

MODEL 6200995 ELECTRIC WINCH AND BOOM KIT

INSTALLATION AND OPERATORS MANUAL



WARNING

You must thoroughly read and understand this manual before operating the equipment, paying particular attention to the Warning & Safety instructions.

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This winch is designed to be installed on a model 555 Reel Grinder for lifting of reel type mower units ONLY. Any use other than this may cause personal injury and void the warranty.

To assure the quality and safety of your machine and to maintain the warranty, you **MUST** use original equipment manufactures replacement parts and have any repair work done by a qualified professional.

ALL operators of this equipment must be thoroughly trained **BEFORE** operating the equipment. Refer to the manual that came with your reel grinder for additional safety and operating instructions.

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Throughout this manual, the following safety symbols will be used to indicate the degree of certain hazards.



This symbol is used throughout this manual to call attention to the safety procedures.



The word **DANGER** indicates an immediate hazardous situation, which if not avoided, will result in death or serious injury.



The word **WARNING** indicates a potential hazardous situation, which if not avoided, could result in death or serious injury.



The word **CAUTION** preceded with a safety alert symbol indicates a potential hazardous situation which, if not avoided, may result in minor or moderate injury.

SAFETY INSTRUCTIONS

Read carefully before attempting to operate or service your winch! Failure to comply with instructions could result in personal injury and/or property damage!

WARNING

FOR YOUR OWN SAFETY AND THAT OF OTHERS, THIS EQUIPMENT MUST BE USED AS RECOMMENDED BY THE MANUFACTURER. FAILURE TO HEED THE FOLLOWING RECOMMENDATIONS COULD ENDANGER YOUR LIFE.

1. Maximum lifting capacity is 400 pounds (180 kg.) in single line winch operation. **DO NOT ATTEMPT TO MOVE LOADS GREATER THAN THESE RATINGS.**
2. **NEVER CARRY** personnel on the hook or the load.
3. **NEVER MOVE A LOAD** with this winch until all personnel are clear.
4. **NEVER HOOK THE WIRE ROPE BACK ON ITSELF. USE THE SPREADER BAR ASSEMBLY.**
Hooking the wire rope back on itself creates an unacceptable strain on the wire rope.
5. **DO NOT ALLOW** unqualified personnel to operate this unit.
6. **KEEP CLEAR OF WINCH WIRE ROPE AND HOOK WHEN OPERATING WINCH. DO NOT ATTEMPT** to guide wire rope by hand as it rewinds.
7. **DO NOT** use the wire rope as a ground for welding.
8. **NEVER TOUCH** a welding electrode to the wire rope.
9. **WHEN SPREADER BAR ASSEMBLY IS USED** be sure it is properly seated in the saddle of the hook.
10. **AVOID** excessive inching and quick reversals of load.
11. **BE SURE** that the power supply is disconnected before performing maintenance and repair procedures.
12. **DO NOT OPERATE** this unit if it is not functioning properly.
13. **MAINTAIN A MINIMUM OF 4 TURNS OF WIRE ROPE** around the winch drum to prevent the wire rope from pulling off under load.
14. **KEEP WINCHING AREA CLEAR.** Do not allow people to remain in the winching area. Do not stand between the winch and load.
15. **INSPECT WIRE ROPE FREQUENTLY.** A frayed wire rope with broken strands should be replaced immediately. Never replace the wire rope with rope of any kind or with wire rope other than the type and size specified in the repair parts section of this manual.
16. **USE HEAVY LEATHER GLOVES** when handling the wire rope to eliminate the possibility of cuts or scratches from burrs and slivers from broken strands.
17. **ALLOW WINCH TO COOL DOWN FREQUENTLY,** as the motor is designed for intermittent duty only. When the metal motor housing is hot to touch, it is time to let the winch cool down. (Electric winch only).
18. **DO NOT OPERATE WINCH WHEN UNDER THE INFLUENCE OF DRUGS, ALCOHOL, OR MEDICATION.**
19. **DO NOT USE WINCH TO HOLD LOADS IN PLACE.** Use other means of securing loads, such as tie down straps.
20. **USE ONLY FACTORY APPROVED SWITCHES, REMOTE CONTROLS AND ACCESSORIES.** Use of non-factory approved components may cause injury or property damage and could void your warranty. (Electric winch only).
21. **DO NOT MACHINE OR WELD ANY PART OF THE WINCH.** Such alterations may weaken the structural integrity of the winch and could void your warranty.
22. **DO NOT OPERATE THIS WINCH OUT DOORS OR IN A CORROSIVE OR EXPLOSIVE ENVIRONMENT.**

