

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 Macron 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 ohm meter, 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/Brg
8	1	088090	Housing, Worm Gear/Studs
9	1	088170	Housing, Spur Gear/Brg
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

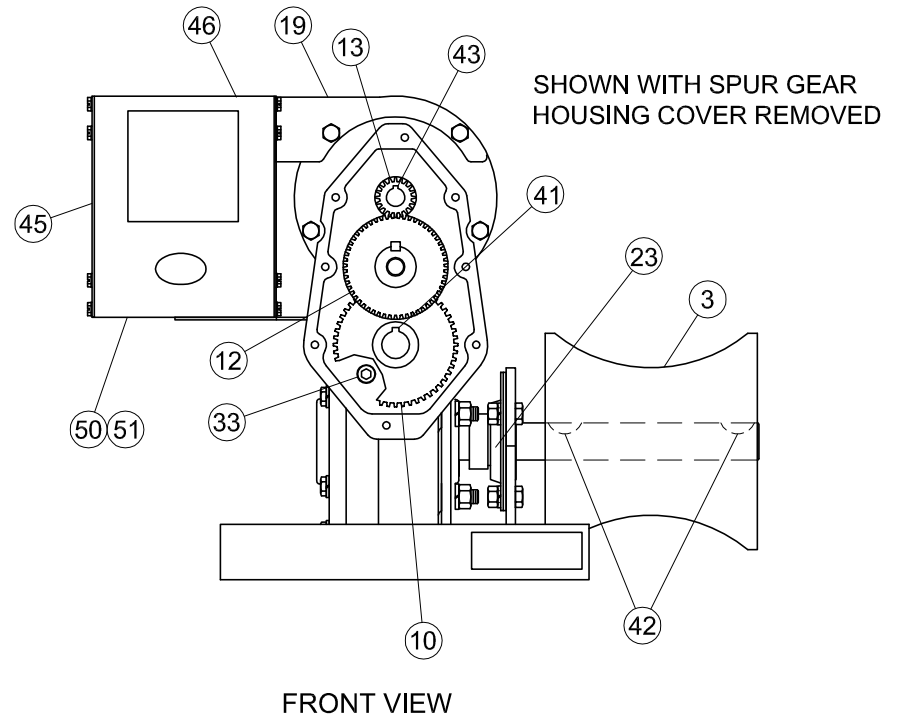
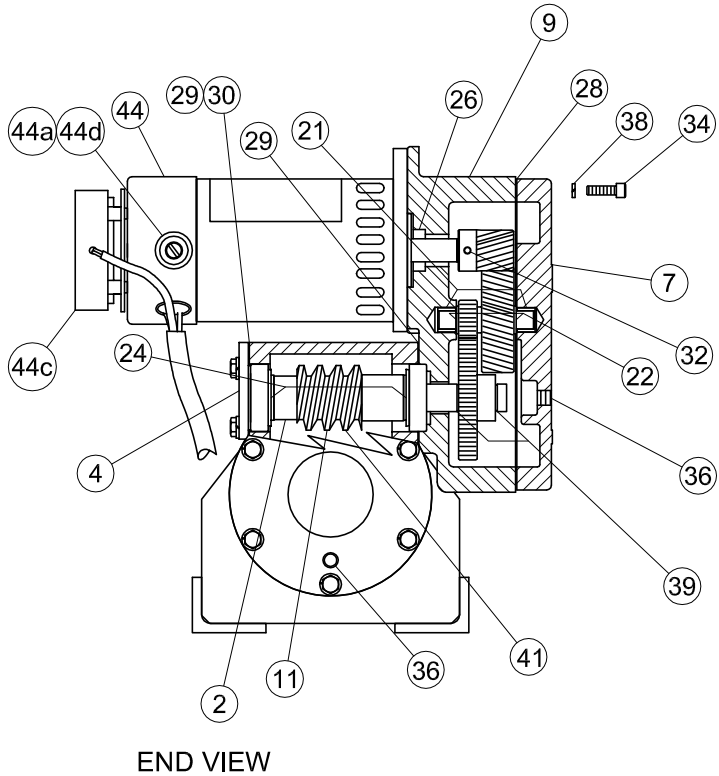
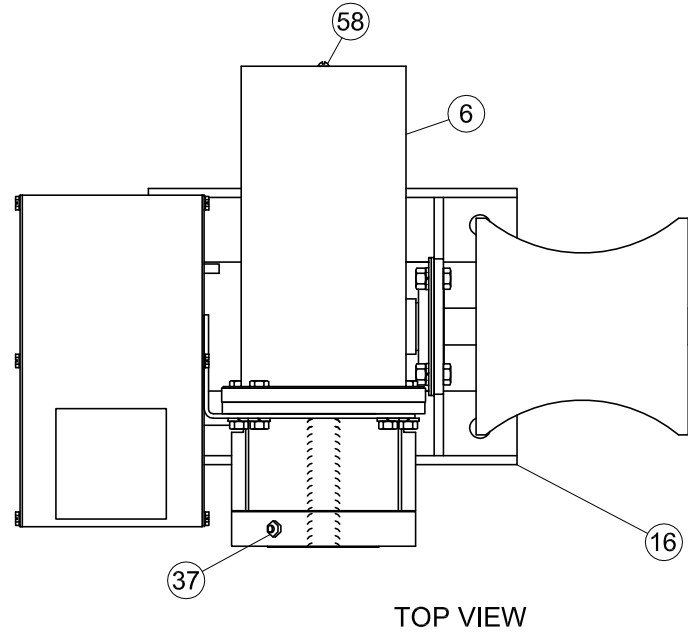
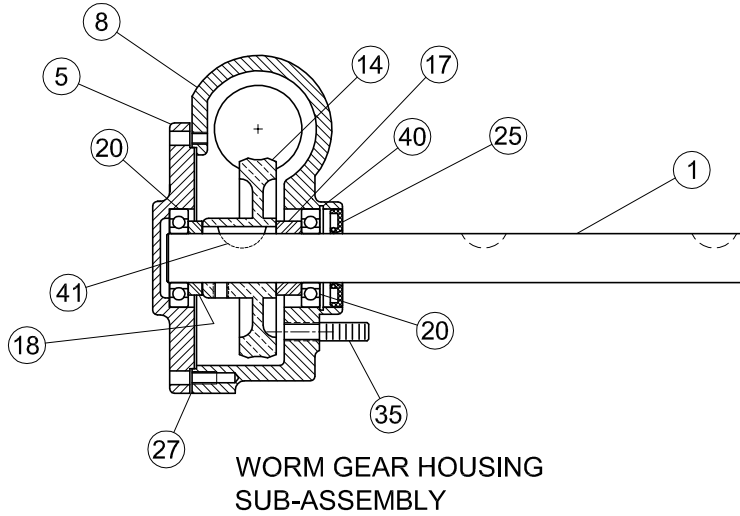
ITEM	QTY	PART No.	DESCRIPTION
41	2	351020	Key, Worm Shaft
42	3	351030	Key, Main Shaft
43	1	351050	Key, Pinion
44	1	448120	Brake Motor Assy
44a	2	443020	Brush Cap,Current Apps
44b	1	443030	Rectifier Assy, Current Apps
44c	1	443040	Motor Brake, Current Apps
44d	1	448130	Brush Set, Current Apps
**		518521	Complete Control Box with Switch & Power Cord
45	1	512020	Panel, Plain
46	1	518010	Control Box w/Brkt & Cover
47	1	518261	Panel Assy w/Compts&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

