3/8 PHP ZN
14	S-6144	NUT HEX #6-32 ZN GR2 FINISHED

* Note: For clarity, wire and wire shield not shown in BOM or assembly view.



Drop Tube/Electrical Box Assembly



Item	Part No.	Description
	C2000091	ATF DROP TUBE/ELEC BOX ASSY
1	C2000092	ATF DROP TUBE ASSY
2	AP-2329	GASKET FOAM ELASTOMER
3	C2000071	ATF ELECTRICAL BOX ASSY
4	52-0170	SPRING, ADJ ROD EXTENSION
5	S-2010	NUT NYLOCK #10-24 ZN GR2
6	S-1102	NUT HEX 1/4-20 ZN GR2

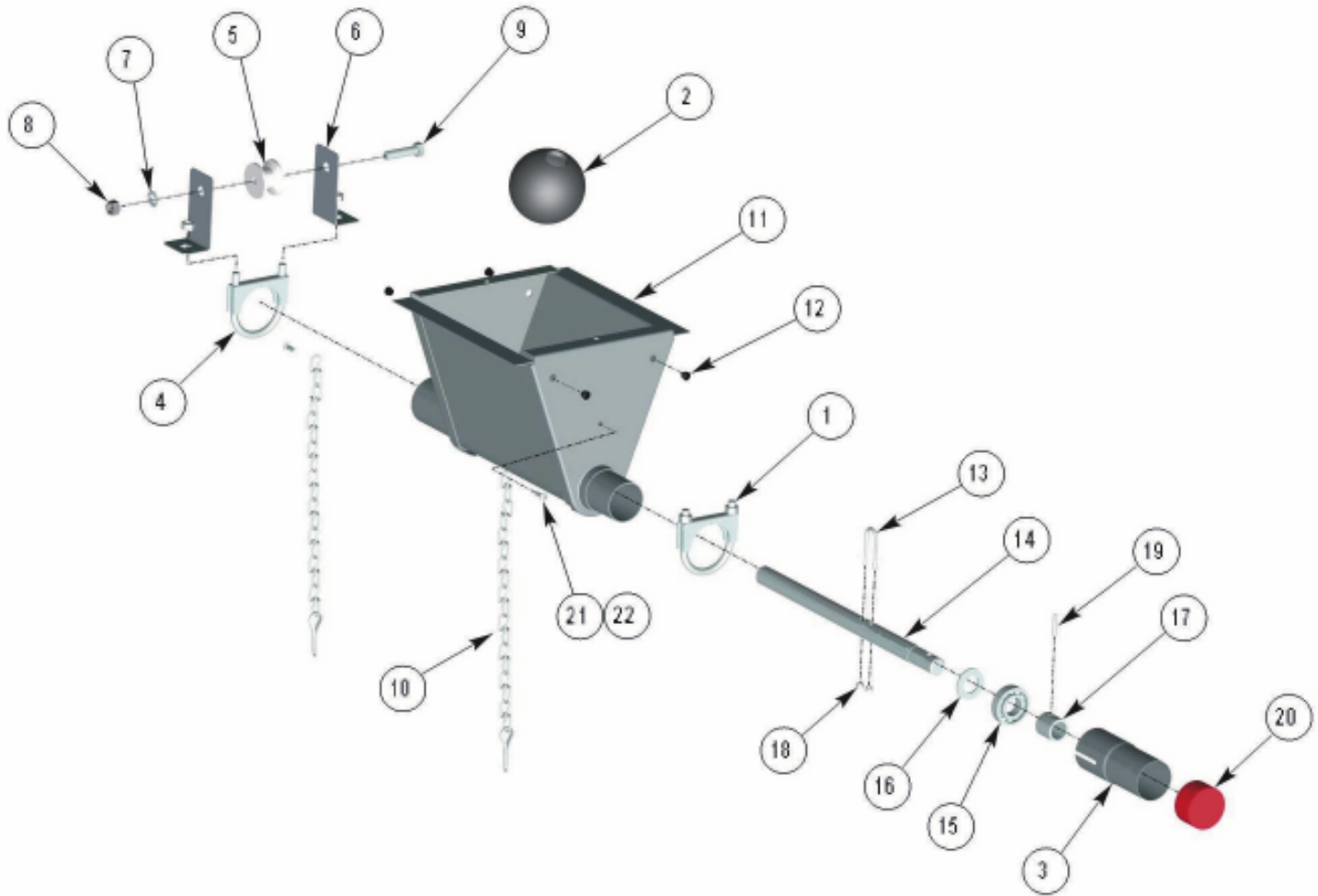
Shield and Pan Support Assembly



Item	Part No.	Description
	C2000090	ATF SHIELD/SUPPORT ASSY
1	C2000081	ATF CTL PAN SHIELD W/2 HOLES
2	07097831	ATF PAN SUPPORT
3	07097832	ATF PAN PIVOT SUPPORT
4	S-7235	RIVET POPMG BH 3/16X1/4 ARSM



