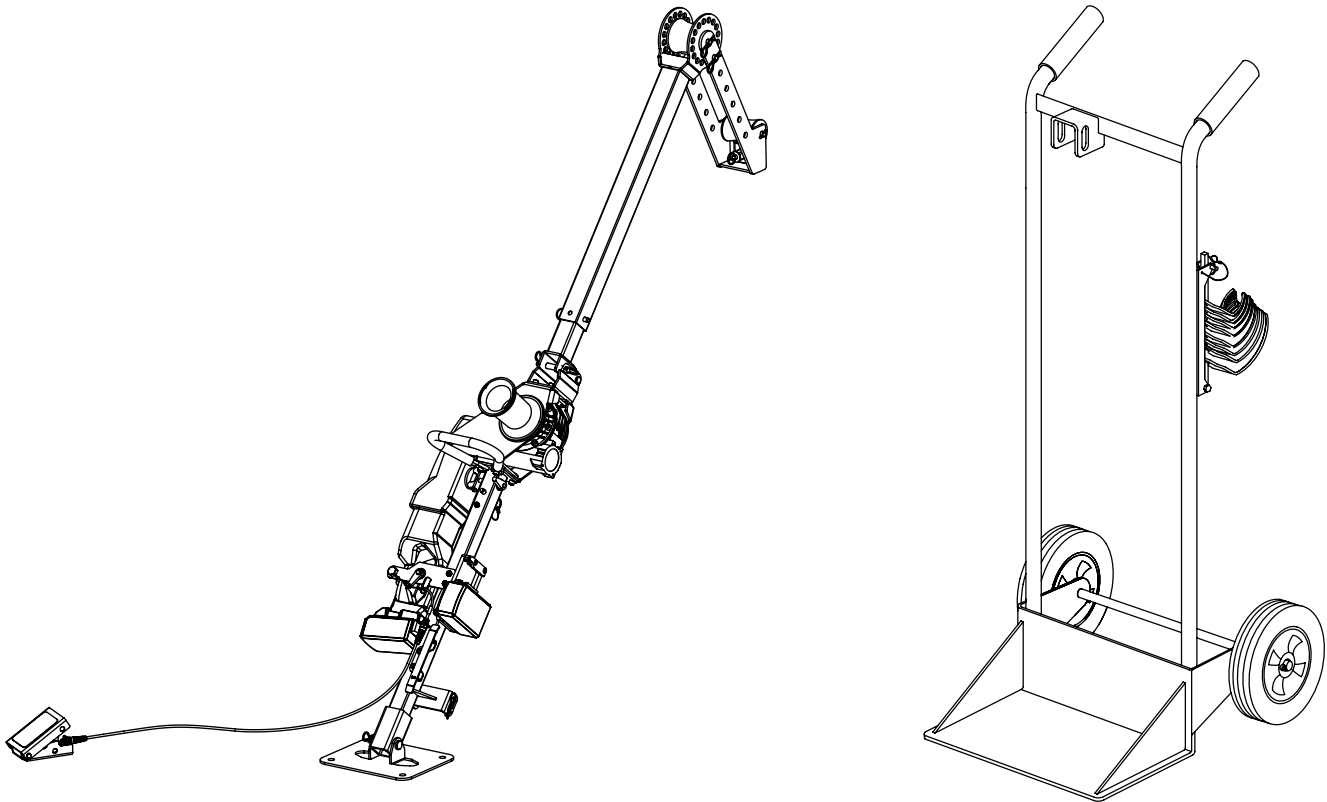




# **Current Tools**

**FOR THE PROFESSIONAL ELECTRICIAN**

## **Model 33BAT Battery Powered High Speed Cable Puller – 3,000 lb. Capacity**



## **Operating, Maintenance, Safety and Parts Manual**

09/22



**Read and understand this material before operating or servicing the Cable Puller. Failure to understand how to safely operate and service this unit may result in serious injury or death.**

This manual is free of charge. All personnel who operate the Cable Puller should have a copy of this manual and read and understand its contents. To request a copy of this manual or replacement safety decals, or for technical assistance, call or write to the address below. All information, specifications and product designs may change due to design improvements or updates and are subject to change without notice. Current Tools does not assume any liability for damages resulting from misuse or incorrect application of its products.

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## Safety Alert Symbol

THIS SAFETY SYMBOL is used to call your attention to instructions that concern your personal safety. It means: ATTENTION! BE AWARE! THIS IS AN IMPORTANT SAFETY INSTRUCTION!

Read, understand and follow these safety instructions. Failure to follow these safety instructions may result in injury or death.

### **DANGER**

Immediate hazards which, if not avoided, WILL result in serious personal injury or death.

### **WARNING**

Hazards or unsafe practices which, if not avoided, COULD result in serious personal injury or death.

### **CAUTION**

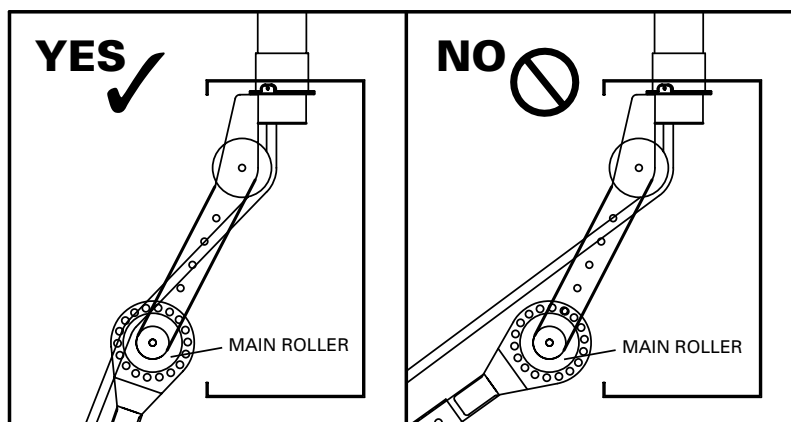
Hazards or unsafe practices which, if not avoided, COULD result in minor personal injury or property damage.

## IMPORTANT SAFETY INFORMATION



This manual should be read and understood by all personnel who operate or service this Cable Puller. Failure to understand how to safely operate and service this equipment could result in injury or death. This equipment should only be operated and serviced by qualified personnel.