INSTALLATION

These instructions are designed for technicians who have the necessary knowledge and skills to reliably test and repair the Neary Technologies Model 555 Reel Grinder. For those without that background, service can be arranged through your local distributor. **READ ALL INSTRUCTIONS BEFORE STARTING.**

INSTALLING WINCH AND BOOM

To install the winch and boom to the right rear side of the grinder, first attach the Boom Socket Weldment with the (4) B371611 (3/8-16 x 1" Socket Head Screws), (4) K370001 (3/8" flat washers), and (4) K371501 (3/8" lock washers) from the Bag Assembly. See FIG. 1 & 2, and also page 8.

Install the Electric Winch Assembly onto the Boom with (2) B371211 (3/8-16 x 3/4 Socket Head Cap Screw), and (2) J377100 (3/8-16 Lock Nut). Note the motor position in FIG. 1.

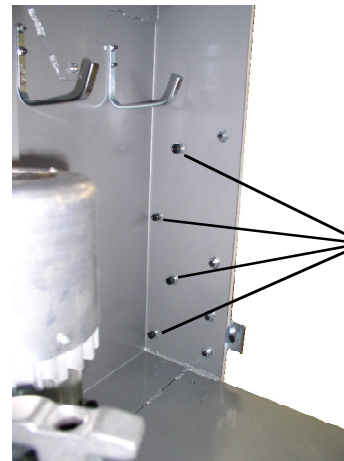
Plug the winch into a 115 VAC outlet and feed out approximately five feet of cable. Pass the Hook and Cable from the winch through the front pulley bracket on the boom. Install the Pulley (3709795) onto the front boom bracket with B372801 (3/8-16 x 1-3/4 Hex Head Cap Screw) and J377100 (3/8-16 Locknut). See page 8.

Install the Boom Assembly into the Boom Socket Weldment.

Replace the rear door lift handle (6329174) on the boom side of the rear slide up guard door with the included Short Handle (3706117) using the existing (2) 1/4-20 x 1/2 Button Head Socket Cap Screws (B250816), and (2) 1/4-20 Nylon Locknuts (J257100) that were used to fasten the old handle. See FIG. 3.



FIG. 1



FASTENERS TO ATTACH THE BOOM HOUSING WELDMENT

FIG. 2

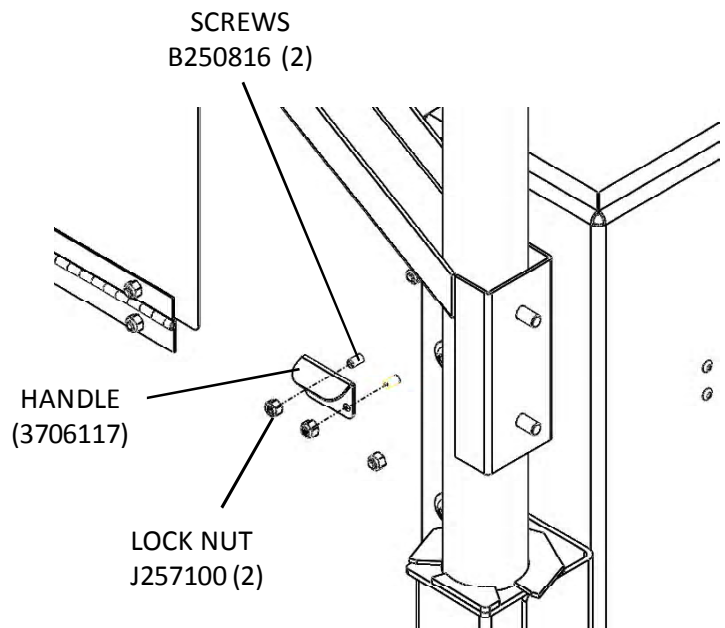


FIG. 3

INSTALLATION (Continued)

