

Winch and Hoist OPERATION and MAINTENANCE OF 12V DC Capstan Winch-Hoist Parts List, Wiring and Mounting

1600# Double Line Lift Capacity

READ THIS BEFORE OPERATING UNIT

INSTALLATION:

Mount on clean, flat surface. Bolt down with 4-1/2" bolts, grade 5 or better. For ease of service, we do not recommend welding frame to surface.

Connect a battery cable from the positive battery post or 12V DC power supply to the positive post on the winch control box (p/n 281750) using the boot provided. Connect a battery cable from the negative battery post to the grounding post on the winch frame. The negative cable may not be required when the winch and the battery or power supply are connected to a common ground. Use #4 battery cable or larger for cable runs up to 10'. Use #2 battery cable or larger for cable runs from 11-25'. For vehicle mounted applications, a cab mounted disconnect switch may be used to disconnect power to the winch when it is not in use. This will prevent accidental engagement of the winch motor during travel. Contact My-te for more information.

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. To hoist or retrieve the load, the operator must pull the fall line (the unloaded end of the rope) from the drum by hand as the drum rotates. To lower the load, carefully pay the fall line back onto the drum allowing the wraps of rope to slip, thus lowering the load. An alternate method of lowering a load is to operate the winch-hoist in the lifting direction while paying rope back onto the drum.

The proper number of wraps is determined by feel. Take time to become familiar with the capstan's operation. 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 and traveling sheave block 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:

Extreme caution should be exercised when operating any winching or hoisting equipment as loss of control over the load may result in property damage, injury or death. Operation of such equipment should only be performed by qualified personnel.

The 30-12 and 30-12/FS are designed for intermittent operation. My-te recommends a 25% duty cycle. For optimum motor and control life, do not exceed 15 minutes of run time per hour at full load.

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

Hand held or foot operated pendant provides forward and reverse control through winch-hoist control solenoids. Pulling power is the same in either direction.

MAINTENANCE:

If the unit is installed outside, a cover may be provided to protect motor and controls from the inclement weather. Do not allow the cover to interfere with the capstan drum.

Frequent inspection of the winch including battery cables and pendant should be made to detect any damage that may affect proper operation of the unit.

A periodic inspection should include a check of all hardware to ensure that fasteners have not worked loose. This includes the locking collar on the 218010 flangette bearing assembly, as well as the capstan drum set screws. Check the gear box oil and bearing lubrication as described in the attached Lubrication Guide. Check electrical connections for corrosion.

TROUBLE SHOOTING AND REMEDIES:

If the unit does not run, check power supply. Be sure correct voltage is being applied. Verify that the winch-hoist is well grounded to the 12V DC power supply.

Check all connections in the winch-hoist control box. Check connections in the hand held or foot operated pendant.

Check for damage to the battery cables and pendant cord.

If a cab mounted cut-off switch or circuit breaker/fuse has been installed in the power supply to the winch-hoist, check for proper wiring and operation of these components.

If the control solenoid(s) click(s) but the winch-hoist does not run, determine whether the problem is in the motor or the winch-hoist control panel. This may be done by checking for 12V DC voltage at the motor terminals on the outboard end of the motor when the pendant switch is operated. Operating the pendant in the opposite direction should reverse polarity of the voltage. Proper voltage at the motor indicates that the problem is most likely in the motor.

Motor brushes may be replaced. Contact the factory, your My-te dealer or a motor repair shop for assistance. In order to remove the motor, the 118081 pinion gear must first be removed.

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 manufacturers factory or a point designated by the manufacturer. Inspection by the manufacturer will determine manufacturers liability.

All MY-TE WINCH-HOISTS ARE DESIGNED FOR MATERIAL HANDLING USE ONLY.

