

## Model 300AB



## Winch and Hoist

# OPERATION and MAINTENANCE

## OF

## 115 Volt AC Capstan Winch-Hoist Main Parts List for 300AB

**1600# Double  
Line Lift Capacity**

### READ THIS BEFORE OPERATING UNIT

#### INSTALLATION:

Mount on clean, flat surface. Bolt down with 4-1/2" bolts. For ease of service, we do not recommend welding frame to surface.

Unit should be plugged into a 115 Volt A.C. grounded receptacle. Use of extension cords may cause power loss at full capacity. Make sure the voltage and type of current stamped on the name plate is used. The 115 Volt units require 19 amps. service for maximum lift, and uses a manual reset circuit breaker rated at 20 amps

For additional safety, a power disconnect may be installed to provide a means of cutting power in place of using the power cord to disconnect.

#### ROPE USAGE AND SAFETY:

The capstan drum winch-hoist is designed to be used with rope of 1/2" to 3/4" diameter to winch or hoist loads requiring up to 800 lbs. of single line pull. Polyester or Dacron rope makes a good rope choice due to its resistance to heat generated by drum friction. Do not use wire rope.

Wrap the rope around the drum placing the load line closest to the gear box. An alternate method of lowering a load is to operate the winch-hoist in the forward direction while paying rope back onto the drum.

The proper number of wraps is determined by feel. Feeding off and paying back of the fall line should require minimal effort. Use at least 3 wraps of rope on the drum. Heavier loads may require 4 wraps. Do not place so many wraps on the drum as to allow the rope to ride over the end of the drum. If the load requires excessive operator effort or more than 4 wraps of rope on the drum, a two part line must be used. If this does not alleviate the problem, check the weight of the load and be sure rope travel and load path are unrestricted. Do not overload the winch-hoist!

#### OPERATION:

These units are designed for intermittent duty operation. Mfg. recommends a 25% duty cycle. That is, for good motor life, usage of 15 minutes out of one hour is preferable.

To prevent shock loading, slowly remove slack from rope before full load is moved.

The remote control switch is a special 4 wire control which is part of the dynamic brake control system. Changing the switch to some other type will eliminate the braking action. Use only factory provided switch.

Remote switch provides forward and reverse control through a 24 volt transformer. Lifting power is the same in either direction.

**MY-TE WINCH-HOISTS ARE DESIGNED  
FOR MATERIAL HANDLING USAGE.**

#### MAINTENANCE:

If the unit is installed outside, be sure to provide a cover to protect motor and controls from the weather. When the unit is in operation be sure cover is completely removed.

Periodic inspection of switch and power cord should be made to detect any damage or cuts which would require replacement.

The gearbox oil is shared between the spur and worm gear housings. The factory-installed oil is a Shell product, Omala 68. It is an EP type industrial gear oil, ISO Grade 68. If this is not available, an SAE 20 weight, non-detergent motor oil is acceptable. Standard capacity is 18 ounces.

#### TROUBLE SHOOTING AND REMEDIES:

**CAUTION: BEFORE SERVICING OR INSPECTING UNIT FOR PROBLEMS BE SURE TO DISCONNECT POWER.**

If the unit does not run, check power supply. Be sure correct voltage and frequency are being used. Remove power plug and remove control box cover. Visually inspect for loose wires, stuck contacts on relays, and screws which may have worked loose.

If the unit runs but braking is not instantaneous, check resistors and motor brush condition. Bad resistors will effect the dynamic braking. Check resistors for cracked porcelain and exposed wire. Replace as needed. To check resistors electrically, test individually with a continuity test. On ohmeter, each resistor should have a value of 4 ohms and together a resistance of 2 ohms.

Care should be taken to keep the armature in good condition which may be accomplished by lightly rubbing commutator with a rubstone.

Check brushes to see that they seat on the commutator and are not cracked or badly worn. Replace as needed. Brush springs should provide enough tension to help keep brushes seated.

If the unit does not operate properly after the above remedies, contact a qualified electrician or the factory.

