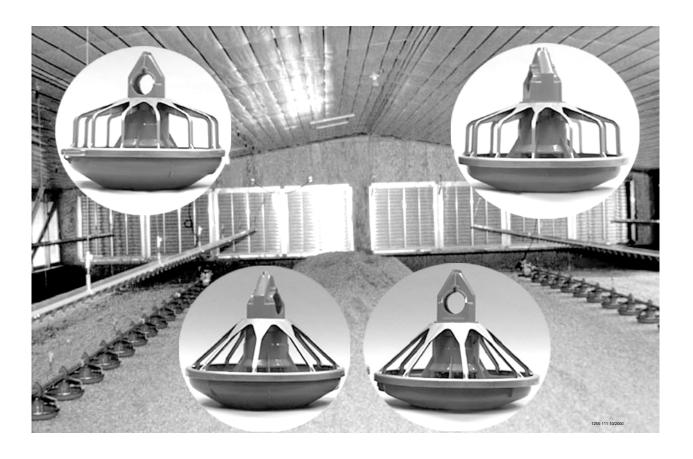




# MODEL C2<sup>®</sup> PLUS & MODEL G<sup>™</sup> PLUS with Electronic Sensor (ES) Feeding System Installation and Operators Manual



Installation and Operators Manual

### **Chore-Time Warranty**

Chore-Time Group, a division of CTB, Inc. ("Chore-Time") warrants the new CHORE-TIME MODEL  $C2^{(R)}$  AND G<sup>TM</sup> PLUS Feeding System with Electronic Sensor manufactured by Chore-Time to be free from defects in material or workmanship under normal usage and conditions, for One (1) year from the date of installation by the original purchaser ("Warranty"). Chore-Time provides for an extension of the aforementioned Warranty period ("Extended Warranty Period") with respect to certain Product parts ("Component Part") as set forth in the table below. If such a defect is determined by Chore-Time to exist within the applicable period, Chore-Time will, at its option, (a) repair the Product or Component Part free of charge, F.O.B. the factory of manufacture or (b) replace the Product or Component Part free of charge, F.O.B. the factory of manufacture. This Warranty is not transferable, and applies only to the original purchaser of the Product.

Product	Time Period from Installation	Charge to be paid by the purchaser for replacement	
Feeder Pans	0 - 3 years	No Charge	
	3-4 years	4/10 of then current list price	
	4-5 years	5/10 of then current list price	
Rotating Centerless Augers excluding applications involving high moisture feed stuffs (exceeding 18%)	10 years	No Charge	
Chore-Time manufactured roll formed steel auger tubes	10 years	No Charge	

#### CONDITIONS AND LIMITATIONS

THIS WARRANTY CONSTITUTES CHORE-TIME'S ENTIRE AND SOLE WARRANTY AND CHORE-TIME EXPRESSLY DISCLAIMS ANY AND ALL OTHER WARRANTIES, INCLUDING, BUT NOT LIMITED TO, EXPRESS AND IMPLIED WARRANTIES, INCLUDING, WIHTOUT LIMITATION, WARRANTIES AS TO MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSES. CHORE-TIME shall not be liable for any direct, indirect, incidental, consequential or special damages which any purchaser may suffer or claim to suffer as a result of any defect in the Product. Consequential or Special Damages as used herein include, but are not limited to, lost or damaged products or goods, costs of transportation, lost sales, lost orders, lost income, increased overhead, labor and incidental costs, and operational inefficiencies. Some jurisdictions prohibit limitations on implied warranties and/or the exclusion or limitation of such damages, so these limitations and exclusions may not apply to you. This warranty gives the original purchaser specific legal rights. You may also have other rights based upon your specific jurisdiction.

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

The following circumstances shall render this Warranty void:

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

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

Effective: January 2014

# Contents

Topic Page
Chore-Time Warranty
About This Manual
Safety Information
Safety Instructions7Follow Safety Instructions7Decal Descriptions7DANGER: Moving Auger.7DANGER: Electrical Hazard7CAUTION:7
General
Planning the Suspension System
General Installation Information9
Laying out the Suspension System9
Installing the Suspension System10Power Lift Winch Installation10Installing the Main Winch Cable11Screw Hook Installation12Ceiling Hook Installation13Drop Installation14
Hopper Assembly Procedure.       15         Assembly       15         Suspend the Hopper       15
Feeder pan assembly
Feeder Line Assembly and Suspension.       16         Feeder Pan and Tube Assembly Process       16         Assemble and Suspend the Feeder Line       16
Installing the End Control, Boot Assembly, and Auger
Auger Installation       23         Auger Brazing
Mid-Line Control
Anti-Roost Assembly
Wiring32End Control with Electronic Sensor (ES) Internal Wiring32Electronic Sensor Control Wiring Diagram32Mid Control with Electronic Sensor (ES) Internal Wiring32Mechanical Switch Single Phase(Ø) Wiring Diagram33Mechanical Switch Single Phase(Ø) Wiring Diagram with Motor Starter33Mechanical Switch Three Phase(Ø) Wiring Diagram:220 V.Mechanical Switch Three Phase(Ø) Wiring Diagram:34Mechanical Switch Three Phase(Ø) Wiring Diagram:380/415 V.Sandard Sensor Three Phase (Ø) Wiring.35

# **Contents - continued**

Topic Pa	age
Troubleshooting	36
Maintenance       3         Floor Feeding System Maintenance       3         Gear Head Maintenance       3         Mechanical Switch Adjustment procedure for Control Units       3         Electronic Sensor Adjustment for Control Units       3         Feeder Line       3         Power Lift Winch Maintenance       3	37 37 38 38 38 39
Management	
Initial Start-up of the Feeding System       4         General Operation of the MODEL C2® PLUS and MODEL G™ PLUS Feeders       4         End Control and Mid Line Control Pans       4         Controlling the Feeders (optional equipment)       4         Electro-guard Operation       4	40 41 42 42
Parts List	
150# Plastic Hopper4200# Hopper Components4100 # Hopper Components4100 # Hopper Components4Hopper Mount Bracket (Optional)4Single Boot Components Part No. 6822.4Twin Boot Components Part No. 6824.4Feeder Line Components4C2 PLUS Standard with Two Piece Top.4C2 PLUS Standard with One Piece Top.4MODEL C2 PLUS Shallow with Two Piece Top.5C2 PLUS Shallow with One Piece Top.5MODEL C2 PLUS and G PLUS with Extended Fins5MODEL G PLUS Standard with One Piece Top.5MODEL G PLUS Standard with One Piece Top.5MODEL G PLUS Standard with Two Piece Top.5MODEL G PLUS Standard with One Piece Top.5MODEL G PLUS Standard with Two Piece Top.5MODEL G PLUS Standard with One Piece Top.5MODEL G PLUS Standard with Two Piece Top.5MODEL G PLUS Standard with Two Piece Top.5MODEL G PLUS Shallow with Two Piece Top.5Power Unit Assemblies.	43 44 45 46 46 47 48 49 49 50 50 51 52 53 53 53 54
Power Unit Assembly Part Numbers:       5         Mechanical End Control       5         Mechanical Mid Line Control       5         Electronic Sensor End Control       5	55 57
Electronic Sensor Mid Line Control       6         MODEL G PLUS Pan Extension (Optional)       6         2883 Power Winch       6         Miscellaneous Suspension Components       6	51 52 52

### Manufacturer's Recommendations: Birds per Pan

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

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

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

# **About This Manual**

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

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

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

- *Metric measurements are shown in millimeters and in brackets, unless otherwise specified.* "" " equals inches and "'" equals feet in English measurements.
  - Examples: 1" [25.4] 4' [1 219]
- Optional equipment contains necessary instructions for assembly or operation.
- Very small numbers near an illustration (*i.e.*, 1257-48) are identification of the graphic, not a part number.
- Note: The original, authoritative version of this manual is the English version produced by CTB, Inc. or any of its subsidiaries or divisions, (hereafter collectively referred to as "CTB"). Subsequent changes to any manual made by any third party have not been reviewed nor authenticated by CTB. Such changes may include, but are not limited to, translation into languages other than English, and additions to or deletions from the original content. CTB disclaims responsibility for any and all damages, injuries, warranty claims and/or any other claims associated with such changes, inasmuch as such changes result in content that is different from the authoritative CTB-published English version of the manual. For current product installation and operation information, please contact the customer service and/or technical service departments of the appropriate CTB subsidiary or division. Should you observe any questionable content in any manual, please notify CTB immediately in writing to: CTB Legal Department, P.O. Box 2000, Milford, IN 46542-2000 USA.

# **Safety Information**

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

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

### Safety-Alert Symbol



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

# **Understanding Signal Words**

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



**DANGER** indicates an imminently hazardous situation which, if not avoided, **WILL** result in death or serious injury.



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



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

# **Safety Instructions**

### Follow Safety Instructions

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

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

### **Decal Descriptions**

### **DANGER: Moving Auger**

This decal is placed on the Panel Weldment.

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



2527-25

A DANGER

**ELECTROCUTION** 

HAZARD!

Do not open this con-

trol box until electrical

power is disconnected at circuit breakers.

### **DANGER: Electrical Hazard**

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

Ground all electrical equipment for safety.

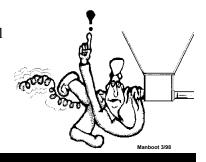
All electrical wiring must be done by a qualified electrician in accordance with local and national electric codes.

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

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

### CAUTION:

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



# General

# **Support Information**

The Chore-Time MODEL C2® PLUS and, MODEL G<sup>TM</sup> PLUS Feeding System's have been 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 and installation information. The Table of Contents provides a convenient overview of the information in this manual.

### **Planning the Suspension System**

#### 1. Select the House Layout.

A. Optional Mid Line Controls may be used for partial house brooding. See .

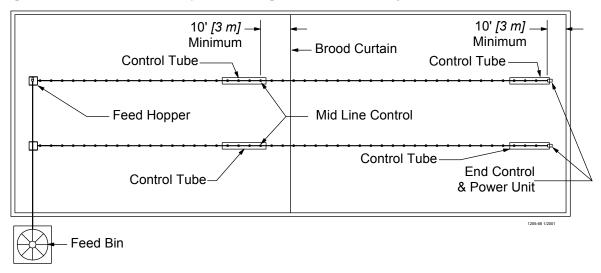


Figure 1. Component location diagram for systems up to 400 feet [122 m]. (Top View).

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

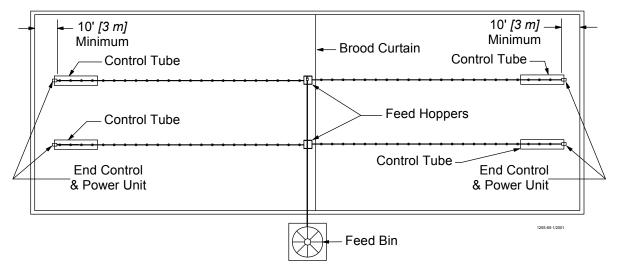


Figure 2. Component location diagram for systems over 400 feet [122 m]. (Top View).

- 2. Determine the Feed Bin location.
- 3. Determine the Brood Curtain location.
- 4. Determine the location for the End Control Pans, and if used the Mid Line Control Pans. The Feeder Control Pans should be at least 10' [3 m] from the Wall or Brood Curtain.
- 5. Determine the distance to the Feeder Line from the Side Wall.
- 6. Determine the distance from the Feed Hoppers to the End Wall for a Straight Line Feeding System.

# **General Installation Information**

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

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

The MODEL C2<sup>®</sup> PLUS and G<sup>TM</sup> PLUS Control Units use a 348 RPM Gearhead, delivering approximately 17 lbs [7.7 kg] per minute. This rating is based on feed with a density of 40 lbs per cubic foot [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 and G PLUS Feeders.

Systems up to 300' [91 m] require 1/3 HP. Power Units. Systems over 300' [91 m] require 1/2 HP. Power Units.

# Laying out the Suspension System

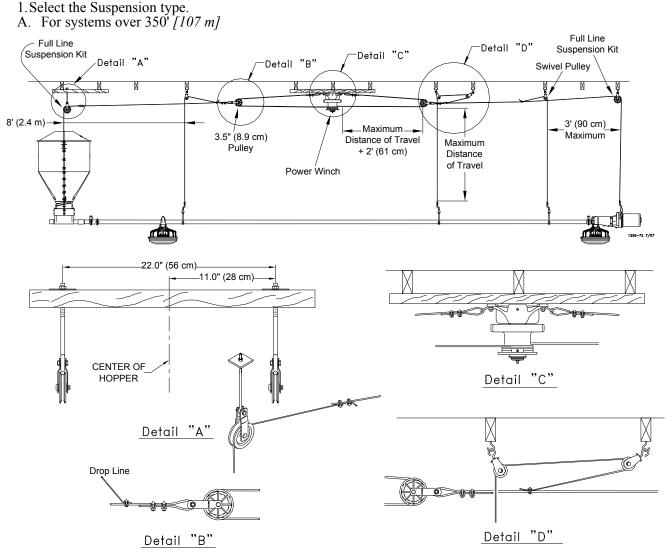


Figure 3. Suspension for systems over 350' [107 m]

B. For systems up to 350' [107 m]

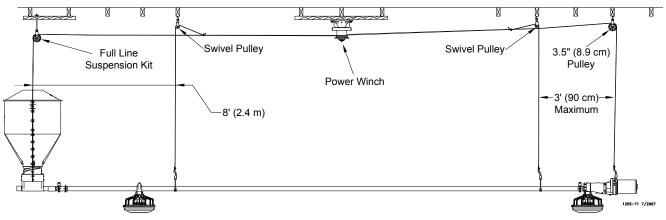


Figure 4. Suspension for systems up to350' [107 m]

- 2. Locate the Power Lift Winch. The Power Lift Winch requires a support that will span, in a wood frame house at least 3 rafters, and in a steel frame house at least 2 rafters.
- 3. Locate the Power Unit and Feed Hopper. Special support is required at each Power Unit and Feed Hopper location.
- 4. Determine the Drop Location and length. Suspension systems are based on ceiling heights of 14' [4.3 m] with suspension drop points every 8' [2.4 m]. DO NOT EXCEED 10' [3 m] BETWEEN SUSPENSION DROPS.
- 5. Determine the location for Screw Hooks. Mark a straight line or use cable to locate Screw Hooks. Use the offset of Screw Hooks where necessary.

# Installing the Suspension System

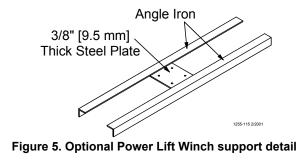
### **Power Lift Winch Installation**

1. Bolt the Power Winch, fully assembled, to the Power Lift Winch Support, either a 2" x 8" [50x 200 mm] board that will span at least 3 rafters or a 3/8" [9.5 mm] thick steel plate welded to two pieces angle iron that are each long enough to span at least 2 rafters, using 5/16 18 beckers were list done the Handware Pack

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 6**. Assembling the Power Winch to the Rafters

2. Attach the Power Lift Winch Support (with the Power Winch secured) to the ceiling at the center of the feeder line. See **Figure 7**. The Power Lift Winch Support must be parallel to the feeder line and must span at least 3 rafters in a wood frame house and 2 rafters in a steel frame house.



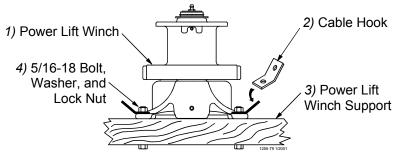


Figure 6. Assembling the Power Winch to the Rafters

**note:** 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.

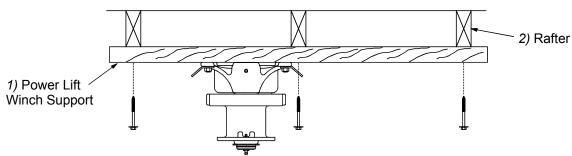


Figure 7. Mounting the Power Lift Winch and Support to the Rafters

### Installing the Main Winch Cable

The Suspension Systems are based on ceiling heights of 14' [4.3 m] with Suspension Drop points every 8' [2.4 m]. DO NOT EXCEED 10' [3 m] BETWEEN SUSPENSION DROPS. Refer to suspension section in this manual for installation details.