30-12 Parts List

COMMON FASTENERS AND OTHER ITEMS NOT LISTED 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
6	1	088090	Housing, Worm Gear/Studs
7	1	088160	Cover, Spur Gear Hsg/Brig
8	1	088170	Housing, Spur Gear/Brig
9	1	112010	Spur Gear
10	1	113010	Worm
11	1	118010	Idle Gear Assy/Shaft 10-12
12	1	118081	Pinion Assy/SS
13	1	118160	Worm Gear Assy
14	1	148051	Frame Assy, Capstan
15	1	171250	Spacer, Idle Gear
16	1	171280	Spacer, Thick Main Shaft
17	1	171310	Spacer, Thin Main Shaft
18	1	182032	Brace, Control Box
19	2	184050	Buss Bar, Sol'd-Long Angle
20	2	184060	Buss Bar, Sol'd-Short Angle

ITEM	QTY	PART No.	DESCRIPTION
21	1	184070	Buss Bar, Sol'd-U Shaped
22	2	211010	Bearing, Main Shaft
23	2	211060	Bearing, Needle SGH
24	2	212010	Thrust Washer
25	1	218010	Bearing Assy, Flangette
26	2	218020	Bearing Assy, Worm Shaft
27	1	241010	Oil Seal, Main Shaft
28	1	241020	Oil Seal, Motor Shaft
29	1	241510	Gasket, Worm Gear Hsg
30	1	241521	Gasket, Spur Gear Hsg
31	2	241530	Gasket, Worm Hsg Cap 1/32
32	2	241540	Gasket, Worm Hsg Cap .010
33	1	281750	Screw 5/16-.18 x 1-1/4 Brass
34	4	283020	Screw 5/16-.18 x 1 SHCS
35	8	283080	Screw, 1/4-20 x 1-1/4 SHCS
36	3	285750	Stud, WGH 3/8-.16 x 1-1/4
37	2	286250	Oil Plug, 1/8 NPT
38	1	286260	Oil Plug, Valved 1/8 NPT
39	2	286560	Nut, 5/16-.18 Brass
40	8	287041	Lockwasher, Split 1/4 HC

