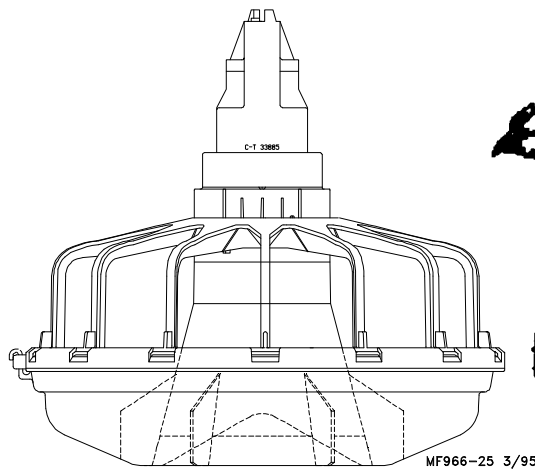


Installation Manual
for the
Pan Breeder Feeder



WARRANTY INFORMATION

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. TURBO™ and RLX™ Fans, less motors, for three years from date of installation.
- *2. Poultry feeder pans that become unusable within five years from date of installation. Warranty prorated after three years usage.
3. MEAL-TIME® Hog Feeder pans that become unusable within five years of installation.
4. Rotating centerless augers, excluding applications involving High Moisture Corn (exceeding 18%), for ten years from date of installation. Note: MULTIFLO® and applications involving High Moisture Corn are subject to a one year warranty.
5. Chore-Time manufactured roll-formed steel auger tubes for ten years from date of installation.
- *6. Laying cages that become unusable within ten years. Warranty prorated after three years usage.
- *7. ULTRAFLO® Auger and ULTRAFLO® Feed Trough (except ULTRAFLO® Trough Liners) are warranted for a period of five (5) years from date of original purchase against repeated breakage of the auger or wear-through of the feed trough caused solely by the auger.

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.

*See separate Chore-Time Cage Wire Warranty as to these products.

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

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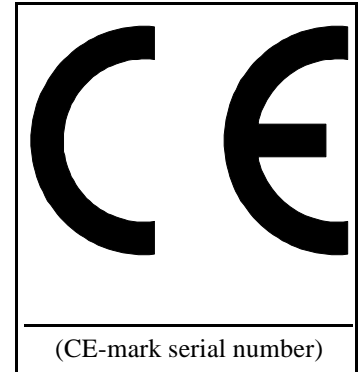
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Support Information

The Chore-Time Pan Breeder Feeder Feeding Systems is 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 and/or death.

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).

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.



Please fill in the following information about your Chore-Time feeding system. 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 _____

Feed Delivery System Supplying _____

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 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. Chore-Time 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



WARNING

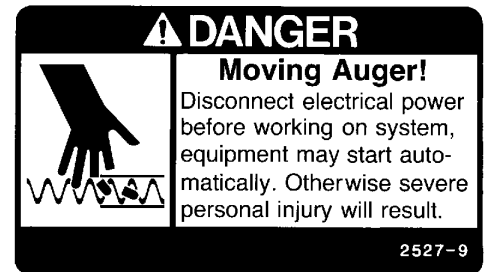


CAUTION

DANGER—MOVING AUGER

This decal is placed on the Clean-Out Cover of the FLEX-AUGER Control Unit.

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



DANGER—ELECTRICAL HAZARD

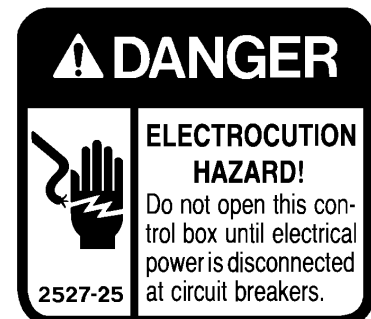
Disconnect electrical power before inspecting or servicing equipment unless maintenance instructions specifically state otherwise.

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.

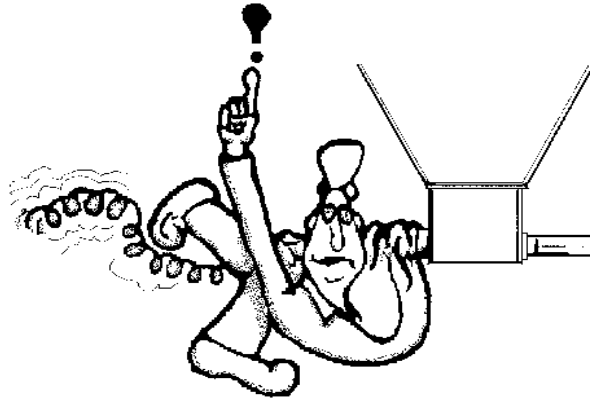


SAFETY INFORMATION

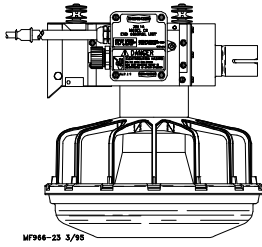


CAUTION

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

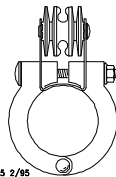
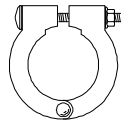


Glossary of Terms



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

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



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

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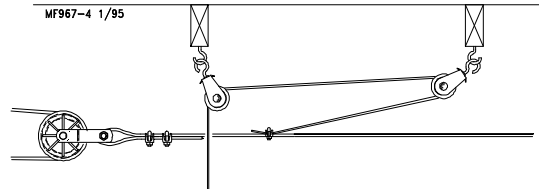
Adjustment Leveler: A cable locking device used to conveniently adjust the feeder to a level position.



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

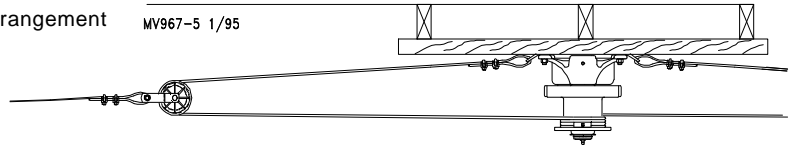
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Throw-back: A cable/pulley arrangement that allows cable to be routed to a desired location.



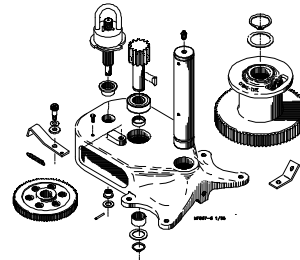
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Double-Back: A cable/pulley arrangement that reduces the load on the Power Winch.

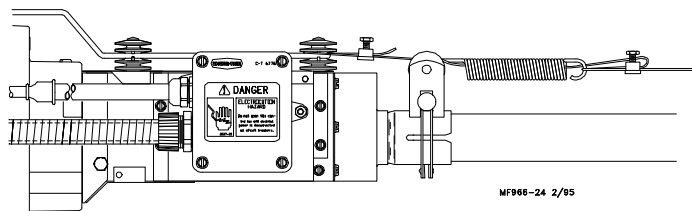


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Power Lift: Red, cast iron winch used to raise and lower the feeder line(s). Operated by a hand crank or electric drill. Referred to as Power Winch.



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



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Capacities, Specifications, & Management

The Pan Breeder Feeder and WEIGH-MATIC® Scales make up a comprehensive system designed to weigh and feed a specific amount of feed automatically over a 24 hour period of time.

The WEIGH-MATIC Scale System is available in two styles; mechanical and digital.

The mechanical WEIGH-MATIC Scale has a maximum capacity of 5,000 pounds (2,268 kg). It is possible to feed larger amounts by dividing total feed requirements into 2 or more equal feedings of less than 5,000 pounds (2,268 kg).

The Digital WEIGH-MATIC Scale may be ordered with various Load Cells to accommodate various capacity requirements.

The feeder will operate automatically to feed the desired quantity of feed. Operating times will be set on the AGRI-TIME™ Breeder Control Panel. Refer the Breeder Control Installation Manual (MF1061) for additional Breeder Control information.

Nine foot/four pans per tube and twelve foot/four pans per tube models are available with the Pan Breeder Feeder. Nine Foot Tube feeder lines should not exceed 279' (85 m) or 31 tubes. Twelve Foot Tube feeder lines should not exceed 372' (113 m) or 31 tubes.

Hangers should be placed at 8 foot (2.4 m) intervals along the feeder line. The Pan Breeder Feeder MUST be programmed (indexed) to properly deliver feed to the pans. Carefully follow the instructions on setting the Hangers and programming the Auger Tubes.

The Pan Breeder Feeder utilizes a high speed 696 RPM Power Unit. Delivery rate from the hopper is approximately 35 pounds (10.6 kg) per minute--based on feed with 40 lbs/cu ft or 64 kg/cu meter feed density. Feed is delivered down the Auger Tubes at approximately 90 ft. (27.4 m) per minute.

For partial house brooding, the Feed Hoppers should be located in the center of the house and lines run in each direction. Alternatively, the chicks may be brooded on the motor end of the house. The Pan Breeder Feeder System is not designed to be used with an Intermediate Control.

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.**

The 2883 Power Winch has lifting capacity of approximately 2,000 lbs. (907 kg). The 2500 Pulley is recommended for loads up to 2,000 lbs. (907 kg). The 3004 Pulley is rated at 200 lbs. (91 kg.).

The AGRI-TIME™ Breeder Control is used to control the Pan Breeder Feeder.

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

Single phase 60 Hz and single and three phase 50 Hz Power Units are available for the Pan Breeder Feeder.

Adequate overhead structure must be provided to support the weight of the feeder, hoppers, power units, etc. Refer to the chart on page 9 for individual component weights.

Component	Weigh in pounds (kg)
Tube, Auger, Feeders, & Feed	5 lbs. (2.26 kg.) linear foot (.3 m)
Power Unit & Control Unit Assembly	50 lbs. (22.6 kg)
200 lb. Feed Hopper & Feed	250 lbs. (113.4 kg)
Power Winch	40 lbs. (18.1 kg)

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.

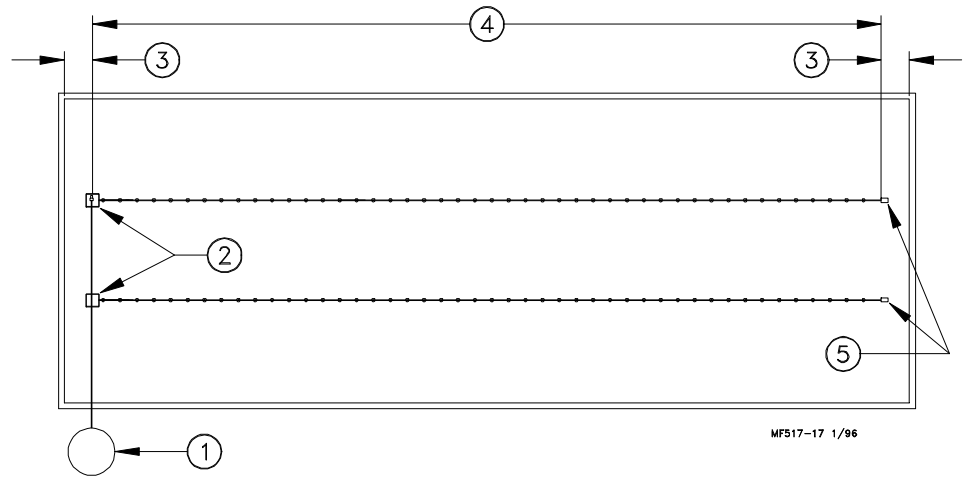
It may be desirable to raise the feeder line so birds cannot reach it, fill all the pans, then carefully lower the line.

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.

System Layout Information

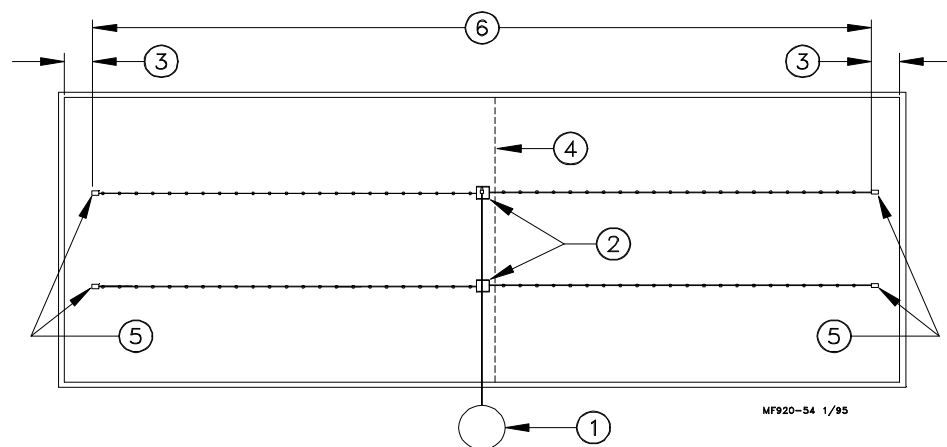
Systems with line lengths up to 31 tubes should have the Feed Hoppers and Control Units at opposite ends of the house. See Figure 1. This allows the system to be operated with (1) Power Unit per feeder line. The Control Unit end of the house may be used for partial house brooding, if necessary.

Systems with line lengths over 31 tubes should be split in the center, as shown in Figure 2. This will reduce auger running time. This allows either end of the house to be used for partial house brooding, if necessary.



Key	Description
1	Feed Bin
2	Feed Hopper
3	10' (3 m) minimum
4	Up to 31 Tubes
5	End Control/Power Unit

Figure 1. Component location diagram for systems up to 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 31 Tubes

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

The C2 Feeder is designed to operate with the Feed Windows OPEN or CLOSED with the feeder on the floor or suspended.

The 1-Piece (windowless) version is available for applications where the windows feature (flooding the pan w/ feed) is not required.

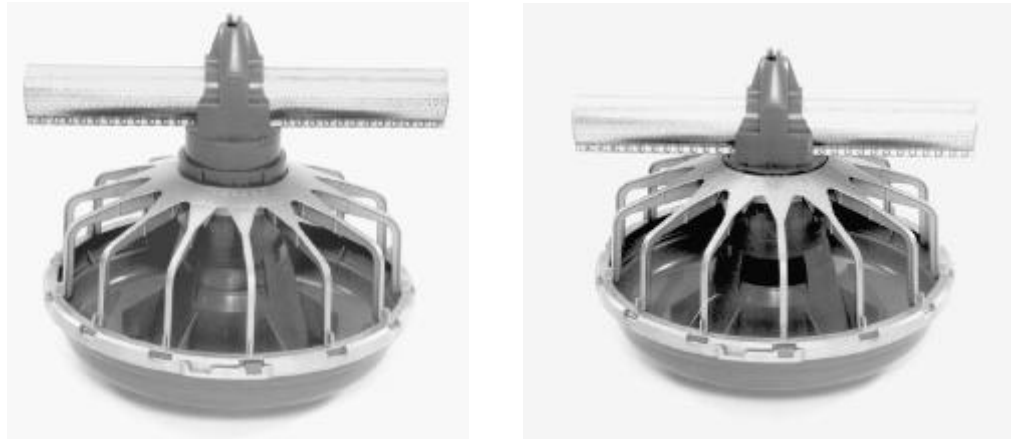


Figure 5. C2 Feeder (Windows closed: left, windows open: right.)

Adjustment settings are easy to understand and change. Settings numbers are embossed on both sides of the grill, so they may be easily seen from either side of the feeder line.

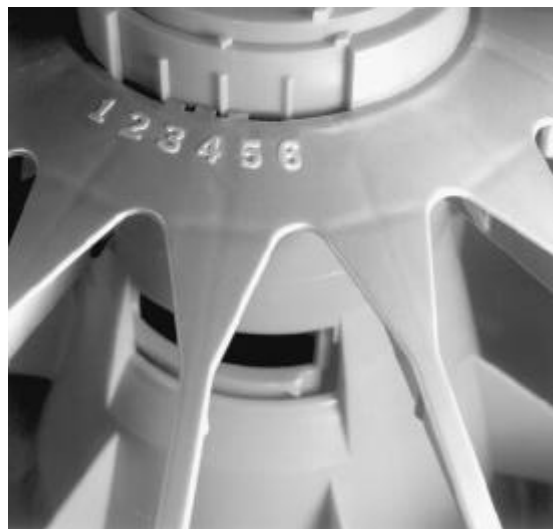


Figure 6. Adjustment settings (Top View).

It is easy to determine the amount of feed opening in the bottom of the pan. It is equal to the distance from the top of the grill to the top of the cone adjustment, when the feeder is suspended.

Key	Description
1	3/4" (19 mm)

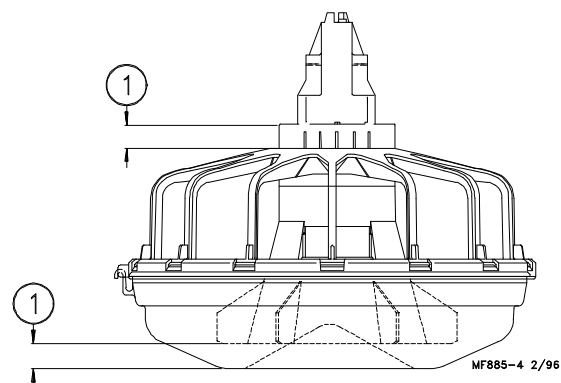


Figure 7. Feed opening dimension (Side View).

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The pans are easily turned on the grill using the tabs formed on the bottom of the pan. **See Figure 8.**



Figure 8. Pan Installation (Bottom View).

The standard feeder uses a one piece Support Cone. The two piece swinging Support Cone, shown, is also available. **See Figure 9.**



Figure 9. Swinging Support Cone (Side View).

