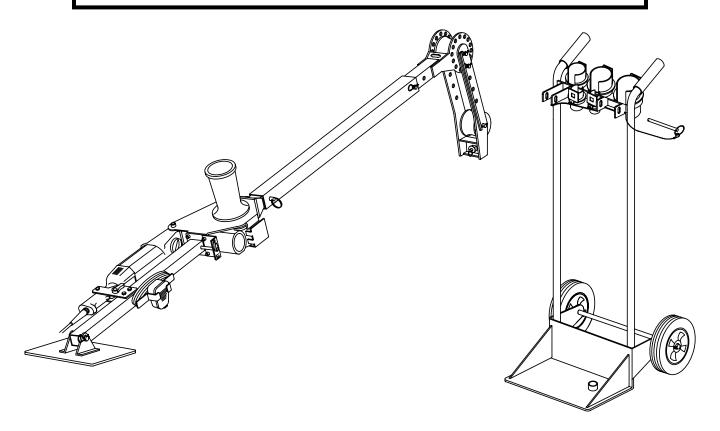


### **Model 66 Cable Puller with Mobile Cart**



# Operating, Maintenance, Safety and Parts Manual

1/15



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.

# TABLE OF CONTENTS

Safety Alerts
Important Safety Information
Specifications
Features 6
Set-Up and Operating Instructions 7-10
Common Set-Ups11
Maintenance
Exploded View
Parts List
Wiring Drawing





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.

## **A** DANGER

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

# **A WARNING**

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

# **A** CAUTION

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

#### **RETAIN 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.

### IMPORTANT SAFETY INFORMATION

**A DANGER** DO NOT operate cable puller in wet or damp locations.

**A DANGER** DO NOT expose to rain.

**A 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.

**A WARNING**DO NOT wrap rope around any body parts. DO NOT wrap rope around wrists. Hold rope so that it may be released quickly.

**A WARNING** ALWAYS keep rope away from operator's feet.

▲ WARNING DO NOT exceed load rating of cable puller, rope or accessories.

**A WARNING** ALWAYS inspect rope before each use.

**AWARNING** ALWAYS disconnect cable puller before servicing.

ALWAYS plug the Model 66 Cable Puller into a grounded receptacle with a 15 amp GFCI protected circuit. DO NOT modify the plug provided with the Model 66 Cable Puller.

**ALWAYS** insure cable puller is properly secured to conduit and all pins are in place before operating.

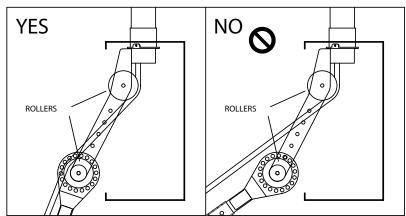
Pulling Rope should be the only thing to contact the capstan.

NEVER let swivels, grips, etc. come in contact with the capstan.

A WARNING

Rope must ALWAYS be pulled over a <u>rotating</u> sheave. If a sheave does not rotate, turn cable puller off immediately and determine problem before continuing the pull.

Set up the cable puller so that pulling rope ALWAYS contacts both rollers. (See drawing below.)



### - IMPORTANT SAFETY INFORMATION continued ----

<b>A</b> WARNING	ONLY use <sup>3</sup> / <sub>4</sub> " or larger double-braided composite pulling rope
25 WAITINING	with an average breaking strength of 26,000 lbs.
<b>▲</b> 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.
<b>▲ WARNING</b>	Keep all body parts, hair, loose clothing, etc. away from rotating parts and pinch points. Keep hands away from capstan.
<b>▲</b> 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.
<b>▲</b> 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.
<b>▲ WARNING</b>	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.
<b>▲ WARNING</b>	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.
(A WARNING)	When making a vertical cable pull, keep the area underneath the cable pull clear of all personnel.
(A WARNING)	Keep fingers away from adjustment holes and pivoting parts. Fingers can be severed by pivoting parts.
<b>▲</b> CAUTION	DO NOT alter this cable puller. Doing so will void the warranty. Guards and safety features are provided for your protection.
<b>A</b> 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.
<b>▲ CAUTION</b>	Be careful during assembly and disassembly of the cable puller. Have control of components before removing any pins.
<b>▲ CAUTION</b>	DO NOT use an extension cord longer than 100 ft. Extension cord should be a minimum of 12 gauge wire with ground.
<b>▲</b> CAUTION	This cable puller exceeds 50 lbs. and will require more than one person to lift or carry.
<b>▲ CAUTION</b>	The motor, gear box and capstan may heat up during the pull. Be careful.
<b>▲ CAUTION</b>	ALWAYS pull in the direction of the arrows on top of the capstan.

