USER'S GUIDE & SAFETY MANUAL USER'S GUIDE & SAFETY MANUAL

# CableGlider<sup>®</sup> Cable Pullers





STD CableGlider



CONDUX

## **IMPORTANT SAFETY INSTRUCTIONS**

# WARNING: When using electric tools, basic safety precautions should always be followed to reduce the risk of fire, electric shock, and personal injury, including the following:

Read and understand all procedure and safety instructions before using a Condux 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 personal 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 require-

ments as explained by procedures called out in this manual. Failure to follow these instructions could result in serious personal injury or death. Save this user's guide for future reference.

# ADVERTENCIA

Favor de leer y comprender todas las instrucciones de operacion y seguridad antes de usar la maquina. Si Ud. no comprende las instrucciones favor

de consultarle a su jefe.

#### Save these instructions



If you have questions on:

**SAFETY • OPERATIONS • APPLICATIONS** 

CALL 1-800-533-2077

or 1-507-387-6576

#### **Important Safety Instructions**

#### **Grounding Instructions**

1. This puller should be grounded while in use to protect the operator from electric shock. The powerpack 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 (See Figures below).





#### **Extension Cords**

2. Use only 3-wire extension cords that have 3-prong grounding-type plugs and 3-pole receptacles that accept the powerpack's 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 1 below).

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
			Wire Siz	e		
18	18	18	18	16	14	12
18	18	18	16	14	12	10
18	18	16	14	12	10	8
18	16	14	12	10	8	8
16	14	12	12	8	8	6
16	14	12	10	8	6	4
14	12	10	8	6	4	4
12	10	8	6	4	4	2
12	10	8	6	4	2	2
10	8	6	4	2	2	1
10	8	6	4	2	1	0
8	6	4	2	1	0	0
	0 - 2.0 18 18 18 18 18 18 18 18 18 18	0 - 2.0      2.1 - 3.4        18      18        18      18        18      18        18      16        16      14        12      10        12      10        10      8        8      6	0 - 2.0      2.1 - 3.4      3.5 - 5.0        18      18      18        18      18      18        18      18      18        18      18      16        18      16      14        16      14      12        16      14      12        14      12      10        12      10      8        12      10      8        10      8      6        10      8      6        8      6      4	0 - 2.0      2.1 - 3.4      3.5 - 5.0      5.1 - 7.0        Wire Size      Wire Size      Wire Size        18      18      18      18        18      18      18      18        18      18      18      16        18      18      16      14        18      16      14      12        16      14      12      10        16      14      12      10        14      12      10      8        12      10      8      6        12      10      8      6        12      10      8      6        10      8      6      4        10      8      6      4        8      6      4      2	0 - 2.0      2.1 - 3.4      3.5 - 5.0      5.1 - 7.0      7.1 - 12.0        Wire Size        18      18      18      16        18      18      18      16      14        18      18      16      14      12        18      18      16      14      12        18      16      14      12      10        16      14      12      10      8        16      14      12      10      8        14      12      10      8      6        12      10      8      6      4        12      10      8      6      4        12      10      8      6      4        10      8      6      4      2        10      8      6      4      2        10      8      6      4      2        10      8      6      4      2        10      8      6      4 <td< td=""><td>0 - 2.0      2.1 - 3.4      3.5 - 5.0      5.1 - 7.0      7.1 - 12.0      12.1 - 16.0        Wire Size      Wire Size      Wire Size      14      14      12        18      18      18      16      14      12        18      18      18      16      14      12        18      18      16      14      12      10        18      18      16      14      12      10        18      18      16      14      12      10        18      16      14      12      10      8        16      14      12      10      8      6        14      12      10      8      6      4        12      10      8      6      4      2        10      8      6      4      2      2        10      8      6      4      2      1        12      10      8      6      4      2      2        10      <t< td=""></t<></td></td<>	0 - 2.0      2.1 - 3.4      3.5 - 5.0      5.1 - 7.0      7.1 - 12.0      12.1 - 16.0        Wire Size      Wire Size      Wire Size      14      14      12        18      18      18      16      14      12        18      18      18      16      14      12        18      18      16      14      12      10        18      18      16      14      12      10        18      18      16      14      12      10        18      16      14      12      10      8        16      14      12      10      8      6        14      12      10      8      6      4        12      10      8      6      4      2        10      8      6      4      2      2        10      8      6      4      2      1        12      10      8      6      4      2      2        10 <t< td=""></t<>

#### Chart 1

5. Position the cord so 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 powerpack 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.