Adequate overhead structure must be provided to support the weight of the feeders, hoppers, power units, etc. The Suspension System is the same for the Rev. 12 and 8 Feeders. The type of installation required depends on the feeder line length.

#### **IMPORTANT:** Special support is required at each Hopper location.

•Power Unit Locations: The Feeder Line must be supported within 3' [.9 m] of the Power Unit. This is in addition to the required Power Unit suspension. If the Control Unit or Hopper does not come out directly under a truss, fasten a pulley to a 2" x 8" /50 x200 mm<sup>7</sup> board or steel angle that will span 2 trusses and is capable of supporting 300 lbs [136 kg] for the Hopper and 75 lbs [34 kg] for the Control Unit.

•Feed Hopper Locations: When steel hoppers with center suspension are used, see figure 8, the feeder line must be supported within 1' *[30 cm]* of the feed hopper. When plastic hoppers are installed only 2 point suspension can be used, see figure 9, this does not require additional supports. See page 15 for plastic hopper suspension. This is in addition to the required Feeder 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 Line is to be installed.

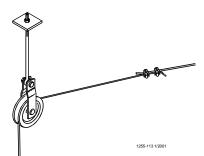
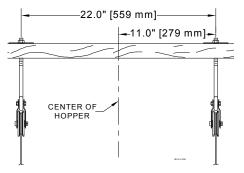


Figure 8. Steel Hopper Suspension



**Figure 9. Plastic Hopper Suspension** 

3. Extend the 3/16" [5 mm] Main Winch Cable the full length of the feeder line. Attach the cable temporarily to the ceiling with nails, staples, or some type of fasteners. Figure 10 shows a double back arrangement for feed lines over

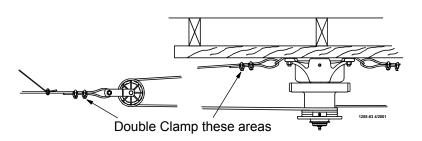


Figure 10. Double back arrangement for feed lines over 350' [107 m]

350' [107 m].

4. Route 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 11.** 

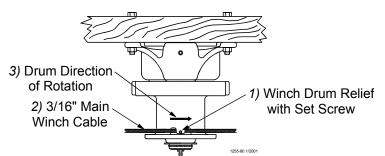
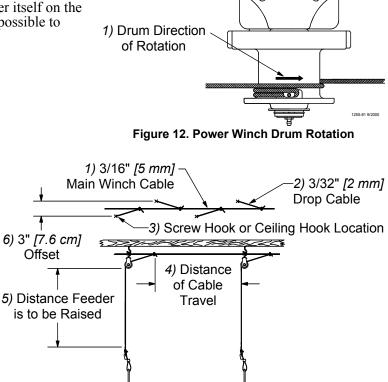


Figure 11. Attaching the Cable to the Power Winch

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 12.** 



Screw the hook into the truss the full length of the threads to prevent bending. The openings of the screw

Screw Hook Installation

drop lines.

The recommended distance between the

drops for the feeder line is 8' [2.4 m] on

If the distance raised is greater than the

center. Do not exceed 10' [3 m] spacing on

distance between the drop spacings, offset

the hooks 3" [7.6 cm] to each side of the

line to prevent the cable clamps from

catching the pulleys, see figure 13.

hooks must be pointed away from the direction of travel when the Power Winch raises the feeder line. See Figure 14.

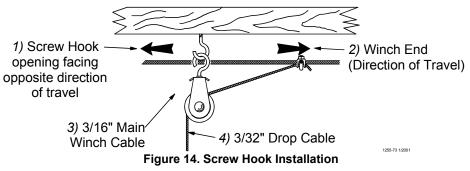


Figure 13. Drop Line Off Set Detail

# **Ceiling Hook Installation**

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 15 - 19**.

### **Steel Truss Installations**

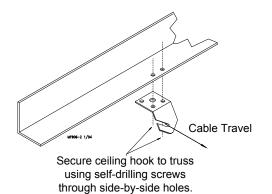


Figure 15. Narrow Steel Truss Installations

### Steel Truss Welded Installations

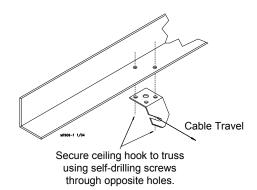
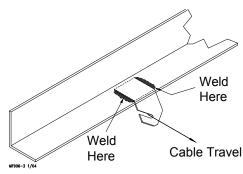
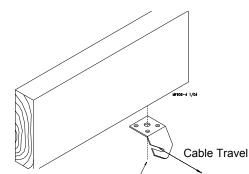


Figure 16. Wide Steel Truss Ceiling Installation



### Wood Truss Installations

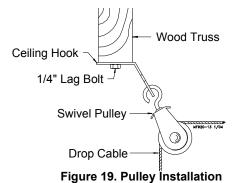
Figure 17. Welded Steel Truss Ceiling Bracket Installation



Secure ceiling hook to truss using 1/4-20 lag bolt through large center hole.

#### Figure 18. Wood Truss Ceiling Bracket Installation

6. After securing the Ceiling Hook to the truss, slide the hook of a Swivel Pulley into the slot, as shown in **Figure 19**.



### **Drop Installation**

#### Refer to page 12 Figure 14.

- 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 14 or 20.
- 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. Figure 20 shows a "throwback" cable arrangement.

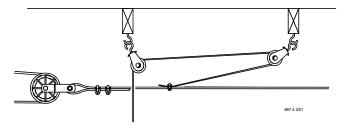


Figure 20. "Throwback" cable arrangement

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

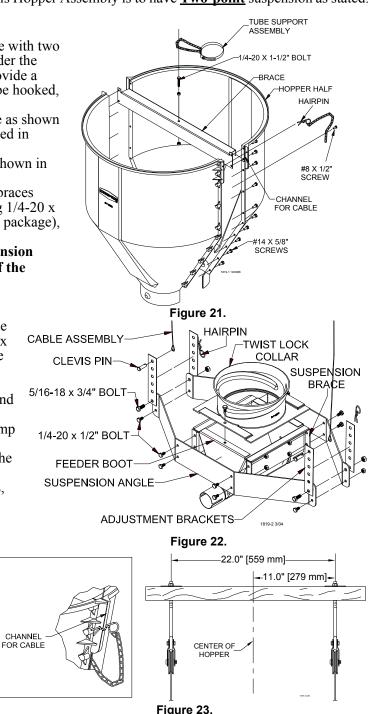
### Assembly

- 1. Assemble the 1/4-20 x 1-1/2" bolt to the brace with two 1/4-20 nuts. One nut should be assembled under the brace with the other on top. This bolt is to provide a place for the tube support assembly chain to be hooked, see figure 21.
- 2. Assemble the 150 lb. hopper halves and brace as shown in **Figure 21**, using #14 x 5/8" screws (supplied in hardware package).
- 3. Assemble the #8 x 1/2" screws and chain as shown in Figure 21.
- 4. Assemble suspension angles and suspension braces around feeder line boot (single or twin), using 1/4-20 x 1/2" Hex bolts and nuts (supplied in hardware package), see figure 22.
- Note: The larger holes on the ends of the suspension angles need to be on the upper side of the assembly.
  - 5. Assemble the twist lock collar to the top of the feeder line boot (single or twin) using 1/4-20 x 1/2" bolts and lock nuts (supplied in hardware package), see figure 22.
  - 6. Assemble the adjustment brackets to the suspension angles with 5/16-18 x 3/4" bolts and nuts (supplied in hardware package).
  - 7. Two cable assemblies (cable with a sleeve clamp and a 5/32 thimble) are supplied with the suspension kit to support the hopper. Attach the cable assemblies to the adjustment brackets using the top holes of the adjustment brackets, see figure 22.
  - 8. Install two pulleys to either a 2" x 8" [50x200 mm] board that will span at least 3 rafters or a 3/8" [9.5 mm] thick steel plate welded to two pieces of angle iron that are long enough to span at least 2 rafters. Install the pulleys directly above the feeder line where the hopper is to be located. The pulleys should be spaced 22" [559mm] apart (11" [279 mm] from the center of the hopper in both directions), **see figure 23**.

### Suspend the Hopper

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

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



# Feeder pan assembly

All feeders assemble in the same manor. Refer to **Figure 24.** below. Slide the Support Cone, the Adjustment Cone, and the Grill together as shown. Hook the loop of the Grill to the tab of the Feeder Pan. Rotate the Feeder Pan over on the top of the Grill and Cones. Seat the Feeder Pan in the ring of the Grill. With the Feeder Pan fully seated rotate the pan clockwise to lock in place. Assemble the remaining Feeders.

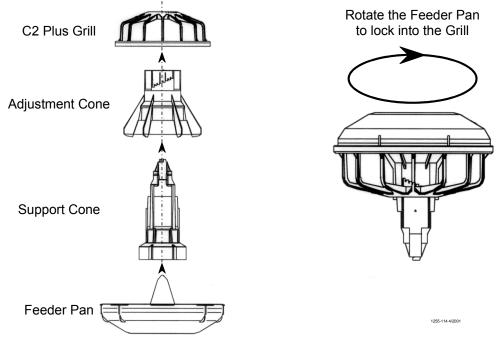


Figure 24. Assembling the Feeder Pan

# Feeder Line Assembly and 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.
- When sliding the feeders on the tubes, make sure the grill openings 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 25**.

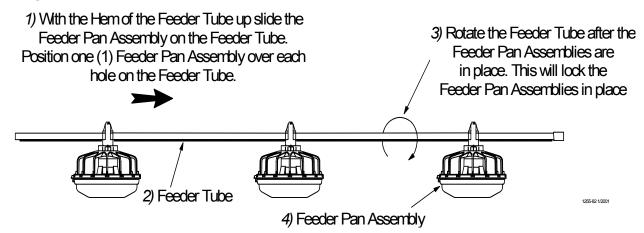


Figure 25. Assemble Feeders on tubes

### 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 belled end of each tube should be toward the Hopper end of the line. See Figure 26.
- 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. The last Feeder Tube before the End Control Pan or Mid Line Control pan needs to be a Control Tube.

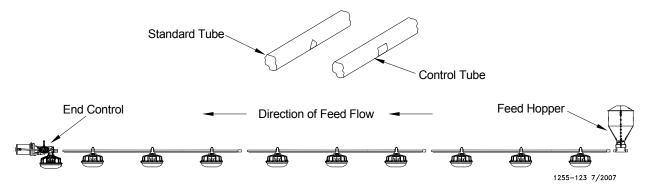


Figure 26. Hanger Installation

3. To achieve total feed drop out all along the system, the Chore-Time Logo should be centered at the crown of the tubes and all the Hangers should be installed as shown in **Figure 27.** 

4. Place a Tube Clamp Assembly or Clamp/

Systems using 9' or 10' tubes require a

Clamp/Anti-Roost Bracket at every fifth

Systems using 12' tubes require a Clamp/ Anti-Roost Bracket at every **fourth** joint.

All other joints in the system use the standard Tube Clamp Assembly.

Anti-Roost Bracket.

joint.

Anti-Roost Bracket at each joint. **Figure 28.** shows the standard Clamp and Clamp/

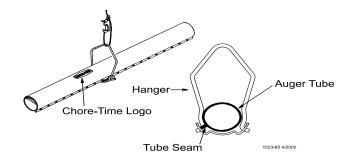


Figure 27.Hanger Installation

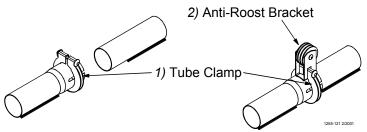


Figure 28.Tube Clamp and Tube Clamp with Anti-Roost Bracket

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 29.** shows the proper clamp location on the tube joint. *Do not tighten the clamp at this time*.

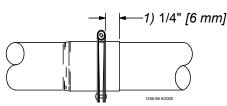
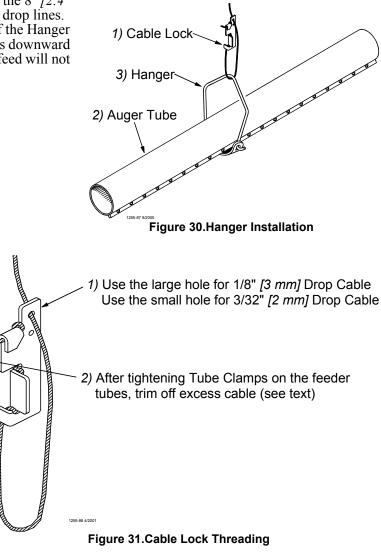


Figure 29.Clamp Installation

5. Install the Hangers on the feed line tube at the 8' [2.4 *m*] spacings determined by the suspension drop lines. **Figure 30.** shows 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.

- 6. Install Adjustment Leveler within
  6" [152 mm] of feeder line. Figure
  31. shows the proper cable routing around the Adjustment Leveler.
- 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 the Chore-Time Logo is on crown of tube.
  - make sure the clamps are located, as shown in Figure 29.

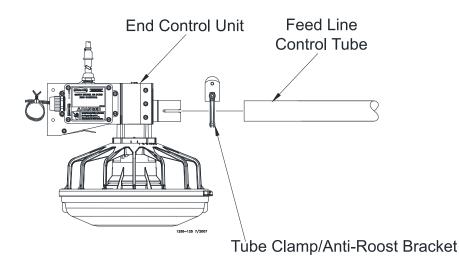
Finally, tighten the Tube Clamps on the feeder tubes. Clamp the joints securely, but do not crush the tubes. Re-adjust all Adjustment Levelers as needed and trim off excess cable as shown in **Figure 31**.



# Installing the End Control, Boot Assembly, and Auger

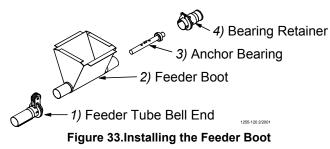
The End Control Unit must be at least 10 feet [3 m] from the end of the building to allow birds access around the end of the feeder line.

1. Assemble the End Control Unit to the Feeder Line Control Tube using a clamp/anti-roost bracket. See **Figure 32. DO NOT INSTALL THE POWER UNIT AT THIS TIME.** 



#### Figure 32.Connecting End Control Unit to the Feed Line Tube

- 2. Install the Feeder Boot by sliding the straight end of the Feeder Boot into the belled end of the Feeder Tube. Install a clamp/anti-roost bracket on the bell and tighten. The Feeder Boot must be level with the open top of the Feeder Boot flat. **Figure 33**.
- 3. DO NOT INSTALL THE ANCHOR BEARING AND BEARING RETAINER AT THIS TIME.



#### 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.



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. Use extreme caution when pushing the auger into the auger tubes. Keep your hand away form the end of the auger tube to avoid injury.

With the auger coiled about 6 feet [1.8 m] from the end of the boot, uncoil the auger from the outside and 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.

- 2. If more that one coil is required for each feeder line, the auger ends will have to be brazed together. Refer to the Brazing the Auger section in this manual.
- 3. Install the Anchor Bracket to the Power Unit/Gearhead, as shown in **Figure 34.**, with the included 5/16-18 Bolts.

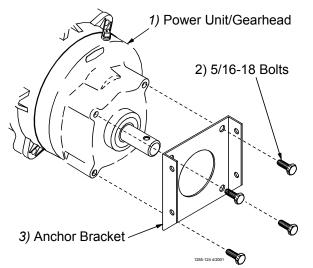


Figure 34.Assemble the Anchor Bracket to the Power Unit/Gearhead

- 4. Slide the Drive Tube and flat washer over the output shaft on the Power Unit, as shown in **Figure 35.**
- 5. Continue installing auger until the auger reaches the Control Unit end of the feeder line.
- 6. Turn the Drive Tube Weldment into the auger, then attach to the output shaft of the Power Unit, as shown in

Figure 35. Use the Driver Block to secure the auger to the Output Shaft.