RECEPTACLE CORD INSTALLATION

⚠ WARNING

REMOVE POWER TO THE MACHINE BY UNPLUGGING THE UNIT. FAILURE TO REMOVE POWER COULD RESULT IN INJURY OR DEATH AND MAY RESULT IN DAMAGE TO THE MACHINE.

1. Remove both the left and right side cover panels, electrical cover panel, and rear access panel. Route the receptacle cord first through the .625 hole at the lower left rear corner of the main cabinet. The plug end of the cord will be on the outside of the machine. Secure the cord with strain relief 3707273 approximately 12" from the end of the plug. See FIG. 4.

2. Next, route the cord through the .625 hole located on the left hand side of the machine, and again secure with strain relief 3707273. See FIG. 4.

3. Run the Receptacle Cord across the inside top of the cabinet base, securing with (2) 3707224 Cable Tie Mounts and (2) 3707225 Cable Ties. See FIG. 5. Make sure the cord will not interfere with the movable rear roller clamp.

4. Route the cord through the .625 hole located on the right side of the machine above the grinding motor and secure with strain relief 3707273. See FIG. 6.

5. Remove the .875 Hole Plug from inside of the canopy as shown in FIG. 6 and install Strain Relief 3707009. Put the Receptacle Cord through the strain relief and tighten. See step 7 on the following page for wire connections.

6. Plug the winch into the installed cord. Use cable tie 3708906 (1), cable tie mount 3707224 (1), and cable tie 3707225 (1) to secure the cord to boom and boom housing as shown in figure 7.