#### SAVE THESE INSTRUCTIONS

#### **Disconnect Tools**

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

#### 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 and balance at all times.

#### Maintain Puller & Powerpack with Care

21. Follow instructions for lubricating and changing accessories. Inspect the powerpack's cord periodically, and if damaged, have it repaired or 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 powerpack if it is plugged in. 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

## Table of Contents



#### **General Information**

Heavy Duty CableGlider	 	 	 	 		 		 				.5
Plus CableGlider	 	 	 	 		 		 				.5
Standard Duty CableGlider	 	 	 	 	-	 		 • •				.5



#### **Safe Operating Practices**

Puller Operation	.6
Four Safety Rules When Working With Rope	.6
What to Look for When Inspecting Rope	.6



#### **Powerpack Installation Instructions**

Installation Instructions	 .7



#### **Operating Instructions**

Heavy Duty CableGlider	8
Standard Duty & Plus CableGlider	8
Standard Duty CableGlider Applications Guide	13
Heavy Duty CableGlider Applications Guide	14



#### **Transportation Instructions**

Heavy Duty & Plus CableG	ider	 	 	 	 	12
Standard Duty CableGlider		 	 	 	 	12



#### **Appendices**

A. Standard Duty CableGlider Assembly1	5
B. Heavy Duty / Plus CableGlider Assembly1	9
C. Standard / Plus / HYD CableGlider Label Kit	5
D. Heavy Duty CableGlider Label Kit	6
E. CableGlider Specifications	7
F. CableGlider Accessories	8



#### **Additional Information**

Factory Assistance	 	 	
Limited Warranty .	 	 	

# General Information

# 1.

Condux CableGlider<sup>®</sup> Cable Pullers are built to provide reliable performance to improve the efficiency of your cable pulling operations. Our pullers are designed to be portable and self-contained, with sheaves and adapters included. Condux pullers have a number of advanced features, such as a self-tailing capstan for added pulling stability and to permit one-worker operation (Standard & Plus models only). Our Heavy Duty and Plus pullers feature an additional adjustable leveling arm to facilitate both horizontal and vertical pulls.

Each model includes a tool box containing  $2^{"}$ ,  $3^{"}$ ,  $3^{1}/_{2}^{"}$ , and  $4^{"}$  (51, 76, 89, and 102 mm) conduit adapters and a  $2^{"}-4^{"}$  (51-102 mm) retaining fork.

**NOTE:** While the cable puller itself can be used with a variety of rope diameters, the self-tailing capstan mechanism is designed to work with rope from  $\frac{5}{8}$ " (16 mm) to  $\frac{7}{8}$ " (22 mm) diameter.

#### **Condux Heavy Duty CableGlider**

The Condux Heavy Duty CableGlider is specially designed to provide maximum pulling power for longer and more difficult conduit runs, while offering unmatched versatility for a variety of pulling applications. Most important, it has the added pulling power you need, delivering up to 12,000 pounds (53,375 N) of pulling force. It operates on 115V at either 15 or 30 feet (5 or 9 m) per minute.

The puller is equipped with a heavy duty powerpack and a two-speed motor capable of pulling at full capacity in low speed. Other features include an extra pivoting arm, heavy duty frame, retaining fork, a foot switch for added safety and operating convenience, and flotation tires with pins on the front wheels for adjusting the puller's height.