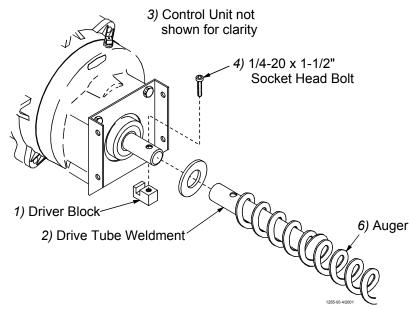
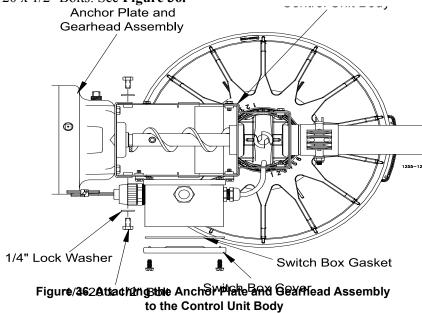


Figure 35.Auger Driver Components

7. Attach the Anchor Plate and Gearhead Assembly to the Control Unit Body using the included 1/4" Lock Washers and 1/4-20 x 1/2" Bolts. See Figure 36.



8. Install the Metal Water Tight Connector (Item 1) in the Feed Line Motor (Item 2). Cut the Flex Conduit (Item 3) to length. Slide the wires from the end control through the Flex Conduit (Item 3). Install the Flex

Conduit (Item 3) in the connectors. Connect the wires to the Feed Line Motor (Item 2).

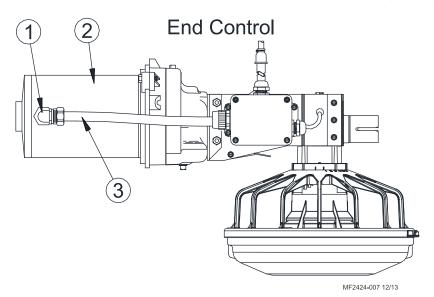


Figure 37.Installing Water Tight, Cutting and Installing Conduit

9. Attach all covers and wire according to the wiring section of this manual.

10.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 38.

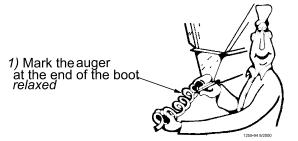


Figure 38.Measure the Auger from the relaxed position

11.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 44**.

# **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.



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. 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, uncoil the auger from the outside and 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.

- 2. If more that one coil is required for each feeder line, the auger ends will have to be brazed together. Refer to the Brazing the Auger section in this manual.
- 3. Install the Anchor Bracket to the Power Unit/Gearhead, as shown in **Figure 39**, with the included 5/16-18 Bolts.

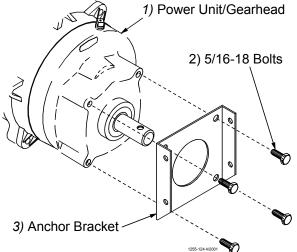
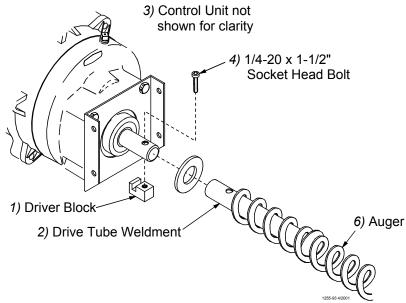


Figure 39. Assemble the Anchor Bracket to the Power Unit/Gearhead

- 4. Slide the Drive Tube and flat washer over the output shaft on the Power Unit, as shown in Figure 40.
- 5. Continue installing auger until the auger reaches the Control Unit end of the feeder line.
- 6. Turn the Drive Tube Weldment into the auger, then attach to the output shaft of the Power Unit, as shown in **Figure 40**. Use the Driver Block to secure the auger to the Output Shaft.



#### Figure 40. Auger Driver Components

7. Attach the Anchor Plate and Gearhead Assembly to the Control Unit Body using the included 1/4" Lock Washers and 1/4-20 x 1/2" Bolts. See Figure 41.

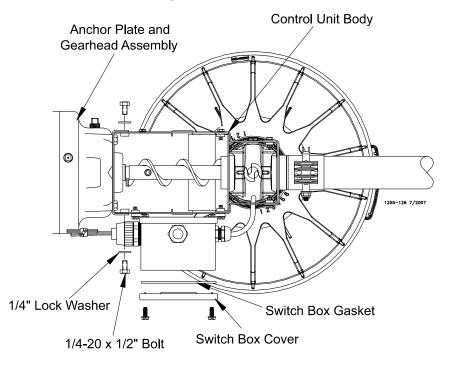
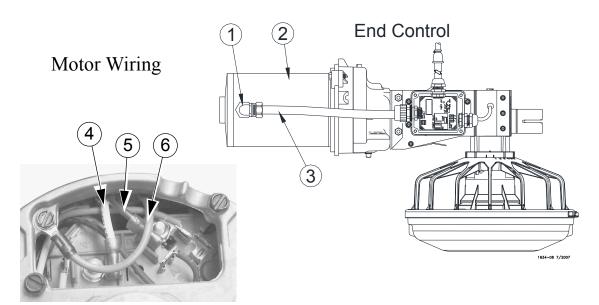


Figure 41. Attaching the Anchor Plate and Gearhead Assembly to the Control Unit Body

8. Install the Metal Water Tight Connector (item 1) in the Feed Line Motor (item 2). Cut the Flex Conduit (item 3) to length. Slide the wires from the end control through the Flex Conduit (item 3). Install the Flex Conduit (item 3) in the connectors. Connect the wires to the Feed Line Motor (item 2), see figure 42.



#### Figure 42. Wiring the Motor

9. Attach all covers and wire according to the wiring section of this manual.

10.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 43.

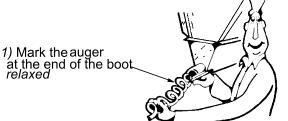


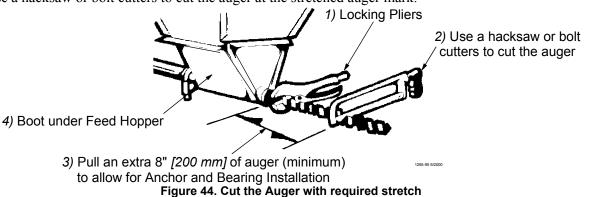
Figure 43. Measure the Auger from the relaxed position

11.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 44**.

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



- 12.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 45**.
- DO NOT OVERTIGHTEN THE SET SCREWS.



POINTS WHEN INSTALLING AUGER.

Set screws

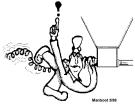
Figure 45. Auger and Anchor Bearing Connection

13. 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.

14.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 46. 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.

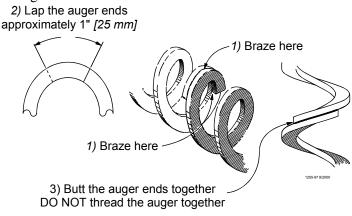
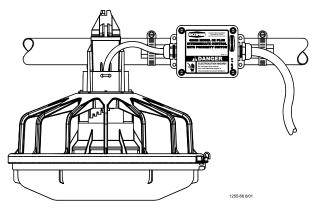


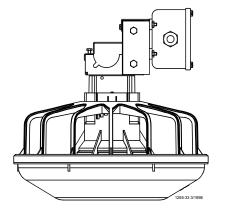
Figure 46. Auger Brazing

# **Mid-Line Control**

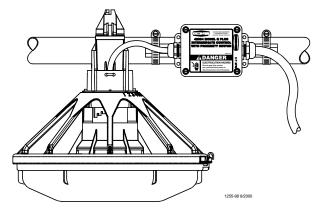
Mid-Line Control Units are available for the MODEL C2 PLUS & G PLUS Feeders. The Mid-Line Controls are shown in **Figure 47**.



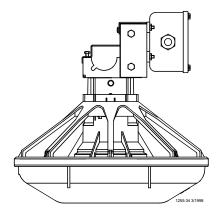
MODEL C2 PLUS Mid-Line Control with (ES) Proximity Switch



MODEL C2 PLUS Mid-Line Control with Mechanical Switch and Windows



MODEL G PLUS Mid-Line Control with (ES) Proximity



MODEL G PLUS Mid-Line Control with Mechanical Switch and Windows

Figure 47.Mid-Line Controls

The Mid-Line Control makes it possible to operate the feeding system when birds are confined away from the End Control Unit. Chore-Time recommends placing the Mid-Line Control Feeder at least 2 pans away from the curtain or partition. See **Figure 48**.

1. **New Feeder Lines:** Leave one feeder pan assembly off the feeder control tube at the point where the Mid-Line Control needs to be placed. The feeder line can be assembled and suspended before attaching the Mid-Line Control; or the Mid-Line 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

Mid-Line Control will be installed.

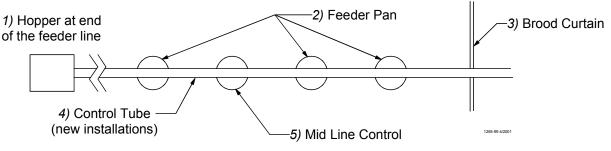
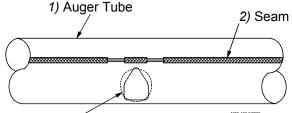


Figure 48.Mid-Line Control Location Diagram

New Feeder Lines: Go to step 3.
 Existing Feeder Lines: Enlarge the outlet hole to approximately 1" [2.5 cm] diameter for the Mid-Line Control, plus enlarge (2) outlet holes in front (to the hopper end) of the Mid-Line Control. Use unibit to enlarge hole size. Be sure there are no burrs inside the tube to catch the auger.



3) Use a Unibit to enlarge outlet holes on existing feeder lines Figure 49.Enlarging Outlet Holes

- 3. Install the Mid-Line Control: Mechanical Switch:
  - 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.

#### **Electronic Sensor:**

- a. Assemble the Mid-Line Control to the Feeder Tube as shown in **Figure 51**.
- b. Attach the Switch Box Assembly to the Feeder Tube with Hose Clamps as shown in **Figure 51**.
- 4. Install a toggle switch, out of reach of the birds, to disconnect power to the Mid-Line Control. This allows the Mid-Line Control to serve as standard feeder when not used as a control feeder.
- 5. Wire the Mid-Line Control as shown in the wiring diagram section of this manual.

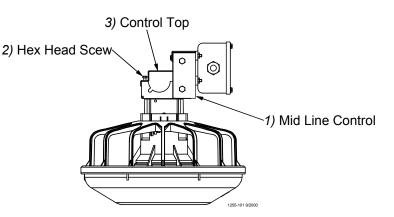


Figure 50.Mid-Line Control Installation

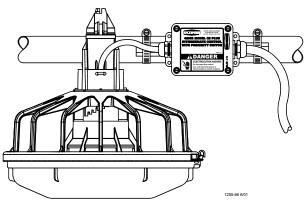


Figure 51. Installing the (ES) Mid Line Control

### Anti-Roost Assembly

6. Unroll the bulk anti-roost cable. Note: If the cable is unrolled as shown in **Figure 52.**, 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.

- 7. 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 53**.
- 8. Insert the cable in the insulator on the top of each Grill Support between the hopper and the next anti-roost bracket.

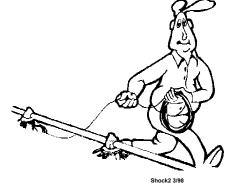


Figure 52. Unrolling Cable

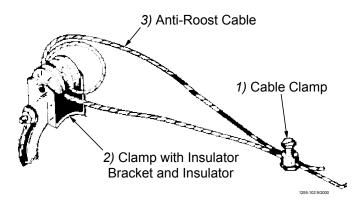


Figure 53.Anti-Roost Cable at the Hopper

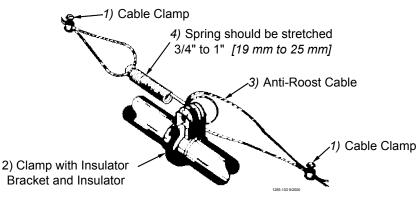


Figure 54.Anti-Roost Cable Mid-Line Connection

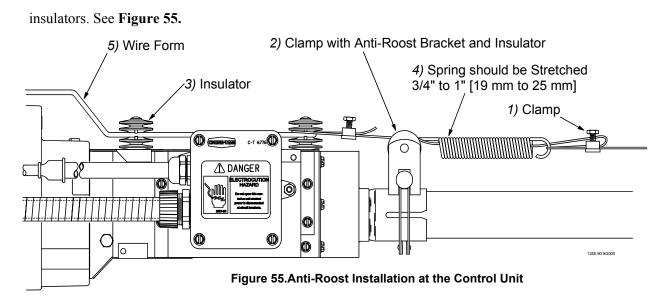
12.Run the cable to the next insulator, attach a spring in the center groove at the anti-roost bracket and cut the cable at this point. The cable should be positioned in the insulator built into the top of each grill support along the feeder line.

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

14.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 55**. Install the wire form on the control unit insulators. Be sure the guard snaps into the retainers molded into the

- 9. Attach a spring in the center groove at the second anti-roost bracket and cut the cable at this point. See **Figure 54**.
- 10. 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 54.

11. 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 54.** 



15.Install the Poultry Trainer or Line Charger, as shown in Figure 56. or Figure 57.

The Poultry Trainer is used to power all Anti-Roost lines in a house. See **Figure 56**. The Line Charger is used to power individual Anti-Roost lines in a house. See **Figure 57**.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.

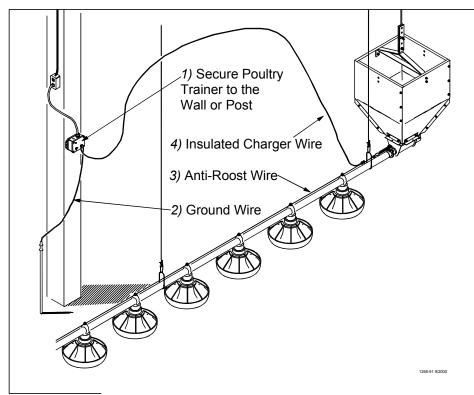


Figure 56.Poultry Trainer Installation

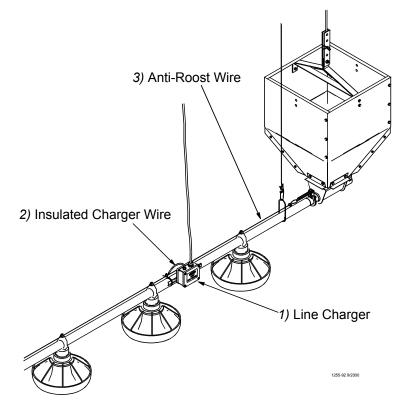


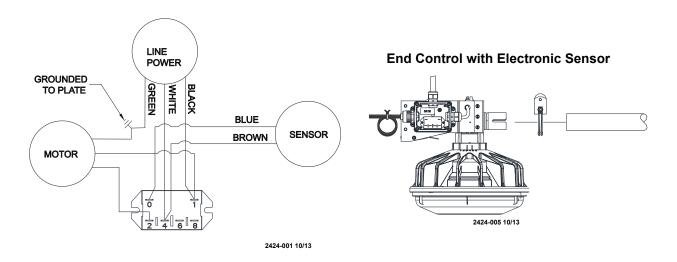
Figure 57.Line Charger Installation

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

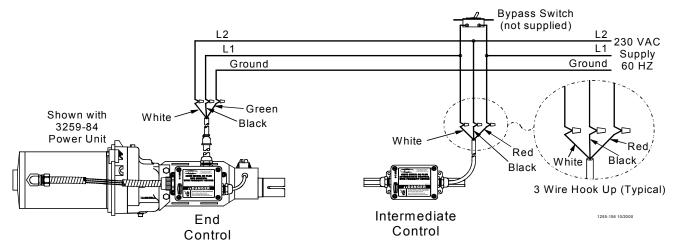
Remember, the anti-roost system should be grounded through the poultry trainer.

