

Poultry Production Systems

Installation and Operators Manual

MODEL ATF™ and MODEL ATF™ PLUS Plastic and metal Feed Cone Feeding System's Installation and Operators Manual

Installation and Operators Manual



Chore-Time Limited Warranty

Chore-Time Group, a division of CTB, Inc. ("Chore-Time") warrants the new CHORE-TIME Model ATF™ and ATF Plus Feeders manufactured by Chore-Time to be free from defects in material or workmanship under normal usage and conditions, for One (1) year from the date of installation by the original purchaser ("Warranty"). Chore-Time provides for an extension of the aforementioned Warranty period ("Extended Warranty Period") with respect to certain Product parts ("Component Part") as set forth in the table below. If such a defect is determined by Chore-Time to exist within the applicable period, Chore-Time will, at its option, (a) repair the Product or Component Part free of charge, F.O.B. the factory of manufacture or (b) replace the Product or Component Part free of charge, F.O.B. the factory of manufacture. This Warranty is not transferable, and applies only to the original purchaser of the Product.

Component Part	Extended Warranty Period
RXL Fan (except motors and bearings)	Three (3) Years
TURBO® Fan (except motors and bearings)	Three (3) Years
TURBO® Fan fiberglass housing, polyethylene cone, and cast aluminum blade.	Lifetime of Product
TURBO® fan motor and bearings.	Two (2) Years
Chore-Time® Poultry Feeder Pan	Three (3) Years
Chore-Time® Rotating Centerless Augers (except where used in applications involving high moisture feed stuffs exceeding 17%)	Ten (10) Years
Chore-Time Steel Auger Tubes	Ten (10) Years
ULTRAFLO® Breeder Feeding System auger and feed trough.	Five (5) Years
ULTRAPAN® Feeding System augers.	Five (5) Years

CONDITIONS AND LIMITATIONS

THIS WARRANTY CONSTITUTES CHORE-TIME'S ENTIRE AND SOLE WARRANTY AND CHORE-TIME EXPRESSLY DISCLAIMS ANY AND ALL OTHER WARRANTIES, INCLUDING, BUT NOT LIMITED TO, EXPRESS AND IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, WARRANTIES AS TO MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSES. CHORE-TIME shall not be liable for any direct, indirect, incidental, consequential or special damages which any purchaser may suffer or claim to suffer as a result of any defect in the Product. Consequential or Special Damages as used herein include, but are not limited to, lost or damaged products or goods, costs of transportation, lost sales, lost orders, lost income, increased overhead, labor and incidental costs, and operational inefficiencies. *Some jurisdictions prohibit limitations on implied warranties and/or the exclusion or limitation of such damages, so these limitations and exclusions may not apply to you. This warranty gives the original purchaser specific legal rights. You may also have other rights based upon your specific jurisdiction.*

Compliance with federal, state and local rules which apply to the location, installation and use of the Product are the responsibility of the original purchaser, and CHORE-TIME shall not be liable for any damages which may result from non-compliance with such rules.

The following circumstances shall render this Warranty void:

- Modifications made to the Product not specifically delineated in the Product manual.
- Product not installed and/or operated in accordance with the instructions published by the CHORE-TIME.
- All components of the Product are not original equipment supplied by CHORE-TIME.
- Product was not purchased from and/or installed by a CHORE-TIME authorized distributor or certified representative.
- Product experienced malfunction or failure resulting from misuse, abuse, mismanagement, negligence, alteration, accident, or lack of proper maintenance, or from lightning strikes, electrical power surges or interruption of electricity.
- Product experienced corrosion, material deterioration and/or equipment malfunction caused by or consistent with the application of chemicals, minerals, sediments or other foreign elements.
- Product was used for any purpose other than for the care of poultry and livestock.

The Warranty and Extended Warranty may only be modified in writing by an officer of CHORE-TIME. CHORE-TIME shall have no obligation or responsibility for any representations or warranties made by or on behalf of any distributor, dealer, agent or certified representative.

Effective: April, 2014

Chore-Time Group, A division of CTB, Inc.

PO Box 2000

Milford, Indiana 46542-2000 USA

Phone (574) 658-4101 Fax (877) 730-8825

Internet: www.choretimepoultry.com

E-mail: poultry@choretime.com

Contents

Topic	Page
Chore-Time Limited Warranty.....	2
About This Manual.....	5
Safety Information	5
Safety Instructions	6
Follow Safety Instructions	6
Decal Descriptions	6
DANGER: Moving Auger	6
DANGER: Electrical Hazard	6
CAUTION:	6
General.....	6
Support Information	6
MODEL ATFT™ and MODEL ATF™ PLUS Recommendations & Guidelines	7
Manufacturer's Recommendations: Birds per Pan	8
Planning the Floor Feeding System.....	9
Suspension System	10
Screw Hook Installation	13
Ceiling Hook Installation	13
Power Winch Installation	15
Drop Installation	15
Hopper Assembly Procedure.....	16
Assembly	16
Suspend the Hopper	17
Feed Cone Assembly and Installation.....	18
MODEL ATFT™ and MODEL ATF™ Feed Cones	18
MODEL ATFT™ Pan Support Assembly	20
MODEL ATFT™ Feeding System	20
Model ATFT™ Plus Pan Shield Assembly	21
Metal feed cone assembly.....	22
Feeder Line Assembly and Suspension.....	24
Feeder Tube Assembly	24
Feeder Line Installation	24
Control Unit Installation	26
End Control Units	26
Mid-Line Control Units	28
Mid-Line Control Operation	29
Auger Installation.....	30
Auger Brazing	32
Winch Adjustable Feed Level Cones	33
Installation of the Winch Adjustable Feed Level System	33
Attaching Feeder Cords	35
Anti-Roost Installation.....	36
Anti-Roost Jumper	37
Wiring Diagrams	39

End & Mid-Line Control Wiring Diagrams: Single Phase(Ø)	39
Single Phase(Ø) Wiring Diagram	39
Single Phase(Ø) Wiring Diagram w/Motor Starter	39
End & Mid-Line Control Wiring Diagrams: Three Phase(Ø)	40
Three Phase(Ø) Wiring Diagram: 220/230 V	40
Three Phase(Ø) Wiring Diagram: 380/415 V	40
Sensor Control Wiring Diagram	41
Maintaining the Feeding System	42
Floor Feeding System Maintenance	42
Gear Head Maintenance	42
Mechanical Switch Adjustment procedure for Control Units	43
Electronic Sensor Adjustment for Control Units	43
Feeder Line	44
Power Lift Winch Maintenance	45
Trouble Shooting the Feeding System	46
Parts Listing	47
150# Hopper Components	47
Single Boot Components Part No. 6821	49
Twin Boot Components Part No. 8460	49
Feeder Line Components	50
Power Unit Components	50
Power Unit Assembly Part Numbers	50
MODEL ATF™ End Control (Mech. Switch): 50355 & 50355G	52
MODEL ATF™ PLUS End Control (Mech. Switch): 50358 & 50358G	52
MODEL ATF™ Mid-Line Control (Mech. Switch): 50364	54
MODEL ATF™ PLUS Mid-Line Control (Mech. Switch): 50363	54
MODEL ATF™ Mid-Line Control W/Sensor: 53020	55
MODEL ATF™ PLUS Mid-Line Control W/Sensor: 53019	55
Feed Level Tube Winch Kit Part No. 53197	56
MODEL ATF™ Drop Tube Repair Tube Part No. 49160	56
MODEL ATF™ PLUS Drop Tube Repair Tube Part No. 49163	56
2883 Power Winch	57
Miscellaneous Suspension Components	58
MODEL ATF™ Feeder Pan Assemblies w/ Plastic Feed Level Cone	59
MODEL ATF™ Feeder Pan Assemblies w/ Metal Feed Level Cone	60
MODEL ATF™ Plus Feeder Pan Assemblies w/ Plastic Feed Level Cone	61
MODEL ATF™ Plus Feeder Pan Assemblies w/ Metal Feed Level Cone	62
Optional Parts	63

About This Manual

The intent of this manual is to help you in two ways. One is to follow step-by-step in the order of assembly of your product. The other way is for easy reference if you have questions in a particular area.

Important: **Read ALL instructions carefully before starting construction.**

Important: **Pay particular attention to all SAFETY information.**

- Metric measurements are shown in millimeters and in brackets, unless otherwise specified. “ ” equals inches and “ ’ ” equals feet in English measurements.

Examples:

1" [25.4]

4' [1 219]

- Optional equipment contains necessary instructions for assembly or operation.
- Very small numbers near an illustration (*i.e.*, 1257-48) are identification of the graphic, not a part number.

Note: The original, authoritative version of this manual is the English version produced by CTB, Inc. or any of its subsidiaries or divisions, (hereafter collectively referred to as "CTB"). Subsequent changes to any manual made by any third party have not been reviewed nor authenticated by CTB. Such changes may include, but are not limited to, translation into languages other than English, and additions to or deletions from the original content. CTB disclaims responsibility for any and all damages, injuries, warranty claims and/or any other claims associated with such changes, inasmuch as such changes result in content that is different from the authoritative CTB-published English version of the manual. For current product installation and operation information, please contact the customer service and/or technical service departments of the appropriate CTB subsidiary or division. Should you observe any questionable content in any manual, please notify CTB immediately in writing to: CTB Legal Department, P.O. Box 2000, Milford, IN 46542-2000 USA.

Safety Information

Caution, Warning and Danger Decals have been placed on the equipment to warn of potentially dangerous situations. Care should be taken to keep this information intact and easy to read at all times. Replace missing or damaged safety decals immediately.

Using the equipment for purposes other than specified in this manual may cause personal injury and/or damage to the equipment.

Safety-Alert Symbol



This is a safety-alert symbol. When you see this symbol on your equipment, be alert to the potential for personal injury. This equipment is designed to be installed and operated as safely as possible...however, hazards do exist.

Understanding Signal Words

Signal words are used in conjunction with the safety-alert symbol to identify the severity of the warning.

- !**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 hazardous situation which, if not avoided, **MAY** result in minor or moderate injury.

Safety Instructions

Follow Safety Instructions

Carefully read all safety messages in this manual and on your equipment safety signs. Follow recommended precautions and safe operating practices.

Keep safety signs in good condition. Replace missing or damaged safety signs.

Decal Descriptions

DANGER: Moving Auger

This decal is placed on the Panel Weldment.

Severe personal injury will result, if the electrical power is not disconnected, prior to servicing the equipment.



DANGER: Electrical Hazard

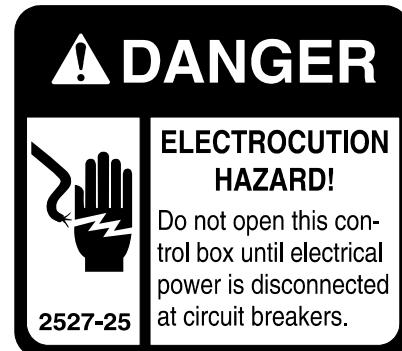
Disconnect electrical power before inspecting or servicing equipment unless maintenance instructions specifically state otherwise.

Ground all electrical equipment for safety.

All electrical wiring must be done by a qualified electrician in accordance with local and national electric codes.

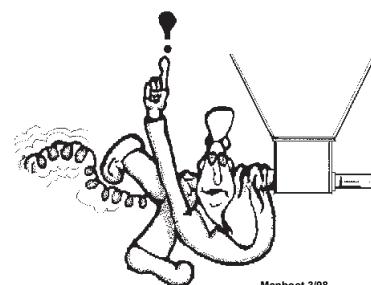
Ground all non-current carrying metal parts to guard against electrical shock.

With the exception of motor overload protection, electrical disconnects and over current protection are not supplied with the equipment.



CAUTION:

Use caution when working with the Auger—springing Auger may cause personal injury.



General

Support Information

The Chore-Time Adult Turkey Feeding System's have been designed to feed poultry. Using this equipment for any other purpose or in a way not within the operating recommendations specified in this manual will void the warranty and may cause personal injury.

This manual is designed to provide comprehensive planning and installation information. The Table of Contents provides a convenient overview of the information in this manual.

MODEL ATF™ and MODEL ATF™ PLUS Recommendations & Guidelines

The Chore-Time Adult Turkey Feeder is recommended for birds 5 to 6 weeks old and over. See “Manufacturer’s Recommendations: Birds per Pan” on page 8 for feeder space recommendations.

Adult Tom Turkeys: 40 to 50 birds per pan.

Hen Turkeys: 60 birds per pan.

Operate the equipment, if possible, before birds are housed to check installation, switch operation, and fill the feeder lines with feed.

The oil coating on new auger will cause the auger to deliver feed at a slower rate. To reduce the load on the motor while the equipment is being broken in, auger 50 pound (20 kg) increments of feed out to the pans. Allow the system to run for approximately 30 seconds, then add another 50 pounds (20 kg) of feed. Repeat this procedure until feed has been supplied to all the pans. Do not feed grit with the Adult Turkey Feeder.

Birds avoid dark or cold areas. Do not locate a control unit in such an area. Also, do not locate the control unit close to the end of the building. Allow a minimum of 10 feet (3 m) between the control unit and the building wall. If these problems are anticipated, they can be corrected during installation. Otherwise, artificial lighting can partially correct the problem.

During the break-in period, check the feed level in the pans. Normally, 1" to 1-1/2" (25 to 38 mm) of feed in the pan controls feed waste. When birds are housed, monitor the feed level in the pans and adjust as needed. Note: When birds are debeaked, a deeper feed level is required. Adjust the feed level by raising or lowering the feed level cone.

The height of the feeder line can be adjusted easily and it should be raised periodically as birds grow. Keep the lip of the pan approximately at the point where the bird’s neck joins the breast so that the birds must reach slightly. For the average 20 pound (9.1 kg) turkey, this will put the lip of the pan about 16 to 18 inches (405 to 455 mm) above the floor. Keeping the pans high results in less feed waste, less litter in pans, and easier bird movement.

Manufacturer's Recommendations: Birds per Pan

Type	Max weight and/or weeks of age	Feeders	Number of birds/pan
Broiler	4.5 lbs/2 kg.	Revolution 12, Models C2 Plus, C2 Plus S, C, H2, H2 Plus, FFR	60 - 90
Broiler	6 lbs/2.7 kg	Revolution 8 & 12, C2 Plus, C2 Plus S, G Plus, G Plus S, C, H2, H2 Plus, FFR	55 - 80
Broiler	7 lbs/3.1 kg	Revolution 8 & 12, C2 Plus, C2 Plus S, G Plus, G Plus S, C, H2, H2 Plus, FFR	55 - 75
Broiler	9 lbs/4.0 kg	Revolution 8, G Plus, G Plus S	45 – 65
Broiler Breeder Pullet – rearing	0 – 18 weeks	C2 Plus (Breeder), C2 Plus S (Breeder)	14 - 15
Broiler Breeder Pullet – rearing	0 – 18 weeks Hi-Yield	C2 Plus (Breeder), C2 Plus S (Breeder)	12-14
Broiler Breeder Male – rearing	0 -- 18 weeks	C2 Plus (Breeder), C2 Plus S (Breeder), G Plus (Breeder), G Plus S (Breeder)	11-13
Broiler Breeder Layer	17 + weeks	C2 Plus (Breeder), C2 Plus S (Breeder)	13 - 14
Broiler Breeder Layer	17 + weeks Hi-Yield	C2 Plus (Breeder), C2 Plus S (Breeder)	12 - 13
Broiler Breeder Male	17 + weeks	Revolution 8, G Plus (Breeder), G Plus S (Breeder)	8-10
Commercial Layer Pullet – rearing	0 – 20 weeks	Revolution 12, C2Plus, H2, H2 Plus	40-60
Commercial Layer	18 + weeks	Revolution 12, C2 Plus, C, H2, H2 Plus	30 - 40
Turkey Poult	0 – 5 weeks	Revolution 8, H2 Plus, H2, G Plus, G Plus S, Liberty	60 - 65
Turkey Poult	0 – 10 weeks	Revolution 8, G Plus, H2 Plus, H2, Liberty	40 - 50
Turkey Female	5 + weeks	ATF, ATF Plus	60
Turkey Male	5 + weeks	ATF Plus	40 - 50
Ducks	0 – 3 weeks	G Plus, G Plus S	60 - 70
Ducks	4 – 8 weeks	G Plus, G Plus S	50 - 60

***Notice:** Please be advised that the maximum number of birds that may be successfully produced per feed pan may vary based upon such factors as climate, housing type or style, bird breeds, genetic factors of the birds at issue, grower management practices, etc. All other environmental and management circumstances, such as proper bird density per house, access to adequate nutrients in feed, access to adequate water supply, proper ventilation, adequate health care for the birds, and other similar factors, must meet industry standards and recommendations, if any, of applicable bird breeder companies.

*** NOTICE:** The above Manufacturer's recommendations do not constitute a product warranty and are in no way to be considered as a guarantee of performance for poultry production. In addition, the above information in no way alters or revises the terms and conditions of any applicable Chore-Time manufacturer's warranty.

Planning the Floor Feeding System

1. Select the House Layout.

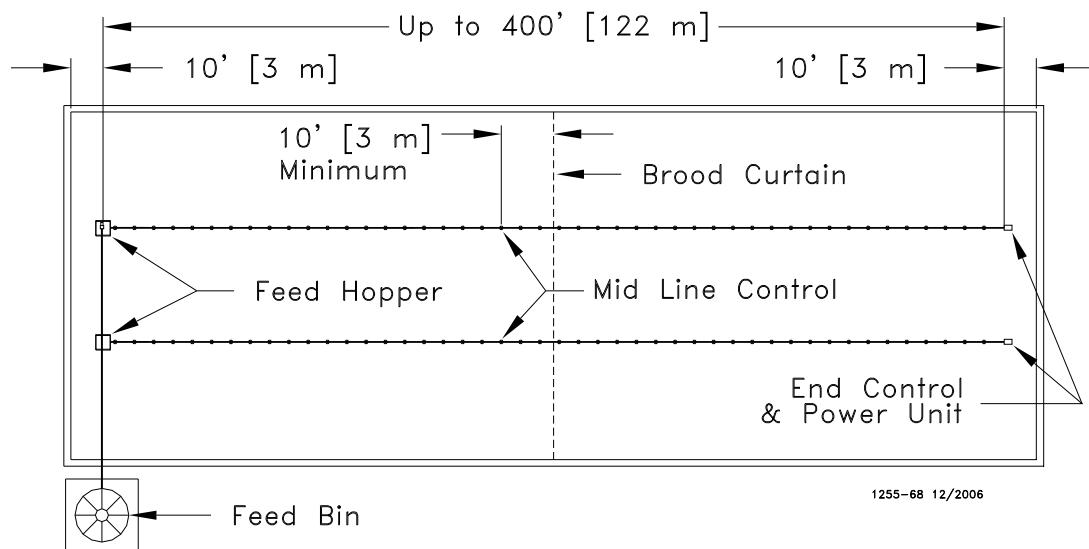


Figure 1. Component location diagram for systems up to 400 feet [122 m]. (Top View).

- Systems with line lengths over 400' [122 m] should be split in the center, as shown in **2**. This will reduce auger running time and eliminate the need for mid-line controls for partial house brooding.

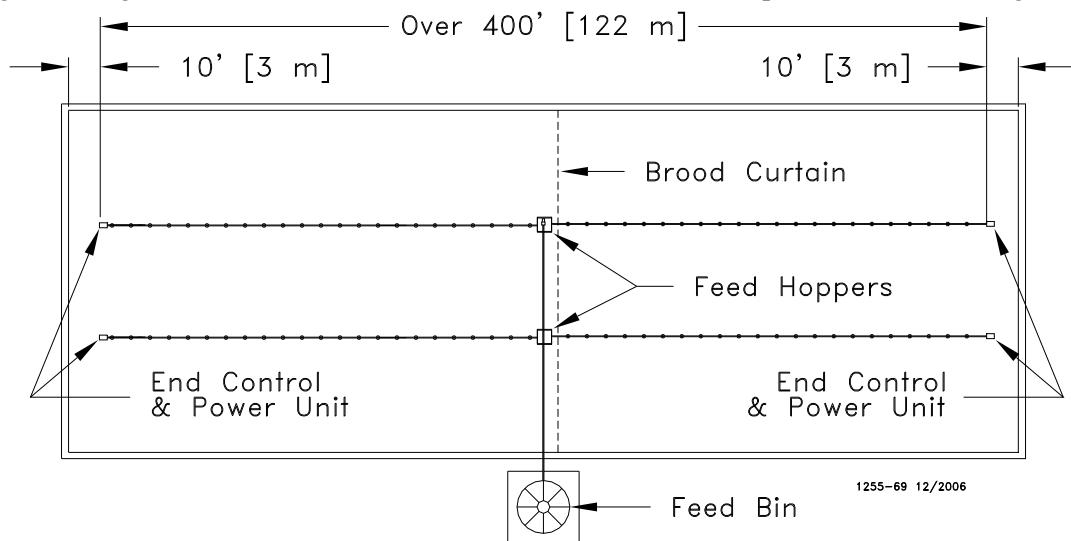


Figure 2. Component location diagram for systems over 400 feet [122 m]. (Top View).

2. Determine the feed bin location.
3. Determine the brood curtain location.
4. Determine the location for the end control pans. **The feeder control pans should be at least 10' /3 m/ from the wall or brood curtain.**
5. Determine the distance to the feeder line from the side wall.
6. Determine the distance from the feed hoppers to the end wall for a straight line feeding system.

Suspension System

The feeder line suspension system is a vital part of your feeding system. Proper planning and installation is necessary to insure proper operation of the system. Use the chart below as a reference guide for determining support load requirements for your system.

Component	Weigh in pounds (kg)
Tube, Auger, Feeders, & Feed	9 lbs./ft (13.4 kg./m)
Power Unit & Control Unit Assembly	50 lbs. (22.6 kg)
150 lb. Feed Hopper & Feed	180 lbs. (81.6 kg)
Power Winch	40 lbs. (18.1 kg)

The type of installation required depends on feeder line length. **Figure 3.** shows the suspension system for feeder line lengths to 350' (107 m). **Figure 3** shows the suspension system for feeder lines over 350' (107 m).

IMPORTANT: Notice that the feeder line **MUST BE SUPPORTED WITHIN 3 FEET (1 M) OF THE MOTOR ON THE CONTROL UNIT.** When Steel Hoppers with center suspension are installed the feeder line **MUST BE SUPPORTED WITHIN 1 FOOT (300MM) OF THE HOPPER.** If the Control Unit does not come out directly under a truss, fasten a pulley to a 2x8 (50x200 mm) board or other fixture that will span 2 trusses supporting the Control Unit. See “Hopper Assembly Procedure” on page 16. for special plastic hopper suspension.

After determining the type of suspension system required, decide where the feeder line is to be installed. Mark a straight line on the ceiling or rafters the full length of the feeder line. Use a string, chalk line, or the winch cable, temporarily attached with staples, to mark the line. Center the line directly over where the feeder is to be installed.

The recommended distance between the drops is 8' (2.4 m) on center. Do not exceed 10' (3 m) spacing on drop lines.

If the distance raised is greater than the distance between the drop spacings, offset the hooks 3" (75 mm) to each side of the line to prevent the cable clamps from catching the pulleys, see **figure 3**.

For installations using wood trusses, standard screw hook or the optional ceiling hook may be used to hold the pulley assemblies.

For installations using steel trusses, the ceiling hooks are available to hold the pulley assemblies.

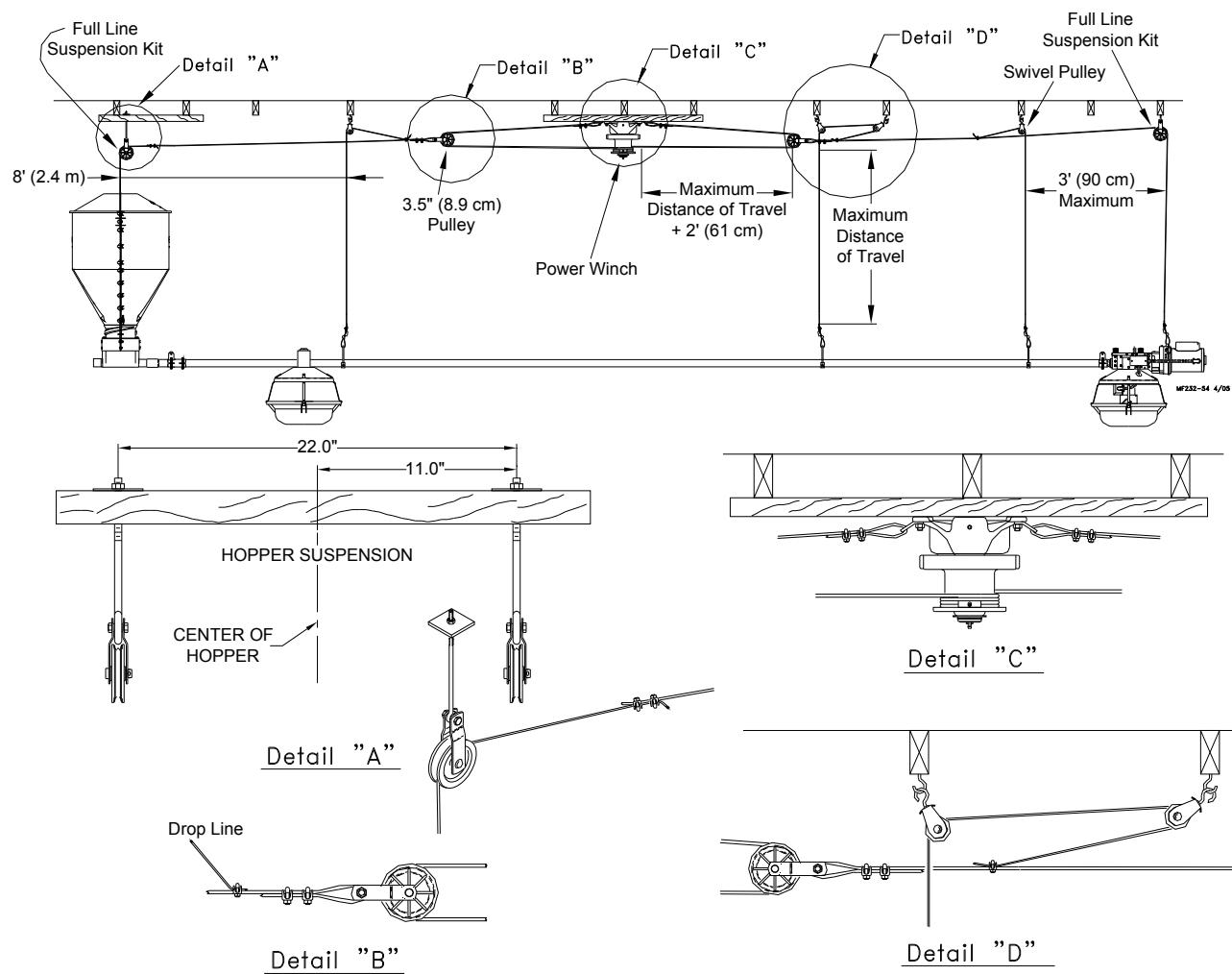


Figure 3. For Systems over 350' (107 m)