#### **CableGlider Plus**

The Condux CableGlider Plus comes equipped with the same removable powerpack and accessories as our Standard Duty puller, but also features a Heavy Duty frame and an extra pivoting arm for added versatility. It has flotation tires with pins provided on the front wheels for adjusting the puller's height.

#### Standard Duty CableGlider

The Condux Standard Duty CableGlider provides up to 6,500 pounds (28,912 N) of pulling force at low speed. It operates on 115V at either 15 or 30 feet (5 or 9 m) per minute . The frame is made of high quality tubular steel and equipped with tandem flotation tires.

#### **SEE CABLEGLIDER SPECIFICATIONS ON PAGE 27**

# Safe Operating Practices

#### **Puller Operation**

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

- 1. Start all pulls on low speed.
- 2. Stay clear of the area directly behind the puller while in operation.
- 3. Use only 10 gauge 3-wire extension cords.
- 4. Always thread the pull line over or under all of the sheaves.
- 5. Condux pullers are not designed for side pulls. Attempting side pulls will damage the puller.

#### **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.
- 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 a 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 a rope under tension.

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

**!WARNING:** Rope under tension may break. Stand at least 30 degrees to either side of rope. Recoil force could cause serious personal injury or death.

#### 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 on 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.

# **Powerpack Installation**



Before installing or removing the powerpack, adjust the puller's frame so that it is nearly horizontal and so that the extension arm rests on the ground (See Figures 1 & 2). This will ensure that the puller is stable.



**!CAUTION:** The powerpack is heavy. Use proper lifting techniques. Improper lifting could result in personal injury or property damage.

- 1. Remove the **mounting pins** from the puller frame.
- 2. Carefully set the powerpack's front end **(capstan end)** on the front mounting pin, gently lower the rear end into place.
- 3. Install both mounting pins through both the frame and powerpack.
- 4. Check that all mounting pins are secure.
- 5. Removal is the opposite of the installation procedures.





Figure 1 (HD/Plus CableGlider)

Figure 2 (STD CableGlider)

# **Operating Instructions**

**IMPORTANT:** While these instructions are written to apply to the Condux Heavy Duty CableGlider, they apply to all Condux puller models. Where operations differ for the Standard Duty and Plus models, those differences are noted in the instructions.

- 1. Select an adapter that corresponds to conduit size and fit it into the retaining fork.
- 2. Tighten thumbscrews on retaining fork. (See Figure 3)
- 3. Position and adjust cable puller for application desired. Refer to "Pulling Applications Guide" (pages 13 & 14) for suggested placement and adjustment of puller and extension arm(s).
- 4. Thread pull line through adapter/retaining fork and **across all of the sheaves.** (See Figure 4)

**!CAUTION:** Failure to run the pulling rope across each of the sheaves will result in damage to the puller frame.

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



Figure 3



Figure 4

5. Manually tension the pull line and wrap it clockwise around the capstan. Each wrap will yield approximately 20% more pulling power. If on the Standard or Plus models the rope size permits, wrap the pull line around the self-tailing portion of the capstan. (See Figure 5) If you wish to use the self-tailing capstan function, you must use pulling rope with a diameter from 5/8" to 7/8" (16 to 22 mm). However, the puller will work without the self-tailing mechanism with a variety of other rope sizes.







**!CAUTION:** The self-tailing capstan's bronze components are not meant to rotate. Never overwrap rope on them. Damage to the puller will result. Do not run the rope directly from the sheave to the self-tailer. Damage to the self-tailer will result. (See Figure 5)



**NOTE:** Use low temp grease (i.e.: Molub-Alloy 4086-1). Before use, always check to make sure the anti-rotation pawl is functioning properly. Grease after 10-15 hours of use.

Figure 5



**!WARNING:** The rope is under tension and could break. Stand at least 30° to either side of the rope. Recoil force could cause serious personal injury or death. (See Figure 6)

- 6. Re-adjust the puller if necessary to assure maximum stability against pulling torque.
- Plug cable puller into 110-120V
  20 amp twist outlet. (For Standard Duty and Plus models you may use 110-120V 15 amp standard outlet.)
   220V motors available upon request.