# Wiring

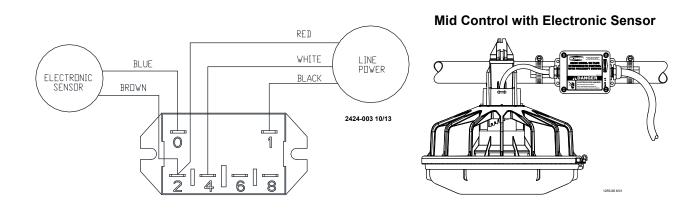
# End Control with Electronic Sensor (ES) Internal Wiring



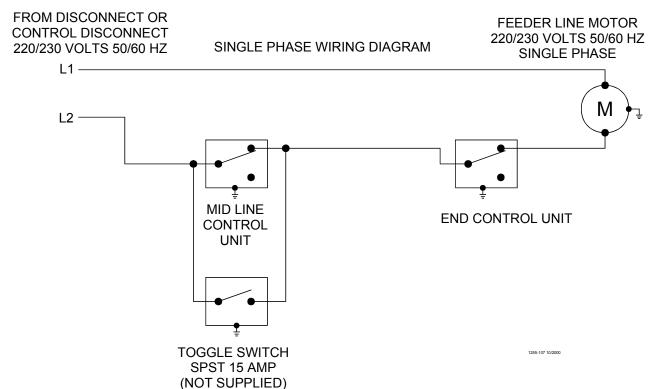
# **Electronic Sensor Control Wiring Diagram**



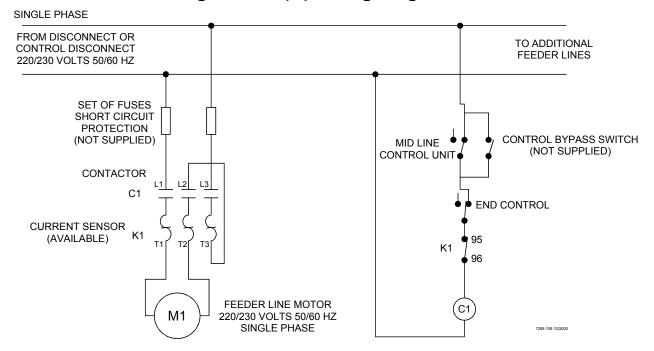
# Mid Control with Electronic Sensor (ES) Internal Wiring



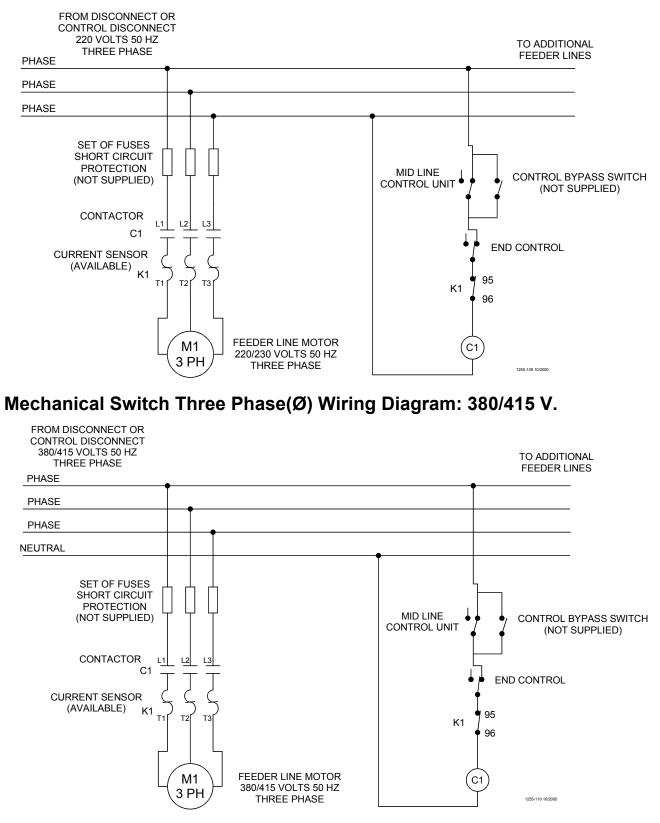
### Mechanical Switch Single Phase(Ø) Wiring Diagram



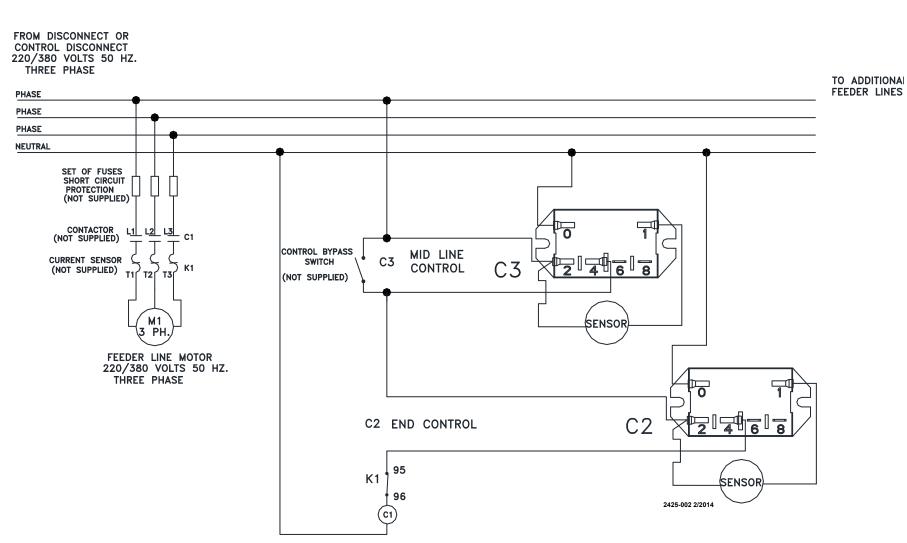
### Mechanical Switch Single Phase(Ø) Wiring Diagram with Motor Starter



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



### Electronic Sensor Three Phase (Ø) Wiring



MODEL C2® PLUS & MODEL G™ PLUS with Electronic Sensor (ES) Feeding System

# Troubleshooting

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.





Moving Auger! Disconnect electrical power before working on system, equipment may start automatically. Otherwise severe personal injury will result.

2527**-**9

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	Auger is bent or kinked	Repair or replace damaged auger	
(Noisy feeder operation)	End of auger is riding up on anchor weldment	Auger must not be positioned over weld on anchor Check for bent or damaged auger	
Oil leaking out of seals on power unit	Gearhead vent plug not installed	Replace plastic shipping plug with vent plug	
	Defective gear head seal	Replace seal	
Not enough feed supplied to the feeder pans	Insufficient time programmed on the time clock	Add more operating time to feeding period	
	Feeder line control unit switch out of adjustment	Adjust switch according to the Switch Adjustment Procedure in the maintenance section	

### Maintenance

### Floor Feeding System Maintenance

The MODEL C2 PLUS and MODEL G 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.

### **Gear Head Maintenance**

Refer to "Gearhead Maintenance" on page 37.

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

3-Stage Gearheads (3261-9, 3261-12, 3261-14): Add approximately 13 oz. (384 ml) of SAE 40W of 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.

1)Vent/Oil Fill Plug



2)Oil Drain Plug

Check the oil level in the gear head at installation

Check the oil level every 6 months

3)Check the oil level at the side plug If oil is needed use SAE 40W oil

Oil capacity for the 2 stage gear head is 9 oz [266 ml]

Oil capacity for the 3 stage gear head is 13 oz [384 ml]

The oil should be changed every 12 months

#### Figure 58.Gearhead Maintenance

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

# Mechanical Switch Adjustment procedure for Control Units

Refer to See Figure 59.

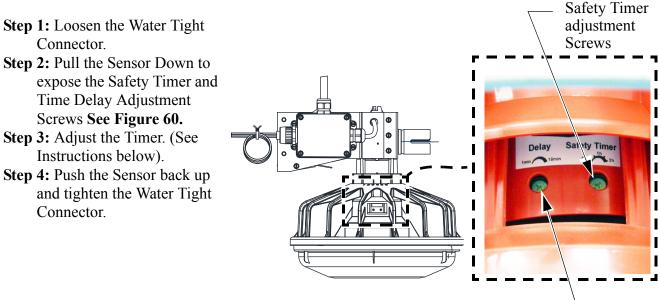
- A. Turn the adjustment nut counterclockwise until the switch clicks.
- B. Turn the adjustment nut clockwise until the switch clicks.
- C. Turn the adjustment nut counterclockwise 3/4 turn.



Figure 59.Switch Adjustment

### Electronic Sensor Adjustment for Control Units

**See Figure 60.** The Electron Sensor's sensitivity is preset at the factory. The time delay adjustment is 1 minute to 10 minutes. *The factory setting is 1 minute*. The Sensor also comes with a Safety Timer that can be set to: Off, 1 hour, or 2 hours. The factory setting is 2 hours. To get access to the Adjustment Screws:



Time Delay Adjustment Screws -

#### Figure 60.Switch Adjustment

#### To adjust the Time Delay:

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

#### To adjust the Safety Timer:

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

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

#### MF2424B

### **Feeder Line**

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

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

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

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

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

If the system must be disassembled, extreme caution must be used to prevent injury from springing auger. Refer to **Figure 61.** 

- 1. Disconnect power to the entire system.
- 2. Loosen the Tube Clamp on the bearing at the hopper end of the system. Remove the Tube Clamp and Bearing Retainer.
- 3. Pull the Anchor and Bearing Assembly and approximately 18" [45 cm] of auger out of the boot.

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

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

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

#### To reinstall the Anchor and Bearing Assembly:

1. Insert the Anchor Assembly into the auger, guide the tip of the auger between the two roll pins in the center of the anchor. Continue to guide the auger until the tip of the auger hits the flat washer. Tighten the setscrews in the center of the anchor until they touch **See Figure 61**.

2. 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.

### **Power Lift Winch Maintenance**

#### Refer to Figure 62.

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

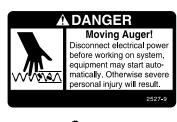
Remove any feed build-up in the Safety Switch Boxes in the Control Units.

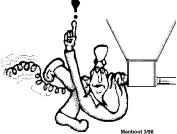


1)Grease the Power Lift Winch every 6 months with 1 to 2 shots of common industrial or automotive grease DO NOT OVER GREASE THE POWER LIFT WINCH

Figure 62.Maintenance to the Power Lift Winch

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





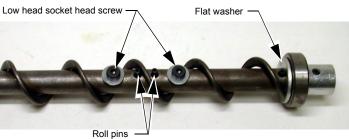


Figure 61.Auger and Anchor Bearing Connection

### Management

This section provides you with valuable information concerning feeder operation and management. It is important that you read this information and understand how the feeding system was designed to operate. Once you become familiar with the system, you may *custom operate* it to fit your individual needs.

### Initial Start-up of the Feeding System

The Feeding System should be operated prior to birds being housed to make sure the installation is correct, the switches function properly, and to fill the feeder lines with feed.

There are two typical layouts for the feeding system that was determined prior to the installation. Normally if the building is 400' [122 m] or over, a center house hopper set-up is used. See **Figure 63.** For buildings under 400' [122 m], the hopper is placed at one end and the control pan/power unit at the other end. See **Figure 64.** 

It is common practice to use partial house brooding during the early days of broiler production. For buildings that have the feeder split in the center (center hopper set-up), normally only the feeders that are in the brood area are used during brood time. For buildings that have the hopper at one end, brooding can be done on the motor end or an optional mid line control pan(s) can be placed on the feeder line.

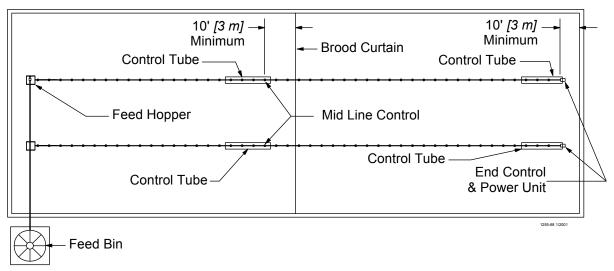


Figure 63.Component location diagram for systems over 400 feet [122 m]. (Top View).

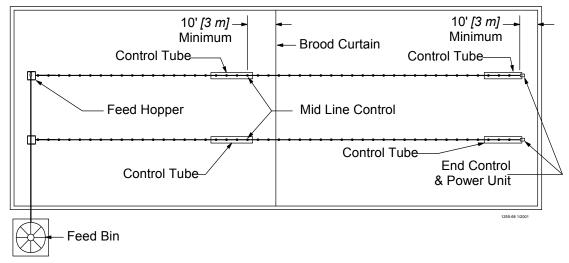


Figure 64.Component location diagram for systems up to 400 feet [122 m]. (Top View).

The feeder tubes and auger are supplied from the factory with a protective oil coating that will cause the system to deliver feed at a reduced rate. The oil coating will also create a larger load on the power unit (motor) until the system has been initially purged with feed, and becomes broken in.

#### To operate

- 1. Lower feeder lines so the feed pans are resting on the floor and the feed flood windows are completely open. Although the major weight of the feeder lines will be on the floor, do not remove all the weight from the suspension system and allow the cables to become slack.
- 2. Apply power to the feeder lines to check the operation. Allow to operate empty for 1-2 minutes.
- **NOTE:** For feeder lines that have mid line controls, the recommended bypass switch(s) are wired into the system for selection of partial or full house control. Select the switch so the mid line control is functional. As the feeder operates, the feed will stop at the mid line control pan.
- 3. With the shut-off slide on the feed bin boot closed, energize the Flex-Auger® fill system. After operation of approximately 1-2 minutes, open the boot slide 1/2 way to allow feed to be conveyed to the feeders.
- 4. Once feed begins to be dispensed into the feed hopper(s), manually shut-off the fill system.
- 5. Apply power again to the feeder lines. Operate the fill system manually to dispense approximately 50 lb. *[23 kg]* increments of feed into the feed hopper(s). Allow the feed hopper to become empty for 30 seconds between each increment to reduce load on the feeder motor. Continue this procedure until feed has been dispensed to all the feeder pans. When the feed reaches the control pan, the feeder line will be shut-off.
- 6. Once the feeder lines have been initially filled with feed, manually dispensing feed in 50 lb. *[23 kg]* increments will no longer be necessary. The shut-off slide on the Flex-Auger® fill system may be completely opened. Refer to the Flex-Auger fill system Operator's Manual for information when multiple feed bins are used.

### General Operation of the MODEL C2<sup>®</sup> PLUS and MODEL G<sup>™</sup> PLUS Feeders

**These recommendations are the guideline to aid producers with the use of the feeding system.** With experience a feeding program will be developed to enhance the feeding systems performance. Several factors such as feed content, type of birds, climate, lighting programs, and etc. may dictate change from these recommendations.

The MODEL C2 PLUS and G PLUS feeders have a feed flood windows which allows the feeder pan, when lowered to the floor, to be filled with feed for the brooding of young birds. Start young birds with the feeder line lowered so the feed pans are resting on the floor and the feed flood windows are completely open. Although the major weight of the feeder lines will be on the floor, do not remove all the weight from the suspension system and allow the cables to become slack.

It is advisable to provide supplemental feed during the first few days for the young birds. This is especially true when partial house brooding is used (refer to page 40). Supplemental feeders such as the CHORE-TIME® E-Z START<sup>TM</sup> Chick Feeder, provide extra feeding space and access to the feed.

With the feeders lowered to the floor and the feed flood windows open, the operation of the feeder will allow a high level of feed to be placed into the feed pans making it easy for the birds to find feed, adapt to the feeder, and begin to eat.

Do not operate the feeding system on automatic (full demand feed) when the feed windows are open. Chore-Time recommends opening the feed windows for the first 8 to 14 days. The feeders will need to be operated at least 2 times a day for the first 5 days, and thereafter, 3 times a day or more as needed, while the windows are open. If it is not possible to operate the feeder manually 1-3 times a day during the brood time (windows open), then a time clock should be utilized to limit the number of times and length of time the feeder can operate. Failure to do one of the above will create the possibility of an excessive high feed level in the feed pans and the birds to waste feed.

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

As the birds grow and become acclimated to the feeder pans, the feeder will need to be raised to the grow-out position. Before raising the feeder, it is recommended to allow the birds to eat the feed level down below the feed flood windows. This will ease the process of the feed flood windows closing properly.

Use the suspension system to raise the feeder(s) line. As the feeder is raised the feed flood windows will close. Continue raising the feeder lines until the feed pans just begin to clear the floor or litter.

# **IMPORTANT:** When raising the feeder to the grow-out position, make sure the feed pans are to the point of just clearing the floor.

This will insure the feed will properly flow out into the feeder pan. When the feeder is raised to just clear the litter, there may a few places where the litter is lower and the pans seem too high. Do not be concerned as the birds will level the litter and at this young bird age, there will be sufficient feeder space.

The feeder should be set on the #4 position for most applications. The adjustment settings are easy to understand and change. Setting numbers are embossed on both sides of the grill so they may be easily seen from either side of the feeder line. See Figure 65.