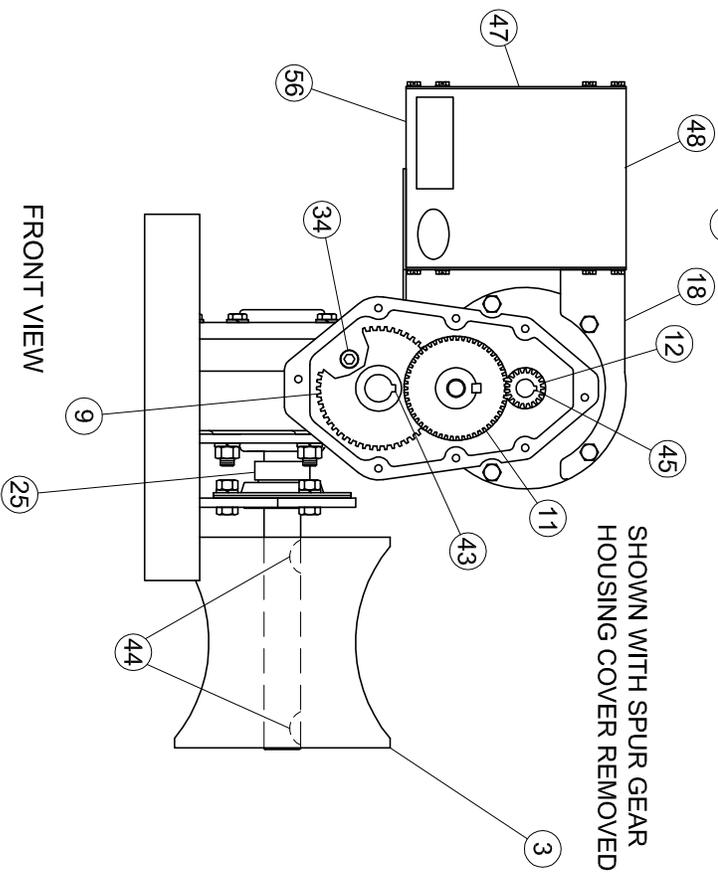
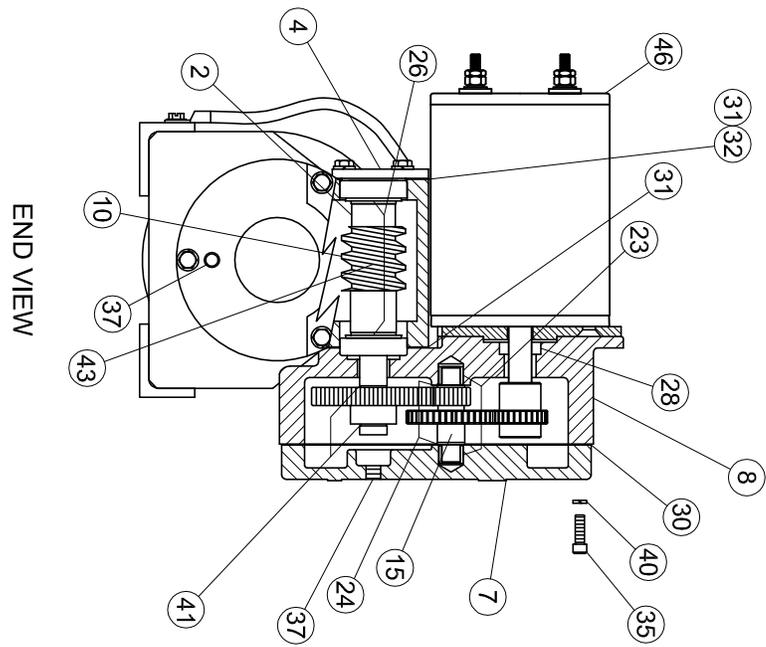
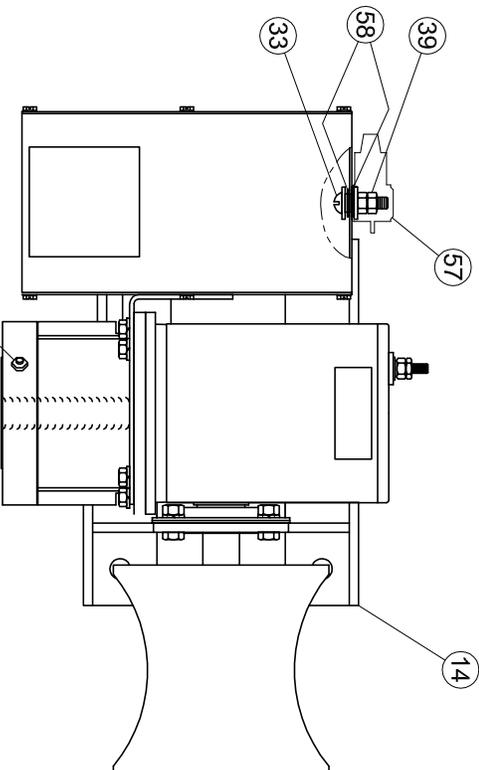
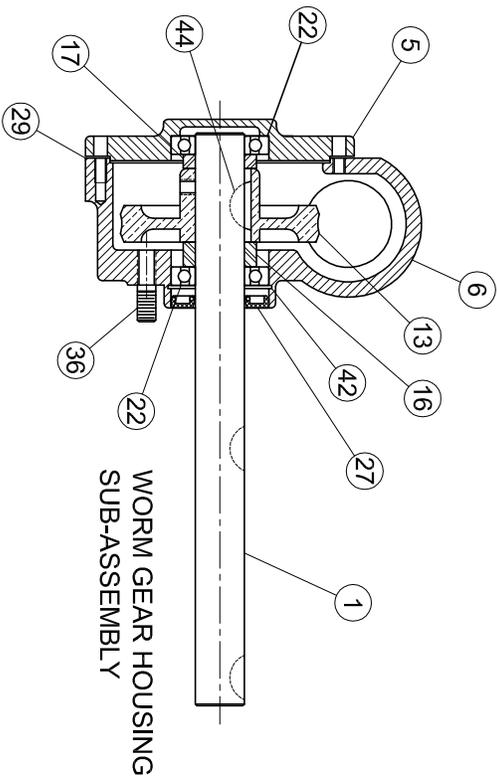
ITEM	QTY	PART No.	DESCRIPTION
41	2	321520	Snap Ring Worm Shaft
42	1	321530	Snap Ring WGH
43	2	351020	Key, Worm Shaft
44	3	351030	Key, Main Shaft
45	1	351080	Key, Pinion 12V
46	1	418143	Motor Assy 12V/End Plate
	1	418150	Brush Assy, 12V Motor
47	1	512020	Panel, Plain
48	1	528011	Control Enclosure w/Brk&Cvr
49	1	528251	Panel Assy, w/Comp/Brace
**	1	528521	Complete Control Box Assy, 12V/Components/Handswitch
50	1	538121	Hand Switch Assy 3 Wire
50a	1	241550	Gasket, Switch Hsg
50b	1	532011	Plate, Switch Cover
50c	2	531140	Switch, Pushbutton 5 Term
50d	2	532550	Guard, Pushbutton
50e	1	552110	Strain Relief, Switch Hsg
51	1	542030	Cable, Battery-Long 17"
52	1	542040	Cable, Battery-Short
53	2	542060	Cable, Battery-Long

