FOLEY COMPANY

MODEL 6539502 ELECTRIC WINCH AND BOOM KIT

INSTALLATION AND OPERATOR'S MANUAL

⚠ WARNING

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

TABLE OF CONTENTS

This boom is designed to be installed on the ACCU-Pro 633 or ACCU-Master 653 Reel Mower Sharpener and used to lift reel type mowing units into the machine. Failure to install this correctly or any use other than that specified may cause personal injury and void the warranty. Be sure to read and understand all safety instructions in this manual and the manual for the machine in which this will be attached BEFORE using this equipment.

To assure the quality and safety of your equipment and to maintain the warranty, you MUST use original equipment manufacturer's 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.

READ AND UNDERSTAND AND LOCATE ALL DECALS ON THIS MACHINE BEFORE OPERATING THIS EQUIPMENT.

WINCH AND BOOM CAPACITY IS A MAXIMUM OF 180 KG OR 400 LBS. Exceeding the capacity may result in personal injury or damage to the equipment.

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

This symbol is used to indicate important information.

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

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

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

CAUTION **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

⚠ WARNING

CAREFULLY READ ALL THE INSTRUCTIONS BELOW BEFORE ATTEMPTING TO OPERATE OR SERVICE YOUR WINCH! FAILURE TO COMPLY WITH INSTRUCTIONS COULD RESULT IN PERSONAL INJURY, DEATH AND/OR PROPERTY DAMAGE!

1. Maximum lifting capacity is 400 pounds (180 kg.) in a single line operation. **DO NOT ATTEMPT TO MOVE LOADS GREATER THAN THE RATING.**

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 procedure.

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 the 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 (Electric Winch)**, 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

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 PARTS, SWITCHES, REMOTE CONTROLS AND ACCESSORIES**. Use of non-factory approved components may cause injury or property damage and could void your warranty.

21. **DO NOT MACHINE OR WELD ANY PART OF THE WINCH**. Such alterations may weaken the structural integrity of the winch and could result in personnel injury and void your warranty.

22. **DO NOT OPERATE THIS WINCH OUT DOORS OR IN A CORROSIVE OR EXPLOSIVE ENVIRONMENT.**

INSTALLING WINCH AND BOOM

This winch and boom assembly is designed to be installed to the left side of the machine as shown in FIG. 1.

FIG. 1

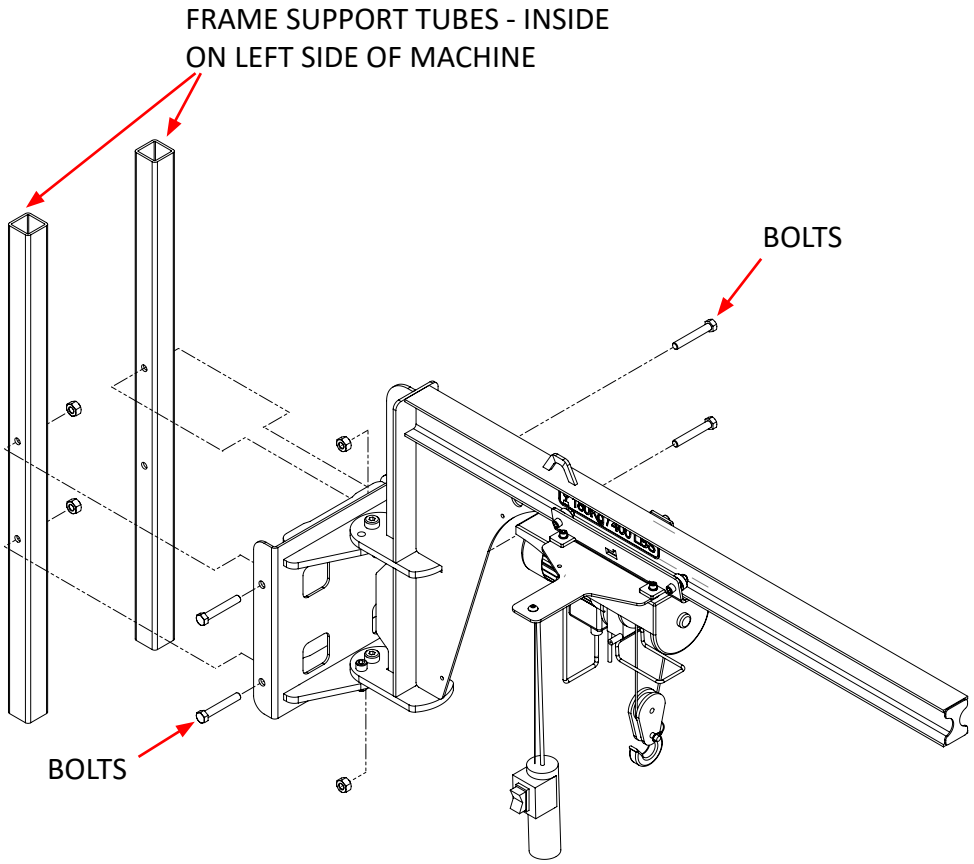


FIG. 2

STEPS FOR INSTALLATION OF WINCH AND BOOM

1. Remove the components from the box and lay them on the floor or workbench.

2. Install the boom support weldment (Item 15) to the upright frame tubes on the left side of the machine, using (4) ½ x 3 bolts and locknuts (Items 4 and 6). Tighten the bolts and nuts and torque to 40 ft.-lbs. (See FIG. 3).