Figure 65.Feeder Pan Assembly adjustment

Feed texture and consistency, type of bird, or other variables may make it necessary to change to another feed setting position. The combination of proper pan height, feeder setting, and feeder operation will result in optimum feeder performance (refer to **Figure 66.** for pan height information). The operator will learn what performs best for his/her situation with experience.

# **End Control and Mid Line Control Pans**

At installation time, the end control pan of the feeder was placed to be 10 feet [3 m] from the end of the building to allow the birds access around the end of the feeder line. It is important the feed setting of the end control pan be the same as the rest of the feeder pans so the birds activate the feeder.

The Mid Line Control is placed on the feeder line when partial house brooding is desired. It is important the mid line control be installed at least 2 feeder pans away from the curtain or partition so the birds will activate the feeder line. The feed setting for the mid line control should be the same as the rest of the feeder pans on the feeder line. A toggle switch or disconnect is used to bypass the power to the mid line control. This allows the mid line control to serve as a standard feeder after brooding. The feeder can be changed from full

# **Controlling the Feeders (optional equipment)**

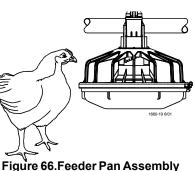
house operation to partial house brooding with the activation of the switch.

A time clock control is used with the feeding system to reduce excessive feeder operation time and limit feed wastage. The basic use of a time clock control is to allow periods of time during the day for the birds to reduce the feed level in the feeder pans and to limit the possibility of the birds creating a high feed level and wasting feed. This is not to be confused with lighting programs that have become very common place. If lighting or intermittent lighting programs are to be used, the use of the time clock control will be limited to just the light period. **Caution should be used to not restrict the feed from the birds during the light period.** Experience with the feeding system will determine how the time clock control is used.

The MODEL C2 PLUS and G PLUS Feeding Systems may be controlled by the #34385 Control Panel or the #34574 Time Clock Control. Refer to the instructions supplied with each control for information.

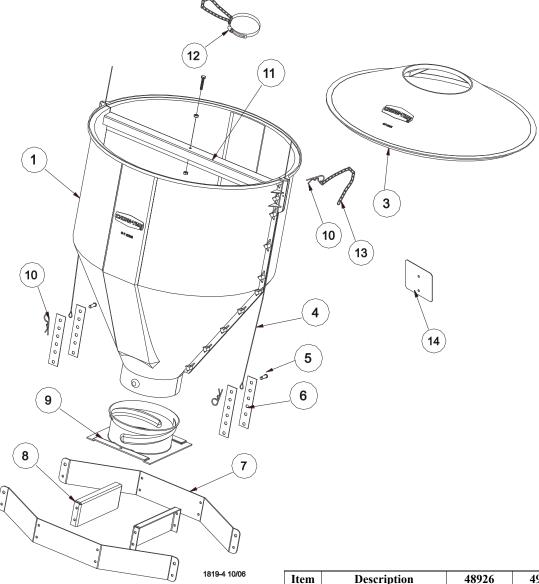
### **Electro-guard Operation**

The electro-guard chargers should be operated on a separate electrical circuit so the anti-roost system can be shut off using a switch next to the entrance door when someone enters the building. Birds are less likely to become wild and flighty if the anti-roost is off when people are in the building.



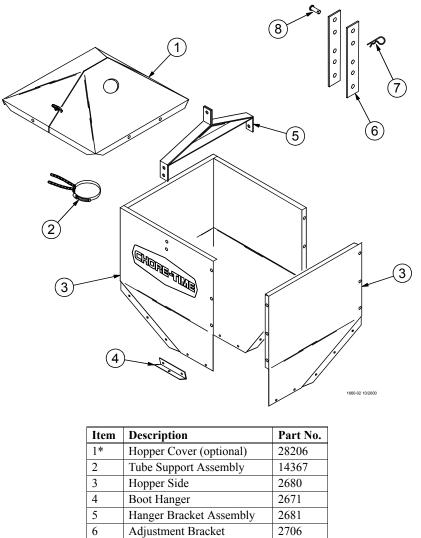
gure 66.Feeder Pan Assembly height adjustment

# Parts List 150# Plastic Hopper



Item	Description	48926 Hopper Kit	49267 Hopper Kit		
1	Switch Backup Plate	50966	50966		
2	Plastic hopper half	49028	49028		
3	Hopper cover		48675		
4	Support cable assembly	2809-3	2809-3		
5	Clevis pin	2797-1	2797-1		
6	Boot adjuster bracket	2706	2706		
7	Suspension angles	48679	48679		
8	Suspension brace	48680	48680		
9	Twist lock collar	49041	49041		
10	Hair pin	2664	2664		
11	Cross brace	49029	49029		
12	Drop tube support	14367	14367		
13*	Chain 2128 2128				
	must be ordered in either 100 is 100 ft and 2128-250		ft quantities,		

### 200# Hopper Components



\*Hopper Cover not included. Must be ordered separately.

The 200# Hopper Assembly may be ordered under Part No. 7941. Hopper Cover must be ordered separately.

Clevis Pin, 5/16 x 1"

2664

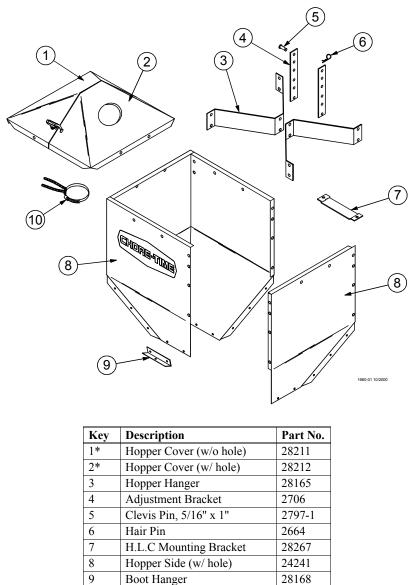
2797-1

Hair Pin

7

8

### **100 # Hopper Components**



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

10

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

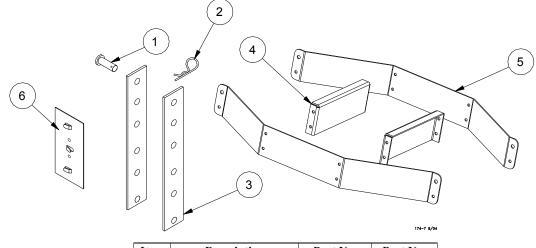
The 100# Hopper Assembly, including the Cover, may be ordered under Part No. 28240.

Tube Support Assembly

14367

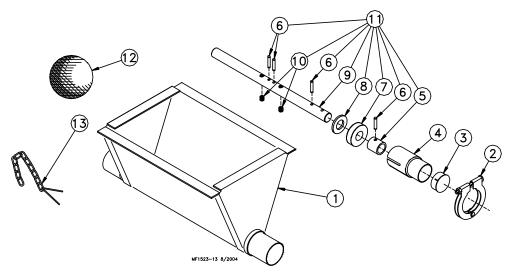
### Hopper Mount Bracket (Optional)

#### Part Number 49358 - Hopper Suspension Kit



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

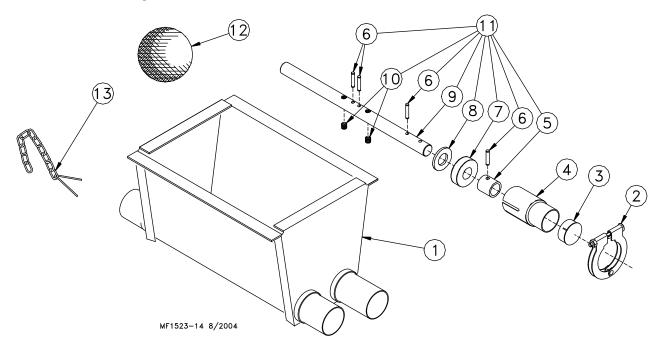
# Single Boot Components Part No. 6822



Item	Description	Part No.
1	Boot Weldment	3760
2	Tube Clamp	24063
3	Сар	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	47867
11	Anchor and Bearing Ass'y	39372
12	Cannonball	3531
13	Latch Pin Ass'y	2683
	Danger Decal	2527-9

## **Twin Boot Components Part No. 6824**

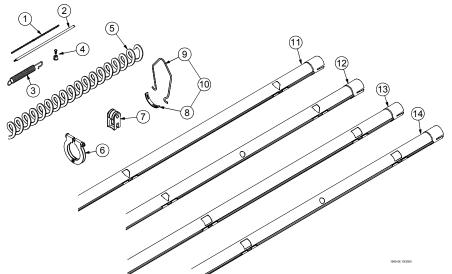


Item	Description	Part No.
1	Boot Weldment	3932
2	Tube Clamp	24063
3	Сар	29373
4	Outlet Tube	4556
5	Sleeve	5648
6	3/16 x 1" Pin	2960-1
7	Bearing	2689
8	Washer	2955-14
9	Anchor	38540

Item	Description	Part No.
10	Setscrew	47867
11	Anchor and Bearing Ass'y	39372
12	Cannonball	3531
13	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**



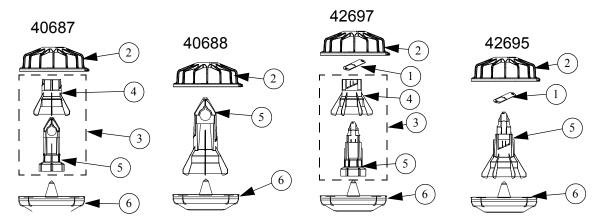
Item	Description	Part No.
1	1/16" Cable	1922
2	Charger Wire (165')	28994-165
2	Charger Wire (330')	28994-330
3	Spring	7551
4	1/16" Cable Clamp	1826
4 5*		
e	Auger	6820-0
6	Tube Clamp	24063
7	Anti-Roost Bracket	24060
8	Hanger Bracket	7297
9	Hanger Strap	7298
10	Hanger Kit	7299
11	Standard Feeder Tube-1 3/4" Roll Form	
	- 9', 4 Hole Tube	6854-1
	- 10', 3 Hole Tube	6854-5
	- 10', 4 Hole Tube	6854-4
	- 12', 3 Hole Tube	6854-8
	- 12', 4 Hole Tube	6854-7
	- 12', 5 Hole Tube	6854-6
12	Standard Feeder Tube-1 3/4" with Chick Holes (EZ. Holes)	
	- 9', 4 Hole, 4 EZ. Holes	6854-15
	- 10', 4 Hole, 4 EZ. Holes	6854-16
	- 12', 4 Hole, 4 EZ. Holes	6854-17
	- 12', 5 Hole, 5 EZ. Holes	6854-18
	- 10', 3 Hole, 3 EZ. Holes	6854-19
	- 9', 4 Hole, 2 EZ. Holes	6854-20
	- 10', 4 Hole, 2 EZ. Holes	6854-21
	- 12', 4 Hole, 2 EZ. Holes	6854-22
13	Control Feeder Tube-1 3/4" Roll Form	
	- 9', 4 Hole Tube	43006-1
	- 10', 4 Hole Tube	43006-4
	- 10', 3 Hole Tube	43006-5
	- 12', 3 Hole Tube	43006-8
	- 12', 4 Hole Tube	43006-7
	- 12', 5 Hole Tube	43006-6
14	Control Feeder Tube-1 3/4" with Chick Holes (EZ. Holes)	
	- 9', 4 Hole, 4 EZ. Holes	43006-15
	- 10', 4 Hole, 4 EZ. Holes	43006-16
	- 12', 4 Hole, 4 EZ. Holes	43006-17
	- 12', 5 Hole, 5 EZ. Holes	43006-18

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

### C2 PLUS Standard with Two Piece Top

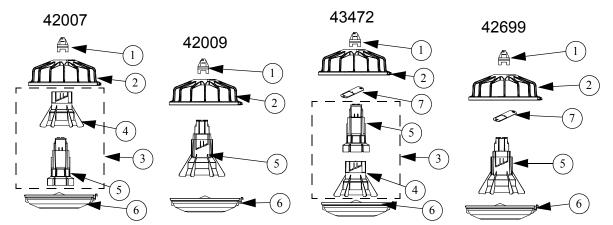
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		40690		<b>42698</b> <b></b> ∉ <b>−</b> 1		
		- <u>5</u> - <u>6</u>		<b>→</b> (6)		5
		Model Number	40689	40690	42698	<b>- -</b>
			C2 PLUS with Removable Top	C2 PLUS Non Window Removable Top	C2 PLUS Non Window with Slide Shut-Off	
	Item	Description	Part No.			
	1	Slide Top Cap	38603	38603	38603	
	2	C2 PLUS Grill	39567	39567	39567	
	3 Cone Assembly (Packed)		44346	-	-	
-	4	Adjustment Cone	38604	-	-	
-	5	C2 PLUS Cone	44352	39565	42705	
	6	Feeder Pan	38600	38600	38600	
	7	Shut-Off Slide	-	-	39564	

### C2 PLUS Standard with One Piece Top



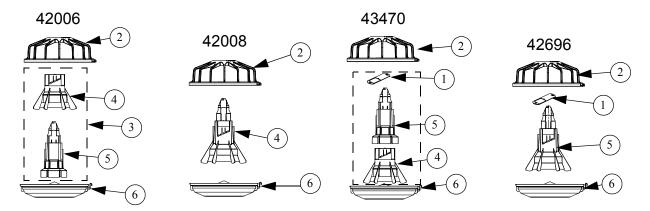
Model Number		40687 C2 PLUS with Windows	40688 C2 PLUS Non Window	42697 C2 PLUS Non Window with Slide Shut-Off	42695 C2 PLUS
Item	Description		Part No.		
1	Shut-Off Slide	-	-	39564	39564
2	C2 PLUS Grill	39567	39567	39567	39567
3	Cone Assembly (Packed)	41187	-	42702	
4	Adjustment Cone	38604	39566	38604	
5	Cone	38601	-	42701	42706
6	Feeder Pan	38600	38600	38600	38600

### **MODEL C2 PLUS Shallow with Two Piece Top**



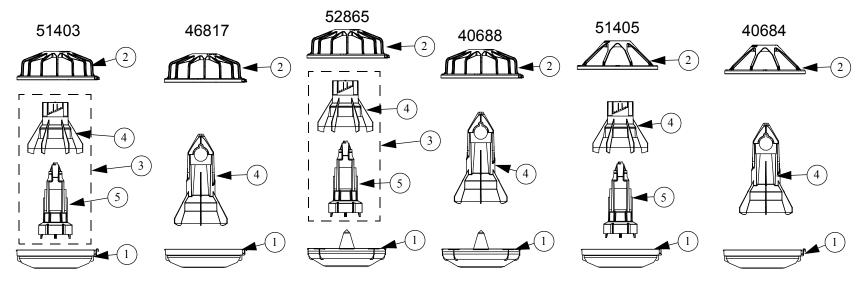
Model Number		42007 C2 PLUS Shallow W Window & Removable Top	42009 C2 PLUS Shallow Non Window & Removable Top	43472 C2 PLUS Shallow Non Window Removable Top with Slide Shut-Off	42699 C2 PLUS Shallow Non Window with Slide Shut-Off
Item	Description			Part No.	
1	Slide Top Cap	38603	25052	38603	25022
2	C2 PLUS Grill	39567	39567	39567	39567
3	Cone Assembly (Packed)	42011	-	43471	-
4	Adjustment Cone	41504	-	41504	-
5	C2 PLUS Cone	41503	41892	42238	42677
6	Feeder Pan	41500	41500	41500	41500
7	Shut-Off Slide	-	-	39564	39564

### C2 PLUS Shallow with One Piece Top



Model Number		42006 C2 PLUS Shallow Removable Top	42008 C2 PLUS Shallow Non Window Removable Top	43470 C2 PLUS Shallow Non Window with Slide Shut-Off	42696 C2 PLUS Shallow Non Window with Slide Shut-Off
Item	Description		Part No.		
1	Shut-Off Slide	-	-	39564	39564
2	C2 PLUS Grill	39567	39567	39567	39567
3	Cone Assembly (Packed)	42010	-	43469	-
4	Adjustment Cone	41504	-	41504	-
5	C2 PLUS Shallow Cone	41502	41505	42237	42678
6	Shallow Feeder Pan	41500	41500	41500	41500