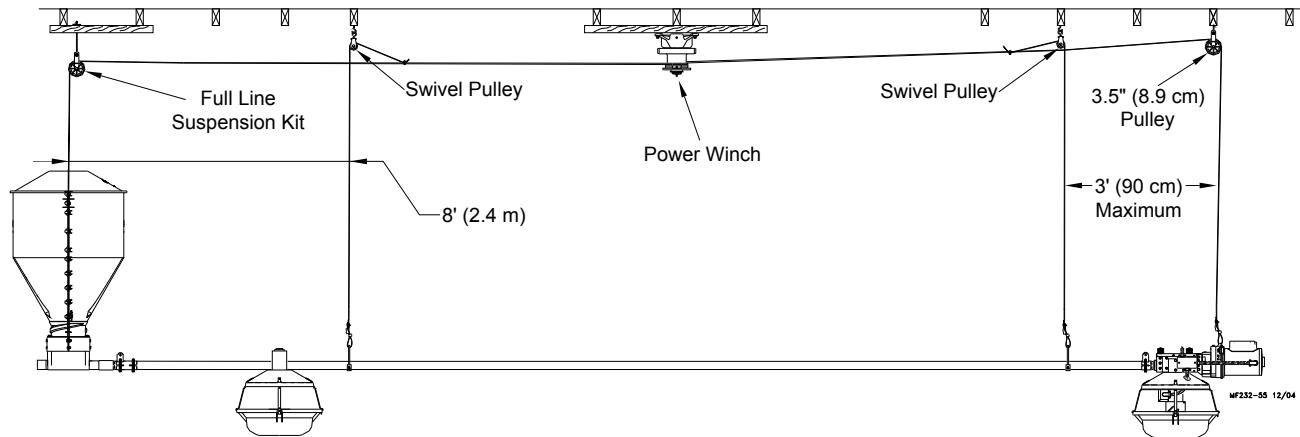


Figure 4. For Systems up to 350' (107 m)

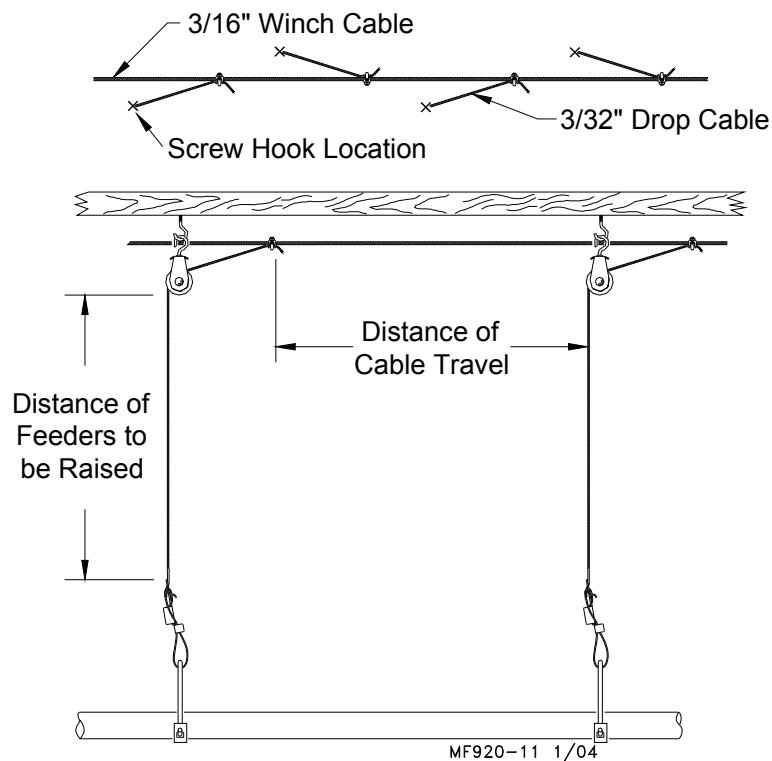


Figure 5. Suspension System with Offsets

Screw Hook Installation

Screw the hook into the truss the full length of the threads to prevent bending. The openings of the screw hooks must be pointed away from the direction of travel when the power winch raises the feeder line, **see figure 6.**

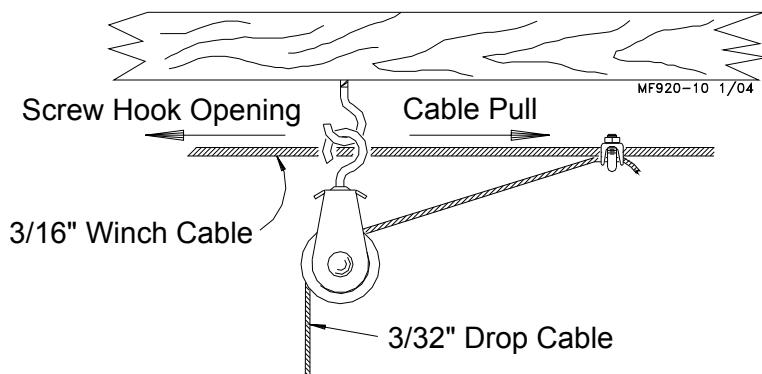


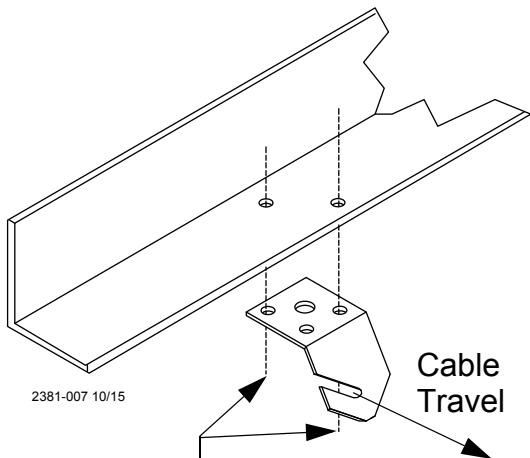
Figure 6. Screw Hook Installation

Ceiling Hook Installation

The ceiling hook may be used in a variety of installations. Depending on your individual situation, install the ceiling hooks as shown in **Figures 7-11.**

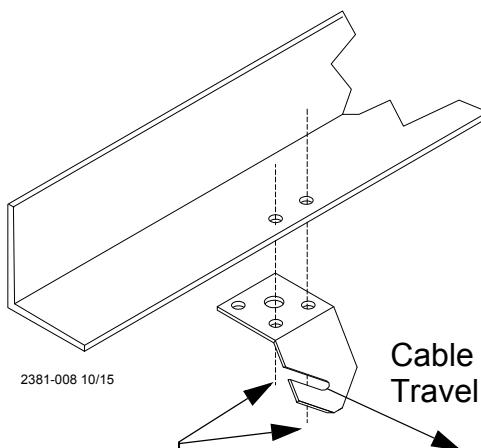
After securing the ceiling hook to the truss, slide the hook of a swivel pulley into the slot, as shown in **Figure 6.**

Steel Truss Installations



Secure Ceiling Hook to Truss
using self-drilling Screws
through opposite holes.

Figure 7. Wide Steel Truss Installations



Secure Ceiling Hook to Truss
using self-drilling Screws
through side by side holes.

Figure 8. Narrow Steel Truss Installations

Steel Truss Welded Installations

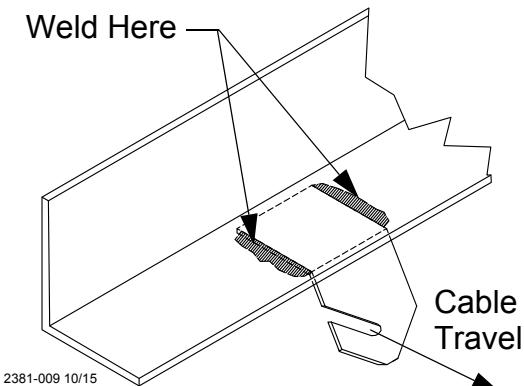
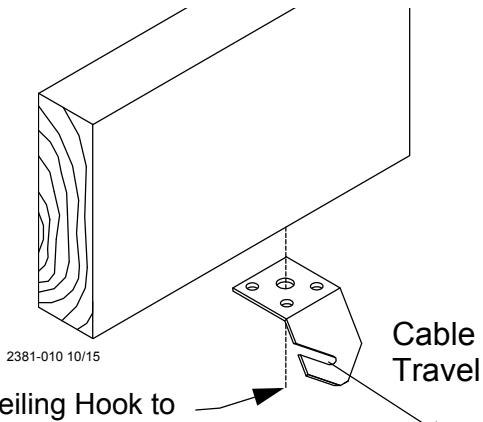


Figure 9. Welded Steel Truss Ceiling Bracket

Wood Truss Installations



Secure Ceiling Hook to
Truss using 1/4-20 Lag Bolt
through large Center Hole

Figure 11. Swivel Pulley Installation

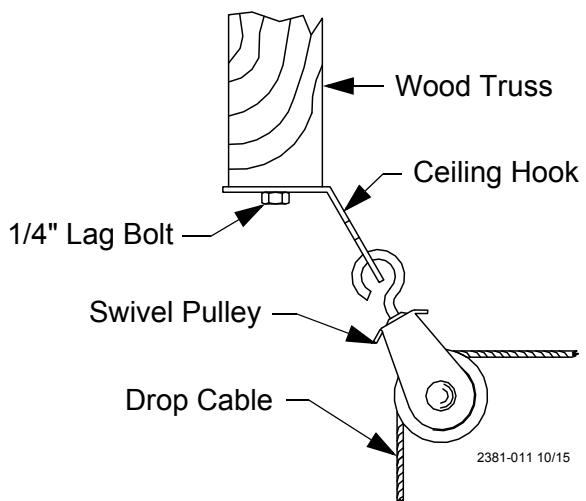


Figure 10. Swivel Pulley Installation

Power Winch Installation

1. Bolt the power winch, fully assembled, to a 2 x 8" (50 x 200 mm) board or other fixture that will span at least 3 rafters. The brake mechanism will protrude on one side.
For feeder lines over 350 feet (106 m), install a 2985 cable hook between the mounting bolt and power winch frame, as shown in **Figure 12**.
2. Attach the 2 x 8" (50 x 200 mm) board, with the power winch secured, to the ceiling at the center of the feeder line. The 2 x 8" (50 x 200 mm) or other fixture must be parallel to the line and must span at least 3 rafters or other fixture.
If the hopper is located at the center of the feeder line, locate the power winch a few feet offset from the center of the feeder line.
3. Extend the 3/16" (5 mm) cable the full length of the feeder line. Attach the cable temporarily to the ceiling with nails, staples, or some type of fastener.

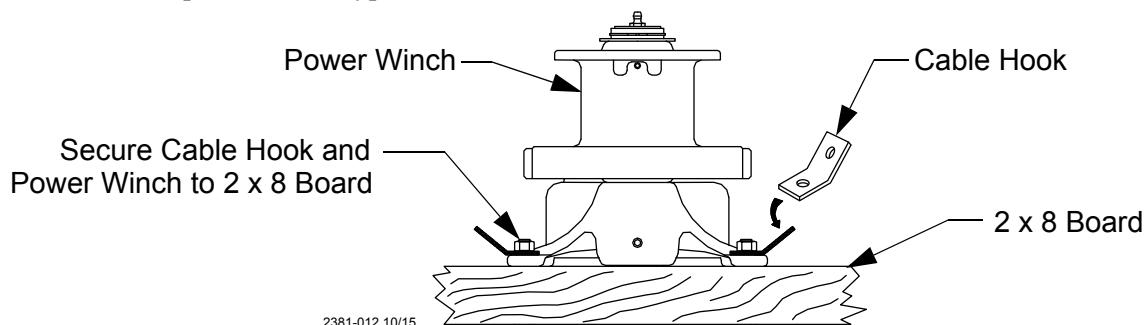


Figure 12. Swivel Pulley Installation

4. Wrap the cable through the winch drum relief located near the bottom of the drum. Tighten the set screw to anchor the cable to the drum, see **figure 13**.
5. Turn the winch drum one full revolution. Guide the cable against the flange at the bottom of the winch drum. The cable must not wrap over itself on the drum, but should be wrapped as close as possible to each previous wrap, see **figure 13**.

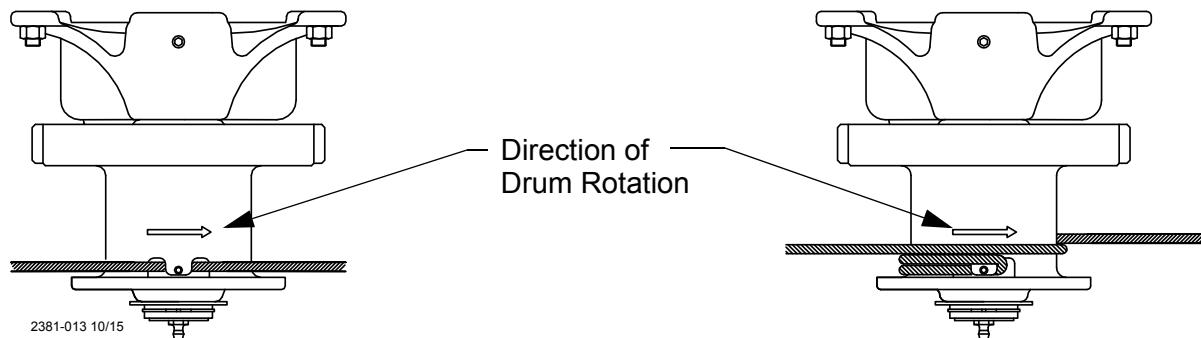


Figure 13. Cable Installation & Wrap

Drop Installation

1. Attach a 3004 Pulley to each hook.
2. Thread the end of the 3/32" cable through the pulley toward the winch. Clamp this end to the 3/16" winch cable about 6" (150 mm) from the pulley, using a 3/16" cable clamp, see **figure**.
3. Cut the cable long enough to allow for installation to the feeder line and to the adjustment leveler. Sufficient cable is included to provide "throwbacks" on drops located beneath and near the winch. See **Figure 3 (on page 11)**, Detail D shows a "throwback" cable arrangement.
4. Begin installing suspension drops at the winch and proceed to the ends of the feeder line. Keep the main cable tight between drops. It may be necessary to hang a weight on the end of the main cable to maintain tension.

Hopper Assembly Procedure

The 150 lb. Hopper Assembly is NOT designed for single-point suspension. The upper cross brace is designed for supporting the drop tube ONLY. This Hopper Assembly is to have Two-point suspension as stated.

Assembly

1. Assemble the 1/4-20 x 1-1/2" bolt to the brace with two 1/4-20 nuts. One nut should be assembled under the brace with the other on top. This bolt is to provide a place for the tube support assembly chain to be hooked, see figure 14.
2. Assemble the 150 lb. hopper halves and brace as shown in Figure 14., using #14 x 5/8" screws (supplied in hardware package).
3. Assemble the #8 x 1/2" screws and chain as shown in Figure 14.

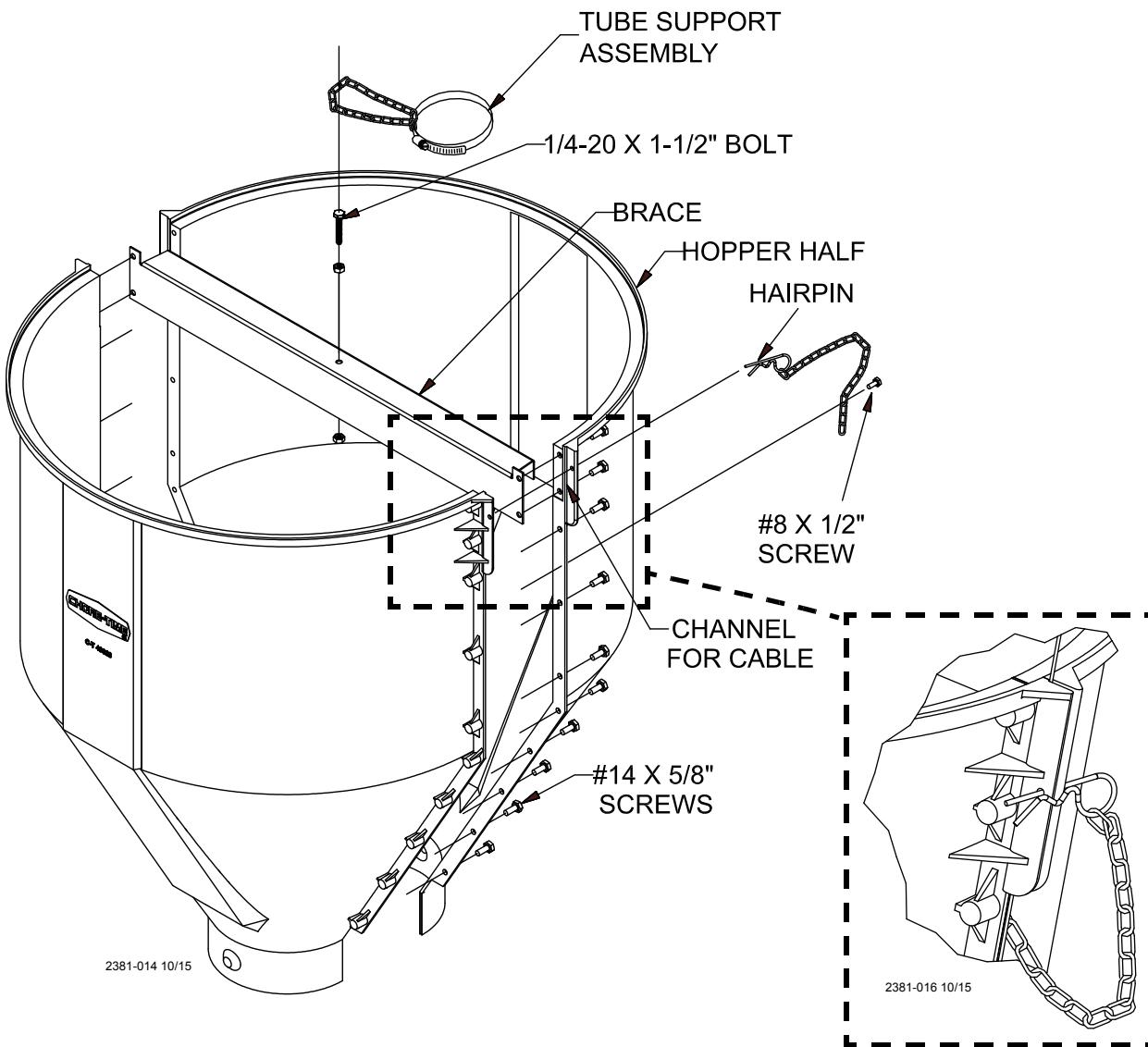


Figure 14.Hopper Assembly (Top)

4. Assemble suspension angles and suspension braces around feeder line boot (single or twin), using 1/4-20 x 1/2" Hex bolts and nuts (supplied in hardware package), see **figure 15**.

Note: The larger holes on the ends of the suspension angles need to be on the upper side of the assembly.

5. Assemble the twist lock collar to the top of the feeder line boot (single or twin) using 1/4-20 x 1/2" bolts and lock nuts (supplied in hardware package), see **figure 15**.
6. Assemble the adjustment brackets to the suspension angles with 5/16-18 x 3/4" bolts and nuts (supplied in hardware package).
7. Two cable assemblies (cable with a sleeve clamp and a 5/32 thimble) are supplied with the suspension kit to support the hopper. Attach the cable assemblies to the adjustment brackets using the top holes of the adjustment brackets, see **figure 15**.

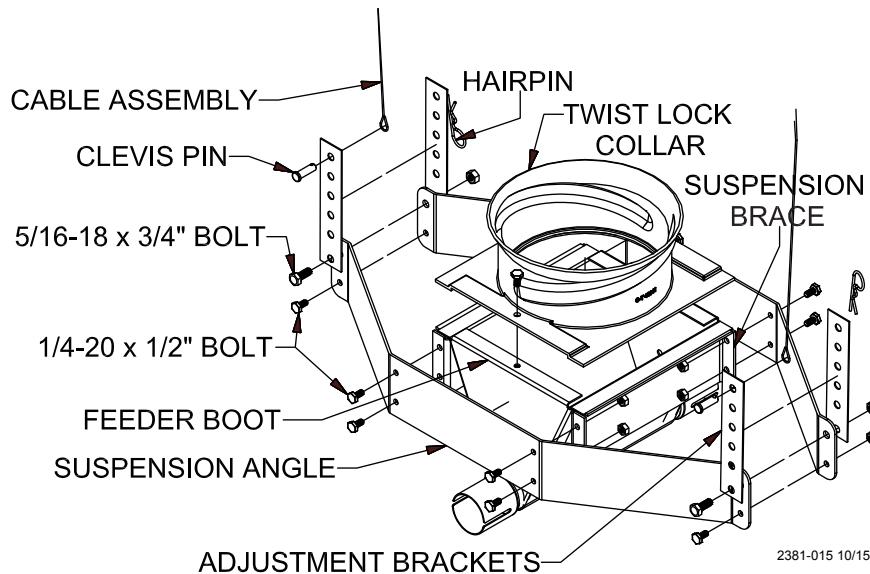


Figure 15.Hopper Assembly (Bottom)

8. Install two pulleys to either a 2" x 8" [50x200 mm] board that will span at least 3 rafters or a 3/8" [9.5 mm] thick steel plate welded to two pieces of angle iron that are long enough to span at least 2 rafters. Install the pulleys directly above the feeder line where the hopper is to be located. The pulleys should be spaced 22" [559mm] apart (11" [279 mm] from the center of the hopper in both directions), see **figure 16**.

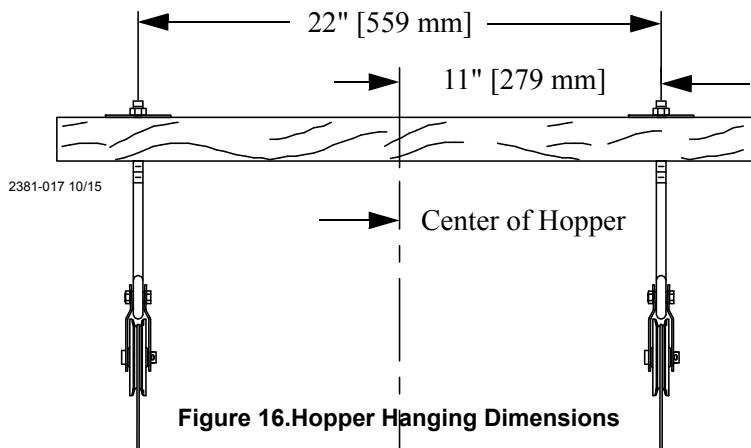


Figure 16.Hopper Hanging Dimensions

Suspend the Hopper

1. Attach the boot to the feeder line.
2. Route the two cable assemblies up and around the pulleys.
3. Level the boot with the feed line and clamp the cables to the main cable using 1 cable clamp per cable assembly.
4. Place the hopper on top of the twist lock collar and rotate the hopper 90 degrees into position.

Make sure the cables lay in the channels on the sides of the hopper for support then use the hairpin to contain the cable.

Feed Cone Assembly and Installation

MODEL ATF™ and MODEL ATF™ Feed Cones

5. Assemble the feed level cone and adjustment cone as shown, See **Figure 17**.

- To assemble the cones line up the threads on the feed level cone with the threads on the adjusting cone by inserting the adjusting cone into the feed level cone.
- Screw the (2) two parts together and adjust to feed level #3.

When assembling feed cones, DO NOT PUSH the parts together. Pushing the parts together could cause the threads to cross which will not allow the parts to lock in position.

When properly installed the cones WILL ONLY MOVE IF they are rotated to a different feed level.

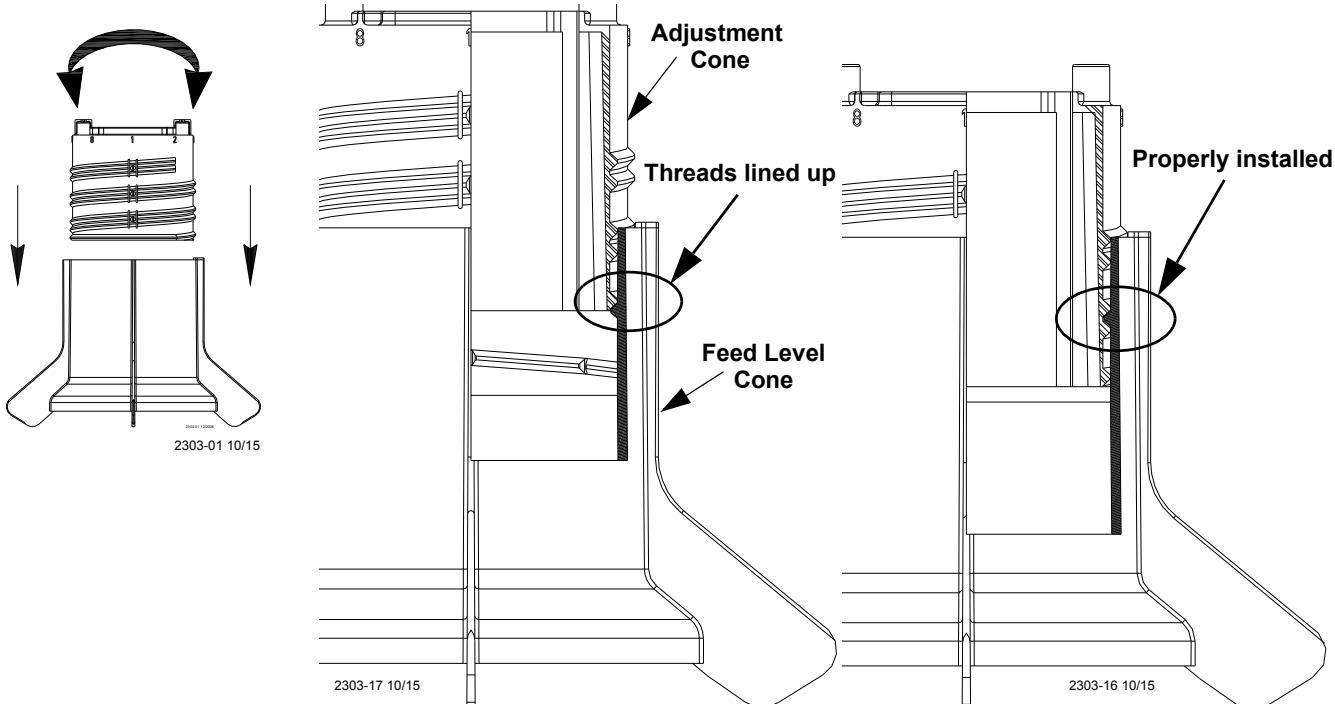


Figure 17. Cone Assembly

6. If the feed level cones are to be winch adjustable, install the cable assemblies at this point. If the feed level tubes are not to be winch-able - proceed to step 8.

Note: After the feeder operates, re-adjustment of the feed level tubes may be done to achieve the desired feed level.

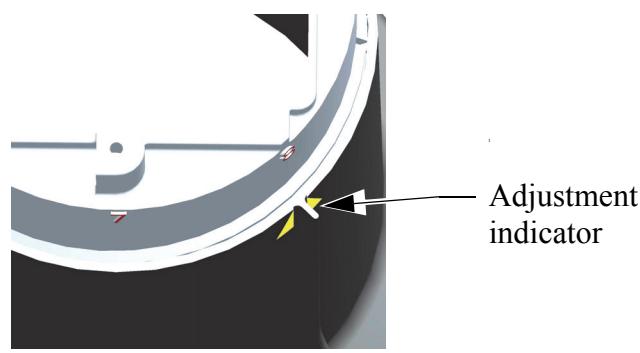


Figure 18. Adjustment Indicator

7. Install two cables at each Feed Level Tube as shown, **See Figure 19.** The cable assembly should snap into the top of the Feed Level Cone and needs to be pulled up tight against the inside.