**!DANGER:** Electrical equipment is very hazardous in wet areas. Properly ground the puller (see Figures 7 & 8), wear insulated footwear and gloves, keep the operator zone dry, and keep cords dry and in good condition. Failure to do so could result in serious personal injury or death.



Figure 7 (Twist plug/outlet)

Figure 8 (Standard plug/outlet and adapter)

**!WARNING:** Inadequate size extension cords may fail. As the distance from the supply outlet increases, heavier gauge extension cords are required. The accompanying table, Figure 9, 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.

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		ł		Wire Siz	e	ł	<u>.</u>
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

Figure 9

**!WARNING:** 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 operations, set the motor to low speed by running the motor momentarily and then turning the shift lever on the motor (See Figure 10) while the motor is idling down. Do not attempt to shift speed with the motor off. (On the Standard and Plus Pullers, to adjust the speed, pull out and twist the clutch knob located on the side of the power pack assembly after the puller has stopped.) (See Figure 11)
- 9. Start the puller and begin pulling operations. Stay clear of the area directly behind the puller. This is especially important during the first stages of the pull when the pulling force has not yet stabilized.

**!WARNING:** Strained rope may fail unexpectedly. Downgrade or discard rope after a strenuous job. Recoil force could cause serious personal injury or death.







Figure 10 (HD CableGlider)



Figure 11 (STD / Plus CableGlider)

#### **Switching to High-Speed Operation**

Once tension on the pull line has stabilized at low speed, you may shut off the motor, and as it is idling down, shift the motor gear box for high-speed operation. On the Standard and Plus pullers, stop the puller and use the clutch knob on the side of the power pack assembly to change the speed. (See Figures 10 & 11)

#### **Recommended Working Load for Rope**

The recommended working load is determined by taking the average tensile strength of new rope under laboratory conditions and dividing by a factor to determine the maximum load that should be applied to the rope. The factor varies with type of fiber and construction. This factor usually is sufficient to assure you of a comfortable safety margin, however, there are exceptions.

Synthetic fibers are susceptible to degradation and damage in many ways that are not controllable by the manufacturer. Therefore, it is imperative that the rope be inspected before use. If it shows signs of excessive wear it should be replaced.

# **Transportation Instructions**

An object's stability is determined by its center of gravity-the lower, the better. When transporting the CableGlider, first perform the following steps so that its lowest center of gravity is achieved:

**!CAUTION:** The CableGlider is heavy. Use care when removing the height-adjusting pins. Failure to do so could cause personal injury or property damage.

#### Heavy Duty & Plus CableGlider

- 1. Remove the two pins that adjust the height of the frame's base and lower it until its holes line up with the vertical support's bottom holes. Re-insert the two pins. (See Figure 12)
- 2. Remove the lower arm's locking pin and move the arm towards the powerpack until it rests on it. Re-insert the locking pin.
- 3. Remove the upper arm's locking pin and lower the arm until it is nearly horizontal. Re-insert the locking pin.

#### **Standard Duty CableGlider**

- 1. Position the frame's base so that it is standing upright on the end of the base tubes. (See Figure 13)
- 2. Remove the arm's locking pin and swing the arm beneath the frame's base. Re-insert the locking pin through both the frame and the locking plate.



Figure 12 (HD/Plus CableGlider)



Figure 13 (STD CableGlider)





**Standard Duty CableGlider Applications Guide** 



## Appendices



 A. Standard Duty CableGlider Assembly
 1. Standard Duty CableGlider Frame Part # 08610690



#### Qt V ശ 2 2 4 4 ო 4 ~ ~ ~ <u>-</u> 60 Bearing, Flange .766-1.002-1.25 (Included in items 5 & Frame, Base Standard Puller Weldment Frame, Arm Standard Puller Weldment Tire Option Weldment, Standard Puller Shaft, Center Sheave-Standard Puller Axle, Center Frame-Standard Puller Shaft, End Sheave-Standard Puller Sheave, with Bearings 5.00 x 7.50 Sheave, with Bearings 5.00 x 5.50 Axle, End Frame-Standard Puller Pin, Hitch Cotterless 5/8 x 8.20 Pin, Hitch 5/8 x 8.20 (.18 Hole) Ring, Retaining .750 External Ring, Retaining .625 External Tube, Rd .87-.09-3.25 Blue Wheel Pneum 4.10/3.50-4 Hair Pin, .62 Shaft 08610715 Label Kit, Standard Frame Description

