## USER'S GUIDE & SAFETY MANUAL

# CableGlider® LW Cable Puller







## **Important Safety Notice**

WARNING: When using electric tools, basic safety precautions should always be followed to reduce the risk of fire, and personal injury, including the following: Read and understand all procedure and safety instructions before using the Condux CableGlider Cable Puller. Observe all safety information on this page and note specific safety requirements as explained by procedures called out in this manual. Failure to follow these instructions could result in serious personal injury or death.

## **ADVERTENCIA**

Favor de leer y comprender todas las instrucciones de operación y seguridad antes de usar la máquina. Si Ud. No comprende las instrucciones favor de consultarle a su jefe.



**WARNING:** Electrical equipment is hazardous. Train personnel to use basic safety precautions. Misuse can result in serious personal injury or death



!CAUTION: Wear personnel protective equipment: hard hat, safety glasses, safety shoes, and leather work gloves



!WARNING: Read all instructions before using a Condux CableGlider Cable Puller. Observe all safety information on this page, and note specific safety requirements as explained by procedures called out in this manual, Failure to follow these instructions could result in serious personnel injury or death. Save this user's guide for future reference



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## Save this user's guide for future reference



If you have questions on:

**Safety – Operations – Applications** 

Call 1-800-533-2077

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# **General Information**

#### **General Product Use**

- A. Condux CableGlider LW Cable Puller is built to provide reliable performance to improve the efficiency of your cable pulling operations. Our puller is designed to be portable and self-contained, with sheaves and adapters included.
- B. Each model includes a wheeled canvas-carrying bag and includes the following: fork and drill motor.
- C. The Condux LW Cable Puller provides up to 3,000 pounds of pulling force. It operates on 115V at 30 feet per minute. The frame is made of high quality tubular steel.

NOTE: While the cable puller itself can be used with a variety of rope diameters, Condux recommends using ½" diameter rope

#### **Operator Qualifications**

- A. Operator must know the required safety directives to run the product that are pertinent to the country where it is being used.
- B. Operator in charge of the product and installation project must be appropriately dressed, avoiding large clothes, hanging jewelry or whatever might become entangled in the moving parts
- C. Operator must also wear the necessary protective equipment such as gloves, boots, helmet, etc.
- D. Operator must carefully follow all advisements contained in the instruction manual or on the machine

Operator must have work area kept clean of obstacles that might inhibit a safe working area.

### **Maintenance Qualification**

- A. Periodically inspect product for wear and tear.
- B. Authorized and trained personnel must do all maintenance operations. Trained personnel are defined as people who have received qualified training from the using company or from the manufacturer

# 2 Safe Operating Practices

### **Important Safety Instructions**

#### **Electrical Requirement**

1. This puller should be grounded while in use to protect the operator from electric shock. The power pack is equipped with a 3-conductor cord and 3-prong grounding type plug to fit the proper grounding type receptacle. The green conductor in the cord is the grounding wire. Never connect the green wire to a live terminal. If necessary, an adapter is available for connecting 3-prong plugs to 2-prong receptacles. The adapter's green-colored lug must be connected to a permanent ground, such as a properly grounded outlet box.

#### **Extension Cords**

2. Use only 3-wire extension cords that have 3-prong grounding-type plugs and 3-pole receptacles that accept the pullers plug.

#### **Outdoor Use Extension Cords**

- 3. If used outdoors, the extension cord must be marked with the suffix W-A following the cord type designation (e.g., STJW-A).
- 4. Use an extension cord with the proper wire size for the length of the cord. An undersized cord will cause a drop in line voltage, resulting in loss of power and overheating (See Chart below).

Total Amps	0-2.0	2.1-3.4	3.5-5.0	5.1-7.0	7.1-12.0	12.1-16.0	16.1-20.0
Ext. Cord Length	Wire Size						
25 ft.(8 m)	18	18	18	18	16	14	12
50 ft. (15 m)	18	18	18	16	14	12	10
75 ft. (23 m)	18	18	16	14	12	10	8
100 ft. (30 m)	18	16	14	12	10	8	8
150 ft. (46 m)	16	14	12	12	8	8	6
200 ft. (61 m)	16	14	12	10	8	6	4
300 ft. (91 m)	14	12	10	8	6	4	4
400 ft. (122 m)	12	10	8	6	4	4	2
500 ft. (152 m)	12	10	8	6	4	2	2
600 ft. (183 m)	10	8	6	4	2	2	1
800 ft. (244 m)	10	8	6	4	2	1	0
1000 ft. (305 m)	8	6	4	2	1	0	0