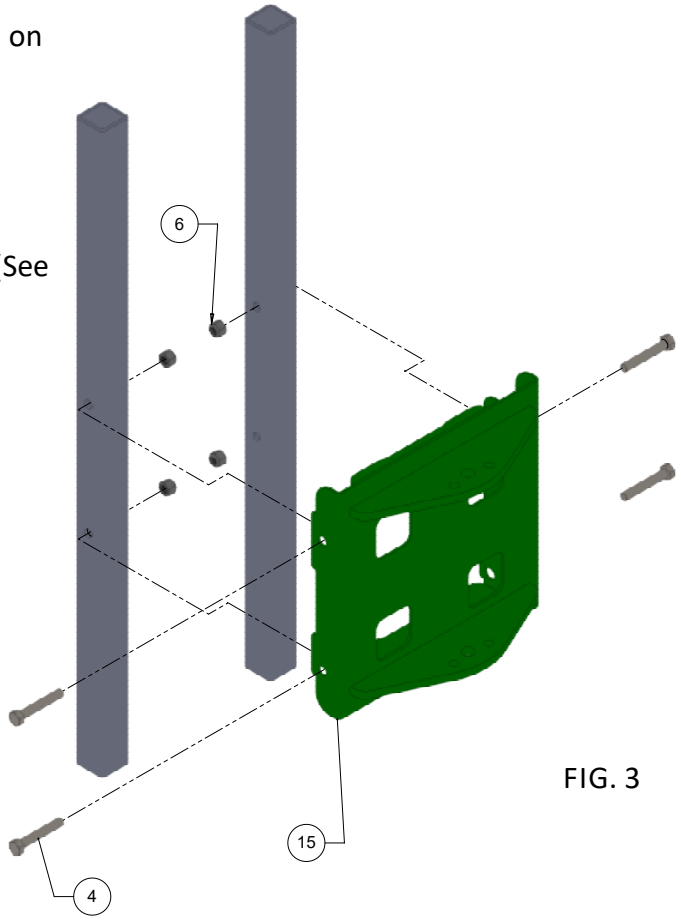


FIG. 3

3. Attach the boom weldment (Item 9) to the boom support weldment (Item 15), using (2) ¾ inch shoulder bolts (Item 10), thrust washers (Item 8) and 5/8 locknuts (Item 7). Apply Never-Seize to the thrust washers. Place the thrust washers between the ear on the boom weldment and the tab on the boom support weldment. Tighten the shoulder bolts, making sure the boom is free to swing. (FIG. 4).

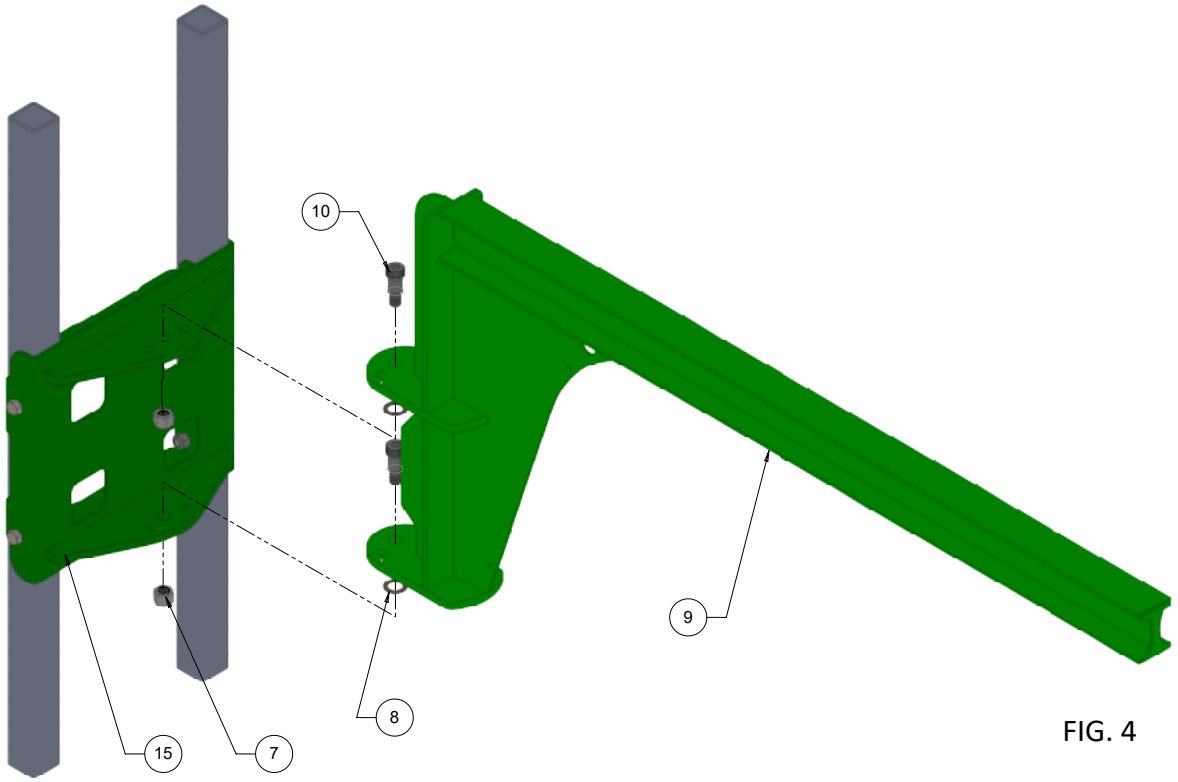


FIG. 4

4. Attach the trolley sub-assembly (Item 17) to the boom by sliding the trolley onto the end of the boom arm until the bearings go past the end cap on the boom. Lower the trolley sub-assembly until all (4) bearings are resting on the lower web of the I-beam. (FIG. 5).

