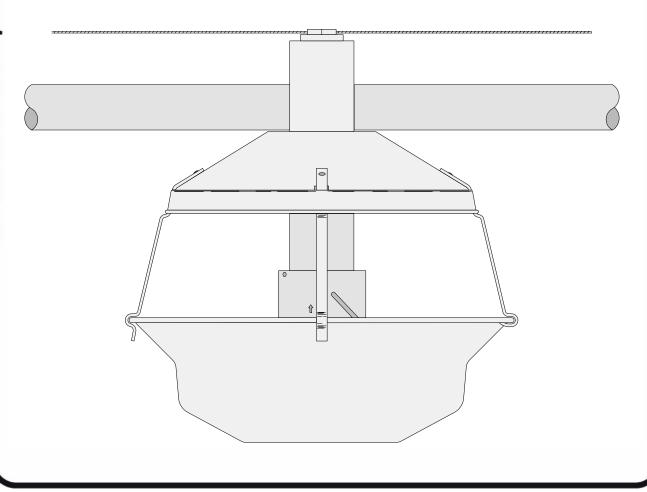


Poultry Production Systems

MODEL ATFTM PLUS

Feeding System
Installation and Operators Manual



Installation and Operators Manual

June 2004

MF1814B

Installation and Operators Manual

Chore-Time Warranty

Chore-Time Equipment ("Chore-Time") warrants each new Chore-Time product manufactured by it to be free from defects in material or workmanship for one year from and after the date of initial installation by or for the original purchaser. If such a defect is found by the Manufacturer to exist within the one-year period, the Manufacturer will, at its option, (a) repair or replace such product free of charge, F.O.B. the factory of manufacture, or (b) refund to the original purchaser the original purchase price, in lieu of such repair or replacement. Labor costs associated with the replacement or repair of the product are not covered by the Manufacturer.

Conditions and Limitations

- 1. The product must be installed by and operated in accordance with the instructions published by the **Manufacturer or Warranty will be void**.
- 2. Warranty is void if **all components** of the system are not original equipment supplied by the **Manufacturer**.
- 3. This product must be purchased from and installed by an authorized distributor or certified representative thereof or the Warranty will be void.
- 4. Malfunctions or failure resulting from misuse, abuse, negligence, alteration, accident, or lack of proper maintenance shall not be considered defects under the Warranty.
- 5. This Warranty applies only to systems for the care of poultry and livestock. Other applications in industry or commerce are not covered by this Warranty.

The **Manufacturer** shall not be liable for any **Consequential or Special Damage** 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.

THIS WARRANTY CONSTITUTES THE MANUFACTURER'S ENTIRE AND SOLE WARRANTY AND THIS MANUFACTURER EXPRESSLY DISCLAIMS ANY AND ALL OTHER WARRANTIES, INCLUDING, BUT NOT LIMITED TO, EXPRESS AND IMPLIED WARRANTIES AS TO MERCHANTABILITY, FITNESS FOR PARTICULAR PURPOSES SOLD AND DESCRIPTION OR QUALITY OF THE PRODUCT FURNISHED HEREUNDER.

Chore-Time Distributors are not authorized to modify or extend the terms and conditions of this Warranty in any manner or to offer or grant any other warranties for Chore-Time products in addition to those terms expressly stated above. An officer of CTB, Inc. must authorize any exceptions to this Warranty in writing. The Manufacturer reserves the right to change models and specifications at any time without notice or obligation to improve previous models.

Effective: June 2004

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Thank You

The employees of Chore-Time Equipment would like to thank your for your recent Chore-Time purchase. If a problem should arise, your Chore-Time distributor can supply the necessary information to help you.

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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.

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.

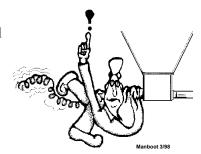
Ground all non-current carrying metal parts to guard against electrical shock.

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 MODEL ATFTM PLUS Feeding System has 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™ PLUS Recommendations & Guidelines

The Chore-Time Adult Turkey Feeder is recommended for birds 5 to 6 weeks old and over. See the chart for feeder space recommendations.

Adult Tom Turkeys: 45 to 50 birds per pan.

Hen Turkeys: 70 to 80 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 Tube in the Feed Level Ring.

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.

Glossary of Terms

Sensor Plus control:

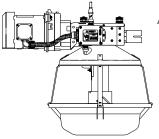
Electronic Switch

A feeder, equipped with a switch, (located at the power unit), used to control the feeding system.

End control:

Mechanical Switch

A feeder, equipped with a switch, (located at the power unit), used to control the feeding system.



Clamp:

A two-piece, riveted strap used to secure auger tubes together.

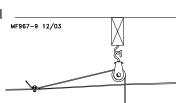


Anti-Roost Bracket:

An insulator and bracket assembly mounted on every fourth or fifth clamp to support shocker wire.

Adjustment Leveler:

A cable locking devise used to conveniently adjust the feeder to a level position.



Drop Line:A section of c

A section of cable fastened to the main cable, routed through a pulley, down to the feeder line.



A cable/pulley arrangement that allows cable to be routed to a desired location.

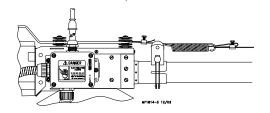
Double-back:

A cable/pulley arrangement that reduces the load on the Power Winch.

Power Lift:

Red, cast iron winch used to raise and lower the feeder line(s). Operated by a hand crank or electric drill. Referred to as Power Winch.

MF967-4 12/03



Electro-Guard:

A high voltage, low current shocking device used to keep birds from setting on the feeder line.



Planning the Floor Feeding System

1. Select the House Layout.

A.Optional Mid Line Controls may be used for partial house brooding, see figure 1.

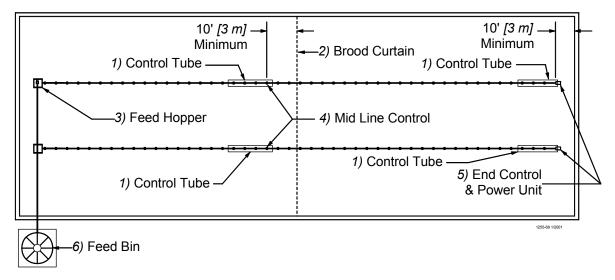


Figure 1.Component location diagram for systems up to 400 feet [122 m]. (Top View).

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

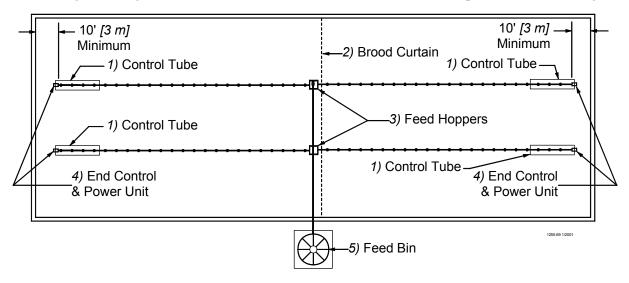


Figure 2. Component location diagram for systems over 400 feet [122 m]. (Top View).

- 2. Determine the Feed Bin location.
- 3. Determine the Brood Curtain location.
- 4. Determine the location for the End Control Pans, and if used the Mid Line 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.

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) |
| 200 lb. Feed Hopper & Feed | 250 lbs. (113.4 kg) |
| Power Winch | 40 lbs. (18.1 kg) |

The type of installation required depends on feeder line length. **Figure 4** 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 1 FOOT (300 MM) OF THE HOPPER AND 3 FEET (1 M) OF THE MOTOR ON THE CONTROL UNIT. 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.

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 5.

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.