The Feeder Pans may be removed from the grill, for easy cleaning, and remain attached for convenience, as shown in **Figure 10.**



Figure 10. Hanging Feeder Pans (Side View).

Feeder Management

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.

Start young birds with the feeder pans resting on the floor. The Model C2 has the ability to fill the feeders while setting on the floor or suspended. With the feed windows open, feed will spill out in the pan, making it easier for the birds to find feed, adapt to the feeder, and begin to eat. Make sure all the feed windows are in the same position, OPEN or CLOSED.

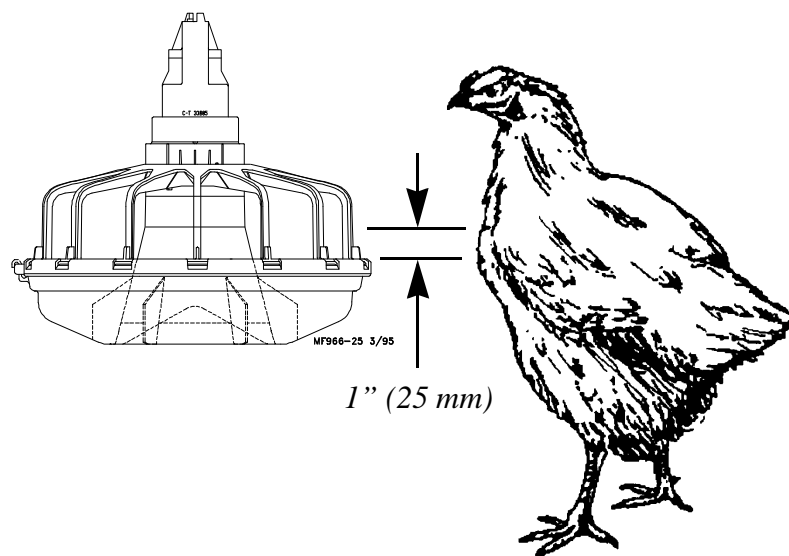
Raise the feeder as the birds grow. This will automatically close the feed windows, unless they are locked open. Chore-Time recommends opening the feed windows in the pans for the first 5 to 10 days, for broilers. Open the feed windows in the pans for the first 10 to 14 days, for turkeys. The feeders will need to be operated at least twice a day for the first 5 days, thereafter pans may need to be resupplied 3 times a day or as birds eat feed level down.

DO NOT RUN THE SYSTEM ON AUTOMATIC (FULL FEED) WHEN FEED WINDOWS ARE OPEN.

In most cases, setting the feeder to position #4 is recommended. However, feed texture, fat content, type of bird, or some other variables may make it necessary to change to another setting. The combination of proper pan height, feeder setting, and time clock operation, will result in optimum feeder performance. The operator will learn what works best for his/her situation by experience.

Keeping the pans at the proper height prevents birds from raking feed excessively. Proper pan height also reduces feed wastage, improves feed conversion, and provides more income for the producer.

After the birds are through the brood stage, the lip of the pan should be raised to approximately 1" (25 mm) below where the bird's neck enters the breast, as shown below.



Feeder Assembly Procedure

Assembly Box Construction

This information and assembly only applies to Model C2 installations. Chore-Time recommends building an assembly box to aid in assembling the Model C2 feeders.

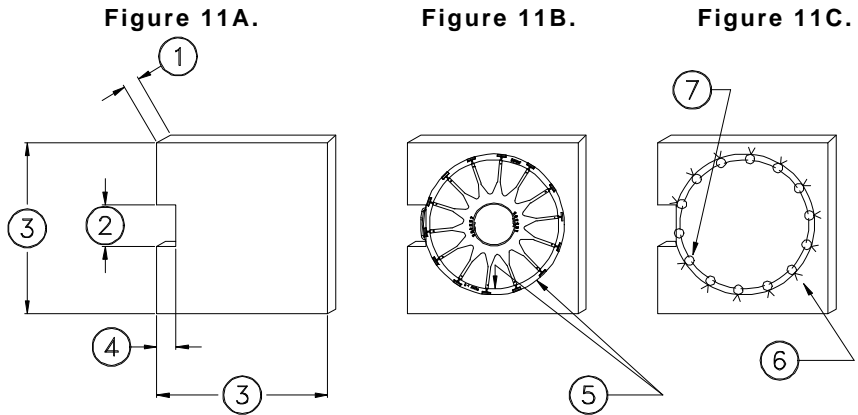
To build the assembly box for the C2 Feeder, use a 16" (406 mm) square piece of plywood and four 14-1/2" (368 mm) long pieces of 2 x 10 (20 x 250 mm).

1. Cut a 3/4" (20 mm) piece of plywood 16" (400 mm) square. **See Figure 11A.**

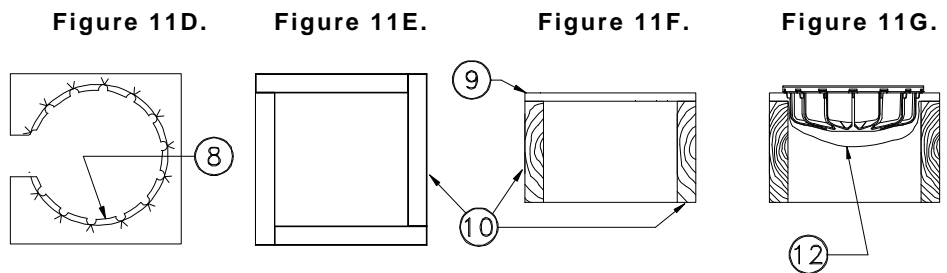
Cut a 4" (100 mm) piece out of the middle of one side. **See Figure 11A.**

2. Center the grill on the 16" (400 mm) square piece of plywood. Use a pencil and draw around the outside edge of the grill as shown in **Figure 11B.**

Mark a "V" at each strut location.



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Key	Description
1	.75" (19 mm)
2	4" (100 mm)
3	16" (406 mm)
4	3" (75 mm)
5	Center a Grill on the board and draw around the outside & between the struts on the inside.
6	Mark a "V" at each strut location.

Key	Description
7	Use a 7/8" spade bit to drill a hole at each strut location.
8	Cut on inside circle
9	3/4" (19 mm) plywood with cut-out.
10	2"x10"x13" (50x250x33 mm)
12	Board is shown cut away to clearly show the Grill set in assembly box.

Figure 11A - 11E.(11A - 11D Top View; 11E - 11F Side View)

3. Remove the grill.
Use a 7/8" (22 mm) spade bit to drill a hole at each strut location, as shown in **Figure 11C**.
4. Use a sabre saw to cut along the *inside* circle, between the 7/8" holes. **See Figure 11D**.
5. Use (4) 14-1/2" (370 mm) 2 x 10's (50 x 250 mm) to construct the box sides. **See Figure 11E**.
It is important to use at least 10" (250 mm) sides for the box. Smaller lumber will not allow sufficient depth for the grill to be placed in the box face down.
6. Nail the 3/4" plywood fixture to the box. **See Figure 11F**.
Figure 11G shows how the grill should fit down in assembly box.
NOTE: Board is cut away for clarity only.

Pan Assembly Procedure

1. Place a Grill in the pan assembly box fixture. Make sure the hinge lip on the grill is located in the cut out section of the box.
2. Two-Piece Model C2 Feeders: Install the Cone Adjustment and Support Cone in the grill, as shown in **Figure 12**.
One-Piece Model C2 Feeders: Install the One-Piece Support Cone in the grill, as shown in **Figure 12**.

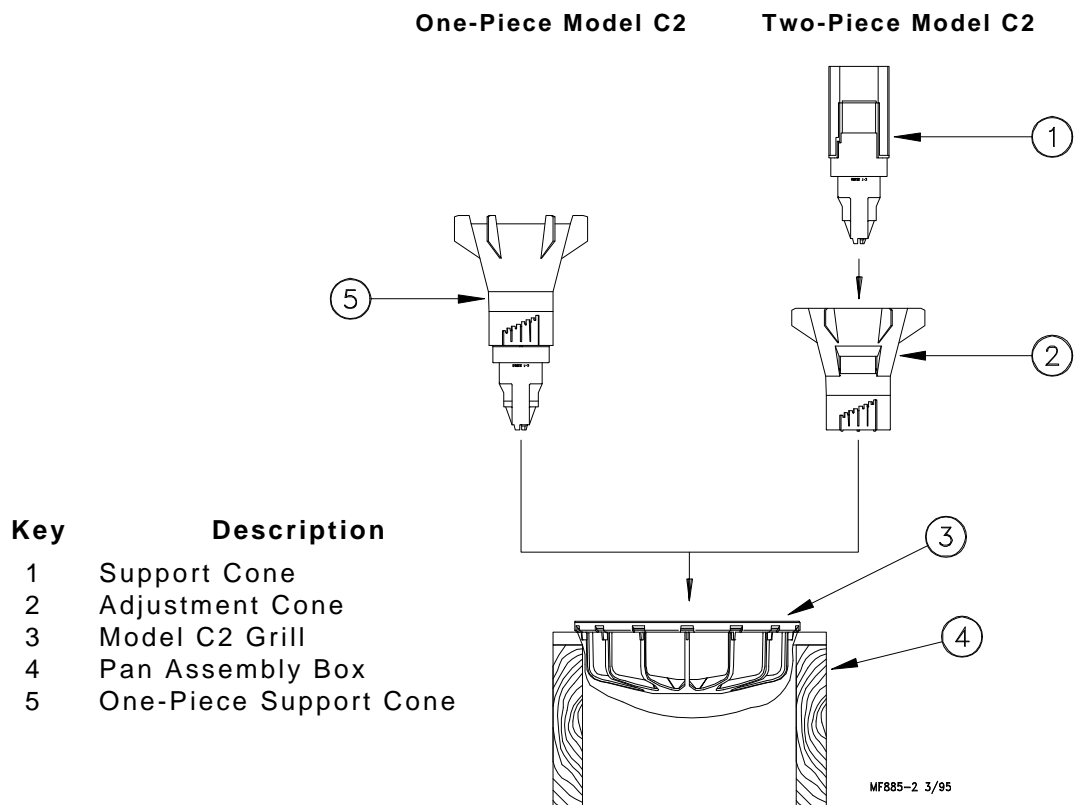
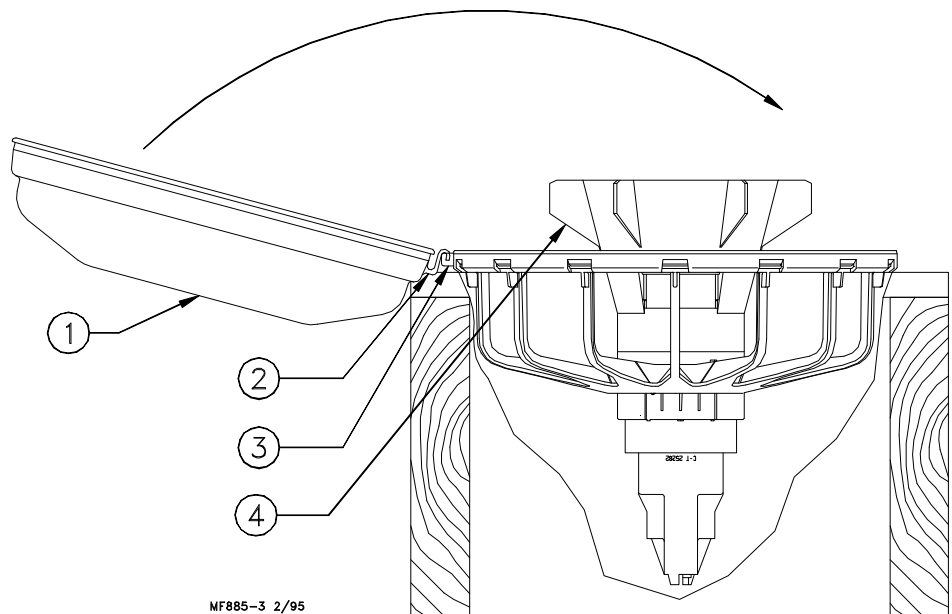


Figure 12. Model C2 Feeder Assembly (Side View)

3. Interlock the hinge hook on the pan with the hinge lip on the grill. The pan should be face up, as shown in **Figure 13**.
Flip the pan into the groove of the grill.
4. With the feeder still in the fixture, rotate the pan clockwise in the grill until pan locks engage.
The tabs (on the bottom of the pan) may be used to grip the pan when rotating.
5. Remove the pan assembly from the fixture.
6. 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.



Key	Description
1	Model C2 Feeder Pan
2	Hinge Hook
3	Hinge Lip
4	Support Cone

Figure 13. C2 Pan Assembly (Side View)

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 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 14 and 15** show the **additional** suspension required at these locations.

- **Power Unit locations:** The feeder line must be supported within 3' (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' (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 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 16.**

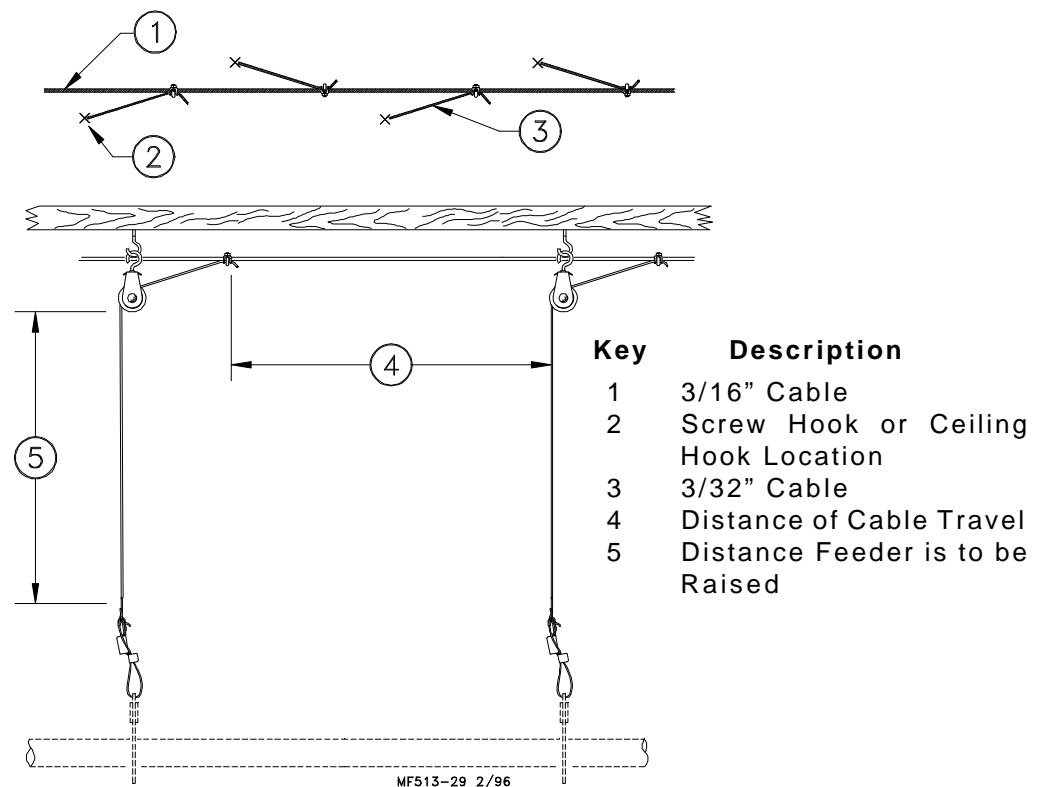
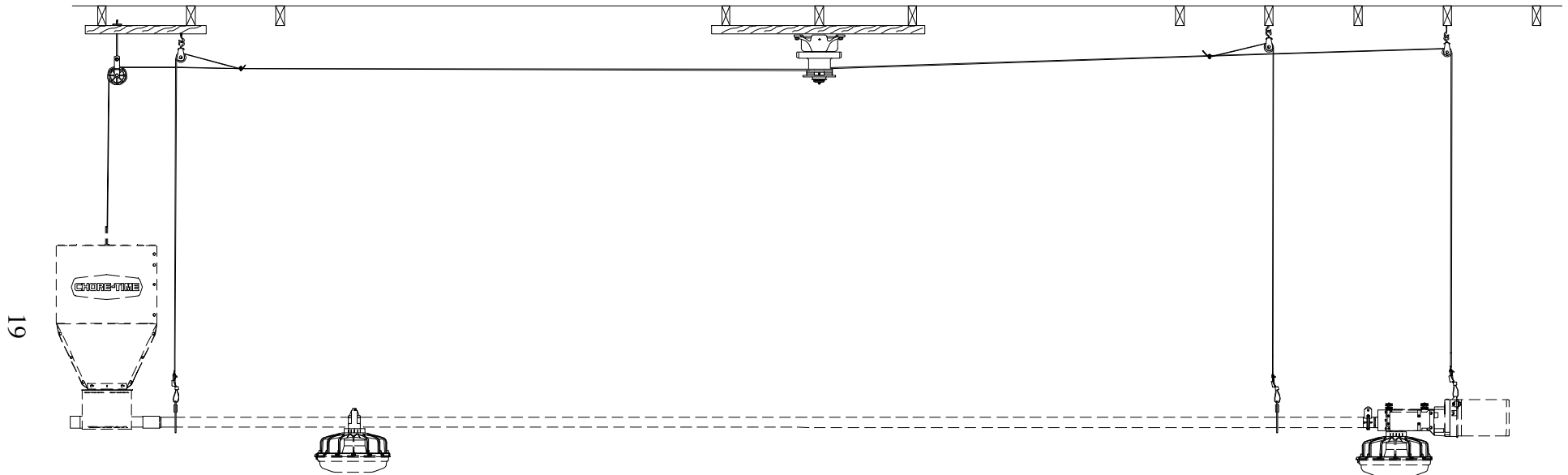


Figure 16. Drop Line Off Set Detail (Side View).