#### WARRANTY:

All My-te winch-hoists are designed for material handling use only. My-te Products, Inc. warrants each My-te winch-hoist to be free of defects in material and workmanship for a period of one year. This warranty does not cover abuse, neglect or use above or beyond rated capacity and duty cycle. Warranty coverage includes shipping charges, one way, by standard ground service. Warranty does not cover cost of installation or removal of winch-hoist from service or loss due to downtime or time out of service. My-te will not reimburse unauthorized warranty expense. The final responsibility for fit of winch-hoist with application rests with end user. The warranty is void if the winch-hoist is altered or parts substituted. This warranty is limited to repair or replacement at manufacturer's factory or a point designated by the manufacturer. Inspection by the manufacturer will determine manufacturer's liability.

# 300AB Parts List

COMMON FASTENERS AND OTHER ITEMS NOT SHOWN HERE ARE AVAILABLE THROUGH MY-TE PARTS DEPT OR YOUR MY-TE DEALER.

| ITEM | QTY | PART No. | DESCRIPTION               |
|------|-----|----------|---------------------------|
| 1    | 1   | 052621   | Main Shaft, Capstan       |
| 2    | 1   | 058010   | Worm Shaft Assy           |
| 3    | 1   | 068080   | Capstan Drum Assy         |
| 4    | 1   | 081510   | Cap, Worm Gear Hsg        |
| 5    | 1   | 082011   | Cover, WGH Closed         |
| 6    | 1   | 082191   | Cover, Motor              |
| 7    | 1   | 088160   | Cover, Spur Gear Hsg/Brng |
| 8    | 1   | 088090   | Housing, Worm Gear/Studs  |
| 9    | 1   | 088170   | Housing, Spur Gear/Brng   |
| 10   | 1   | 112010   | Spur Gear                 |
| 11   | 1   | 113010   | Worm                      |
| 12   | 1   | 118040   | Idler Gear Assy/Shaft     |
| 13   | 1   | 118110   | Pinion Assy/SS            |
| 14   | 1   | 118160   | Worm Gear Assy w/SS       |
| 15   |     |          |                           |
| 16   | 1   | 148051   | Frame Assy, Capstan       |
| 17   | 1   | 171280   | Spacer, Thick Main Shaft  |
| 18   | 1   | 171310   | Spacer, Thin Main Shaft   |
| 19   | 1   | 182032   | Brace, Control Box        |
| 20   | 2   | 211010   | Bearing, Main Shaft       |

| ITEM | QTY | PART No. | DESCRIPTION                |
|------|-----|----------|----------------------------|
| 21   | 2   | 211060   | Needle Bearing             |
| 22   | 2   | 212010   | Thrust Washer              |
| 23   | 1   | 218010   | Bearing Assy, Flangette    |
| 24   | 2   | 218020   | Bearing Assy, Worm Shaft   |
| 25   | 1   | 241010   | Oil Seal, Main Shaft       |
| 26   | 1   | 241020   | Oil Seal, Motor Shaft      |
| 27   | 1   | 241510   | Gasket, Worm Gear Hsg      |
| 28   | 1   | 241521   | Gasket, Spur Gear Hsg      |
| 29   | 2   | 241530   | Gasket, Worm Hsg Cap 1/32  |
| 30   | 2   | 241540   | Gasket, Worm Hsg Cap .010  |
| 31   | 1   | 241550   | Gasket, Switch Housing     |
| 32   | 1   | 282750   | Setscrew, 10-32 x 3/16     |
| 33   | 4   | 283020   | Screw, 5/16-18 x 1 SHCS    |
| 34   | 8   | 283080   | Screw, 1/4-20 x 1-1/4 SHCS |
| 35   | 3   | 285750   | Stud, WGH 3/8-16 x 1-1/4   |
| 36   | 2   | 286250   | Oil Plug, 1/8 NPT          |
| 37   | 1   | 286260   | Valve, Oil Plug 1/8 NPT    |
| 38   | 8   | 287041   | Lockwasher, 1/4 HC         |
| 39   | 2   | 321520   | Snap Ring Worm Shaft       |
| 40   | 1   | 321530   | Snap Ring WGH              |