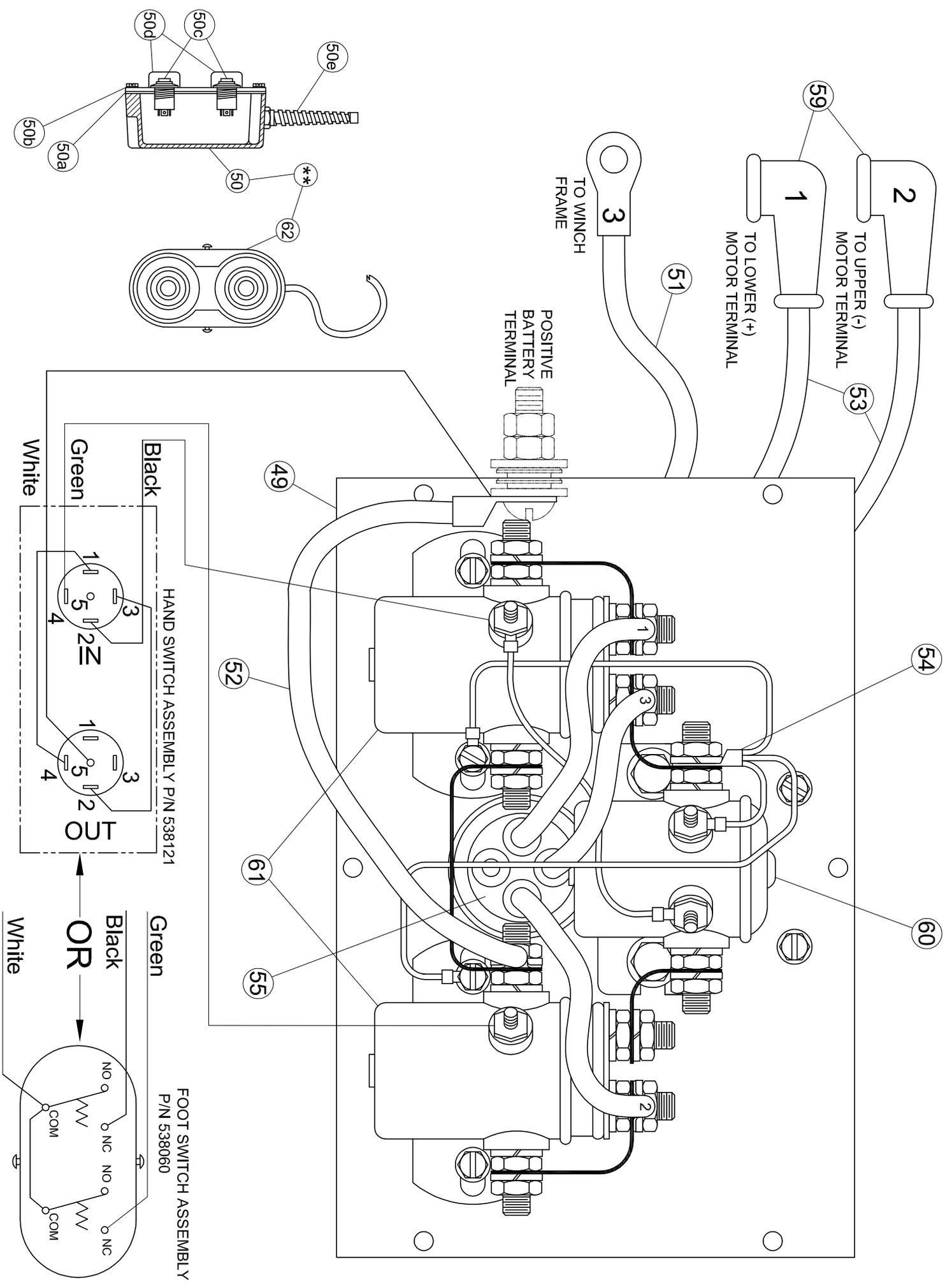
ITEM	QTY	PART No.	DESCRIPTION
54	1	543030	Ground Wire, 3 Wire Sid
55	1	552010	Grommet, Rubber-4-Hole
56	1	552060	Strain Relief, 3 Wire Sw Cord
57	1	552070	Boot, 12V Control Box Post
58	2	552581	Insulator, 12V-Shldr Washer
59	2	552620	Boot, Insulating-Motor Leads
60	1	561512	Solenoid, 12VDC SPST
61	2	561532	Solenoid, 12VDC SPDT
62	1	538060	Foot Switch Assy-Optional
	1	621020	Decal-Oil Level
	1	621031	Decal, 12V Motor
	1	621190	Decal, Post - 12V Units
	1	621250	Decal-Drum Warning
	1	621260	Decal-Safety 3 x 3
	1	621270	Decal-Capacity & SN
	1	621290	Decal, Made In USA
		248022	Seal & Gasket Kit-New Cover

