

ELECTRIC POWERED WINCH for PORTABLE AUGERS

OWNER'S & OPERATOR'S MANUAL

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POLICIES and PROCEDURES

Prices: Prices in effect at time of shipment will apply. Prices are subject to change without notice. All prices are F.O.B. Clay Center, Kansas. Orders shipped from locations other than Clay Center, Kansas will be subject to additional charges, such as back freight and/or additional freight.

Service Charge: A service charge will be assessed for all past due balances as permitted by state law not to exceed 1-1/2% per month.

Minimum Order: Processing and handling costs necessitate a minimum charge of \$15.00 net on all orders.

Back Orders: Back orders will be shipped as they become available. Contact Hutchinson,Mayrath Customer Service for alternative shipping options or if cancellation is desired.

Damaged Goods: It is the consignee's responsibility to check all shipments thoroughly upon receipt of goods. If any damage is discovered, it must be noted on the freight bill of lading before signing. The consignee must make necessary claims against the respective freight line. All damage claims must be submitted within 30 days of delivery receipt.

Shortages: All shortages must be noted at time of delivery. Shortages must be noted on the freight bill of lading before signing. Hutchinson,Mayrath must be advised of all concealed shortages upon discovery. Once notified of concealed shortages Hutchinson,Mayrath will advise corrective action to be taken.

Return of Goods: All returns must be approved by Hutchinson,Mayrath prior to shipment. All return requests will be issued a return authorization number. NO RETURNS WILL BE ACCEPTED WITHOUT A RETURN AUTHORIZATION NUMBER AND PRIOR AUTHORIZATION FROM THE FACTORY. All returns must be shipped prepaid. A 15% restocking charge will be applied to all returned merchandise. Custom Products may not be returned for credit. Only current products in new and salable condition may be returned. No safety devices may be returned for credit.

Modifications: It is the policy of Hutchinson,Mayrath to improve its product whenever possible and practical to do so. We reserve the right to make changes, improvements and modifications at any time without incurring the obligation to make such changes, improvements and modifications on any equipment sold previously.

Limited Warranty: (a) For a period of (1) year after receipt of goods by the original consumer buyer, Hutchinson,Mayrath will supply free of charge replacement parts for parts that prove defective in workmanship or material. Defective parts must be returned freight prepaid to a specified Hutchinson,Mayrath location. Only Hutchinson,Mayrath original repair parts may be used for warranty repairs.

(b) This limited warranty does not extend to parts designed to wear in normal operation and be replaced periodically; or to damage caused by negligence, accident, abuse or improper installation or operation.

(c) GOODS NOT MANUFACTURED BY HUTCHINSON,MAYRATH CARRY ONLY THE MANUFACTURER'S WARRANTY.

(d) THIS UNDERTAKING IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

FAILURE TO FOLLOW THE INSTRUCTIONS CONTAINED IN THE OWNER'S & OPERATOR'S MANUALS AND THE ITEMS LISTED BELOW WILL RESULT IN THE VOIDING OF THIS LIMITED WARRANTY.

(1) Improper assembly, including failure to properly install all safety equipment.

(2) Improper installation.

(3) Unauthorized alternations of goods.

(4) Goods operated when obviously in need of repair.

(5) Use of unauthorized repair parts.

(6) Irresponsible operation.

(7) Used to handle materials other than free flowing, nonabrasive and dry materials, as intended.

(8) Damaged through abusive use or accident.

Limitation of Liability: BUYER AGREES THAT IN NO EVENT SHALL HUTCHINSON,MAYRATH HAVE LIABILITY FOR DIRECT DAMAGES IN EXCESS OF THE CONTRACT PRICE OF THE GOODS IN RESPECT OF WHICH CLAIM IS MADE. BUYER FURTHER AGREES THAT IN NO EVENT SHALL HUTCHINSON,MAYRATH ON ANY CLAIM OF ANY KIND HAVE LIABILITY FOR LOSS OF USE, LOSS OF PROFITS, OR FOR ANY INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES.

