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Chore-Time Warranty

Chore-Time Group, a division of CTB, Inc. ("Chore-Time") warrants the new CHORE-TIME Turbo Fans[®] 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.

Component Part	Extended Warranty Period
RXL Fan (except motors and bearings)	Three (3) Years
TURBO® Fan (except motors and bearings)	Three (3) Years
TURBO® Fan fiberglass housing, polyethylene cone, and cast aluminum blade.	Lifetime of Product
TURBO® fan motor and bearings.	Two (2) Years
Chore-Time® Poultry Feeder Pan	Three (3) Years
Chore-Time® Rotating Centerless Augers (except where used in applications involving high moisture feed stuffs exceeding 17%)	Ten (10) Years
Chore-Time Steel Auger Tubes	Ten (10) Years
ULTRAFLO® Breeder Feeding System auger and feed trough.	Five (5) Years
ULTRAPAN® Feeding System augers .	Five (5) Years

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 meintenance, or from liceturing strikes, electrical neuron surges or interpretion of electricity.
- dent, 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: April, 2014

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About This Manual

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

Important: Read ALL instructions carefully before starting construction.

Important: Pay particular attention to all SAFETY information.

- *Metric measurements are shown in millimeters and in brackets, unless otherwise specified.* "" " equals inches and "'" equals feet in English measurements.
 - Examples: 1'[25.4] 4' [1 219]
- Optional equipment contains necessary instructions for assembly or operation.
- Very small numbers near an illustration (*i.e.*, 1257-48) are identification of the graphic, not a part number.
- 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

WARNING: CRUSH HAZARD

This decal is placed on the side of the winch.

Do not stand under the feeder line while operating the electric winch. This is a potentially hazardous situation which, if not avoided, may result in death or serious injury.

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 Feeder Strap Lift Winch has been designed to raise and lower poultry feeders. 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.

Please refer to the feeding system manual for additional information about the feeding system suspension.

MF2445E

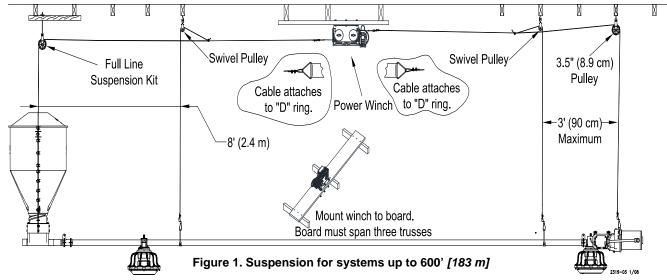
Planning

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 Strap Lift Winch System. See your feeding system manual for additional information about the feeding system suspension.

The Strap Lift Winch System is made up of a series of worm gear drives powered by a 1 HP. motor. The strap lift winch system has a lift speed of 1.5 - 3 ft. per minute. Total strap lift straight pull is 12 ft.

Important! The Strap Lift Winch System has a working load of 3,000 pounds to handle feed lines up to 600' [183m]. The Winch is designed to be installed in the center of the house and lift and lower from both directions to center.

The strap lift winch utilizes a 1 HP. 230 VAC 60 HZ. single phase motor with a 600:1 reduction ratio.

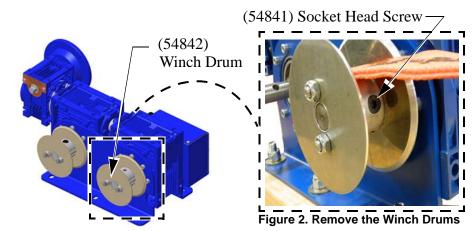


- 1. Mount the Winch and Support Board to the trusses using the main winch cable as a guide for alignment.
- 2. Attach the Strap Winch Support Board (with the Strap Winch secured) to the ceiling at the center of the feeder line, The Support Board must be parallel to the feeder line and must span at least 3 trusses in a wood frame house, or 2 trusses in a steel framed house. If the hopper is located at the center of the feeder line, locate the Strap 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 installed.**
- 3. Use (3) three lag screws for each truss end and two lag screws in the center of the board next to the winch.

Installation

Remove the Winch Drums

- 4. Unpack the Strap Winch.
- 5. To ease installation, remove the Winch Drums by removing the Cap Screws as shown.



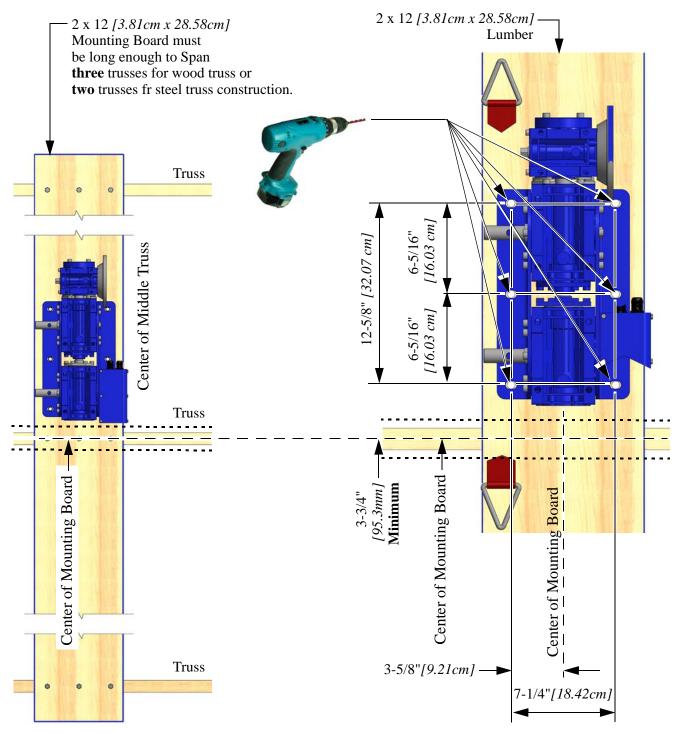
Attaching the Winch (Wood Trusses)

Horizontal Flat Position Installation (54812-1, 54812-3, or 54812-5)

(For Angled truss mounting skip to "Angle Truss Mount (54812-2,-4,-6)" on page 10)

Drilling Holes in Mounting Board

Cut a 2 x 12 Board long enough to span three trusses when mounting to wood Trusses (See Figure 3.).
 Pre-drill 1/2" [13mm] holes in the Mounting Board as shown using the Center of the Mounting Board as a guide.





Attaching the Winch to the Mounting Board

1. Attach the Winch to the Mounting Board as shown below.

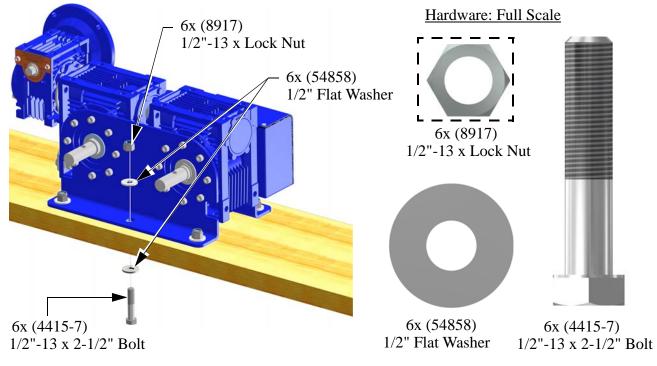


Figure 4. Attaching Winch to Mounting Board

Attaching the Straps and Re-Attaching the Drums

1. Remove the Nuts (54840) and one Disk (54837) from each Drum and attach Straps as shown.

2. Re-install the Disks and attach the Drums to the Winch with Cap Screws (54841).

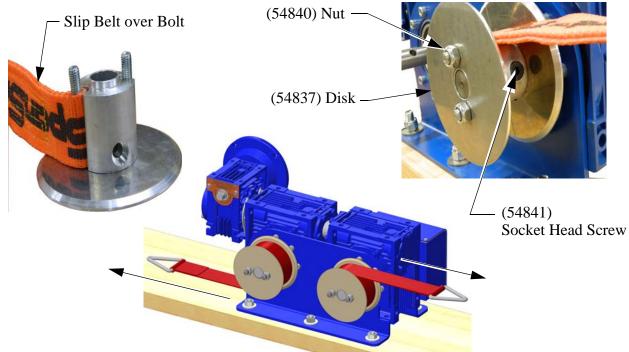


Figure 5. Attaching Winch to Mounting Board

Attaching the Mounting Board to the Trusses

- 1. With the Mounting Board still on the floor Mark a Chalk-line parallel with the Mounting Board lined up with the center of the Straps (See Figure 6.).
- 2. Line up the Chalk-line with the Feeder Line and attach the Mounting Board to the Trusses (Hardware not Included).

Important! IT IS VERY IMPORTANT TO MAKE SURE THE MASTER CABLE IS CENTERED WITH THE WINCH DRUMS. If the alignment is not correct the straps WILL NOT track onto the winch drums correctly.

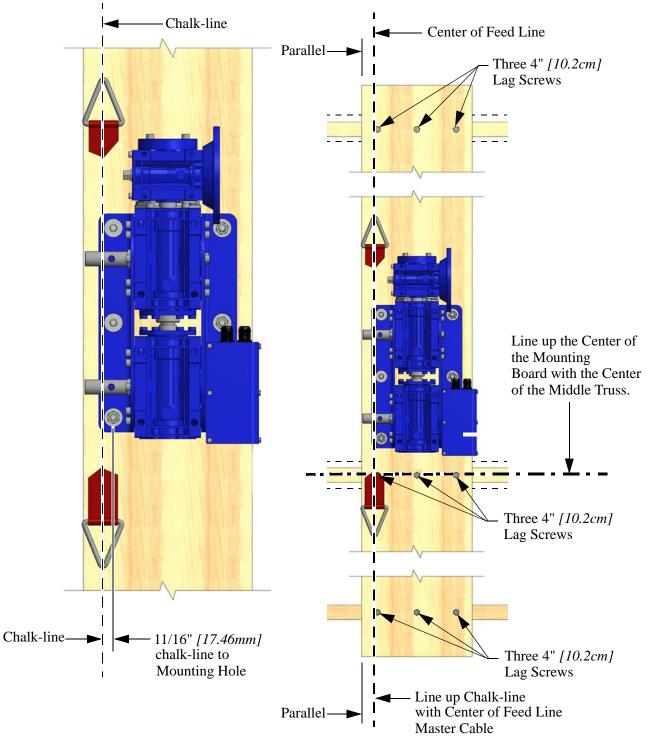


Figure 6. Attaching the Mounting Board to the Trusses

Angle Truss Mount (54812-2,-4,-6)

Attaching the Angle Mount Bracket to the Winch

When mounting the Winch to angled trusses it is necessary to use an Angle Mount Bracket.

- 1. Attach the Angled Truss Mount (54915) as shown (See Figure 7.) Finger tighten hardware for now. You will use the Bracket as a drill template in the next step and then it will be un-assembled.
- 2. Cut a 2 x 12 [3.81cm x 28.58cm] to a length that will span three trusses when mounting to wood trusses (See Figure 8.)
- 3. Fasten the Winch to the Mounting Board 3-3/4" [95.3mm] offset from the center of the board to avoid interference when mounting to the trusses, and flush with the edge. Slots in the Mounting Bracket allow for adjustment. Tighten down the (8917) Locknuts.

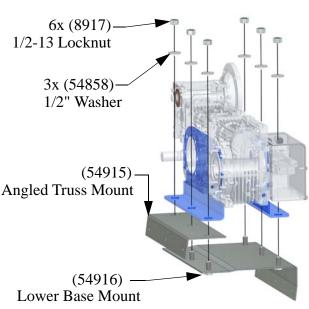
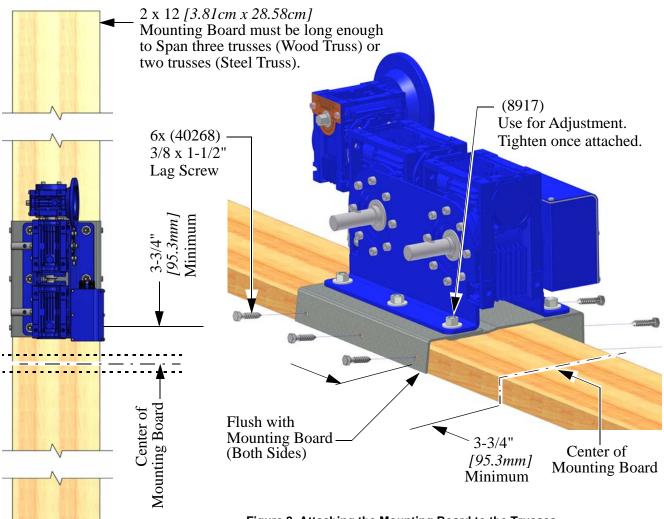


Figure 7. Angle Truss Mount



Attaching the Straps and Re-Attaching the Drums

1. Remove the Nuts (54840) and one Disk (54837) from each Drum and attach Straps as shown.

2. Re-install the Disks and attach the Drums to the Winch with Cap Screws (54841).

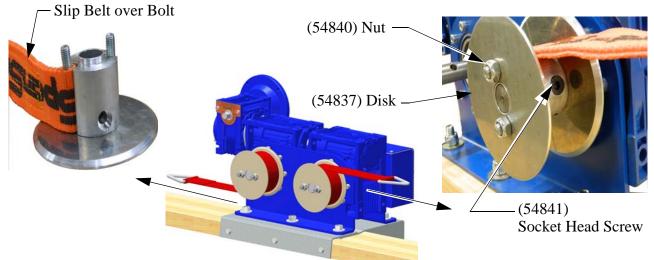


Figure 9. Attaching Straps and Re-attaching Drums

Attaching the Mounting Board to the Trusses

- 1. With the Mounting Board still on the floor Mark a Chalk-line parallel to the Mounting Board lined up with the center of the Straps (See Figure 10.).
- 2. Line up the Chalk-line with the Feeder Line below and attach the Mounting Board to the Trusses (Hardware not Included).
- **Important!** IT IS VERY IMPORTANT TO MAKE SURE THE MASTER CABLE IS CENTERED WITH THE WINCH DRUMS. If the alignment is not correct the straps WILL NOT track onto the winch drums correctly.

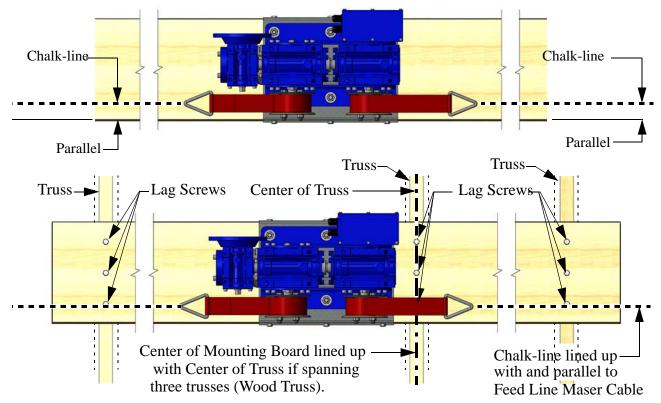


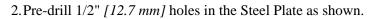
Figure 10. Attaching Mounting Board to the Trusses

Attaching the Winch (Steel Trusses)

Make a Steel Mounting Plate

1. If mounting to Steel Trusses we recommend a 3/8" [9.5 mm] thick steel plate welded to two pieces of angle iron that are each long enough to span at least 2 Trusses.

Important! Consult a Structural Engineer for specifying adequate structural support. CTB, Inc. is not responsible for Structural integrity of the building or the angle iron used when mounting.



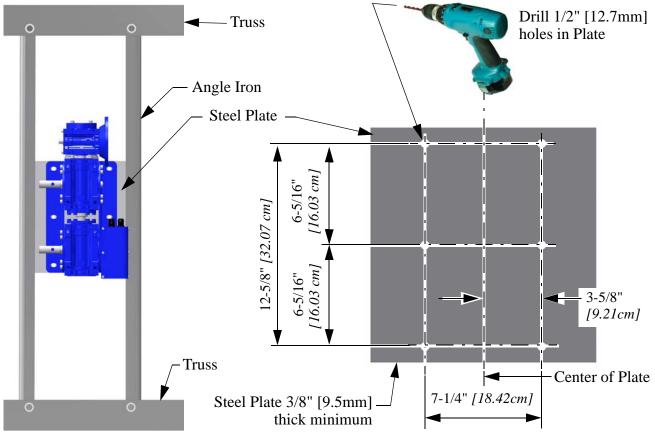
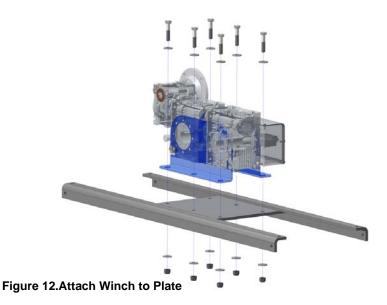


Figure 11. Attaching Mounting Board to the Trusses

Attach Winch to Fabricated Plate

1. Attach the Winch to the Plate. Hardware is not supplied for mounting.



Attaching the Straps and Re-Attaching the Drums

1. Remove the Nuts (54840) and one Disk (54837) from each Drum and attach Straps **as shown**. 2. Re-install the Disks and attach the Drums to the Winch with Cap Screws (54841).

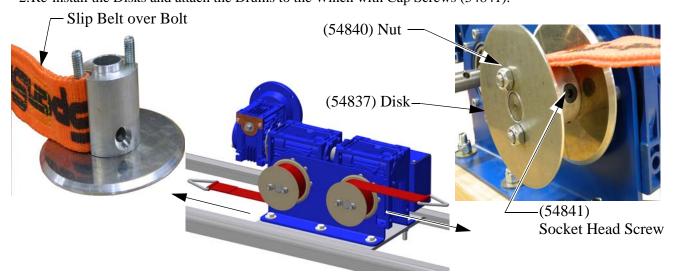
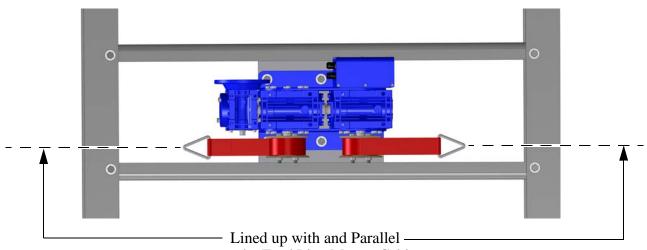


Figure 13. Attaching Straps and Re-attaching Drums

Attach the Winch and Angle Iron to Trusses

- 1. Line up the Center of the Straps with the Feeder Line below and attach the Angle Iron to the Trusses (Hardware not Included).
- **Important!** IT IS VERY IMPORTANT TO MAKE SURE THE MASTER CABLE IS CENTERED WITH THE WINCH DRUMS. If the alignment is not correct the straps WILL NOT track onto the winch drums correctly.



to the Feed Line Master Cable

Figure 14. Attaching the Winch to the Trusses

Installing the Winch Motor

- Apply Anti-Seize to the entire surface of the Motor Shaft
 Insert the Key (Supplied with Motor) and attach the Motor with four Bolts and Nuts. (Supplied with Motor).

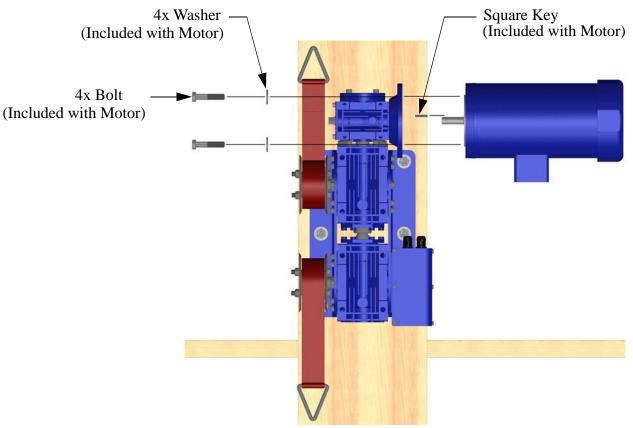


Figure 15. Attaching the Motor

Attaching the Straps to the Master Cable

Cable must be centered with the strap.

1. With the cable pulled taught and secured to the truss on each side of the winch cut the cable. Strap must be fully extended before installing the Cable on the "D" ring.

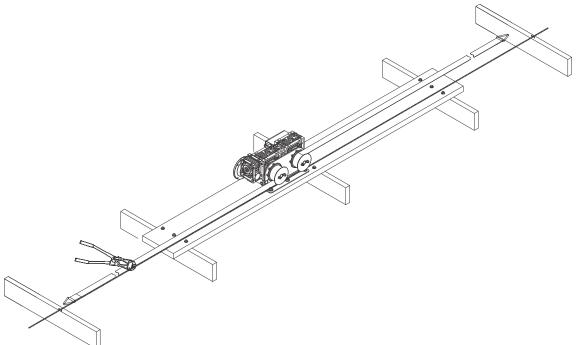


Figure 16.Attaching the Motor

- 2.Install a Thimble to the Winch Strap "D" Ring.
- 3. Route the Master Cable through the "D" Ring over the Thimbles.
- 4. Install two Cable Clamps.

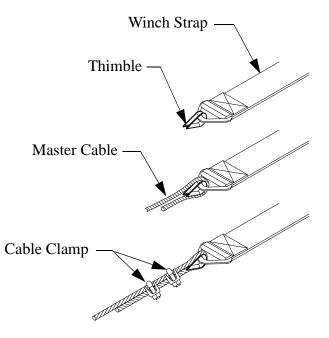
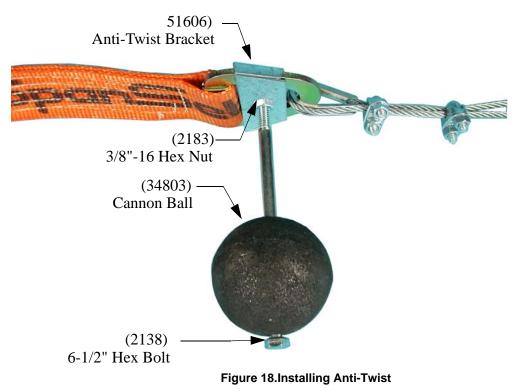


Figure 17. Attaching Cable to Straps

Anti-Twist

Install the Anti-Twist as shown



Screw Hook Installation

See appropriate Feeder Manual for Screw Hook and drop installation.

Winch Operation

Initial Setup (Before Birds) Setting Down Limit

During initial setup set the down limit to approximately 20". This will be close to the height for Male Birds. This can be fine tuned later when the Birds are in the house.

- 1. Put the local/remote Switch in the "Local" position.
- 2. Use the up/down switch up to adjust the Feeders to approximately 20" [51 cm] off the floor (See Figure 19).

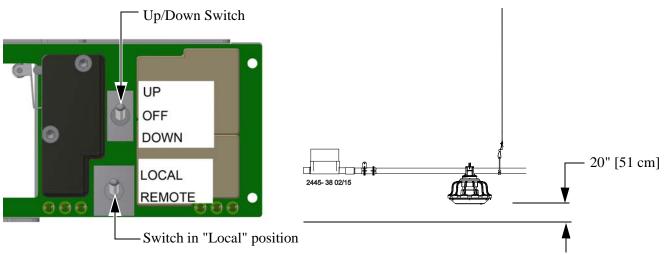
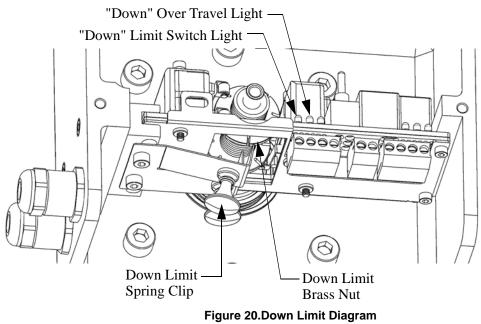


Figure 19.Down Limit Switch

3.Pull the Spring Clip from the Down Limit Nut. Rotate the Brass Nut until the Down Limit Switch light comes on and the Switch Clicks (See Figure 20).

Important! DO NOT OVER PULL SPRING CLIP!

4. **NOTE:** If the Down Over Travel Light is activated, the system will stop operation! If this happens you will need to rotate the Brass Nut back from the switch arms.



5. Lock the Spring Clip back into a groove in the Brass Nut once desired height is reached.

Initial Setup

Setting Up Limit

Before birds the Up limit should be set high enough to be able to get vehicles into the house to bring in litter.

- 1. Put the local/remote Switch in the "Local" position
- 2. Use the up/down switch up to lift the Feeders up to a level that will allow litter trucks to enter the building.

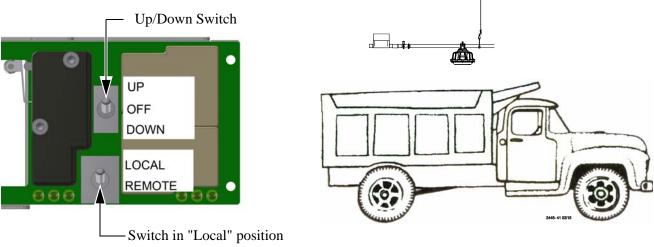
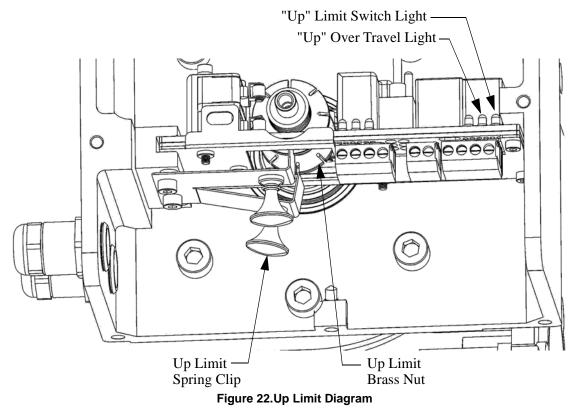


Figure 21.Up Limit Setup

3. Pull the Spring Clip from the Up Limit Nut. Rotate the Brass Nut until the Up Limit Switch Light comes on, and the Up Limit Switch is energized. (Should hear a click) (See Figure 22).

Important! DO NOT OVER PULL SPRING CLIP!

4. **NOTE:** If the "Up" Over Travel Light is activated, the system will stop operation! If this happens you will need to rotate the Brass Nut back from the switch arms.



5. Lock the Spring Clip back into a groove in the Brass Nut once the desired height is reached.

Setting Limit Switches with Birds in House

1. After shavings have been delivered, reset the "down" limit to accommodate the size of the birds. Adjust the brass nut as you did in "Setting Down Limit" on page 17.

2. Adjust the Up limit for the height of the Feed Scale. Adjust the Brass Nut as you did in "Setting Up

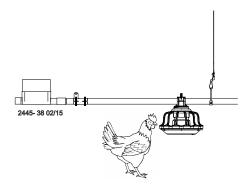


Figure 23.Down Limit with Birds in House

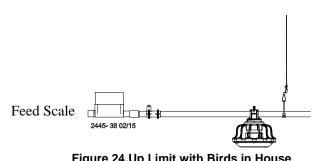


Figure 24.Up Limit with Birds in House

Caution! Always replace covers on Winch Controls after adjusting or servicing. Failure to replace covers could result in moisture or dust entering, causing damage to the Circuit Boards and/or their Components.

Operating External Controls

Limit" on page 18.

To operate the Winch using an external Control...

1.Place the up/down switch to the center position 2.Place the local/remote switch to remote position

Manual Control (Part No. 54831)

1.Push the up/down switch. This will operate the winch in the up or down direction. You must push and hold the switch in the desired direction. Limit switches will operate as set.

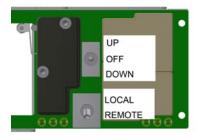


Figure 25. External Controls

Timed Control (Part No. 54831)

- 1.Push and hold the up/down switch on the control box. Limit switches will operate as set.
- 2. After programming the digital time clock (see digital clock section for instruction), set the time that you wish the feeder to be lowered. The time clock will not lift the feed line. Lifting the feed line must be done manually.

Chore-Tronics Control (Part No. 54832)

- 1. After selecting the relay you wish to lower the feed line, program a time for the feeder to be lowered. Lifting the Feeder must be done manually.
- 2. The up/down switch on the Control will raise or lower the feed line. The limit switches will operate as set.

Full Manual Operation

This winch incorporates a 5/8" [16 mm] hex extension on the main input shaft (opposite motor) for full manual operation.

In the event of a power or control failure, the strap winch can be operated manually.

A power failure would require use of a strong battery drill. This will be a slow process since the winch is configured with a 600:1 gear reduction ratio. The manual feature is mostly intended for lowering the feeder to accommodate feeding the male birds. Lowering the feeder with the strap winch requires much less torque input than trying to raise the feeder.

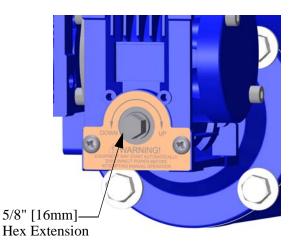


Figure 26.Full Manual Operation

If the manual mode of operation is required due to a motor or control failure, where manual toggle switches are not functioning, then a $\frac{1}{2}$ " electric drill is the most practical tool to use in the full manual mode.

WARNING! : If attempting full manual operation of winch, disconnect power to the winch at the circuit breaker to prevent unexpected starting (power restoration) while trying to operate manually.

CAUTION: If operating in full manual mode, be careful not to exceed the normal travel distances up and down which the limit switches are set for. If this happens, then limit and/or safety switches could be damaged by the brass actuator nuts in the integral winch control head. If safety switch/es are contacted by the limit nuts, the nut/s would need to be adjusted away from the switches to allow the winch to function normally with electric power restored.

Winch Drum Rotation

Check for proper Rotation. When operating in the **up direction** the Drum should pull the belts as shown below.

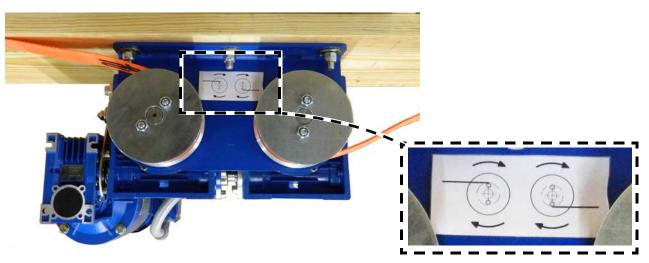


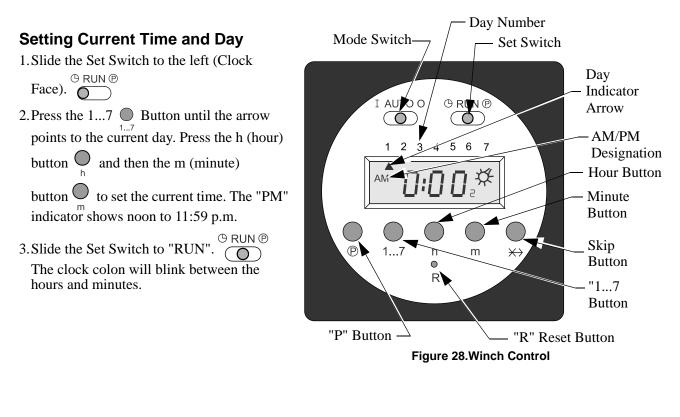
Figure 27. Winch Drum Rotation

Time Clock Setting Instructions

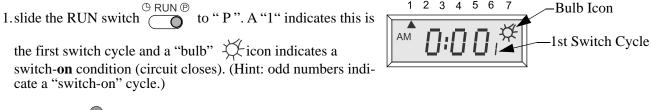
Note: to save time you can set up each on/off cycle:

- A) to be unique for each individual day, or
- B) for Monday to Friday (days 1 to 5), or
- C) for weekends only (days 6 & 7), or
- D) for all days except Sunday (days 1 to 6), or ...

E) the entire week at one time. This can save a lot of time when programming the "on" and "off" cycles.



Setting Each Cycle to Switch On



2.- press $1....7 \bigoplus_{1...7}$ button until arrows point to selected day(s) you want this ON cycle to occur. (See **step 2 above** for how to choose days of the week)

3.- press " h " \bigcap_{h} and " m " \bigcap_{m} buttons to show switch-on time, noting the "PM" indicator.

Setting Each Cycle to Switch Off

1. Slide the RUN switch to "P". $\bigcirc^{\bigcirc} \mathsf{RUN}^{\textcircled{O}}$ Press the "p" button. $\bigcirc_{\textcircled{P}}$ Note that the switch cycle number changes to 2 and the bulb of blinks, indicating switch-off (circuit opens). (Hint: even numbers indicate a "switchoff" cycle.) 2.- press $1...7 \bigcup_{i=7}^{\infty}$ button until arrows point to the selected day(s) you want this OFF cycle to occur. 3.- press the h (hour) \bigoplus_{h} and m (minute) \bigoplus_{m} button to select-switch-off time. Note: Remember you can repeat the above steps to program up to 8 on/off events for each day of the week. By pressing the lower " P " button $\bigcirc_{\mathbb{P}}$ you can advance to the desired on/off cycle. Slide RUN switch to RUN position. $\bigcirc^{\bigcirc \text{RUN } \textcircled{O}}$ The clock colon will blink. Auto Run Mode 1. Set time, Day, and desired switch cycles. 2. Slide the Set Switch to run $\bigcirc^{\bigcirc} \text{RUN } \bigcirc^{\bigcirc}$ and the Mode Switch to "Auto". $\overset{\square}{\bigcirc} \overset{\square \text{AUTO } \bigcirc}{\bigcirc}$ Switching begins with next "switch-on" time. **Override On** Slide the Mode Switch to I. $\overset{I}{\bigcirc}$ The switch remains **on** indefinitely (circuit closed). **Override Off** Slide the Mode Switch to O. I = 0 The switch remains **off** indefinitely (circuit open). Skip Cycle In Automatic run mode $\begin{bmatrix} AUTO \\ \bigcirc \end{bmatrix}$ press the Skip button. \bigcirc The next program is skipped. Setting Error 1. If EEE appears a setting error exists. The switch cycle number in error is shown. Slide the Set Switch to $"P". \bigcirc^{\bigcirc \mathsf{RUN}\, \textcircled{\mathbb{P}}}$ 2. Press the "P " button until "Cycle" is shown. Review and correct the error. Slide the Set Switch to

 $Run. \bigcirc \mathbb{R}UN \bigcirc$

Clear Any Setting

1.Slide the Set Switch to "P". Press the "P" button \bigcirc_{\bigcirc} to show any switch cycle to be cleared.

2. To Clear a switch cycle press the $1...7 \bigoplus_{1...7}$ button until no days are indicated.

3. Repeat for the next switch cycle. This on/off cycle is now inactive.

Clear All

To erase all settings press "R". \bigcirc

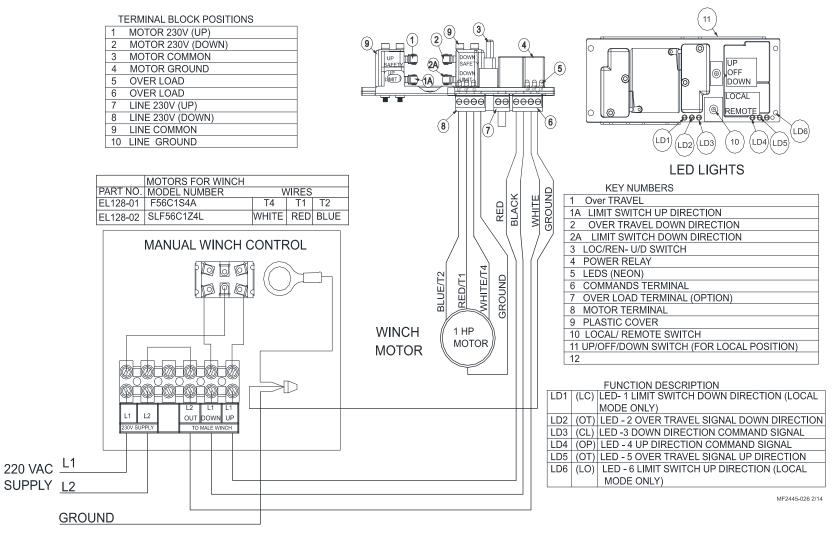
Wiring

MF2445E

DANGER: Always disconnect power to the system when servicing or maintaining the equipment. Failure to disconnect power may cause injury or death.

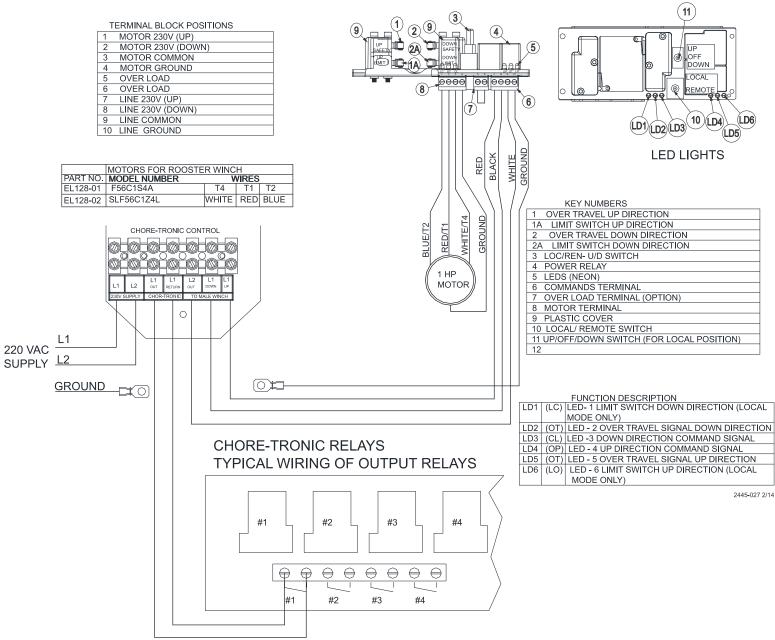
All electrical wiring must be done by a qualified electrician in accordance with local and national codes

Wiring to 54833 Manual Winch Control.



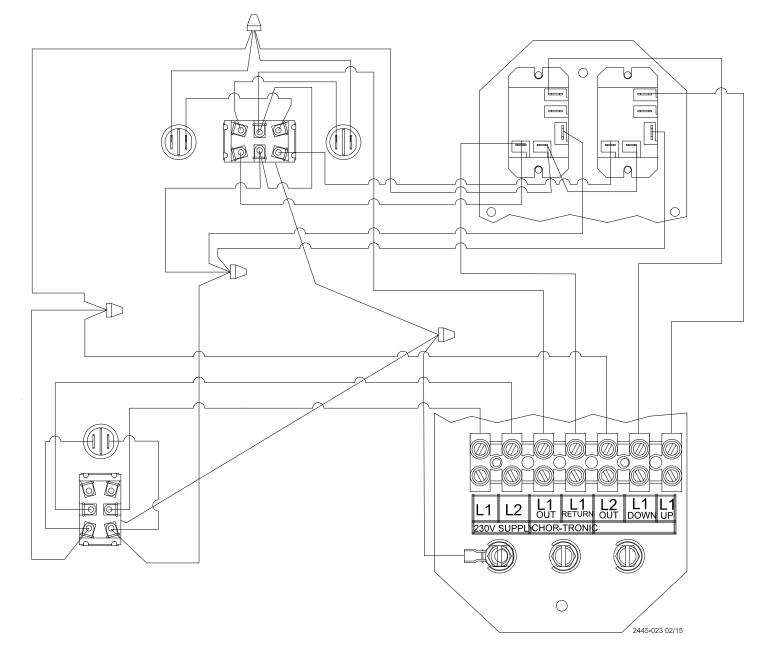
23

Wiring to Chore-Tronics[®] Control Part No.54832

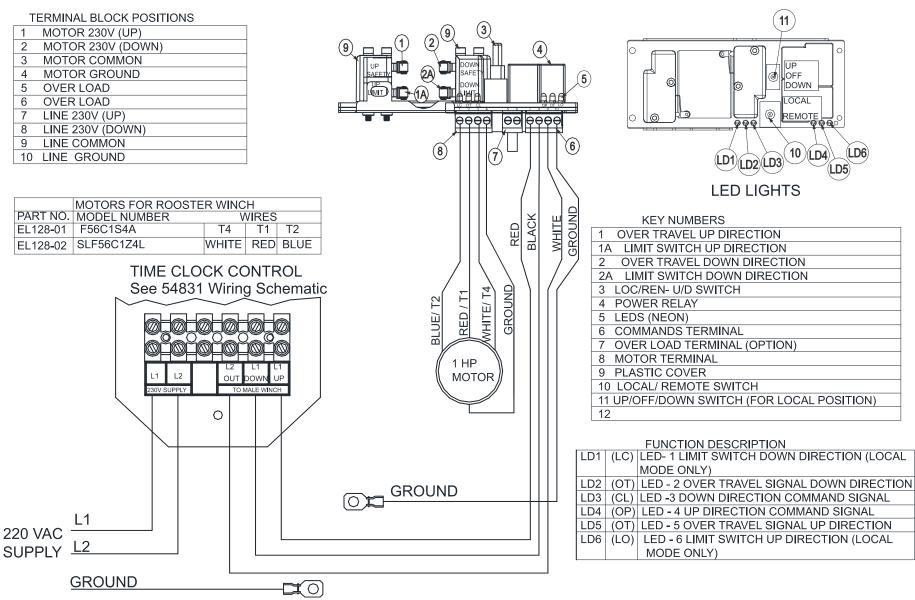


MF2445E

54832 Chore-Tronics[®] Winch Timer Internal Wiring



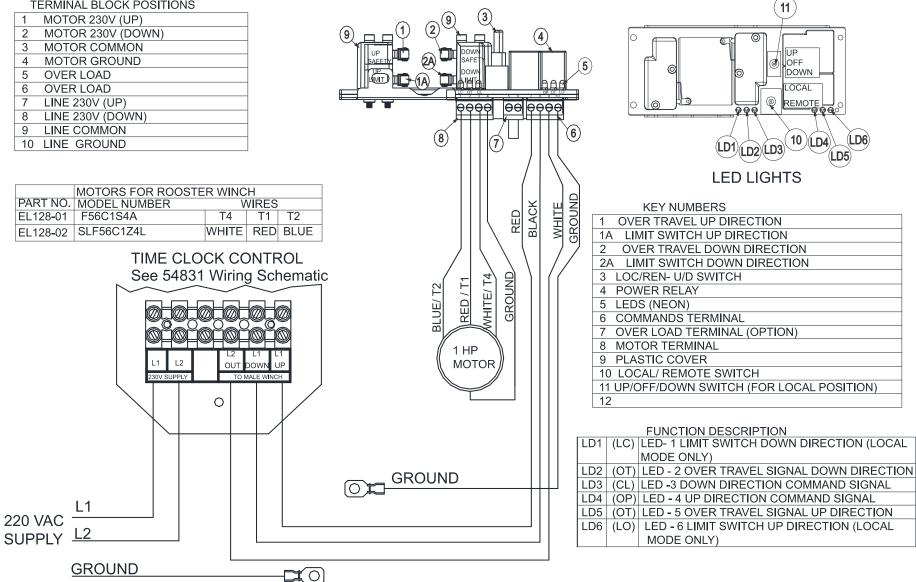
Winch to Timer Control (Part No.54831) Wiring



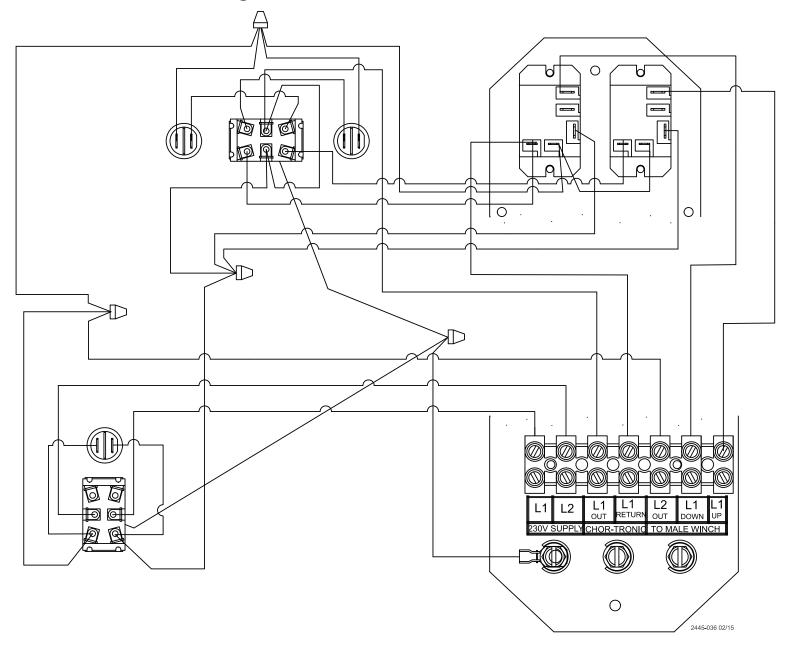
Feeder Strap Winch

Winch to Timer Control (Part No.54831) Wiring

TERMINAL BLOCK POSITIONS



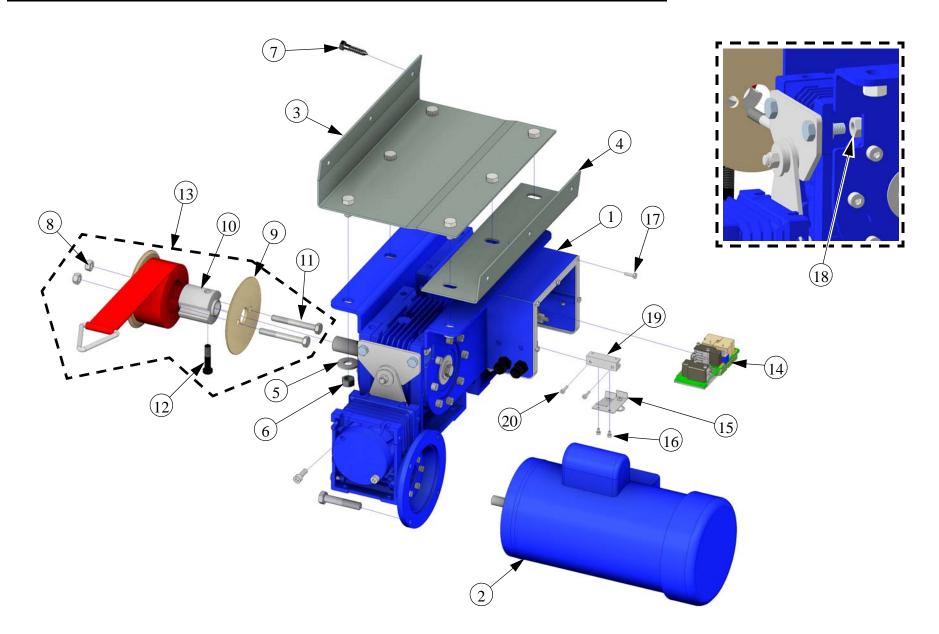
MF2445E



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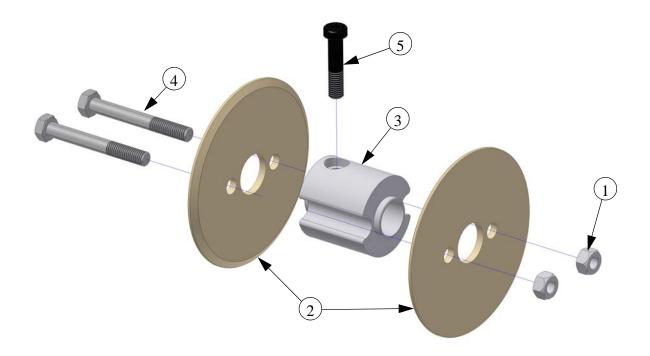
Parts Listing 54812-X

30



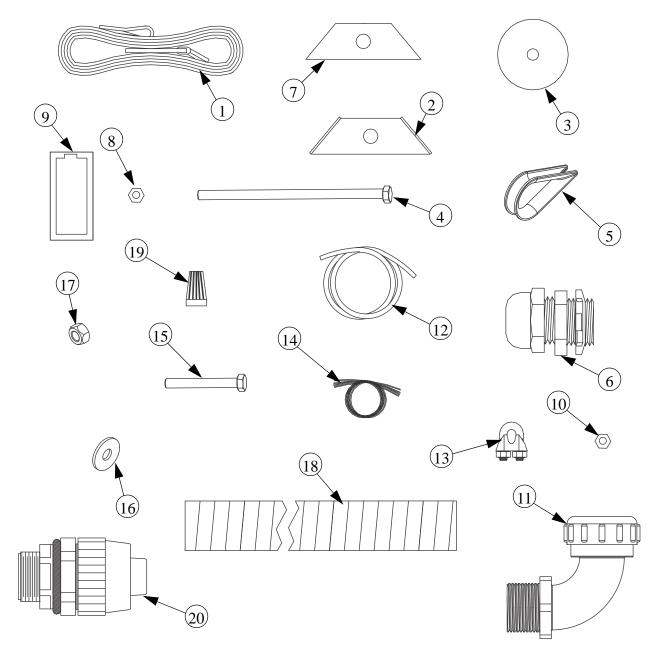
		54812-1 Horizontal Manual Control	54812-2 Angle Truss Mount Manual Control	54812-3 Horizontal Timer Control	54812-4 Angle Truss Mount Timer Control	54812-5 Horizontal Chore-Tronics [®] Control	54812-6 Angle Truss Mount Chore-Tronics [®] Control
Item	Description]	Part No.		
1	Winch Assembly	54834	54834	54834	54834	54834	54834
2	1 HP, 230VAC, 60Hz, 1 PH Motor	54835	54835	54835	54835	54835	54835
3*	Angled Truss Mount		54915		54915		54915
4*	Lower Base Mount		54916		54916		54916
5*	1/2" Washer	54858	54858	54858	54858	54858	54858
6*	1/2-13 Locknut	8917	8917	8917	8917	8917	8917
7*	3/8 x 1-1/2" Lag Screw	40268	40268	40268	40268	40268	40268
8**	M10 Torque Nut	54840	54840	54840	54840	54840	54840
9**	Drum Disc	54837	54837	54837	54837	54837	54837
10**	Winch Drum Base	54838	54838	54838	54838	54838	54838
11**	M10 x 80mm HxHd Bolt	54839	54839	54839	54839	54839	54839
12**	M10 x 45 x1.5 Screw	54841	54841	54841	54841	54841	54841
13	Winch Drum Assembly	54842	54842	54842	54842	54842	54842
14	Feeder Winch Circuit Board	55180	55180	55180	55180	55180	55180
15	Spring Lever Assembly	54866	54866	54866	54866	54866	54866
16	M4-6 Socket Head Screw	54868	54868	54868	54868	54868	54868
17	M5-16 Hex Bolt	54867	54867	54867	54867	54867	54867
18	M10 Torque Nut	54870	54870	54870	54870	54870	54870
19	PCB Support Rail	55700	55700	55700	55700	55700	55700
20	M4 x 8 Soc. Hd Cap Screw	55699	55699	55699	55699	55699	55699
	*Included in 51533-X Winch Hardware Kit (page 33, and page 34)						
	**Included in 54842 Winch Drum Kit (page 32)						

Feeder Winch Drum Part No. 54842



Item	Description	Part No.
1	M10 Torque Nut	54840
2	Drum Disc	54837
3	Winch Drum Base	54838
4	M10 x 80mm HxHd Bolt	54839
5	M10 x 1.5 Screw	54841

Horizontal Mount Kit P/N 51533-1

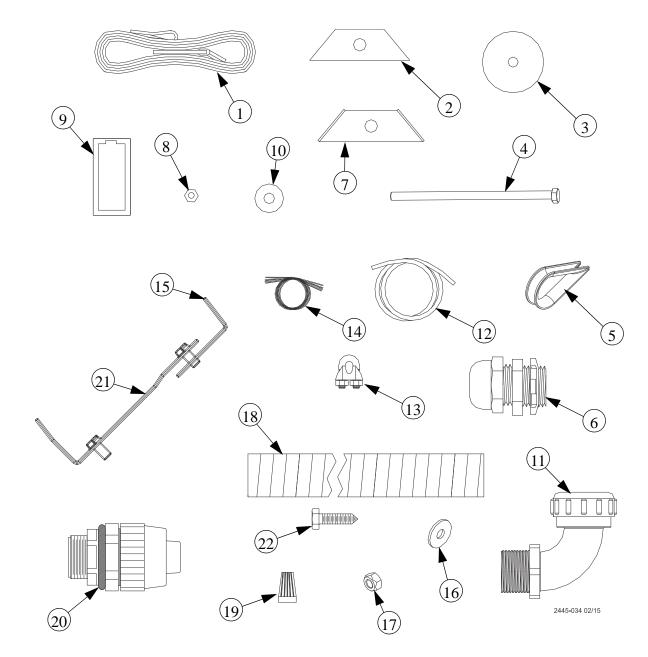


2445-035 02/15

Item	Description	Part No.
1	12" Winch Strap	54811
2	Anti Twist Bracket	51606
3	Cannon Ball	34803
4	3/8-16 x 6" Bolt	2138
5	3/16" Cable Thimble	51568
6	1/2" Liquid Tight Conn.	24685
7	Anti Twist Plate	51607
8	3/8-16 Hex Nut	2183
9	Anti Seize Tube	47749-1
10	3/8 Hex Jam Nut	4566

Item	Description	Part No.
11	90 Deg. Connector	23810
12	16-4 SJO Cord Assy.	4999-118
13	3/16" Cable Clamp	732
14	16 Ga. Wire Leads	51533W
15	1/2-13 Hex Bolt	4415-7
16	1/2" Flat Washer	54858
17	1/2"-13 Lock-nut	8917
18	Flex Conduit	26982-1
19	Orange Wire Nut	756-2
20	1/2" Conduit Conn.	26980

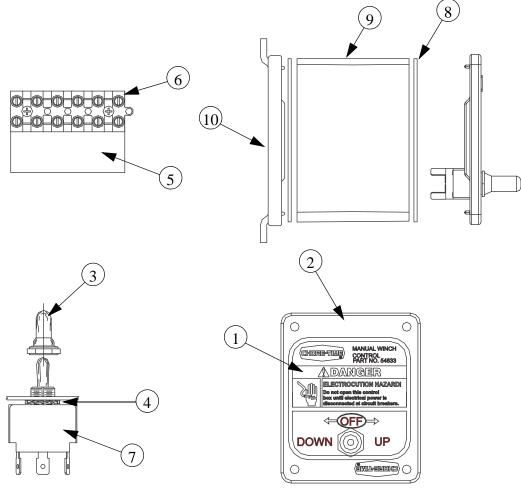
Angled Truss Mount Hardware Kit P/N 51533-2



Item	Description	Part No.
1	12" Winch Strap	54811
2	Anti Twist Bracket	51606
3	Cannon Ball	34803
4	3/8-16 x 6" Bolt	2138
5	3/16" Cable Thimble	51568
6	1/2" Liquid Tight Conn.	24685
7	Anti Twist Plate	51607
8	3/8-16 Hex Nut	2183
9	Anti Seize Tube	47749-1
10	3/8 Hex Jam Nut	4566
11	90 Deg. Connector	23810

Item	Description	Part No.
12	16-4 SJO Cord Assy.	4999-118
13	3/16" Cable Clamp	732
14	16 Ga. Wire Leads	51533W
15	Lower Base Mount	54916
16	1/2" Flat Washer	54858
17	1/2"-13 Lock-nut	8917
18	Flex Conduit	26982-1
19	Orange Wire Nut	756-2
20	1/2" Conduit Conn.	26980
21	Angled Truss Mount	54915
22	3/8 x 1-1/2" Lag Screw	40268

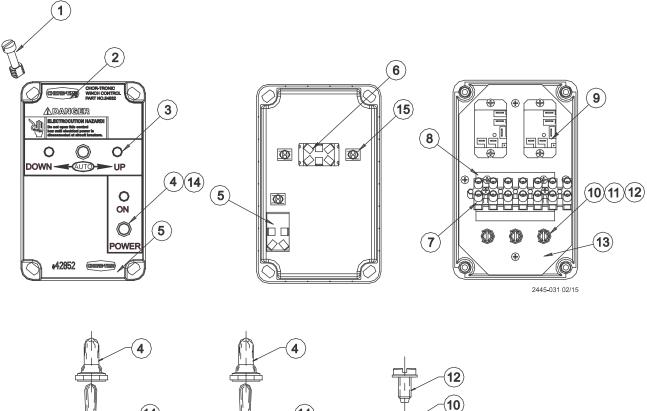
Manual Winch Control Part No.54833

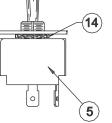


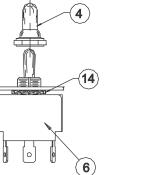
2445-033 2/15

Item	Description	Part No.
1	Cover Decal	2529-1128
2	Machined Cover	54845
3	Switch Boot	1739
4	15/32" Lock Washer	24671
5	Terminal Mount Plate	54846
6	Terminal Block	34925-6
7	Toggle Switch	46847
8	Gasket	6777
9	Deep Terminal Box	42610
10	Mount Cover	6956

CHORE-TRONIC Winch Control Part No. 54832



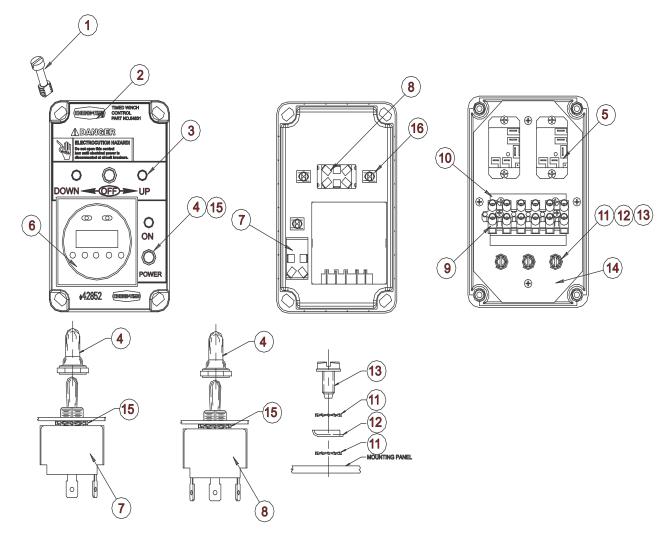




£	Mounting Panel

Item	Description	Part No.
1	Plastic Screw	42849
2	Cover Decal	2529-1128
3	Pilot Light	7044
4	Switch Boot	1739
5	Toggle Switch	6014
6	Toggle Switch (DPDT)	46847
7	Terminal Block	34925-6
8	Terminal Mount Bracket	54830
9	Small Relay	34702
10	Ext. Lock Washer	305
11	Brass Cup Washer	5775
12	#10 Ground Screw	34662
13	4 x 6 Mount Plate	54829
14	15/32" Lock Washer	24671
15	Spring Clip	29770

Timed Winch Control Part No. 54831



Item	Description	Part No.
1	Plastic Screw	42849
2	Cover Decal	2529-1129
3	Pilot Light	7044
4	Switch Boot	1739
5	Small Relay	34702
6	Digital Time Clock	51830
7	Toggle Switch	6014
8	Toggle Switch (DPDT)	46847
9	Terminal Block	34925-6
10	Terminal Mount Bracket	54830
11	Ext. Lock Washer	305
12	Brass Cup Washer	5775
13	#10 Ground Screw	34662
14	4 x 6 Mount Plate	54829
15	15/32" Lock Washer	24671
16	Spring Clip	29770



MADE TO WORK.

BUILT TO LAST.[®]

Revisions to this Manual

Page No.Description of Change19Added "Replace Cover to prevent damage to Circuit Board"

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

CTB Inc. P.O. Box 2000 • Milford, Indiana 46542-2000 • U.S.A. Phone (574) 658-4101 • Fax (877) 730-8825 E-Mail: ctb@ctbinc.com • Internet: http//www.ctbinc.com



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

Chore-Time Group A division of CTB, Inc. PO Box 2000 Milford, Indiana 46542-2000 USA Phone (574) 658-4101 Fax (877) 730-8825 E-mail: www.choretimepoultry.com Internet: poultry@choretime.com

Limited Warranty

LIMITED WARRANTY

Chore-Time Group, a division of CTB, Inc. ("Chore-Time") warrants the new CHORE-TIME Strap Winch 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. 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.

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: April 2014

Contents

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Limited Warranty
Safety and General Information 4 Follow Safety Instructions 4 Decal Descriptions 4 DANGER: Moving Parts 4 DANGER: Electrical Hazard 4
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Assembly
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Safety and General 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.

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.

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 Parts

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

Severe personal injury will result if the equipment is operated without covers properly installed.

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.

Electrical disconnects and over current protection are not supplied with the equipment.



A DANGER

Rotating Parts! Do not operate with covers removed! Disconnect electrical power before working on system, equipment may start automatically. Otherwise severe personal injury will result.



General Information

The Chore-Time Ventilation Strap Winch is designed to raise and lower, and/or actuate Ventilation Equipment in a Poultry House . Using the equipment for purposes other than specified in this manual may cause personal injury and/or damage to the equipment.

Specifications

Strap Winch Travel Speed- The Strap Winch travels between 8"-12-1/2" [20.3cm-31.8cm] per minute.

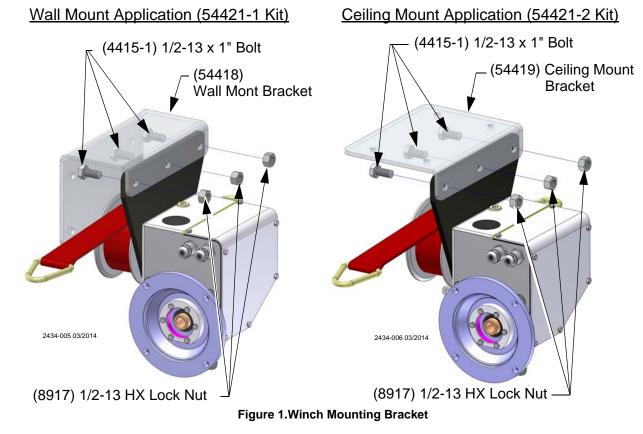
Winch Capacity- The Strap Winch has a working load capacity of 2000 lbs. [907.2 kg] working load.

Pull Direction- The Strap Winch is designed to be centered within the winching load and pull both directions to lift and lower from center.

Pull Distance- The Strap Winch is capable of pulling 6' [1.83m] in both directions.