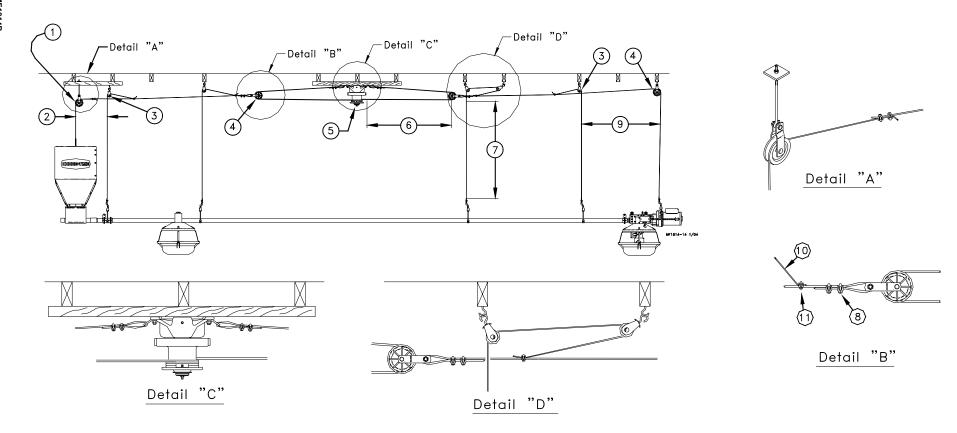


Figure 3. For Systems over 350' (107 m)

| Key | Description |
|-----|----------------------------|
| 1 | Full Line Suspension Kit |
| 2 | 1' (30 cm) maximum |
| 3 | Swivel Pulley |
| 4 | 3.5" (8.9 cm) Pulley |
| 5 | Power Winch |
| 6 | Key #7 + 2' (61 cm) |
| 7 | Maximum Distance of Travel |
| 8 | Double Clamp Here |
| 9 | 3' (90 cm) Maximum |
| 10 | Drop Line |
| 11 | Single Clamp Here |

Suspension System

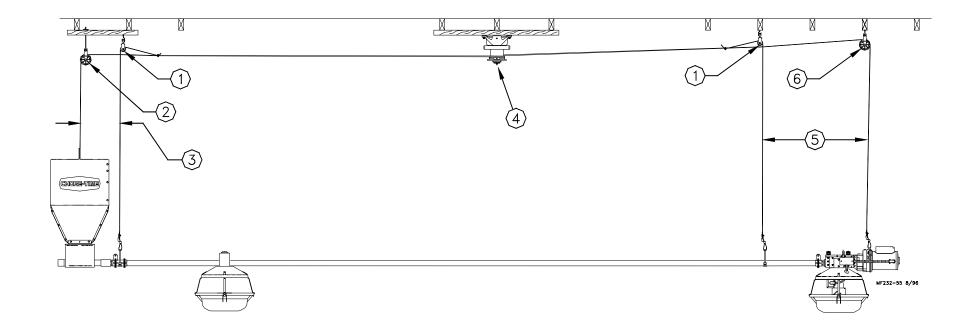


Figure 4.For Systems up to 350' (107 m)

| Key | Description | |
|-----|--------------------------|--|
| 1 | Swivel Pulley | |
| 2 | Full Line Suspension Kit | |
| 3 | 1' (30 cm) maximum | |
| 4 | Power Winch | |
| 5 | 3' (90 cm) maximum | |
| 6 | 3.5" (8.9 cm) Pulley | |

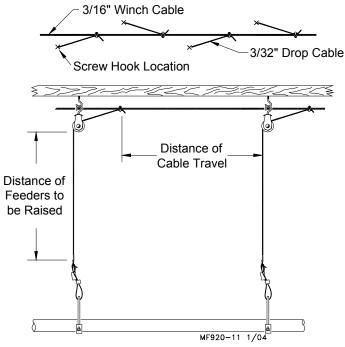


Figure 5. Suspension System with Off-Sets

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.

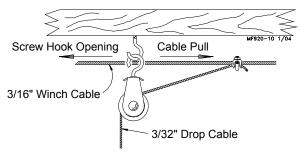


Figure 6. Screw Hook Installation

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 19 - 23.

After securing the Ceiling Hook to the truss, slide the hook of a Swivel Pulley into the slot, see figure 11.

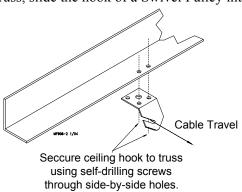


Figure 7.Narrow Steel Truss Installations

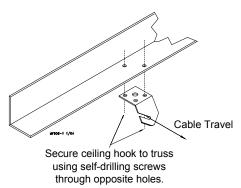


Figure 8. Wide Steel Truss Installations

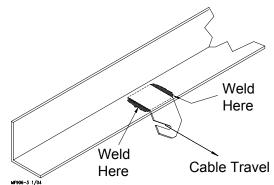


Figure 9. Steel Truss Welded Installations

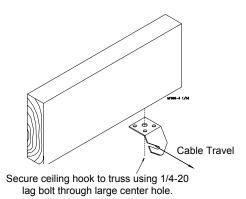


Figure 10. Wood Truss Installations

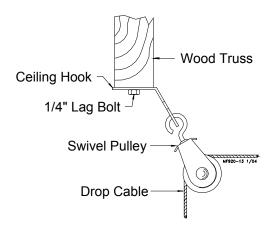


Figure 11. Swivel Pulley Installation

Power Winch Installation

1. Bolt the Power Winch, fully assembled, to a 2x8 (50x200 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 22.

2. Attach the 2x8 (20x200 mm) board, with the Power Winch secured, to the ceiling at the center of the feeder line. The 2x8 (50x200 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.

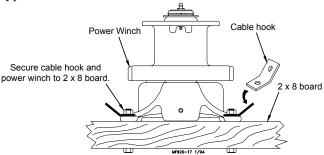


Figure 12. Power Winch Installation

- 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.

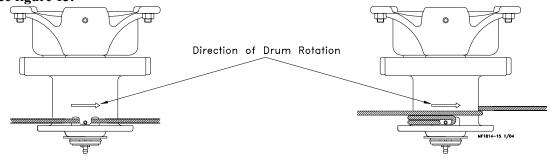


Figure 13. Cable Installation & Wrap

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 6.
- 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 10), Detail D shows a "throwback" cable arrangement.

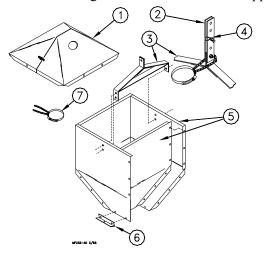
4. Begin installing suspension drops at the winch and proceed to the ends of the feeder line.

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 200# Hopper is used with the MODEL ATFTM PLUS feeding system.

- 1. Loosely, assemble the 200# Hopper Side Panels, as shown in **Figure 14**, using 1/4-20 bolts and 1/4-20 hex nuts (supplied in Hardware Package). The Hopper should be assembled so that the "CHORE-TIME" decals are on opposite sides of the hopper.
- 2. Secure the Boot Hangers to the bottom of the hopper, using 1/4-20 hardware, see figure 14.



| Key | Description | |
|-----|----------------------------|--|
| 1 | Two-Piece Cover (optional) | |
| 2 | Adjustment Bracket | |
| 3 | Hanger Bracket | |
| 4 | Clevis Pin & Hair Pin | |
| 5 | Side Panels | |
| 6 | Boot Hanger | |
| 7 | Tube Support Assembly | |

Figure 14. Hopper Assembly Procedure

Feeder Assembly

MODEL ATF™ PLUS Feeding System

1. Attach (4) pan supports to the pan shield using the (4) carriage bolts and plastic lock nuts. Then tighten the nuts.

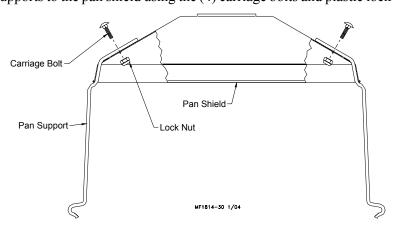


Figure 15. Pan Shield Assembly

2. Determine which Feeder Pan (Adult Turkey or Steel) is to be installed, see figure 16.

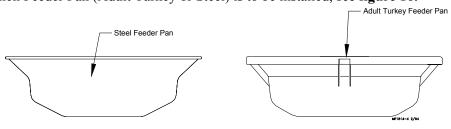


Figure 16. Feeder Pans

- 3. Assemble the feed level tube and feed level ring as shown, see figure 17.
- 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 the plastic adult turkey feeder pan.
- Position the feed level ring in the fourth hole from the top for the steel adult turkey feeder pan, see figure 17.
- 4. If the feed level tubes are to be winch adjustable, install the cable assemblies at this point. If the feed level tubes are not to be winchable, proceed to step 5.

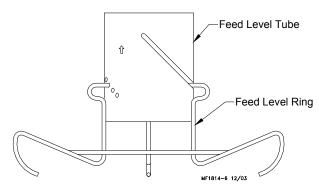


Figure 17. Adult Turkey Feeder Feed Level Ring Plastic Pan

Before installing the cable assemblies a 90 degree bend needs to be put in the cable to keep all the feed level tube assemblies at a uniform height, To do this take a pair of needle nose pliers and grab the cable behind the cable stop. Now bend the cable over the pliers back onto itself, **see figure 18.**





Figure 18. Cable

Install two cables at each feed level tube as shown, **see figure 19.** The cable stop should be located on the inside of the feed level tube and pulled up tight against the inside.

