

Winch and Hoist

## OPERATION and MAINTENANCE

OF

ALL 12 VOLT DC WINCHES

2500LB. Double Line Lift Capacity

### READ THIS BEFORE OPERATING UNIT

#### INSTALLATION:

Mount on clean, flat surface. Bolt down with 6-1/2" bolts. For ease of service, we do not recommend welding frame to surface.

To wire unit to power, connect one battery cable from positive post on winch control box to positive side of power source. Connect the other battery cable to the negative side. Negative cable may not be necessary when winch and battery are attached to common ground. Use #4 battery cable for operations with 10 feet or less between winch and battery. Use #2 for more than 10 feet.

Before the unit is wall mounted, or mounted upside down, remove P/N 286260 Oil Plug Valve and exchange with P/N 286250 Oil Plug located below the control box on the worm gear housing cover.

#### CABLE CONNECTION AND CABLE SAFETY:

Maintain at least 4 wraps of cable on the drum at the maximum reach. The drum cable clamp is not designed to hold load. Inspect the winch, sheaves and cable frequently. Especially watch for frayed cable, loose parts and worn components which may be hazardous. Use the correct size and length of cable for the job. We recommend use of 1/4" cable for most jobs up to 2500 lb. double line. Always provide a 5 to 1 safety factor.

The cable tensioner is designed to prevent the cable from riding over the drum flanges and to maintain a constant pressure against the cable to keep it from binding.

When installing the cable, cable should be placed between the drum and the tensioner, bringing cable around drum to hole in flange. Push cable through hole and secure screws so that they do not extend through the drum flange and interfere with cable tensioner. Be sure cable is wrapped as evenly as possible on drum.

For best results, use only enough cable to meet specific job requirements.

Worn cable is dangerous. Replace cable that has become frayed, broken, kinked or abraded.

#### OPERATION:

**CAUTION: DO NOT REVERSE ROTATION INSTANTLY.**

Winch drum should be allowed to coast to complete stop before reversing rotation.

These units are designed for intermittent use. 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 cable before full load is moved.

For no load unwinding of cable, turn drum in either direction, by hand, to free clutch dogs before pulling on clutch handle.

Do not attempt to disengage the clutch with a load on the winch.

Remote switch provides forward and reverse control. Lifting power is the same in either direction. For additional safety, a power disconnect may be installed to provide means of cutting power in place of using the battery cable to disconnect.

Do not hammer on motor as it may break the magnets in motor.

#### MAINTENANCE:

Check all sheaves, rollers and areas of friction. Be sure they turn freely. Misalignment of cable, dragging sheaves, or rollers will consume a great amount of power.

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 battery cable 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:

If the unit runs free in one direction, but binds in the other direction, loosen lock collar on outboard drum shaft bearing. Run winch in free direction a couple of turns. Take hold of drum and hold in the direction of the outboard bearing and while holding, tighten bearing lock collar. This re-setting eliminates friction between worm and worm gear due to excessive end play of main shaft.

If the unit runs, but does not pull capacity, be sure battery leads are clean and tight. Check for good clean ground connection at winch. Check battery for charge. Without load, run motor in both directions. If motor pulls hard in one direction, check for and adjust main shaft end play as in previous instruction.

If the unit does not run but solenoids click, check all connections. Be sure there is full power from battery to winch. This condition may indicate a faulty motor.

If the solenoids do not click, be sure battery cable connections are intact. Open control box and remove switch wires. Manually connect a test wire from any solenoid small top post to positive battery connection. If unit operates, problem is in switch. If unit does not run, this could be a faulty motor.

To run motor without wiring connected, remove the two leads that come from the electrical panel and are connected to the motor. Disconnect ground and positive leads from unit. Connect positive battery cable to one motor post, and the negative to the other motor post. (Caution: This will cause an arc.) Be careful that the power leads do not touch the motor housing. If motor runs okay, the problem would be in the panel or switch. If possible to check amperage, the normal draw would be 10 amps.

If motor shows high amperage draw (but not a complete short), remove spur gear housing cover. Remove idler gear and try motor again to determine whether drag is in motor or winch. If drag is in the winch, check for excess end play or bent main shaft. If drag is in motor, the usual checks for shorts should be made. If no shorts are found, check motor bearing for bind.