### 9 MODEL C2 PLUS and G PLUS with Extended Fins

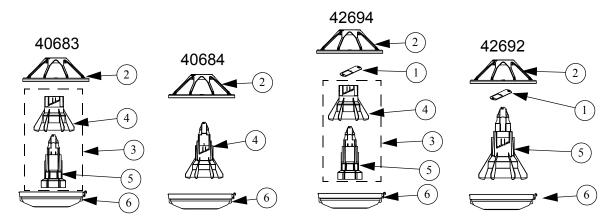


	Model Number	51403 MODEL C2 and	46817 MODEL C2 and G	52865 MODEL C2 and G	40688 MODEL C2 and G	51405 MODEL C2 and G	40684 MODEL C2 and G
		<b>G PLUS Extended</b>	PLUS Extended				
Item	Description		Part No.				
1	Feeder Pan	41501	41501	38600	38600	41501	41501
2	C2 PLUS Grill	39567	39567	39567	39567	38599	38599
3	Cone Assembly (Packed)	51415	-	51415	-	51415	
4	Adjustment Cone	51406	39566	51406	39566	51406	39566
5	C2 PLUS Shallow Cone	51404	-	51404	-	51404	

# **MODEL G PLUS Standard with Two Piece Top**

	40685			
		40686		$ \begin{array}{c} 39 \\ -1 \\ \hline 7 \\ \hline 5 \\ \hline 6 \end{array} $
		6)		
	Model Number	6)	40686	42689
	Model Number	MODELG	MODEL G PLUS	MODEL GPLUS
	Model Number	MODELG PLUS with	MODEL G PLUS Non Window	MODEL GPLUS Non Window
Item		MODELG	MODEL G PLUS Non Window Removable Top	MODEL GPLUS
Item 1	Description	MODELG PLUS with	MODEL G PLUS Non Window	MODEL G PLUS Non Window with Slide Shut-Off
		MODELG PLUS with Removable Top	MODEL G PLUS Non Window Removable Top Part No.	MODEL G PLUS Non Window with Slide Shut-Off 25052
1	<b>Description</b> Slide Top Cap MODEL G PLUS Grill	MODELG PLUS with Removable Top 38603	MODEL G PLUS Non Window Removable Top Part No. 38603	MODEL G PLUS Non Window with Slide Shut-Off
1 2	Description Slide Top Cap MODEL G PLUS Grill Cone Assembly (Packed)	MODELG PLUS with Removable Top 38603 38599	MODEL G PLUS Non Window Removable Top Part No. 38603	MODEL G PLUS Non Window with Slide Shut-Off 25052
1 2 3	<b>Description</b> Slide Top Cap MODEL G PLUS Grill	MODELG PLUS with Removable Top 38603 38599 44346	MODEL G PLUS Non Window Removable Top Part No. 38603	MODEL G PLUS Non Window with Slide Shut-Off 25052
1 2 3 4	Description Slide Top Cap MODEL G PLUS Grill Cone Assembly (Packed) Adjustment Cone	MODELG PLUS with Removable Top 38603 38599 44346 38604	MODEL G PLUS Non Window Removable Top Part No. 38603 38599 - -	MODEL G PLUS Non Window with Slide Shut-Off 25052 38599 - -

# **MODEL G PLUS Standard with One Piece Top**



Model Number		40683 MODEL G PLUS with Window	40684 MODEL G PLUS Non Window	42694 MODEL G PLUS Window with Slide Shut-Off	42692 MODEL G PLUS Non Window with Slide Shut-Off
Item	Description		Part No.		
1	Shut-Off Slide	-	-	39564	39564
2	MODEL G PLUS Grill	38599	38599	38599	38599
3	Cone Assembly (Packed)	41187	-	42702	
4	Adjustment Cone	38604	39566	38604	
5	C2 PLUS Cone	38601	-	42701	42706
6	Feeder Pan	41501	41501	41501	41501

# **MODEL G PLUS Shallow with Two Piece Top**

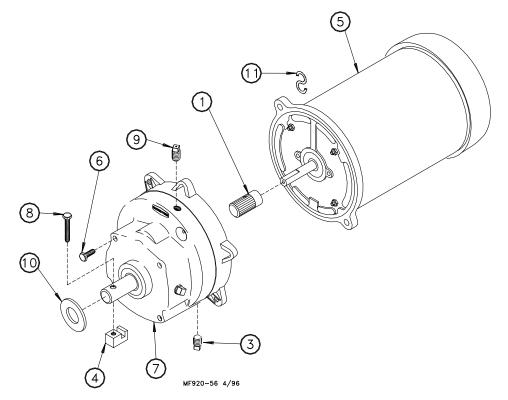
42023		42708	
	42025		42690
4			
	5		
	6		

	Model Number	42023 MODEL G PLUS Shallow with Window & Removable Top	42025 MODEL G PLUS Shallow with Non Window & Removable Top	42708 MODEL G PLUS Shallow with Window & Slide Shut-Off	42690 MODEL G PLUS Shallow Non Window with Removable Top & Slide Shut-Off
Item	Description			Part No.	
1	Slide Top Cap	38603	25052	38603	25052
2	MODEL G PLUS Grill	38599	38599	38599	38599
3	Cone Assembly (Packed)	42011	-	43471	-
4	Adjustment Cone	41504	-	41504	-
5	C2 PLUS Cone	41503	41892	42238	42677
6	Shallow Feeder Pan	41500	41500	41500	41500
7	Shut-Off Slide	-	-	39564	39564

### **MODEL G PLUS Shallow with Two Piece Top**

		42024			42693 2 1 - - - - - - - - - - - - -
	Model Number	42022 MODEL G PLUS Shallow with Windows	42024 MODEL G PLUS Shallow Non Window	42707 MODEL G PLUS Shallow with Window &	42693 MODEL G PLUS Shallow Non Window with Slide Shut-Off
	T			Slide Shut-Off	
Item	Description			Part No.	
1	Shut-Off Slide	-	-	39564	39564
2	MODEL G PLUS Grill	38599	38599	38599	38599
3	Cone Assembly (Packed)	42010	-	43469	-
4	Adjustment Cone	41504	-	41504	-
5	C2 PLUS Cone	41502	41505	42237	42678
6				.==0 /	

### **Power Unit Assemblies**

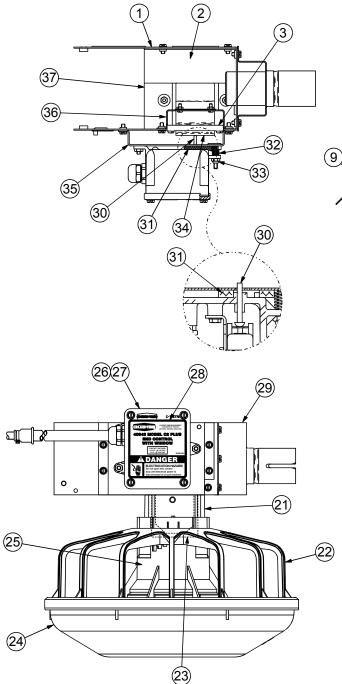


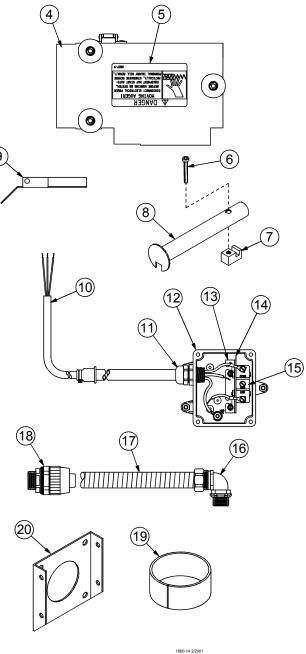
Item	Description	3259-84	3259-85	3259-98	3259-100	3259-128
	-	Part No.				
1	Pinion Assembly	5046	5046	5046	5046	5046
2						
3	Pipe Plug (magnetic)	30160	30160	30160	30160	30160
4	Driver Block	4642	4642	4642	4642	4642
5	Motor	4229	5703	5977	28031	24624
6	5/16-18x5/8 Hex HD Screw	4412-1	4412-1	4412-1	4412-1	4412-1
7	Gearhead	3261-5	3261-5	3261-11	3261-11	3261-5
8	1/4-20x1-1/2 Socket Hd Screw	5083-8	5083-8	5083-8	5083-8	5083-8
9	Vent Plug	3516	3516	3516	3516	3516
10	Flat Washer	1484	1484	1484	1484	1484
11	"S" Hook	2805	2805	2805	2805	2805
	Cord Assembly			28028		
	Connector (Romex)					
1	Connector (90 Degree)			4228		

# **Power Unit Assembly Part Numbers:**

Part No.	HP	RPM	Phase	Hz	Voltage	Usages
3259-84	1/3 HP	348 RPM	Single Phase	60 Hz	230	
3259-85	1/2 HP	348 RPM	Single Phase	60 Hz	230	
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