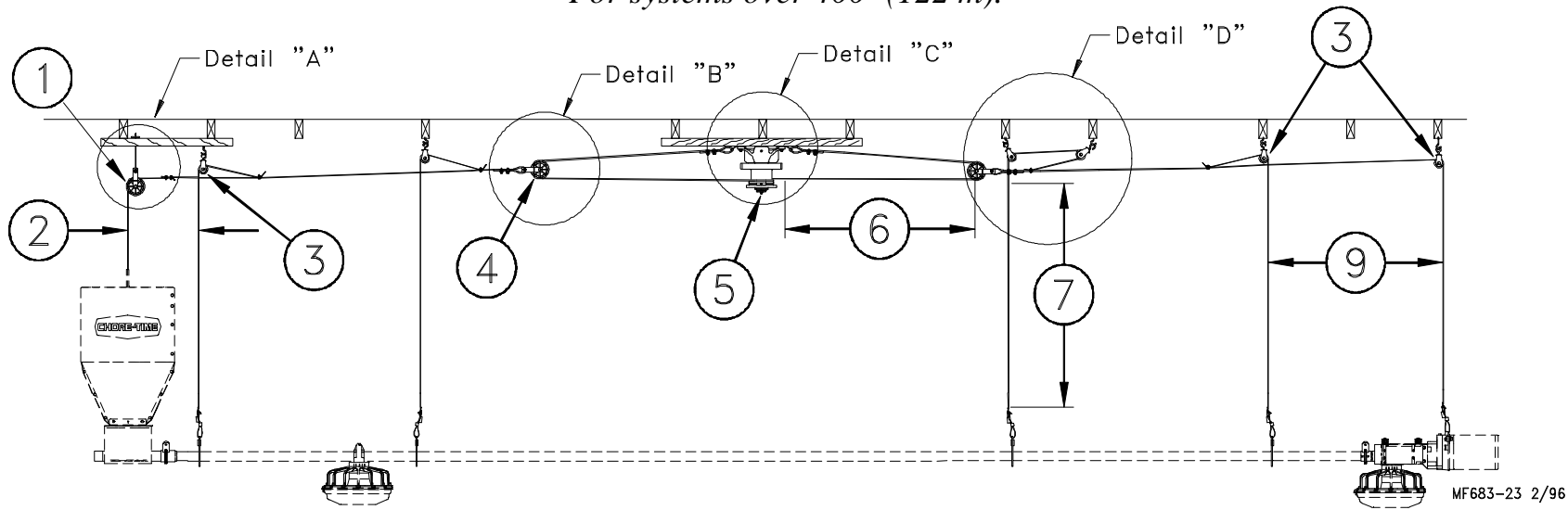
For systems up to 350' (107 m).



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

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

For systems over 400' (122 m).



20

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

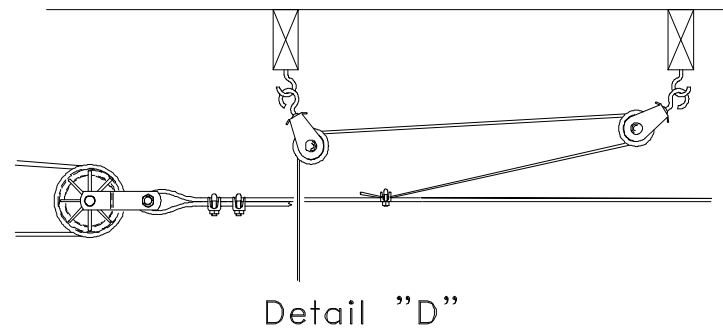
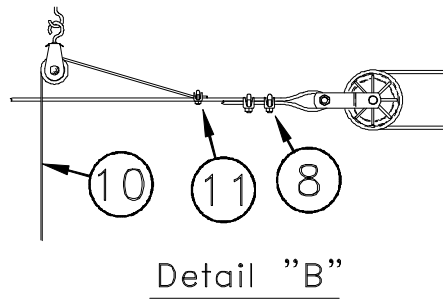
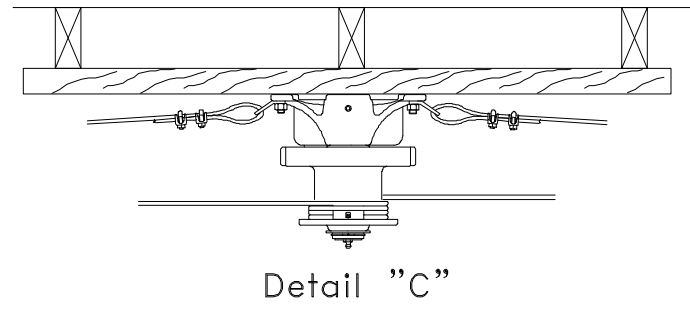
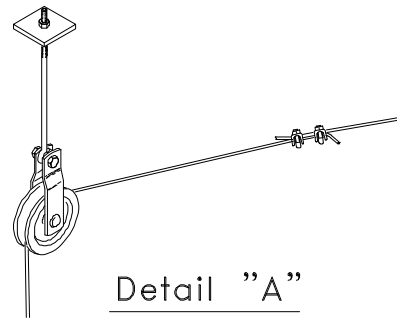


Figure 15. Suspension for systems over 4' (107 m).

Refer to **Figures 17 or 18 through 22** 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 17**.

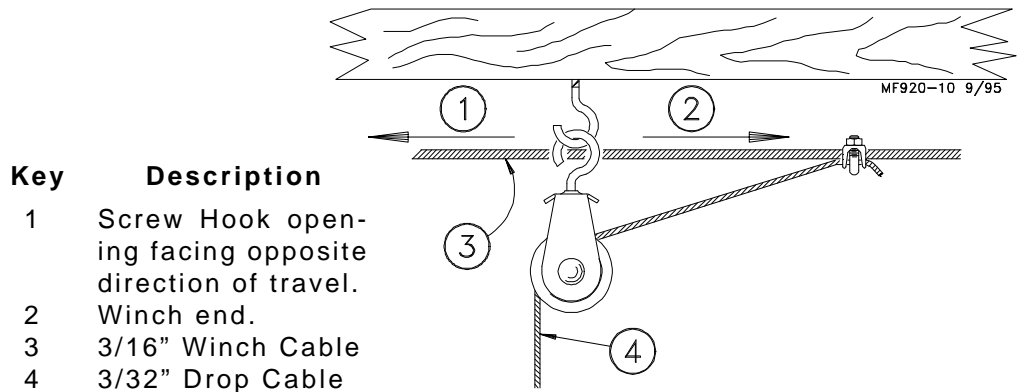


Figure 17. Screw Hook Installation (Side View)

Ceiling Hook Installation

1. The ceiling hook may be used on a variety of ceiling or rafter types. Install the Ceiling Hooks as shown in **Figures 18 - 22**.

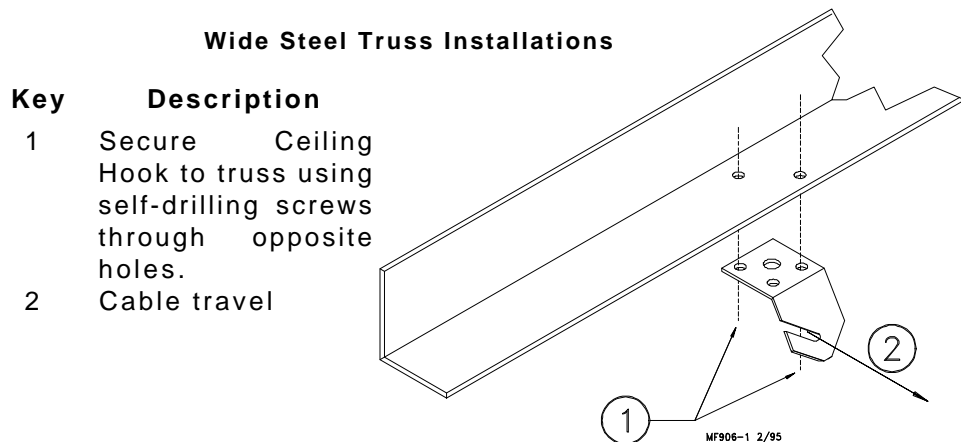


Figure 18. Ceiling Bracket Installation

Narrow Steel Truss Installations

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

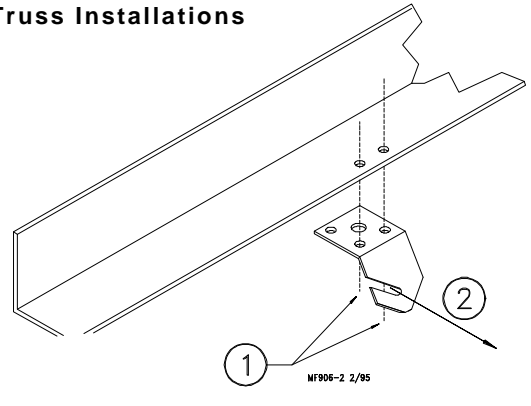


Figure 19. Ceiling Hook Installations

Steel Truss Welded Installations

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

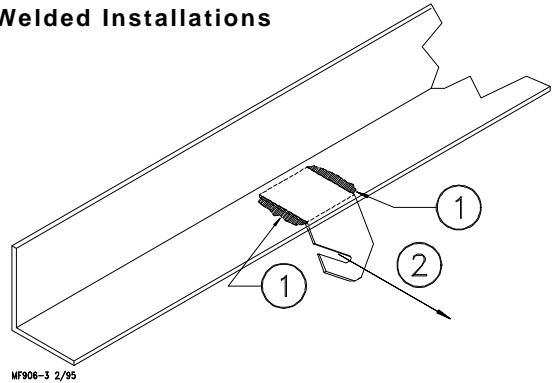


Figure 20. Ceiling Hook Installations

Wood Truss Installations

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

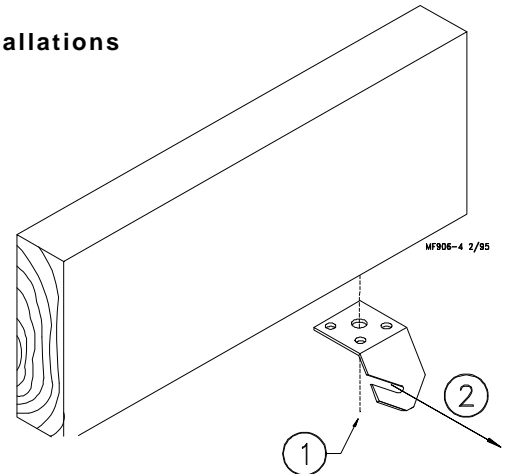
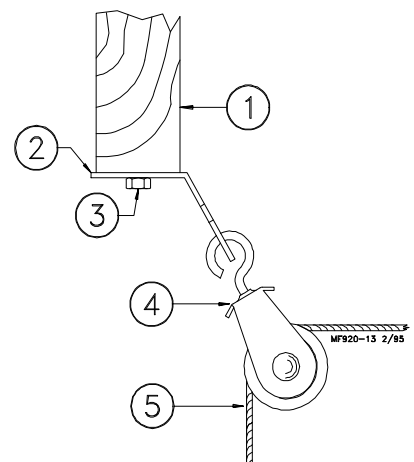


Figure 21. Ceiling Hook Installations

- After securing the Ceiling Hook to the truss, slide the hook of a Swivel Pulley into the slot, as shown in **Figure 22**.

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

Figure 22. Pulley Installation (End View)



Power Winch Installation

1. Bolt the Power Winch to a 2" x 8" (50 x 200 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 23**.

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.

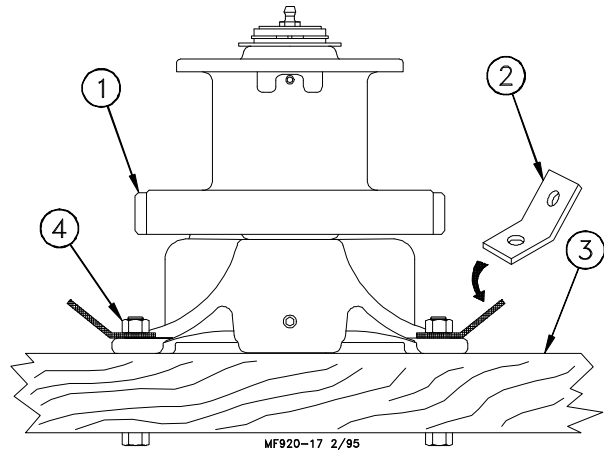
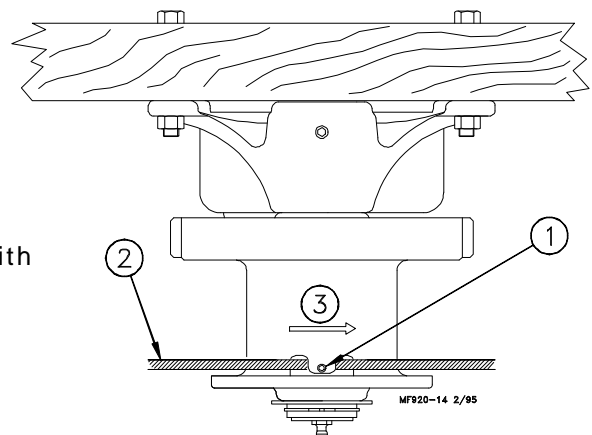


Figure 23. (End View)

2. Attach the 2" x 8" (50 x 200 mm) board (with the Power Winch secured) to the ceiling at the center of the feeder line. See **Figure 15** on [page 20](#). The 2" x 8" (50 x 200 mm) must be parallel with the feeder 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 24**.



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

Figure 24. (End View)

- 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 25.**

Key	Description
1	Drum Rotation

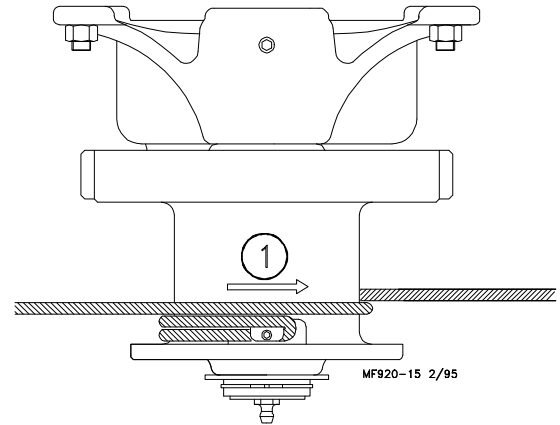


Figure 25. (End View)

Drop Installation

- Attach a 3004 Pulley to each hook.
- 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 17 or 22.**
- 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 15** shows a "throwback" cable arrangement.
- 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

Loosely, assemble the 200# Hopper Side Panels, as shown in **Figure 26**, 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.

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 supplied. The Hopper Panel with Switch Hole should be directly over the feeder line.

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

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

A Cable Assembly (including 20' or 6 meters of cable, a Sleeve Clamp, and a 5/32" Thimble) is supplied to suspend the hopper. **Figure 27** shows the suspension components assembled. The pin should be located in the center hole of the Hanger.

Install the Hopper Switch, as shown in **Figure 26**.

