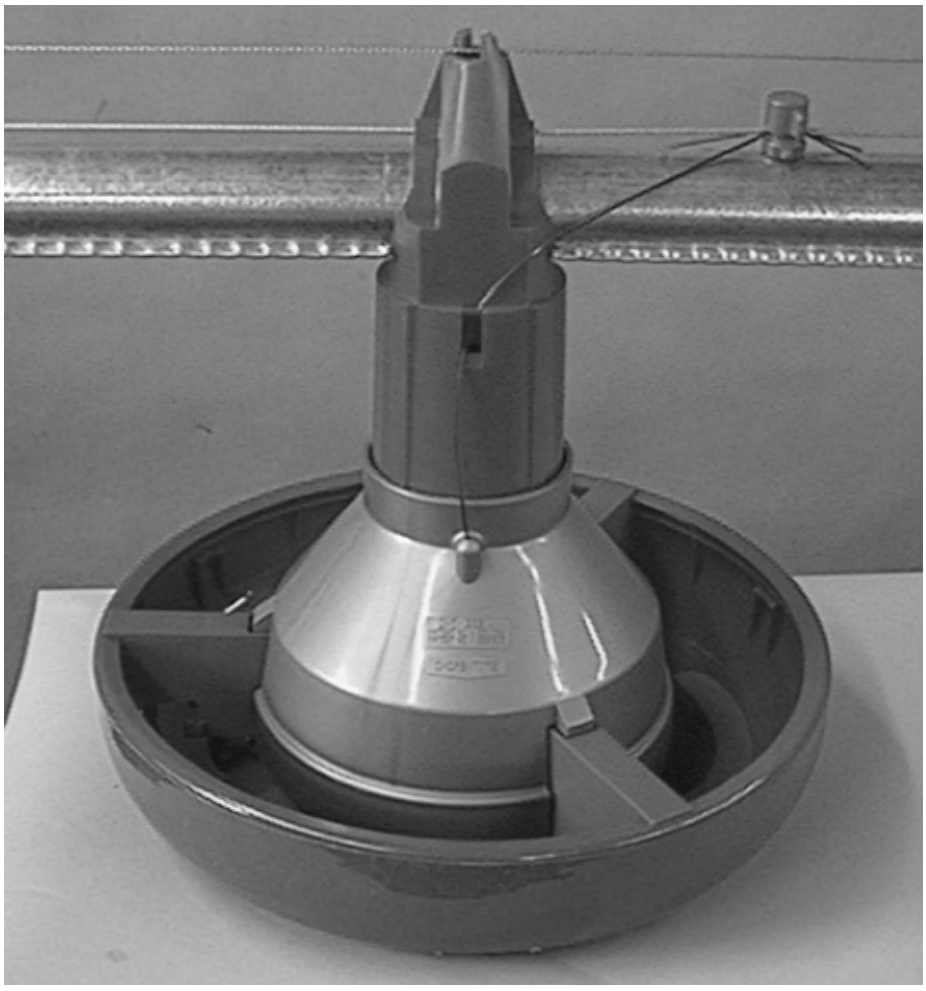
CHORE-TIME®

# Model H2™ Plus Feeding Systems

## Installation & Operator's Instruction Manual



MF1523-53 3/98

October 1998 MF1523C

# Chore-Time Warranty

**Chore-Time Equipment** warrants each new product manufactured by it to be free from defects in material or workmanship for one year from the date of initial installation by the original purchaser. If such a defect is found by Chore-Time to exist within the one year period, Chore-Time 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.

Additional extended warranties are herewith provided to the original purchaser as follows:

*1. Poultry feeder pans that become unusable within five years from date of installation. Warranty prorated after three years usage.
2. Rotating centerless augers for ten years from date of installation.
3. Chore-Time manufactured roll-formed steel auger tubes for ten years from date of installation.

**Conditions and limitations:**

1. The product must be installed and operated in accordance with instructions published by **Chore-Time or warranty will be void.**
2. Warranty is void if **all components** of a system are not supplied by **Chore-Time.**
3. This product must be purchased from and installed by an authorized Chore-Time dealer 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 this 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.

**Chore-Time** shall not be liable for any **Consequential or Special Damage** which any purchaser may suffer or claim to have suffered 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 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 AS TO MERCHANTABILITY, FITNESS FOR PARTICULAR PURPOSE SOLD AND DESCRIPTION OR QUALITY OF THE PRODUCT FURNISHED HEREUNDER.

Any exceptions to this warranty must be authorized in writing by an officer of the company. Chore-Time reserves the right to change models and specifications at any time without notice or obligation to improve previous models.

**CHORE-TIME EQUIPMENT, A Division of CTB, Inc.**
**P.O. Box 2000**
**Milford, Indiana 46542-2000 U.S.A.**

## Chore-Time Poultry Feeder Pan Pro Rata Schedule

| Year from date of installation during which pan becomes unusable | Charge to be paid by the purchaser for replacement. |
|---|---|
| 0 - 1 years | NO CHARGE |
| 1 - 2 years | NO CHARGE |
| 2 - 3 years | NO CHARGE |
| 3 - 4 years | 4/10 of then current list price |
| 4 - 5 years | 5/10 of then current list price |

# Table of Contents



***Legend: C = Customer (end user), D = Distributor (sales), I - Installer of equipment**

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# Support Information

The Chore-Time Model H2 Plus Feeding Systems are designed to feed poultry feed types. 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, installation, operation, and parts listing information. The Table of Contents provides a convenient overview of the information in this manual. The Table of Contents also specifies which pages contain information for the sales personnel, installer, and consumer (end user).

IMPORTANT: **CE stands for certified Europe.** It is a standard which equipment must meet or exceed in ordered to be sold in Europe. **CE** provides a benchmark for safety and manufacturing issues. **CE is required only on equipment sold in Europe.**

Chore-Time Equipment recognizes CE Mark and pursues compliance in all applicable products. ***Fill in the CE-Mark serial number in the blank space provided for future reference.***

CE

_____

(CE-mark serial number)

# Distributor and Installer Information

Please fill in the following information about your Product.
Keep this manual in a clean, dry place for future reference.

**Distributor's Name**_____

**Distributor's Address** _____

**Distributor's Phone** _____ **Date of Purchase** _____

**Installer's Name** _____

**Installer's Address**_____

**Installer's Phone** _____ **Date of Installation** _____

**System Specifications**_____

_____

# 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 signs.

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.

## 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.

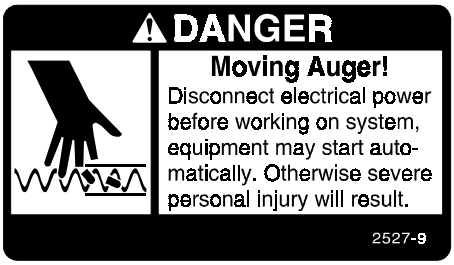

**WARNING**..... indicates a potentially hazardous situation which, if not avoided, **COULD** result in death or serious injury.


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


## 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

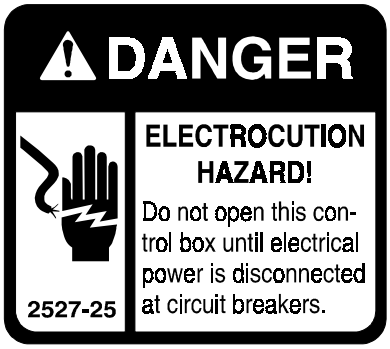
Disconnect electrical power before inspecting or servicing equipment unless maintenance instructions specifically state otherwise.

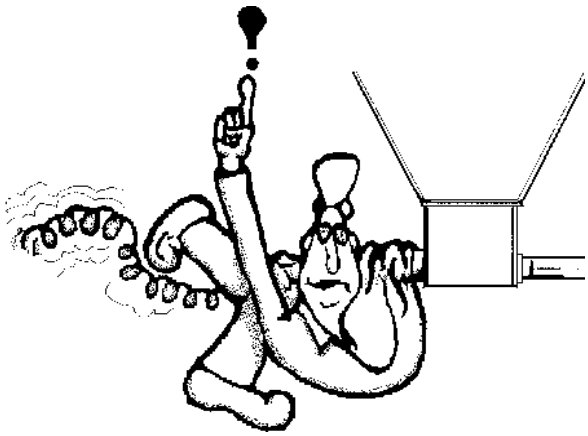
Ground all electrical equipment for safety.

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.



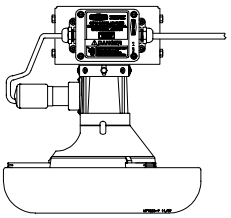



## CAUTION:

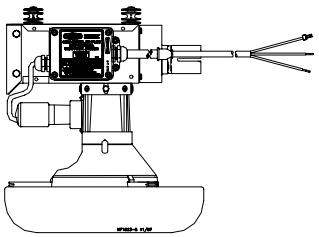
Use caution when working with the Auger--springing auger may cause personal injury.

# Glossary of Terms

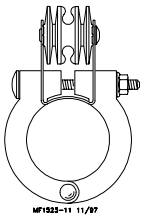
**Intermediate Control**: . . A feeder, equipped with a switch, (located near the center of the feeder line) used to control the feeding system when partial house brooding.



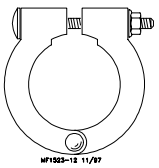
**End Control:** . . . . . A feeder, equipped with a switch, (located at the power unit), used to control the feeding system.



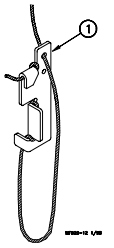
**Item #1 Anti-Roost Bracket:** . . An insulator and bracket assembly mounted on every fourth or fifth clamp to support shocker wire.



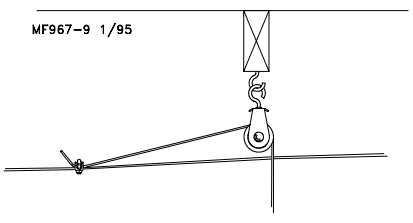
**Item #2 Clamp:** . . . . A two-piece, riveted strap used to secure auger tubes together.



**Adjustment Leveler:** . . . . .A cable locking devise used to conveniently adjust the feeder to a level position.

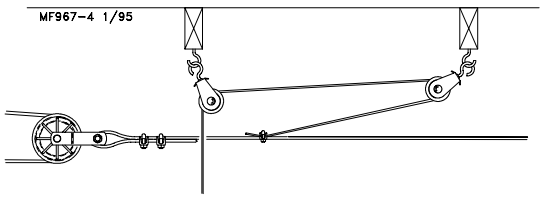



**Drop Line:** . . . . . A section of cable fastened to the main cable, routed through a pulley, down to the feeder line.

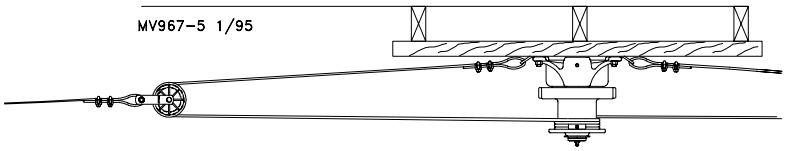


## Glossary of Terms - continued

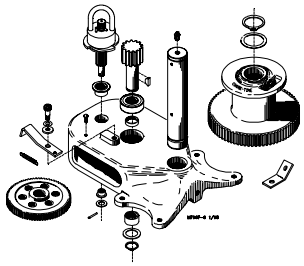
**Throw-back:** . .A cable/pulley arrangement that allows cable to be routed to a desired location.



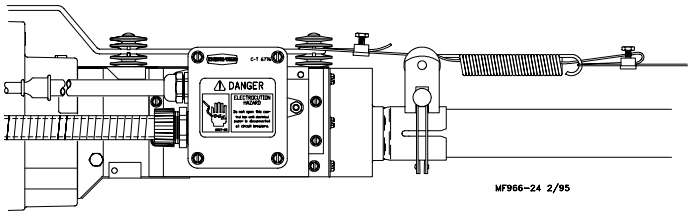

**Double-back:** . .A cable/pulley arrangement that reduces the load on the Power Winch.




**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.



**Electro-Guard:** . A high voltage, low current shocking device used to keep birds from setting on the feeder line.



# General Installation Information

Please read the installation instructions in this manual prior to beginning the installation. This manual provides the necessary information on the installation, operation, and maintenance of the Chore-Time feeding equipment you have purchased.

The suspension, hopper assembly, feeder line installation, and Anti-Roost installation is the same for each system, except where noted otherwise. Please pay particularly close attention to insure proper assembly and installation of the equipment.

# Capacities & Specifications

The Model H2™ Plus Feeders is all plastic for long product life. With the moveable feed cone raised, the feeder starts the young birds, and with the feed cone lowered, the feeder will feed the older birds.

The H2 Plus Feeder may be used on broilers from 1 day old through the grow-out. The feeders are also recommended for turkey poults from 1 day old to 5 weeks old. The H2 Plus Feeder has adjustability features built-in, allowing the operator to manage the feeding system effectively and efficiently.

The chart below provides the recommended birds-per-pan ratio.

| Type of Bird | Recommended Feeder | Birds Per Pan |
|---|---|---|
| Broiler | Model H2 Plus | 60 to 75 |
| Turkey Poults (0 to 5 weeks old) | Model H2 Plus | 60 to 65 |

Suspension systems are based on ceiling heights of 14 feet (4.26 m) with suspension drop points every 8 feet (2.4 m). DO NOT EXCEED 10 FEET (3 M) BETWEEN SUSPENSION DROPS. Refer to the suspension section in this manual for installation details.

The Agri-Time Meal-Time Control is used to control the Model H2 Plus Feeders. The optional Agri-Time Time Clock Control may be used in certain installations where the Meal-Time feature is not required.

The Feeder Control Units should be at least 10 feet (3 m) from the wall or partition. See diagrams on page 11.

The Model H2 Plus Control Units use a 348 R.P.M. Gearhead, delivering approximately 17 pounds per minute or 7.7 kg per minute. This rating is based on feed with a density of 40 pounds per cubic foot or 640 kg per cubic meter.

Single phase 60 Hz and single and three phase 50 Hz Power Units are available for the Model H2 Plus Feeders.

Systems up to 300’ (91 m) require 1/3 H.P. Power Units. Systems over 300’ (91 m) require 1/2 H.P. Power Units.

General Management Recommendations that apply to Model H2 Plus Feeder systems is covered below. In addition, each style of feeder has a section, explaining some of its individual features.

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These sections provide you with valuable information concerning feeder installation, operation, etc. It is important that you read this information and understand how the feeder was designed to operate. Then, *you* may *custom operate* the system to fit *your* individual needs.

# General Management & Start-Up

## Partial House Brooding

It is recommended that the power unit end of the house be used for the brooding area. This helps avoid any section of the system running dry. Also, Intermediate Controls are not needed in this situation. Houses over 400' (122 m) should be split in the center, allowing either end to be used for partial house brooding.

If partial house brooding is required, the Intermediate Control is available.

With the recommended toggle switch wired into the system, the feeder line can be changed from full house brooding to partial house brooding with the flip of a switch.

Maintain a lower feed level in the Intermediate Control than in the rest of the feeders. This will cause the Intermediate Control Pan to empty more often, thereby starting the feeder line before the other pans become empty.

Do not hinder the bird movement around the Intermediate Control pan. Locate the curtain or partition several pans away from the Intermediate Control pan.

Provide adequate lighting so that the birds will not shy away from the Intermediate Control area.

## Electro-guard Operation

Electro-guard cables should be tight to prevent sagging onto the feeder and shorting out. Tight cables also help keep pans in line on the tube.

The feeding equipment must be grounded through the power unit wiring or a separate ground wire for the electro-guard to work properly.

Electro-guard chargers should be operated on a separate circuit so the anti-roost system can be disconnected using a switch at the door when someone enters the pen. Birds are less likely to become wild and flighty if the electro-guard can be disconnected when people are in the house.

## Start-Up Information

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.

Birds avoid dark or cold areas. Do not locate a control unit or intermediate control 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 avoided during installation. Later, artificial lighting can partially correct the problem.

During the first 5 days the system should be run manually with the feeder pans setting on the floor.

If the system accidentally runs out of feed and birds are without feed for some time, care must be taken when the pans are refilled.

Feed hoppers can be filled prior to starting the feeder lines to give the fill system a head start.

When feeders are turned on, it may be necessary to walk up and down the lines to scatter large groups of birds as they rush to the feeders.

It may be desirable to raise the feeder line so birds cannot reach it, fill all the pans, then carefully lower the line.

When birds are removed, all the remaining feed in the hoppers and the feeder pans must be removed. If possible, allow the birds to clean up feed prior to their removal.

# Component Locations Diagram

Line lengths up to 300' (90 m) use 1/3 H.P. Power Units. Line lengths from 300' (90 m) to 500' (152 m) require 1/2 H.P. Power Units.

Adequate overhead structure must be provided to support the weight of the feeder, hoppers, power units, etc. Refer to the chart below for individual component weights.

| Component | Weight in pounds (kg) |
|---|---|
| Tube, Auger, Feeders, & Feed | 5 lbs. (2.26 kg) per linear foot (.3 m) |
| Power Unit & Control Unit Assembly | 50 lbs. (22.6 kg) |
| 200 lbs. Feed Hopper & Feed | 250 lbs. (113.4 kg) |
| 100 lbs. Feed Hopper & Feed | 150 lbs. (68 kg) |
| Power Winch | 40 lbs. (18.1 kg) |

Optional Intermediate Controls may be used for partial house brooding. See Figure 1.

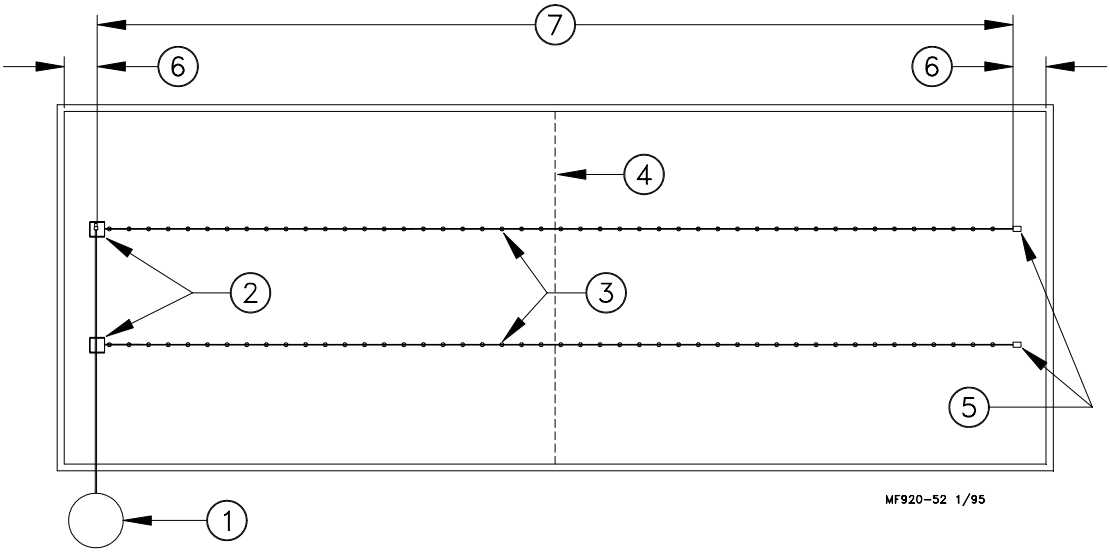



**Figure 1. Component location diagram for systems up to 400 feet (122 m). (Top View).**

| Key | Description |
|---|---|
| 1 | Feed Bin |
| 2 | Feed Hopper |
| 3 | Intermediate Control |
| 4 | Brood Curtain |
| 5 | End Control/Power Unit |
| 6 | 10' (3 m) minimum |
| 7 | Up to 400' (122 m) |

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 Intermediate Controls for partial house brooding.

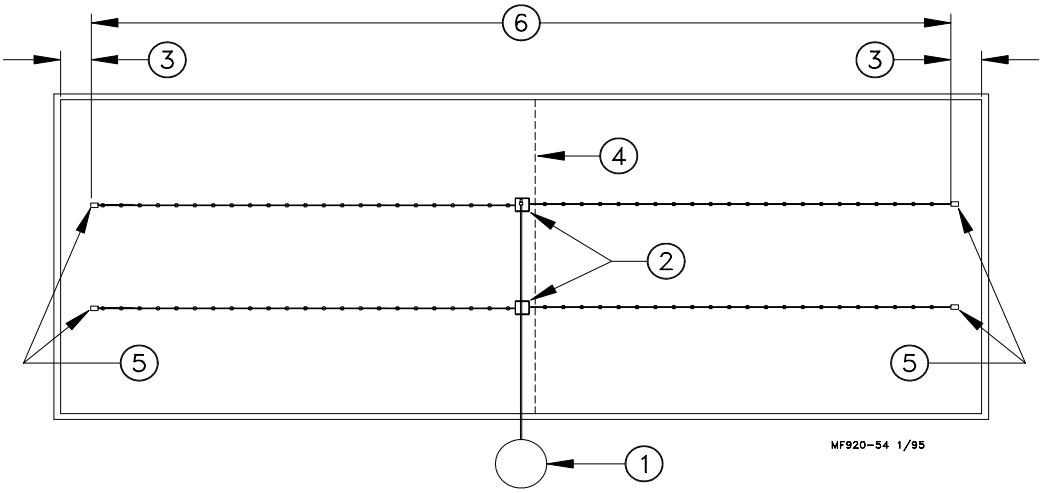



**Figure 2. Component location diagram for systems over 400 feet (122 m). (Top View).**

| Key | Description |
|---|---|
| 1 | Feed Bin |
| 2 | Feed Hoppers |
| 3 | 10’ (3 m) minimum |
| 4 | Brood Curtain |
| 5 | End Controls/Power Unit |
| 6 | Over 400’ (122 m) |

# Model H2 Features

The Model H2 Plus Feeder Pan Components. The 13 inch diameter pan with high center cone provides even feed in the pan. The center support connects the pan to the feed tube. The moveable feed cone operates by two cords to provide a hi feed level for young birds and low feed level to finish the older birds.

Recommended for Broilers or Turkeys

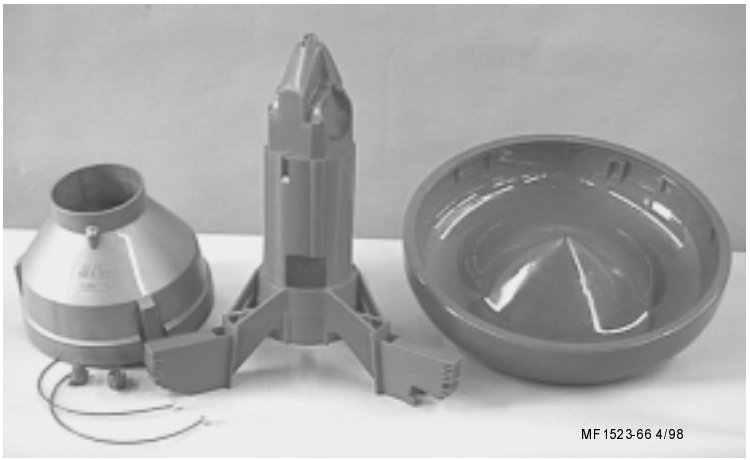



**Figure 3. Model H2 Plus.**

The Model H2 Plus with the feed cone raised provides a high feed level for young birds. See Figure 4.


**Figure 4. Model H2 Plus with feed cone in up position.**

The Model H2 Plus with feed cone lowered will finish birds, to market weight.

