





CANNON TK

USER'S GUIDE



GENERAL SAFETY RULES

WARNING! Read and understand all instructions. Failure to follow all instructions listed below may result in electric shock, fire, and/or serious personal injury.

SAVE THESE INSTRUCTIONS

WORK AREA SAFETY

Keep your work area clean and well lit. Cluttered benches and dark areas invite accidents.

Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust. Power tools create sparks which may ignite the dust or fumes.

Keep bystanders, children, and visitors away while operating a power tool. Distractions can cause you to lose control.

ELECTRICAL SAFETY

Grounded tools must be plugged into an outlet properly installed and grounded in accordance with all codes and ordinances. Never remove the grounding prong or modify the plug in any way. Do not use any adapter plugs. Check with a qualified electrician if you are in doubt as to whether the outlet is properly grounded. If the tools should electrically malfunction or break down, grounding provides a low resistance path to carry electricity away from the user.

Avoid body contact with grounded surfaces such as pipes, radiators, ranges, and refrigerators. There is an increased risk of electric shock if your body is grounded.

Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.

Do not abuse the cord. Never use the cord to carry the tools or pull the plug from an outlet. Keep cord away from heat, oil, sharp edges or moving parts. Replace damaged cords immediately. Damaged cords increase the risk of electric shock.

When operating a power tool outside, use an outdoor extension cord marked "W-A" or "W." These cords are rated for outdoor use and reduce the risk of electric shock.

PERSONAL SAFETY

Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use tool while tired or under the influence of drugs, alcohol, or medication. A moment of inattention while operating power tools may result in serious personal injury.

Dress properly. Do not wear loose clothing or jewelry. Contain long hair. Keep your hair, clothing, and gloves away from moving parts. Loose clothes, jewelry, or long hair can be caught in moving parts.

Avoid accidental starting. Be sure switch is off before plugging in. Carrying tools with your finger on the switch or plugging in tools that have the switch on invites accidents.

Remove adjusting keys or switches before turning the tool on. A wrench or a key that is left attached to a rotating part of the tool may result in personal injury.

Do not overreach. Keep proper footing and balance at all times. Proper footing and balance enables better control of the tool in unexpected situations.

Use safety equipment. Always wear eye protection. Dust mask, non-skid safety shoes, hard hat, or hearing protection must be used for appropriate conditions.

TOOL USE AND CARE

Use clamps or other practical way to secure and support the workpiece to a stable platform. Holding the work by hand or against your body is unstable and may lead to loss of control.

Do not force tool. Use the correct tool for your application. The correct tool will do the job better and safer at the rate for which it was designed.

Do not use tool if switch does not turn it on and off. Any tool that cannot be controlled with the switch is dangerous and must be repaired.

Disconnect the plug from the power source before making any adjustments, changing accessories, or storing the tool. Such preventive safety measures reduce the risk of starting the tool accidentally.

Store idle tools out of reach of children and other untrained persons. Tools are dangerous in the hands of untrained users.

Maintain tools with care. Keep cutting tools sharp and clean. Properly maintained tools, with sharp cutting edges, are less likely to bind and are easier to control.

Check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the tool's operation. If damaged, have the tool serviced before using. Many accidents are caused by poorly maintained tools.

Use only accessories that are recommended by the manufacturer for your model. Accessories that may be suitable for one tool may become hazardous when used on another tool.

SERVICE

Tool service must be performed only by qualified repair personnel. Service or maintenance performed by unqualified personnel could result in a risk of injury.

When servicing a tool, use only identical replacement parts. Follow instructions in the "Maintenance" section of this manual. Use of unauthorized parts or failure to follow maintenance instructions may create a risk of electric shock or injury.



BEFORE OPERATION OF THIS TOOL, READ & UNDERSTAND ALL OF THE INSTRUCTIONS & SAFETY INFORMATION IN THIS MANUAL.



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SAFETY FIRST

Safety is essential in the use and maintenance of this tool. This instruction manual & any markings on the tool provide information for avoiding hazards and unsafe practices related to the use of this tool.

Observe all of the safety information provided.

SAFETY ALERT SYMBOLS

This symbol is used to call your attention to hazards ord unsafe practices that could result in injusry or property damage. The three signal words, defined below, indicate the severity of the hazard. The message after the signal word provides the information for preventing or avoiding the hazard.



DANGER

Immediate hazards that, if not avoided, WILL result in severe injury or death.



WARNING

Hazards that, if not avoided, COULD result in severe injury or death.



