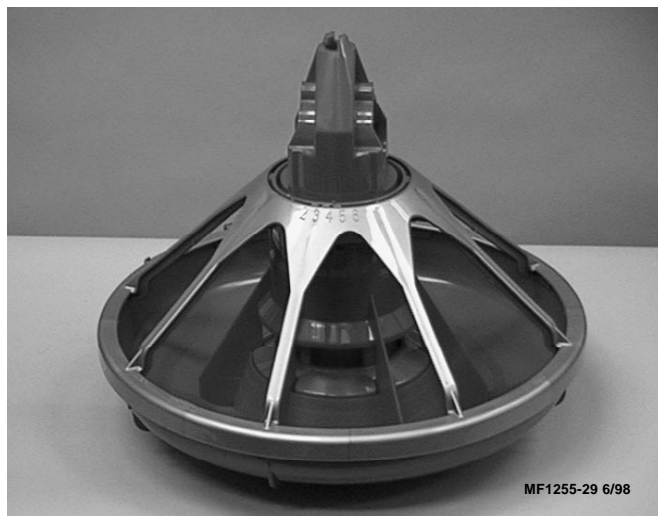


Model C2 Plus & G Plus Feeding Systems

Installation & Operator's Instruction Manual



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.

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 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

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

Table of Contents

Topic	Page	User*
Chore-Time Warranty	2	C,D
Support Information	5	C,D
Distributor and Installer Information	5	C
Safety Information	6	C,I
Safety–Alert Symbol.	6	
Signal Words.	6	
DANGER: Moving Auger	6	
DANGER: Electrical Hazard	6	
Glossary of Terms.	7	C,I
Glossary of Terms - continued	8	
General Installation Information	9	C,I
Capacities & Specifications	9	C,I
General Management & Start-Up.	10	C,I
Partial House Brooding.	10	
Electro-guard Operation	10	
Start-Up Information.	11	
Component Locations Diagram.	12	C,I
Model C2 Plus Features	13	C,D
Model G Plus Features	17	C,D
Feeder Management.	19	C,D,I
General Operation of the Model C2 Plus and Model G Plus Feeders	19	
Optional Slide Shut-Off	19	C,D,I
Feeder Assembly	20	I
Assembly Box Construction for Model C2 Plus Feeders	20	
Pan Assembly Procedure for Model C2 Plus Feeders	22	
Assembly Box Construction for Model G Plus Feeders	24	
Pan Assembly Procedure for Model G Plus Feeders	26	
Suspension System	28	I
For systems up to 350' (107 m).....	29	
For systems over 350' (107 m).	30	
Screw Hook Installation	31	
Ceiling Hook Installation	31	
Power Winch Installation	33	
Drop Installation	34	
Hopper Assembly Procedure.	36	I
200# Hopper	36	
100# Hopper	38	
Feeder Line Assembly & Suspension	40	I

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

Table of Contents – continued

Topic	Page	User*
Feeder Pan and Tube Assembly Process	40	
Assemble and Suspend the Feeder Line	40	
End Control Unit Assembly	44	
Anti-Roost Installation	45	
Auger Installation	48	
Auger Brazing.	50	
Intermediate Control	51	I
Proximity Switch Adjustment	54	C,I
Setting the Delay.	54	
Adjusting the Sensitivity.	54	
Meal-Time Feeding Guidelines	55	C
Controlling the Feeders (optional equip.)	56	C,I
End & Intermediate Control Wiring Diagrams: Single Phase(Ø)	57	I
Single Phase(Ø) Wiring Diagram	57	
Single Phase(Ø) Wiring Diagram with Motor Starter	57	
End & Intermediate Control Wiring Diagrams: Single Phase(Ø)	58	I
Single Phase(Ø) Wiring Diagram with Proximity Switch	58	
Single Phase(Ø) Wiring Diagram with Proximity Switch & Motor Starter	58	
End & Intermediate Control Wiring Diagrams: Three Phase(Ø)	59	I
Three Phase(Ø) Wiring Diagram: 220 V.	59	
Three Phase(Ø) Wiring Diagram: 380/415 V.	59	
Parts Listing	60	C,D,I
200# Hopper Components	60	
100 # Hopper Components	61	
Switch Kit (Part Number 8798)	62	
Single Boot Components Part No. 6822.	63	
Twin Boot Components Part No. 6824.	63	
Feeder Line Components	64	
Model C2 Plus Feeder Pan Assemblies	65	
Model C2 Plus Feeder Pan Assemblies - Continued	66	
Model G Plus Feeder Pan Assemblies	67	
Model G Plus Feeder Pan Assemblies - Continued	68	
Power Unit Assemblies.	69	
Power Unit Assembly Part Numbers:	69	
Model C2 Plus Mechanical End Control	70	
Model C2 Plus Mechanical Intermediate Control	71	
Model C2 Plus Proximity End Control.	72	
Model C2 Plus Proximity Intermediate Control.	73	
Model G Plus Mechanical End Control	74	
Model G Plus Mechanical Intermediate Control	75	
Model G Plus Proximity End Control.	76	
Model G Plus Proximity Intermediate Control.	77	
2883 Power Winch	78	
Miscellaneous Suspension Components.	79	
Model G Plus Optional Item.	79	
Maintaining the Floor Feeder	80	C
Trouble Shooting the Floor Feeding System	82	C,I

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

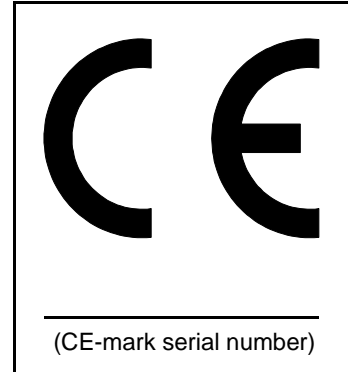
Support Information

The Chore-Time Model C2 Plus & G 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 order 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.*



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.



DANGER

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



WARNING

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



CAUTION

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

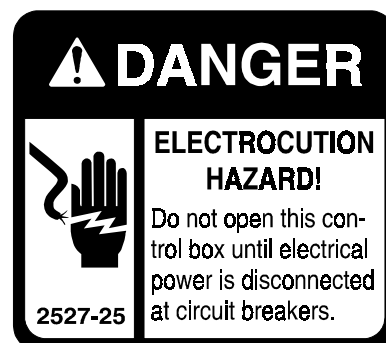
Disconnect electrical power before inspecting or servicing equipment unless maintenance instructions specifically state otherwise.

Ground all electrical equipment for safety.

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

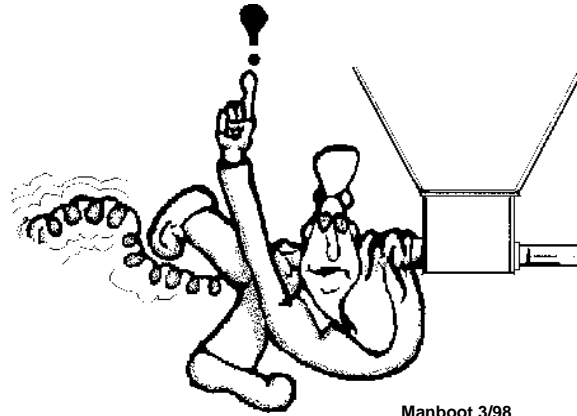
Ground all non-current carrying metal parts to guard against electrical shock.

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



CAUTION:

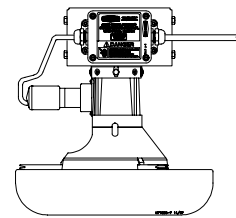
Use caution when working with the Auger--
springing auger may cause personal injury.



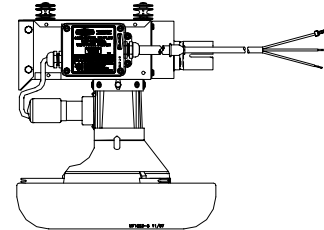
Manboot 3/98

Glossary of Terms

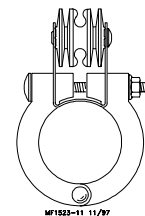
Intermediate Control: . . A feeder, equipped with a switch, (located near the center of the feeder line) used to control the feeding system when partial house brooding.



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

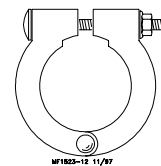


Item #1 Anti-Roost Bracket: . . An insulator and bracket assembly mounted on every fourth or fifth clamp to support shocker wire.



MF1823-11 11/97

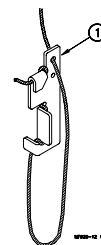
Item #2 Clamp: A two-piece, riveted strap used to secure auger tubes together.



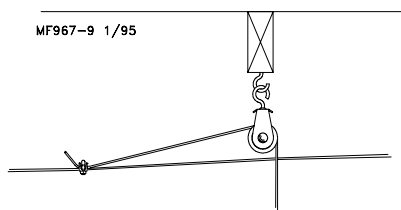
MF1823-12 11/97

Glossary of Terms - continued

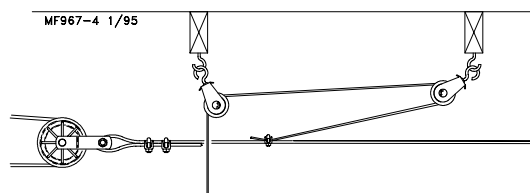
Adjustment Leveler: A cable locking device used to conveniently adjust the feeder to a level position.



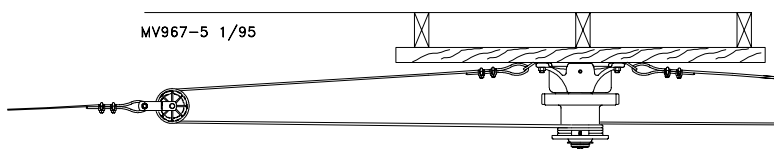
Drop Line: A section of cable fastened to the main cable, routed through a pulley, down to the feeder line.



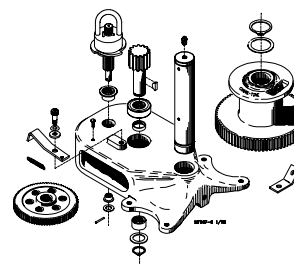
Throw-back: . . . A cable/pulley arrangement that allows cable to be routed to a desired location.



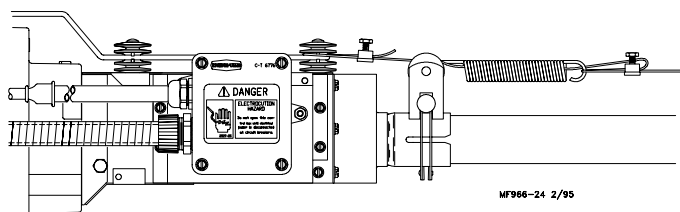
Double-back: . . . A cable/pulley arrangement that reduces the load on the Power Winch.



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 feeder pan assembly is different for each of the feeder systems. Refer to the applicable feeder pan assembly section.

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 C2 Plus, G Plus Feeders all use plastic feeder pans.

Each of the feeders 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, and turkey hens 6 to 14 weeks old*. Each 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 C2 Plus, G Plus	60 to 75
Broiler Breeder	Model C2 Plus, G Plus	14 to 15
Commercial Leghorn Pullet or Hen (0 to 18 weeks)	Model C2 Plus, G Plus	20 to 25
Commercial Leghorn Pullet or Hen (19 to 65 weeks)	Model C2 Plus, G Plus	45 to 50
Turkey Poults (0 to 0 weeks)	Model C2 Plus, G Plus	60 to 65
Turkey Poults (5 to 17 weeks)	Model G Plus (with Pan Lip Extension*)	40 to 45
Ducks (0 to 3 weeks)	Model G Plus	60 to 70
Ducks (4 to 8 weeks)	Model G Plus	50 to 60
Ducks Layer	Model G Plus	40 to 45
Guinea (0 to 8 weeks)	Model G Plus	45 to 55

*The Model G Plus Feeder with Pan Lip Extension is the only feeder recommended for use with turkey hens from 6 to 14 weeks old.

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 C2 Plus, G 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 C2 Plus, G 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 C2 Plus , G 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 C2 Plus, G Plus Feeder systems are covered below. In addition, each style of feeder has a section, explaining some of its individual features. Refer to the section that applies to the feeder you have purchased.

The *Model C2 Plus Features* are covered on pages **12** through **14**.

The Model G Plus Features are covered on page **15**.

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.

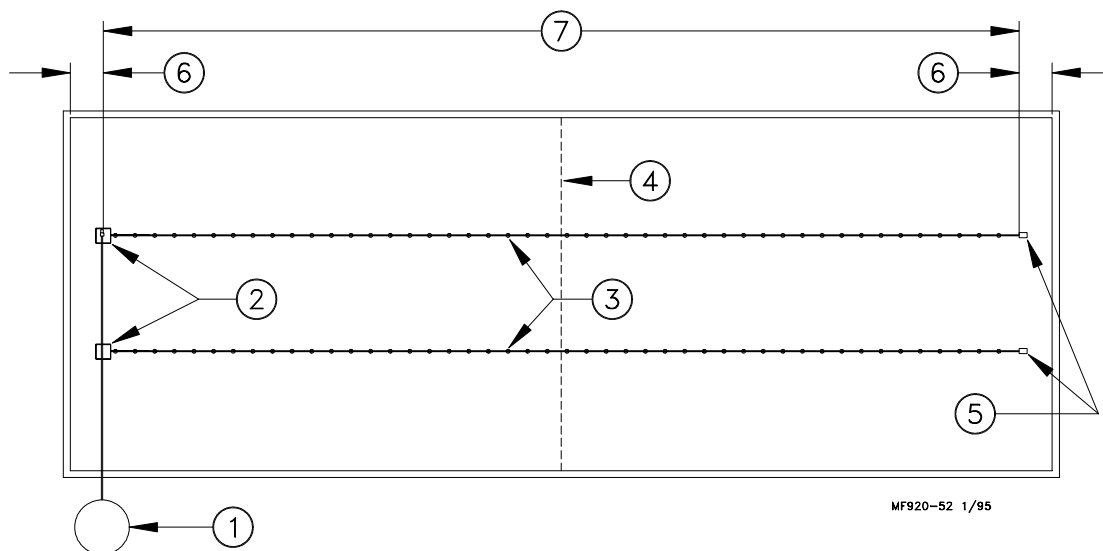


Figure 1. Component location diagram for systems up to 400 feet (122 m). (Top View).

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.

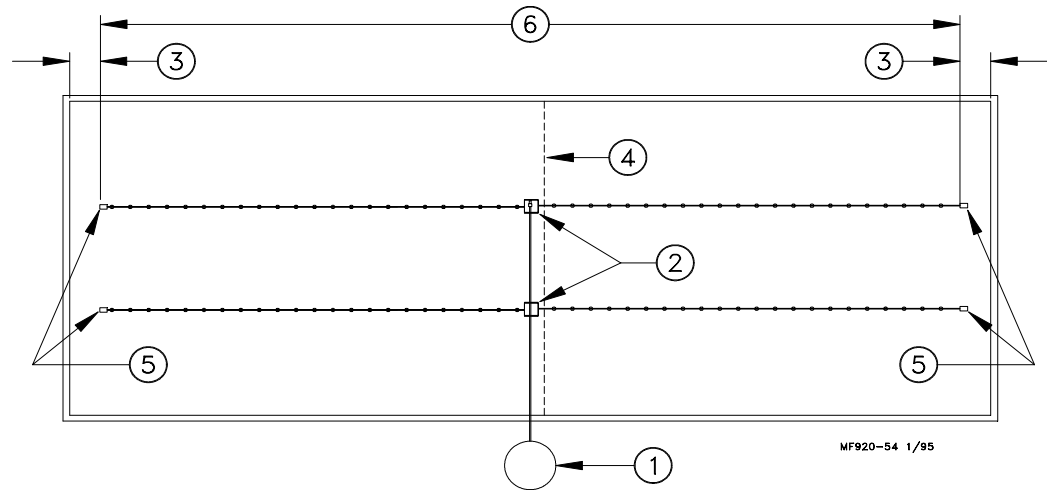


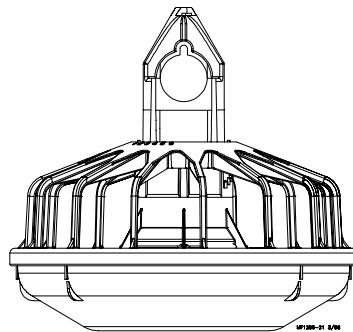
Figure 2. Component location diagram for systems over 400 feet (122 m). (Top View).

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 C2 Plus Features

The Model C2 Plus Feeder is designed to be used on broilers, cockerels, pullets and hens from day old through grow out.

Standard Model C2 Plus Feeder
(With Feed Windows)



1-Piece Model C2 Plus Feeder
(Windowless)

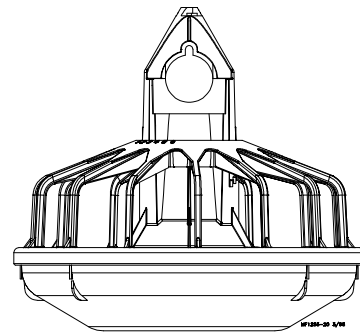


Figure 3. Model C2 Plus Feeder

The Model C2 Plus Feeder has a variety of features as shown in Figures 4 through 10.

The Model C2 Plus Feeder components are all plastic to avoid rust and corrosion while providing years of trouble free service. See Figure 4.

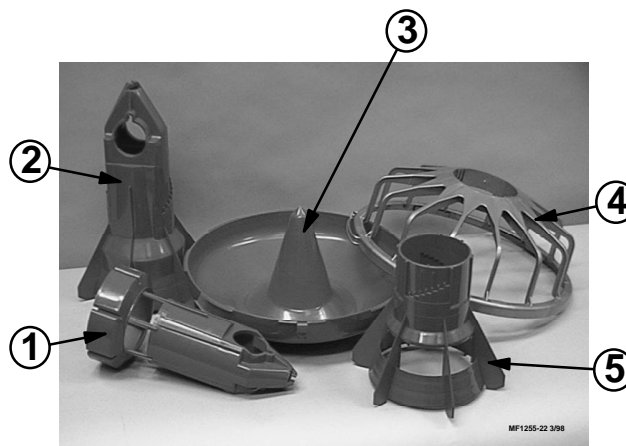


Figure 4. Model C2 Plus Plastic Parts

Item	Description
1	Two-Piece Cone Top
2	One-Piece Cone
3	Feeder Pan
4	Feeder Grill
5	Two-Piece Cone Bottom

The C2 Plus 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.

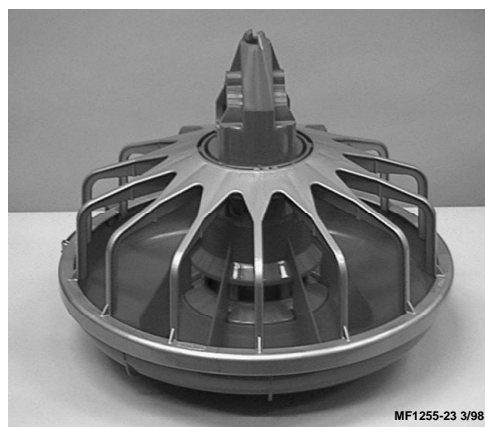


Figure 5. Model C2 Plus Feeder with window

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.

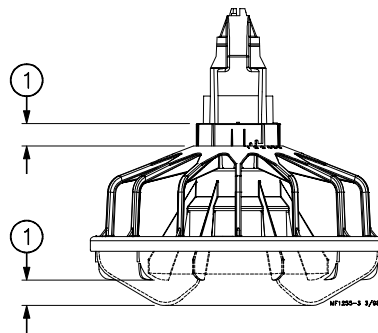


Figure 7. Feed Opening Dimension

Item	Description
1	3/4" (19.05 mm)

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

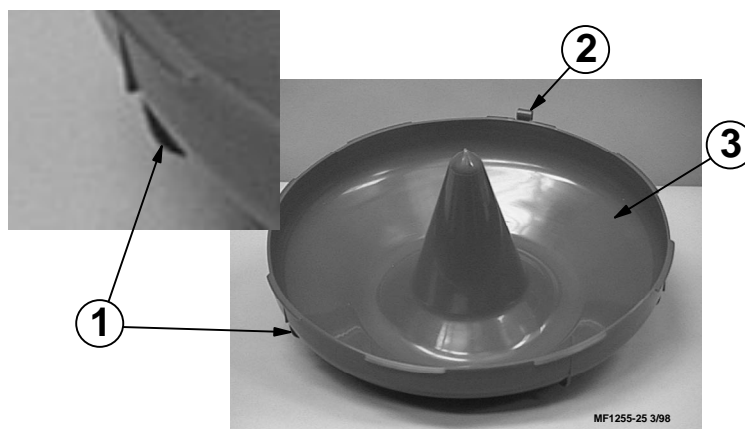


Figure 8. Formed Tabs on Pan

Item	Description
1	Turn Tabs
2	Pan Hanger
3	Feeder Pan

The standard feeder uses a one piece Support Cone as shown in Figure 9. The Removable Top Support Cone, not shown, is also available.