5. Position the cord that it will be clear of any rotating parts and will not be a trip hazard to the operator.

#### **Don't Abuse Electrical Cord**

6. Never lift or carry the puller by the cord, and never yank the cord to disconnect it from the receptacle. Keep the cord away from heat, oil, and sharp edges

7. Do not use the puller if the switch is malfunctioning. Have it replaced by an authorized service center.

#### **Disconnect Tools**

8. Always disconnect the power when not in use and before installing, removing, or servicing the puller.

#### **Keep Work Area Clean**

9. Cluttered areas invite injuries.

#### **Consider Work Area Environment**

- 10. Do not use the puller in wet or damp locations, and do not expose it to rain
- 11. Keep the work area well-lit
- 12. Do not use the puller in the presence of flammable liquids or gases.

#### **Guard Against Electric Shock**

13. Guard against shock, while operating the puller, by preventing bodily contact with grounded surfaces (e.g., metal pipes)

#### **Keep Children Away**

14. Do not let anyone but the operator touch the puller or the extension cord; all visitors should be kept a safe distance away from the work area.

#### **Store Idle Tools**

15. When not in use, the puller should be stored in a dry, secure area-out of the reach of children.

#### **Don't Force Tool**

16. Use the puller only for its designed use; do not force the puller to perform beyond its capabilities.

#### **Dress Properly**

17. Do not wear loose clothing or jewelry; they can become caught in moving parts.

#### **Use Safety Glasses**

- 18. Work gloves, non-skid safety boots, safety glasses, and a hard hat should always be worn.
- 19. Operators with long hair, should contain their hair beneath their hard hat.

#### Don't Overreach

20. Keep proper footing an balance at all times.

#### **Maintain Puller with Care**

21. Follow instructions for lubricating and changing accessories. Inspect the puller's cord periodically, and if damaged, have it replaced by an authorized service center. Inspect extension cords periodically, and if damaged, replace them. Keep the puller dry, clean and free from oil and grease.

#### **Stay Alert**

22. Watch what you are doing, Use common sense. Do not operate the puller when you are tired.

#### **Check for Damaged Parts**

23. Before further use of the puller, any damaged part should be carefully inspected to determine that it will operate properly and perform its intended function. Check for proper alignment of moving parts and that there is no binding. Ensure all mounting hardware is securely fastened. Any damaged part should be properly repaired or replaced by an authorized service center.

#### **Avoid Unintentional Starting**

24. Do not carry the puller it is plugged in, and be sure the switch is off before plugging in the power cord.

#### Secure Work

25. Secure the conduit to its associated structure before pulling any cable through it.

### SAVE THESE INSTRUCTIONS

## **Puller Operation:**

Condux Cable Pullers are designed for safe operation, but these safety precautions should be practiced:

- 1. Stay clear of the area directly behind the puller while in operation
- 2. Use only 10 gauge 3 wire extension cords.
- 3. Always thread the pull line over or under all of the sheaves

### **Rope Guidelines:**

#### Four Safety Rules When Working With Rope

- 1. **RIGHT ROPE FOR THE JOB:** Use adequate size rope recommended to accommodate your pulling load.
- 2. **CORRECT HANDLING AND USAGE**: Observe the recommended working load. Make sure all pulleys, fairleads, etc. are proper size and free of grit and rust. Avoid knots or severe bending that will reduce rope strength. Store rope in accordance with manufacturer's recommendations.
- 3. DOWNGRADE OR DISCARD: When rope has been subjected to forces or conditions that reduce its strength, it should immediately be downgraded (used in less demanding or less critical applications) or discarded. It is both poor economics and unsafe to use rope beyond its normal lifetime.
- 4. **STAY CLEAR OF ROPE**: Never allow anyone to stand in line or within 30 degrees on either side of the rope under tension.