CAUTION

Hazards or unsafe practices that, if not avoided, MAY result in injury or property damage.



IMPORTANT SAFETY INFORMATION



WARNING

Read and understand all instructions and safety information in this manual before operating or servicing this tool.

Also read the instruction manual supploed with your drill.
FAILURE TO OBSERVE THESE WARNINGS CAN RESULT IN SEVERE
INJURY OR DEATH.



WARNING - PERSONAL SAFETY HAZARDS

Only qualified persons should use this equipment.

Wear eye protection and hard hat when using this equipment.

Do not use this equipment while tired or under the influence of drugs, alcohol, or medication.

Keep body parts and loose clothing awat from moving parts.

Always follow operating provedures.

FAILURE TO OBSERVE THESE WARNINGS CAN RESULT IN SEVERE INJURY OR DEATH.



WARNING - ELECTRICAL SHOCK HAZARDS

Do not expose power tools to rain or wet conditions. Water entering a power tool can increase the risk of electric shock. Plug into a GFCI ground fauly interuppted circuit outlet only. Use a 20 amp 120 volt extension cord no more than 100 feet in length. Maintain proper care of power cords. Do not use the cord to cary tools or pull the plug from an outlet. Replace damaged cords immediately. Damaged cords can increase the risk of electrical shock. Do not use this tool near live circuits. Shut off and lock out power when working near existing circuits. FAILURE TO OBSERVE THESE WARNINGS CAN RESULT IN SEVERE INJURY OR DEATH.



IMPORTANT SAFETY INFORMATION



WARNING ENTAGLEMENT HAZARD

Do not operate this tool while wearing loose fitting clothing. Put up long hair and keep it away from the unit. Keep hands away from moving objects or anything that can pinch or crush a hand or body part.

FAILURE TO OBSERVE THESE WARNINGS CAN RESULT IN SEVERE INJURY OR DEATH.



WARNING - TIPPING HAZARDS

Always be aware of your surroundings. Keep unit on even ground and ensure weight is always evenly distributed. Maintain a safe distance from the unit when in transit.

FAILURE TO OBSERVE THESE WARNINGS CAN RESULT IN SEVERE INJURY OR DEATH.



WARNING - TOOL USE HAZARDS

Use this tool for manufacturer's intended purpose only. Use of the product other than that which is described in this manual can result in injury or property damage.

Inspect all aspects of wire pulls to ensure safety. Including cable pullers, booms, sheaves, rope, swivels, pins, etc. and replace any defective components BEFORE you proceed.

Always inspect the structual integrity of any supports, conduit, anchoring system, etc. that will be used to hold wire pullers during pulls. These supports should be able to withstand the maximum pulling force of the cable puller plus a safety factor of 3:1. A 12,000 lb. wire puller should be anchored to a support that can withstand the force of a 36,000 lb. pull. Only qualified personnell should use pulling equipment.

Do not use cable pullers as a hoist or winch. Cable pullers cannot lower a load and may fall causing serious injury or death.

Do not exceed the load rating of any cable puller, rope or accessories in use. Always plug into a grounded receptacle with a 20 amp CGFI protected circuit. Do not modify the provided plug. Always disconnect cable pullers and other equipment before servicing.

FAILURE TO OBSERVE THESE WARNINGS CAN RESULT IN SEVERE INJURY OR DEATH.



IMPORTANT SAFETY INFORMATION



WARNING - TOOL USE HAZARDS (CONTINUED)

Do not operate cable pullers in wet or damp locations.

Do not expose to rain.

Do not operate in an explosive atmosphere.

Some components of cable pulling packages can exceed 50 lb.

and will require more than one person to lift, transport or assemble.

Always inspect pins to be sure they are the correct part for the assembly and are fully inserted through the unit and have spring clips properly attached.

Do not subsitute any other objext for factory supplied pins.

When making a vertical pull, keep the area underneath the cable puller clear of all personnel.

Use caution during assembly and dissassembly of pulling setups.

Keep pins and bolts in place to avoid uncontrolled movement.

Do not switch between low and high speeds while foot pedal is depressed.

Always make sure the puller has completely

stopped before switching from low to high speed or high to low speed.

DO NOT ALTER CABLE PULLING EQUIPMENT OR ANY EQUIPMENT

BOUGHT FROM iTOOLco. Doing so will VOID YOUR WARRANTY.