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.**

**My-te Products, Inc.**

9880 East 30th St., Indianapolis, IN 46229

317-897-9880

317-897-9811 (fax)

[www.myte.com](http://www.myte.com)

[sales@myte.com](mailto:sales@myte.com) (E-mail)

# 10-12 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	052510	Main Shaft, Long w/Clutch
2	1	058010	Worm Shaft Assy
3	1	068140	Drum Assy, Long Cast
4	1	081510	Cap, Worm Gear Hsg
5	1	082010	Cover, WGH
6	1	088160	Cover, Spur Gear Hsg/Brg
7	1	088090	Housing, Worm Gear/Studs
8	1	088170	Housing, Spur Gear/Brg
9	1	112010	Spur Gear
10	1	113010	Worm
11	1	118010	Idler Gear Assy/Shaft 10-12
12	1	118081	Pinion Assy/SS
13	1	118150	Worm Gear Assy for Clutch
14	1	148170	Frame Assy, Std Long
15	1	148360	Tensioner Bar Assy/HW
16	1	171250	Spacer, Idler Gear
17	1	171280	Spacer, Thick Main Shaft
18	1	181510	Clutch, Machined
19	1	181520	Spool, Clutch Shifter
20	1	181580	Clutch Shifter Shaft
21	1	181590	Bracket, Clutch Shifter RH
22	1	181620	Locking Tab, Clutch
23	1	181630	Shifter Handle, Clutch RH

ITEM	QTY	PART No.	DESCRIPTION
24	1	182032	Brace, Control Box
25	2	184050	Buss Bar,Sol'd-Long Angle
26	2	184060	Buss Bar,Sol'd-Short Angle
27	1	184070	Buss Bar,Sol'd-U Shaped
28	2	211010	Bearing, Main Shaft
29	2	211060	Bearing, Needle SGH
30	2	212010	Thrust Washer
31	1	218010	Bearing Assy, Flangette
32	2	218020	Bearing Assy,Worm Shaft
33	2	241010	Oil Seal, Main Shaft
34	1	241020	Oil Seal, Motor Shaft
35	1	241030	Oil Seal, Shifter Rod
36	1	241510	Gasket,Worm Gear Hsg
37	1	241521	Gasket,Spur Gear Hsg
38	2	241530	Gasket,Worm Hsg Cap 1/32
39	2	241540	Gasket,Worm Hsg Cap .010
40	1	251080	Knob, Clutch Shifter Handle
41	1	281750	Screw 5/16-18 x 1-1/4 Brass
42	4	283020	Screw,5/16-18 x 1 SHCS
43	8	283080	Screw,1/4-20 x 1-1/4 SHCS
44	3	285750	Stud,WGH 3/8-16 x 1-1/4
45	2	286250	Oil Plug, 1/8 NPT
46	1	286260	Oil Plug, Valved 1/8 NPT