- ⚠ DANGER** DO NOT operate cable puller in wet or damp locations.
- ⚠ DANGER** DO NOT expose to rain.
- ⚠ DANGER** DO NOT operate in an explosive atmosphere.
- ⚠ DANGER** DO NOT use near energized circuits.
- ⚠ WARNING** DO NOT use cable puller as a hoist or for lifting, supporting or transporting people or loads. Use only for its intended purpose as a cable puller.
- ⚠ WARNING** DO NOT wrap rope around any body parts. DO NOT wrap rope around wrists. Hold rope so that it may be released quickly.
- ⚠ WARNING** ALWAYS keep rope away from operator's feet.
- ⚠ WARNING** DO NOT exceed load rating of cable puller, rope or accessories.
- ⚠ WARNING** ALWAYS inspect rope before each use.
- ⚠ WARNING** ALWAYS ensure cable puller is properly secured to conduit and all pins are in place before operating.
- ⚠ WARNING** Pulling Rope should be the only thing to contact the capstan. NEVER let swivels, grips, etc. come in contact with the capstan.
- ⚠ WARNING** Rope must ALWAYS be pulled over a rotating sheave. If a sheave does not rotate, turn cable puller off immediately and determine problem before continuing the pull.
- ⚠ WARNING** Set up the cable puller so that pulling rope ALWAYS contacts both rollers. (See drawing below.)





## IMPORTANT SAFETY INFORMATION — CONTINUED

- ▲ WARNING** ONLY use  $\frac{9}{16}$ " or larger double-braided composite pulling rope or a pulling rope with a minimum average breaking strength of 16,000 lbs.
- ▲ WARNING** NEVER allow the rope to slip on a rotating capstan for more than a couple of seconds. The rope will wear in that spot and the rope could break under pressure.
- ▲ WARNING** Keep all body parts, hair, loose clothing, etc. away from rotating parts and pinch points. Keep hands away from capstan.
- ▲ WARNING** DO NOT allow the rope to overlap on the capstan. If this condition begins to occur, immediately release the tailing force on the rope. If this does not remedy the overlap, stop the puller and run the puller in reverse to unwind the overlap.
- ▲ WARNING** During the pull, all personnel must stand to the side of the cable puller and out of the direct line of tight pulling rope.
- ▲ WARNING** The cable puller must be attached to steel or schedule 40 PVC conduit only. When attached to PVC conduit, the conduit MUST be supported within 2" of the end.
- ▲ WARNING** ALWAYS inspect pins to be sure they are fully inserted through holes and have spring clips properly attached. DO NOT substitute any other object for factory supplied pins.
- ▲ WARNING** When making a vertical cable pull, keep the area underneath the cable pull clear of all personnel.
- ▲ WARNING** Keep fingers away from adjustment holes and pivoting parts. Fingers can be severed by pivoting parts.
- ▲ WARNING** ALWAYS remove the battery pack from the drill motor prior to servicing the puller.
- ▲ CAUTION** DO NOT alter this cable puller. Doing so will void the warranty. Guards and safety features are provided for your protection.
- ▲ CAUTION** Wear eye protection when operating the cable puller.
- ▲ CAUTION** Inspect all components of the cable puller before beginning any cable pull. Replace any worn or defective components.
- ▲ CAUTION** Be careful during assembly and disassembly of the cable puller. Have control of components before removing any pins.
- ▲ CAUTION** This cable puller exceeds 50 lbs. and will require more than one person to lift or carry.
- ▲ CAUTION** The motor, gear box and capstan may heat up during the pull. Be careful.
- ▲ CAUTION** ALWAYS pull in the direction of the arrows on top of the capstan.
- ▲ CAUTION** ONLY use Milwaukee™ branded battery packs.



## SPECIFICATIONS

**model no.** — 33BAT

**width** — 22"

**depth** — 22"

**height** — 48"

**fully extended length** — 104"

**weight** — 75 lbs. — cable puller only

121 lbs. — cable puller mounted on mobile cart

**maximum pulling force** — 3,000 lbs.

**speeds** — no load

Low — 25 ft./min.

High — 75 ft./min.

**motor** — 18V right angle drill — 1/2"

**pulling rope** — 9/16" or larger double braided composite pulling rope or a pulling rope with a minimum average breaking strength of 16,000 lbs.



## FEATURES

- Integral 18 volt heavy duty 2 speed motor
- Extra battery storage for quick power change
- Mounts to mobile cart for storage and ease of mobility
- No disassembly to store cable puller on mobile cart
- Quick release conduit couplings
- Tapered capstan
- Integral foot switch
- Permanently lubricated vent-free gear box
- Light weight — cable puller weighs approximately 75 lbs. (without cart)

# SET-UP and OPERATING INSTRUCTIONS



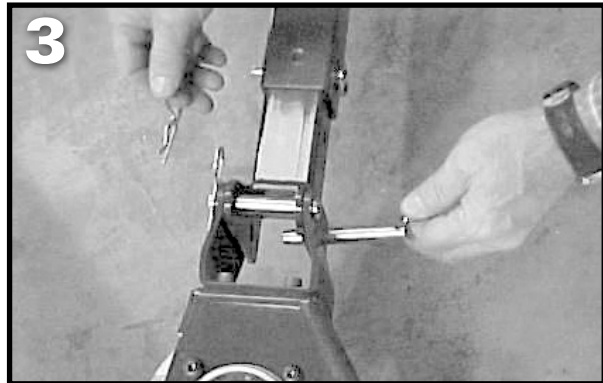
Model 33BAT shown pinned for transport on mobile cart.



**1** Remove the transport pin to release the cable puller from the mobile cart.



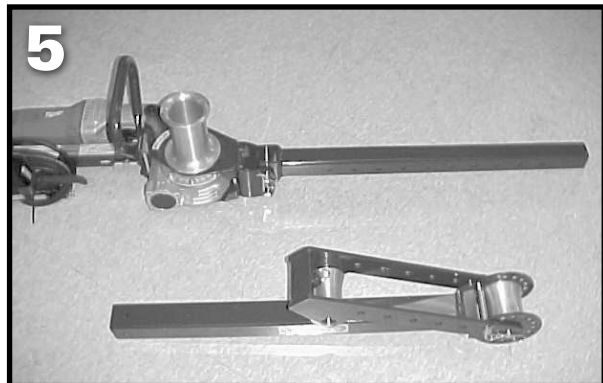
**2** Unpin the adjustable tube from the hold down bracket as shown. Reinsert the pin in the hold down bracket.



**3** Unfold pivot tube and secure into position as shown using transport pin.

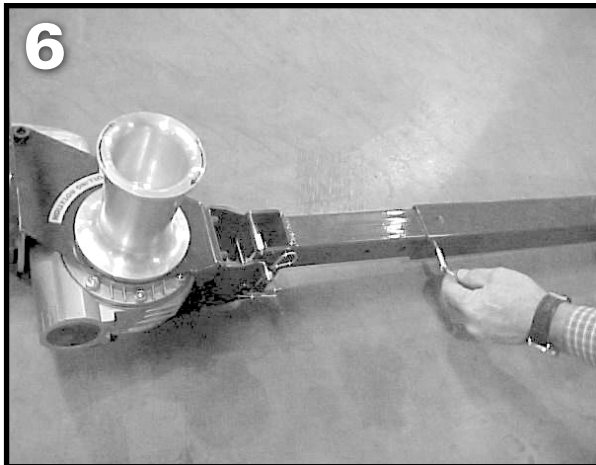


**4** Cable puller shown unfolded and pinned.

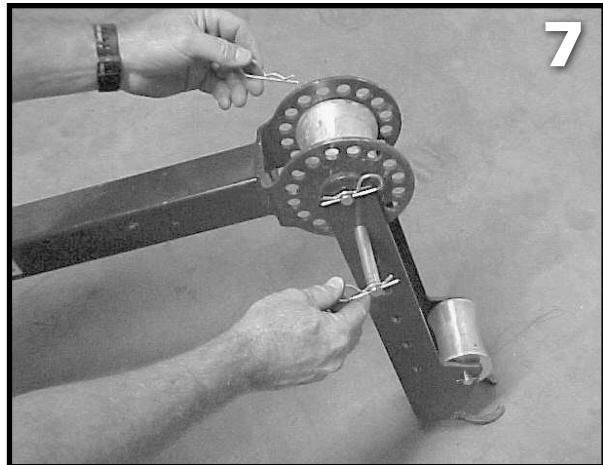


**5** In order to set-up the adjustable tube in the correct direction for the pull, unpin and remove the adjustable tube from the pivot tube.

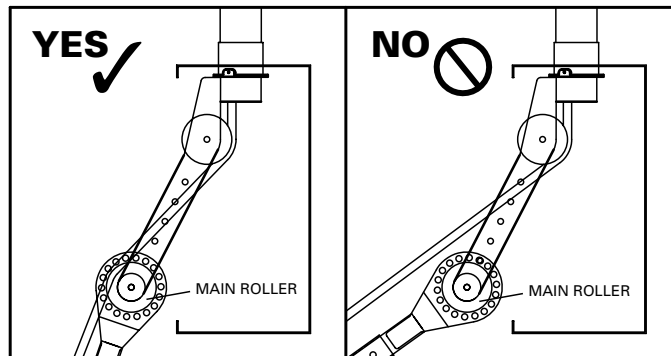
**SET-UP and OPERATING INSTRUCTIONS — CONTINUED**



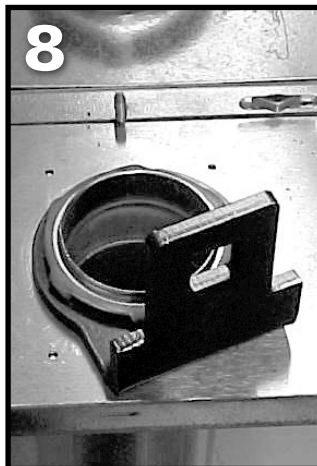
**6** Turn the adjustable tube in the direction needed for the type pull (UP, DOWN, SIDE – See **COMMON SET-UPS** on page 11.) and slide back onto the pivot tube to the desired length and re-pin.



**7** Next, to position the extension arm to the desired angle for the pull, remove the pin that allows the extension arm to be adjusted to various positions and re-pin at desired angle. NOTE: If needed, the extension arm length may be adjusted. See close-up photo of side pull in **COMMON SET-UPS** on page 11.



**⚠ WARNING** Set up the cable puller so that pulling rope ALWAYS contacts both rollers. (See drawing above).



**8** Choose the conduit coupling for the size conduit you will be connecting to. Remove the conduit lock nut and place the conduit coupling over the conduit. Then, replace and tighten the conduit lock nut.



The couplings are stored on the mobile cart on a pivoting rod. Remove the linch pin to lower the rod.



# SET-UP and OPERATING INSTRUCTIONS — CONTINUED



9

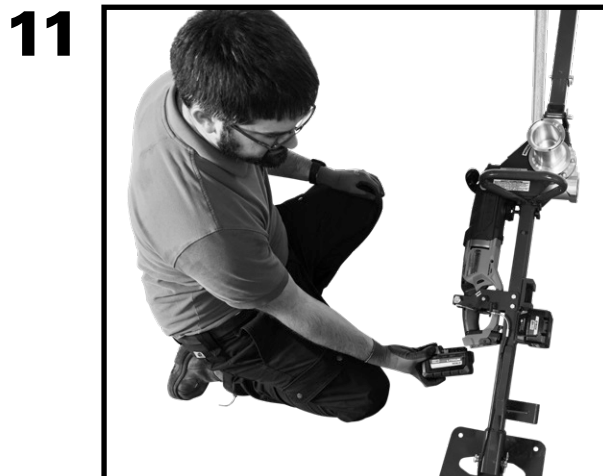
9 Next, move the cable puller into position and attach the extension arm onto the conduit coupling. You should hear a "click" as the conduit coupling fits into the extension arm. If extension arm is not at the correct angle to attach to conduit coupling, the angle and/or length of the extension arm may be adjusted. Also, the adjustable tube can be repositioned.

**▲ WARNING** Keep fingers away from adjustment mount holes and pivoting parts. Fingers can be severed by pivoting parts.



10

10 Operator may stand on either side of the cable puller. Place the foot switch on the side the operator will be standing.

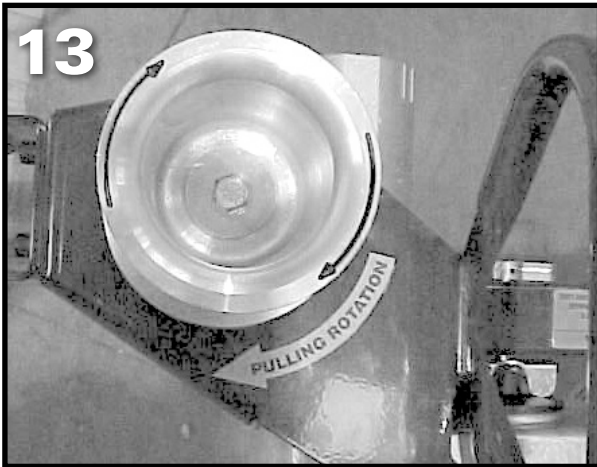


11

11 Install the battery pack into the motor

12 Turn the FWD/REV switch on motor to the **forward** position. (not shown)

## SET-UP and OPERATING INSTRUCTIONS — CONTINUED



**13** Depress the foot switch and check the rotation of the capstan with the pulling rotation decal on the cable puller.



**14** Next, turn the High/Low speed switch to the desired position.



**15** To begin the pull, place 2 to 3 wraps of the pulling rope around the capstan. Depress the foot switch and begin the pull. If the amount of tension (tailing force) you have to put on the pulling rope exceeds approximately 10 lbs., then turn the cable puller off and add one wrap of the pulling rope. Note that if the rope is in a "v" shape, the pull for the operator is easier than if pulled at a 90°. (or "L" shape)



**16** When the pull is completed, pull the ring on the back of the extension arm to separate the conduit coupling from the extension arm. Loosen the lock nut and remove the conduit coupling.

**▲ WARNING** NEVER allow the rope to slip on a rotating capstan for more than a couple of seconds. The rope will wear in that spot and the rope could break under pressure.

**▲ WARNING** DO NOT allow the rope to overlap on the capstan. If this condition begins to occur, immediately release the tailing force on the rope. If this does not remedy the overlap, stop the puller and run the puller in reverse to unwind the overlap.

**▲ CAUTION** The motor, gear box and capstan may heat up during the pull. Be careful.

# COMMON SET-UPS



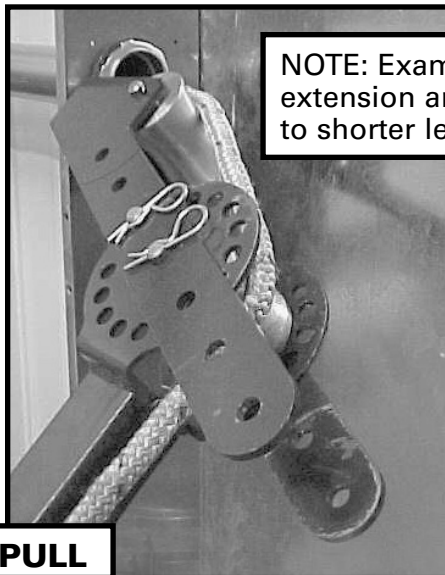
**UP PULL**



**DOWN PULL**



**SIDE PULL**



NOTE: Example of extension arm adjusted to shorter length.

**⚠ WARNING**

ALWAYS remove the battery pack from the drill motor prior to servicing the puller.

**⚠ CAUTION**

DO NOT alter this cable puller. Doing so will void the warranty. Guards and safety features are provided for your protection.

**Capstan**

Replace the capstan if it is grooved more than 1/16" deep.

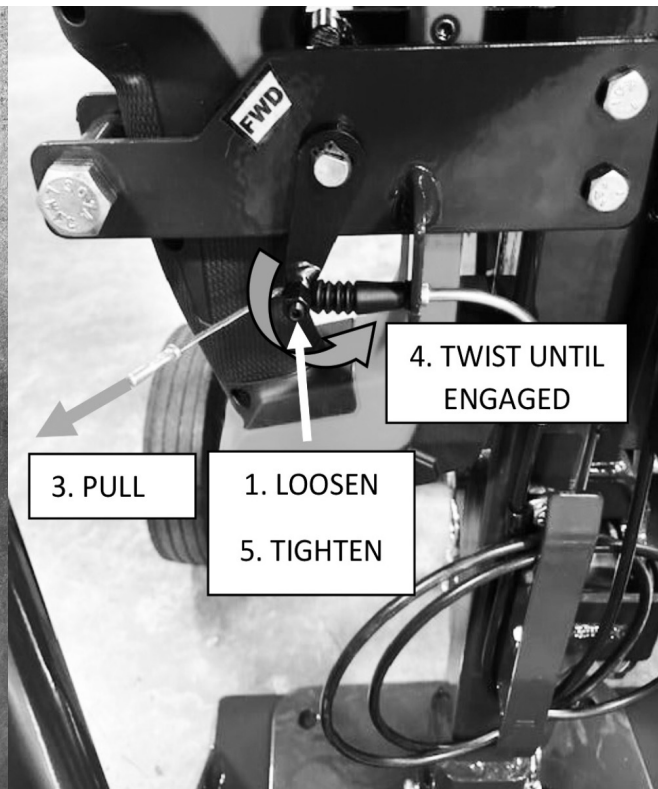
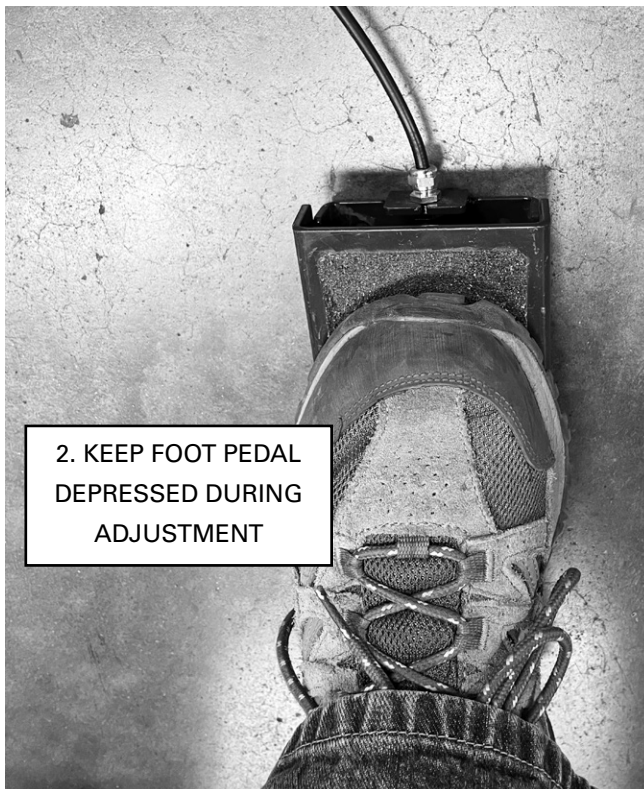
**Gear Box**

The Model 33BAT Cable Puller has a vent-free gear box and is factory lubricated for life with synthetic, semi-fluid gear lubricant with an operating range of +5°F to +220°F.

**Lubrication**

Please refer to Milwaukee Electric Tool Corporation Operator's Manual. A copy is provided with this cable puller. This cable puller uses an 18V Milwaukee #2809-20 Super Hawg 1/2" Right Angle Drill Motor.

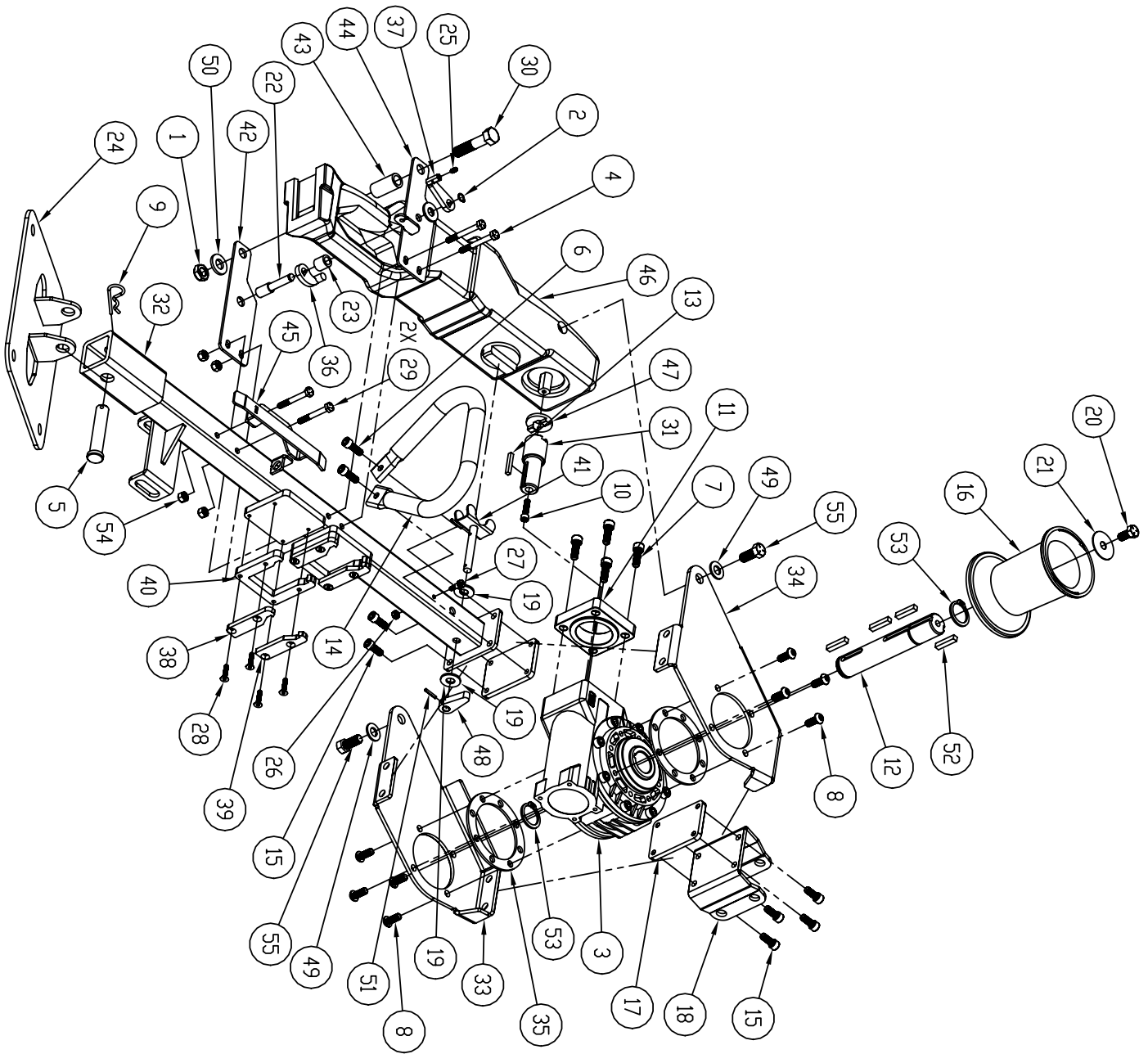
**Foot Switch Adjustment**



1. Remove battery and loosen set screw next to motor
2. Ensure foot pedal is uncoiled and in a comfortable position. Depress foot pedal and keep depressed for duration of adjustment.
3. Pull loose end of cable until tight
4. With cable tight, rotate actuator until motor trigger is fully engaged.
5. Tighten set screw to retain cable
6. Release foot pedal and test adjustment



# EXPLODED VIEW - MODEL 33BAT MAIN FRAME





## PARTS LIST – MODEL 33BAT MAIN FRAME

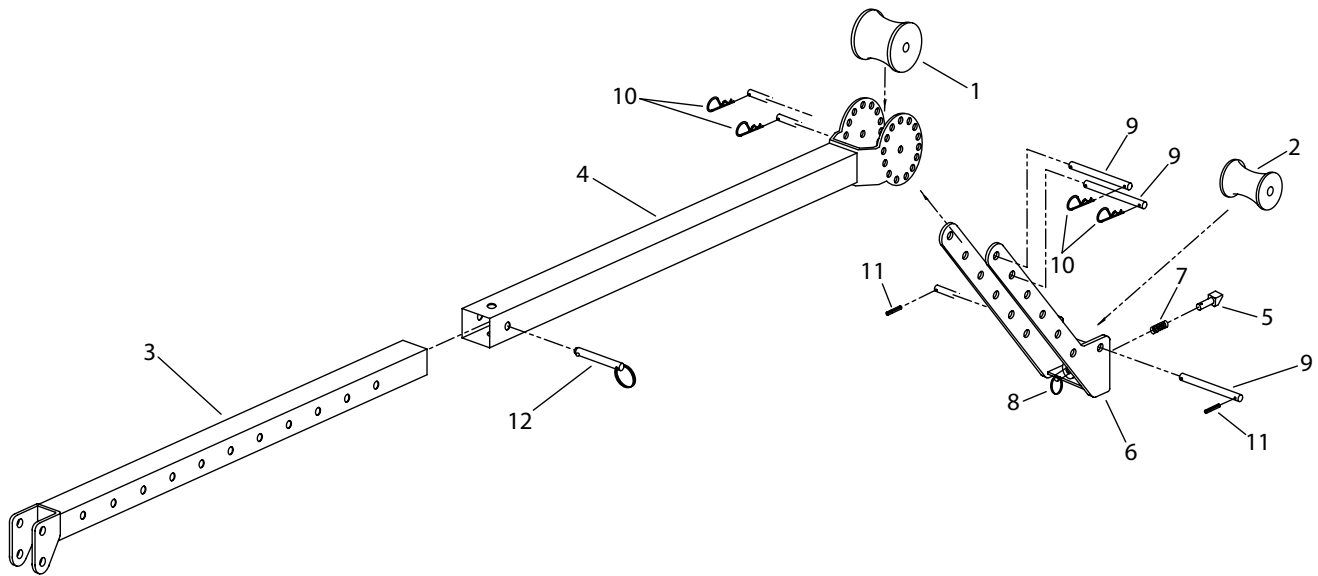
ITEM #	PART #	DESCRIPTION	QTY.
1	281-1J	NUT – HEX, 1/2-13THIN (NYL INS)	1
2	33-19	RING – RETAINING 3/8 EXTERNAL	1
3	33-2	33 GEARBOX	1
4	33-21	SCREW – HEX HEA CAP (1/4"-20 × 2 1/4")	2
5	33-24	PIN 5/8" CLEVIS	1
6	33-30	SCREW – SOCKET HEAD CAP (5/16-18 × 7/8)	2
7	33-32	SCREW – SOCKET HEAD CAP (M8 × 25)	4
8	33-35	SCREW – BUTTON HEAD SOCKET (M8 × 20)	8
9	33-36	R CLIP	1
10	33-460 SCREW	SCREW – SOCKET HEAD CAP (1/4-20 × 1" LH)	1
11	33-461	GEARBOX ADAPTER CAP	1
12	33-462	SHAFT – GEARBOX	1
13	33-49	KEY 3/16" SQ × 1-1/4"	1
14	33-491	STAND	1
15	33-50	SCREW – SOCKET HEAD CAP (5/16–18 × 3/4)	6
16	33-504	CAPSTAN – HS PULLER	1
17	33-510	BACK-UP PLATE	2
18	33-514	PIVOT BRACKET	1
19	33-52	WASHER 3/8 USS PLAIN	3
20	33-53	SCREW – HEX HEAD CAP GR5 ZINC (3/18–16 × 3/4)	1
21	33-54	FLAT WASHER 3/8"	1
22	33-702	BAR – ACTUATOR, SWITCH, 33	1
23	33-703	SPACER – DRILL SWITCH, 33	1
24	33-934	PLATE – BOTTOM	1
25	33BAT-001	SCREW – SET, OVAL POINT (10–32 × 3/8)	1
26	33BAT-005	NUT – HEX NYLON INSERT THIN (#10–24)	1
27	33BAT-006	SCREW – SHOULDER SOCKET (1/4 × 1/4")	1
28	33BAT-007	SCREW – FLAT SOCKET (10–32 × 7/8")	8
29	33BAT-008	SCREW – HEX HEAD CAP GR5 ZINC (1/4–20 × 2")	2
30	33BAT-012	SCREW – HEX HEAD CAP GR5 ZINC (1/2–13 × 2.25")	1
31	33BAT-102	ADAPTER SHAFT	1
32	33BAT-145	DRIVE FRAME	1
33	33BAT-104RH	GEARBOX MOUNTING PLATE – RH	1
34	33BAT-104LH	GEARBOX MOUNTING PLATE – LH	1
35	33BAT-106	GEARBOX RING SPACER	2
36	33BAT-110	ACTUATOR CAM	1
37	33BAT-112	ACTUATOR LINKAGE	1
38	33BAT-116	BATTERY LOCK –LH	2



## PARTS LIST – MODEL 33BAT MAIN FRAME — CONTINUED

ITEM #	PART #	DESCRIPTION	QTY.
39	33BAT-117	BATTERY LOCK — RH	2
40	33BAT-118	BATTERY LOCK — SPACER	1
41	33BAT-127	HI/LO WELDMENT, 33BAT	1
42	33BAT-131	ACTUATOR BRACKET — RH	1
43	33BAT-132	SPACER — ACTUATOR BRACKET	1
44	33BAT-133	WELDMENT, ACTUATOR BRACKET — LH	1
45	33BAT-139	CABLE HANGER	1
46	500-002A	MOTOR	1
47	500-002B	KEYED WASHER	1
48	66-742	HI/LO SWITCH	1
49	66-76	WASHER — FLAT 7/16" (SAE)	2
50	77-017A	WASHER — FLAT SAE ZINC (1/2)	1
51	77-035A	ROLL PIN 1/8 x 3/4	2
52	8042-11	KEY 1/4" SQ x 1-1/4"	4
53	88-40	RING — RETAINING EXT HD 1.125	2
54	9518SR-12	NUT — HEX NYLON INSERT (1/4-20)	4
55	99-30	SCREW — HEX HEAD CAP GR5 ZINC (7/16-14 x 1)	2