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

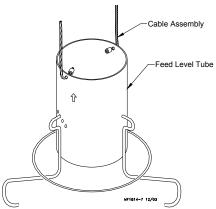
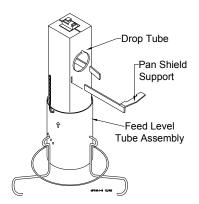


Figure 19. Cable Installation

5. Place the feed level tube assembly in the feeder pan.

- 6. Insert drop tube into feed level tube assembly, **see figure 20.** Install the pan shield supports in the slots in the drop tube.
- 7. 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.

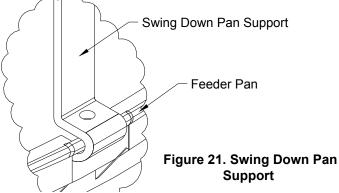


Figure 20. Drop Tube Installation

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 that all the Swing Down Pan Supports are on the same side of the feeder line.
- 2. Rotate the feeder Tube so that 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 22.** 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.**

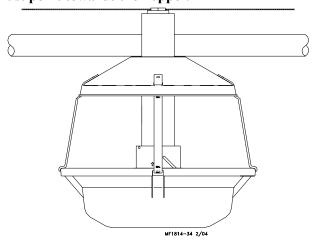


Figure 22. Install Feeders on Tubes

Feeder Line Assembly & Suspension

Feeder Line Installation

- 1. The tubes should be laying end to end in approximately the final location of the line. The expanded end of each tube should be toward the hopper end of the line, see figure 23.
- 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.

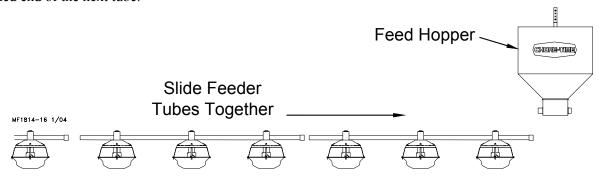


Figure 23. Feeder Line Assembly Procedure

3. Place a Tube Clamp Assembly **or** Clamp/Anti-Roost Bracket at each joint. **Figure 24** shows the standard Clamp and Clamp/Anti-Roost Bracket.

Make sure that each tube fits as far as possible into the belled end of the next tube. The outlet holes <u>must point</u> <u>down</u>. Install tube clamps as shown in **Figure 25**.

4. Begin at the hopper end of the line. Use a tube clamp with 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 cable clamp with anti-roost bracket at each end of the line and at 20 foot (6 m) intervals along the length of the line.

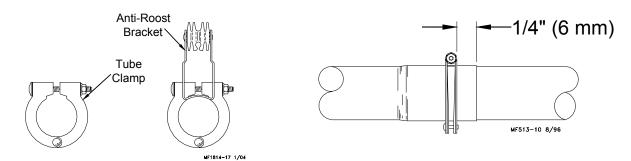


Figure 24. Tube Clamp & Anti-Roost Bracket

Figure 25. Tube Joint Connection

- 5. Install the Hangers on the tubes on the 8' (2.4 m) spacings determined by the suspension drop lines. **Figure 26** 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.
- 6. Install Adjustment Leveler within 6" (152 mm) of feeder line hanger. **Figure 26** shows the proper cable routing around the Adjustment Leveler.
- 7. Following installation of all drops, check drop cables before raising feeder line. Cable must be on all pulleys before raising the feeder line.
- 8. Raise the feeder line to a convenient working height.
- 9. After the feeder line has been suspended, level the system to the bird walking surface.
- 10. Before tightening each clamp;
 - make sure each tube is level (not sagging, sloping, etc.).
 - make sure straight end of tube is fully inserted in belled end of next tube.
 - make sure clamp is located, as shown in Figure 25.

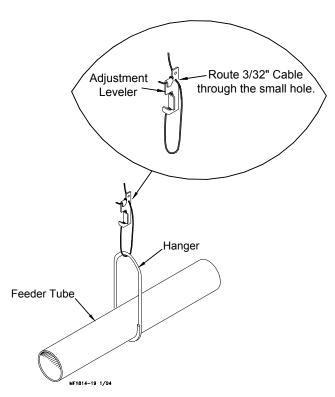
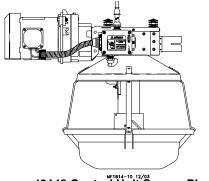


Figure 26. Adjustment Leveler & Hanger Assembly

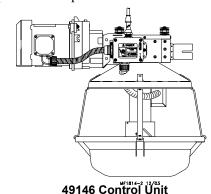
11. Finally, tighten the Tube Clamps on the feeder tubes. Clamp the joints securely, but do not crush the tubes.

Control Unit Installation

The assembly instructions are very similar for the 49148 Control Assembly and the 49146 Control Assembly. The primary differences between the controls are in the electrical components and protection devices.



49148 Control Unit Sensor Plus



nite

Figure 27. Control Units

1. Remove the four 5/16-18x5/8" 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 28.

2. Bolt the Control Unit Body Assembly to the Power Unit, using hardware supplied, see figure 28.

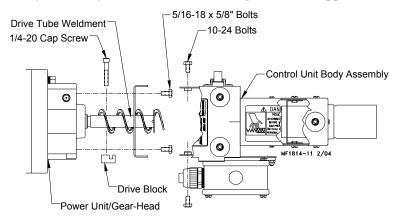
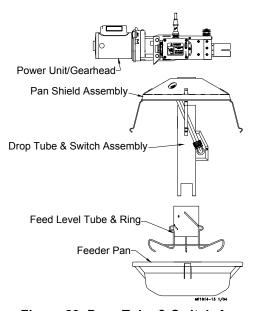


Figure 28. Control to Power Unit Ass'y

- 3. Bolt the pan support to the pan shield. See figure 15 (on page 15) for instructions on bolting.
- 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 MODEL ATFTM PLUS Feeding System" on page 43.



- 5. Insert the Drop Tube and Switch Assembly through the Pan Shield, from the bottom, **see figure 29.** 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, **see figure 30.**

Three Phase: Refer to applicable electrical standards for connecting Power Unit to Control Unit. Components are not supplied by Chore-Time.



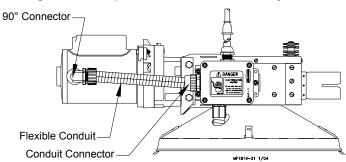


Figure 30. Conduit Installation

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 31.

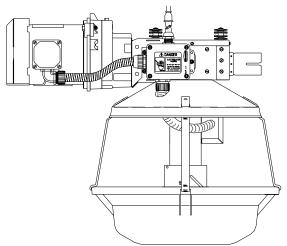


Figure 31. Switch Installation

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

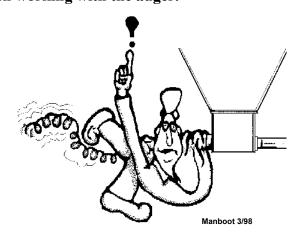
Single Phase Control Unit may be wired as shown in the wiring diagrams on page 30.

Three Phase Control Unit must be wired as shown in the wiring diagrams on page 31.

9. Mount the control unit on the end of the feeder line and secure with a tube clamp. **See figure 28 (on page 20)**. The distance between the control unit pan and the last pan should be five feet (1.5 m) or less.

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 AUGER!

To avoid kinking the auger, be careful not to drop the rolled auger when handling. Inspect the auger carefully as it is installed. Small kinks may be straightened. 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 the Auger Brazing section of this manual.





- 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 form the end of the auger tube to avoid injury.

With the auger coiled about 6 feet (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 that one coil is required for each feeder line, the auger ends will have to be brazed together. Refer to the Brazing the Auger section in this manual.
- 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, as shown in **Figure 32**.
- 6. Attach the auger to the output shaft of the Power Unit. Use the Drive Block to secure the auger to the Output Shaft.

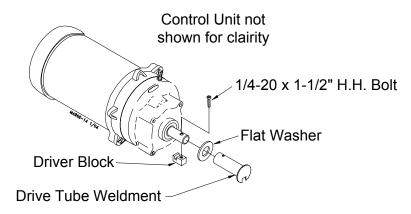
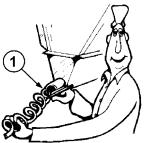


Figure 32. Auger Driver Components

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 33.**



| Key | Description | |
|-----|---------------------------|--|
| 1 | Mark the relaxed auger at | |
| | the end of the boot. | |

Figure 33. Marking the Relaxed Auger

8. Auger stretch:

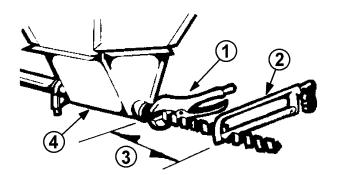


The auger needs to be stretched 7" (180 mm) per 100' (30 m). Example: A 300' (90 m) feeder line requires 21" (500 mm) of stretch.