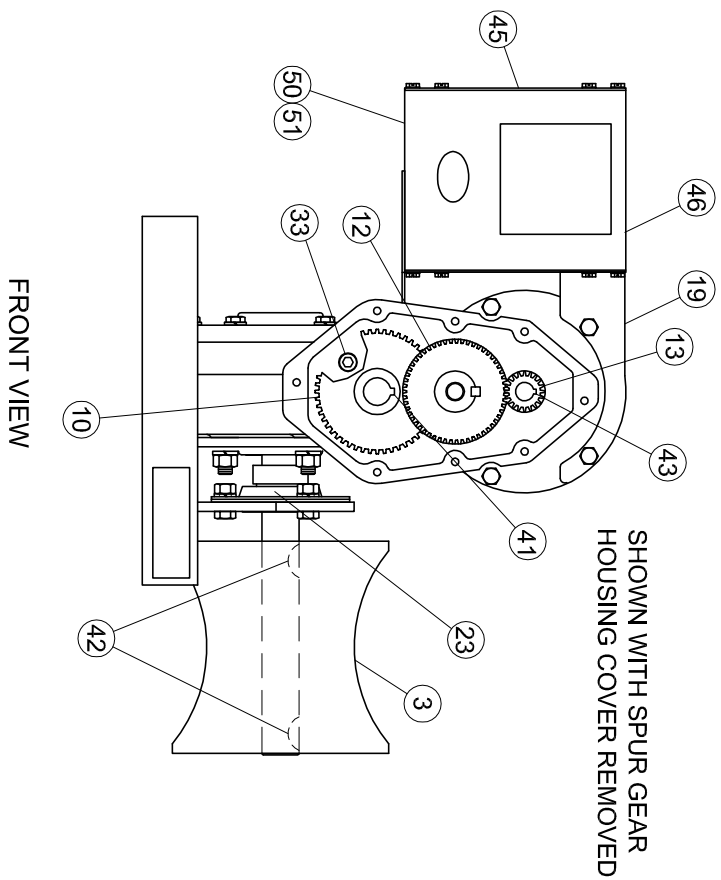
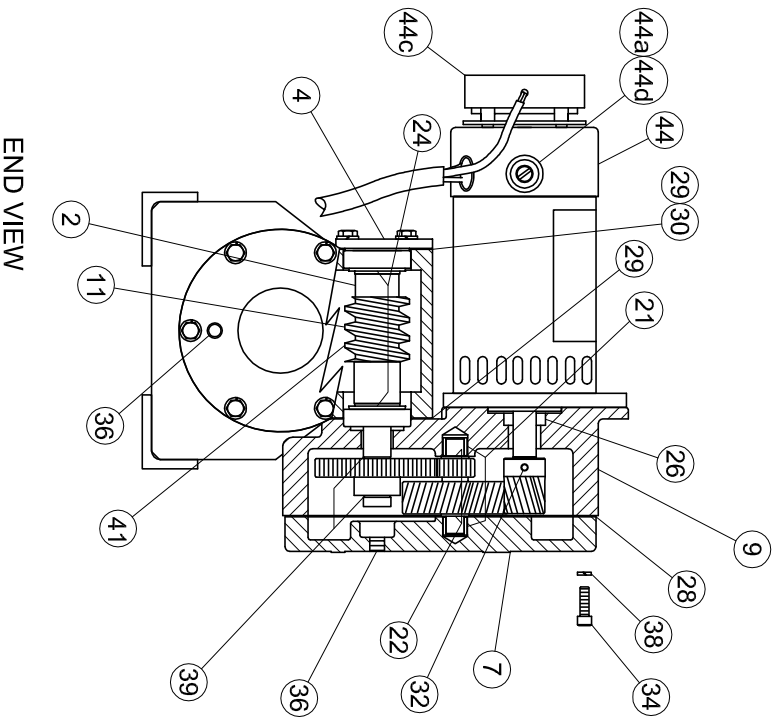
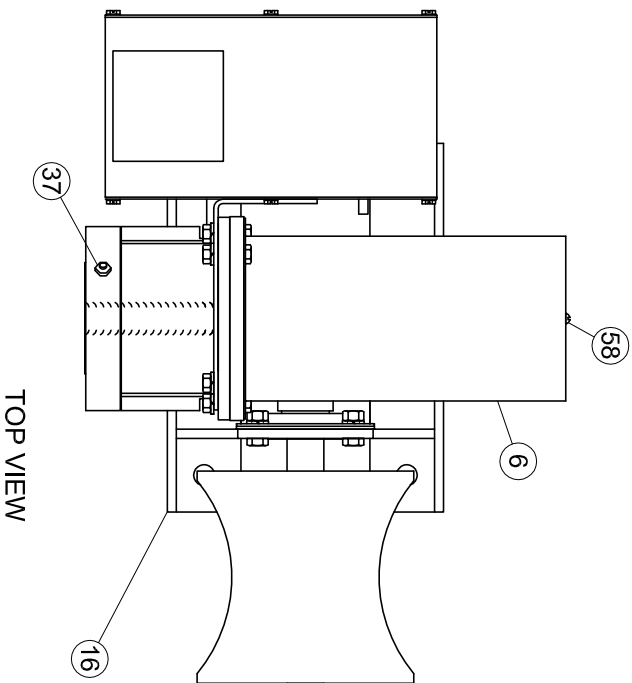
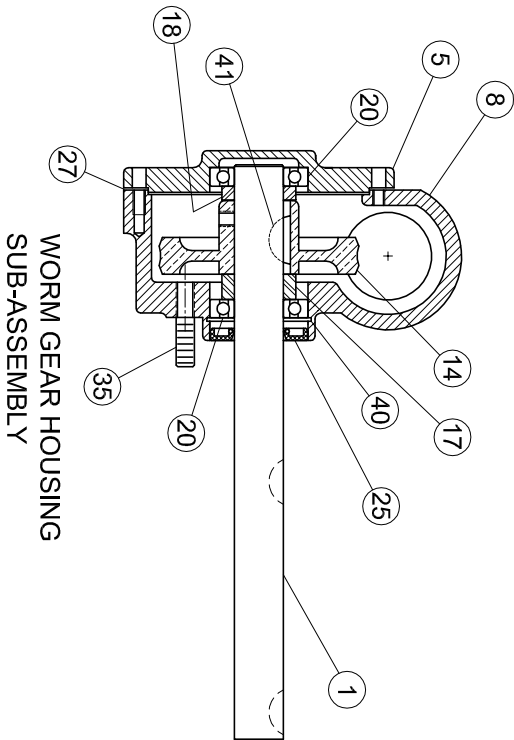
| ITEM | QTY | PART No. | DESCRIPTION                                   |
|------|-----|----------|---|
| 41   | 2   | 351020   | Key, Worm Shaft                               |
| 42   | 3   | 351030   | Key, Main Shaft                               |
| 43   | 1   | 351050   | Key, Pinion                                   |
| 44   | 1   | 448120   | Brake Motor Assy                              |
| 44a  | 2   | 443020   | Brush Cap, Current Apps                       |
| 44b  | 1   | 443030   | Rectifier Assy, Current Apps                  |
| 44c  | 1   | 443040   | Motor Brake, Current Apps                     |
| 44d  | 1   | 448130   | Brush Set, Current Apps                       |
| **   |     | 518521   | Complete Control Box with Switch & Power Cord |
| 45   | 1   | 512020   | Panel, Plain                                  |
| 46   | 1   | 518010   | Control Box w/Bklt & Cover                    |
| 47   | 1   | 518261   | Panel Assy w/Comps&Brace                      |
| 48   | 1   | 538033   | Hand Switch Assy 4 Wire                       |
| 48a  | 2   | 531140   | Switch, Push Button SPDT                      |
| 48b  | 1   | 532021   | Switch Plate/Switch/Guard                     |
| 48c  | 2   | 532550   | Guard, Switch                                 |
| 48d  | 1   | 552110   | Strain Relief, Pendant                        |
| 49   | 1   | 548030   | Power Cord Assy                               |
| 50   | 1   | 552020   | Strain Relief, Motor                          |

