

MODEL 10-12



Winch and Hoist

OPERATION and MAINTENANCE OF

ALL 12 VOLT DC WINCHES

2500 LB. Double Line Lift Capacity

READ THIS BEFORE OPERATING UNIT

INSTALLATION:

Mount on clean, flat surface. Bolt down with 6- $\frac{1}{2}$ " 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.

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 $\frac{1}{4}$ " cable for most jobs up to 2500 lb. 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 hold in flange. Push cable through hole and secure under cable clamp. Do not tighten cable clamp screws so that they 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 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 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 a 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 free. 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 power cord should be made to detect any damage or cuts which would require replacement.

The gear case is filled at the factory with one pint of Shell Omala #68 weight oil. Check at least every 6 months and, if necessary, fill to oil level plug with a comparable weight, non-detergent oil. The oil relief valve, P/N 286260, allows for release of oil pressure to prevent damage to seals.

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 check the motor, remove the brush cover and inspect brushes to see that they seat on the commutator and are not cracked or badly worn. Replace as needed. Brush springs should provide a good tension to help keep brushes seated.

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 bearings for bind.

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

WARRANTY:

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. Warranty on component parts is determined by the manufacturers of those components. This warranty is void if the Winch is altered or parts are 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 the manufacturers liability.

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

MY-TE DC STANDARD 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	052510	Main Shaft — Long-w/Clutch	1	74	287030	Lockwasher, Int. Str. #10	1
*	052520	Main Shaft — Short-w/Clutch (20-12)	1	75	287040	Lockwasher, Split 1/4	20
3	058010	Worm Shaft Assy. w/Spacer/Pin	1	76	287050	Lockwasher, Solenoid Mtg. Int. 1/4	12
4	058020	Worm Shaft Assy. w/Spacer/Pin, HC	1	77	287060	Lockwasher, Flangette 3/16	5
*	068060	Drum Assy., Short w/Hdw. (20-12)	1	78	287070	Lockwasher, W.G.H. 3/8	3
6	068140	Drum Assy., Cast w/Hdw.	1	79	311260	Spring Pin, Clutch Shifter	1
7	081030	Adapter, Motor	1	80	311270	Spring Pin, Spur Gear Hsg.	2
8	081510	Cap, Worm Gear Housing	1	81	311280	Spring Pin, Worm Spacer	1
9	082010	Cover, Worm Gear Housing	1	82	321080	Spring, Cable Ten. Bar L.H.	1
10	088010	Cover, Spur Gear Hsg. w/Bearing	1	83	321090	Spring, Cable Ten. Bar R.H.	1
11	088030	Cover, Spur Gear Hsg. w/Bearing, HC	1	84	321110	Spring, Clutch Shifter	1
12	088050	Housing, Spur Gear, w/Bearing	1	85	321150	Snap Ring, Main Shaft	1
13	088090	Housing, Worm Gear, w/Studs	1	86	321520	Snap Ring, Worm Shaft	2
14	112010	Spur Gear	1	87	321530	Snap Ring, Worm Gear Hsg.	4
15	113010	Worm	1	88	351020	Key, Worm Shaft	2
16	118010	Idler Gear Assy. w/Shaft	1	89	351030	Key, Main Shaft	4
17	118081	Pinion Assy. w/S.S.	1	90	351050	Key, Pinion	1
18	118150	Worm Gear Assy.	1	91	418143	Motor Assy., Perm. Mag. w/Mtg. Plate	1
19	143750	Block, Cable Tensioner	2	94	512020	Panel, Plain	1
*	144020	Tensioner Bar Only - Std.	1	97	528010	Ctrl. Box Assy. w/Brkt./Pln.Pln.	1
*	148030	Frame Assy., Short (20-12)	1	95	528251	Panel Assy. w/Comp. w/o Sw.	1
21	148170	Frame Assy., Long	1	99	538121	Hand Sw. Assy., 3W-10' w/Term	1
22	148360	Tensioner Bar Assy., Std. w/Hdw.	1	100	542030	Cable, Long Battery w/Termis.	1
23	171250	Spacer, Idler Gear	1	101	542040	Cable, Short Battery w/Termis.	5
24	171270	Spacer, Worm Gear 1"x1.140	1	102	542510	Wire, Solenoid Jumper	2
25	171280	Spacer, Worm Gear Hsg-Thick	1	103	552010	Grommet, Rubber 4 Hole (12V)	1
26	181510	Clutch, Machined	1	104	552580	Insulator, Flat Fiber Washer	2
27	181520	Spool, Clutch Shifter	1	105	552590	Insulator, Fiber Bushing	1
28	181580	Clutch Shaft	1	106	561512	Solenoid, 12V Tested w/Hdw.	1
29	181590	Bracket, Clutch Shifter	1	114	531140	Push Button, 5T	2
30	181620	Locking Tab, Clutch	1	115	532550	Guard, Push Button	2
31	182010	Brace, Control Box	1	116	184060	Solenoid Angled Buss Bar	2
32	184030	Buss Bar, Solenoid	2	117	184070	Double End Buss Bar	1
33	188080	Shifter Handle Assy.	1	*	621010	Nameplate	1
34	211010	Bearing Main Shaft	2	*	621020	Decal, Oil Level	1
35	211060	Needle Bearing	2	*	621230	Decal, Clutch Operation	1
36	211530	Bushing, Bronze (Hand Crank)	1	*	621250	Decal, Drum Warning	1
37	212010	Thrust Washer	2	*	621260	Decal, Capacity & Serial Number	1
38	218010	Bearing Assy., Flangette	1	*	621270	Decal, Safety	1