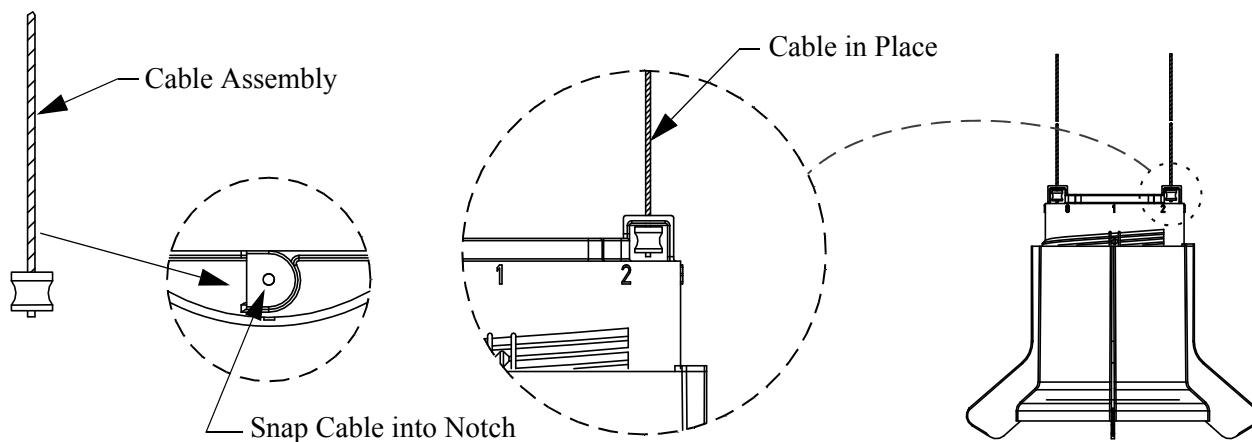


Figure 19.Cable Installation

8. Insert the Drop Tube into the Feed Cone assembly, **See Figure 20.**

9. Insert the Drop Tube and cone through the shield opening. Install the Pan Shield Supports in the slots of the Drop Tube. Route the cable through the openings in the Pan Shield.

10. With the bottom of the Pan up, Hook the swing down Pan Support. Then rotate the Pan down to hoop the remaining Pan Supports over the lip of the Pan.

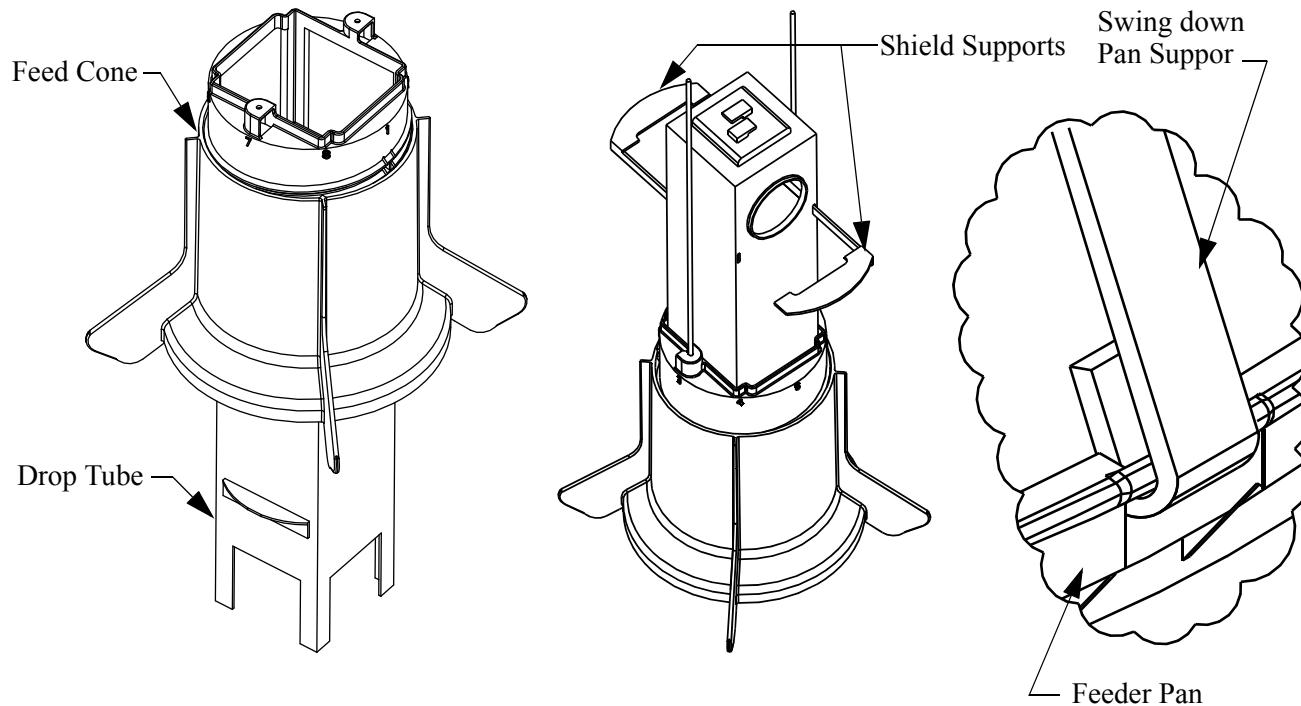


Figure 20.Drop Tube Installation

MODEL ATF™ Pan Support Assembly

MODEL ATF™ Feeding System

1. For NON Swing-Down Pans attach four Pan Supports (4199) to each Pan Shield (4192) with the Rivets (4200) supplied as shown in **Figure 21**.
2. For Swing Down applications attach one Swing Down Pan Support (24274) and three regular Pan Supports (4199) to the Pan Shield using Rivets supplied. Always attach the Swing Down Pan support at the same location on all Pan Shields. It will be necessary to support the Pan Shield while installing the Rivets. Use a hammer to drive Rivets as shown in **Figure 21**.

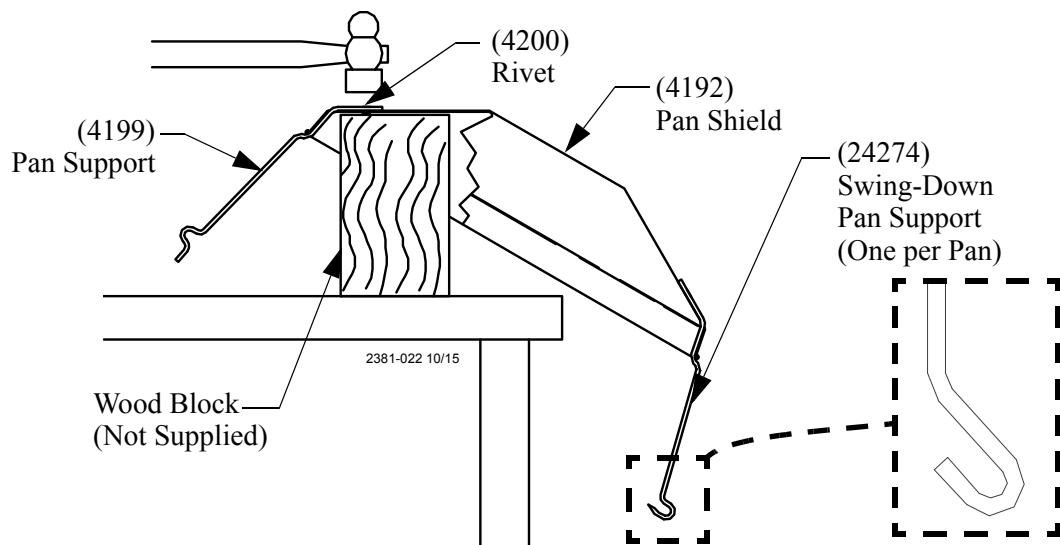


Figure 21.Pan Shield Assembly

3. Determine which feeder pan (Adult Turkey or Steel) is to be installed, see **figure 22**.

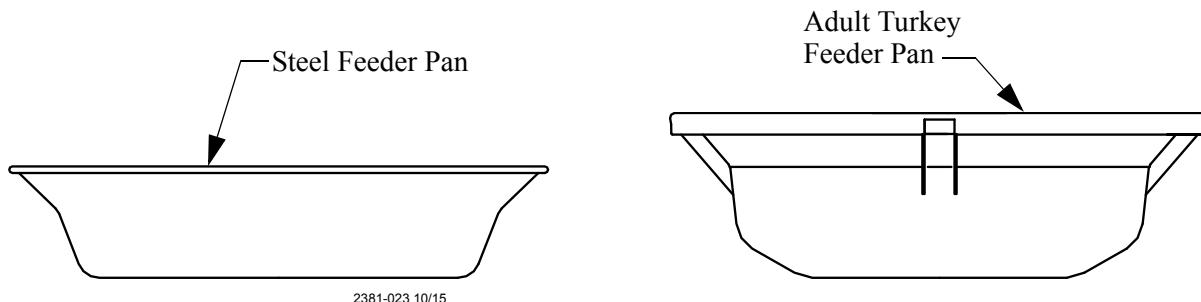


Figure 22.Feeder Pans

Model ATF™ Plus Pan Shield Assembly

1. For NON Swing-Down models attach four Pan Supports (49171) to the Pan Shield (49137) using four Carriage Bolts (22692) and Lock Nuts (1269).
2. On Swing-Down Models, attach one Swing-Down Strut (49172).

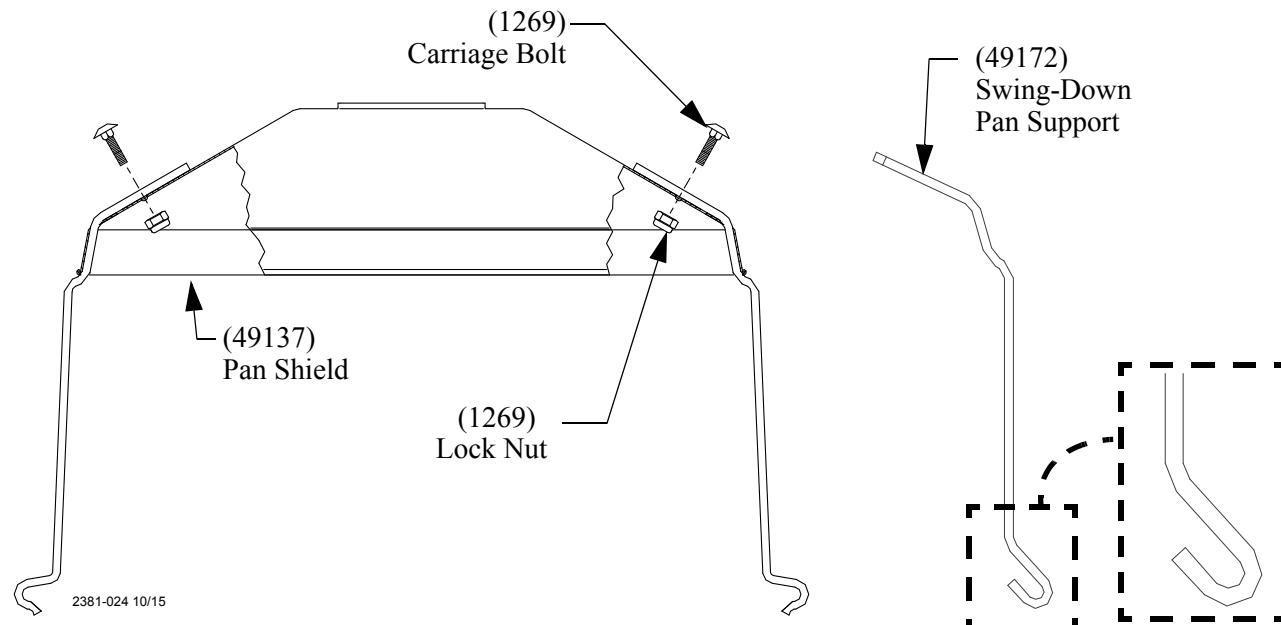


Figure 23.Pan Shield Assembly

3. Determine which Feeder Pan (Adult Turkey or Steel) is to be installed, see **figure 24**.

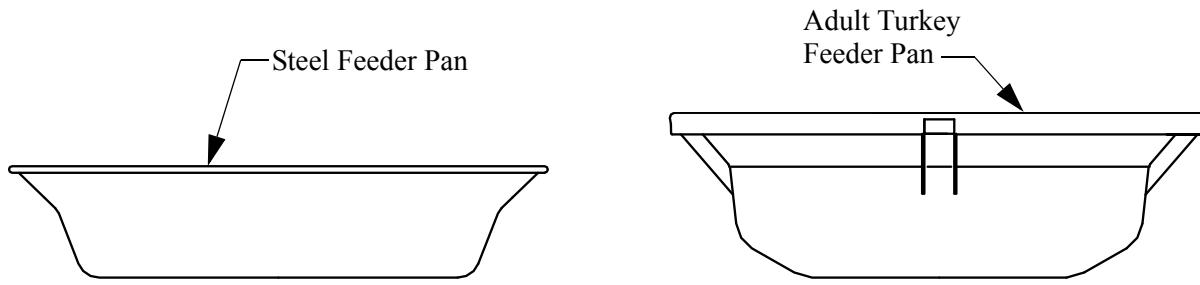


Figure 24.Feeder Pans

Metal feed cone assembly

4. Attach the Feed Level Tube (4194) to the Feed Level Ring (29320) as shown in (See Figure 25.)
- Note the direction of the arrow on the side of the Feed Level Tube.
 - Position the Feed Level Ring in the third hole from the bottom for adult turkeys.
 - If the feed level tubes are to be winch adjustable, install the cable assemblies at this point (See Figure 26.) If the feed level tubes are not to be winch able, proceed to step 5.

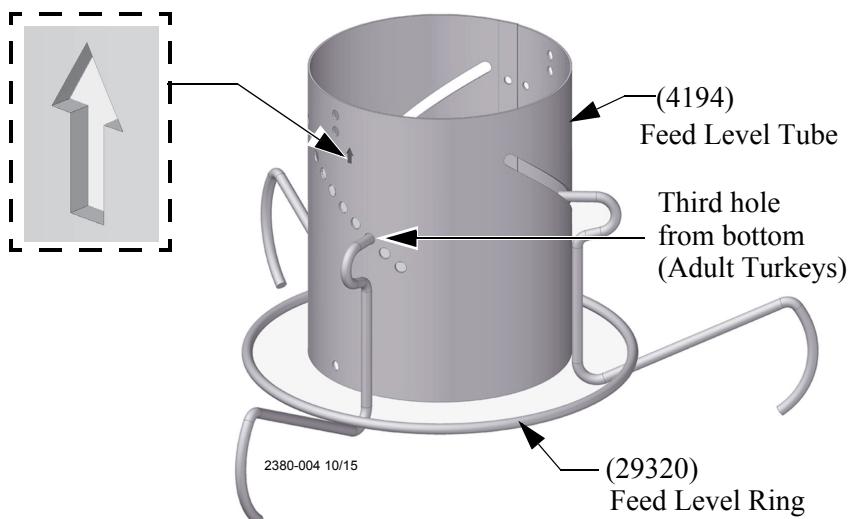


Figure 25.Feed Level Tube and Ring

Note: After the Feeder operates, re-adjustment of the feed level tubes may be done to achieve the desired feed level.

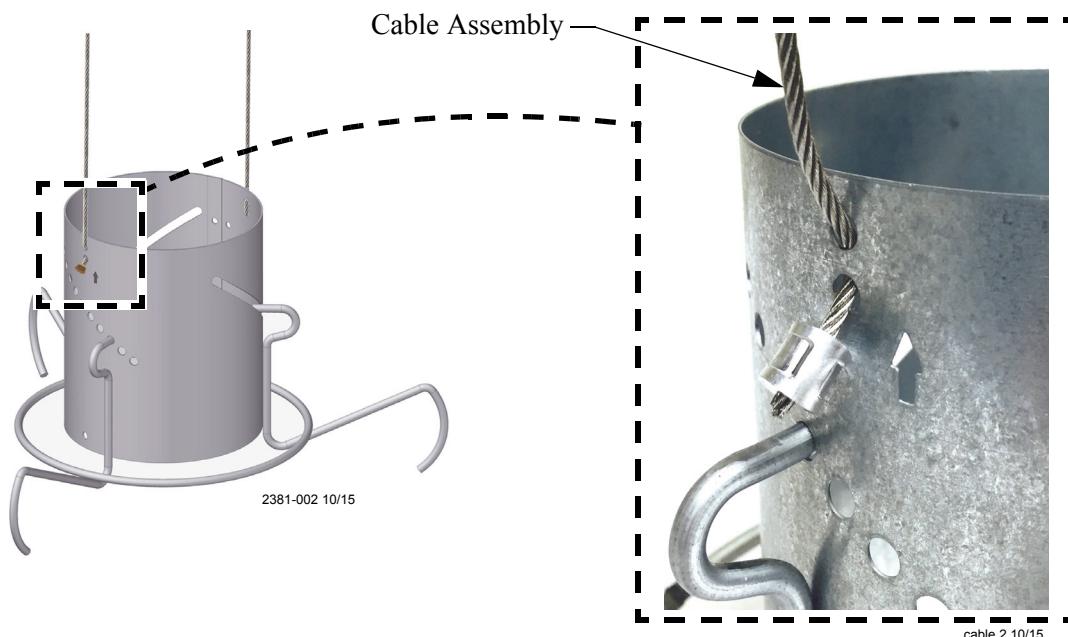


Figure 26.Attaching Cable Assemblies

5. Insert drop tube into feed level tube assembly, see **figure 27**. Install the pan shield supports in the slots in the drop tube.
6. With the bottom of the pan up, hook the swing down pan support. Then rotate the pan down to hook the remaining pan supports over the lip of the pan.
Do not bend the pan supports during assembly.

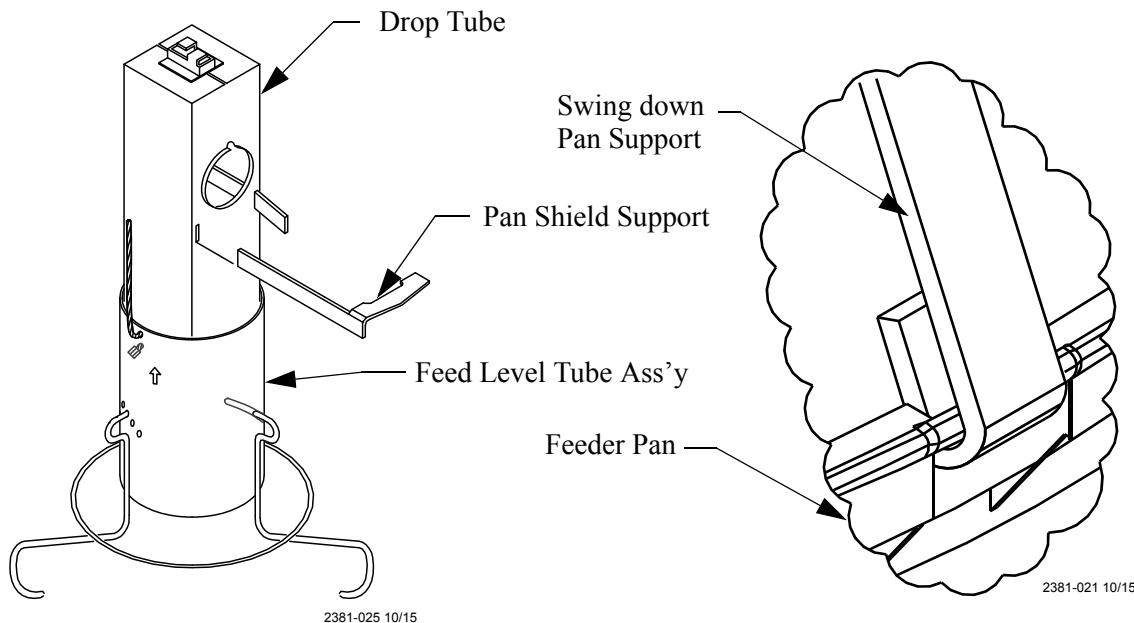


Figure 27. Drop Tube Installation

Feeder Line Assembly and Suspension

Feeder Tube Assembly

1. Slide one pan assembly onto the feeder tube for each outlet hole. Lift the drop tube through the pan shield so the feeder tube can slide through the holes in the sides of the drop tube. Install the pan assemblies so all the swing down supports are on the same side to the feeder line.
2. Rotate the feeder tube so the tab at the outlet hole will pass through the notch in the drop tube. Rotate the tube 180 degrees to lock the pans in place, **see figure 28**. Make sure outlet holes are down.
3. Position the tubes with pans attached end to end in the approximate location where they will be suspended. **The belled ends of the tubes must point towards the hopper.**

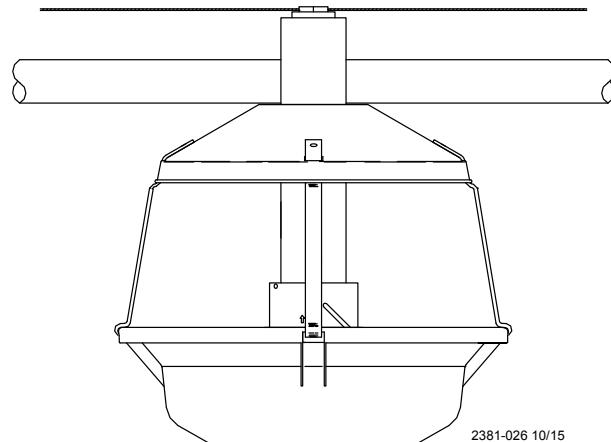


Figure 28. Install Feeders on Tubes

Feeder Line Installation

1. The tubes should be laying end to end in approximately the final location of the line. The expanded (belled) end of each tube should be toward the hopper end to the line, **see figure 3**.
2. Connect the individual feeder tubes together by inserting the straight end of the tube as far as possible into the belled end of the next tube.

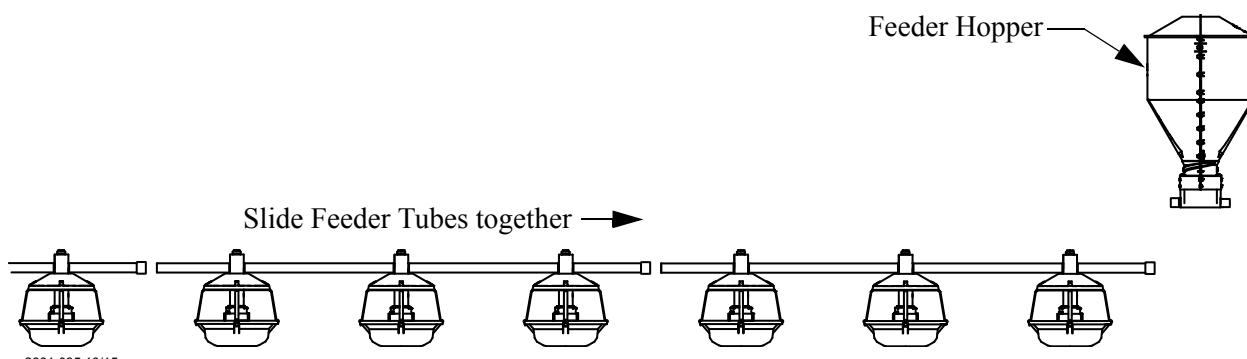


Figure 29. Feeder Line Assembly Procedure

3. Place a tube clamp assembly or clamp/anti-roost bracket at each joint. **Figure 30** shows the standard clamp and clamp/anti-roost bracket. Make sure each tube fits as far as possible into the belled end of the next tube. the outlet holes **must point down**. Install tube clamps as shown in **Figure 31**.
4. Begin at the hopper end of the line. Use a tube clamp with an anti-roost bracket to attach the hopper to the first tube. Use a tube clamp (w/o insulator) at the next joint between the first and second feeder tubes. Continue down the line clamping the tubes together. Use a tube clamp with anti-roost bracket at the end of the line. This should give a tube clamp with anti-roost bracket at each end of the line and at 20 foot (6 m) intervals along the length of the line.
5. If the optional mid-line control unit is used, install it at the desired location. See “Mid-Line Control Units” on page 28.

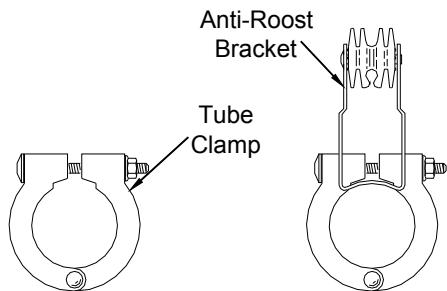


Figure 30. Tube Clamp and Anti-Roost Bracket

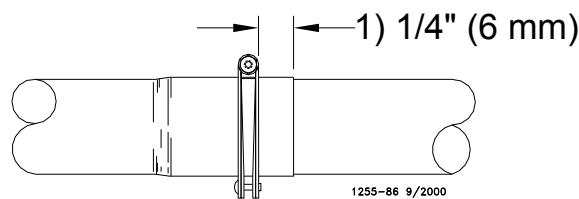


Figure 31. Tube Joint Connection

6. Install the hangers on the tubes on 8' (2.4 m) spacings determined by the suspension drop lines. **Figure 32** shows the proper installation of the hanger assembly. Make sure the outlet drop hole is down when the hangers are installed, otherwise feed will not be allowed to drop into the feeder pan.
7. Install the adjustment leveler within 6" (152 mm) of feeder line hanger. **Figure 32** shows the proper cable routing around the adjustment leveler.
8. Following installation of all drops, check drop cables before raising feeder line. Cable must be on all pulleys before raising the feeder line.
9. Raise the feeder line to a convenient working height.
10. After the feeder line has been suspended, level the system to the bird walking surface.
11. Before tightening each clamp;
 - make sure each tube is level (not sagging, sloping, etc.)
 - make sure the straight end to the tube is fully inserted in the belled end of the next tube.
 - make sure clamp is located, as shown in **Figure 31**.
12. Finally, tighten the tube clamps on the feeder tubes. Clamp the joints securely, **but do not crush the tubes**.

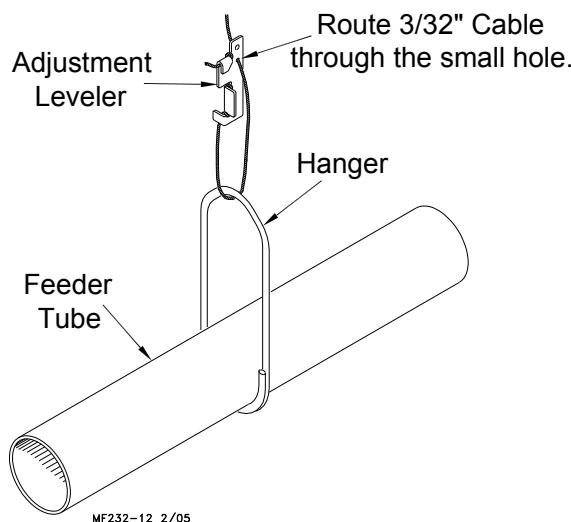
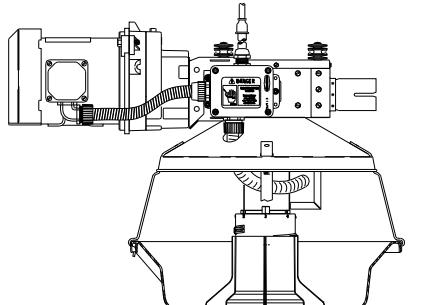


Figure 32. Adjustment Leveler and Hanger Installation.

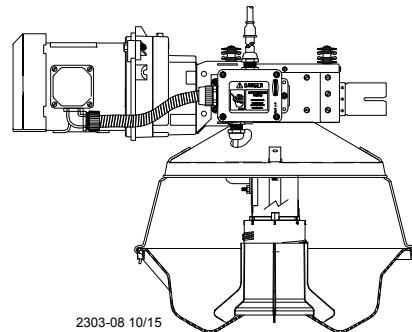
Control Unit Installation

End Control Units

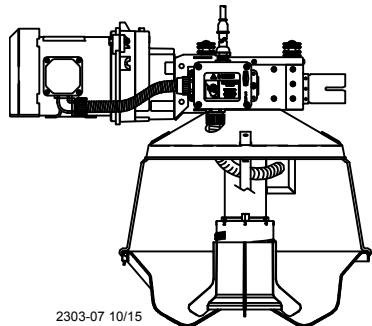
The assembly instructions are very similar for the ATF™ and ATF™ PLUS controls. The primary differences between the controls are in the electrical components and protection devices.