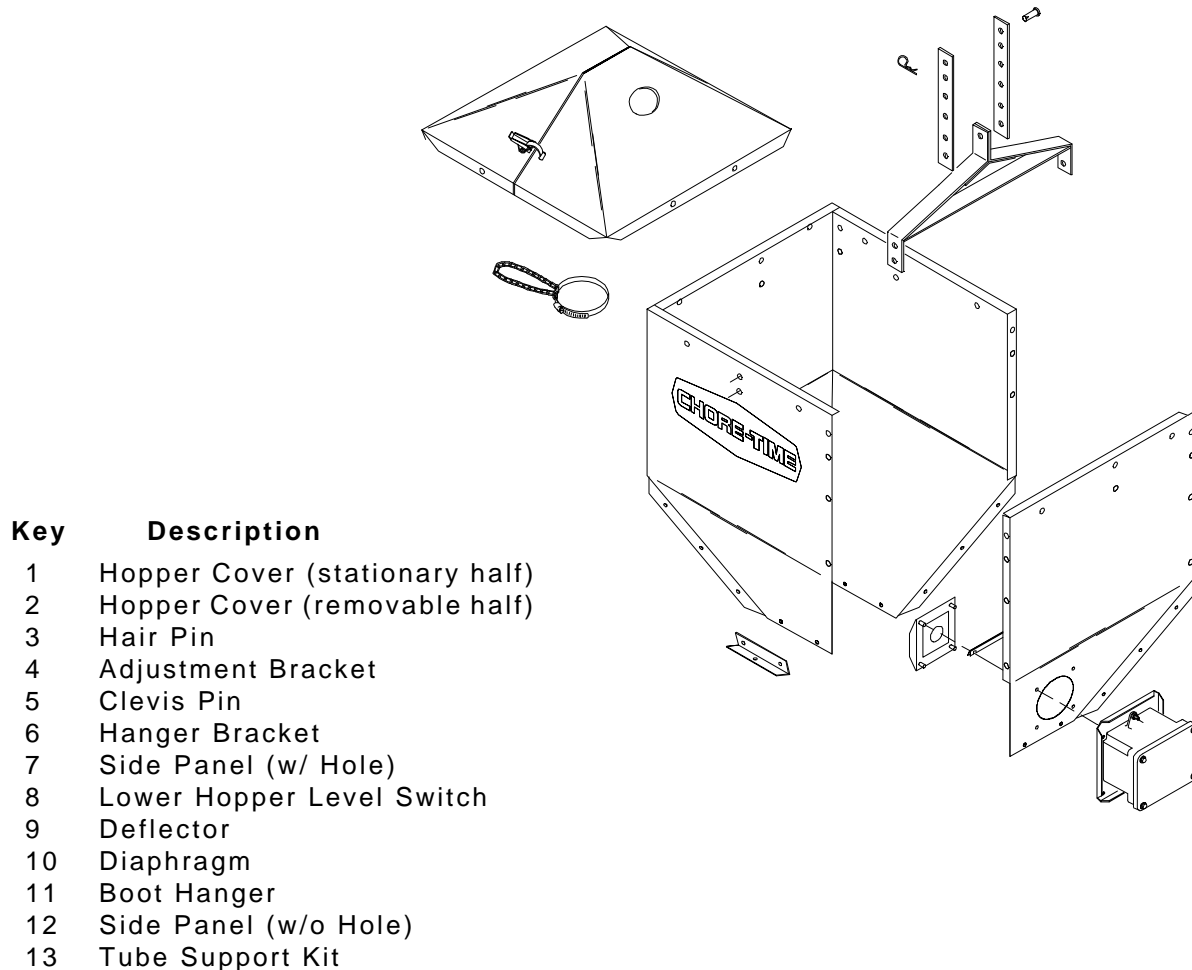


Figure 26. 200# Hopper Assembly Procedure

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

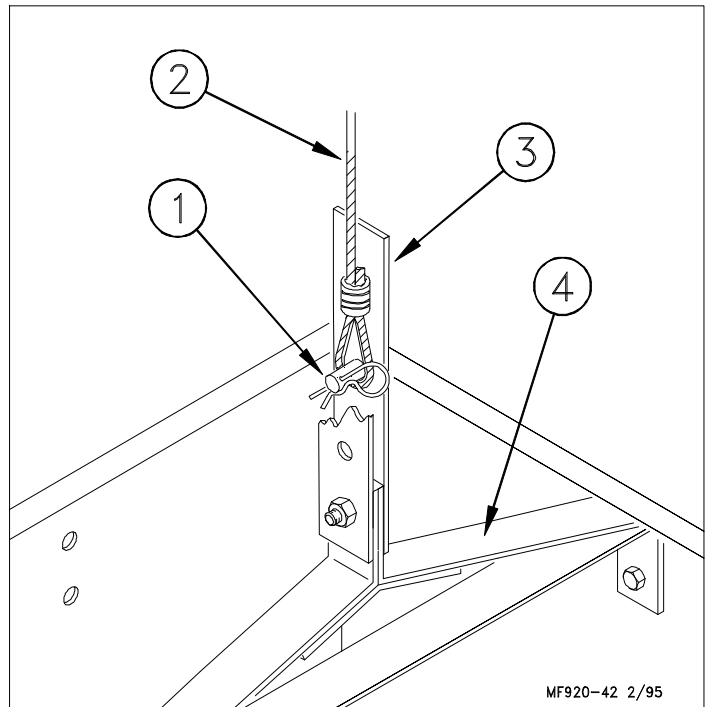


Figure 27. 200# Hopper Suspension components.

Figure 28 shows the assembled hopper with suspension components installed.

Suspend the hopper, as shown in **Detail A (Figure 15)** 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 built into the bottom of the hopper. Use cotter pins, supplied, to secure the boot to the hopper.

The Hopper Cover, shown in **Figure 26**, 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.

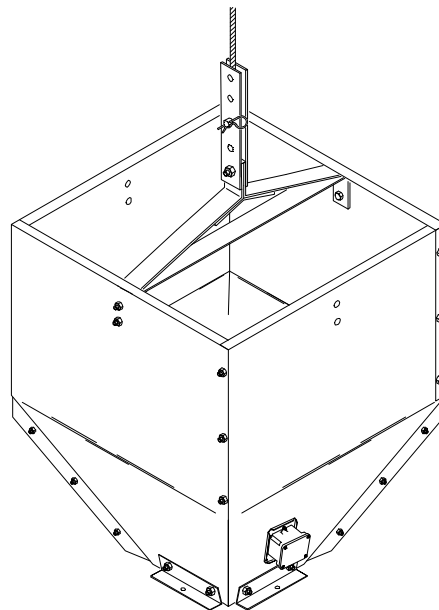
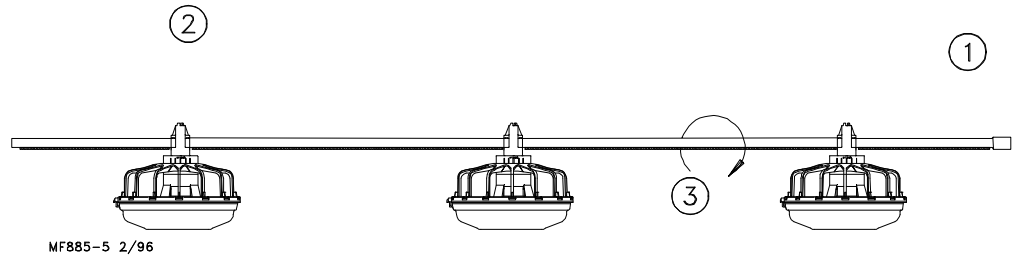


Figure 28. Assembled 200# Hopper w/o Cover.

Feeder Line Assembly & Suspension

Feeder Pan and Tube Assembly Process

- Slide one Feeder Pan Assembly per hole onto the Auger Tubes.
IMPORTANT: Install all the feeders on the tubes in the same orientation.
 When sliding the feeders on the tubes, make sure the grill openings or hinges are on the same side of the tube.
- Rotate the auger tubes so that the seam is down, this holds the Pan Assemblies in place on the tubes. **See Figure 29.**



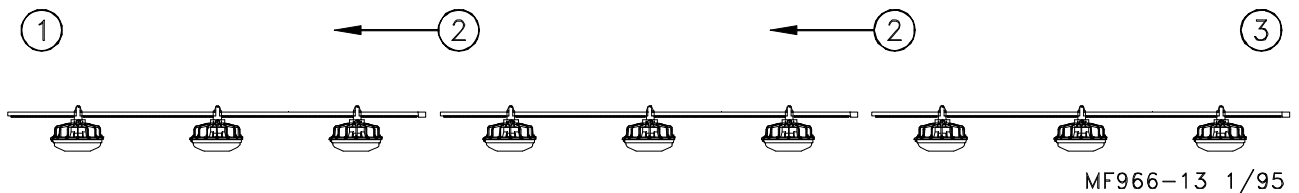
Key	Description
1	Toward Hopper
2	Slide (1) feeder over each outlet hole.
3	With the feeders in their appropriate positions, rotate the tube to hold the feeders in place.

Figure 29. Assemble Feeders on Tubes (Side View)

Assemble and Suspend the Feeder Line

- 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 30.**
- 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.

Use suspension drop lines and Hangers to support the tubes as they are being installed. Make sure the tubes are level.



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

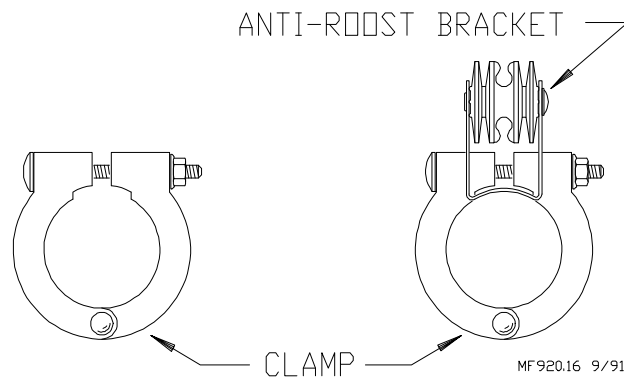
Figure 30. Assemble Feeders on Tubes (Side View)

3. Use a marker to number the Auger Tubes, beginning at the Hopper. The first Auger Tube at the hopper end of the feeder line would be 1, the second Auger Tube would be 2, etc. Mark each Auger Tube between the hopper and the Control Unit.
4. Place a Tube Clamp Assembly or Clamp/Anti-Roost Bracket at each joint. **Figure 31** shows the standard Clamp and Clamp/Anti-Roost Bracket.

Systems using 9' Auger 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.

Continue down the feeder line until each tube joint has a standard Tube Clamp or Clamp/Anti-Roost Bracket. Do not tighten at this time.



Key	Description
1	Anti-Roost Bracket
2	Standard Tube Clamp Assembly

Figure 31. Tube Clamps (Side View).

5. The Adjustable Hanger is used to hang the feeder line. It is also used to index the feeder line.

Make sure the Adjustable Hanger is facing the proper direction, as specified in **Figure 32**.

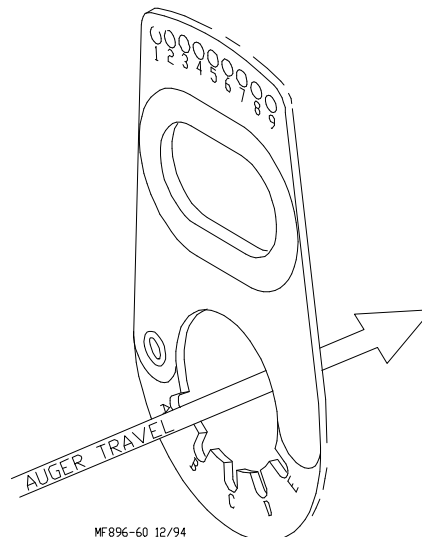


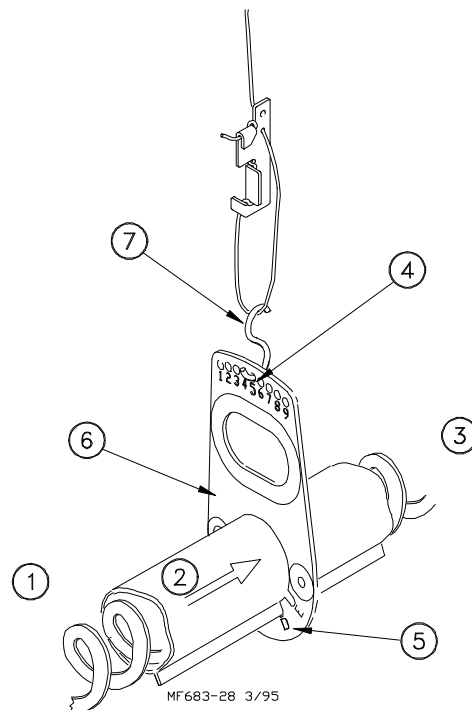
Figure 32. Adjustable Hanger Orientation Diagram

- Refer to the appropriate Indexing Chart on page 31 or 32 of this manual (depending on whether your Auger Tubes are 9' or 12' long) to program the Auger Tubes. The hanger settings are different for 9' and 12' Auger Tube. However, the settings will work for both mash or crumbles feed.

Find the heading for the number of tubes in your feeder line in the horizontal line at the top of the Indexing Chart. The correct hanger adjustments for each feeder tube are shown in the column under the heading.

Setting Example: If the appropriate setting for the #7 Auger Tube is D5, the "S" Hook should be installed in the #5 hole in the Hanger. The Auger Tube Seam should be in the "D" position. See **Figure 33**.

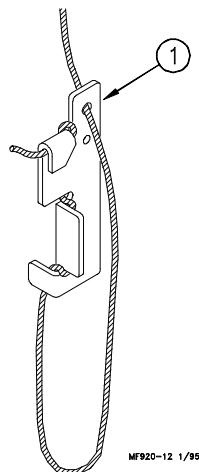
Program each Auger Tube in the feeder line according to the Indexing Chart. Some Auger Tubes may have (2) Hangers, since suspension drop lines are 8' (2.4 m) apart. Both Hangers should be indexed to the same setting.



Key	Description
1	Toward Hopper
2	Direction of Auger Travel
3	Toward Power Unit
4	Setting #5
5	Setting "D"
6	Adjustable Hanger
7	S Hook

Figure 33. Indexing the feeder line

- Install Adjustment Leveler within 6" (152 mm) of feeder line. **Figure 34** 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 34. Adjustment Leveler Installation

7. Raise the feeder line to a convenient working height.
8. With all the Adjustable Hangers in their appropriate settings, the Auger Tubes are ready to be fine tuned.

Begin at the hopper end of the house. Standing down the feeder line looking toward the hopper, the Indexing Gauge should be positioned between the second and third hole in the first Auger Tube with the notch over the tube seam. The Indexing Gauge must be on the right-hand side of the feeder line. See **Figure 35**.

Set the clear pointer on the gauge to the proper setting according to the Indexing Chart.

Rotate the Auger Tube until the bubble in the leveler comes to the center. Tighten the clamp on the bell toward the hopper.

Note: If the tube must be rotated so much that the Adjustable Hangers are tilted too far to one side or the other, check the following;

- a. Make sure the Adjustable Hanger is set according to the Indexing Chart.
- b. Make sure the Indexing Gauge is set correctly according to the tube number and Indexing Chart.
- c. Make sure Indexing Gauge is placed on the tube correctly.
- d. Make sure that you are referring to the appropriate Indexing Chart for the length of Auger Tubes being indexed.

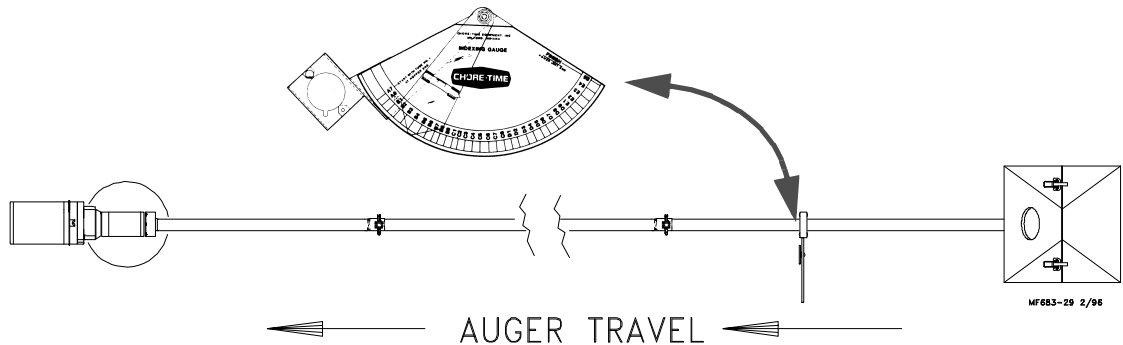


Figure 35. Indexing the feeder line

9. Continue to set each Auger Tube in the feeder line. After each tube is set, tighten the clamp on the bell end toward the hopper. The clamps should be positioned as shown in **Figure 36**. Do not crush the tubes by overtightening the clamps.

Be careful not to accidentally move the tube already set. This may require an extra person to hold the end of the tube just set, while you fine tune the next tube.

Be careful not to deform the tubes with wrenches or large adjustable pliers.