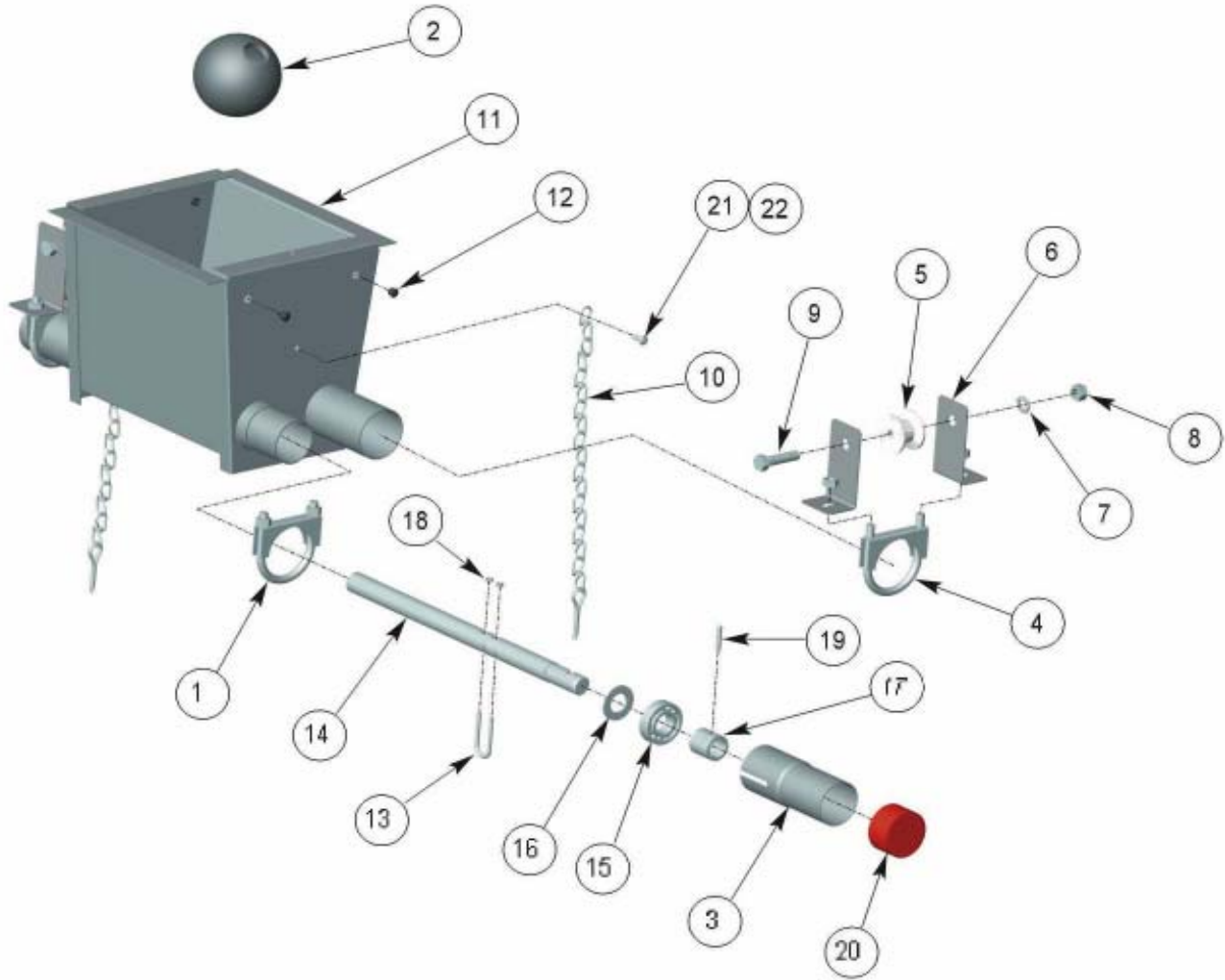
Single Boot Assembly



Item	Part No.	Description
	07098257	ATF SINGLE BOOT
	07098258	ATF DOUBLE BOOT
1	00401920	U-BOLT 5/16-18x1 3/4 W/ SADDLE
2	00404238	BALL IRON 3"HOLLOW 1 1/2#
3	07097345	OUTLET/INLET TUBE
	07097946	TURKEY SGL BOOT INSULATOR PKG
4	00404083	U-BOLT 5/16-18x2 SADDL W/NOTCH
5	07097366	INSULATOR DARE
6	07098227	ADULT TURKEY INSUL. MTG. BRKT
7	S-1054	WASHER LOCK SPLIT 3/8 ZN
8	S-456	NUT HEX 3/8-16 ZN YDP GR5
9	S-7928	BOLT FLNG 3/8-16x1-1/2 ZN G8
10	07098109	BOOT LATCH CHAIN ASSY. - 9
11	07098288	SINGLE BODY TRKY BOOT ASSY
12	07100649	PLUG 5/16" HOLE (SHORTY)
	07098932	BOOT SHAFT & BEARING ASSY
13	00401906	U-BOLT #10-24X1 3/8 HARDENED
14	07097980	BOOT IDLER SHAFT
15	07098107	BEARING
16	07100437	WASHER FLAT 3/4IDX1 3/8OD
17	07101031	COLLAR ROLLED LOCKING W/HOLE
18	S-2010	NUT NYLOCK #10-24 ZN GR2
19	S-8169	PIN SPRING 3/16X1 ROLL TYPE
20	07101135	BEARING CAP COVER
21	S-2010	NUT NYLOCK #10-24 ZN GR2
22	S-7139	SCREW MS #10-24x3/8 HWH ZN GR2



Double Boot Assembly



Item	Part No.	Description
	07098257	ATF SINGLE BOOT
	07098258	ATF DOUBLE BOOT
1	00401920	U-BOLT 5/16-18x1 3/4 W/ SADDLE
2	00404238	BALL IRON 3"HOLLOW 1 1/2#
3	07097345	OUTLET/INLET TUBE
	07097946	TURKEY SGL BOOT INSULATOR PKG
4	00404083	U-BOLT 5/16-18x2 SADDL W/NOTCH
