

Model 300A



Winch and Hoist

OPERATION and MAINTENANCE

OF

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

**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.

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.

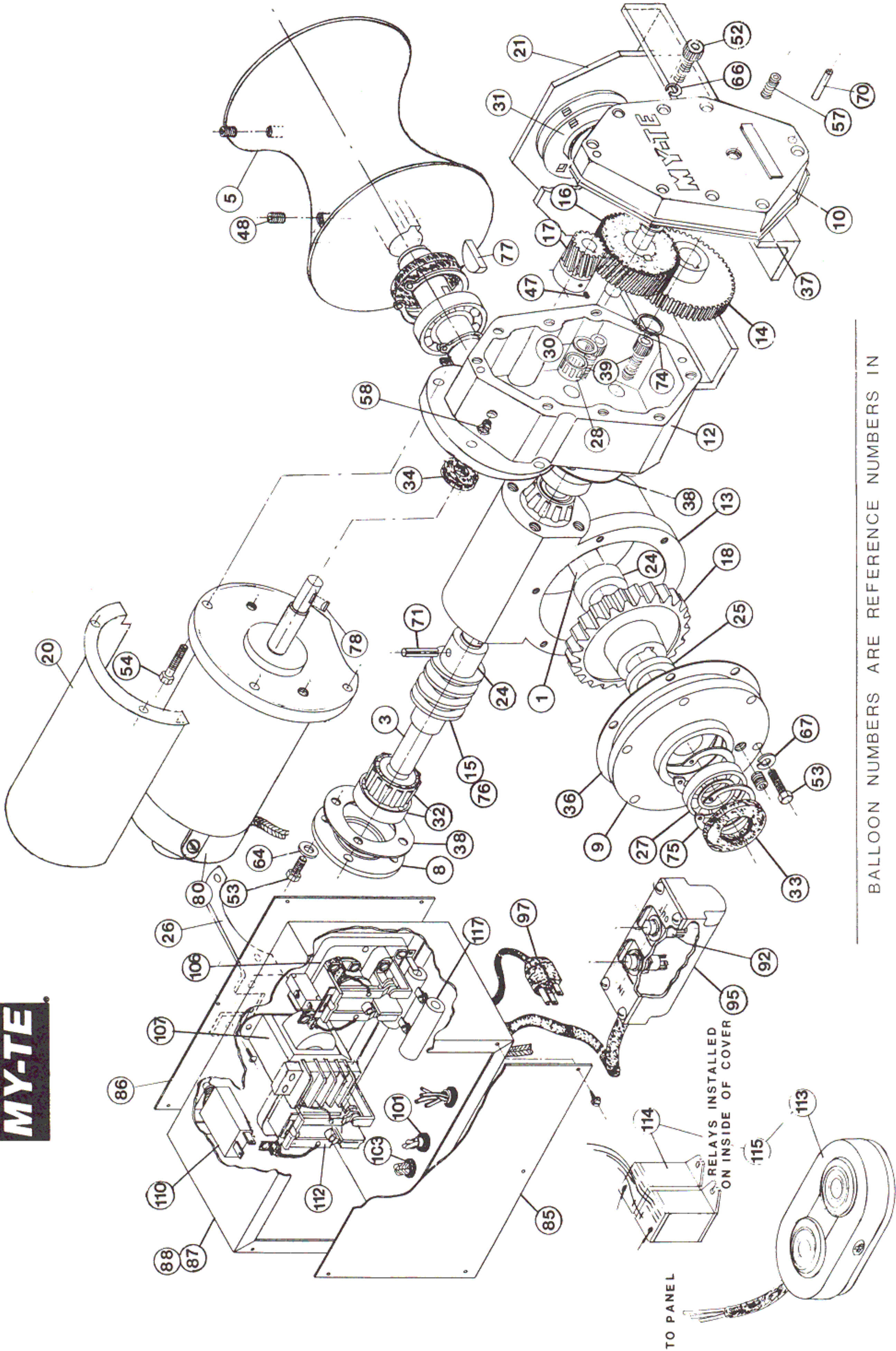
If the unit does not operate properly after the above remedies, contact a qualified electrician or the factory.

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.

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

115 Volt Parts Diagram



BALLOON NUMBERS ARE REFERENCE NUMBERS IN PARTS LIST. SPECIFY PART NUMBER WHEN ORDERING.