### SPECIFICATIONS

**model no.** — 66 Cable Puller (mounted on Mobile Cart)

width — 24½" depth — 18" height — 49"

fully extended length — 102"

weight — 115 lbs. – (cable puller only)

— 179 lbs. - (cable puller mounted

on mobile cart)

maximum pulling force — 6,000 lbs.

speeds — <u>no load</u>

Low – 12 ft./min. High – 44 ft./min.

motor — 120 volts AC, 60 hertz, 13 amps

**pulling rope** — <sup>3</sup>/<sub>4</sub>" or larger double braided composite

pulling rope with an average breaking

strength of 26,000 lbs.

### (A) FEATURES

- Integral heavy-duty 2 speed motor
- Quick-release conduit couplings
- Mobile Cart with storage for conduit couplings (see photo 1 at right)
- · Tapered capstan
- Integral foot switch
- Permanently lubricated vent-free gear box
- Lightweight weighs only 115 lbs.
   when assembled and ready for pull.
- Foot switch storage pocket (see photo 2 below)

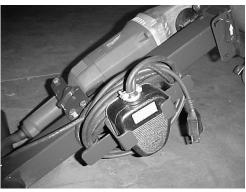


Photo 2



Photo 1

#### **SET-UP AND OPERATION INSTRUCTIONS**



Model 66 Cable Puller shown pinned for transport on mobile cart.



Photo 3



Photo 4

1 Remove the transport pins to release the cable puller (photo 3) and boom section (photo 4) from the mobile cart.

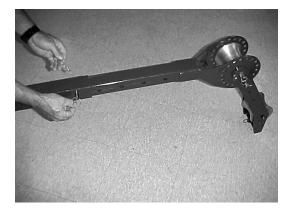


**2** Turn the boom section in the direction needed for the type pull (UP or DOWN). See common setups on page 11. Re-insert the pin removed in photo 3 to connect puller section to boom section.

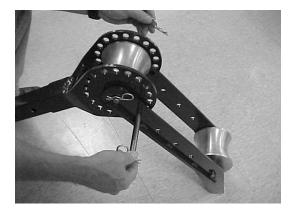


**3** Model 66 Cable Puller shown pinned together and ready for pull.

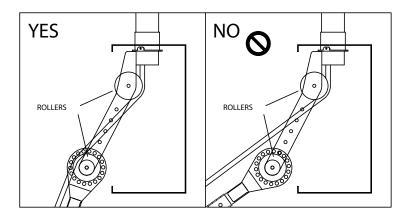
#### **SET-UP AND OPERATION INSTRUCTIONS** continued



**4** Adjust Boom section to desired length and re-pin.



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 ON BOTTOM OF PAGE 11).



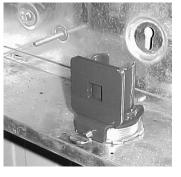
#### **▲ WARNING**

Set up the cable puller so that pulling rope ALWAYS contacts both rollers. (See drawing at left).



**6** Complete coupling set stores on mobile cart as shown above. To store or remove couplings from cart, loosen or tighten the provided thumb screw.

7 Choose the conduit coupling for the size conduit you will be connecting to. Back out the thumb screw and insert the conduit coupling into the conduit until the ring of



the conduit coupling sits flush against the top of the conduit.

NOTE: For a down pull, back out the thumb screw and insert the conduit coupling into the conduit until the ring of the conduit coupling sits flush against the top of the conduit. Then, to hold the conduit coupling in place, tighten the thumb screw.

#### **SET-UP AND OPERATION INSTRUCTIONS** continued



**8** 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 of the extension arm may be adjusted. (SEE STEP #5). Also, the adjustable tube can be repositioned (SEE STEP #4).