See Figure 5.


**Figure 5. Model H2 Plus with cone in down position.**

The Chore-Time Model H2 Plus is designed to feed broilers from day old through grow-out, and turkeys from day old through 5 weeks.

The H2 Plus Feeders is specifically designed to fill the feeder pan with feed while the birds are very young. This insures the birds will have a good start. The H2 Plus Feeder Pans have the ability to hang to facilitate easy cleaning without having to fully remove the feeder pans. See Figure 6.


**Figure 6. Hanging Model H2 Plus Feeder Pans.**

# Operation of the Model H2 Plus Feeder

These recommendations are guidelines to aid producers in developing a feeding program. Many factors such as feed content, type of bird, etc. may dictate change from these recommendations.

Set the Struts in the #2 setting for poultry or the #4 setting for turkeys.

The feeder should be raised just enough to clear the litter. As birds grow, raise the feeder accordingly. Normally, the lip of the pan should be at the height that the birds breast enter the neck. Keeping the pans up at the proper height prevents the birds from raking the feed excessively.

At 3 weeks of age, begin meal feeding the birds, if desired. Follow the chart in this instruction manual to set up time clock. Adjust the daily run times through-out the life of the birds on a weekly basis. Additional adjustment may be required to suit the feed and the birds. Refer to the General Management Recommendations for Meal-Time Feeding on page 47, of this manual.

Because of variation in feed texture, fat content, type of birds and other variables, the operator must learn what works best for his situation by experience. A combination of proper pan height, feeder pan adjustment, and time clock operation, will result in optimum feeder performance.

After the birds are through the brood stage, the lip of the pan should be at the approximate height the bird's neck enters the breast. Proper pan height reduces feed wastage, improves feed conversion, and provides more income for the producer. Note the proper pan height as shown in Figure 7.

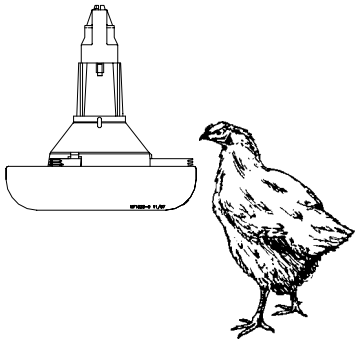
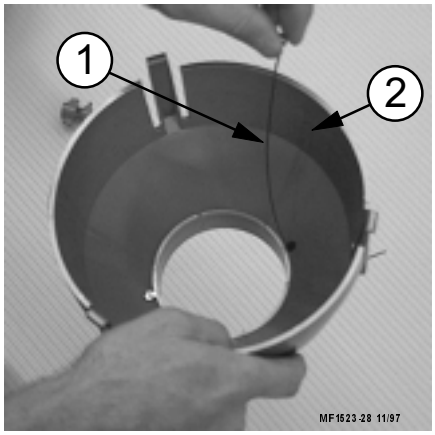


Figure 7. Pan Height Adjustment.

# Pan Assembly procedure for Model H2 Plus Feeder

## Assemble Feed cone and support cords

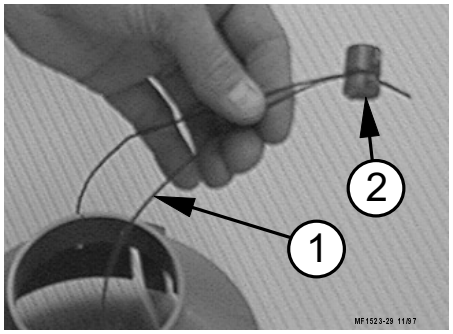
With the large end of the Feed Cone up, slide the straight end of the Support Cord in the openings on each side of the Feed Cone. See Figure 8.




| Item | Description |
|---|---|
| 1 | Support Cord |
| 2 | Feed Cone |

Figure 8. Assembling Support Cord to Feed Cone

Connect the two ends of the Support Cords together with the Cable Clamp. This will keep the cords from sliding back through the hole while the remainder of the feeder is assembled. See Figure 9.

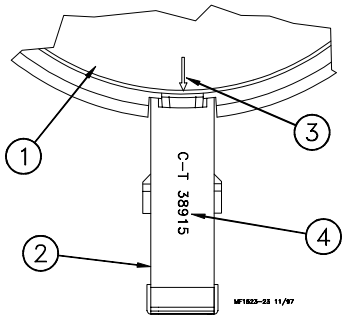



| Item | Description |
|---|---|
| 1 | Support Cord |
| 2 | Cable Clamp |

**Figure 9. Attaching the Cable Clamp**

## Assemble the feed cone and center support

Align the three legs of the Center Support and the three tabs on the Feed Cone. Align the arrow on the Feed Cone with the part number on the Center Support. Start the tabs in the three legs, apply down pressure the tabs should snap into the legs of the Center Support. See Figure 10.




| Item | Description |
|---|---|
| 1 | Feed Cone |
| 2 | Center Support |
| 3 | Arrow on Feed Cone |
| 4 | Part Number on Center Support |

**Figure 10. Aligning Feed Cone with Center Support**

## Assemble the center support and feed cone to pan

1. Broilers: Position the lip of the feeder pan in the #2 tab of 2 of the struts. See Figure 11.

   Turkeys: Position the lip of the feeder pan in the #4 tab of 2 of the struts. See Figure 11.

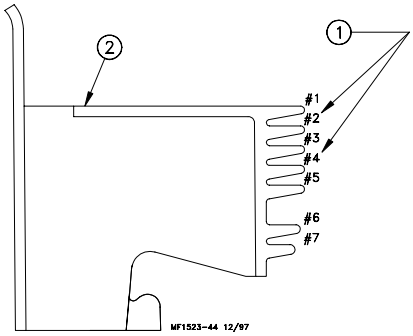



**Figure 11. (Side View)**

| Key | Description |
|---|---|
| 1 | Position the pan lip in setting #2 for broilers.<br>Position the pan lip in setting #4 for turkeys. |
| 2 | Strut on Model H2 Plus Feeder Cone |

2. Pull the pan, as shown in Figure 12, so that the lip of the pan will be in the proper setting on the third strut.

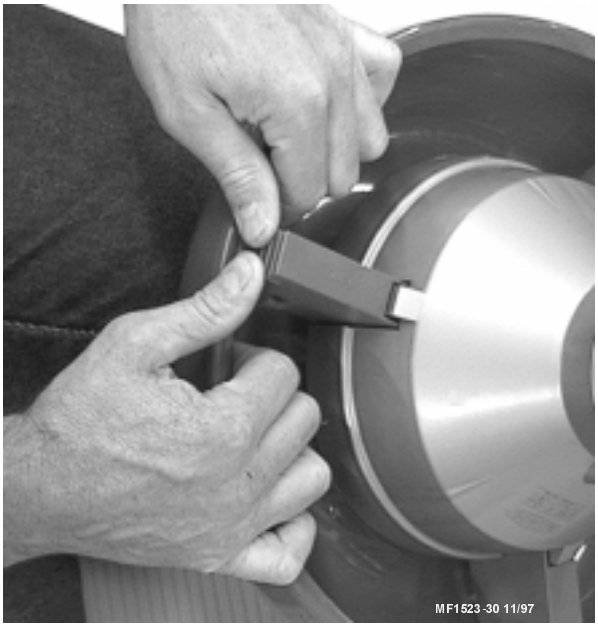



**Figure 12. Assembling the center support and feed cone to the pan.**

3. Build all the required Feeder Assemblies for the house.

   The Feeder Assemblies will be installed on the auger tubes in the Feeder Line Installation section.

# 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.

The suspension system is the same for the Model H2 Plus Feeders. The type of installation required depends on feeder line length. Figure 14, on page 19, shows the suspension system for feeder line lengths to 350' (107 m). Figure 15, on page 20, shows the suspension system for feeder lines over 350' (107 m).

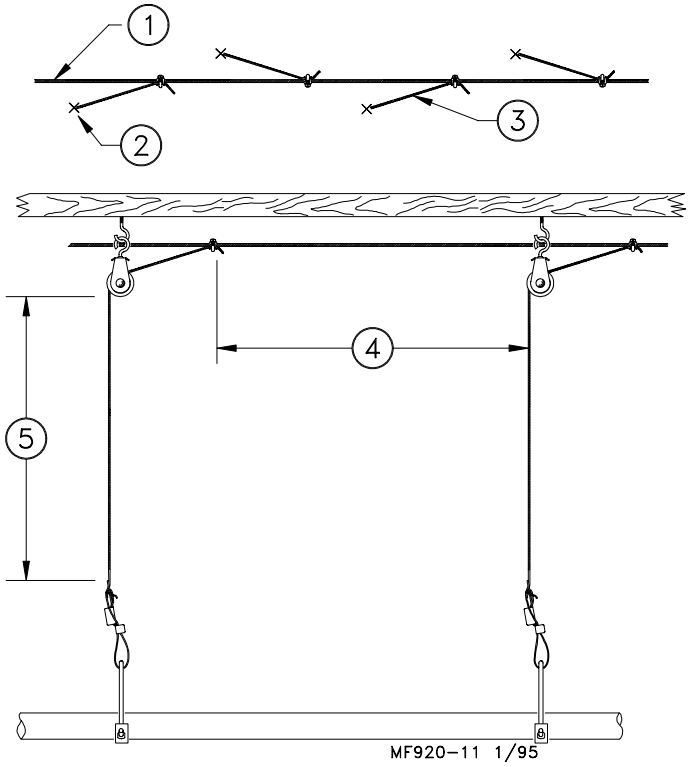
IMPORTANT: Special support is required at each Power Unit and Hopper location. Figures 29 and 30 show the **additional** suspension required at these locations.

- Power Unit locations: The feeder line must be supported within 3 feet (1 m) of the Power Unit. This is in addition to the required Power Unit suspension. If the Control Unit does not come out directly under a truss, fasten a pulley to a 2x8 (50x200 mm) board that will span 2 trusses to support the Control Unit.
- Feed Hopper locations: The feeder line must be supported within 1 foot (30 cm) of the Feed Hopper. This is in addition to the required Feed 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 for the Model H2 Plus 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 13.




| Key | Description |
|---|---|
| 1 | 3/16” Cable |
| 2 | Screw Hook or Ceiling Hook Location |
| 3 | 3/32” Cable |
| 4 | Distance of Cable Travel |
| 5 | Distance Feeder is to be Raised |

**Figure 13. Drop Line Off Set Detail (Side View).**

## For systems up to 350’ (107 m)

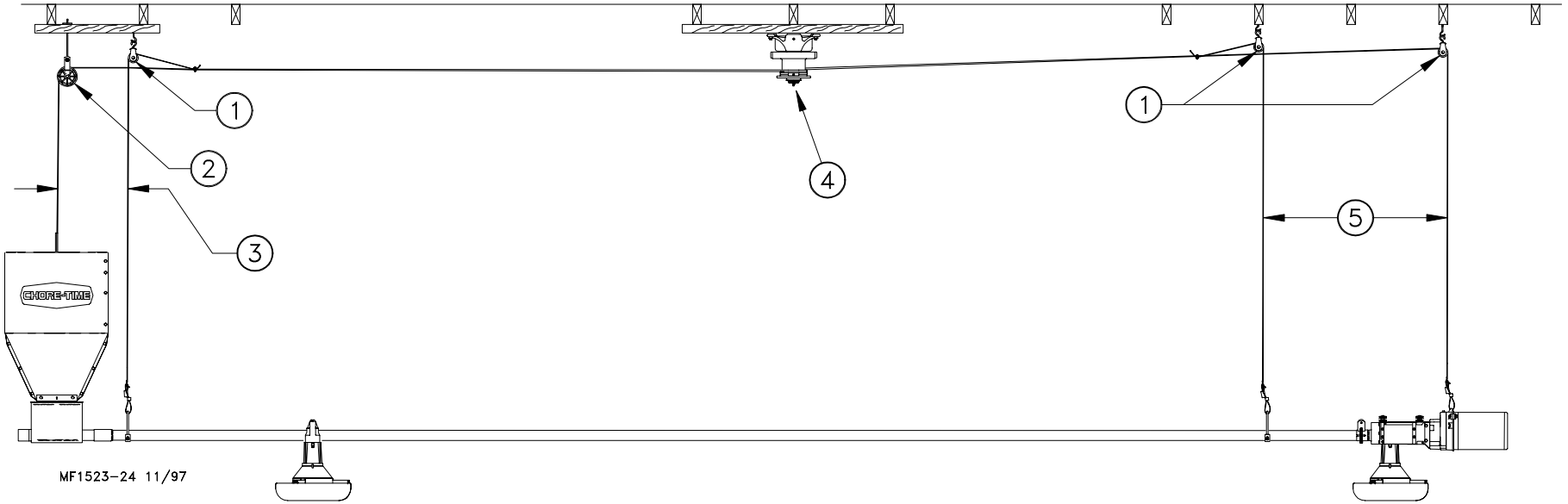
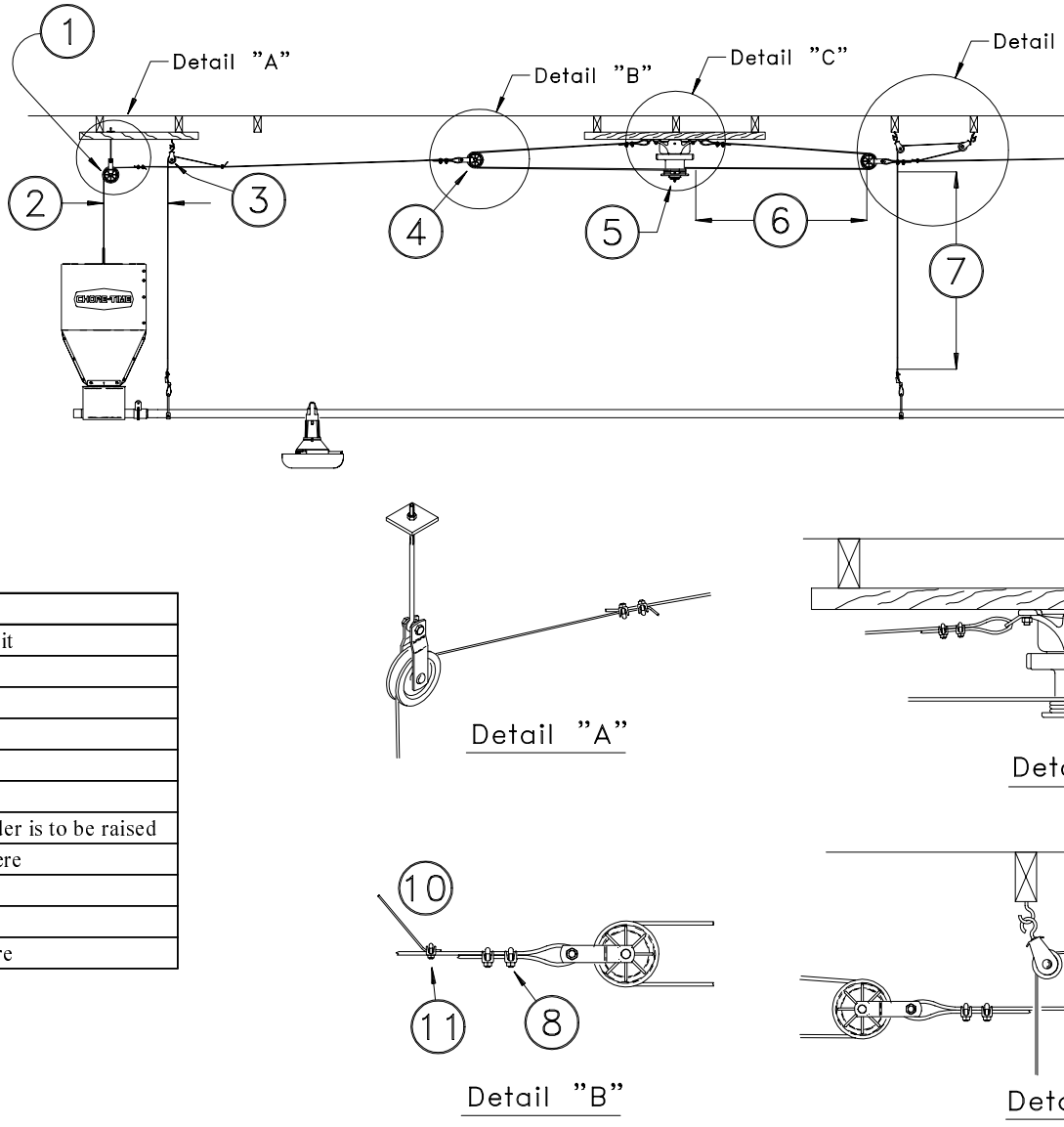



**Figure 14. Suspension for systems up to 350’ (107 m).**

| Key | Description |
|---|---|
| 1 | Swivel Pulley |
| 2 | Full Line Suspension Kit |
| 3 | 1 Foot (30 cm) |
| 4 | Power Winch |
| 5 | 3 Feet (1 m) |

## For systems over 350’ (107 m)




| Key | Description |
|---|---|
| 1 | Full Line Suspension Kit |
| 2 | 1 Foot (30 cm) |
| 3 | Swivel Pulley (#3004) |
| 4 | Pulley (#2500) |
| 5 | Power Winch |
| 6 | “X” + 2 Foot (60 cm) |
| 7 | “X” = Distance the feeder is to be raised |
| 8 | Double Cable Clamp here |
| 9 | 3 Feet (90 cm) |
| 10 | Drop Line |
| 11 | Single Cable Clamp here |

**Figure 14. Suspension for systems over 350’ (107 m).**

Refer to Figures 16 or 17 through 20 for specific installation instructions for the screw hooks and ceiling hooks.

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 required to hold the pulley assemblies.

## Screw Hook Installation

1. Screw the hook into the truss the full length of the threads to prevent bending.
2. 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 16.

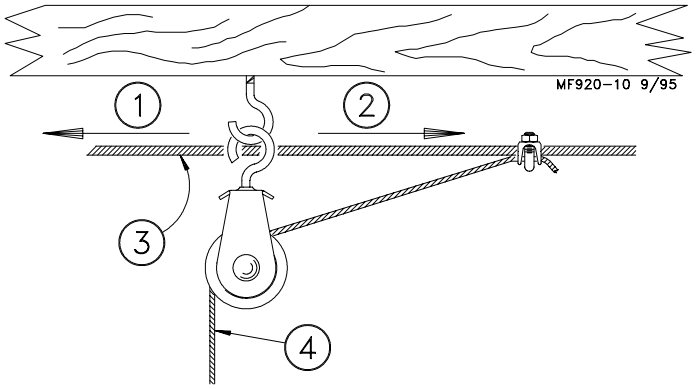



**Figure 16. Screw Hook Installation (Side View)**

| Key | Description |
|---|---|
| 1 | Screw Hook opening facing opposite direction of travel. |
| 2 | Winch end. |
| 3 | 3/16” Winch Cable |
| 4 | 3/32” Drop Cable |

## Ceiling Hook Installation

1. The ceiling hook may be used in a variety of installations. Depending on your ceiling or rafter type, install the Ceiling Hooks as shown in Figures 33-37.

## Wide Steel Truss Installations

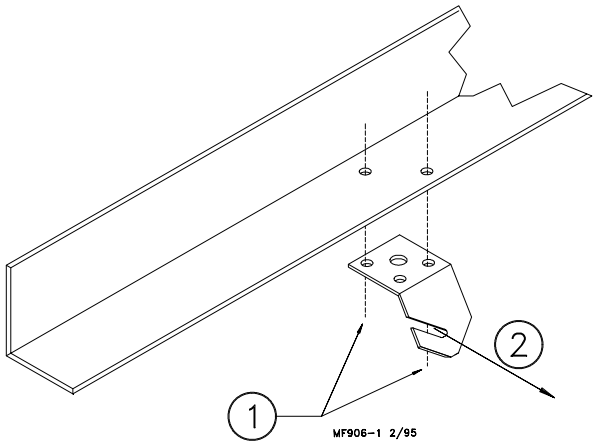



**Figure 17. Ceiling Bracket Installation**

| Key | Description |
|---|---|
| 1 | Secure Ceiling Hook to truss using self-drilling screws through opposite holes. |
| 2 | Cable travel |

## Narrow Steel Truss Installations

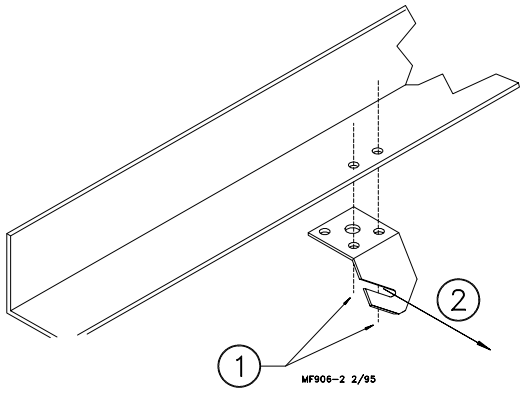
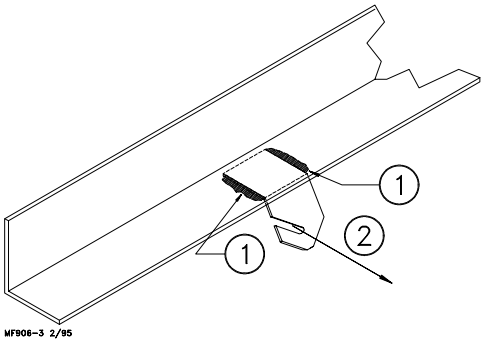



**Figure 18. Ceiling Hook Installations**

| Key | Description |
|---|---|
| 1 | Secure Ceiling to truss using self-drilling screws through side-by-side holes. |
| 2 | Cable travel |

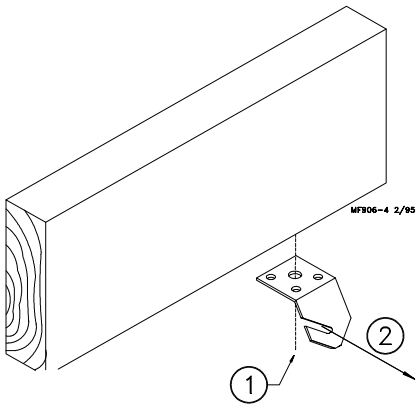
## Steel Truss Welded Installations




| Key | Description |
|---|---|
| 1 | Weld Ceiling Bracket to truss here. |
| 2 | Cable travel. |

Figure 19. Ceiling Hook Installations

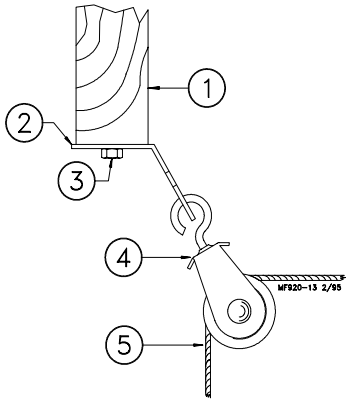
## Wood Truss Installations




| Key | Description |
|---|---|
| 1 | Secure Ceiling Bracket to truss using 1/4" lag screw through center hole. |
| 2 | Cable travel. |

Figure 20. Ceiling Hook Installations

2. After securing the Ceiling Hook to the truss, slide the hook of a Swivel Pulley into the slot, as shown in Figure 21.




| Key | Description |
|---|---|
| 1 | Wood Truss |
| 2 | Ceiling Bracket |
| 3 | 1/4" Lag Screw |
| 4 | Swivel Pulley |
| 5 | 3/32" Drop Cable |

Figure 21. Pulley Installation (End View)

# Power Winch Installation

1. Bolt the Power Winch, fully assembled, to a 2”x8” (50x200 mm) board that will span at least 3 rafters, using 5/16-18 hardware supplied in the Hardware Package. The brake mechanism will extend toward one side.