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08610790

Part Number

Item Number

17

02215801

08610793

13 13 12

08610794

02203901

15

#### 3. Standard Duty / Plus CableGlider Power Pack Assembly

Part # 08610860 Standard Part # 08674360 Plus



	Ś	tandard Duty CableGlider Part Numbers			08674661	Label Kit, Standard Powerpack	-
tem	Part Number	Description	Qty	77	08678001	Motor, with Foot Switch & Cord (220 Volt AC)	1
38	02209000	Capscrew, .250-2050-GR8-SC-Button Head	-	76 =	00181900	Wire Cord, 1.00mm / 3 type VDR-HAR	
37	08610606	Capscrew, Capstan-Powerpack	1	75	02278800	Capscrew, .375-16-3.50-GR8-BZ Hex Head	2
36	08610682	Washer, Fender .250-1.50 OD-BZ	2	74 = +	08610811	Plate, Foot Switch Mounting	1
35	08610772	Bushing, Retaining-Powerpack	1	73 = +	02182501	Capscrew, .250-20 x .75 Flat Head	2
34	08674537	Flatwasher, .750-2.00013 Brass	+	72 = +	12013700	Hex Nut .250-20 Nyloc	2
33	08610653	Flange, Outer Dentator-Powerpack	-	71 = +	12011200	Lockwasher, #10 External Tooth	1
32	08610654	Finger, Bronze-Powerpack	1	70	12010600	Lockwasher, .500-BZ	1
31	02204600	Capscrew, .375-16-1.00-GR8-CZ-Socket Head	8	69	08610661	Post, Motor Mounting-Standard Powerpack	1
30	08610820	Bracket, Front Mounting-Plus Puller	1	68	08610685	Handle, Standard Powerpack	1
29	08610819	Bracket, Front Mounting-Standard Puller	1	67	02032000	Capscrew, .375-16-1.25-GR8-SC-Hex Head	1
28	08610801	Housing, with Shaft & Bearing-Standard Powerpack	1	99	08610815	Mount, Motor-Plus Puller	1
27	08610669	Cover, Spped Adjust-Standard Powerpack	1	65	08610805	Mount, Motor-Standard Puller	1
26	08610767	Sprocket, Motor Drive-Standard Powerpack	1	64	02117101	Capscrew, .500-13-1.00-GR5-BZ-Hex Head	1
25	02238801	Capscrew, .312-18-1.00-GR5-BZ-Hex Head	1	63 = +	02274300	Screw, Tapping #10-3225 CZ	1
24	02183700	Flatwasher, .312-Regular-BZ	1	62 = +	02236600	Terminal, Ring 16-14GA / .25 Stud	1
23	08610671	Chain, #40-70 Pitches Single-with Master Link	1	61 = +	02247800	Switch, Foot without Cord-Standard Powerpack	1
22 *	02230901	Screw, Mach .250-2050-GR2-BZ-Pan Head	6	+ = 09	08674025	Guard, Foot Switch-Standard Powerpack	1
21	08610663	Chain, #40-52 Pitches Single-with Master Link	1	<del>5</del> 9 = +	08930054	Terminal, Ring 16-14GA Stud	3
20	02204700	Bearing, Thrust 1.015-2.87512	1	58 +	02205300	Cord, with Plug 12 / 3 SJ 9 Feet (120 Volt AC)	1
19	08610611	Hub, Main-Standard Powerpack	1	57 +	00233100	Wire Cord, 16 / 3 Type Sjto	
18	08610613	Collar, Speed Adjust-Standard Powerpack	1	56 = +	02232200	Connector, Strain Relief .3850	2
17	08610614	Knob, Clutch-with Pins-Standard Powerpack	1	55 = +	02236800	Jamnut, Strain Relief 1/2 NPT	2
16	08610618	Spring, Speed Adjust-Standard Powerpack	1	54 = +	08610702	Box, Junction-Standard Powerpack	1
15	02239101	Flatwasher, .437-Regular-BZ	1	53 = +	02205400	Cover, Single Gang-Blank with Gasket & Screws	1
14	12001302	Nut, Hex .375-16-GR2-CZ	1	52 = +	02241701	Capsrw, .25-2037-GR5-CZ-Hex Serrated Washer Head	3
13	12023300	Setscrew, .250-2050-Hex Socket-SC	2	51 = +	02252700	Terminal, Ring 16-14GA / #10 Stud	1
12	02064300	Key, .250250-2.38-Keystock	1	50 = +	02238400	Terminal, Butt Connector 16-14GA	4
11	08610604	Sprocket, High Speed 40-30	1	49	08610704	Motor, with Foot Switch & Cord (120 Volt AC)	1
10	08610638	Spring, Pawl-Standard Powerpack	4	48	02205000	Bearing, Sleeve 1.00-1.252-2.25	1
6	08610612	Pawl. Low Speed Drive-Standard Powerpack	4	47	08610668	Cover, Capstan-Standard Powerpack	1
8	08610610	Spring, Compress .04960075	1	46	02204800	Bearing, Thrust 1.003-1.50412	1
2	08610609	Sprocket, Low Speed 40-60	1	45	08610619	Sprocket, Drive-with Transfer Shaft	1
0	08610635	Pin, Taper #5(0.289)-2.25 Steel	1	44	08610665	Chain, #50-56 Pitches Single-with Master Link	1
2	02204900	Bearing, Thrust 1.265-2.37512	+	43	08610624	Pawl, Anti-rotation-Standard Powerpack	1
4	08610622	Sprocket, Capstan-Standard Powerpack	1	42	08610615	Bearing, Sleeve 1.254-1.753-3.00	-
	12013500	Nut, Hex .375-16-GR2-BZ Nyloc	2	41	08610655	Ring, Control, Bronze-Powerpack	1
2	02204301	Capscrew, .375-16-2.25-GR8-BZ Hex Head	+	40	08610602	Capstan, with Bearing-Standard Powerpack	1
-	12000901	Flatwasher 0.37 Typea-Wide St CZ	4	39	08610656	Index, Bronze-Powerpack	1