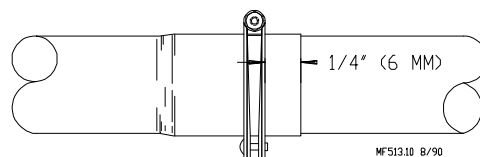


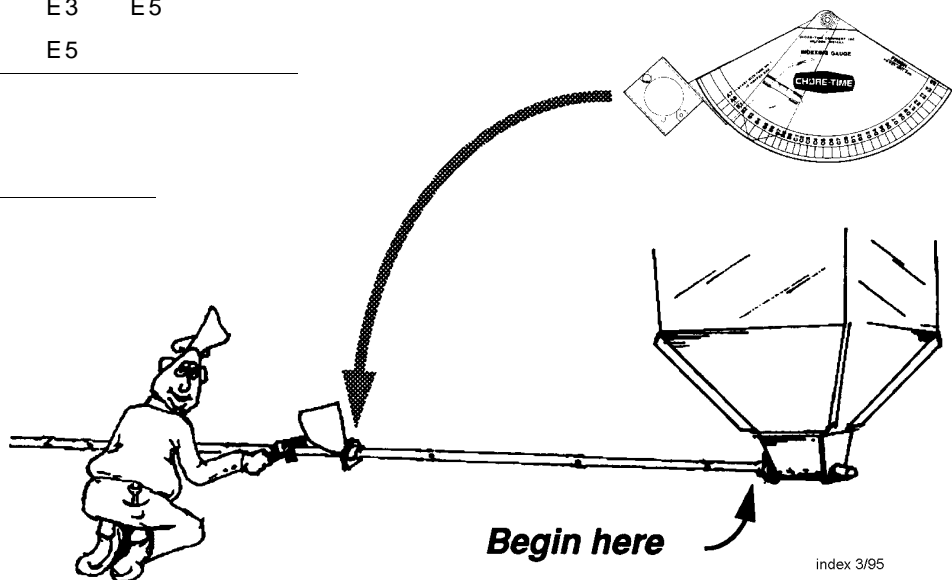
Figure 36. Tube Clamp Location (side view)

Indexing Chart for Pan Breeder Feeders

For systems using 9' (2.7 m) Auger Tube and 696 R.P.M Power Units

Number Of Tubes

	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	
1	B5	B5	B6	B6	B6	B6	B6	B7	B7	B7	B8	B8	B8	B9	B9	B9	1
2	B6	B6	B7	B7	B7	B7	B7	B8	B8	B8	B9	B9	B9	C1	C1	C1	2
3	B7	B7	B8	B8	B8	B8	B8	B9	B9	B9	C1	C1	C1	C1	C1	C2	3
4	B8	B8	B9	B9	B9	B9	B9	C1	C1	C1	C1	C1	C1	C2	C2	C3	4
5	B9	B9	C1	C1	C1	C1	C1	C1	C1	C1	C2	C2	C2	C2	C3	C4	5
6	C1	C1	C1	C1	C1	C1	C1	C2	C2	C2	C2	C2	C2	C3	C4	C5	6
7	C1	C1	C2	C2	C2	C2	C2	C2	C2	C2	C3	C3	C3	C4	C5	C6	7
8	C2	C2	C2	C2	C2	C2	C2	C3	C3	C3	C4	C4	C4	C5	C6	C7	8
9	C2	C2	C3	C3	C3	C3	C3	C4	C4	C4	C5	C5	C5	C6	C7	C8	9
10	C3	C3	C3	C3	C4	C4	C4	C4	C4	C5	C6	C6	C6	C7	C8	D2	10
11	C3	C3	C4	C4	C4	C4	C5	C5	C5	C6	C7	C7	C7	C8	D2	D4	11
12	C4	C4	C4	C4	C5	C5	C5	C6	C6	C7	C7	C8	C8	D2	D4	D6	12
13	C4	C4	C5	C5	C5	C5	C6	C7	C7	C7	C8	C8	D2	D4	D6	D7	13
14	C5	C5	C5	C5	C6	C6	C7	C7	C7	C8	C8	D2	D4	D6	D7	D8	14
15	C5	C5	C6	C6	C7	C7	C7	C8	C8	C8	D2	D4	D6	D7	D8	E3	15
16	C6	C6	C6	C7	C7	C7	C8	C8	C7	D2	D4	D6	D7	D8	E3	E5	16
17	C6	C6	C7	C7	C8	C8	C8	D1	D2	D4	D6	D7	D8	E3	E5		17
18	C7	C7	C7	C8	C8	C8	D1	D2	D4	D6	D7	D8	E3	E5			18
19	C7	C7	C8	C8	D1	D1	D2	D4	D6	D7	D8	E3	E5				19
20	C8	C8	C8	D1	D2	D2	D4	D6	D7	D8	E3	E5					20
21	C8	C8	D1	D2	D3	D4	D6	D7	D8	E3	E5						21
22	D1	D1	D2	D3	D4	D6	D7	D8	E3	E5							22
23	D2	D2	D3	D4	D6	D8	D8	E3	E5								23
24	D3	D3	D4	D6	D8	D9	E3	E5									24
25	D4	D4	D6	D8	D9	E3	E5										25
26	D5	D6	D8	D9	E3	E5											26
27	D6	D8	D9	E3	E5												27
28	D8	D9	E3	E5													28
29	D9	E3	E5														29
30	E3	E5															30
31	E5																31

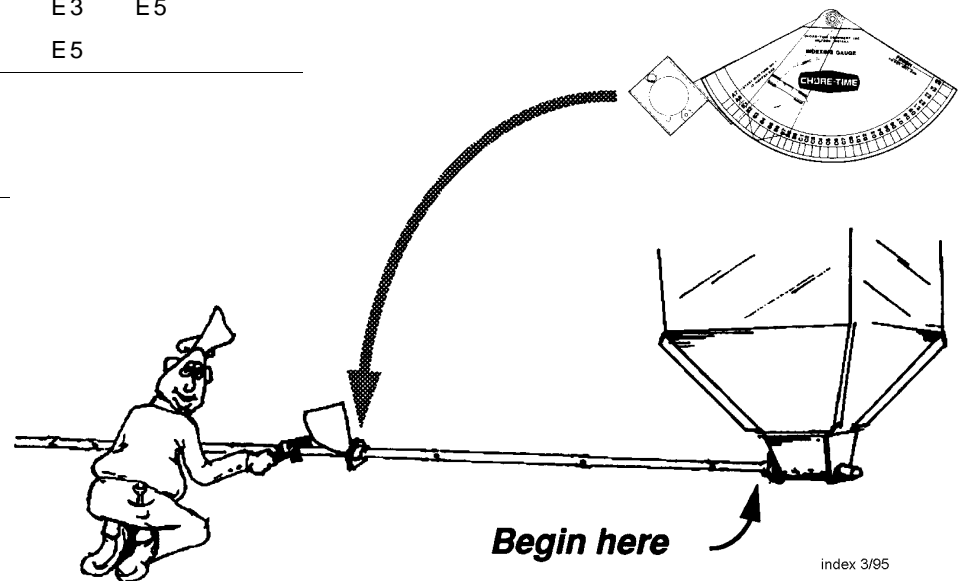


Indexing Chart for Pan Breeder Feeders

For systems using 12' (3.6 m) Auger Tube and 696 R.P.M Power Units

Number Of Tubes

	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	
1	B5	B5	B5	B5	B6	B6	B6	B6	B6	B7	B7	B7	B7	B8	B8	B8	1
2	B6	B6	B6	B6	B7	B7	B7	B7	B7	B8	B8	B8	B8	B9	B9	B9	2
3	B7	B7	B7	B7	B8	B8	B8	B8	B8	B9	B9	B9	B9	C1	C1	C1	3
4	B8	B8	B8	B8	B9	B9	B9	B9	B9	C1	C1	C1	C1	C2	C2	C2	4
5	B9	B9	B9	B9	C1	C1	C1	C1	C1	C1	C2	C2	C2	C2	C3	C3	5
6	C1	C1	C1	C1	C1	C1	C1	C2	C2	C2	C2	C2	C2	C3	C4	C4	6
7	C1	C1	C2	C2	C2	C2	C2	C2	C2	C2	C3	C3	C3	C4	C5	C6	7
8	C2	C2	C2	C2	C2	C2	C2	C3	C3	C3	C4	C4	C4	C5	C6	C7	8
9	C2	C2	C3	C3	C3	C3	C3	C4	C4	C4	C5	C5	C5	C6	C7	C8	9
10	C3	C3	C3	C3	C4	C4	C4	C4	C4	C5	C6	C6	C6	C7	C8	D2	10
11	C3	C3	C4	C4	C4	C4	C5	C5	C5	C6	C7	C7	C7	C8	D2	D5	11
12	C4	C4	C4	C4	C5	C5	C5	C6	C6	C7	C7	C8	C8	D2	D5	D6	12
13	C4	C4	C5	C5	C5	C5	C6	C7	C7	C7	C8	C8	D2	D4	D6	D7	13
14	C5	C5	C5	C5	C6	C6	C7	C7	C7	C8	C8	D2	D4	D6	D7	D8	14
15	C5	C5	C6	C6	C7	C7	C7	C8	C8	C8	D2	D4	D6	D7	D8	E3	15
16	C6	C6	C6	C7	C7	C7	C8	C8	C7	D2	D4	D6	D7	D8	E3	E5	16
17	C6	C6	C7	C7	C8	C8	C8	D1	D2	D4	D6	D7	D8	E3	E5		17
18	C7	C7	C7	C8	C8	C8	D1	D2	D4	D6	D7	D8	E3	E5			18
19	C7	C7	C8	C8	D1	D1	D2	D4	D6	D7	D8	E3	E5				19
20	C8	C8	C8	D1	D2	D2	D4	D6	D7	D8	E3	E5					20
21	C8	C8	D1	D2	D3	D4	D6	D7	D8	E3	E5						21
22	D1	D1	D2	D3	D4	D6	D7	D8	E3	E5							22
23	D2	D2	D3	D4	D6	D8	D8	E3	E5								23
24	D3	D3	D4	D6	D8	D9	E3	E5									24
25	D4	D4	D6	D8	D9	E3	E5										25
26	D5	D6	D8	D9	E3	E5											26
27	D6	D8	D9	E3	E5												27
28	D8	D9	E3	E5													28
29	D9	E3	E5														29
30	E3	E5															30
31	E5																31



End Control Unit Assembly

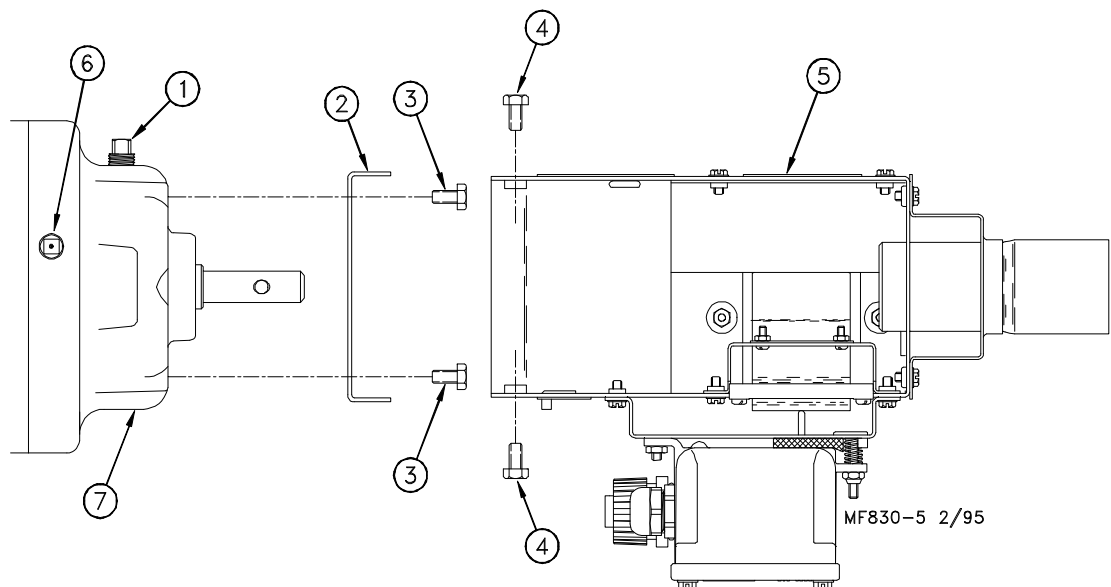
The Control Unit must be at least 10' (3 m) from the end of the building to allow birds access around the end of the feeder line.

Assemble the End Controls to the Power Units according to the instructions below and **Figure 37**.

1. The Anchor Plate is shipped secured to the Control Unit using bolts. Remove the Anchor Bracket.
2. Bolt the Anchor Bracket to the Power Unit using the (4) bolts (items #3) in the front of the gearhead.

The angled end of the Anchor Plate should be installed toward the bottom of the Power Unit.

3. Bolt the Control Unit Body Assembly to the Anchor Bracket, using 1/4-20 bolts (items 4). Remove the Top and Bottom Closures on the Control Unit to fasten auger to the power unit.
4. 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.
5. Remove plastic shipping plug and replace with vented plug, supplied.



Key	Description
1	Pipe Plug (oil level)
2	Anchor Bracket
3	5/16-18 Bolts
4	1/4-20 Bolts
5	Control Unit Body
6	Replace Shipping Plug with Vent Plug.
7	Power Unit/Gearhead

Figure 37. Control Unit Installation (Top View)

Anti-Roost Installation

1. Unroll the bulk anti-roost cable. Note: If the cable is unrolled as shown in **Figure 38**, 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.

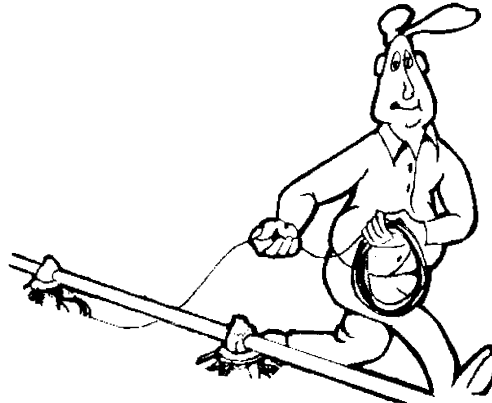


Figure 38. Unrolling the Cable

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 39**.

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

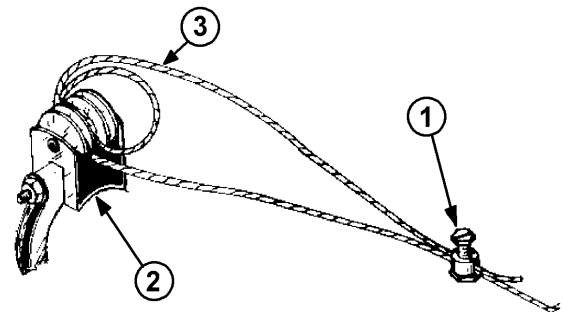


Figure 39. Anti-Roost Cable at the Hopper

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 40**.

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).

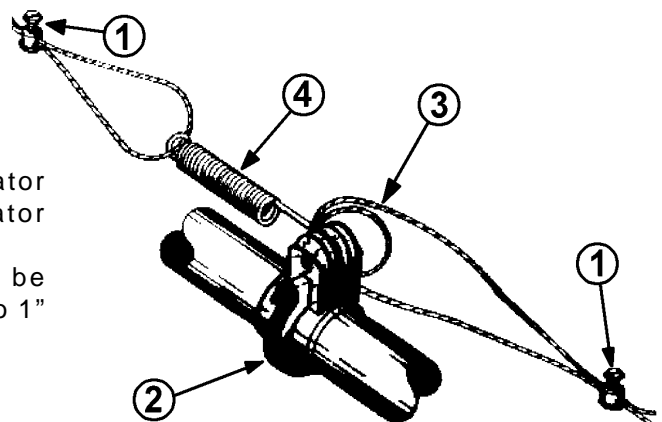
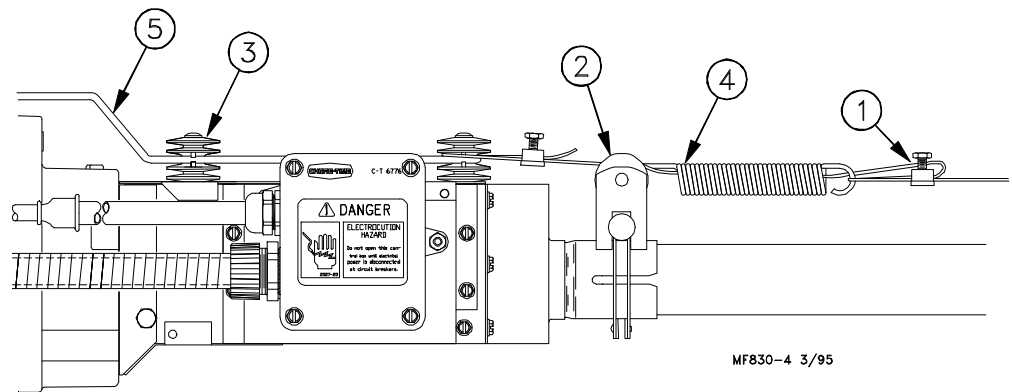


Figure 40. Anti-Roost Cable Mid-Line Connection

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 41**.
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 41**.
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 42**.



Key	Description
1	1" - 2" (25 - 50 mm)
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

Figure 42. Anti-Roost Installation at the Control Unit

10. Install the wire form on the control unit insulators. Be sure the guard snaps into the retainers molded into the insulators. See **Figure 42**.
11. Install the Poultry Trainer or Line Charger, as shown in **Figure 43** or **44**.

The Poultry Trainer is used to power all Anti-Roost lines in a house. See **Figure 43**.

The Line Charger is used to power individual Anti-Roost lines in a house. See **Figure 44**.

Route the charger wire from the Poultry Trainer or Line Charger to the Anti-Roost system. Secure the Charger Wire to the Anti-Roost cable, using a cable clamp.