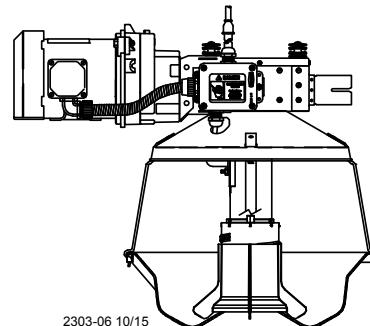
50355 ATF™ Control Pan Mechanical



55531 ATF™ Control Pan with sensor



50358 ATF™ PLUS Control Pan



55535 ATF™ PLUS Control Pan with sensor

Figure 33. Control Units

1. Remove the four 5/16-18 x 5/8" bolts from the parts package and use them to bolt the anchor plate to the power unit. Install the anchor plate with the angled end pointing down, see **figure 34**.
2. Bolt the control unit body assembly to the power unit, using hardware supplied, see **figure 34**.

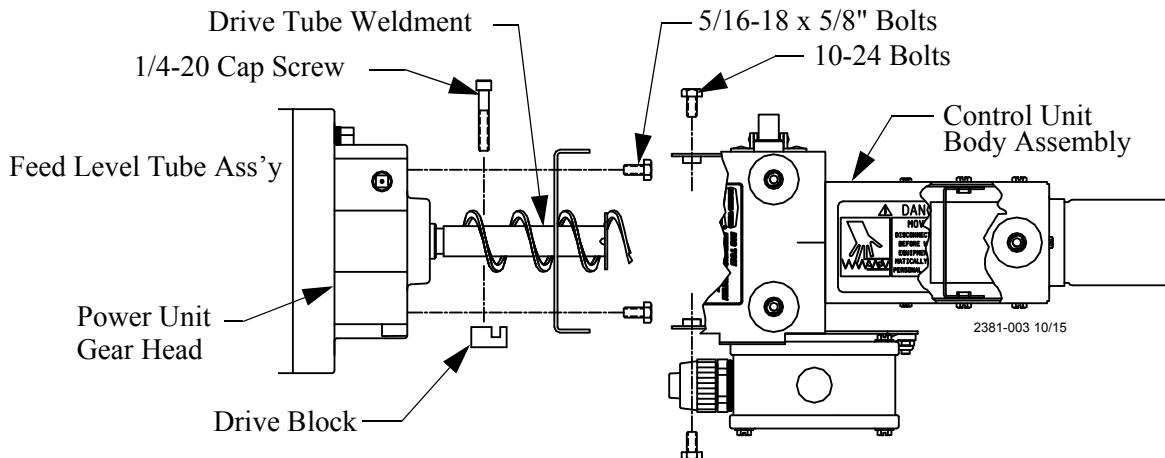
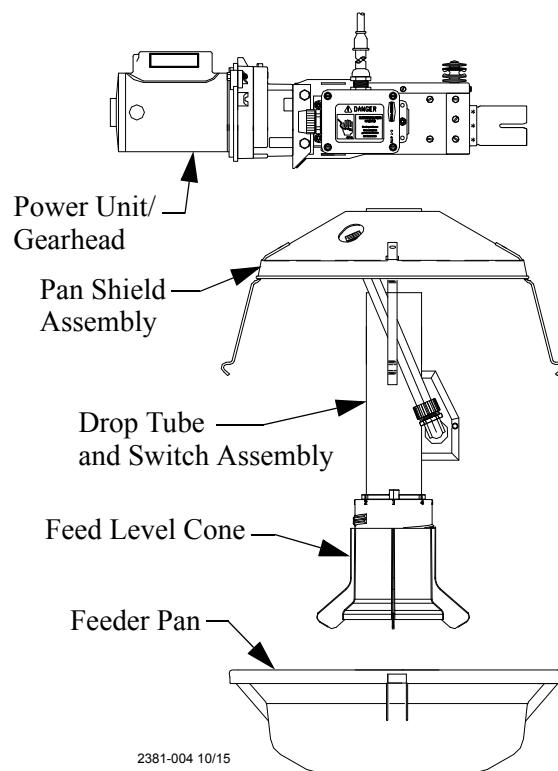


Figure 34. Control Unit Installation

3. Attach the pan supports to the control unit shield. See “**MODEL ATF™ Pan Support Assembly**” on page 20 or See “**Model ATF™ Plus Pan Shield Assembly**” on page 21.
4. The feed level switch is factory adjusted. To check adjustment before assembling depress the switch paddle and listen for the switch to “click”. If the switch needs adjustment, See “**Mechanical Switch Adjustment procedure for Control Units**” on page 43.

5. Insert the drop tube and switch assembly through the pan shield from the bottom, **see figure 35**. The hole in the pan shield should be located on the same side of the drop tube as the switch cord and directly under the white box on the body assembly. Bolt the drop tube to the body assembly. The switch on the drop tube should be mounted opposite the power unit.



6. Single Phase: Install the 90 degree connector, flexible conduit, electrical wire, and conduit connector as shown in **Figure 36**.

Three Phase: Refer to applicable electrical standards for connecting power unit to control unit.
Components are not supplied by Chore-Time.

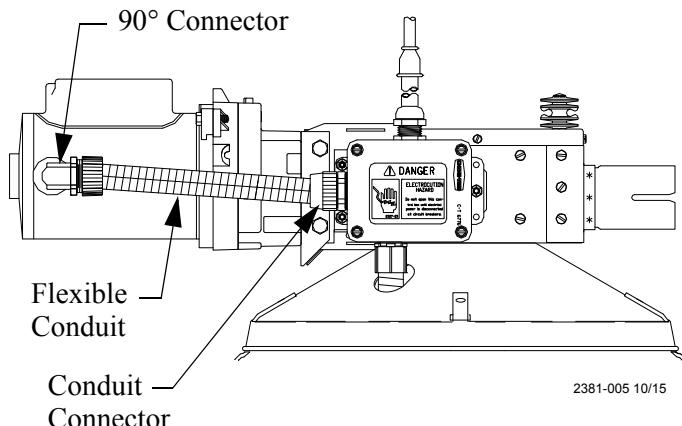


Figure 36. Conduit Installation

7. Insert the flex cable that is attached to the control switch through the hole in the control unit pan shield and attach the romex connector to the handy box, **see figure 37**.

8. DISCONNECT ELECTRICAL POWER PRIOR TO WIRING THE CONTROL UNIT.

Single phase control unit may be wired as shown, See “**Single Phase(Ø) Wiring Diagram**” on page 39
Three phase control unit must be wired as shown, See “**Three Phase(Ø) Wiring Diagram: 220/230 V.**” on page 40

Mount the control unit on the end of the feeder line and secure with a tube clamp. See **Figure 34 (on page 26)**. The distance between the control unit pan and the last pan should be 5' (1.5 m) or less.

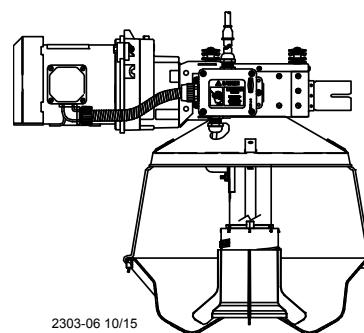
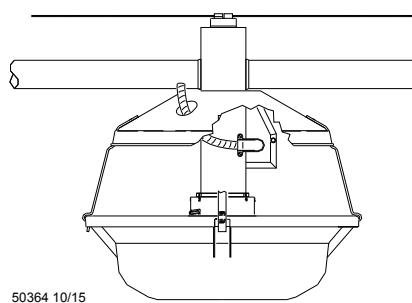
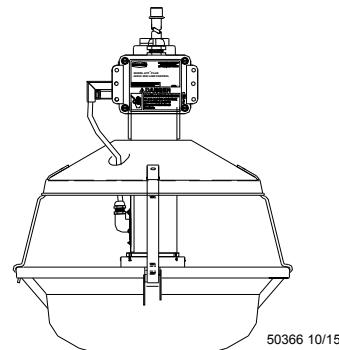


Figure 37. Switch Installation

Mid-Line Control Units



ATF control pan w/mechanical switch P/N 50364



ATF control pan w/sensor P/N 53020

Figure 38. Mid-Line Controls

The mid-line control makes it possible to operate the feeding system when birds are confined away from the end control unit. Chore-Time recommends placing the mid-line control feeder at least 2 pans away from the curtain or partition, see **figure 39**.

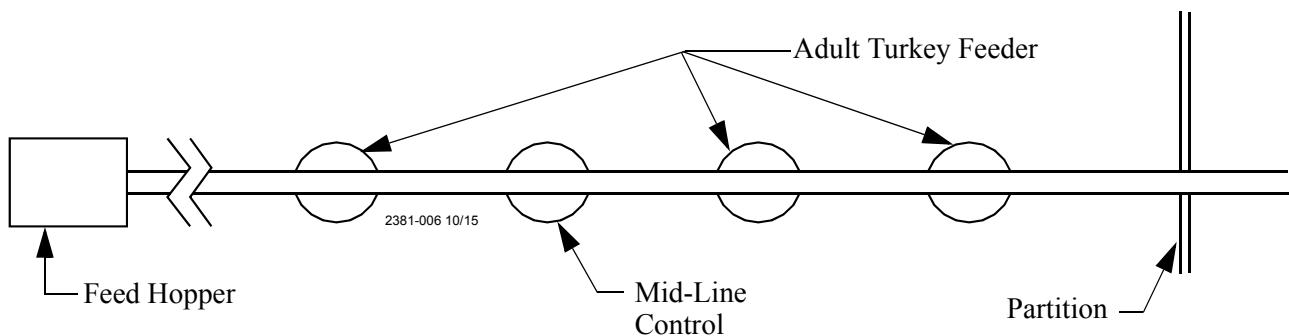


Figure 39. Mid-Line Control Installation

1. Determine which feeder tube and outlet hole will be used for the mid-line control. Slide a mid-line control into place on the tube. Make sure the mid-line control is installed so the switch is directly under the incoming supply of feed, see figure 40.

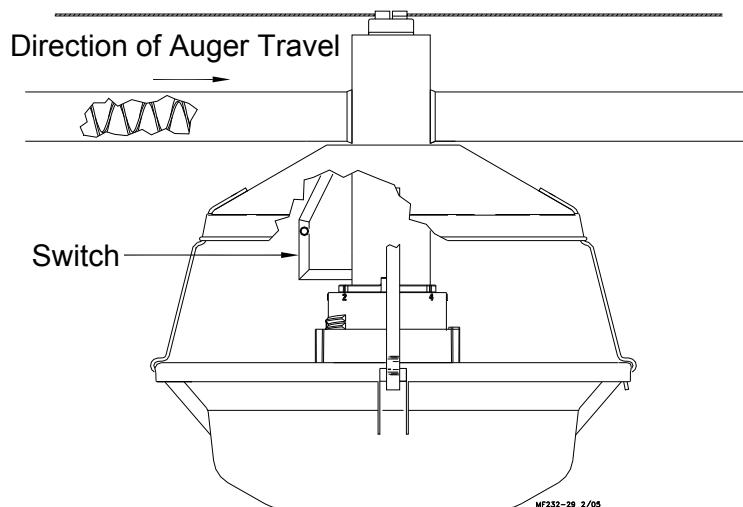


Figure 40. Orientation of Mid-Line Control Switch

2. Install the feed adjustment cone and feed level cone similar to the standard feeders. The mid-line control serves as the drop tube assembly.
If the feeders are to have the winch able feed level cones, install the necessary cables now. See "**Winch Adjustable Feed Level Cones**" on page 33
3. Install the feeder pan, pan shield and other miscellaneous components similar to the standard feeders.
4. The feed level switch is factory adjusted. To check adjustment before assembling depress the switch paddle and listen for the switch to "click". If the switch needs adjustment See "**Maintaining the Feeding System**" on page 42
5. Install a toggle switch out of the birds reach to disconnect power to the mid-line control. This allows the mid-line control to serve as a standard feeder when not used as a control feeder.
6. Wire the mid-line control as shown in the wiring diagram section of this manual. See "**Wiring Diagrams**" on page 39.

Mid-Line Control Operation

Chore-Time recommends having a toggle switch wired into the system to allow the feeder line to be changed from full house brooding to partial house brooding.

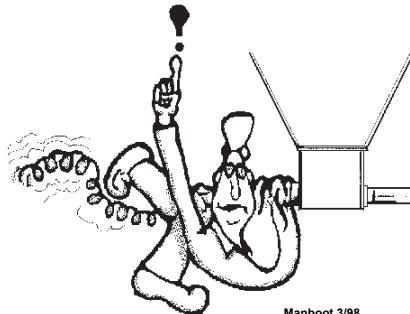
Maintain a lower feed level in the mid-line control than in the rest of the feeders. This will cause the mid-line control pan to operate more often, thereby starting the feeder line before the other pans become empty.

Do not hinder the bird movement around the mid-line control pan. Locate the curtain or partition several pans away from the mid-line control pan.

Provide adequate lighting so the birds will not shy away from the mid-line control area.

Auger Installation

Note: Use extreme caution when working with the auger. The auger is under tension and may spring causing personal injury. Wear protective clothing, gloves, and safety glasses when working with the auger.



BE CAREFUL WHEN WORKING WITH THE AUGER!

Be careful not to drop the rolled auger when handling to avoid kinking the auger. Inspect the auger carefully as it is installed. Small kinks may be straightened but large kinks must be removed and the auger brazed back together.

Cut the leading 18" (450 mm) and last 18" (450 mm) off each roll of auger. Also, cut out any other distorted auger sections and reconnect the auger as specified in “**Auger Brazing**” on page 32.



1. Remove the anchor & bearing assembly from the boot under the hopper.
2. Use extreme caution when pushing the auger into the auger tubes. Keep your hand away from the end of the auger tube to avoid injury.
 - With the auger coiled about 6' (1.8 m) from the end of the boot, feed the auger through the boot into the tubes.
 - Push the auger into the tube in short strokes.
 - Uncoil and handle the auger carefully to avoid damaging or kinking the auger.
3. If more than one coil is required for each feeder line the auger ends will have to be brazed together. Refer to “**Auger Brazing**” on page 32.
4. Continue installing auger until the auger reaches the control unit end of the feeder line.
5. Slide the drive tube and flat washer over the output shaft on the power unit, see **figure 41**.
6. Attach the auger to the output shaft of the power unit. Use the drive block to secure the auger to the output shaft.

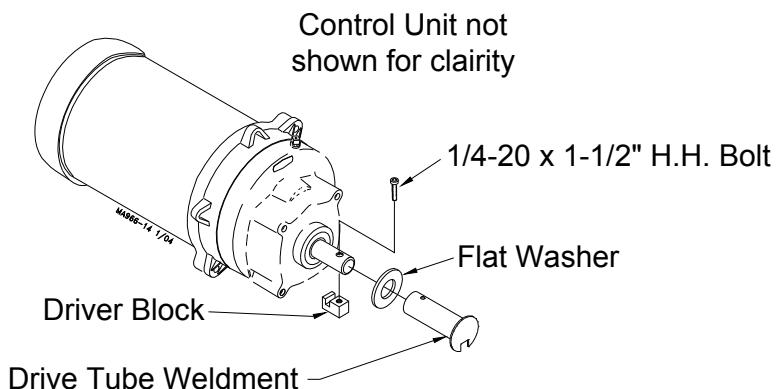


Figure 41. Auger Driver Components

7. Pull the auger at the boot end until it begins stretching then let it relax. In the relaxed position, mark the auger at the end of the boot. See **Figure 42**.

8. Auger stretch:

- The auger needs to be stretched 7" (180 mm) per 100' (30 m). Example: A 300' (90 m) feeder line requires 21" (500 mm) of stretch.
- Beginning at the relaxed position, measure the required amount of stretch. Mark the auger at that point.
- Grip the auger 8" (200 mm) ahead of this mark with locking pliers. Allow the auger to pull back into the boot so the pliers rest against the end of the boot,

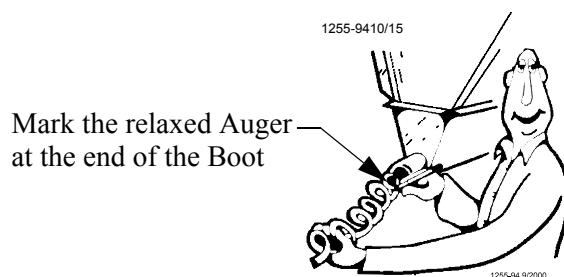


Figure 42. Marking the

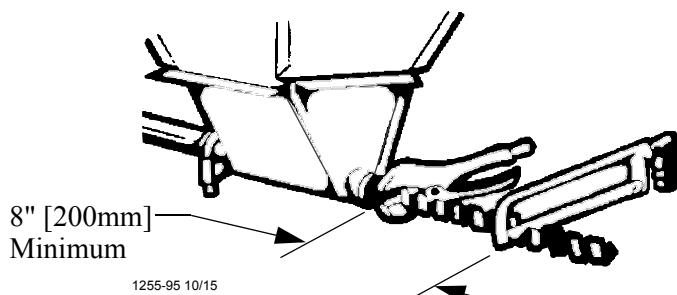


Figure 43. Cut the Auger with required stretch

9. Insert the anchor assembly into the auger, guide the tip of the auger between the two roll pins and continue to insert the auger until it touches the washer at the back of the anchor. Tighten the two screws in the center of the anchor.

10. Carefully remove the locking pliers while holding onto the anchor and bearing assembly and auger securely.

Slowly ease the auger back into the tube. Use caution.

If the auger is allowed to spring back, the bearing race may crack.

Install the bearing retainer and fasten with a tube clamp. Keep the bearing retainer flush with the end of the anchor for safety.

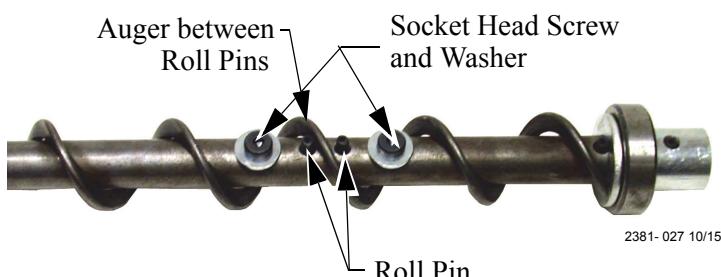
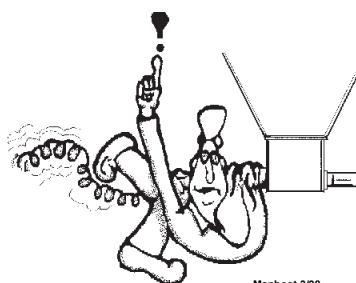


Figure 44.Auger Assembly

**BE CAREFUL WHEN WORKING
WITH THE AUGER!**



Auger Brazing

The Auger should be brazed if it is necessary to splice or lengthen it. A bronze, flux coated rod is recommended.

The ends of the Auger should butt against each other, **DO NOT THREAD INSIDE EACH OTHER**. See **Figure 45**. The joint should be well filled with no sharp edges or tough corners to ware against the tube. To align the Auger for brazing, lay it in 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.

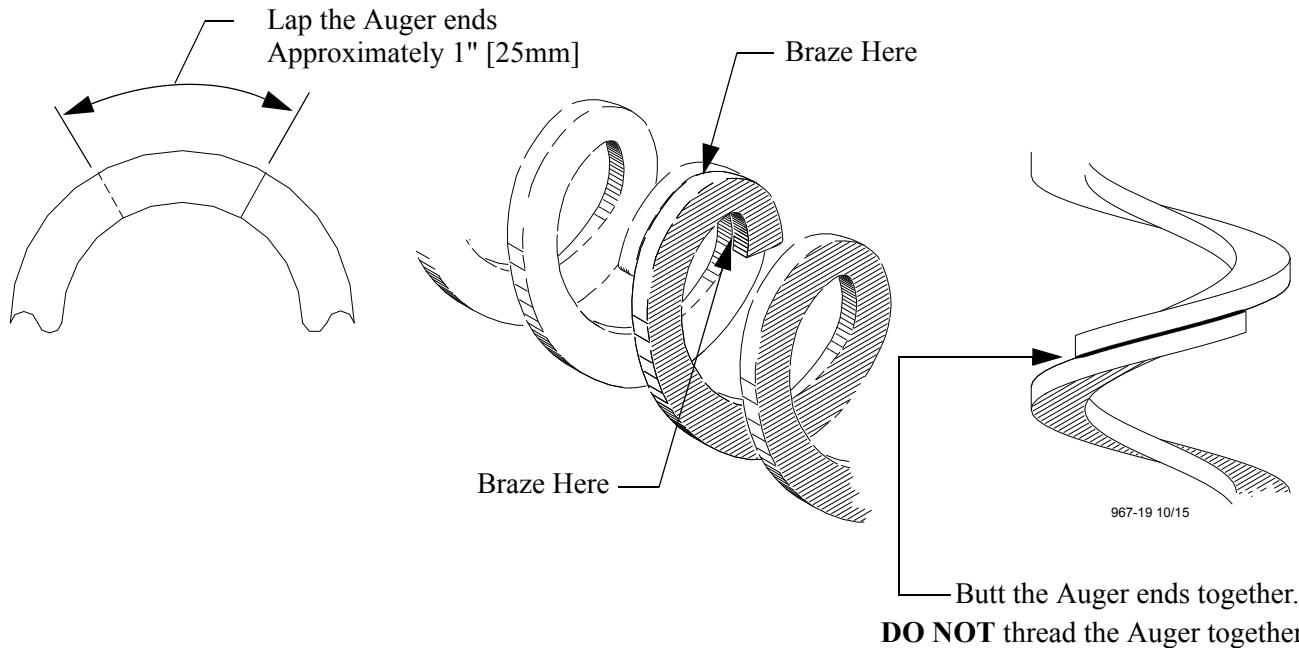


Figure 45. Auger Brazing

Winch Adjustable Feed Level Cones

Chore-Time's Adult Turkey Feeder can be equipped to provide winch adjustable Feed Level Cones. New systems can be ordered with this feature. Existing systems can be (easily) upgraded to include feed level cone winching components. The Feed Level Cones are adjusted using a Winch and cable. The maximum line length for each Winch is 200' [61 m]. The Winch should be located in the middle of the line of Feeders it is to adjust, See **Figure 46**. The Feed Level Cones are winched up to flood the Pans with feed to allow maximum access to the feed for young turkeys. As the birds grow the Feed Level Cones can be lowered to reduce the feed level.

Installation of the Winch Adjustable Feed Level System

1. Install a Spring at one end of the Feeder Line and attach the end of the Cable to it as shown in **Figure 46**.
2. Use two U-bolts provided to fasten the winch to the Feeder Line Tube, See **Figure 46**. The winch should be placed in the center of the line of Feed Level Cones it will adjust, as shown in **Figure 46**.
3. Feed the Cable through the Feeder Support Cones to the Actuator.

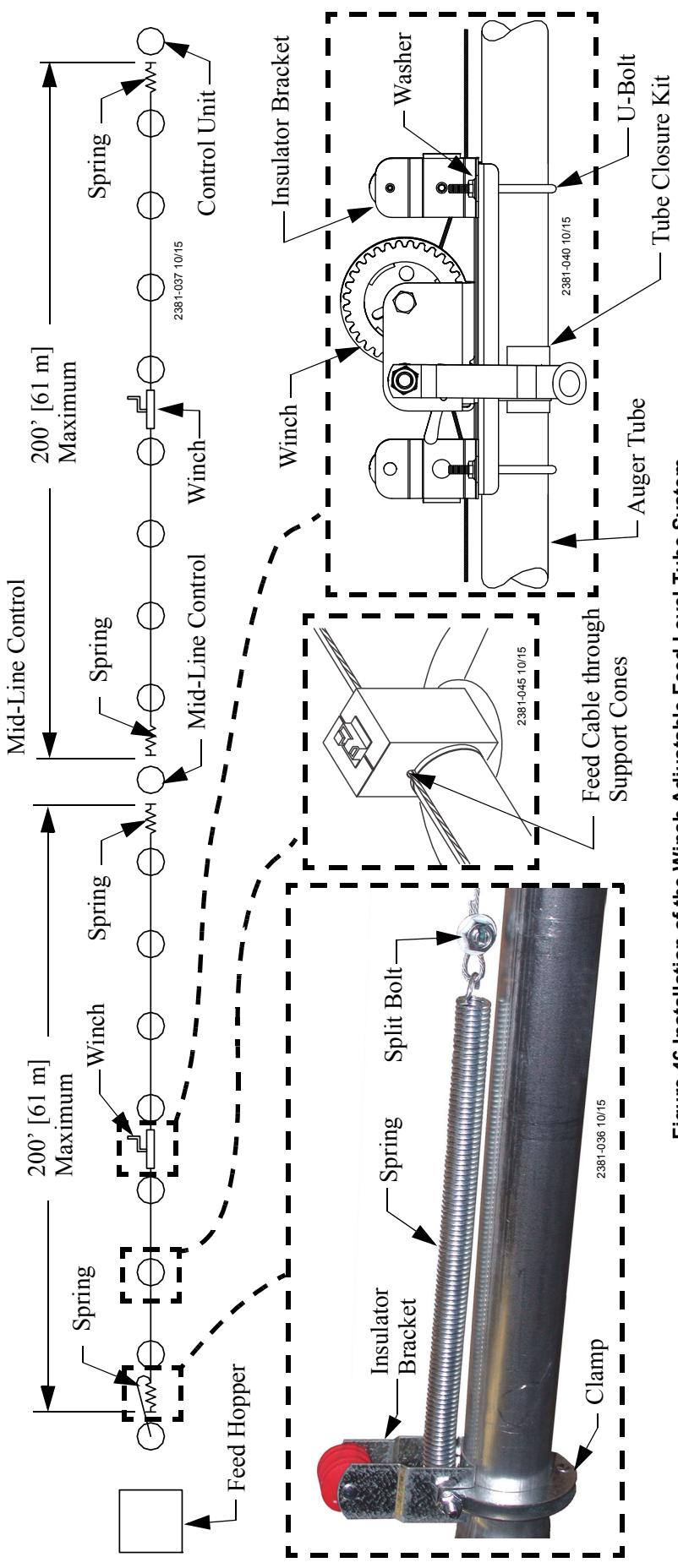


Figure 46. Installation of the Winch Adjustable Feed Level Tube System

4. Route the Cable through the Center Hub of the Winch as shown. See **Figure 47**.
5. With the Cable in place, install the Center Clamp and tighten Set Screws.
6. Route the Cable through the Feeder Support Cones to the end of the Feeder line.
7. Install a Spring and Insulator at the other end of the Feeder Line and fasten with a Split Bolt..