TABLE OF CONTENTS

POLICIES AND PROCEDURES	(Inside Front Cover)
TABLE OF CONTENTS	1
SAFETY, General Safety Statement, Safety Alert Symbol, Safety Decals ...	2 - 4
GENERAL INFORMATION	5 - 7
Operator Qualifications, Sign-Off Sheet	5
Right and Left Designation	5
General Winch Information	6
Transporting	6
Winch Maintenance	6 - 7
Winch Oil Level and Capacity	6
Capacities	7
Electric Winch Belt Adjustment	7
ASSEMBLY INSTRUCTIONS	8 - 9
Install Winch to Auger	8
Attach Winch Cable	8
Connect Power to Winch	9
PARTS LIST	10

SAFETY

GENERAL SAFETY STATEMENT

This manual was written with the safety of the operator and others who work with the equipment as our prime concern. The instructions presented will help the reader learn **SAFE** day to day work practices. We want you as our partner in safety.

It is your responsibility as an owner, operator or supervisor to know what specific safety requirements and precautions exist and to make these known to all other personnel working with the equipment or in the area, so that they too may safely perform their duties and avoid any potentially hazardous situations.

We suggest the implementation of a Safety Program for all personnel that includes, but is not limited to, the proper use of PPE (personal protective equipment), Fall Protection Systems and Lock Out-Tag Out procedures.

Please remember safety equipment provides important protection for persons around a grain handling system that is in operation. Be sure **ALL** safety shields and protection devices are installed and properly maintained. If any shields or guards are damaged or missing, contact your dealer to obtain the correct items.

Avoid any alterations of the equipment. Such alterations may create a dangerous situation where serious injury or death may occur.

SAFETY ALERT SYMBOL

The safety symbol shown is used throughout this manual to alert you to information about unsafe actions or situations, and will be followed by the word **DANGER, WARNING, or CAUTION.**

DANGER - Indicates immediate hazards that may result in severe injury or death. **WARNING** - Indicates unsafe actions or situations that may cause severe injury, death and/or major equipment or property damage. **CAUTION** - Indicates unsafe actions or situations that may cause injury, and/or minor property damage.

Watch this symbol - it points out important safety precautions. It means - **ATTENTION! Become alert! Your safety and the safety of others is involved!** Read the message that follows the symbol when a warning is given, be alert to the possibility of personal injury or death.



Follow Safety Instructions

Carefully read all safety messages in this manual and safety signs on your machine. Check to ensure all Safety Decals are present and in good condition.

If a decal cannot easily be read for any reason, or has been painted over, replace the decal immediately. Safety decals are offered free of charge, and can be ordered through your Hutchinson/Mayrath dealer or directly from the factory.

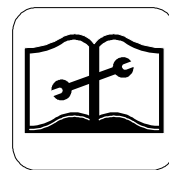
Learn how to operate the machine and how to use controls properly.

Keep your machinery in proper working condition. Understand service procedures before doing work. Never lubricate, service or adjust machine while it is in operation.

Keep work area clean, dry and free from of all debris and tools which may cause accidental tripping or falling.



Read and Understand Manual



Understand Service Procedures



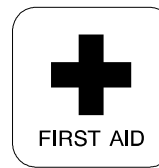
Keep Work Area Clean

Prepare for Emergencies

Keep emergency numbers for doctors, ambulance service, hospital and fire department near your telephone.

Keep a first-aid kit and fire extinguisher handy.

Be prepared if a fire starts



First Aid Equipment



Fire Extinguisher

Wear Proper PPE (Personal Protective Equipment)

Some materials can create flying debris when they are filed, cut or drilled. Safety glasses should be worn at all times to protect your eyes from such debris.

Hearing protection should be worn when operating power tools or other power equipment that could be harmful to your hearing.

Gloves should be worn to protect your hands from sharp metal and plastic edges, as well as providing protection from the handling of heavy objects.

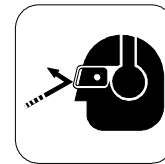
Wear steel toe boots to protect your feet from falling debris.

Wear a hard hat to help protect your head from falling objects as well as from accidental bumping.

Use caution when working at elevations greater than four (4) feet (1.22 m) above the ground.

Use the appropriate fall protection equipment as set forth by OSHA guidelines and regulations.

A respirator may be needed to prevent breathing potentially toxic fumes and dust, especially when working within a grain bin or storage structure.