### **Mechanical End Control**



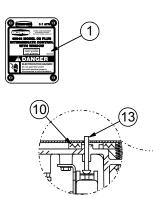


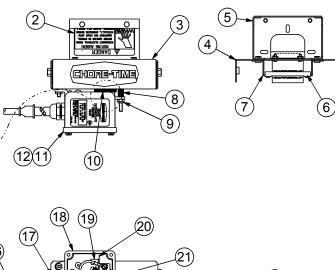
C2 PLUS         C2 PLUS         GPLUS         GPLUS         GPLUS         Standard Standard         Part No. Part No. 40943         GPLUS         GPLUS         Standard Mobility           1         Control Body         14434         14434         14434         14434         14434           2         Deflector Panel         41363         41363         41363         41363           3         Paddle Retainer         25045         25045         25045         25045           4         Control Cover Assembly         24682         24682         24682         24682           5         Danger Decal         2527-9         2527-9         2527-9         2527-9           6         1/4-20x1-1/2 Socket Hd Screw         5083-8         5083-8         5083-8         5083-8           7         Driver Block         4442         4442         4442         4442           8         Driver Block         24602         24685	Item	Description	MODEL	MODEL	MODEL	MODEL
Part No. 40943Part No. 40944Part No. 409281Control Body1443414434144342Deflector Panel41363413633Paddle Retainer2504525045250454Control Cover Assembly2468224682246825Danger Decal2527-92527-92527-961/4-20x1-1/2 Socket Hd Screw5083-85083-85083-87Driver Block4642464246428Driver Tube Weldment4479444794447949Bottom Cover14432144321443210Control Cord Assembly2549524685246852468512Switch Box2470224702247022470213*Switch Bracket4612246122461224612214*Switch Insulation1907-51907-51907-51907-515**Actuator Switch46091460914609146091161/2" Liquid Tight Connector268026980269802698019Cut Sleve4311043110431104311020Anchor Plate41884188418821Center Support Assembly20947337314094723Mylar Assembly2531823182318231824Feeder Pan4150141500415014150425Adjustment Cone36604415043860441504<			C2 PLUS	C2 PLUS	GPLUS	G PLUS
40943         42012         40944         42028           1         Control Body         14434         14434         14434           2         Deflector Panel         41363         41363         41363         41363           3         Paddle Retainer         25045         25045         25045         25045           4         Control Cover Assembly         24682         24682         24682         24682           5         Danger Decal         2527-9         2527-9         2527-9         2527-9           6         1/4-20x1-1/2 Socket Hd Screw         5083-8         5083-8         5083-8         5083-8           7         Driver Block         4642         4642         4642         4642           8         Driver Tube Weldment         44794         44794         44794           9         Bottom Cover         14432         14432         14432         14432           10         Control Cord Assembly         25495         25495         25495         14432           13*         Switch Box         24702         24702         24702         24702         24702           13*         Switch Box         24702         24702         24702         247			Standard	Shallow	Standard	
1         Control Body         14434         14434         14434         14434           2         Deflector Panel         41363         41363         41363         41363           3         Paddle Retainer         25045         25045         25045         25045           4         Control Cover Assembly         24682         24682         24682         24682           5         Danger Decal         2527-9         2527-9         2527-9         2527-9           6         1/4-20x1-1/2 Socket Hd Screw         5083-8         5083-8         5083-8         5083-8           7         Driver Block         4642         4642         4642         444794           8         Drive Tube Weldment         44794         44794         44794           9         Bottom Cover         14432         14432         14432           10         Control Cord Assembly         25495         25495         25495           11         1/2" Liquid Tight Connector         24685         24685         24685           14*         Switch Box         24702         24702         24702         24702           13*         Switch Box Conduit         26982-1         26982-1         1907-5     <						
2         Deflector Panel         41363         41363         41363         41363           3         Paddle Retainer         25045         25045         25045         25045           4         Control Cover Assembly         24682         24682         24682         24682           5         Danger Decal         2527-9         2527-9         2527-9         2527-9         2527-9           6         1/4-20x1-1/2 Socket Hd Screw         5083-8         5083-8         5083-8         5083-8           7         Driver Block         4642         4642         4642         4642           8         Drive Tube Weldment         44794         44794         44794           9         Bottom Cover         14432         14432         14432         14432           10         Control Cord Assembly         25495         25495         25495         25495           12         Switch Bracket         46122         46122         46122         46122         46122           14*         Switch Insulation         1907-5         1907-5         1907-5         1907-5           15**         Actuator Switch         46091         46091         46091         46091           16 <th></th> <th></th> <th>40943</th> <th>42012</th> <th>40944</th> <th>42028</th>			40943	42012	40944	42028
3         Paddle Retainer         25045         25045         25045         25045           4         Control Cover Assembly         24682         24682         24682         24682         24682           5         Danger Decal         2527-9         2527-9         2527-9         2527-9         2527-9         2527-9           6         1/4-20x1-1/2 Socket Hd Screw         5083-8         5083-8         5083-8         5083-8           7         Driver Block         4642         4642         4642         4642           8         Drive Tube Weldment         44794         44794         44794         44794           9         Bottom Cover         14432         14432         14432         14432           10         Control Cord Assembly         25495         25495         25495         24685         24685           12         Switch Bracket         46122         46122         46122         46122         46122         46122         46122         46091         46091         46091         46091         46091         46091         46091         46091         46091         26982-1         26982-1         26982-1         26982-1         26982-1         26982-1         26982-1         2698	1	Control Body	14434	14434	14434	14434
4         Control Cover Assembly         24682         24682         24682         24682         24682           5         Danger Decal         2527-9         2527-9         2527-9         2527-9           6         1/4-20x1-1/2 Socket Hd Screw         5083-8         5083-8         5083-8         5083-8           7         Driver Block         4642         4642         4642         4642           8         Driver Block         44794         44794         44794         44794           9         Bottom Cover         14432         14432         14432         14432           10         Control Cord Assembly         25495         25495         25495         25495           11         1/2" Liquid Tight Connector         24685         24685         24685         24685           12         Switch Bracket         46122         46122         46122         46122           14*         Switch Insulation         1907-5         1907-5         1907-5         1907-5           15**         Actuator Switch         46091         46091         46091         46091           16         1/2" Liquid Tight Connector         2980         26980         26980         26980         26980 <td>2</td> <td>Deflector Panel</td> <td>41363</td> <td>41363</td> <td>41363</td> <td>41363</td>	2	Deflector Panel	41363	41363	41363	41363
5         Danger Decal         2527-9         2527-9         2527-9         2527-9           6         1/4-20x1-1/2 Socket Hd Screw         5083-8         5083-8         5083-8         5083-8           7         Driver Block         4642         4642         4642         4642           8         Drive Tube Weldment         44794         44794         44794         44794           9         Bottom Cover         14432         14432         14432         14432           10         Control Cord Assembly         25495         25495         25495         25495           12         Switch Box         24702         24702         24702         24702         24702           13*         Switch Bracket         46122         46122         46122         46122         46122           14*         Switch Insulation         1907-5         1907-5         1907-5         1907-5         1907-5           15**         Actuator Switch         46091         46091         46091         46091         26982-1         26982-1           16         1/2" Liquid Tight Connector         26980         26980         26980         26980         26980         26980         26980         26980         <	3	Paddle Retainer	25045	25045	25045	25045
6         1/4-20x1-1/2 Socket Hd Screw         5083-8         5083-8         5083-8         5083-8         5083-8           7         Driver Block         4642         4642         4642         4642           8         Drive Tube Weldment         44794         44794         44794         44794           9         Bottom Cover         11432         14432         14432         14432           10         Control Cord Assembly         25495         25495         25495         25495           11         1/2" Liquid Tight Connector         24685         24685         24685           12         Switch Box         24702         24702         24702         24702           13*         Switch Insulation         1907-5         1907-5         1907-5         1907-5           15**         Actuator Switch         46091         46091         46091         46091           16         1/2" Liquid Tight Connector         26980         26980         26980         26982-1           18         Straight Liquid Tight Connector         26980         26980         26980         26980           20         Anchor Plate         4188         4188         4188         4188           21	4	Control Cover Assembly	24682	24682	24682	24682
7         Driver Block         4642         4642         4642         4642           8         Drive Tube Weldment         44794         44794         44794         44794           9         Bottom Cover         14432         14432         14432         14432           10         Control Cord Assembly         25495         25495         25495         25495           11         1/2" Liquid Tight Connector         24685         24685         24685         24685           12         Switch Box         24702         24702         24702         24702           13*         Switch Insulation         1907-5         1907-5         1907-5         1907-5           14*         Switch Insulation         1907-5         1907-5         1907-5         1907-5           16         1/2" Liquid Tight Connector         23810         23810         23810         23810           18         Straight Liquid Tight Connector         26980         26980         26980         26980           19         Cut Sleeve         43110         43110         43110         43110           20         Anchor Plate         4188         4188         4188           21         Center Support Assembly	5	Danger Decal	2527-9	2527-9	2527-9	2527-9
8         Drive Tube Weldment         44794         44794         44794         44794           9         Bottom Cover         14432         14432         14432         14432           10         Control Cord Assembly         25495         25495         25495         25495           11         1/2" Liquid Tight Connector         24685         24685         24685         24685           12         Switch Box         24702         24702         24702         24702           13*         Switch Box         24702         24702         24702         24702           14*         Switch Insulation         1907-5         1907-5         1907-5         1907-5           16         1/2" Liquid Tight Connector         23810         23810         23810         23810           17         14" Flexible Conduit         26982-1         26982-1         26982-1         26982-1           18         Straight Liquid Tight Connector         26980         26980         26980         26980           19         Cut Sleeve         43110         43110         43110         43110           20         Anchor Plate         4188         4188         4188           21         Center Suppor	6	1/4-20x1-1/2 Socket Hd Screw	5083-8	5083-8	5083-8	5083-8
9         Bottom Cover         14432         14432         14432         14432           10         Control Cord Assembly         25495         25495         25495         25495           11         1/2" Liquid Tight Connector         24685         24685         24685         24685           12         Switch Box         24702         24702         24702         24702           13*         Switch Bracket         46122         46122         46122         46122           14*         Switch Insulation         1907-5         1907-5         1907-5         1907-5           15**         Actuator Switch         46091         46091         46091         23810         23810         23810           16         1/2" Liquid Tight Connector         23810         23810         23810         23810         23810         24682-1         26982-1         26982-1         26980         2698	7	Driver Block	4642	4642	4642	4642
10         Control Cord Assembly         25495         25495         25495         25495           11         1/2" Liquid Tight Connector         24685         24685         24685         24685           12         Switch Box         24702         24702         24702         24702           13*         Switch Bracket         46122         46122         46122         46122           14*         Switch Insulation         1907-5         1907-5         1907-5         1907-5           15**         Actuator Switch         46091         46091         46091         23810         23818         24821         26980         26980         26980         2	8	Drive Tube Weldment	44794	44794	44794	44794
11         1/2" Liquid Tight Connector         24685         24685         24685         24685           12         Switch Box         24702         24702         24702         24702           13*         Switch Bracket         46122         46122         46122         46122           14*         Switch Insulation         1907-5         1907-5         1907-5         1907-5           15**         Actuator Switch         46091         46091         46091         46091           16         1/2" Liquid Tight Connector         23810         23810         23810         23810           17         14" Flexible Conduit         26982-1         26982-1         26982-1         26982           18         Straight Liquid Tight Connector         26980         26980         26980         26980           19         Cut Sleeve         43110         43110         43110         43110         43110           20         Anchor Plate         4188         4188         4188         4188         4188           21         Center Support Assembly         25318         25318         25318         25318           23         Mylar Assembly         25318         25318         25318         25	9	Bottom Cover	14432	14432	14432	14432
12         Switch Box         24702         24702         24702         24702           13*         Switch Bracket         46122         46122         46122         46122           14*         Switch Insulation         1907-5         1907-5         1907-5         1907-5           15**         Actuator Switch         46091         46091         46091         46091           16         1/2" Liquid Tight Connector         23810         23810         23810         23810         23810           17         14" Flexible Conduit         26982-1         26982-1         26982-1         26982-1         26982-1           18         Straight Liquid Tight Connector         26980         26980         26980         26980           19         Cut Sleeve         43110         43110         43110         43110           20         Anchor Plate         4188         4188         4188         4188           21         Center Support Assembly         40947         37371         40947         37371           22         Feeder Grill         39567         38599         38599           23         Mylar Assembly         25318         25318         25318         25318	10	Control Cord Assembly	25495	25495	25495	25495
13*Switch Bracket461224612246122461224612214*Switch Insulation1907-51907-51907-51907-515**Actuator Switch46091460914609146091161/2" Liquid Tight Connector238102381023810238101714" Flexible Conduit26982-126982-126982-126982-118Straight Liquid Tight Connector2698026980269802698019Cut Sleeve4311043110431104311020Anchor Plate418841884188418821Center Support Assembly4094737371409473737122Feeder Grill3956739567385993859923Mylar Assembly2531825318253182531824Feeder Pan4150141500415014150025Adjustment Cone3860441504386044150426Switch Box Cover677667766776677727Switch Box Gasket677767776777677728Danger/Product Identification Decal2529-6602529-6972529-6592529-69829Support Bracket2468324683246832468330Spring697269726972697231#10-32 Lock Nut696369636968-16968-134Actuator Pin875787578757 <td>11</td> <td>1/2" Liquid Tight Connector</td> <td>24685</td> <td>24685</td> <td>24685</td> <td>24685</td>	11	1/2" Liquid Tight Connector	24685	24685	24685	24685
14*Switch Insulation1907-51907-51907-51907-515**Actuator Switch46091460914609146091161/2" Liquid Tight Connector238102381023810238101714" Flexible Conduit26982-126982-126982-126982-118Straight Liquid Tight Connector2698026980269802698019Cut Sleeve4311043110431104311020Anchor Plate418841884188418821Center Support Assembly4094737371409473737122Feeder Grill3956739567385993859923Mylar Assembly2531825318253182531824Feeder Pan4150141500415014150025Adjustment Cone3860441504386044150426Switch Box Cover677667766776677627Switch Box Gasket677767776777677728Danger/Product Identification Decal2529-6602529-6972529-6592529-69829Support Bracket2468324683246832468330Spring697269726972697231#10-32 Lock Nut6963696369636963-//33Gasket6968-16968-16968-16968-134Actuator Pin8757875787578757	12	Switch Box	24702	24702	24702	24702
15**Actuator Switch46091460914609146091161/2" Liquid Tight Connector23810238102381023810238101714" Flexible Conduit26982-126982-126982-126982-118Straight Liquid Tight Connector2698026980269802698019Cut Sleeve4311043110431104311020Anchor Plate418841884188418821Center Support Assembly4094737371409473737122Feeder Grill3956739567385993859923Mylar Assembly2531825318253182531824Feeder Pan4150141500415014150025Adjustment Cone3860441504386044150426Switch Box Cover677667766776677627Switch Box Gasket677767776777677728Danger/Product Identification Decal2529-6602529-6972529-6592529-69829Support Bracket2468324683246832468330Spring697269726972697231#10-32 Lock Nut696369636963-//6968-133Gasket6968-16968-16968-16968-134Actuator Pin875787578757875735Switch Box Mount25084250842508425084	13*	Switch Bracket	46122	46122	46122	46122
161/2" Liquid Tight Connector23810238102381023810238101714" Flexible Conduit26982-126982-126982-126982-126982-118Straight Liquid Tight Connector2698026980269802698019Cut Sleeve4311043110431104311020Anchor Plate418841884188418821Center Support Assembly4094737371409473737122Feeder Grill3956739567385993859923Mylar Assembly2531825318253182531824Feeder Pan4150141500415014150025Adjustment Cone3860441504386044150426Switch Box Cover677667766776677627Switch Box Gasket677767776777677728Danger/Product Identification Decal2529-6602529-6972529-6592529-69829Support Bracket2468324683246832468330Spring697269726972697231#10-32 Lock Nut696369636963696332Paddle4612346123461234612333Gasket6968-16968-16968-16968-134Actuator Pin875787578757875735Switch Box Mount25084250842508425084	14*	Switch Insulation	1907-5	1907-5	1907-5	1907-5
1714" Flexible Conduit26982-126982-126982-126982-118Straight Liquid Tight Connector2698026980269802698019Cut Sleeve4311043110431104311020Anchor Plate418841884188418821Center Support Assembly4094737371409473737122Feeder Grill3956739567385993859923Mylar Assembly2531825318253182531824Feeder Pan4150141500415014150025Adjustment Cone3860441504386044150426Switch Box Cover677667766776677627Switch Box Gasket677767776777677728Danger/Product Identification Decal2529-6602529-6972529-6592529-69829Support Bracket2468324683246832468330Spring697269726972697231#10-32 Lock Nut696369636963696332Paddle4612346123461234612333Gasket6968-16968-16968-16968-134Actuator Pin875787578757875735Switch Box Mount2508425084250842508436Stop Panel2543325433254332543337Switch Bracket <td>15**</td> <td>Actuator Switch</td> <td>46091</td> <td>46091</td> <td>46091</td> <td>46091</td>	15**	Actuator Switch	46091	46091	46091	46091
18         Straight Liquid Tight Connector         26980         26980         26980         26980           19         Cut Sleeve         43110         43110         43110         43110           20         Anchor Plate         4188         4188         4188         4188           21         Center Support Assembly         40947         37371         40947         37371           22         Feeder Grill         39567         39567         38599         38599           23         Mylar Assembly         25318         25318         25318         25318           24         Feeder Pan         41501         41500         41501         41500           25         Adjustment Cone         38604         41504         38604         41504           26         Switch Box Cover         6776         6776         6776         6777           28         Danger/Product Identification Decal         2529-660         2529-697         2529-659         2529-698           29         Support Bracket         24683         24683         24683         24683         24683           30         Spring         6972         6972         6972         6972         6972	16	1/2" Liquid Tight Connector	23810	23810	23810	23810
19Cut Sleeve4311043110431104311020Anchor Plate418841884188418821Center Support Assembly4094737371409473737122Feeder Grill3956739567385993859923Mylar Assembly2531825318253182531824Feeder Pan4150141500415014150025Adjustment Cone3860441504386044150426Switch Box Cover677667766776677728Danger/Product Identification Decal2529-6602529-6972529-6592529-69829Support Bracket246832468324683246832468330Spring697269726972697231#10-32 Lock Nut696369636963696332Paddle4612346123461234612333Gasket6968-16968-16968-16968-134Actuator Pin875787578757875735Switch Box Mount2508425084250842508436Stop Panel2543325433254332543337Switch Bracket40749407494074940749Anti-Roost Guard2798279827982798	17	14" Flexible Conduit	26982-1	26982-1	26982-1	26982-1
20Anchor Plate4188418841884188418821Center Support Assembly4094737371409473737122Feeder Grill3956739567385993859923Mylar Assembly2531825318253182531824Feeder Pan4150141500415014150025Adjustment Cone3860441504386044150426Switch Box Cover677667766776677627Switch Box Gasket677767776777677728Danger/Product Identification Decal2529-6602529-6972529-6592529-69829Support Bracket2468324683246832468330Spring697269726972697231#10-32 Lock Nut696369636963696332Paddle4612346123461234612333Gasket6968-16968-16968-16968-134Actuator Pin875787578757875735Switch Box Mount2508425084250842508436Stop Panel2543325433254332543337Switch Bracket407494074940749Anti-Roost Guard2798279827982798	18	Straight Liquid Tight Connector	26980	26980	26980	26980
21Center Support Assembly4094737371409473737122Feeder Grill3956739567385993859923Mylar Assembly2531825318253182531824Feeder Pan4150141500415014150025Adjustment Cone3860441504386044150426Switch Box Cover677667766776677627Switch Box Gasket677767776777677728Danger/Product Identification Decal2529-6602529-6972529-6592529-69829Support Bracket2468324683246832468330Spring697269726972697231#10-32 Lock Nut696369636963696332Paddle4612346123461234612333Gasket6968-16968-16968-16968-134Actuator Pin875787578757875735Switch Box Mount2508425084250842508436Stop Panel2543325433254332543337Switch Bracket407494074940749Anti-Roost Guard2798279827982798	19	Cut Sleeve	43110	43110	43110	43110
22Feeder Grill3956739567385993859923Mylar Assembly253182531825318253182531824Feeder Pan4150141500415014150025Adjustment Cone3860441504386044150426Switch Box Cover677667766776677627Switch Box Gasket677767776777677728Danger/Product Identification Decal2529-6602529-6972529-6592529-69829Support Bracket2468324683246832468330Spring697269726972697231#10-32 Lock Nut696369636963696332Paddle4612346123461234612333Gasket6968-16968-16968-16968-134Actuator Pin875787578757875735Switch Box Mount2508425084250842508436Stop Panel2543325433254332543337Switch Bracket40749407494074940749Anti-Roost Guard27982798279827982798	20	Anchor Plate	4188	4188	4188	4188
23Mylar Assembly2531825318253182531824Feeder Pan4150141500415014150025Adjustment Cone3860441504386044150426Switch Box Cover677667766776677627Switch Box Gasket677767776777677728Danger/Product Identification Decal2529-6602529-6972529-6592529-69829Support Bracket2468324683246832468330Spring697269726972697231#10-32 Lock Nut696369636963696332Paddle4612346123461234612333Gasket6968-16968-16968-16968-134Actuator Pin875787578757875735Switch Box Mount2508425084250842508436Stop Panel2543325433254332543337Switch Bracket40749407494074940749Anti-Roost Guard27982798279827982798	21	Center Support Assembly	40947	37371	40947	37371
24Feeder Pan4150141500415014150025Adjustment Cone3860441504386044150426Switch Box Cover677667766776677627Switch Box Gasket677767776777677728Danger/Product Identification Decal2529-6602529-6972529-6592529-69829Support Bracket2468324683246832468330Spring697269726972697231#10-32 Lock Nut696369636963696332Paddle4612346123461234612333Gasket6968-16968-16968-16968-134Actuator Pin875787578757875735Switch Box Mount2508425084250842508436Stop Panel2543325433254332543337Switch Bracket40749407494074940749Anti-Roost Guard27982798279827982798	22	Feeder Grill	39567	39567	38599	38599
25Adjustment Cone3860441504386044150426Switch Box Cover677667766776677627Switch Box Gasket677767776777677728Danger/Product Identification Decal2529-6602529-6972529-6592529-69829Support Bracket2468324683246832468330Spring697269726972697231#10-32 Lock Nut696369636963696332Paddle4612346123461234612333Gasket6968-16968-16968-16968-134Actuator Pin875787578757875735Switch Box Mount2508425084250842508436Stop Panel2543325433254332543337Switch Bracket40749407494074940749Anti-Roost Guard27982798279827982798	23	Mylar Assembly	25318	25318	25318	25318
26         Switch Box Cover         6776         6776         6776         6776           27         Switch Box Gasket         6777         6777         6777         6777           28         Danger/Product Identification Decal         2529-660         2529-697         2529-659         2529-698           29         Support Bracket         24683         24683         24683         24683           30         Spring         6972         6972         6972         6972           31         #10-32 Lock Nut         6963         6963         6963         6963           32         Paddle         46123         46123         46123         46123           33         Gasket         6968-1         6968-1         6968-1         6968-1           34         Actuator Pin         8757         8757         8757         8757           35         Switch Box Mount         25084         25084         25084         25084           36         Stop Panel         25433         25433         25433         25433           37         Switch Bracket         40749         40749         40749            Anti-Roost Guard         2798         2798	24	Feeder Pan	41501	41500	41501	41500
27         Switch Box Gasket         6777         6777         6777         6777           28         Danger/Product Identification Decal         2529-660         2529-697         2529-659         2529-698           29         Support Bracket         24683         24683         24683         24683           30         Spring         6972         6972         6972         6972           31         #10-32 Lock Nut         6963         6963         6963         6963           32         Paddle         46123         46123         46123         46123           33         Gasket         6968-1         6968-1         6968-1         6968-1           34         Actuator Pin         8757         8757         8757           35         Switch Box Mount         25084         25084         25084         25084           36         Stop Panel         25433         25433         25433         25433           37         Switch Bracket         40749         40749         40749            Anti-Roost Guard         2798         2798         2798         2798	25	Adjustment Cone	38604	41504	38604	41504
28         Danger/Product Identification Decal         2529-660         2529-697         2529-659         2529-698           29         Support Bracket         24683         24683         24683         24683         24683           30         Spring         6972         6972         6972         6972         6972           31         #10-32 Lock Nut         6963         6963         6963         6963         36963           32         Paddle         46123         46123         46123         46123         46123           33         Gasket         6968-1         6968-1         6968-1         6968-1         6968-1           34         Actuator Pin         8757         8757         8757         8757           35         Switch Box Mount         25084         25084         25084         25084           36         Stop Panel         25433         25433         25433         25433           37         Switch Bracket         40749         40749         40749         40749            Anti-Roost Guard         2798         2798         2798         2798	26	Switch Box Cover	6776	6776	6776	6776
29         Support Bracket         24683         6972         6973         6963         6963         6963         6963         6963         6968-1         6968-1         6968-1         6968-1         6968-1         6	27	Switch Box Gasket	6777	6777	6777	6777
30         Spring         6972         6973         1033         1033         1033         1034         1034         1033         1034         1034         1034         1034         1034         1034         1034         1034         1035         1034         1034         1034         1034         1034 <th1035< th="">         1034         1035         <th1< td=""><td>28</td><td>Danger/Product Identification Decal</td><td>2529-660</td><td>2529-697</td><td>2529-659</td><td>2529-698</td></th1<></th1035<>	28	Danger/Product Identification Decal	2529-660	2529-697	2529-659	2529-698
31         #10-32 Lock Nut         6963         6968-1 </td <td>29</td> <td>Support Bracket</td> <td>24683</td> <td>24683</td> <td>24683</td> <td>24683</td>	29	Support Bracket	24683	24683	24683	24683
32         Paddle         46123         46123         46123         46123         46123           33         Gasket         6968-1         6968-1         6968-1         6968-1         6968-1           34         Actuator Pin         8757         8757         8757         8757           35         Switch Box Mount         25084         25084         25084         25084           36         Stop Panel         25433         25433         25433         25433           37         Switch Bracket         40749         40749         40749         40749            Anti-Roost Guard         2798         2798         2798         2798         2798	30	Spring	6972	6972	6972	6972
33         Gasket         6968-1         6968-1         6968-1         6968-1           34         Actuator Pin         8757         8757         8757         8757           35         Switch Box Mount         25084         25084         25084         25084           36         Stop Panel         25433         25433         25433         25433           37         Switch Bracket         40749         40749         40749            Anti-Roost Guard         2798         2798         2798	31	#10-32 Lock Nut	6963	6963	6963	6963
34         Actuator Pin         8757         8757         8757           35         Switch Box Mount         25084         25084         25084         25084           36         Stop Panel         25433         25433         25433         25433           37         Switch Bracket         40749         40749         40749         40749            Anti-Roost Guard         2798         2798         2798         2798	32	Paddle	46123	46123	46123	46123
35         Switch Box Mount         25084         25084         25084         25084           36         Stop Panel         25433         25433         25433         25433           37         Switch Bracket         40749         40749         40749         40749            Anti-Roost Guard         2798         2798         2798         2798	33	Gasket	6968-1	6968-1	6968-1	6968-1
36         Stop Panel         25433         25433         25433         25433           37         Switch Bracket         40749         40749         40749         40749            Anti-Roost Guard         2798         2798         2798         2798	34	Actuator Pin	8757	8757	8757	8757
37         Switch Bracket         40749         40749         40749         40749            Anti-Roost Guard         2798         2798         2798         2798	35	Switch Box Mount	25084	25084	25084	25084
Anti-Roost Guard 2798 2798 2798 2798	36	Stop Panel	25433	25433	25433	25433
	37	Switch Bracket	40749	40749	40749	40749
Parts Package 40809 40809 40809 40809		Anti-Roost Guard	2798	2798	2798	2798
		Parts Package	40809	40809	40809	40809