   Install a Cable Hook, supplied in Hardware Package, between the mounting bolt and Power Winch frame, as shown in Figure 22.

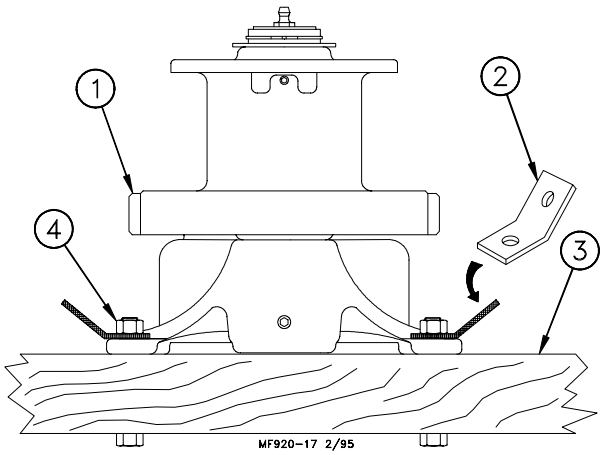



**Figure 22. (Winch End View)**

| Key | Description |
|---|---|
| 1 | Power Winch |
| 2 | Cable Hook |
| 3 | 2”x8” (50x200 mm) board that spans (3) three rafters. |
| 4 | 5/16-18X2-1/2” Bolt, washer, and lock nut. |

2. Attach the 2”x8” (50x200 mm) board (with the Power Winch secured) to the ceiling at the center of the feeder line. See Figure 14 on page 20. The 2”x8” (50x200 mm) must be parallel to the line and must span at least 3 rafters.

   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. However, the Winch Drum must be directly in line with where the main cable is to be installed.

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 fasteners.

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 23.

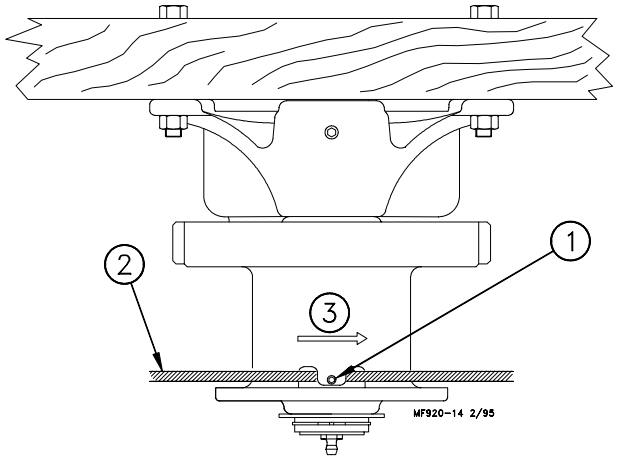



**Figure 23. (Winch End View)**

| Key | Description |
|---|---|
| 1 | Winch Drum Relief with set screw. |
| 2 | 3/16” Winch Cable |
| 3 | Drum Rotation |

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 24**.

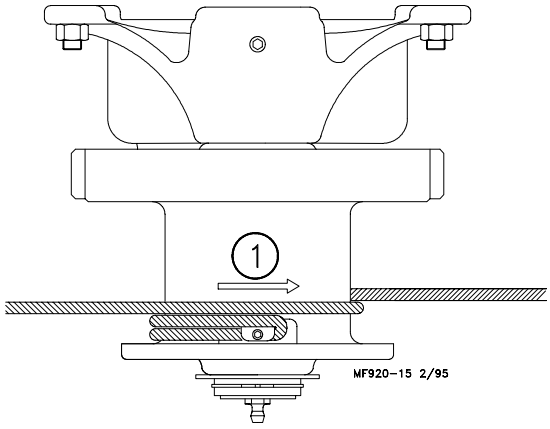



**Figure 24. (Winch End View)**

| Key | Description |
|---|---|
| 1 | Drum Rotation |

## Drop Installation

1. Attach a 3004 Pulley to each hook.
2. Thread the end of the 3/32" or 1/8" cable through the pulley toward the winch. Clamp this end to the 3/16" winch cable about 6" (150 mm) from the last pulley, using a 3/16" cable clamp. See applicable figure; Figure 16 or 21.
3. Allow enough cable length for installation of the Adjustment Leveler.

Sufficient cable is included to provide "throwbacks" on drops located beneath and near the winch. Detail “A” in Figure 14 shows a "throwback" cable arrangement.

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

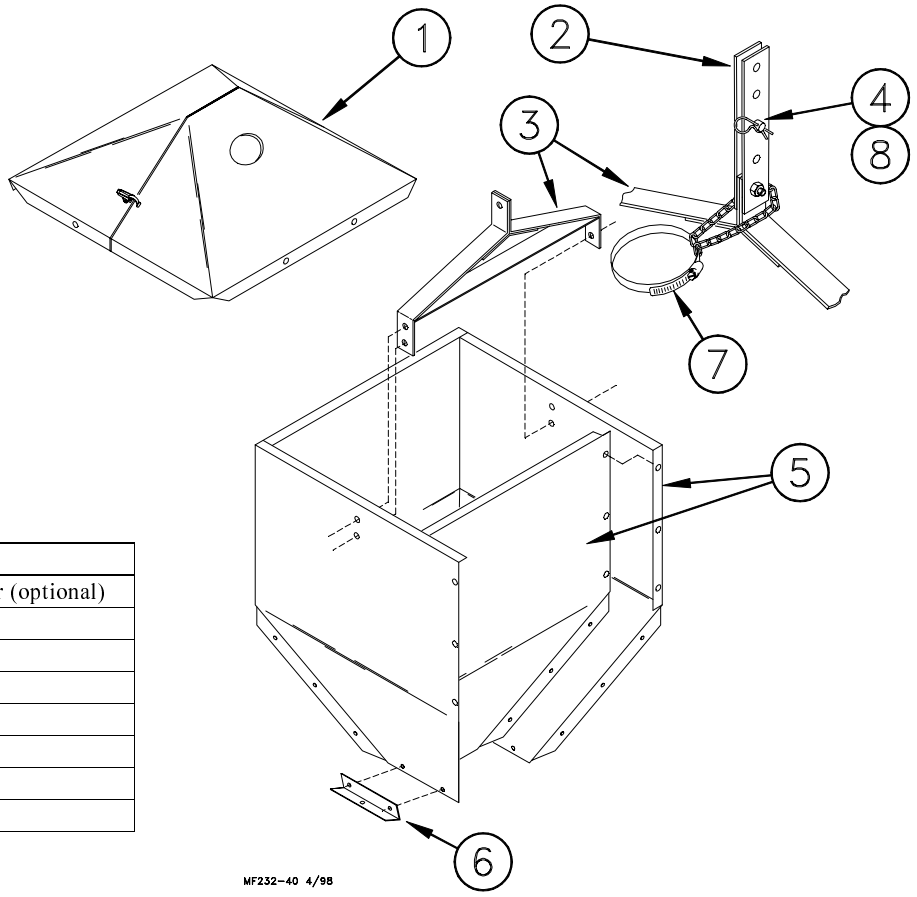
   Keep the main cable tight between drops. It may be necessary to hang a weight on the end of the cable to maintain tension on the line.

# Hopper Assembly Procedure

The 200# or 100# Hopper may be used with the Model C, C2, G, and H2. Refer to applicable instructions.

## 200# Hopper

Loosely, assemble the 200# Hopper Side Panels, as shown in Figure 25, 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.




| Key | Description |
|---|---|
| 1 | Two Piece Hopper Cover (optional) |
| 2 | Adjustment Bracket |
| 3 | Hanger Bracket |
| 4 | Clevis Pin |
| 5 | Side Panels |
| 6 | Boot Hanger |
| 7 | Tube Support Kit |
| 8 | Hair Pin |

**Figure 25. 200# Hopper Assembly Procedure**

Secure the Boot Hangers to the bottom of the hopper, using 1/4-20 hardware.

Install the Hanger Bracket Assembly *perpendicular* to the feeder line, using 1/4-20 hardware.

Secure Adjustment Brackets to Hanger, using 5/16-18 bolt and locknut, supplied.

With the Hopper assembled, less the cover, tighten the hardware.

A Cable Assembly (including 20’ (6.1 m) of cable, a Sleeve Clamp, and a 5/32" Thimble) is supplied to suspend the hopper. Figure 26 shows the suspension components assembled. The pin should be located in the center hole of the Hanger

| Key | Description |
|---|---|
| 1 | Clevis Pin and Hair Pin |
| 2 | Cable Assembly |
| 3 | Adjustment Bracket |
| 4 | Hanger Bracket |

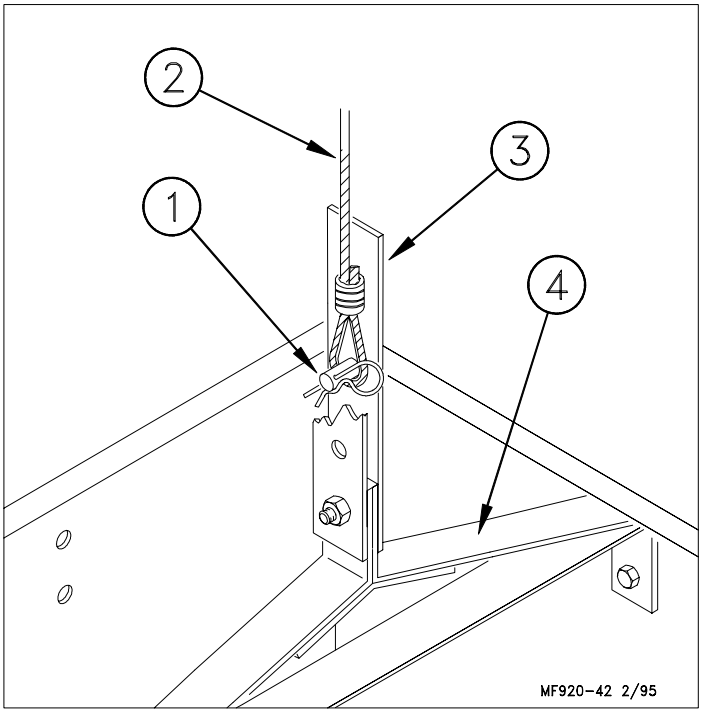



**Figure 26. 200# Hopper Suspension components.**

Figure 27 shows the assembled hopper with suspension components installed.

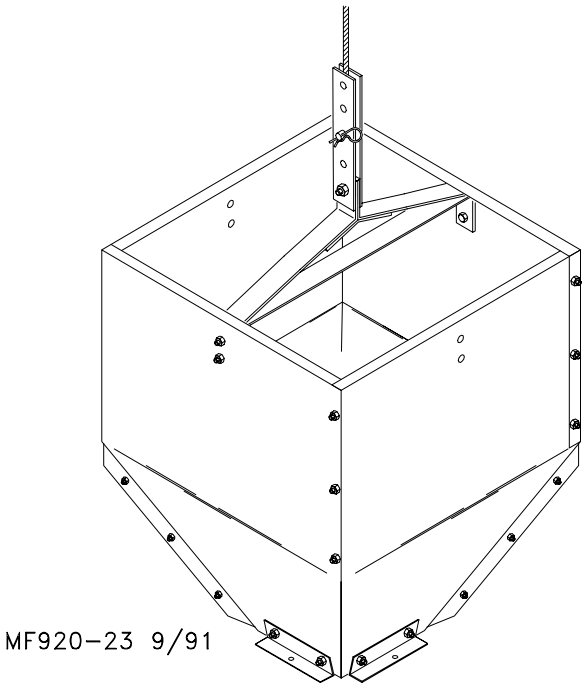



**Figure 27. Assembled 200# Hopper w/o Cover.**

Suspend the hopper, as shown in Detail A (Figure 14) by routing the cable around the Full Line Suspension Pulley and fastened to the main cable, using (2) cable clamps.

To install the boot on the hopper, slide the boot onto the hangers bolted on the bottom of the hopper. Use cotter pins, supplied, to secure the boot to the hopper.

The Hopper Cover, shown in Figure 25, is optional and must be ordered separately, if desired.

Secure the half of the cover with the tube opening on the top of the hopper. The other half of the cover will latch in place.

## 100# Hopper

Loosely, assemble the 100# Hopper Side Panels, as shown in Figure 28, using 1/4-20 bolts and 1/4-20 hex nuts (supplied in Hardware Package).

Assemble the Hopper Hangers, as shown in Figure 28.

Secure Adjustment Brackets to Hanger, using the 5/16-18 bolt and nut, supplied.

Locate the (2) Hopper Hangers (assembled) in the Side Panel corners, as shown, and secure using 1/4-20 hardware supplied.

| Key | Description |
|---|---|
| 1 | Hopper Cover (w/o hole) |
| 2 | Hopper Cover (w/ hole) |
| 3 | Tube Support Assembly |
| 4 | Hopper Hanger |
| 5 | Cotter Pin |
| 6 | Adjustment Bracket |
| 7 | Hair Pin |
| 8 | Hopper Side (w/o hole) |
| 9 | Switch Mount Bracket |
| 10 | Boot Hanger |

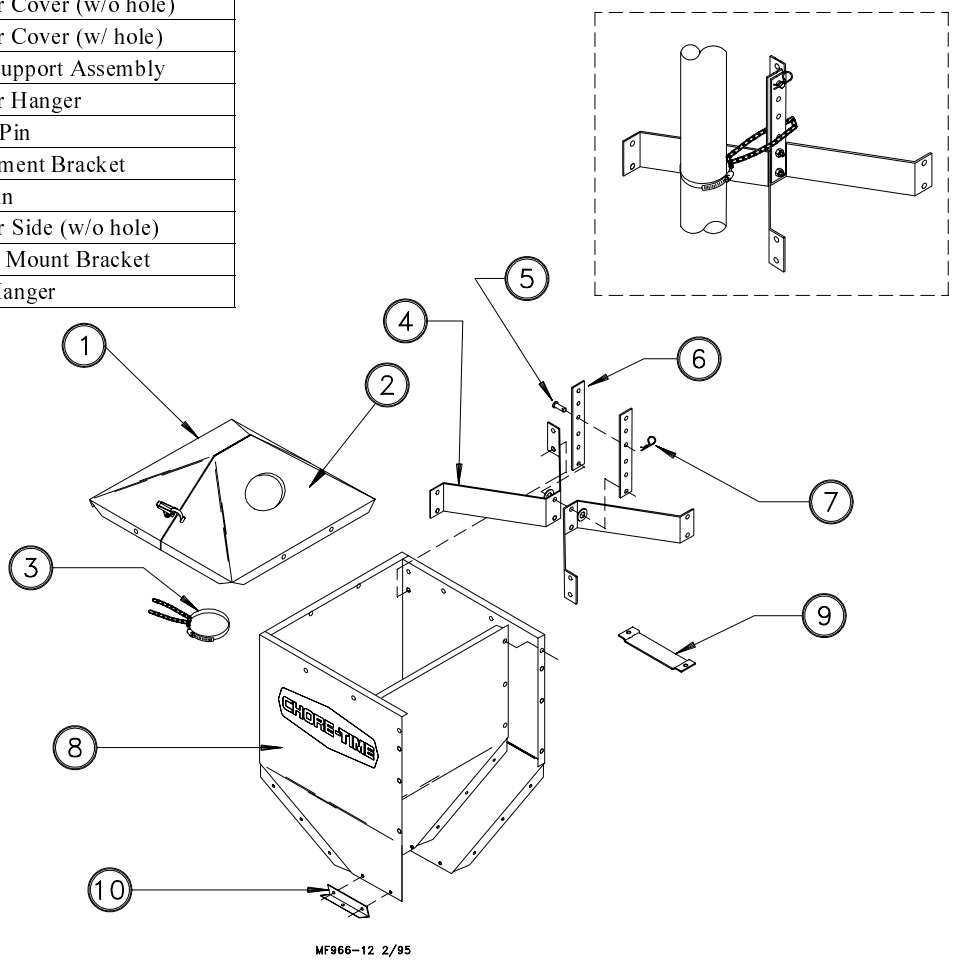



**Figure 28. 100# Hopper Assembly Procedure**

With the Hopper assembled, less the cover, tighten the hardware.

A Cable Assembly (including 20' (6.1 m) of cable, a Sleeve Clamp, and a 5/32" Thimble) is supplied to suspend the hopper. Figure 29 shows the suspension components assembled. The pin should be located in the center hole of the Hanger.

The 100# Hopper may be ordered with the optional Hopper Cover.

Secure the half of the cover with the tube opening on the top of the hopper. The other half of the cover will latch in place.

Install the Tube Support Kit, as shown in inset on the previous page (Drop Tube supplied with the fill system).

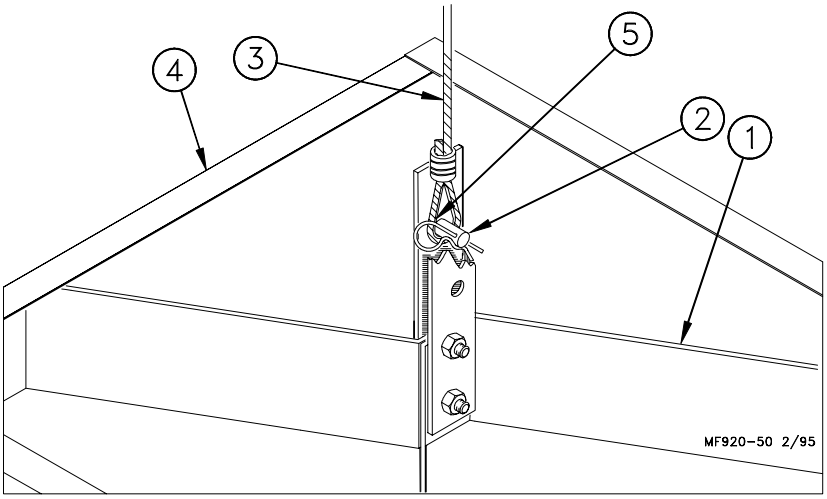



**Figure 29. 100# Hopper Suspension components.**

| Key | Description |
|---|---|
| 1 | Hopper Support |
| 2 | Clevis Pin and Hair Pin |
| 3 | Cable Assembly |
| 4 | Side Panel |
| 5 | Thimble |

Suspend the hopper, as shown in Detail A (Figure 14 on page 20) by routing the cable around the Full Line Suspension Pulley and fastened to the main cable, using (2) cable clamps.

To install the boot on the hopper, slide the boot onto the hangers bolted on the bottom of the hopper. Use cotter pins, supplied, to secure the boot to the hopper.

Secure the Hanger Bracket in the Hopper, using 1/4-20 hardware supplied. Use the holes in the Hanger Bracket as a template for drilling .312 dia. (8 mm) holes in the Side Panels. The Hanger Bracket should be located so that when the Hopper Level Control Switch is installed, it is located near the center of the hopper body.

The Hopper Cover, shown in Figure 28, is optional and must be ordered separately, if desired.

Secure the half of the cover with the tube opening on the top of the hopper. The other half of the cover will latch in place.

# Feeder Line Assembly & Suspension

## Feeder Pan and Tube Assembly Process

1. Slide one Feeder Pan Assembly per hole onto the auger tubes.

   **IMPORTANT:** Install all the feeders on the tubes in the same orientation.

   Model H2 Plus: The single strut of each feeder should be on the same side of the auger tube throughout the system.

2. Rotate the auger tubes so that the seam is down, this holds the Pan Assemblies in place on the tubes. See Figure 30.

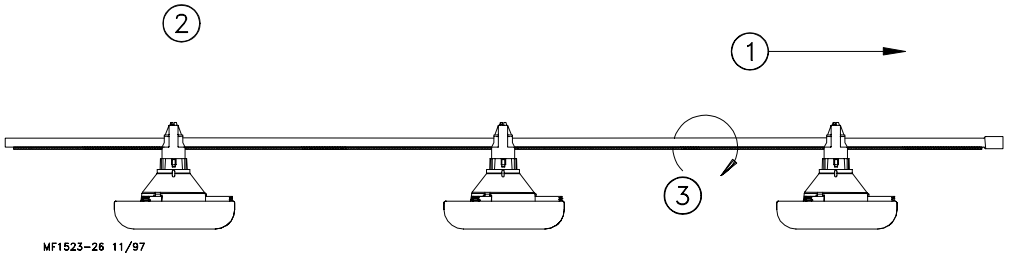



**Figure 30. Assemble Feeders on Tubes (Side View)**

| Key | Description |
|---|---|
| 1 | Hopper |
| 2 | Slide (1) feeder over each outlet hole. |
| 3 | With the feeders in their appropriate positions, rotate the tube to hold the feeders in place |

## Assemble and Suspend the Feeder Line

1. The auger tubes and feeders may be laid out 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 31.
2. Connect the individual feeder tubes together by inserting the straight end of one tube as far as possible into the belled end of the next tube.

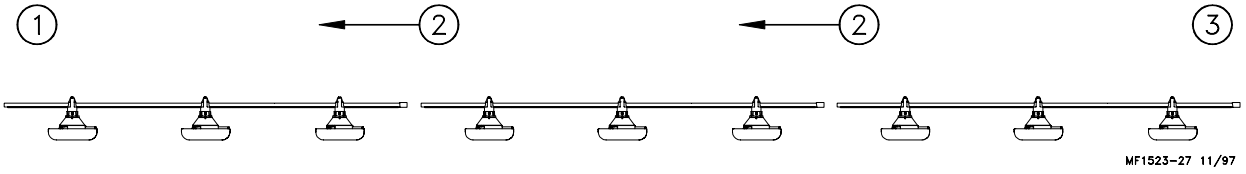



**Figure 31. Assemble Feeders on Tubes (Side View)**

| Key | Description |
|---|---|
| 1 | Control Unit end of the feeder line. |
| 2 | Direction of feed flow. |
| 3 | Feed Hopper end of the feeder line. |

3. To achieve total feed drop out all along the system, the mark "CONT" should be centered at the crown of the tubes and all the Hangers should be installed as shown in Figure 32.

| Key | Description |
|---|---|
| 1 | Tube Seam |
| 2 | Auger Tube |
| 3 | Hanger |

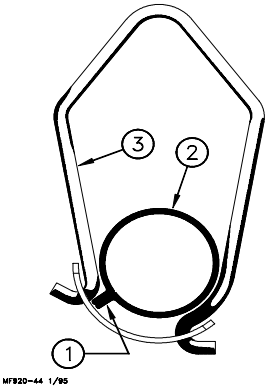
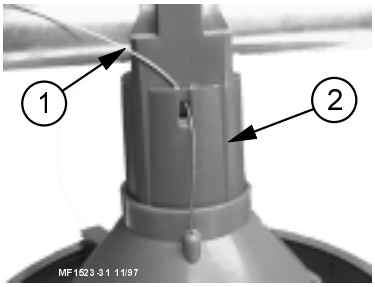



**Figure 32. Hanger Installation. (View: Cross section of tube, facing the hopper, showing appropriate Hanger installation for tube in the "CONT" setting.**

4. Remove the Cable Clamp from the Support Cords. Route the Support Cords through the cable guides on the side of the Center Support. With the Support Cords above the feed tube place the Cable Clamp on the Support Cords. See Figure 33.




| Item | Description |
|---|---|
| 1 | Support Cord |
| 2 | Center Support |

**Figure 33. Cord routing**

## Grow Area

5. Place a Tube Clamp Assembly or Clamp/Anti-Roost Bracket at each joint. Figure 34 shows the standard Clamp and Clamp/Anti-Roost Bracket.