* Not Shown

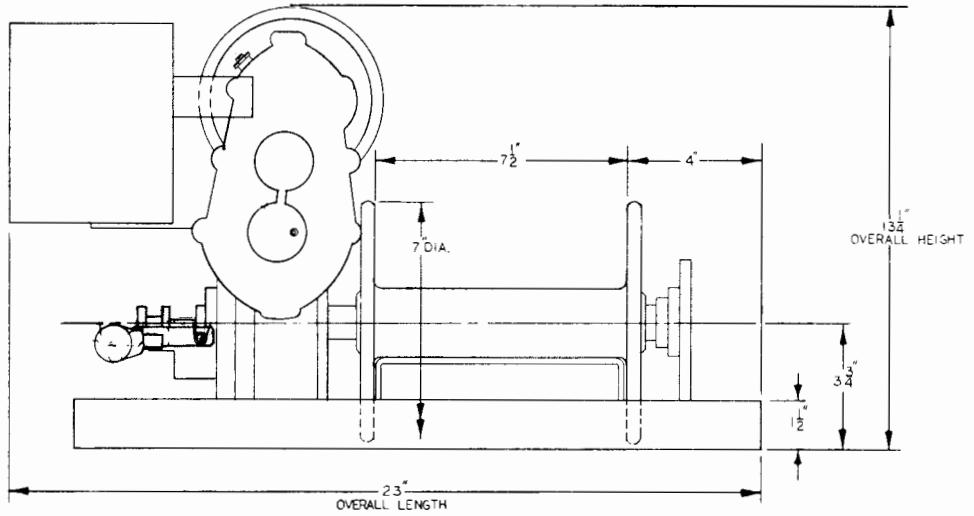
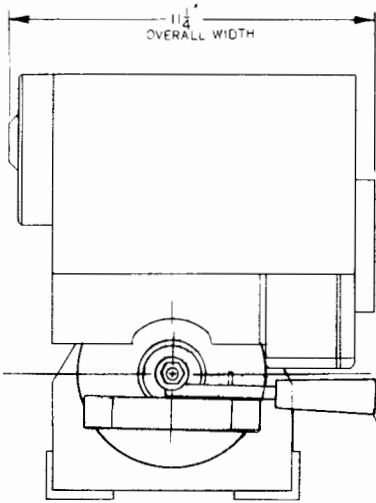
MINIMUM ORDER — \$10.00