| ITEM | QTY | PART No. | DESCRIPTION                           |
|------|-----|----------|---------------------------------------|
| 51   | 2   | 552040   | Strain Relief, Cord & Switch          |
| 52   | 1   | 561030   | Relay, Power DPDT w/Aux Switch        |
| 53   | 1   | 562011   | Transformer, 115/24 VAC w/Term. Block |
| 54   | 1   | 562530   | Circuit Breaker, 20amp 115v           |
| 55   | 1   | 568040   | Resistor Assy                         |
| 56   | 1   | 568050   | Capacitor Assy                        |
| 57   | 1   | 561031   | Relay, Power DPDT                     |
| 58   | 1   | 281272   | 8-32 x 1-3/4 PHMS                     |
|      | 1   | 621020   | Decal-Oil Level                       |
|      | 1   | 621130   | Decal-Circuit Breaker                 |
|      | 1   | 621250   | Decal, Drum Warning                   |
|      | 1   | 621260   | Decal-Safety 3 x 3                    |
|      | 1   | 621270   | Decal-Capacity & SN                   |
|      | 1   | 621290   | Decal-Made in America                 |
|      | 1   | 621310   | Decal-Danger Hot!                     |
|      |     | 248022   | Seal & Gasket Kit-New Cover           |

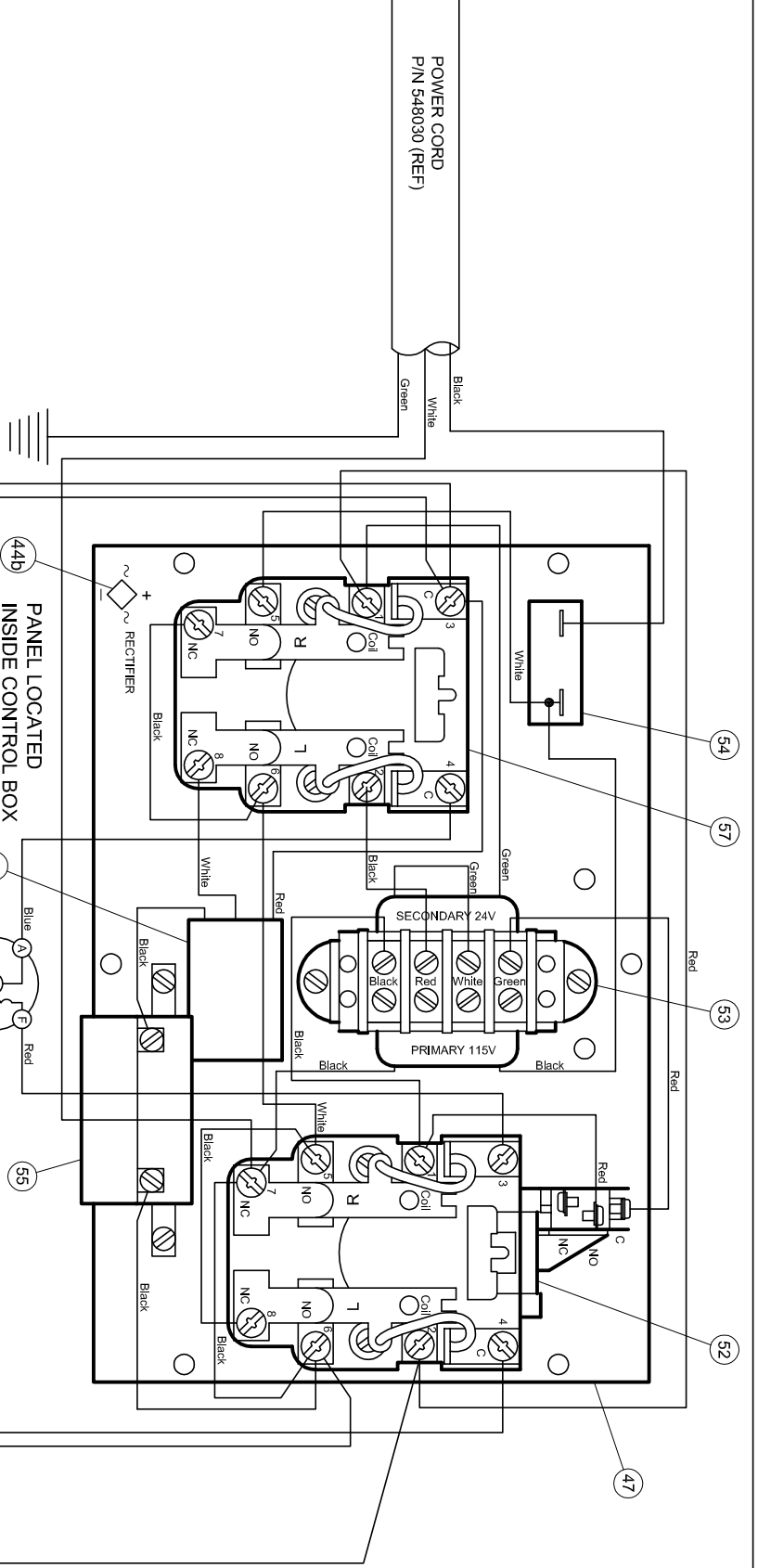


# 300AB Parts Drawing

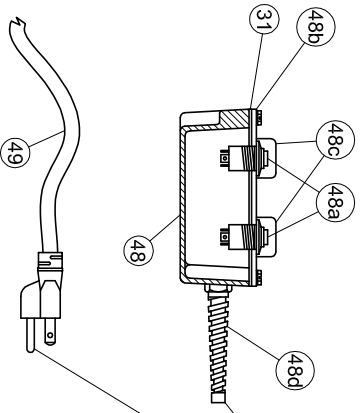
P/N 742035



POWER CORD  
P/N 548030 (REF)