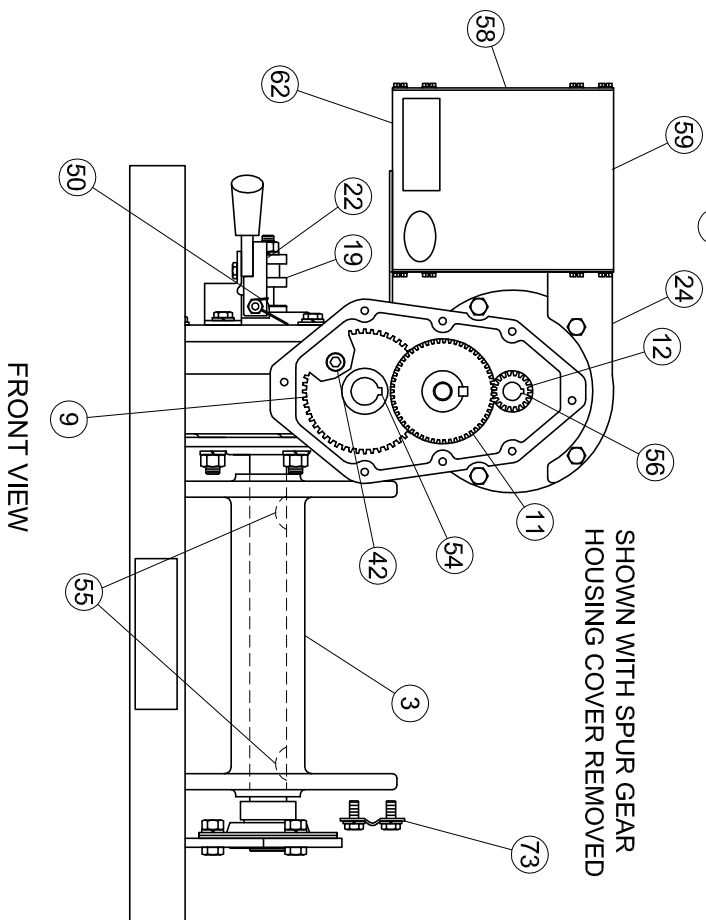
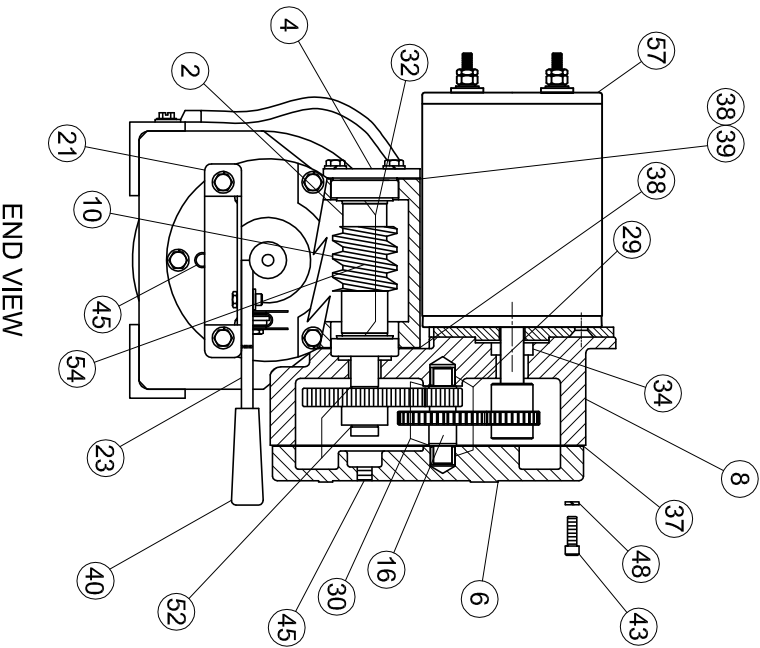
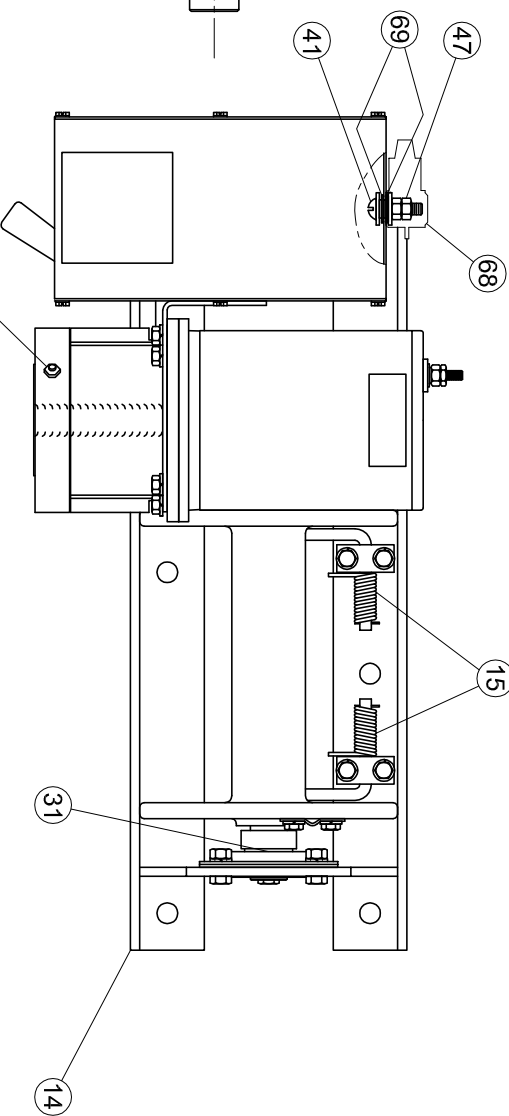
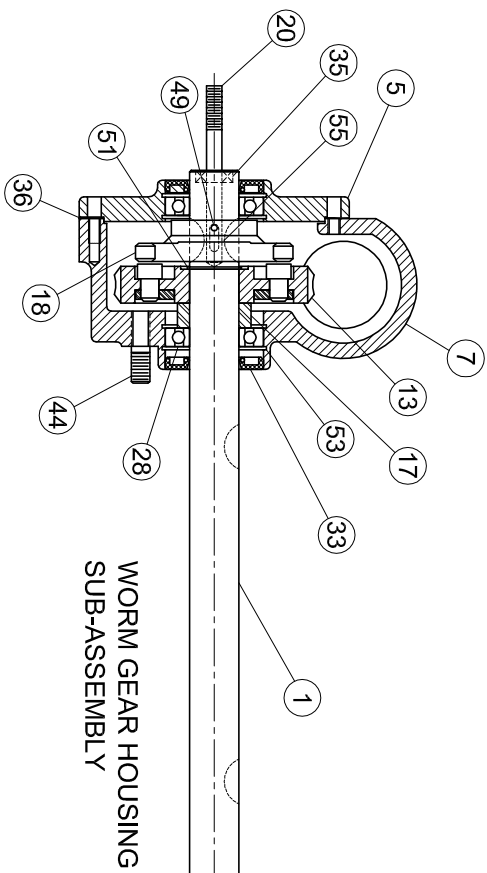
ITEM	QTY	PART No.	DESCRIPTION
47	2	286560	Nut, 5/16-18 Brass
48	8	287041	Lockwasher, Split 1/4 HC
49	1	311260	Spring Pin, Clutch Shifter
50	1	321110	Spring, Clutch Shifter
51	1	321510	Snap Ring Main Shaft
52	2	321520	Snap Ring Worm Shaft
53	4	321530	Snap Ring WGH
54	2	351020	Key, Worm Shaft
55	4	351030	Key, Main Shaft
56	1	351080	Key, Pinion 12V
57	1	418143	Motor Assy 12V /End Plate
	1	418150	Brush Assy, 12V Motor
58	1	512020	Panel, Plain
59	1	528011	Control Enclosure w/Brkt&Cvr
60	1	528251	Panel Assy,w/Comp/Brace
**	1	528521	Complete Control Box Assy, 12V/Components/Switch
61	1	538121	Hand Switch Assy 3 Wire
61a	1	241550	Gasket, Switch Hsg
61b	1	532011	Plate, Switch Cover
61c	2	531140	Switch, Pushbutton 5 Term
61d	2	532550	Guard, Pushbutton
61e	1	552110	Strain Relief, Switch Hsg