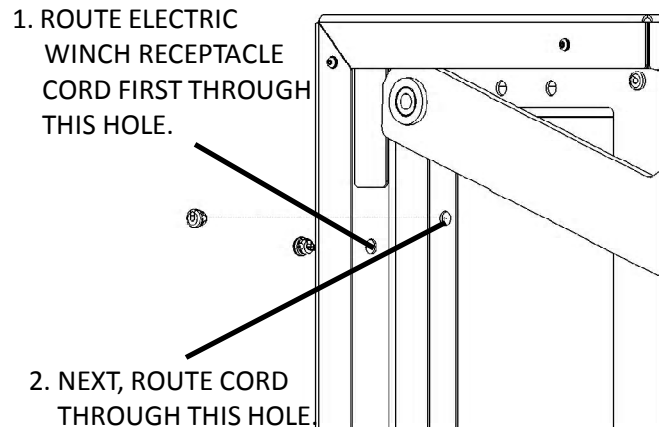


FIG. 4

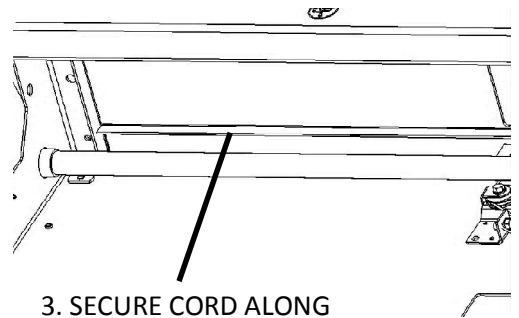


FIG. 5

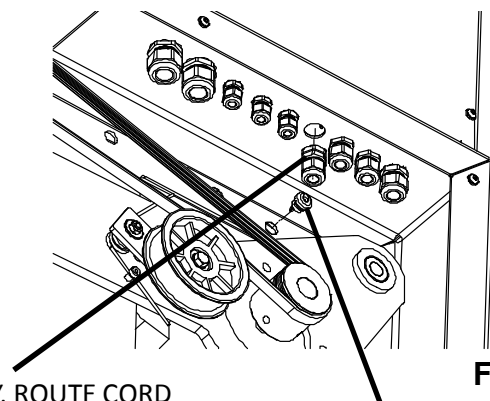


FIG. 6

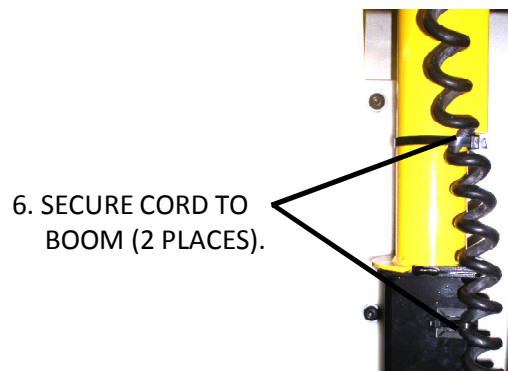


FIG. 7

INSTALLATION (Continued)

RECEPTACLE CORD INSTALLATION

(continued)

WARNING

BEFORE ATTEMPTING TO CONNECT ANY WIRES VERIFY THAT POWER HAS BEEN REMOVED FROM THE MACHINE. FAILURE TO REMOVE POWER COULD RESULT IN INJURY OR DEATH AND MAY RESULT IN DAMAGE TO THE MACHINE.

7. Connect the cord as illustrated in figure 8.

Brown Wire to Terminal TBG-6
Light Blue Wire to Terminal TBW-13