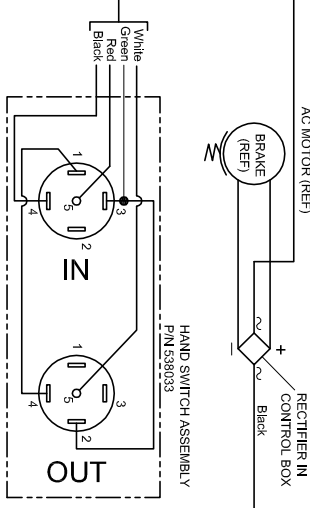


PANEL LOCATED  
INSIDE CONTROL BOX

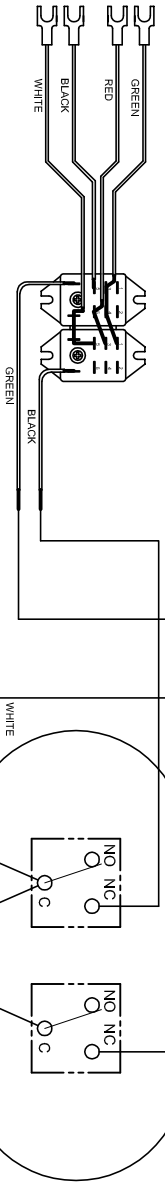


CONNECT WIRES TO TERMINAL  
STRIP AT CORRESPONDING  
COLOR MARK

SWITCH CORD P/N 541120  
CONNECT WIRES TO TERMINAL  