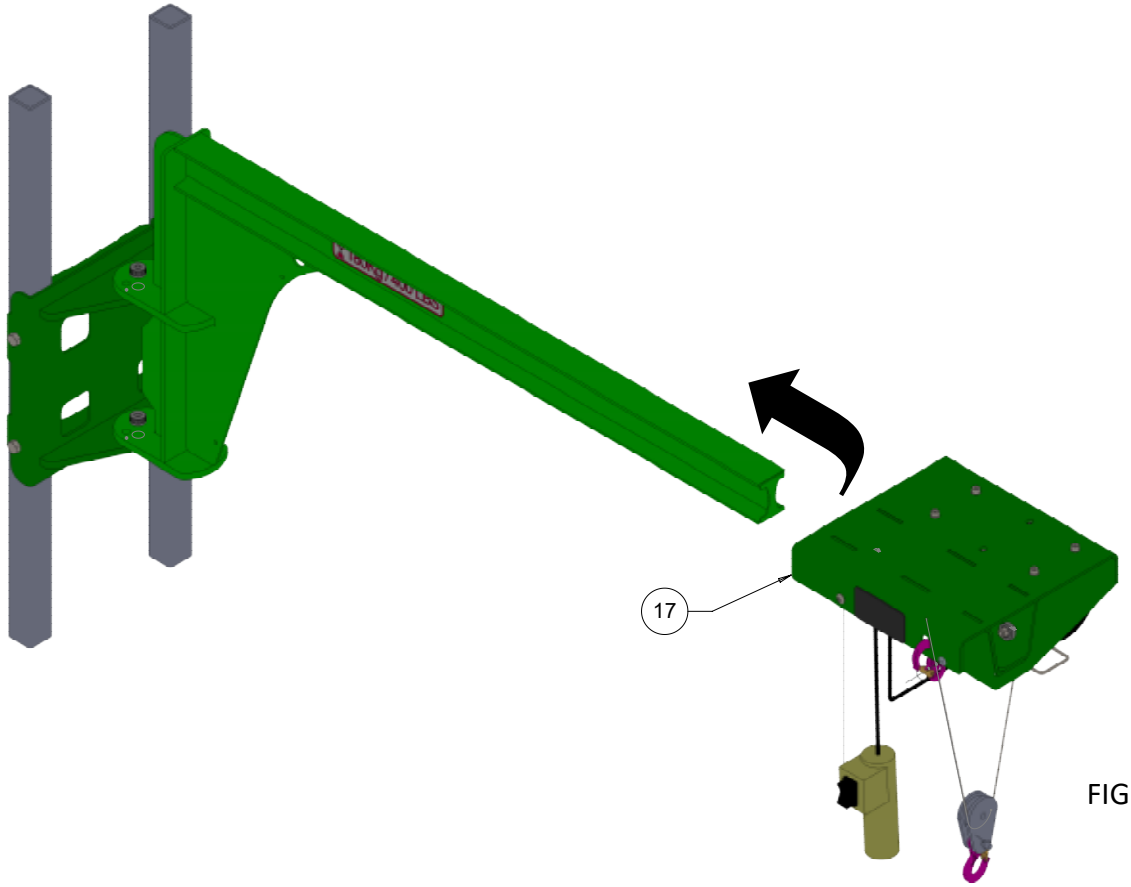


FIG. 5

5. Attach the bearing (Item 11) and (2) spacers (Item 12) to the roller bearing guide plate (Item 13) using a 3/8 x 1-1/2 socket head cap screw (Item 2) and a 3/8 jam locknut (Item 5) as shown in FIG. 6.

6. Attach the roller bearing assembly to the trolley sub-assembly using (2) 5/16 x ¾ button head cap screws (Item 1) in the rear location. Use Blue Loctite on the 5/16-inch button head cap screws. (FIG. 6).

   Adjust the bearing assembly so the bearing contacts the upper web of the I-beam. The bearing prevents the trolley assembly from twisting on the I-beam when lifting with the electric winch. Adjust the bearing assembly so the trolley assembly is free to roll in and out on the boom weldment.

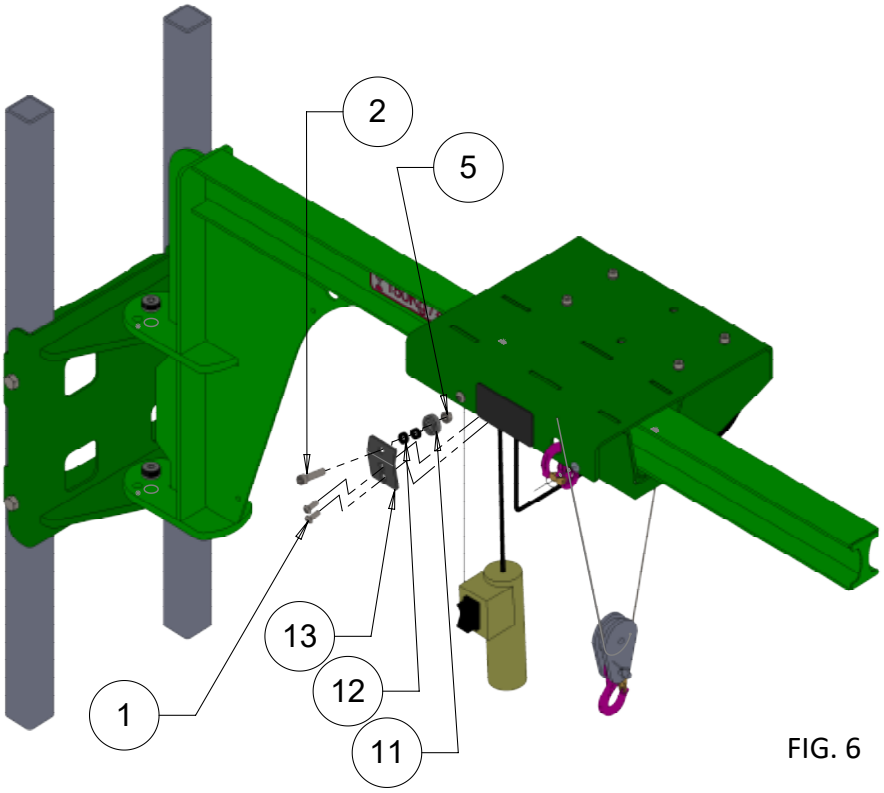


FIG. 6

7. Route the power cable back along the boom and down along the gusset on the boom weldment, making sure there is enough free cable for the trolley to move in and out without straining the cable. (See FIG.7). Lightly secure the cable to the boom weldment using (2) push in cable ties (item 22). Do not tighten the cable ties now. Continue to route the power cable along the support tube and down under the frame top cover plate over to the control box located on the right side of the machine. Be sure that the grinding carriage will not contact or pull on the cable when traversing left and right.