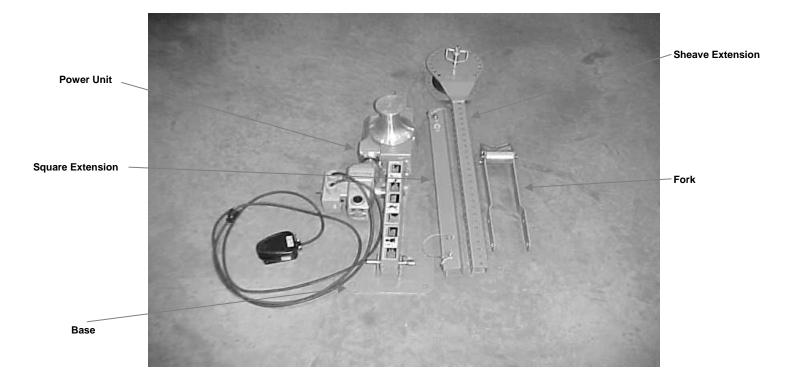


WARNING: Rope under tension may break. Stand at least 30 degrees to either side

#### What to Look for When Inspecting Rope

- 1. **RUST:** Contact on surfaces with rust will cause a significant loss of strength in a short time. Discoloration is the key.
- 2. **DIRT & GRIT**: Using the rope in mud, sand, or dirt will allow particles into the construction, causing the strength of the rope to deteriorate rapidly. What to look for: caked on mud, grease with sand and dirt, or sand in outer construction.
- **3. CUT OR PULLED STRANDS**: (braid no braid) When any of the jacket strands are cut, rope should be downgraded. Careful attention should be given to pulled strands and all strands should be worked back into the rope. If in doubt, downgrade rope to a less demanding application.
- **4. WORN STRANDS**: When the fibers show extreme wear in any given area, rope should be replaced or downgraded.
- **5. HARDNESS OR STIFFNESS**: When rope is very hard or stiff it usually indicates the rope has been overloaded or subjected to intense heat. Rope should be downgraded or discarded.
- **6. NYLON ROPE**: Nylon suffers approximately 15% strength loss when wet. This factor should be considered when selecting rope.
- **7. DOWNGRADING**: A rope's history is important. Anytime the rope has been subjected to sustained loads, shock loads, or loads three times the recommended working load, the rope should be downgraded or discarded.

# Puller Assembly Instructions



- 1. Remove puller components from the carrying case.
- 2. Place Power Unit into the Base Plate and secure with Clevis Pin (See Figure 1)

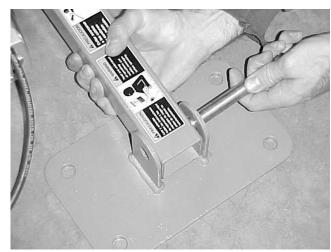


Figure 1

3. Remove Lock Pins from square adapter and slide over Mounting Tube on Power Unit. Reinstall Lock Pins. (See Figure 2)

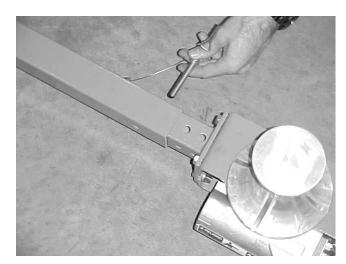


Figure 2

4. Slide Sheave Extension into Square Adapter. Reinstall Lock Pin. (See Figure 3). Sheave Extension can be adjusted to desired height during puller set-up.



Figure 3

5. Remove Hitch Pin from Extension Head Bracket and slide Fork over Sheave Bracket and replace Hitch Pin (See Figure 4)



Figure 4

6. Puller is completely assembled.

# 4 Operating Instructions

- 1. Select an adapter that corresponds to conduit size and fit it into the retaining fork.
- 2. Screw thumbscrew on retaining fork into adapter. (See Figures 5 & 6)





Figure 5

Figure 6

- 3. Position and adjust cable puller for desired application.
- 4. Thread pull line through adapter and across all of the sheaves.

WARNING: Inferior rope may break. Ensure the rope is rated for the load. Failure to do so could result in serious personnel injury or death.

5. Manually tension the pull line and wrap it counter clockwise around the capstan. Each wrap will yield approximately 20% more pulling power.



WARNING: The rope is under tension and could break. Stand at least  $30^\circ$  to either side of the rope. Recoil force could cause serious personal injury or death.