9 Operator may stand on either side of the cable puller. Place the foot switch on the side the operator will be standing. Plug the cord into a 15 amp GFCI protected outlet.

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

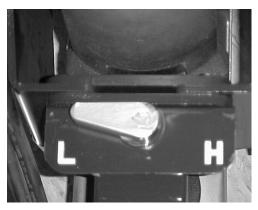


10 Turn the FWD/REV switch to the *forward* position.

#### **SET-UP AND OPERATION INSTRUCTIONS** continued



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



Next, turn the High/Low speed switch to the desired position, "H" or "L".



**13** 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 as shown in photo 13, the pull for the operator is easier than if pulled at a 90° (or "L" shape).



14 When the pull is completed, pull the ring on the back of the extension arm to separate the conduit coupling from the extension arm. NOTE: Be sure to loosen the thumb screw if you have tightened it against the conduit.

**A 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.

**A 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.

**A** CAUTION

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

# COMMON SET-UPS





### **UP PULL**





### **DOWN PULL**



Example of extension arm adjusted to shorter length



# **WARNING**

Unplug the cable puller before servicing.

# **A** CAUTION

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

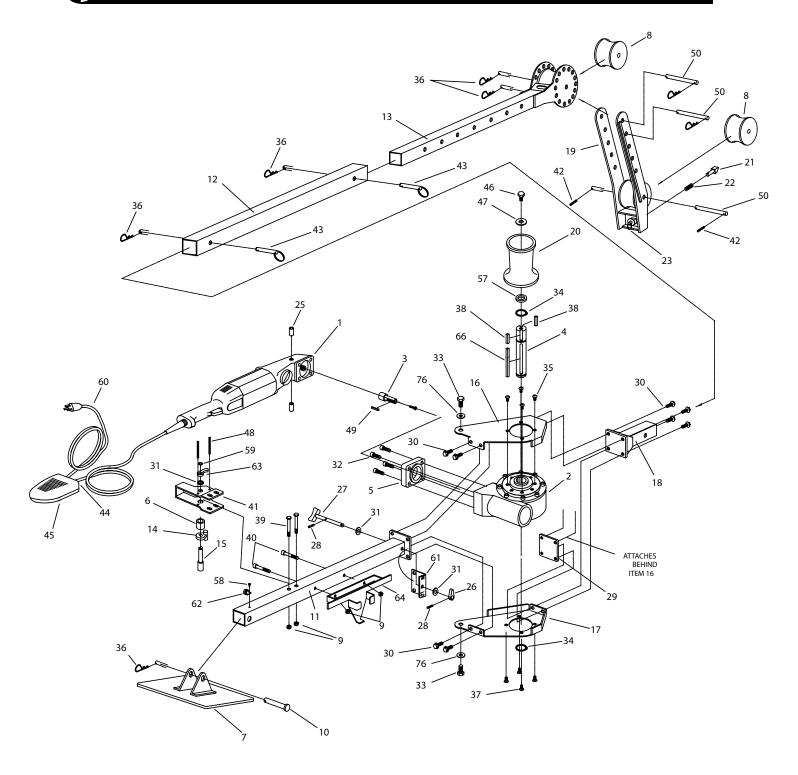
#### Capstan

Replace the capstan if it is grooved more than  $\frac{1}{16}$  deep.