# EXPLODED VIEW — MODEL 33-200 BOOM ASSEMBLY

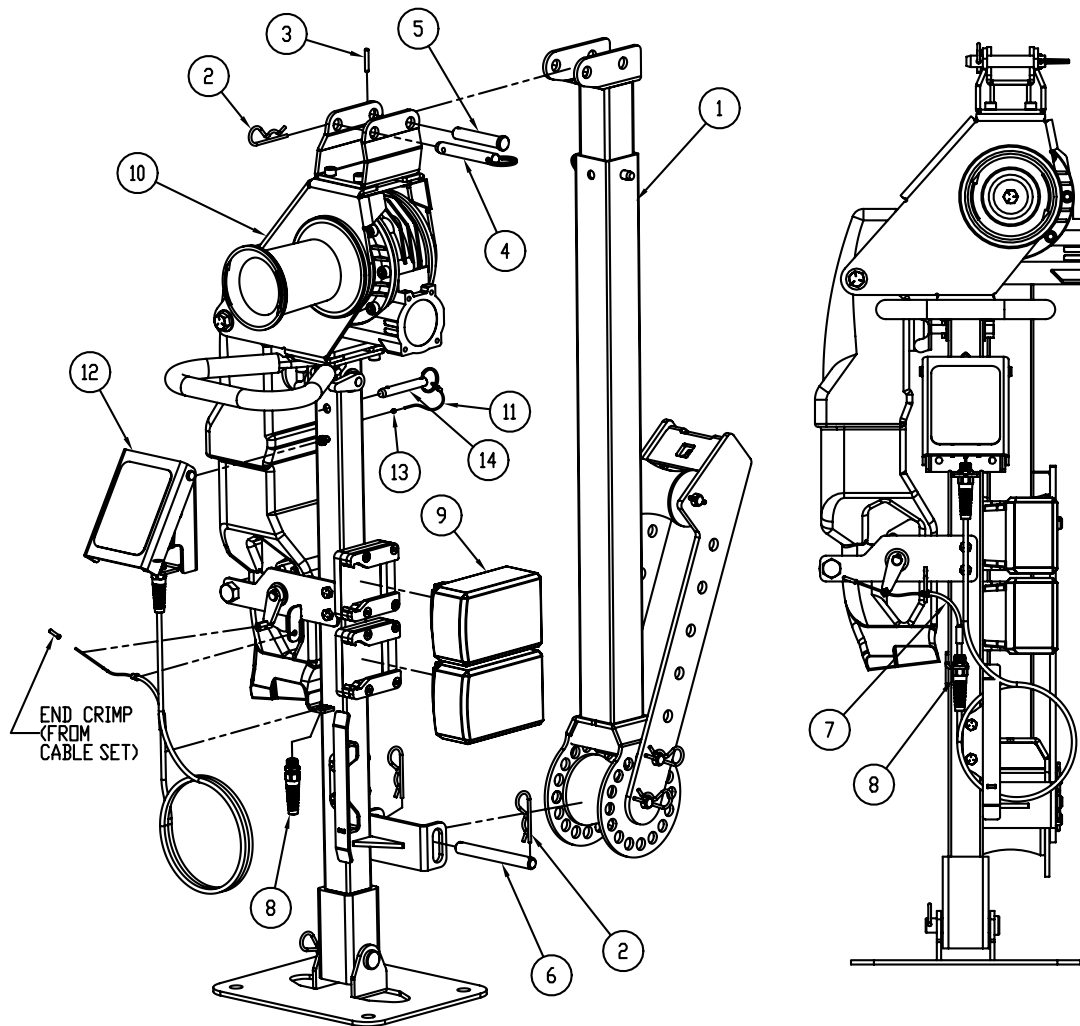


# PARTS LIST — MODEL 33-200 BOOM ASSEMBLY

ITEM #	PART #	DESCRIPTION	QTY.
1	33-683	ROLLER — MAIN	1
2	33-482	ROLLER — EXTENSION	1
3	33-531	PIVOT TUBE	1
4	33-532	ADJUSTABLE TUBE	1
5	33-485	PAWL	1
6	33-533	EXTENSION ARM	1
7	33-22	SPRING	1
8	33-23	RING	1
9	33-492	PIN — 1/2" x 4-1/2"	3
10	33-36	R-CLIP	8
11	33-42	ROLL PIN - 5/32" x 1	3
12	9548-7	PIN — QUICK REL. 3/8" X 2"	1