# = included in item 77; + included in item 49; \* also used with handle

#### 4. Standard Duty CableGlider Part Numbers



#### Qty ω 2 ω 4 2 ო ო ß ശ 2 2 ശ <del>~</del> ~ ~ <u>\_</u> 2 Bearing, Flange 1.010-1.252-1.75 (Included in Item 12) Support, Forward Wheel-Heavy Duty / Plus Puller Frame, Arm Middle- Heavy Duty / Plus Puller Capscrew, .375-16-1.00-GR5-BZ Hex Head Frame, Arm Third-Heavy Duty / Plus Puller Caster, Pnewm 10.00 Swivel and Break Shaft, Sheave-Heavy Duty / Plus Puller Frame, Base-Heavy Duty / Plus Puller Sheave, with Bearings 4.00 x 11.00 Spacer, Sheave-Middle Frame Arm Spacer, Sheave-Third Frame Arm Nut, Hex .375-16-GR2-BZ Nyloc Pin, Locking .75 Dia-10.50 Lg Ring, Retaining 1.000 External Pin, Quick Release .375-3.00 Ring, Retaining .625 External Wheel Pneum 4.10 / 3.50-4 08674305 Label Kit, Heavy Duty / Plus Frame Description Part Number 08674335 08674325 08674315 12013500 02252300 08674338 08674303 08674302 08610695 08674337 08674311 02231900 02224800 02222900 02020701 08674301 02187001 ltem 15 16 4 13 12 9 17 ი $\infty$ 9 $\sim$ 5 4 ĉ $\sim$ ~