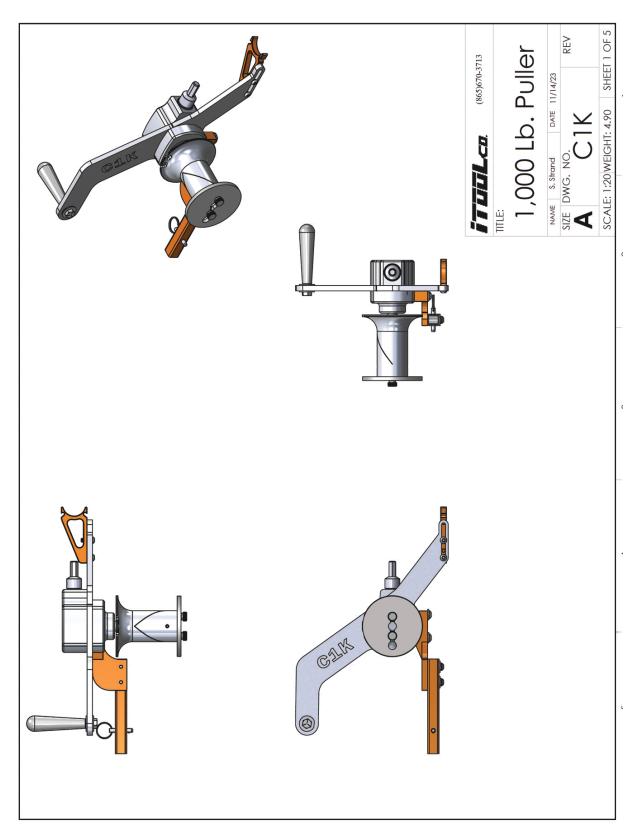
Guards, testing, and safety features are provided for your protection.

Do not use an extension cord longer than 100'. Extension

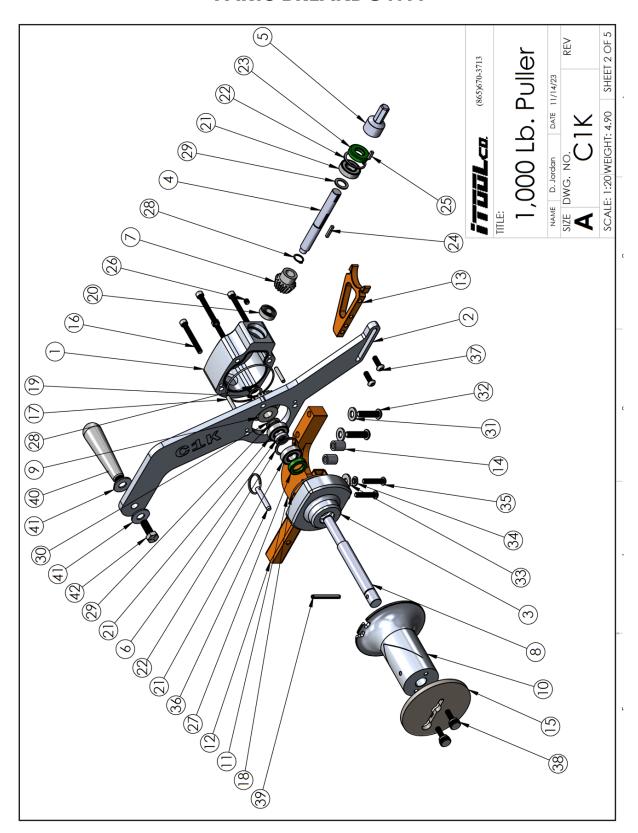
cords should be a minimum of 12 gauge wire with ground.

FAILURE TO OBSERVE THESE WARNINGS CAN RESULT IN SEVERE INJURY OR DEATH.