Green w/Yellow Stripe Wire to Terminal GROUND.

8. Reinstall all access panels. Reconnect the power to the machine. Final test the operation of the electric boom.

Note: the boom will not function if the machine is in E-Stop. To reset the E-stop pull up on the Red Stop button and press the reset button on the control panel.

TERMINAL BLOCKS:

To insert or remove a wire from the terminal block insert a small screw driver into the square hole. Then insert or remove wire from the round hole. Remove screwdriver to lock the wire in place.

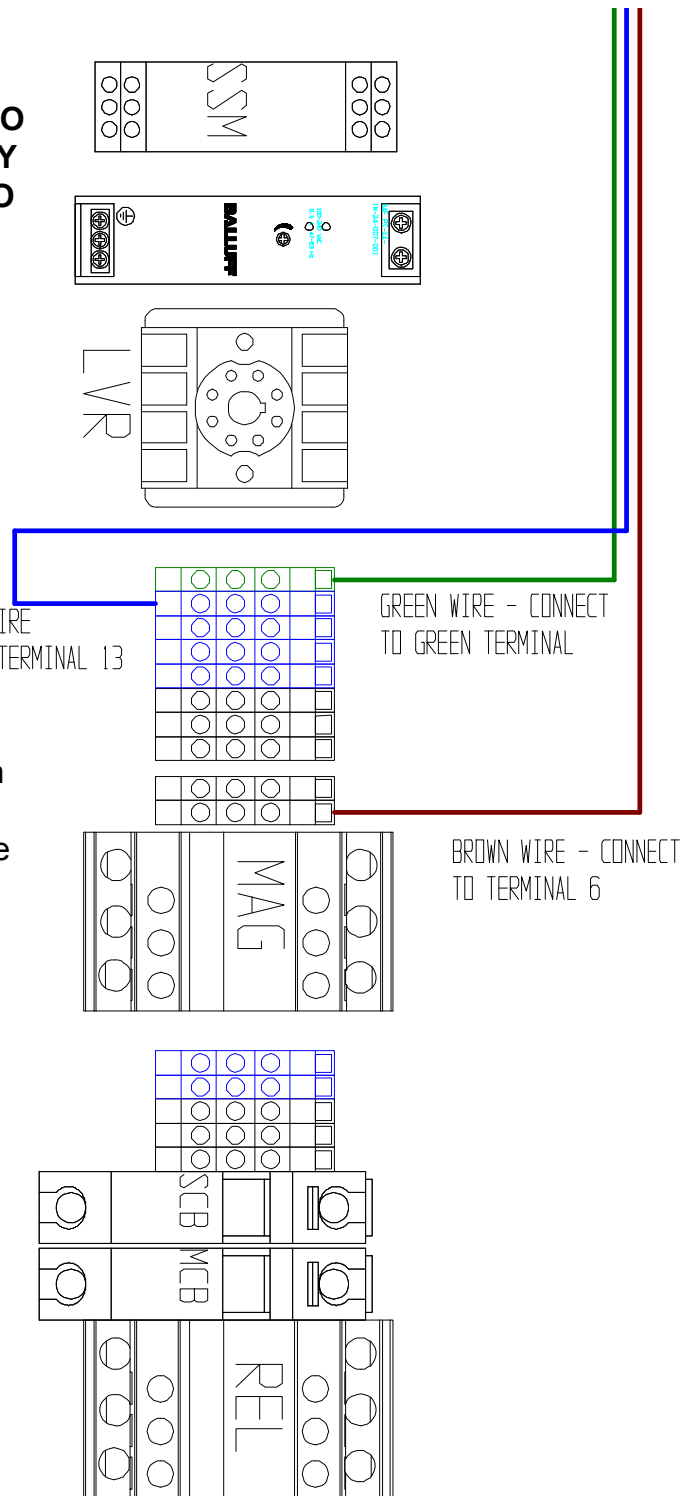
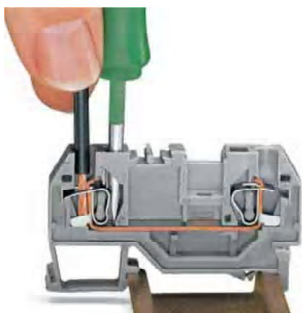