6. Re-adjust the puller if necessary to assure maximum stability against pulling torque.

7. Plug cable puller into 110-120V 15 amp standard outlet.



WARNING: Electrical equipment is very hazardous in wet areas. Properly ground puller, wear insulated footwear and gloves, keep the operator zone dry, and keep cords in good condition. Failure to do so could result in serious personal injury or death.



CAUTION: Inadequate size extension cords may fail. As the distance from the supply outlet increases, heavier gauge extension cords are required. The accompanying table, Figure 3, is based on limiting the line voltage drop to five volts at 150% of the rated amperes. Inadequate size results in voltage drop, loss of power, and possible motor damage.

Other precautions to protect the cord: keep cords away from excessive heat, sharp edges, and the puller itself; and keep the cord out of damp or wet areas. Also, repair or replace damaged extension cords before using.

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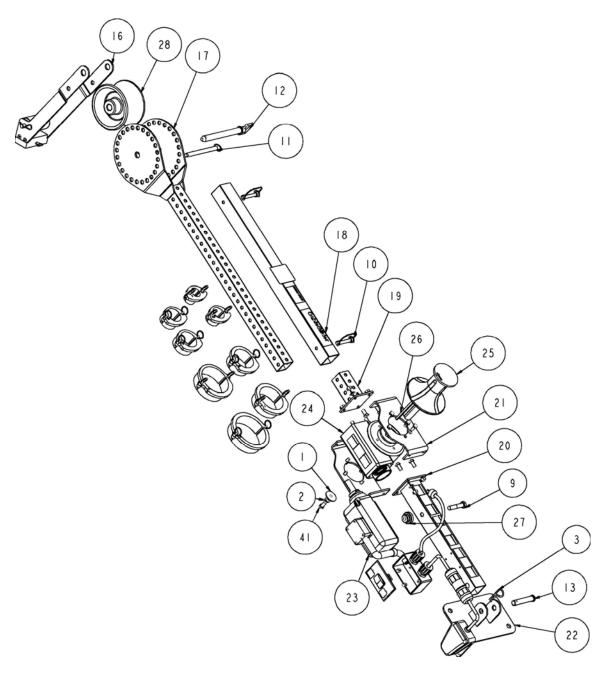


CAUTION: Excessive voltage and/or voltage boosters will overwork the motor. Ensure the outlet voltage matches the motor's nameplate voltage. Excessive voltage could result in motor failure.

8. To begin operation, grab rope, keeping tension on the rope throughout the pull, step on foot pedal to start puller.

# 5 Appendices

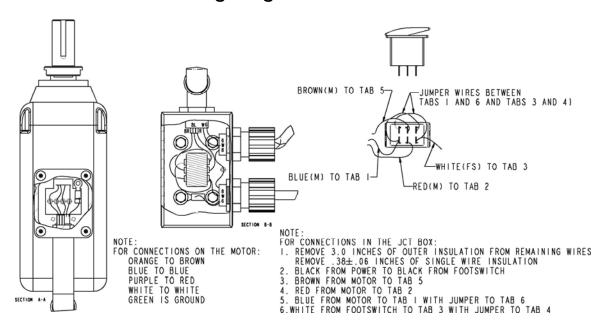
## LW CableGlider Assembly



### LW CableGlider BOM

<u>ITEM</u>	PART NO.	DESCRIPTION	QTY
1	02001900	FLATWSHR,FENDER .375 X 1.50	1
2	02004500	LOCKWSHR 0.37 REGULAR ST CZ	9
3	02203901	PIN,HAIR .62 SHAFT15 DIA	1
8	02288429	CAPSRW 0.31-18X0.75 HHSTGR5 CZ	8
9	02288686	CAPSRW 0.50-13X2.50 HHSTGR5 CZ	1
10	02289016	PIN, .375 DIA - 2.250 LG QUICK	2
11	02289407	PIN,QUICK RELEASE - 0.50 X 5.50	1
12	02289408	PIN,HITCH - 3/4 X 7.00	1
13	02289410	PIN,CLEVIS - 0.625 X 3.50	1
14	02289411	LOCKWSHR 0.31 REGULAR ST CZ	8
16	08678205	FORK,RETAINING - 3000# CG	1
17	08678208	EXTENSION,SHEAVE WELD 3000# CG	1
18	08678211	TUBE,FRONT - WELDMENT	1
19	08678215	MOUNT,FRONT EXTENSION WELDMENT	1
20	08678216	MOUNT,BASE EXTENSION WELDMENT	1
21	08678218	PLATE,MOTOR MOUNTING BRACKET	2
22	08678221	BASE, WELDMENT	1
23	08678225	MOTOR,DRIVE W/ FT SWITCH 3000# CG	1
24	08678229	GEARBOX,REDUCTION - CHANGE CFACE	1
25	08678315	CAPSTAN,SHAFT ASSEMBLY 3000#CG	1
27	08678232	POST,MOTOR MOUNTING-3000# CG	1
28	08678233	SHEAVE,NYLON 3.50 X 6.00	1
41	12004700	CAPSRW 0.37-16X0.75 HHSTGR5 CZ	9