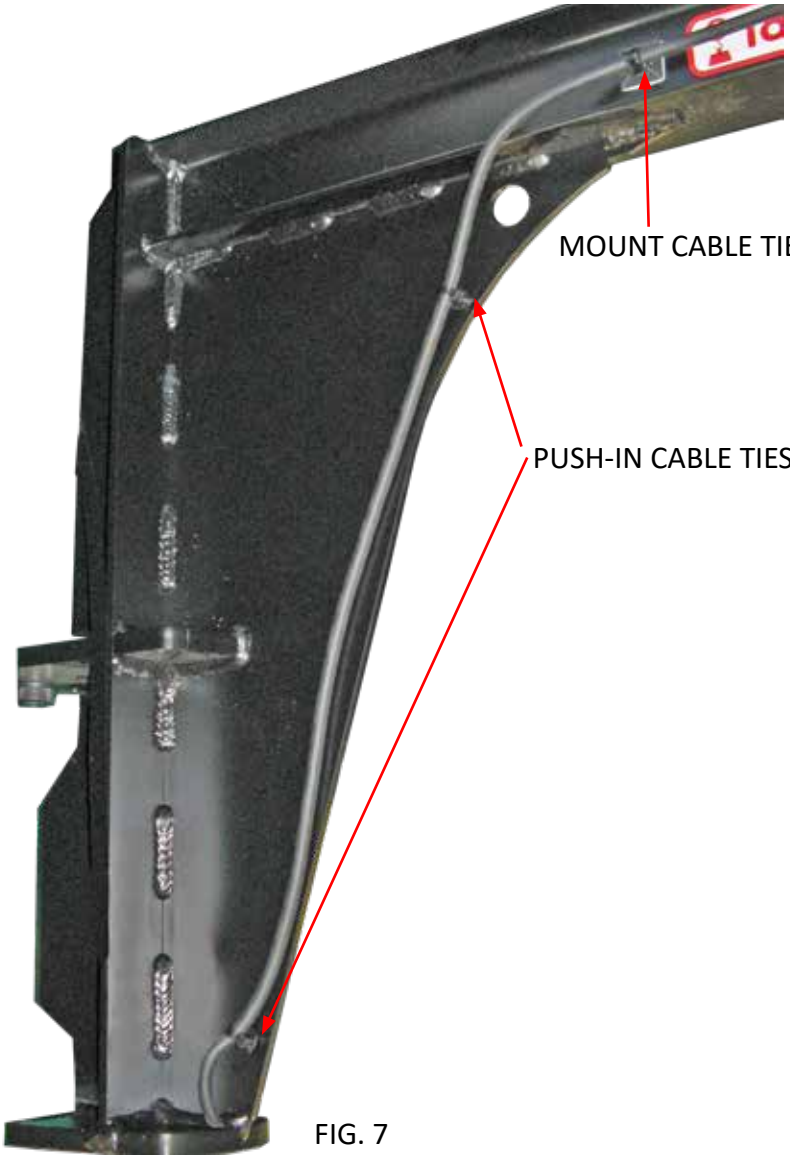


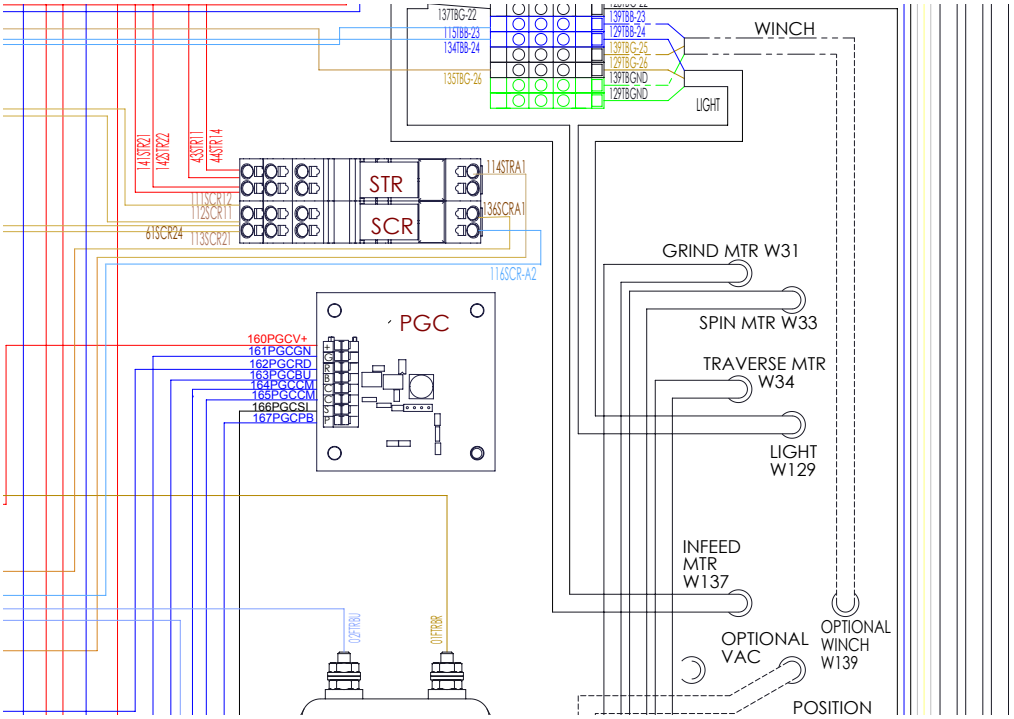
FIG. 7

FIG. 8

FIG. 9

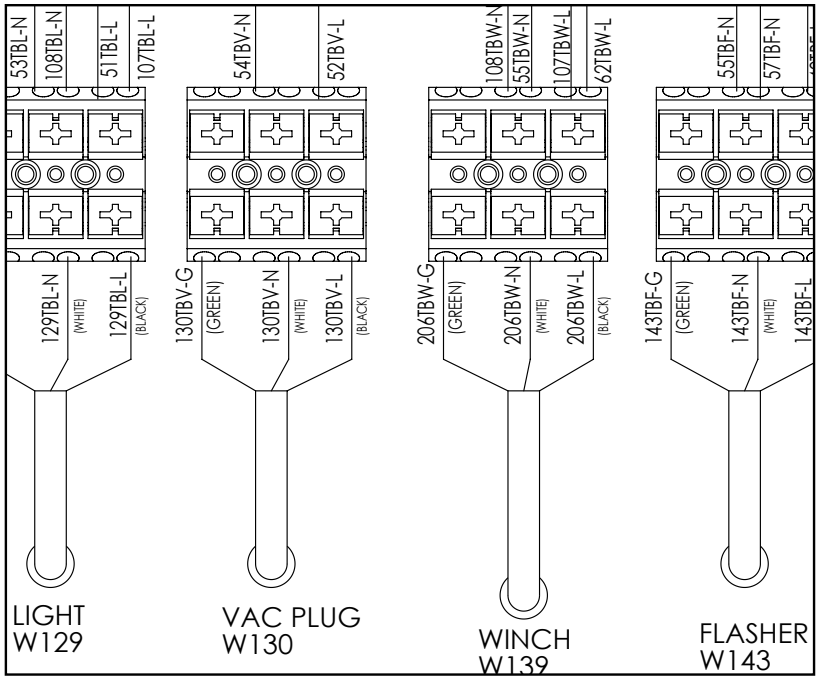
8. Unplug the machine to ensure that all power is removed. Open the control box on the right side. Remove one of the hole plugs in the bottom of the control panel and install the strain relief provided (see FIG. 9). Install the cord through the strain relief (Item 19) and connect the wires as shown for the 633 ACCU-Pro control (FIG. 10) and the ACCU-Touch 3 control (FIG. 11).

9. Plug in the machine and check that the control switch on the winch works correctly.
UP on the switch causes the winch pulley and hook assembly to go up. DOWN on the switch will cause the winch pulley and hook assembly to go down.



633 ACCU-PRO CONTROL (NOT ACCU-TOUCH 3) WIRING

FIG. 10



ACCU-TOUCH 3 CONTROL WIRING.

FIG. 11

10. Attach the spreader bar assembly (Item 16) to the winch by putting the winch hook assembly through the eye bolt as shown in FIG. 12.

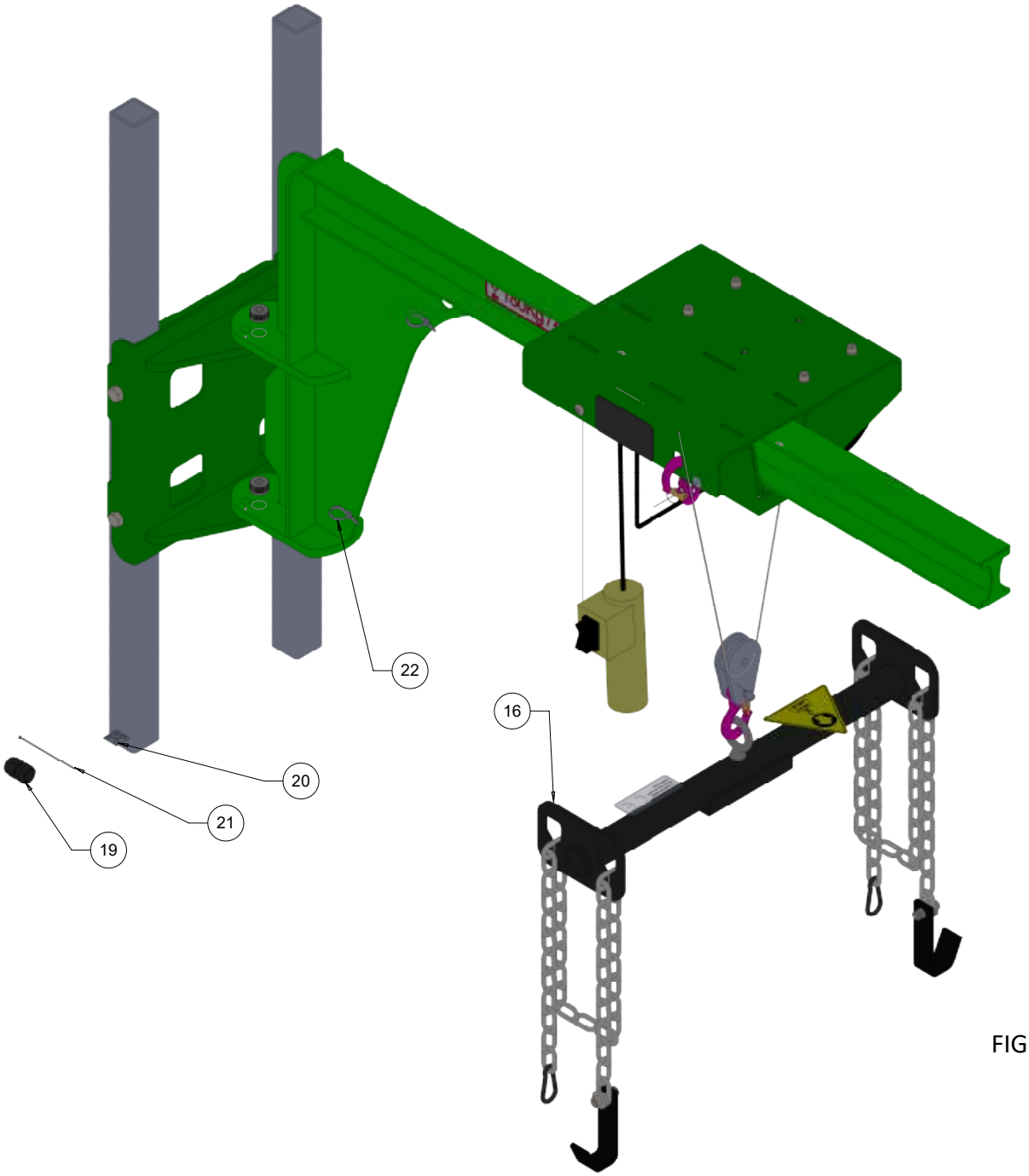


FIG. 12

LIFTING A REEL INTO POSITION

Position the reel in front of (or behind, if machine has a rear door) the grinder on the floor so the front of the mower faces in the same direction as the front of the machine. See FIG.13.

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. Press the UP button on the control to raise the cutting unit and then DOWN button to lower the cutting unit.

FIG. 13

⚠ 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.

To increase the lift height clearance, you can unfasten the Wire Hitch Pin and remove the Hook. You can then attach the Snatch Block directly to the Spreader Bar using the same Wire Hitch Pin.

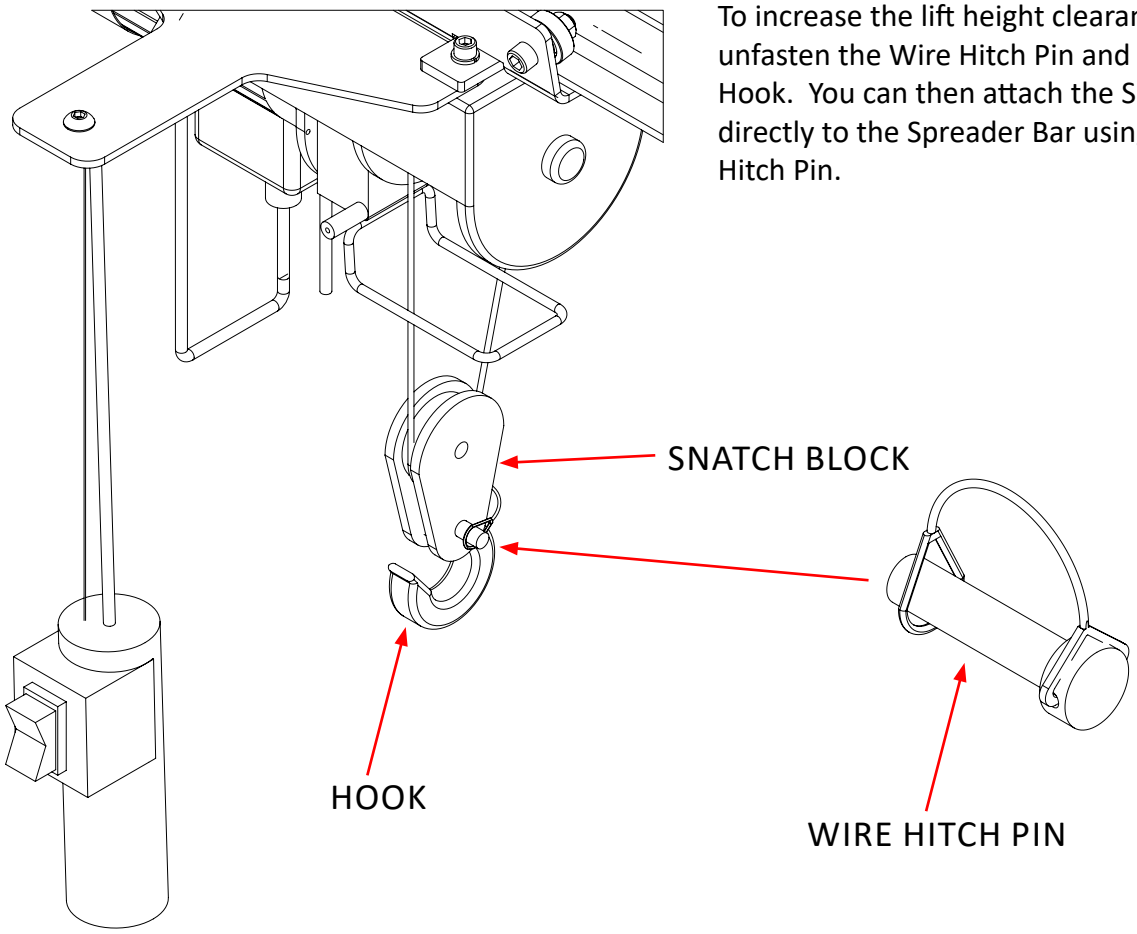


FIG. 14

ADJUSTING THE WINCH STOP TRIP LEVER

The Winch Stop Switch can be adjusted by loosening the two screws and sliding the spring trip lever forward or back. The Trip Lever should touch the Switch when the Snatch Block touches the Cable Guide. Retighten the screws after adjusting the Trip Lever.