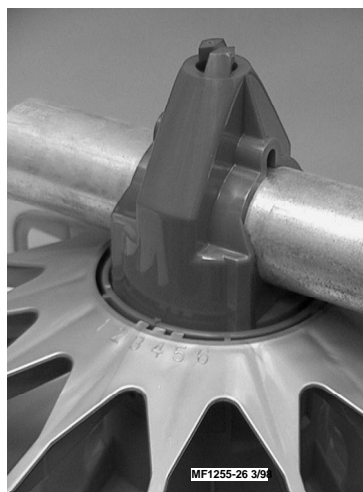


Figure 9. One-Piece Swinging Support Cone

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

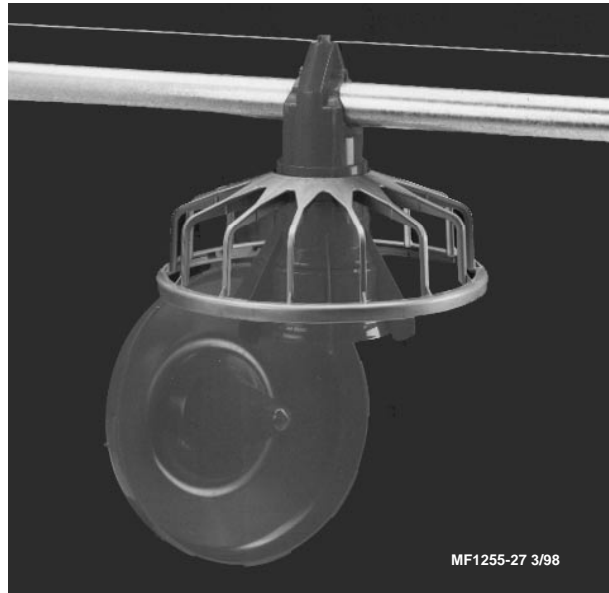


Figure 10. Disassembled Feeder Assembly for Cleaning

Model G Plus Features

The recommended usages of the Model G Plus Feeder include broilers, cockerels, turkeys, and ducks. The Model G Plus may also be used to feed other types of birds.

The Model G Plus Feeders shown in Figure 11 has a 8 spoke grill which allows ample feed access for large birds. Features include a high cone feed pan and a Feed Level Tube with feed fins to provide minimal feed wastage. A valuable feature of the Model G Plus is feed flood windows which allows the feeder pan, when lowered to the floor, to be filled with feed for the brooding of young birds. The optional Pan Extension may be used to prevent feed wastage on large birds.

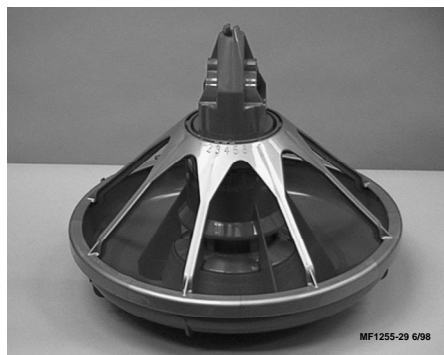


Figure 11. Model G Plus Feeder

The Model G Plus is available with the standard adjustable windowed Grill Support or the optional 1 piece (non-window) Grill Support. Both versions are shown in Figure 12. Both the windowed and the non-windowed cones are available with a optional removable top

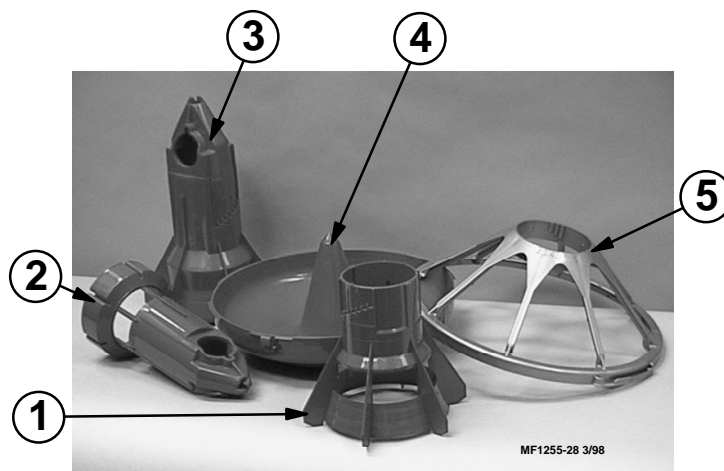


Figure 12. Model G Plus Plastic Parts

Item	Description
1	Two-Piece Cone Bottom
2	Two-Piece Cone Top
3	One-Piece Cone
4	Feeder Pan
5	Feeder Grill

The Model G Plus with Pan Extension, shown below in Figure 13, will be used to finish Turkey Hens to 14 weeks.

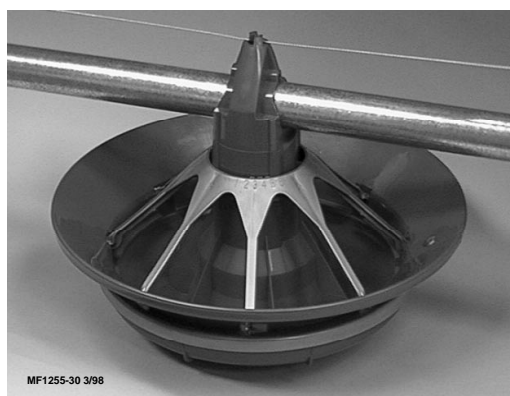


Figure 13. Model G Plus Feeder with Pan Extension

Feeder Management

General Operation of the Model C2 Plus and Model G Plus Feeders

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 Plus 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. 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.

Keeping the pans at the proper height prevents birds from raking feed excessively. For additional information on pan height adjustment refer to the diagram on page 20 in this manual.

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

In most cases, setting #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.

Optional Slide Shut-Off

An Optional Slide Shut-Off is available for Non-Windowed Feeder Assemblies. The Slide Shut-Off may be used on either style of feeders.

To assemble the Slide Shut-Off to the Non-Window Feed Cone, remove the thinned area from the Non-Windowed Feed Cone, then insert the Slide Shut-Off into the slots, as shown in Figure 14.

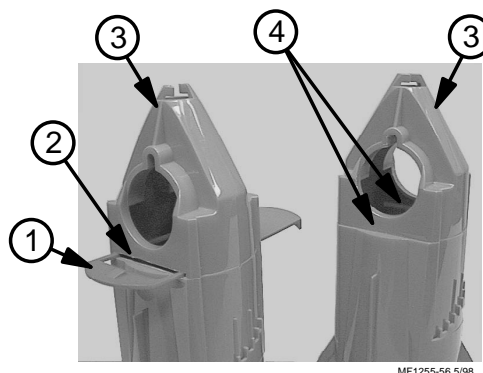


Figure 14. Optional Slide Shut-Off Assembly

Item	Description
1	Slide Shut-Off
2	Removed Portion of Non-Window Cone
3	Non-Window Cone
4	Thinned area on Non-Window Cone

Feeder Assembly

Assembly Box Construction for Model C2 Plus Feeders

This information and assembly only applies to Model C2 Plus installations.

Chore-Time recommends building an assembly box to aid in assembling the Model C2 Plus feeders.

To build the assembly box for the C2 Plus 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), these can be cut from a 5' (1.5 m) section of 2 x 10 (50 x 250 mm).

1. Cut a 3/4" (20 mm) piece of plywood 16" (400 mm) square. See Figure 15A.
Cut a 4" (100 mm) piece out of the middle of one side. See Figure 15A.
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 15B.
Mark a "V" at each strut location. Remove the grill.
Use a 7/8" (22 mm) spade bit to drill a hole at each strut location, as shown in Figure 15C.
3. Use a sabre saw to cut along the *inside* circle, between the 7/8" holes. See Figure 15D.
4. Use (4) 14-1/2" (370 mm) 2 x 10's (50 x 250 mm) to construct the box sides.
Nail the 3/4" plywood fixture to the box. See Figure 15E.
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.
Figure 15F shows how the grill should fit down in assembly box. NOTE: Board is cut away for clarity only.

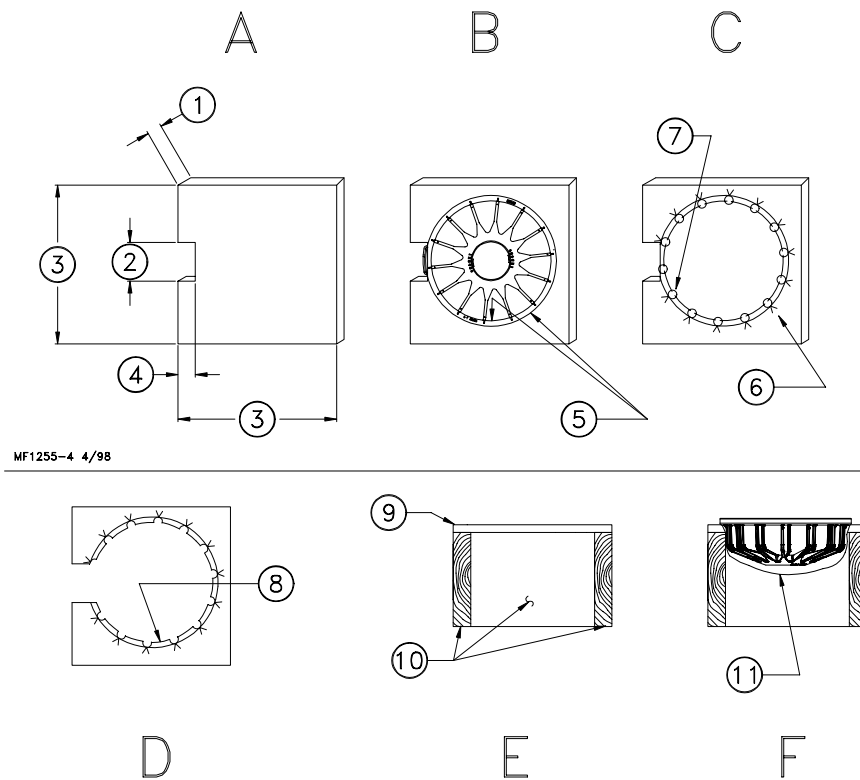


Figure 15. Model C2 Plus Assembly Box Construction

Item	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.
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"x14.5" (50x250x368 mm)
11	Board is shown cut away to clearly show the Grill set in assembly box.

Pan Assembly Procedure for Model C2 Plus Feeders

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 Plus Feeders: Install the Cone Adjustment and Support Cone in the grill, as shown in Figure 16.
One-Piece Model C2 Plus Feeders: Install the One-Piece Support Cone in the grill, as shown in Figure 16.

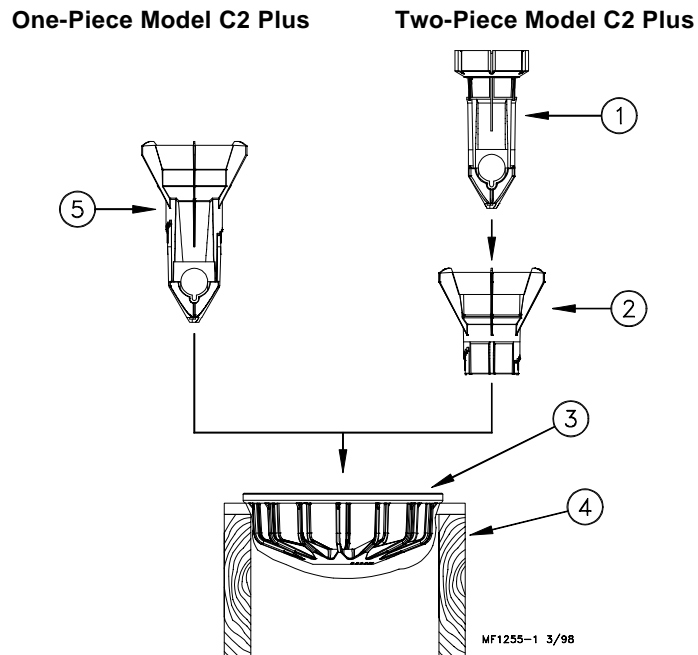


Figure 16. Model C2 Plus Feeder Assembly

Item	Description
1	Support Cone
2	Adjustment Cone
3	Model C2 Plus Grill
4	Pan Assembly Box
5	One-Piece Support Cone

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 17.
Flip the pan into the groove of the grill. Make sure the Feeder Pan is seaded in 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 side 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.

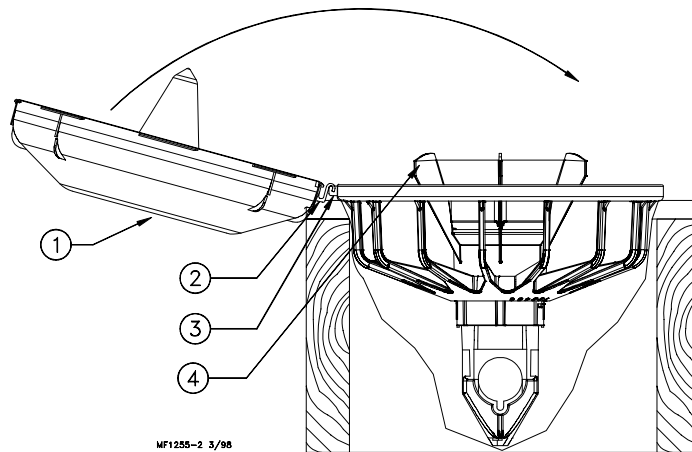


Figure 17. Assembling Pan to C2 Plus Grill

Item	Description
1	Feeder Pan
2	Feeder Pan Hinge Hook
3	Grill Hinge Lip
4	Support Cone

Assembly Box Construction for Model G Plus Feeders

This information and assembly only applies to Model G Plus installations.

Chore-Time recommends building an assembly box to aid in assembling the Model G Plus feeders.

To build the assembly box for the G Plus 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), these can be cut from a 5' (1.5 m) section of 2 x 10 (50 x 250 mm).

1. Cut a 3/4" (20 mm) piece of plywood 16" (400 mm) square. See Figure 18A.
Cut a 4" (100 mm) piece out of the middle of one side. See Figure 18A.
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 18B.
Mark a "V" at each strut location.
3. Remove the grill.
Use a 7/8" (22 mm) spade bit to drill a hole at each strut location, as shown in Figure 18C.
4. Use a sabre saw to cut along the *inside* circle, between the 7/8" holes. See Figure 18D.
5. Use (4) 14-1/2" (370 mm) 2 x 10's (50 x 250 mm) to construct the box sides.
Nail the 3/4" plywood fixture to the box. See Figure 18E.
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. Figure 18F shows how the grill should fit down in assembly box. NOTE: Board is cut away for clarity only.

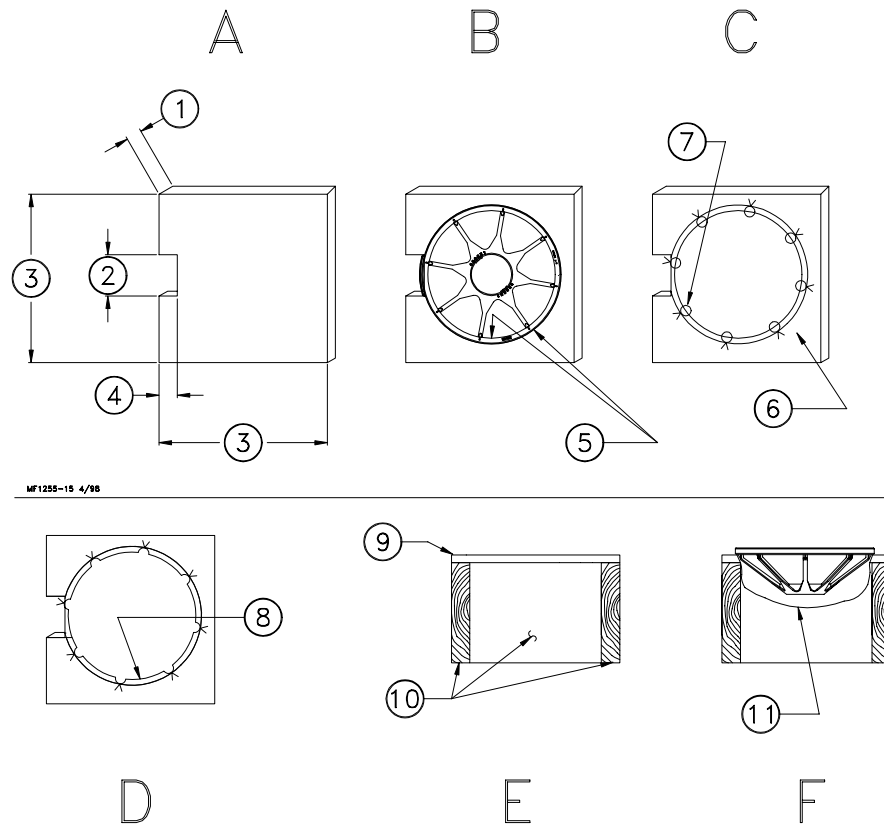


Figure 18. Model G Plus Assembly Box Construction

Item	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.
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"x14.5" (50x250x368 mm)
11	Board is shown cut away to clearly show the Grill set in assembly box.

Pan Assembly Procedure for Model G Plus Feeders

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 G Plus Feeders: Install the Cone Adjustment and Support Cone in the grill, as shown in Figure 19.
One-Piece Model G Plus Feeders: Install the One-Piece Support Cone in the grill, as shown in Figure 19.

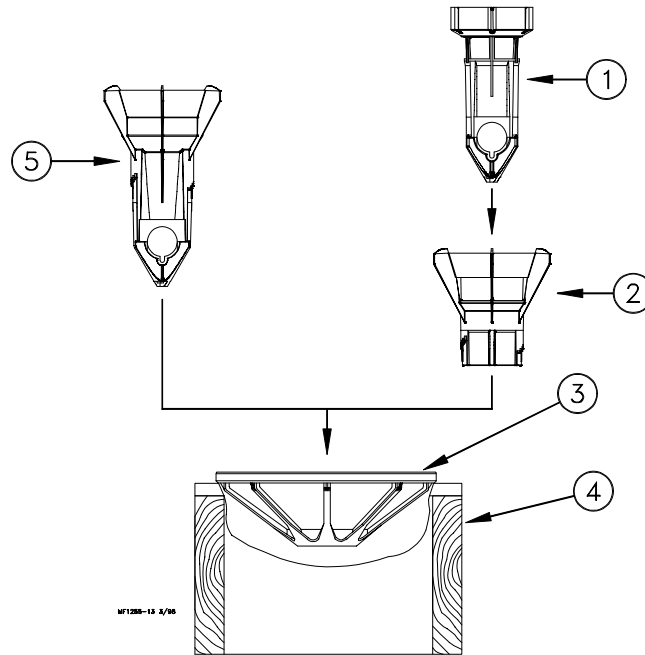


Figure 19. Model G Plus Feeder Assembly

Item	Description
1	Support Cone
2	Adjustment Cone
3	Model G Plus Grill
4	Pan Assembly Box
5	One-Piece Support Cone

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 20.
Flip the pan into the groove of the grill. Make sure the Feeder Pan is seated in 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.

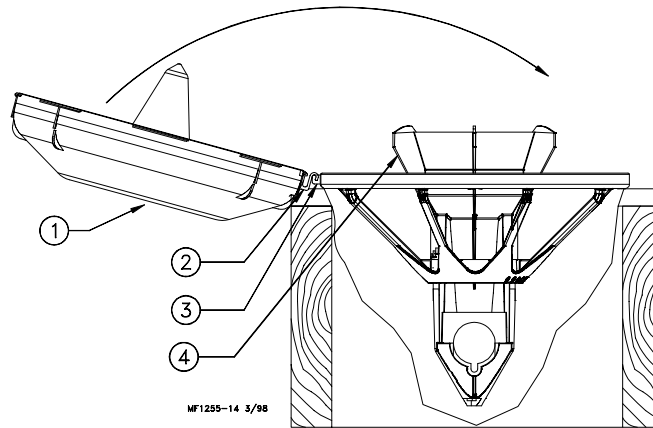


Figure 20. Assembling Pan to Model G Plus Grill

Item	Description
1	Feeder Pan
2	Feeder Pan Hinge Hook
3	Grill Hinge Lip
4	Support Cone

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 C2 Plus & G Plus Feeders. The type of installation required depends on feeder line length. Figure 22, on page 29, shows the suspension system for feeder line lengths to 350' (107 m). Figure 23, on page 30, shows the suspension system for feeder lines over 350' (107 m).

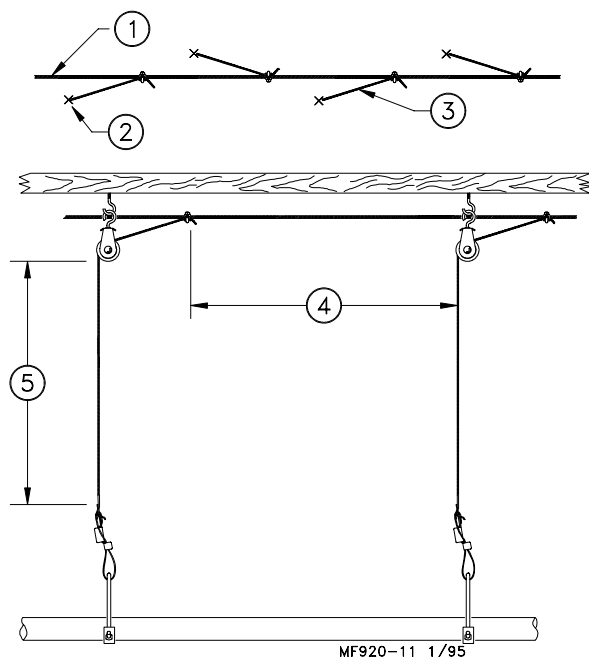
IMPORTANT: Special support is required at each Power Unit and Hopper location. Figures 22 and 23 show the **additional** suspension required at these locations.

- **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 C2 Plus & G 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 21.



Item	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 21. Drop Line Off Set Detail

For systems up to 350' (107 m).

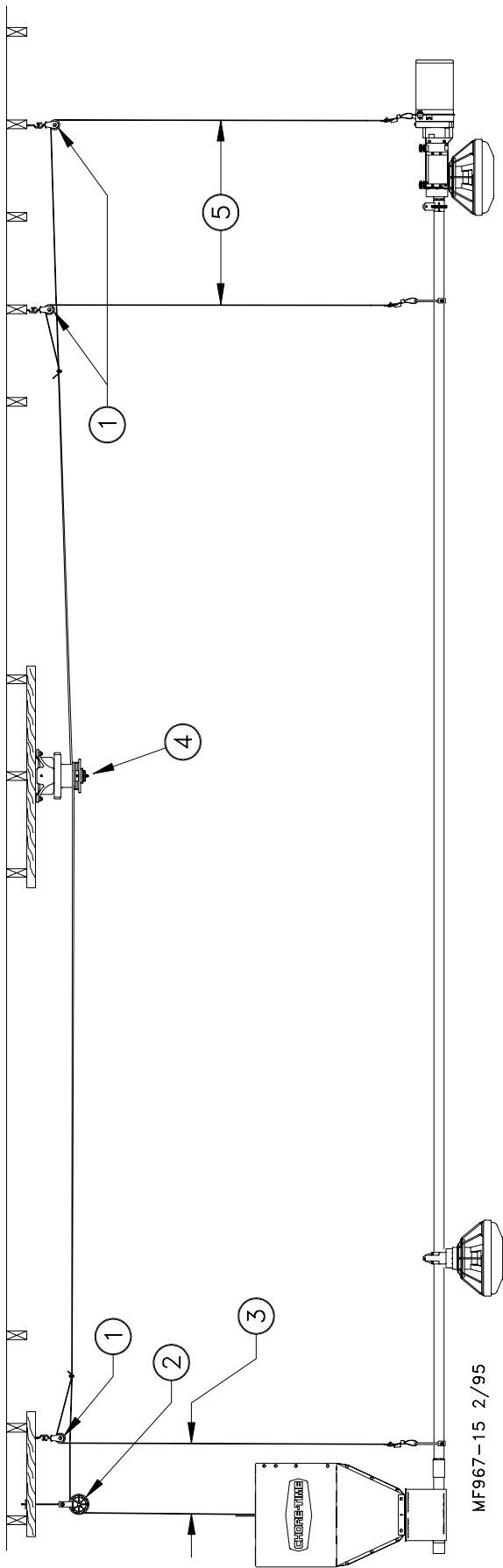


Figure 22. Suspension for systems up to 350' (107 m)

Item	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).

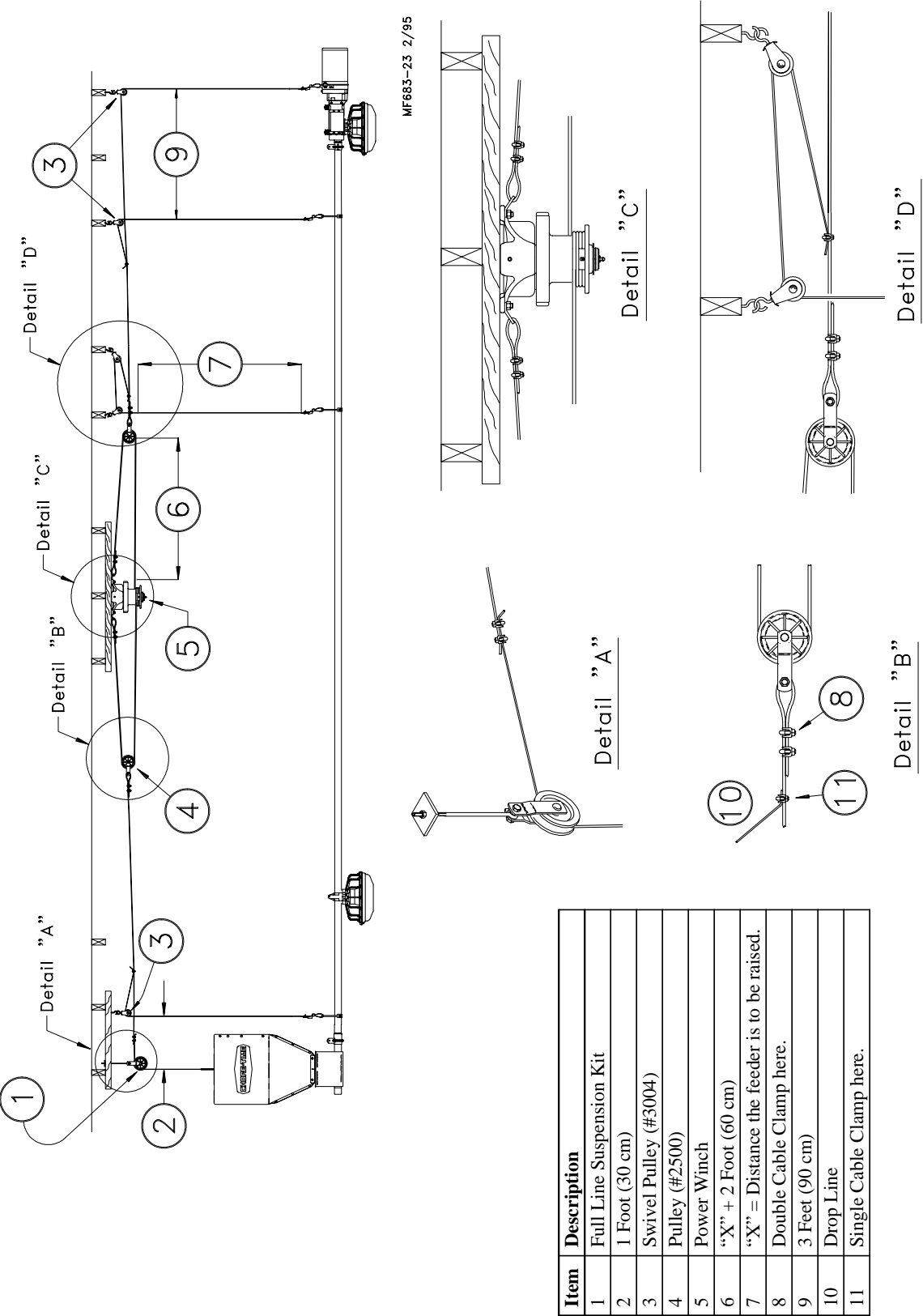


Figure 23. Suspension for systems over 350' (107 m)

Refer to Figures 24 or 25 through 29 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 24.

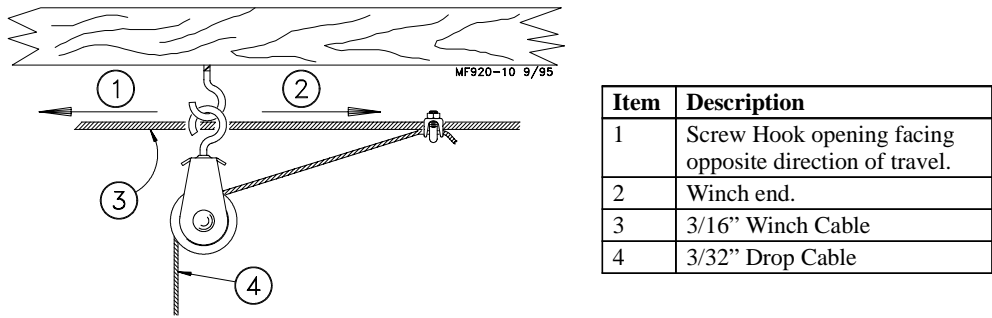


Figure 24. Screw Hook Installation

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 25 - 29.

Wide Steel Truss Installations

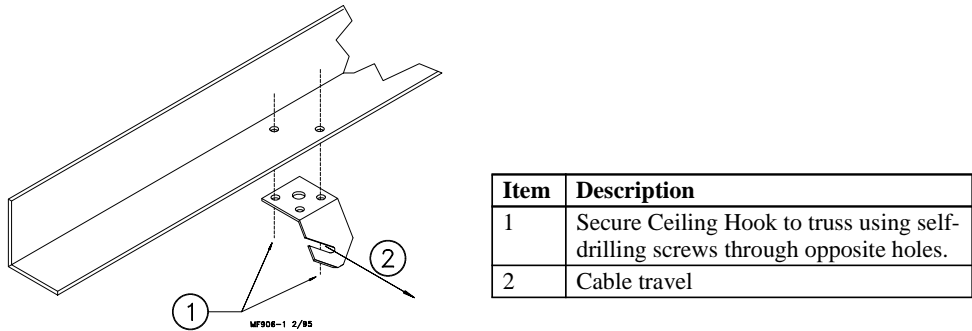


Figure 25. Wide Steel Truss Ceiling Bracket Installation

Narrow Steel Truss Installations

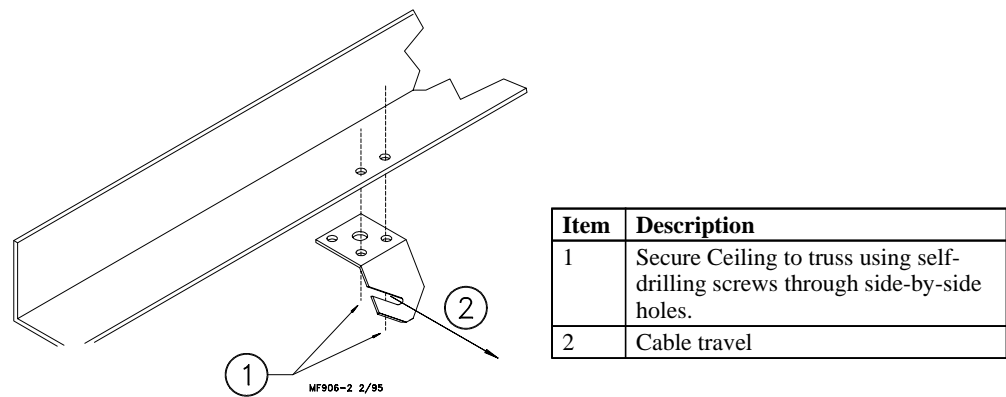


Figure 26. Narrow Steel Truss Ceiling Bracket Installation

Steel Truss Welded Installations

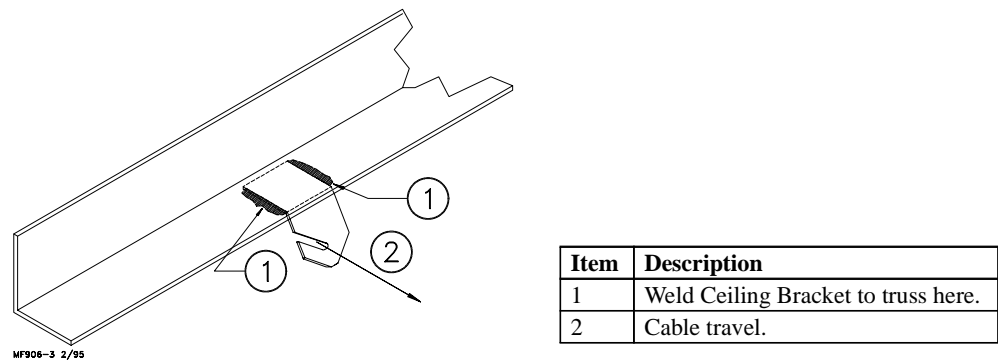


Figure 27. Welded Steel Truss Ceiling Bracket Installation

Wood Truss Installations

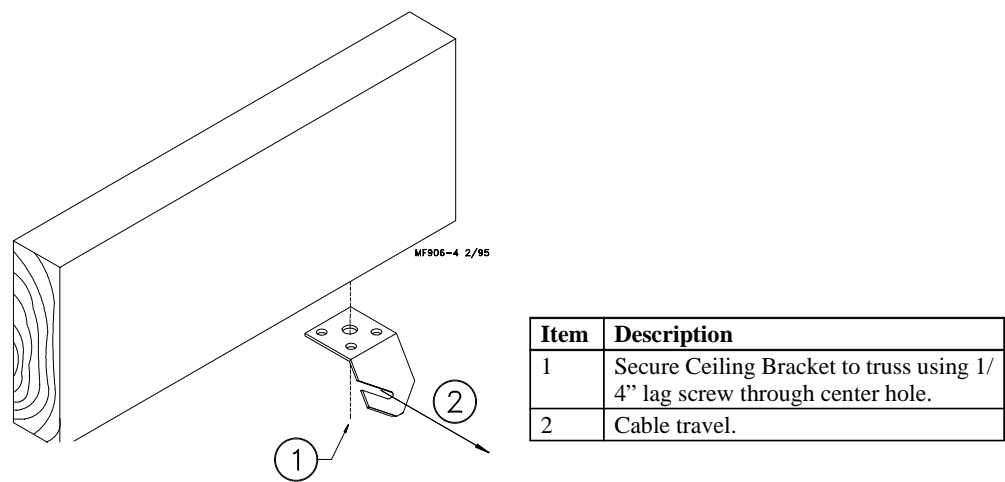


Figure 28. Wood Truss Ceiling Bracket Installation

- After securing the Ceiling Hook to the truss, slide the hook of a Swivel Pulley into the slot, as shown in Figure 29.

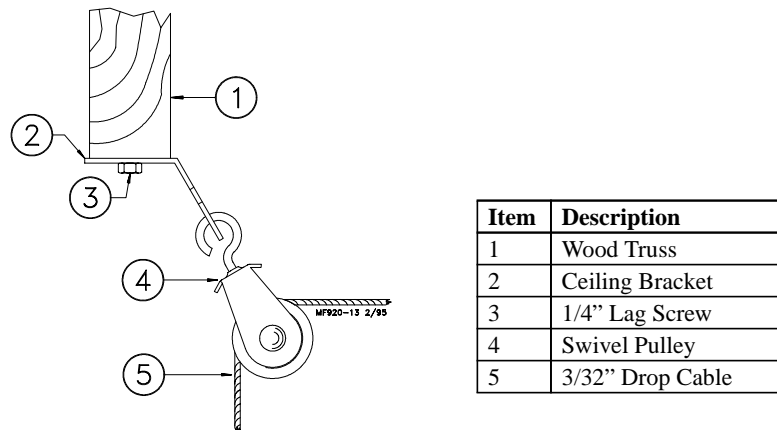


Figure 29. Pulley Installation

Power Winch Installation

- 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 30.

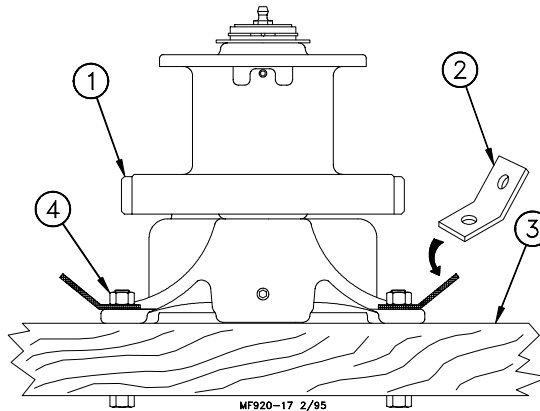


Figure 30. Assembling the Power Winch to the Rafters

Item	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.

- Attach the 2"x8" (50x200 mm) board (with the Power Winch secured) to the ceiling at the center of the feeder line. See Figure 31 on page 34. 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 31.

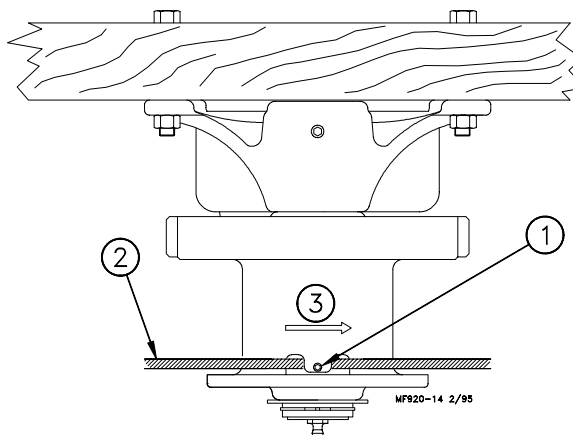


Figure 31. Attaching the Cable to the Power Winch

Item	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 32.

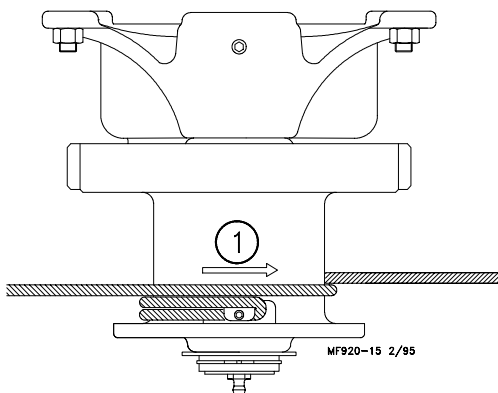


Figure 32. Power Winch Drum Rotation

Item	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 24 or 29.

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 23 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 C2 Plus & G Plus. Refer to applicable instructions.

200# Hopper

Loosely, assemble the 200# Hopper Side Panels, as shown in Figure 33, 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.

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

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

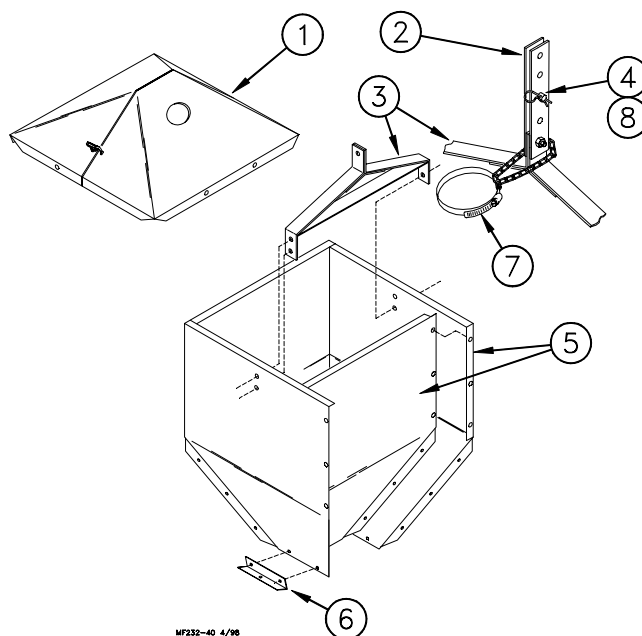


Figure 33. 200# Hopper Assembly Procedure

Item	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

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 34 shows the suspension components assembled. The pin should be located in the center hole of the Hanger. Figure 35 shows the assembled hopper with suspension components installed.

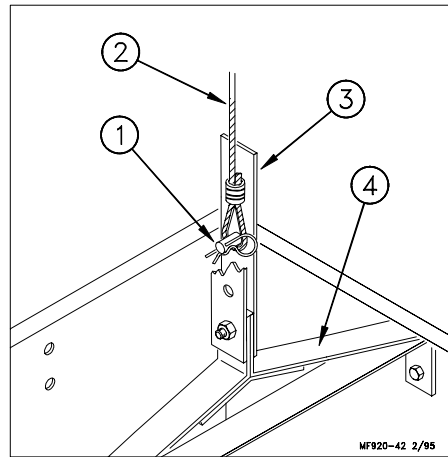


Figure 34. 200# Hopper Suspension Components

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

Suspend the hopper, as shown in Detail A (Figure 22) 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 33, 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.

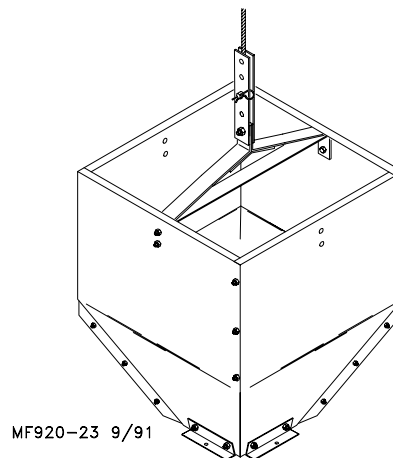


Figure 35. Assembled 200# Hopper w/o Cover

100# Hopper

Loosely, assemble the 100# Hopper Side Panels, as shown in Figure 36, using 1/4-20 bolts and 1/4-20 hex nuts (supplied in Hardware Package).