5	07097366	INSULATOR DARE
6	07098227	ADULT TURKEY INSUL. MTG. BRKT
7	S-1054	WASHER LOCK SPLIT 3/8 ZN
8	S-456	NUT HEX 3/8-16 ZN YDP GR5
9	S-7928	BOLT FLNG 3/8-16x1-1/2 ZN G8
10	07098109	BOOT LATCH CHAIN ASSY. - 9
11	07098288	SINGLE BODY TRKY BOOT ASSY
12	07100649	PLUG 5/16" HOLE (SHORTY)
	07098932	BOOT SHAFT & BEARING ASSY
13	00401906	U-BOLT #10-24X1 3/8 HARDENED
14	07097980	BOOT IDLER SHAFT
15	07098107	BEARING
16	07100437	WASHER FLAT 3/4IDX1 3/8OD
17	07101031	COLLAR ROLLED LOCKING W/HOLE
18	S-2010	NUT NYLOCK #10-24 ZN GR2
19	S-8169	PIN SPRING 3/16X1 ROLL TYPE
20	07101135	BEARING CAP COVER
21	S-2010	NUT NYLOCK #10-24 ZN GR2
22	S-7139	SCREW MS #10-24x3/8 HWH ZN GR2



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- B) THE 2.00 INCH DIAMETER AUGER FEEDER TUBING FOR 10 YEARS AFTER THE DATE OF RETAIL SALE.
- C) ROTATING CENTER-LESS AUGERS, EXCLUDING APPLICATIONS WITH HIGH MOISTURE CORN (EXCEEDING 18%), FOR 10 YEARS AFTER THE DATE OF RETAIL SALE.

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THIS EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE CURRENT INSTALLATION CODES AND APPLICABLE REGULATIONS WHICH SHOULD BE CAREFULLY FOLLOWED IN ALL CASES. AUTHORITIES HAVING JURISDICTION SHOULD BE CONSULTED BEFORE INSTALLATIONS ARE MADE.



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