FIG. 8

OPERATION

LIFTING THE REEL INTO POSITION

Position the reel at the rear of the grinder on the floor so that the front of the mower faces in the same direction as the front of the machine. See FIG. 9. Hook the winch spreader bar onto the reel. The clamps on the spreader bar should be spaced evenly along the mower, so they do not slide as the mower is being raised. Stand to the side of the mowing unit and at arms length, winch the mowing unit to height. Then guide it into position.

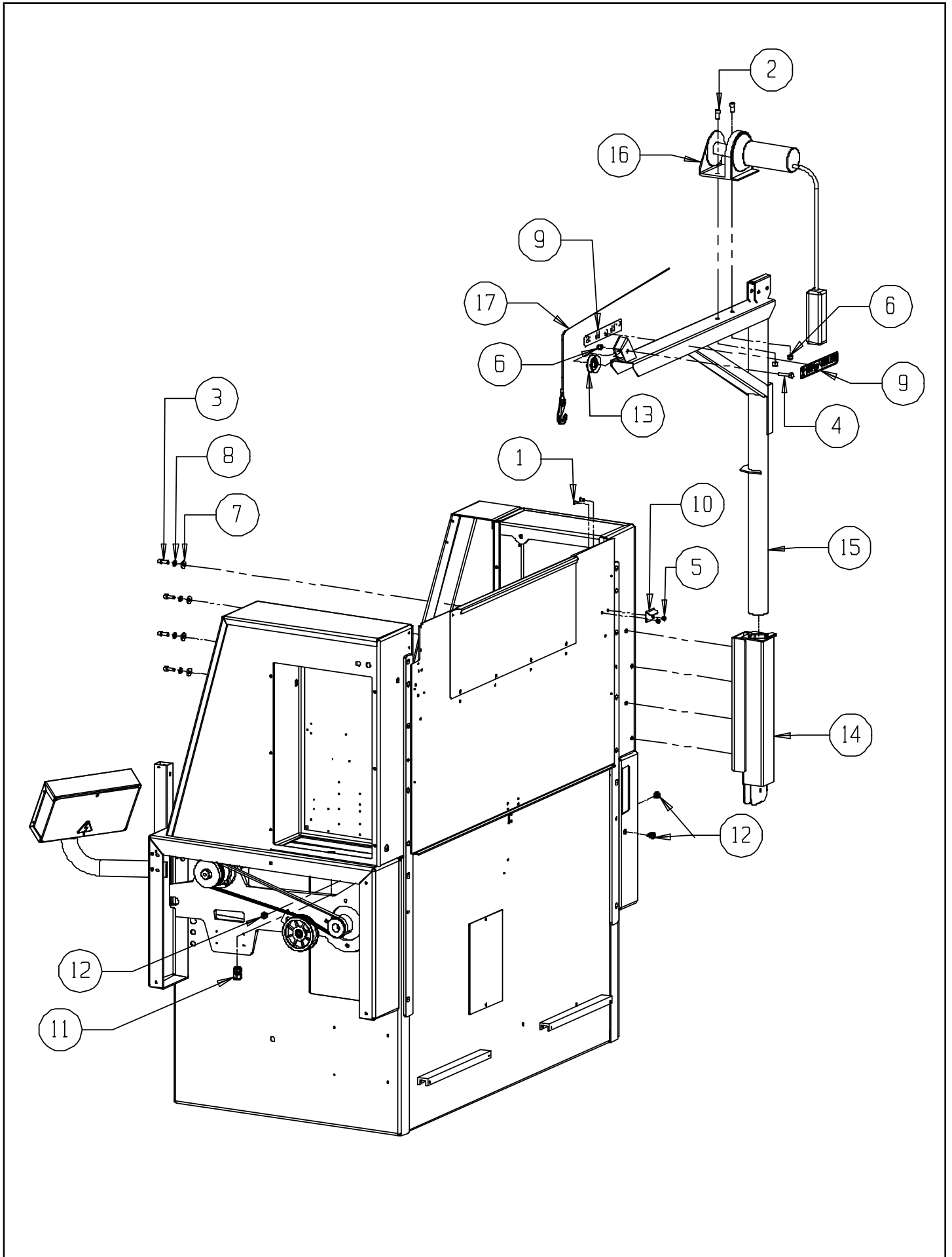


FIG. 9

WARNING

THE OPERATOR SHOULD BE POSITIONED AWAY FROM THE REEL. DO NOT STAND UNDERNEATH THE REEL AS IT IS BEING RAISED. GUIDE REEL AT ARMS LENGTH.