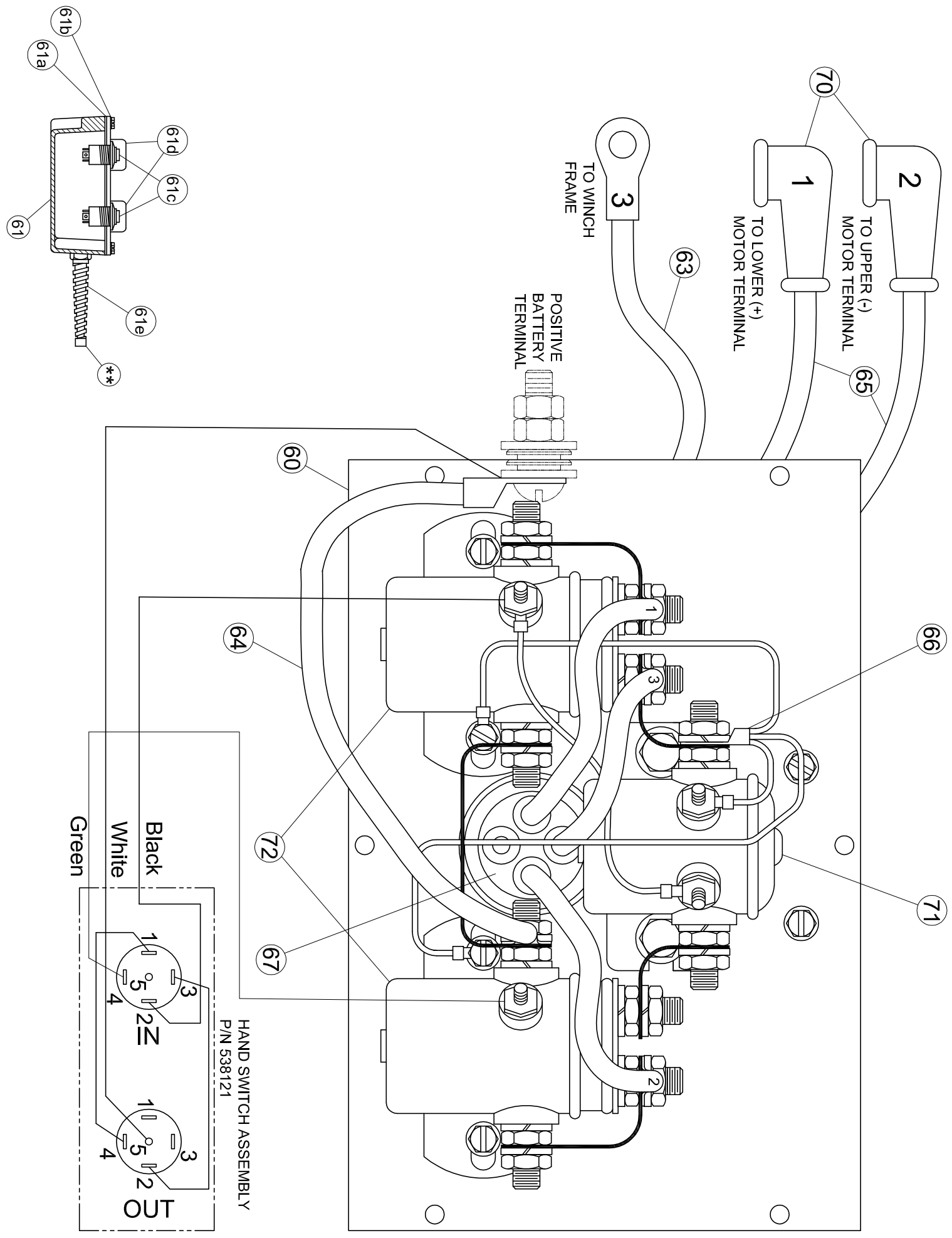
ITEM	QTY	PART No.	DESCRIPTION
62	1	552060	Strain Relief, 3 Wire Sw Cord
63	1	542030	Cable,Battery-Long 17"
64	1	542040	Cable,Battery-Short
65	2	542060	Cable, Battery-Long
66	1	543030	Ground Wire,3 Wire Std
67	1	552010	Grommet, Rubber-4-Hole
68	1	552070	Boot, 12V Control Box Post
69	2	552581	Insulator, 12v-Shldr Washer
70	2	552620	Boot, Insulating-Motor Leads
71	1	561512	Solenoid, 12VDC SPST
72	2	561532	Solenoid, 12VDC SPDT
73	1	828090	Drum Cable Clamp Assy
	1	621020	Decal-Oil Level
	1	621031	Decal, 12V Motor
	1	621190	Decal, Post - 12V Units
	1	621230	Decal, Clutch Operation
	1	621250	Decal-Drum Warning
	1	621260	Decal-Safety 3 x 3
	1	621270	Decal-Capacity & SN
	1	621290	Decal, Made in USA
		248011	Seal & Gasket Kit - w/Clutch



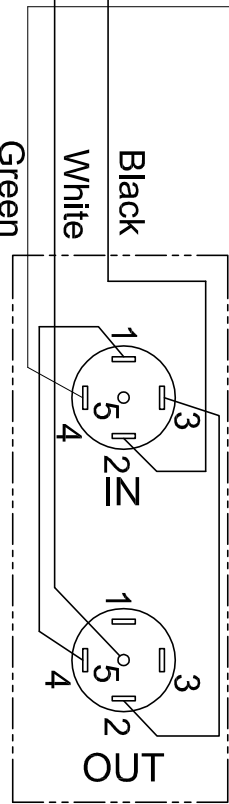
# 10-12 Parts Drawing

P/N 741020





HAND SWITCH ASSEMBLY  
P/N 538121



Black  
White  
Green