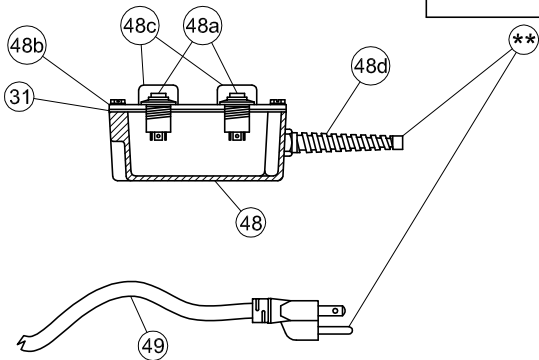
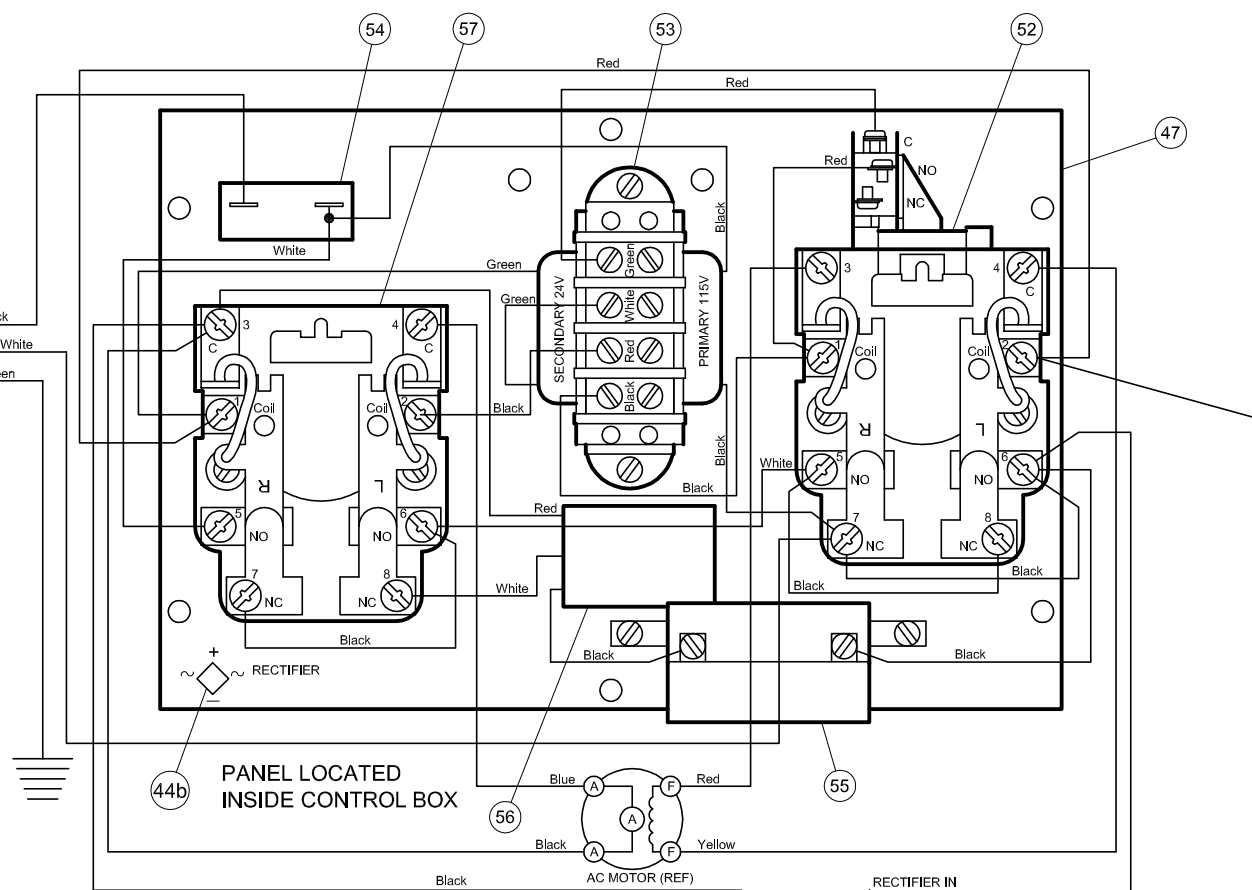