300A

My-te Winch and Hoist Parts List MY-TE 115 VOLT WINCH & HOIST UNITS

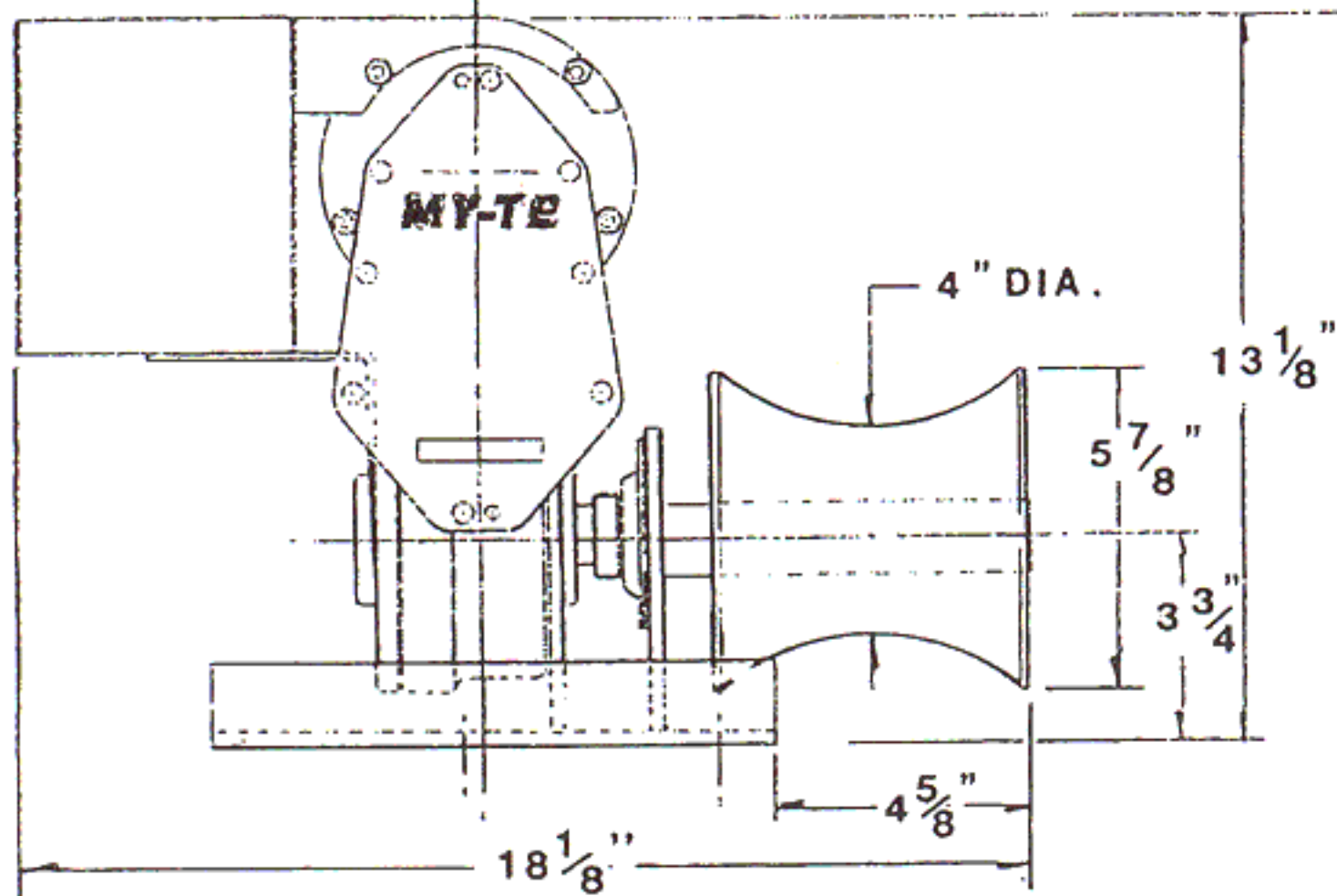
To insure receiving correct part, always give serial number and model number of winch & hoist unit.