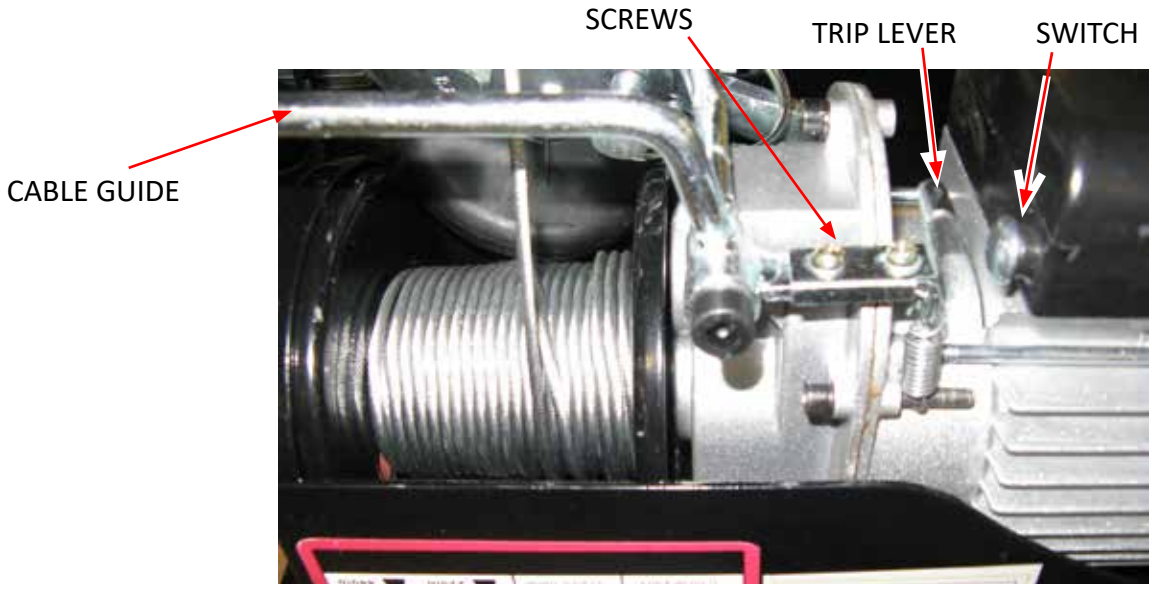


FIG. 15

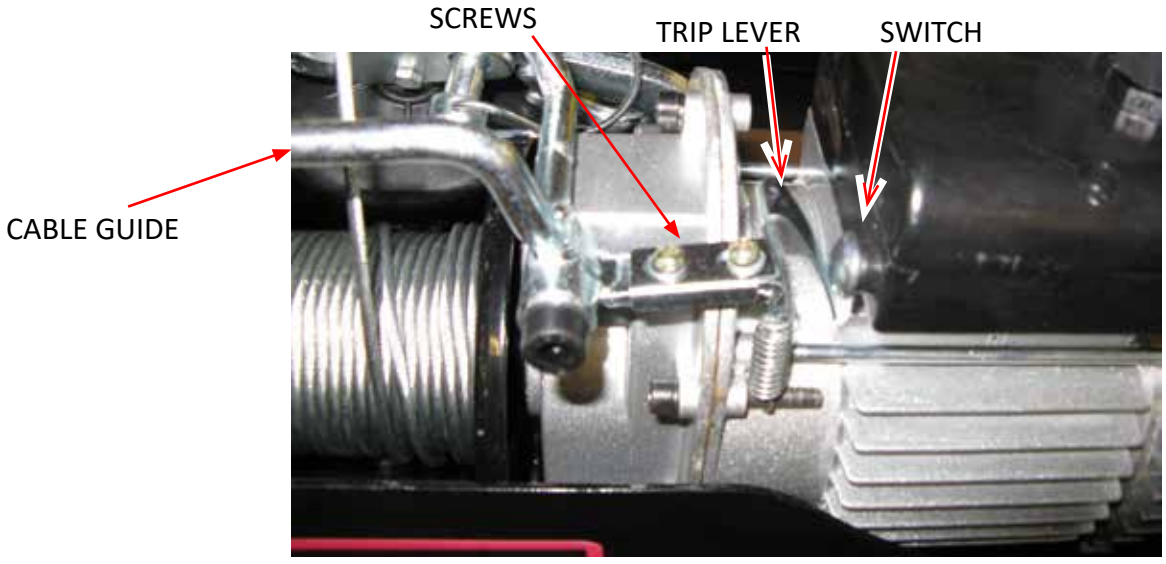
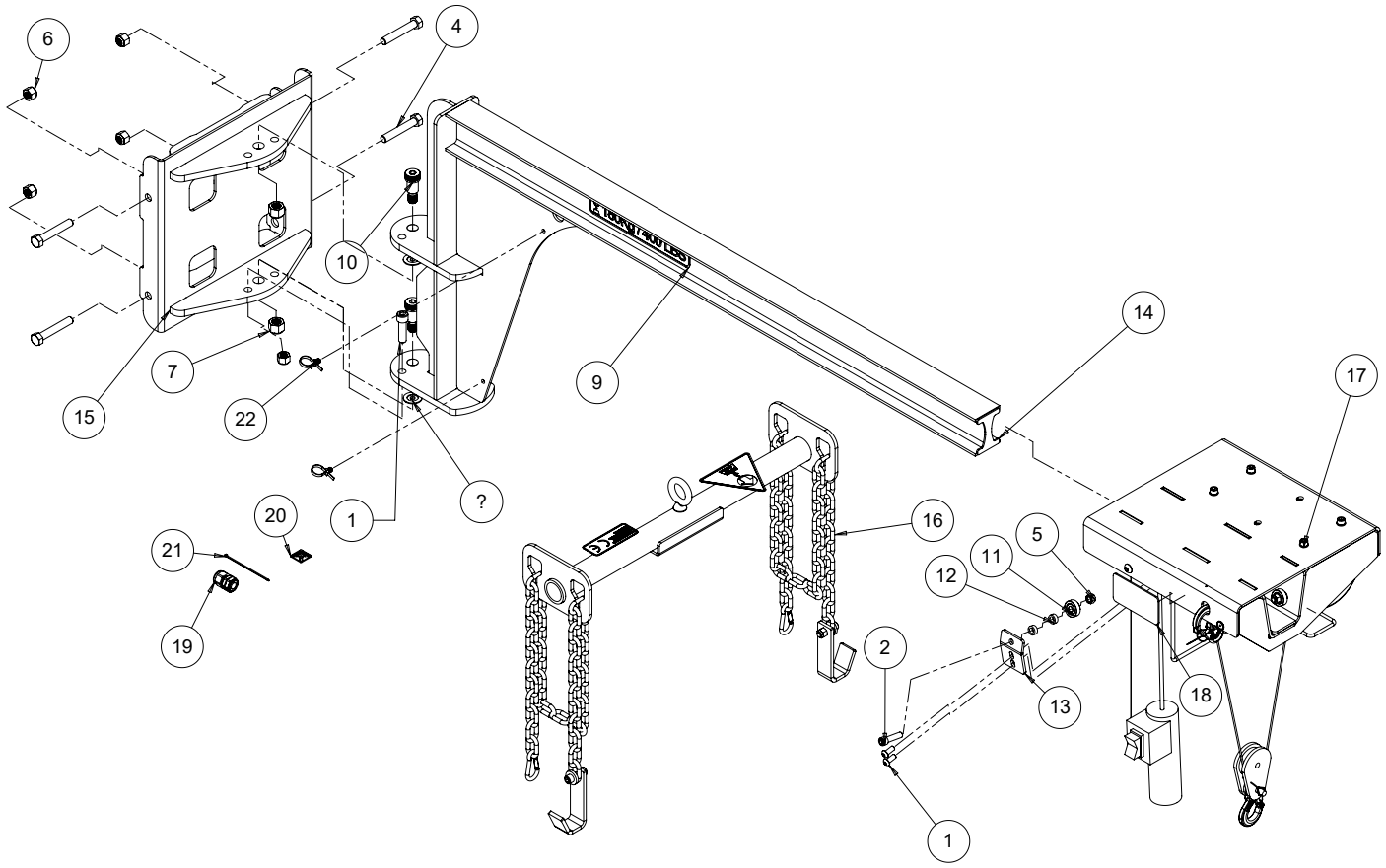