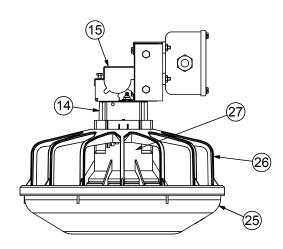
\*These items are included in the Parts Package.

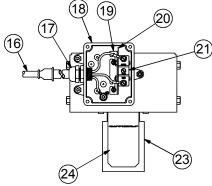
\*\*Actuator Switch, Chore-Time part number 7114, is no longer available. When replacing, use 7114 Switch Replacement Kit Part Number 46678.

### **Mechanical Mid Line Control**









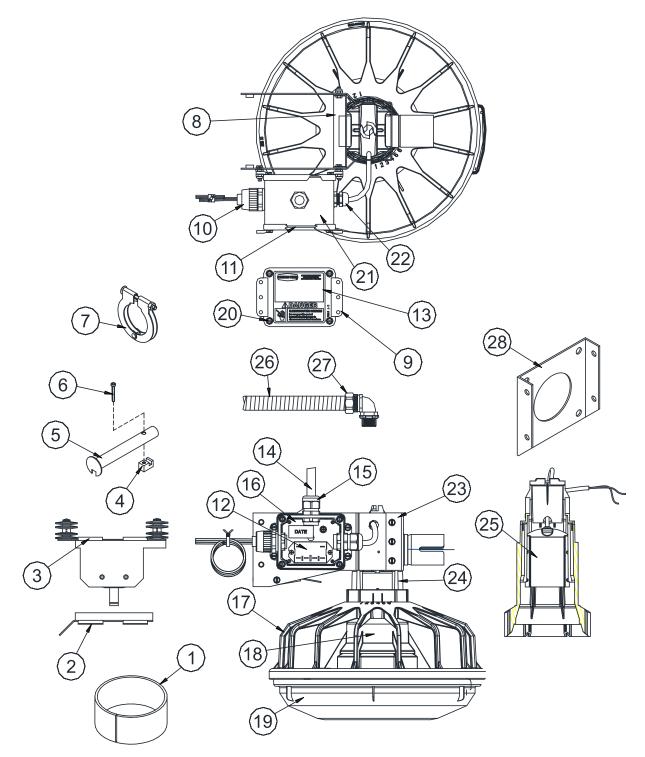


660-15 2/2001

Item	Description	MODEL	MODEL	MODEL	MODEL
		C2 PLUS	C2 PLUS	G PLUS	G PLUS
		Standard	Shallow	Standard	Shallow
		Part No.	Part No.	Part No.	Part No.
		40945	42013	40946	42029
1	Danger/Product Identification Decal	2529-658	2529-248	2529-657	2529-694
2	Danger Decal	2527-9	2527-9	2527-9	2527-9
3	Back Cover	25047	25047	25047	25047
4	Front Panel	25046	25046	25046	25046
5	Tube Support	41364	41364	41364	41364
6	Paddle Retainer	25045	25045	25045	25045
7	Pivot Bracket	25048	25048	25048	25048
8	Spring	6972	6972	6972	6972
9	#10-32 Lock Nut	6963	6963	6963	6963
10	Gasket	6968-1	6968-1	6968-1	6968-1
11	Switch Box Cover	6776	6776	6776	6776
12	Gasket	6777	6777	6777	6777
13	Actuator Pin	8757	8757	8757	8757
14	Support Cone Assembly	40947	37371	40947	37371
15	Tube Retainer	14756	14756	14756	14756
16	Cord Assembly	4999-49	4999-49	4999-49	4999-49
17	1/2" Liquid Tight Connector	24685	24685	24685	24685
18	Machined Switch Box	34842	34842	34842	34842
19	Switch Bracket	46122	46122	46122	46122
20	Switch Insulation	1907-5	1907-5	1907-5	1907-5
21*	Actuator Switch	46091	46091	46091	46091
22	Cut Sleeve	43110	43110	43110	43110
23	Mylar Assembly	25318	25318	25318	25318
24	Switch Paddle	46123	46123	46123	46123
25	Feeder Pan	41501	41500	41501	41500
26	Feeder Grill	39567	39567	38599	38599
27	Adjustment Cone	38604	41504	38604	41504

\*Actuator Switch, Chore-Time part number 7114, is no longer available. When replacing, use 7114 Switch Replacement Kit Part Number 46678.

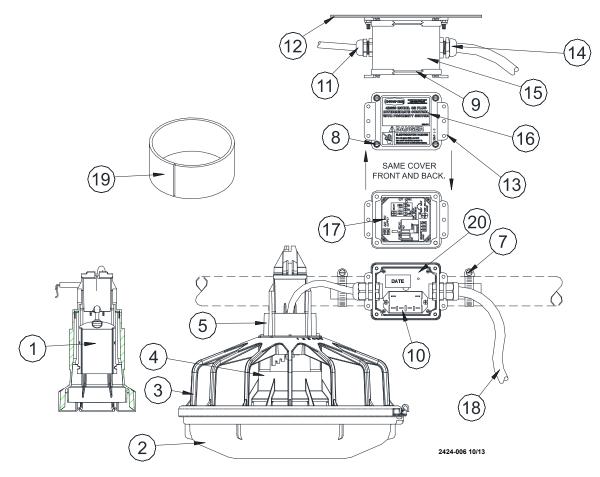
### **Electronic Sensor End Control**



2424-002 1/2014

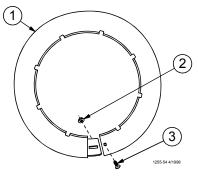
Item	Description	C2 PLUS	C2 PLUS	G PLUS	G PLUS
		Standard	Shallow	Standard	Shallow
		Part No.	Part No.	Part No.	Part No.
		54563	54564	54567	54568
1	Cut Sleeve	43110	43110	43110	43110
2	Bottom Cover	42085	42085	42085	42085
3	Top Cover with Insulators	42082	42082	42082	42082
4	Driver Block	4642	4642	4642	4642
5	Drive Tube Weldment	44794	44794	44794	44794
6	1/4-20x1-1/2 Socket Hd Screw	5083-8	5083-8	5083-8	5083-8
7	Tube Clamp	24063	24063	24063	24063
8	Support Bracket	42081	42081	42081	42081
9	Terminal Box Mounting Cover	6956	6956	6956	6956
10	Straight Liquid Tight Connector	26980	26980	26980	26980
11	Switch Box Gasket	6777	6777	6777	6777
12	Relay	28904	28904	28904	28904
13	Danger/Product Identification Decal	2529-710	2529-731	2529-709	2529-729
14	Cord Assembly	4999-116	4999-116	4999-116	4999-116
15	Liquid Tight Connector	24685	24685	24685	24685
16	Relay Plate	52316	52316	52316	52316
17	Grill	39567	39567	38599	38599
18	Adjustment Cone	38604	41504	38604	41504
19	Feeder Pan	41501	41500	41501	41500
20	#10 x 1/2 Hex Washer Head Screw	28075	28075	28075	28075
21	General Purpose Terminal Box	42627-3	42627-3	42627-3	42627-3
22	Liquid Tight Connector	23779	23779	23779	23779
23	Control Body Weldment	42080	42080	42080	42080
24	Support Cone	37077	44884	37077	44884
25	Pan Half Round Sensor	54670	54670	54670	54670
26	14" Flexible Conduit	26982-1	26982-1	26982-1	26982-1
27	Liquid Tight Connector	23810	23810	23810	23810
28	Anchor Plate	4188	4188	4188	4188

### **Electronic Sensor Mid Line Control**



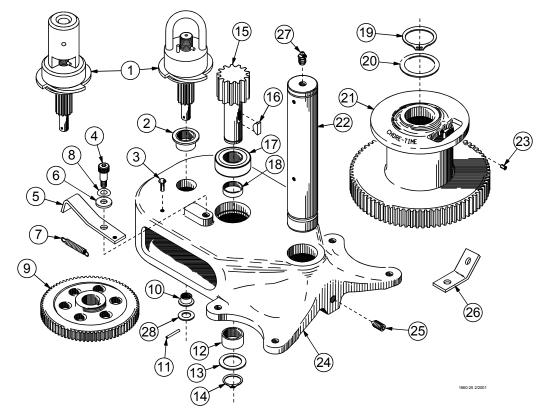
Item	Description	Model C2 PLUS Standard with Electronic Sensor	MODEL C2 PLUS Shallow with	MODEL G PLUS Standard with Electronic Sensor	Model G PLUS Shallow with Electronic Sensor
		Part No. 54565	Electronic Sensor Part No. 54564	Part No. 54569	Part No. 54570
1	Pan Half Round Sensor	54670	54670	54670	54670
2	Feeder Pan	41501	41500	41501	41500
3	Feeder Grill	39567	39567	38599	38599
4	Adjustment Cone	38604	41504	38604	41504
5	Support Cone	377077	44884	37077	44884
6	Slide Top Cap	38603	38603	38603	38603
7	Hose Clamp	3527	3527	3527	3527
8	#10 x 1/2 Hex Washer Head Screw	28075	28075	28075	28075
9	Switch Box Gasket	6777	6777	6777	6777
10	Relay	28904	28904	28904	28904
11	Liquid Tight Connector	23779	23779	23779	23779
12	Tube Mount	42681	42681	42681	42681
13	Terminal Box Mounting Cover	6956	6956	6956	6956
14	Liquid Tight Connector	24685	24685	24685	24685
15	General Purpose Terminal Box	42627-2	42627-2	42627-2	42627-2
16	Danger/Product Identification Decal	2529-711	2529-728	2529-712	2529-730
17	Pan Half Round Sensor	48200	48200	48200	48200
18	Cord Assembly	4999-117	4999-117	4999-117	4999-117
19	Cut Sleeve	43110	43110	43110	43110
20	Relay Plate	52316	52316	52316	52316

# **MODEL G PLUS Pan Extension (Optional)**



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

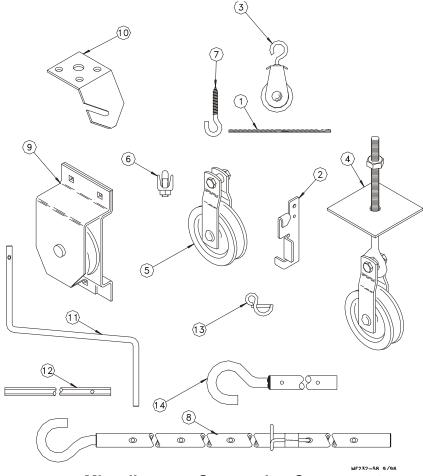
### 2883 Power Winch



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

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

### **Miscellaneous Suspension Components**



#### **Miscellaneous Suspension Components**

<u>ltem</u>	<b>Description</b>	Part No.
1	3/16 Cable	1213
2	Cable Lock	14337
3	Pulley with Swivel	3004
4	Heavy Duty Pulley Assembly	2014
5	Pulley	2500
6	3/16" Cable Clamp	732
7	ATF Screw Hook	2041
8	Extendable drive tube	47637
9	Pulley Assembly	28429
10	Ceiling Hook	28550
11	Handle Shank	3148
12	Drill Adapter Shaft	2886
13	Winch Handle Pin	3761
14	Winch Drive Tube (4')	2884-1
	Winch Drive Tube (8')	2884-2
	Winch Drive Tube (2')	2884-4
	Full Line Suspension Kit	7948

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

Item 11, 13 and 8 may be ordered as a kit under Part No. 47638.

Item 10 and Item 12 may be ordered as a kit under part no. 2885. Item 11 and Item 12 may be ordered as a kit under part no. 2886.



# MADE TO WORK.

### **BUILT TO LAST.<sup>®</sup>**

**Revisions to this Manual** 

Page No. Description of Change New Manual

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

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