Assemble the Hopper Hangers, as shown in Figure 36.

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.

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

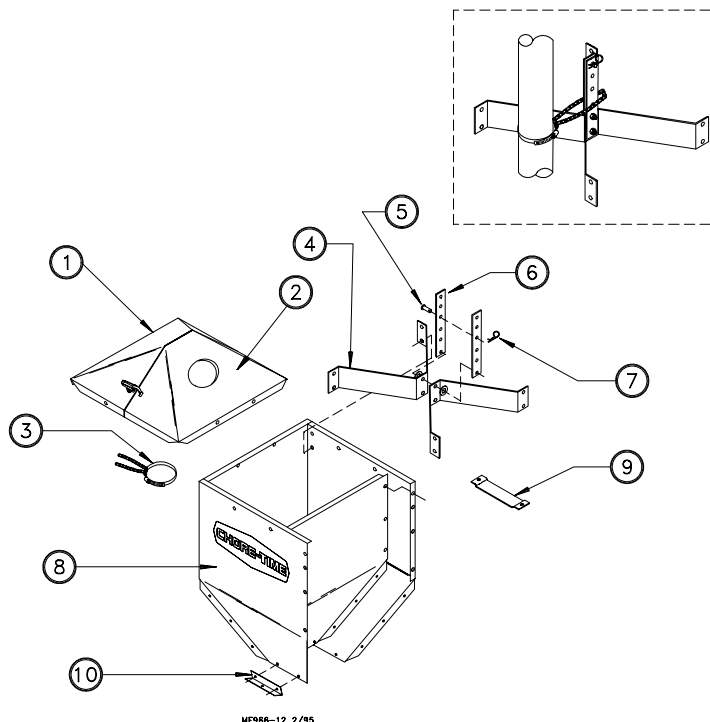


Figure 36. 100# Hopper Assembly Procedure

Item	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
9	Switch Mount Bracket
10	Boot Hanger

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 37 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 (Drop Tube supplied with the fill system).

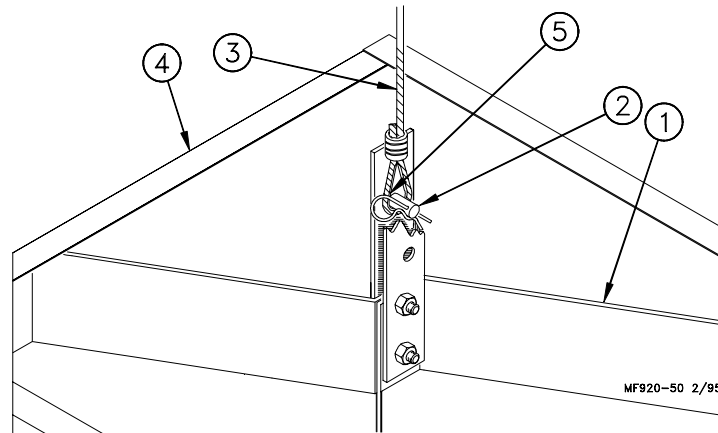


Figure 37. 100# Hopper Suspension Components

Item	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 23 on page 30) 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.

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 36, 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 C2 Plus & G Plus Feeders: When sliding the feeders on the tubes, make sure the grill openings or hinges are on the same side of the tube.

1. Rotate the auger tubes so that the seam is down, this holds the Pan Assemblies in place on the tubes. See Figure 38..

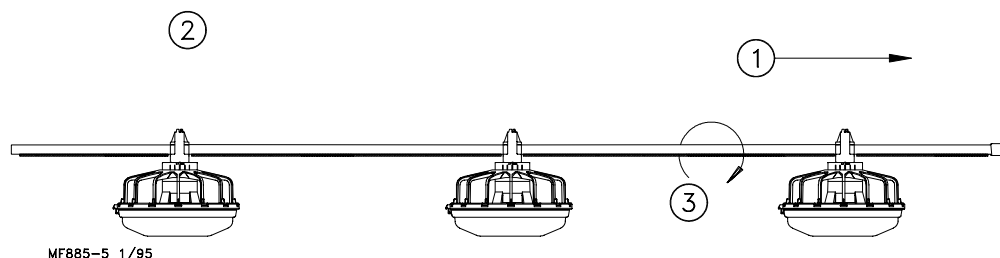
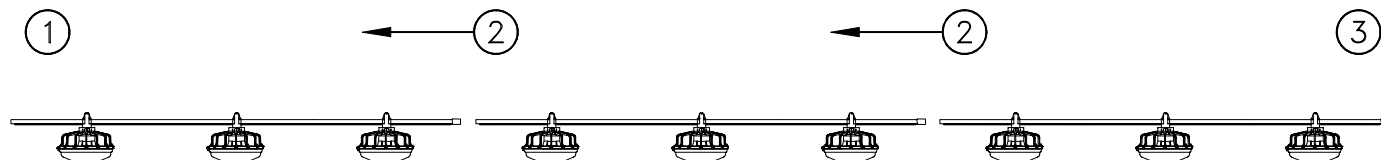


Figure 38. Assemble Feeders on tubes

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 39
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.



MF966-13 1/95

Figure 39. Attaching Feeder Tube Assemblies

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 40.

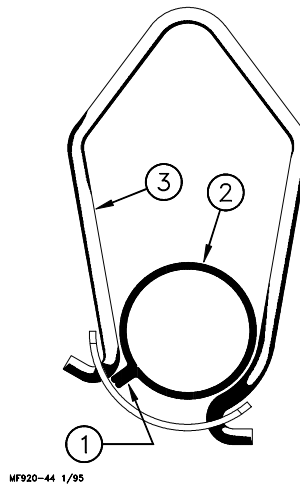


Figure 40. Hanger Installation

Item	Description
1	Tube Seam
2	Auger Tube
3	Hanger

4. Place a Tube Clamp Assembly or Clamp/Anti-Roost Bracket at each joint. Figure 41 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 joint in the system use the standard Tube Clamp Assembly.

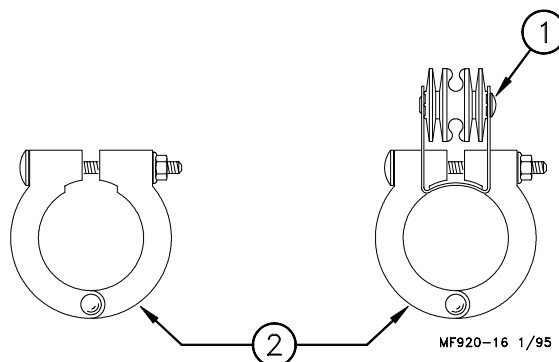
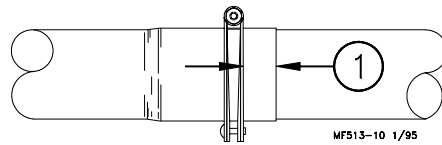


Figure 41. Tube Clamp and Tube Clamp with Anti-Roost Bracket

Item	Description
1	Anti-Roost Bracket
2	Standard Clamp

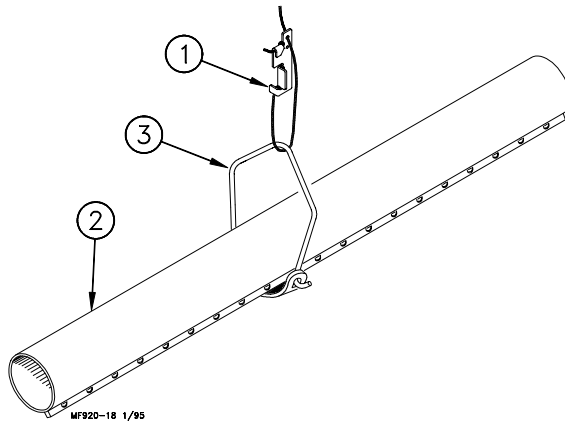
Continue down the entire length of the feeder line so that every joint is secured with a standard Clamp or Clamp/Anti-Roost Bracket. Figure 42 shows the proper clamp location on the tube joint. Do not tighten the clamp at this time.



Item	Description
1	1/4" (6 mm)

Figure 42. Clamp Installation

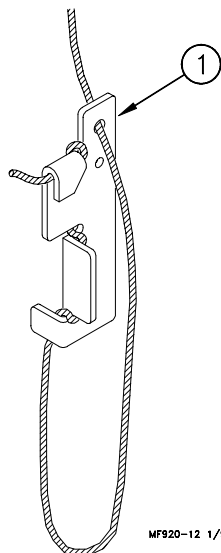
5. Install the Hangers on the trough at the 8' (2.4 m) spacings determined by the suspension drop lines. Figures 40 and 43 show the proper installation of the Hanger Assembly. Make sure the outlet drop hole is downward when the Hangers are installed, otherwise feed will not be allowed to drop into the feeder pan.



Item	Description
1	Cable Lock
2	Auger Tube
3	Hanger

Figure 43. Hanger Installation

6. Install Adjustment Leveler within 6" (152 mm) of feeder line. Figure 44 shows the proper cable routing around the Adjustment Leveler.



Item	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 44. Cable Lock Threading

7. 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.
8. Raise the feeder line to a convenient working height.
9. With the feeder line suspended, measure from the floor or ceiling to the auger tubes to level the system.
10. 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.
 - make sure the clamps are located, as shown in Figure 42.

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 45.

1. Bolt the Anchor Bracket key # 2 to the Power Unit using the (4) bolts (key #3) to 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 key # 5 to the Anchor Bracket, using 1/4-20 bolts.

Connect the power/control unit to the feeder line using a clamp/anti-roost bracket.

3. 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.

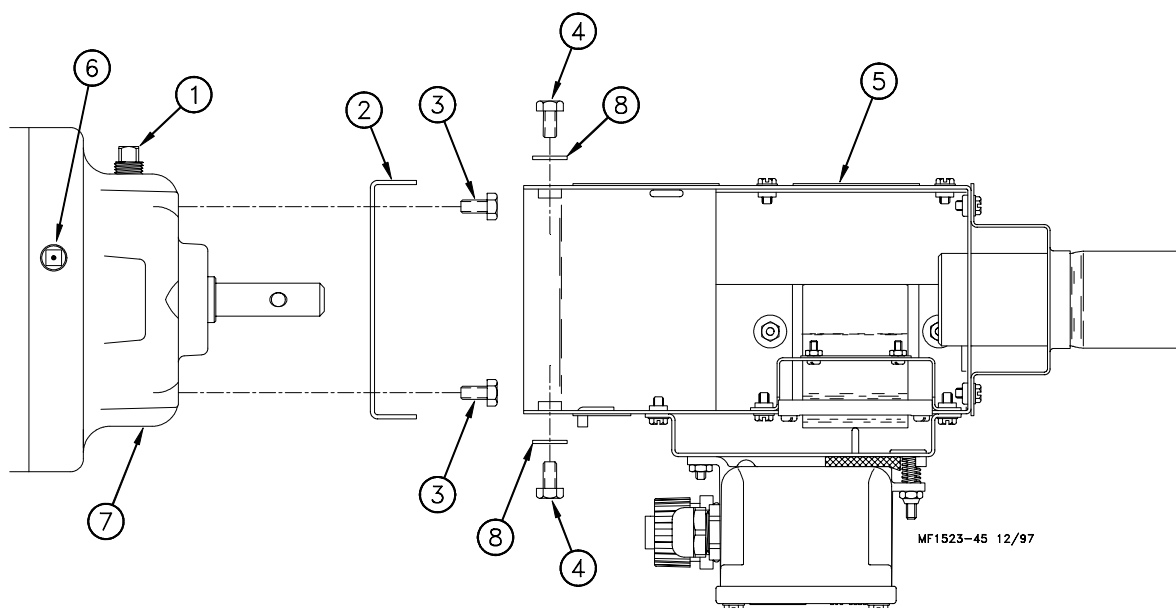


Figure 45. Control Unit Installation

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

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.

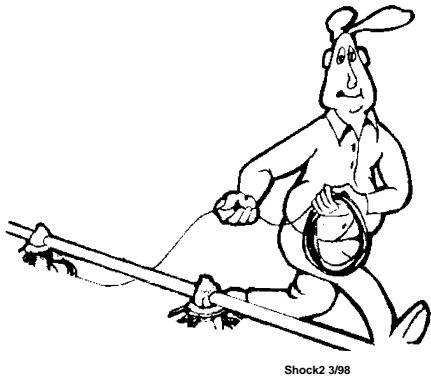
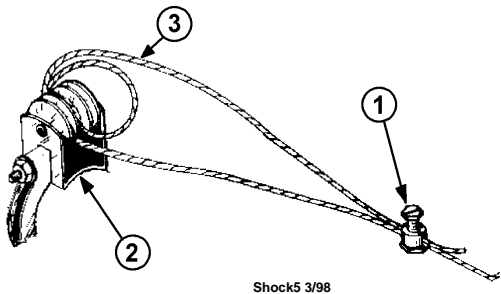


Figure 46. Unrolling the Cable

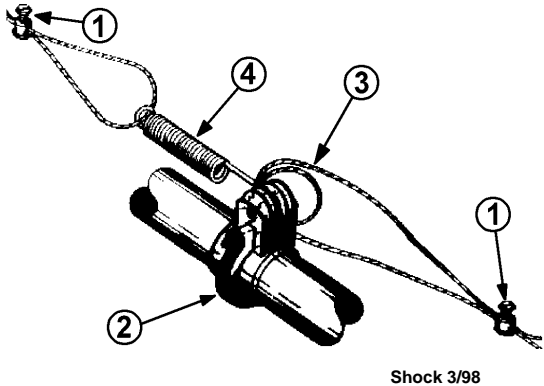
2. Start at the hopper end of the line and form a loop around the anti-roost bracket. For best results, make a double loop around the anti-roost insulator in the center groove of the insulator and fasten with a 1/16" cable clamp as shown in Figure 47.



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

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.



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

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.
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.

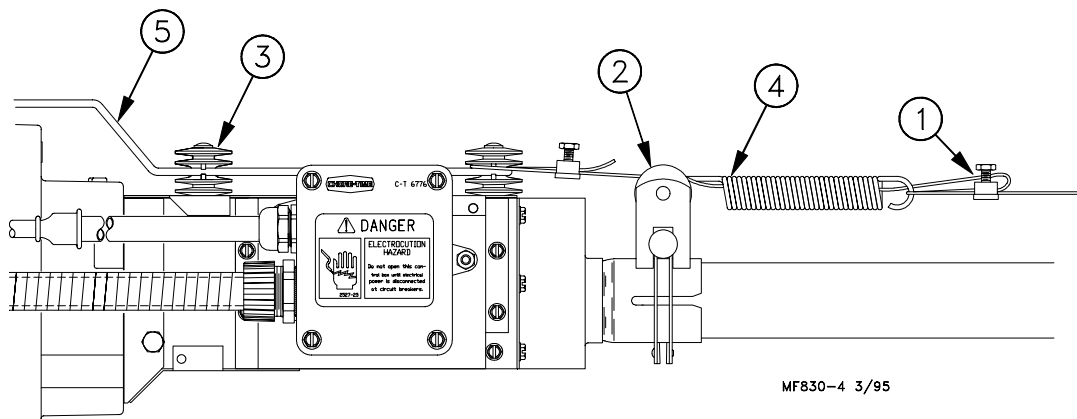


Figure 49. Anti-Roost Installation at the Control Unit

Item	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.

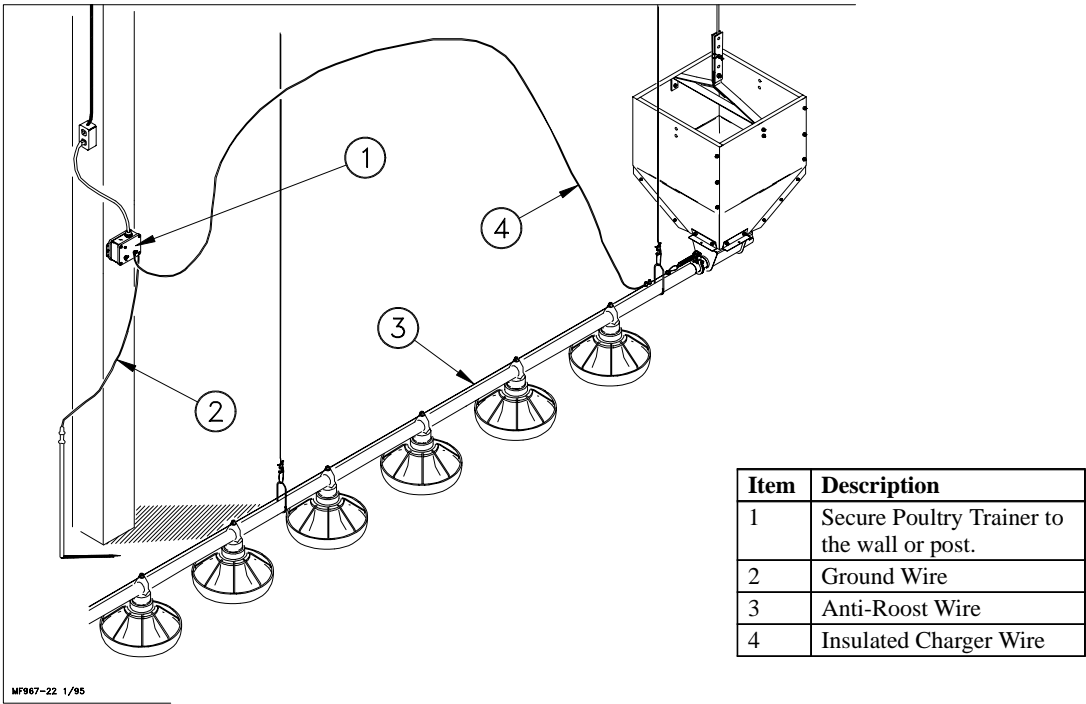


Figure 50. Poultry Trainer Installation

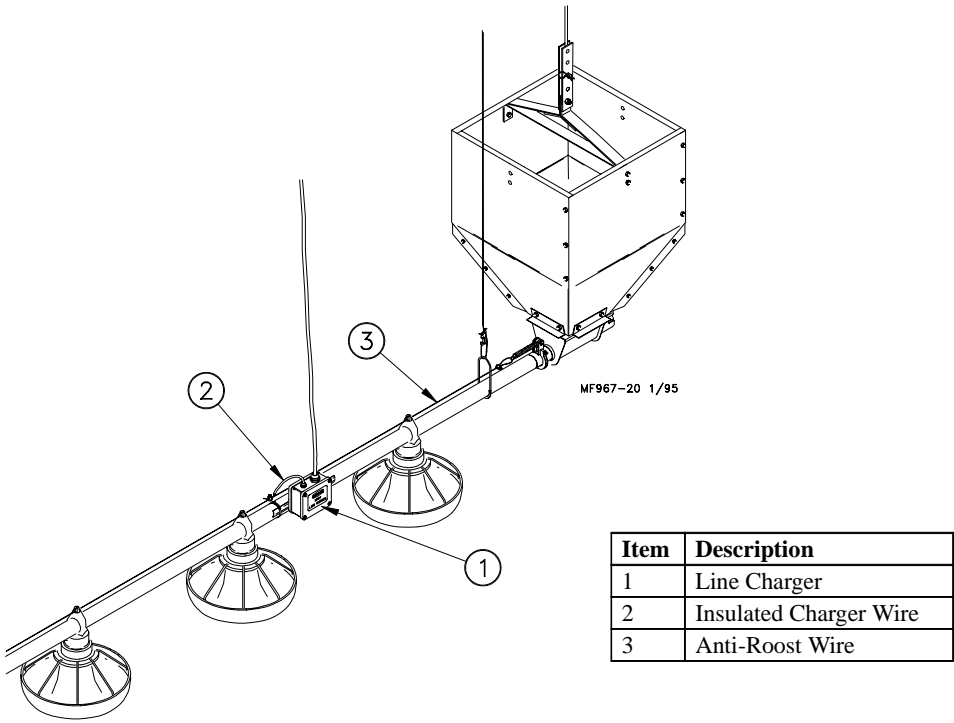
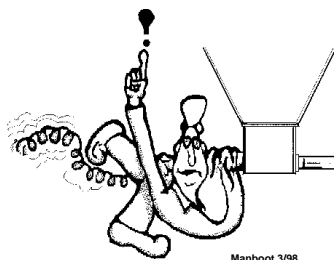


Figure 51. Line Charger Installation

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 from 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 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. 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.

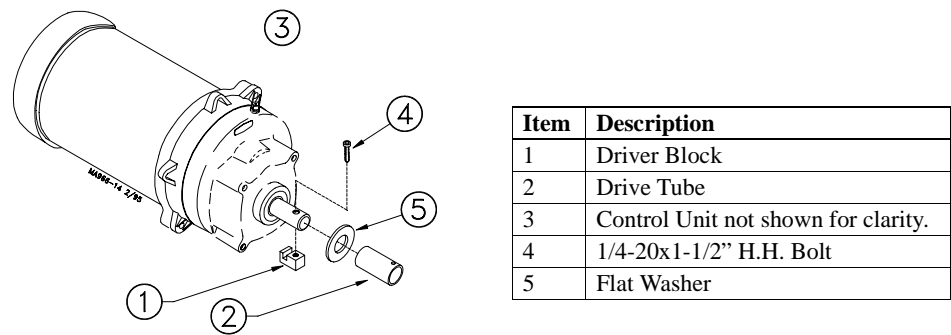


Figure 52. Auger Driver Components

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.