FIG. 16

EXPLODED VIEW



PARTS LIST

-ORIGINAL INSTRUCTIONS-

DIA. NO.	PART NUMBER	DESCRIPTION	QTY.
1	B311213	5/16-18 x 3/4 BUTTON HEAD SOCKET CAP SCREW	2
2	B372411	3/8-16 x 1-1/2 SOCKET HEAD CAP SCREW	1
3	B502811	1/2-13 x 1.75 x 1.75 SOCKET HEAD CAP SCREW	1
4	B504801	1/2-13 x 3 x 1.25 HEX HEAD CAP SCREW	4
5	J377000	LOCKNUT 3/8-16	1
6	J507100	1/2-13 LOCKNUT FULL NYLON INSERT	5
7	J627100	5/8-11 LOCKNUT FULL NYLON INSERT	2
8	80355	THRUST WASHER	2
9	3706111	CAP DECAL 400 LB/ 180 KG	2
10	3706201	SHOULDER BOLT .75 D x 1.0LG	2
11	3709257	BALL BEARING 1614ZZ	1
12	4609063	SPACER .385 x .625 x .25 L	2
13	6539112	ROLLER BEARING GUIDE PLATE	1
14	6539530	BOOM WELDMENT	1
15	6539501	BOOM SUPPORT WELDMENT	1
16	6539525	SPREADER BAR ASSEMBLY W/O DECALS	1
17	6539531	TROLLEY SUB ASSEMBLY	1
18	3706259	DECAL 400LBS	1
19	3707009	STRAIN RELIEF LIQ	1
20	3707224	MOUNT CABLE TIE	6
21	3707255	CABLE TIE 4 L x .10 W x .038 T	7
22	3706118	PUSH IN CABLE TIE	2

EXPLODED VIEW

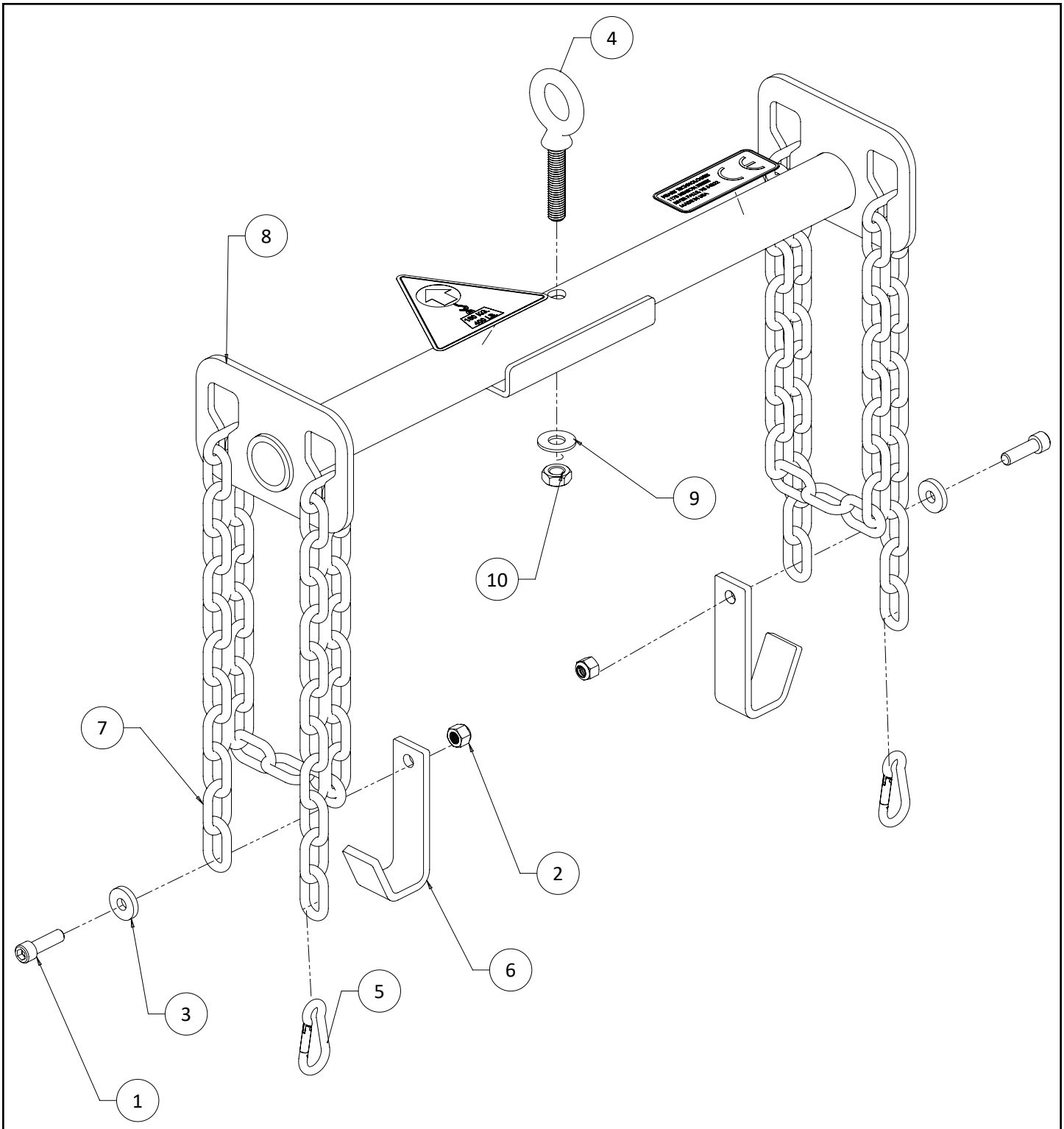


DIAGRAM NO.	PART NO.	DESCRIPTION
1	B372011	3/8-16 x 1-1/4 SOCKET HEAD CAP SCREW
2	J377100	3/8-16 LOCKNUT
3	3599028	FLAT WASHER .37
4	3706257	EYEBOLT 1/2
5	3706253	CARABINER 3/8
6	6009102	GRAB HOOK
7	6329062	CHAIN 45” LONG
8	6539524	SPREADER BAR WELDMENT
9	K500001	FLAT WASHER 1/2 SAE
10	J502000	1/2-13 HEX JAM NUT GRADE 5