#### 2. Heavy Duty CableGlider Part Numbers

#### 3. Heavy Duty CableGlider Power Pack (1) Part # 08674680







#### 4. Heavy Duty CableGlider Power Pack (2) Part # 08674680



#### 5. Heavy Duty CableGlider Power Pack (3) Part # 08674680



	He	eavy Duty CableGlider Part Numbers		35	08065215	Jamnut, Strain Relief- 3/4 NPT	2
ltem	Part Number	Description	Qty	34	02277800	Connector, Strain Relief .5063	2
68	02229301	Nut, Wire-Yellow	3	33	02242300	Bearing, Thrust 1.265-2.00012	1
67	08678011	Motor, w/ Plug & Cord-220 Volt AC	٦	32	02242100	Capscrew, .500-13-4.00-PL Socket	4
99	02277801	Connector, Strain Relief .3850	-	31	02266400	Capscrew, .190-3450-SC Flat	2
65	00181800	Wire 2.5mm-3 Conductor VDE-HAR-7FT	2	30	02241900	Handle, Fldng-2.25 HGH-4.68LG-BZ	3
64	12013700	Hex Nut .250-20-Nyloc	2	29	02241800	Capscrew, .190-2450-SC Flat	12
63	08610804	Plate, Foot Switch Mounting	1	28	02241700	Capscrew, .250-2025-SC Flat	3
62	02182501	Capscrew, .250-2075-Flat HD	2	27	02241600	Spring, .720 OD .081 Wire 1" FL	1
61	08674672	Retainer, Tensioner Rod HD Powerpack	٢	26	02241500	Screw, Shoulder .250 Diameter375	1
60	08674670	Powerpack, Bore & Shaft-HD	٦	25	02241100	Pin, Coil Spring .19 Dia-1.50 LG	1
59	08674667	Sprocket, Motor-HD Powerpack	1	24	02240900	Capscrew, .190-2475-SC Button	9
58	08674666	Spring, Anti-Rotation HD Powerpack	1	23	02240800	Capscrew, .190-2450-SC Button	8
57	08674665	Rod, Chain Tension Wldmnt-HD	1	22	02236800	Jamnut, Strain Relief- 1/2 NPT	1
56	08674664	Mount, Motor Weldment HD	1	21	02234701	Screw, Tapping .138-3250	1
55	08674660	Shaft, Center-HD Powerpack 1.00	1	20	02232300	Chain, #50-5/8 Pitch 56 PTCHS DBL	1
54	08674658	Frame, Weld Chain Tensioner	٢	19	02232200	Connector, Strain Relief .3850	1
53	08674654	Block, Wear Pad Support	٦	18	02232000	Ring, Retaining 1.750 Exter MD	1
52	08674653	Pad, Wear Cahin Tensioner	2	17	02231400	Capscrew, .250-2062-SC Socket	5
51	08674637	Pawl, Anti-Rotation HD Powerpack	1	16	02230000	Bearing, Thrust 1.510-3.50018	1
50	08674634	Sprocket, Capstan w/ Bushing-HD	٦	15	02229600	Switch, Foot-HD Powerpack	1
49	08674626	Sprocket, Center Shaft HD Powerpack	1	14	02229500	Chain, #40-1/2 Pitch 70 PTCHS DBL	1
48	08674625	Collar, Motor HD Powerpack	1	13	02229300	Nut, Wire-Red	3
47	08674624	Cap, Bearing Motor w/ Bushing	1	12	02228100	Pin, Dowel .250 Dia-1.50 Long	1
46	08674622	Cap, Bearing Center w/ Bushing	2	11	02216500	Bag, 9.00-12.00002 Plastic	1
45	08674619	Capstan, w/ Bushing-HD No Selftailing	1	10	02209000	Capscrew, .250-2050-SC Button	7
44	08674613	Cover, