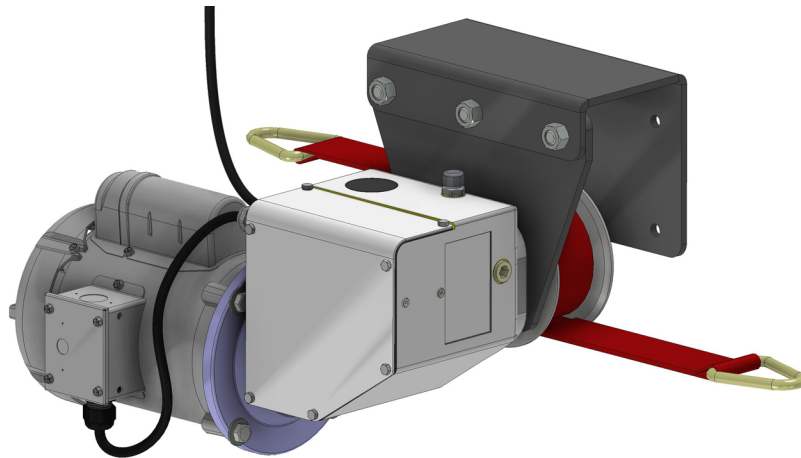


Strap Winch Installation and Operators Instruction Manual



Installation and Operators Manual

Installation and Operators Manual

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

CTB, Inc.

PO Box 2000

Milford, Indiana 46542-2000 USA

Phone (574) 658-4101 Fax (877) 730-8825

Email: choretime@choretime.com

Internet: www.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, WITHOUT 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

| Topic | Page |
|---|-----------|
| Limited Warranty | 2 |
| Safety and General Information | 4 |
| Follow Safety Instructions | 4 |
| Decal Descriptions | 4 |
| DANGER: Moving Parts | 4 |
| DANGER: Electrical Hazard | 4 |
| General Information | 5 |
| Specifications | 5 |
| Assembly | 6 |
| Attaching the Winch Mounting Bracket | 6 |
| Motor Installation | 6 |
| Wiring Motor to the Winch Unit | 7 |
| Installation | 8 |
| Mounting Bracket Installation | 8 |
| Wall Mount Bracket Installation | 8 |
| Ceiling Mount Bracket Installation | 9 |
| Attaching Winch to Mounting Bracket | 10 |
| Wall Mount | 10 |
| Ceiling Mount | 10 |
| Installing Breather Plug | 10 |
| Wiring | 11 |
| Wiring to Power | 11 |
| Wiring 2 Strap Winches in Parallel (To prevent back-feed between Strap Winches) | 12 |
| Setup | 13 |
| Winch Board Switches and LED's | 13 |
| Local Operation | 13 |
| Setting Travel Limits | 14 |
| "Out" Limit | 14 |
| "IN" limit | 14 |
| Proper Winch Cabling | 15 |
| Maintenance | 16 |
| Strap Replacement | 16 |
| Oil Recommendation | 16 |
| Parts Listing | 18 |
| Kits | 19 |

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.

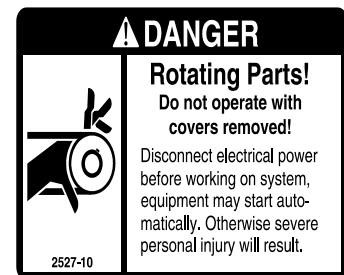
Keep safety signs in good condition. Replace missing or damaged safety signs.

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

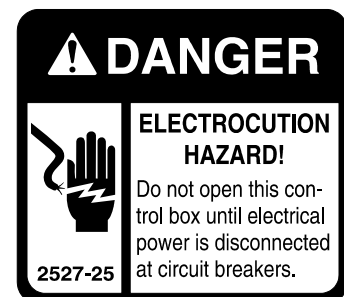
Disconnect electrical power before inspecting or servicing equipment unless maintenance instructions specifically state otherwise.

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.



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.

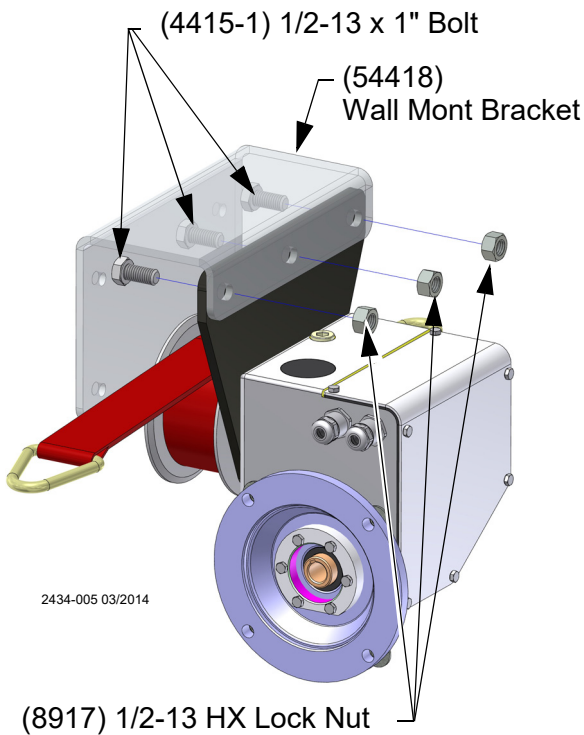
Pull Direction- The Strap Winch is designed to be centered within the winching load and pull both directions to lift and lower from center.

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

Assembly

Attaching the Winch Mounting Bracket

Wall Mount Application (54421-1 Kit)



Ceiling Mount Application (54421-2 Kit)

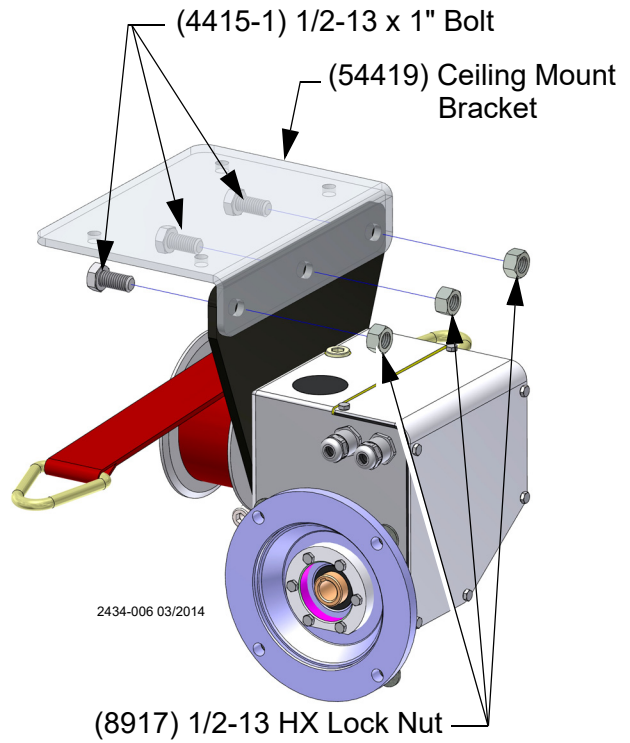


Figure 1. Winch Mounting Bracket

Motor Installation

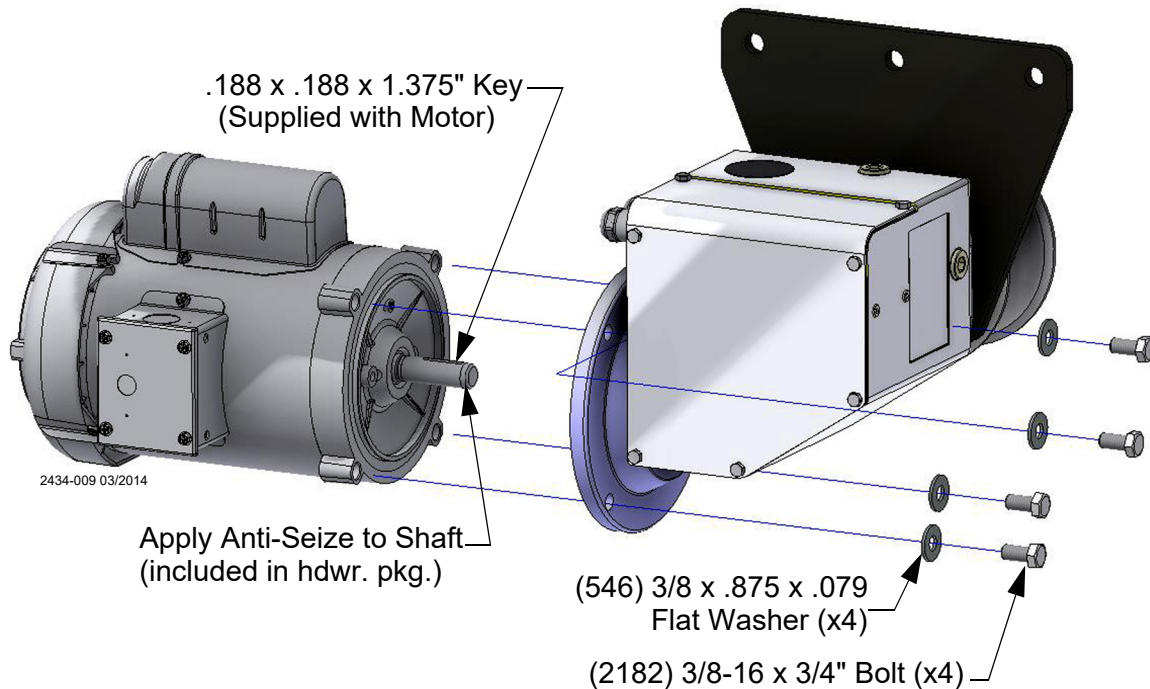


Figure 2. Motor Installation

Wiring Motor to the Winch Unit

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

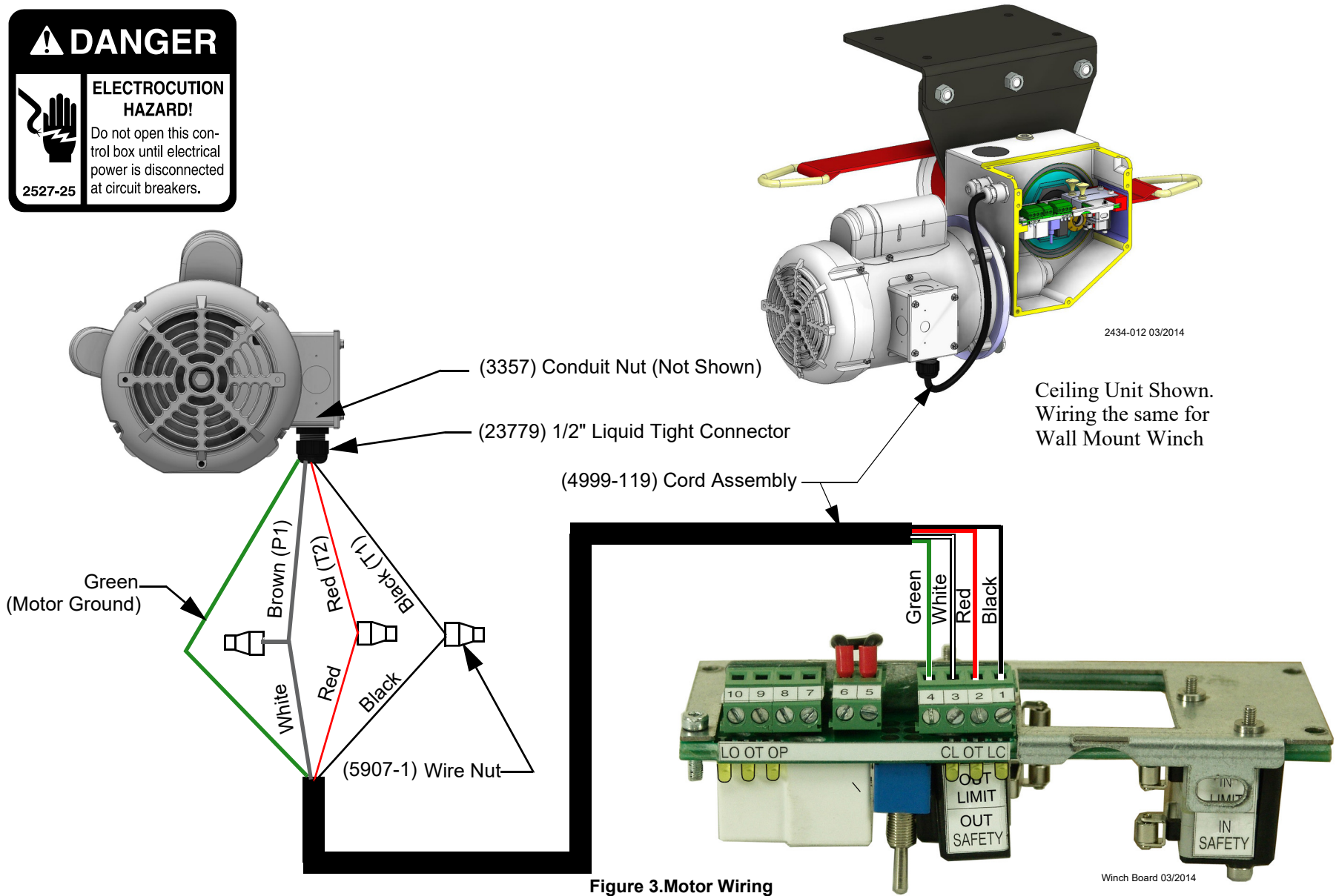
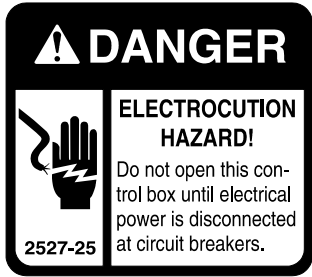


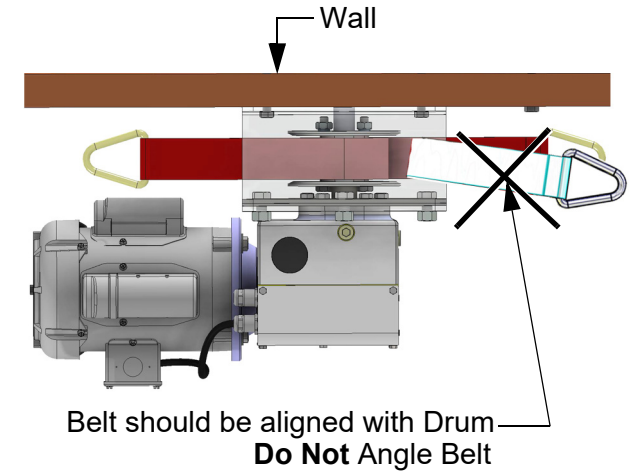
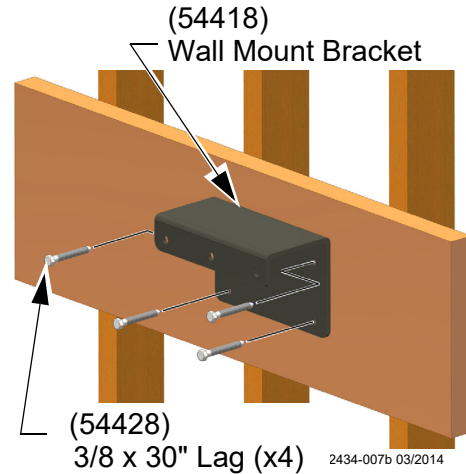
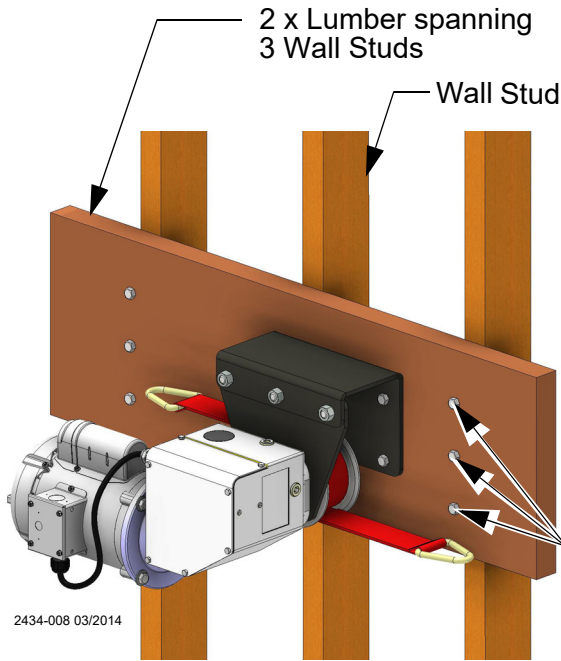
Figure 3. Motor Wiring

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.



Minimum 3 Lag Screws at each end of mounting board

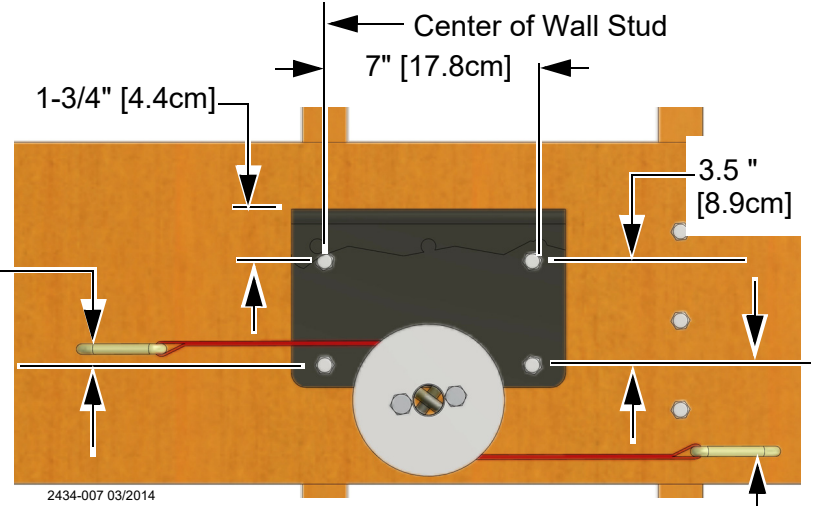
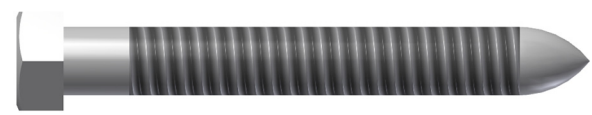


Figure 4. Wall Mount Bracket



(54428) 3" Lag Bolt

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 Ceiling Mount Bracket.

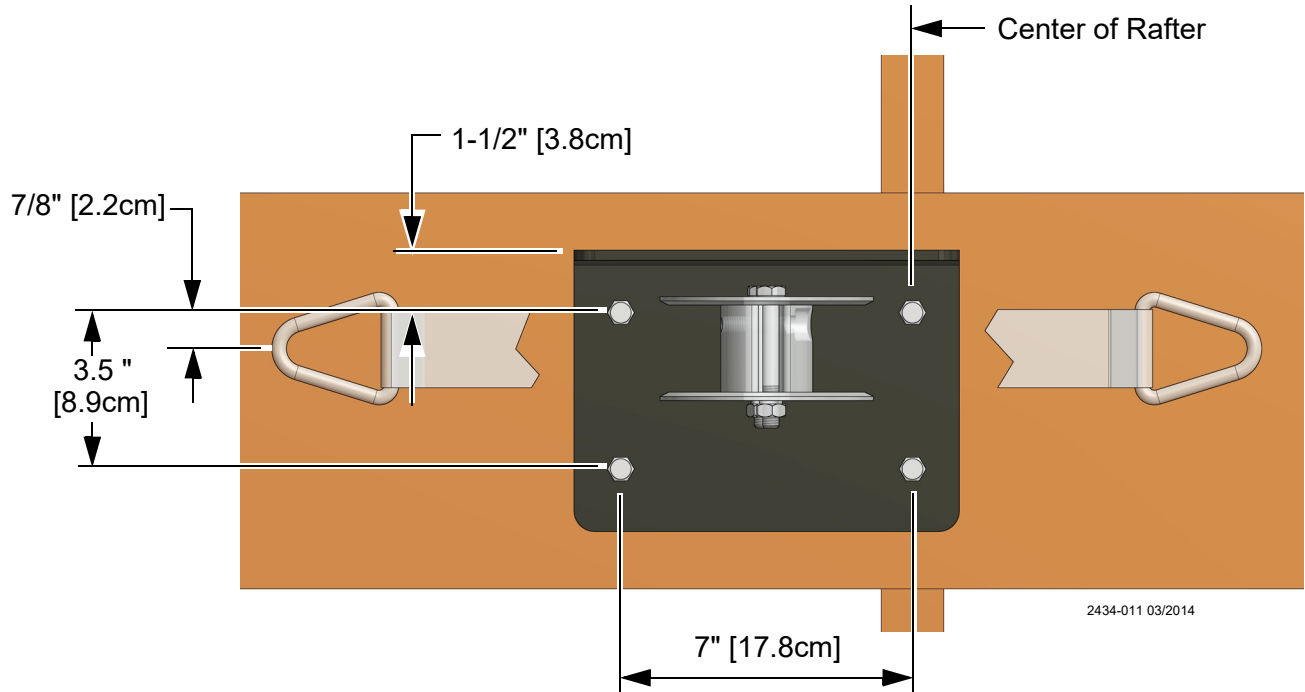
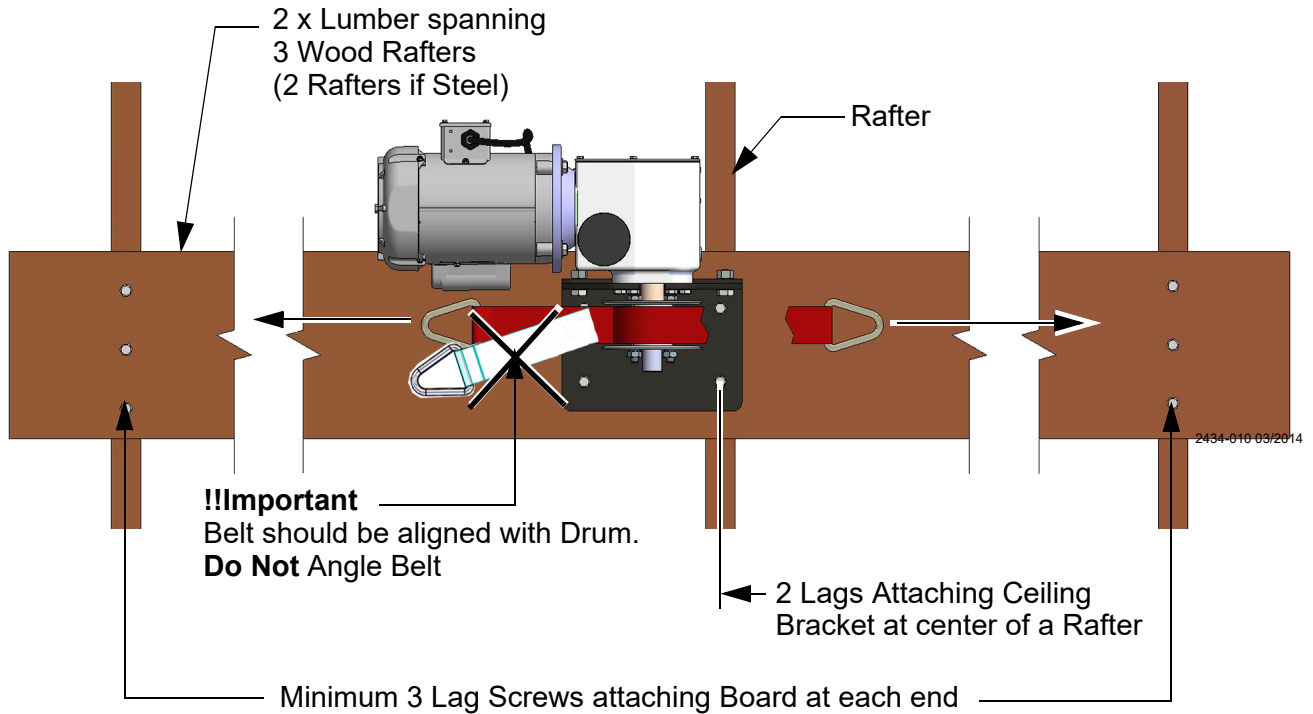
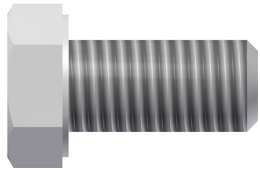


Figure 5.Ceiling Mounting Bracket

Attaching Winch to Mounting Bracket

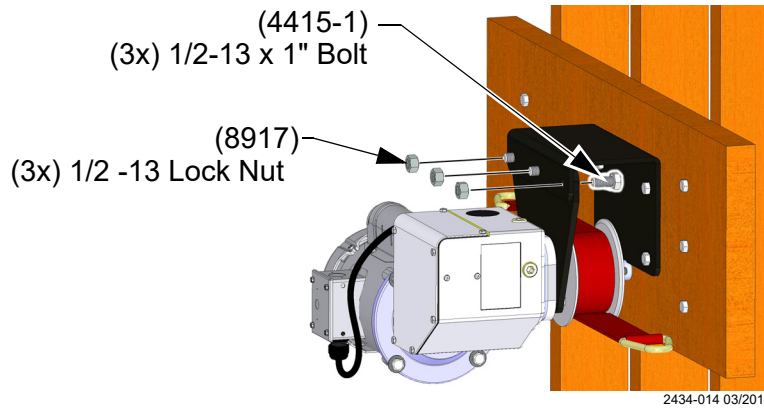
Wall Mount



(4415-1) 1/2-13 x 1" Bolt



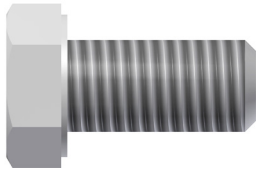
(8917) 1/2 -13 Hx Lock Nut



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Figure 6. Attaching Winch to Wall Mount Bracket

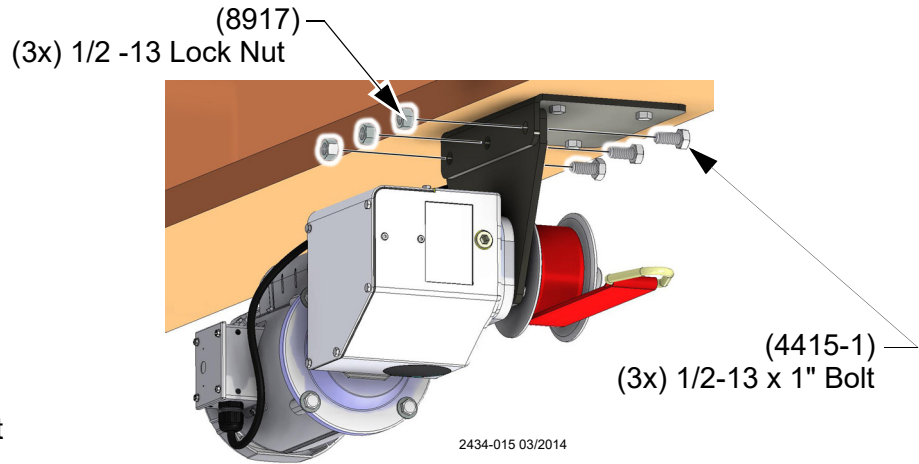
Ceiling Mount



(4415-1) 1/2-13 x 1" Bolt



(8917) 1/2 -13 Hx Lock Nut



2434-015 03/2014

Figure 7. Attaching Winch to Ceiling Mount Bracket

Installing Breather Plug

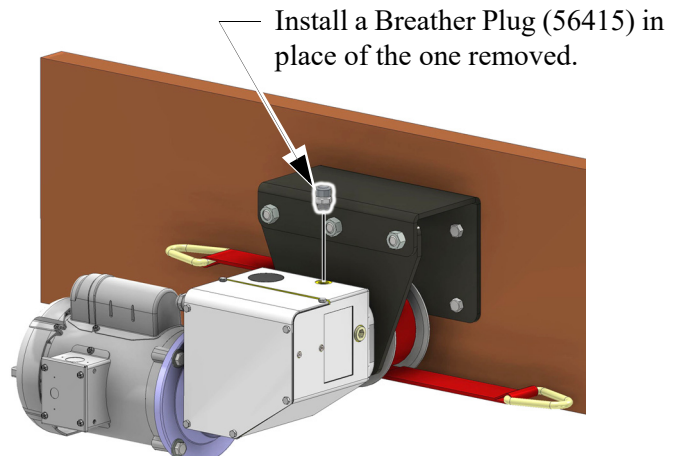
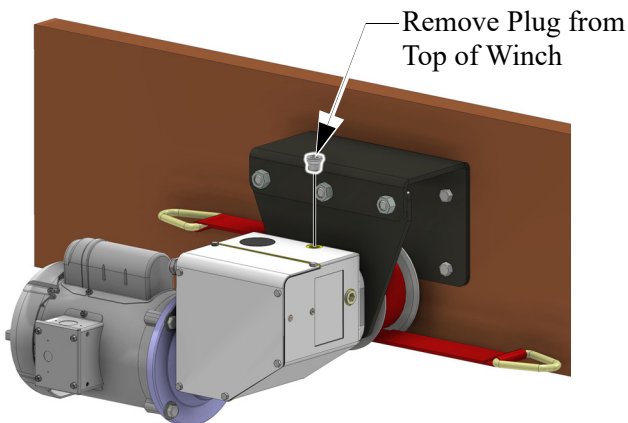


Figure 8. Installing Breather Plug

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)



Form a Drip Loop in Cord to avoid water entering Winch

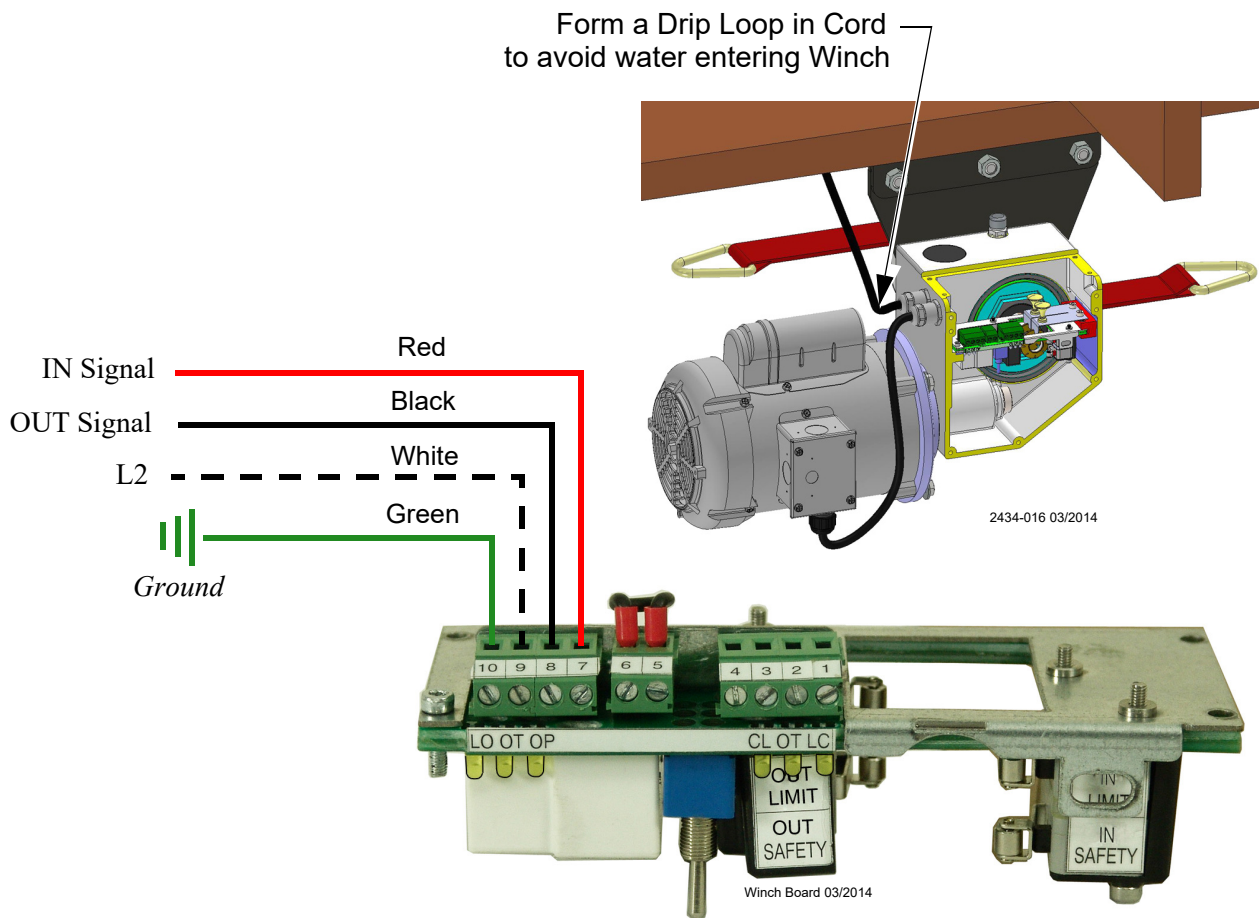


Figure 9. Attaching Winch to Wall Mount Bracket

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

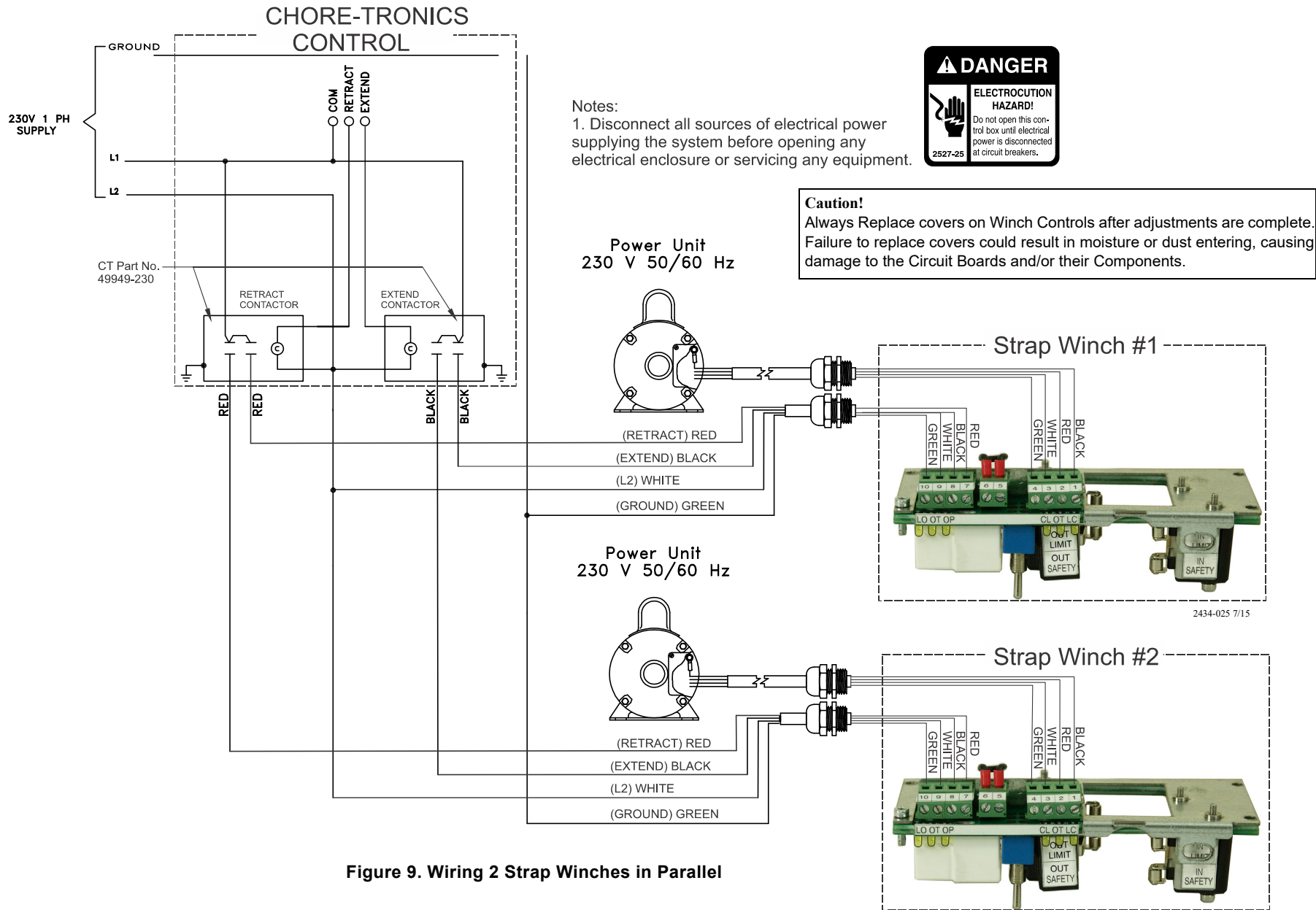


Figure 9. Wiring 2 Strap Winches in Parallel

Setup

Winch Board Switches and LED's

Local Operation

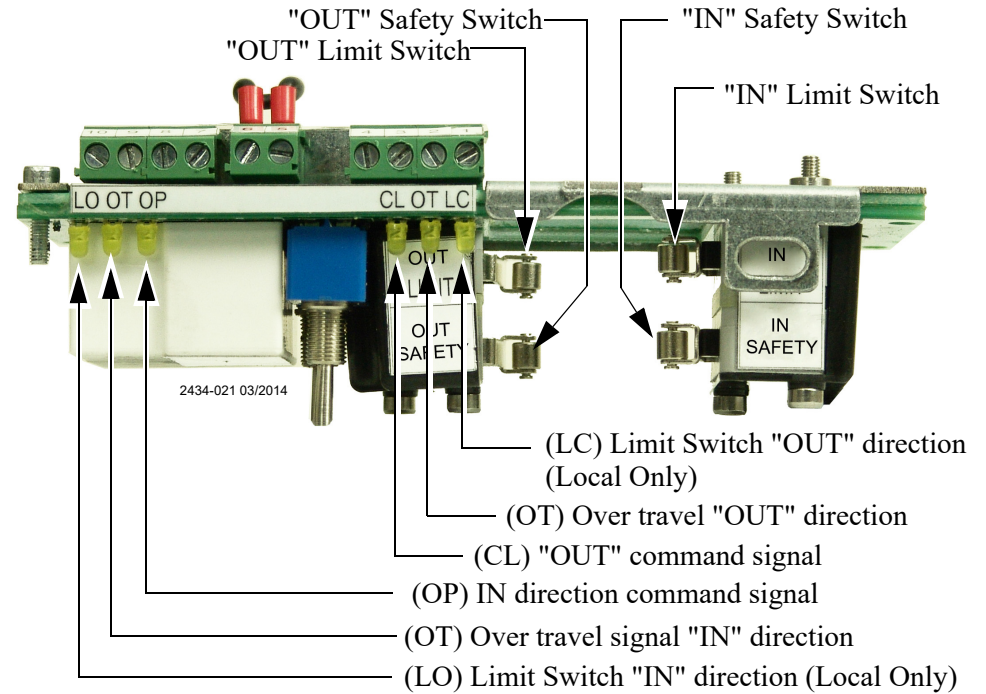
Strap "Out" rotation

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



- Remote/Local Switch
- Remote**-Used if connecting to an external Control.
- Local**-For operating with Winch with the OUT/OFF/IN switch
- OUT/OFF/IN Switch
- OUT**-To operate the Winch letting Strap out.
- OFF**-Will not allow any operation.
- IN**-To operate the Winch pulling Strap in

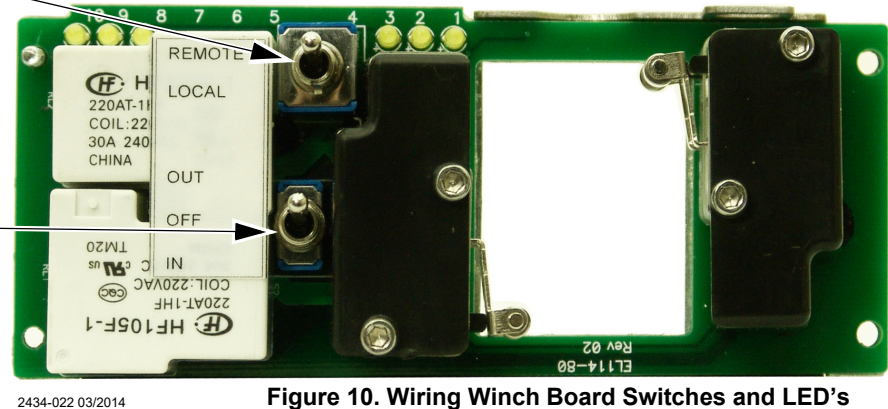


Figure 10. Wiring Winch Board Switches and LED's

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)

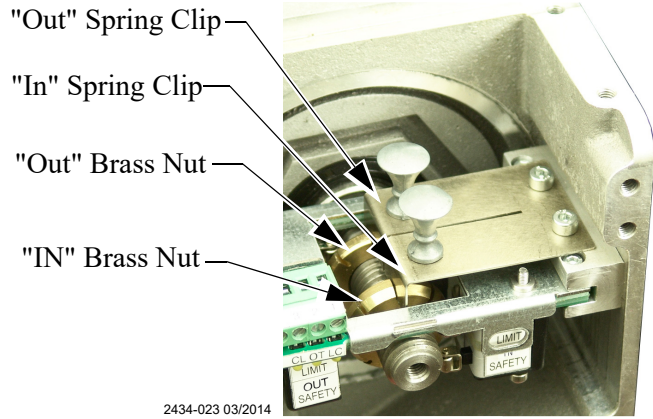
4. Snap the Spring Clip back into the slot in the Brass Nut.

"IN" limit

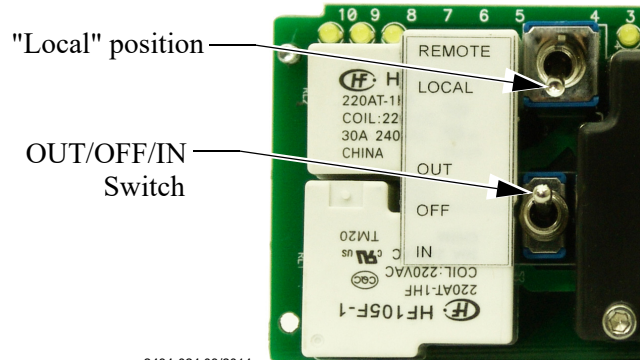
1. Use the "IN" Switch to Retract the Strap to the desired length and adjust the "IN" Brass Nut until it depresses the "IN" Limit Switch. (The "LC" LED will illuminate.

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.

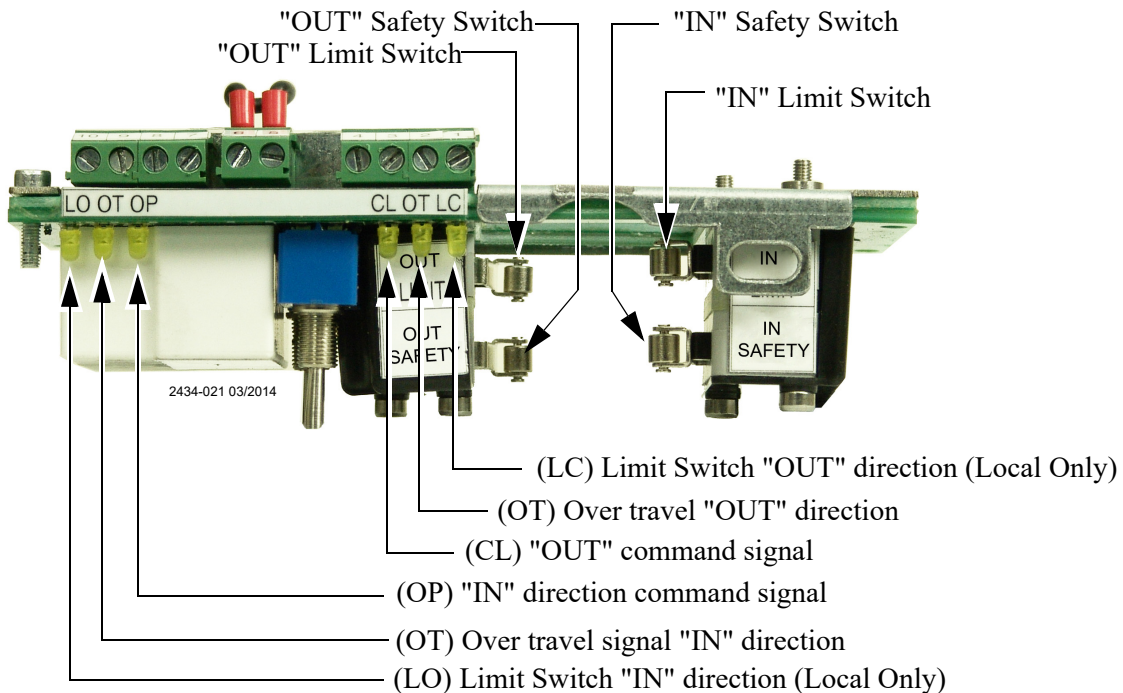


2434-023 03/2014



2434-024 03/2014

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.



Proper Winch Cabling

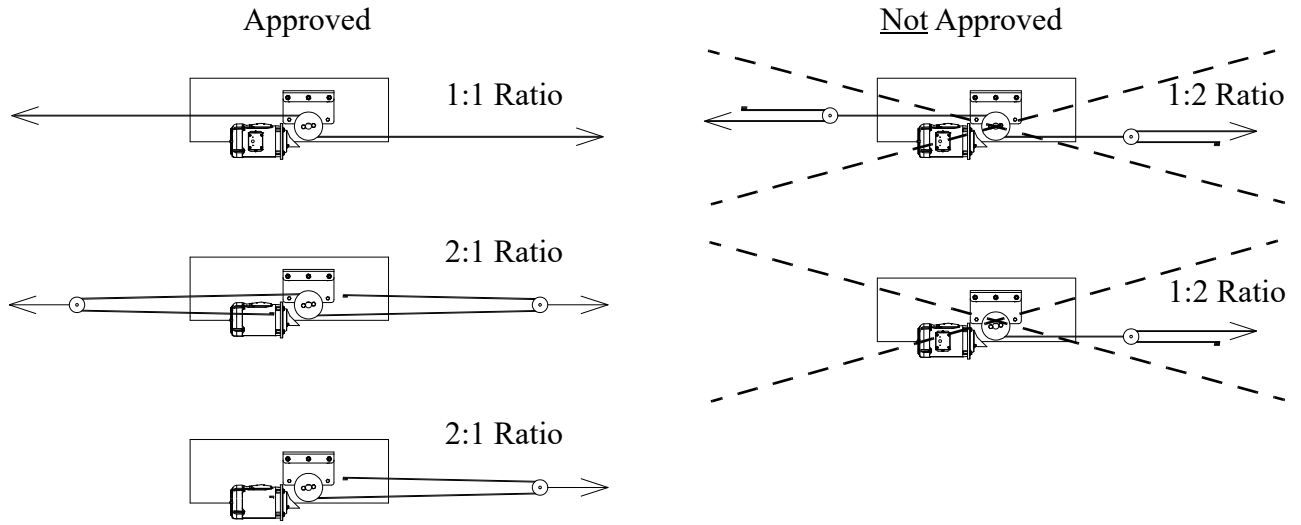


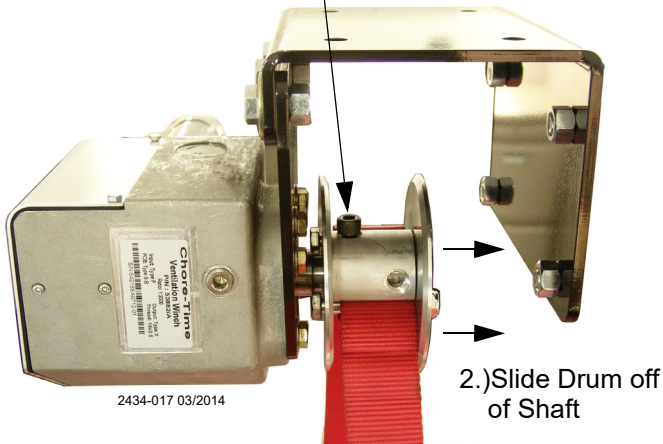
Figure 9. Proper Cabling

Maintenance

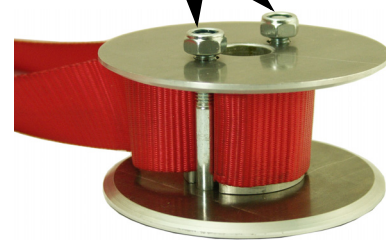
Strap Replacement

1. Remove the old Strap as shown below.

1.) Remove 10 x 45 Socket Head Screw



3.) Remove #10 Nuts (54840)



4.) Remove old Strap

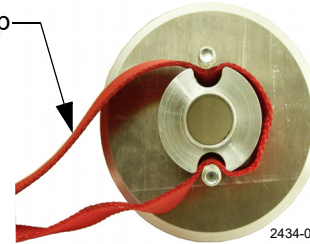
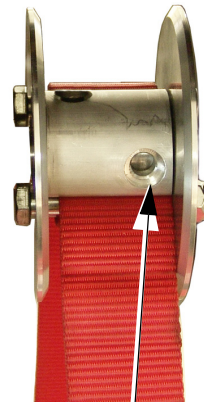
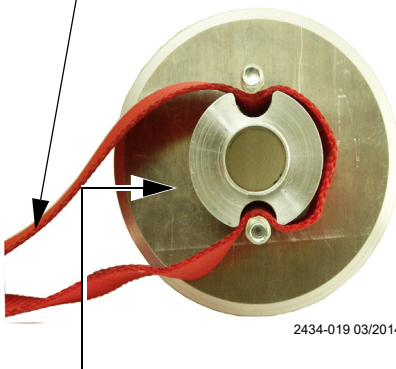


Figure 12. Removing

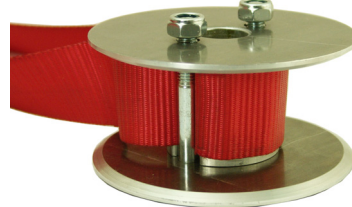
2. Route new Strap, re-assemble, and re-attach Drum.

1.) Put new Strap on

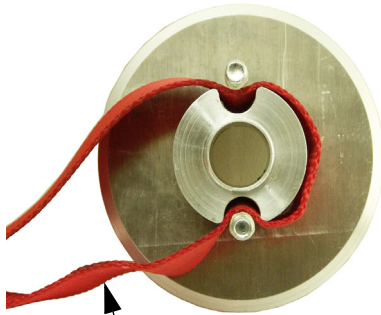


Do not Cover Holes with Strap

3.) Re-install #10 Nuts (54840)

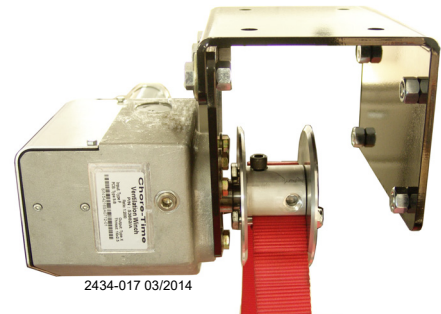


4.) Slide Drum on and Re-install 10 x 45 Socket Head Screw



2.) Put on New Strap

Figure 13. Attaching new Strap

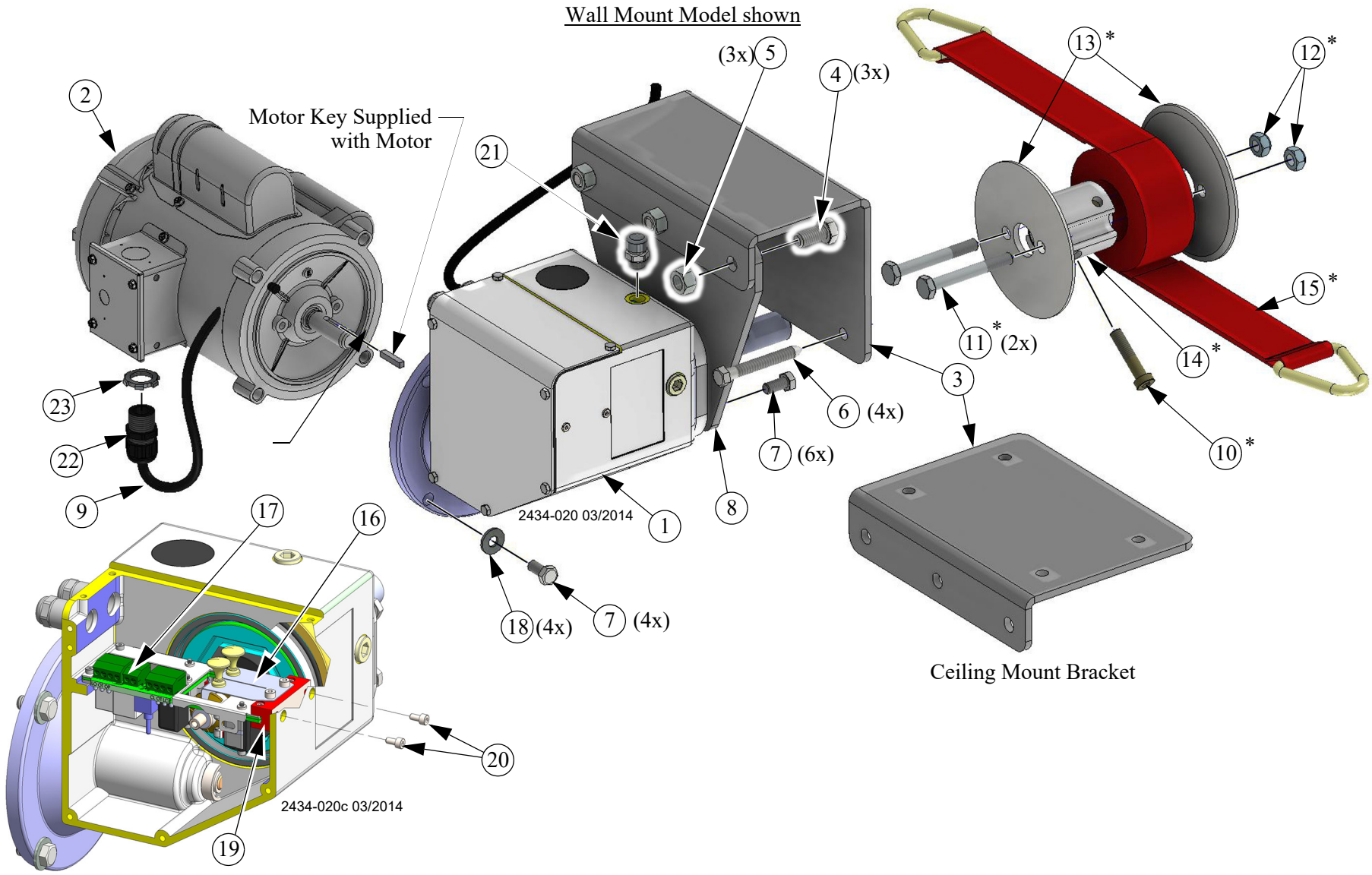


Oil Recommendation

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

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Parts Listing



| | | | 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 | 56463 | 56463 |
| 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 | 10 | 2182 | 2182 |
| 8** | Strap Winch Gear Case Bracket | 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 |
| 21** | 1/2-20 UNF Breather Plug | 1 | 56415 | 56415 |
| 22 | 1/2" Liquid Tight Connector | 1 | 23779 | 23779 |
| 23 | 1/2" Conduit Lock | 1 | 3357 | 3357 |
| *Included in 54842 Drum Assembly **In Strap Winch Assembly 53882 | | | | |

Kits

Winch with Motor (54979)

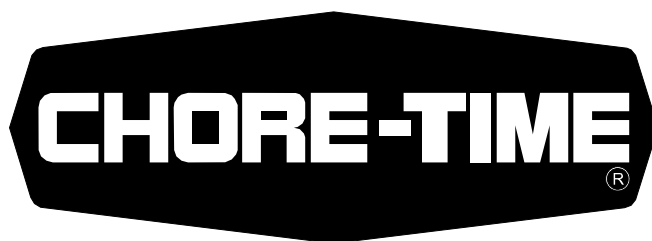
| Description | Qty | Part No. |
|----------------------------|-----|----------|
| Ventilation Strap Winch | 1 | 53882 |
| 230V, 50/60HZ C Face Motor | 1 | 56463 |
| Motor Mount Hardware Kit | 1 | 54921 |

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 |



MADE TO WORK.

BUILT TO LAST.®

Revisions to this Manual

| Page No. | Description of Change | ECO |
|-----------------|----------------------------------|------------|
| 19 | Updated Parts List | 34942 |
| 7 | Wiring Colors and numbers change | |

**For additional parts and information, contact your nearest Chore-Time distributor or representative.
Find your nearest distributor at: www.choretime.com/contacts**

CTB, Inc.
PO Box 2000
Milford, Indiana 46542-2000 USA
Phone (574) 658-4101 Fax (877) 730-8825
Email: choretime@choretime.com
Internet: www.choretime.com