Assembly

Attaching the Winch Mounting Bracket



Motor Installation

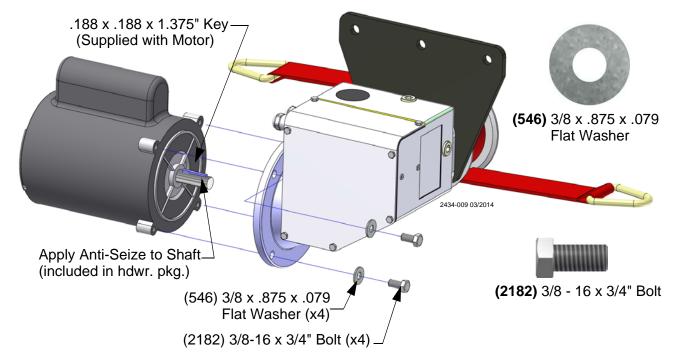
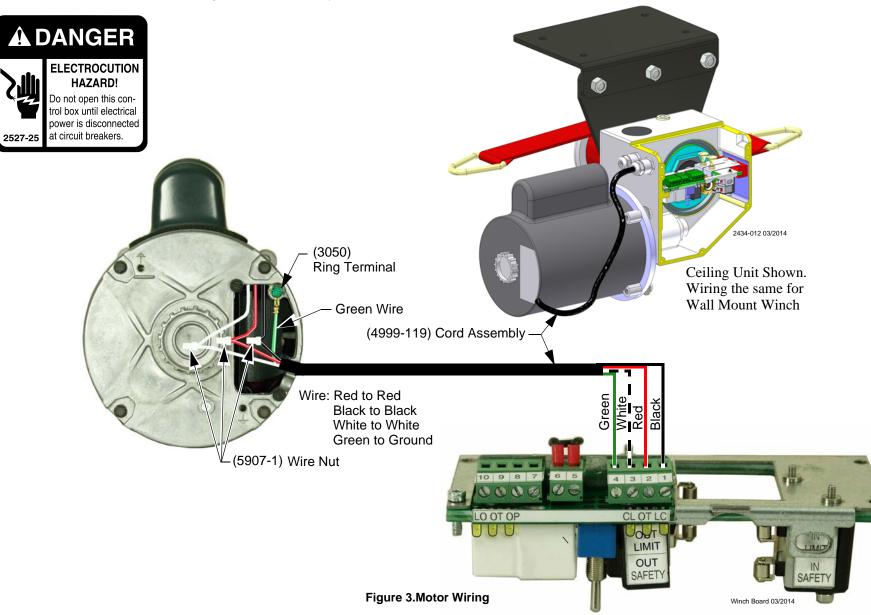


Figure 2.Motor Installation

Wiring Motor to the Winch Unit

Wire the Motor to the Winch Unit using the Cord Assembly (4999-119) included as shown below.



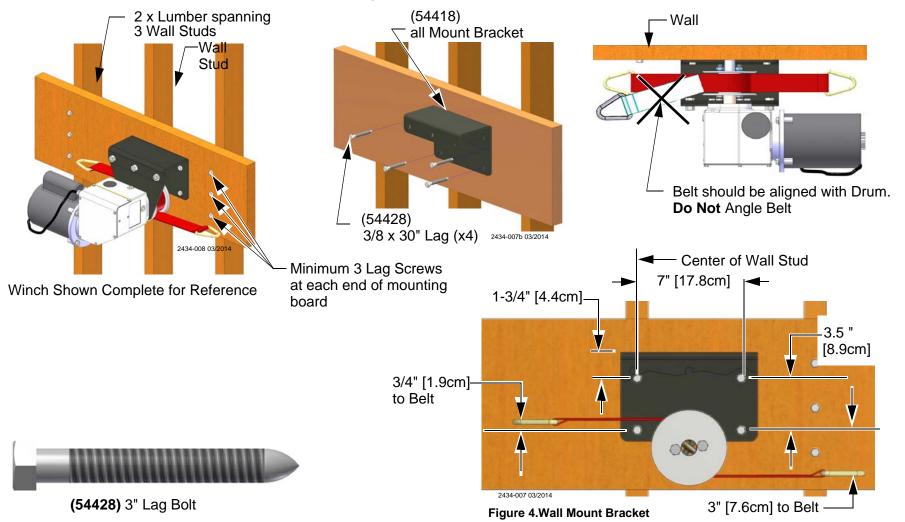
MV2434H

Installation

Mounting Bracket Installation

Wall Mount Bracket Installation

Chore-Time Recommends mounting the Strap Winch to a Board that spans at least three Wall Studs. At least two of the Lag Screws (54428) used to attach the Winch should be secured to a Wall Stud. See **Figure 4.** for attaching the Wall Mount Bracket.



Ceiling Mount Bracket Installation

Chore-Time Recommends mounting the Strap Winch to a Board that spans at least three Rafters (Wood Rafters) or two Rafters (Metal Studs). At least two of the Lag Screws (54428) used to attach the Winch should be secured to a Rafter. **See Figure 5.** below for attaching the Wall Mount Bracket.

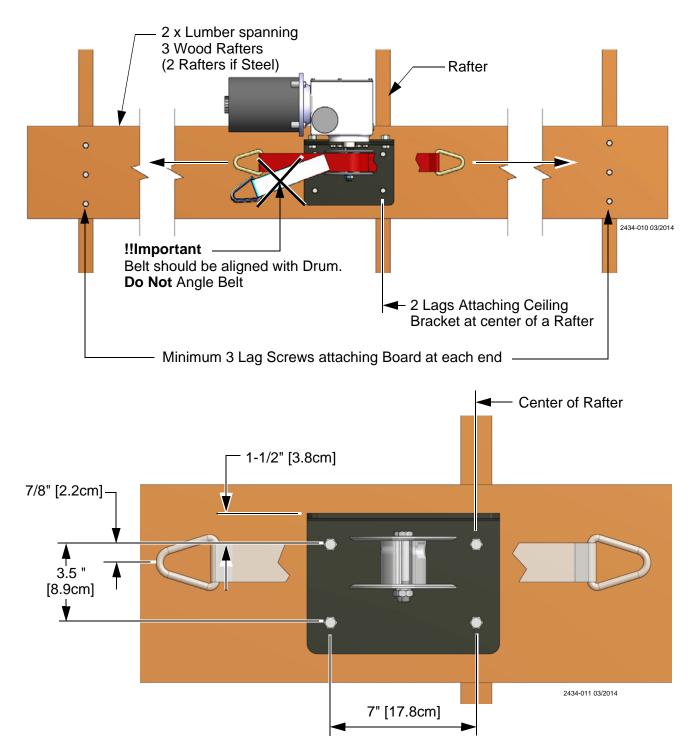


Figure 5.Ceiling Mounting Bracket

Attaching Winch to Mounting Bracket

Wall Mount

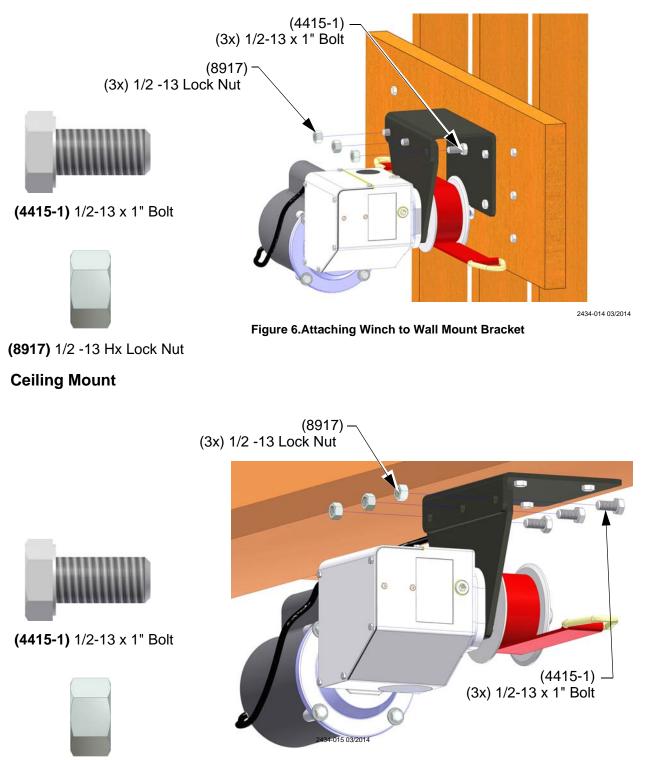


Figure 7. Attaching Winch to Ceiling Mount Bracket

(8917) 1/2 -13 Hx Lock Nut

Wiring

Wiring to Power

See "Wiring Motor to the Winch Unit" on page 7 for Motor Wiring...

- 1. If Wired as shown the "OUT" command signal will cause the strap to extend. An "IN" signal will retract the strap. (Red wire #7 terminal, and Black wire #8 terminal)
- 2. If you want the "OUT" command signal to retract the strap, reverse the red and black wires. (Red wire #8 terminal, and Black wire #7 terminal)



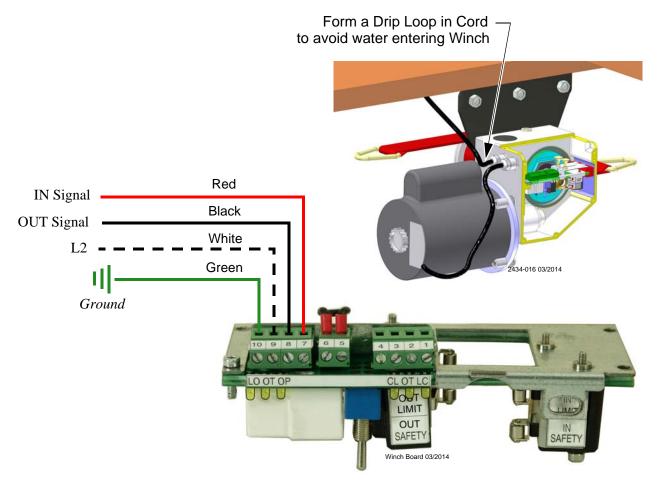
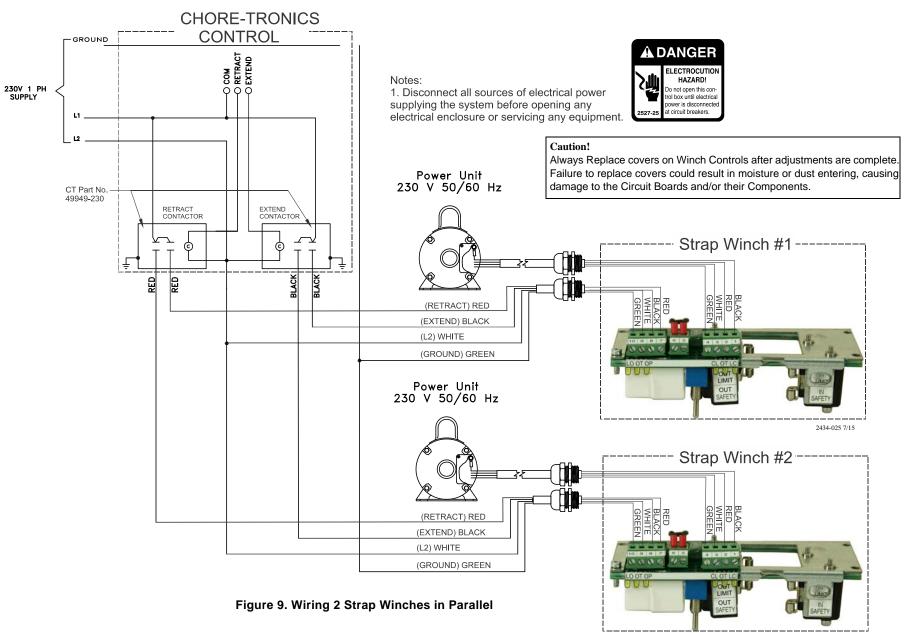


Figure 8. Attaching Winch to Wall Mount Bracket

Wiring 2 Strap Winches in Parallel (To prevent back-feed between Strap Winches)



Strap Winch

Wiring

Setup

3

Winch Board Switches and LED's

Local Operation

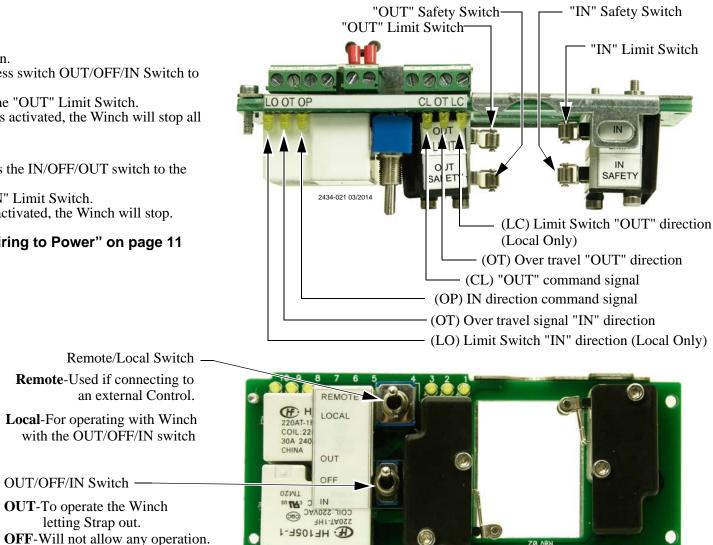
Strap "Out" rotation

- 1. Switch to the "Local" position.
- 2. For Strap "OUT" rotation press switch OUT/OFF/IN Switch to the "OUT" position.
- 3. For stopping rotation press the "OUT" Limit Switch.
- 4. If the "OUT" Safety Switch is activated, the Winch will stop all operation.

Strap "IN" rotation

- 1. For Strap "IN" rotation, press the IN/OFF/OUT switch to the "IN" position.
- 2. To stop rotation press the "IN" Limit Switch.
- 3. If the "IN" Safety Switch is activated, the Winch will stop.

To reverse Rotation see "Wiring to Power" on page 11



IN-To operate the Winch pulling Strap in

2434-022 03/2014

OUT/OFF/IN Switch -

letting Strap out.

Figure 10. Wiring Winch Board Switches and LED's

Rev 02 08-+LL73

Setting Travel Limits

"Out" Limit

- 1. Set the Local/Remote Switch to Local.
- 2. Use the "Out" switch to let out the desired length of Strap. (If needed, Pull up on the Spring Clip and move the "Out" Brass Nut to gain enough travel.
- 3. With the Strap in the desired location, move the "Out" Brass Nut out until it activates the "Out" Limit Switch. (The "LO" LED will illuminate)

Note: If the "OUT" Safety Switch is activated the Winch will stop operation. (The "OT" LED will illuminate)

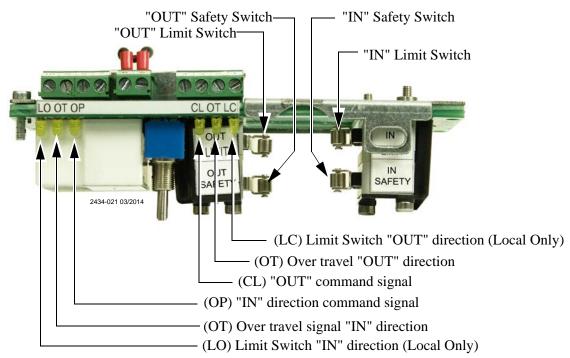
4. Snap the Spring Clip back into the slot in the Brass Nut.

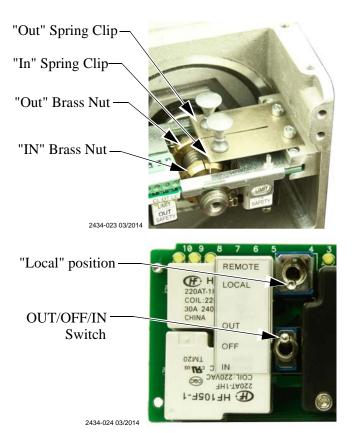
"IN" limit

1. Use the "IN" Switch to Retract the Strap to the desired length and adjust the "IN" Brass Nut until it depresses the "IN" Limit Switch. (The "LC" LED will illuminate.

Note: If the "IN" Safety Switch is activated the Winch will stop operation. (The "CL" LED will illuminate)

- 2. Snap the Spring Clip back into the slot in the Brass Nut.
- **Caution!** Always replace covers on Winch Controls after adjusting or servicing. Failure to replace covers could result in moisture or dust entering, causing damage to the Circuit Boards and/or their Components.

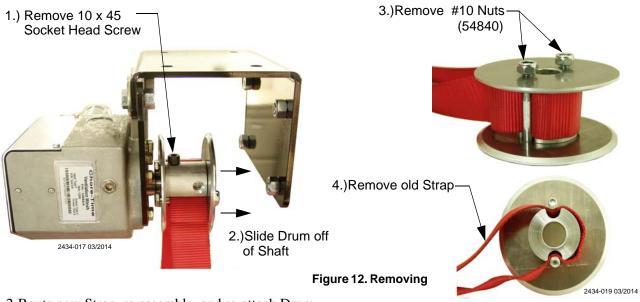




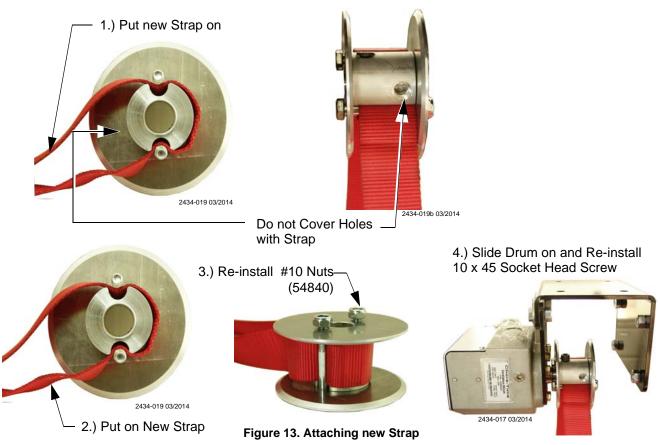
Maintenance

Strap Replacement

1. Remove the old Strap as shown below.



2. Route new Strap, re-assemble, and re-attach Drum.

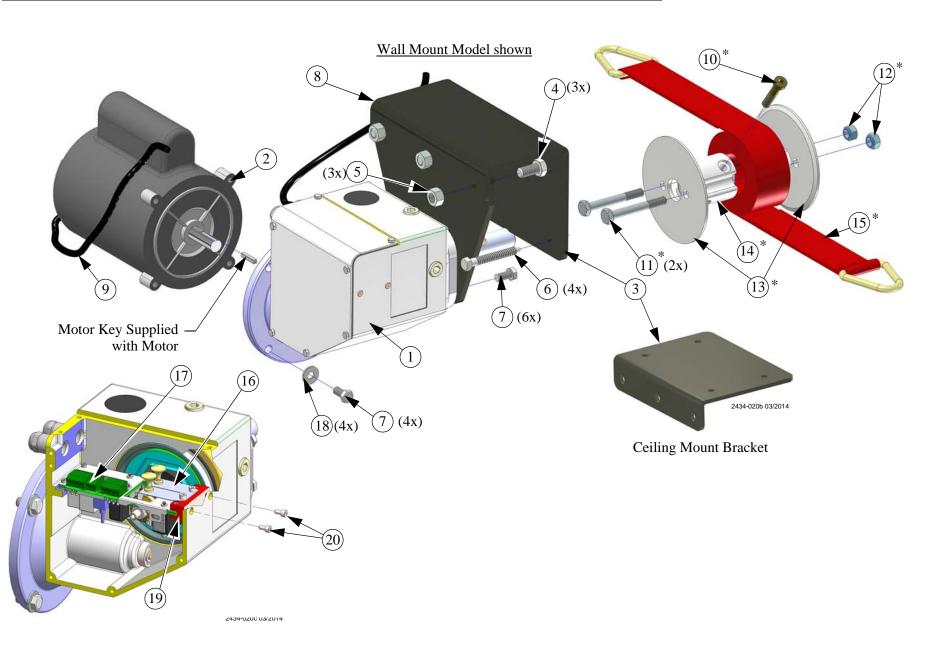


Oil Recommendation

Use: Mobil Glycoil 30, Shell-Tivela 220, Texaco-Synoil, SG-XP220, Esso-S220, Telesia Oil 150, BP-Energol SG -XP 220 Synthetic Oil.

Parts Listing

16



			54421-1 Wall Mount	54421-2 Ceiling Mount
Item	Description	Qty.	Part No.	
1	Strap Winch	1	53882	53882
2	Motor .33H 1-60/50-220/230 BHD	1	54985	54985
3	Wall Mount Bracket	1	54418	
	Ceiling Mount Bracket	1		54419
4	1/2-13 x 1 HH5 Bolt	3	4415-1	4415-1
5	1/2-13 HX Lock Nut	3	8917	8917
6	3/8 x 3" Lag Bolt	4	54428	54428
7	3/8-16 x 3/4" HH5 Bolt	6	2182	2182
8	Strap Winch Gear Case Bracket (In Strap Winch Assembly 53882)	1	54420	54420
9	Cord	1	4999-119	4999-119
10	M10 x 45 Socket Head Screw	1	54841	54841

			54421-1 Wall Mount	54421-2 Ceiling Mount
Item	Description	Qty.	Part No.	
11	M10 x 80 Hex Grade Bolt	2	54839	54839
12	Prevailing Torque M10 Nut	2	54840	54840
13	Drum Disc	2	54837	54837
14	Winch Drum Base	1	54838	54838
15	Winch Strap	1	54919	54919
16	Spring Lever Assembly	1	54866	54866
17	Strap Winch Circuit Board	1	54836	54836
18	3/8 x .875 x .079 Flat Washer	4	546	546
19	PCB Support Rail	1	55700	55700
20	M4 x 8 Soc. Hd. Screw	2	55699	55699
*Included in 54842 Drum Assembly				

Kits

Winch with Motor (54979)

Description	Qty	Part No.
Ventilation Strap Winch	1	53882
230V, 50/60HZ C Face Motor	1	54985
Motor Mount Hardware Kit	1	54921

Wall Mount Kit (54426)

Description	Qty	Part No.
Wall Mount Bracket	1	54418
1/2-13x1 Bolt	3	4415-1
1/2-13 Hx Lock Nut	3	8917
3/8 x 3" Lag Bolt	4	54428

Ceiling Mount Kit (54425)

Description	Qty	Part No.
Ceiling Mount Bracket	1	54419
1/2-13x1 Bolt	3	4415-1
1/2-13 Hx Lock Nut	3	8917
3/8 x 3" Lag Bolt	4	54428

Strap Winch



MADE TO WORK.

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Revisions to this Manual

Page No.Description of Change14Added "Replace Cover to prevent damage to Circuit Board"

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

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