



Adult Turkey Feeder and Feed Line Systems

Adult Turkey Pan Feeder - 460217

Turkey End Control Pan - 460250

Installation and Operation Manual

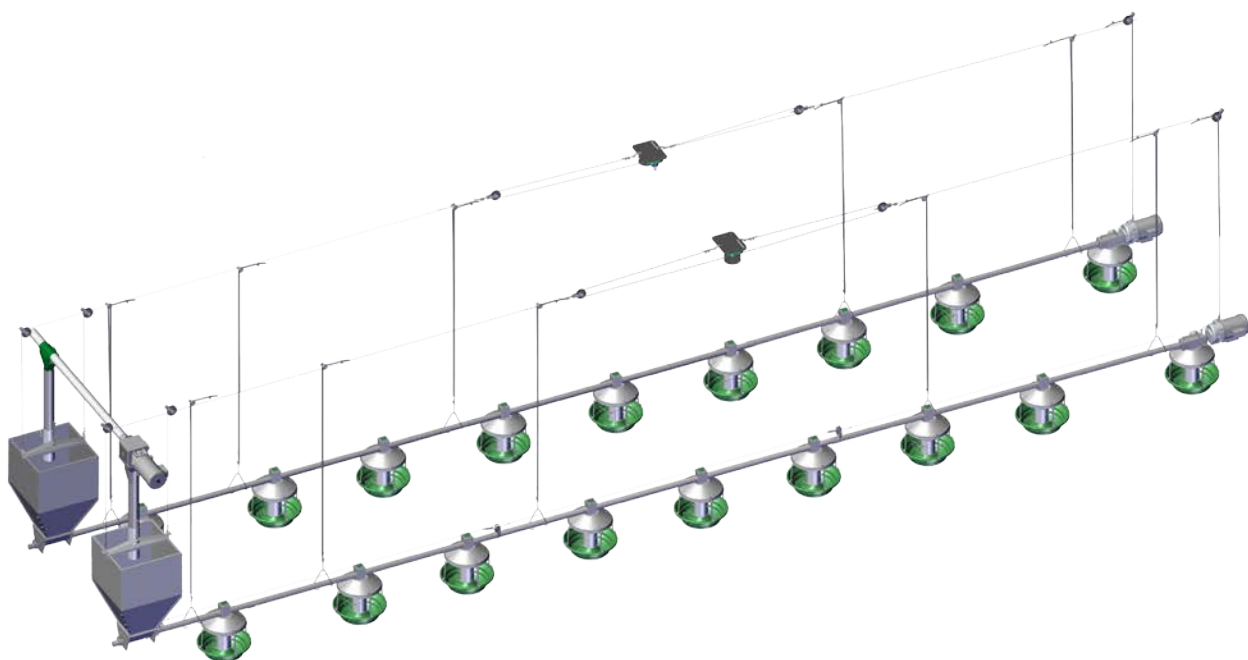


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VAL PRODUCTS, INC. WARRANTIES

For Warranty claims information, please see the “Manufactured Products Standard Warranty” form QMS101 available from Val Products, Inc. by:

- Phone: 1-800-998-2526
- Email: marcom@val-co.com
- Online: <http://val-co.it/warranty>

Conditions and Limitations:

- Products and Systems involved in a warranty claim under the “Manufactured Products Standard Warranty” shall have been properly installed, maintained and operated under competent supervision, according to the instructions provided by Val Products, Inc.
- Malfunction or failure resulting from misuse, abuse, negligence, alteration, accident or lack of proper installation or maintenance shall not be considered a defect under the Warranty.

Introduction

It is important that you read all instructions and pay particular attention to all SAFETY information. (Measurements throughout the manual are given in both english then metric units with brackets.)

Symbols

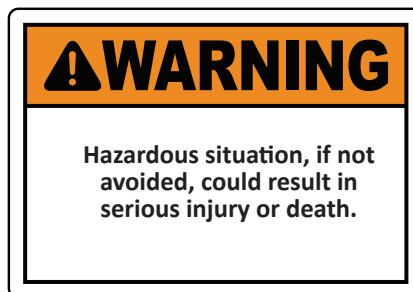
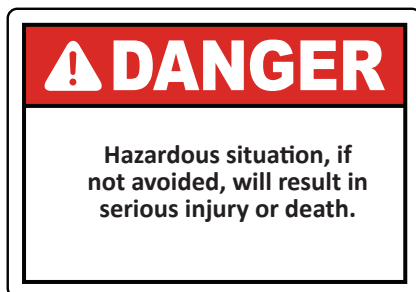
Our concern is for your safety. The safety warnings are included in this manual as a guide to help and encourage the safe operation of your equipment. It is your responsibility to evaluate the hazards of each operation and implement the safest method of protecting yourself as owner and/or operator.



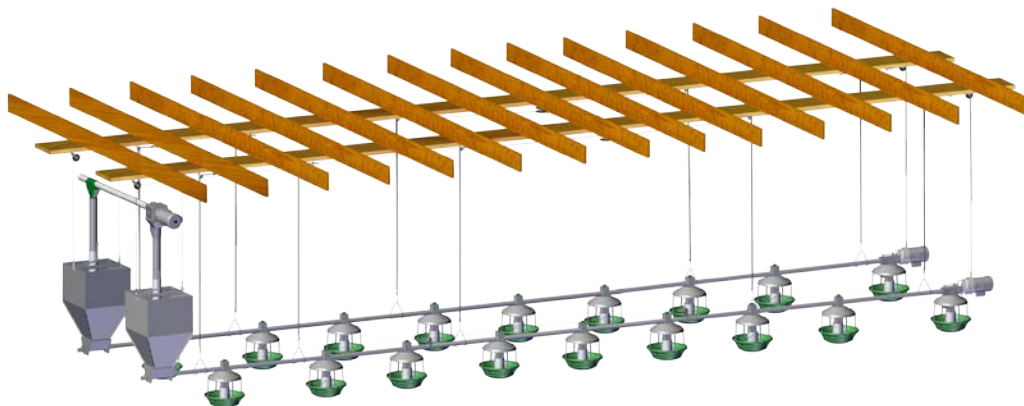
= NOTICE - Important information. Be sure to read.



= WARNING - The safety alert symbol is used on warning signs that describe the importance of a feature or explain a step that one should pay close attention to avoid problems or personal injury.



An Overview of Adult Turkey Feeder System



SAFETY INFORMATION



1. Disconnect electrical power before inspecting or servicing this equipment.
2. Keep hands and tools away from exposed auger.
3. All wiring should be done by a qualified electrician in accordance with Local and National Electrical Codes.
4. Keep all covers and guards in place.
5. Ground all electrical equipment.

Feed Pan Features

The PTF Adult Turkey Pan Feeder

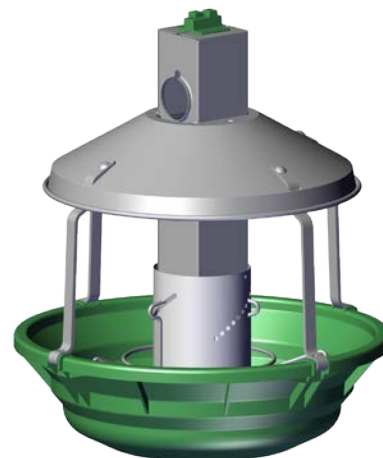
The VAL-CO® turkey feeders and drinkers provide top performance and results that save you time and money. The PTF Turkey Pan Feeder is adjustable and easy to handle giving excellent results. The ample and deep poly pan offers sufficient space for the growing turkeys, avoids feed waste and can easily be removed, exchanged or cleaned.

Features:

- Self-leveling which allows feeder to swing, provides less bruising.
- Steel feed level tube can be adjusted in seconds.
- Even feed distribution.
- Extra strength construction designed to withstand the movements of full-grown turkeys.

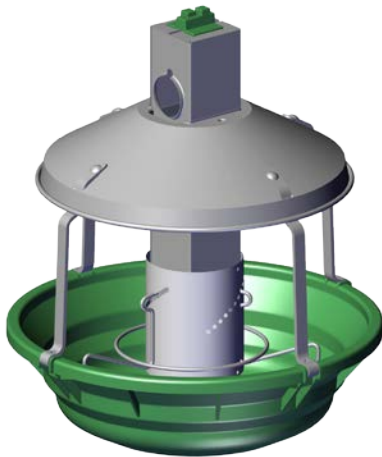
Recommended Density per Pan:

- Toms: 45-50
- Hens: 70-80
- (Densities will vary based upon finish weight.)

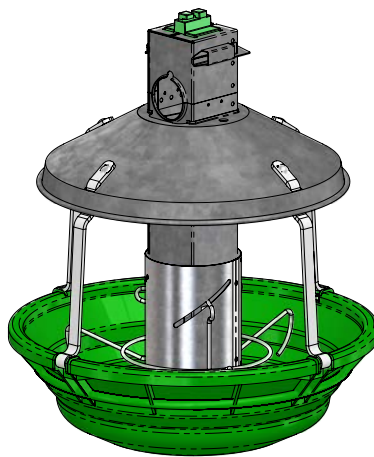


Glossary

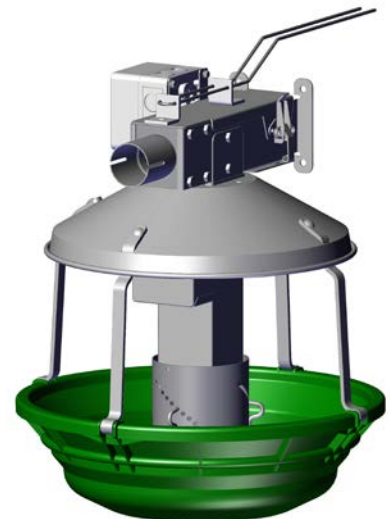
**460217
TURKEY PAN FEEDER
BASIC FEEDER**



**460280
TURKEY PAN FEEDER
TWO PIECE TOWER**



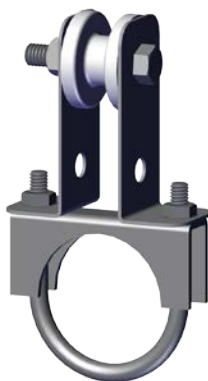
**460250
END-HOUSE
DIRECT DRIVE UNIT
CONTROLS FEED FLOW**



**460022
CLAMP BRACKET**



**460075
INSULATOR CLAMP BRACKET**



**720220
TUBE HANGER**



**VS342
ADJUSTMENT BRACKET**



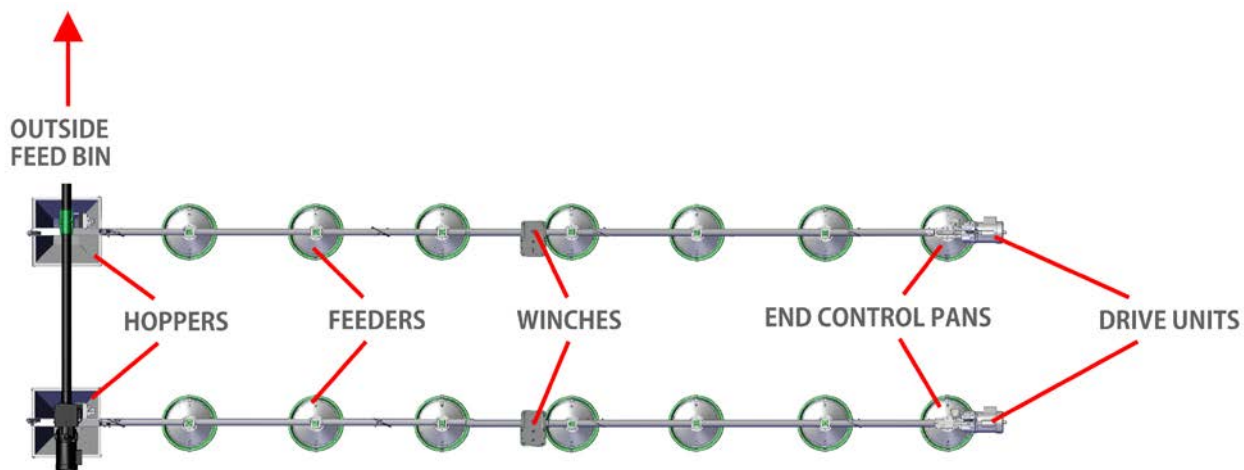
Winch System Installation

General Information

Please read this entire manual before installing the feed system. It provides pertinent information on the VAL-CO® adult turkey feeder, turkey control pan, winch system, hopper, auger/feed line and the anti-roost system. The system is designed in a straight line for using an auger with 10' smooth tubes to deliver feed to the feed pans with a choice of hand or electric winches.

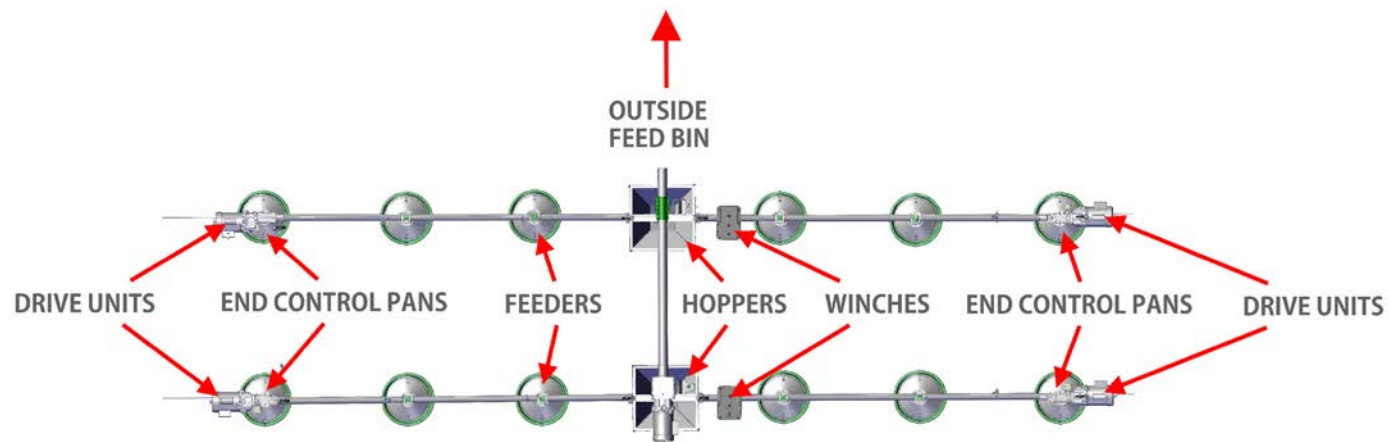
Option 1

FIGURE 1



Option 2 –A large system should be split in the center. (This will reduce the auger run-time and eliminate the need to use mid-line controls.)

FIGURE 2



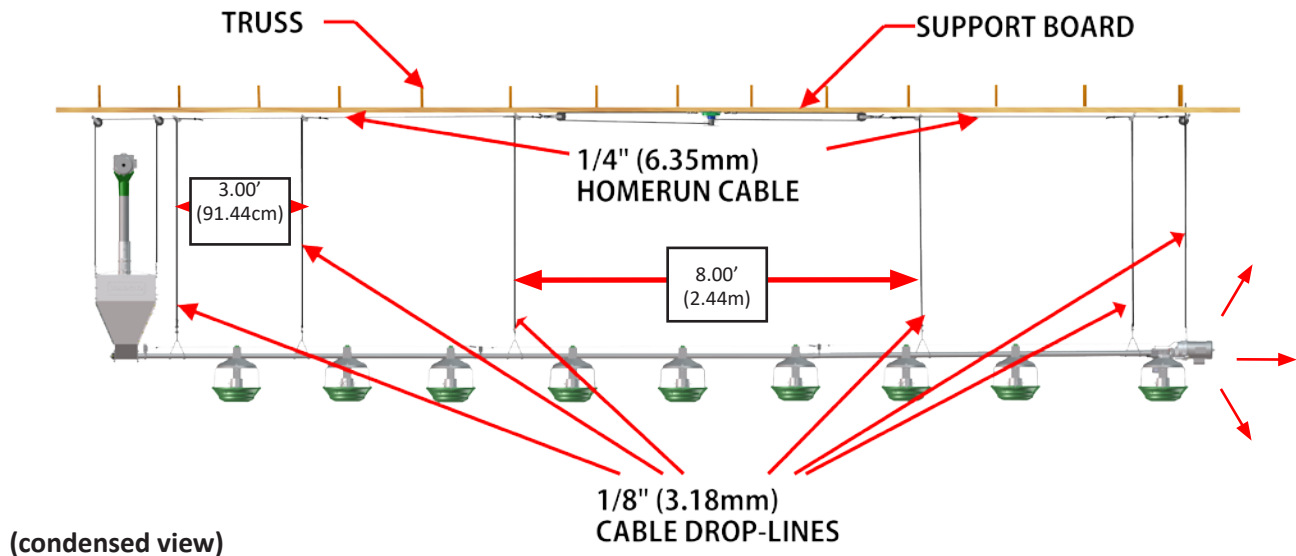
The winch is usually placed approximately in the middle of the feed line for either option. Be sure to leave room for cable travel on first pulley to winch.

Winch System / Suspension

1. Locate the best placement of the winch. The winch requires a support that will span at least 3 rafters in a wood frame house and at least 2 rafters in a steel house.
2. Locate the placement of the control pan units and feed hopper. A special support is required to suspend the drive heads and feed hoppers. Support is also needed at each joint. When planning BE SURE TO ALLOW ENOUGH ROOM AT THE END OF THE FEED LINE AROUND THE CONTROL PAN UNIT FOR BIRD FEEDING, usually 5' (1.52m).
3. Determine drop locations, giving special attention to the placement of the hopper and control unit. The suspension system is based on a ceiling height of 14 feet (4.267m) with drop points every 8 ft (2.438m). Special consideration for support must be used with 10 ft spacing.
4. Determine and mark a straight line or use cable to locate placement of the eye bolts. Offset the eye bolts slightly so that the pulley does not interfere with the homerun cable.

Overview

FIGURE 3



LEAVE A MINIMUM OF 5 FEET (1.52M) BEYOND DRIVE CONTROL PAN UNIT FOR BIRD FEEDING.



DO NOT EXCEED 10 FEET (3.05m) BETWEEN SUSPENSION DROPS!
Installation detail on following pages.

Winch System / Suspension - continued

FIGURE 4

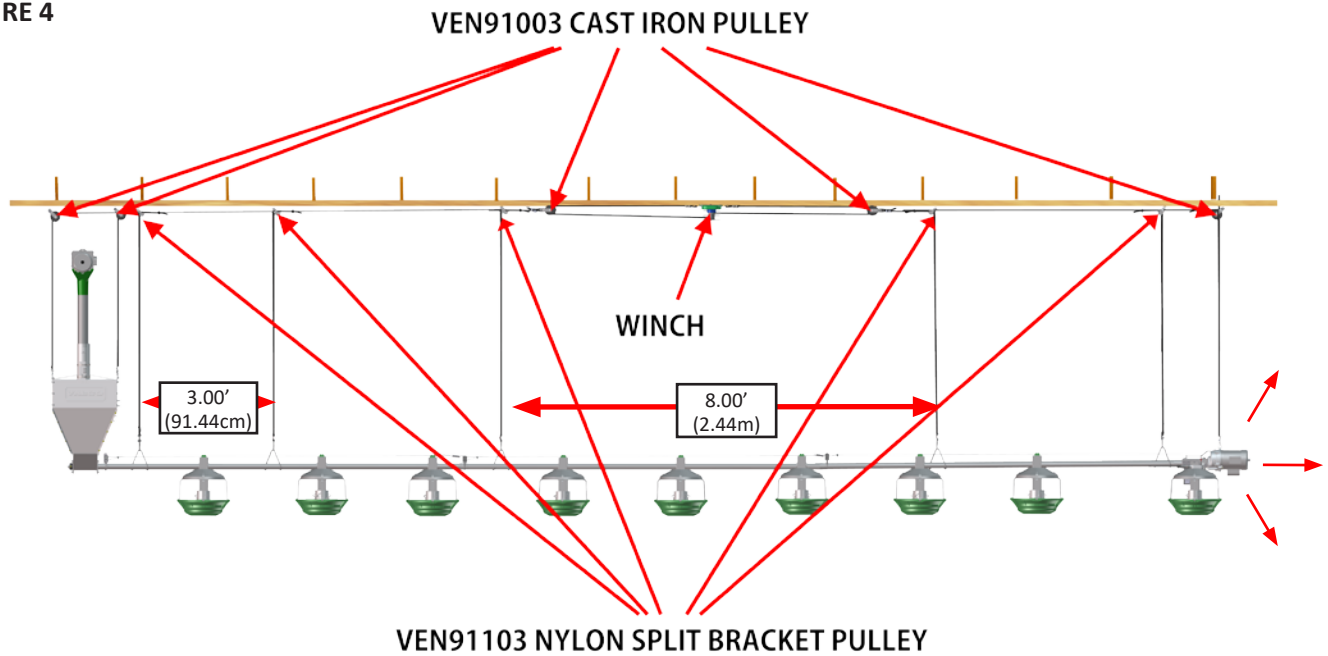
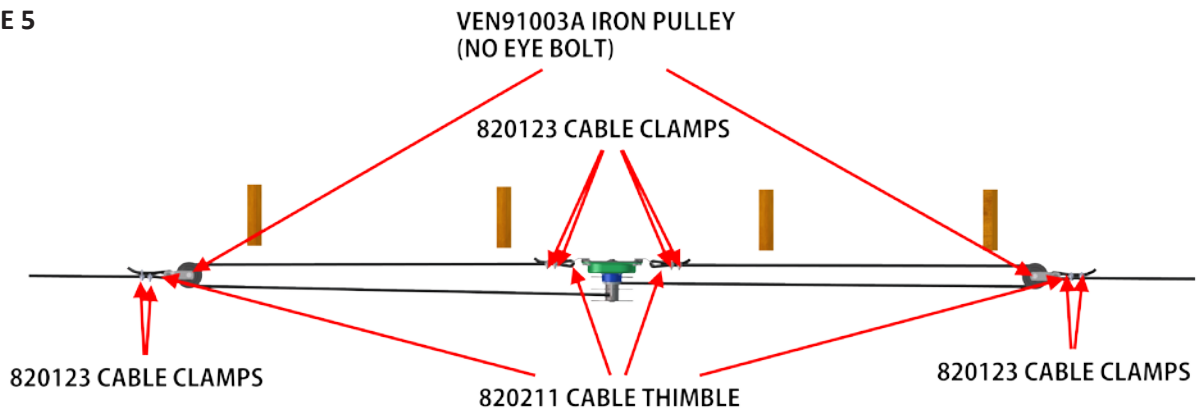


FIGURE 5



CAUTION ! Handle CABLE with caution.

Wear safety glasses & gloves to protect your eyes & hands from injury.

Winch Installation

There are two types of winch supports, angle iron or wood.

FIGURE 6

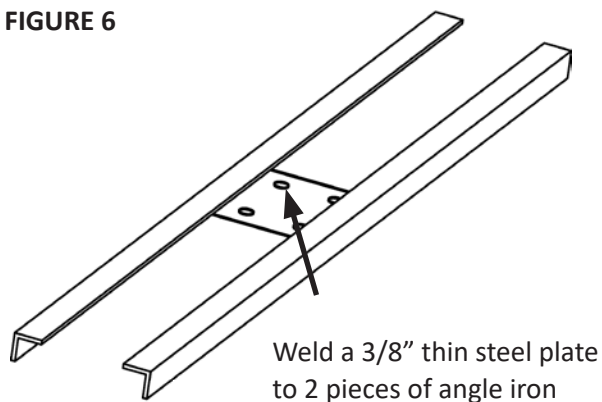


FIGURE 7



1. Bolt the fully assembled winch to the winch support, shown in Figures 8 or 9. Use either a 2 inch x 8 inch (5.08cm X 20.32cm) wooden board that will span (3) TRUSSES or a 3/8 inch (.95cm) thin steel plate welded to (2) pieces of angle iron which are long enough to span (2) TRUSSES, shown in Figures 11 & 12 on the next page.

FIGURE 8

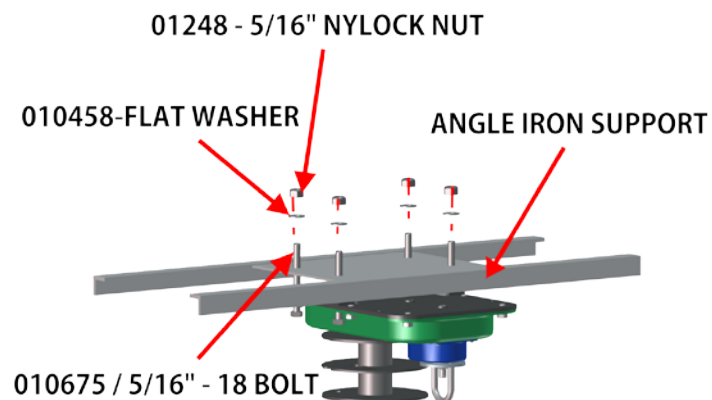


FIGURE 9

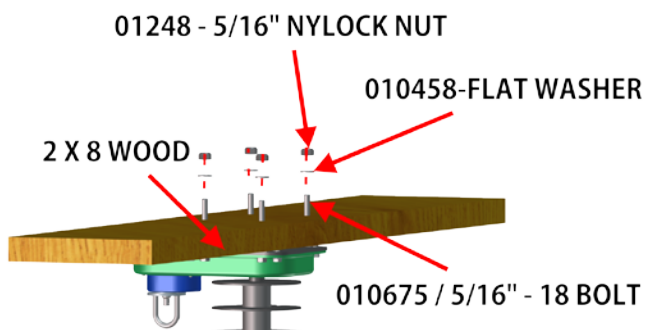


FIGURE 10



If you are using the double back system, install cable hook between the mounting bolt and winch frame, shown in Figure 10, before you attach the winch to the winch support.

NOTE: cable hooks are not provided.

Winch Installation - continued

- The winch **MUST BE** secured to the winch support angle iron or 2 inch x 8 inch (5.08cm X 20.32cm) wood board. Attach the winch support to ceiling/trusses at the center of the feeder line, shown in Figures 4 or 5 of previous pages. The winch support **MUST BE PARALLEL** to the feeder line and **MUST SPAN AT LEAST (3) RAFTERS IN A WOOD FRAME HOUSE AND (2) RAFTERS IN A STEEL FRAME HOUSE**. If the hopper is located at the center of the feeder line, place the winch a few feet offset from the center of the feeder line. **MAKE SURE THAT THE WINCH DRUM IS DIRECTLY IN LINE WITH WHERE THE CABLE WILL BE INSTALLED.**

(condensed views, distance of rafters is less than actual)

FIGURE 11

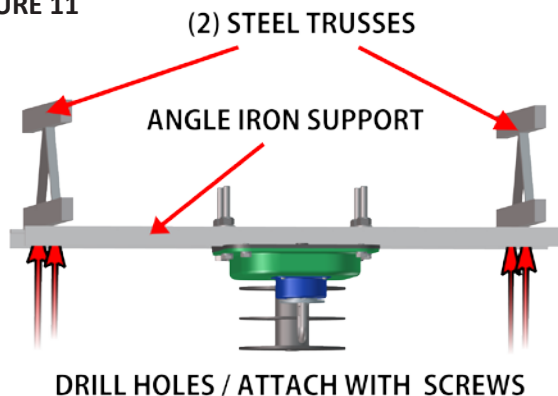
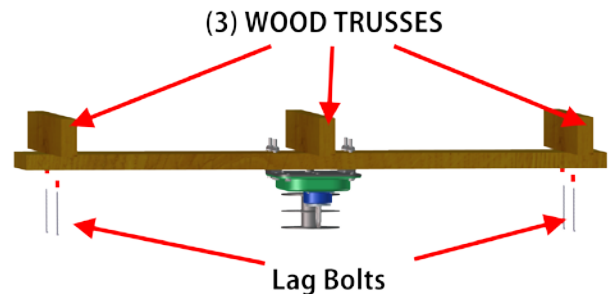


FIGURE 12



Installing the Winch Cable

The suspension systems are based on ceiling heights of 14 ft (4.27m) with drop points at approximately every 8 ft (2.44m).

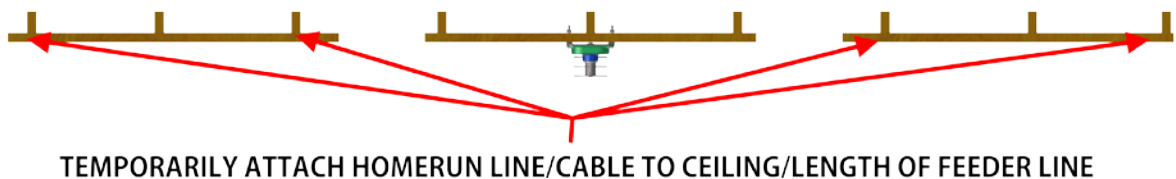


DO NOT EXCEED 10 FEET (3.05M) BETWEEN SUSPENSION DROPS!

Adequate overhead structure must be provided to support the weight of the Feeders, Hoppers, Control Pans, and Drive units.

- Extend the main/homerun line winch cable the full length of the feeder line. Attach the cable temporarily to the ceiling with nails, staples, or some type of fasteners.

FIGURE 13

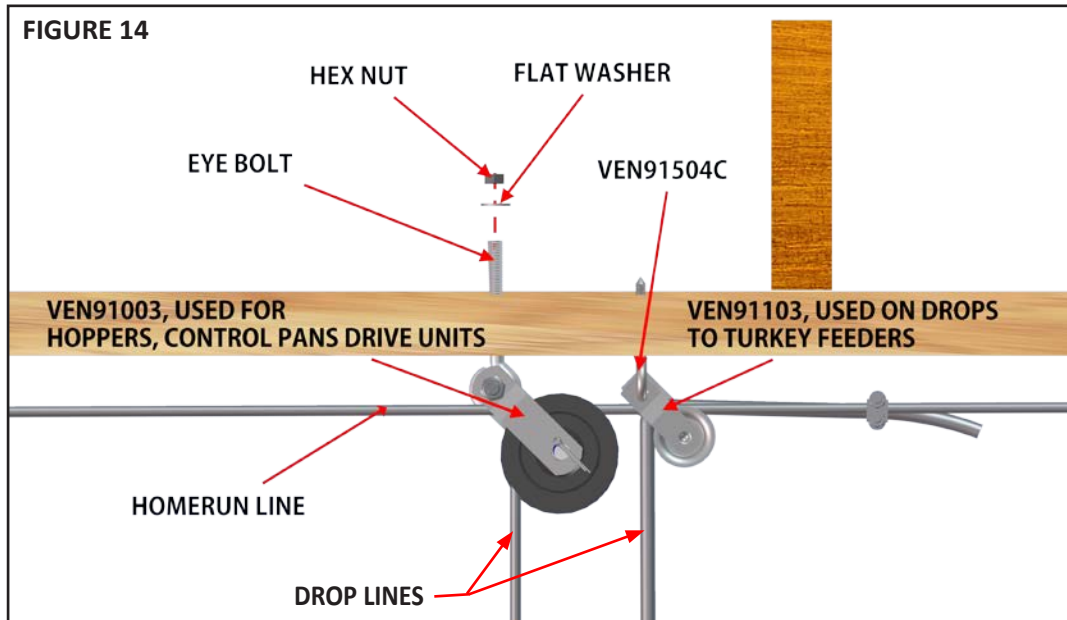


The recommended distance between each drop is 8 feet (2.44m) on center. DO NOT exceed 10 feet (3.05m).