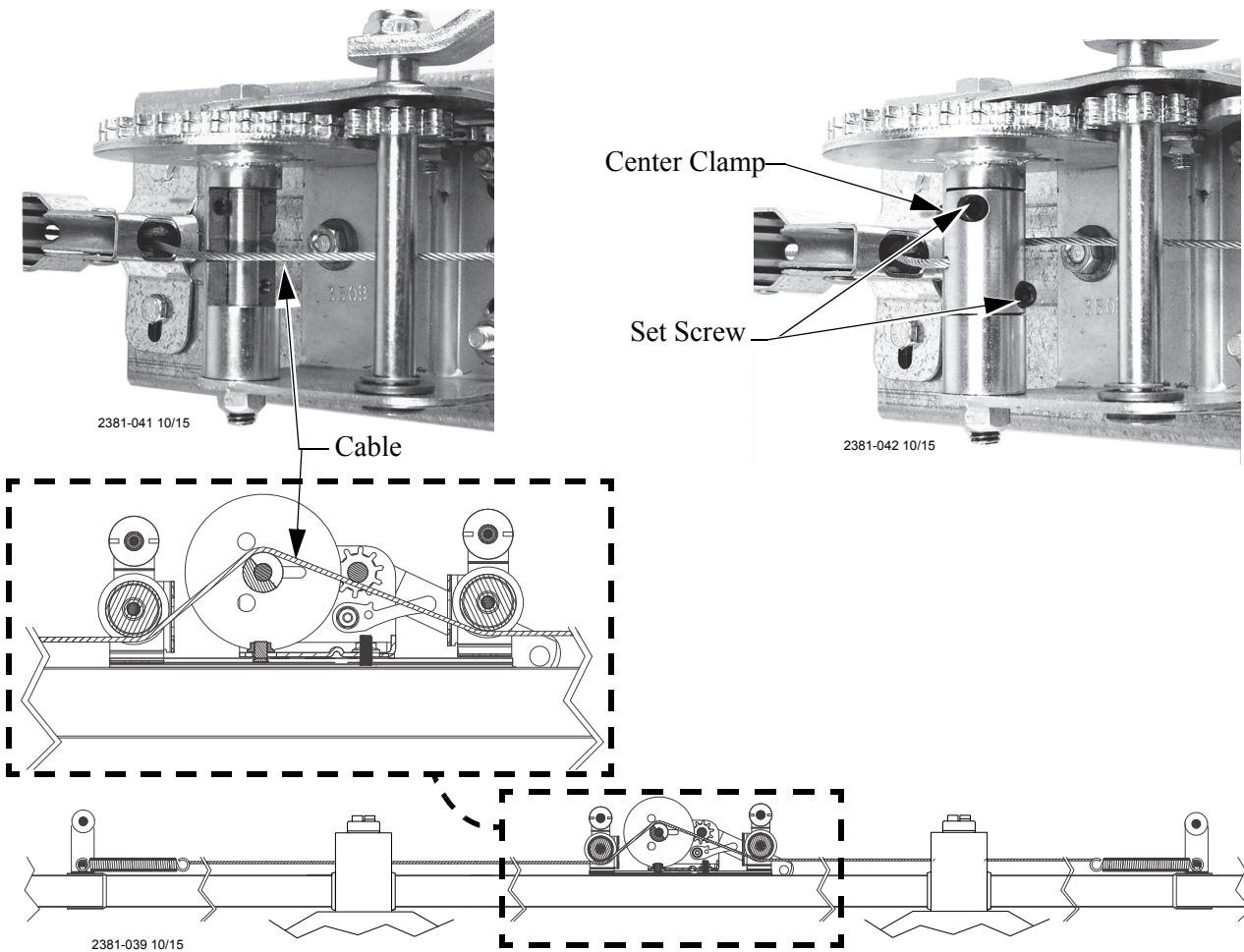


Figure 47.Cable Routing

8. Feed the Cable through the Feed Cones to the Spring at the other end of the Brooding area.
9. With the Winch Actuator set to the "A" position stretch the Spring approximately 1" [25mm] and fasten the Cable to the Spring with a Split Bolt.

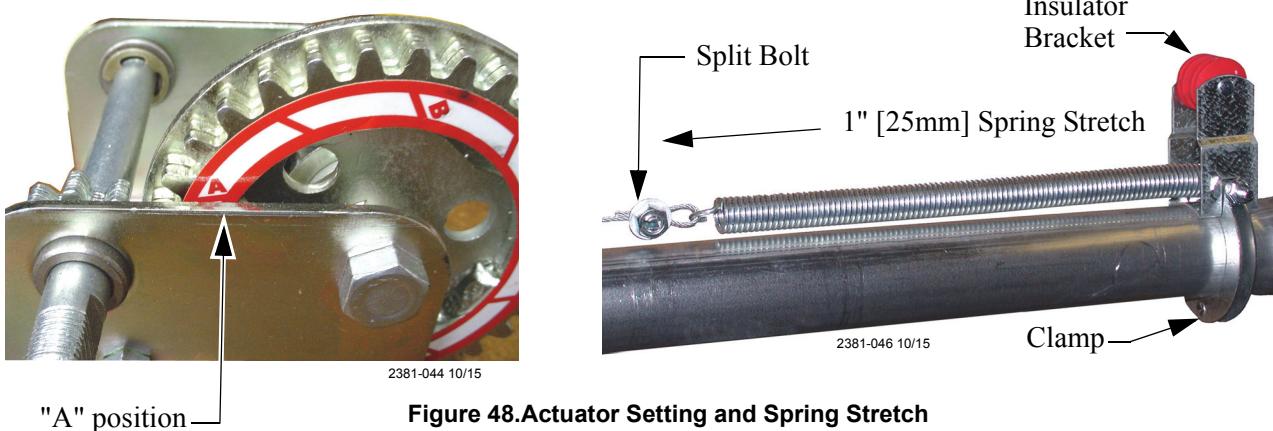


Figure 48.Actuator Setting and Spring Stretch

Attaching Feeder Cords

- With both end of the Cable securely anchored and Spring stretch set, run the Actuator up and down 2 to 3 times. Return the Actuator to A position.



- Install two cable assemblies at each feed level cone (if the cable assemblies have not yet been installed). See **Figure 26 (on page 22)**.
- Thread the cable assemblies through the holes on each side of the pan shield from the underside.
- Using the Lift Cords to raise the feed cone then return it to the down position. Starting at the winch, pull the support cone toward the Actuator and fasten to the Main Cable with a Cable Clamp. **Important! The Cords must be routed toward the actuator (center of the brood area).**

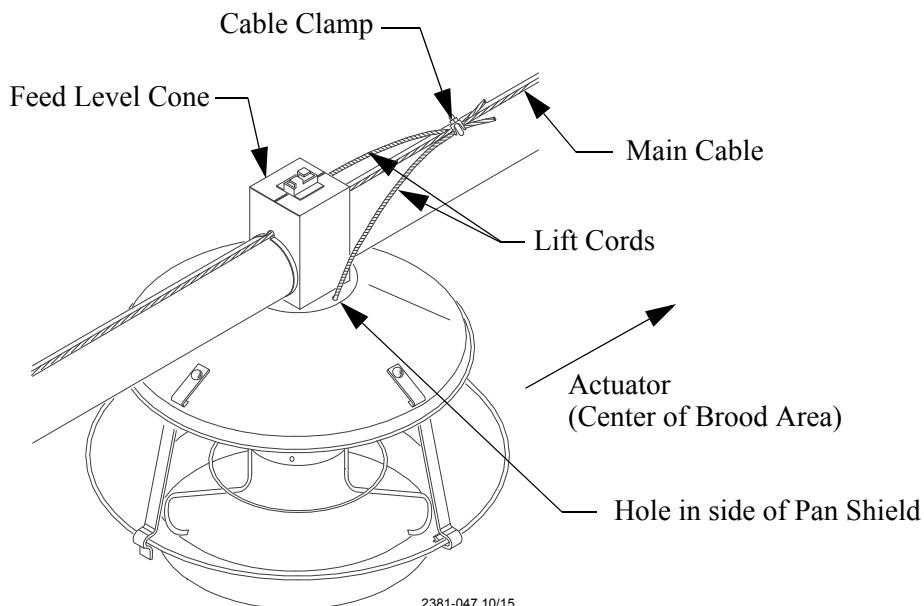


Figure 49 Attaching Cords

Anti-Roost Installation

1. Unroll the bulk anti-roost cable.

Note: If the cable is unrolled as shown in Figure 50, taking 5 loops of the coil with one hand and then changing hands to remove 5 loops as it is unrolled the cable will lie flat during installation.

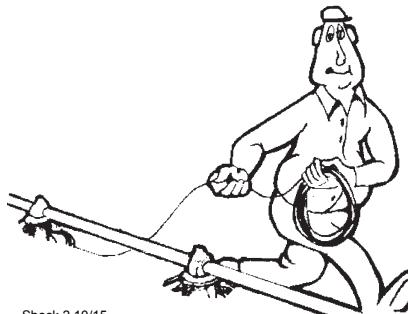


Figure 50. Unrolling the Cable

2. Start at the hopper end of the line and form a loop around the anti-roost bracket. For best results, make a double loop around the anti-roost insulator in the center groove of the insulator and fasten with a 3/32" cable clamp as shown in Figure 51.

3. Insert the cable in the insulator on the top of each grill support between the hopper and the next anti-roost bracket.

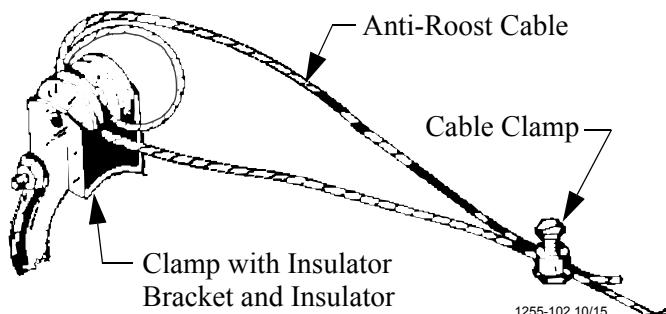


Figure 51. Anti-Roost Cable at the Hopper

4. Attach a spring in the center groove at the second anti-roost bracket and cut the cable at this point, see figure 52.

5. Thread the ends of the cable through the end of the spring. Pull the cable tight so there is 3/4" to 1" (20 to 25 mm) of stretch in the spring. Clamp the cable to form a loop and cut off any excess, see figure 52.

6. Attach the cable to the insulator. 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 as shown in Figure 52.

7. Run the cable to the next insulator, attach a spring in the center groove at the anti-roost bracket and cut the cable at this point. The cable should be positioned in the insulator built into the top of each grill support along the feeder line.

8. Repeat this installation until the anti-roost cable is installed along the feeder line.

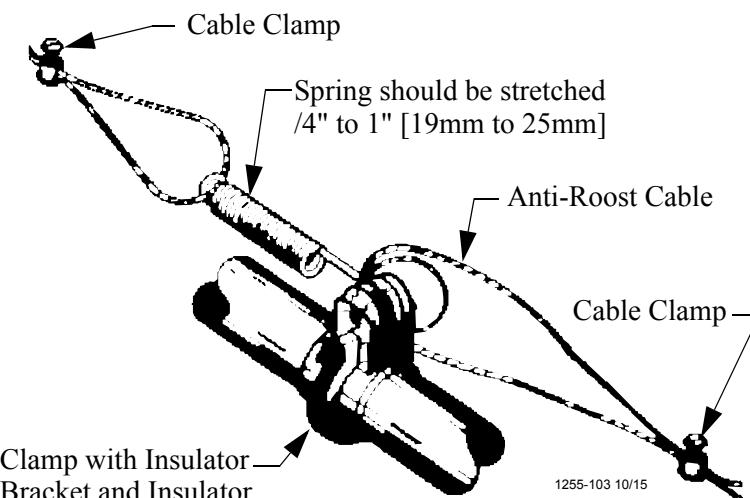


Figure 52. Anti-Roost Cable at the Hopper

9. At the control unit, after clamping the cable to the spring, cut the cable 8" to 10" (200 to 250 mm) longer than necessary. Feed the end of the cable through the center of the spring, around the first insulator on the control unit, and clamp the cable using the cable clamp supplied with the control unit, see **figure 53**.

10. Install the wire from on the control unit insulators. Be sure the guard snaps into the retainers molded into the insulators, see **figure 53**.

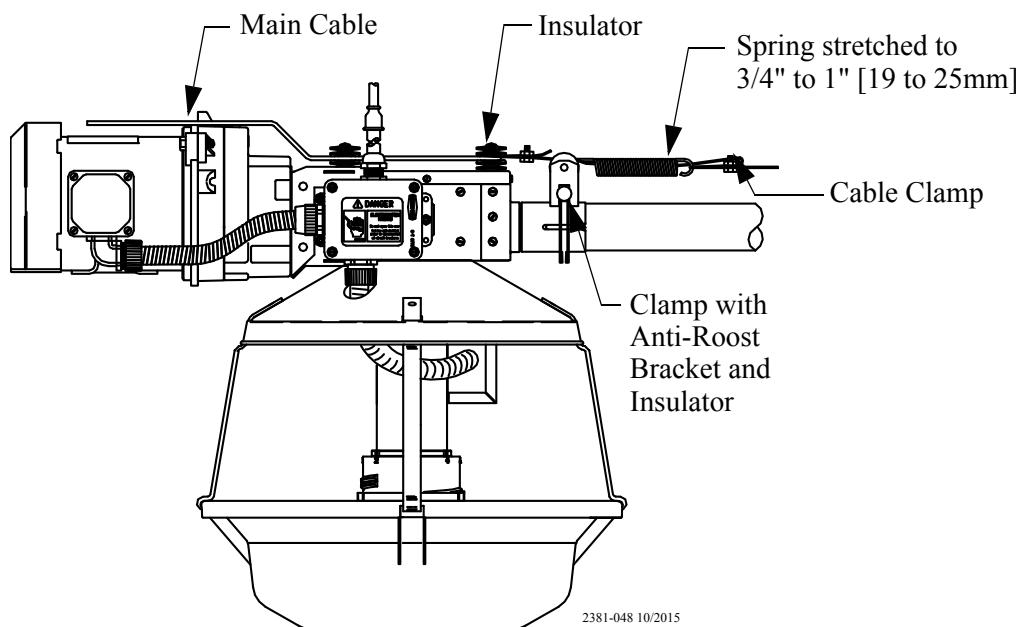


Figure 53. Anti-Roost Installation at the Control Unit

Anti-Roost Jumper

1. Install a Anti-Roost Jumper at the Actuator as shown in **Figure 54**.

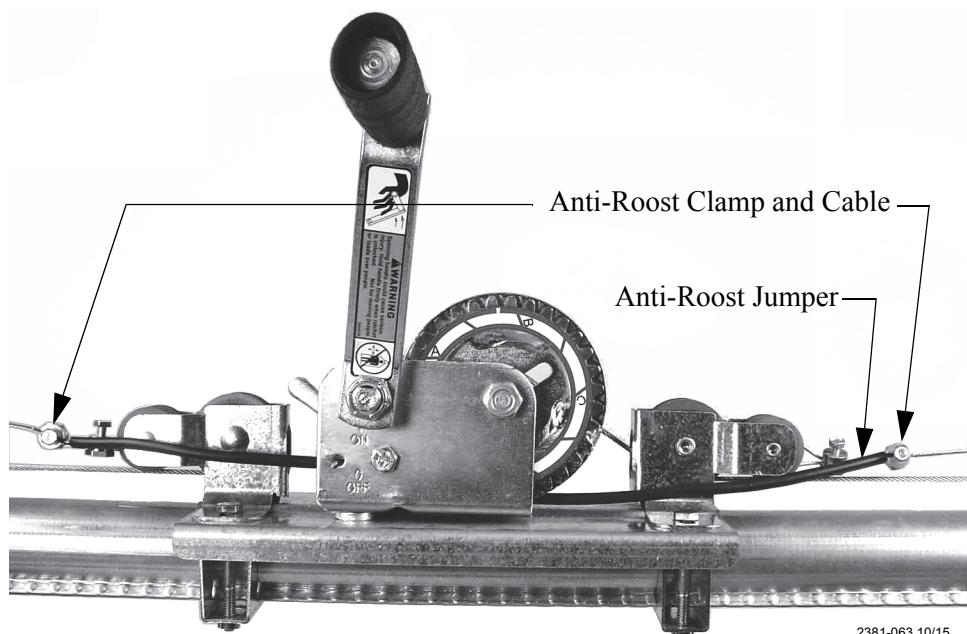


Figure 54. Anti-Roost Installation at the Actuator

2. Install the poultry trainer or line charger, as shown in **Figure 55 or Figure 56**.
3. Route the charger wire from the poultry trainer or line charger to the anti-roost system. Secure the charger wire to the anti-roost cable, using a cable clamp.
4. The anti-roost system must be on a separate electrical circuit, allowing the system to be disconnected by a switch near the door.

Note: The anti-roost system should be grounded through the poultry trainer.

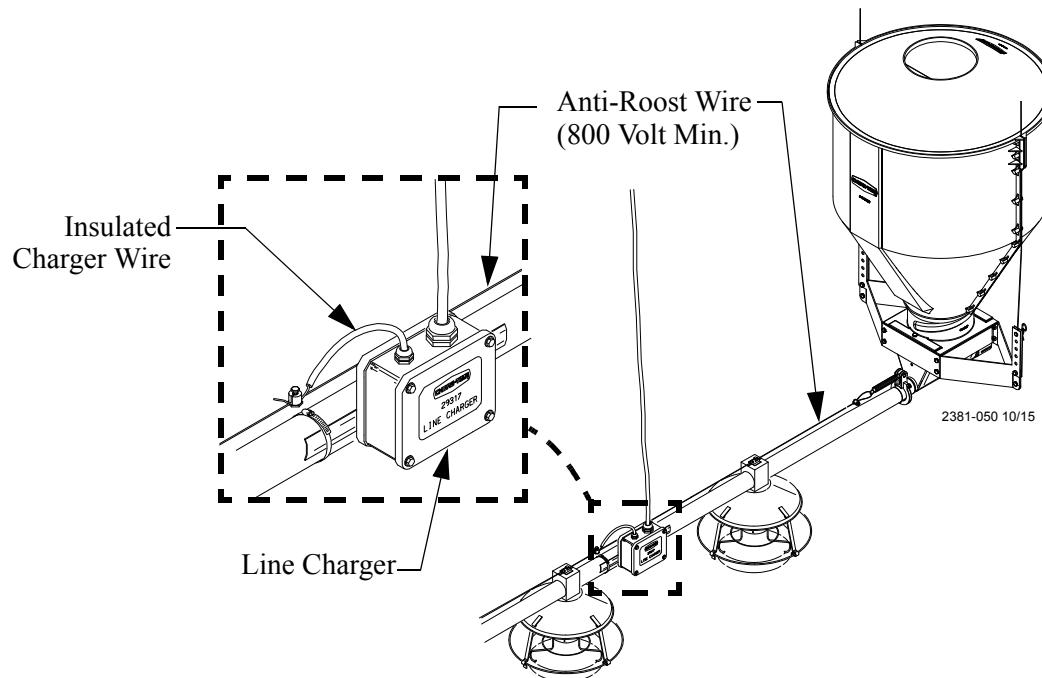
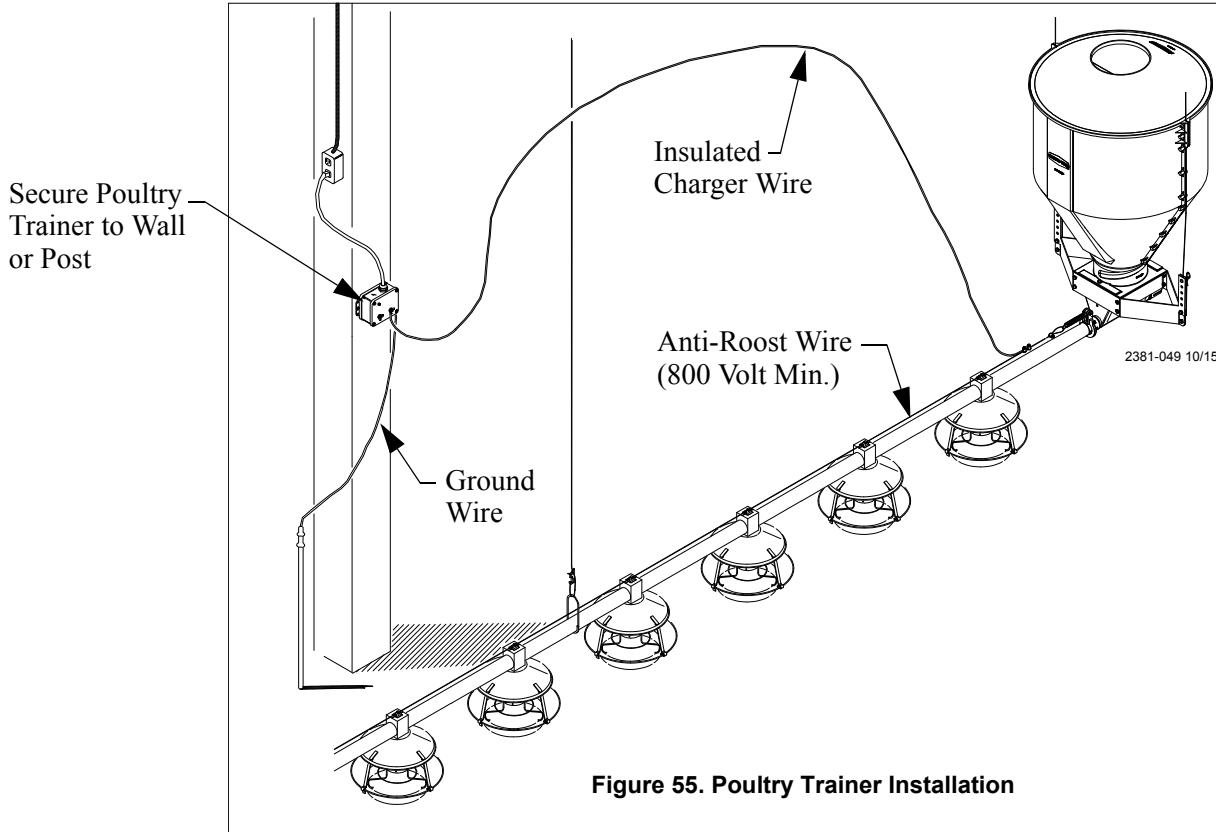
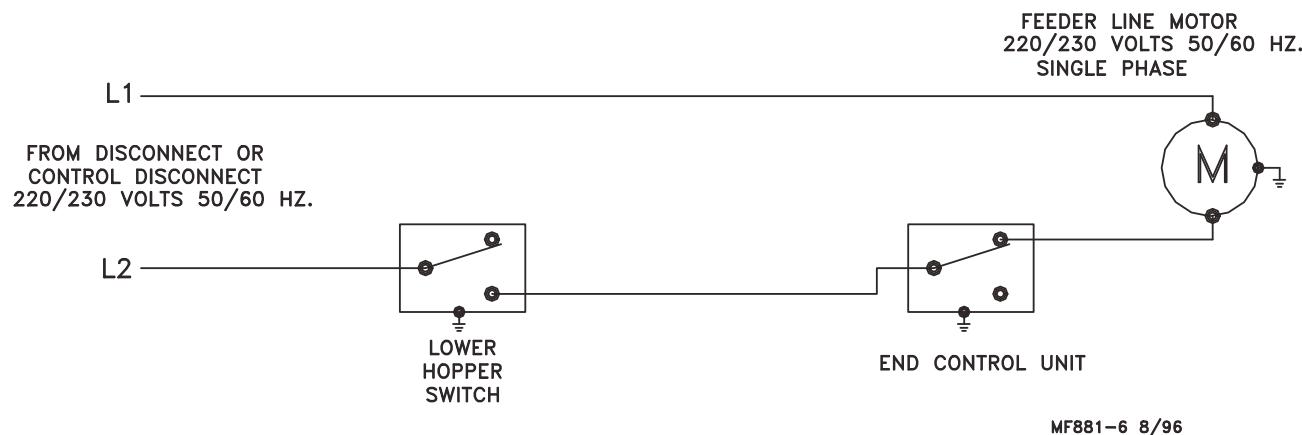


Figure 56. Line Charger Installation

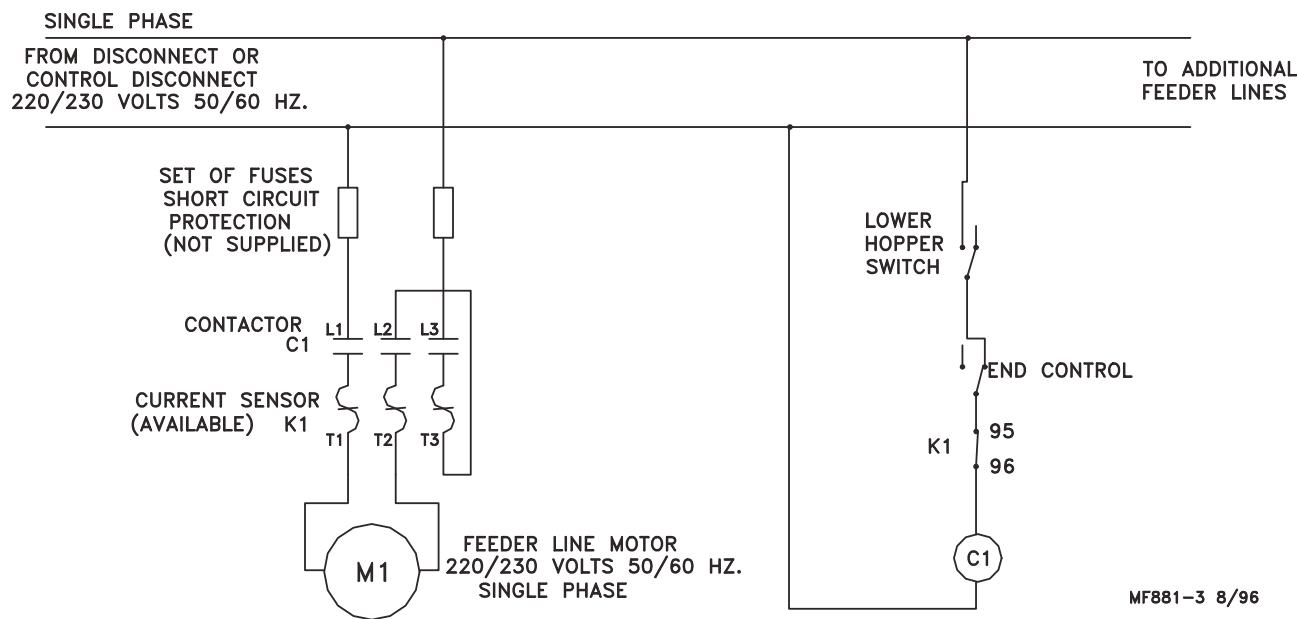
Wiring Diagrams

End & Mid-Line Control Wiring Diagrams: Single Phase(Ø)