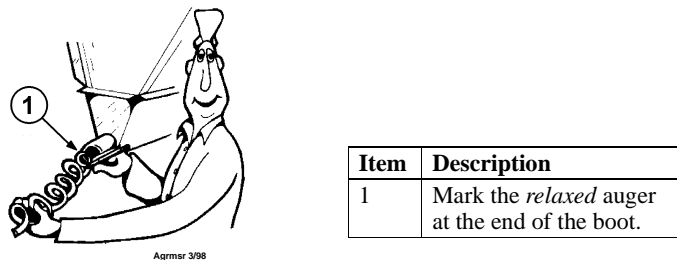


Figure 53. Measure the Auger from the relaxed position

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.

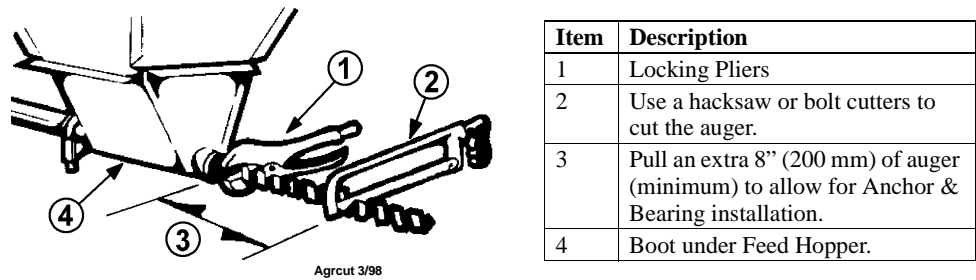
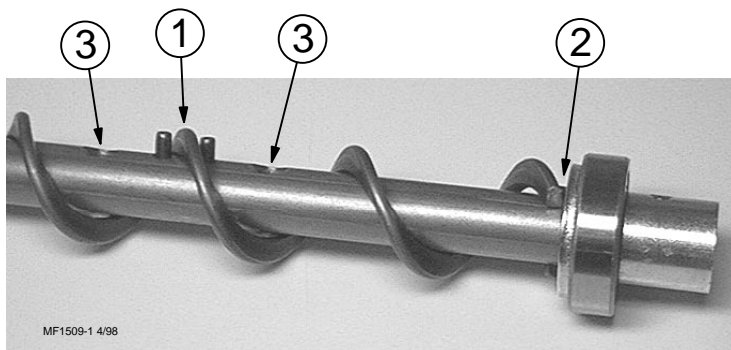


Figure 54. Cut the Auger with required stretch

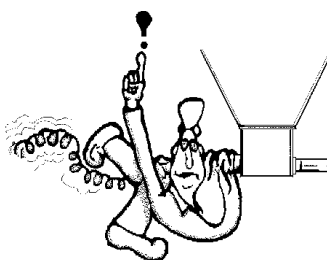
9. Insert the Anchor Assembly into the auger until it touches the washer at the back of the anchor. Tighten the setscrews in the center of the anchor until they touch the auger, then tighten a maximum of 1/2 turn. See Figure 55. **DO NOT OVERTIGHTEN THE SET SCREWS.**



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

Figure 55. Auger and Anchor Bearing Connection

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, **DO 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.

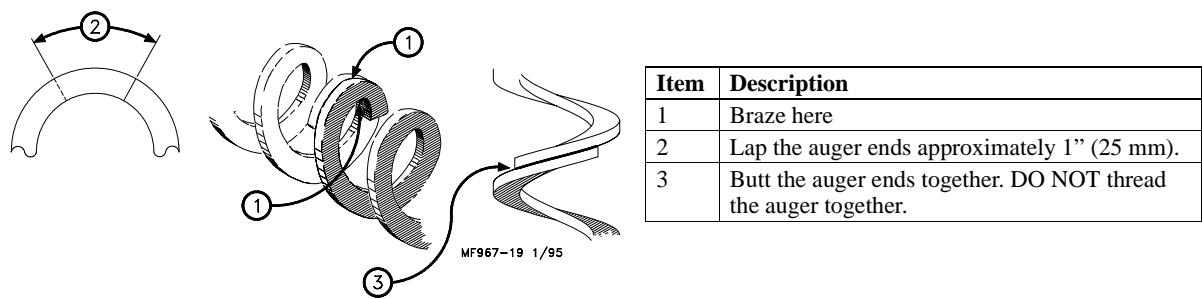


Figure 56. Auger Brazing

Intermediate Control

Intermediate Control Units are available for the Model C2 Plus & G Plus Feeders. The Intermediate Controls are shown in Figure 57.

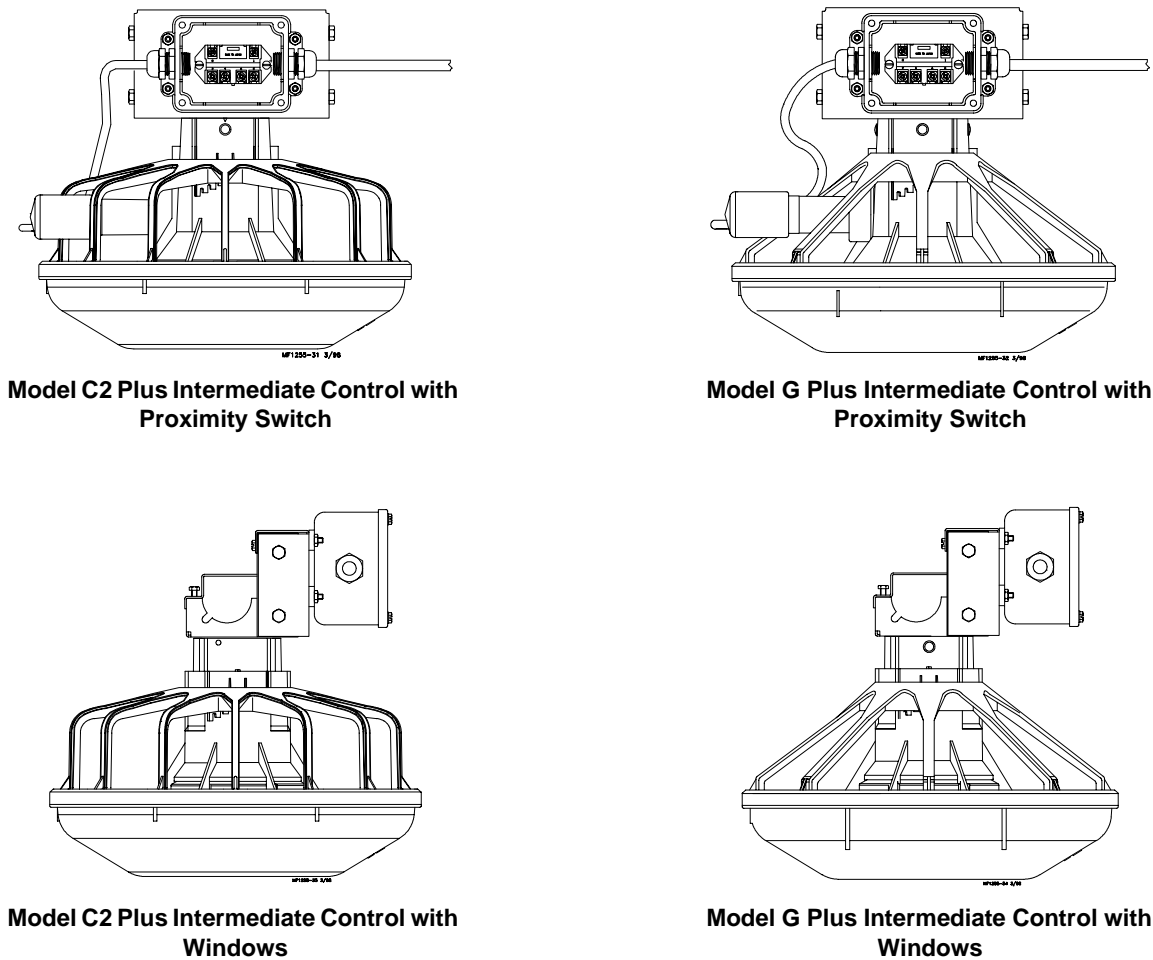


Figure 57. Intermediate Controls

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.

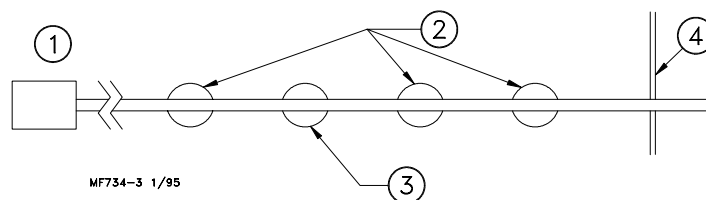


Figure 58. Intermediate Control Location Diagram

Item	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 unibit to enlarge hole size. Be sure there are no burrs inside the tube to catch the auger.

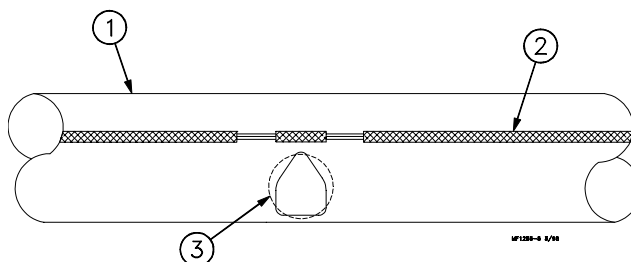
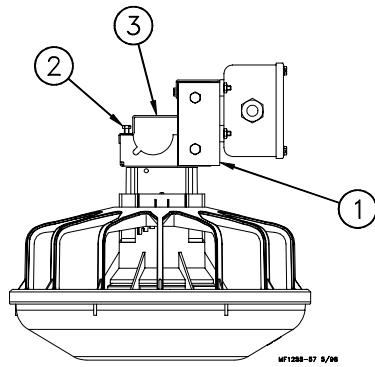


Figure 59. Enlarging Outlet Holes

Key	Description
1	Auger Tube
2	Seam
3	Use a unibit to enlarge outlet holes.

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.

Proximity Switch Adjustment

The Proximity Switch requires a constant 230 volt power supply between the black and white wires.

Warning: Make sure ALL power sources supplying your system are disconnected at the circuit breakers before performing any service work.

Setting the Delay

The Proximity Switch includes an adjustable delay. The delay may be set from 1 second to 10 minutes.

Use the small screwdriver provided to turn the Delay Adjustment. Turn the screw counterclockwise until the light stays on. Turn the adjustment screw clockwise one complete revolution. This sets the delay to 1 second.

To increase the delay, turn the adjustment screw clockwise.

Quick flashes = shorter time delay. Slow flashes = longer time delay.

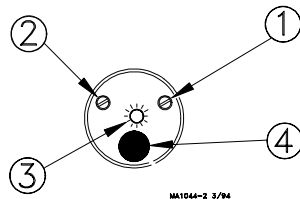
Adjusting the Sensitivity

The Proximity Switch includes a Sensitivity Adjustment Screw. It may be set to sense feed 0 to 15 mm from end of switch.

The switch is set to the recommended sensitivity for most feed types.

If sensitivity does need to be adjusted, remove the sealing caulk to allow access to the Sensitivity Adjustment Screw.

Note the screw orientation before turning the Sensitivity Adjustment Screw. Fine tune the switch sensitivity by making 1/4 turns or less to the Sensitivity Adjustment Screw.



Key	Description
1	Sensitivity Adjustment Screw
2	Delay Adjustment Screw
3	Indicator Light
4	Power Cord

IMPORTANT:

The wiring diagram decal (on the Switch) represents the switch in the non-powered condition. When power is applied the N.O. and N.C. contacts reverse.

Refer to the wiring diagram in this instruction when wiring the Proximity Switch.

Meal-Time Feeding Guidelines

Chore-Time Programmed Meal-Time Feeding is recommended for use with Model C2 Plus & G 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 C2 Plus & G Plus only: Set the Feed Windows in open or brood position 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.

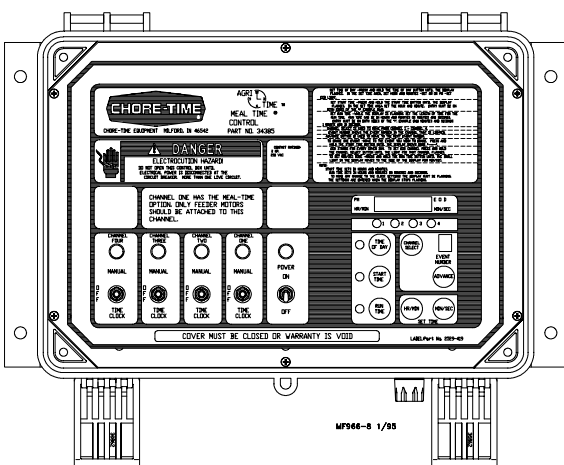
Following Chore-Time Programmed Meal-Time Feeding improves results and minimizes labor, energy usage, and wear on equipment while reducing feed cost per pound of gain and improved feed conversion.

Controlling the Feeders (optional equip.)

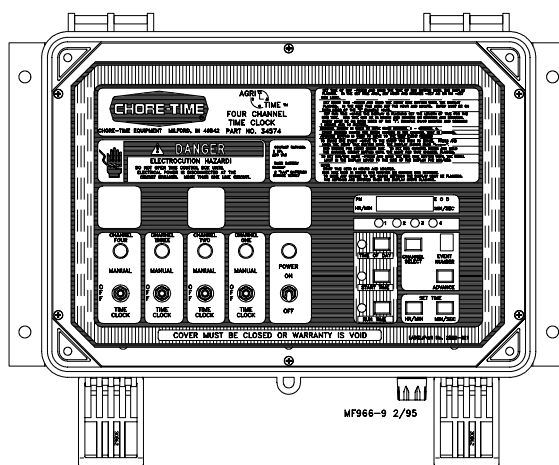
The Model C2 Plus & G Plus Feeding Systems may be controlled by the 34385 Control Panel **or** the 34574 Time Clock Control.

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.

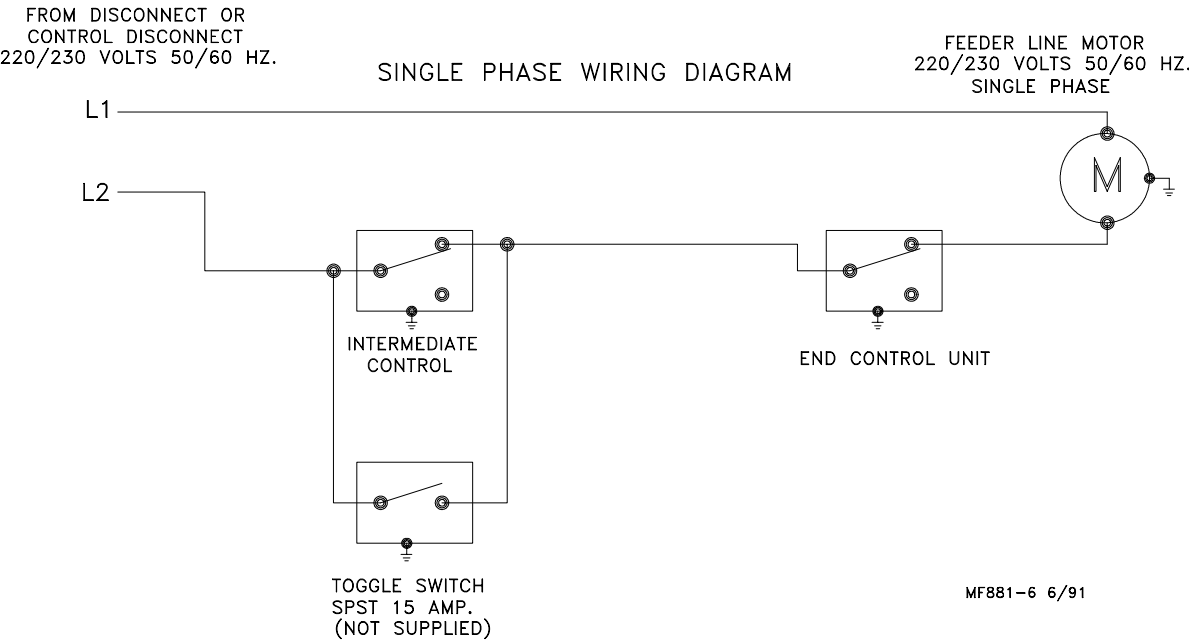
4-Channel Time Clock Control P/N 34574

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.

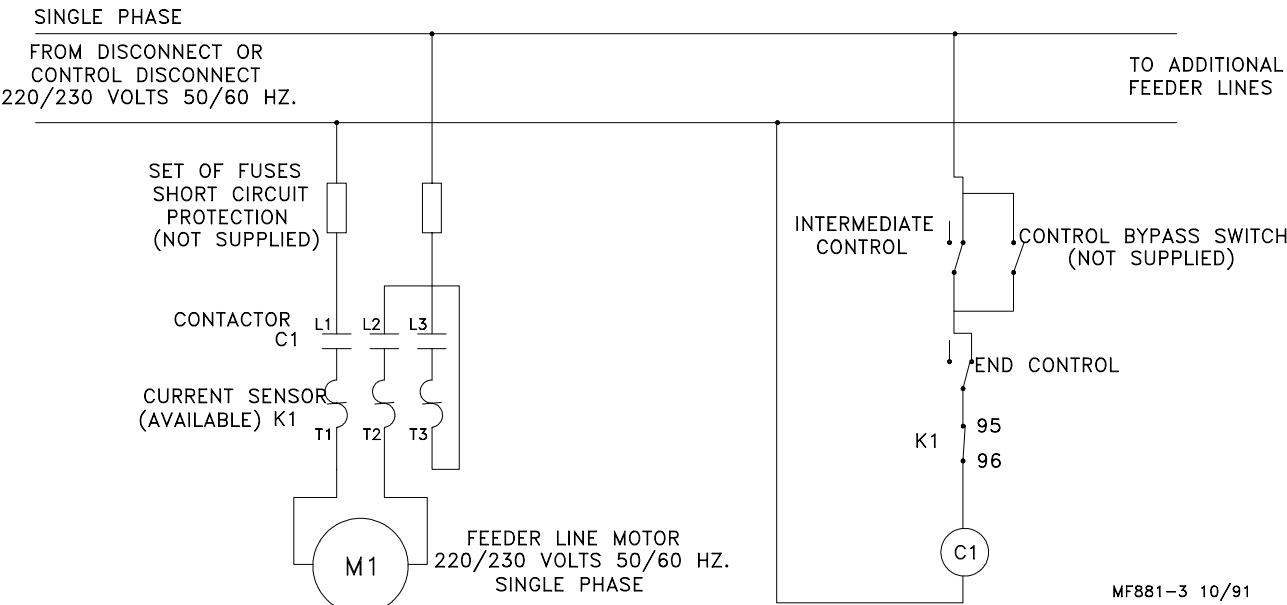
Each channel has a 2 H.P. (max.), 230 V. power relay.

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

Single Phase(Ø) Wiring Diagram

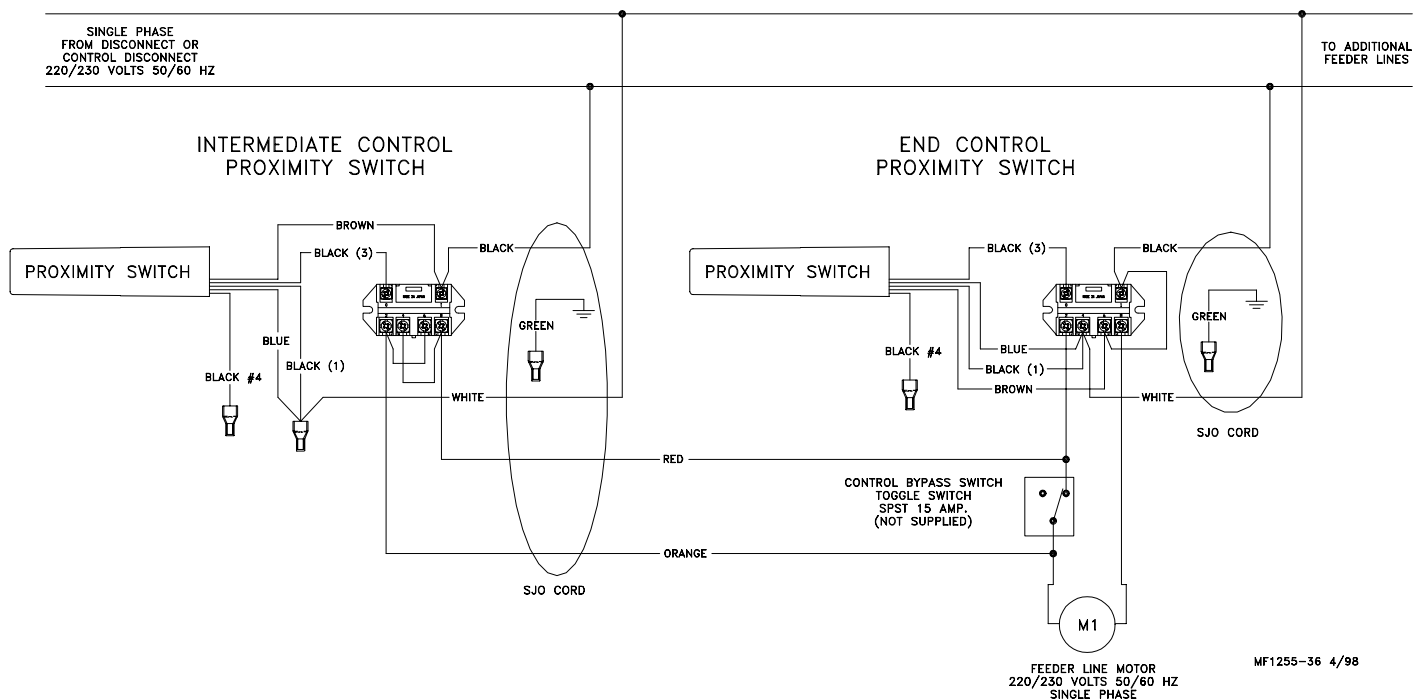


Single Phase(Ø) Wiring Diagram with Motor Starter

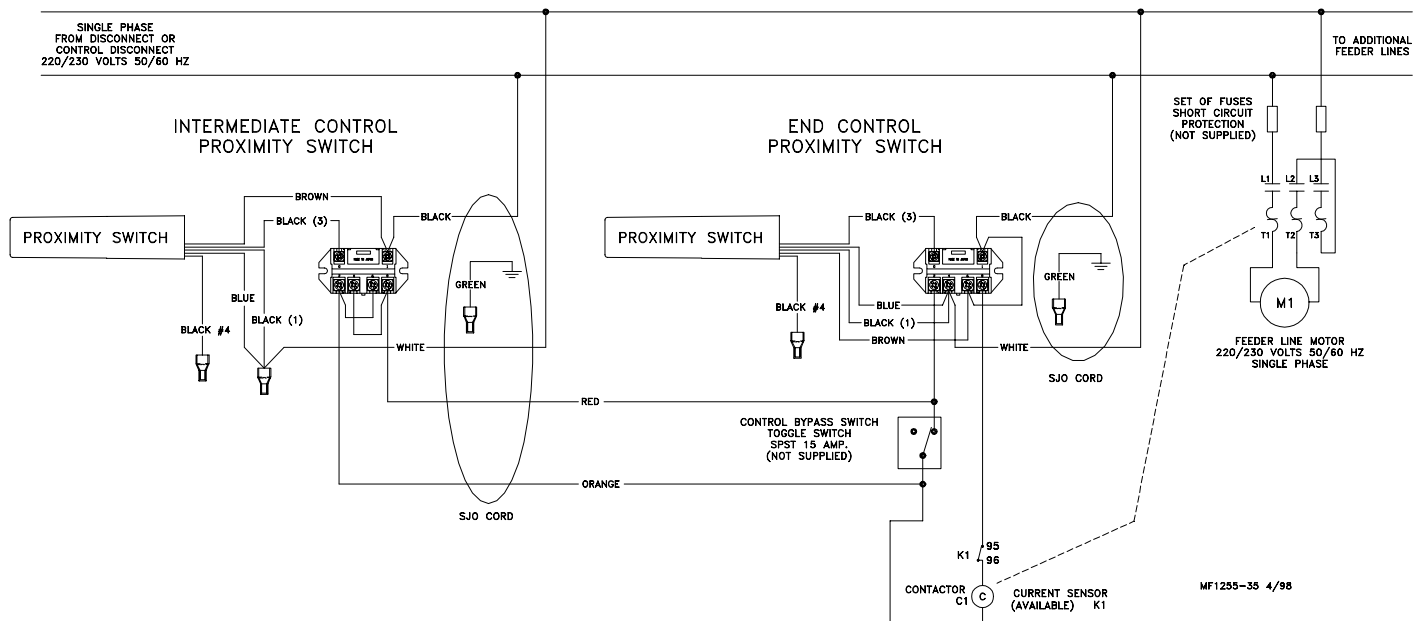


End & Intermediate Control Wiring Diagrams: Single Phase(Ø)

Single Phase(Ø) Wiring Diagram with Proximity Switch

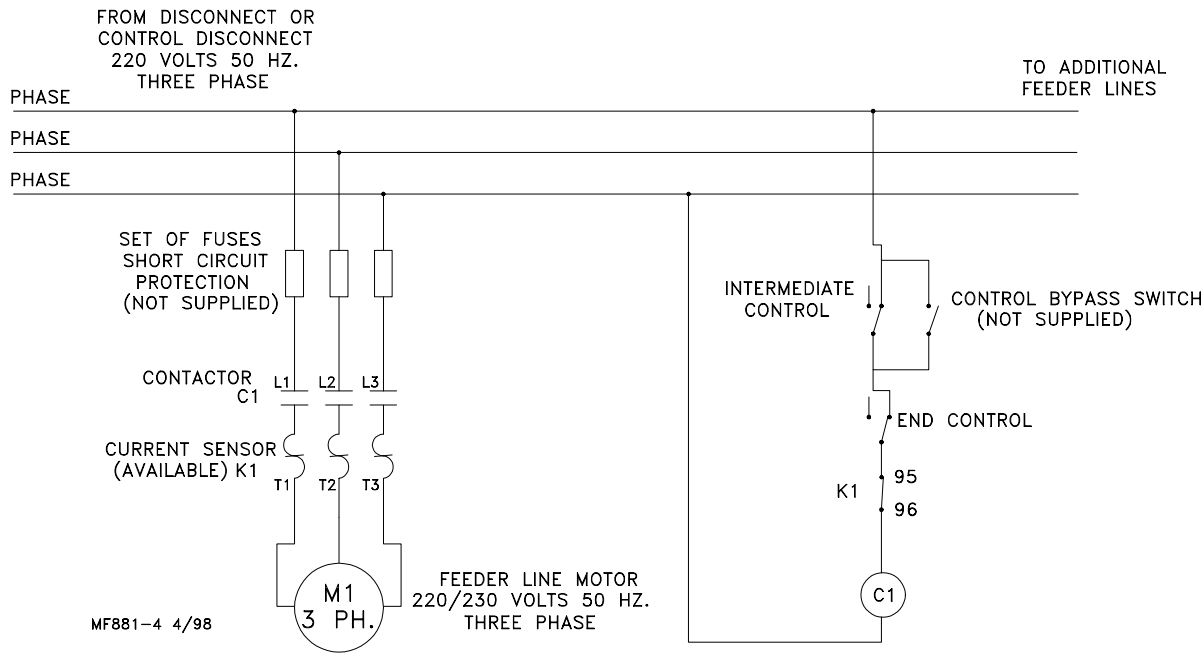


Single Phase(Ø) Wiring Diagram with Proximity Switch & Motor Starter

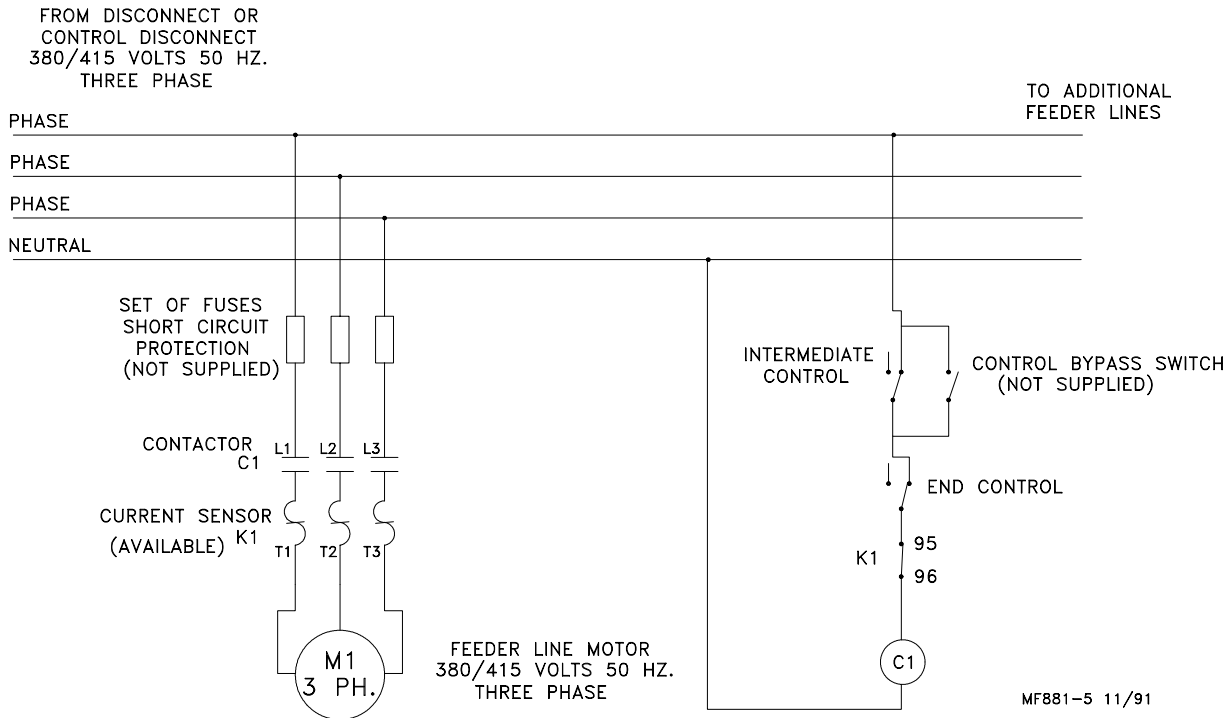


End & Intermediate Control Wiring Diagrams: Three Phase(Ø)

Three Phase(Ø) Wiring Diagram: 220 V.

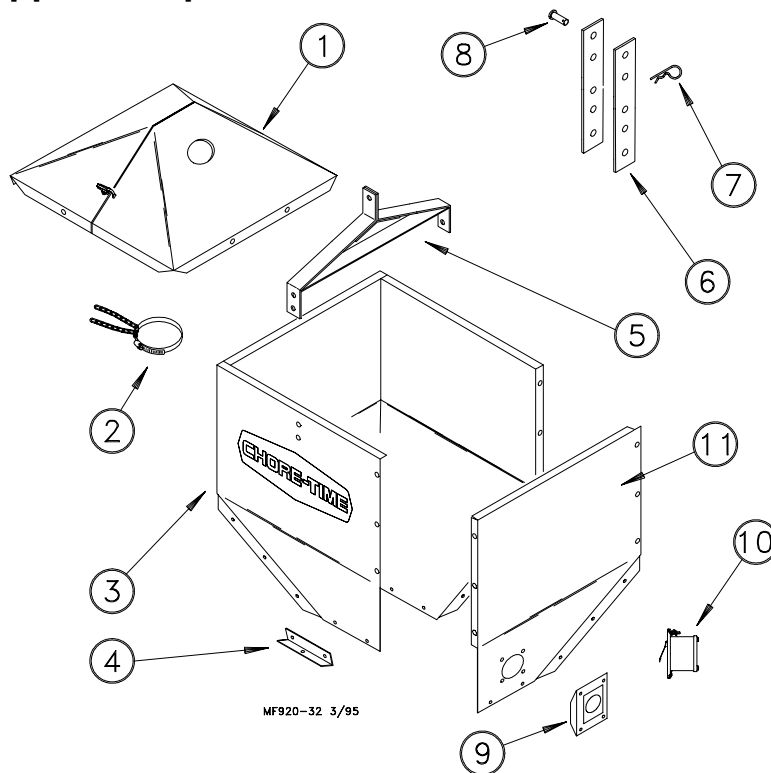


Three Phase(Ø) Wiring Diagram: 380/415 V.



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

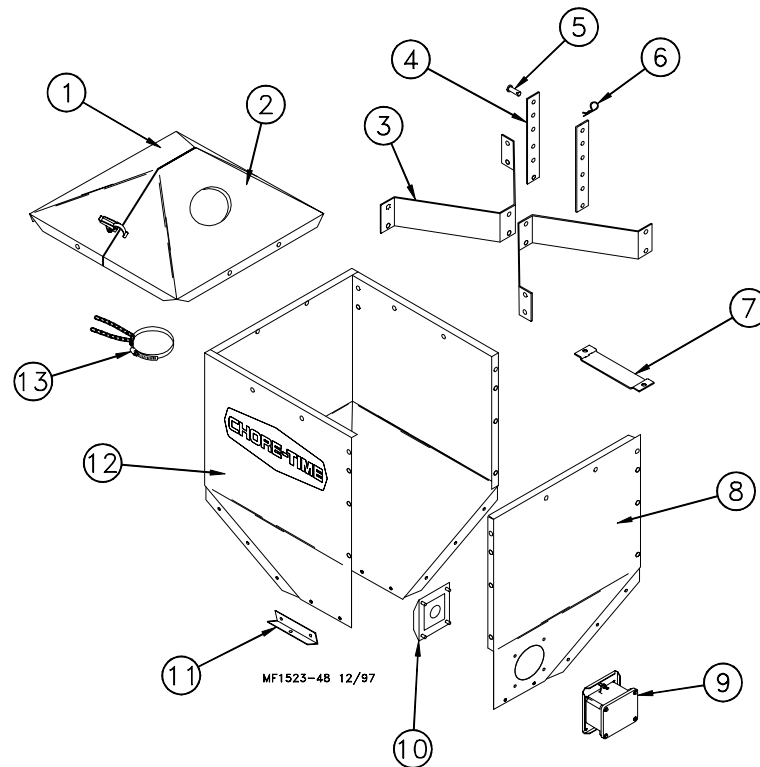
*Hopper Cover not included. Must be ordered separately.

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.

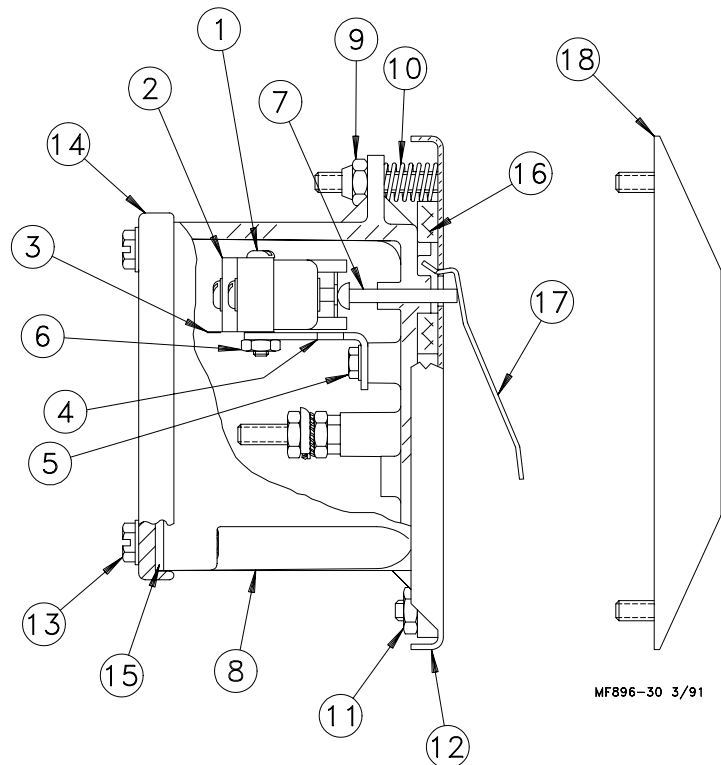
The 100# Hopper Assembly may be ordered under Part No. 28220.

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.

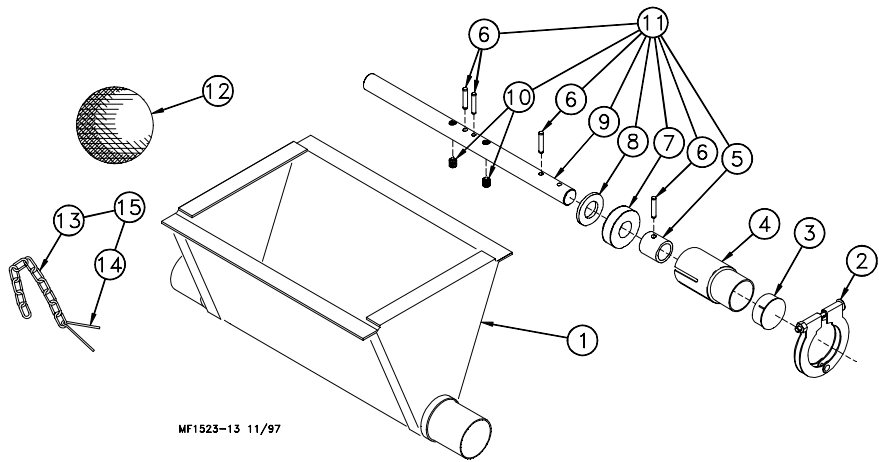
The 100 # Hopper Assembly, including the Cover and Switch, may be ordered under Part No. 28245.

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

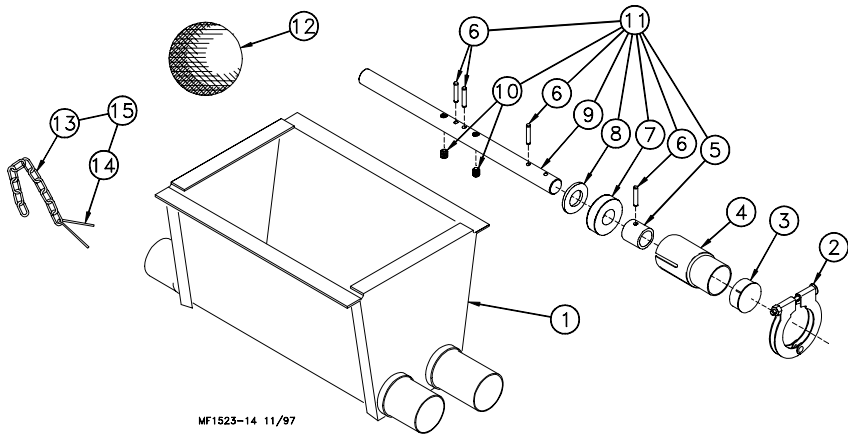


MF1523-13 11/97

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



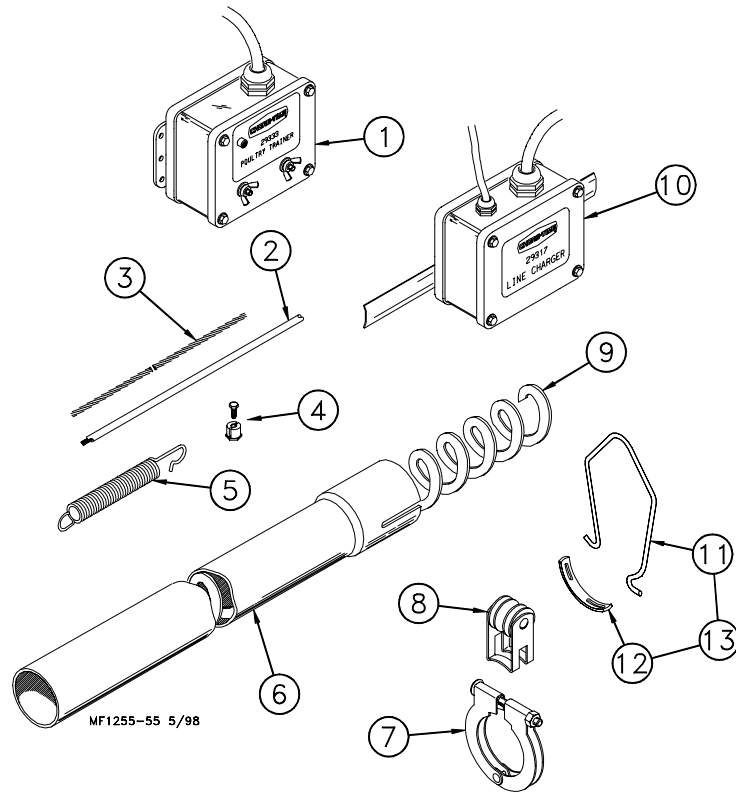
MF1523-14 11/97

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.

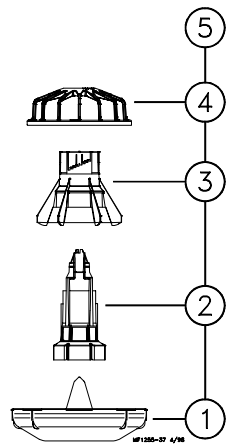
Feeder Line Components



Item	Description	Part No.
1	Poultry Trainer (110 V, 60 Hz)	5303
	Poultry Trainer (220 V, 50/60 Hz)	5699
2	Charger Wire (165')	28994-165
	Charger Wire (330')	28994-330
3	1/16" Cable	1922
4	1/16" Cable Clamp	1826
5	Spring	7551
6	Roll Formed Tube	
	--12', 5 hole tube	6854-7
	--12', 4 hole tube	6854-7
	--10', 4 hole tube	6854-4
	--10', 3 hole tube	6854-5
	--9', 4 hole tube	6854-1
7	Tube Clamp	24063
8	Anti-Roost Bracket	24060
9*	Auger	6820-0
10	Line Charger (110 V, 60 Hz)	5458
	Line Charger (220 V, 50/60 Hz)	5459
11	Hanger Bracket	7297
12	Hanger Strap	7298
13	Hanger Kit	7299

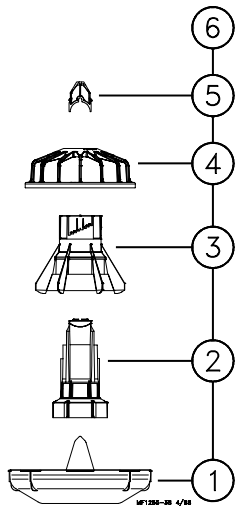
*Round up to the nearest 10'. Auger lengths from 50' to 500'. Example: 6820-200 would be a 200' roll of 6820 Auger.

Model C2 Plus Feeder Pan Assemblies
Model C2 Plus Feeder



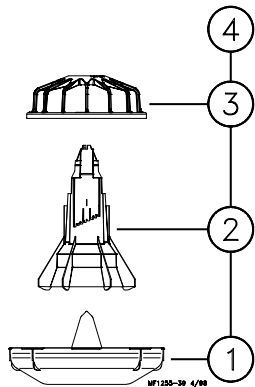
Item	Description	Part No.
1	Feeder Pan	38600
2	Support Cone	38601
3	Adjustment Cone	38604
4	Model C2 Plus Grill	39567
5	Model C2 Plus Feeder	40687

Model C2 Plus Feeder with Removable Top



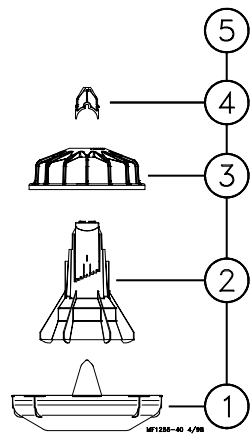
Item	Description	Part No.
1	Feeder Pan	38600
2	Support Cone	38602
3	Adjustment Cone	38604
4	Model C2 Plus Grill	39567
5	Removable Top	38603
6	Model C2 Plus Feeder with Removable Top	40689

Model C2 Plus Feeder (Non-Window)



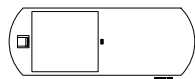
Item	Description	Part No.
1	Feeder Pan	38600
2	Support Cone (Non-Window)	39566
3	Model C2 Plus Grill	39567
4	Model C2 Plus Feeder (Non-Window)	40688

Model C2 Plus Feeder Pan Assemblies - Continued
Model C2 Plus Feeder with Removable Top (Non-Window)



Item	Description	part No.
1	Feeder Pan	38600
2	Support Cone (Non-Window)	39565
3	Model C2 Plus Grill	39567
4	Removable Top	38603
5	Model C2 Plus Feeder with Removable Top (Non-Window)	40690

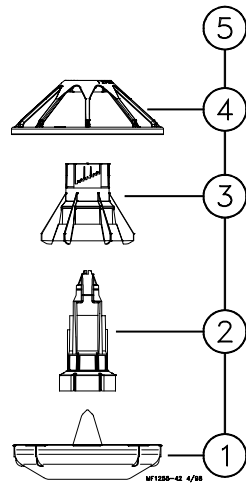
Slide Shut-Off
(Use with the Non-Window Cone)



Description	Part No.
Slide Shut-Off	39564

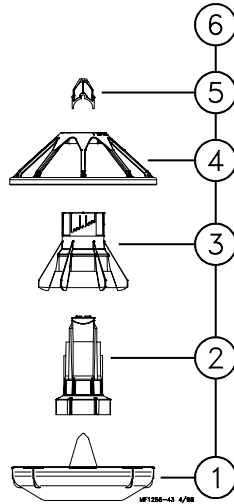
Model G Plus Feeder Pan Assemblies

Model G Plus Feeder



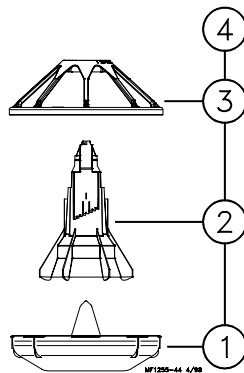
Item	Description	Part No.
1	Feeder Pan	38600
2	Support Cone	38601
3	Adjustment Cone	38604
4	Model G Plus Grill	38599
5	Model G Plus Feeder	40683

Model G Plus Feeder with Removable Top



Item	Description	Part No.
1	Feeder Pan	38600
2	Support Cone	38602
3	Adjustment Cone	38604
4	Model G Plus Grill	38599
5	Removable Top	38603
6	Model G Plus Feeder with Removable Top	40685

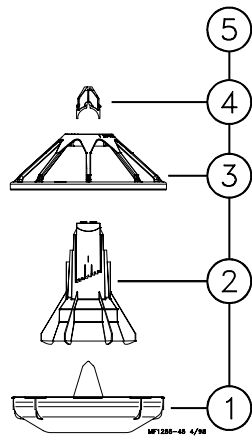
Model G Plus Feeder (Non-Window)



Item	Description	Part No.
1	Feeder Pan	38600
2	Support Cone (Non-Window)	39566
3	Model G Plus Grill	38599
4	Model G Plus Feeder (Non-Window)	40684

Model G Plus Feeder Pan Assemblies - Continued

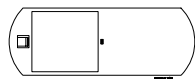
Model G Plus Feeder with Removable Top (Non-Window)



Item	Description	part No.
1	Feeder Pan	38600
2	Support Cone (Non-Window)	39565
3	Model G Plus Grill	38599
4	Removable Top	38603
5	Model G Plus Feeder with Removable Top (Non-Window)	40686

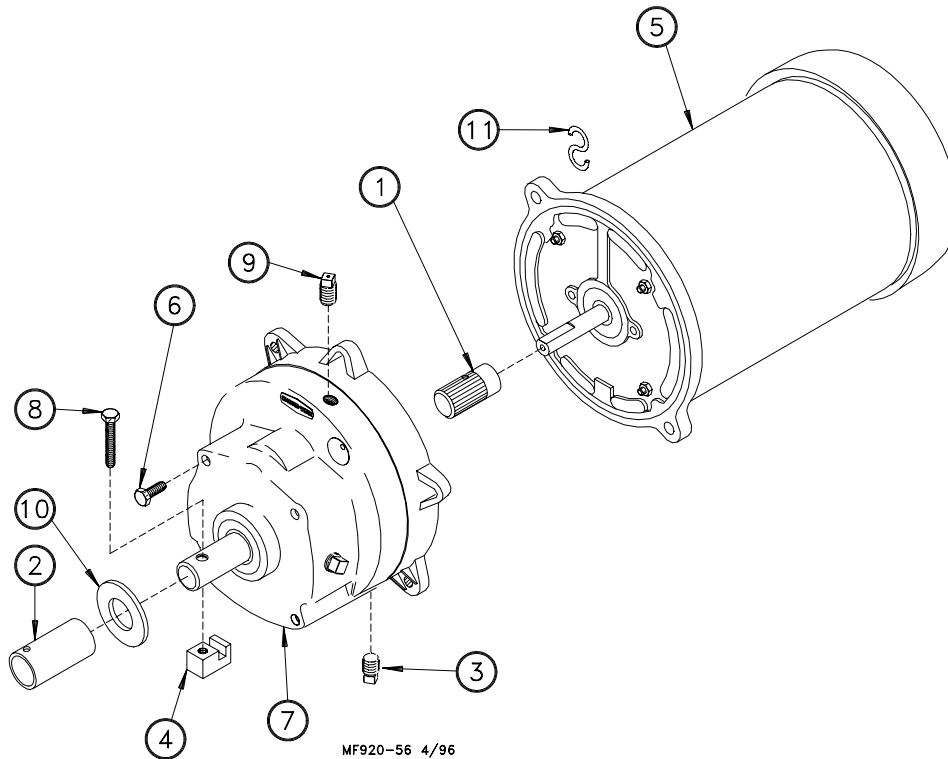
Slide Shut-Off

(Use with the Non-Window Cone)



Description	Part No.
Slide Shut-Off	39564

Power Unit Assemblies



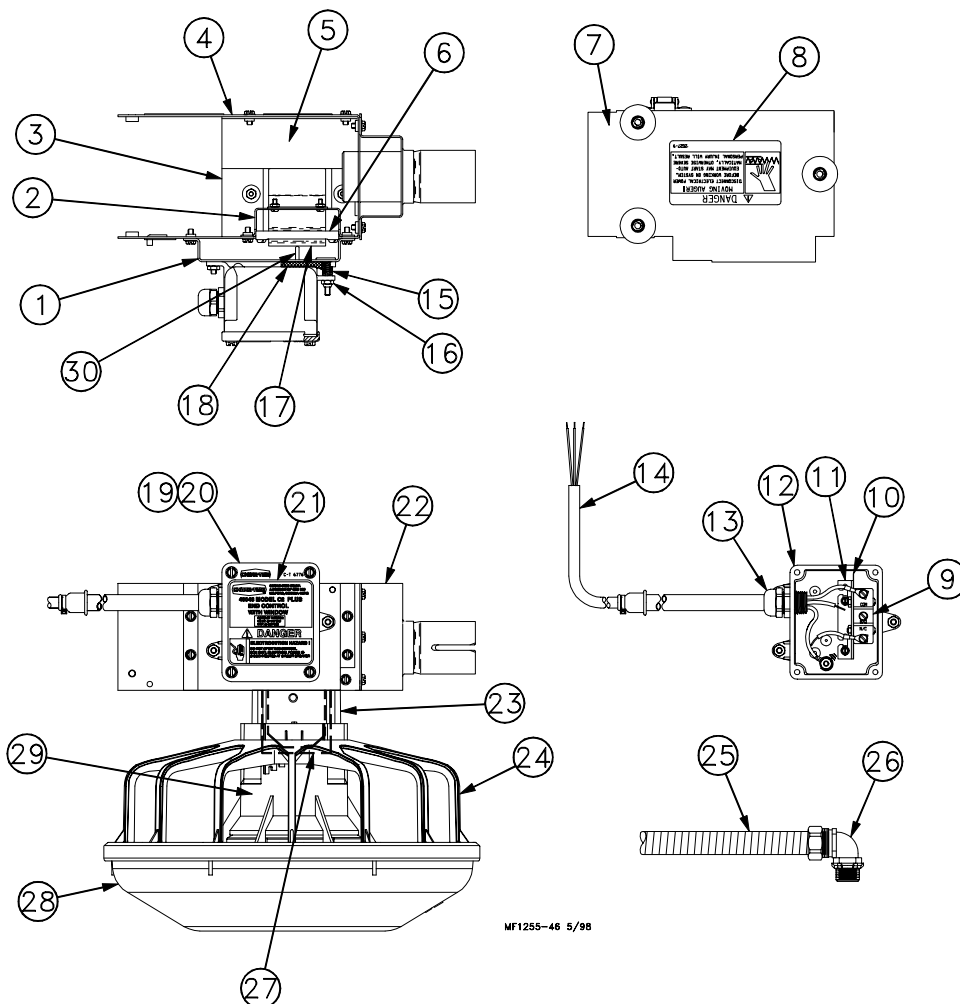
Item	Description	3259-8 Part No.	3259-25 Part No.	3259-84 Part No.	3259-85 Part No.	3259-98 Part No.	3259-100 Part No.	3259-128 Part No.
1	Pinion Assembly	5046	5046	5046	5046	5046	5046	5046
2	Drive Tube Connector	1048	1048	1048	1048	1048	1048	1048
3	Pipe Plug (magnetic)	30160	30160	30160	30160	30160	30160	30160
4	Driver Block	4642	4642	4642	4642	4642	4642	4642
5	Motor	4229	5703	4229	5703	5977	28031	24624
6	5/16-18x5/8 Hex Hd Screw	4412-1	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	3261-5
8	1/4-20x1-1/2 Hex Hd Screw	2919	2919	2919	2919	2919	2919	2919
9	Vent Plug	3516	3516	3516	3516	3516	3516	3516
10	Flat Washer	1484	1484	1484	1484	1484	1484	1418
11	"S" Hook	4270	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
3259-128	1/2 HP	348 RPM	Three Phase	60 Hz	230	Use with all Control Units

Model C2 Plus Mechanical End Control

Part Number 40943



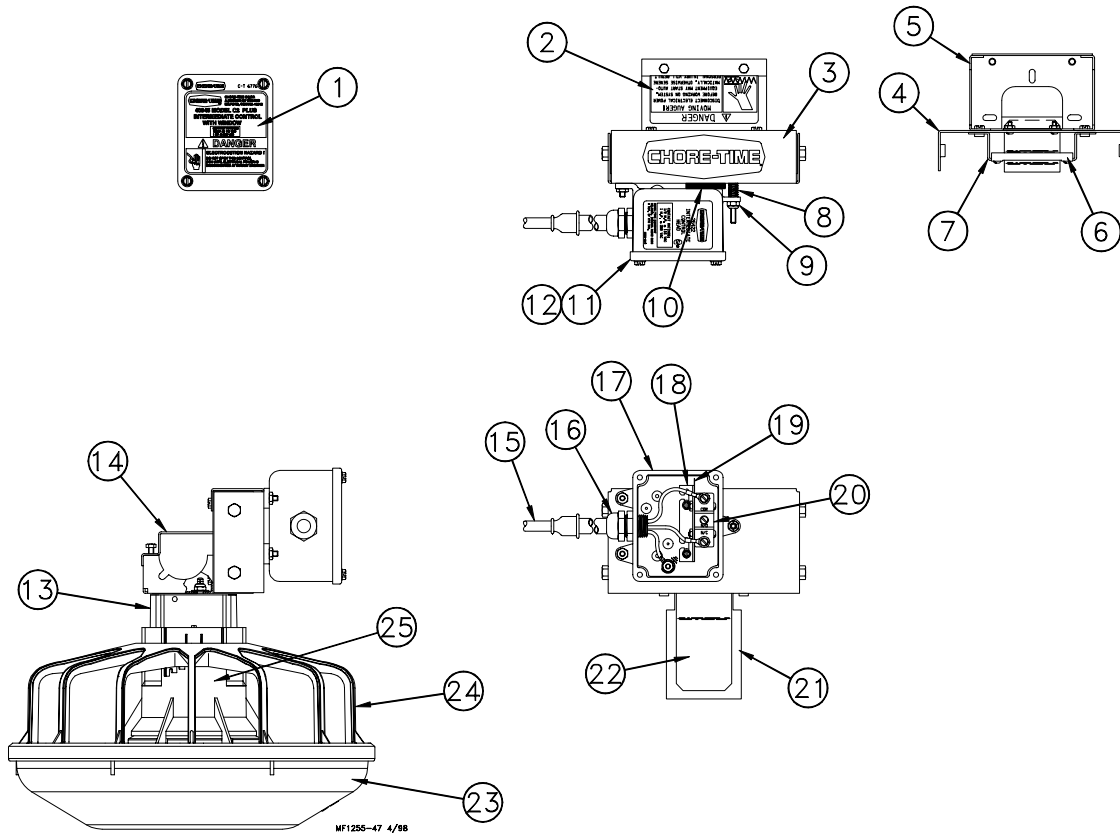
Item	Description	Part No.
1	Switch Box Mount	25084
2	Stop Panel	25433
3	Switch Bracket	40749
4	Control Body	14434
5	Deflector Panel	41363
6	Paddle Retainer	25045
7	Control Cover Assembly	24682
8	Danger Decal	2527-9
9	Actuator Switch	7114
10	Switch Insulation	1907-5
11	Switch Bracket	7068
12	Switch Box	24702
13	1/2" Liquid Tight Connector	24685
14	Control Cord Assembly	25495
15	Spring	6972
16	#10-32 Lock Nut	6963
17	Paddle	24848

Item	Description	Part No.
18	Gasket	6968-1
19	Switch Box Cover	6776
20	Switch Box Gasket	6777
21	Control Decal (Control P/N 40943)	2529-660
22	Support Bracket	24683
23	Center Support Assembly	40947
24	Model C2 Plus Grill	39567
25	14" Flexible Conduit	26982-1
26*	1/2" Liquid Tight Connector	23810
27	Mylar Assembly	25318
28	Feeder Pan	41445
29	Adjustment Cone	38604
30	Actuator Pin	8757
--	Anti-Roost Guard	2798
--	Anchor	4188
--	Bottom Cover	14432
--	Parts Package	40809

*This part is included in the Parts Package.

Model C2 Plus Mechanical Intermediate Control

Part Number 40945

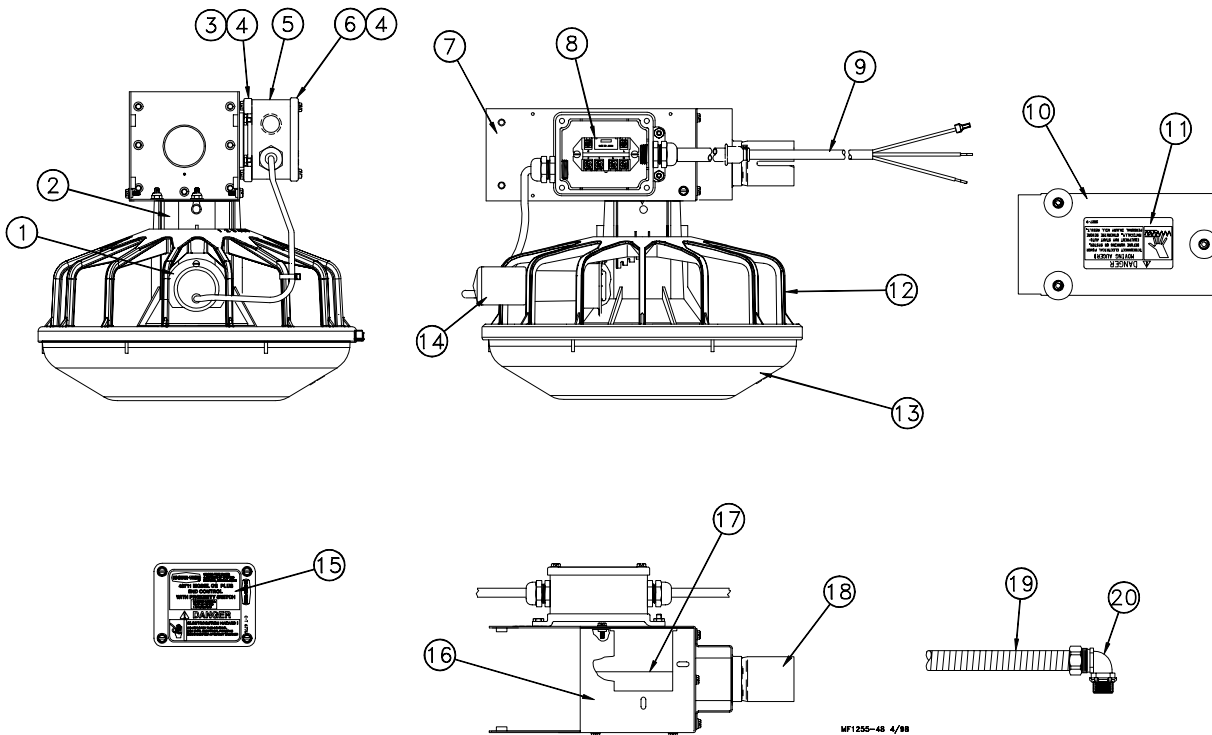


Item	Description	Part No.
1	Intermediate Control Decal	2529-658
2	Danger Decal	2527-9
3	Back Cover	25047
4	Front Panel	25046
5	Tube Support	41364
6	Paddle Retainer	25045
7	Pivot Bracket	25048
8	Spring	6972
9	#10-32 Lock Nut	6963
10	Gasket	6968-1
11	Switch Box Cover	6776
12	Gasket	6777
13	Support Cone Assembly	40947

Item	Description	Part No.
14	Tube Retainer	14756
15	Cord Assembly	4999-49
16	1/2" Liquid Tight Connector	24685
17	Machined Switch Box	34842
18	Switch Bracket	7068
19	Switch Insulation	1907-5
20	Actuator Switch	7114
21	Mylar Assembly	25318
22	Switch Paddle	24848
23	Feeder Pan	41445
24	Model C2 Plus Grill	39567
--	Actuator Pin	8757