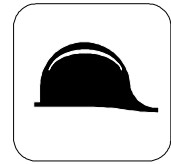
Eye & Hearing Protection



Gloves



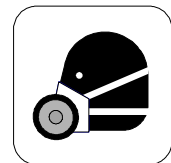
Steel Toe Boots



Hard Hat



Fall Protection



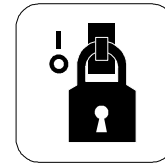
Respirator

Operate Electric Motor(s) Properly

Do not operate electric motor equipped units until motor(s) are properly grounded.

Know how to "Shutdown and Lockout" the power source. Shutdown and lockout power source before performing any service, maintenance or adjustments to the unit.

Disconnect power on electrical driven units before resetting motor overloads.



Lockout / Tagout



Electric Shock Hazard

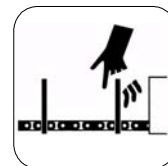
Stay Clear of Moving Parts

Keep all shields, covers and safety devices in place at all times.

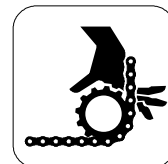
Entanglement in moving chains, rotating impeller arms and sprockets will cause serious injury or death.

Wear close fitted clothing. Keep hands, feet and clothing away from moving parts.

Shutdown and lockout power source before making adjustments, cleaning or maintaining the equipment.



Entanglement Hazards





SAFETY

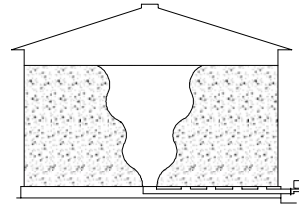
GRAIN BIN SAFETY

The auger/conveyor equipment used with this winch is generally designed to transfer grain into grain bins or other storage structures.

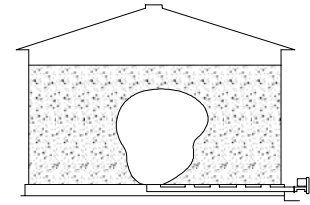
Be aware of the dangers inherent in grain bins.

Consult the grain bin manufacturer's manual for information on the proper loading and unloading of the bins, structural stress analysis, adequate venting and important safety information.

	<p>WARNING! Do Not enter the bin if the grain has “Bridged” or has not flowed normally out of the bin, See Example’s 1 & 2. The grain may suddenly break loose and bury resulting in suffocation.</p>
	<p>Do Not enter the bin unless all power driven equipment has been shut down and locked out. Never enter the bin unless monitored by another person.</p>



Example 1
(Abnormal Flow)

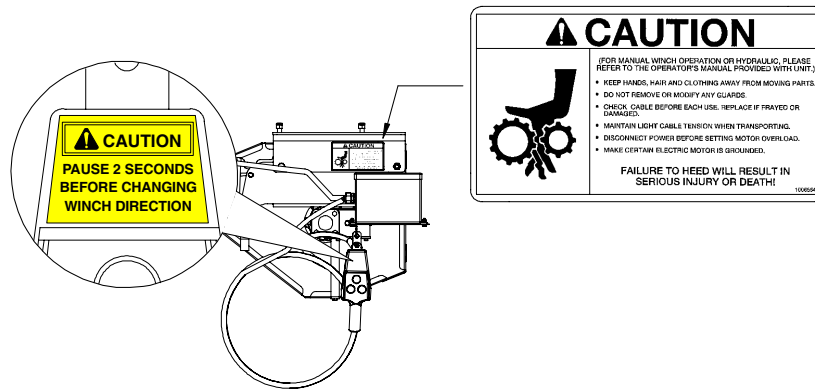


Example 2
 (“Bridging”)

SAFETY DECALS

Check to ensure all Safety Decals are present and in good condition. If a decal cannot easily be read for any reason, or has been painted over, replace the decal immediately. Safety decals are offered free of charge, and can be ordered through your Hutchinson/Mayrath dealer or directly from the factory.

Refer to the Parts List Section for decal Part No’s. and location of decals on components.



OPERATOR QUALIFICATIONS



WARNING!

Anyone who will operate or work around this machine shall first read this manual! This manual must be delivered with the equipment to its owner. Failure to read this manual and its safety instructions is a misuse of the equipment.