Single Phase(Ø) Wiring Diagram

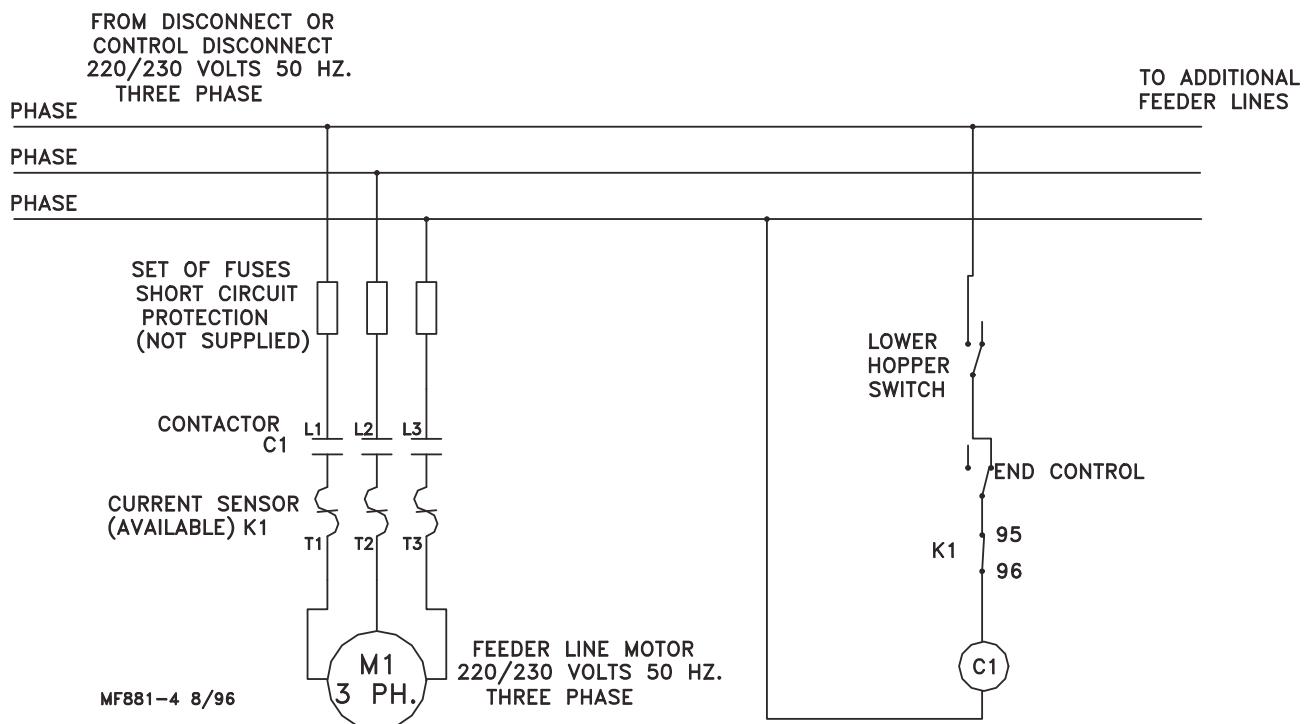


Single Phase(Ø) Wiring Diagram w/Motor Starter

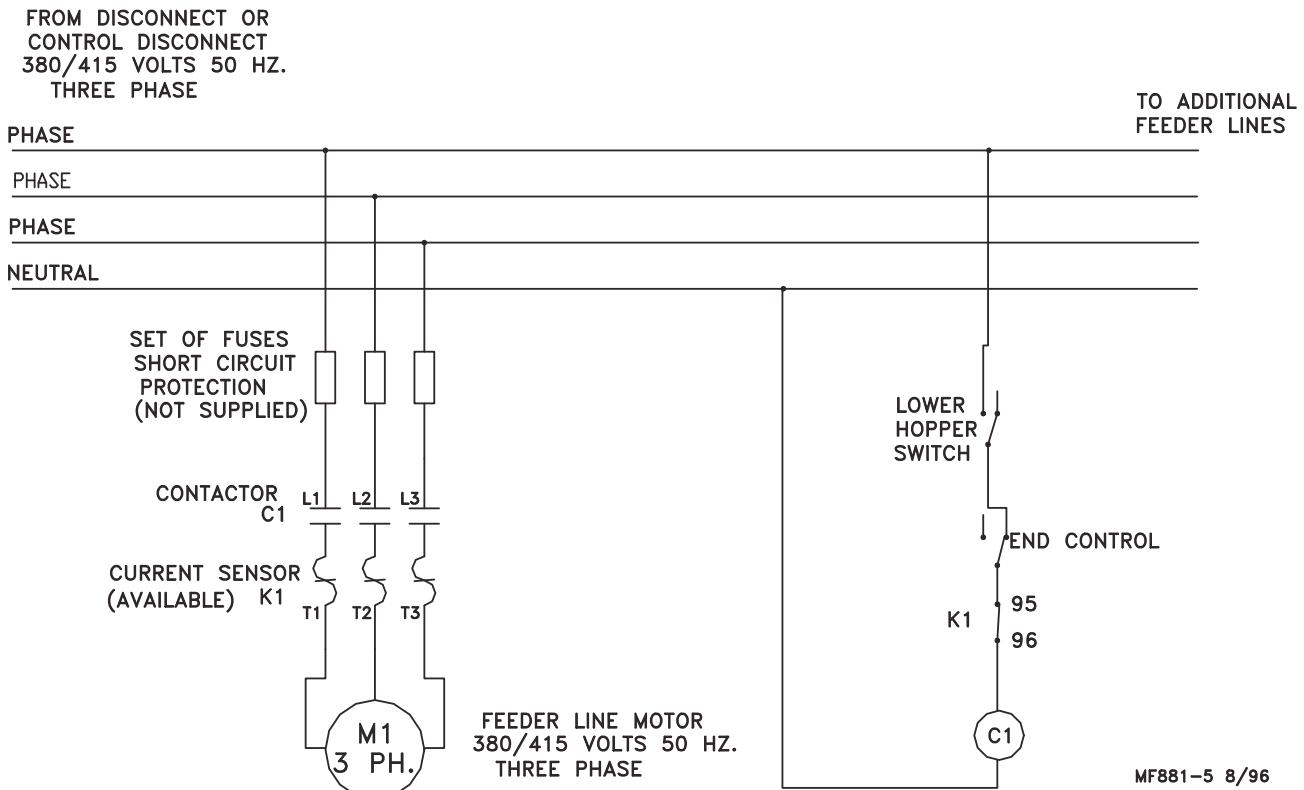


End & Mid-Line Control Wiring Diagrams: Three Phase(Ø)

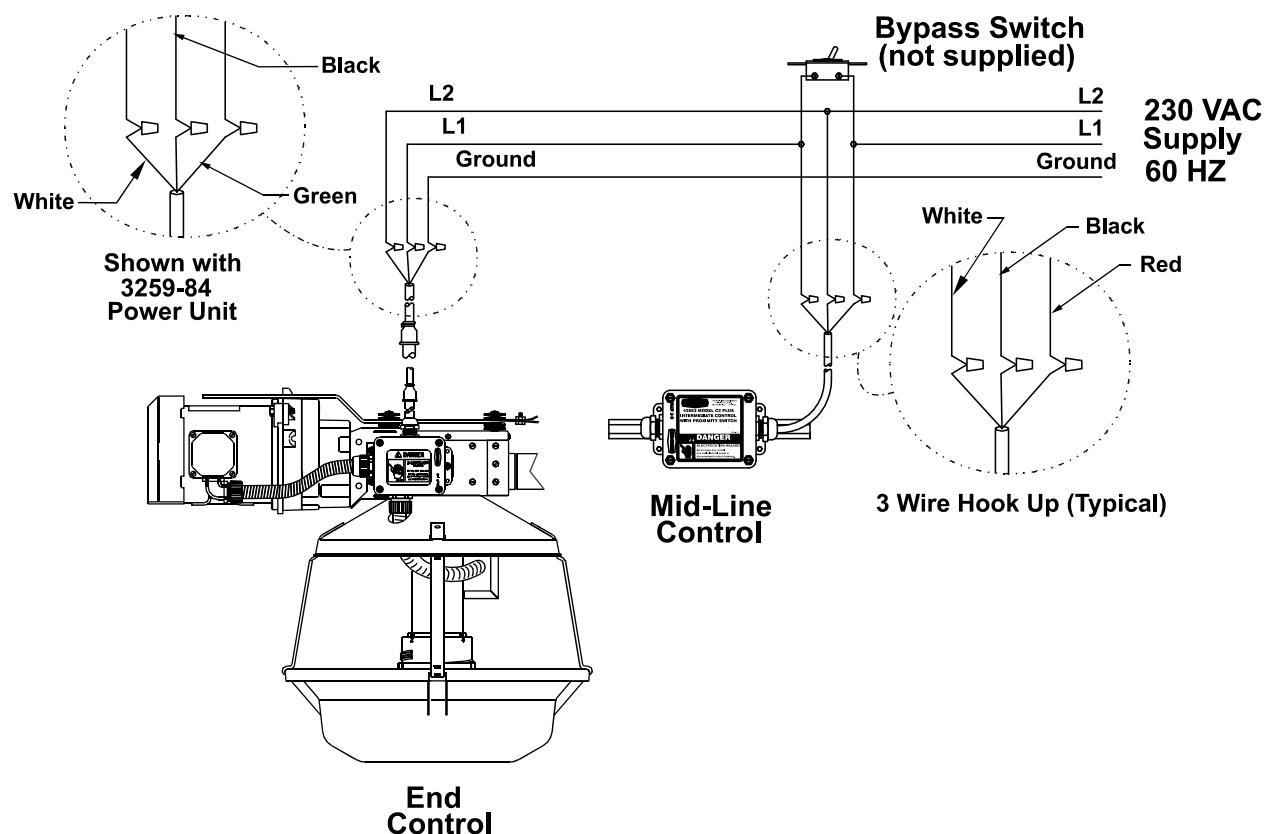
Three Phase(Ø) Wiring Diagram: 220/230 V.



Three Phase(Ø) Wiring Diagram: 380/415 V.



Sensor Control Wiring Diagram



Maintaining the Feeding System

Floor Feeding System Maintenance

The MODEL ATF™ and MODEL ATF™ PLUS require minimum maintenance. However, a routine periodic inspection of the equipment will prevent unnecessary problems.

Maintenance should be done by a qualified technician.



ALWAYS DISCONNECT POWER TO THE SYSTEM WHEN SERVICING OR MAINTAINING THE EQUIPMENT. FAILURE TO DISCONNECT POWER MAY CAUSE INJURY OR DEATH.

Gear Head Maintenance

Refer to **Figure 57**.

Check the oil level in the gear heads at installation and every 6 months. The Pipe Plug, on the side of the gear head, indicates proper oil level. Add SAE 40W oil when necessary.

The oil in the gearheads should be replaced every 12 months with new SAE 40W oil

- A. Remove the bottom pipe plug to drain the oil. Discard used oil in accordance with local and national codes.
- B. Wipe any debris off the magnet on the bottom pipe plug and reinstall. Remove the side pipe plug and (top) vent plug.
- C. Set the power unit in the horizontal position.
- D. 2-Stage Gearheads: Add approximately 9 oz. (266 ml) of SAE 40W oil through top hole. This should be just enough oil to reach the side pipe plug.
3-Stage Gearheads (3261-9, 3261-12, 3261-14): Add approximately 13 oz. (384 ml) of SAE 40W oil through top hole. This should be just enough oil to reach the side pipe plug.
- E. Install the side pipe plug and (top) vent plug.

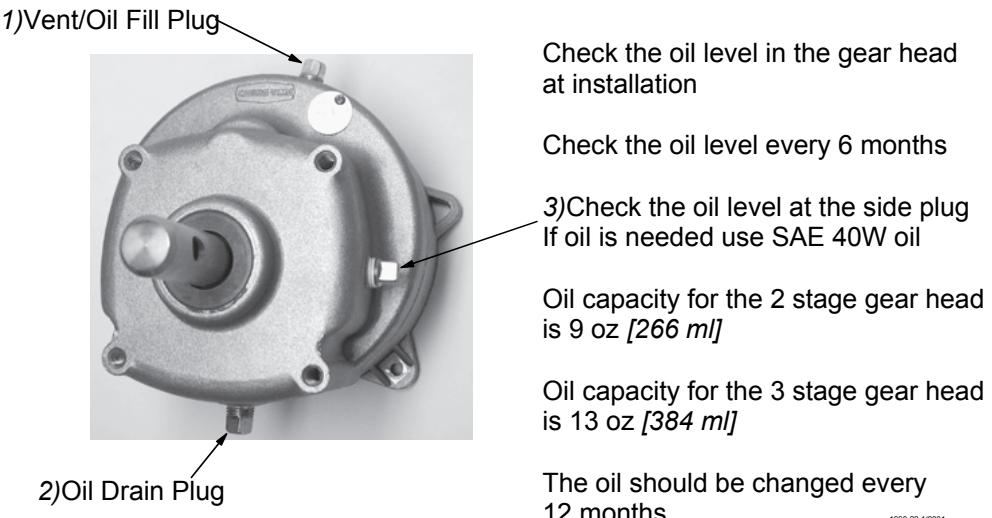


Figure 57.Gearhead Maintenance

Check equipment for loose hardware after the first flock and then every 6 months--including the anchor block. Tighten if necessary.

Mechanical Switch Adjustment procedure for Control Units

Refer to See Figure 58.

- Turn the adjustment nut counter-clockwise until the switch clicks.
- Turn the adjustment nut clockwise until the switch clicks.
- Turn the adjustment nut counter-clockwise 3/4 turn.

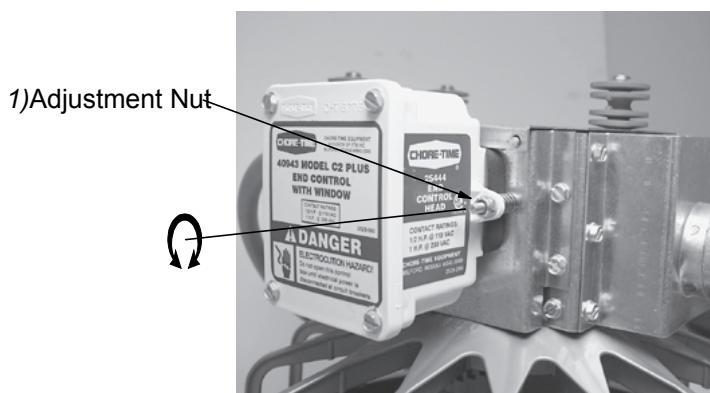


Figure 58.Manual Switch Adjustment

1660-23 1/2001

Electronic Sensor Adjustment for Control Units

See Figure 59. The Electron Sensor's sensitivity is preset at the factory. The time delay adjustment is 1 minute to 10 minutes. *The factory setting is 1 minute*. The Sensor also comes with a Safety Timer that can be set to: Off, 1 hour, or 2 hours. The *factory setting* is 2 hours. To get access to the Adjustment Screws:

Step 1: Loosen the Water Tight Connector.

Step 2: Pull the Sensor Down to expose the Safety Timer and Time Delay Adjustment Screws see figure 59.

Step 3: Adjust the Timer. (See Instructions below).

Step 4: Push the Sensor back up and tighten the Water Tight Connector.

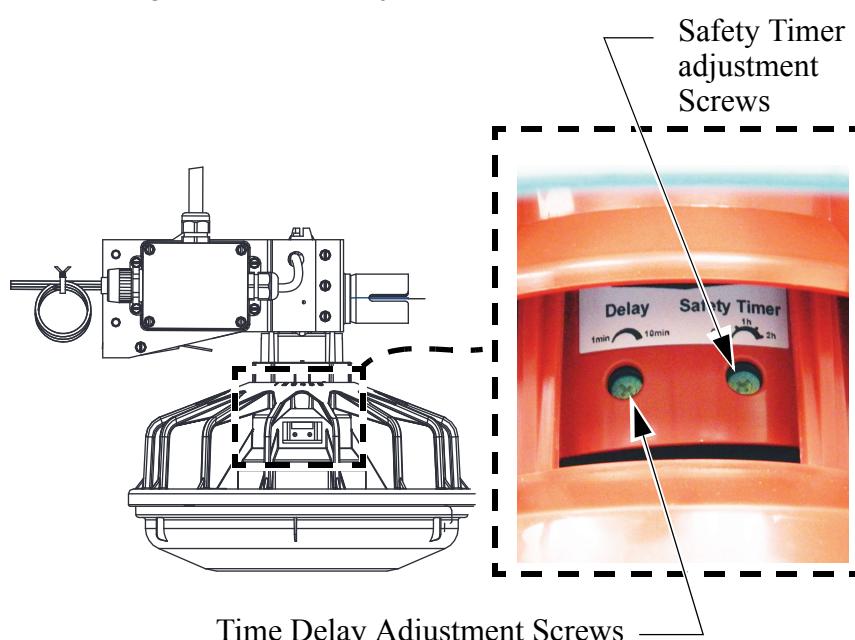


Figure 59. Electronic Switch Adjustment

To adjust the Time Delay:

- For less time — turn Time Delay Selector counter-clockwise.
- For more time — turn Time Delay Selector clockwise.

To adjust the Safety Timer:

- If No Safety Timer turn the "Safety Timer" adjustment screw completely **counter** clockwise.
- For a Safety Timer of 1 hour turn the selector **half way** between clockwise and counter clockwise.
- For a Safety Timer of 2 hours turn the selector completely **clockwise**.

- If the Safety Timer is triggered, simply cycle the power off/on to reset the Sensor.**

Feeder Line

Keep anti-roost cables tightly stretched. This increases the effectiveness of the electro-guard anti-roost system and keep the pans from being tilted when birds push against them.

Remove all feed from the feeder when there are no birds in the house and when the building is washed and disinfected.

Turn the feeders off prior to removing the birds from the house. This will allow them to clean the feed out of the pans.

If the system is not to be used for an extended period of time, remove all the feed from the feeder lines and feeder pans.

Disconnect power to the system to prevent accidentally starting the system.

If the system must be disassembled, extreme caution must be used to prevent injury from springing auger.

1. Disconnect power to the entire system.
2. Loosen the tube clamp on the bearing at the hopper end of the system. Remove the tube clamp and bearing retainer.
3. Pull the anchor and bearing assembly and approximately 18" [45 cm] of auger out of the boot.

CAUTION: Stand clear...the auger may spring back into the tube.

4. Place a clamp or locking pliers securely on the auger to prevent it from springing back into the auger boot.
5. Loosen the setscrew in the bearing assembly shaft and remove the anchor and bearing assembly from the auger.



To reinstall the Anchor and Bearing Assembly:

1. Insert the anchor assembly into the auger until it touches the washer at the back of the anchor. Tighten the setscrews in the center of the anchor until they touch the auger, then tighten a maximum of 1/2 turn. See **Figure 60..**
2. **DO NOT OVERTIGHTEN THE SET SCREWS.**
3. Carefully remove the locking pliers while holding onto the anchor and bearing assembly and auger securely. **Slowly** ease the auger back into the tube. Use caution. If the auger is allowed to spring back, the bearing race may crack.

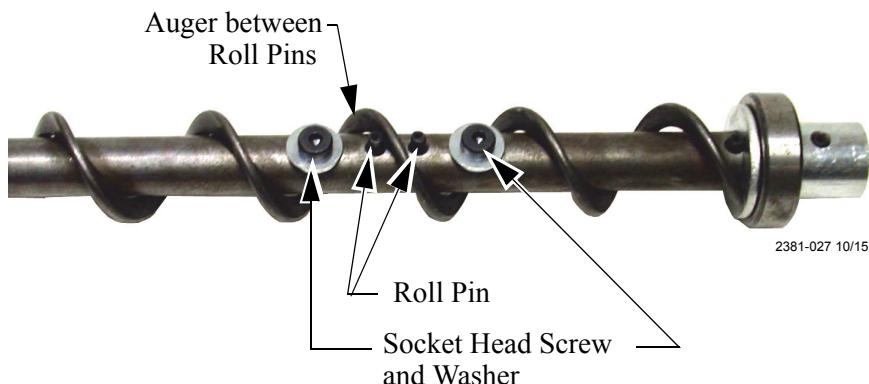


Figure 60. Auger and anchor Bearing Connection

Install the bearing retainer and fasten with a tube clamp. Keep the bearing retainer flush with the end of the anchor for safety.

Power Lift Winch Maintenance

Refer to **Figure 61.**

Grease the Winch every 6 months with 1 to 2 shots of common industrial or automotive grease.

DO NOT OVER GREASE THE WINCH.

Remove any feed build-up in the Safety Switch Boxes in the Control Units.

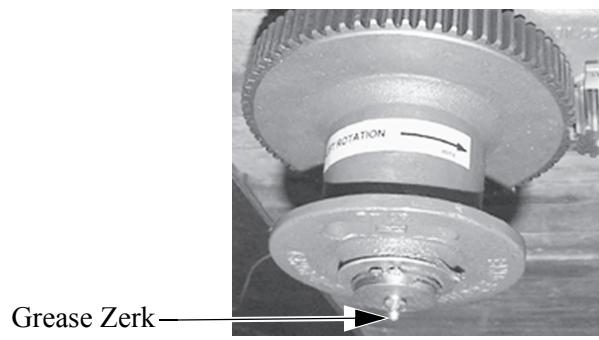


Figure 61. Maintenance to the Power Lift Winch

It may be necessary to periodically retighten the Shocker Cable. Be sure to disconnect power to the Shocker before servicing the equipment.



Trouble Shooting the Feeding System

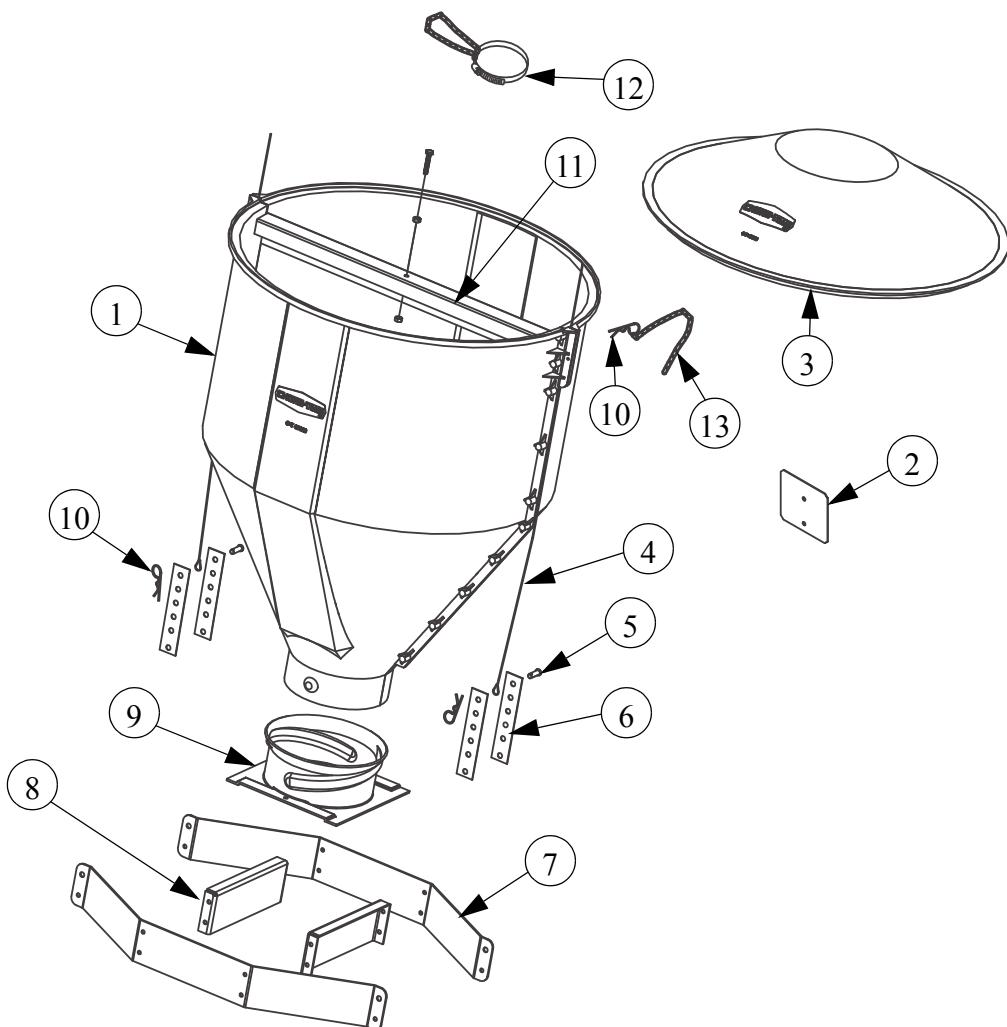
**ALWAYS DISCONNECT POWER TO THE SYSTEM WHEN SERVICING OR
MAINTAINING THE EQUIPMENT. FAILURE TO DISCONNECT POWER
MAY CAUSE INJURY OR DEATH.**

Service and maintenance work should be done by a qualified technician only.

Problem	Possible Cause	Corrective Action
None of the feeder lines will operate.	No power supplied to equipment.	Replace burned fuses or reset circuit breaker. Make sure voltage required is supplied.
	Time clock or relay defective.	Replace time clock or relay.
	Time clock improperly programmed.	Refer to programming the time clock section and reprogram the time clock.
Feeder line will not operate.	Power unit cord not plugged in sufficiently to make contact.	Check motor cord plug at control unit and control unit plug at outlet for connection.
	Motor cord wires are broken at plug or where cord enters motor.	Check cord for continuity, replace if defective.
	Power units thermal overload tripped.	Push motor overload reset button to reset.
	Control unit switch defective or out of adjustment.	Adjust switch according to the switch adjustment procedure in the maintenance section.
Motor overloads frequently.	Oil on new auger loads motor excessively when feed is carried for first time.	Polish auger by running 50 lb. (20 kg) increments of feed out to pans.
	Inadequate power reaching motors.	Check line voltage at the motors. Wiring of adequate size is essential to feeder operation.
	Object caught in the auger; motor runs, stalls, then auger spins in reverse.	Check hopper boot, control unit and pan outlets. Remove obstruction.
Auger runs erratically.	Frozen or cracked bearing at boot anchor.	Replace bearing. Slowly ease auger back into tube. Be careful no to damage the bearing when reinserting the auger.
	Insufficient stretch in auger.	Shorten the auger.
	Obstruction in auger.	Remove obstruction.
Auger tube or boot wears out rapidly (Noisy feeder operation)	Auger is bent or kinked	Repair or replace damaged auger.
	End of auger is riding up on anchor weldment.	Auger must not be positioned over weld on anchor. Check for bent or damaged auger.
Oil leaking out of seals on power unit	Gearhead vent plug not installed.	Replace plastic shipping plug with vent plug.
	Defective gear head seal.	Replace seal.
Not enough feed supplied to the feeder pans.	Insufficient time programmed on the time clock.	Add more operating time to feeding period.
	Feeder line control unit switch out of adjustment.	Adjust switch according to the switch Adjustment procedure in the maintenance section.

Parts Listing

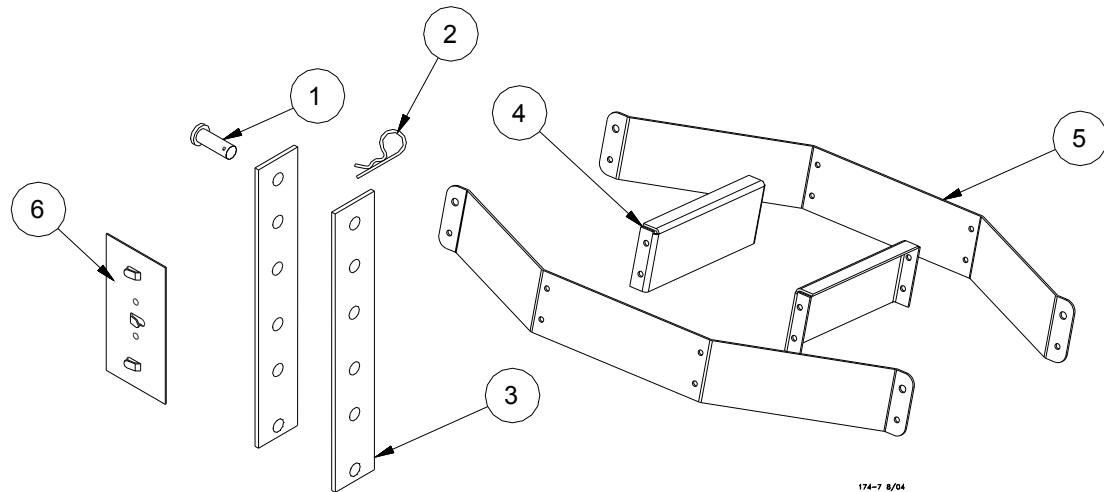
150# Hopper Components



Key	Description	Without Cover	With Cover
1	Hopper Half	49028	49028
2	Switch brace	50966	50966
3	Cover	--	48675
4	Cable Assembly	2809-3	2809-3
5	Clevis Pin	2797-1	2797-1
6	Adjustment Bracket	2706	2706
7	Suspension Angle	48679	48679
8	Suspension Brace	48680	48680
9	Twist Lock Collar	49041	49041
10	Hairpin	2664	2664
11	Brace	49029	49029
12	Tube Support Assembly	14367	14367
*13	Chain	2128	2128

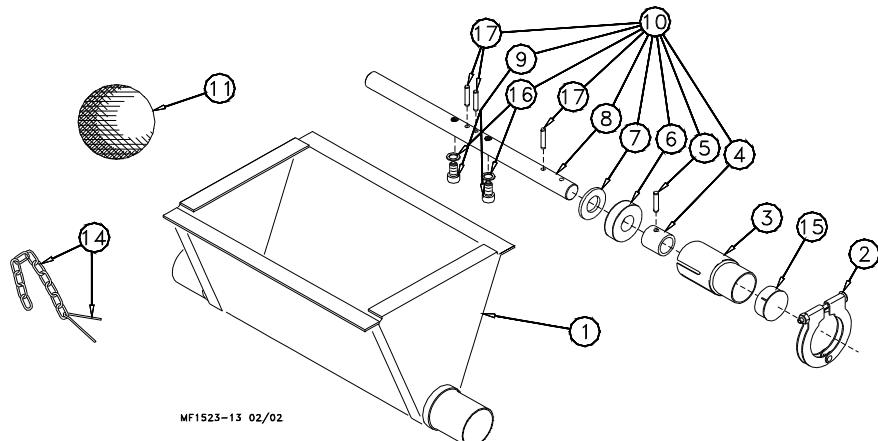
***Item must be ordered in either 100 ft or 250 ft quantities, 2128-100 is 100 ft and 2128-250 is 250 ft.**

Part No. 49358 Hopper Suspension Kit

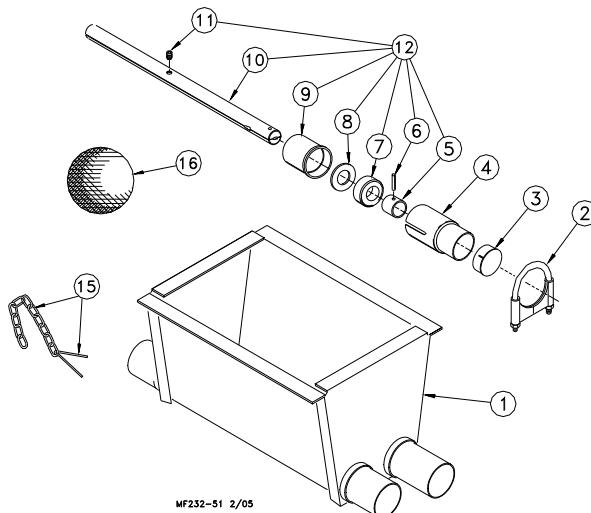


Item	Description	Part No. Single Boot Kit	Part No. Twin Boot Kit
1	Clevis Pin, 5/16" x 1"	2797-1	2797-1
2	Adjustment Bracket	2706	2706
3	Hair Pin	2664	2664
4	Suspension Brace	48680	48680
5	Suspension Angle	48679	48679
6	Cable Guide	34573	34573

*This kit is used for steel hopper suspension.