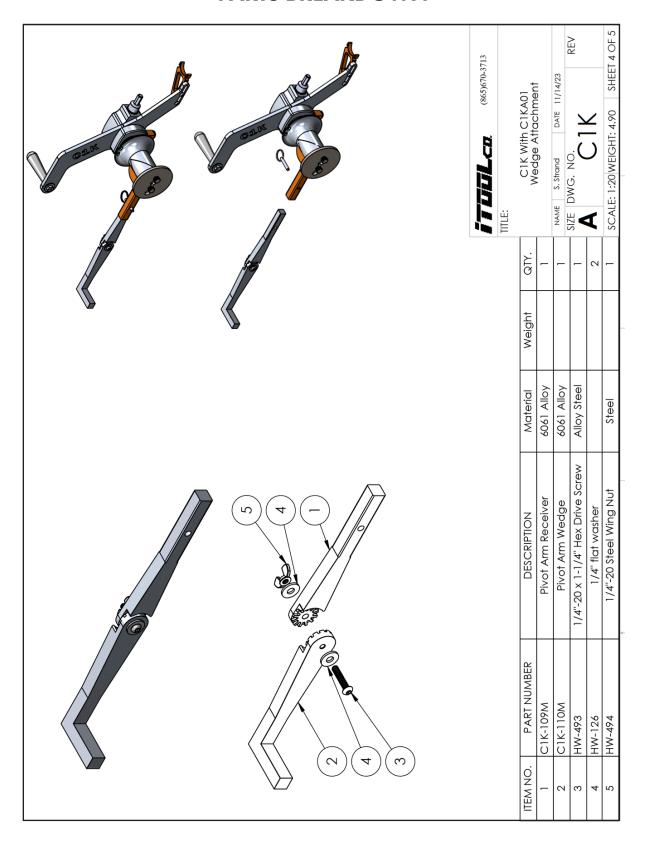




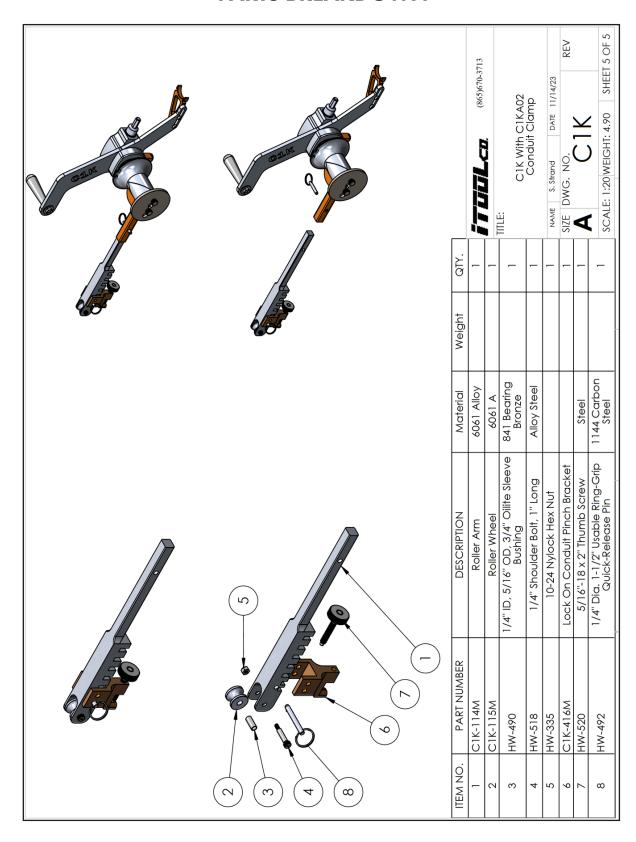
ITEM NO.	PART NUMBER	DESCRIPTION	Material	Weight	QTY
1	C1K-101M	Gear Housing	6061 Alloy	0.69	1
2	C1K-106.2M	Center Plate	6061A	0.96	1
3	C1K-105M	Gear Box End Cap 6061 A		0.58	1
4	C1K-104M	1/2" Drive Shaft Keyed		0.03	1
5	C1K-117M	Input Shaft Adapter	6061 A	0.02	1
6	C1K-107M	Bearing Spacer	6061 A	0.00	1
7	SP-402	Pinion Bevel Gear	1144 Carbon Steel		1
8	C1K-108M	5/8" Long Shaft Keyed		0.06	1
9	SP-401	Metal Bevel Gear	1144 Carbon Steel		1
10	C1K-102M	C1K Capstan	4" Od BMA-08	1.35	1
11	C1K-412				1
12	C1K-413	Receiver Tube	3/4" x 0.065" Wall Tube	0.04	1
13	C1K-403				1
14	C1K-119M	Receiver Tube Spacer	6061 Alloy	0.01	2
15	C1K-418.2	Capstan End Cap	1/4" Aluminum	0.79	1
16	HW-513	1/4"-20 x 2" Socket Head Screw	Alloy Steel		4
17	HW-502	3/16" Dia. 1" Long Steel Dowel Pin	18-8 Stainless Steel		2
18	HW-498	1/16 Fractional Width, Dash Number 035 Oil-Resistant O-Ring	Buna-N Rubber		1
19	HW-499	1/16 Fractional Width, Dash Number 038 Oil-Resistant O-Ring	Buna-N Rubber		1
20	HW-510	3/8" (R6-2RS) Sealed Ball Bearing			1
21	HW-496	1/2" Ball Bearing (R8-2RS)			3
22	HW-505	1-1/8" Internal Retaining Ring	1060-1090 Spring Steel		2
23	HW-514	1/2" Shaft Seal, 1.124" OD			1
24	HW-501	1/8" x 1/8" x 3/4" Machine Key	1008-1045 Carbon Steel		1
25	HW-500	1/8" x 1/8" x 1/2" Machine Key	1008-1045 Carbon Steel		1
26	HW-495	1/4"-20 x 1/4" Set Screw	Alloy Steel		1
27	HW-515	5/8" ID, 1" OD, 1/4" Deep Shaft Seal (CR6141)			1
28	HW-504	For 1/2" OD External Retaining Ring	1060-1090 Spring Steel		2
29	HW-508	1/2" OD, 0.062 Thick Shim	18-8 Stainless Steel		2
30	HW-507	1/2" ID, 0.02" Thick Shim	316 Stainless Steel		2
31	HW-357	5/16" Flat Washer			2
32	HW-512	5/16"-18 x 1-1/4" Button Head Hex Drive Screw	Alloy Steel		2
33	HW-126	1/4" flat washer	<u> </u>		2
34	HW-124	1/4" Split Lock Washer	Steel		2
35	HW-493	1/4"-20 x 1-1/4" Hex Drive Screw	Alloy Steel		2
36	HW-491	1/4" Dia. 1" Usable Ring-Grip Quick- Release Pin	1144 Carbon Steel		1
37	HW-511	1/4"-20 x 3/4" Button Head Hex Drive Screw	Alloy Steel		2
38	HW-521	1/4"-20 x 3/4" Raised Thumb Screw	18-8 Stainless Steel		2
39	HW-489	3/16" Dia. 1-3/4" Long Roll Pin	420 Stainless Steel		1
40	SP-405	3/8"-16 Plastic Tapered Handle	Phenolic Plastic		1
41	HW-146	3/8" Washer			2
42	HW-394	3/8"-16 x 1" Hex Bolt			1