Operation of this auger and winch system shall be limited to competent and experienced persons. In addition, anyone who will operate or work around a conveyor must use good common sense. In order to be qualified, they must also know and meet all other requirements, such as:

1. Some regulations specify that no one under the age of 16 may operate power machinery. This includes this auger system. It is your responsibility to know what these regulations are in your area or situation.
2. Current OSHA regulations state in part: "At the time of initial assignment and at least annually thereafter, the employer shall instruct every employee in safe operation and servicing of all equipment with which the employee is, or will be involved." *
3. Unqualified persons are to stay out of the work area.
4. A person who has not read and understood all operating and safety instructions is not qualified to operate the machine.
5. Persons operating, servicing or repairing equipment that requires above ground work shall be properly secured with the use of "fall protection" equipment as set forth by OSHA guidelines and regulations.

*Federal Occupational Safety & Health Standards for Agriculture Subpart D, Section 1928.57 (a) (6).

SIGN OFF SHEET

As a requirement of OSHA, it is necessary for the employer to train the employee in the safe operation and safety procedures with this conveyor. We include this sign off sheet for your convenience and personal record keeping.

<i>Training Sign-Off Sheet</i>		
Date	Employer Signature	Employee Signature

RIGHT and LEFT DESIGNATION

When referencing the left, right, front or rear of the auger, it is always determined by standing at the inlet end of the auger and looking towards the discharge end.

GENERAL WINCH INFORMATION

WARNING! Keep all safety shields and devices in place. Keep hands, feet and clothing away from moving parts.

Shut off power and lockout whenever cleaning, or servicing the unit.



Never fully extend the cable and always keep three complete wraps of cable around the winch drum.

Don't operate with cable kinked or damaged.

- The winch requires a dedicated 110V 20 amp circuit.
- Also any electrical power cord over 25' (7.62 m) in length **MUST** be a 10-3 wire. 12-3 is okay for cords less than 25' (7.62 m).
- Visually inspect the winch periodically during operation, be aware of all adjustments and checks which should be performed.

Note: This winch is not designed to be a human hoist and should never be operated when there are persons positioned under or near the auger when raising or lowering.

TRANSPORTING

Always transport the auger in the full down position. The lift arm of the undercarriage should be seated against the down position stop with slight tension on the winch cable and at least three complete wraps of cable around the winch drum.

WINCH MAINTENANCE

WARNING! Shut off power and lockout power source before attempting to adjust, service, clean or repair the winch or any of its components.



A main power disconnect switch capable of being locked only in the "Off" position shall be used. This shall be locked whenever work is being done to the equipment.

The winch is shipped with **oil already installed.**

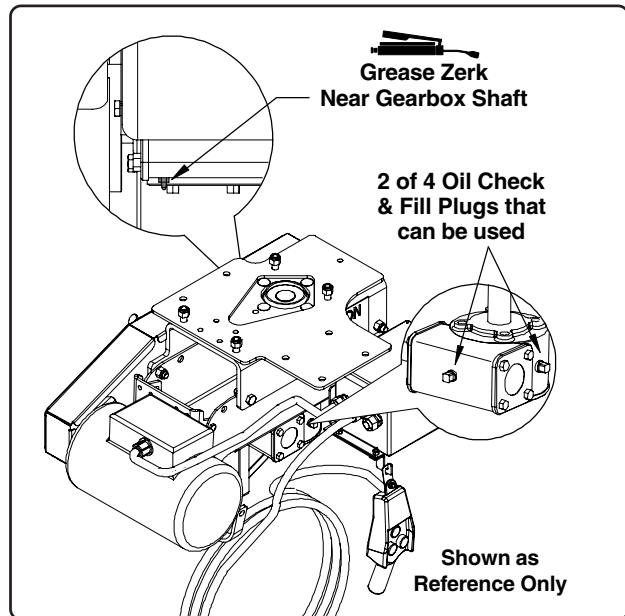
Even under normal operating conditions, oil still has the tendency to dissipate. Periodically check oil level and maintain proper oil level.

Check Oil Level:

Before mounting the winch onto the auger, place winch on bench as level as possible. Remove one of the plugs as stated in the following procedures and verify oil level.

CHECK OIL LEVEL (con't.)**Winch Mounted to Auger**

1. Place the auger in as horizontal position as possible (auger will need to be in the full down position and as **level as possible** for an accurate reading).
2. Remove one of the plugs from the gearbox as shown in Fig. 1, oil should begin to leak from the opening. If it does, oil level is sufficient, reinstall plug (there are a total of four plugs that can be used for checking and adding oil. Use plug that works best for you).
If additional oil is needed, add oil until it begins to flow out of the level check plug opening (a syringe type device works good for adding the oil). Reinstall plug. **Do Not overfill. Too much oil may damage the seals.**

**Fig. 1**

When additional oil is required, we recommend the use of an **SAE 85W140** non-foaming multipurpose gear oil. **Capacity: 8 oz. (.24 L).**

Use a grade/brand that is commercially available for automotive differentials. Extra pressure additives may be of some value in severe applications.

3. There is a **grease zerk** located on the bottom side of the gearbox near the shaft attached to the driven sheave (See Fig. 1). Grease has been installed at the factory.

Because the winch is a "low use" component, **1 pump at the beginning of every second season** will be sufficient. Use a good quality lithium based grease.

Electric Winch Belt Adjustment:

1. Check belts for fraying, cracking, or other damage. Replace as necessary.
2. Check belts for proper tension. Belts should deflect approximately 1/2" (13 mm) when firmly pressed in the center of the span between the two sheaves.
3. To adjust belt tension, loosen the four bolts securing the motor mount plate (two bolts on each side of motor mount plate, the lower bolt on the right-hand side also secures the electric cord strap hanger, See Fig. 2).

Using a pry bar, piece of wood or similar object, pry the motor mount plate out to achieve proper belt tension (the pry bar can be inserted from the top side of the motor mount plate). After proper tension has been set, retighten all four bolts.

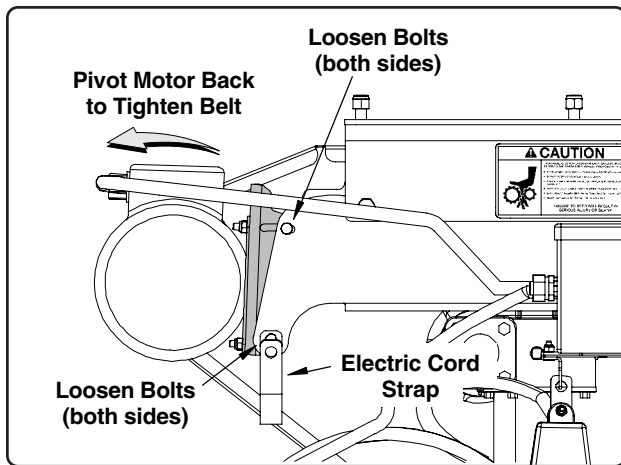


Fig. 2

WINCH OPERATION

- Watch cable to ensure it is winding on drum properly.
- Don't use hands to guide cable onto winch drum during winch operation.
- Don't raise auger after undercarriage slide reaches the track stop.
- Operator's must pay attention when raising and lowering auger. **Be aware of overhead obstructions and electrical power lines (maintain at least 10 feet (30.5 m) of clearance from power lines, electrocution can occur without direct contact of power lines).**

The winch pendant has a Forward and Reverse button that operate's winch direction (See Fig. 3). Typically "Forward" is used to raise the auger and "Reverse" is used to lower the auger.

WINCH OPERATION (con't.)

IMPORTANT! To avoid damage to winch motor, it is recommended to pause two (2) seconds before changing winch direction. Avoid pressing forward and reverse buttons in rapid succession.

If the winch operates in the opposite direction shown on the label, or opposite as desired by the operator, reverse the two wires that are located on the backpanel in the control box (See Fig. 4).

If the winch should stop during operation, or it does not work after electrical connection has been made, the breaker inside the control box may have flipped.

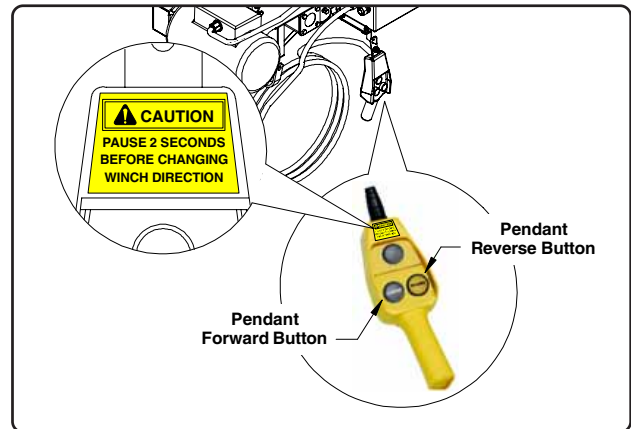


Fig. 3

IMPORTANT! It is suggested to have a qualified electrician or a Hutchinson/Mayrath service tech perform the following procedure.

1. **Shut off and lockout the power source.** Remove the cover from the control panel box.
2. Reverse the 1L1 & 5L3 wires as shown below.

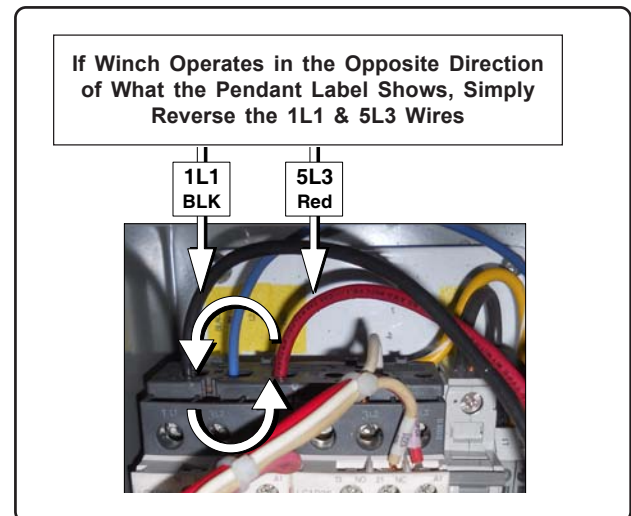


Fig. 4

ASSEMBLY INSTRUCTIONS

INSTALL WINCH to AUGER



WARNING! Keep all safety shields and devices in place. Keep hands, feet and clothing away from moving parts.

Shut off power and lockout whenever cleaning, or servicing the unit.



Never fully extend the cable and always keep three complete wraps of cable around the winch drum.

Don't operate with cable kinked or damaged.

The electric winch is shipped with an adapter plate that is used for augers that may have differently designed winch mounts. Use the mounting holes in the adapter plate accordingly.

When installing the winch and adapter plate on smaller augers, it may only require four mounting bolts. These bolts will pass through the winch top cover, the adapter plate and the auger mount plate. Use 1/2" x 1 3/4" with nylon locknuts for installation (See Fig. 5).

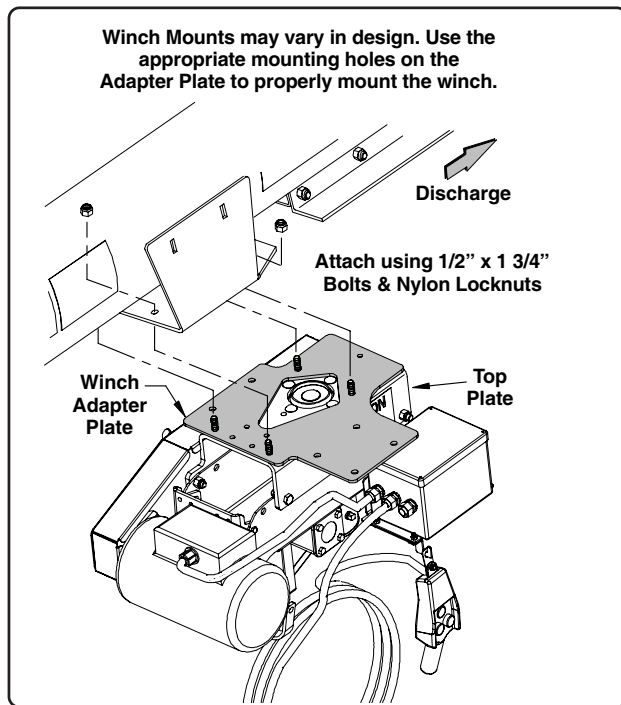


Fig. 5

Larger augers will have bolts that pass through only the adapter plate and the auger mount plate.

Use 1/2" x 1 1/2" bolts and nylon locknuts for those that pass through only the adapter plate and auger mount plate, (See Fig. 6).

INSTALL WINCH to AUGER (con't.)

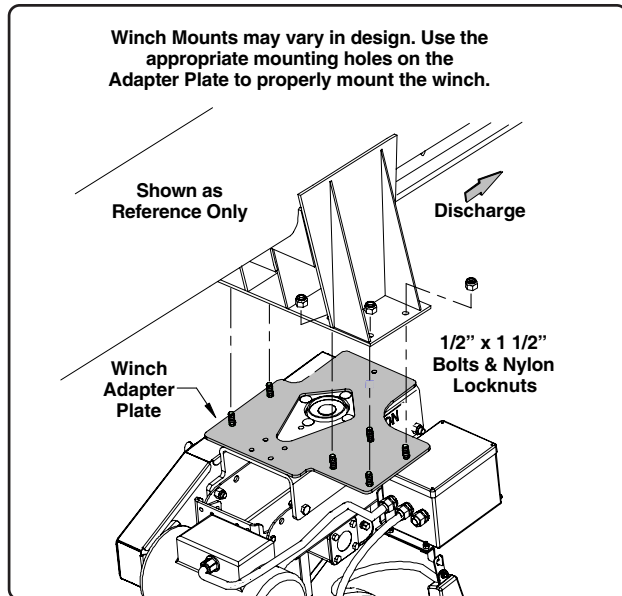


Fig. 6

Attach Cable to Winch Drum

1. Make three (3) wraps of cable around the winch drum, then insert the cable end into one of the larger holes on the winch drum (it may be necessary to loosen the setscrew in the opening to allow the cable to slide into it).

The cable setscrew in the drum alone cannot support the weight of the auger, Therefore a minimum of three complete wraps need to be wound around the winch drum.

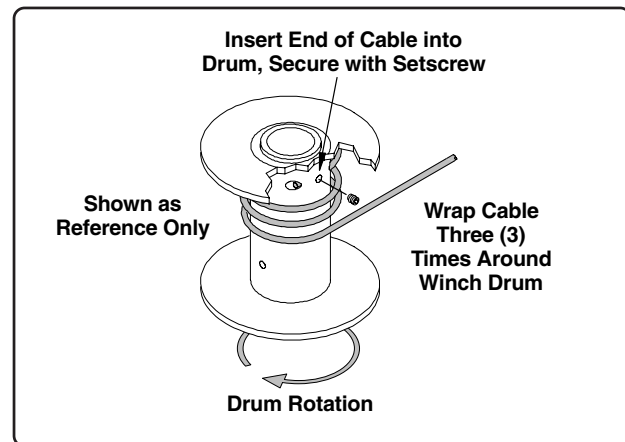


Fig. 7

If the cable has not been routed to the undercarriage and lift pulleys, follow the instructions in the Owner's and Operator's manual that is shipped with the auger and route the cable accordingly.

INSTALL WINCH to AUGER (con't.)

Connect Power to Winch



WARNING! Shut off power and lockout power source before attempting to adjust, service, clean or repair the winch or any of its components.

Electric motors and controls shall be installed by a qualified electrician and must meet the standards set by the National Electric Code and all local and state codes.

1. Remove the cover from the control panel box as shown in Fig. 8.
2. Bring in power cord through the cord grip, attach **BLACK** to contact **L1**, **WHITE** to **3L2** and **GREEN** to **GND** (See Fig. 8).

After power has been connected, run the winch through several cycles to ensure it is operating properly. Make any adjustments as needed.