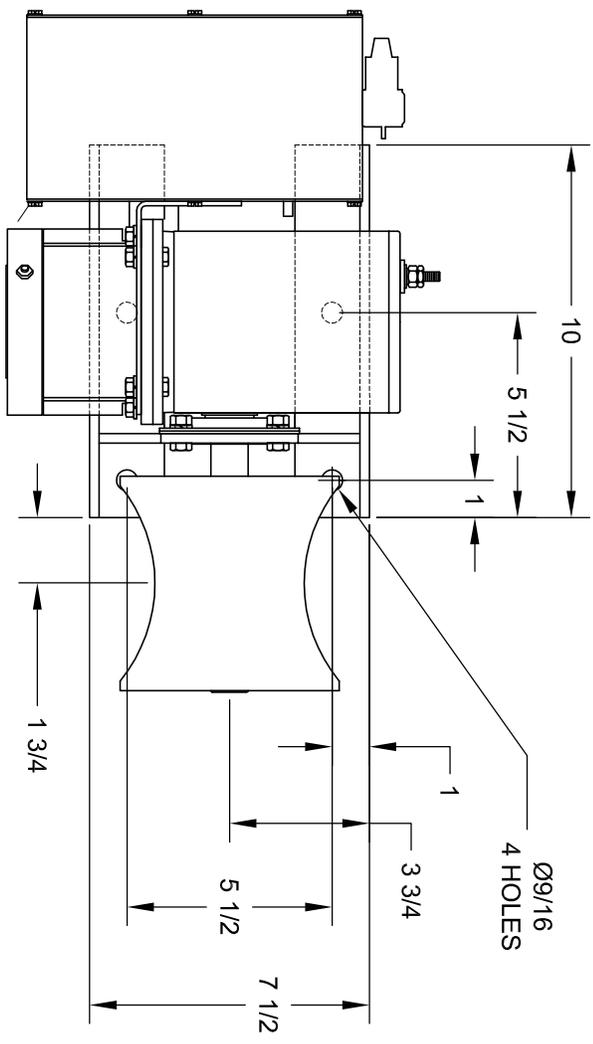


30-12 Parts Drawing

P/N 741020, 741041 (Foot Switch Model)







B-DIRECTIONAL
WINCHING/HOISTING