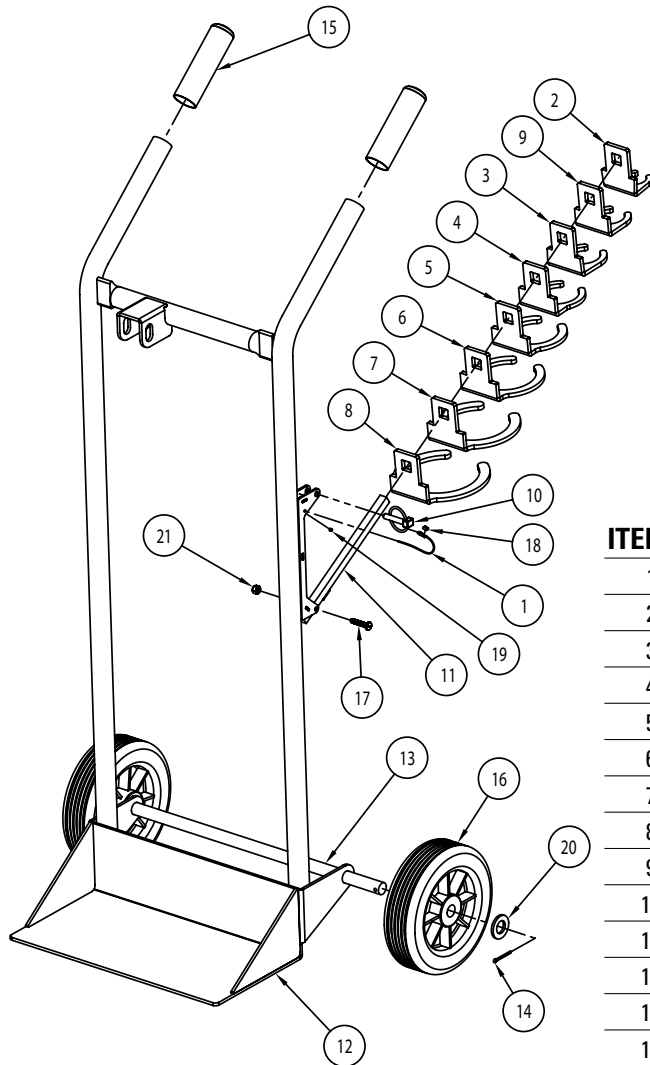
# EXPLODED VIEW – MODEL 33BAT ASSEMBLY



# PARTS LIST – MODEL 33BAT ASSEMBLY

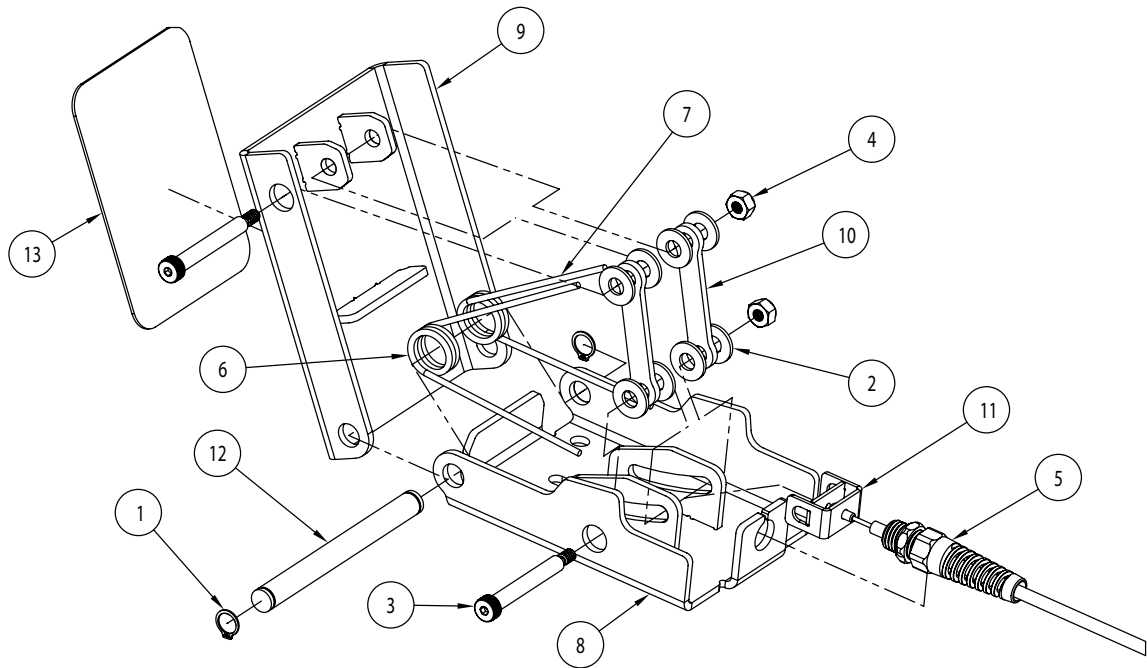
ITEM #	PART #	DESCRIPTION	QTY.
1	33-200	BOOM ASSEMBLY	1
2	33-36	R CLIP	3
3	33-42	PIN – 5/32 X 1	1
4	33-43	PIN – 1/2" × 2-1/2" WITH RING	1
5	33-44	PIN – 1/2" × 2-1/2" HEADED WITH HOLE	1
6	33-492	PIN – ROLLER	1
7	33BAT-003	CABLE GUIDE	1
8	33BAT-013	CORD GRIP WITH RELIEF	1
9	500-003	BATTERY – MILWAUKEE 18V 8AH	2
10	33BAT-140	LOWER ASSEMBLY	1
11	33-BAT-143	LANYARD – 33BAT	1
12	33BAT-200	FOOT CONTROL ASSEMBLY	1
13	670-6A	SLEEVE – SINGLE	1
14	9548-7	PIN – QUICK RELEASE 3/8 × 2-1/4"	1

# EXPLODED VIEW – MOBILE CART AND COUPLINGS



ITEM #	PART #	DESCRIPTION	QTY.
1	33-27	LANYARD CABLE	1
2	33-520	COUPLING 1"	1
3	33-522	COUPLING 1-1/2"	1
4	33-523	COUPLING 2"	1
5	33-524	COUPLING 2-1/2"	1
6	33-525	COUPLING 3"	1
7	33-526	COUPLING 3-1/2"	1
8	33-527	COUPLING 4"	1
9	33-534	COUPLING 1-1/4"	1
10	33-78	LINCH PIN	1
11	33-908	BRACKET — COUPLING HOLDER	1
12	33-966	CART	1
13	33-967	AXLE — 33 CART	1
14	501-14	PIN — COTTER (1/8 × 1.25) ZINC	2
15	504-1	GRIP	2
16	510-2	8" WHEEL	2
17	450-29	1/4-20 × 1.25 SCREW, MACH SLOTTED	1
18	670-6	FERRULE — DOUBLE	1
19	670-6A	SLEEVE — SINGLE	1
20	77-017	WASHER — FLAT 3/4" (SAE)	2
21	9518SR-12	NUT — HEX NYLON INSERT (1/4-20)	1

# EXPLODED VIEW — 33BAT-200 FOOT CONTROL



ITEM #	PART #	DESCRIPTION	QTY.
1	33-19	RING — RETAINING 3/8 EXTERNAL	2
2	33BAT-002	WASHER — FLAT 1/4 SAE ZINC	8
3	33BAT-009	SCREW — SHOULDER SOCKET (1/4 x 1-3/4)	2
4	33BAT-010	NUT — HEX NYLON INSERT (#10-24)	2
5	33BAT-013	CORD GRIP WITH RELIEF	1
6	33BAT-014	RETURN SPRING — RH	1
7	33BAT-015	RETURN SPRING — LH	1
8	33BAT-205	BOTTOM — FOOT PEDAL	1
9	33BAT-206	TOP — FOOT PEDAL	1
10	33BAT-207	LINKAGE	2
11	33BAT-211	FOOT PEDAL CABLE ASSEMBLY	1
12	33BAT-212	HINGE PIN, FOOT PEDAL	1
13	33BAT-215	GRIP SURFACE	1