300AB Parts Drawing

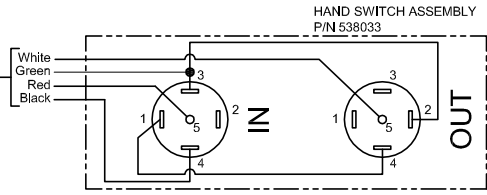
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POWER CORD
P/N 548030 (REF)

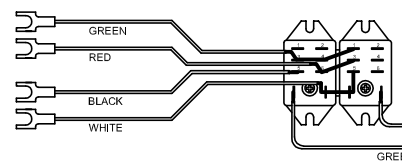


SWITCH CORD P/N 541020
CONNECT WIRES TO TERMINAL STRIP AT CORRESPONDING COLOR MARK

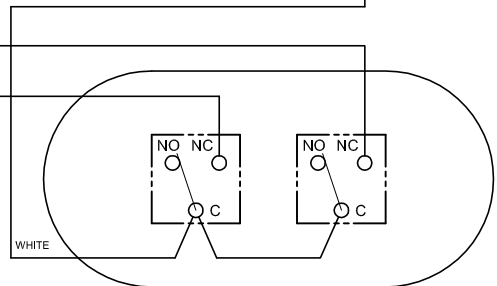


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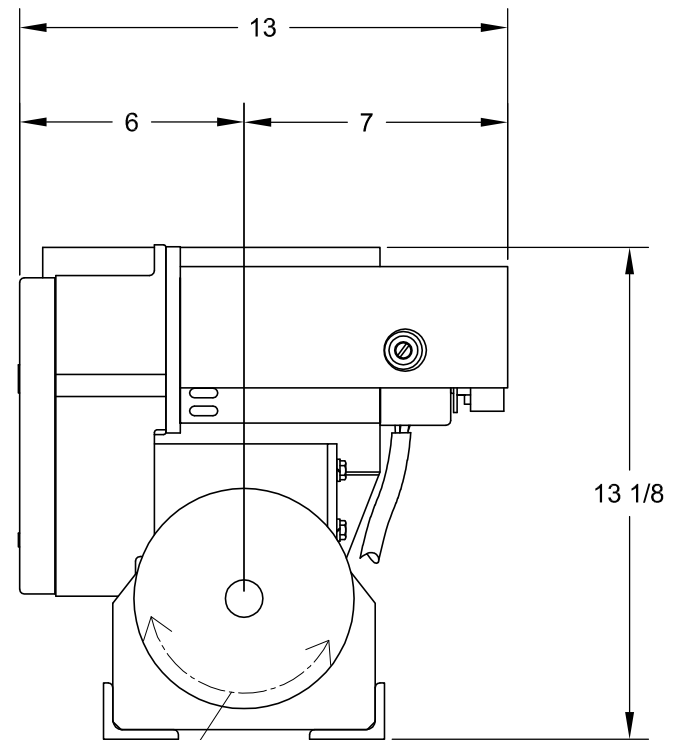
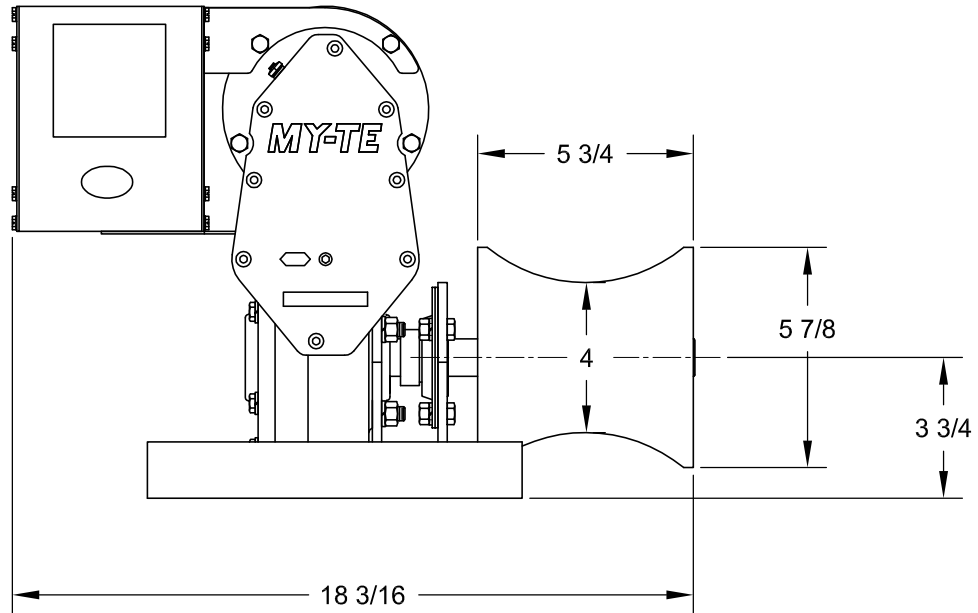
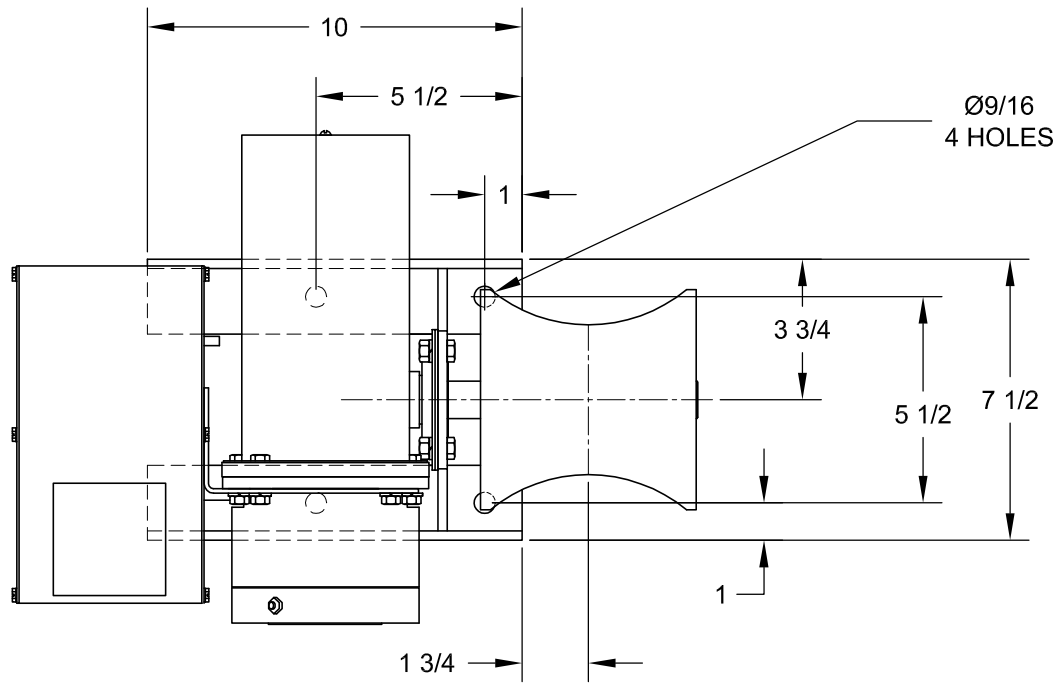
CONNECT WIRES TO TERMINAL STRIP AT CORRESPONDING COLOR MARK



RELAY ASSEMBLY P/N 568030



FOOT SWITCH ASSY P/N 538060



BI-DIRECTIONAL
WINCHING/HOISTING