Model C2 Plus Proximity End Control

Part Number 40711



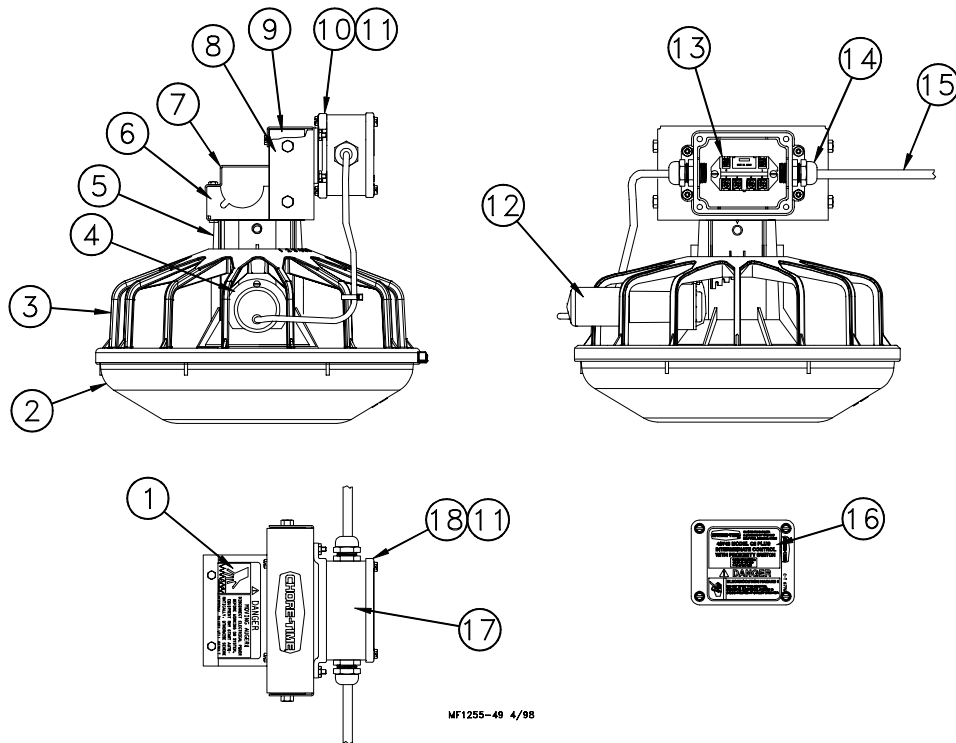
Item	Description	Part No.
1	Proximity Switch Mount Collar	36966
2	Support Cone Assembly	40957
3	Switch Box Cover	37047
4	Gasket	6777
5	General Purpose Terminal Box	36334-2
6	Switch Box Cover	6776
7	Control Body	36965
8	Relay	34654
9	Cord Assembly	4999-97
10	Cover Assembly	36967
11	Danger Decal	2527-9
12	Model C2 Plus Grill	39567

Item	Description	Part No.
13	Feeder Pan	41445
14	Proximity Switch Assembly	36881-1
15	Control End Decal	2529-653
16	Mount Bracket	40749
17	Deflector Panel	41363
18	Tube Bracket Weldment	24683
19	14\" Flexible Conduit	26982-1
20*	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 C2 Plus Proximity Intermediate Control

Part Number 40748

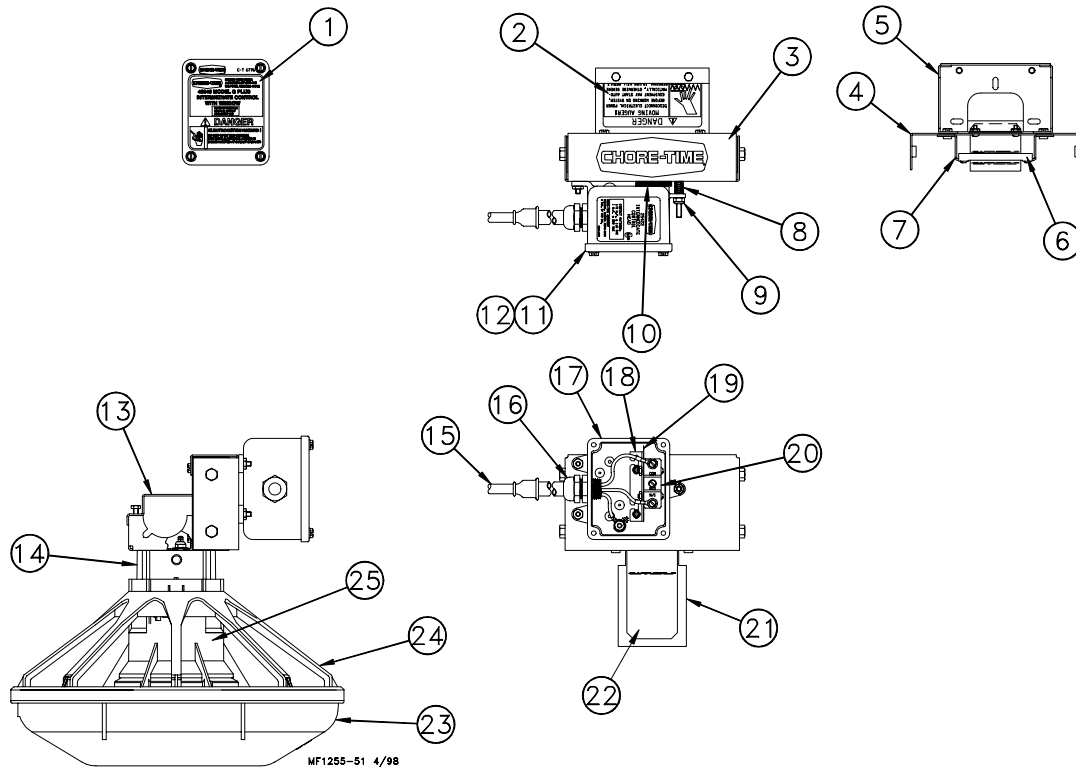


Item	Description	Part No.
1	Danger Decal	2527-9
2	Feeder Pan	41445
3	Model C2 Plus Grill	39567
4	Proximity Switch Collar	36966
5	Support Cone Assembly	40957
6	Tube Support	41364
7	Tube Retainer	14756
8	Back Cover	36869
9	Front Intermediate Panel	37061

Item	Description	Part No.
10	Switch Box Cover	37047
11	Gasket	6777
12	Proximity Switch Assembly	36881-1
13	Relay	34654
14	1/2" Liquid Tight Connector	24685
15	Cord Assembly	4999-96
16	Intermediate Control Decal	2529-663
17	General Purpose Terminal Box	36334-1
18	Switch Box Cover	6776

Model G Plus Mechanical Intermediate Control

Part Number 40946

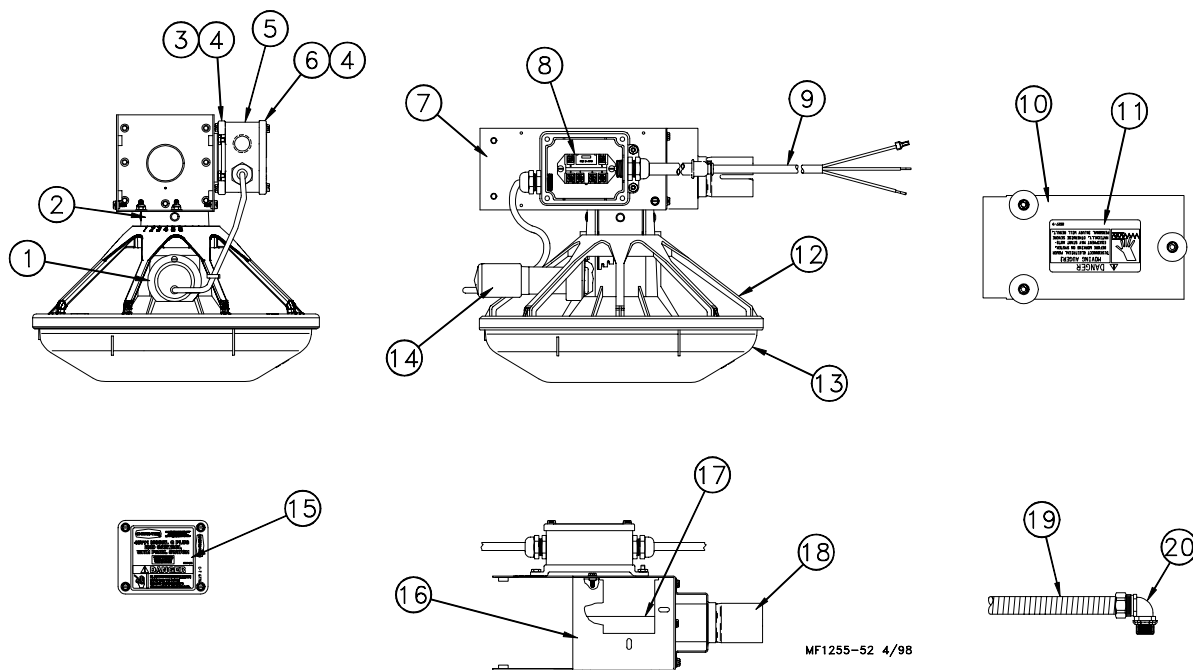


Item	Description	Part No.
1	Intermediate Control Decal	2529-657
2	Danger Decal	2527-9
3	Back Cover	25047
4	Front Panel	25046
5	Tube Support	41364
6	Paddle Retainer	25045
7	Pivot Bracket	25048
8	Spring	6972
9	#10-32 Lock Nut	6963
10	Gasket	6968-1
11	Switch Box Cover	6776
12	Gasket	6777
13	Support Cone Assembly	40947

Item	Description	Part No.
14	Tube Retainer	14756
15	Cord Assembly	4999-49
16	1/2" Liquid Tight Connector	24685
17	Machined Switch Box	34842
18	Switch Bracket	7068
19	Switch Insulation	1907-5
20	Actuator Switch	7114
21	Mylar Assembly	25318
22	Switch Paddle	24848
23	Feeder Pan	41445
24	Model G Plus Grill	38599
--	Actuator Pin	8757

Model G Plus Proximity End Control

Part Number 40713



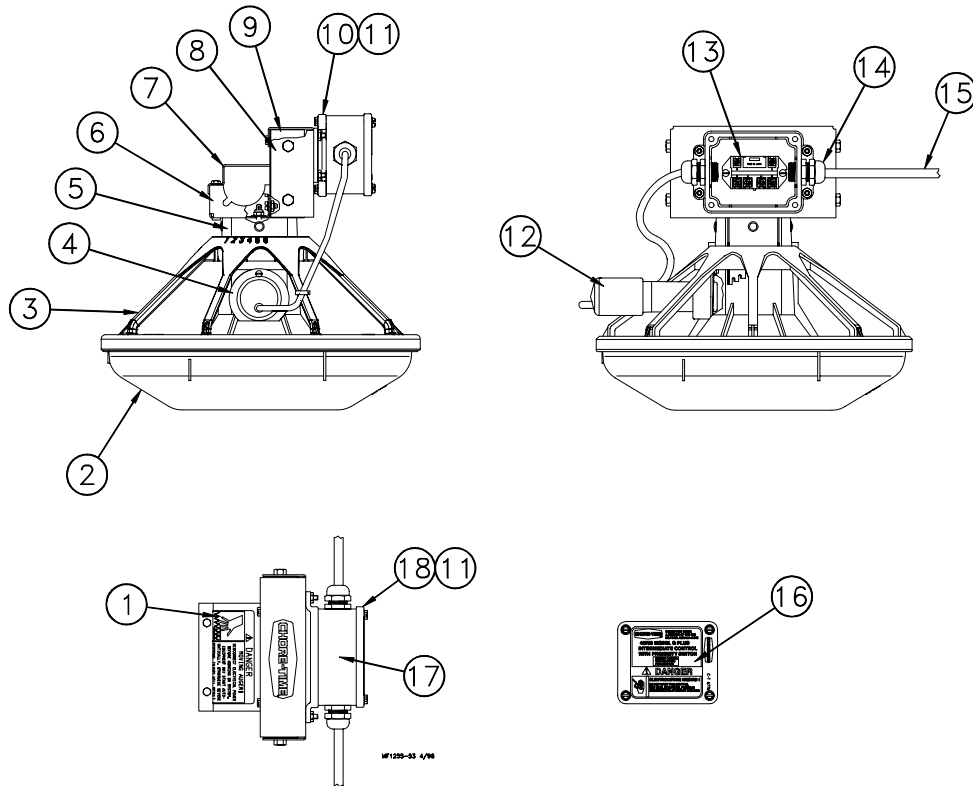
Item	Description	Part No.
1	Proximity Switch Mount Collar	36966
2	Support Cone Assembly	40957
3	Switch Box Cover	37047
4	Gasket	6777
5	General Purpose Terminal Box	36334-2
6	Switch Box Cover	6776
7	Control Body	36965
8	Relay	34654
9	Cord Assembly	4999-97
10	Cover Assembly	36967
11	Danger Decal	2527-9
12	Model G Plus Grill	38599

Item	Description	Part No.
13	Feeder Pan	41445
14	Proximity Switch Assembly	36881-1
15	Control End Decal	2529-655
16	Mount Bracket	40749
17	Deflector Panel	41363
18	Tube Bracket Weldment	24683
19	14\" Flexible Conduit	26982-1
20*	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 G Plus Proximity Intermediate Control

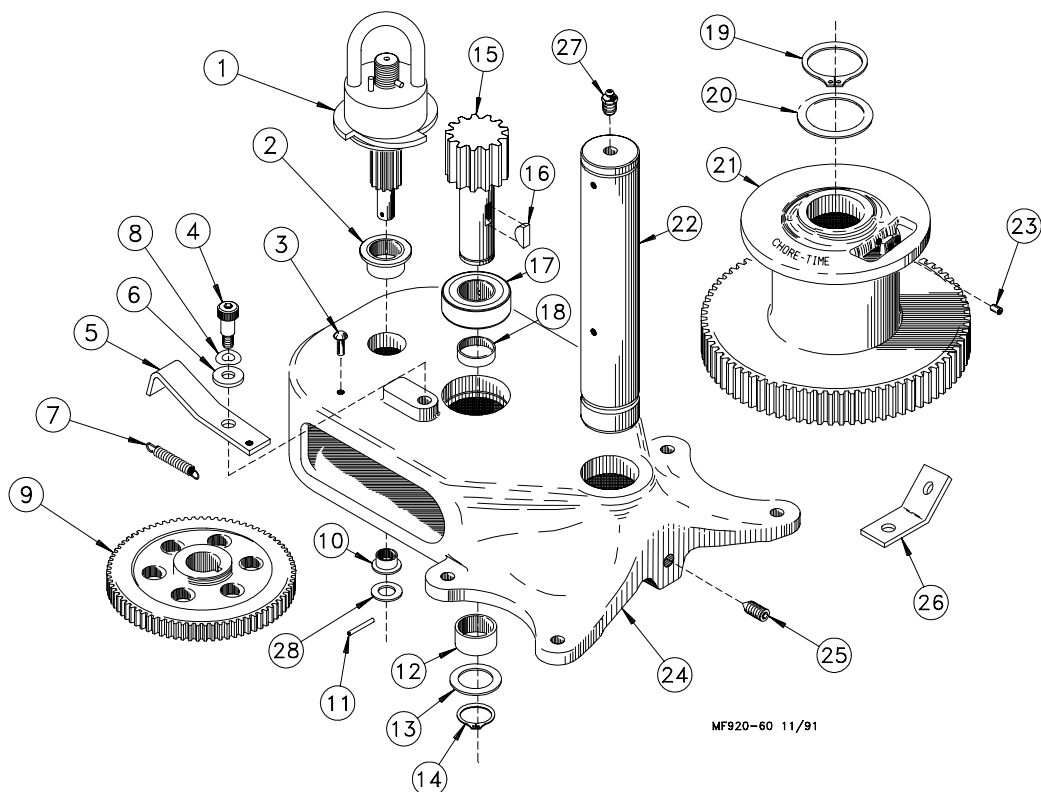
Part Number 40750



Item	Description	Part No.
1	Danger Decal	2527-9
2	Feeder Pan	41445
3	Model G Plus Grill	39567
4	Proximity Switch Collar	36966
5	Support Cone Assembly	40957
6	Tube Support	41364
7	Tube Retainer	14756
8	Back Cover	36869
9	Front Intermediate Panel	37061

Item	Description	Part No.
10	Switch Box Cover	37047
11	Gasket	6777
12	Proximity Switch Assembly	36881-1
13	Relay	34654
14	1/2\" Liquid Tight Connector	24685
15	Cord Assembly	4999-96
16	Intermediate Control Decal	2529-661
17	General Purpose Terminal Box	36334-1
18	Switch Box Cover	6776

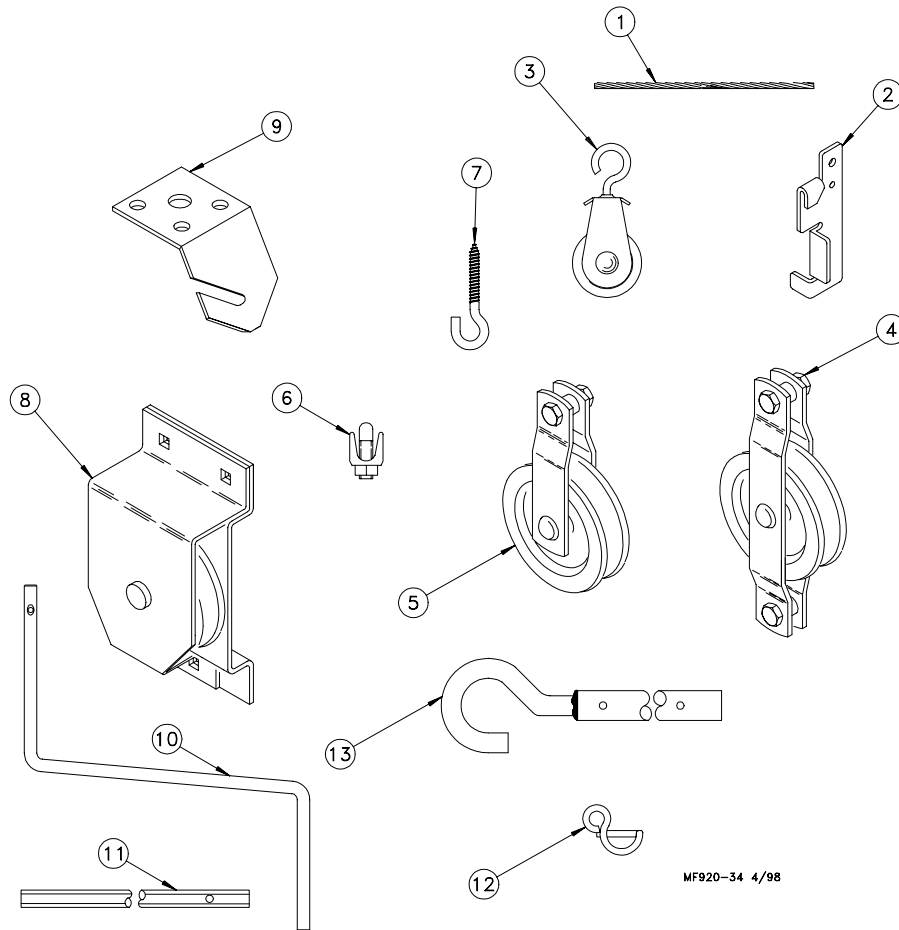
2883 Power Winch



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



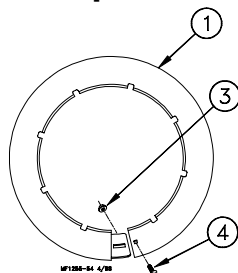
Item	Description	Part No.
1	3/32" Cable 3/16" Cable 1/8" Cable	4973 1213 27975
2	Cable Lock	14337
3	Pulley with Swivel	3004
4	Double Eye Pulley	2501
5	Pulley	2500
6	3/16" Cable Clamp 1/8" Cable Clamp	732 14898
7	Standard Screw Hook Large Screw Hook	1214 2041

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') Winch Drive Tube (8')	2884-1 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.

Model G Plus Optional Item



Item	Description	Part No.
1	Pan Extension	29510
2	Lock Nut	24208
3	1/4" Carriage Bolt	22692

Maintaining the Floor Feeder

The Model H2 Plus Feeders require minimum maintenance. However, a routine periodic inspection of the equipment will prevent unnecessary problems.

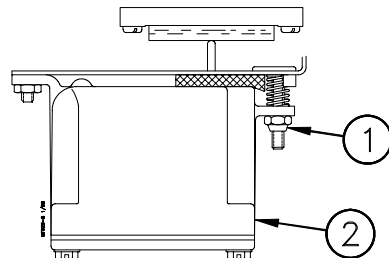
Maintenance should be done by a qualified technician.

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.

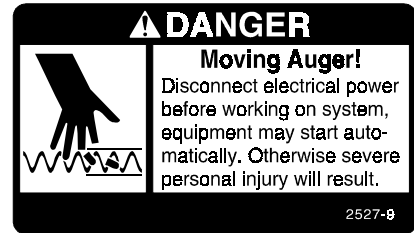
Turn the feeders off prior to removing the birds from the house. This will allow them to clean the feed out of the pans.

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.



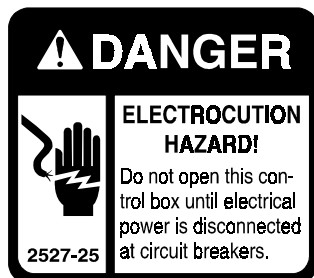
CAUTION: Stand clear...the auger may spring back into the tubes.

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

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



**Made to work.
Built to last.**

Revisions to this Manual

Page No.	Description of Change
-----------------	------------------------------

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

**CTB, Inc.
P.O. Box 2000
Milford, Indiana 46542-2000 U.S.A.
Phone: 219-658-4101 • E-Mail: ctb@ctbinc.com**

Printed in the U.S.A