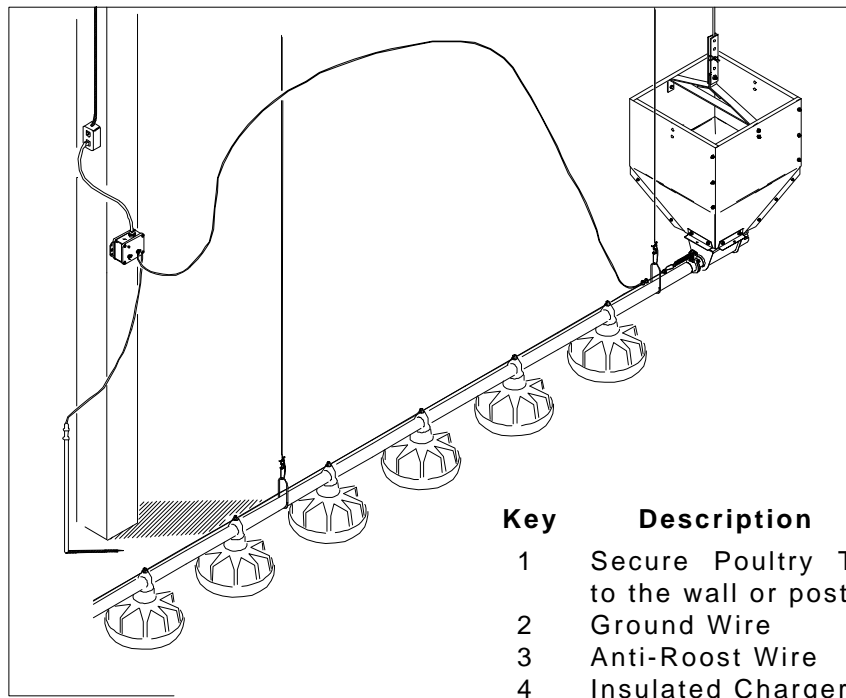


Figure 43. Poultry Trainer Installation

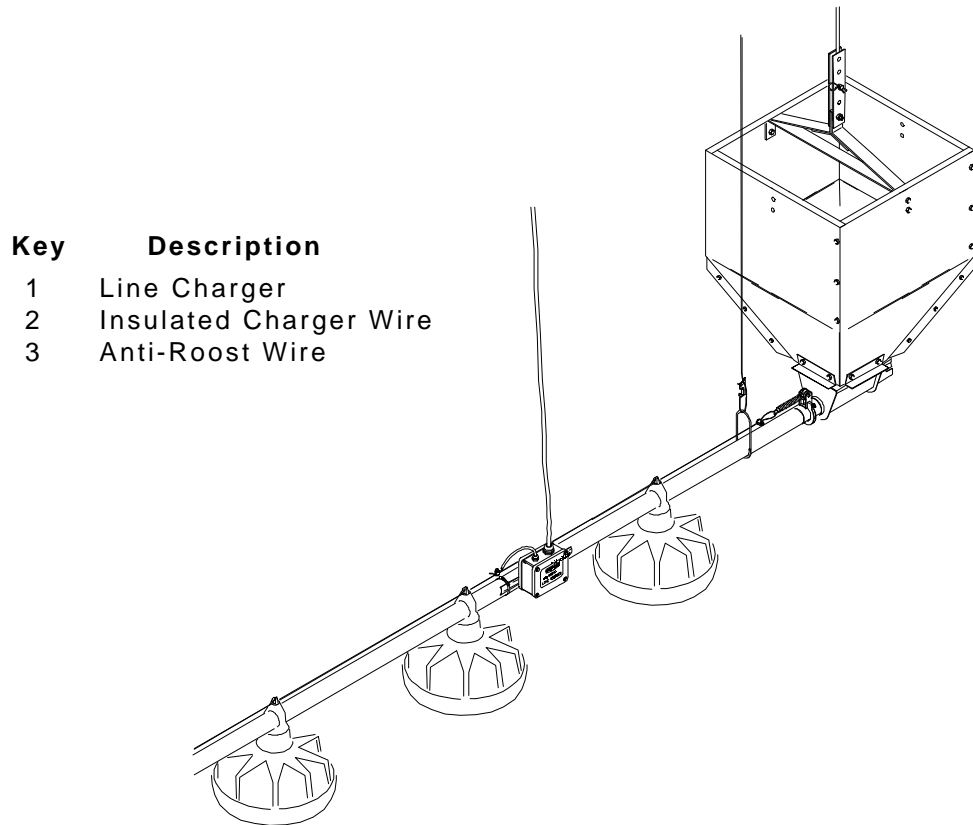


Figure 44. Line Charger Installation

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.

Model C2 Feeder Lock Installation

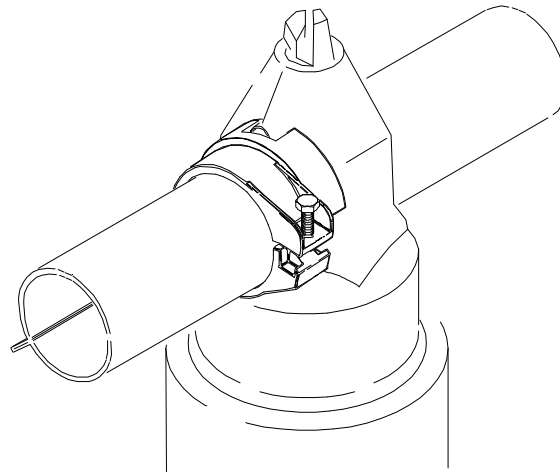
The Model C2 Feeder Lock is designed to prevent the feeders from swinging on the auger tubes.

Note: The seam of auger tube and hardware for the Lock **must** be on opposite sides as shown. Otherwise an interference will occur.

To install, gently spread the Lock to allow it to slide over the auger tube as shown in Figure 45.

Slide the Lock into position against the Feeder Support Cone.

Make sure the feeder is in the upright position before securing the Lock to the auger tube using the hardware supplied.

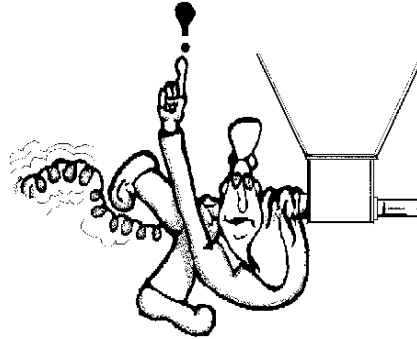


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Figure 45. Feeder Lock Installation

Auger Installation

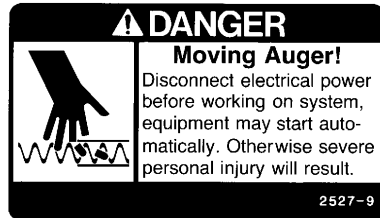
Note: Use extreme caution when working with the auger. The auger is under tension and may spring causing personal injury. Wear protective clothing, gloves, and safety glasses when working with the auger.



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 from the end of the auger tube to avoid injury.**

With the auger coiled about 6' (1.8 m) from the end of the boot, feed the auger through the boot into the tubes.

Push the auger into the tube in short strokes.

Uncoil and handle the auger carefully to avoid damaging or kinking the auger.

3. If more than one coil is required for each feeder line, the auger ends will have to be brazed together. Refer to the Brazing the Auger section in this manual.
4. Continue installing auger until the auger reaches the Control Unit end of the feeder line.
5. Slide the Drive Tube and flat washer over the output shaft on the Power Unit, as shown in **Figure 46**.

- Attach the auger to the output shaft of the Power Unit. Route the auger through the Drive Block. Tighten the 1/4-20 x 1-1/2" H. H. Bolt to secure the auger to the Output Shaft

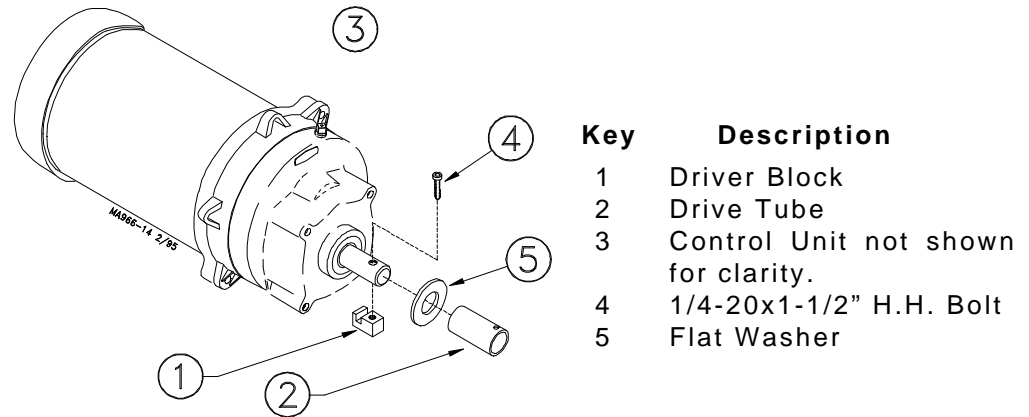


Figure 46. Auger Driver Components.

- 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 47**.

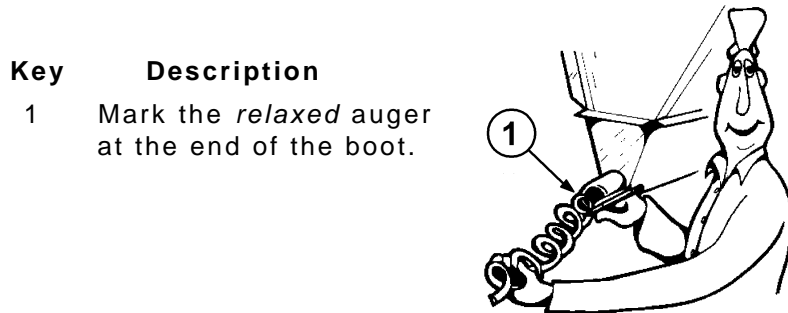


Figure 47. Measure the Auger from the *relaxed* position.

- Auger stretch:

The auger needs to be stretched 7" (180 mm) per 100' (30 m). Example: A 250' (76 m) feeder line requires 17" (43 cm) 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 48**.

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

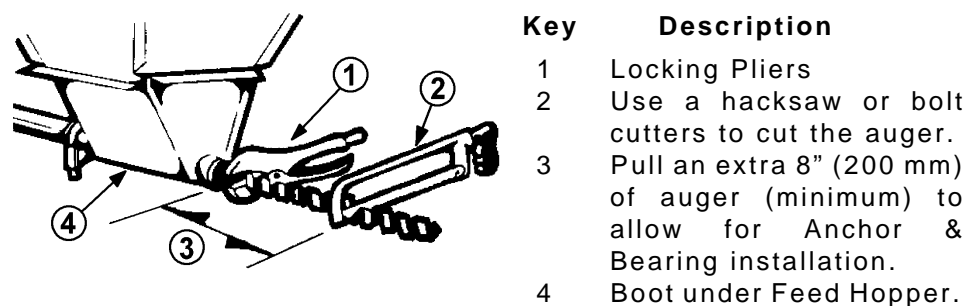


Figure 48. Cut the Auger with required stretch.

9. Insert the Anchor Assembly into the auger until it touches the weld at the back of the anchor. Do not allow the auger to ride up over the weld. Tighten the setscrew in the center of the anchor. **THIS SETSCREW MUST BE TIGHT.**



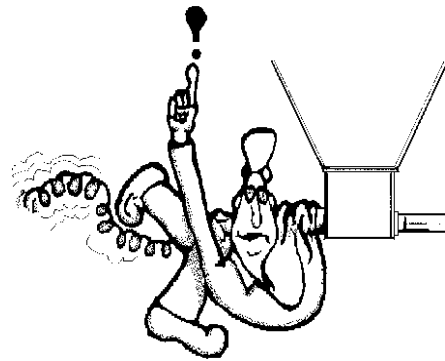
10. **Carefully** remove the locking pliers while holding onto the Anchor and Bearing Assembly and auger securely.

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

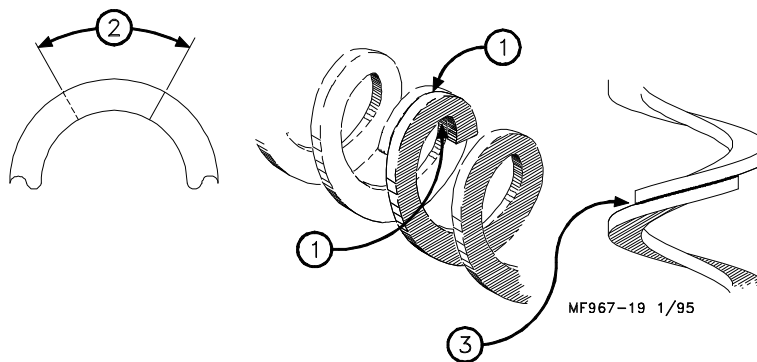
The auger must be brazed if it is necessary to splice or lengthen it. A bronze, flux coated rod is recommended.

The ends of the auger should butt against each other, **NOT THREAD INSIDE EACH OTHER.** See **Figure 49.**

To align the auger for brazing, lay it in angle or channel iron and clamp it firmly in place. Use low heat.

The joint should be well filed with no sharp edges or rough corners to wear against the tube.

Allow the joint to air cool; rapid cooling will cause the auger to become brittle.



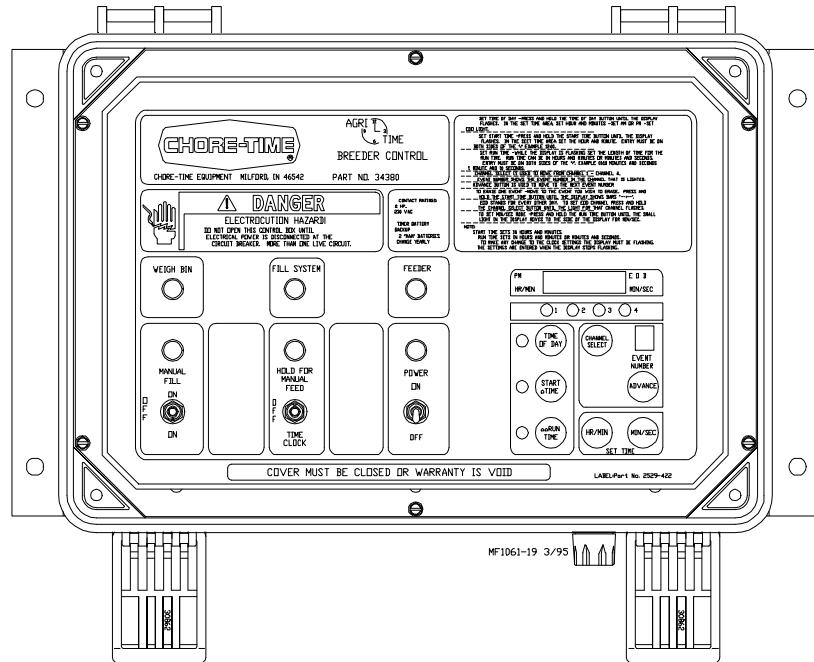
Key	Description
1	Braze here
2	Lap the auger ends approximately 1" (25 mm).
3	Butt the auger ends together. DO NOT thread the auger together.

Figure 49. Auger Brazing.

Controlling the Feeders (optional equip.)

The Pan Breeder Feeding System is controlled by the 34380 Breeder Control Panel.

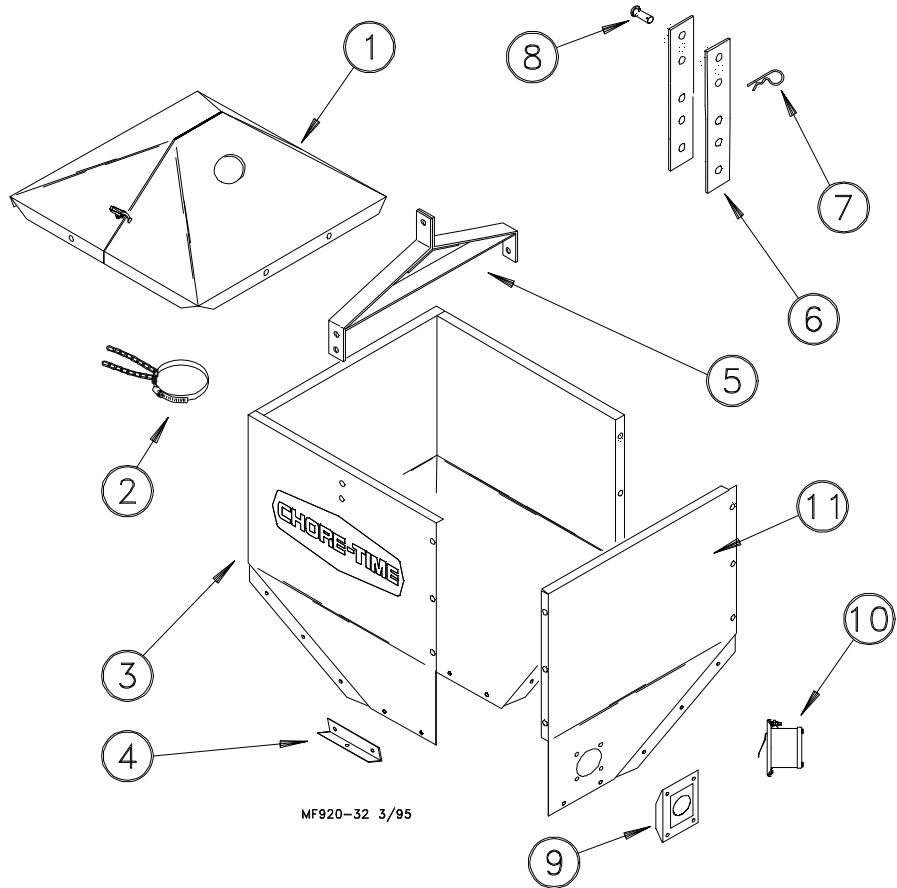
The 34380 Breeder Control uses an Agri-Time™ Time Clock. Refer to the instructions shipped with the control for information on installation, wiring, programming, and operating the controls.



200# Hopper Components (Part No. 9474)

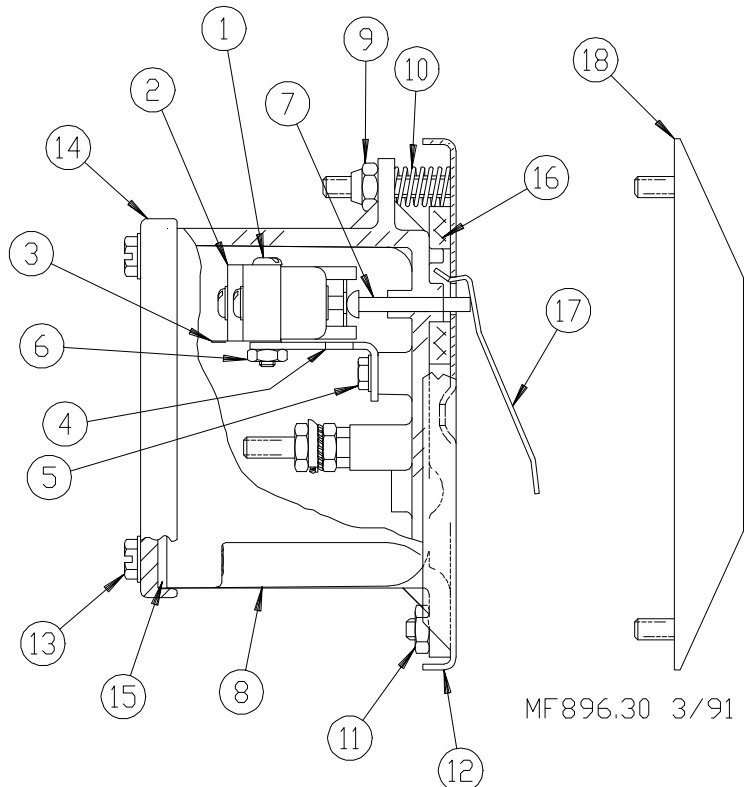
Item	Description	Part No.
1	Hopper Cover (optional)	28206
2	Tube Support Assembly	14367
	Clamp	13948
	Chain	2128-1
3	Hopper Side (w/o hole)	2680
4	Boot Hanger	2671
5	Hanger Bracket Assembly	2681
6	Adjustment Bracket (2 req'd)	2706
7	Hair Pin	2664
8	Clevis Pin, 5/16 x 1"	2797-1
9*	Diaphragm Assembly	7900
10*	Boot Switch	7840
11	Hopper Side Panel (w/ hole)	8791

*These items are components of the 8798 Switch Kit. See separate parts listing, below, for individual components.



Switch Kit (Part No. 8798)

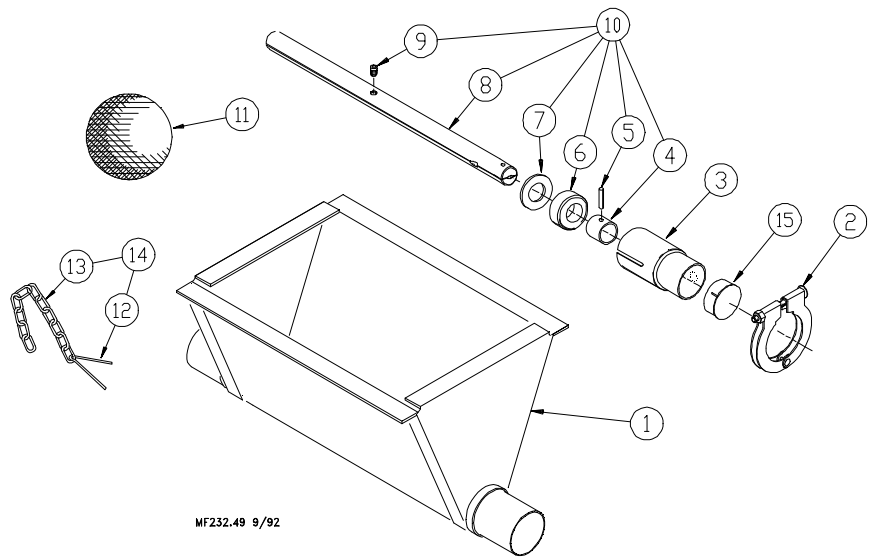
Item	Description	Part No.
1	6-32 x 7/8" Rd. Hd. M.S.	1921
2	SPDT Actuator Switch	7114
3	Switch Insulation	1907-5
4	Switch Bracket	7068
5	#6 x 3/8" Slot Wash. Hd. Screw	6782
6	6-32 Hex Nut	771
7	Pin	8757
8	Switch Box	7841
9	10-32 Hex Lock Nut	6963
10	Spring	6972
11	10-32 Hex Nut	4297
12	Mounting Plate	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

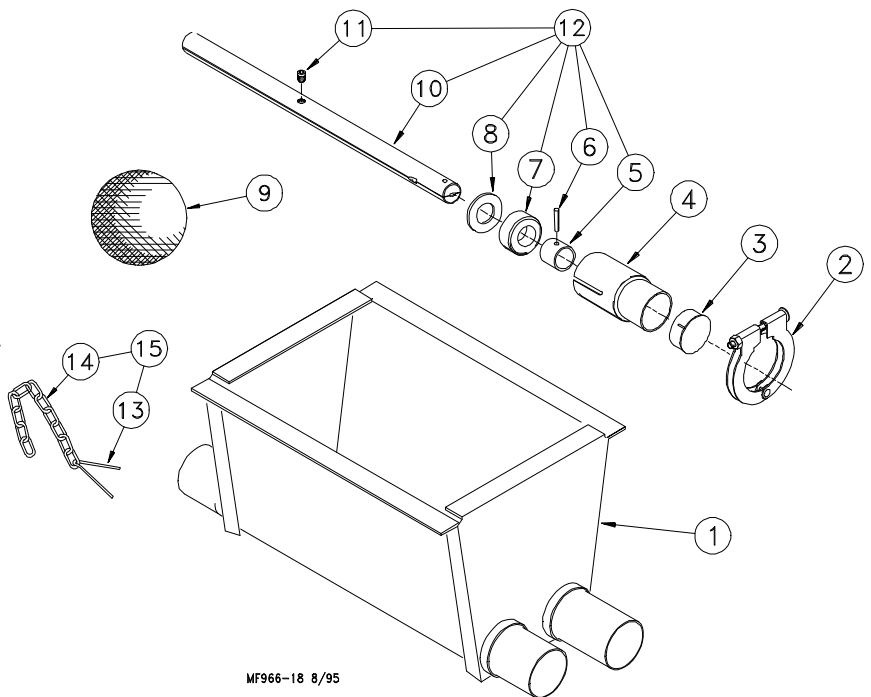
Item	Description	Part No.
1	Boot Weldment	3760
2	Tube Clamp	24063
3	Outlet Tube	4556
4	Sleeve	5648
5	3/16 x 1" Pin	2960-1
6	Bearing	2689
7	Washer	2955-14
8	Anchor	6818
9	Setscrew	1174
10	Anchor and Bearing Ass'y	6817
11	Cannonball	3531
12	Cotter Pin	1639
13	Chain	2128-1
14	Latch Pin Ass'y	2683
15	Cap	29373
--	Danger Decal	2527-9



Twin Boot Components

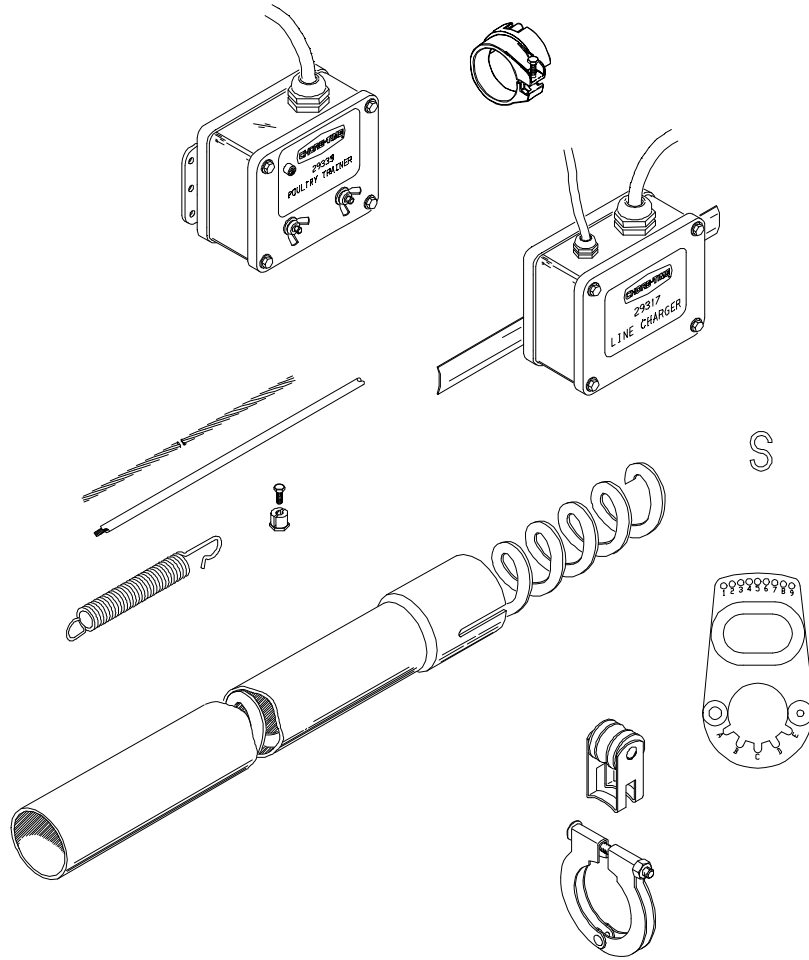
Part No. 6824

Item	Description	Part No.
1	Boot Weldment	3932
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	Cannonball	3531
10	Anchor	6818
11	Setscrew	1174
12	Anchor and Bearing Ass'y	6817
13	Cotter Pin	1639
14	Chain	2128-1
15	Latch Pin Ass'y	2683
--*	Jumper Wire Kit	5360
--	Danger Decal	2527-9



*The Jumper Wire Kit includes an insulated piece of High-Voltage Wire (part no. 5359) and (2) cable clamps.

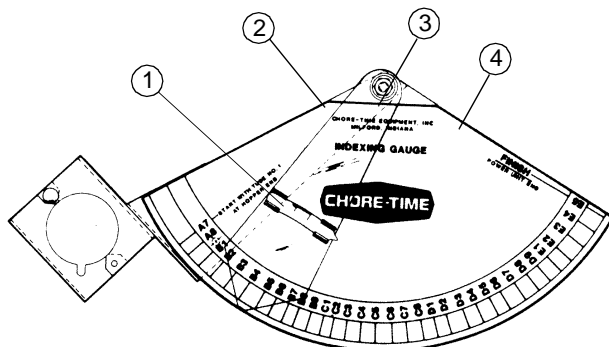
Feeder Line Components



<u>Item</u>	<u>Description</u>	<u>Part No.</u>	<u>Item</u>	<u>Description</u>	<u>Part No.</u>
1*	Auger	6820WM-0	8	Anti-Roost Bracket	24060
2	Line Charger (110 V, 60 Hz)	29317	9	Tube Clamp	24063
	Line Charger (220 V, 50/60 Hz)	29341	10	Hanger Assembly	7604
3	Poultry Trainer (110 V, 60 Hz)	29333	11	Grommet (component of 7604)	14899
	Poultry Trainer (220 V, 50/60 Hz)	29325	12	S Hook	723
4	1/16" Cable	1922	13	Charger Wire (165')	28994-165
5	1/16" Cable Clamp	1826		Charger Wire (330')	28994-330
6	Spring	7551	14	Feeder Lock	34570
7	Roll Formed Tube				
	--12 ft., 4 hole tube	6854-7			
	-- 9 ft., 4 hole tube	6854-1			

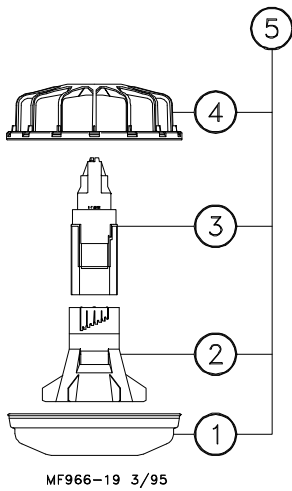
*Round up to the nearest 10'. Auger lengths from 50' to 500 feet. Example: 6820-200 would be a 200' roll of 6820 Auger.

Indexing Gauge (Part No. 14251)



<u>Item</u>	<u>Description</u>	<u>Part No.</u>
1	Level Glass	4853
2	Gauge Clamp Weldment	14523
3	Pointer Assembly	4852
4	Indexing Gauge Decal	2529-207

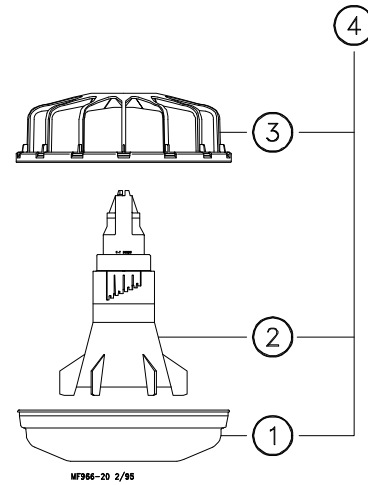
Model C2 Feeder Assemblies



2-Piece Model C2 Feeder

<u>Item</u>	<u>Description</u>	<u>Part No.</u>
1	Model C2 Feeder Pan	25281
2	Adjustment Cone	29064
3	Support Cone	25282
4	Grill	25280
5	2-Piece Model C2 Feeder	28110

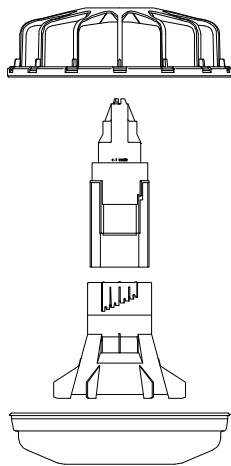
Note: Order Feeder Lock separately. See Page 45.



1-Piece Model C2 Feeder (Windowless)

<u>Item</u>	<u>Description</u>	<u>Part No.</u>
1	Model C2 Feeder Pan	25281
2	1-Piece Support Cone (windowless)	33885
3	Grill	25280
4	1-Piece Model C2 Feeder	34569

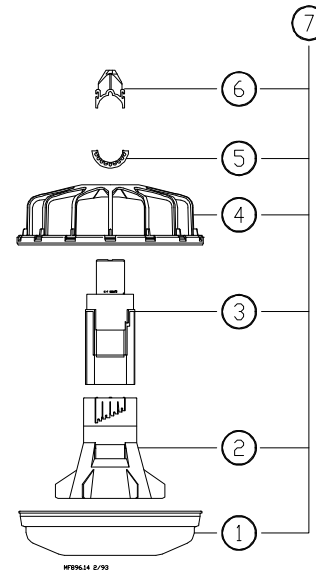
Note: Order Feeder Lock separately. See Page 45.



2-Piece Model C2 Feeder (w/legs)

<u>Item</u>	<u>Description</u>	<u>Part No.</u>
1	Model C2 Feeder Pan	25281
2	Adjustment Cone	30730
3	Support Cone	25282
4	Grill	25280
5	2-Pcs Mod. C2 Feeder (w/legs)	30740

Note: Order Feeder Lock separately. See Page 45.



Model C2 Feeder (for Repair)

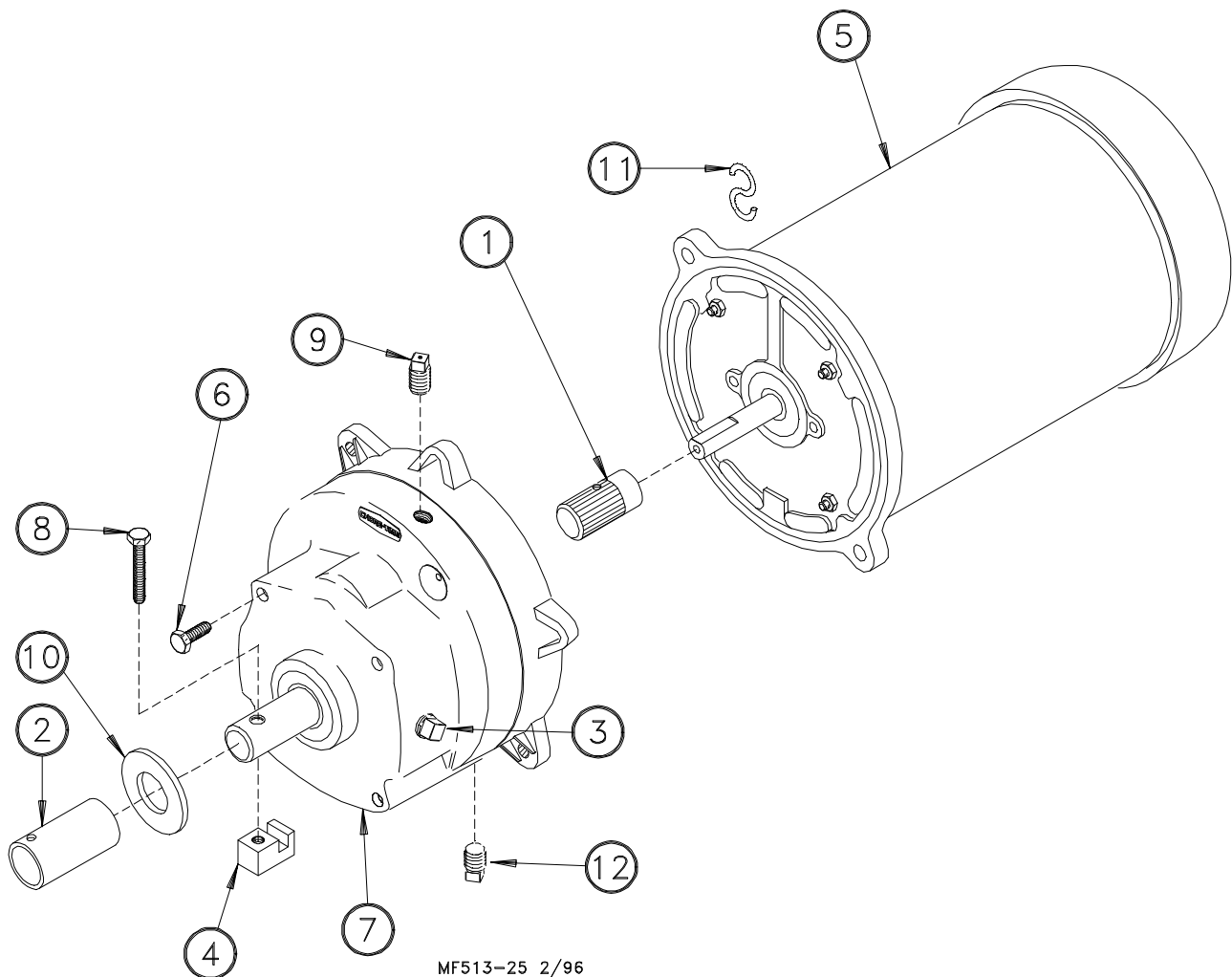
<u>Item</u>	<u>Description</u>	<u>Part No.</u>
1	Model C2 Feeder Pan	25281
2	Adjustment Cone	29064
3	Support Cone	25283
4	Grill	25280
5	Support Insert (Locking)	25053
6	Support Cap	25052
7	Model C2 Assembly (Slide Top)	28120