Single Boot Components Part No. 6821

Item	Description	Part No.	Item	Description	Part No.
1	Boot Weldment	4224	10	Anchor and Bearing Ass'y	39372
2	Tube Clamp	24062	11	Cannonball	3531
3	Outlet Tube	4556	12	---	---
4	Sleeve	5648	13	---	---
5	3/16 x 1" Pin	2960-1	14	Latch Pin Ass'y	2683
6	Bearing	2689	15	Cap	29373
7	Washer	2955-14	16	Flat Washer	48609
8	Anchor	38540	17	Roll Pins	2960-1
9	5/16-18 x 7/8 Low head cap screw	47867	--	Danger Decal	2527-9

Twin Boot Components Part No. 8460

Item	Description	Part No.	Item	Description	Part No.
1	Boot Weldment	8461	10	Anchor	29526
2	Tube Clamp	29520	11	Set Screw	1174
3	Cap	29523	12	Anchor and Bearing Ass'y	29530
4	Stub Tube	4163	13	---	---
5	Sleeve	5648	14	---	---
6	3/16 x 1" Pin	2960-1	15	Latch Pin Ass'y	2683
7	Bearing	29433	16	Cannonball	3531
8	Washer	2955-14	---	Danger Decal	2527-9
9	Bearing Retainer	29441			

Feeder Line Components

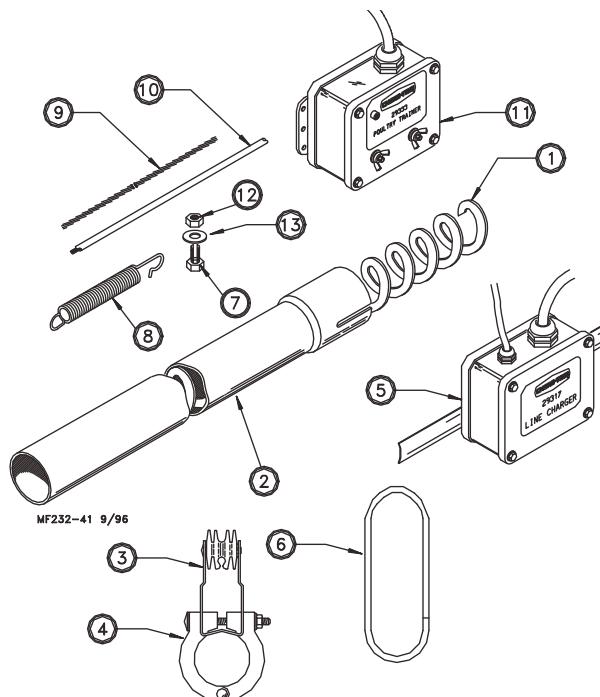
Item	Description	Part No.
1*	Auger	6820-0
2	ATF 10 ft. 2 hole tube	53628-1
	* ATF 10ft. 3 hole tube	53628-4
	* ATF 20ft. 3 hole tube	53628-2
	* ATF 20ft. 3 hole tube	53628-3
	** ATF 10ft. 5 hole tube	53628-5
	** ATF 10ft. 5 hole tube	53628-6
3	Anti-Roost Bracket	29516
4	Clamp	29520
5	Line Charger	29317
6	Hanger	4207
7	Split Bolt	6342
8	Spring	7551
9	3/32" Cable	4973
10	Charger Wire (165 ft.)	28994-165
	Charger Wire (330 ft.)	28994-330
11	Poultry Trainer	29333
12	3/8" Hex Nut	1549
13	3/8" Flat Washer	4976

*Round up to the nearest 10'. Auger lengths from 50 to 500

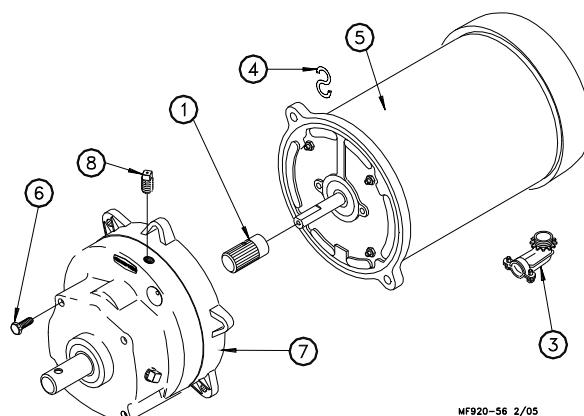
feet. Example: 6820-200 would be a 200' roll of Auger

* USE together for 3 pans per 20 ft.

** USE together for 5 pans per 20 ft.



Power Unit Components



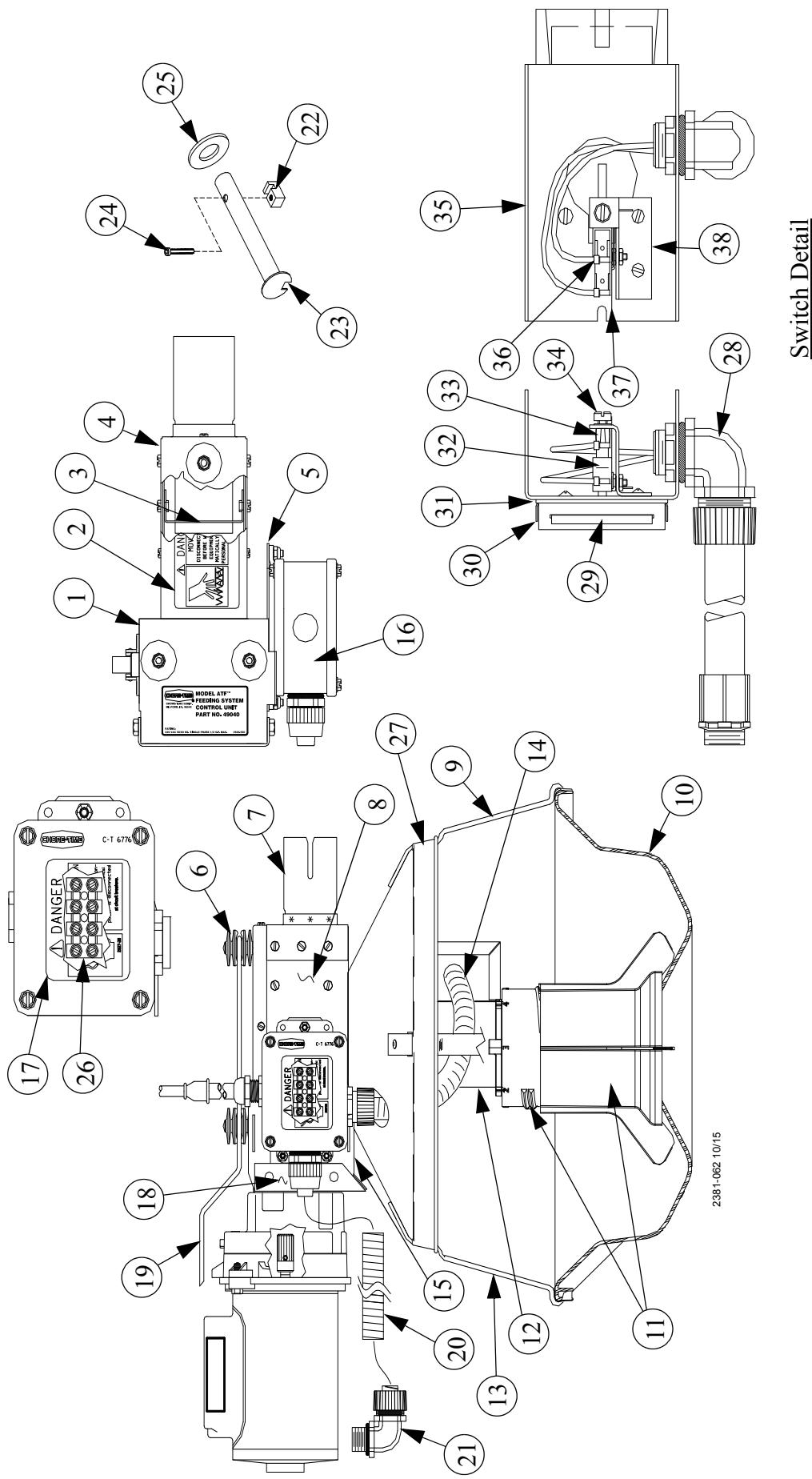
Item	Description	Part No.	Part No.	Part No.	Part No.
1	Pinion Assembly	5046	5046	5046	5046
2	Cord Assembly	----	----	28028	----
3	Connector (90 Degree)	4228	4228	4228	4228
4	"S" Hook	2805	2805	2805	2805
5	Motor	4229	5703	5977	28031
6	5/16-18 x 5/8 Hex Hd Screw	4412-1	4412-1	4412-1	4412-1
7	Gearhead	3261-5	3261-5	3261-11	3261-11
8	Pipe Plug	3516	3516	3516	3516

Power Unit Assembly Part Numbers

Part Number	HP	RPM	Phase	Hz	Voltage	Usages
3259-34	1/3 HP	348 RPM	Single Phase	60 Hz	230	Use with both Control Units
3259-39	1/2 HP	348 RPM	Single Phase	60 Hz	230	Use with both Control Units
3259-98	1/2 HP	348 RPM	Single Phase	50 Hz	230	Use with both Control Units
3259-100	1/2 HP	348 RPM	Three Phase	50 Hz	220/380	Use with both Control Units

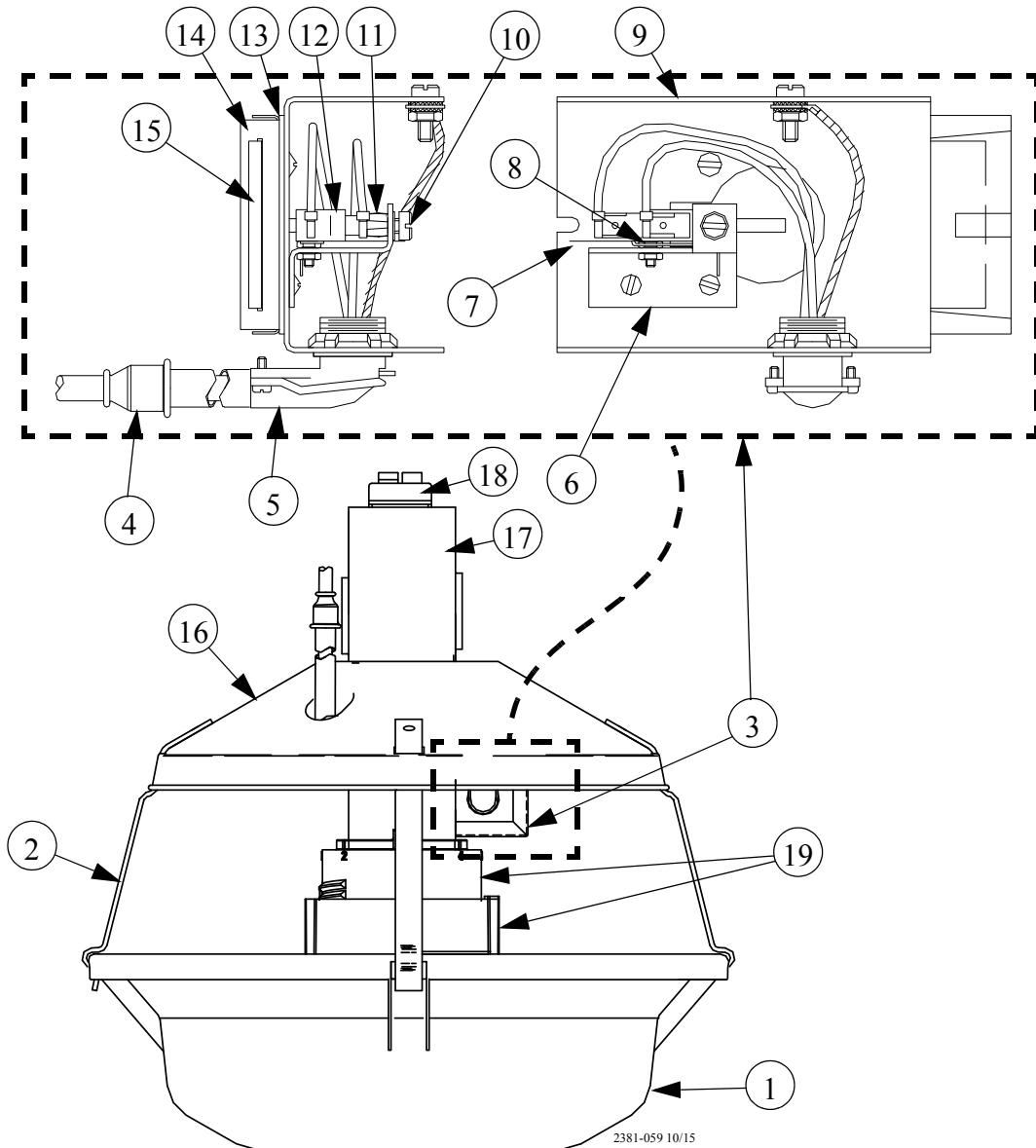
Page left blank intentionally.....

MODEL ATF™ End Control (Mech. Switch): 50355 & 50355G
MODEL ATF™ PLUS End Control (Mech. Switch): 50358 & 50358G



50355		50358		50355		50358	
Item	Description	Part No.	Part No.	Item	Description	Part No.	Part No.
1	Safety Cover	49043	49043	20	Flex Conduit	26982-1	26982-1
*2	Danger Decal	2527-9	2527-9	21	90° 1/2" Conduit Conn.	23810	23810
*3	Tube Support	27891	27891	22	Drive Block	4642	4642
*4	Body Cover	27942	27942	23	Drive Tube Weldment	47584	47584
5	Switch Mount Plate	43815	43815	24	1/4-20 x 1 1/2" Screw	5083-8	5083-8
6	Insulator	2976	2976	25	Flat Washer	1484	1484
*7	Stub Tube Weldment	27900	27900	26	Terminal Block	34925-4	34925-4
*8	Control Body	49042	49042	27	Pan Shield	4191	49138
9	Pan Support	4199	49171	28	90° Conduit Conn.	24726	24726
10	Red feeder pan Green feeder pan	29000 29000G	29000 29000G	29	Paddle	4890	4890
11	Feed Cones	50359	50359	30	Diaphragm Assembly	4889	4889
12	Control Drop Tube	4180	49145	31	Spacer Plate	4921	4921
13	Pan Support (Swing Down)	24274	49172	32	Snap Action Switch	46324	46324
14	Conduit Assembly	27866	27866	33	Nylon Grommet	50602	50602
15	Bottom Cover	49044	49044	34	Nylon Screw	4303-5	4303-5
16	Junction Box	36334-5	36334-5	35	Housing	6048	6048
17	Danger Decal	2527-25FE	2527-25FE	36	Torsion Spring	5820	5820
18	Anchor Plate	4188	4188	37	Barrier	6936	6936
19	Anti-Roost Guard	2798	2798	38	Switch Bracket	51516	51516

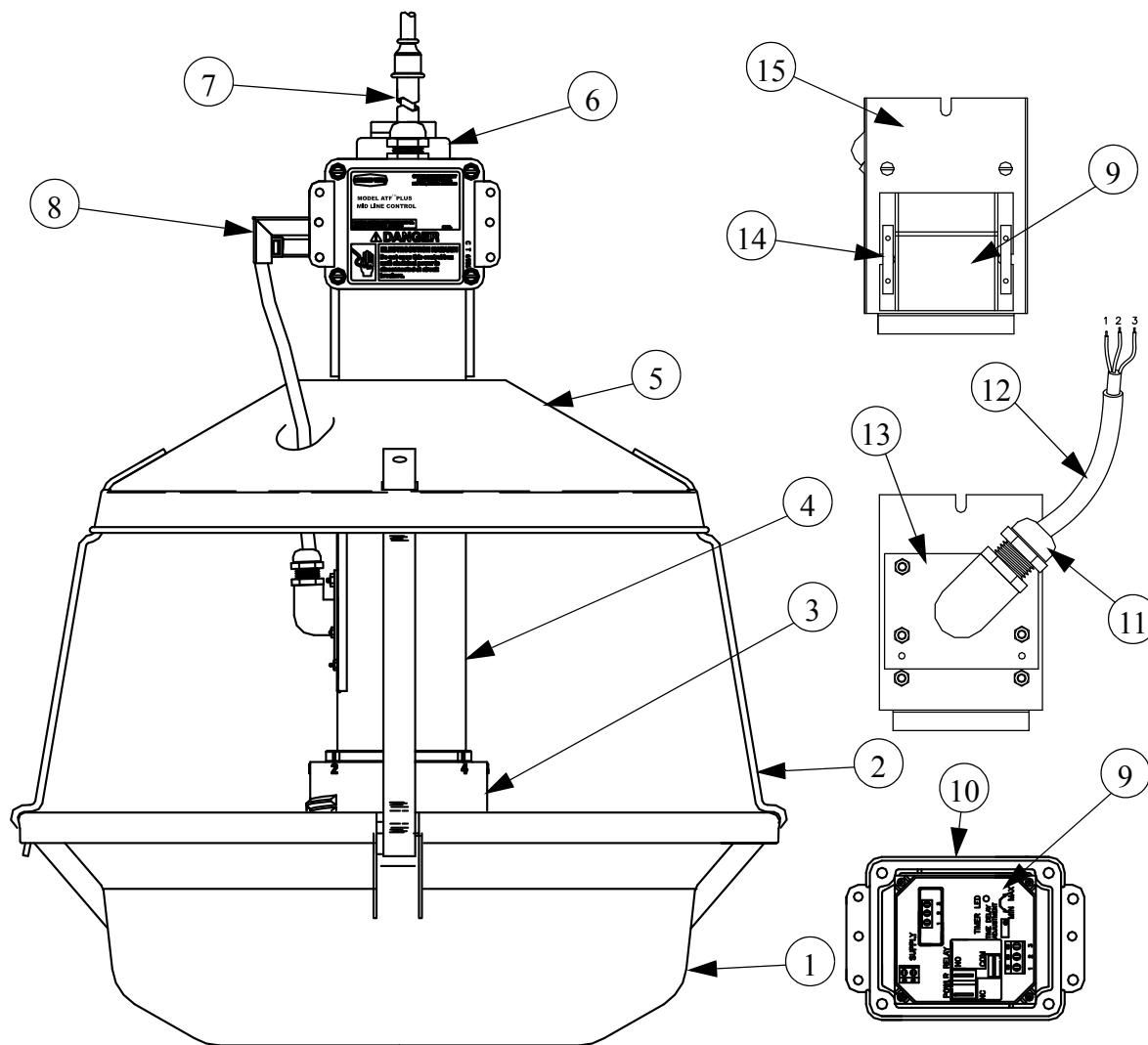
*These components may be ordered as an assembly Part No. 49045

MODEL ATF™ Mid-Line Control (Mech. Switch): 50364**MODEL ATF™ PLUS Mid-Line Control (Mech. Switch): 50363**

		50364	50363
Item	Description	Part No.	Part No.
*1	Feeder Pan (Plastic)	29000	29000
*2	Pan Support	4199	49171
	Pan Support (Swing Down)	24274	49172
3	Switch Assembly	6044-4	6044-4
4	Cord Assembly	4999-111	4999-111
5	90° Connector	4228	4228
6	Switch Bracket	51517	51517
7	Barrier	6936	6936
8	Torsion Spring	5820	5820
9	Housing	6048	6048
10	Nylon Screw	4303-5	4303-5

***These items are not included with the control assembly and must be ordered separately.**

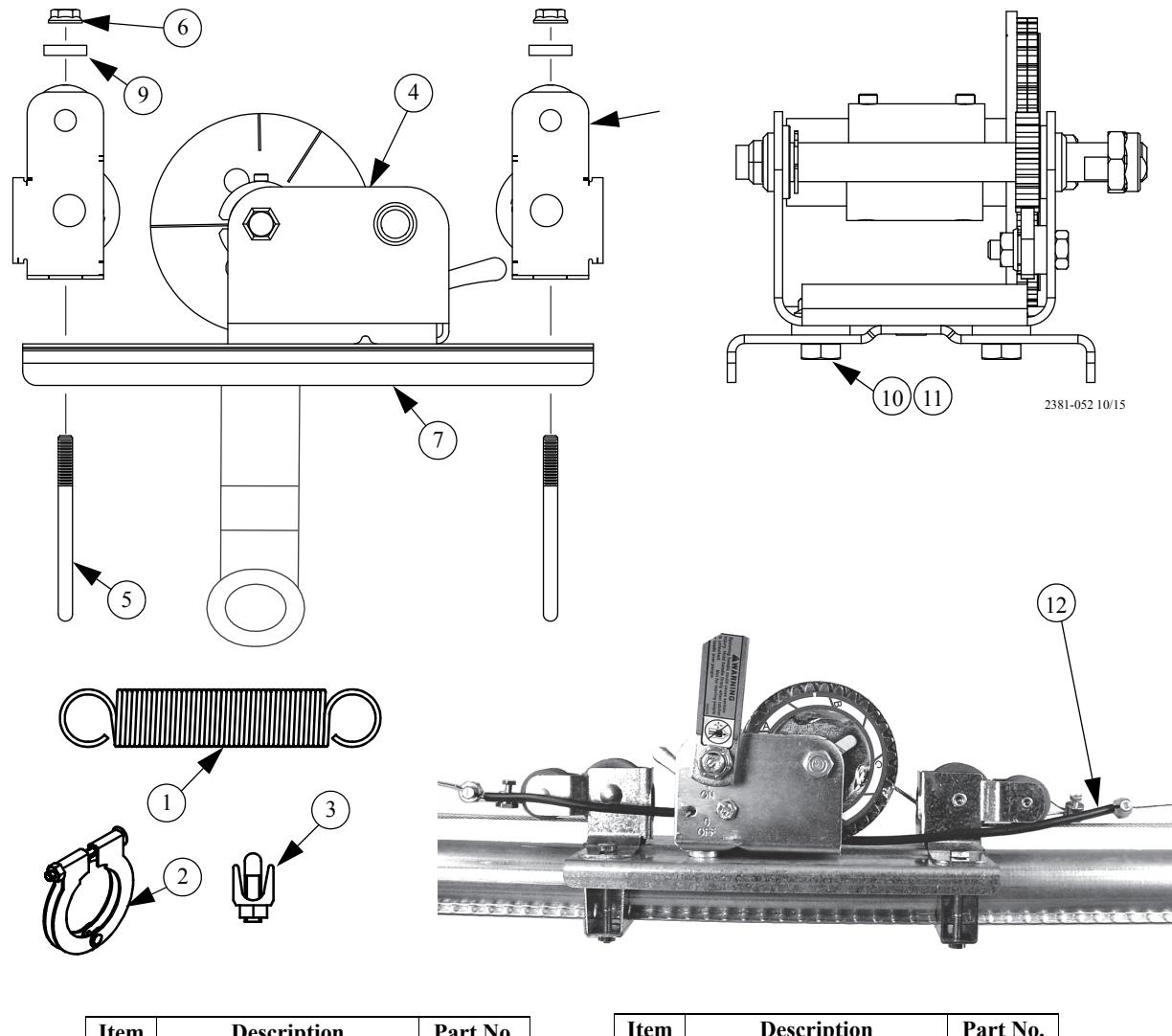
		50364	50363
Item	Description	Part No.	Part No.
11	Nylon Grommet	50602	50602
12	Snap Action Switch	46324	46324
13	Spacer Plate	4921	4921
14	Diaphragm Assembly	4889	4889
15	Paddle	4890	4890
*16	Pan Shield	4191	49138
17	Drop Tube	6446	49559
18	Insulator	5754	5754
19	Feed Cones	50359	50359

MODEL ATF™ Mid-Line Control W/Sensor: 53020**MODEL ATF™ PLUS Mid-Line Control W/Sensor: 53019**

2381-060 10/15

Item	Description	Part No	Part No
*1	Feeder Pan (Plastic)	29000	29000
*2	Pan Support	4199	49171
	Pan Support (Swing Down)	24274	49172
3	Feed Cones	50359	50359
4	Drop Tube	6446	49559
*5	Pan Shield	4191	49138
6	Insulator	5754	5754
7	Cord Assembly	4999-103	4999-103
8	90° 1/2" Conduit Conn.	49587	49587
9	Electronic sensor	52967	52967
10	Mounting Cover	6956	6956
11	Watertight Connector	24685	24685
12	Black Tubing	14454-10	14454-10
13	Plastic Adapter Plate	43819	43819
14	Sensor Retainer	46728	46728
15	Adapter Plate	43813	43813

***These items are not included with the control assembly and must be ordered separately.**

Feed Level Tube Winch Kit Part No. 53197

Item	Description	Part No.
1	Spring .62 x 11"	24302
2	2" Tube Clamp	29520
3	1/8" Cable Clamp	14898
4	Feed Level Tube Winch	53196
*5	1/4" x 20 U Bolt	7975
*6	1/4" x 20 Flange Nut	46298

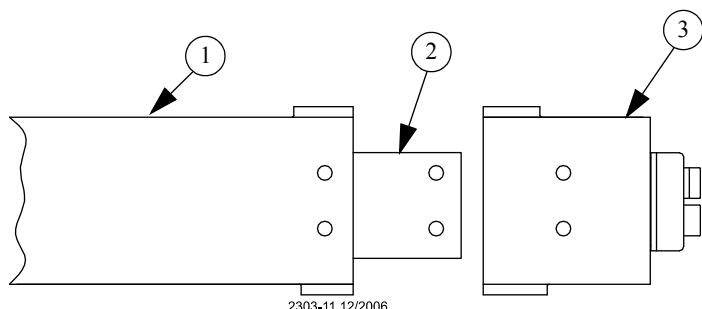
*These parts included in a Kit Part No. 29520