Ref. No.	Part No.	Part Name/Description	Qty. Used	Ref. No.	Part No.	Part Name/Description	Qty. Used
1	052620	Main Shaft - Capstan	1	76	351020	Key, Worm Shaft	2
3	058010	Worm Shaft Assy. w/Spacer/Pin	1	77	351030	Key, Main Shaft	3
5	068080	Drum Assy., Capstan	1	78	351050	Key, Pinion	1
8	081510	Cap, Worm Gear Housing	1	80	441511	Motor, 115V	1
9	082010	Cover, Worm Gear Housing	1	*	448020	Armature Assy., 115V	1
10	088160	Cover, Spur Gear Hsg. w/Bearing	1	*	448030	Brush Set, Motor 115V	1
12	088170	Housing, Spur Gear, w/Bearing	1	85	512020	Panel, Plain	1
13	088090	Housing, Worm Gear, w/Studs	1	87	518010	Ctrol. Box Assy. w. Brkt./Pln.Pnl.	1
14	112010	Spur Gear	1	86	518281	Panel Assy. w/Comp. & Brace-230V	1
15	113010	Worm	1	88	518521	Comp. Ctr. Box w/Sw. & Pwr. Crd.-Hand Sw. Models	1
16	118040	Idle Gear Assy. w/Shaft	1	*	518561	Comp. Ctr. Box w/Sw. & Pwr. Crd.-Foot Sw. Models	1
17	118110	Pinion Assy. w/S.S.	1	92	531140	Switch, Push Button (Hand Switch)	2
18	118160	Worm Gear Assy. w/S.S.	1	95	538033	Hand Sw. Assy., 4W w/ Term.	1
20	082150	Cover, Motor-Metal	1	97	548030	Power Cord Assy. 14/3 w/Term.	1
21	148051	Frame Assy., Capstan	1	*	551060	Terminal, Push-on "Y"	8
24	171280	Spacer, Worm Gear Hsg-Thick	1	*	551080	Terminal, Female Push-on 1/4"	1
25	171310	Spacer, Worm Gear Hsg-Thin	1	101	552020	Strain Relief, Motor Wires	1
26	182032	Brace, Control Box	1	103	552040	Strain Relief, Cord & Switch	2
27	211010	Bearing Main Shaft	2	*	552540	Cable Tie, 4 1/2"	1
28	211060	Needle Bearing	2	106	561030	Relay, Power DPDT 24 VAC Coil w/ Aux. Sw.	1
30	212010	Thrust Washer	2	107	562011	Transformer, 115/24 VAC w/Term. Block	1
31	218010	Bearing Assy., Flangette	1	110	562530	Circuit Breaker, 20 Amp 115V	1
32	218020	Bearing Assy., Worm Shaft	2	111	568040	Resistor, Assy 4 Ohm 25W	2
33	241010	Oil Seal, Main Shaft	2	*	621020	Decal, Oil Level	1
34	241020	Oil Seal, Motor Shaft	1	*	621130	Decal, Circuit Breaker	1
36	241510	Gasket, Worm Gear Housing	1	*	621250	Decal, Drum Warning	1
37	241521	Gasket, Spur Gear Hsg.	1	*	621260	Decal, Capacity & Serial Number	1
38	241530	Gasket, End Cap 1/32	2	*	621270	Decal, Safety	1
*	241540	Gasket, End Cap.010	2	112	561031	Relay, Power DPDT 24 VAC Coil w/o Aux. Sw.	1
*	241550	Gasket, Switch Housing	1	113	538060	Foot Switch Assy.	1
				114	568030	Relay Assy.	1
				115	538063	Foot Switch Relay Pkg.	1

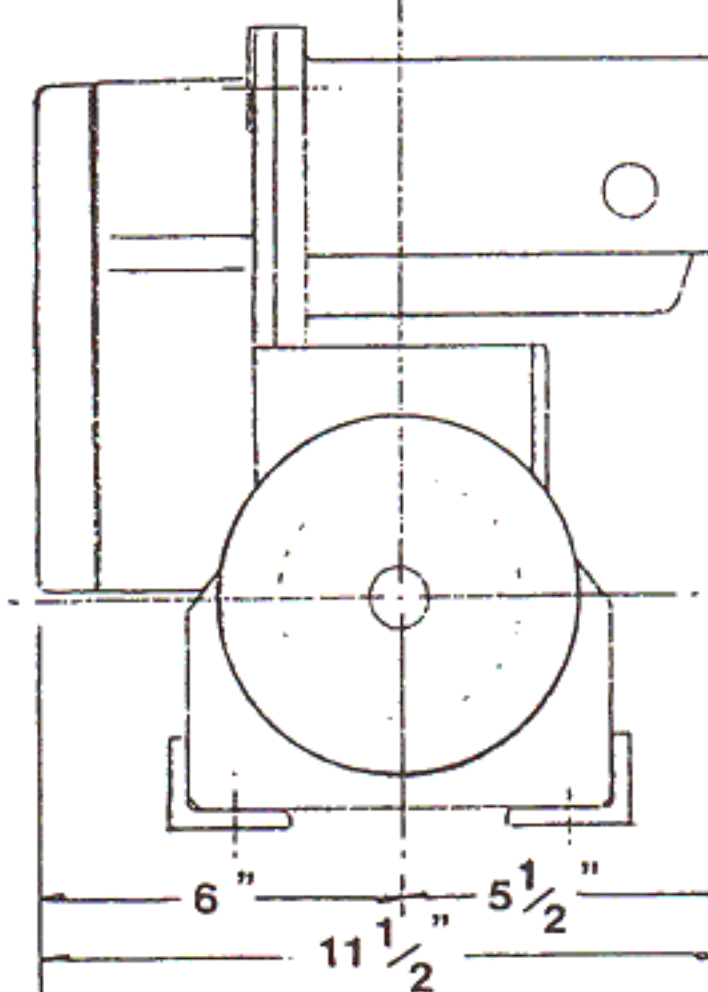
* Not Shown

MINIMUM ORDER - \$10.00

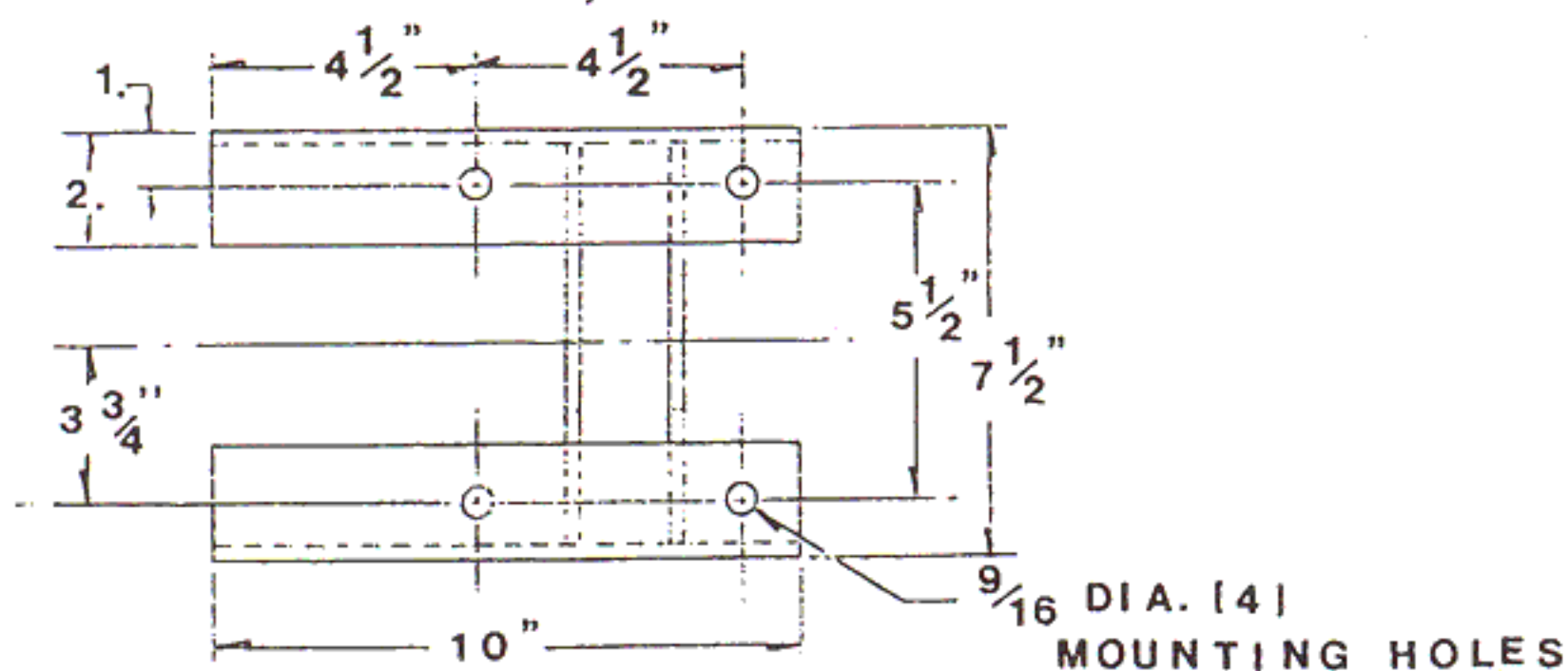
FRONT VIEW



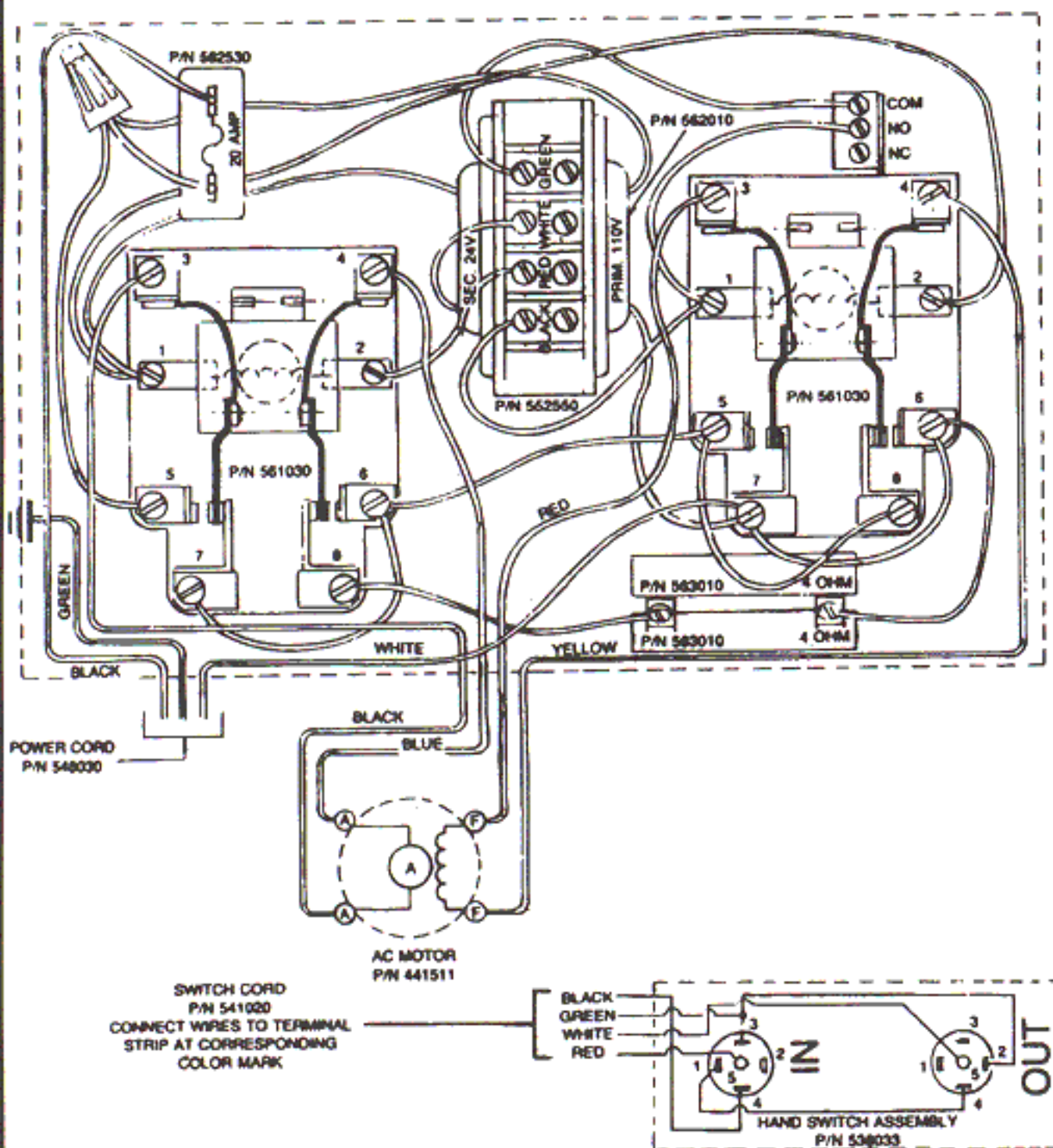
SIDE VIEW



TOP VIEW, FRAME ONLY



115V HAND SWITCH WIRING DIAGRAM



OPTIONAL 115V FOOT SWITCH WIRING SCHEMATIC