   Systems using 9' or 10' tubes require a Clamp/Anti-Roost Bracket at every **fifth** joint.

   Systems using 12' tubes require a Clamp/Anti-Roost Bracket at every **fourth** joint. All other joints in the system use the standard Tube Clamp Assembly.

   Place a Clamp/Anti-Roost Bracket at the Hopper and at each of the Bells in the Brood End of the building. See Figure 35 for location.

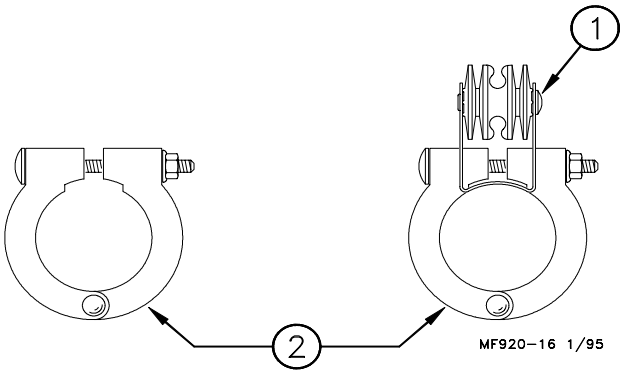



**Figure 34. Tube Clamps (Side View).**

| Key | Description |
|---|---|
| 1 | Anti-Roost Bracket |
| 2 | Standard Clamp |

Continue down the entire length of the feeder line so that every joint is secured with a standard Clamp or Clamp/Anti-Roost Bracket. Figure 35 shows the proper clamp location on the tube joint. Do not tighten the clamp at this time.

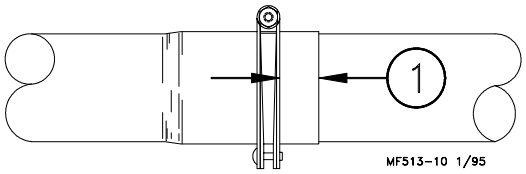



**Figure 35. Clamp Installation (Side View).**

| Key | Description |
|---|---|
| 1 | 1/4" (6 mm) |

6. Install the Hangers on the trough at the 8' (2.4 m) spacings determined by the suspension drop lines. Figures 32 and 36 show the proper installation of the Hanger Assembly. Make sure the outlet drop hole is downward when the Hangers are installed, otherwise feed will not be allowed to drop into the feeder pan.

| Key | Description |
|---|---|
| 1 | Cable Lock |
| 2 | Auger Tube |
| 3 | Hanger |

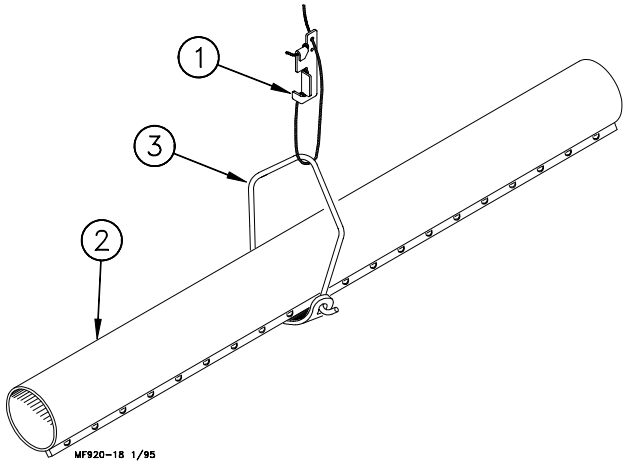



**Figure 36. Hanger Installation**

7. Install Adjustment Leveler within 6" (152 mm) of feeder line. Figure 37 shows the proper cable routing around the Adjustment Leveler.

| Key | Description |
|---|---|
| 1 | Use the large hole for 1/8” (3 mm) drop cable. Use the small hole for 3/32” (2 mm) drop cable |

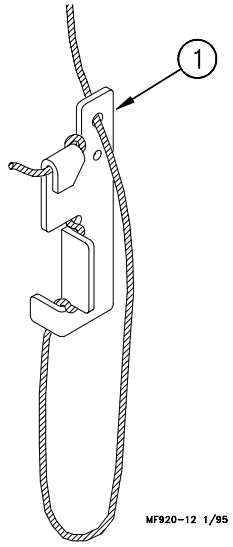



**Figure 37. Cable Lock Threading**

8. Following the installation of all drops, check drop cables before raising feeder line. Cable must be tracking properly on all pulleys before raising the feeder line.
9. Raise the feeder line to a convenient working height.
10. With the feeder line suspended, measure from the floor or ceiling to the auger tubes to level the system.
11. Before tightening each clamp;
    - make sure each tube is level (not sagging, sloping, etc.).
    - make sure straight end of each tube is fully inserted in belled end of next tube.
    - if providing total drop out, tubes should be rotated so that "CONT" is on crown of tube.
    - if indexing tubes, refer to indexing section on page 37.
    - make sure the clamps are located, as shown in Figure 35.

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

## End Control Unit Assembly

The Control Unit must be at least 10 feet (3 m) from the end of the building to allow birds access around the end of the feeder line.

Assemble the End Controls to the Power Units according to the instructions below and Figure 38.

1. Bolt the Anchor Bracket to the Power Unit using the (4) bolts (item #3) in the front of the gearhead.

   The angled end of the Anchor Plate should be installed toward the bottom of the Power Unit.
2. Bolt the Control Unit Body Assembly to the Anchor Bracket, using 1/4-20 bolts.
3. Connect the power/control unit to the feeder line using a clamp/anti-roost bracket. It

may be necessary to place a temporary support under the motor until the feeder line is suspended.

4. Remove plastic shipping plug and replace with vented plug, supplied.

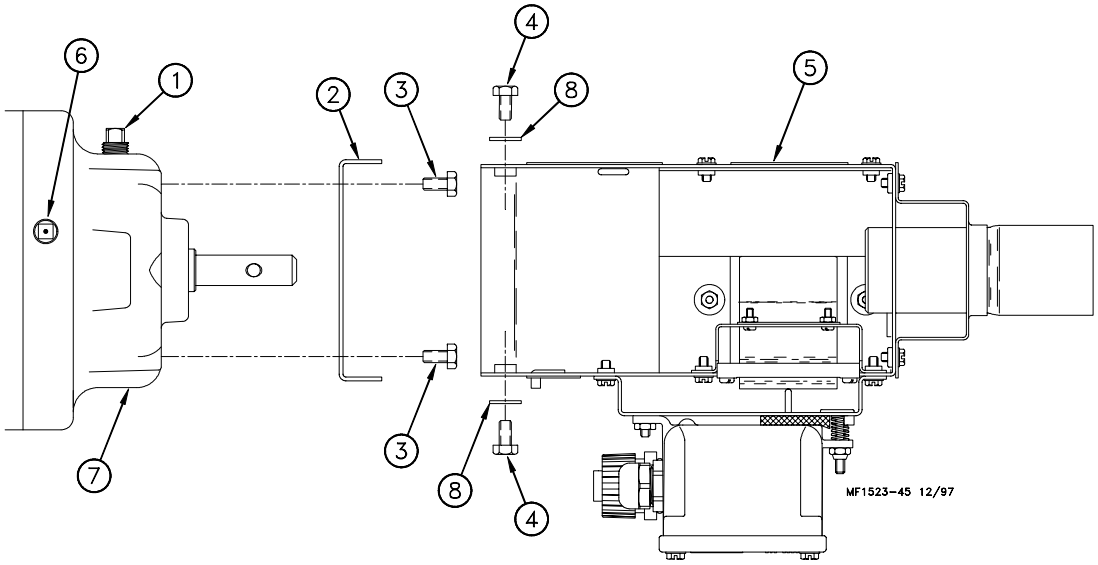
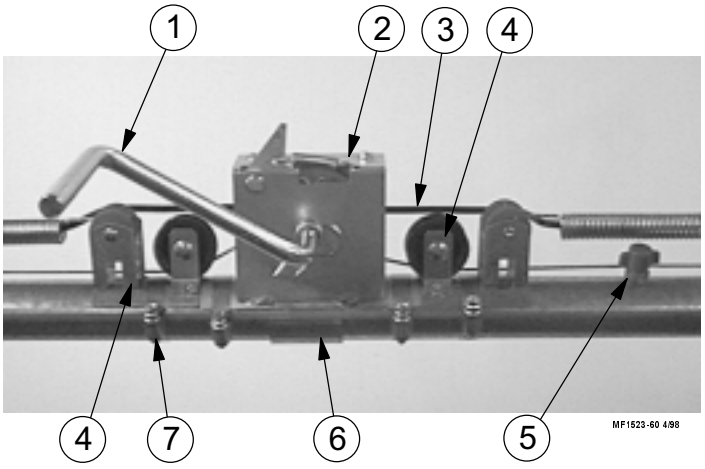



**Figure 38. Control Unit Installation (Top View)**

| Key | Description |
|---|---|
| 1 | Pipe Plug |
| 2 | Anchor Bracket |
| 3 | 5/16-18 Bolts |
| 4 | 10-24 Bolts |
| 5 | Control Unit Body |
| 6 | Replace Shipping Plug with Vent Plug. |
| 7 | Power Unit/Gearhead |
| 8 | 1/4 Lock Washer |

## Feed Line Winch Installation

Install the feed line winch in the center of the brood area. Remove one pan and use the Closure Kit to cover the outlet hole. Mount the winch using the band clamps supplied with the winch. Install the Insulator Pulley Assemblies as shown using the included Band Clamps. See Figure 39.




| Item | Description |
|---|---|
| 1 | Winch Crank |
| 2 | Feed Line Winch |
| 3 | Anti Roost Jumper Wire |
| 4 | Insulator Pulley Assembly |
| 5 | Cable Clamp for Stop |
| 6 | Tube Closure |
| 7 | Band Clamp |

**Figure 39. Winch Installation**

Assemble an insulator bracket and tube clamp at the ends of the brood area, one at the hopper and one at the control unit. Assemble the spring to the tube clamp as shown in Figure 40.

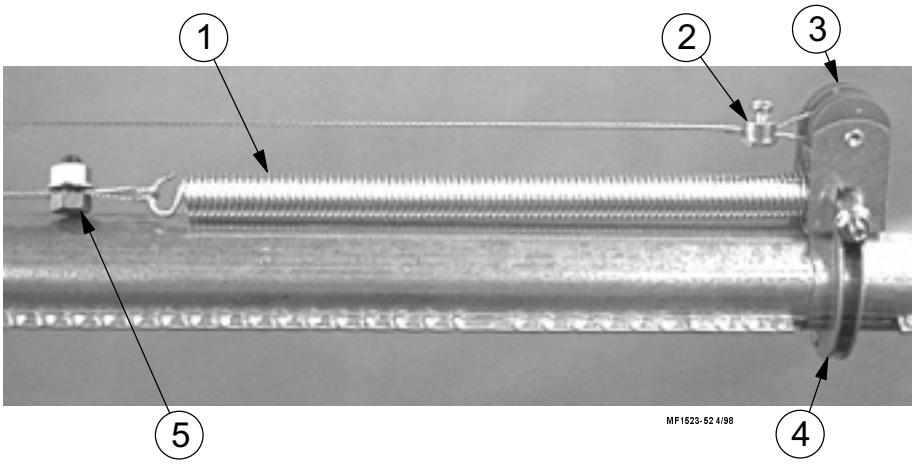
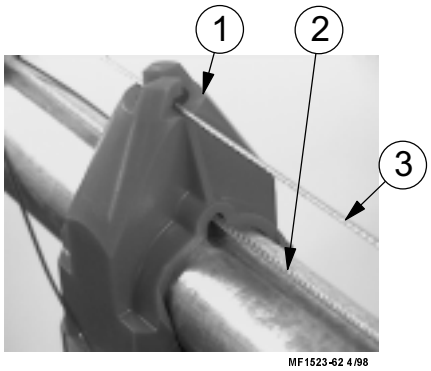



**Figure 40. Insulator Bracket and Spring installation**

| Item | Description |
|---|---|
| 1 | Spring |
| 2 | Cable Clamp |
| 3 | Insulator Bracket |
| 4 | Tube Clamp |
| 5 | Split Bolt |

Starting at the Control End, thread the 3/32" cable through every Drop Tube to support the cable and keep it in position. See Figure 41.




| Item | Description |
|---|---|
| 1 | Drop Tube |
| 2 | Cable |
| 3 | Anti Roost Wire |

**Figure 41. Cable routing through Drop Tubes**

Route the cable through the center of the feed line winch drum. See Figure 42

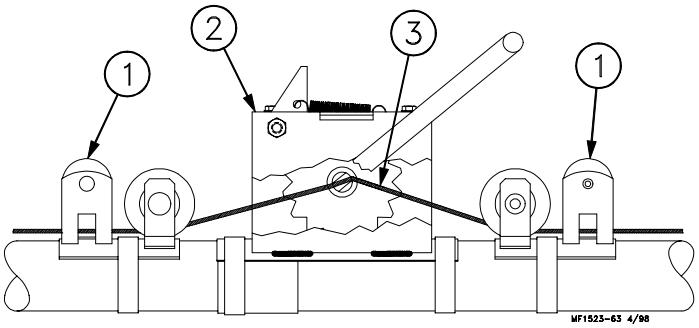


Figure 42. Cable Routing through Feed Line Winch

| Item | Description |
|---|---|
| 1 | Insulator Pulley Assembly |
| 2 | Feed line Winch |
| 3 | Cable |

Continue routing the cable through the Drop Tubes and connect the cable at the hopper end of the brood area and at the Control End, stretching the springs approximately 1 inch. Turn winch and apply 2 turns to the drum.

Starting at the winch, connect one of the Support Cords to the lift cable. The cords must be routed toward the winch (center of the brood area).

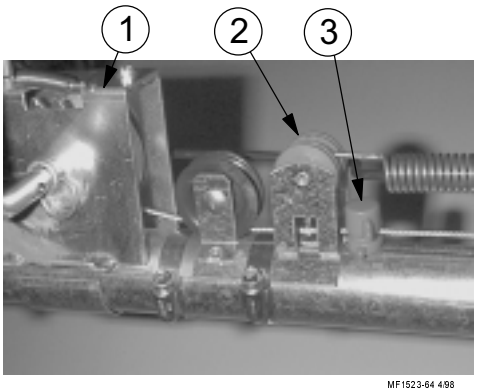
**Do not raise the first feed cone when connecting the cords**.

Figure 43. Connecting the Support Cords

See Figure 44 for the proper way of connecting the cords to the cable

Figure 44. Cable Clamp installation detail

Using the Feed Line Winch, raise the Feed Cone to it highest position. Position a Cable Clamp next to the Insulator Pulley Assembly at the Feed Line Winch. This Cable Clamp is to indicate when the Feed Cones have reached their highest setting. There is to be only one Cable Clamp per Feed Line Winch. See figure 45.




| Item | Description |
|---|---|
| 1 | Feed Line Winch |
| 2 | Insulator Pulley Assembly |
| 3 | Cable Clamp for fully raised stop |

**Figure 45. Support Cords installed**

Continue to attach the remainder of the feeders to the lift cable, making sure the feeders are in their highest position when connected.

Remember to route the cords toward the Feed Cone Winch.

## Anti-Roost Installation

1. Unroll the bulk anti-roost cable. Note: If the cable is unrolled as shown in Figure 46, 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.

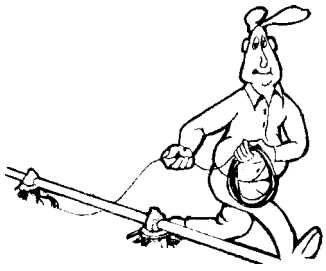
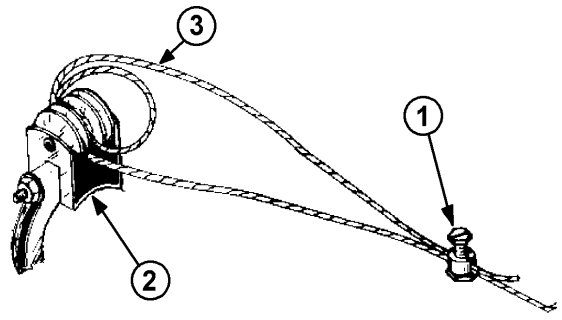


**Figure 46. Unrolling the Cable**

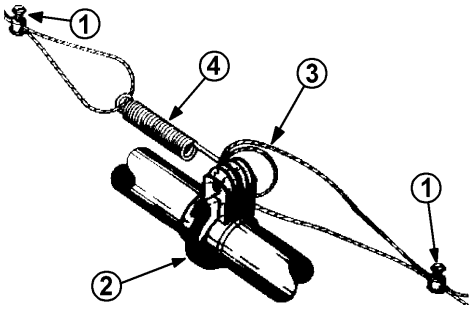
2. Start at the hopper end of the line and form a loop around the anti-roost bracket. For best results, make a double loop around the anti-roost insulator in the center groove of the insulator and fasten with a 1/16" cable clamp as shown in Figure 47.




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

**Figure 47. Anti-Roost Cable at the Hopper**

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 48.
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 48.
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 48.




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

**Figure 48. Anti-Roost Cable Mid-Line Connection**

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.

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 49.
10. Install the wire form on the control unit insulators. Be sure the guard snaps into the retainers molded into the insulators. See Figure 49.

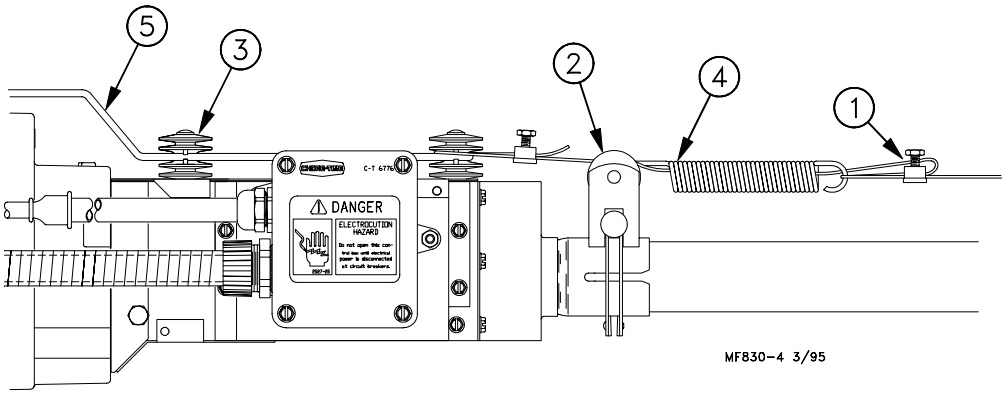



**Figure 49. Anti-Roost Installation at the Control Unit**

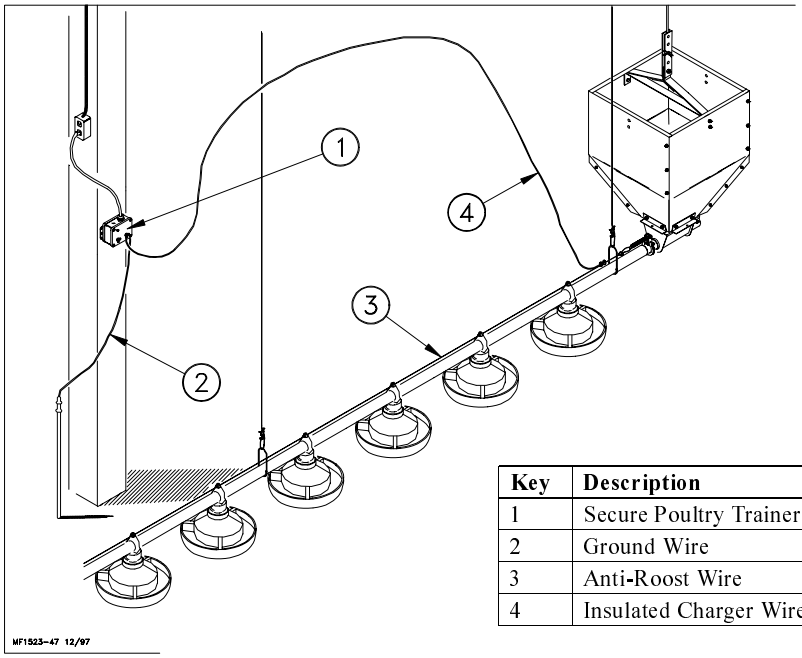
| Key | Description |
|---|---|
| 1 | Clamp |
| 2 | Clamp with Anti-Roost Bracket and Insulator |
| 3 | Insulator |
| 4 | Spring should be stretched to 3/4" to 1" (19 to 25 mm). |
| 5 | Wire Form |

11. Install the Poultry Trainer or Line Charger, as shown in Figure 50 or 51.

    The Poultry Trainer is used to power all Anti-Roost lines in a house. See Figure 50.

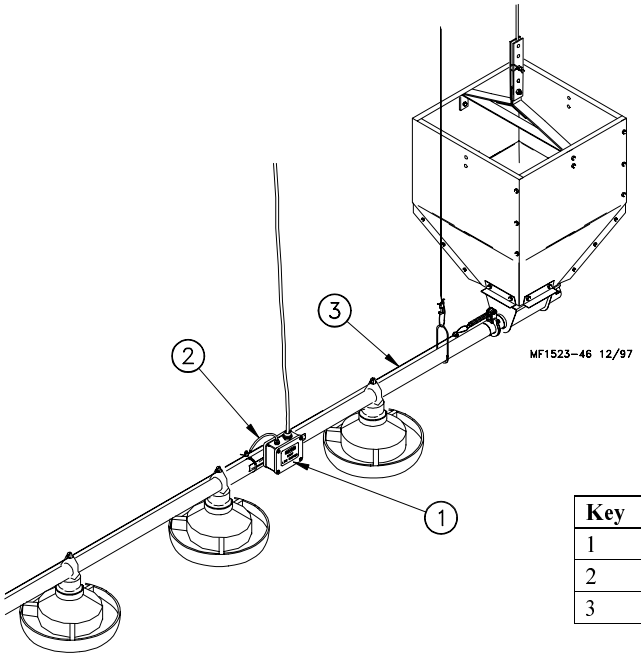
    The Line Charger is used to power individual Anti-Roost lines in a house. See Figure 51.

    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.




| Key | Description |
|---|---|
| 1 | Secure Poultry Trainer to the wall or post. |
| 2 | Ground Wire |
| 3 | Anti-Roost Wire |
| 4 | Insulated Charger Wire |

**Figure 50. Poultry Trainer Installation**




| Key | Description |
|---|---|
| 1 | Line Charger |
| 2 | Insulated Charger Wire |
| 3 | Anti-Roost Wire |

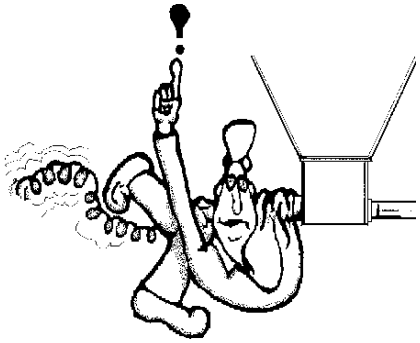
**Figure 51. Line Charger Installation**

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.