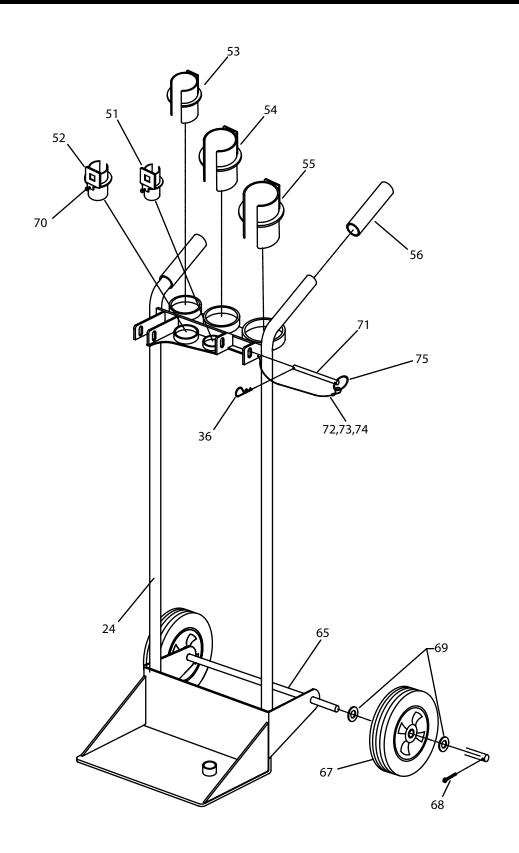
#### **Gear Box**

The Model 66 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.

### EXPLODED VIEW — 66 CABLE PULLER



### EXPLODED VIEW — 66 MOBILE CART





## PARTS LIST — 66 CABLE PULLER

#### **6000 LB PULLER**

ITEM#	<u>PARTS DESCRIPTION</u>	<u> </u>	PART#
	MOTOR		
	GEAR BOX		
	ADAPTER SHAFT		
	CAPSTAN SHAFT		
•	ADAPTER CAP		
	SPACER		
	BOTTOM PLATE		
	ROLLER		
	NUT-5/16-18 NYLON INSERT		
	PIN, 5/4" CLEVIS		
	LOWER FRAME		
	EXTENSION TUBE		
	ADJUSTABLE TUBE		
	BAR-ACTUATOR, SWITCH		
	BOTTOM GEAR BOX MOUNTING PLATE		
	EXTENSION ARM		
	CAPSTAN		
	PAWL		
	SPRING		
	RING		
	CART		
	SPACER		
	HI/LO SWITCH		
	HI/LO SVITCHHI/LO STEM		
	ROLL PIN-SPRING ½" X ¾"		
	BACK UP PLATE		
	SCREW-HEX FLANGE %"-16 X 1"		
	FLAT WASHER-5/16"		
	SCREW-SOC. HD. CAP M6 X 25		
	SCREW-HEX HD. CAP-7/16-14 x 1-1/2" (GR. 5)		
	EXT.RETAINING RING-1-½" (HEAVY)		
	SCREW-BUTTON SOC. CAP M10x20		
	R-CLIP		
	SCREW-BUTTON SOC. CAP M10x30		
• /	KEY 3/8"SQ x 1-1/4"		
	SCREW-HEX HEAD 5/16-18x2-3/4"		
	SCREW-SOC. HD. CAP-5/16-18 x 2-1/2"		
	SWITCH BRACKET-DRILL		
	ROLL PIN-5/32 x 1"		
	PIN-½" x 2-½" WITH RING		
	STRAIN RELIEF		
	FOOT SWITCH		
	SCREW-HEX HD. CAP-3/8-16 x 3/4"		
	CAPSTAN RETAINING WASHER		
	KEY <sup>3</sup> /16"SQ x 1- <sup>1</sup> / <sub>4</sub> "		
	PIN- 5/8" (DIAMETER) x 5-7/8"		
	COUPLING-2"		

### PARTS LIST — 66 CABLE PULLER continued

#### **6000 LB PULLER**

ITEM #	PARTS DESCRIPTION	<u> </u>	PART#
	COUPLING-2-½"		
	COUPLING-3"		
	COUPLING-3-½"		
	COUPLING-4"		
56	GRIP	2	504-1
	CAPSTAN BEARING WASHER		
	SCREW-HEX HEAD 10 x ½ SELF DRILL		
59	%" RETAINING RING	1	33-19
60	POWER CORD	1	450-4
61	SELECTOR SWITCH PLATE	1	66-660
62	CORD RETAINER	1	66-62
	LEVER-ON/OFF		
64	WIRE/FOOT SWITCH HANGER	1	33-706
	AXLE		
66	KEY ¾"SQ x 4-¾"	1	66-66
	WHEEL		
	COTTER PIN		
	WASHER, ¾ SAE		
70	SCREW – SPADE THUMB	5	66-56
71	PIN	1	66-981
· —······	STOP		
	FERRULE		
	CABLE ½16" x 10"		
75	RING	1	8099-3
76	WASHER – ½16 SAE	2	66-76

# WIRING DRAWING