Power Unit Assemblies

Item	Description	3259-57 Part No.	3259-101 Part No.
1	Pinion Assembly	5046	5046
2	Drive Tube Connector	1048	1048
3	Pipe Plug	3516	3516
4	Drive Block	4642	4642
5	Motor (3/4 HP, 696 RPM, 1-Phs, 60 Hz)	7522	----
	Motor (3/4 HP, 696 RPM, 3-Phs, 50 Hz)	----	28032
6	5/16-18 x 5/8" Hex Hd. Screw	4412-1	4412-1
7	Gearhead Assembly	3261-5	3261-11
8	1/4-20 x 1-1/2" Hex Hd. Screw	2919	2919
9	Vent Plug	3523	3523
10	Flat Washer	1484	1484
11	S Hook	4270	4270
12	Magnetic Pipe Plug	30160	30160

Power Unit Assembly Part Numbers:

Part Number	HP	RPM	Phase	Hz	Voltage
3259-57	3/4 HP	696 RPM	Single Phase	50/60 Hz	220/230 V
3259-101	3/4 HP	696 RPM	Three Phase	50 Hz	220/380 V



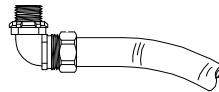
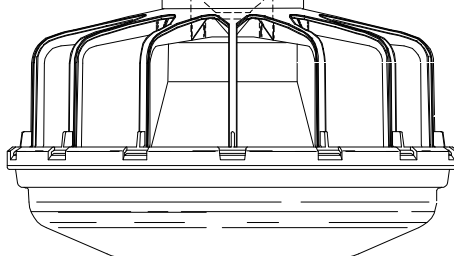
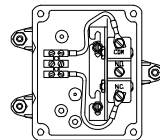
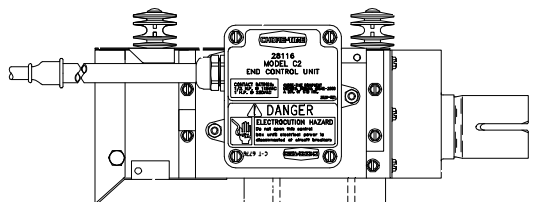
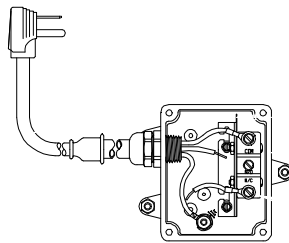
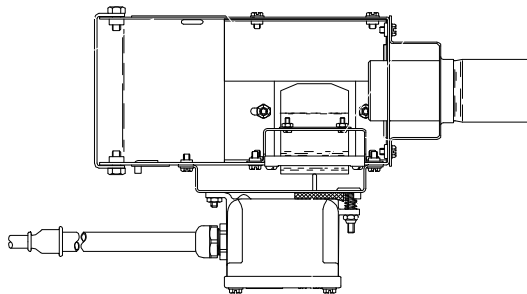
MF513-25 2/96

Model C2 End Control-Single Phase: 28116

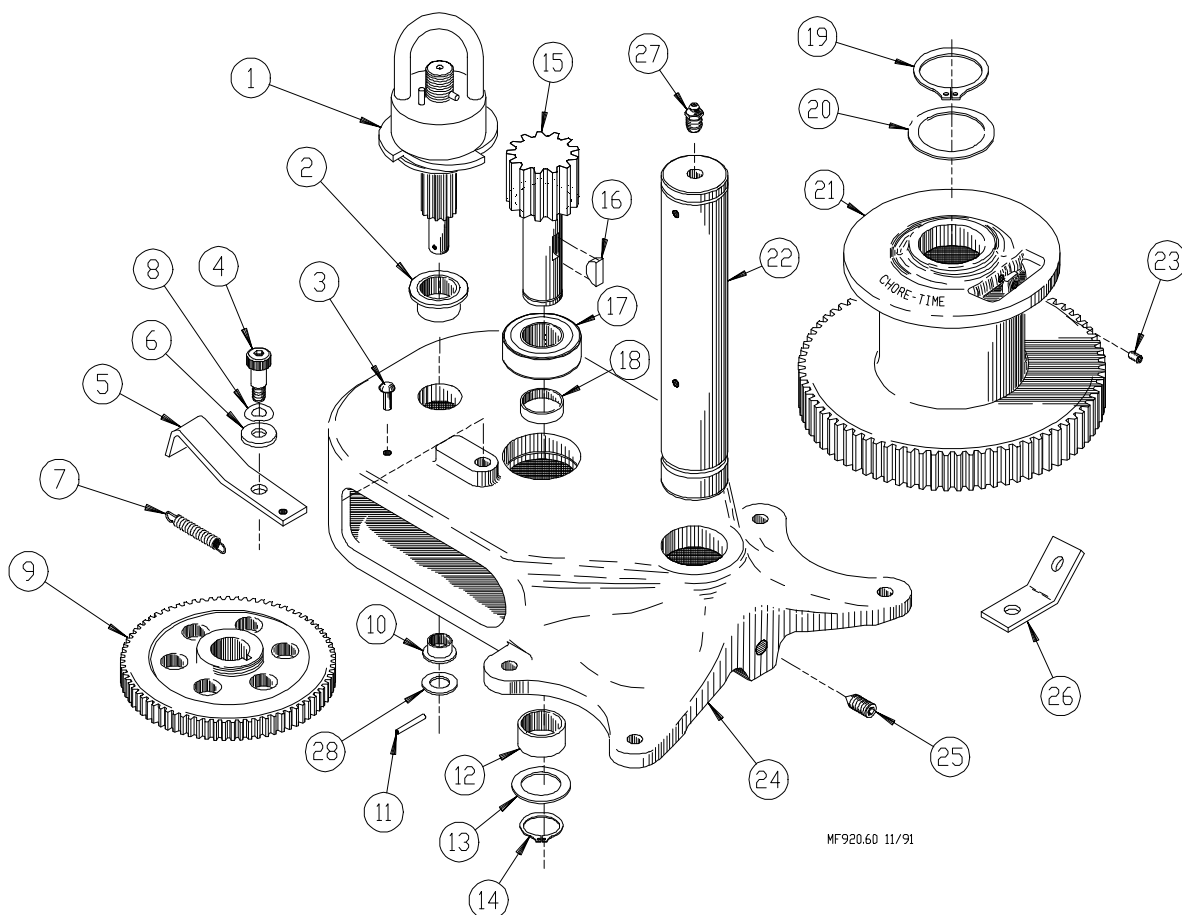
Model C2 End Control-3 Phase: 28270

Item	Description	1 Phase Part No.	3 Phase Part No.
1	Cover and Insulator Assembly	24682	24682
2	Insulator	2976	2976
3	Support Bracket	24683	24683
4	Support Assembly	35729	35729
5	Switch Bracket	7068	7068
6	Control Unit Sleeve	29349	29349
7	Grill Assembly	25280	25280
8	Pan	25281	25281
9	Deflector Panel	34310	34310
10	Anchor	4188	4188
11	Control Body	14434	14434
12	Switch Box Mount	25084	25084

Item	Description	1 Phase Part No.	3 Phase Part No.
13	Gasket	6968-1	6968-1
14	10-32 Lock Nut	6963	6963
15	Spring	6972	6972
16	Paddle	24848	24848
17	Stop Panel	25433	25433
18	Switch Box Cover	6776	6776
19	Switch Box	24702	7841
20	Control Cord Assembly	25495	----
21	90 Degree Connector	23810	23810
22	Gasket	6777	6777
23	Actuator Switch	7114	7114
24	Bottom Cover	14432	14432
25	Mylar	25318	25318
26	Paddle Retainer	25045	25045
27	Liquid Tight Connector	24685	----
28	Terminal Block	----	34925-3
29	Switch Insulation	1907-5	1907-5
30	Mount Bracket	34309	34309
31	Switch Actuation Pin	8757	8757
32	14" Flexible Conduit	26982-1	26982-1
--	Anti-Roost Guard	2798	2798
--	Danger Decal	2527-9	2527-9



2883 Power Winch

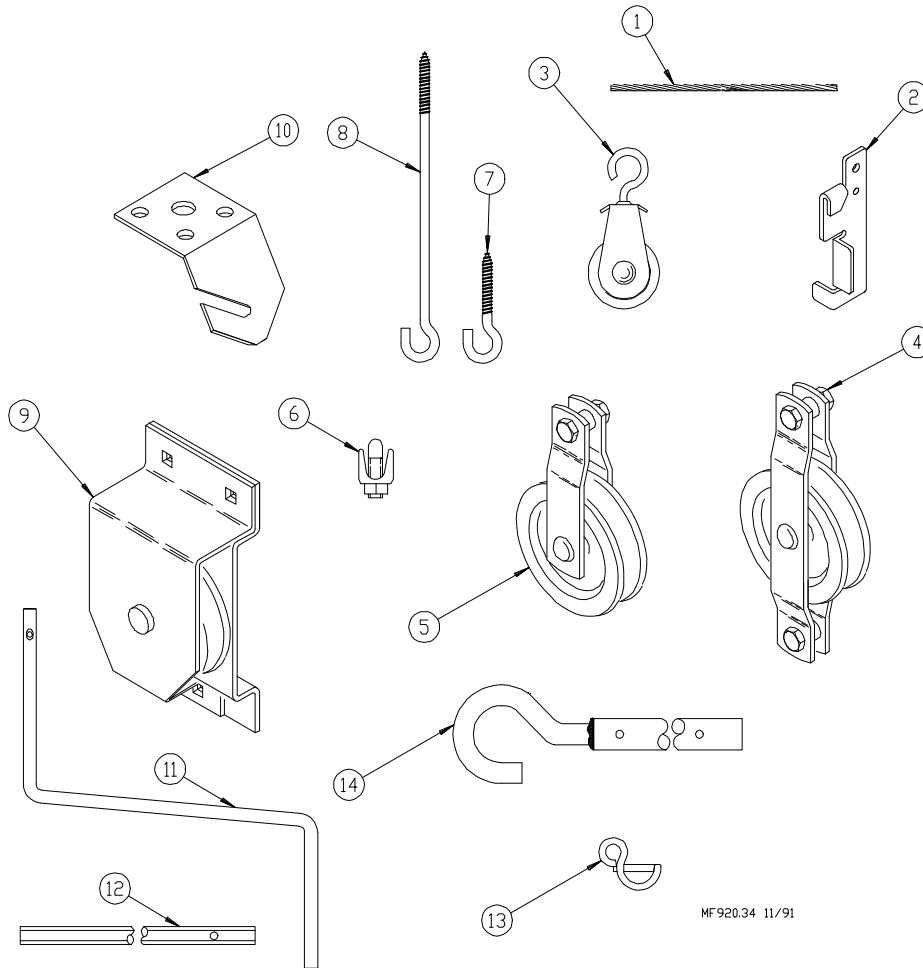


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Item	Description	Part No.
1	Input Shaft Assembly	14885
2	Flange Bushing	2967-2
3	Drive Stud	4128-1
4	Shoulder Bolt	4022-2
5	Pawl	6672
6	Spring Washer	4023
7	Spring	1543
8	5/16" Flat Washer	2255-44
9	Intermediate Gear	2890
10	Flange Bushing	3252
11	Spiral Pin	2960-3
12	Bushing	2967-4
13	Washer	2955-1
14	Retaining Ring	2958-1
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

*These items may be ordered as an assembly under Chore-Time Part No. 3212

Miscellaneous Suspension Components



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Item	Description	Part No.
1	3/32" Cable	4973
	3/16" Cable	1213
	1/8" Cable	27975
2	Cable Lock	14337
3	Pulley with Swivel	3004
4	Double Eye Pulley	2501
5	Pulley	2500
6	3/16" Cable Clamp	732
	1/8" Cable Clamp	14898
7	Standard Screw Hook	1214
	ATF Screw Hook	2041
8	7" Screw Hook	28357
9	Pulley Assembly	28429
10	Suspension Bracket	28550
	w/ 10-16x1" screws	28832
11	Handle Shank	3148
12	Drill Adapter Shaft	3151
13	Winch Handle Pin	3761
14	Winch Drive Tube (4')	2884-1
	Winch Drive Tube (8')	2884-2
	Winch Drive Tube (24")	2884-4

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 Pan Breeder Feeder

The Pan Breeder Feeder requires 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.

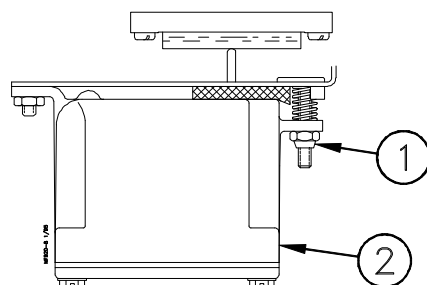
1. Check the oil level in the gear heads at installation and every 6 months. The Pipe Plug, on the side of the gear head, indicates proper oil level. Add SAE 40W oil when necessary.

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.

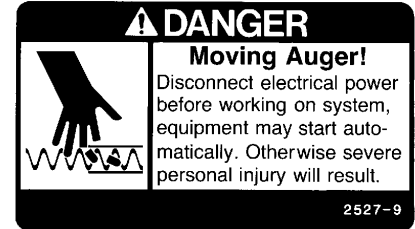
CAUTION: Stand clear...the auger may spring back into the tubes.

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

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

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

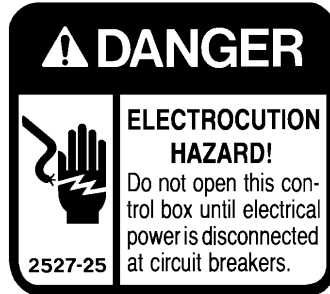
10. It may be necessary to periodically retighten the shocker cable. Be sure to disconnect power to the shocker before servicing the equipment.



Trouble Shooting the Pan Breeder Feeder

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

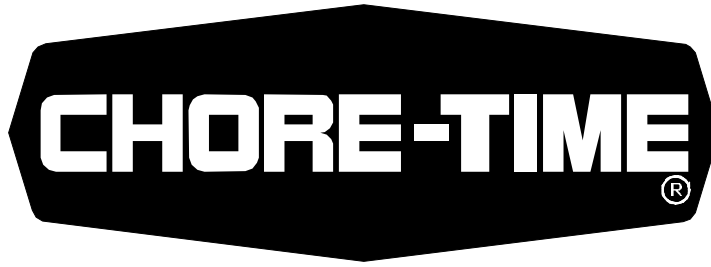
Service and maintenance work should be done by a qualified technician only.



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.
	Breeder Control improperly programmed.	Refer to the Breeder Control Instruction Manual (MF1061).
Feeder line will not operate.	Power unit cord not plugged in sufficiently to make contact.	Check motor cord plug at control unit and control unit plug at outlet for connection.
	Motor cord wires are broken at plug or where cord enters motor.	Check cord for continuity. Replace if defective.
	Power Units thermal overload tripped.	Push motor overload reset button to reset.
	Control unit switch defective or out of adjustment.	Adjust switch according to the Switch Adjustment Procedure in the maintenance section.
Motor overloads frequently.	Oil on new auger loads motor excessively when feed is carried for first time.	Polish auger by running 50 lb. (20 kg) increments of feed out to pans.
	Inadequate power reaching motors.	Check line voltage at the motors. Check starting current draw at motors. Wiring of adequate size is essential to feeder operation.
	Object caught in the auger; motor runs, stalls, then auger spins in reverse.	Check hopper boot, control unit and pan outlet holes for foreign objects. Carefully remove obstruction.

Problem	Possible Cause	Corrective Action
Auger runs erratically.	Frozen or cracked bearing at boot anchor.	Replace bearing. Slowly ease auger back into tube. Be careful not to damage the bearing when reinserting the auger.
	Insufficient stretch in auger.	Shorten the auger.
	Obstruction in the auger.	Carefully remove obstruction.
Auger tube or boot wears out rapidly (Noisy feeder operation)	Auger is bent or kinked.	Repair or replace damaged auger.
	End of auger is riding up on anchor weldment.	Auger must not be positioned over weld on anchor. Check for bent or damaged auger.
Oil leaking out of seals on power unit.	Gearhead vent plug not installed.	Replace plastic shipping plug with vent plug.
	Defective gear head seal.	Replace seal.
Not enough feed supplied to the feeder pans.	Insufficient time programmed on the time clock.	Add more operating time to feeding period.
	Feeder line control unit switch out of adjustment.	Adjust switch according to the Switch Adjustment Procedure in the maintenance section.

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Made to work.
Built to last.

**THANK-YOU for purchasing a Chore-Time
Pan Breeder Feeder System.**

Revisions to this Manual

Page No	Description of Change
--	Updated to new format and to include information required for CE.
8	Added capacities of the Winch and Pulleys.
14	Change bird-to-pan-height specification.
--	Removed mechanical scale information.
--	Updated manual throughout to reflect Model C2 Feeders.
--	Added/Updated Trouble-Shooting and Maintenance sections.

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