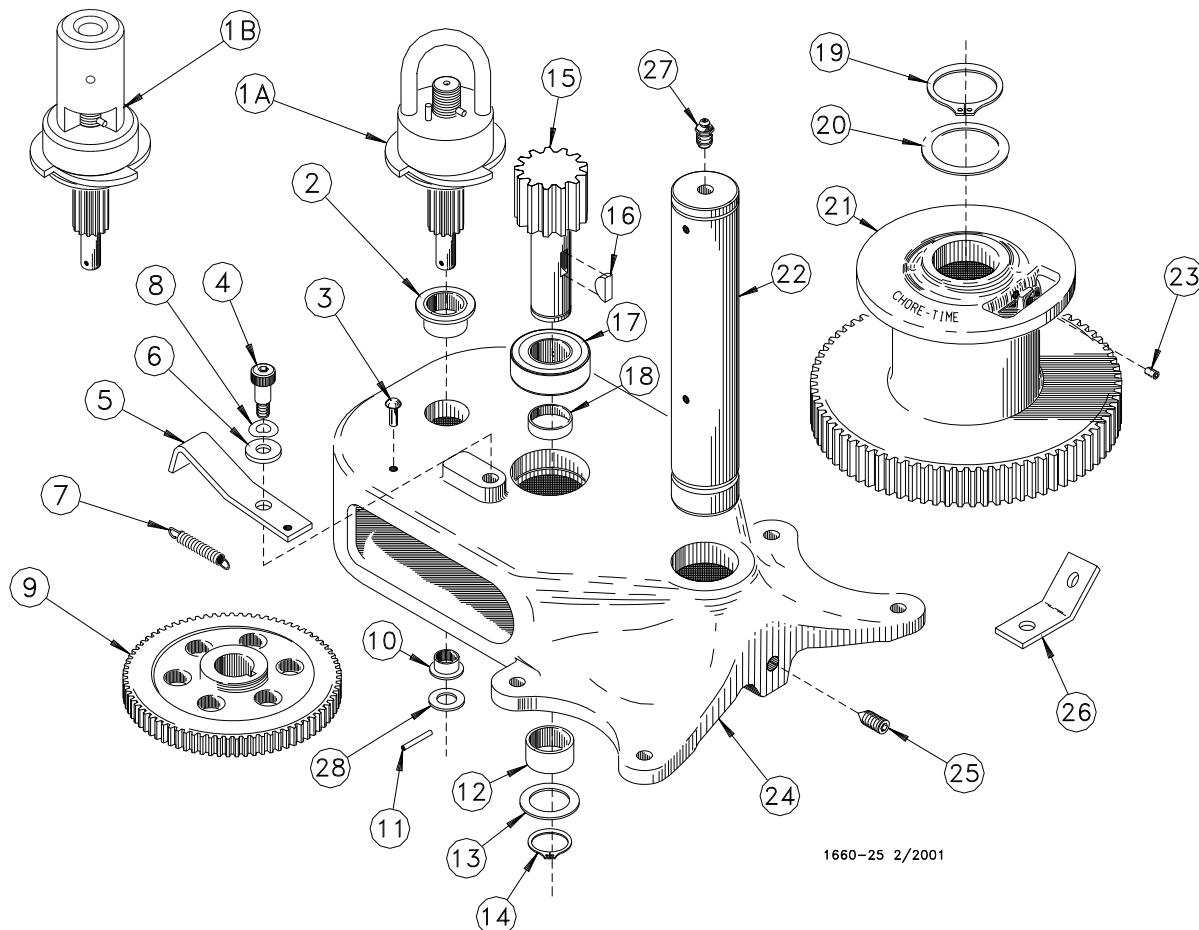
Item	Description	Part No.
7	Winch Base Assembly	48933
8	Insulator Assembly	53202
*9	Washer	5933
10	5/16-18 x .75 Hex Bolt	2046
11	5/16-18 Flange Nut	8490
12	High Voltage Jumper	5359

*These parts included in a Kit Part No. 29520

MODEL ATF™ Drop Tube Repair Tube Part No. 49160**MODEL ATF™ PLUS Drop Tube Repair Tube Part No. 49163**

Item	Description	Part No.	Part No.
1	Drop Tube	49159	49164
2	Spacer	49155	49155
3	Insulator	5754	5754

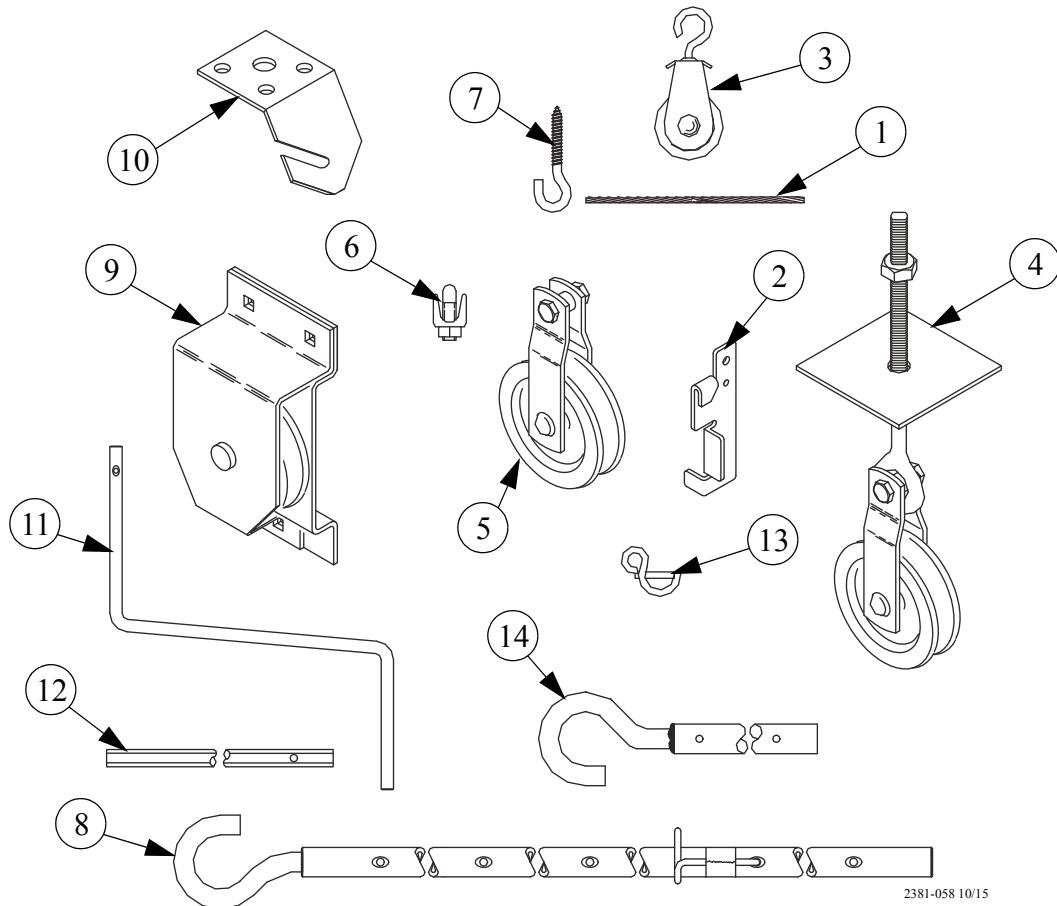


2883 Power Winch

Item	Description	Part No.
1	Input Shaft Assembly	
1A	Manual	42665
1B	Electric	42666
2	Flange Bushing	2967-2
3	Drive Stud	4128-1
4	Shoulder Bolt	4022-2
5	Pawl	6672
6	5/16" Flat Washer	2255-44
7	Spring	1543
8	Spring Washer	4023
9	Intermediate Gear	2890
10	Flange Bushing	3252
11	Spirol Pin	2960-3
12	Bushing	2967-4
13	Washer	2955-1
14	Retaining Ring	2958-1

Item	Description	Part No.
15	Drive Pinion	2962
16	Woodruff Key	2959
17	1" Bearing	4937
18	Spacer	4936
19	Retaining Ring	3556
20	Washer	2955-2
21	Winch Drum	3723
22	Drum Shaft	3637
23	Setscrew	603
24	Winch Frame	3719
25	Setscrew	3727
26	Cable Hook	2985
27	Grease Zerk	24499
28	Washer	2499

Miscellaneous Suspension Components



2381-058 10/15

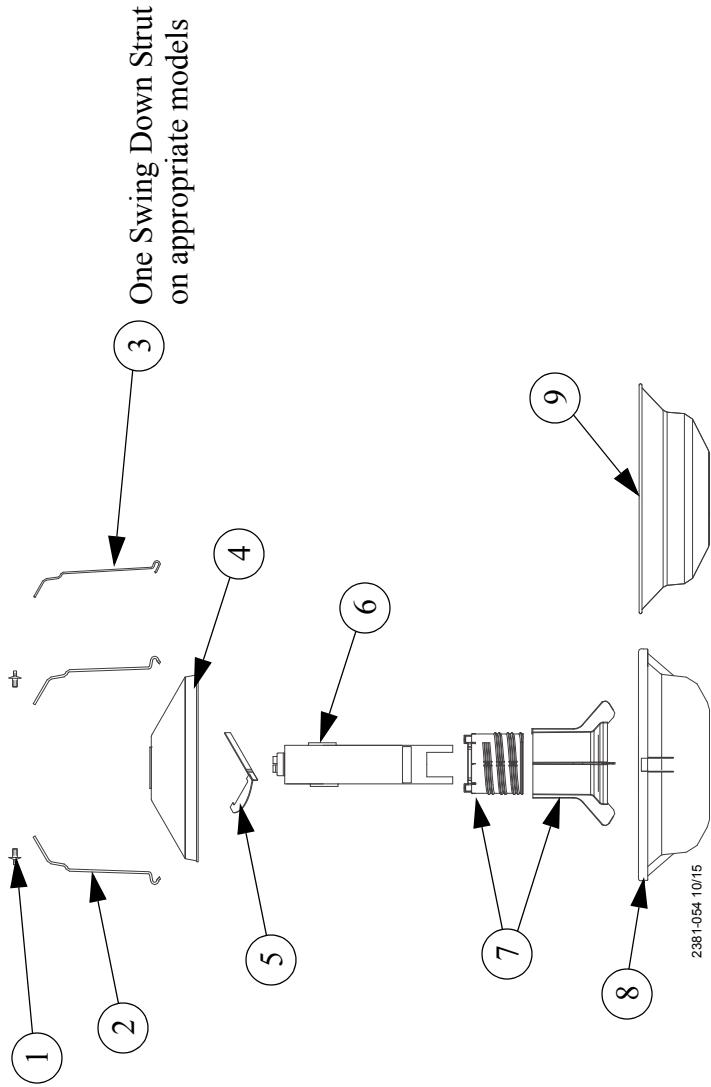
Item	Description	Part No.
1	3/16" Cable	1213
2	Cable Lock	14337
3	Pulley with Swivel	3004
4	Heavy Duty Pulley Assembly	2014
5	Pulley	2500
6	3/16" Cable Clamp	732
7	Screw Hook	2041
8	Extendable Drive Tube	47637
9	Pulley Assembly	28429
10	Ceiling Hook	28550
11	Handle Shank	3148
12	Drill Adapter Shaft	2886
13	Winch Handle Pin	3761
14	Winch Drive Tube (4')	2884-1
	Winch Drive Tube (8')	2884-2
	Winch Drive Tube (2')	2884-4
--	Clevis Pin, 5/16" x 1"	2797-1
--	Adjustable Bracket	2706
--	Hair Pin	2664
--	Full Line Suspension Kit	7948

Item 11 and 13 may be ordered as a kit under Part No. 2885

Item 12 and 13 may be ordered as a kit under Part No. 2886

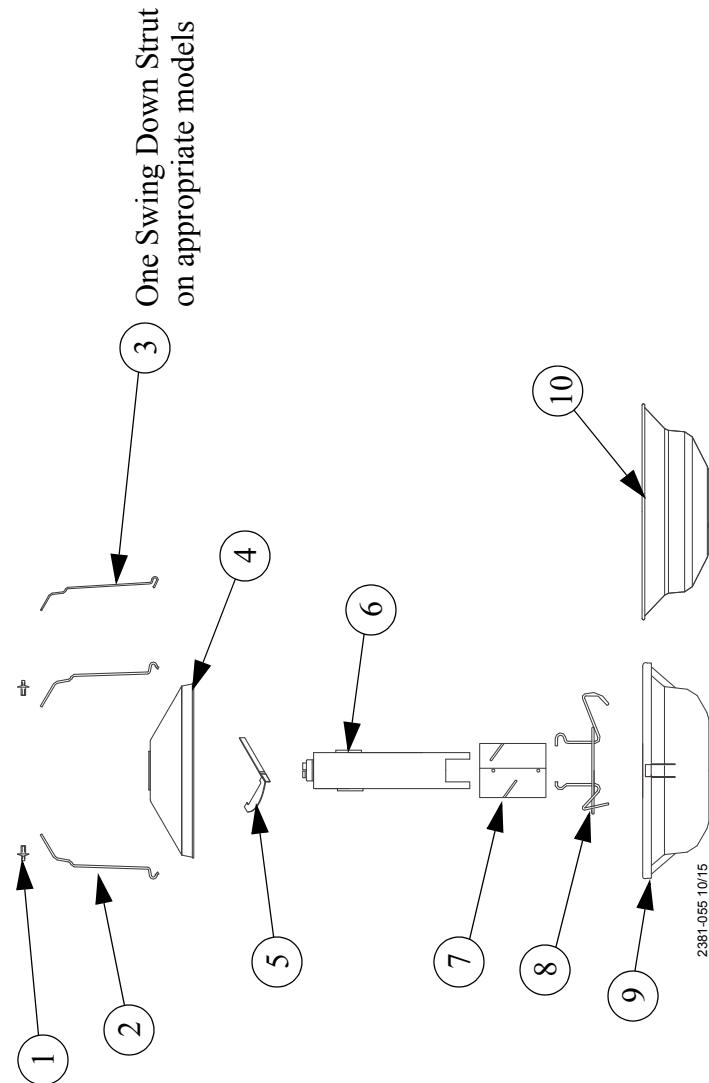
Item 11, 13 and 8 may be ordered as a kit under Part No. 47683

MODEL ATF™ Feeder Pan Assemblies w/ Plastic Feed Level Cone



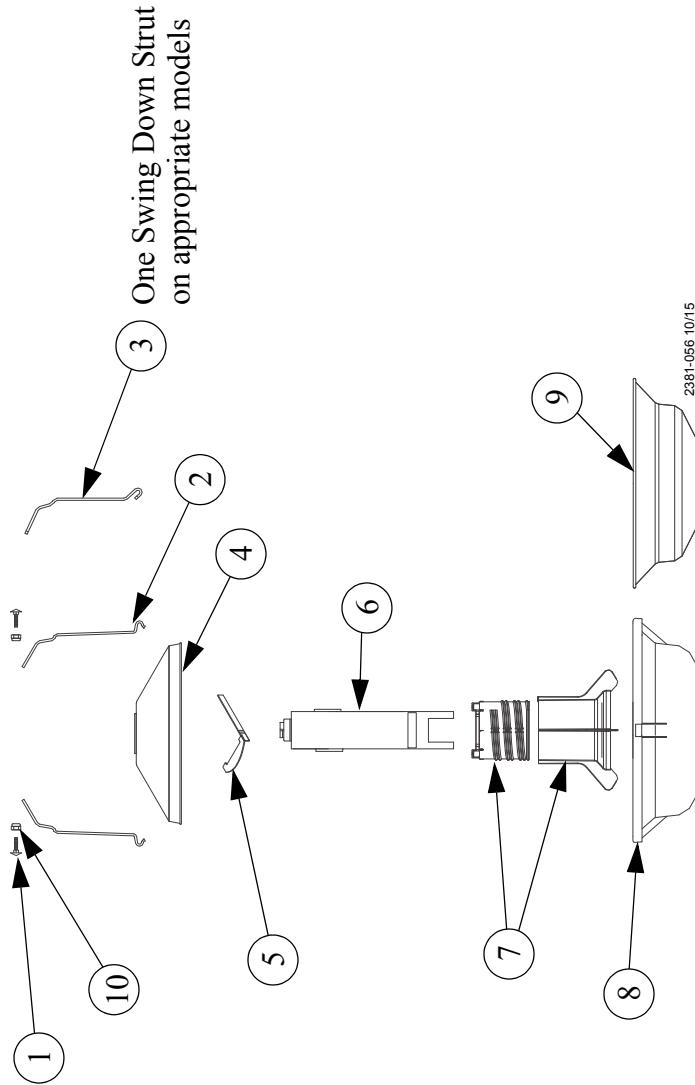
Item	Description	Part No.	50299 ATF Feeder w/Red Plastic Pan & Plastic Feed Level Tube	50299G ATF Feeder w/Green Plastic Pan & Plastic Feed Level Tube	50302 ATF Swing Down Feeder w/Red Plastic Pan & Plastic Feed Level Tube	50302G ATF Swing Down Feeder w/Green Plastic Pan & Plastic Feed Level Tube	50301 ATF Feeder w/ Metal Pan & Plastic Feed Level Tube	50303 ATF Swing Down Feeder w/ Metal Pan & Plastic Feed Level Tube
1	Drive Rivet	4200	4200	4200	4200	4200	4200	4200
2	Strut	4199	4199	4199	4199	4199	4199	4199
3	Swing Down Strut	--	--	24274	24274	--	--	24274
4	Pan Shield	4192	4192	4192	4192	4192	4192	4192
5	Shield Support	44733	44733	44733	44733	44733	44733	44733
6	Drop Tube	50300	50300	50300	50300	50300	50300	50300
7	Plastic Feed Cone	50359	50359	50359	50359	50359	50359	50359
8	Red Plastic Pan	29000	--	29000	--	--	--	--
	Green Plastic Pan	--	29000G	--	29000G	--	--	--
9	Metal Pan	--	--	--	--	--	4193	4193

MODEL ATF™ Feeder Pan Assemblies w/ Metal Feed Level Cone



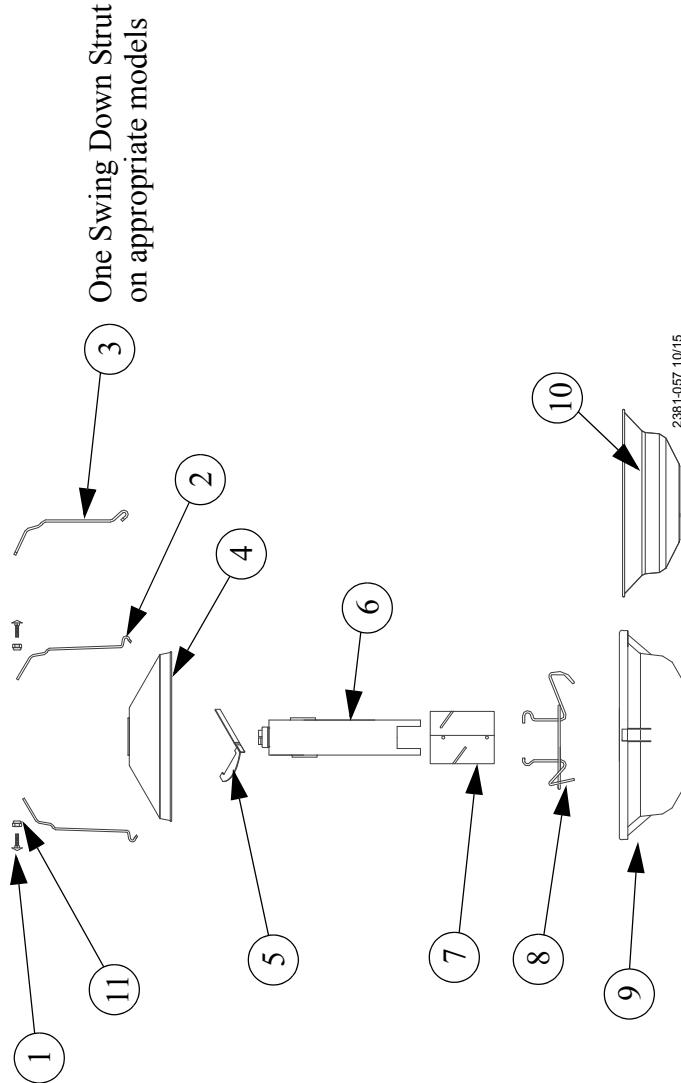
Item	Description	38667 ATF Feeder Pan w/Red Plastic Pan & Metal Feed Level Tube	38667G ATF Feeder Pan w/Green Plastic Pan & Metal Feed Level Tube	38666 ATF Swing Down Feeder Pan w/Red Plastic Pan & Metal Feed Level Tube	38666G ATF Swing Down Feeder Pan w/Green Plastic Pan & Metal Feed Level Tube	46763 ATF Feeder Pan w/ Metal Pan & Metal Feed Level Tube	46762 ATF Swing Down Feeder Pan w/ Metal Pan & Metal Feed Level Tube
		Part No.					
1	Drive Rivet	4200	4200	4200	4200	4200	4200
2	Strut	4199	4199	4199	4199	4199	4199
3	Swing Down Strut	--	--	24274	24274	--	24274
4	Pan Shield	4192	4192	4192	4192	4192	4192
5	Shield Support	44733	44733	44733	44733	44733	44733
6	Drop Tube	5806	5806	5806	5806	4194	4194
7	Feed Level Ring	29320	29320	29320	29320	29320	29320
8	Feed Level Ring Wldmt.	42773	42773	42773	42773	42773	42773
9	Red Plastic Pan	29000	--	29000	--	--	--
9	Green Plastic Pan	--	29000G	--	29000G	--	--
10	Metal Pan	--	--	--	--	4193	4193

MODEL ATF™ Plus Feeder Pan Assemblies w/ Plastic Feed Level Cone



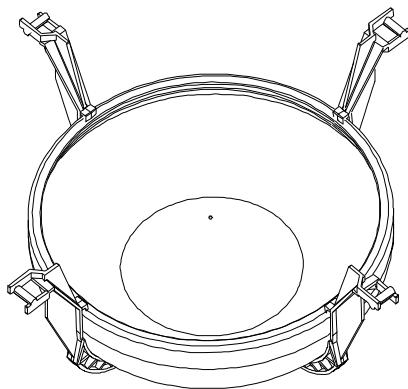
Item	Description	Part No.	50304 ATF Plus Feeder w/ Red Plastic Pan & Plastic Feed Level Tube	50304G ATF Plus Feeder w/Green Plastic Pan & Plastic Feed Level Tube	50305 ATF Plus Swing Down Feeder w/Red Plastic Pan & Plastic Feed Level Tube	50305G ATF Swing Down Feeder w/Green Plastic Pan & Plastic Feed Level Tube	50306 ATF Feeder w/ Metal Pan & Plastic Feed Level Tube	50307 ATF Swing Down Feeder w/ Metal Pan & Plastic Feed Level Tube
1	1/4" Carriage Bolt	22692			22692		22692	22692
2	Strut	49171			49171		49171	49171
3	Swing Down Strut	--			49172		--	49172
4	Pan Shield	49137			49137		49137	49137
5	Shield Support	44733			44733		44733	44733
6	Drop Tube	50308			50308		50308	50308
7	Plastic Feed Cone	50359			50359		50359	50359
8	Red Plastic Pan	29000			29000		--	--
	Green Plastic Pan	--			--		--	--
9	Metal Pan	--			--		4193	4193
10	Lock Nut	1269			1269		1269	1269

62 MODEL ATF™ Plus Feeder Pan Assemblies w/ Metal Feed Level Cone



Item	Description	49141 ATF Plus Feeder w/ Red Plastic Pan & Metal Feed Level Tube	49141G ATF Plus Feeder w/Green Plastic Pan & Metal Feed Level Tube	49175 ATF Plus Swing Down Feeder w/Red Plastic Pan & Metal Feed Level Tube	49175G ATF Swing Down Feeder w/Green Plastic Pan & Metal Feed Level Tube	49177 ATF Feeder w/ Metal Pan & Metal Feed Level Tube	49176 ATF Swing Down Feeder w/ Metal Pan & Metal Feed Level Tube
	Part No.						
1	1/4" Carriage Bolt	22692	22692	22692	22692	22692	22692
2	Strut	49171	49171	49171	49171	49171	49171
3	Swing Down Strut	--	--	49172	49172	--	49172
4	Pan Shield	49137	49137	49137	49137	49137	49137
5	Shield Support	44733	44733	44733	44733	44733	44733
6	Drop Tube	49136	49136	49136	49136	49136	49136
7	Feed Level Ring	29320	29320	29320	29320	29320	29320
8	Feed Level Ring Wldmt.	42773	42773	42773	42773	42773	42773
9	Red Plastic Pan	29000	--	29000	--	--	--
	Green Plastic Pan	--	29000G	--	29000G	--	--
10	Metal Pan	--	--	--	--	4193	4193
11	Lock Nut	1269	1269	1269	1269	1269	1269

Optional Parts



THE H2 PLUS PAN ADAPTER IS MADE UP OF TWO PARTS PLUS H2 PAN

PART NO. 41474 INCLUDES 41100-1 & -2

TOP HALF PART NO. 41100-1

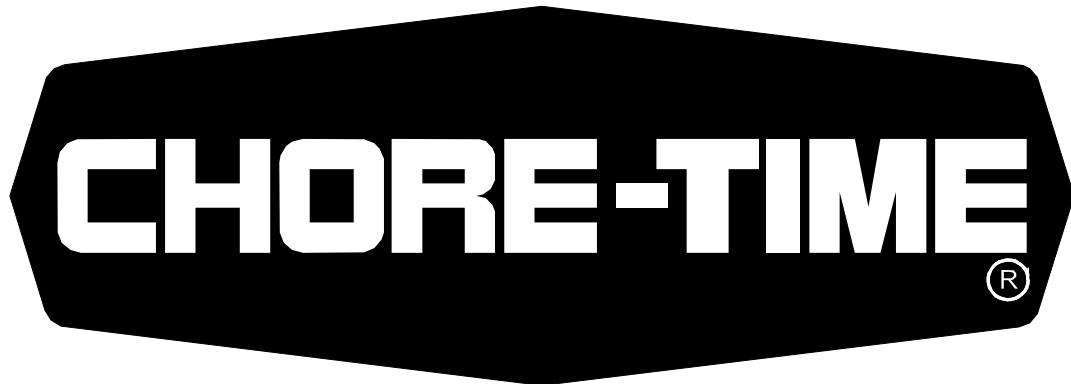
BOTTOM HALF PART NO. 41100-2

H2 PLUS PAN PART NO. 24901

PART NO. 41475 INCLUDES 41100-1 & -2

PLUS 24901 PAN

APPLICATION: THIS PRODUCT WILL BE USED WHERE THE DAY OLD TURKEYS WILL BE STARTED ON THE ADULT TURKEY FEEDER FOR THE FIRST 5 WEEKS. THEN THE PAN ASSEMBLY WILL BE REMOVED AND THE ADULT PAN INSTALLED.



MADE TO WORK.

BUILT TO LAST.[®]

Revisions to this Manual

Page No.	Description of Change
Various	Consolidated Turkey Feeder Manuals

Contact your nearby Chore-Time distributor or representative for additional parts and information.

CTB Inc.
P.O. Box 2000 • Milford, Indiana 46542-2000 • U.S.A.
Phone (574) 658-4101 • Fax (877) 730-8825
E-mail: poultry@choretme.com • Internet: www.choretme.com