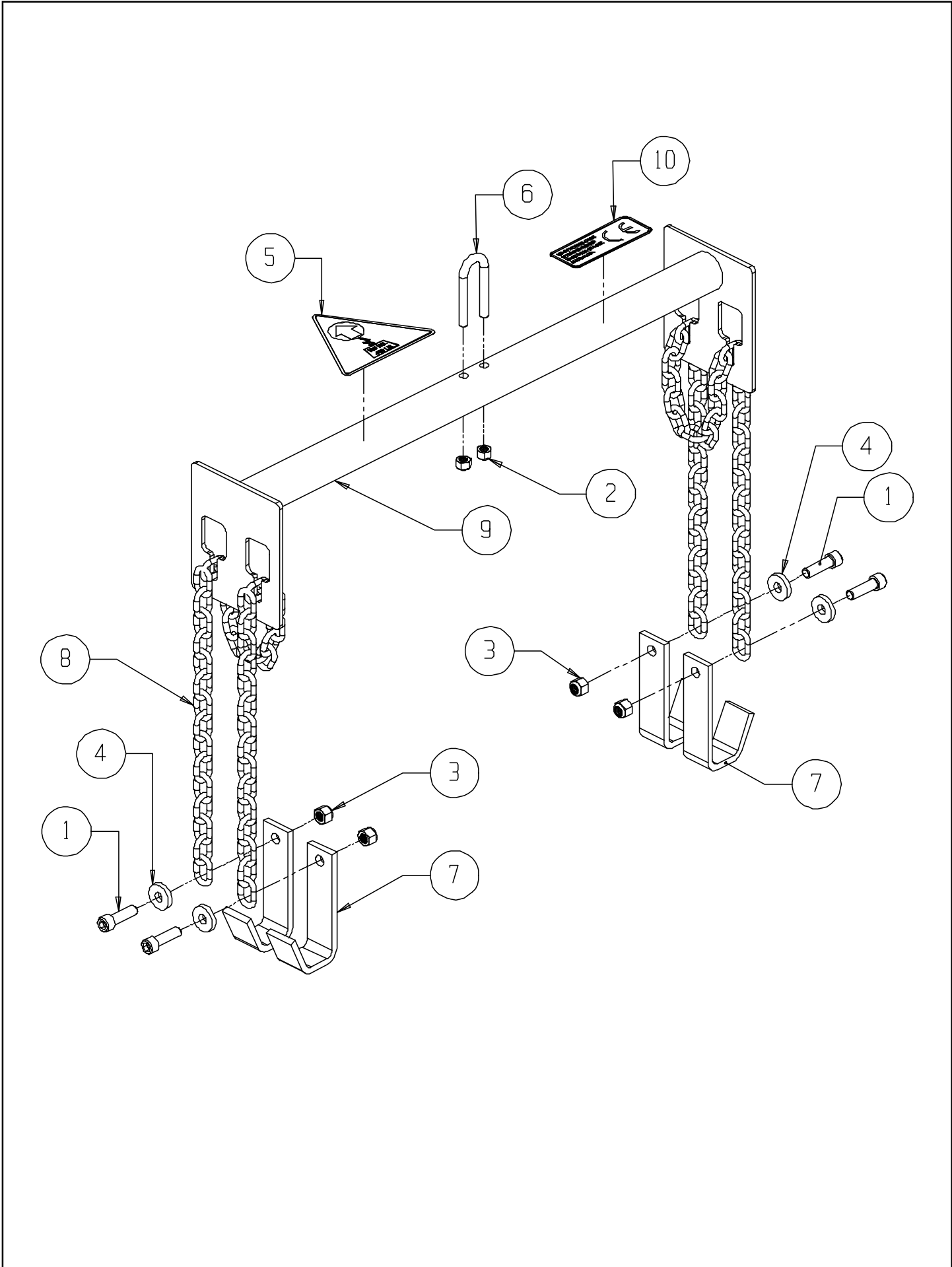
EXPLODED VIEW



PARTS LIST

<u>DIAGRAM NUMBER</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>
1	B250816	Button Head Socket Cap Screw 1/4-20 x 1/2" Long
2	B371211	Socket Head Cap Screw 3/8-16 x 3/4" Long
3	B371611	Socket Head Cap Screw 3/8-16 x 1" Long
4	B372801	Hex Head Cap Screw 3/8-16 x 1 3/4 Long
5	J257100	1/4-20 Nylon Locknut
6	J377100	3/8-16 Nylon Locknut
7	K370001	3/8 Flat Washer
8	K371501	3/8 Split Lock Washer
9	3706111	Boom Capacity Decal
10	3706117	Door Handle (Short)
11	3707009	Liquid Tight Strain Relief .27-.47 Wire
12	3707273	Strain Relief .33-.36 Wire .625 Hole
13	3709795	Pulley
14	55484	Boom Housing Weldment
15	6059527	Boom Weldment
16	6509546	Electric Winch Assembly
17	6509594	Hook and Cable Assembly
.....	3707224	Cable Tie Mount (Not Shown)
.....	3707225	Cable Tie 6.5" Long (Not Shown)
.....	3708906	Cable Tie 14" Long (Not Shown)
.....	6329096	Cord - Electric Winch Receptacle (Not Shown)

EXPLODED VIEW



PARTS LIST

<u>DIAGRAM NUMBER</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>
1	B372011	Socket Head Cap Screw 3/8-16 x 1-1/4 Long
2	J317100	5/16-18 Nylon Locknut Full
3	J377100	3/8-16 Nylon Locknut Full
4	3599028	Flat Washer .375 x 1.0 x .188 Thick
5	3708456	Load Capacity Warning Decal
6	3709316	U-Bolt 5/16-18 x 3
7	6009102	Grab Hook
8	6329061	Chain 44.6"
9	6509590	Spreader Bar Weldment
10	80432	Spreader Bar Decal