Eye Bolt and Screw Hook Installation



In order to prevent the cable clamps from interfering with the pulleys, offset the hooks 3 inches (7.62 cm) to each side of the line.

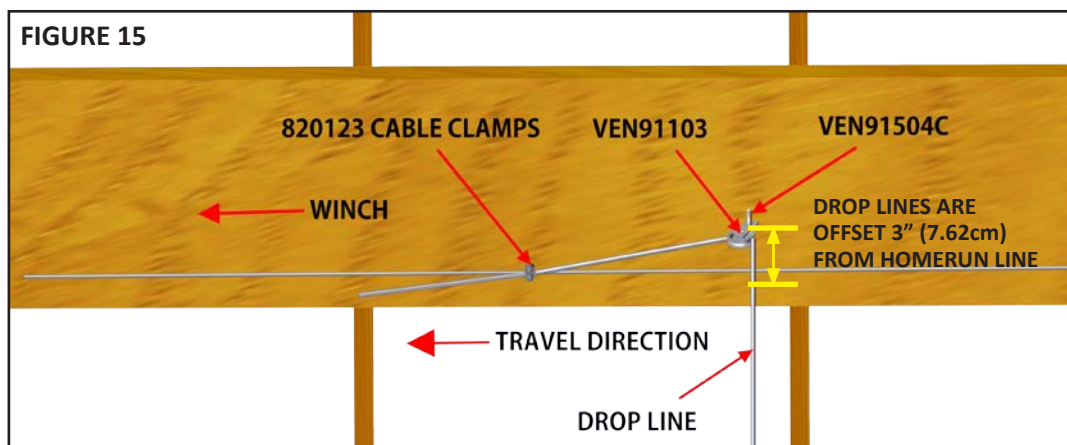


DROP LINE OFFSET DETAIL USING SCREW HOOKS

The direction of travel is determined when the Winch raises the feeder line.

The Screw Hook openings MUST POINT AWAY FROM THE DIRECTION OF TRAVEL.

1. Insert a swivel pulley onto each screw hook, shown in Figure 15.
2. Thread the end of the 1/8" cable through the pulley toward the winch, shown in Figure 15. Clamp this end to the Homerun Line/main winch cable about 6ft (1.83m) from the last pulley. (Use a 820123 cable clamp, shown in Figure 15.)
3. Allow enough cable length for installation of the adjustment leveler. (Sufficient cable is included to provide extension on drops located beneath and near the winch.)
4. Begin installing the suspension drops at the winch and proceed outward to the ends of the Feeder line. Keep the main cable tight between the drops.



Drop Installation and Cable Travel - continued

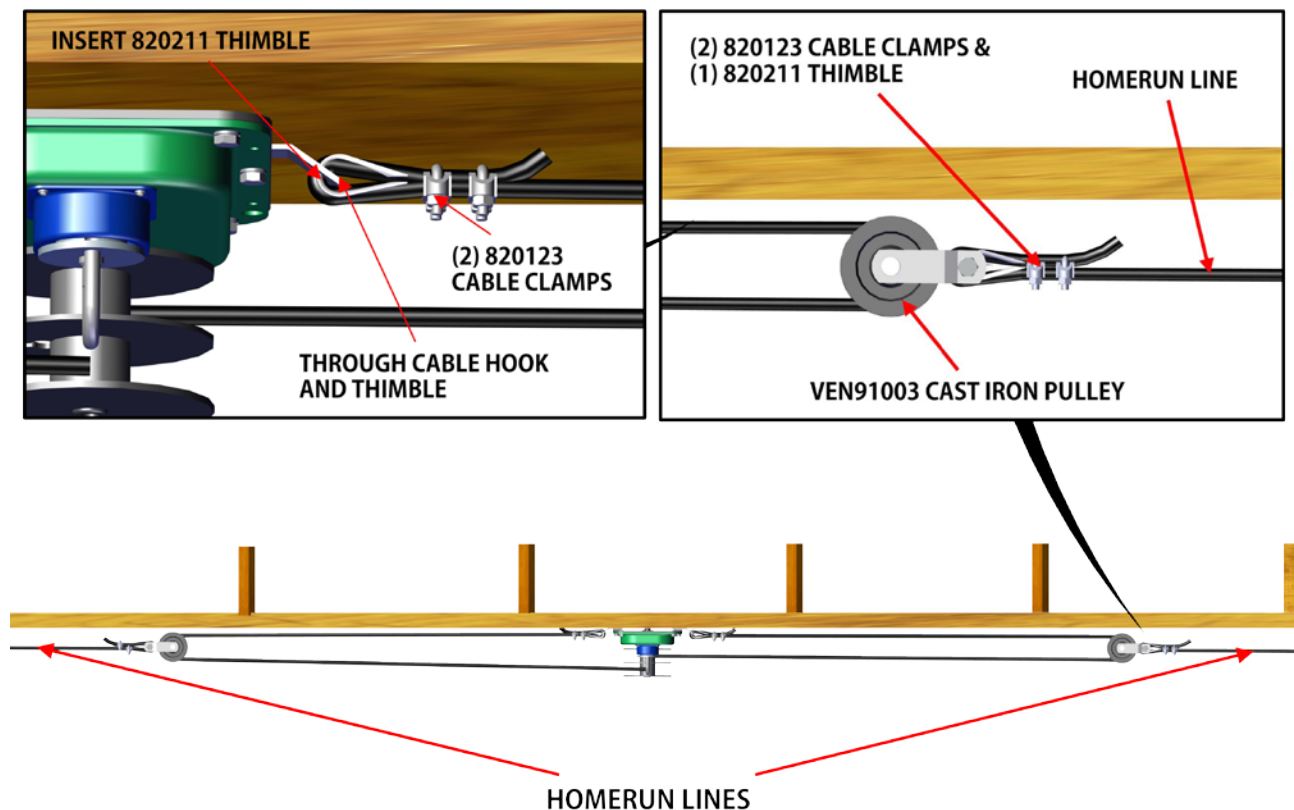


A weight attached to each drop line might be useful to maintain tension in the line.
Or you may use the cable lock/adjuster and hangers.

Double Back Cable Detail

1. Thread cable thru cable hook and clamp using (2) 820123 cable clamps and an 820211 cable thimble, shown in Figure 16 detailed view.
2. Run cable around cast iron pulley and back to winch. The cast iron pulleys should be attached to the homerun line, shown in Figure 16.
3. Allow enough cable length for installation of the adjustment leveler. Sufficient cable is included to provide extension on drops located beneath and near the winch.
4. Begin installing the suspension drops at the winch and proceed outward to the ends of the feeder line. Keep the main cable tight between the drops.

FIGURE 16



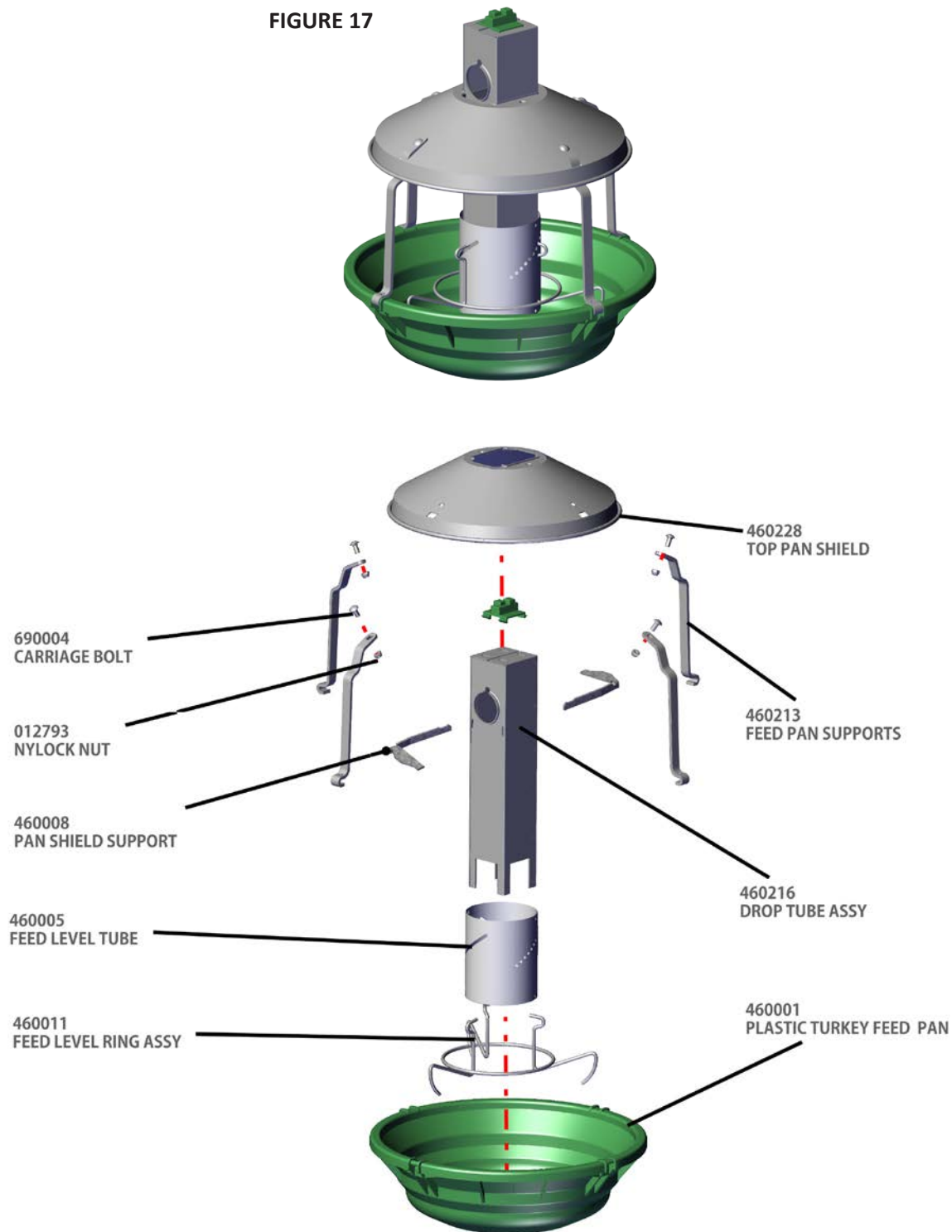
Feeders

Adult Turkey Pan Feeder Assembly Overview



Verify that all the parts ordered are included in the shipment. Assembly kits are broken down by parts and can be found in the part listings at the end of the manual. Assemble feeders before you begin the feed tube line assembly so that you may slide the feeders on as you assemble the feed line.

FIGURE 17



Adult Turkey Pan Feeder Assembly

1. Bolt all four (4) 460213 feed pan supports or struts onto the 460228 top pan shield using 690004 carriage bolts and 012793 nylock nuts, shown in Figure 18 and Figure 19.

FIGURE 18

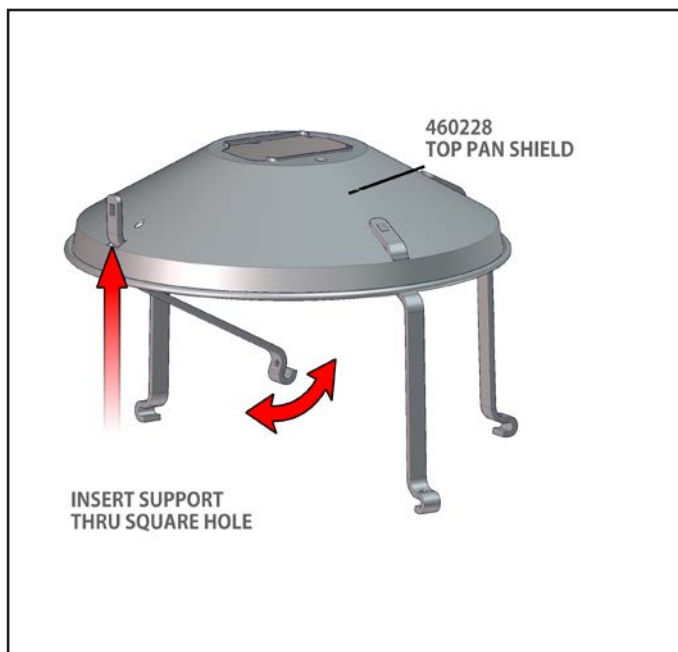
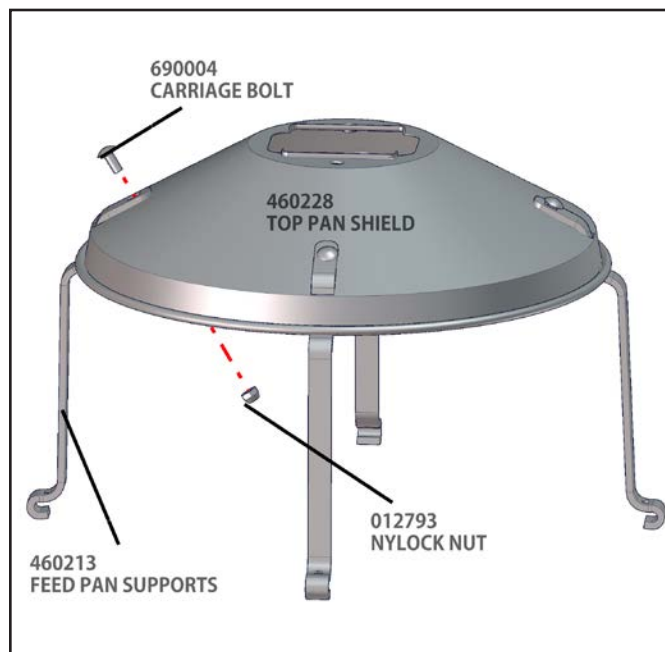


FIGURE 19



2. Attach the 460011 feed level ring assembly to the 460005 feed level tube at the holes and slides provided. Now place the feed level tube and feed level ring assembly onto the feed pan. The legs of the feed level ring should nest nicely in pan bottom of feed pan and feed level tube should be centered in the feed pan. Now set the adjustment using the holes to secure the desired height. The adjustment may be changed as needed at any time.

FIGURE 20

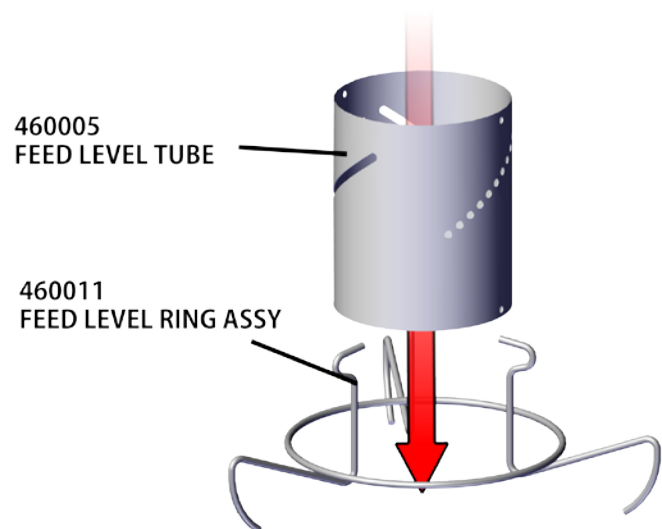
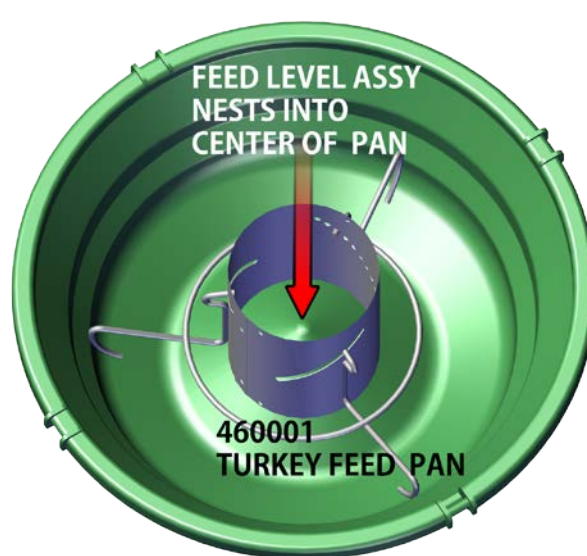


FIGURE 21



Adult Turkey Pan Feeder Assembly - continued

3. Place the 460216 drop tube into the 460005 feed level tube. Lowering the drop tube until it rests against the 460001 feed pan. Then, insert the 460008 pan shield supports into the 460216 drop tube assembly, shown in Figure 22.
4. Slide 460008 pan shield supports into the slots provided on the drop tube, shown in Figure 23.

FIGURE 22

460216
FEED DROP
TUBE

460011
FEED LEVEL
RING ASSY

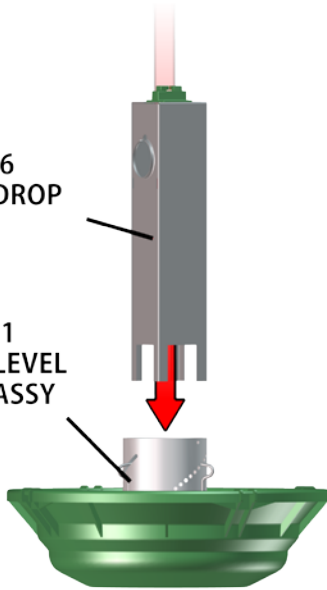
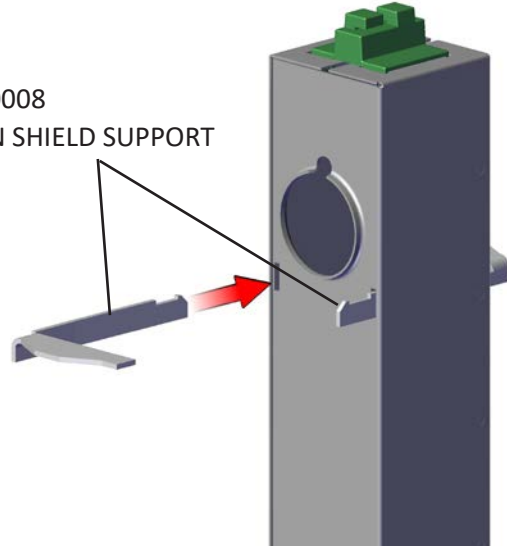


FIGURE 23

460008
PAN SHIELD SUPPORT



5. Lower the 460228 top pan shield into the 460216 drop tube, orienting the top pan shield to the feed tube, shown in Figure 24.
6. Snap the 460213 feed pan supports one (1) at a time onto the outer edge (at designated channels) of the 460001 feed pan, shown in Figure 25.

FIGURE 24

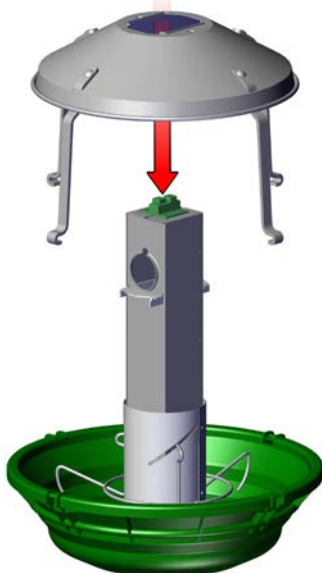
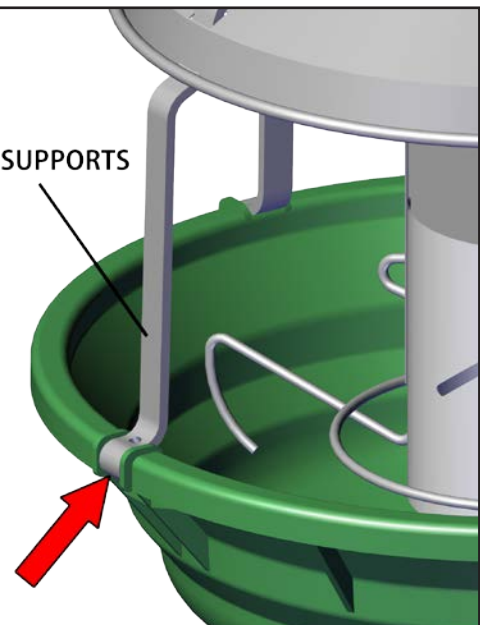


FIGURE 25

460213
FEED PAN SUPPORTS



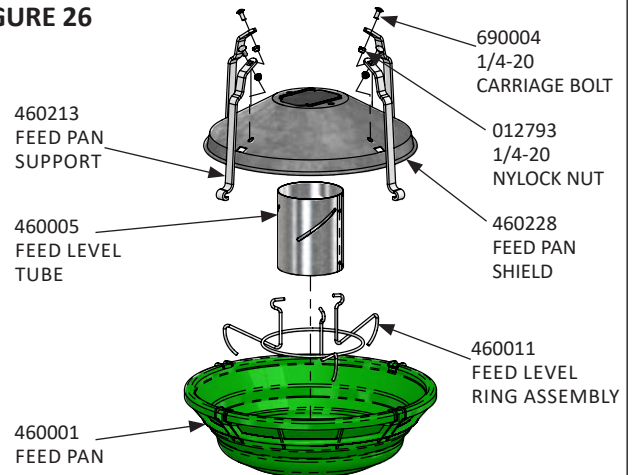
Two-Piece Turkey Tower

1. Bolt all four 460213 feed pan supports onto the 460228 feed pan shield, using a 690004 1/4-20 carriage bolt and a 012793 1/4-20 nylock nut.

Attach the 460011 feed level ring assembly to the 460005 feed level tube and place into the 460001 feed pan. Then set adjustment to the desired height, as shown in Figure 26.

Place the 460281 drop tube half into the feed level tube, lowering until it rests against the feed pan, as shown in Figure 27.

FIGURE 26

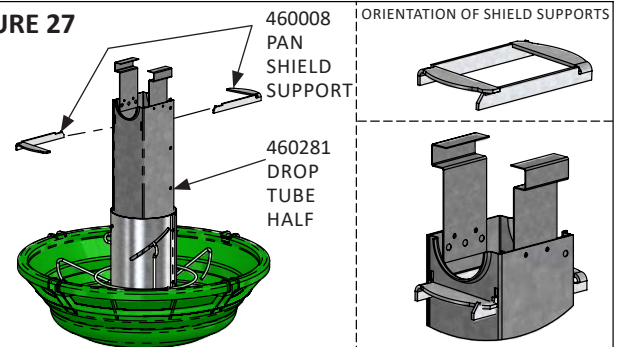


2. Insert 460008 pan shield supports, as shown in Figure 27.

Push both pan shield supports through the slots in the drop tube half until the end notches pass through the slots on the other side.

Force the tips of the flats into the notch of the opposing pan shield support, as shown in Figure 27.

FIGURE 27

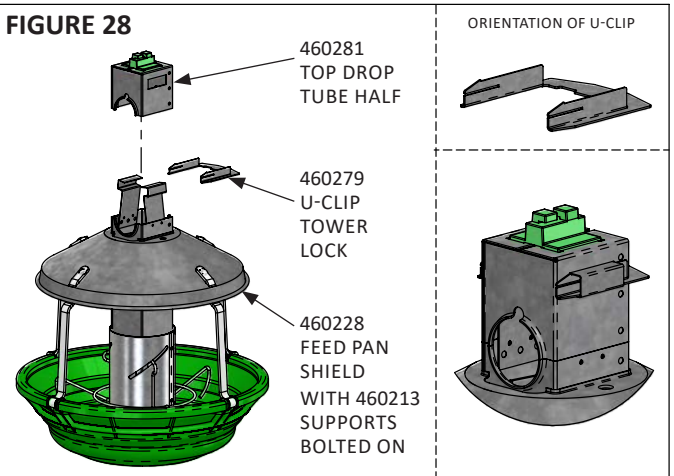


3. Lower the 460228 feed pan shield into the drop tube. Be sure to orient as shown in Figure 28.

Secure the feed pan supports one at a time to the feed pan, as shown in Figure 28.

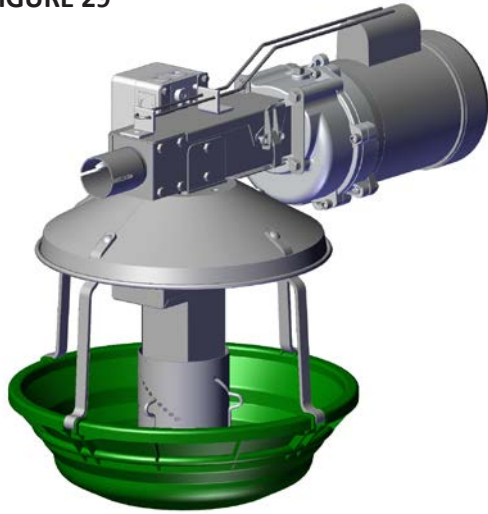
Bend in tabs on bottom drop tube half enough to slip inside of the top drop tube half. Keep moving down until the tabs on the turkey tower half slip into the slots onto the top half fully connecting the top and bottom half. Push 460279 U-clip through slots located on the tabs of the turkey tower half. Orient as shown in Figure 28.

FIGURE 28

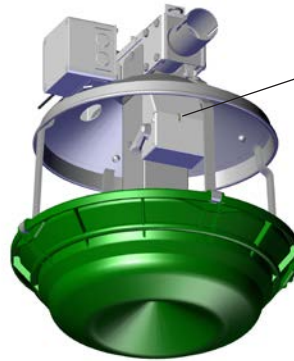


End Control Pan / Direct Drive Assembled

FIGURE 29



END CONTROL PAN IS SHOWN
WITH DIRECT DRIVE HEAD
(MOTOR) AND GEARBOX



To make the switch more sensitive
(will turn the motor off more
quickly), turn the screw clockwise.

To make the switch less sensitive
(will allow the motor to run longer),
turn the screw counter-clockwise.



Birds are sensitive to light, temperature, moisture and drought and will avoid places that do not maintain the average environment. Make sure the END-HOUSE pan area keeps a consistent average temperature, has good ventilation and moisture level. It is advisable to install a small spot light above the END-LINE pan and to keep the END-LINE pan free of litter and manure to attract birds.

End Control Pan / Direct Drive Head and Gearbox Unit - detail

FIGURE 30

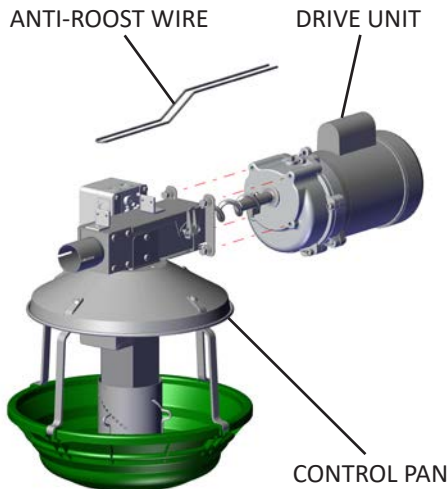
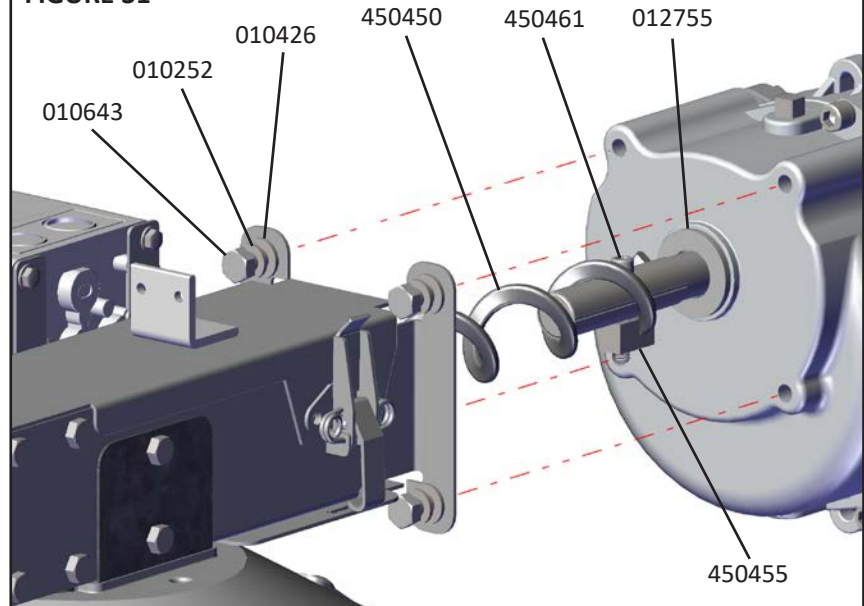


FIGURE 31



Electrical enclosure contains grommets and wire nuts.
There are no wires included for wiring to the motor or incoming supply.