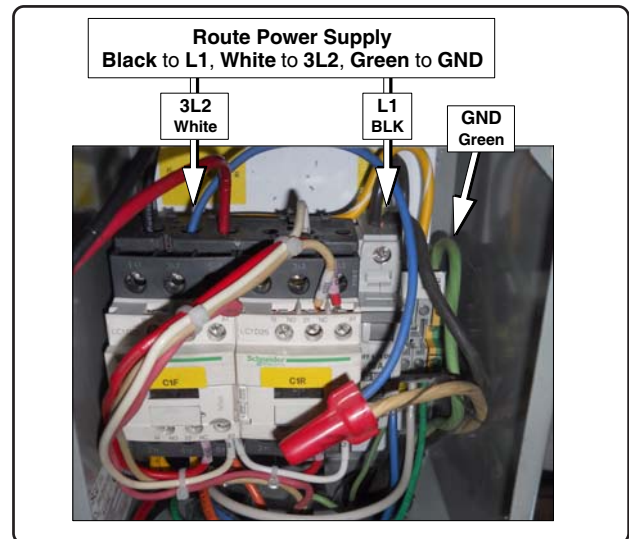
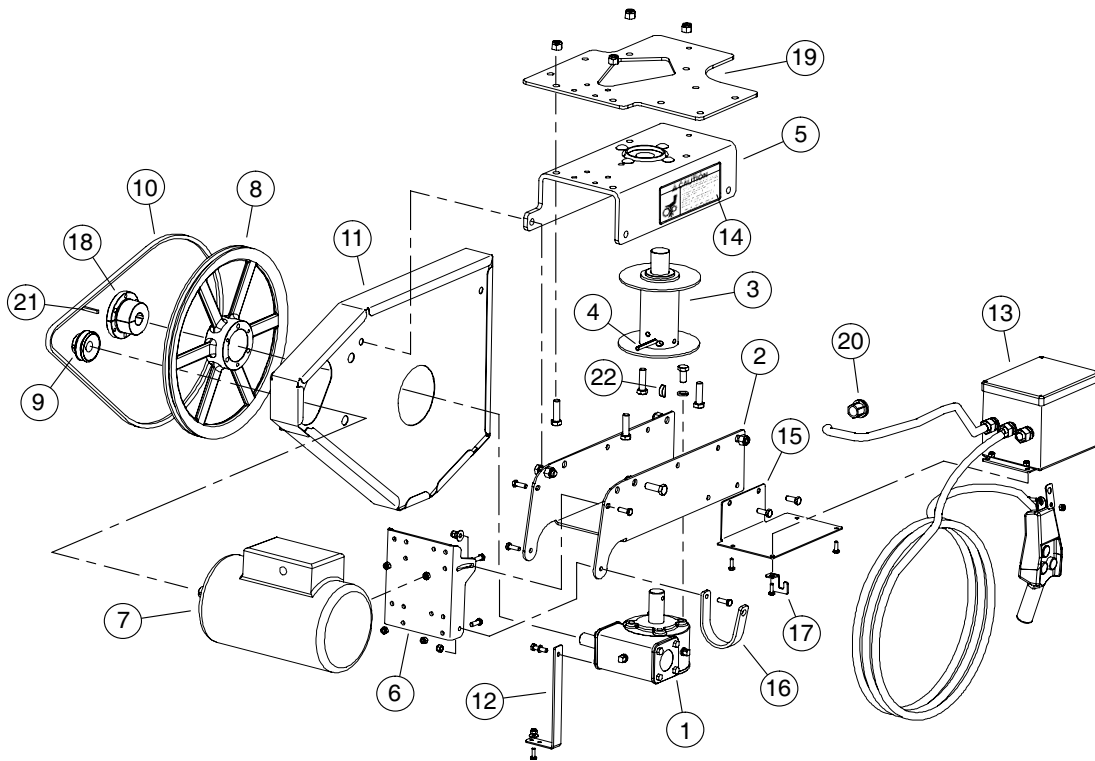


Fig. 8

PARTS LIST

ELECTRIC WINCH COMPONENTS



**Complete Winch Assembly:
Part No. 1006526**

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
1	1034615	Gearbox, Superior (20:1 ratio)	12	1044591	Bracket, Belt Guard Mount
2	1044644	Frame Weldment w/ Decal	13	1042691	Control Box w/ Pendant
3	1044614	Drum Weldment	14	1006554	Decal, Caution, f/ Electric Winch
4	33190	Roll Pin, 5/16" x 2 1/2" long	15	1044384	Mount Plate f/ Control Box
5	1044612	Top Plate f/ Frame	16	1035351	Strap, Holder f/ Electrical Cord
6	1044590	Motor Mount f/ Gearbox	17	1044372	Hanger f/ Pendant Control
7	1011044	Electric Motor, 2HP (145T frame)	18	3294A1	Bushing, QD SK, 1.00 B#SKX1
8	40681	Sheave, 1B 15.4"	19	1038158	Adapter, Spacer Plate
9	40165	Sheave, 1A x 2.5, 7/8" Bore	20	1038412	Adapter, 1/2" Conduit
10	40106	Belt, B-59	21	8371C	Key, 1/4" sq. x 1 1/2" long
11	1044627	Belt Guard f/ Electric Winch	22	1007288	Woodruff Key #1008

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