STRIP AT CORRESPONDING  
COLOR MARK

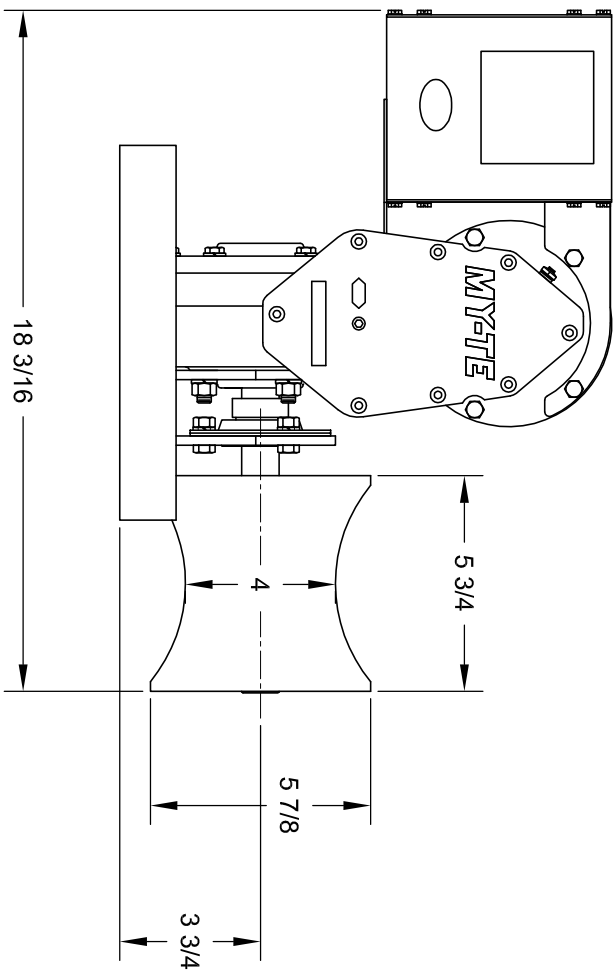
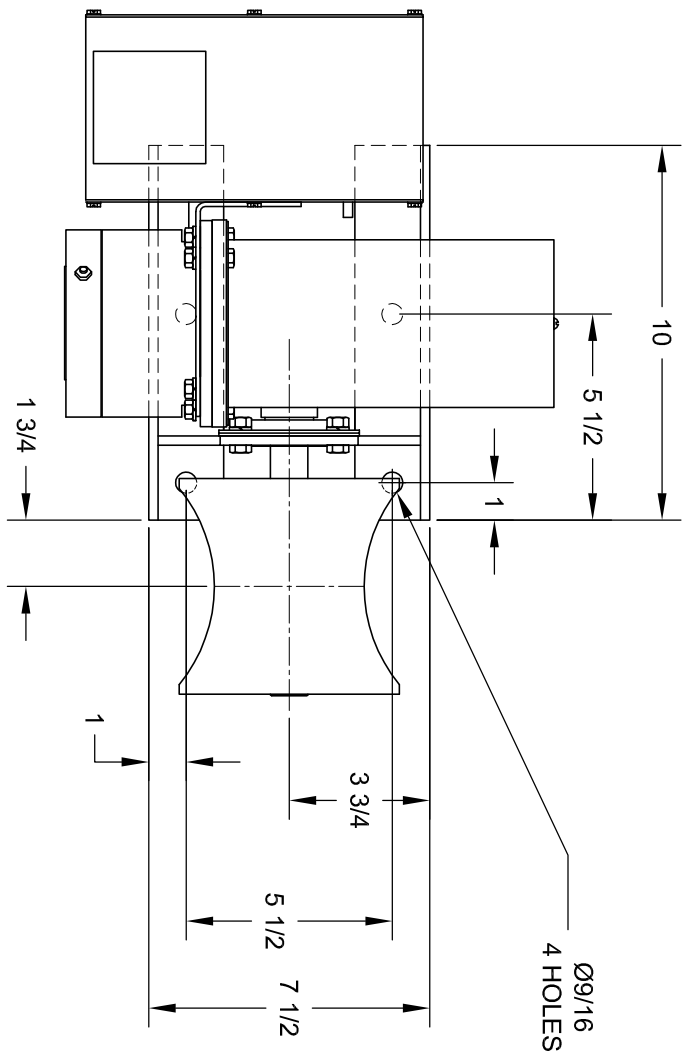


OR



RELAY ASSEMBLY P/N 568030

FOOT SWITCH ASSY P/N 538060



BI-DIRECTIONAL  
WINCHING/HOISTING