Dimension Views and Wiring Diagrams

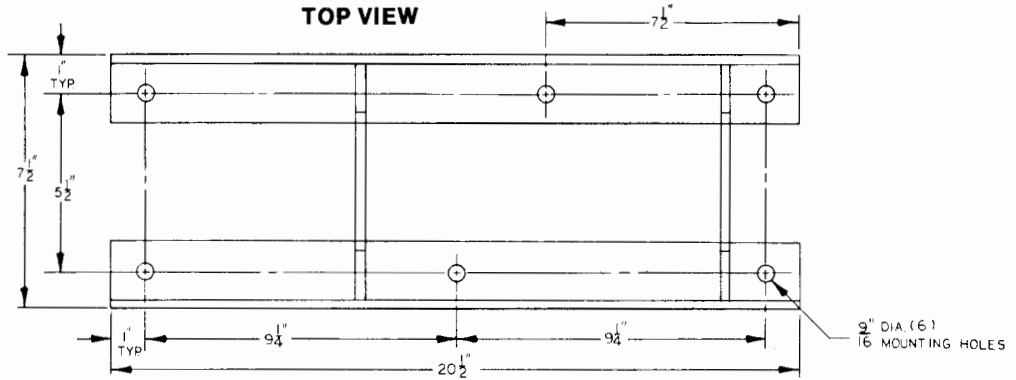
Serial Number _____

SIDE VIEW

FRONT VIEW

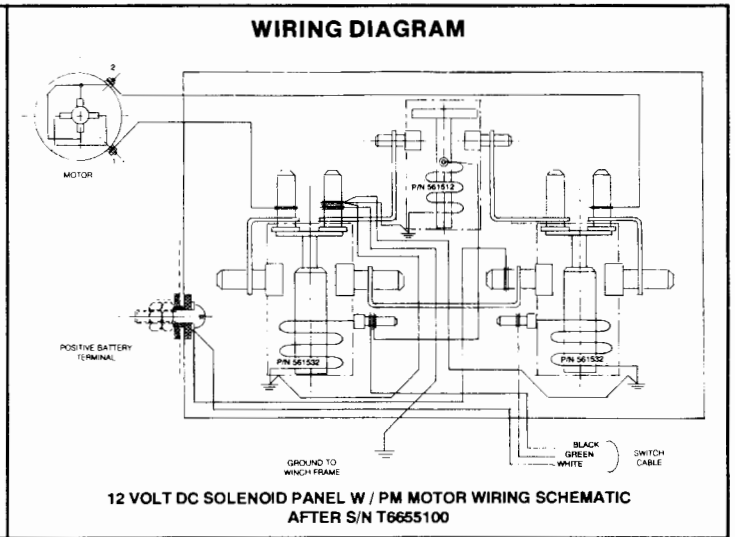
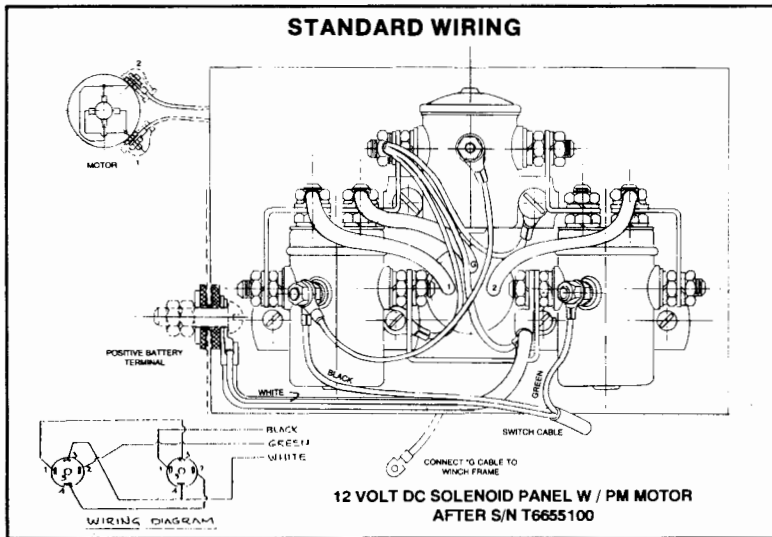


TOP VIEW



STANDARD WIRING

WIRING DIAGRAM



MANUFACTURED BY

FORM 10-12/-1096

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