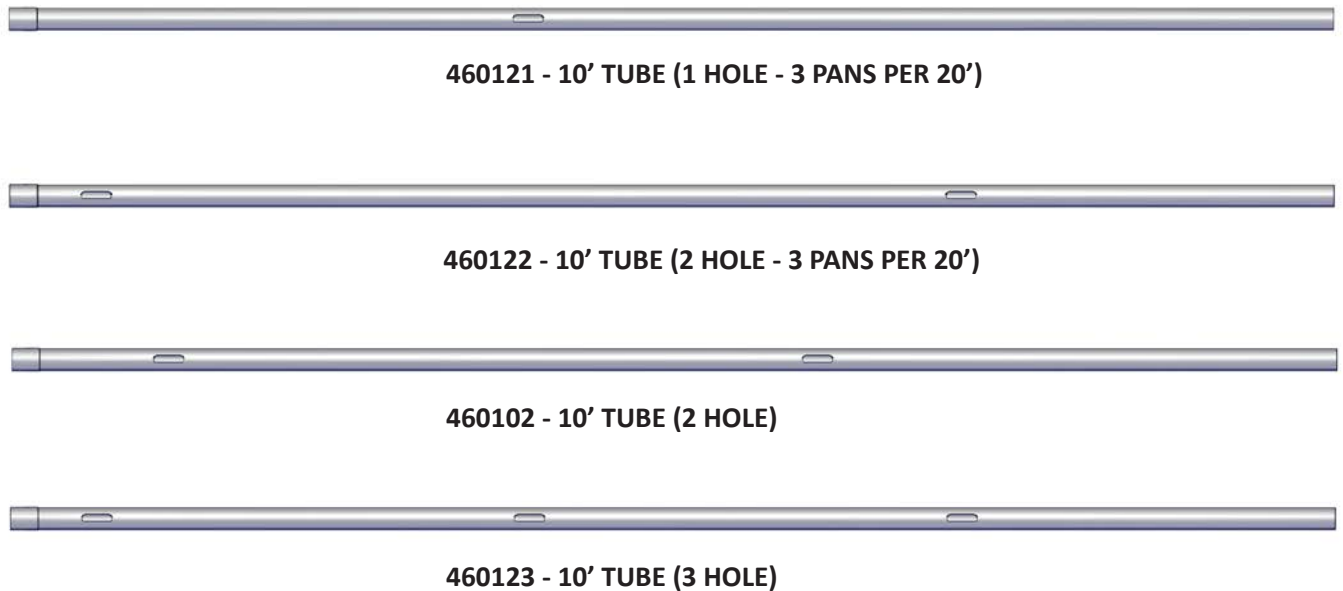
Feed Line Assembly and Suspension

Feed Tubes



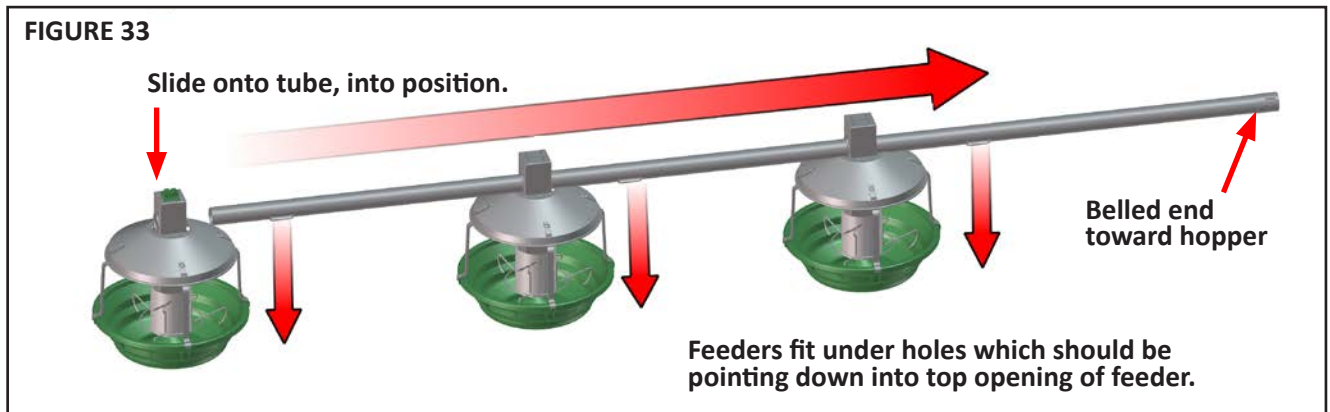
Pay particular attention to the placement of feed tubes. The holes should be located and strategically placed to accommodate the control feeders and proper spacing to all feeders on the feed tube line. **FEEDERS SHOULD BE MOUNTED ON THE FEED TUBE AS THE FEED TUBES ARE BEING PUT TOGETHER.**

FIGURE 32



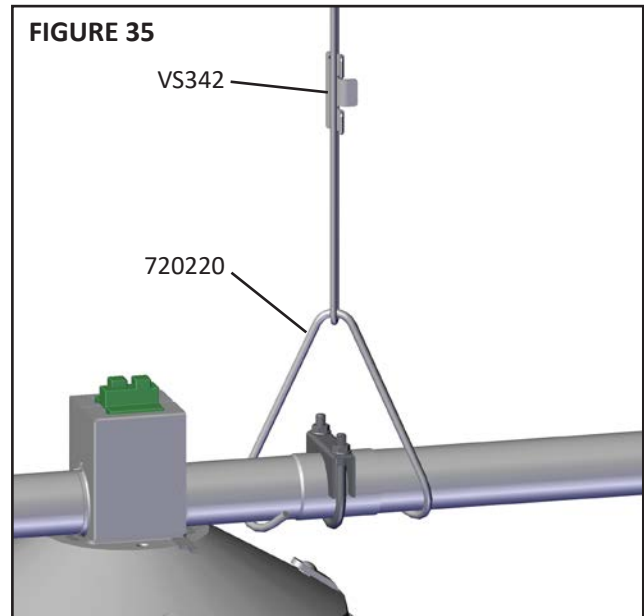
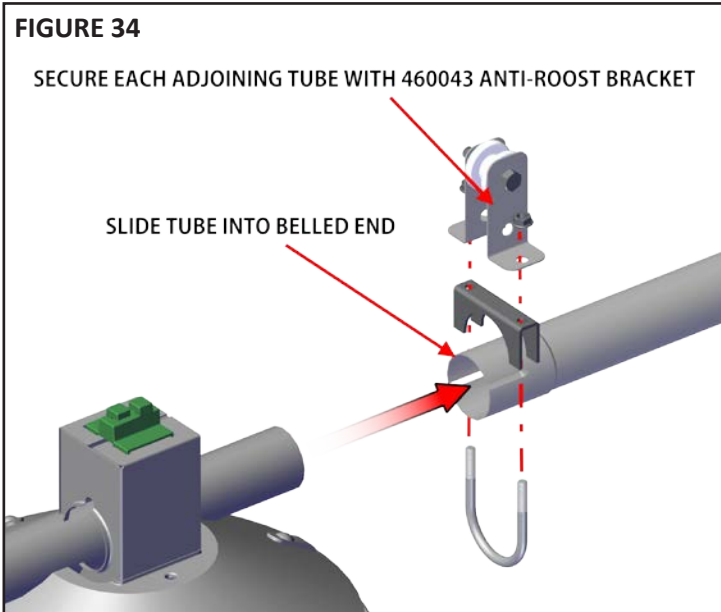
1. Put the tubes with belled ends toward the hopper and feeders on the floor in line with where you want to suspend the feed tubes. You will need to rotate the feed tubes to align feed drop holes and feeder as you slide (one feeder assembly per hole) onto the feed tubes. **Be sure the holes of the feed tubes are pointing down toward the feed drops. It is important to install all of the feeders on the tubes in the same orientation.**

FIGURE 33



Feed Line Assembly and Suspension - continued

2. To achieve secure and uniform feed drops throughout the system, place hangers as shown in Figures 34 and 35 below. They may be installed by spreading the wire over the feed (auger) tubes or may be slipped on the end of tubes as you connect tubes and feeders. THERE MUST BE A CLIP AT EACH DROP LINE TO ALLOW FOR LEVELING. The spacing will be determined by your drop line / truss spacing, 8' (2.44m) minimum to 10' (3.05m) maximum.
3. Connect the tubes as shown in Figure 34 and continue the entire length of the feeder line.
4. Assemble Insulator support brackets at every 50ft tube joint/connection, as shown in Figure 34.



DO NOT TIGHTEN THE CLAMPS AT THIS TIME.



If you are using the anti-roost system, an insulator bracket & tube clamp assembly must be positioned on the tubes at every fifth joint or a maximum of 50 ft (15.24m) apart and tube clamps at all other joints. If you are not using the anti-roost system, place a tube clamp assembly at each joint.



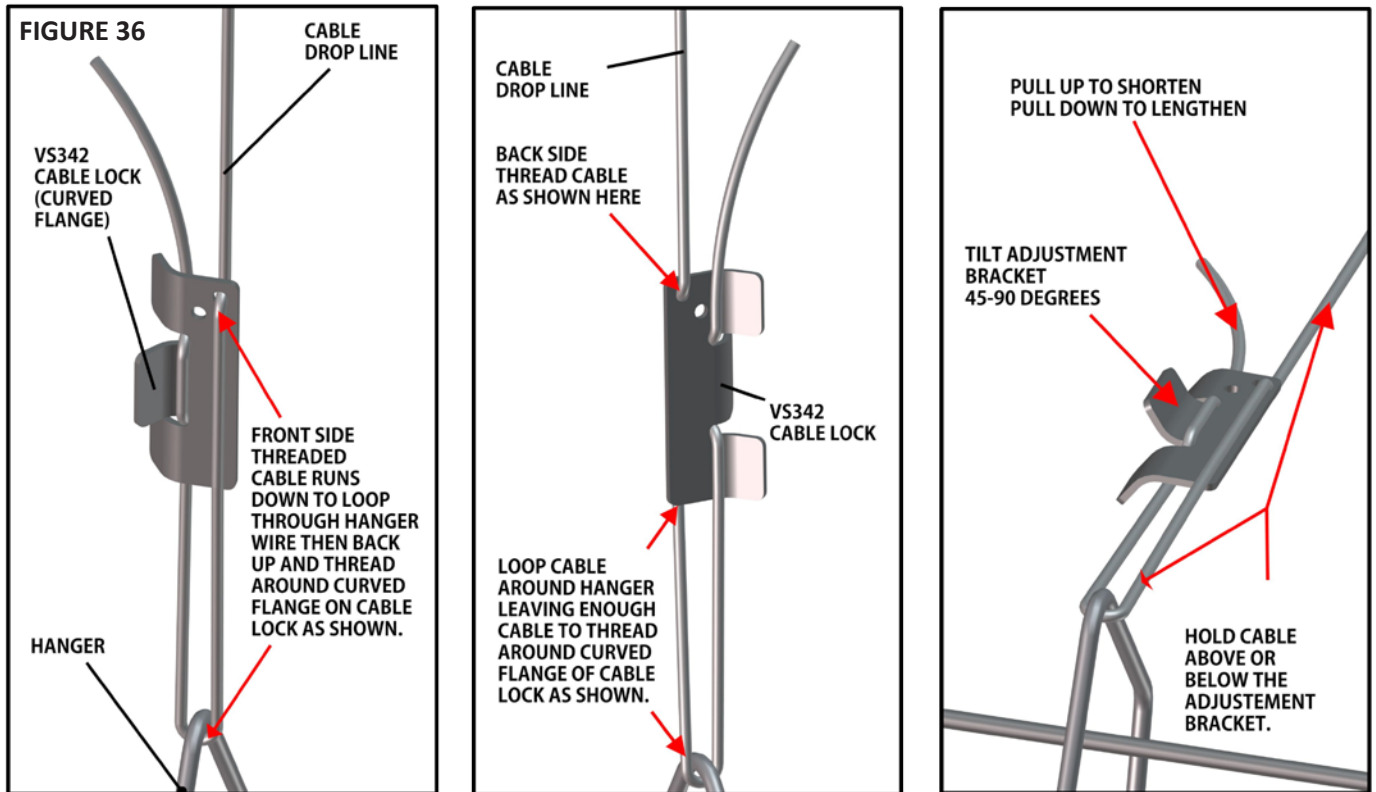
- Push tube into belled end of next tube as far as possible!
- Make sure all feed drop holes are well aligned and pointing downward.
- Place hangers every 8 feet minimum to 10 feet maximum.



REMINDER! Make sure the outlet drop holes are downward when the hangers are installed, otherwise feed will not be allowed to drop into the feeder pans.

Feed Line Assembly and Suspension - continued

5. Install the cable locks/adjusters as you connect and hang feed tubes. Slip the hangers on the feed tubes at the 8ft (2.44m) or 10ft (3.05m) spacing determined by the suspension drop lines. Figure 36 shows the proper installation of the hanger assembly to the cable lock. Be sure the cable lock is within 6 inches (15.24cm) of the feeder line.



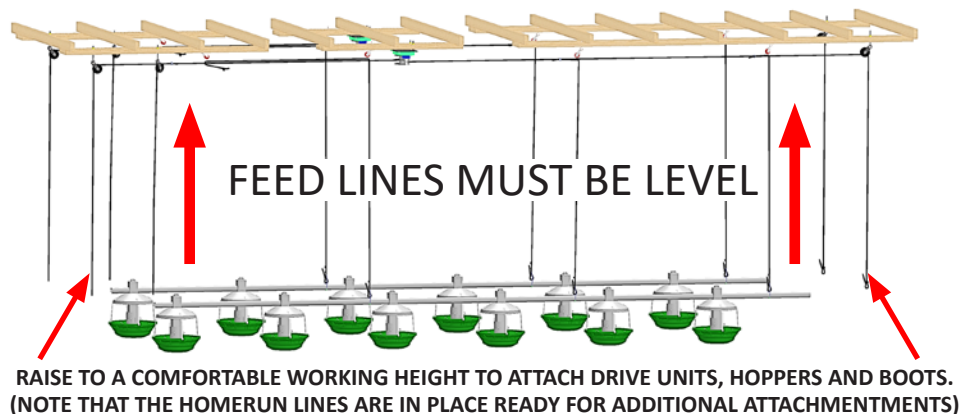
6. Continue the installation for all drops, check drop lines before raising feeder line. **The cable must be tracking properly on all pulleys before raising the feeder line.**

Raising the Feed line

Now you are ready to test the feed line suspension system and raise it to a comfortable working height.

1. Once line is raised adjust feed (auger) lines with the cable locks/adjusters and level. Measure from the floor to level the system. This is to be done while the line is suspended.
2. Before tightening the clamp:
 - Make sure each tube is level. (Make adjustments with cable locks on drop lines.)
 - Ensure that the end of each tube is fully inserted into the belled end of the next tube.
 - Make sure the tube clamps are located correctly.
3. Finally, tighten the tube clamps on the feeder tubes. Clamp the joints securely, **BUT DO NOT CRUSH THE TUBES.** Re-adjust all cable locks as needed and trim off the excess end of the cable.

RAISE FEED LINES WITH WINCH



Hopper / Boot / Level Switch Assy

Typically the Auger is installed from the hopper/boot end of the feed line, however, it may be installed from the control unit end first. This is a matter of personal preference. This manual will instruct the installation from the boot end, therefore, we will start with the hopper/boot assembly. (The order would be reversed if you choose to start with the Control Unit end.)

Hopper Assembly

1. Assemble the 4 panels in order as shown in Figures 37, 38, 39 & 40. Wrap top flanged edge on panel #2 around the top edge of panel #1, then fasten with 1/4" - 20 x 1/2" hex bolt, 1/4" lock-washers and 1/4" finished hex nut.
2. Fasten the flanged bottom ends of both panel #1 & #2 together as shown in the detail of Figure 38.
3. Continue the same until all 4 panels are assembled, as shown in Figures 39 & 40.

FIGURE 37

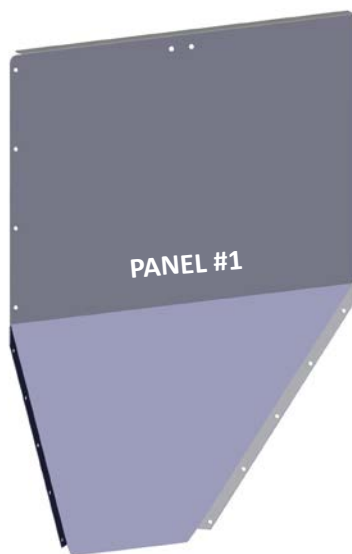


FIGURE 38

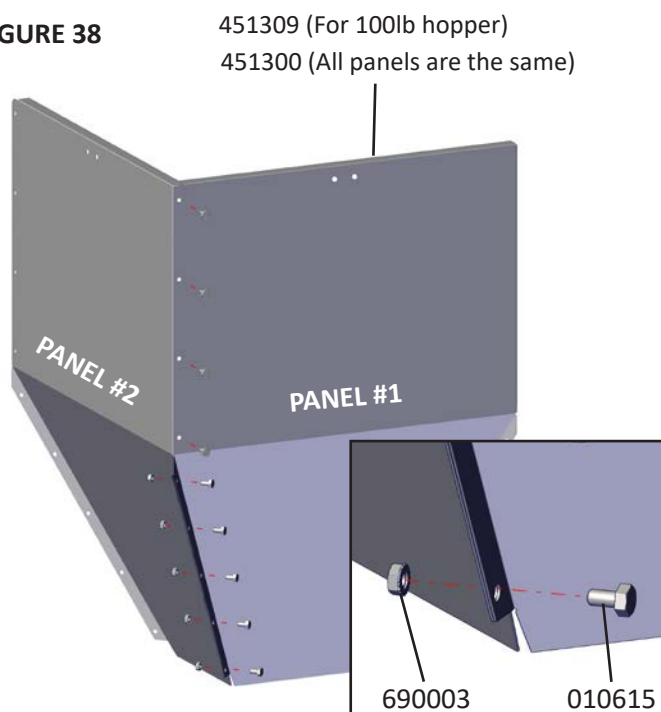


FIGURE 39

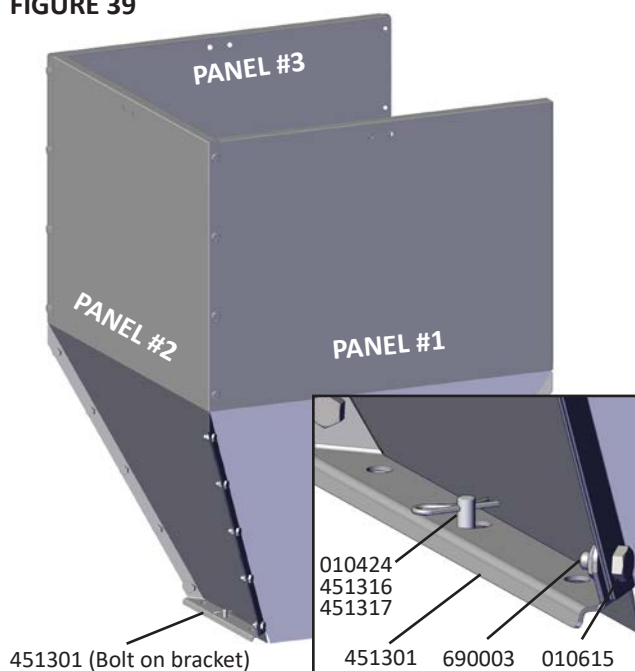
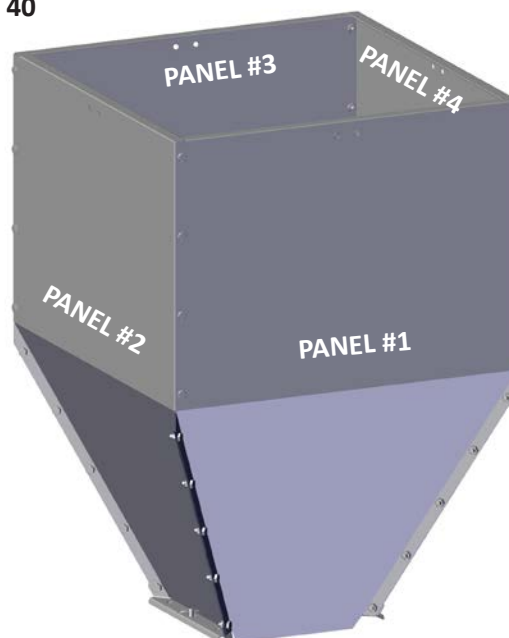
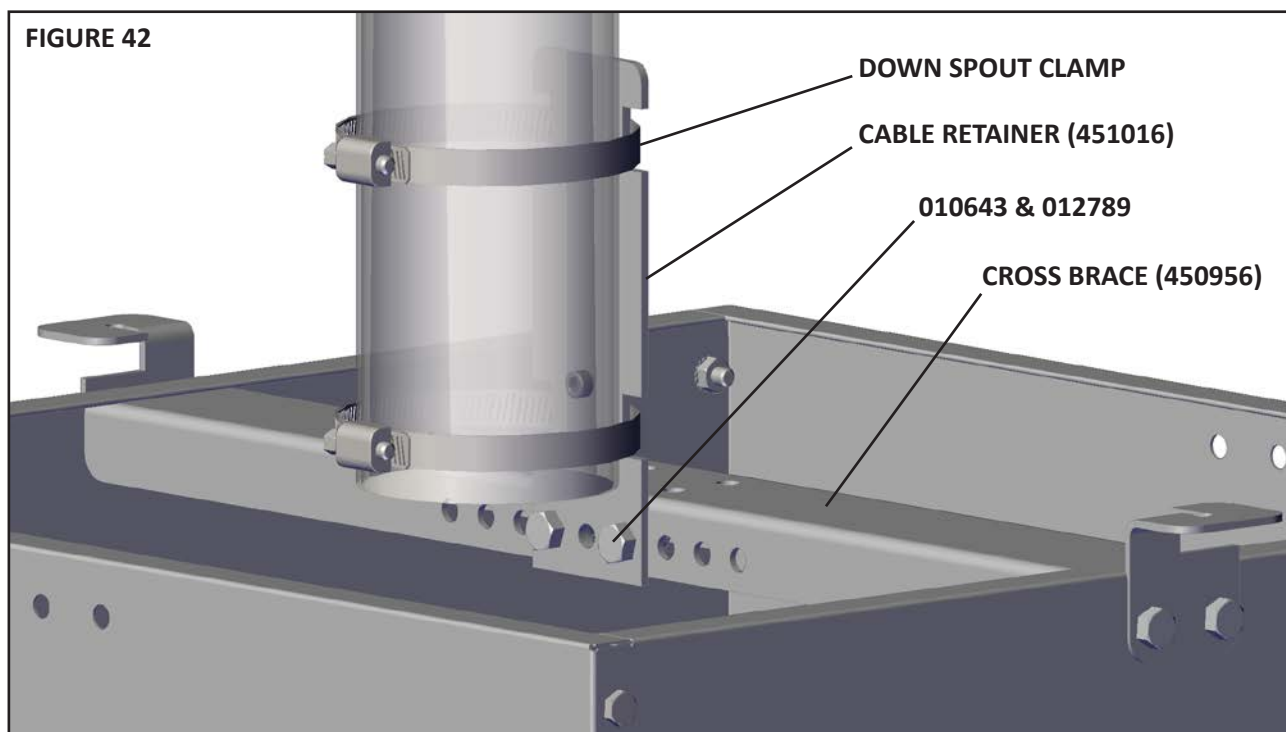
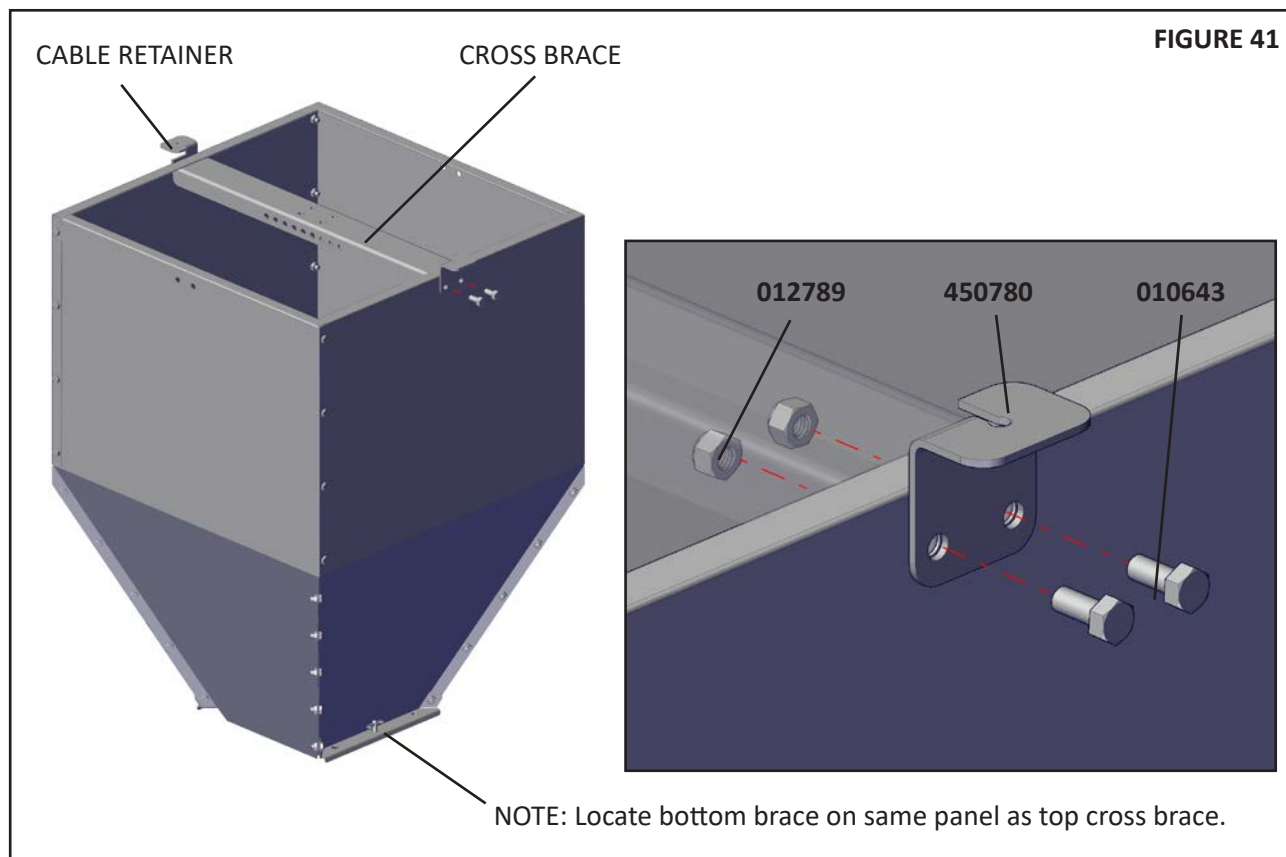


FIGURE 40



Hopper Assembly - continued

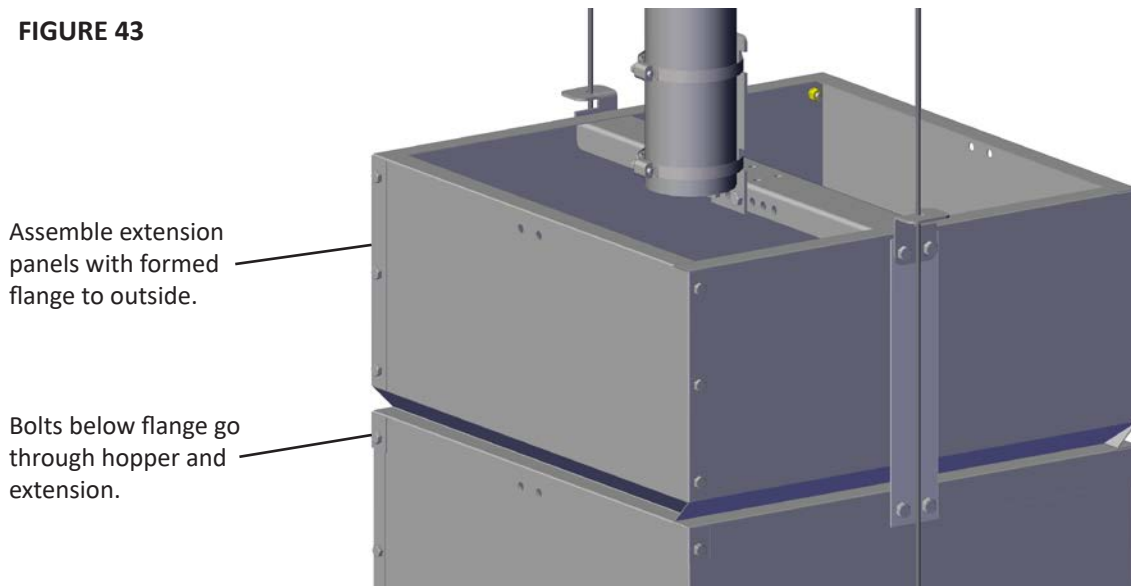
4. Assemble the cross brace and cable retainers with the 5/16" x 3/4" hex bolts and 5/16" nylock nuts as shown in Figure 41 and 42. Locate top cross brace on same panels as bottom braces (451301).



Optional Hopper Extension Installation

Assemble extension panels with formed flanges to the outside. Bolts below formed flanges go through hopper and hopper extension, as shown in Figure 43.

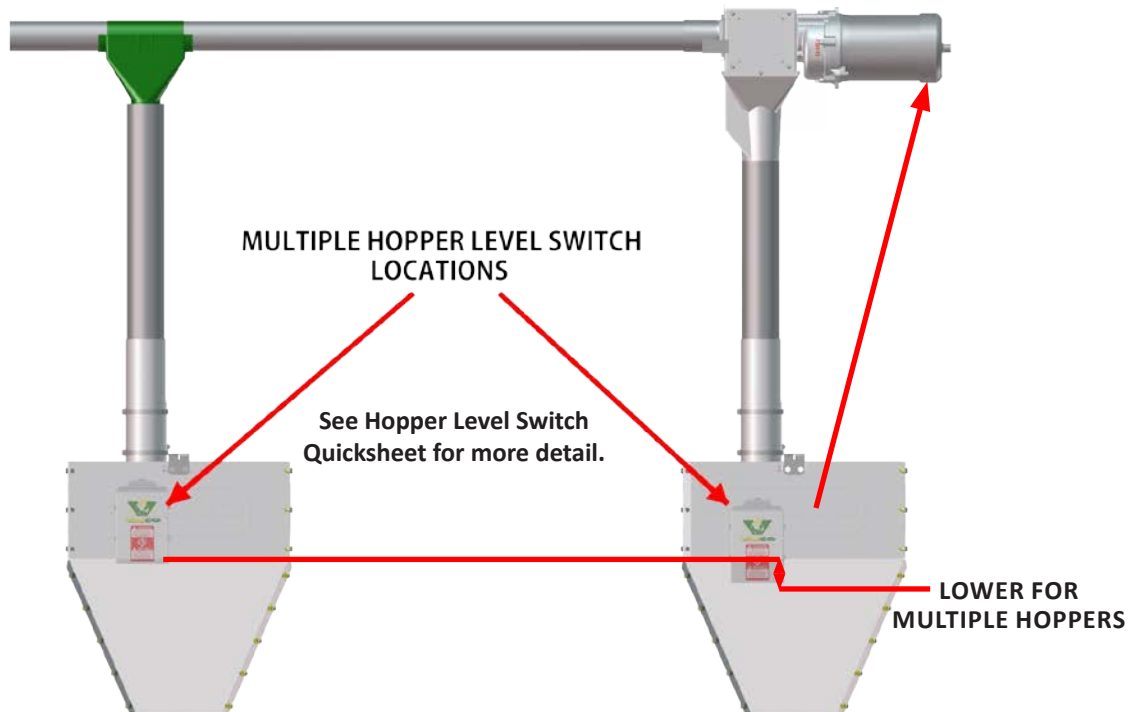
FIGURE 43



Level Switch Installation

1. Install the hopper level switch closest to the fill system motor and lower than the other hopper level switches if you are using multiple hopper level switches. This will ensure that the feed level will be higher in the other hoppers and will cause the system to start in order to maintain the feed level in every hopper, thus providing a reservoir of feed in the fill system in the case that another hopper calls for feed.
2. Position the feed drop tube to the center of the hopper to deliver feed near the top of the hopper and in front of the hopper level switch. The drop tubes and switches should be positioned high in the other hoppers so they fill but do not overflow as shown in Figure 44.

FIGURE 44



Level Switch Installation - continued

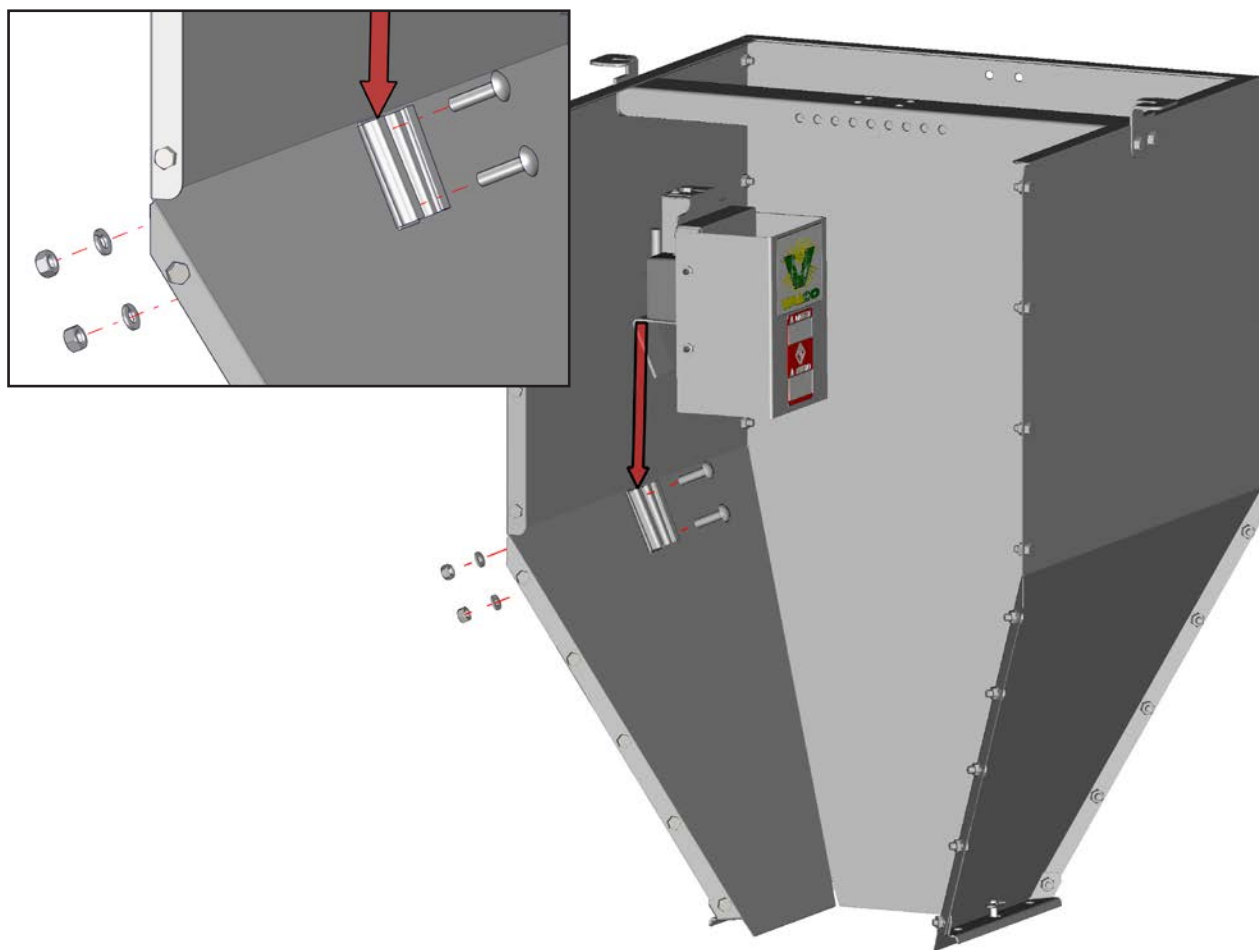


To assure that no hoppers empty before the control unit hopper requires feed, the level switches (controls) may be placed in more than one hopper. **WHEN USED IN THIS MANNER, Wire all switches in parallel so any one switch can start the system.**

3. Locate the best position for the level switch shown in Figure 44 and explained in step 1 on the previous page. Use a center punch and drill (2) 11/32inch (.87cm) diameter holes through the panel of the hopper for the mounting bracket shown in Figure 44. Use the bracket as a guide (template) to determine the hole spacing. Secure to the hopper panel using the 5/16" - 18 3/4" hex bolts and 5/16" - 18" lock nuts included.
4. Slide the 720020 hanger bracket on the back side of the level switch control sensor and onto the #720023 mounting bracket which you just secured to the side panel of the hopper, as shown with arrow pointing down in Figure 45.

FIGURE 45

**DRILL HOLES FOR BRACKET
USE BRACKET HOLES FOR TEMPLATE**



The hopper level switch control may be removed for cleaning.

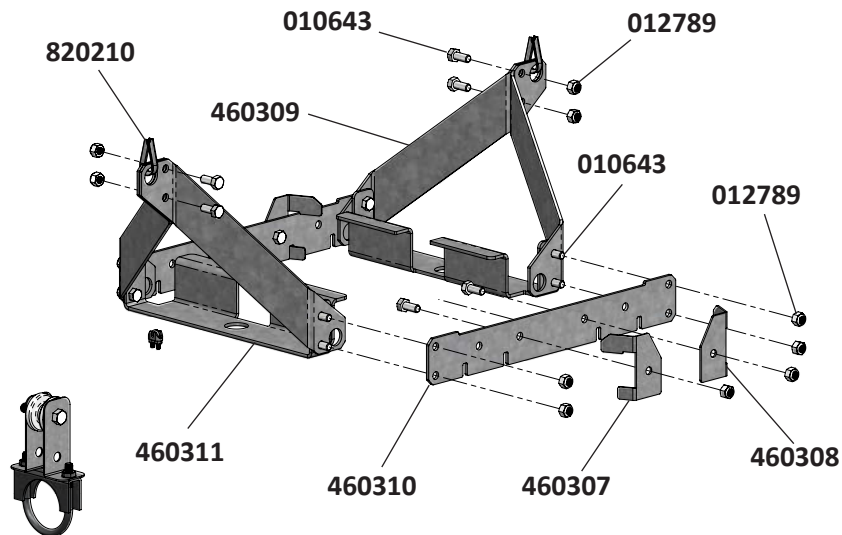


For optimum performance, the feed drop tube should be placed five (5) inches higher than the top edge of the switch shield and at least one (1) inch in front of the switch shield. This will allow the feed to fill the hopper, overflow the sensor and activate the level switch. **THIS UNIT SHOULD ONLY BE WIRED TO A VAL-CO® DISCHARGE HEAD.** It is recommended to mount the boot to the feed hopper and thread the cables through the cable retainers *after* installing the hopper level switch.

Suspension Installation (Single and Twin Boots - Metal Hopper)

1. Assemble suspension components, as shown in Figure 46.

FIGURE 46



2. Slide suspension components into boot and secure with 460307 and 460308 left and right boot holding brackets. Complete bearing and tube assembly as shown in Figure 47. Install drop cables and tube as shown in Figure 48.

FIGURE 47

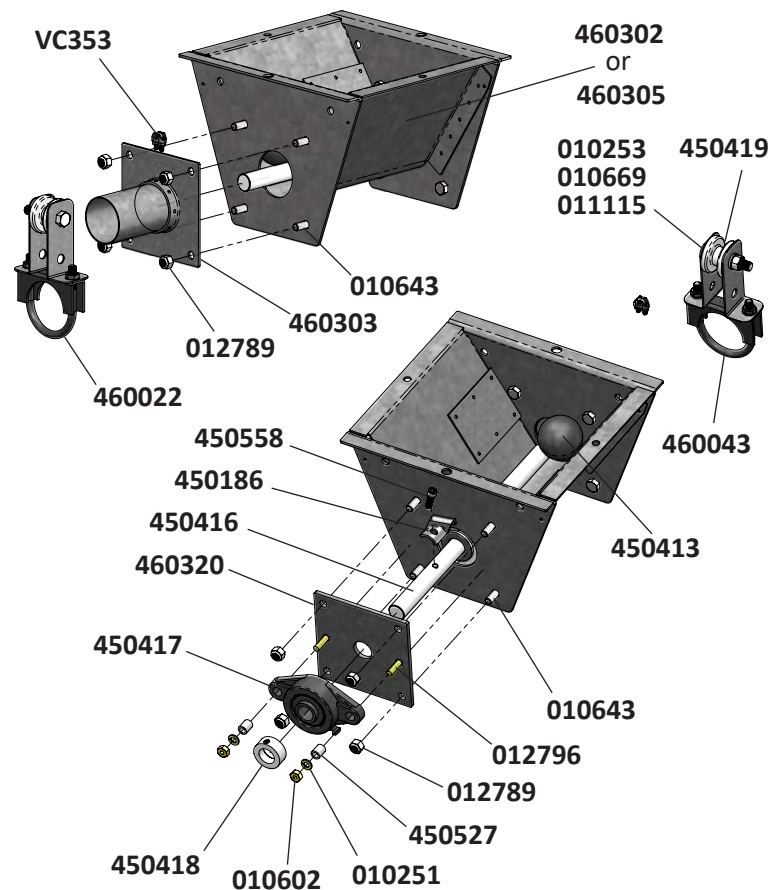
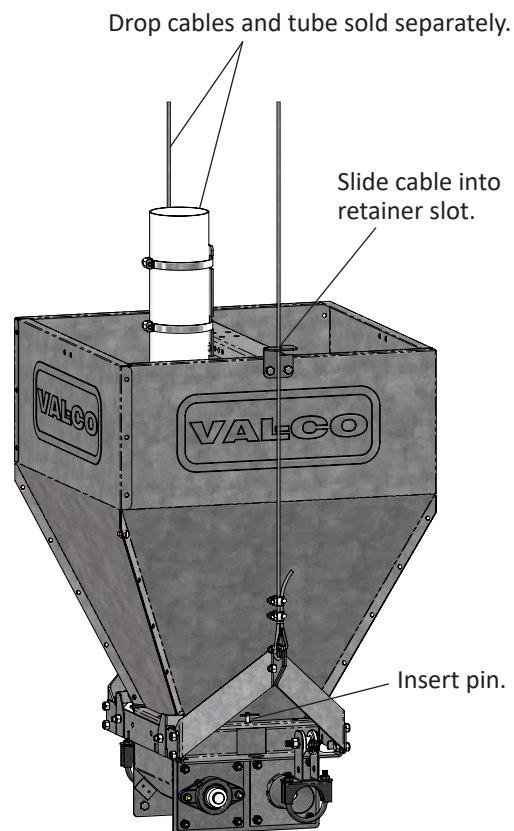


FIGURE 48



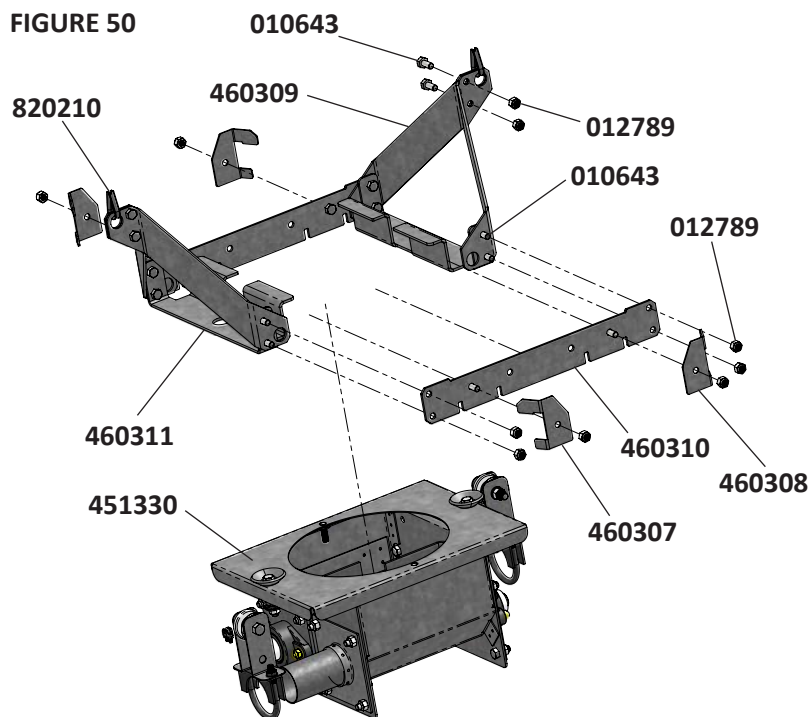
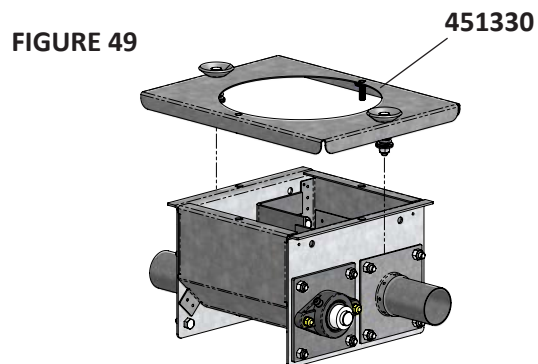
NOTE: 460300 single boot shown for reference in Figure 44. 460301 twin boot shown assembled in Figure 45.

Suspension Installation (Single and Twin Boots - Plastic Hopper)

1. Assemble boot components, as shown on previous page.
2. Attach plastic hopper base assembly (451330) to the boot assembly as shown in Figure 49.

NOTE: 460301 twin boot shown for reference.

3. Assemble suspension components as shown in Figure 50. Slide over boot assembly before installing 460307 and 460308 left and right boot holding brackets.



4. Position assembled plastic hopper over boot as shown in Figure 51. Rotate hopper clockwise to lock into place.
5. Install drop cables and tube as shown in Figure 52.

FIGURE 51

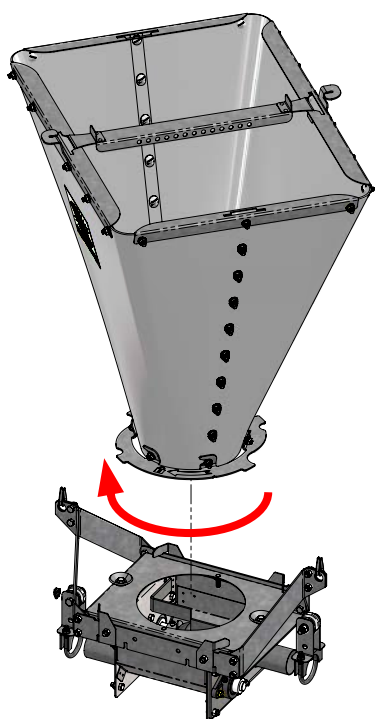
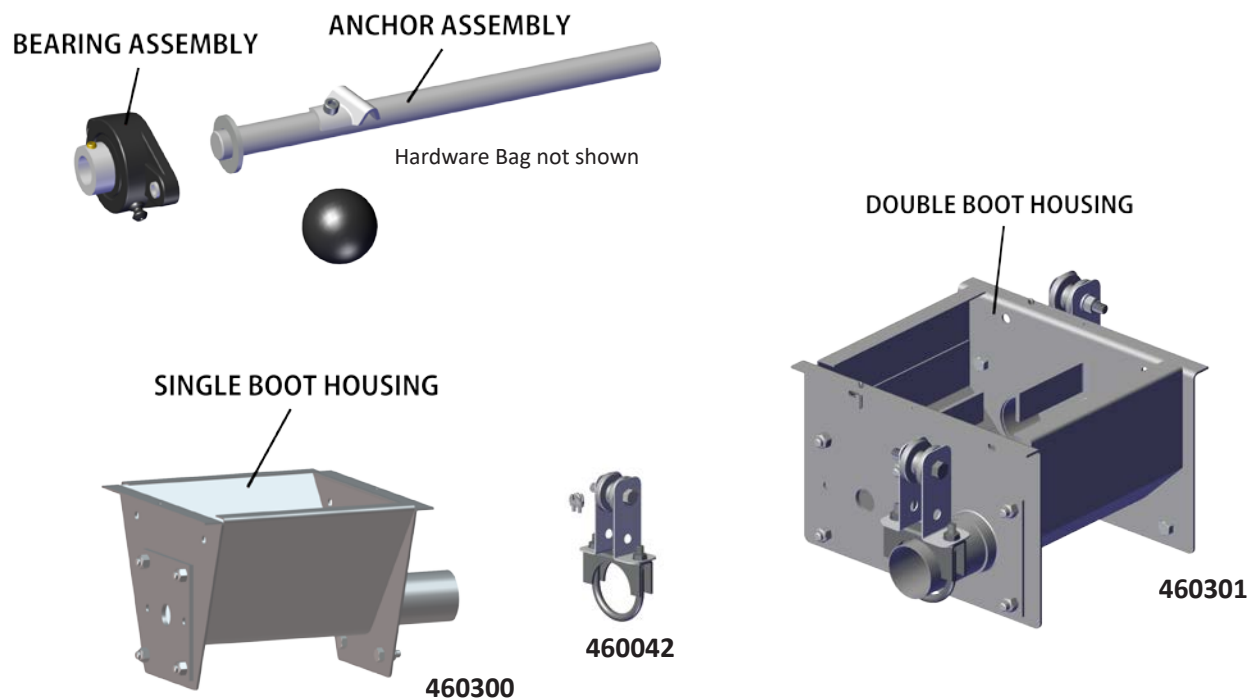


FIGURE 52 Drop cables and tube sold separately.



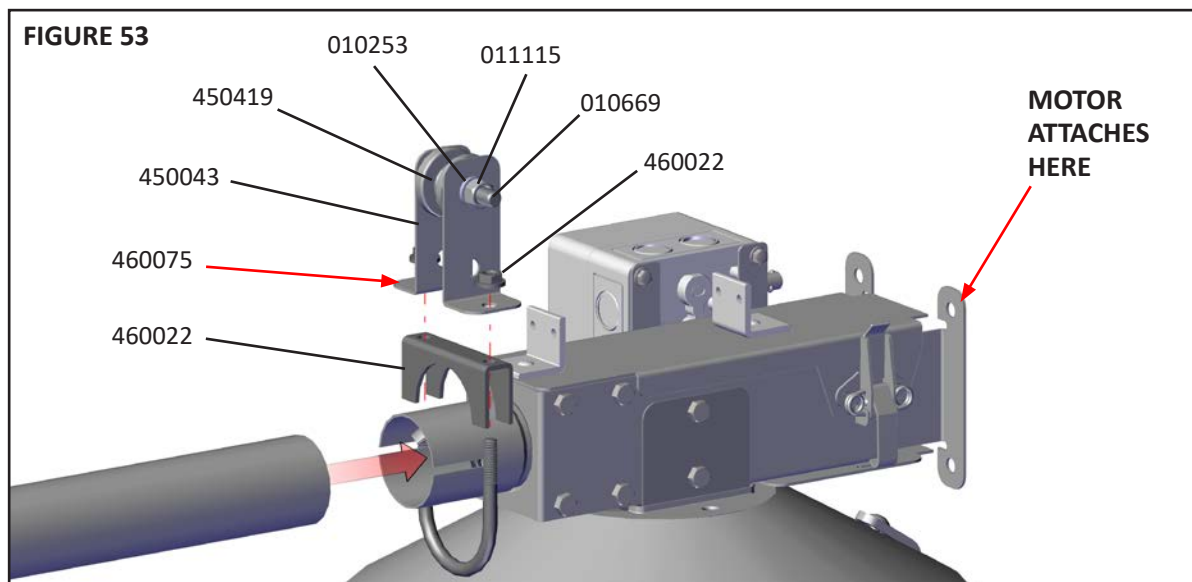
Assemble Boot to Hopper(s)

The single and double boot housing (460300 or 460301) are assembled, however, the anchor and bearing assemblies are partially assembled with a hardware bag containing the necessary hardware parts to complete assembly to the boot and bearing plate. There should be (2) anchor and bearing assemblies included in your shipment for the double boot. Assembly of the anchor and bearing assemblies may wait until you are ready to install the auger.



Attaching the Control Unit

The control unit may be attached at this time or when attaching the auger to drive unit later. Push the control port tube onto the feed tube as far as it will go and secure the joint using a tube clamp with or without the insulator bracket, depending on use of the anti-roost wire.

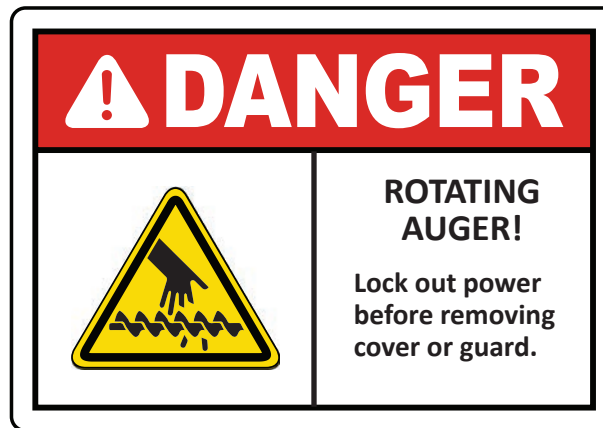


Auger Installation



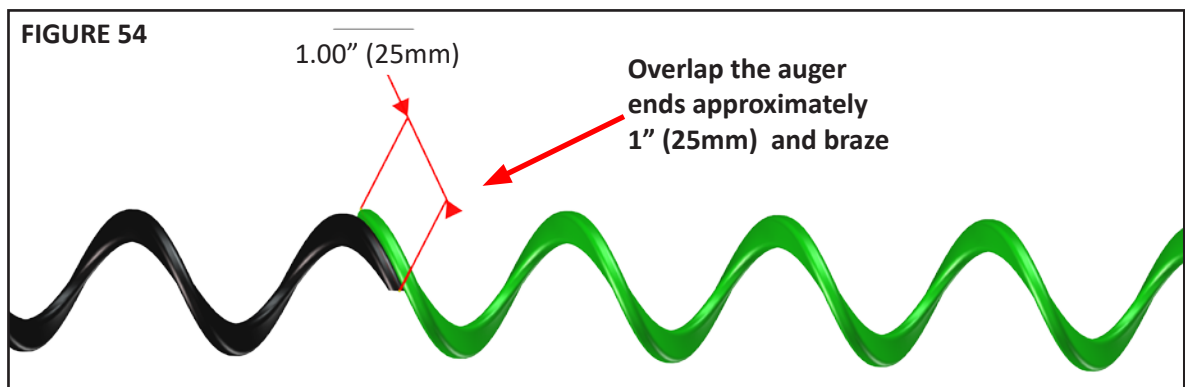
USE EXTREME CAUTION WHEN WORKING WITH THE AUGER!
The auger has tension and may spring which could cause personal injury.
Wear protective clothing, gloves, and safety glasses.

1. To avoid possible kinks in the auger, do not drop the roll when handling.
2. Inspect the auger carefully as it is installed.
3. Kinks must be removed and the auger brazed back together.
4. Cut the first 18" (45.72cm) and the last 18" (45.72cm) off of each roll of auger. (DO NOT USE)



Auger Brazing

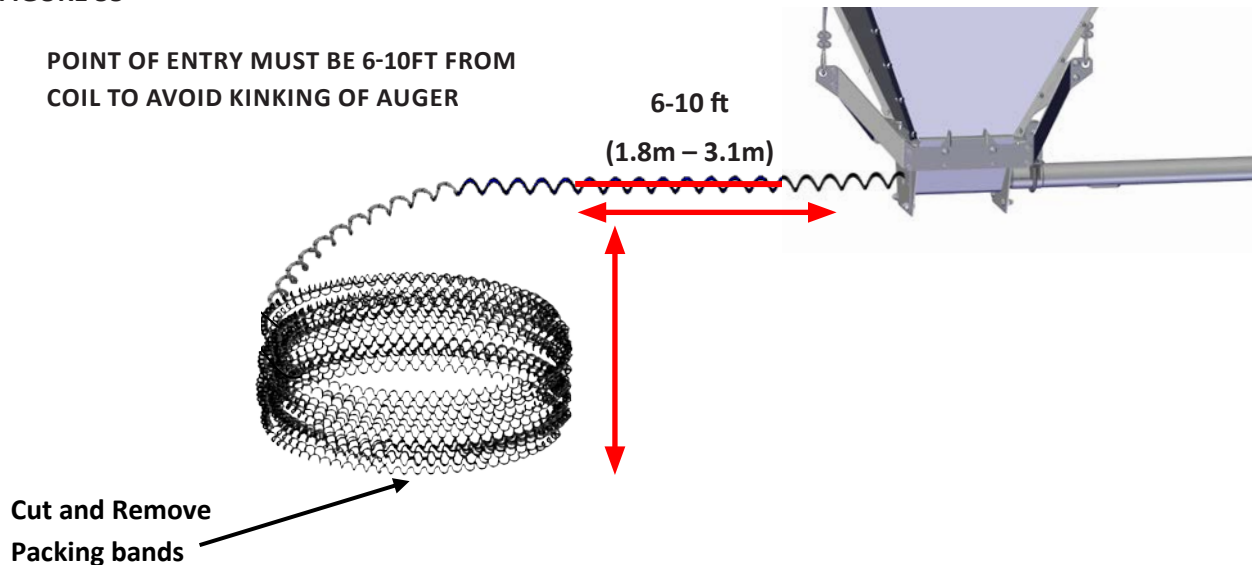
The auger should be brazed as necessary to splice or lengthen it. A bronze, flux coated rod is recommended. The ends of the auger should butt against each other, shown in Figure 54. **DO NOT THREAD INSIDE EACH OTHER.** The joint should be well filled with no sharp edges or rough corners to wear against the tube. To align the auger for brazing, lay it in an angle or channel iron and clamp it firmly in place. Use low heat. Allow the joint to air cool; rapid cooling will cause the auger to become brittle. Brazed joints should not be installed in a 45 degree elbow or in an inclined tube. Installing the brazed joint closer to the drive end of the auger run will help minimize feed flow restrictions.



Feed Auger into Line

1. Place the coiled auger approximately 6 - 10 feet (1.8m – 3.1m) from the end of the boot.
2. Remove all wires and labels and uncoil the auger from the outside of the roll.

FIGURE 55



3. Push the auger into the end of the boot assembly, (opposite the port tube), and through the feed tubes with short strokes until it reaches through the port tube and housing assembly and can be attached to the drive shaft on the direct drive unit.



DO NOT FORGET THAT IF MORE THAN ONE COILED ROLL OF AUGER IS REQUIRED TO REACH THE END CONTROL PAN UNIT, you will need to braze the auger ends together.



CAUTION! Handle AUGER with caution.



Auger Installation - continued

Before you hang the direct drive head & gearbox it is important to read the following to prepare the motor for proper installation and performance.

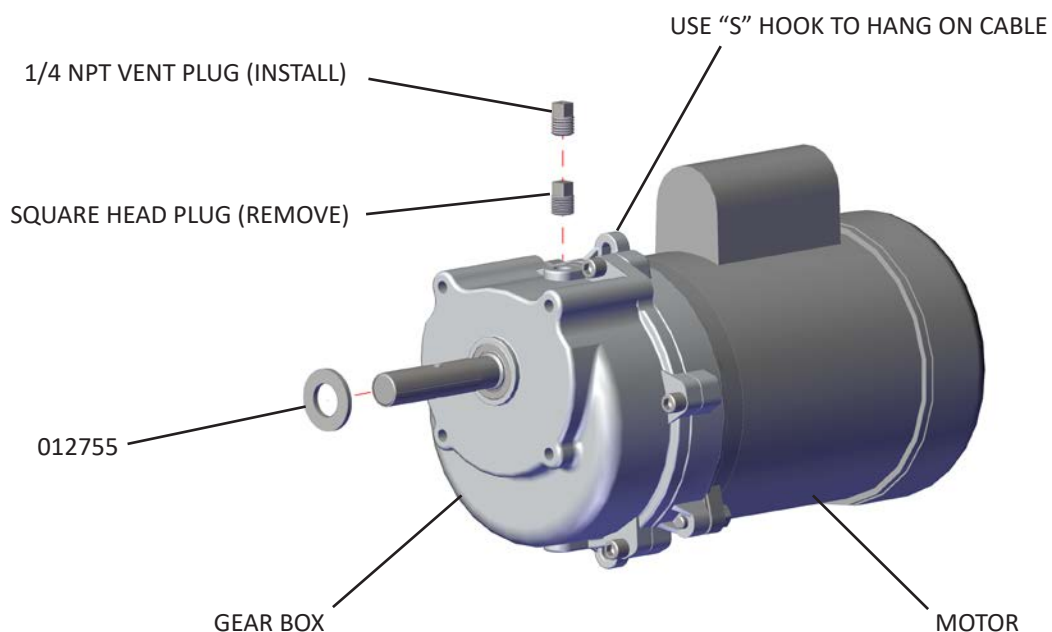


GEAR BOX PREPARATION

Install the vent plug. This unit was filled with 90W transmission oil when assembled. **THE OIL SHOULD BE CHANGED EVERY 500 HRS OF USE.** This unit must be grounded and wired according to your local area's applicable codes.

4. Remove the square head pipe plug that is installed and replace with the vent plug.

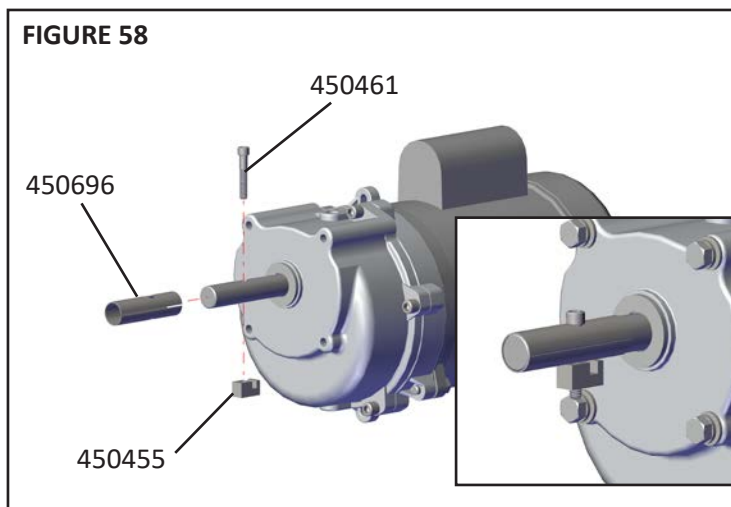
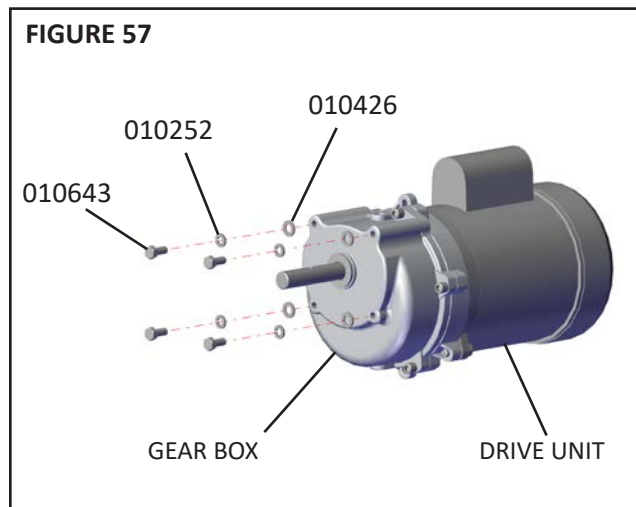
FIGURE 56



The gearbox must be installed so that the vent plug is to the top of the unit. **OPERATING THIS UNIT WITHOUT A VENT PLUG WILL CAUSE BLOWN SEALS, OIL LOSS, AND CONSEQUENT UNIT FAILURE.**

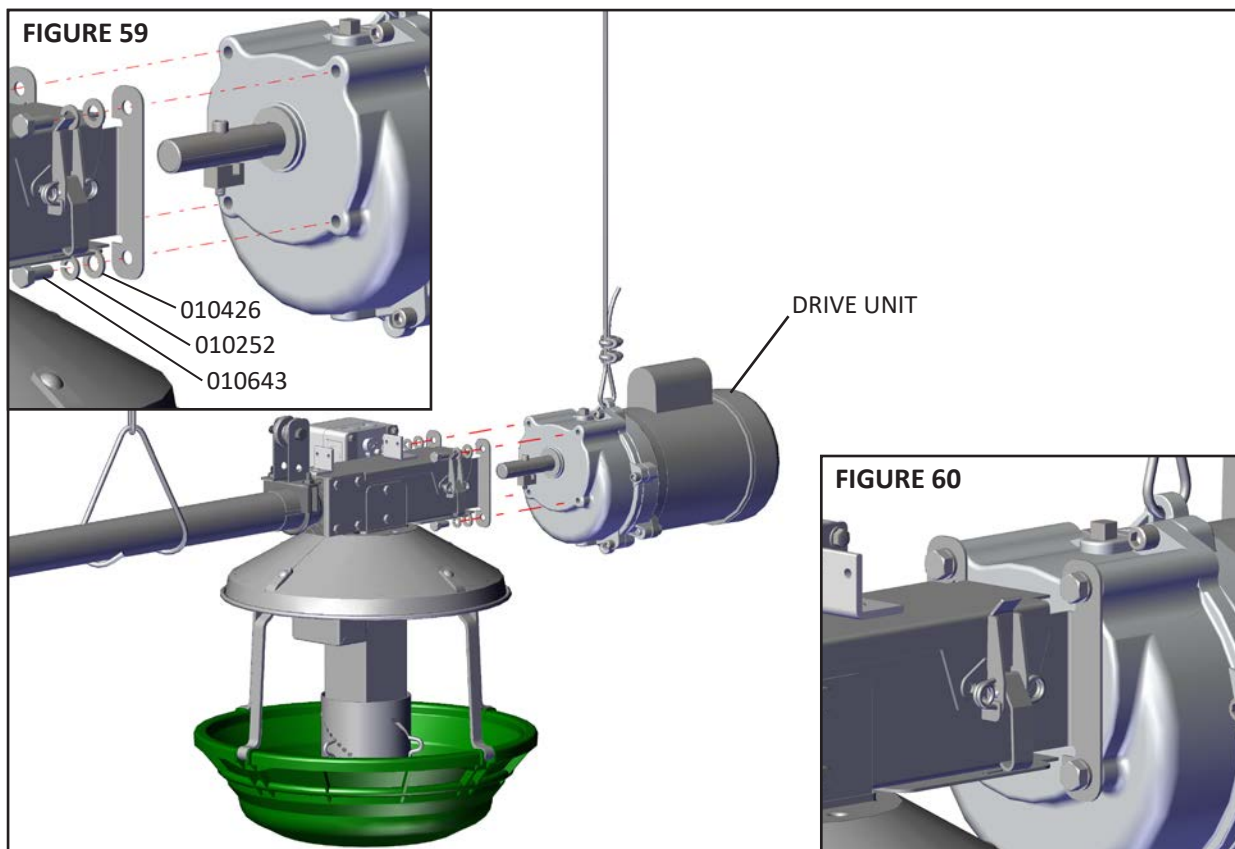
Auger Installation - Connecting the Drive End

5. Prepare the Drive Unit for installation by removing the 010643 hex bolts, 010252 split washer and 010426 flat washer from the gearbox, shown in Figure 57.
6. Slide the optional 450696 Auger Shim onto the Gearbox Shaft (if it is not already on shaft) shown below in Figure 58. (It may be necessary to rotate the auger shim to align the holes.) If auger will not fit with shim installed, remove and discard shim.



Now that you have the auger inserted into the feed line (from the boot end through the feed tubes and end control pan assembly) you will need to pull out enough auger to attach to the direct drive unit.

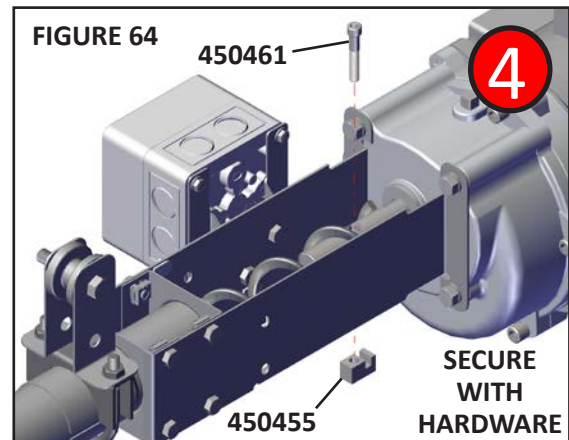
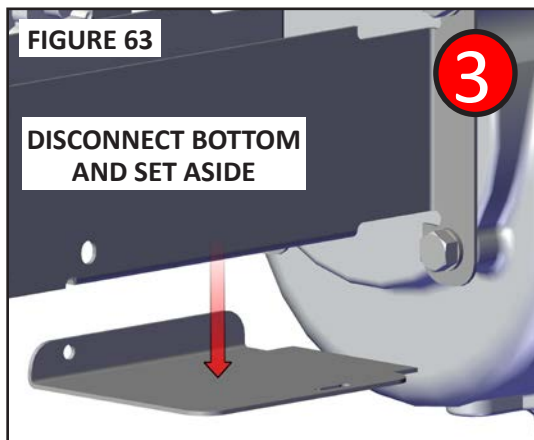
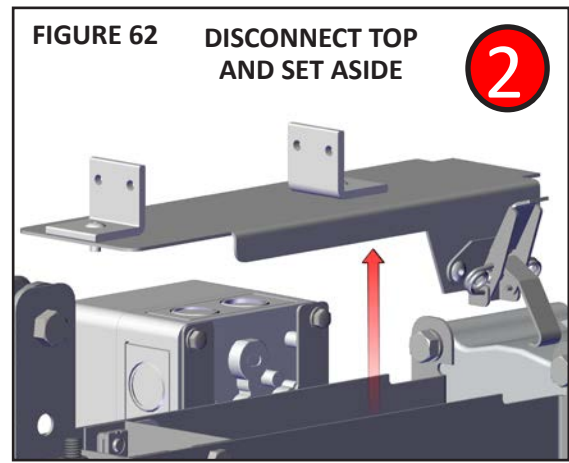
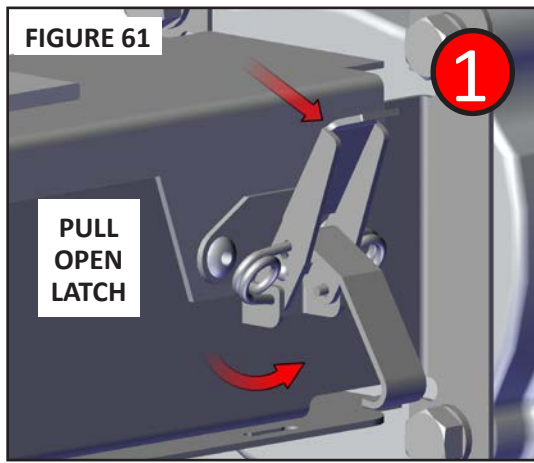
7. Attach drive head and gearbox unit to port tube assembly, as shown in Figure 59 and 60, using (4) 010643 hex bolts, (4) 010252 split washers, and (4) 010426 flat washers from the hardware bag.



Attaching the Auger to the Direct Drive

Now that you have the auger inserted into the feed line from the boot end through the port tube/housing assembly and have pulled enough auger to attach to the drive unit proceed with the following steps.

1. Unlatch spring latch by pulling down top of latch (top arrow) to release the bottom clamp (bottom arrow) of latch, shown in Figure 61.
2. To access the 450461 socket head screw, remove the top lid of the port tube housing, as shown in Figure 62.
3. To access the 450455 retainer, remove the bottom plate of the port tube housing, as shown in Figure 63.
4. Secure the auger to the drive shaft using the 450461 socket head screw and the 450455 retainer included in the hardware bag shown in Figure 64. (Auger retainer may already be attached, if so remove and re-attach. **MAKE SURE THE AUGER IS POSITIONED THROUGH THE SLOT ON THE AUGER RETAINER AND SLIDE ALL THE WAY BACK AGAINST 012755 WASHER.**)

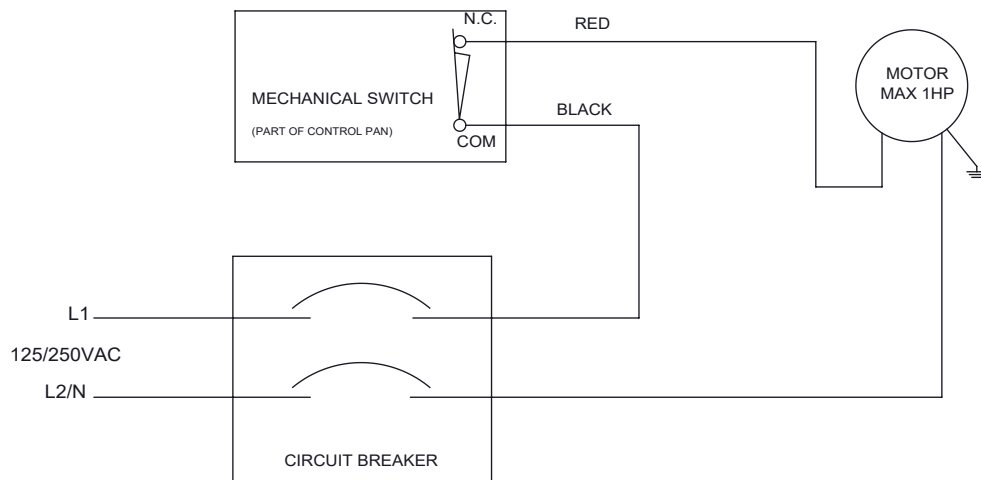


At this time, you may move to the opposite (hopper/boot) end to complete the auger installation or you may assemble the control pan unit at this time. For the purposes of saving time, you may interrupt the auger installation process and assemble the control pan unit to the port tube/housing assembly.



Disconnect power to Switch circuit before moving on to control pan wiring.

End Control Pan (Mechanical Switch Wiring Diagram)



WIRING DIAGRAM

SINGLE PHASE / END CONTROL

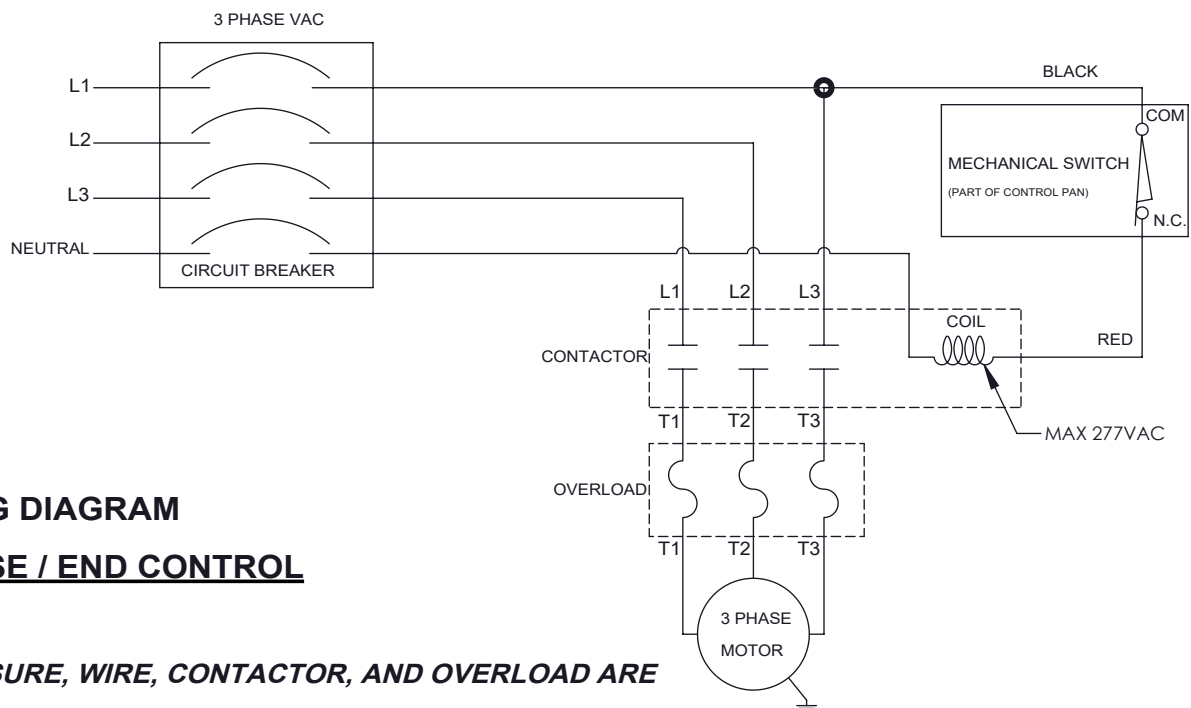


RELAYS/COILS MUST BE INTEGRATED AS SHOWN.

MECHANICAL SWITCH MUST NOT BE USED TO DIRECTLY SWITCH MOTORS OVER 1/2 HP.

WIRING MUST BE DONE BY A LICENSED ELECTRICIAN. ALL LOCAL CODES MUST BE FOLLOWED!

ENCLOSURE, WIRE, CONTACTOR, AND OVERLOAD ARE TO BE SUPPLIED BY OTHERS.



WIRING DIAGRAM

3 PHASE / END CONTROL

NOTES:

ENCLOSURE, WIRE, CONTACTOR, AND OVERLOAD ARE SUPPLIED BY OTHERS.

Auger Connection at Hopper / Boot end



Be sure ALL POWER IS TURNED OFF before servicing this equipment!
Follow Lock Out Tag Out procedures!

You are ready to perform the final steps to installing the auger.

1. Pull the auger from the boot end until it begins stretching. Other end should already be attached to the direct drive/control pan.
2. Allow the auger to relax.
3. Mark the auger at the end of the boot while the auger is relaxed in the tube, shown in Figure 65.

FIGURE 65

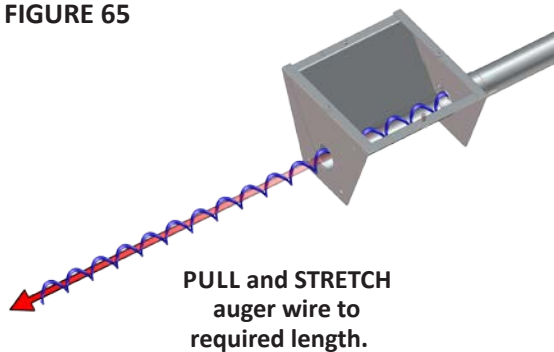
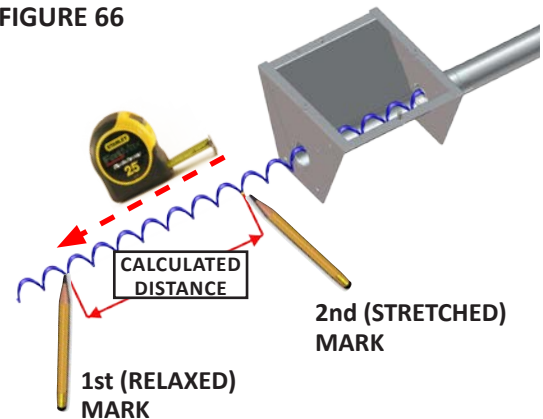


FIGURE 66



4. Stretch the auger 7 inches (178mm) per 100 feet. Example: A 350 feet (107m) feed line requires approximately 24 inches (609mm) of stretch.
5. Beginning at the relaxed mark, measure the required amount of stretch. Mark the auger, as shown in Figure 66.
6. Grip the auger approximately 12" (203mm) ahead of the 2nd (stretched) mark with locking pliers and allow the auger to pull back into the boot so that the pliers rest against the end of the Boot, shown in Figure 67.
7. Cut the auger at the stretched mark with a bolt cutter or grinder, shown in Figure 67.
8. Insert the fighting anchor shaft into the end of the auger while pliers are still attached, shown in Figure 68.

FIGURE 67

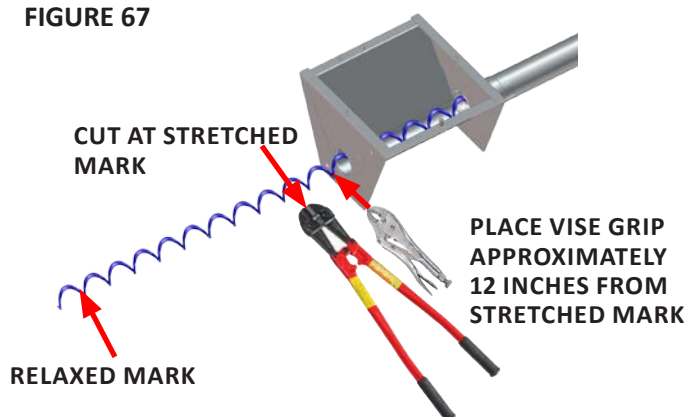
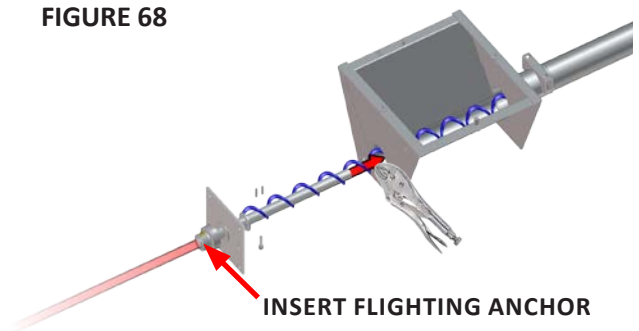


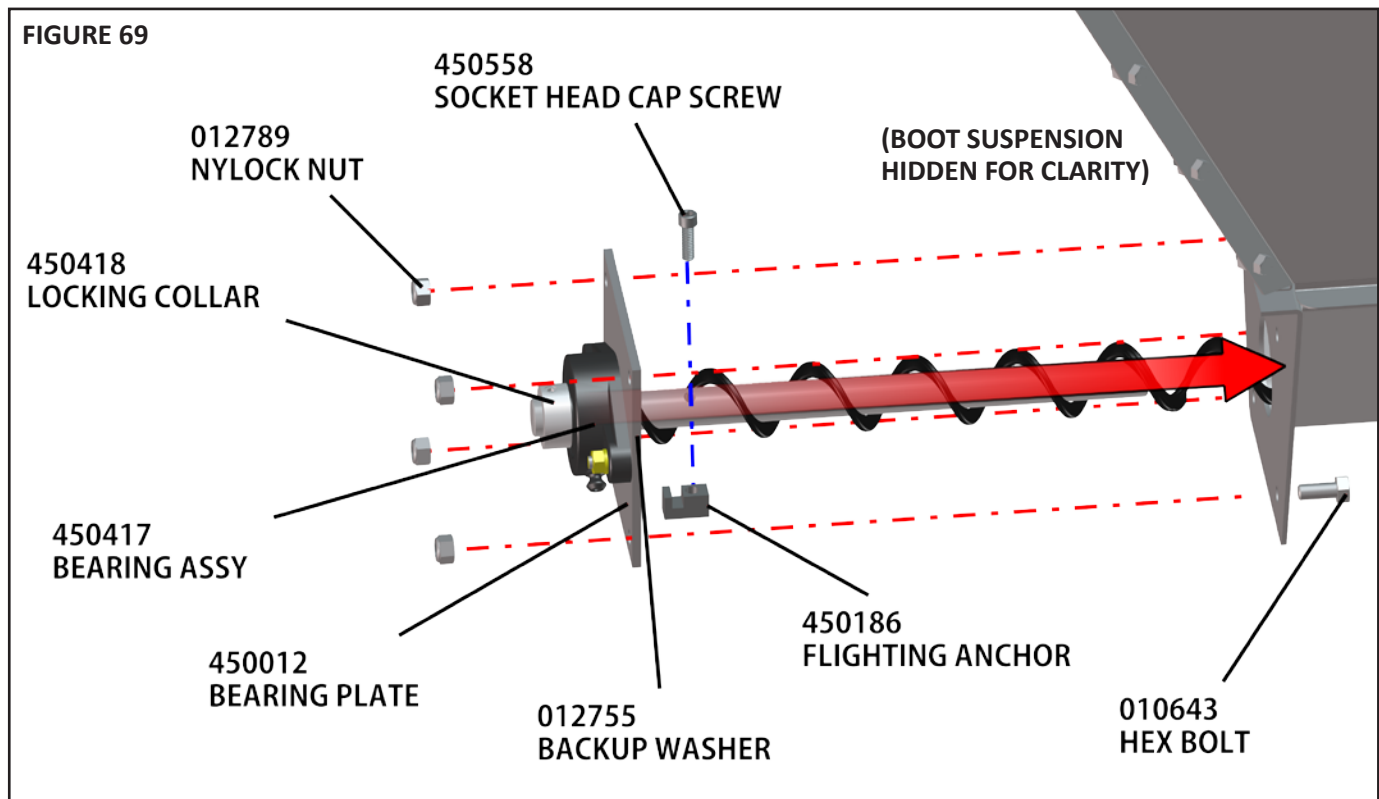
FIGURE 68



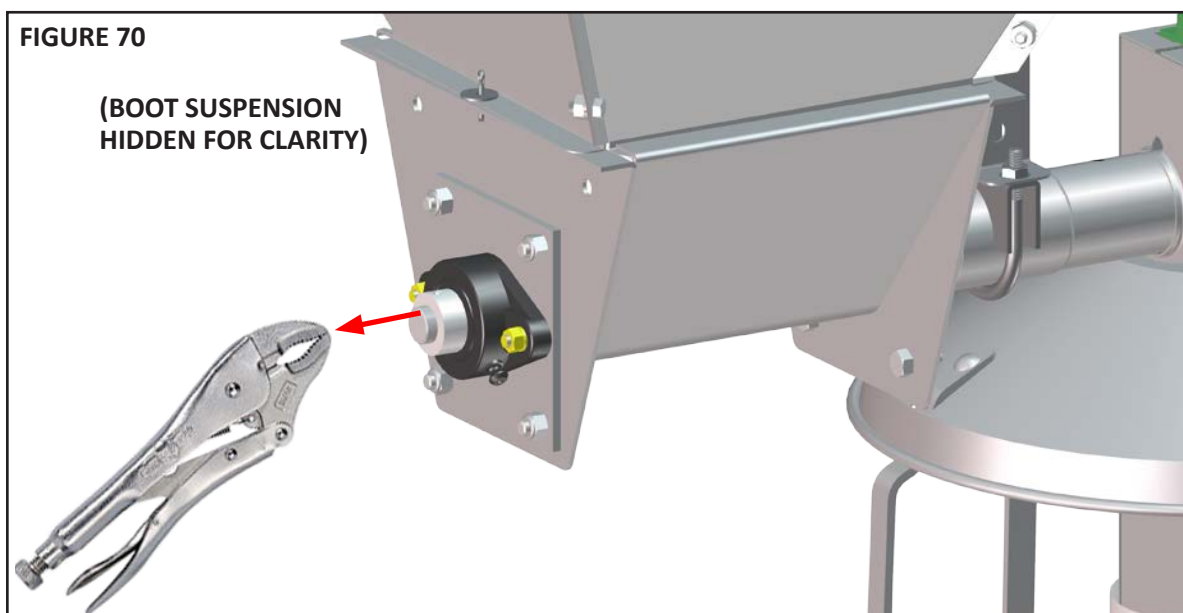
REMINDER: Don't forget to handle AUGER with caution.
Wear safety glasses and gloves to protect your eyes and hands from injury.

Auger Connection at Hopper / Boot end - continued

9. Rotate the flighting anchor shaft assembly so that the auger moves between the flighting anchor and reaches the backup washer at the head of the shaft, shown in Figure 69. When the auger is in place, the socket head cap screw will need to be tightened to hold the auger securely. It will hold the auger tight to one side of the shaft.



10. Carefully remove the pliers as you hold the auger in place and gradually allow the shaft with the stretched auger to pull back into the boot. The flighting anchor shaft will be held in place by the pull of the auger and the bearing. Install the bolts and nuts to hold the bearing plate in place.



Winch Adjustable Feed Level Tubes (optional)

Valco's Adult Turkey Feeder can be equipped to provide winch adjustable feed level tubes. New systems can be ordered with this feature and existing systems can be upgraded to include feed level tube winching components.

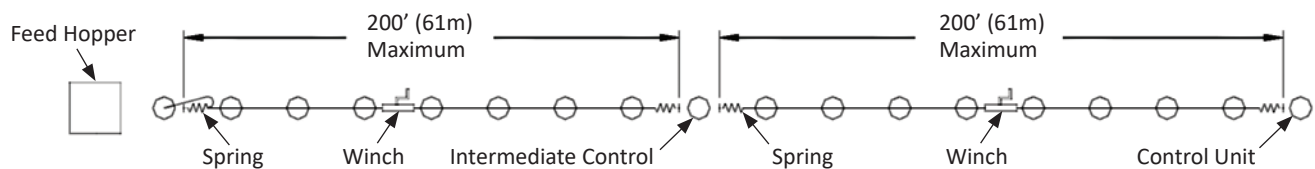
The Feed Level Tubes are adjusted using a winch and cable. The maximum line length for each winch is 200' (61m). The winch should be located in the middle of the line of feeders it is to adjust, as shown below in Figure 71.

Operation

The Feed Level Tubes are winched up to flood the pans with feed to allow maximum access for young turkeys. As the birds grow, the Feed Level Tubes can be lowered to reduce the feed level.

For systems using winchable Feed Level Tubes, the Feed Level Ring will need to be adjusted manually.

FIGURE 71

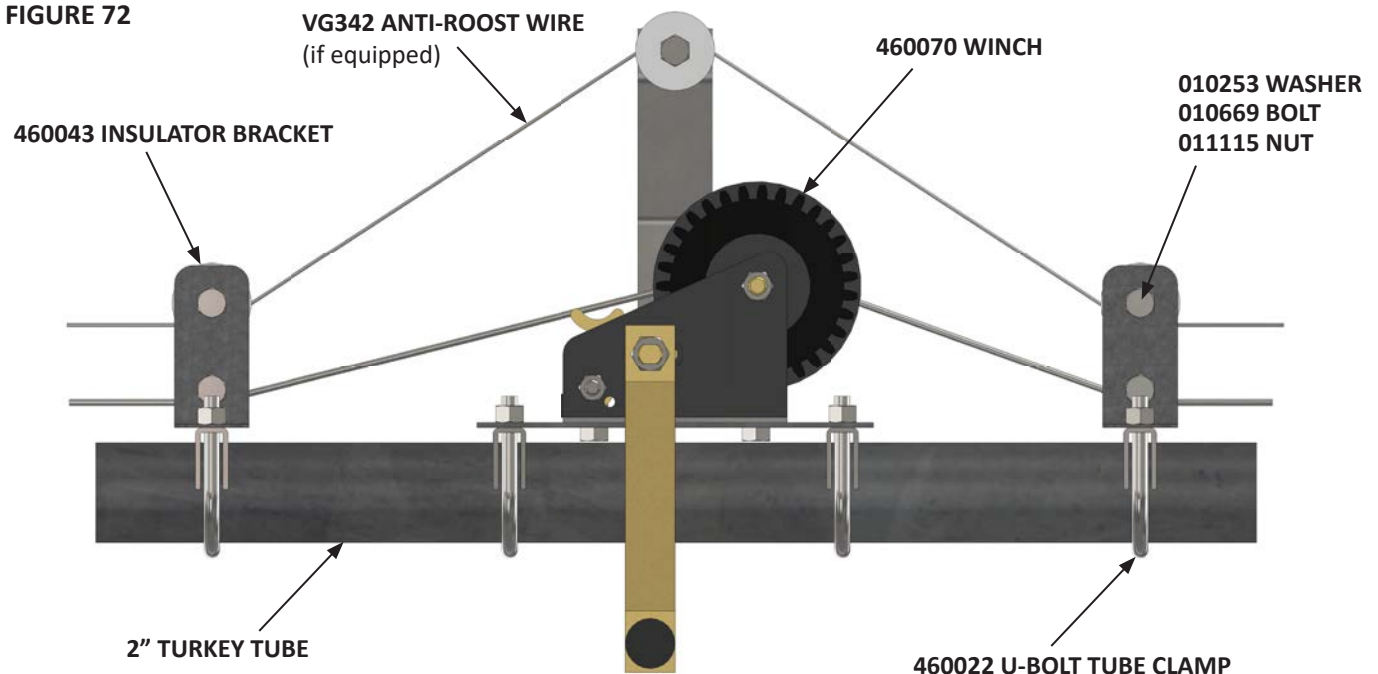


Installation of the Winch Adjustable Feed Level Tube System

1. Use two U-bolts (provided) to fasten the winch to the feeder line tube, as shown in Figure 72. The winch should be placed in the center of the line of Feed Level Tubes it will adjust, as shown in Figure 71.

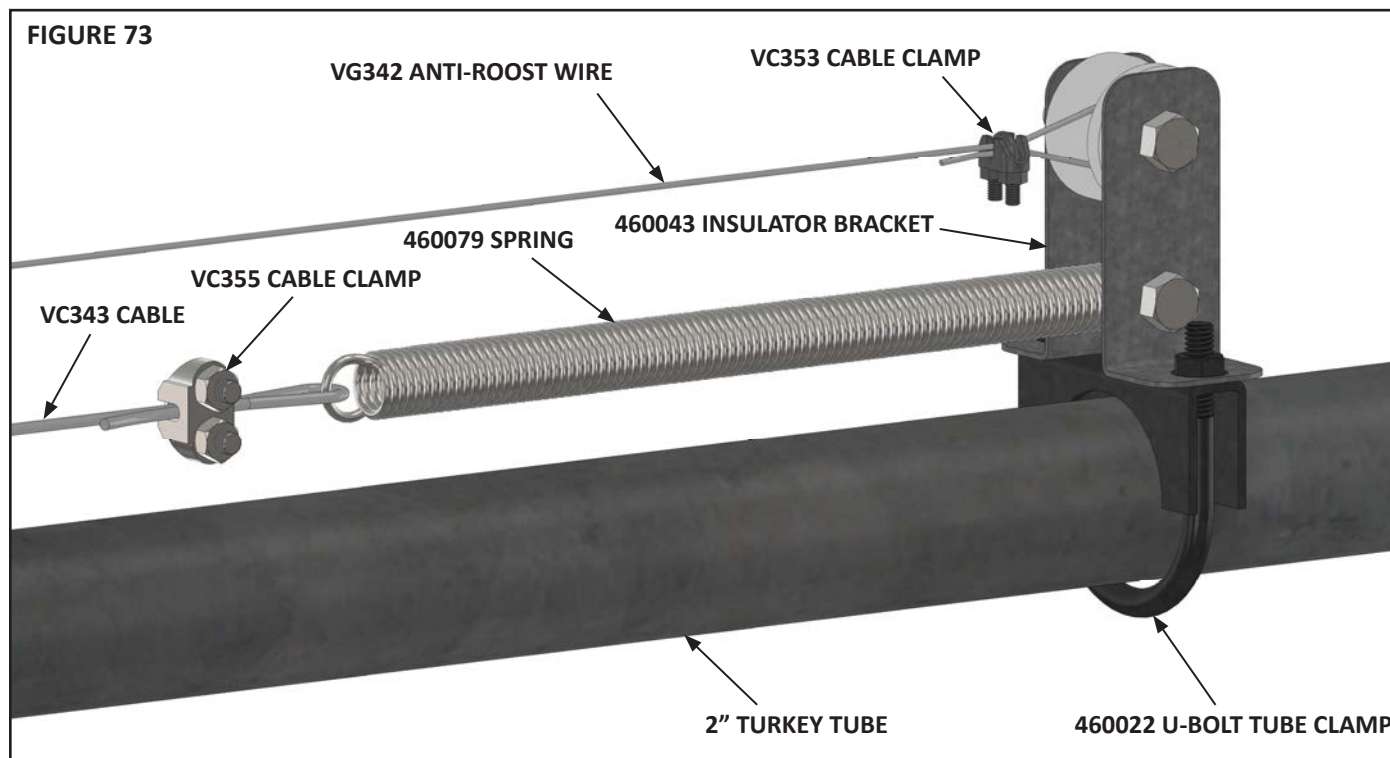
NOTE: The Line Length must NOT exceed 200 feet (61m).

FIGURE 72



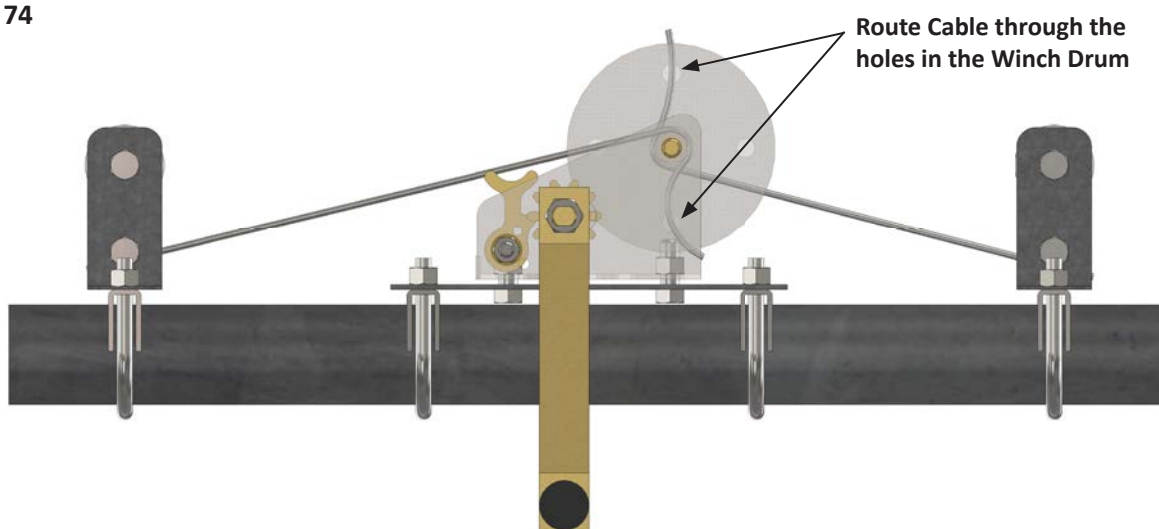
Winch Adjustable Feed Level Tubes (optional) - continued

2. Attach spring to clamp on each side of the winch, as shown in Figure 73. Attach the Tube Clamp/Spring assemblies to the feeder line tube at a maximum distance of 100 feet (30m) from the winch, as shown in Figure 7.



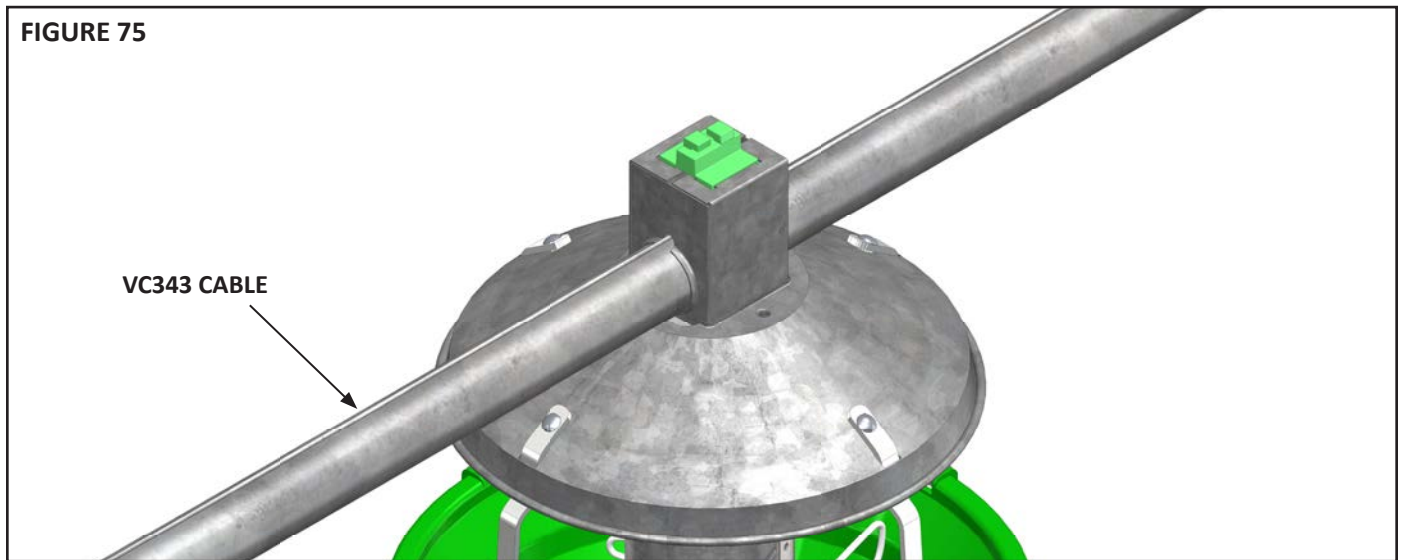
3. Route the cable through the holes in the winch drum. Turn the winch handle clockwise two revolutions to wind some cable onto the winch drum, as shown in Figure 74.

FIGURE 74



Winch Adjustable Feed Level Tubes (optional) - continued

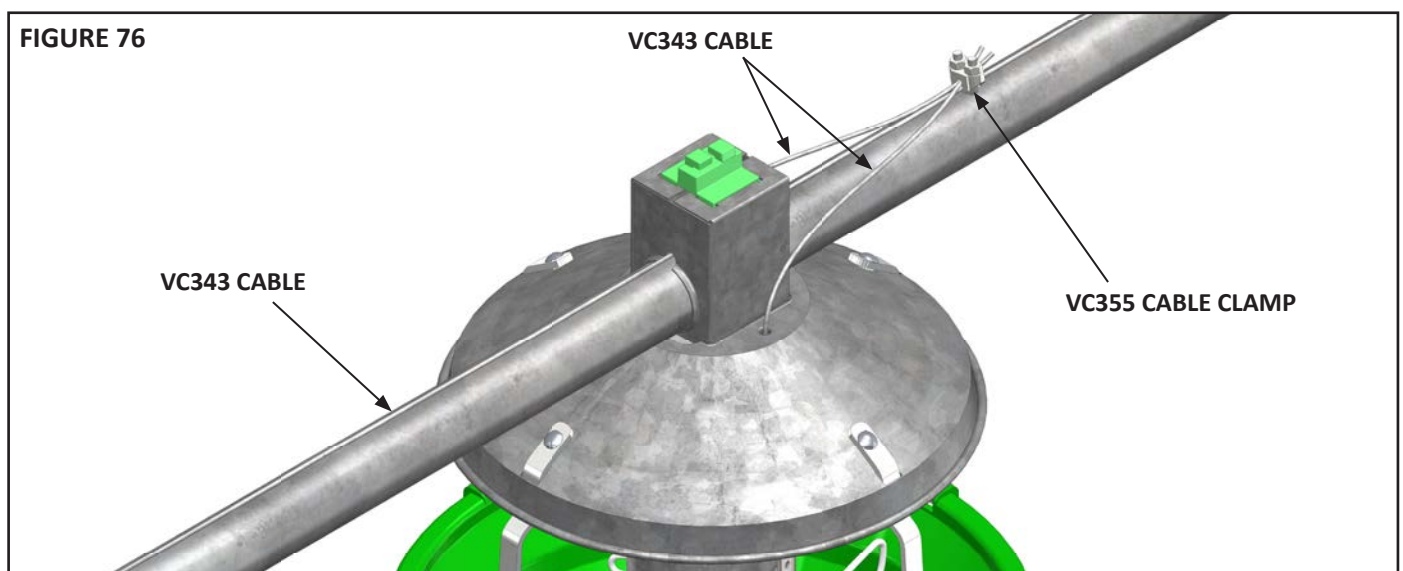
4. Thread the cable through every Drop Tube to support the cable and keep it in position, as shown in Figure 75.



5. Loop the cable around the end of the spring and secure with a cable clamp, as shown in Figure 73.
6. Install two cable assemblies at each feed level tube (if the cable assemblies have not yet been installed). The cable stop should be on the inside of the feed level tube and pulled up tight against the inside.
7. Thread the cable assemblies through the holes on each side of the pan shield from the underside. Then clamp to the master cable with a cable clamp, as shown in Figure 76.

NOTE: Before clamping the cable assemblies to the cable, make sure:

- A. The springs at each end of the cable are stretched approximately 14" (355.6 mm).
- B. The feed level tubes are raised as high as possible.
- C. The stop on the cable assemblies are pulled up against the inside of the feed level tube.



Anti-Roost Installation

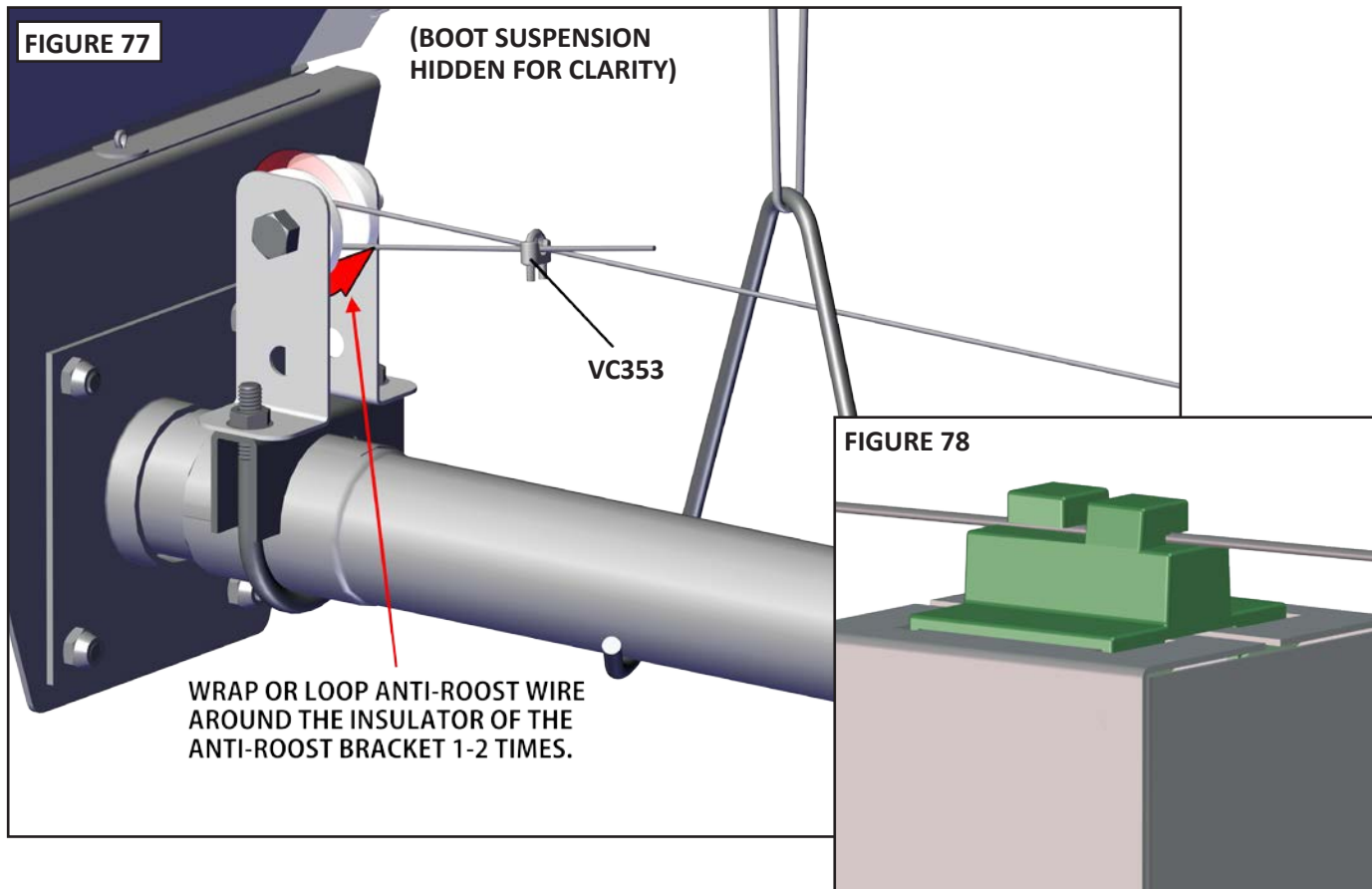


REMINDER! The anti-roost wire is not installed on the control head when shipped. The insulator with the bracket 460075 will NOT be included. The anti-roost wire must have an insulator at least every 50 feet. $(\text{Length} \div 50 \text{ feet (15.24m)} + 1 = \text{number of insulators required})$



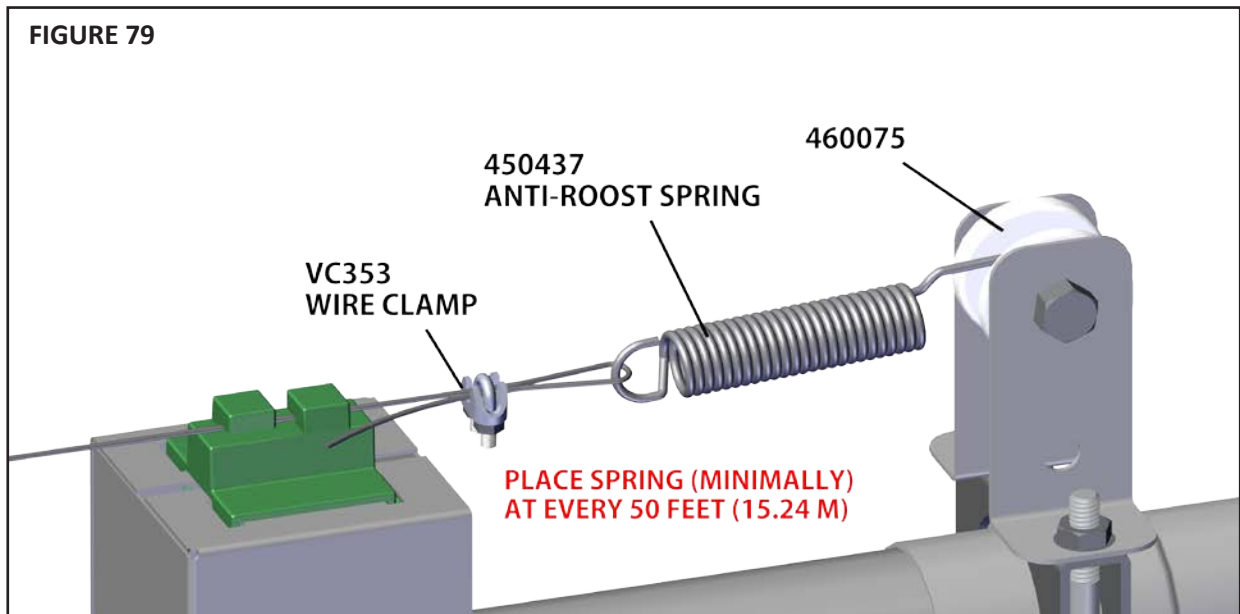
CAUTION! Handle Anti-Roost wire with caution.
Wear safety glasses and gloves to protect your eyes and hands from injury.

1. Un-wrap the anti-roost wire as you need for installation. The wire is ordered by the foot (30.48cm), 500' (152.4m), or 1000' (304.8m) spools. Large spools may require a cable reel for easier handling.
2. Start at the hopper end of the line and form a loop or double loop (wrap) around the anti-roost bracket and fasten with a 1/16" cable clamp, shown in Figure 77.
3. As you pull the anti-roost wire to the next anti-roost bracket, insert the wire from the insulator into the top of each anti-roost bracket of each feed pan, shown in Figure 78.

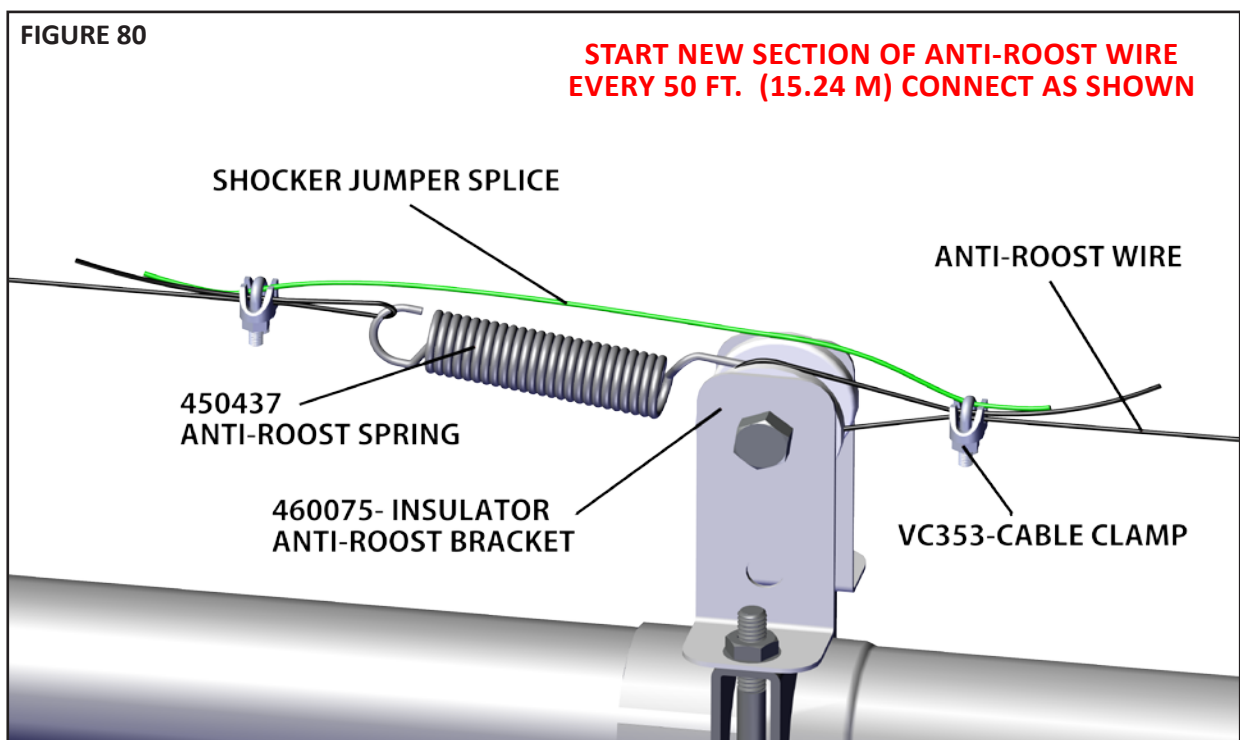


Anti-Roost Installation - continued

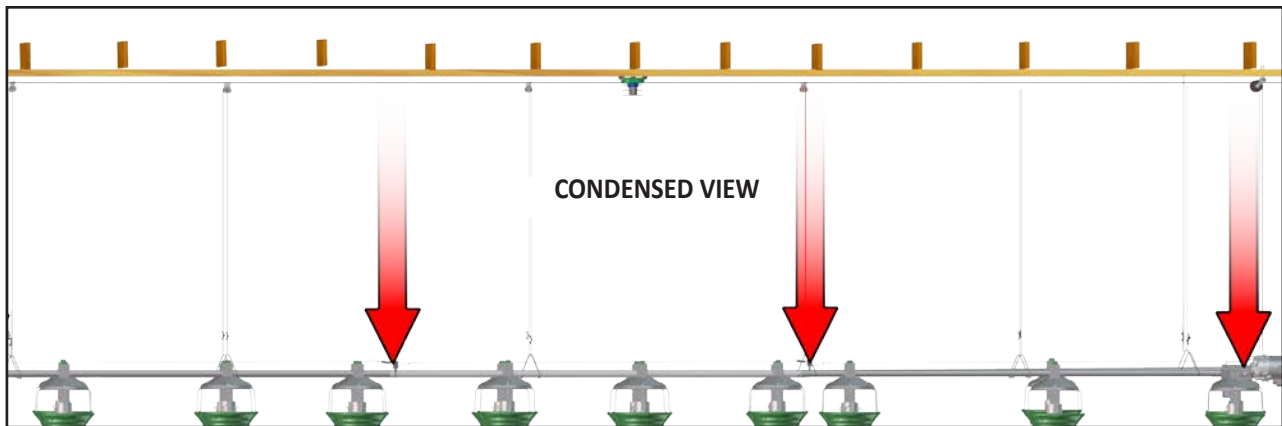
4. Attach the spring onto the center groove at the second (or next) anti-roost bracket, which will be at the 50 ft length from the anti-roost clamp on the hopper end, shown in Figure 79.
5. Thread the end of the wire through the end of the spring. Pull the wire tight so that there is 3/4" [20 to 25mm] of stretch in the spring. Clamp the anti-roost wire to form a loop and cut off any excess.



6. Now you need to start the next (50 ft) run of anti-roost wire by attaching the wire to the same insulator that you just attached the spring to. For best results, make a double loop around the anti-roost insulator in the center groove of the insulator and fasten with a 1/16" cable clamp just as you did at the hopper end.
7. Attach a jumper cable at the adjoining 50 ft (15.24 M) anti-roost shocking/wire runs as it is shown in Figure 80.

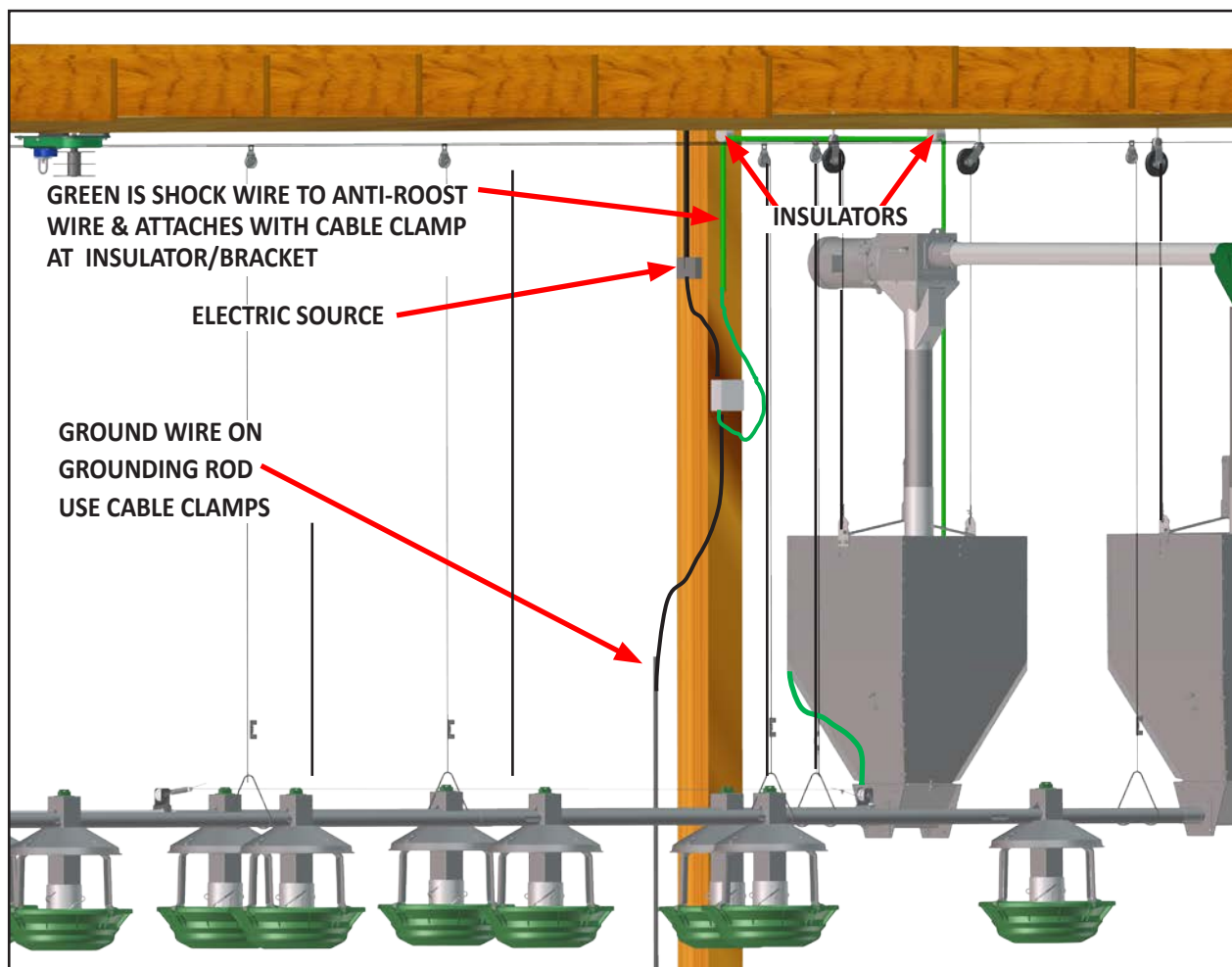


Anti-Roost Installation - continued



7. Run the anti-roost wire to the next anti-roost insulator as you did in step 4 on the previous page.
8. Repeat this installation until the anti-roost wire is installed along the entire feeder line.
9. Install the shocking unit. The shocking unit is used to power all anti-roost lines in a house.
Route the shocking unit wire from the shocking unit to the anti-roost system. Secure the shocking unit wire to the anti-roost wire using a cable clamp. (Suggestion: attach wire to ceiling with insulators, keeping path clear for workers.)

FIGURE 81



Operation Guidelines

1. Keep the lip of the feed pan level with the top of the bird's breast, where the neck joins the body, so that the turkeys reach slightly to get into the pan. This will be around 16" (40.5cm) from the floor at placement. Adjust as the turkeys grow.
2. Keep the depth of feed in the pan around 1 1/2" (3.8cm) to allow easy access but prevent excessive wastage.



These are to be used as general guidelines. Differences in breed, feed consistency, lighting, climate, and other external factors will dictate changes in these guidelines to individualize a growing program to optimize feeding system performance.

Feeder Cleaning and Maintenance

End of Grow-Out - Maintenance

- Empty all pans at the end of grow-out.
- Auger all feed out of the tubes.
- Winch up the complete feed system to a comfortable working height and remove debris.
- For thorough cleaning unsnap three (3) of the four (4) struts, letting the pan hang from the remaining attachment that has a hinging ability.
- Clean with a high pressure cleaner.
- To protect the hopper base from corrosion loosen the tube clamp and turn with the opening downwards before you use the high pressure cleaner.

FIGURE 82

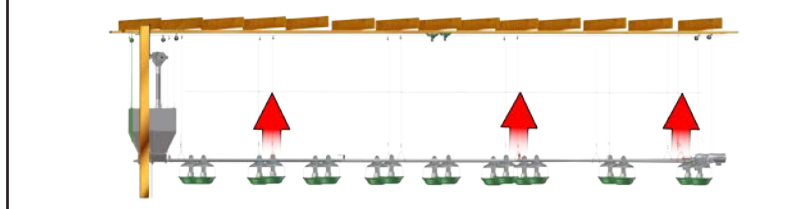
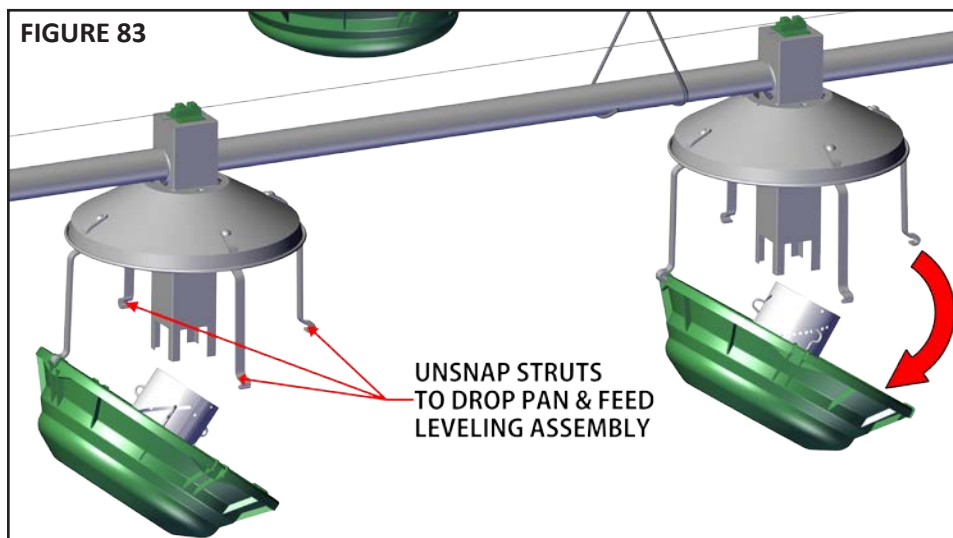


FIGURE 83



DON'T FORGET TO COVER THE CONTROL PAN AND DRIVE UNIT WITH PLASTIC!