## LW CableGlider Wiring Diagram



## **LW CableGlider Accessories**





**Internal Adapter** 

**External Adapter** 

Duct Adpaters				
Part Number	Description			
08678240	External Adapter, 1.00" Conduit			
08678245	External Adapter, 1.25" Conduit			
08678250	External Adapter, 1.50" Conduit			
08678255	External Adapter, 2.00" Conduit			
08678260	External Adapter, 2.50" Conduit			
08678265	External Adapter, 3.00" Conduit			
08678270	External Adapter, 3.50" Conduit			
08678275	External Adapter, 4.00" Conduit			
08678276	Internal Adapter, 1.00" Conduit			
08678277	Internal Adapter, 1.25" Conduit			
08678278	Internal Adapter, 1.50" Conduit			
08678279	Internal Adapter, 2.00" Conduit			
08678280	Internal Adapter, 2.50" Conduit			
08678281	Internal Adapter, 3.00" Conduit			
08678282	Internal Adapter, 3.50" Conduit			
08678283	Internal Adapter, 4.00" Conduit			

## **Replacing Fork Thumbscrew:**

- 1. Remove thumbscrew with a tap and hammer. (See Figure 7)
- 2. Insert new thumbscrew (See Figure 8)



Figure 7



Figure 8

3. Place lockwasher on thumbscrew (See Figure 9), use a 5/16" socket to push lockwasher onto the thumbscrew (See Figure 10). Thumbscrew needs to be pushed till it is resting on the inside lip of the fork.



Figure 9



Figure 10

#### **Replacement Part Numbers**

Part No.	Description	Qty Required
02289412	Thumbscrew	1
02289439	Push Nut	1

# **NOTES:**

# **NOTES:**

# **NOTES:**

## 6

## Warranty Information

Condux International, Incorporated extends the following warranty to the original purchaser of these goods for use, subject to the qualifications indicated:

Condux International, Incorporated warrants to the original purchaser for use that the goods or any component thereof manufactured by Condux International will be free from defects in workmanship for a period of 1 year form the date of purchase, provided such goods are installed, maintained, and used in accordance with Condux's written instructions.

Components not manufactured by Condux International but used within the assembly provided by Condux International are subject to the warranty period as specified by the individual manufacturer of said component, provided such goods are installed, maintained, and used in accordance with Condux's and the original manufactures written instructions.

Condux's sole liability and the purchaser's sole remedy for a failure of goods under this limited warranty, and for any and all claims arising out of the purchase and use of goods, shall be limited to the repair or replacement of the goods that do not conform to this warranty.

To obtain repair of replacement service under the limited warranty, the purchaser must contact the factory for a Return Material Authorization (RMA), Once obtained, send the RMA along with the defective part or goods, transportation prepaid, to:

Condux International, Inc. 145 Kingswood Drive Mankato, MN 56001 USA

THERE ARE NO EXPRESS WARRANTIES COVERING THESE GOODS OTHER THAN AS SET FORTH ABOVE. THE IMPLIED WARRANTIES OR MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE ARE LIMITED IN DURATION TO ONE YEAR FROM DATE OF PURCHASE

CONDUX ASSSUMES NO LIABILITY IN CONNECTION WITH THE INSTALLATION OR USE OF THIS PRODUCT, EXCEPT AS STATED IN THIS LIMITED WARRANTY, CONDUX WILL IN NO EVENT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES



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