i	TOOL	CO. (8	65)670-3713			
TITLE:						
1,000 Lb. Puller						
NAME	D. Jordan	DATE 1	/14/23			
SIZE	DWG. NO.					
A	С	1K				
SCAL	.E: 1:20 WEIGH	IT: 4.90	SHEET 3 OF 5			











Mounting The Puller on a Drill.

The C1K is designed to fit on most manufacturers' 18v or 20v cordless drills. it is recommended to use brush-less drills for the best pulling results. We do not recommend using the C1K with a 120v electrical drill, these drills can damage your unit.

To make an adjustment to the Drill Cradle, loosen the two screws on the Drill Cradle (fig 1.) and open the drill motor chuck. Slide the drill motor forward so you have at lease 3/4"-1" of the shaft inside the the drill motor.

FIG. 1 ____



Securly tighten the drill motor chuck as you normally would.
Tighten the Drill Cradle screws and install the Drill Cradle
"O" Ring retainer over the drill. Once the drill chuck is tightened
and the retainer ring are in place, you are ready to go.

FIG. 2 __

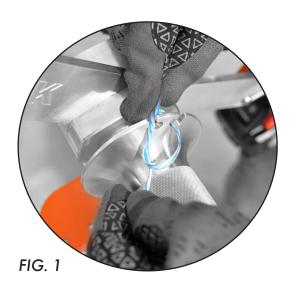


NOTE: IF THE DRILL MOTOR IS NOT ABLE TO SIT ON THE SHAFT AT LEASE 3/4"-1", REMOVE THE TWO SCREWS THAT HOLD THE DRILL CRADLE AND RE-ALIGN THOSE TWO SCREWS WITH THE OTHER SET OF TAP HOLES THAT HOLD THE DRILL CRADLE ONTO YOUR UNIT.



Using the Capstan Cleat

You can tie off your rope or string to the capstan using the cleat built into the side of the capstan. Once you have reached the end of the pull, simply remove the rope from the cleat, remove the end plate & slide the rope off.





Using the Articulating Wedge Arm

The wedge arm is perfect for overhead junction boxes and subpanel boxes. Simply push the arm to the top of the box next to the conduit opening & run the rope or string to the capstan.





Understanding the Capstan End Plate

The Capstan End Plate is designed to allow greater spooling capacity. To remove the plate, loosen the two thumb screws and slide the plate down the channel. Then slide the plate over the thumbscrews to remove it. Use reverse order to install.



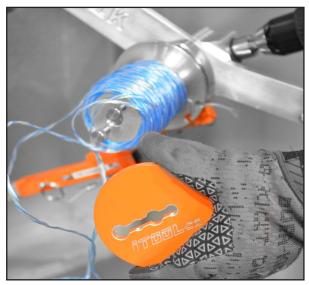


Fig 1. Fig 2.

Using the Slotted Roller Arm Attachment

The Slotted Roller Arm Attachment is used for pulling wire in an electrical panel, gutter, junction box, or switch ring. Make sure to place the slotted side face down over the lip of the panel, conduit, or other equipment.

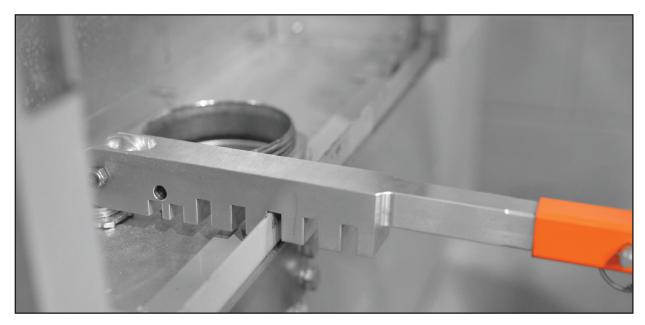


Fig 1.



Using the Slotted Roller Arm Attachment (Cont.)

When pulling directly on a conduit, align the roller arm wheel center to the edge of the conduit that is going to be used for pulling.

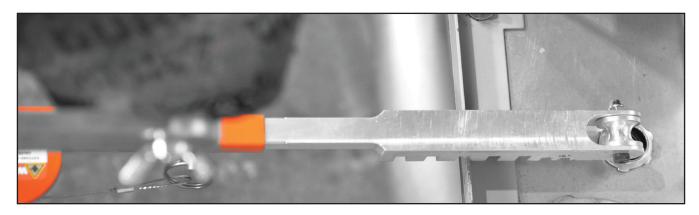


Fig 2.

Once the alignment is complete, let the slotted arm rest on the lip of the electrical panel with slight downward pressure. This will keep the arm in place during the pull.



Fig 3.



Using the Slotted Roller Arm Attachment with the End Screw.

When installing wire in an underground conduit or any electrical conduit stub up, install the End Screw on the Slotted Roller Arm. Place End Screw adapter inside the conduit, then tighten down the set screw on the lip of the conduit.



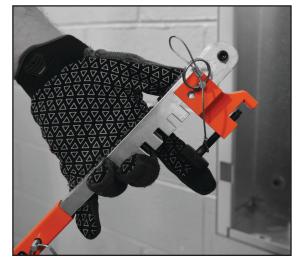


Fig 1. Fig 2.

You can adjust the location of the End Screw by pulling the pin and moving the clamp forward or backward. For smaller conduit use the hole that is furthest away from the conduit.

For larger conduit use the hole that is closest to the conduit.





Fig 3. Fig 4.



General Usage Instructions.

WARNING: Never use the puller in situations where live electrical circuits are in use.

Always use the proper hand protection (gloves) and eye protection (goggles) when working with tools like the C1K.

For wire pulls in electrical junction boxes, gutters, switchgear, or sub panels when using rope, we recommend that you use the Pivot Arm. Position the Pivot Arm against the pulling surface. Then wrap the rap around the capstan at least 3-4 times. Then remove your hand from the pulling area and run the drill.

When using polyline or mule tape, tie the line material to the cleat on the capstan. Once tied, run the drill in forward and let the tape self tighten over the capstan. When completed remove the capstan end plate and slide the polyline or mule tape off the capstan and remove it from the cleat.

For wire pulls in a sub panel where you have conduits enterint the bottom of that panel, we recommend using the Slotted Roller Arm or the Slotted Roller Arm with the End Screw. Align the roller with the conduit and then pull. Keep constant pressure on the puller at a slight angle so the wheel does not pull down to the panel surface.

For wire pulls where there are conduit stub ups close to the ground, or wire pulls in a light pole, we recommend that you ise the slotted extender arm.