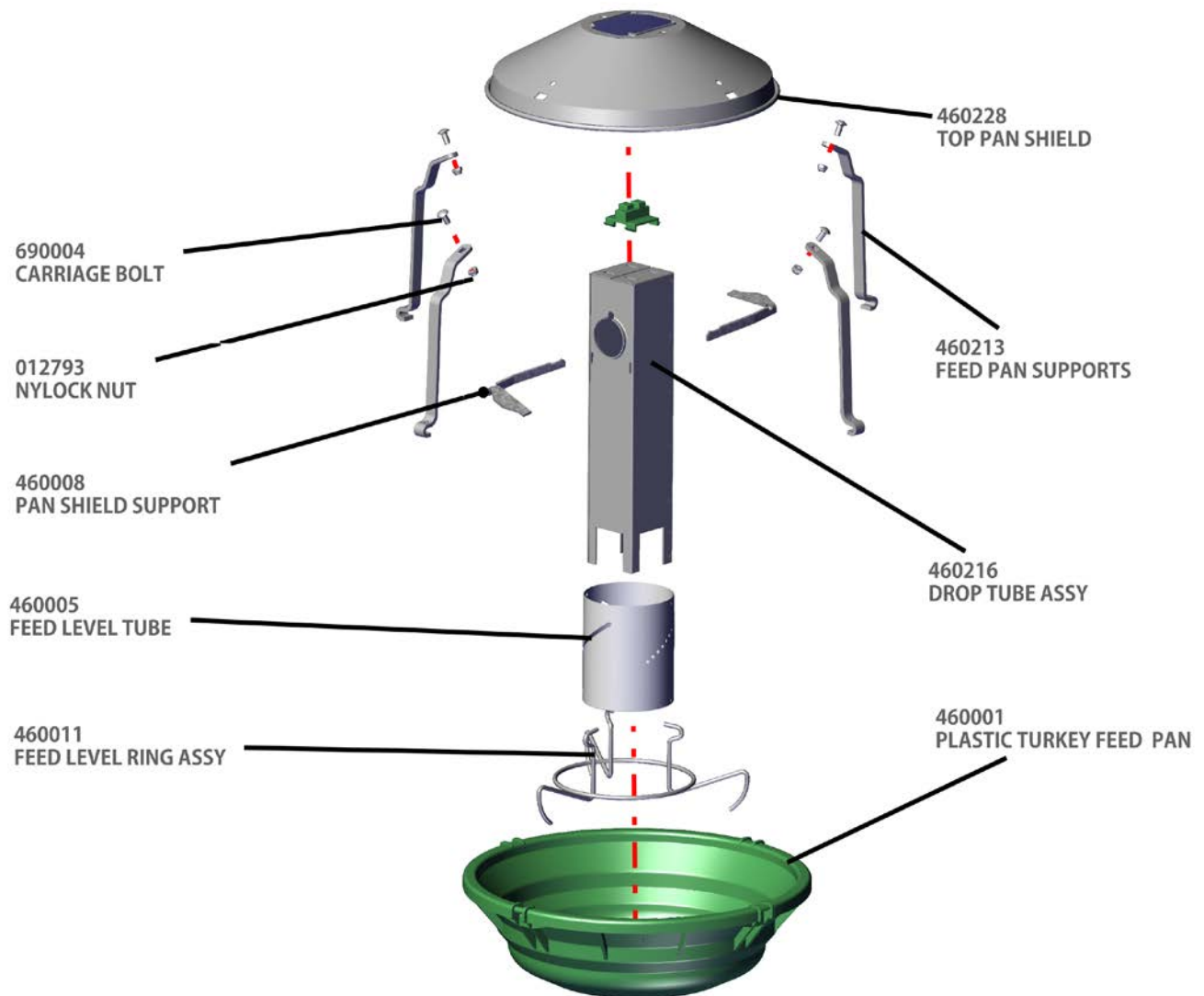
Make sure no water remains in the hopper base or it will CORRODE!

Gaseous formaldehyde (formalin) liquid caustic soda or solution of caustic soda, hypochlorite, or chlorine water cresols are very corrosive and will quickly affect equipment.

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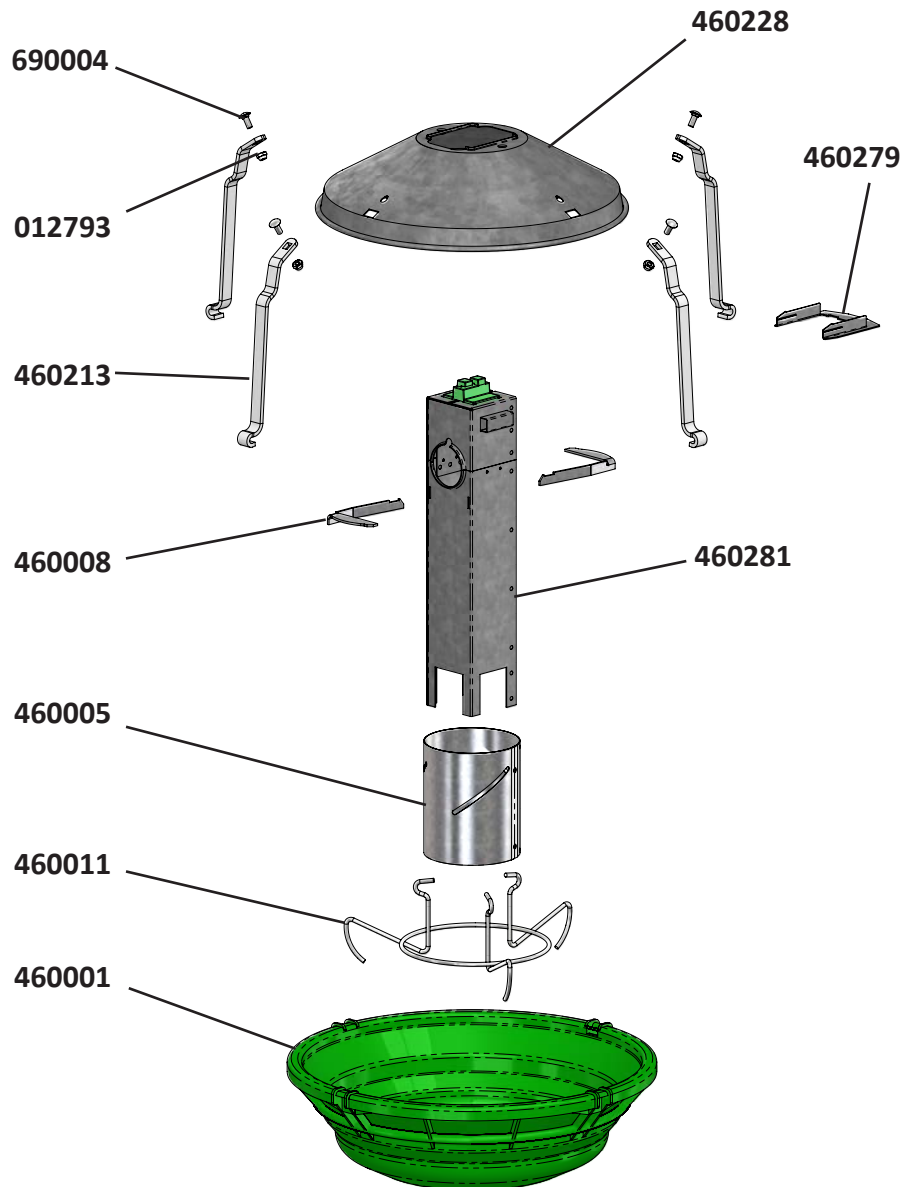
Parts Pages

Adult Turkey Pan Feeder - Exploded View / Parts List



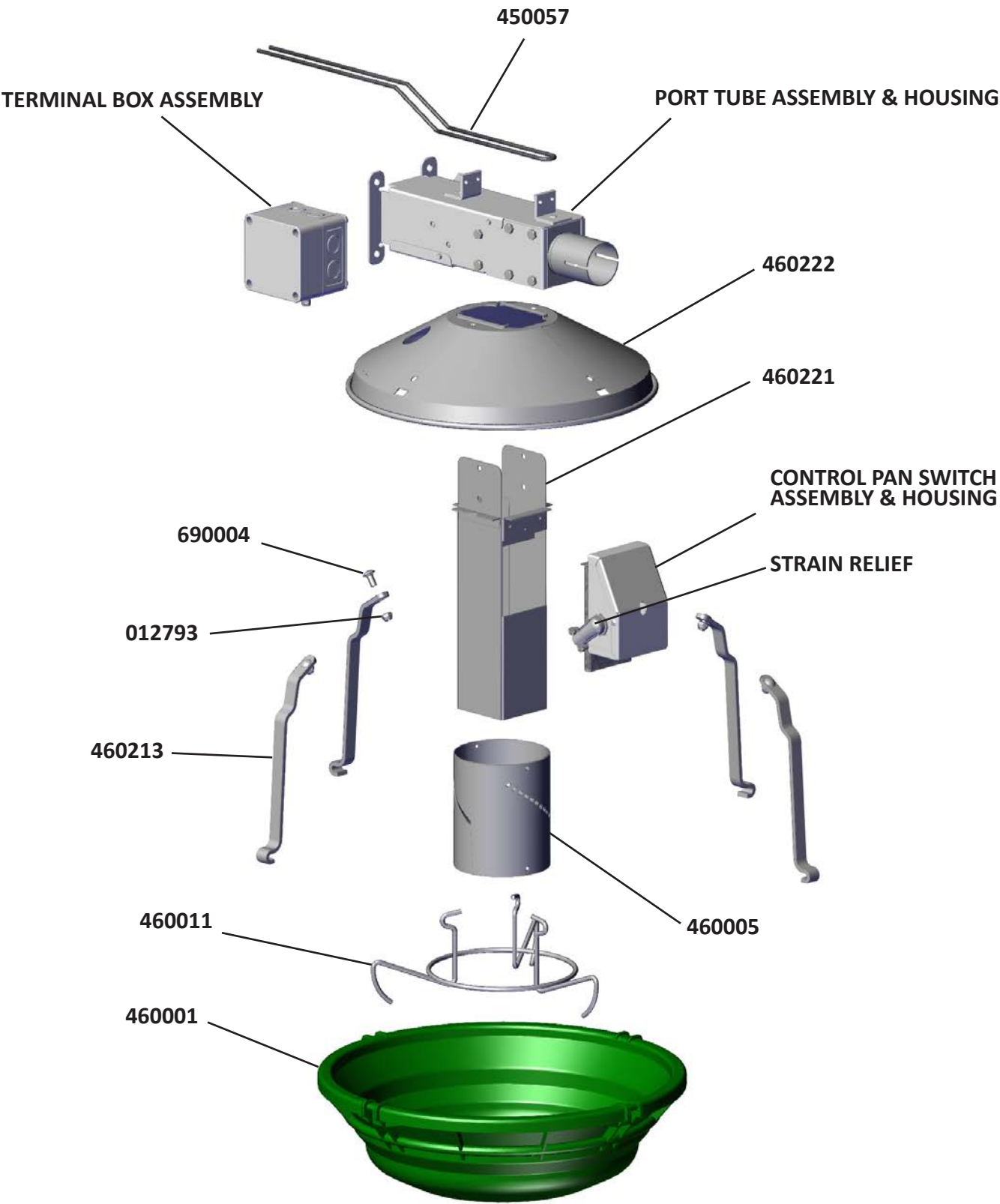
PART #	DESCRIPTION	QTY
460217 - ADULT TURKEY PAN FEEDER		
012793	1/4-20 NYLOCK NUT	4
460001	PLASTIC TURKEY FEED PAN	1
460005	FEED LEVEL TUBE	1
460008	PAN SHIELD SUPPRT	2
460011	FEED LEVEL RING ASSY	1
460213	FEED PAN SUPPORT - ZINC PLATED ADULT TURKEY PAN FEEDER	4
460216	DROP TUBE ASSEMBLY ADULT TURKEY PAN FEEDER	1
460228	TOP PAN SHIELD, ADULT TURKEY PAN FEEDER	1
690004	SCREW, 1/4-20 X 5/8 CRG SN ZP	4

Two Piece Adult Turkey Pan Feeder - Exploded View / Parts List



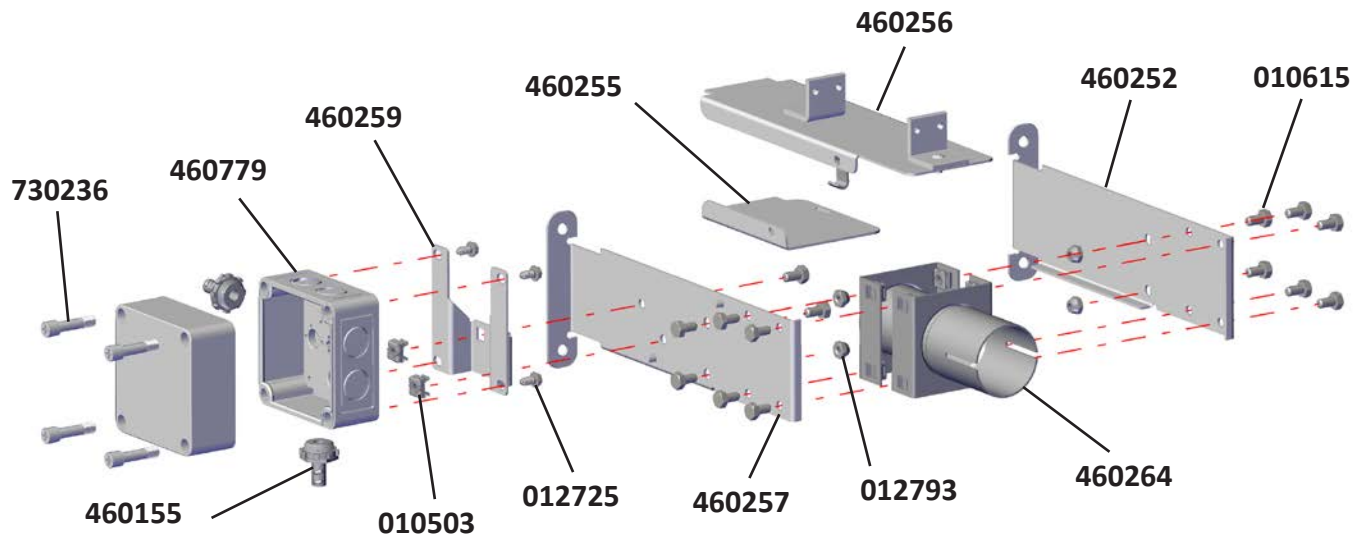
PART #	DESCRIPTION	QTY
460280 - TWO PIECE ADULT TURKEY PAN FEEDER		
012793	1/4-20 NYLOCK NUT	4
460001	PLASTIC TURKEY FEED PAN	1
460005	FEED LEVEL TUBE	1
460008	PAN SHIELD SUPPRT	2
460011	FEED LEVEL RING ASSY	1
460213	FEED PAN SUPPORT - ZINC PLATED ADULT TURKEY PAN FEEDER	4
460228	TOP PAN SHIELD, ADULT TURKEY PAN FEEDER	1
460279	U CLIP TOWER LOCK	1
460281	2 PIECE TURKEY TOWER	1
690004	SCREW, 1/4-20 X 5/8 CRG SN ZP	4

End Control Pan - Exploded View

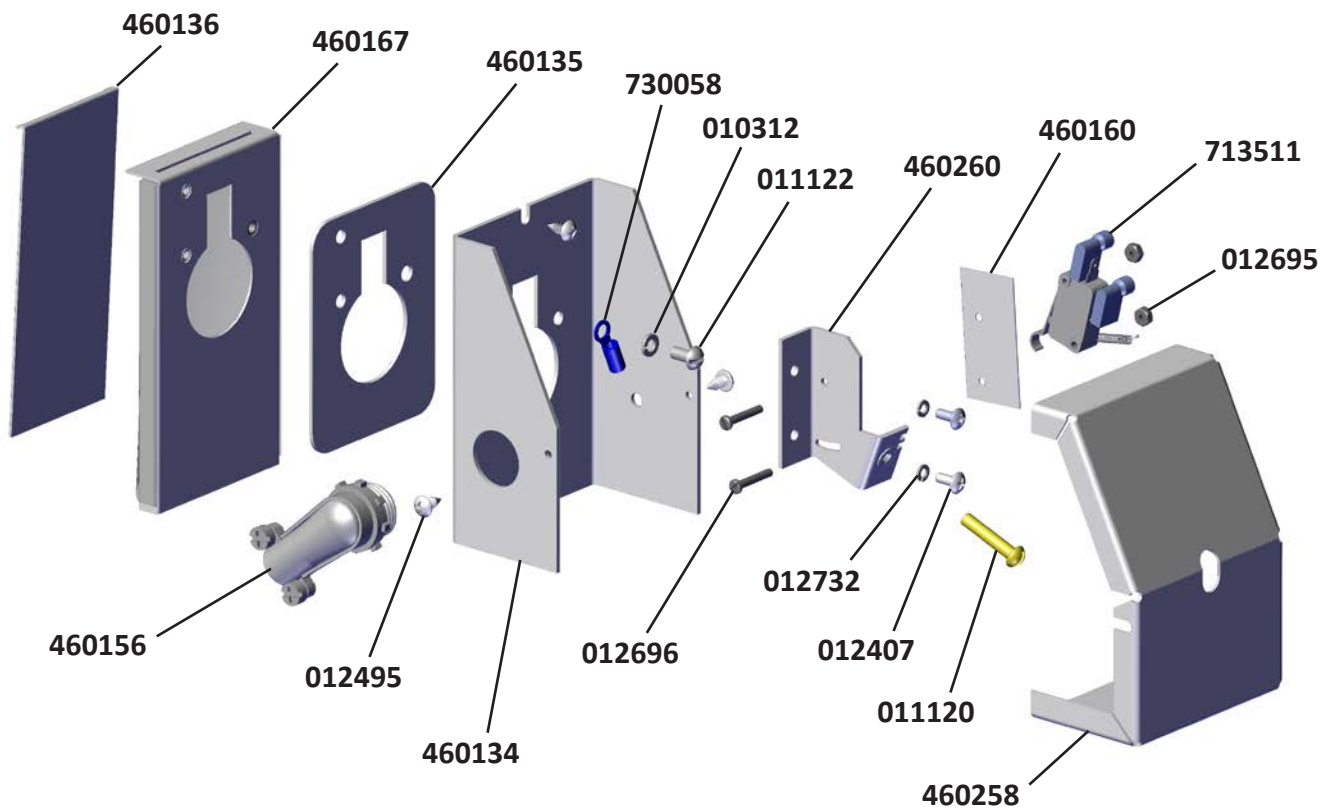


End Control Pan - Exploded View - continued

TERMINAL BOX & PORT TUBE HOUSING ASSEMBLY



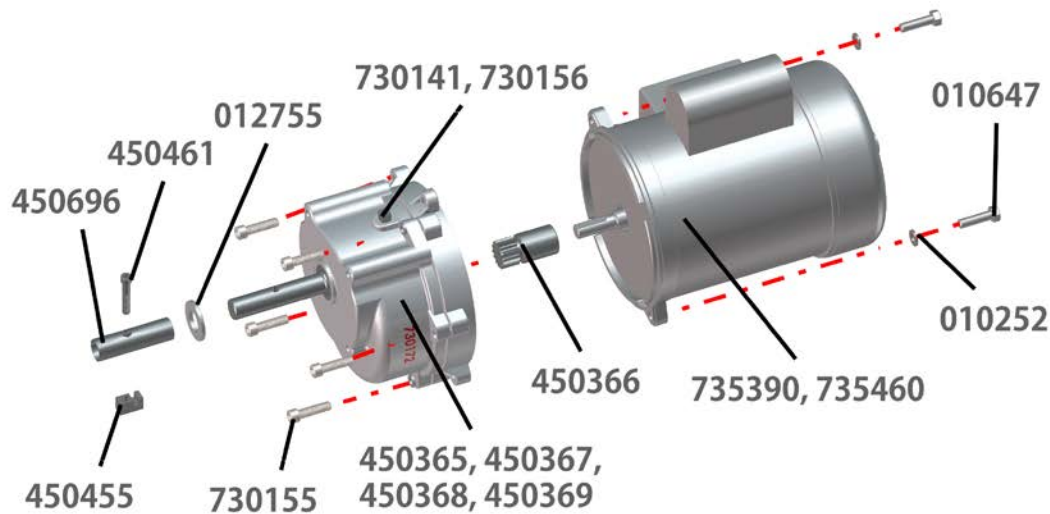
CONTROL PAN SWITCH ASSEMBLY & HOUSING



End Control Pan - Parts List

PART #	DESCRIPTION	QTY
460250 - END CONTROL PAN		
010312	#10 MEDIUM SPLIT LOCKWASHER	1
010503	NUT, RETAINER 1/4-20 ZP	14
010615	1/4-20 X 1/2" HEX BOLT	14
011120	10-24 X 1" PLASTIC PH SCREW	1
011122	#10-24 X 3/8" ROUND HEAD SCREW	1
012407	#6-32 X 3/8" TRUSS HEAD BOLT	2
012495	#8 X 3/8" ROUND HEAD PHILLIPS SHEET METAL SCREW	3
012695	#4-40 MACHINE SCREW NUT	2
012696	#4-40 X 3/4" PHILLIPS HEAD MACHINE SCREW	2
012725	# 12 X 1/2" HEX HEAD SM SCREW	4
012732	#6 LOCKWASHER	2
012793	1/4-20 NYLOCK NUT	8
450057	ANTI-ROOST GUARD WIRE	1
450779	ELECTRICAL BOX	1
460001	PLASTIC TURKEY FEED PAN	1
460005	FEED LEVEL TUBE	1
460011	FEED LEVEL RING ASSY	1
460134	CONTROL PAN SWITCH BASE	1
460135	CTRL PAN BASE SPACER	1
460136	FEED PLATE	1
460155	3/8" SCREW-IN CONDUIT CONNECTOR	2
460156	3/8 X 90 DEG CONDUIT CONNECT	2
460158	1/8" X .016" X 1/2" EXTENSION SPRING	1
460160	.012" PLASTIC INSULATOR	1
460164	18-1/2" X 18-1/2" X 19" CARTON	1
460167	PILOT PLATE ASSEMBLY	1
460199	MICRO SWITCH	1
460213	FEED PAN SUPPORT - ZINC PLATED ADULT TURKEY PAN FEEDER	4
460221	DROP TUBE WELDMENT END CONTROL TURKEY	1
460222	CONTROL PAN SHIELD	1
460252	LEFT HOUSING	1
460255	LOWER COVER	1
460256	TOP COVER ASSEMBLY	1
460257	RIGHT CONTROL PAN HOUSING	1
460258	SWITCH COVER	1
460259	ENCLOSURE BRACKET	1
460260	SWITCH BRACKET	1
460264	PORT TUBE ASSEMBLY	1
690004	SCREW, 1/4-20 X 5/8 CRG SN ZP	4
713511	DISCONNECT, 16-14 FEMALE FLAG .187 X .02 TAB SIZE	2
730058	#16-14 RING TERMINAL	1

Direct Drive / Gearbox - Exploded View / Parts List

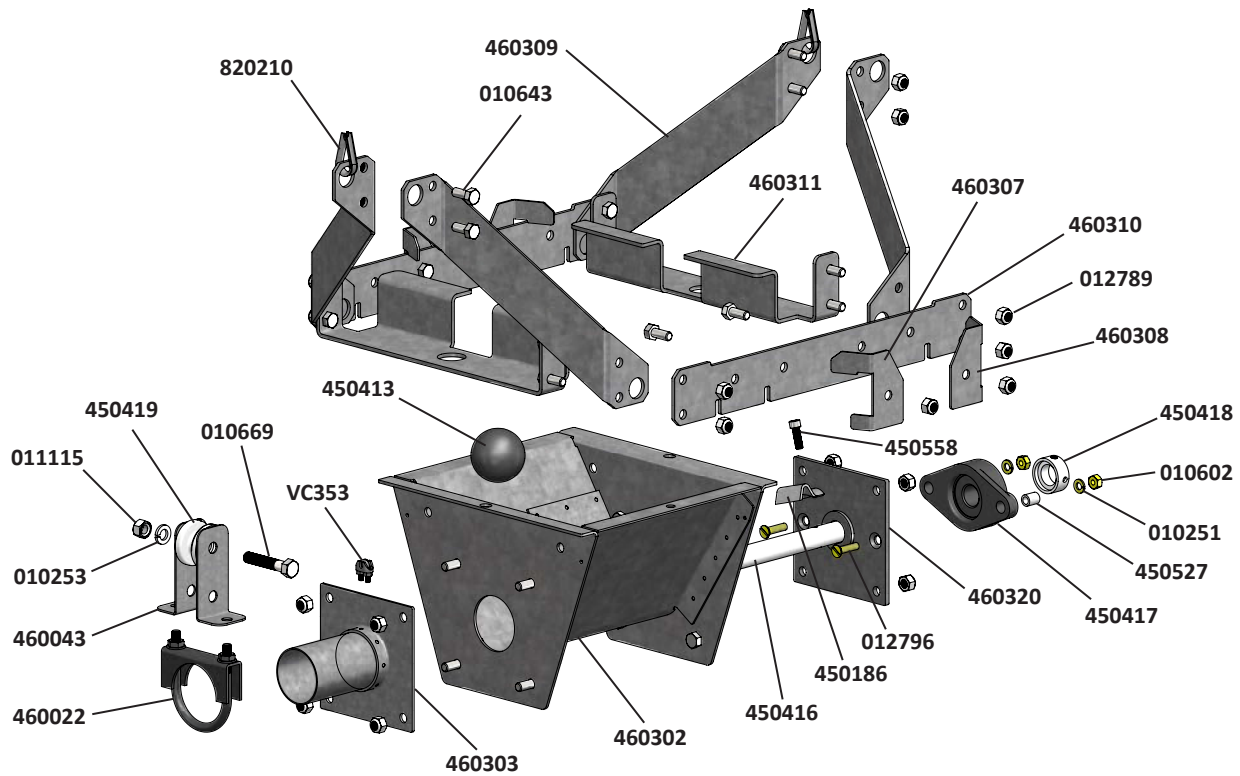


PART #	DESCRIPTION	QTY
450287 MOTOR/GEARBOX ASSY – 543/657 RPM 1P		
735390	MTR,.50HP,115/230V,50/60HZ,1P 1425/1725RPM,56N,SF1.00,IN.B	1
450369	GEARBOX, 2.63:1 RATIO, 3/4 SH 56N DIE CAST AL	1
450366	1/2" PINION DIE CAST- COMPLETE	1
450391 MOTOR/GEARBOX ASSY – 296/359 RPM 3P		
735460	MTR,.50HP,190/380&208-230/460V 50&60HZ,3P,1425/1725RPM,56N	1
450365	GEARBOX, 4.81:1 RATIO, 3/4 SH 56N, DIE CAST AL	1
450366	1/2" PINION DIE CAST- COMPLETE	1
450393 MOTOR/GEARBOX ASSY – 441/367 RPM 1P		
735390	MTR,.50HP,115/230V,50/60HZ,1P 1425/1725RPM,56N,SF1.00,IN.B	1
450368	GEARBOX, 3.91:1 RATIO, 3/4 SH 56N, DIE CAST AL	1
450366	1/2" PINION DIE CAST- COMPLETE	1
450395 MOTOR/GEARBOX ASSY – 441/367 RPM 3P		
735460	MTR,.50HP,190/380&208-230/460V 50&60HZ,3P,1425/1725RPM,56Y	1
450368	GEARBOX, 3.91:1 RATIO, 3/4 SH 56N, DIE CAST AL	1
450366	1/2" PINION DIE CAST- COMPLETE	1
450397 MOTOR/GEARBOX ASSY – 187/226 RPM 1P		
735390	MTR,.50HP,115/230V,50/60HZ,1P 1425/1725RPM,56N,SF1.00,IN.B	1
450367	GEARBOX, 7.63:1 RATIO, 3/4 SH 56N, DIE CAST AL	1
450366	1/2" PINION DIE CAST- COMPLETE	1
460025/MOTOR/GEARBOX ASSY – 296/359 RPM 1P		
735390	MTR,.50HP,115/230V,50/60HZ,1P 1425/1725RPM,56N,SF1.00,IN.B	1
450365	GEARBOX, 4.81:1 RATIO, 3/4 SH 56N, DIE CAST AL	1
450366	1/2" PINION DIE CAST- COMPLETE	1
INTERCHANGEABLE PARTS ON NEXT PAGE		

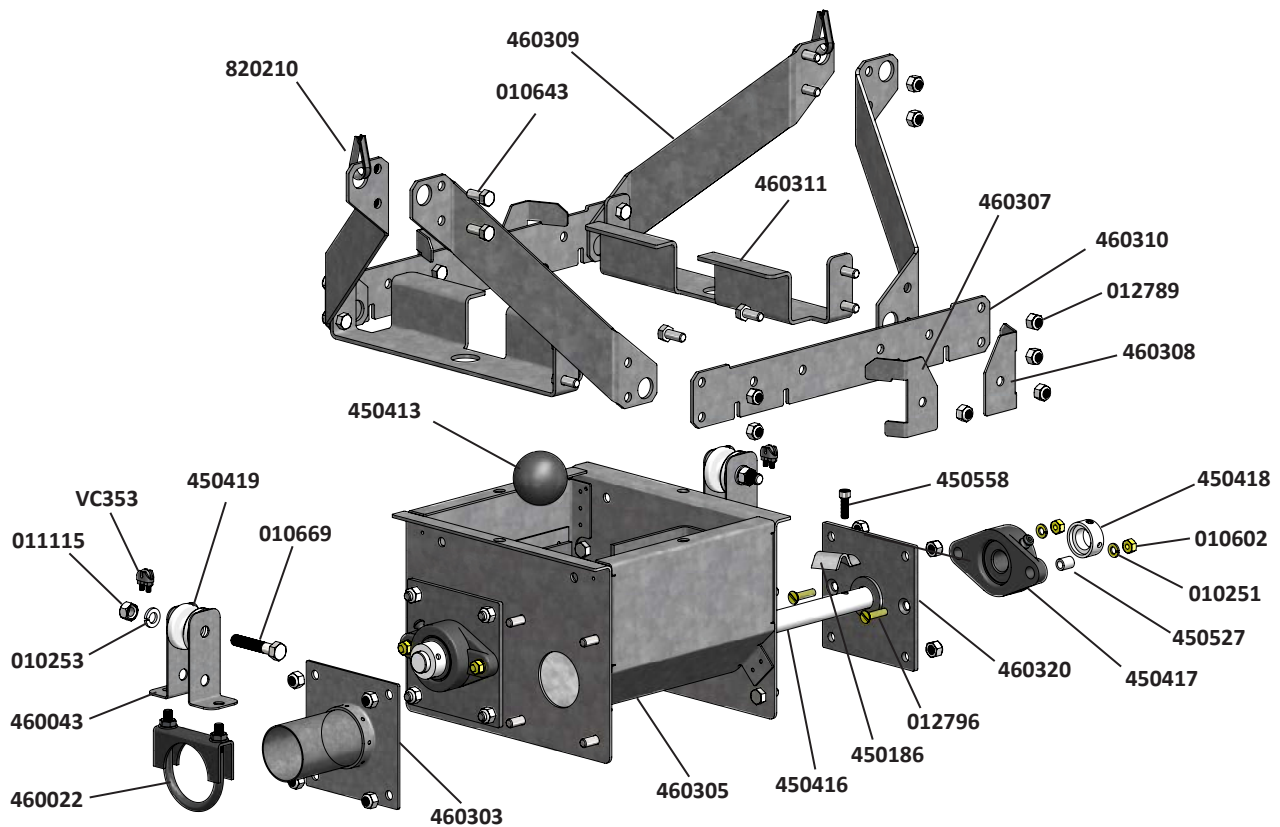
Direct Drive / Gearbox - Parts List, continued

PART #	DESCRIPTION	QTY
DIRECT DRIVE/GEARBOX - INTERCHANGEABLE PARTS		
010252	WASHER, LOCK 5/16" MED SPLIT ZP	2
010647	5/16" X 1-1/4" HEX BOLT	2
012755	WASHER, FLAT, 3/4" SAE	1
450366	1/2" PINION DIE CAST- COMPLETE	1
450455	DRIVE BLOCK	1
450461	1/4" X 1-1/2" SOCKET HEAD SCREW	1
450696	.028 AUGER SHIM	1
730141	NPT VENT PLUG (Part of Gearbox, listed for replacement purposes)	1
730156	NPT PLUG (Part of Gearbox, listed for replacement purposes)	1

Single Boot - Exploded View



Double Boot - Exploded View



Single Boot and Double Boot - Parts Lists

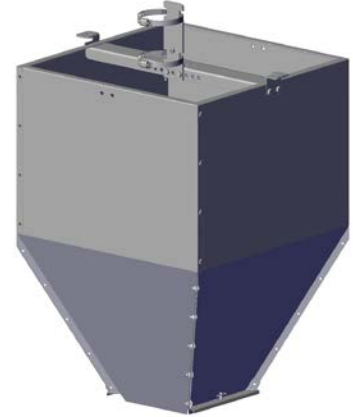
PART #	DESCRIPTION	SINGLE BOOT	DOUBLE BOOT
460300 - SINGLE BOOT			
460302	TURKEY BOOT, SINGLE	1	-
460304	HARDWARE BAG, SINGLE TURKEY BOOT	1	-
460301 - DOUBLE BOOT			
460305	TURKEY BOOT, DOUBLE	-	1
460306	HARDWARE BAG, DOUBLE TURKEY BOOT	-	1
INTERCHANGEABLE PARTS			
450186	450 FLIGHTING ANCHOR	1	2
450413	AGITATOR BALL	1	2
450416	IDLER SHAFT	1	2
450417	BEARING	1	2
450418	LOCKING COLLAR	1	2
450527	NYLON BUSHING	2	4
450558	1/4-20 X 3/4" SOCKET HEAD CAP SCREW	1	2
460303	BOOT TUBE ASSEMBLY	1	2
460307	BOOT HOLDING BRACKET, LEFT	2	2
460308	BOOT HOLDING BRACKET, RIGHT	2	2
460309	CABLE ATTACHMENT ANGLE	4	4
460310	STRAIGHT SUPPORT	2	2
460311	BOOT SUPPORT BRACKET	2	2
460320	BEARING PLATE	1	2

PART #	DESCRIPTION	SINGLE BOOT	DOUBLE BOOT
HARDWARE BAG		460304	460306
010251	WASHER, LOCK 1/4" MED SPLIT ZP	2	4
010253	WASHER, LOCK 3/8",MED SPLIT ZP	1	2
010602	NUT, HEX 1/4"-20 A FINISHED ZP	2	4
010643	5/16-18 X 3/4" HEX BOLT	24	32
010669	3/8" X 2" HEX BOLT	1	2
011115	NUT, HEX 3/8-16"A FINISHED ZP	1	2
012789	5/16-18 NYLOCK NUT	24	32
012796	1/4-20 X 1" SLOTTED COUNTERSUNK BOLT	2	4
450419	WIRE PULLEY INSULATOR	1	2
460022	2" TUBE CLAMP ASSY	1	2
460043	INSULATOR BRACKET	2	4
820210	THIMBLE, 3/16" CABLE	2	2
VC353	CLAMP, 1/16 CABLE, WIRE ROPE CLIP	1	2

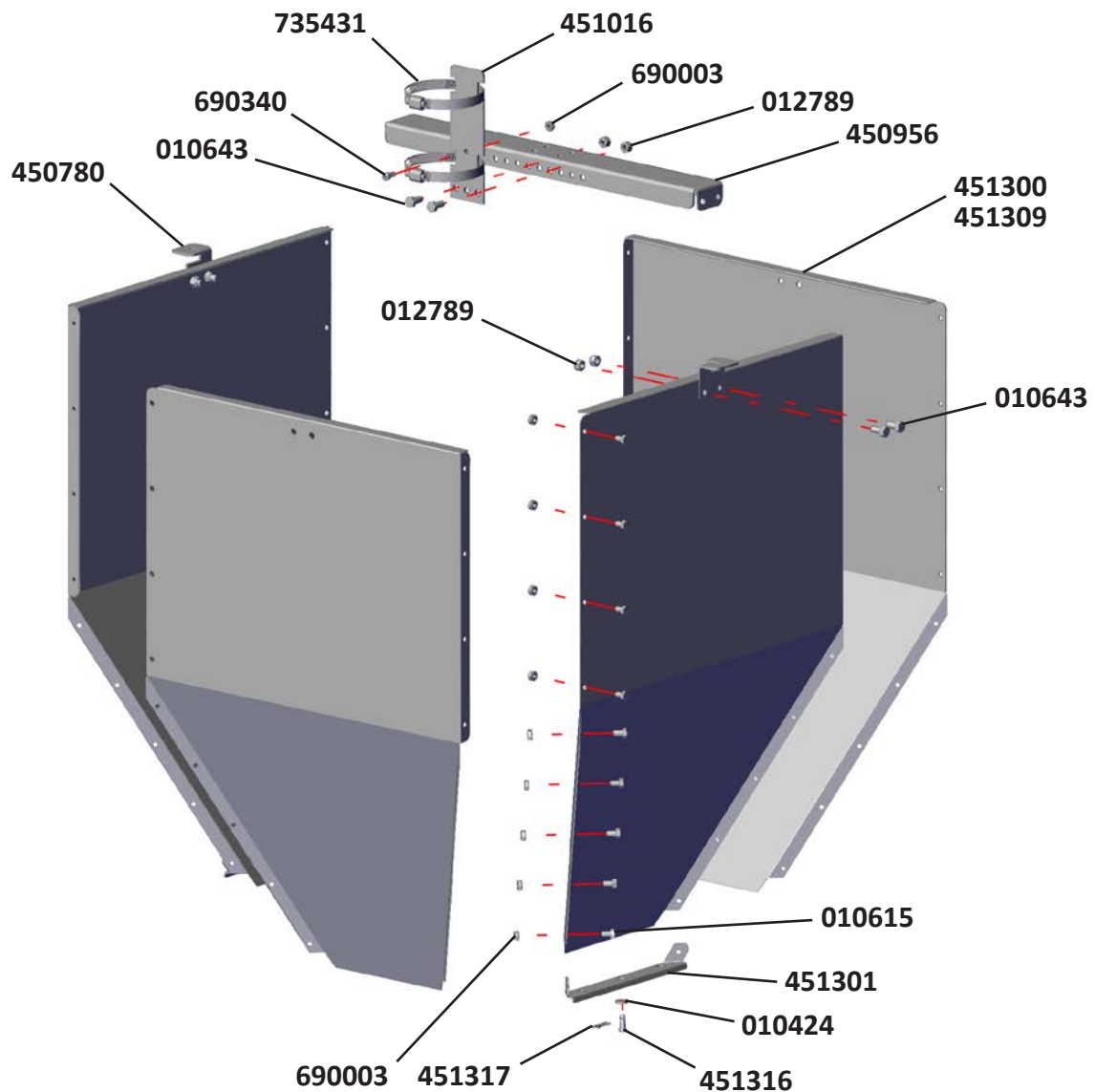
Hopper (100 lb and 200 lb) - Exploded View



451315 - 100lb Hopper



**451320 - 200lb Hopper
(Also shown below)**



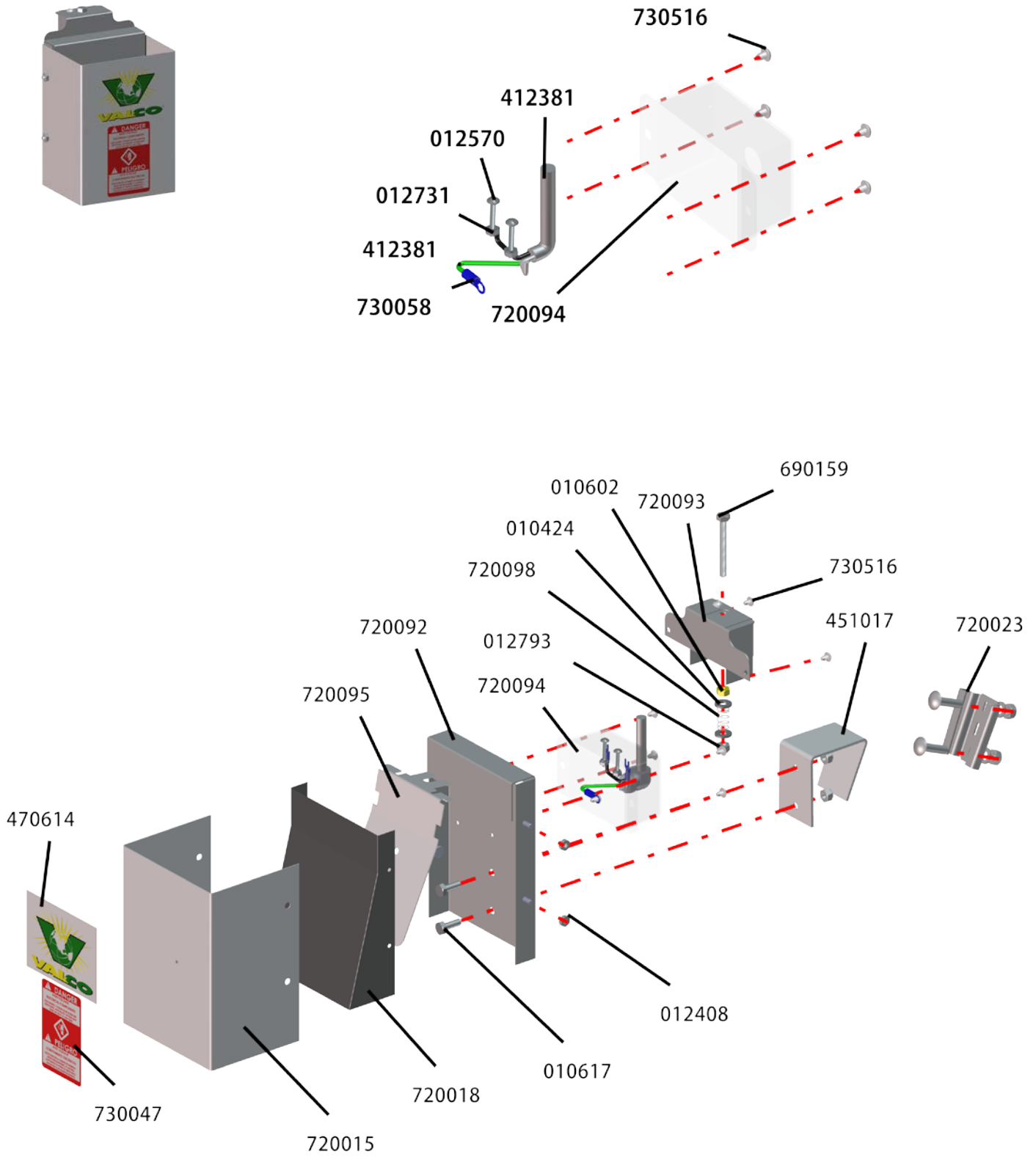
Hopper (100 lb and 200 lb) - Parts List

PART #	DESCRIPTION	QTY 451315	QTY 451320
451315 - 100 LB HOPPER / 451320 - 200 LB HOPPER			
451309	100 LB HOPPER PANEL	4	-
451300	200 LB HOPPER PANEL	-	4
450956	HOPPER CROSS BRACE	1	1
451301	HOPPER BOTTOM BRACE	2	2
451312	HARDWARE BAG, 100 LB HOPPER	1	-
451313	HARDWARE BAG, 200 LB HOPPER	-	1
451312 & 451313 HARDWARE BAGS - INTERCHANGEABLE PARTS			
010424	WASHER, FLAT, 1/4" X 9/16" ZP	2	2
010615	1/4-20 X 1/2" HEX HEAD BOLT ZP	33	37
010643	BOLT, HEX HEAD, 5/16-18 X 3/4" ZP	6	6
012789	5/16-18 NYLOCK NUT	6	6
450780	CABLE RETAINER	2	2
451016	SUPPORT, FEED HOPPER DROP TUBE	1	1
451316	CLEVIS PIN, 1/4" X 9/16" ZP	2	2
451317	COTTER PIN, 5/64" X 1.25" LG ZP	2	2
690003	NUT, KEP 1/4-20 ZP	35	39
690340	SCREW, 1/4-20 X 1/2 SHCS ZP	1	1
735431	4" SS DOWNSPOUT CLAMP	2	2

450804 Cover for 100 lb. & 200 lb. available

451022 Extension for 200 lb. hopper available to increase capacity

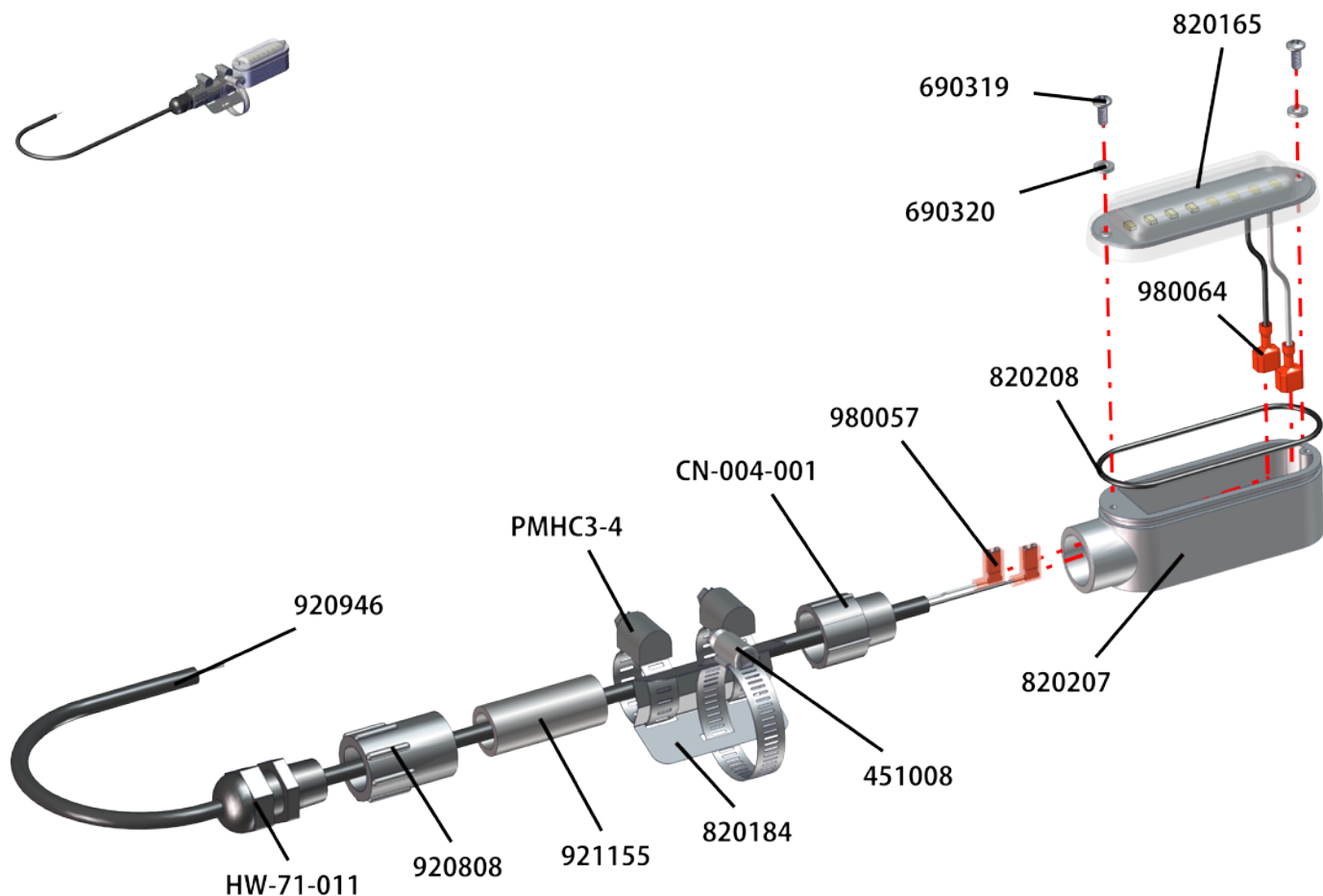
Hopper Level Switch Control - Exploded View



Hopper Level Switch Control - Parts List

PART #	DESCRIPTION	QTY
720097 - HOPPER LEVEL SWITCH CONTROL		
10424	1/4" SAE FLAT WASHER	2
10602	NUT, HEX 1/4"-20 A FINISHED ZP	1
10617	1/4" X 3/4" HEX HEAD BOLT	2
12408	#10-24 HEX KEP LOCKNUT	4
12570	#6-32 X 1" RD HD MACHINE SCREW - SLOTTED	2
12731	#6-32 MACHINE NUT	2
12732	#6 LOCKWASHER	2
12793	1/4-20 NYLOCK NUT	4
412381	14/3 BLACK SJTOW WIRE	8
451017	HANGER BRACKET, 67 DEG	1
470614	4" X 3" VAL-CO DECAL	1
690159	SCREW, 1/4-20 X 2-1/4 HHTB ZP	1
720015	SWITCH SHIELD	1
720018	DIAPHRAM - 7" X 6.5"	1
720020	HANGER BRACKET, 90 DEG	1
720023	MOUNTING BRACKET	1
720092	BODY ASSY, ADJ SWITCH	1
720093	BRACKET, TENSIONER	1
720094	ELECTRIC BOX, ADJ SWITCH	1
720095	SWITCH PLATE, ADJ SWITCH	1
720096	COVER, TENSIONER	1
720098	SPRING, .028 X .437 X .75	1
720099	DECAL, SENSITIVITY ADJUSTMENT	1
720100	STRAIN RELIEF, 90 DEG FOR 14/3	1
730047	HIGH VOLTAGE WARNING LABEL	1
730058	#16-14 RING TERMINAL	1
730516	SCREW, 10-32 X 1/4 PPH TRS ZP	8
730521	TERMINAL, SPADE, 16-14AWG, #6 BLUE	2
730989	MICRO SWITCH, SPDT 20A, 250VAC SCREW TERMINAL	1

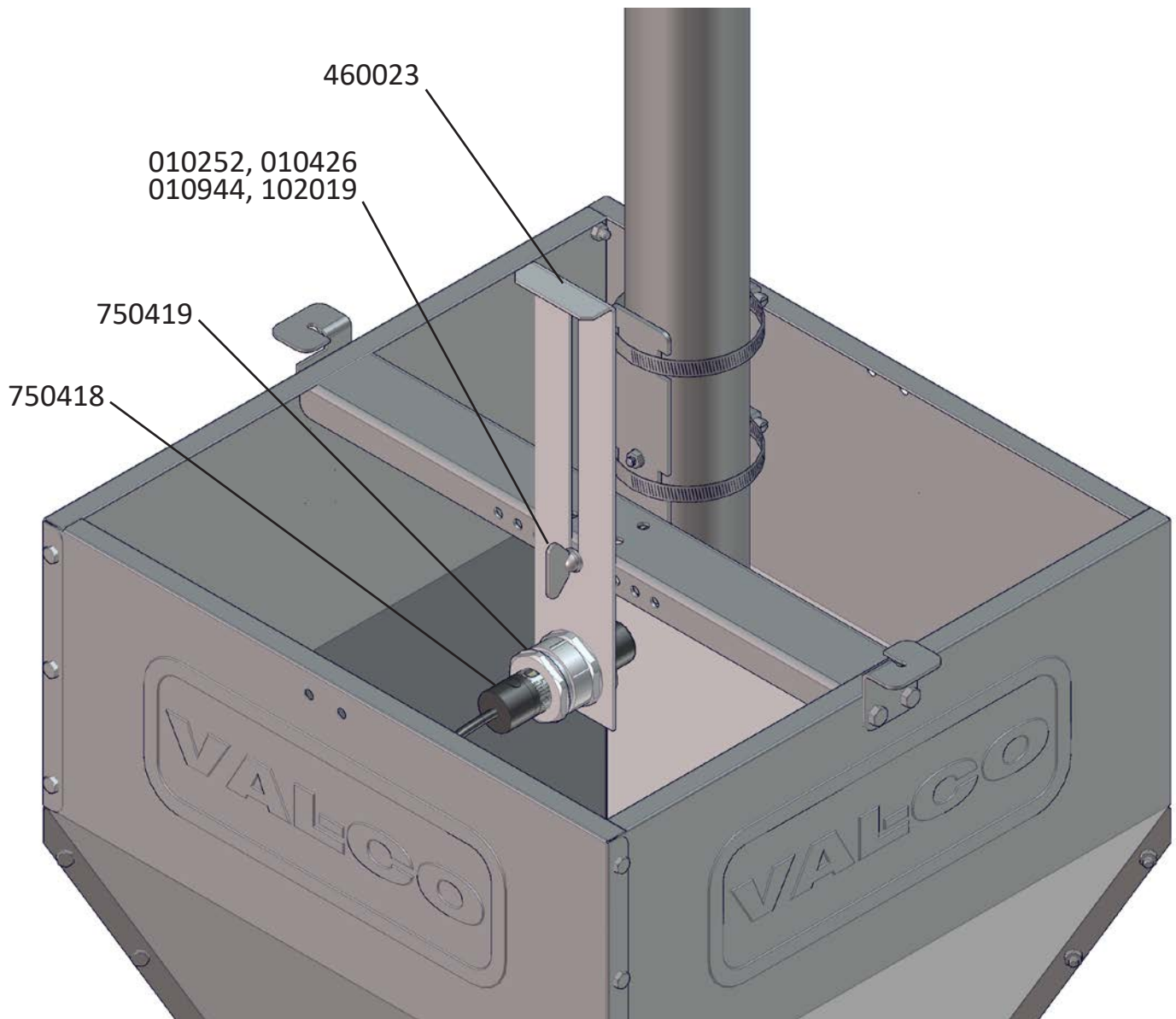
Bird Attracting LED light Universal-Control Pans - Exploded View / Parts List



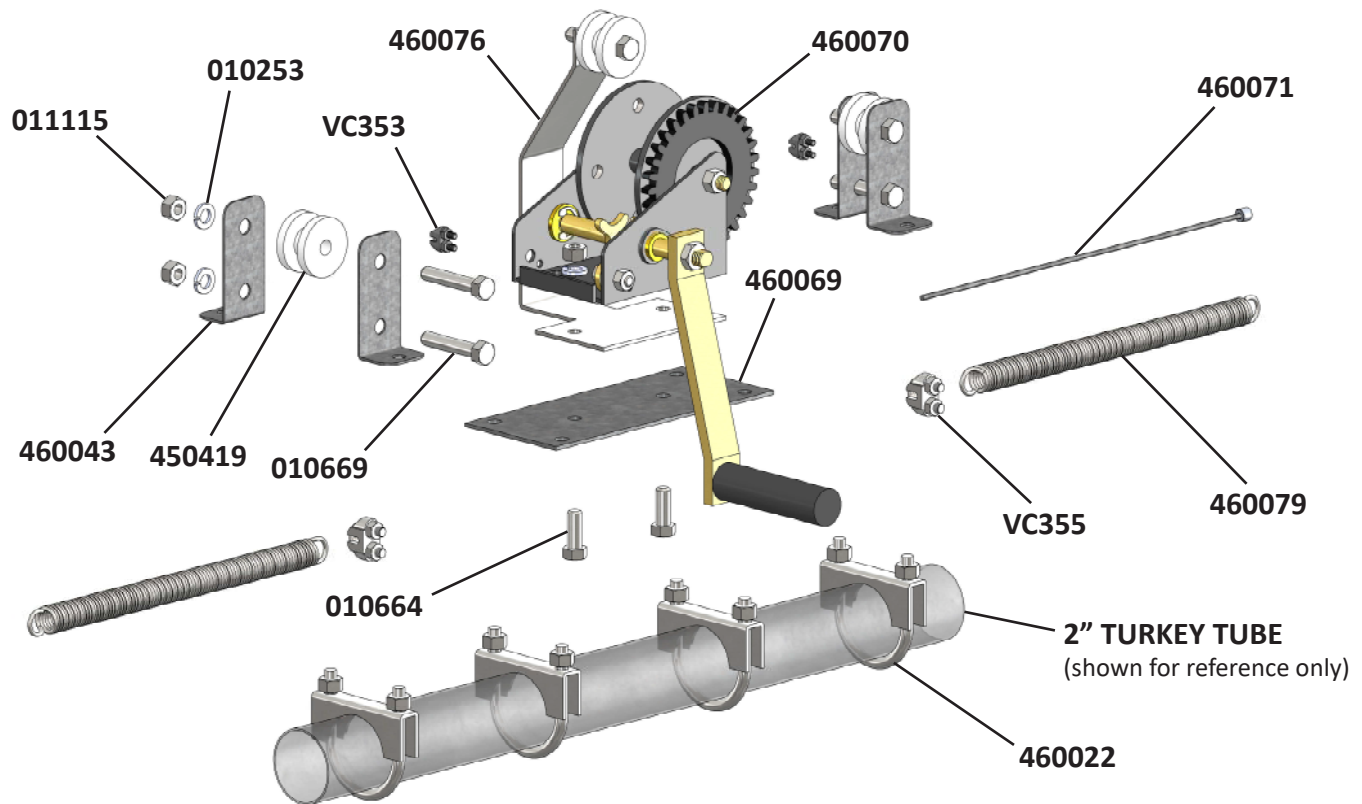
PART #	DESCRIPTION	QTY
820022 - BIRD ATTRACTING LED LIGHT		
451008	1-3/4" SS TUBE CLAMP	1
690319	SCREW, 8-32 X 3/8 PHMS ZP	2
690320	WASHER, FLAT, #8, NYLON,.178 ID X.312 OD X.03THK	2
820165	LIGHT, LED, CONTROL PAN	1
820184	BRACKET, LED FEEDER LIGHT MTG	1
820207	CONDUIT BODY, LED, MACHINED	1
820208	O-RING,.103,-148,BUNA,70A DUR	1
920808	ADAPTER,1/2"NPTF X SKT,SCH40 NON-METALIC	1
920946	CABLE,18/2 18AWG,10A,300V,BLK,PVC JACKET,.29 OD	3
921155	CONDUIT SCH 40 1/2" X 2"	1
980057	CONNECTOR, ELECT, FLAG, FEM, .187X.020, 22-18, FULLY INSUL	2
980064	CONNECTOR,ELECT,STRAIGHT,TAB,.187X.020, 22-18, FULLY INSUL	2
CN-004-001	ADAPTER, 1/2"NPTF X SKT, SCH40,NON-METALIC	1
HW-71-011	STRAIN RELIEF CABLE DOME 1/2	1
PMHC3-4	TRIDON HOSE CLAMP 3/4"	2

Proximity Hopper Level Control Switch - Parts List

PART #	DESCRIPTION	QTY
460057 - PROXIMITY HOPPER LEVEL CONTROL SWITCH - PART NUMBERS		
010252	5/16" SPLIT LOCK WASHER	1
010426	5/16" FLAT WASHER	1
010944	5/16-18 WING NUT	1
102019	5/16-18 X 3/4" THUMBSCREW	1
460023	PROXIMITY SWITCH BRACKET	1
750418	PROXIMITY SENSOR, DOL 33R 220V	1
750419	PLASTIC GLAND FOR PROXIMITY SWITCH	1



Feed Level Winch Kit and Miscellaneous Winching Components - Exploded View/Parts List



PART #	DESCRIPTION	QTY
460072 - FEED LEVEL WINCH KIT		
460069	TURKEY WINCH BRACKET	1
460070	TURKEY WINCH	1
460076	WINCH HANGER	1
460075 - INSULATOR BRACKET & TUBE CLAMP ASSEMBLY (QTY. 2)		
010253	3/8" SPLIT LOCK WASHER	1
010669	3/8" X 2" HEX BOLT	1
011115	3/8-16 HEX NUT	1
450419	WIRE PULLEY INSULATOR	1
460022	2" TUBE CLAMP ASSEMBLY	1
460043	INSULATOR BRACKET	2
VC353	WIRE ROPE CLIP FOR 1/16" CABLE	2
460077 - HARDWARE BAG		
010253	3/8" SPLIT LOCK WASHER	5
010664	3/8" X 1" HEX BOLT	2
010669	3/8" X 2" HEX BOLT	3
011115	3/8-16 HEX NUT	5
450419	WIRE PULLEY INSULATOR	1
460022	2" TUBE CLAMP ASSEMBLY	2
460078	1/8" X 1/8" NICO SLEEVE	2
460079	TURKEY WINCH SPRING	2
PART #	DESCRIPTION	QTY
MISCELLANEOUS WINCHING COMPONENTS		
460071	DROP CABLE ASSEMBLY	-
VC355	WIRE ROPE CLIP FOR 1/8" CABLE	-
VC343	WIRE ROPE, 1/8" CABLE	-

Customer Service

Dealer Name: _____

Street / PO Box _____

City _____

State / Province _____

Zip / Postal _____

Phone _____

Fax _____

E-mail _____

Web site _____

Customer Service
210 E. Main Street
Coldwater, OH 45828
800.998.2526



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