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 that the pliers rest against the end of the boot, **see figure 34.**

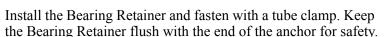
Use a hacksaw or bolt cutters to cut the auger at the stretched auger mark.



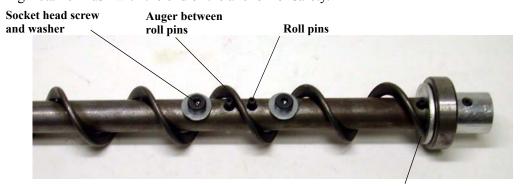
| Key | Description | |
|-----|-------------------------------|--|
| 1 | Locking Pliers | |
| 2 | Use a hacksaw or bolt cutters | |
| | to cut the auger. | |
| 3 | Pull an extra 8" (200 mm) of | |
| | auger (minimum) to allow for | |
| | Anchor & Bearing installation | |
| 4 | Boot under feed hopper. | |

Figure 34. Cutting Auger with stretch

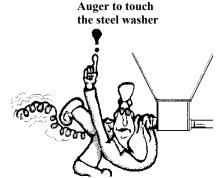
- 9. Insert the Anchor Assembly into the auger, guide the tip of the auger between the two roll pin continue to insert the auger until it touches the washer at the back of the anchor. Tighten the two screws in the center of the anchor.
- 10. Carefully remove the locking pliers while holding onto the 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.







BE CAREFUL WHEN WORKING WITH 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, NOT THREAD INSIDE EACH OTHER, see figure 35. 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 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.

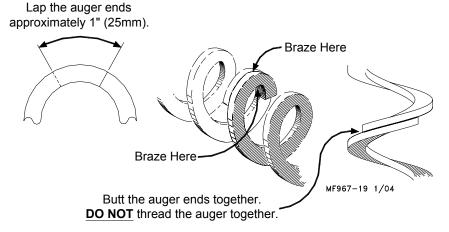


Figure 35. Auger Brazing

Winch Adjustable Feed Level Tubes (optional equipment)

Chore-Time's MODEL ATF™ PLUS feeding system can be equipped to provide winch adjustable Feed Level Tubes. New systems can be ordered with this feature. Existing system can be (easily) 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' (61 m). The winch should be located in the middle of the line of feeders that it is to adjust, **see figure 36.**

Operation

The Feed Level Tubes 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 Tubes can be lowered to reduce the feed level.

For systems using the 9194 Feed Level Tubes (winchable), the Feed Level Ring will need to be adjusted manually.

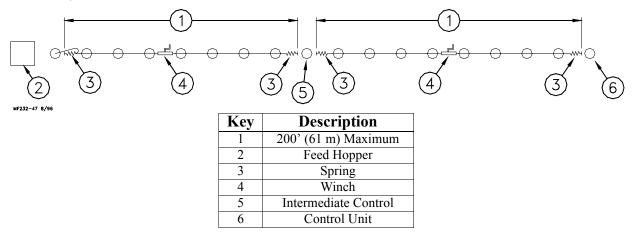


Figure 36. Feed Line Layout

Installation of the Winch Adjustable Feed Level Tube System

1. Use two U-bolts provided to fasten the winch to the feeder line tube, **see figure 37.** The winch should be placed in the center of the line of Feed Level Tubes it will adjust, as shown in **Figure 36**.

THE LINE LENGTH MUST NOT EXCEED 200 FEET (61 M).

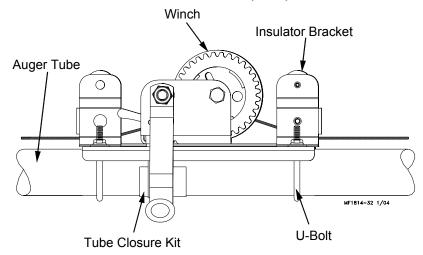


Figure 37. Winch Installation

2. Anchor spring to clamp on each side of the winch, see figure 38. Attach the Tube Clamp/Spring assemblies to the feeder line tube at a maximum distance of 100 feet (30 m) from the winch, see figure 36.

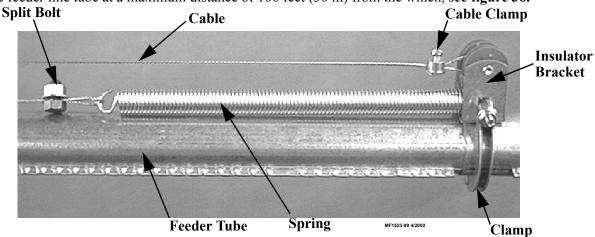
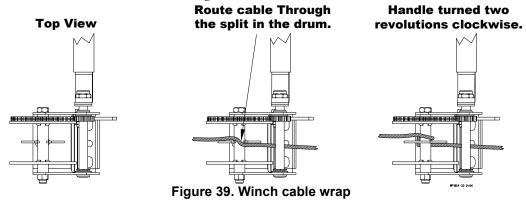


Figure 38. Spring and Insulator Bracket Installation

3. Lay the cable through the split in the winch drum. Turn the winch handle clockwise two revolutions to wind some cable onto the winch drum, see figure 39.



4. Thread the cable through every Drop Tube to support the cable and keep it in position, see figure 40.

5. Loop the cable around the end of the Spring and secure with a split bolt cable clamp, see figure 38.

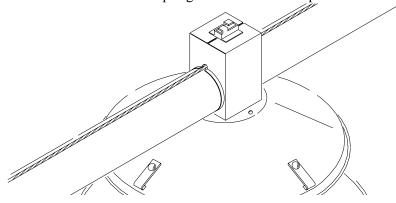


Figure 40. Winch Cable Routing

6. There is not enough room between the feed hopper and the first feeder pan to attach and stretch the spring. Install the spring in between the first and second pan after the hopper. Then route the cable back to the first pan and attach to the feed tube cable assemblies, see figure 41.

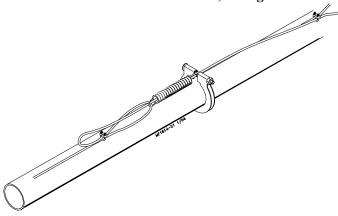


Figure 41. Hopper End Spring Installation

- 7. 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, See figure 18 (on page 16) and See figure 19 (on page 16).
- 8. 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, **see figure 42.**

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

- 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.

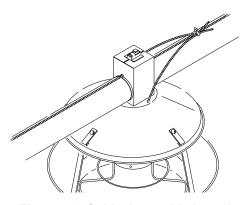
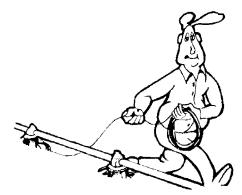


Figure 42. Cable Assembly Installation

Anti-Roost Installation



1. Unroll the bulk anti-roost cable. Note: If the cable is unrolled as shown in **Figure 43**, taking 5 loops of the coil with one hand, then changing hands to remove 5 loops as it is unrolled, it will lie flat during installation.

Figure 43. Unrolling the Cable

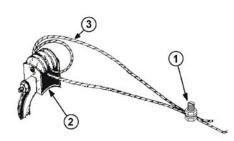
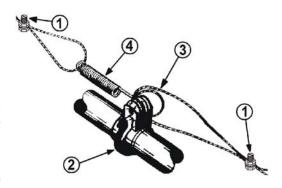


Figure 44. Anti-Roost Cable Installation

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 44.**

| Key | Description |
|-----|-------------------------------|
| 1 | Cable Clamp |
| 2 | Clamp with Anti-Roost Bracket |
| 3 | Anti-Roost Cable |

- 3. Insert the cable in the insulator on the top of each Grill Support between the hopper and the next anti-roost bracket.
- 4. Attach a spring in the center groove at the second anti-roost bracket and cut the cable at this point, see figure 45.
- 5. Thread the ends of the cable through the end of the spring. Pull the cable tight so that 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 45.
- 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 45.**
- 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 entire feeder line.



| Key | Description | |
|-----|-------------------------------|--|
| 1 | Cable Clamp | |
| 2 | Clamp with Anti-Roost Bracket | |
| 3 | Anti-Roost Cable | |
| 4 | Spring should be stretched | |
| | 3/4" to 1" (19 to 25 mm) | |

Figure 45. Anti-Roost Cable Installation

- 9. At the control unit, after clamping the cable to the spring, cut the cable about 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 32.
- 10. Install the wire form on the control unit insulators. Be sure the Guard snaps into the retainers molded into the insulators. See Figure 32.
- 11. Install the Poultry Trainer or Line Charger, as shown in Figure 47 or Figure 48.

The Poultry Trainer is used to power all Anti-Roost lines in a house, see figure 47.

The Line Charger is used to power individual Anti-Roost lines in a house, see figure 48.

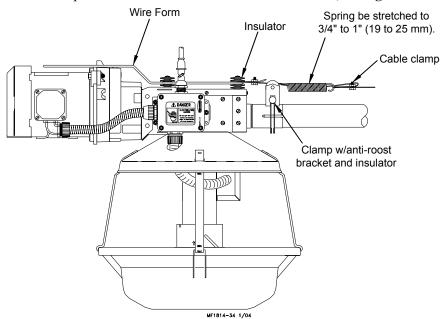


Figure 46. Anti-Roost Installation at Control Unit

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.

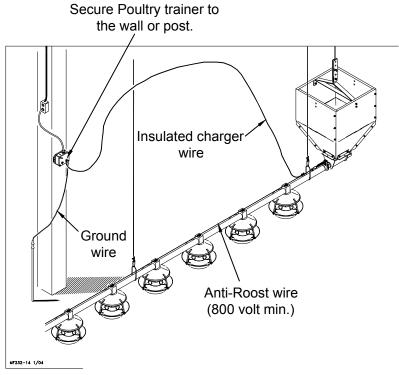


Figure 47. Poultry Trainer Installation

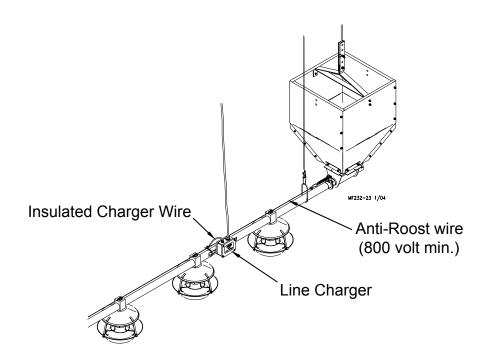


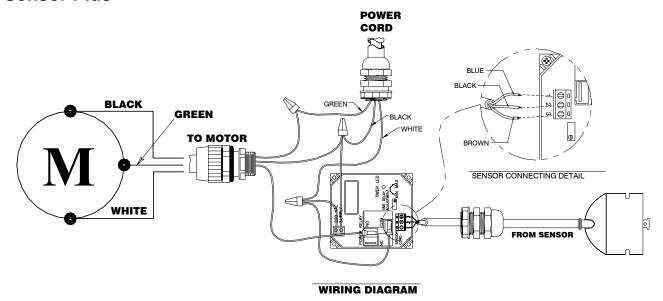
Figure 48. Line Charger Installation

12. The anti-roost system must be on a separate electrical circuit, allowing the system to be disconnected by a switch near the door.

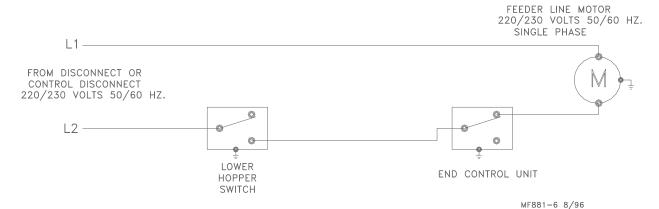
Remember, the Anti-Roost System should be grounded through the poultry trainer.

Wiring Diagrams

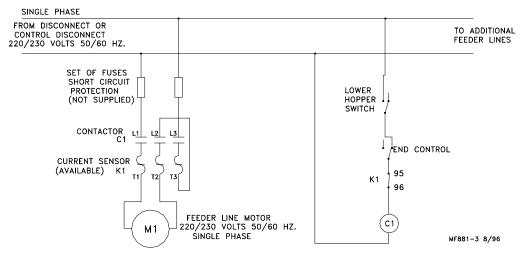
Sensor Plus



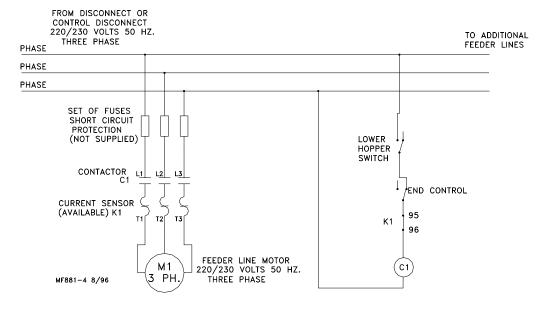
End & Intermediate Control Wiring Diagrams: Single Phase Single Phase Wiring Diagram



Single Phase Wiring Diagram



End & Intermediate Control Wiring Diagrams: Three Phase Three Phase Wiring Diagram: 220/230V.



Three Phase Wiring Diagram: 380/415 V.

FROM DISCONNECT OR CONTROL DISCONNECT 380/415 VOLTS 50 HZ. THREE PHASE TO ADDITIONAL FEEDER LINES PHASE PHASE PHASE NEUTRAL SET OF FUSES SHORT CIRCUIT PROTECTION
(NOT SUPPLIED) LOWER HOPPER SWITCH CONTACTOR L1 L2 L3 END CONTROL CURRENT SENSOR (AVAILABLE) K1 95 T2 T3 Κ1 96

> FEEDER LINE MOTOR 380/415 VOLTS 50 HZ. THREE PHASE

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3 PH

Parts Listings

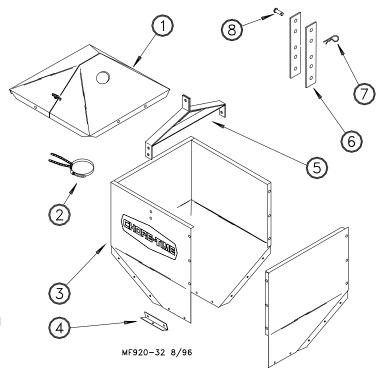
200# Hopper Components

| Item | Description | Part No. |
|------|------------------------------|----------|
| 1* | Hopper Cover (w/o hole) | 28208 |
| | Hopper Cover (w/ hole) | 28702 |
| 2 | Tube Support Assembly | 14367 |
| | Clamp | 13948 |
| | Chain | 2128-1 |
| 3 | Hopper Side (4 req'd | 2680 |
| 4 | Boot Hanger | 2671 |
| 5 | Hanger Bracket Assembly | 2681 |
| 6 | Adjustment Bracket (2 req'd) | 2706 |
| 7 | Hair Pin | 2664 |
| 8 | Clevis Pin, 5/16 x 1" | 2797-1 |

The 200# Hopper Assembly (w/o cover) may be ordered under Part No. 7941.

The 200# Hopper Assembly (w/cover) may be ordered under Part No. 28358.

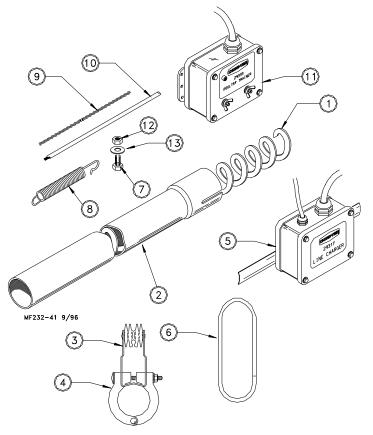
*Both sides of the Hopper Cover and the required hardware may be ordered under Part No. 28206.



Feeder Line Components

| Item | Description | Part No. |
|------|------------------------------|-----------|
| 1* | Auger | 6820-0 |
| 2 | ATF Auger Tube (1-Hole Tube) | 6684 |
| | ATF Auger Tube (2-Hole Tube) | 6685 |
| | ATF Auger Tube (3-Hole Tube) | 6686 |
| 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 (165 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.

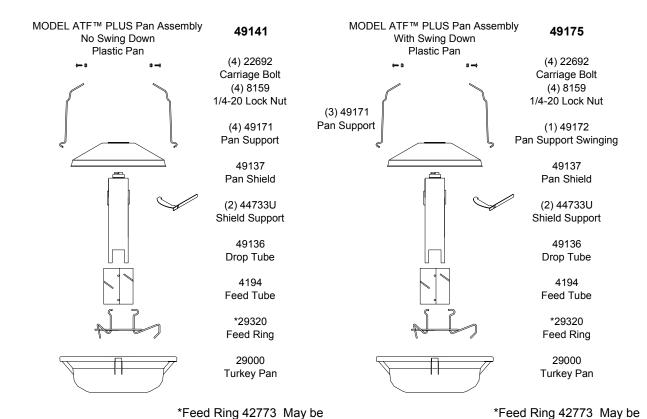


used in place of 29320

*Feed Ring 42773 May be

used in place of 29320

MODEL ATF™PLUS Pan Components



used in place of 29320

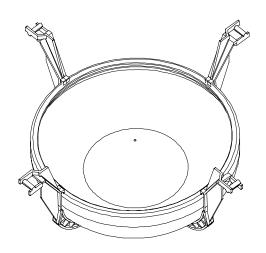
*Feed Ring 42773 May be

used in place of 29320

MF1814-23 6/04

MODEL ATF™ PLUS Pan Assembly MODEL ATF™ PLUS Pan Assembly 49177 49176 No Swing Down With Swing Down Metal Pan Metal Pan (4) 22692 (4) 22692 Carriage Bolt Carriage Bolt (4) 8159 (4) 8159 1/4-20 Lock Nut 1/4-20 Lock Nut (3)49171Pan Support (4)49171(1) 49172 Pan Support Pan Support Swinging 49137 49137 Pan Shield Pan Shield (2) 44733U (2) 44733U Shield Support Shield Support 49136 49136 Drop Tube Drop Tube 4194 4194 Feed Tube Feed Tube *29320 *29320 Feed Ring Feed Ring 4193 4193 Turkey Pan Steel Turkey Pan Steel

Optional Parts

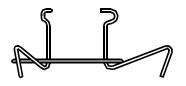


THE H2 PLUS PAN ADAPTER IS MADE UP OF TWO PARTS PLUS H2 PAN

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

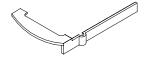
FEED RING PART NO. 42773

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 AN THE ADULT PAN INSTALLED.



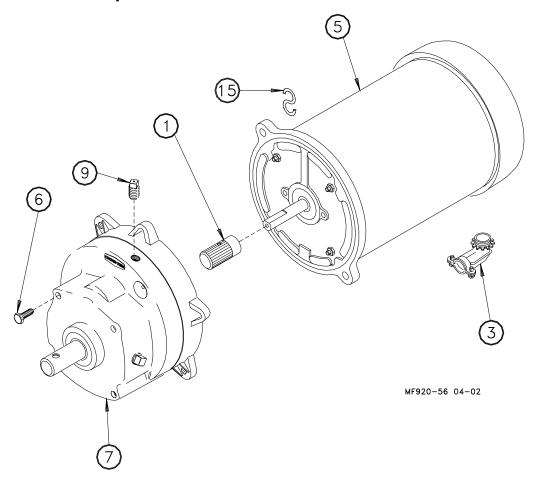
Use 42773 Feed level ring with the H2 Plus Adapter





(2) 44733 Shield Support

Power Unit Components

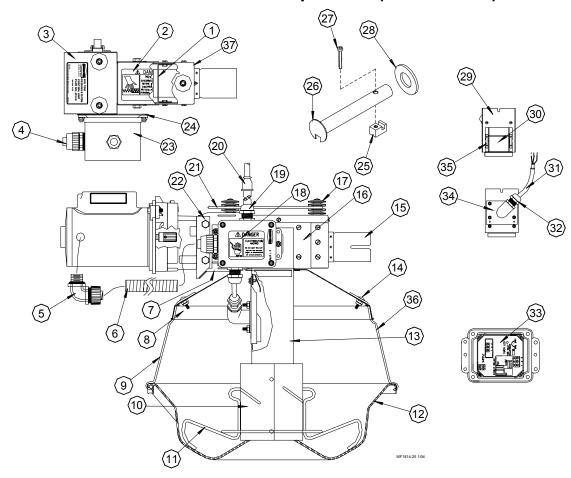


| Item | Description | 3259-34 Part No. | 3259-39 Part No. | 3259-98 Part No. | 3259-100 Part No. |
|------|--------------------------|---------------------|---------------------|---------------------|----------------------|
| 1 | Pinion Assembly | 5046 | 5046 | 5046 | 5046 |
| 2 | Cord Assembly | | | 28028 | |
| 3 | Connector (90 degree) | 4228 | 4228 | 4228 | |
| 4 | Motor | 4229 | 5703 | 5977 | 28031 |
| 5 | 5/16-18x5/8 Hex Hd Screw | 4412-1 | 4412-1 | 4412-1 | 4412-1 |
| 6 | Gearhead | 3261-5 | 3261-5 | 3261-11 | 3261-11 |
| 7 | Pipe Plug | 3516 | 3516 | 3516 | 3516 |
| 8 | "S" Hook | 4270 | 4270 | 4270 | 4270 |

Power Unit Assembly Part Numbers:

| Part No. | 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 | | | Use with both Control Units |
| 3259-100 | 1/2 HP | 348 RPM | Three Phase | 50 Hz | 220/380 | Use with both Control Units |

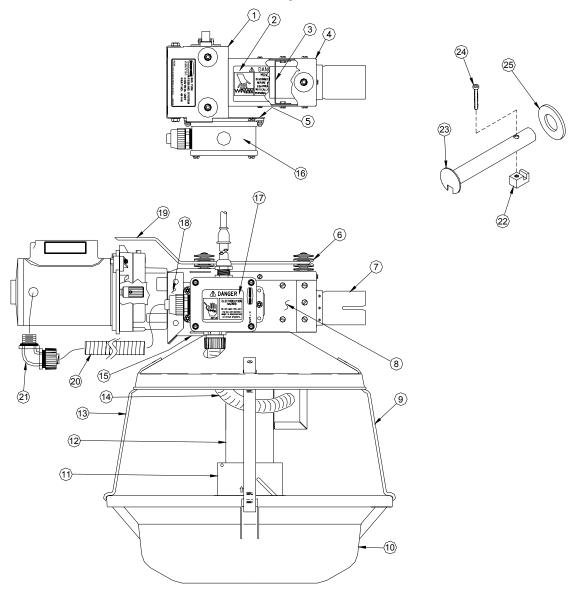
MODEL ATF™ PLUS Control Unit Components (Sensor Plus) Part # 49148



| Item | Description | Part No. | Item | Description | Part No. |
|------|---------------------------|----------|------|----------------------------|----------|
| **1 | Tube Support | 27891 | 19 | 1/2" Water Tight Connector | 24685 |
| **2 | Danger Decal | 2527-9 | 20 | Cord Assembly | 4999-100 |
| 3 | Cover Insulator Assembly | 49043 | 21 | Anti-Roost Guard | 2798 |
| 4 | 1/2" Conduit Connector | 26980 | 22 | Anchor Plate | 4188 |
| 5 | 90°, 1/2" Connector | 23810 | 23 | Junction Box | 42627-8 |
| 6 | 1/2" Flex Conduit | 26982-1 | 24 | Mount Plate | 43815 |
| 7 | Bottom Cover | 49044 | 25 | Drive Block | 4642 |
| 8 | Pan Shield | 49138 | 26 | Tube Weldment | 47584 |
| 9 | Pan Support | 49171 | 27 | SKTH CP 255-20x1.50 Screw | 5083-8 |
| 10 | Feed Level Tube Assembly | 4341 | 28 | Washer | 1484 |
| | Feed Level Tube Assembly | 4194 | 29 | Adapter Plate | 43813 |
| 11 | Feed Level Ring | 29320 | 30 | Level Sensor | 46162 |
| 12 | Turkey Plastic Feeder Pan | 29000 | 31 | Black Tubing | 14454-10 |
| | Turkey Steel Feeder Pan | 4193 | 32 | 1/2" Water Tight Connector | 23779 |
| 13 | Drop Tube Assembly | 49147 | 33 | Circuit Board | 46161 |
| 14 | 1/4-20x.625 Carriage Bolt | 22692 | 34 | Plastic Adapter Plate | 43819 |
| **15 | Stub Tube Weldment | 27900 | 35 | Sensor Retainer | 46314 |
| **16 | Control Body | 49042 | 36 | Pan Support Swing Down | 49172 |
| **17 | Insulator | 2976 | **37 | Body Cover | 27942 |
| 18 | Danger Decal | 2527-35 | | | |

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

MODEL ATF™ PLUS Control Unit Components: Part No. 49146

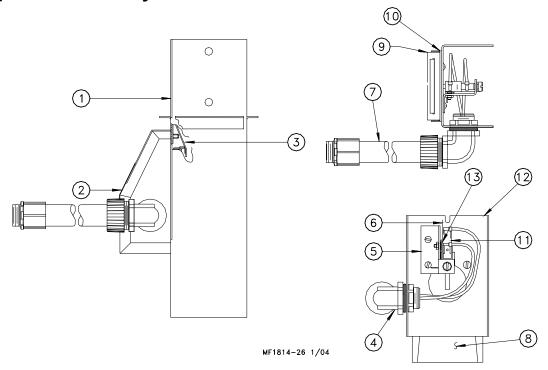


| Item | Description | Part No. | Item | Description | Part No. |
|------|---------------------------|----------|------|---------------------------|----------|
| 1 | Cover, Insulator Assembly | 49043 | 12 | Drop Tube Assembly | 49147 |
| **2 | Danger Decal | 2527-9 | 13 | Pan Support | 49171 |
| **3 | Tube Support | 27891 | *14 | Conduit Assembly | 27866 |
| **4 | Body Cover | 27942 | 15 | Bottom Cover | 49044 |
| 5 | Mount Plate | 43815 | 16 | Junction Box | 36344-5 |
| **6 | Insulator | 2976 | 17 | Danger Decal | 2527-35 |
| **7 | Stub Tube Weldment | 27900 | 18 | Anchor Plate | 4188 |
| **8 | Control Body | 49042 | 19 | Anti-Roost Guard | 2798 |
| 9 | Swing Down Pan Support | 49172 | 20 | 1/2" Flex Conduit | 26982-1 |
| 10 | Turkey Plastic Feeder Pan | 29000 | 21 | 90°, 1/2" Connector | 23810 |
| | Turkey Steel Feeder Pan | 4193 | 22 | Drive Block | 4642 |
| 11 | Feed Level Tube Assembly | 4341 | 23 | Tube Weldment | 47584 |
| | Feed Level Tube Assembly | 4194 | 24 | SKTH CP 255-20x1.50 Screw | 5083-8 |
| | | | 25 | Washer | 1484 |

^{*}See part no. 49147 on page 38 for assembly parts.

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

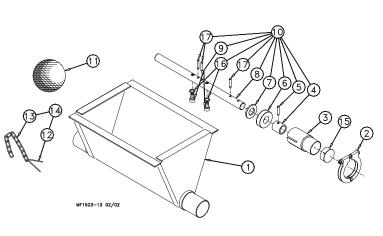
Drop Tube Assembly: Part No. 49147



| Item | Description | Part No. |
|------|----------------------------|----------|
| 1 | Control Drop Tube Weldment | 49145 |
| 2 | Cover | 6053 |
| 3 | Guard Assembly | 4892 |
| 4 | 90° Conduit Connector | 24726 |
| 5 | Switch Bracket Assembly | 6045 |
| 6 | Barrier | 6936 |
| 7 | Conduit Assembly | 27866 |
| 8 | Paddle | 4890 |
| 9 | Diaphragm Assembly | 4889 |
| 10 | Spacer Plate | 4921 |
| 11 | Snap Action Switch | 46324 |
| 12 | Housing | 6048 |
| 13 | Torsion Spring | 5820 |

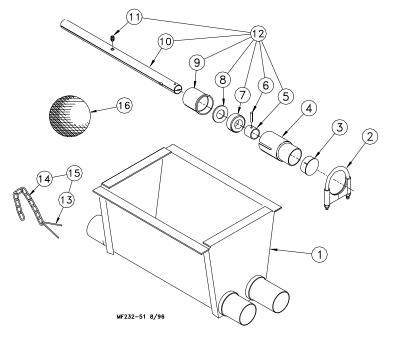
Single Boot Components: Part No. 6821

| Item | Description | Part No. |
|------|----------------------------------|----------|
| 1 | Boot Weldment | 4224 |
| 2 | Tube Clamp | 24062 |
| 3 | Outlet Tube | 4556 |
| 4 | Sleeve | 5648 |
| 5 | 3/16 x 1" Pin | 2960-1 |
| 6 | Bearing | 2689 |
| 7 | Washer | 2955-14 |
| 8 | Anchor | 38540 |
| 9 | 5/16-18 x 7/8 low head cap screw | 47867 |
| 10 | Anchor and Bearing Ass'y | 39372 |
| 11 | Cannonball | 3531 |
| 12 | Cotter Pin | 1639 |
| 13 | Chain | 2128-1 |
| 14 | Latch Pin Ass'y | 2683 |
| 15 | Cap | 29373 |
| 16 | Flat Washer | 2955-58 |
| 17 | Roll Pins | 2960-1 |
| | Danger Decal | 2527-9 |

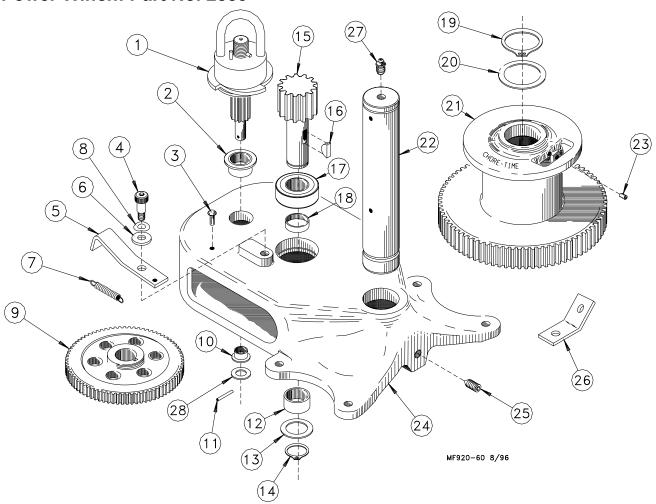


Twin Boot Components: Part No. 8460

| Item | Description | Part No. |
|------|--------------------------|----------|
| 1 | Boot Weldment | 8461 |
| 2 | Tube Clamp | 29520 |
| 3 | Cap | 29523 |
| 4 | Stub Tube | 4163 |
| 5 | Sleeve | 5648 |
| 6 | 3/16 x 1" Pin | 2960-1 |
| 7 | Bearing | 29433 |
| 8 | Washer | 2955-14 |
| 9 | Bearing Retainer | 29441 |
| 10 | Anchor | 29526 |
| 11 | Set Screw | 1174 |
| 12 | Anchor and Bearing Ass'y | 29530 |
| 13 | Cotter Pin | 1639 |
| 14 | Chain | 2128-1 |
| 15 | Latch Pin Ass'y | 2683 |
| 16 | Cannonball | 3531 |
| | Danger Decal | 2527-9 |

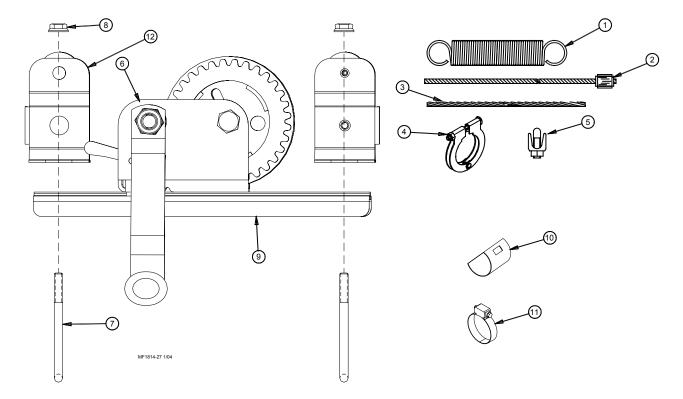


Power Winch: Part No. 2883



| Item | Description | Part No. | Item | Description | Part No. |
|------|----------------------|----------|------|----------------|----------|
| 1 | Input Shaft Assembly | 14885 | 15 | Drive Pinion | 2962 |
| 2 | Flange Bushing | 2967-2 | 16 | Woodruff Key | 2959 |
| 3 | Drive Stud | 4128-1 | 17 | 1" Bearing | 4937 |
| 4 | Shoulder Bolt | 4022-2 | 18 | Spacer | 4936 |
| 5 | Pawl | 6672 | 19 | Retaining Ring | 3556 |
| 6 | Spring Washer | 4023 | 20 | Washer | 2955-2 |
| 7 | Spring | 1543 | 21 | Winch Drum | 3723 |
| 8 | 5/16" Flat Washer | 2255-44 | 22 | Drum Shaft | 3637 |
| 9 | Intermediate Gear | 2890 | 23 | Setscrew | 603 |
| 10 | Flange Bushing | 3252 | 24 | Winch Frame | 3719 |
| 11 | Spiral Pin | 2960-3 | 25 | Setscrew | 3727 |
| 12 | Bushing | 2967-4 | 26 | Cable Hook | 2985 |
| 13 | Washer | 2955-1 | 27 | Grease Fitting | 24499 |
| 14 | Retaining Ring | 3556 | 28 | Washer | 2499 |

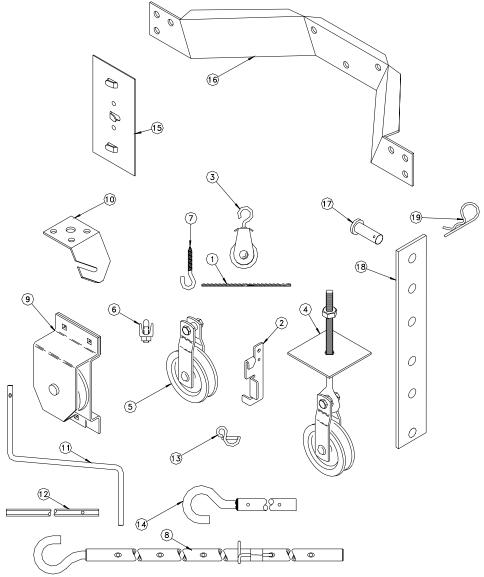
Feed Level Tube Winch Kit: Part No. 46218



| Item | Description | Part No. |
|------|--------------------------|----------|
| 1 | Spring .62 x 11" | 24302 |
| 2 | Cable Assembly | 14278 |
| 3 | 3/32" 7 x 19 Galv. Cable | 28394 |
| 4 | 2" Tube Clamp | 29520 |
| 5 | 1/8" Cable Clamp | 14898 |
| 6 | Feed Level Tube Winch | 43391 |
| 7 | 1/4" x 20 U Bolt | 7975 |
| 8 | 1/4" x 20 Flange Nut | 46298 |
| 9 | Winch Base Assembly | 48933 |
| *10 | Tube Closure | 9126 |
| *11 | Adjustment Clamp | 3527 |
| 12 | Insulator Bracket | 49230 |

These parts may be ordered as a kit under Part No. 14585.

Miscellaneous Suspension Components



MF1814-28 1/04

| Item | Description | Part No. | Item | Description | Part No. |
|------|-----------------------|----------|------|----------------------------|----------|
| 1 | 3/16" Cable | 1213 | 13 | Winch Handle Pin | 3761 |
| 2 | Cable Lock | 14337 | 14 | Winch Drive Tube (4') | 2884-1 |
| 3 | Pulley with Swivel | 3004 | | Winch Drive Tube (8') | 2884-2 |
| 4 | Heavy Duty Pulley | 2014 | | Winch Drive Tube (2') | 2884-4 |
| | Assembly | | | | |
| 5 | Pulley | 2500 | | Full Line Suspension Kit | 7948 |
| 6 | 3/16" Cable Clamp | 732 | 15 | Cable Guide | 34573 |
| 7 | ATF Screw Hook | 2041 | 16 | Hopper Mount (Single Boot) | 34589 |
| 8 | Extendable Drive Tube | 47637 | | Hopper Mount (Twin Boot) | 38242 |
| 9 | Pulley Assembly | 28429 | 17 | Clevis Pin, 5/16" x 1" | 2797-1 |
| 10 | Ceiling Hook | 28550 | 18 | Adjustable Bracket | 2706 |
| 11 | Handle Shank | 3148 | 19 | Hair Pin | 2664 |
| 12 | Drill Adapter Shaft | 2886 | | | |

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.

Maintaining the MODEL ATF™ PLUS Feeding System

The MODEL ATFTM 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.

1. 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 gear heads 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.
- 2. Check equipment for loose hardware every 6 months--including the Anchor Block. Tighten if necessary.
- 3. Switch Adjustment procedure for the Control Units:.
 - A. Turn the adjustment nut counter-clockwise until the switch clicks.
 - B. Turn the adjustment nut clockwise until the switch clicks.
 - C. Turn the adjustment nut counter-clockwise 3/4 turn.
- 4. 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.

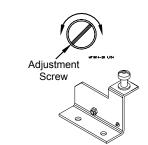


Figure 49. Switch Adjustment

- 5. 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.
- 6. 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.

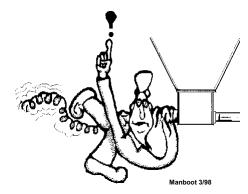
- 7. If the system must be disassembled, extreme caution must be used to prevent injury from springing auger.
 - A. Disconnect power to the entire system.
 - B. Pull the Anchor and Bearing Assembly and approximately 18" (45 cm) of auger out of the boot.
 - C. Place a clamp or locking pliers on the auger to prevent it from springing back into the auger tubes.
 - D. Remove the Anchor & Bearing Assembly.
 - E. Carefully remove the locking pliers.

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

F. Remove system components in the opposite order they were installed, according to this manual.



BE CAREFUL WHEN WORKING WITH AUGER!



- 8. Grease the winch every 6 months with 1 to 2 shots of common industrial or automotive grease. DO NOT OVER GREASE THE WINCH.
- 9. Remove any feed build-up in the Safety Switch Boxes in the Control Units.
- 10. It may be necessary to periodically retighten the shocker cable. Be sure to disconnect power to the shocker before servicing the equipment.

SENSOR PLUS Sensor Switch Adjustment for Control Units

The SENSOR PLUS Pan Half Round Sensor Switch is adjusted at the factory to a sensitivity of .125" from the face of the sensor and a time delay of 15 seconds, the time delay adjustment is 0 seconds to 600 seconds.

To adjust the Time Delay (see figure 50.):

- For less time turn Time Delay Adjusting Screw (item 5) counter-clockwise (Light (item 6) blinks fast)
- For more time turn Time Delay Adjusting Screw (item 5) clockwise (Light (item 6) blinks slow)

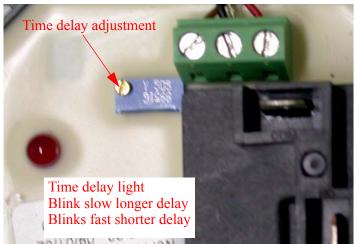


Figure 50. Adjusting Sensor Plus Proximity Switch

Trouble Shooting the MODEL ATF™ PLUS 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 | No power supplied to | Replace burned fuses or reset |
| lines will operate. | equipment. | circuit breaker. |
| | | Make sure voltage required is |
| | | supplied. |
| | Time clock or relay defective. | Replace time clock or relay. |
| | Time clock improperly | Refer to programming the time |
| | programmed. | clock section and reprogram the |
| | | time clock. |
| Feeder line will not | Power unit cord not plugged in | Check motor cord plug at |
| operate. | sufficiently to make contact. | control unit and control unit |
| | | plug at outlet for connection. |
| | Motor cord wires are broken at | Check cord for continuity, |
| | plug or where cord enters motor. | replace if defective. |
| | Power units thermal overload | Push motor overload reset |
| | tripped. | button to reset. |
| | Control unit switch defective or | Adjust switch according to the |
| | out of adjustment. | switch adjustment procedure in |
| | | the maintenance section. |
| Motor overloads | Oil on new auger loads motor | Polish auger by running 50 lb. |
| frequently. | excessively when feed is carried | (20 kg) increments of feed out |
| | for first time. | to pans. |
| | Inadequate power reaching | Check line voltage at the |
| | motors. | motors. Wiring of adequate size |
| | | is essential to feeder operation. |
| | Object caught in the auger; | Check hopper boot, control unit |
| | motor runs, stalls, then auger | and pan outlets. Remove |
| A | spins in reverse. | obstruction. |
| Auger runs erratically. | Frozen or cracked bearing at | Replace bearing. Slowly ease |
| | boot anchor. | auger back into tube. Be careful |
| | | no to damage the bearing when |
| | Insufficient stratch in ougar | reinserting the auger. |
| | Insufficient stretch in auger. Obstruction in auger. | Shorten the auger. Remove obstruction. |
| Auger tube or boot | Auger is bent or kinked | Repair or replace damaged |
| wears out rapidly | Auger is bent of kniked | auger. |
| (Noisy feeder | End of auger is riding up on | Auger must not be positioned |
| operation) | anchor weldment. | over weld on anchor. Check for |
| | | bent or damaged auger. |
| Oil leaking out of | Gearhead vent plug not | Replace plastic shipping plug |
| seals on power unit | installed. | with vent plug. |
| | Defective gear head seal. | Replace seal. |
| Not enough feed | Insufficient time programmed | Add more operating time to |
| supplied to the feeder | on the time clock. | feeding period. |
| pans. | Feeder line control unit switch | Adjust switch according to the |
| | out of adjustment. | switch Adjustment procedure in |
| | | the maintenance section. |



Made to work.

Built to last.

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

CTB Inc.

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