## Auger Installation

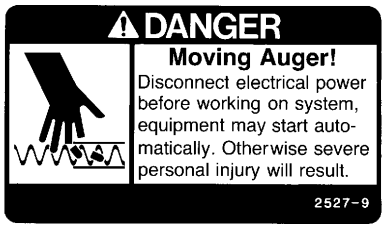
**Note: Use extreme caution when working with the auger. The auger is under tension and may spring causing personal injury. Wear protective clothing, gloves, and safety glasses when working with the auger.**



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

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.





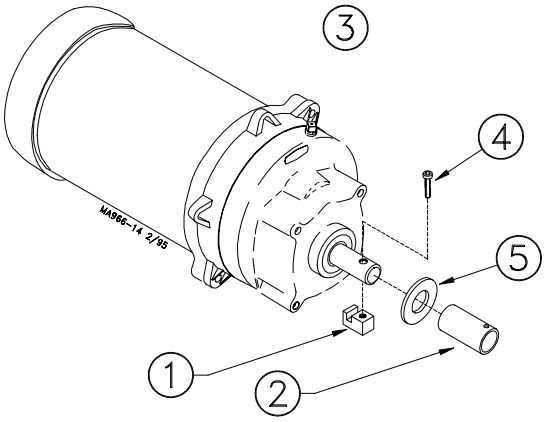
1. Remove the Anchor & Bearing Assembly from the boot under the Hopper.
2. **Use extreme caution when pushing the auger into the auger tubes. Keep your hand away form the end of the auger tube to avoid injury.**

   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. Slide the Drive Tube and flat washer over the output shaft on the Power Unit, as shown in Figure 52.
5. Continue installing auger until the auger reaches the Control Unit end of the feeder line.

6. Attach the auger to the output shaft of the Power Unit, as shown in Figure 52. Use the Drive Block to secure the auger to the Output Shaft.




| Key | Description |
|---|---|
| 1 | Driver Block |
| 2 | Drive Tube |
| 3 | Control Unit not shown for clarity. |
| 4 | 1/4-20x1-1/2" H.H. Bolt |
| 5 | Flat Washer |

**Figure 52. 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 53.

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

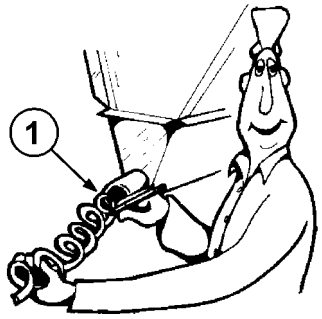



**Figure 53. Measure the Auger from the *relaxed* position.**

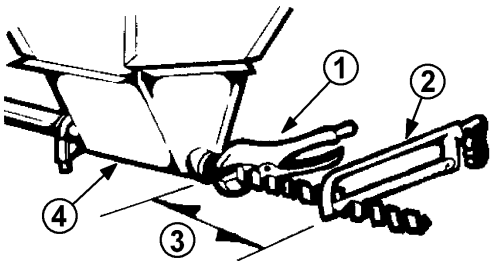
8. Auger stretch:

   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 54.

   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 54. Cut the Auger with required stretch.**

9. Thread the Auger onto the Anchor & Bearing assembly up to the washer. Tighten the set screws until they touch the auger, then tighten a maximum of 1/2 turn. See Figure 55. **DO NOT OVERTIGHTEN THE SET SCREW.**

**CAUTION**

**KEEP HANDS AWAY FROM PINCH POINTS WHEN INSTALLING AUGER.**

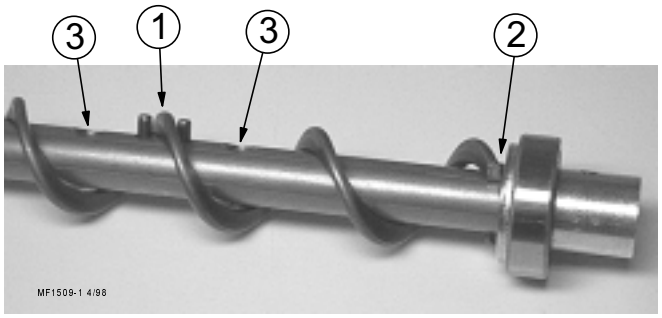



**Figure 55. Auger and Anchor Bearing Connection**

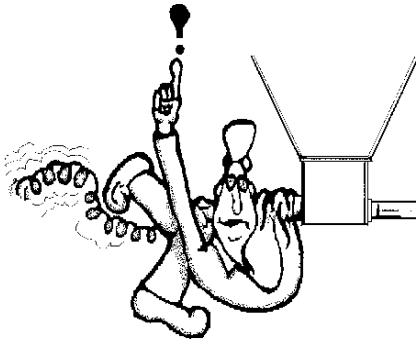
| Item | Description |
|---|---|
| 1 | Thread auger through pins |
| 2 | Auger touching washer |
| 3 | Set Screws |

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.

11. Place the cannonball in the boot.

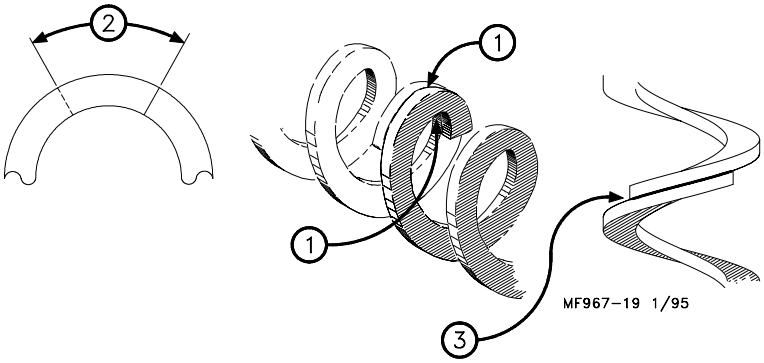


**BE CAREFUL WHEN WORKING WITH THE AUGER!**

## 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, NOT THREAD INSIDE EACH OTHER. See Figure 56. 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.

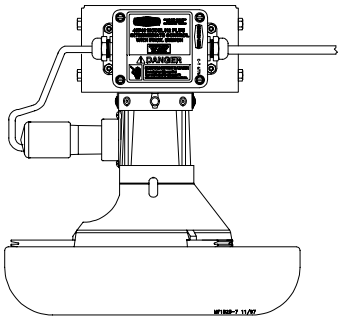



| Key | Description |
|---|---|
| 1 | Braze here |
| 2 | Lap the auger ends approximately 1” (25 mm). |
| 3 | Butt the auger ends together. DO NOT thread the auger together. |

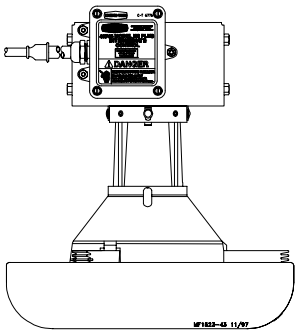
**Figure 56. Auger Brazing.**

# Intermediate Control

Intermediate Control Units are available for the Model H2 Plus Feeder. The Intermediate Controls are shown in Figure 57.



H2 Plus Intermediate control with proximity switch



H2 Plus Intermediate control with mechanical switch

**Figure 57. Intermediate Control Units (Side Views)**

The Intermediate Control makes it possible to operate the feeding system when birds are confined away from the End Control Unit. Chore-Time recommends placing the Intermediate Control Feeder at least 2 pans away from the curtain or partition. See Figure 58.

1. New Feeder Lines: Leave one feeder pan assembly off the feeder tube at the point where the Intermediate Control needs to be placed. The feeder line can be assembled and suspended before attaching the Intermediate Control; or the Intermediate Control may be attached to the feeder tube when the other pans are installed.

   Existing Feeder Lines: Cut the Grill Support and remove the feeder pan at the location where the Intermediate Control will be installed.

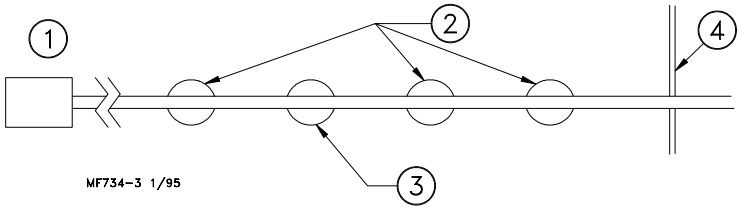



**Figure 58. Intermediate Control Location Diagram (Top View)**

| Key | Description |
|---|---|
| 1 | Hopper at the end of the feeder line. |
| 2 | Feeder Pans |
| 3 | Intermediate Control Unit |
| 4 | Curtain |

2. Enlarge the outlet hole for the Intermediate Control, plus (2) outlet holes in front of Intermediate Control.

   See Figure 59 for recommended size and placement. Use hacksaw and tin snips to enlarge hole size. Be sure there are no burrs inside the tube to catch the auger.

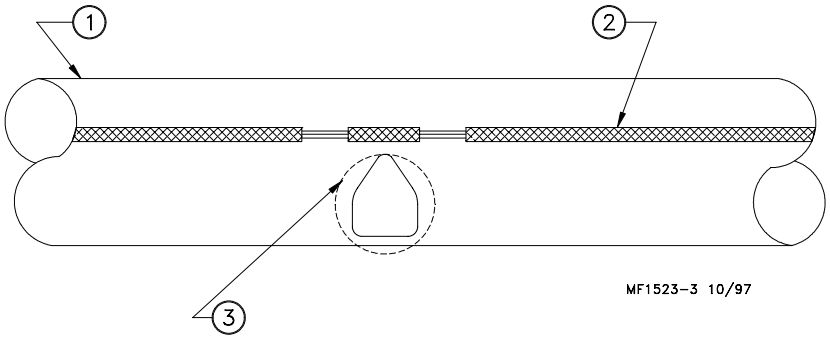
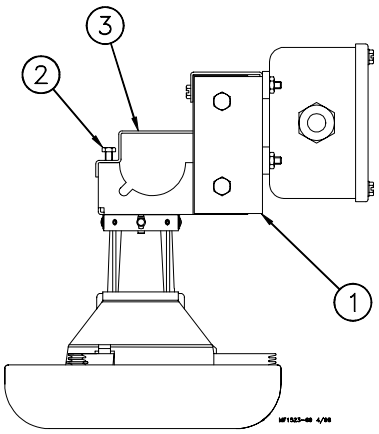



**Figure 59. Enlarging Outlet Holes (Side View)**

| Key | Description |
|---|---|
| 1 | Auger Tube |
| 2 | Seam |
| 3 | Use a unibit to enlarge outlet holes to 7/8" to 1" (2.22 cm - 2.54 cm). |

3. Install the Intermediate Control:
   a. Remove the two hex head screws on the control top.
   b. Lift off the control top.
   c. Cradle the feeder tube in the control housing. The feeder tube may have to be turned slightly to allow the pan to hang straight.
   d. Clamp the control in place by inserting tabs on the control top into the slots on the control body. Install and tighten the two hex head screws previously removed.




| Item | Description |
|---|---|
| 1 | Intermediate Control |
| 2 | Hex Head Screws |
| 3 | Control Top |

**Figure 60. Intermediate Control Installation**

4. Install a toggle switch, out of reach of the birds, to disconnect power to the Intermediate Control. This allows the Intermediate Control to serve as standard feeder when not used as a control feeder.
5. Wire the Intermediate Control as shown in the wiring diagram section of this manual.

# Meal-Time Feeding Guidelines

Chore-Time Programmed Meal-Time Feeding is recommended for use with Model H2 Plus Feeders. Basically, it means the birds are fed meals and are allowed to clean up the feed between meals. This stimulates appetite, reduces protein excretion, and, when combined with good poultry management, can yield a heavier bird with improved feed conversion.

Chore-Time Programmed Meal-Time Feeding does not limit or restrict feed. Only the numbers and lengths of feedings per days are regulated - not the amount of feed.

Based on working experience, Chore-Time has set down the following guidelines. Chore-Time emphasizes that these are GUIDELINES. Individual situations will require monitoring and judgment to determine best performance on the Chore-Time Programmed Meal-Time Feeding system.

1. Start birds with pans on the floor. Empty the Control Unit pan several times a day so the feeder will run. The sound of the feeder will alert the birds and they will use the pans more quickly.
2. Model H2 Plus uses a moveable feed cone to begin feeder operation.
3. Adjust the feeder height weekly. At 3 weeks, the feeder should be high enough so that birds will not stand with one foot on pan lip but still will be able to reach feed.
4. At three weeks, begin the Meal-Time Feeding Program. The following is an example of a Meal-Time program.

   Birds should be fed 4 meals per day - at 7 A.M./ at 1 P.M./ at 7 P.M. / and at 1 A.M.

   Try to be present during the feedings. Use the "Running Time" chart on this page as a guide for determining length of running cycles.
5. After the Chore-Time Programmed Meal-Time Feeding is begun, determine whether running times need to be adjusted. Remember: ONLY LENGTHEN OR SHORTEN RUNNING TIMES. DO NOT DEVIATE FROM 4 FEEDINGS PER DAY.

   The biggest cause of operator concern is usually when birds are without feed. If you are managing this concept for best results, the birds will be without feed. This maybe for as long as 2 hours depending on energy content of the feed.

## Length of Feeder Line

| Age of Birds in Weeks | Lines to 140 ft (Lines to 43 m) | 150 ft to 270 ft (46 m to 82 m) | 280 ft to 390 ft (85 m to 119 m) | 400 ft to 490 ft (122 m to 149 m) | 500 ft to 590 ft (152 m to 168 m) |
|---|---|---|---|---|---|
| 3 to 4 | 15 min | 30 min | 45 min | 1 hour | 1 hour & 15 min |
| 4 to 5 | 30 min | 45 min | 1 hour | 1 hour & 15 min | 1 hour & 30 min |
| 5 to 6 | 45 min | 1 hour | 1 hour & 15 min | 1 hour & 30 min | 1 hour & 45 min |
| 6 to 7 | 1 hour | 1 hour & 15 min | 1 hour & 30 min | 1 hour & 45 min | 2 hours |
| 7 to 8 | 1 hour & 15 min | 1 hour & 30 min | 1 hour & 45 min | 2 hours | 2 hours & 15 min |

1. Determine age of birds.
2. Determine the length of the feeder lines.
3. On the chart, using items determined in steps 1 and 2, find guidelines for running times PER MEAL, in hours and minutes.

6. Adjust running time weekly. The adjustment should be made on the same day each week. It may be convenient to adjust the feeder height at the same time.
7. At the end of the grow-out cycle, allow the birds to clean up feed in the pans. This will further reduce feed waste and reflect in good final results.

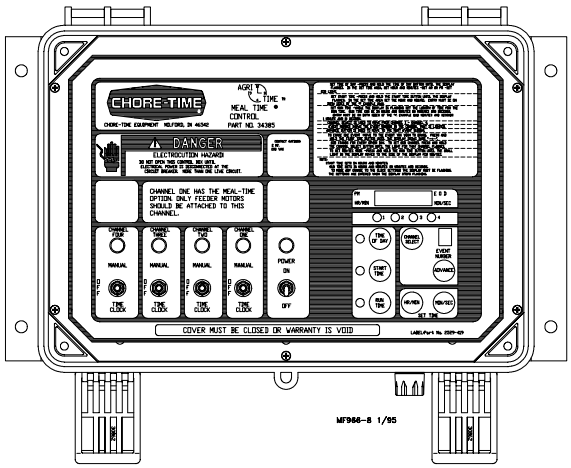
Following Chore-Time Programmed Meal-Time Feeding improves results and minimizes labor, energy usage, and wear on equipment while reducing feed cost per pound of gain and improved feed conversion.

# Controlling the Feeders (optional equip.)

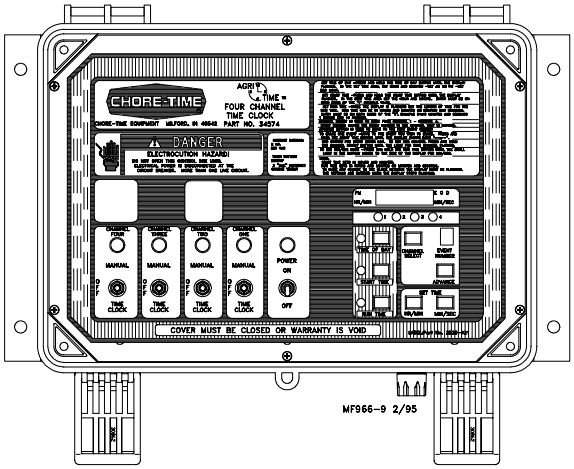
The Model H2 Plus Feeding Systems may be controlled by the 34385 4-Channel Meal-Time Control **or** the 34574 4-Channel Time Clock Control.

Both controls use the Agri-Time™ Time Clock. Refer to the instructions shipped with each control for information on installation, wiring, programming, and operating the controls.

4-Channel Meal-Time Control




4-Channel Time Clock Control




## 4-Channel Meal-Time Control P/N 34385

The Meal-Time Control is primarily designed to meet the feeding needs of broiler applications. The Meal-Time Control is set up with Channel 1 being the feeder channel. Feeder line motors should be powered only by Channel 1.

The Meal-Time channel (Channel 1) allows any feeder line that is running when the run time is finished to continue to run until the line is satisfied.

The other channels (2,3, & 4) may be used to control other equipment (lights, fans, water solenoids, etc.).

Each channel has a 2 H.P. (max.), 230 V. power relay.

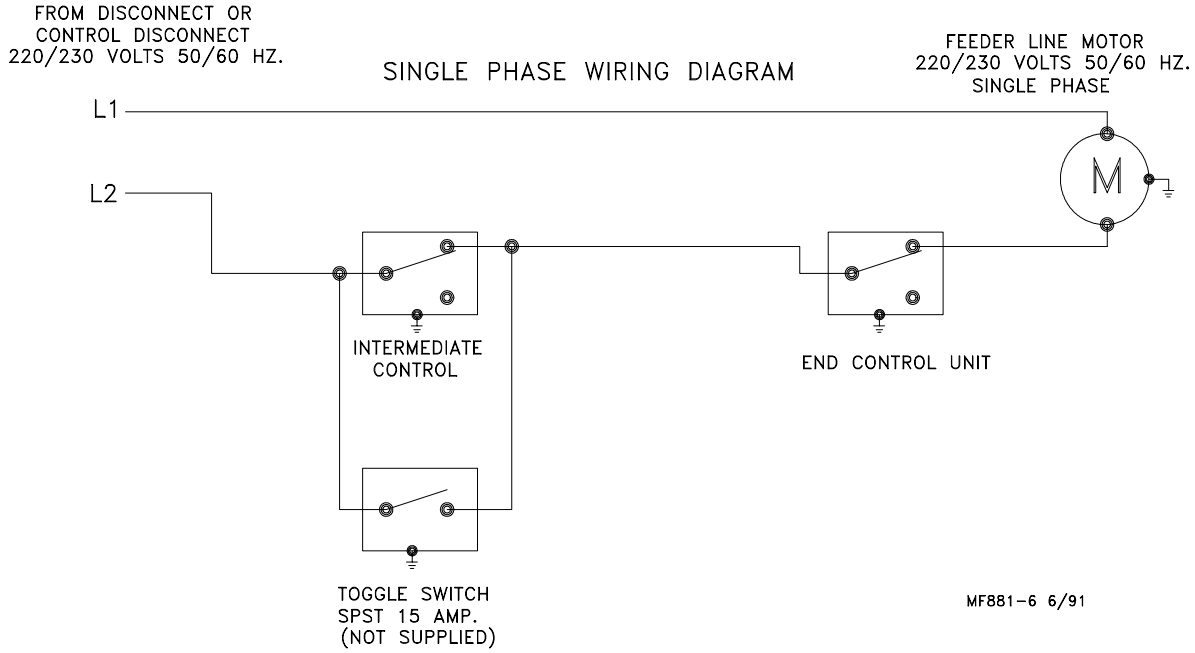
## 4-Channel Time Clock Control P/N 34574

The 4-Channel Time Clock may be used in a variety of applications requiring a time clock to start and run equipment, lights, etc. at a predetermined time, for a predetermined amount of time.

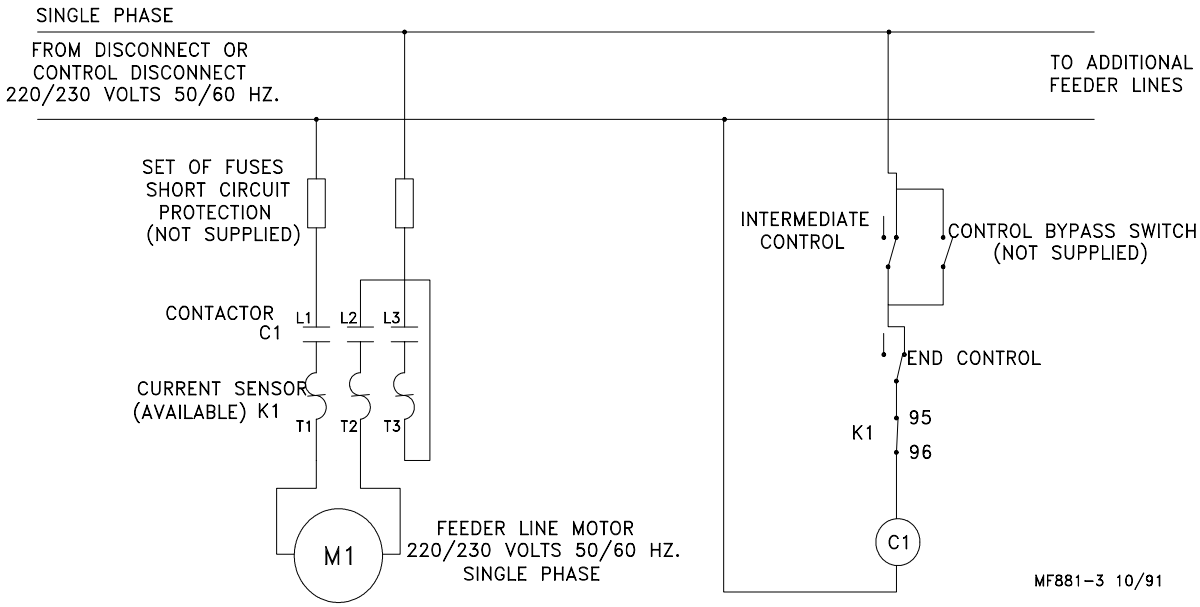
Each channel has a 2 H.P. (max.), 230 V. power relay.

# End & Intermediate Control Wiring Diagrams: Single Phase(Ø)

## Single Phase(Ø) Wiring Diagram

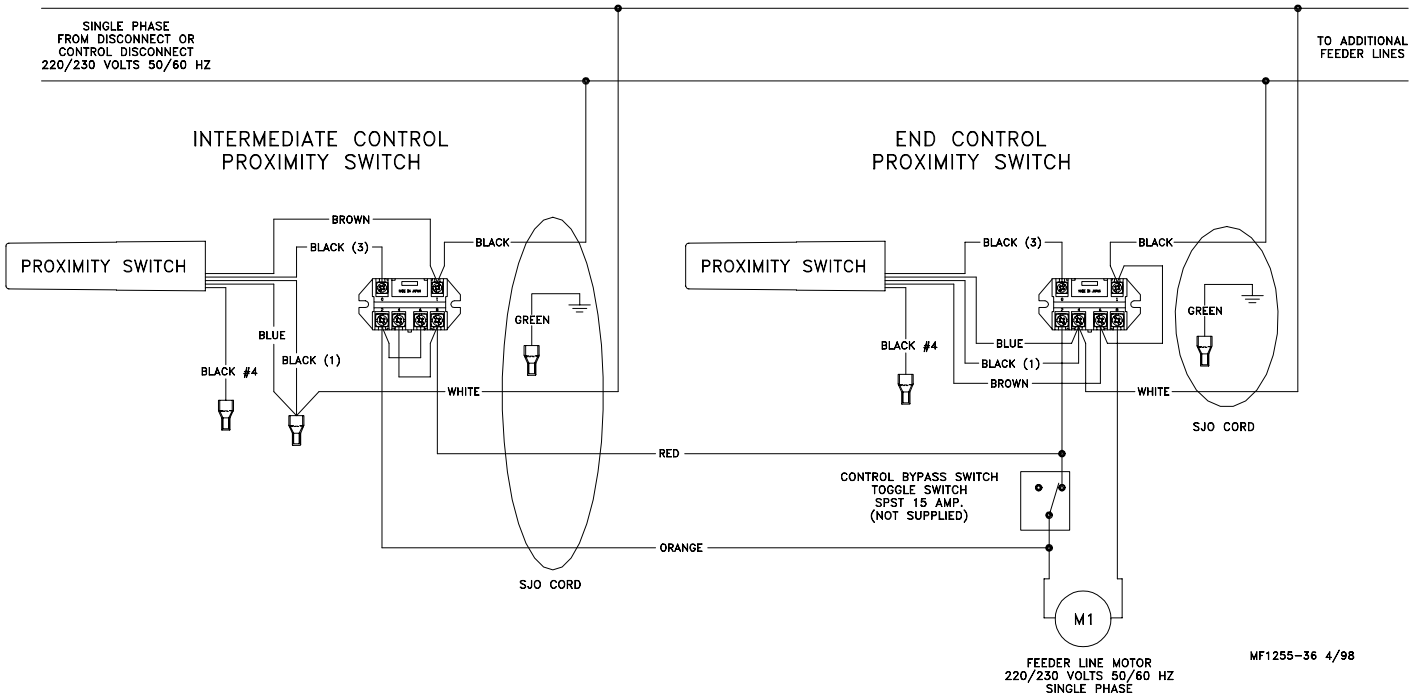



## Single Phase(Ø) Wiring Diagram with Motor Starter

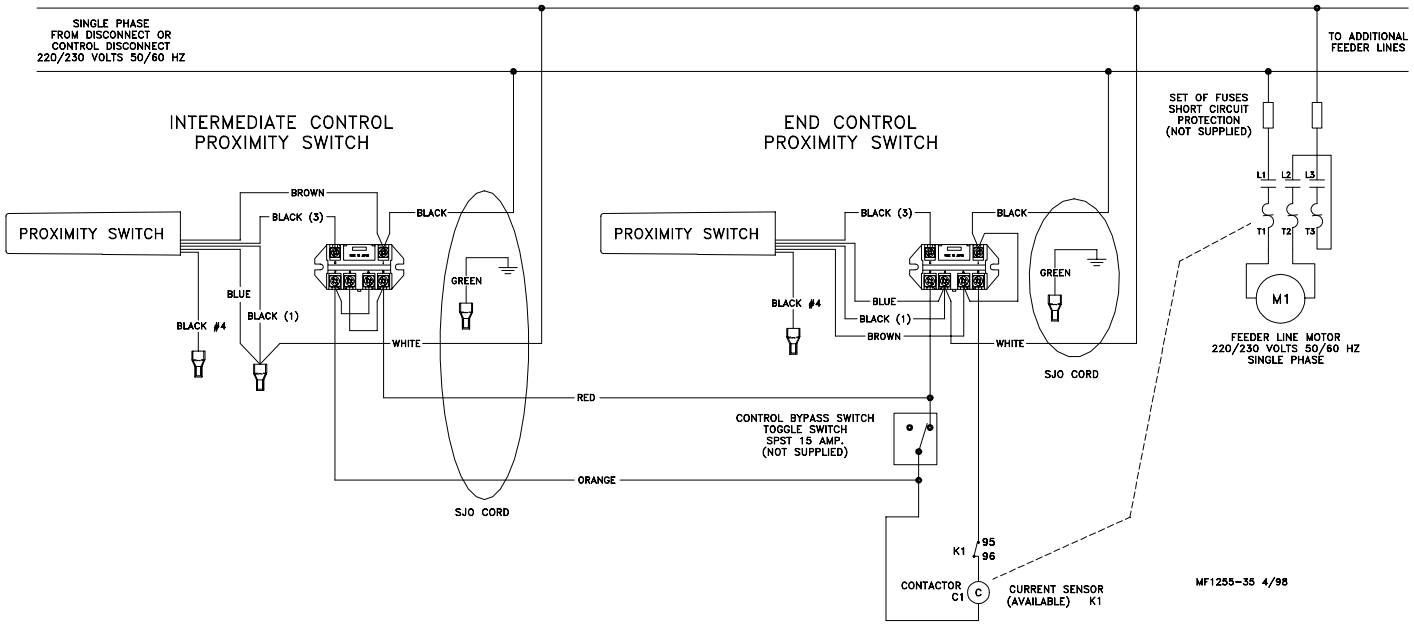


# End & Intermediate Control Wiring Diagrams: Single Phase(Ø)

## Single Phase(Ø) Wiring Diagram with Proximity Switch

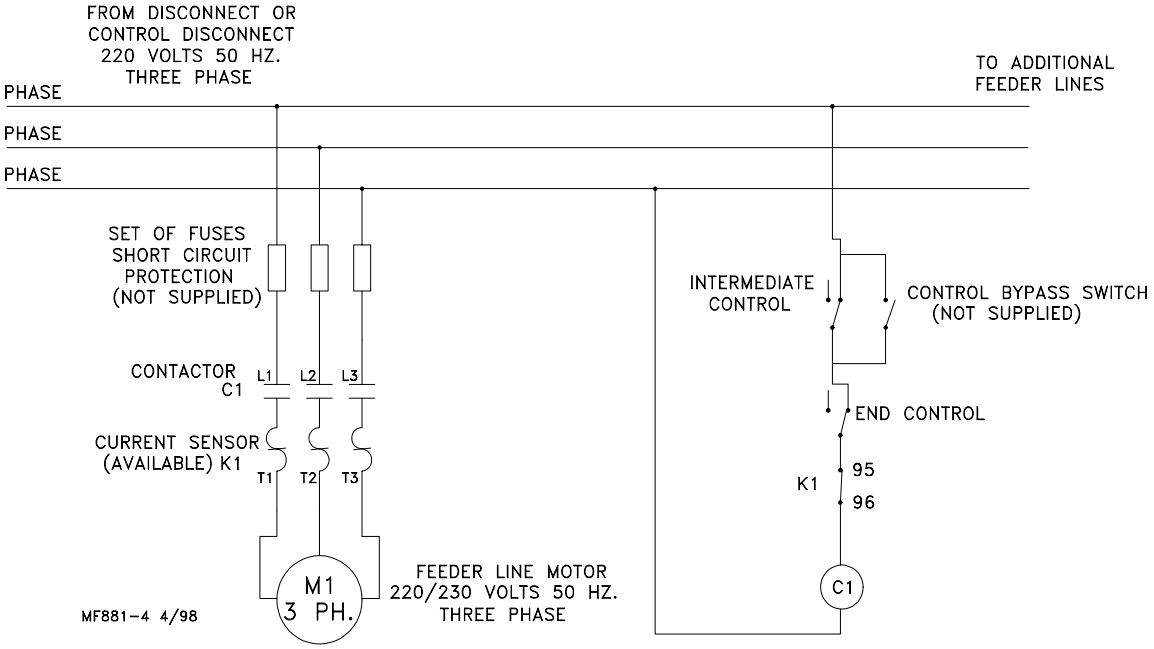



## Single Phase(Ø) Wiring Diagram with Proximity Switch & Motor Starter

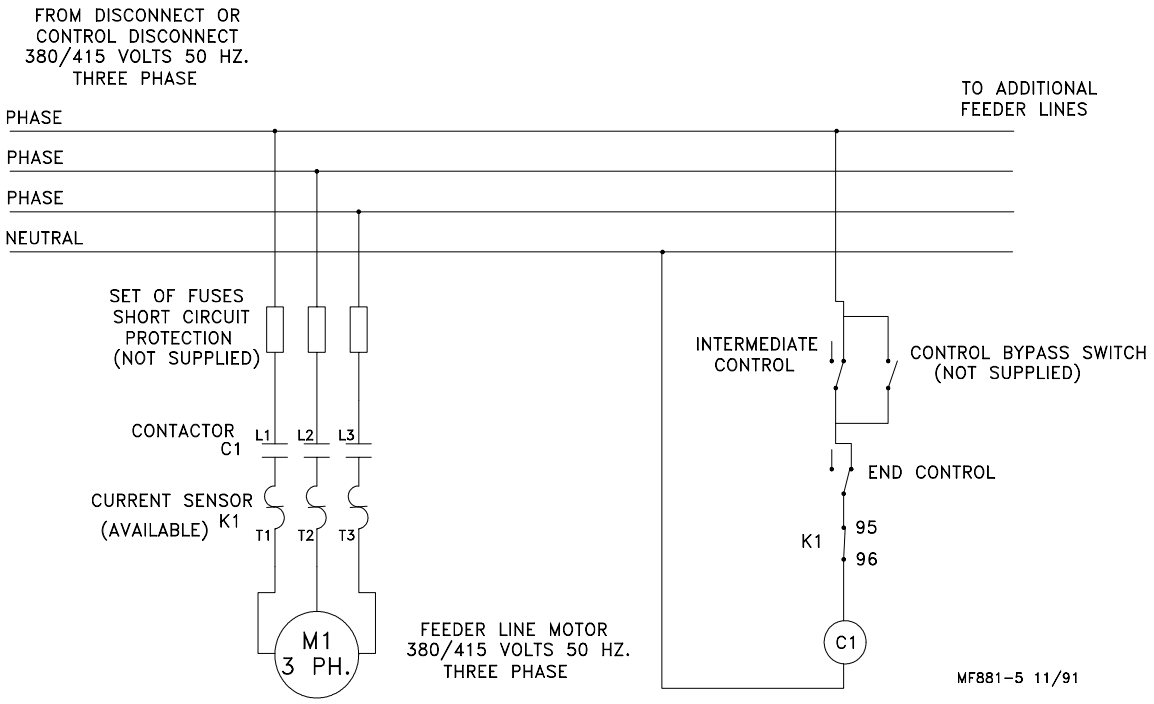


# End & Intermediate Control Wiring Diagrams: Three Phase(Ø)

## Three Phase(Ø) Wiring Diagram: 220 V.

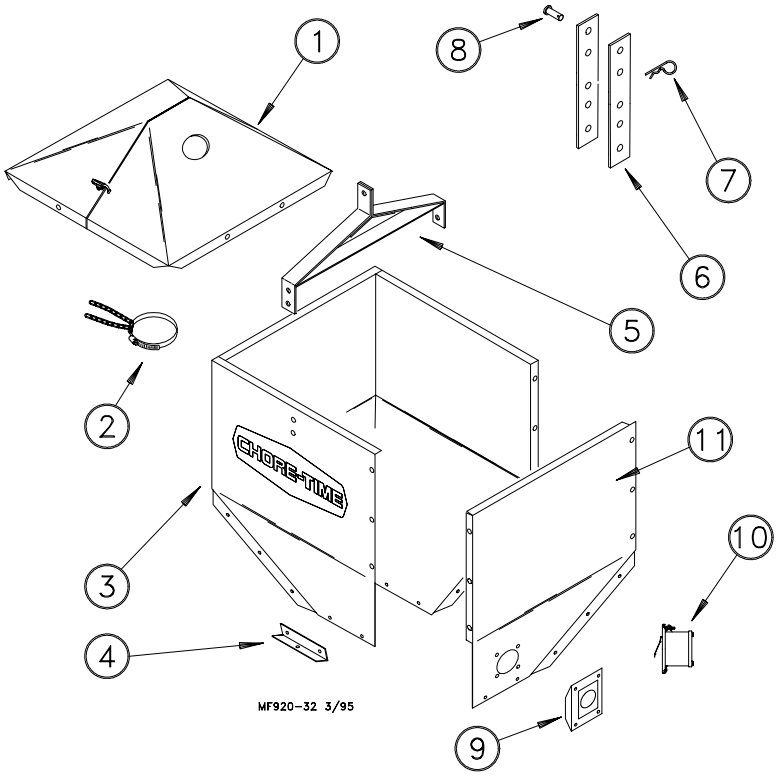



## Three Phase(Ø) Wiring Diagram: 380/415 V.



# Parts Listing

## 200# Hopper Components




| Item | Description | Part No. |
|---|---|---|
| 1* | Hopper Cover (optional) | 28206 |
| 2 | Tube Support Assembly | 14367 |
| | Clamp | 13948 |
| | Chain | 2128-1 |
| 3 | Hopper Side (w/o hole) (3 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 |
| 9 | Diaphragm Assembly | 7900 |
| 10 | Switch Kit | 8798 |
| 11 | Hopper Side Panel (w/ hole) | 8791 |

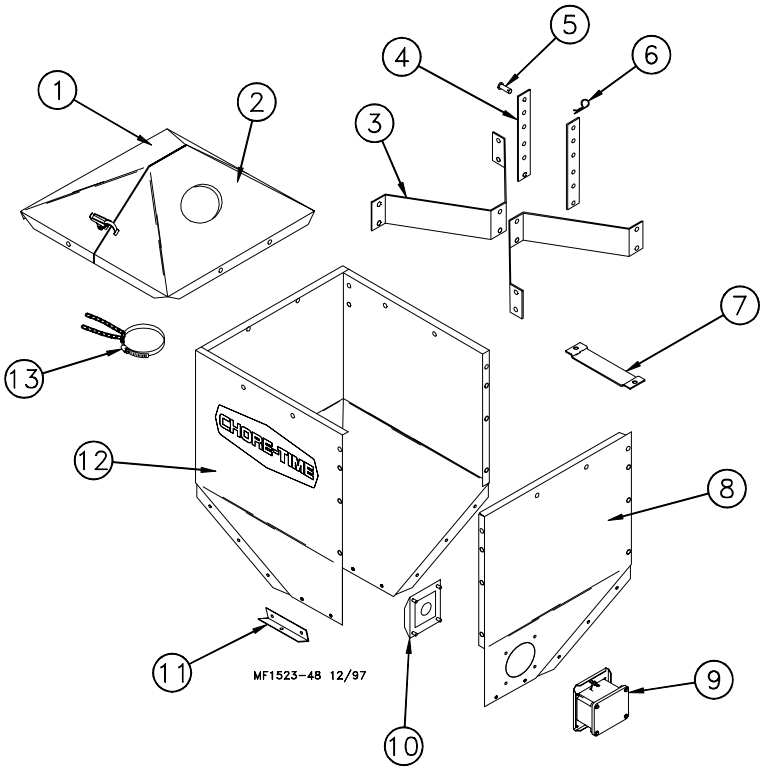
*Hopper Cover not included. Must be ordered separately.

The 200# Hopper Assembly (w/o Switch or Cover) may be ordered under Part No. 7941. Hopper Cover must be ordered separately.

The 200# Hopper Assembly (w/ Switch and Cover) may be ordered under Part No. 9474.

*These components may be ordered as an assembly under Part No. 28206.

# 100 # Hopper Components




| Key | Description | Part No. |
|---|---|---|
| 1* | Hopper Cover (w/o hole) | 28211 |
| 2* | Hopper Cover (w/ hole) | 28212 |
| 3 | Hopper Hanger | 28165 |
| 4 | Adjustment Bracket | 2706 |
| 5 | Cotter Pin | 2797-1 |
| 6 | Hair Pin | 2664 |
| 7 | H.L.C Mounting Bracket | 26287 |
| 8 | Hopper Side (w/ hole) | 24241 |
| 9 | Switch Kit | 8798 |
| 10 | Diaphragm Assembly | 7900 |
| 11 | Boot Hanger | 28168 |
| 12 | Hopper Side (w/o hole) | 28164 |
| 13 | Tube Support Assembly | 14367 |

*These components may be ordered as an assembly under Part No. 28210.

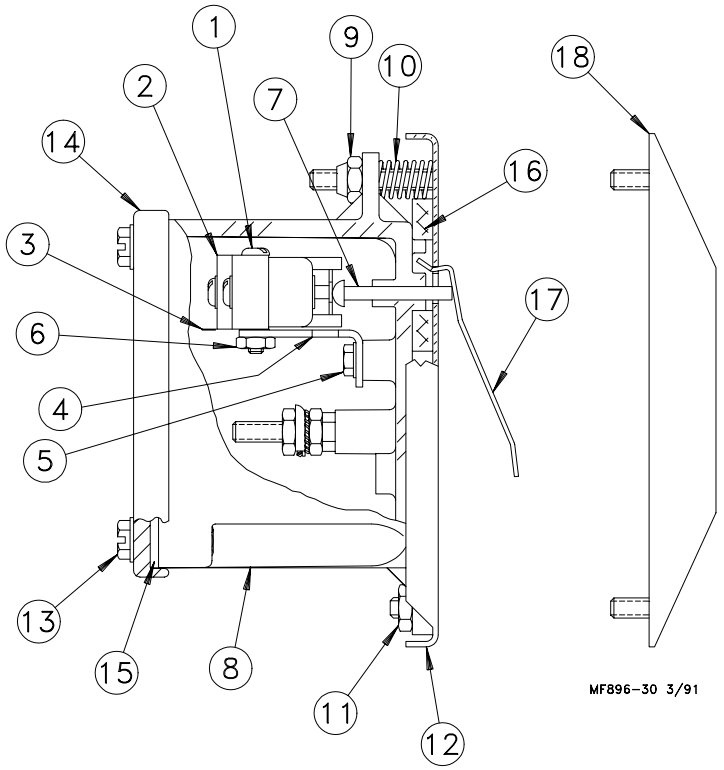
The 100# Hopper Assembly may be ordered under Part No. 28220.

The 100# Hopper Assembly, including the Cover only, may be ordered under Part No. 28240.

The 100# Hopper Assembly, including the Switch only, may be ordered under Part No. 28242.

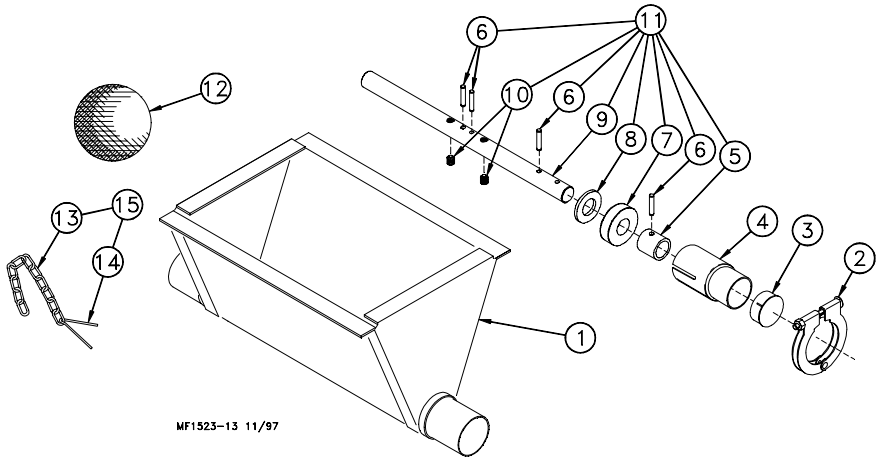
The 100 # Hopper Assembly, including the Cover and Switch, may be ordered under Part No. 28245.

# Switch Kit (Part Number 8798)




| Item | Description | Part No. |
|---|---|---|
| 1 | 6-32 x 7/8" Rd. Hd. M.S. | 1921 |
| 2 | SPDT Actuator Switch | 7114 |
| 3 | Switch Insulation | 1907-5 |
| 4 | Switch Bracket | 7068 |
| 5 | #6 x 3/8"Slot Wash. Hd. Screw | 6782 |
| 6 | 6-32 Hex Nut | 771 |
| 7 | Pin | 8757 |
| 8 | Switch Box | 7841 |
| 9 | 10-32 Hex Lock Nut | 6963 |
| 10 | Spring | 6972 |
| 11 | 10-32 Hex Nut | 4297 |
| 12 | Mounting Plate | 7908 |
| 13 | #10 Twin Helix Screw | 6980 |
| 14 | Switch Box Cover | 6776 |
| 15 | Gasket | 6777 |
| 16 | Gasket | 6968-1 |
| 17 | Paddle | 7896 |
| 18 | Diaphragm Assembly | 7900 |
| -- | Deflector | 28281 |
| -- | Warning Decal | 2527-15 |

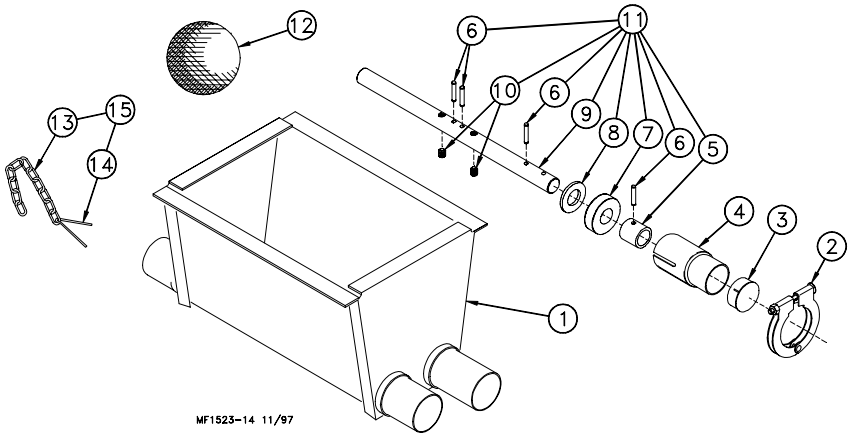
## Single Boot Components Part No. 6822




| Item | Description | Part No. |
|---|---|---|
| 1 | Boot Weldment | 3760 |
| 2 | Tube Clamp | 24063 |
| 3 | Cap | 29373 |
| 4 | Outlet Tube | 4556 |
| 5 | Sleeve | 5648 |
| 6 | 3/16 x 1" Pin | 2960-1 |
| 7 | Bearing | 2689 |
| 8 | Washer | 2955-14 |

| Item | Description | Part No. |
|---|---|---|
| 9 | Anchor | 38540 |
| 10 | Setscrew | 1174 |
| 11 | Anchor and Bearing Ass'y | 39372 |
| 12 | Cannonball | 3531 |
| 13 | Chain | 2128-1 |
| 14 | Cotter Pin | 1639 |
| 15 | Latch Pin Ass'y | 2683 |
| -- | Danger Decal | 2527-9 |

## Twin Boot Components Part No. 6824

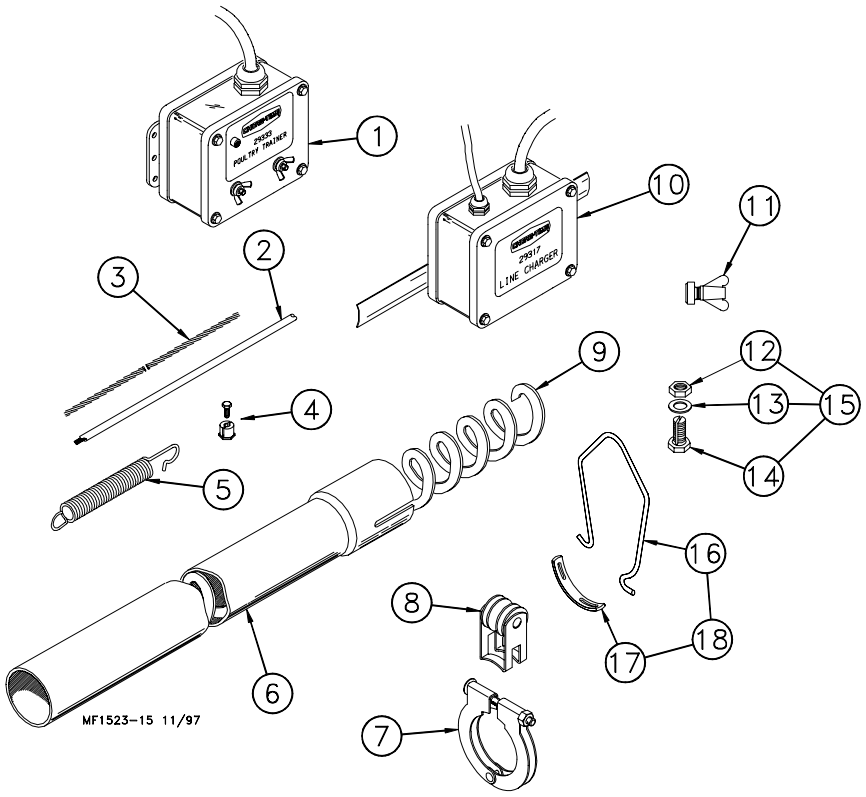



| Item | Description | Part No. |
|---|---|---|
| 1 | Boot Weldment | 3760 |
| 2 | Tube Clamp | 24063 |
| 3 | Cap | 29373 |
| 4 | Outlet Tube | 4556 |
| 5 | Sleeve | 5648 |
| 6 | 3/16 x 1" Pin | 2960-1 |
| 7 | Bearing | 2689 |
| 8 | Washer | 2955-14 |
| 9 | Anchor | 38540 |

| Item | Description | Part No. |
|---|---|---|
| 10 | Setscrew | 1174 |
| 11 | Anchor and Bearing Ass'y | 39372 |
| 12 | Cannonball | 3531 |
| 13 | Chain | 2128-1 |
| 14 | Cotter Pin | 1639 |
| 15 | Latch Pin Ass'y | 2683 |
| --* | Jumper Wire Kit | 5960 |
| -- | Danger Decal | 2527-9 |
| | | |

*The Jumper Wire Kit includes an insulated piece of High-Voltage Wire (part no. 28994) and (2) cable clamps.

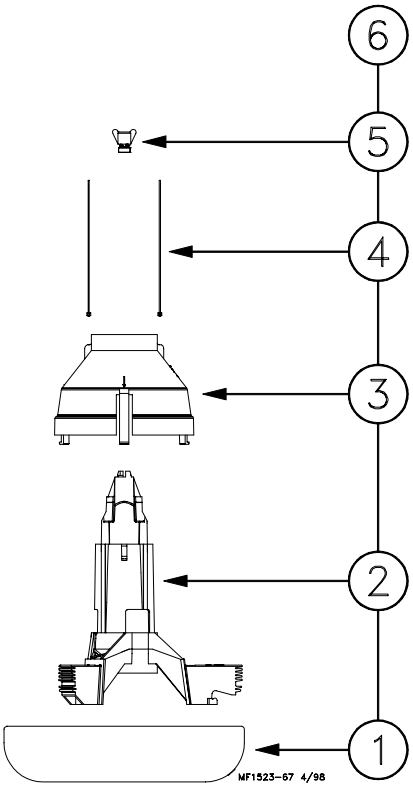
## Feeder Line Components




| Item | Description | Part No. |
|---|---|---|
| 1 | Poultry Trainer (110 V, 60 Hz)<br>Poultry Trainer (220 V, 50/60 Hz) | 5303<br>5699 |
| 2 | Charger Wire (165')<br>Charger Wire (330') | 28994-165<br>28994-330 |
| 3 | 1/16" Cable | 1922 |
| 4 | 1/16" Cable Clamp | 1826 |
| 5 | Spring | 7551 |
| 6 | Roll Formed Tube<br>--12', 5 hole tube<br>--12', 4 hole tube<br>--10', 4 hole tube<br>--10', 3 hole tube<br>-- 9', 4 hole tube | <br>6854-7<br>6854-7<br>6854-4<br>6854-5<br>6854-1 |
| 7 | Tube Clamp | 24063 |
| 8 | Anti-Roost Bracket | 24060 |
| 9* | Auger | 6820-0 |
| 10 | Line Charger (110 V, 60 Hz)<br>Line Charger (220 V, 50/60 Hz) | 5458<br>5459 |
| 11 | Cable Clamp | 13057 |
| 12 | 3/8-16 Hex Nut | 1549 |
| 13 | Washer | 4967 |
| 14 | 3/8-16 Hex Head Slotted Screw | 6342 |
| 15 | Cable Clamp Assembly | 6478 |
| 16 | Hanger Bracket | 7297 |
| 17 | Hanger Strap | 7298 |
| 18 | Hanger Kit | 7299 |

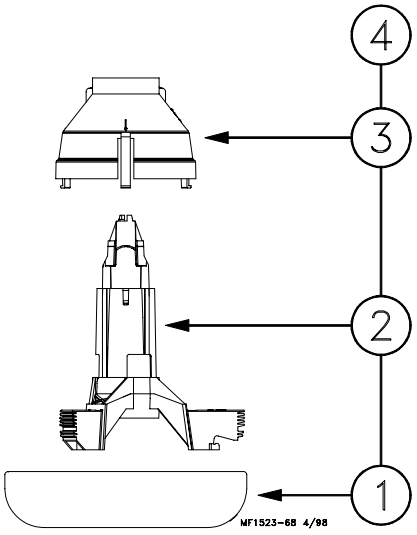
*Round up to the nearest 10'. Auger lengths from 50' to 500'. Example: 6820-200 would be a 200' roll of 6820 Auger.

## Model H2 Plus Feeder Assembly with Cords



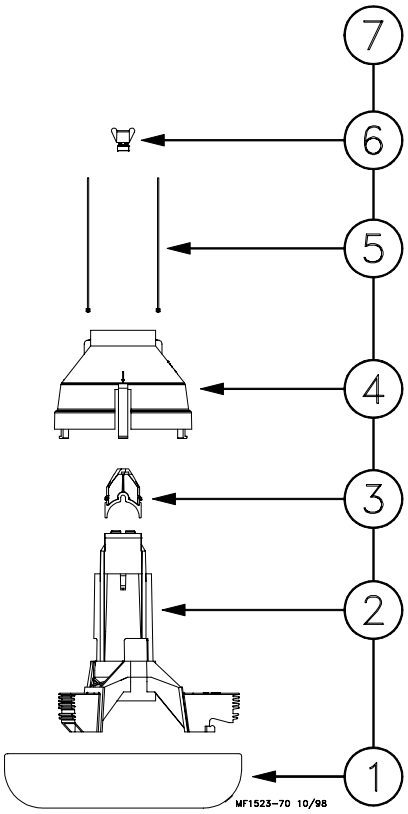

| Item | Description | Part No. |
|---|---|---|
| 1 | H2 Feeder Pan | 24901 |
| 2 | H2 Plus Feeder Cone Support | 38915 |
| 3 | H2 Plus Feeder Cone - Silver<br>H2 Plus Feeder Cone - Green | 38914-1<br>38914-2 |
| 4 | Cable Assembly | 40105 |
| 5 | Cable Clamp | 13057 |
| 6 | H2 Plus Pan Assembly - Silver<br>H2 Plus Pan Assembly - Green | 40109<br>40805 |

## Model H2 Plus Feeder Assembly without Cords



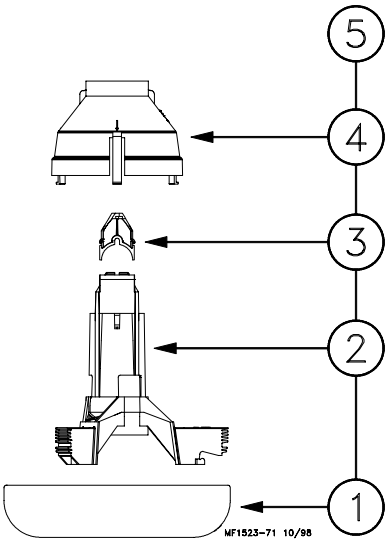

| Item | Description | Part No. |
|---|---|---|
| 1 | H2 Feeder Pan | 24901 |
| 2 | H2 Plus Feeder Cone Support | 38915 |
| 3 | H2 Plus Feeder Cone - Silver<br>H2 Plus Feeder Cone - Green | 38914-1<br>38914-2 |
| 4 | H2 Plus Pan Assembly - Silver<br>H2 Plus Pan Assembly - Green | 40106<br>40806 |

## Removeable Top Model H2 Plus Feeder Assembly with Cords



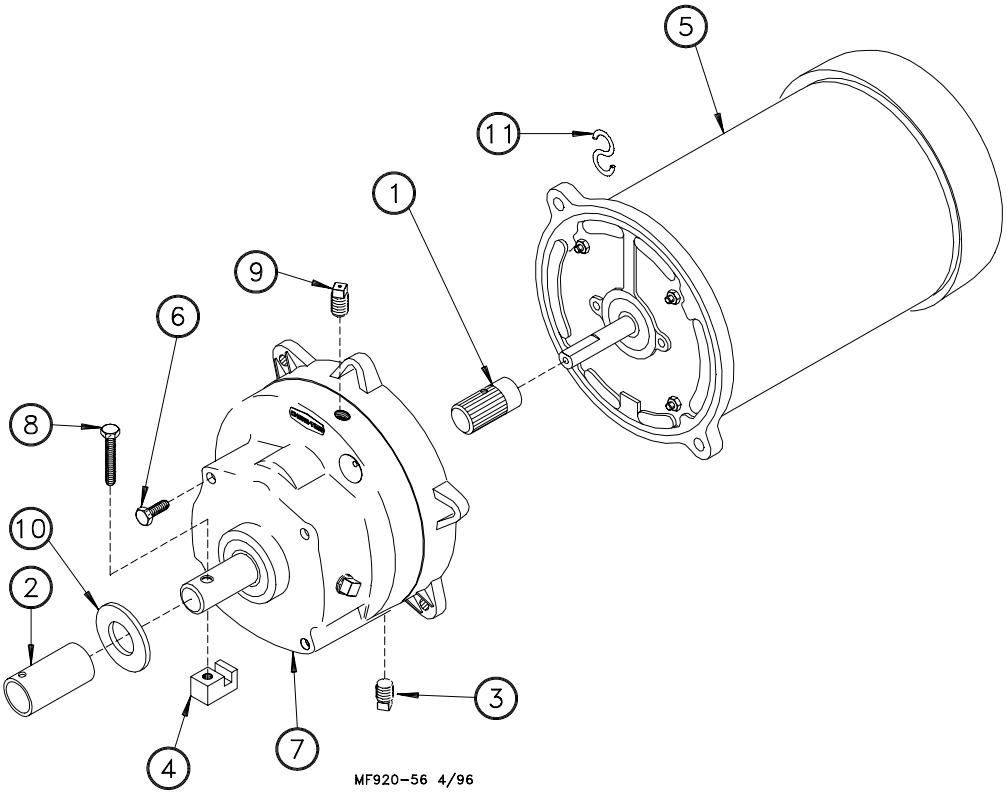

| Item | Description | Part No. |
|---|---|---|
| 1 | H2 Feeder Pan | 24901 |
| 2 | Support Cone Bottom | 40484 |
| 3 | Removeable Top | 38603 |
| 4 | H2 Plus Feeder Cone - Silver<br>H2 Plus Feeder Cone - Green | 38914-1<br>38914-2 |
| 5 | Cable Assembly | 40105 |
| 6 | Cable Clamp | 13057 |
| 7 | H2 Plus Pan Assembly - Silver<br>H2 Plus Pan Assembly - Green | 40636<br>41722 |

## Removeable Top Model H2 Plus Feeder Assembly without Cords




| Item | Description | Part No. |
|---|---|---|
| 1 | H2 Feeder Pan | 24901 |
| 2 | Support Cone Bottom | 40484 |
| 3 | Removeable Top | 38603 |
| 4 | H2 Plus Feeder Cone - Silver<br>H2 Plus Feeder Cone - Green | 38914-1<br>38914-2 |
| 5 | H2 Plus Pan Assembly - Silver<br>H2 Plus Pan Assembly - Green | 40637<br>41723 |

# Power Unit Assemblies



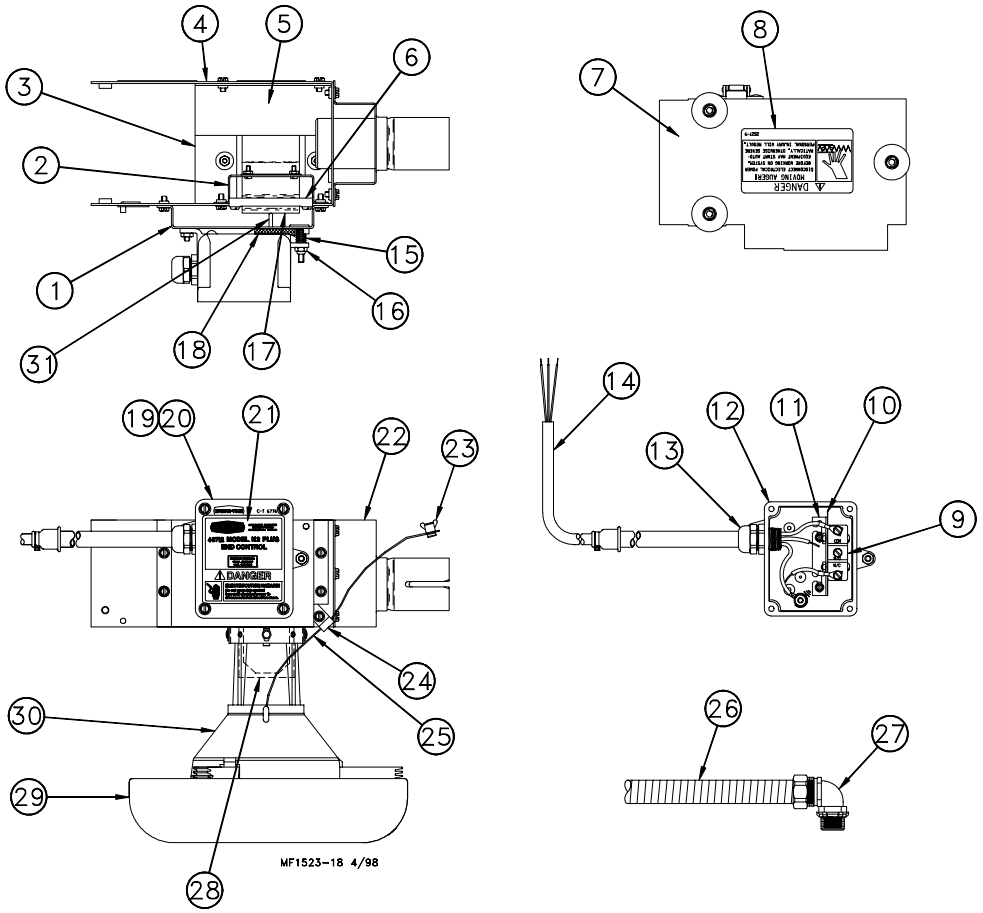

| Item | Description | 3259-8 Part No. | 3259-25 Part No. | 3259-84 Part No. | 3259-85 Part No. | 3259-98 Part No. | 3259-100 Part No. |
|---|---|---|---|---|---|---|---|
| 1 | Pinion Assembly | 5046 | 5046 | 5046 | 5046 | 5046 | 5046 |
| 2 | Drive Tube Connector | 1048 | 1048 | 1048 | 1048 | 1048 | 1048 |
| 3 | Pipe Plug (magnetic) | 30160 | 30160 | 30160 | 30160 | 30160 | 30160 |
| 4 | Driver Block | 4642 | 4642 | 4642 | 4642 | 4642 | 4642 |
| 5 | Motor | 4229 | 5703 | 4229 | 5703 | 5977 | 28031 |
| 6 | 5/16-18x5/8 Hex Hd Screw | 4412-1 | 4412-1 | 4412-1 | 4412-1 | 4412-1 | 4412-1 |
| 7 | Gearhead | 3261-5 | 3261-5 | 3261-5 | 3261-5 | 3261-11 | 3261-11 |
| 8 | 1/4-20x1-1/2 Hex Hd Screw | 2919 | 2919 | 2919 | 2919 | 2919 | 2919 |
| 9 | Vent Plug | 3516 | 3516 | 3516 | 3516 | 3516 | 3516 |
| 10 | Flat Washer | 1484 | 1484 | 1484 | 1484 | 1484 | 1484 |
| 11 | "S" Hook | 4270 | 4270 | 4270 | 4270 | 4270 | 4270 |
| -- | Cord Assembly | 4685 | 8299 | - - - - | - - - - | 28028 | - - - - |
| -- | Connector (Romex) | 1317 | 1317 | - - - - | - - - - | - - - - | - - - - |
| -- | Connector (90 Degree) | - - - - | - - - - | - - - - | - - - - | 4228 | - - - - |

# Power Unit Assembly Part Numbers:

| Part No. | HP | RPM | Phase | Hz | Voltage | Usages |
|---|---|---|---|---|---|---|
| 3259-8 | 1/3 HP | 348 RPM | Single Phase | 60 Hz | 230 | Use with 1878-8 Control Unit ONLY |
| 3259-25 | 1/2 HP | 348 RPM | Single Phase | 60 Hz | 230 | Use with 1878-8 Control Unit ONLY |
| 3259-84 | 1/3 HP | 348 RPM | Single Phase | 60 Hz | 230 | Use with all Control Units except 1878 Control Units |
| 3259-85 | 1/2 HP | 348 RPM | Single Phase | 60 Hz | 230 | Use with all Control Units except 1878 Control Units |
| 3259-98 | 1/2 HP | 348 RPM | Single Phase | 50 Hz | 230 | Use with all Control Units |
| 3259-100 | 1/2 HP | 348 RPM | Three Phase | 50 Hz | 220/380 | Use with all Control Units |

# Model H2 Plus Mechanical End Control

## Silver Control Part Number 40712
## Green Control Part Number 40815




| Item | Description | Part No. |
|---|---|---|
| 1 | Switch Box Mount | 25084 |
| 2 | Stop Panel | 25433 |
| 3 | Switch Bracket | 34309 |
| 4 | Control Body | 14434 |
| 5 | Deflector Panel | 34310 |
| 6 | Paddle Retainer | 25045 |
| 7 | Control Cover Assembly | 24682 |
| 8 | Danger Decal | 2527-9 |
| 9 | Actuator Switch | 7114 |
| 10 | Switch Insulation | 1907-5 |
| 11 | Switch Bracket | 7068 |
| 12 | Switch Box | 24702 |
| 13 | 1/2” Water Tight Connector | 24685 |
| 14 | Control Cord Assembly | 25495 |
| 15 | Spring | 6972 |
| 16 | #10-32 Lock Nut | 6963 |
| 17 | Paddle | 24848 |
| 18 | Gasket | 6968-1 |

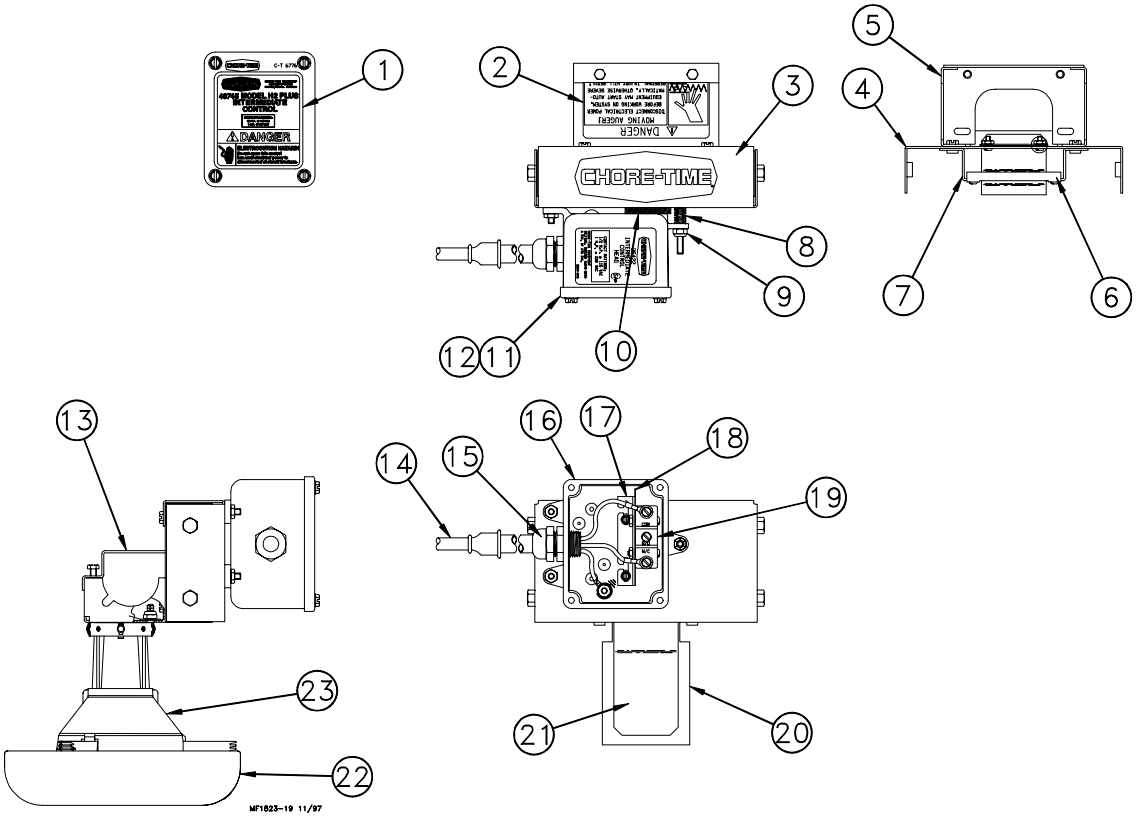
| Item | Description | Part No. |
|---|---|---|
| 19 | Switch Box Cover | 6776 |
| 20 | Switch Box Gasket | 6777 |
| 21 | Control Decal (Control P/N 40712)<br>Control Decal (Control P/N 40815) | 2529-642<br>2529-647 |
| 22 | Support Bracket | 24685 |
| 23 | Cable Clamp | 13057 |
| 24 | 1/8” Nylon Cable Clamp | 34740 |
| 25 | Cord Assembly | 40388 |
| 26 | 14” Flexible Conduit | 26982-1 |
| 27* | 1/2” Liquid Tight Connector | 23810 |
| 28 | Mylar Assembly | 25310 |
| 29 | Pan | 24901 |
| 30 | Center Support Assembly - Silver<br>Center Support Assembly - Green | 40796<br>40828 |
| 31 | Actuator Pin | 8757 |
| -- | Anti-Roost Guard | 2798 |
| -- | Anchor | 4188 |
| -- | Bottom Cover | 14432 |
| -- | Parts Package | 40809 |

*This part is included in the Parts Package.

# Model H2 Plus Mechanical Intermediate Control

## Silver Control Part Number 40745

## Green Control Part Number 40817

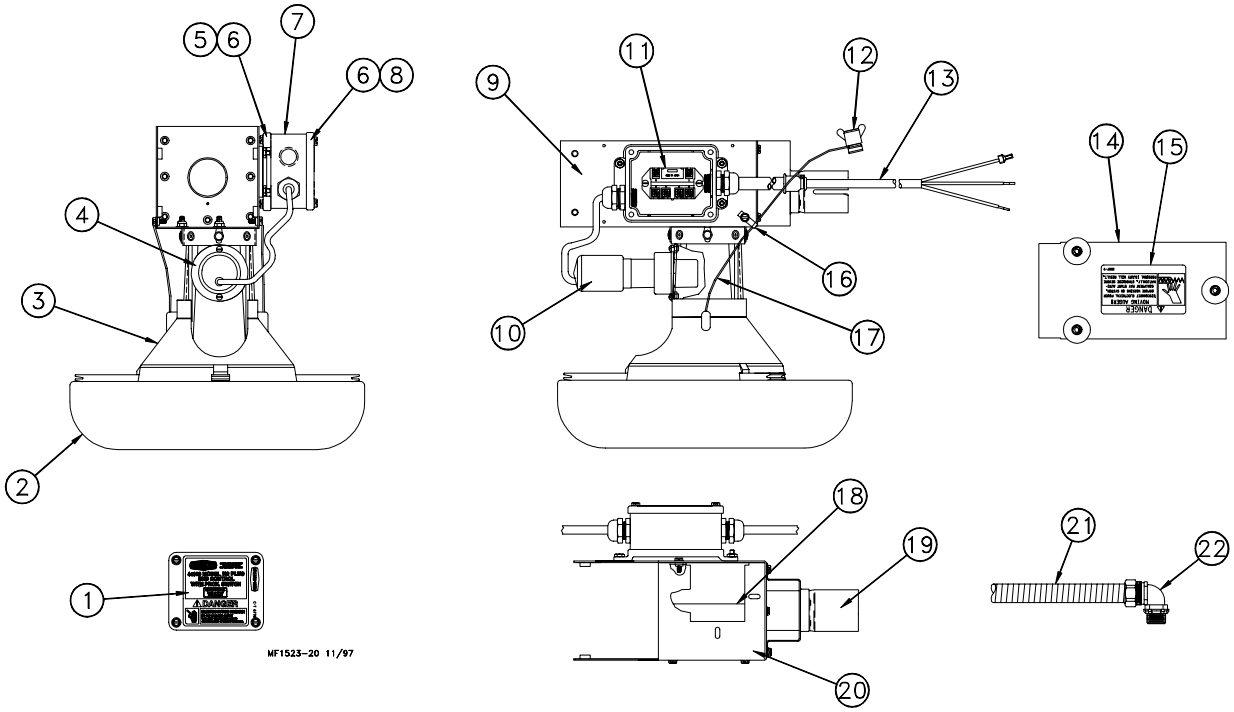



| Item | Description | Part No. |
|---|---|---|
| 1 | Intermediate Control Decal - Silver<br>Intermediate Control Decal - Green | 2529-643<br>2529-649 |
| 2 | Danger Decal | 2529-9 |
| 3 | Back Cover | 25047 |
| 4 | Front Panel | 25046 |
| 5 | Tube Support | 14754 |
| 6 | Paddle Retainer | 25045 |
| 7 | Pivot Bracket | 25048 |
| 8 | Spring | 6972 |
| 9 | #10-32 Lock Nut | 6963 |
| 10 | Gasket | 6968-1 |
| 11 | Switch Box Cover | 6776 |
| 12 | Gasket | 6777 |

| Item | Description | Part No. |
|---|---|---|
| 13 | Tube Retainer | 14756 |
| 14 | Cord Assembly | 4999-49 |
| 15 | 1/2” Water Tight Connector | 24685 |
| 16 | Switch Box | 34842 |
| 17 | Switch Bracket | 7068 |
| 18 | Switch Insulation | 1907-5 |
| 19 | Actuator Switch | 7114 |
| 20 | Mylar Assembly | 25318 |
| 21 | Switch Paddle | 24848 |
| 22 | Pan | 24901 |
| 23 | Center Support Assembly - Silver<br>Center Support Assembly - Green | 40796<br>40828 |
| -- | Actuator Pin | 8757 |

# Model H2 Plus Proximity End Control

## Silver Control Part Number 40108
## Green Control Part Number 40814



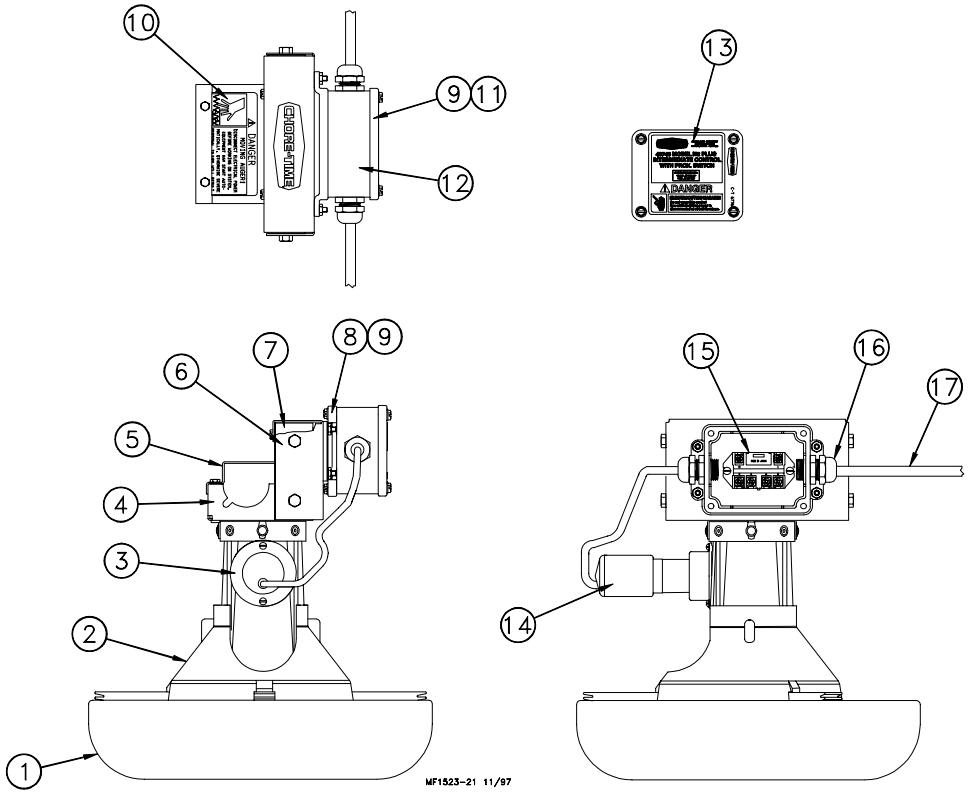

| Item | Description | Part No. |
|---|---|---|
| 1 | End Control Decal - Silver<br>End Control Decal - Green | 2529-645<br>2529-646 |
| 2 | Pan | 24901 |
| 3 | Center Support Assembly - Silver<br>Center Support Assembly - Green | 40792<br>40827 |
| 4 | Switch Mount Collar | 36966 |
| 5 | Switch Box Cover | 37047 |
| 6 | Gasket | 6777 |
| 7 | General Purpose Terminal Box | 36334-2 |
| 8 | Switch Box Cover | 6776 |
| 9 | Control Body | 36965 |
| 10 | Proximity Switch Assembly | 36881-1 |
| 11 | Relay | 34654 |
| 12 | Cable Clamp | 13057 |
| 13 | Cord Assembly | 4999-97 |

| Item | Description | Part No. |
|---|---|---|
| 14 | Cover Assembly | 36967 |
| 15 | Danger Decal | 2527-9 |
| 16 | 1/8” Nylon Cable Clamp | 34740 |
| 17 | Cord Assembly | 40388 |
| 18 | Deflector Panel | 34310 |
| 19 | Bracket Tube Weldment | 24683 |
| 20 | Mount Bracket | 34309 |
| 21 | 14” Flexible Conduit | 26982-1 |
| 22* | 1/2” Liquid Tight Connector | 23810 |
| -- | Bottom Cover | 36964 |
| -- | Anchor Plate | 4188 |
| -- | Anti-Roost Guard | 2798 |
| -- | Parts Package | 40809 |

*This part is included in the Parts Package.

# Model H2 Plus Proximity Intermediate Control

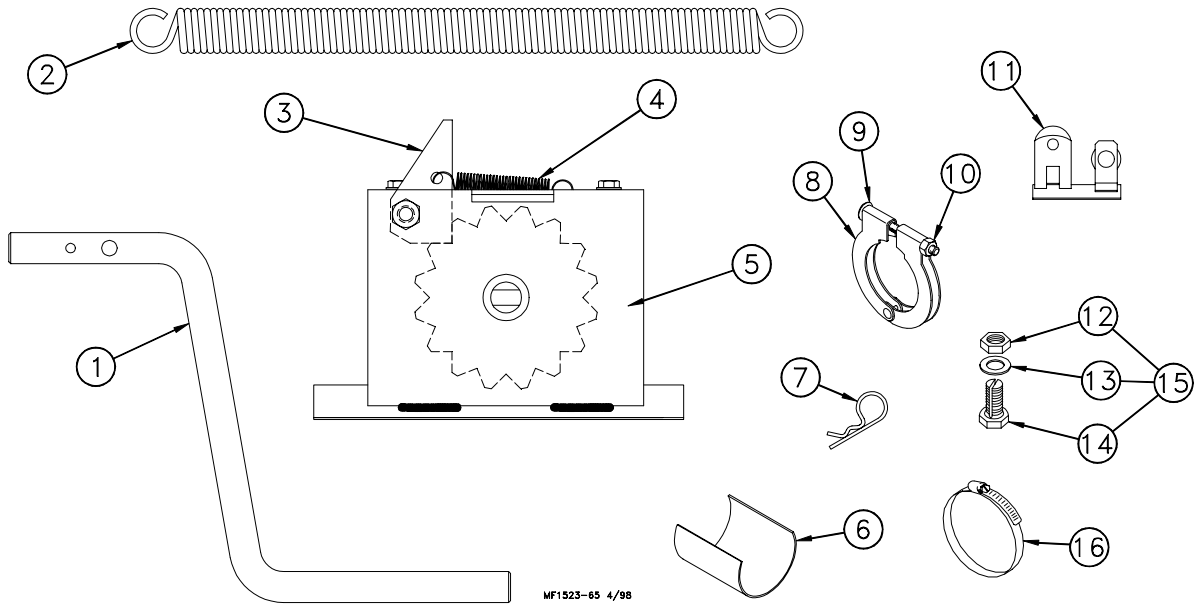
## Silver Control Part Number 40746
## Green Control Part Number 40816




| Item | Description | Part No. |
|---|---|---|
| 1 | Pan | 24901 |
| 2 | Center Support Assembly - Silver<br>Center Support Assembly - Green | 40792<br>40827 |
| 3 | Switch Mount Collar | 36966 |
| 4 | Tube Support | 14754 |
| 5 | Tube Retainer | 14756 |
| 6 | Back Cover | 36869 |
| 7 | Front Intermediate Panel | 37061 |
| 8 | Switch Box Cover | 37047 |
| 9 | Gasket | 6777 |

| Item | Description | Part No. |
|---|---|---|
| 10 | Danger Decal | 2527-9 |
| 11 | Switch Box Cover | 6776 |
| 12 | General Purpose Terminal Box | 36334-1 |
| 13 | Intermediate Control Decal - Silver<br>Intermediate Control Decal - Green | 2529-644<br>2529-648 |
| 14 | Proximity Switch Assembly | 36881-1 |
| 15 | Relay | 34654 |
| 16 | 1/2” Liquid Tight Connector | 24685 |
| 17 | Cord Assembly | 4999-96 |

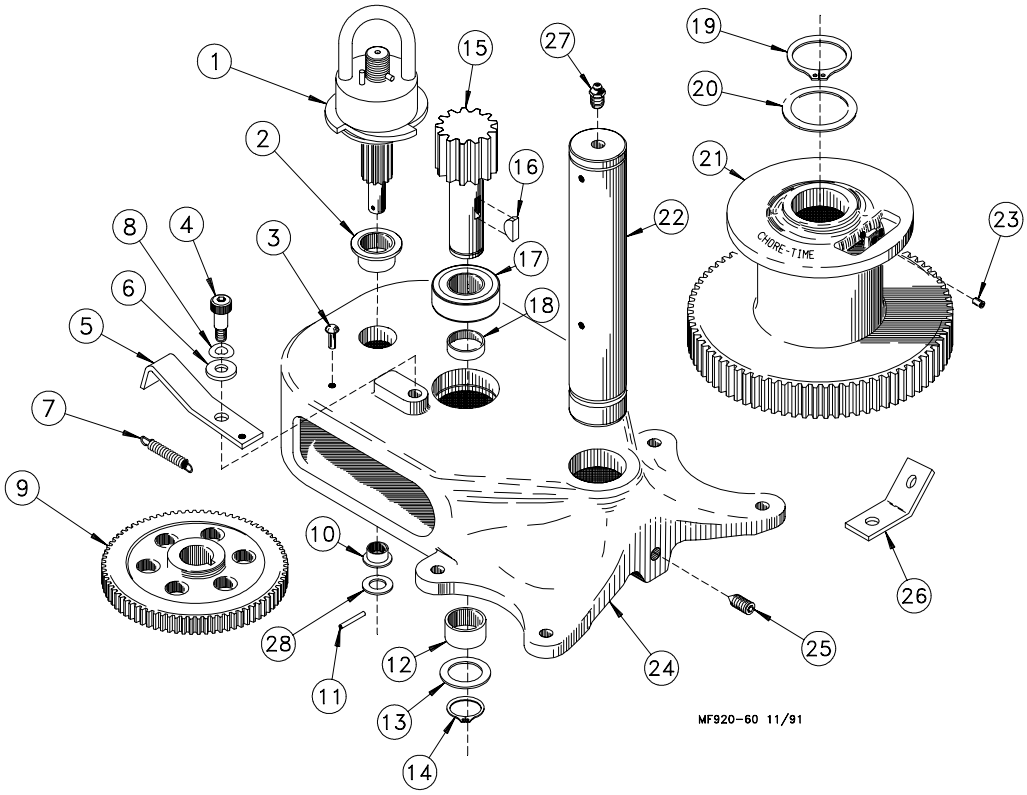
# Feed Line Winch Kit Part No. 40389




| Item | Description | Part No. |
|---|---|---|
| 1 | Winch Crank | 14877 |
| 2 | Spring | 24302 |
| 3 | Ratchet Pawl | 40830 |
| 4 | Spring | 1543 |
| 5 | Winch Housing | 40390 |
| 6* | Tube Closure | 9126 |
| 7* | Hair Pin | 2664 |
| 8* | Clamp Assembly | 24062 |
| 9* | 1/4-20 x 2-1/2 Carriage Bolt | 7550-3 |
| 10* | 1/4-20 Hex Flange Head Nut | 24208 |
| 11* | Insulator Pulley Assembly | 41479 |
| 12* | 3/8-16 Hex Nut | 1549 |
| 13* | Washer | 4967 |
| 14* | 3/8-16 Hex Head Slotted Screw | 6342 |
| 15* | Cable Clamp Assembly | 6478 |
| 16* | Band Clamp | 3527 |

*These items are included in a Hardware Package part number 40107.

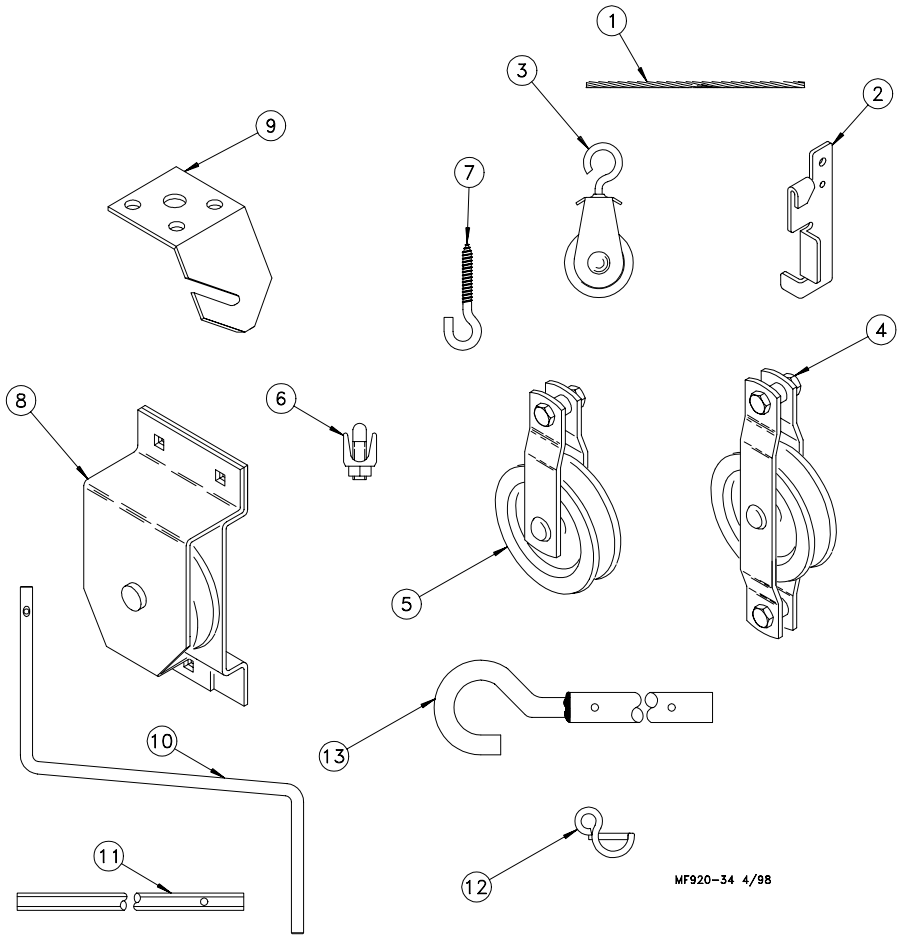
# 2883 Power Winch




| Item | Description | Part No. |
|---|---|---|
| 1 | Input Shaft Assembly | 14885 |
| 2 | Flange Bushing | 2967-2 |
| 3 | Drive Stud | 4128-1 |
| 4 | Shoulder Bolt | 4022-2 |
| 5 | Pawl | 6672 |
| 6 | Spring Washer | 4023 |
| 7 | Spring | 1543 |
| 8 | 5/16" Flat Washer | 2255-44 |
| 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




| Item | Description | Part No. |
|---|---|---|
| 1 | 3/32" Cable<br>3/16" Cable<br>1/8" Cable | 4973<br>1213<br>27975 |
| 2 | Cable Lock | 14337 |
| 3 | Pulley with Swivel | 3004 |
| 4 | Double Eye Pulley | 2501 |
| 5 | Pulley | 2500 |
| 6 | 3/16" Cable Clamp<br>1/8" Cable Clamp | 732<br>14898 |
| 7 | Standard Screw Hook<br>Large Screw Hook | 1214<br>2041 |

| Item | Description | Part No. |
|---|---|---|
| 8 | Pulley Assembly | 28429 |
| 9 | Ceiling Hook | 28550 |
| 10 | Handle Shank | 3148 |
| 11* | Drill Adapter Shaft | 3151 |
| 12** | Winch Handle Pin | 3761 |
| 13 | Winch Drive Tube (4')<br>Winch Drive Tube (8') | 2884-1<br>2884-2 |

*Item 11 and Item 13 may be ordered as a kit under part no. 2885.

**Item 12 and Item 13 may be ordered as a kit under part no. 2886.

# Maintaining the Floor Feeder

The Model H2 Plus Feeders 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 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.

2. Check equipment for loose hardware every 6 months--including the Anchor Block. Tighten if necessary.

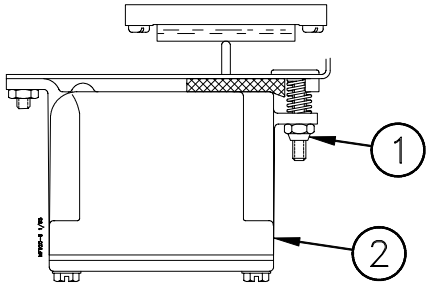
3. Switch Adjustment procedure for the Control Units:

   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.




| Key | Description |
|---|---|
| 1 | Adjustment Nut |
| 2 | Switch Box |

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.

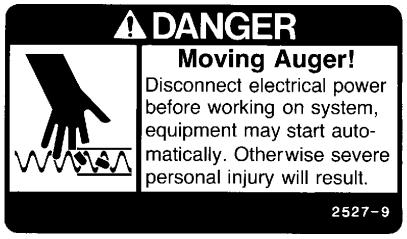
   Disconnect power to the system to prevent accidentally starting the system.

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.

8. Replacing the battering in the Agri-Timer:

   A. Disconnect electrical service at the breaker.

   B. Remove the (6) screws and the face of the control.

   C. Cut the wire ties to allow for battery removal.

   C Replace the existing batteries with new "AAA" batteries.

   D. Replace wire ties to secure the new batteries in place.

   E. Reinstall the face of the timer and secure using (2) screws previously removed.

   F. Reconnect electrical service to the Agri-Time Control.

9. Grease the winch every 6 months with 1 to 2 shots of common industrial or automotive grease. DO NOT OVER GREASE THE WINCH.

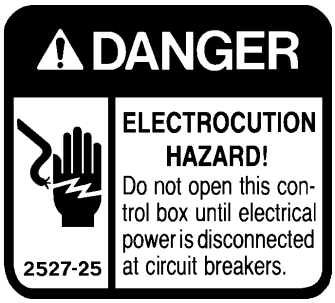
10. Remove any feed build-up in the Safety Switch Boxes in the Control Units.

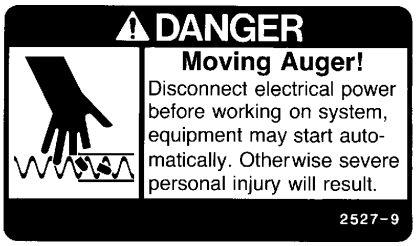
11. It may be necessary to periodically retighten the shocker cable. Be sure to disconnect power to the shocker before servicing the equipment.

# Trouble Shooting the Floor 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<br>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<br>Check starting current draw at motors<br>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 outlet holes for foreign objects<br>Remove obstruction |
| Auger runs erratically | Frozen or cracked bearing at boot anchor | Replace bearing<br>Slowly ease auger back into tube<br>Be careful not to damage the bearing when reinserting the auger |
| | Insufficient stretch in auger | Shorten the auger |
| | Obstruction in the 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<br>Check for bent or damaged auger |

| Problem | Possible Cause | Corrective Action |
|---|---|---|
| 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 |

CHORE-TIME®

# Made to work.
# Built to last.

## Revisions to this Manual

| Page No. | Description of Change |
|---|---|
| 51 | Added Proximity Switch wireing Diagrams for Single Phase Systems |
| 59 | Added Parts List for Two-Piece Support Cone |

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

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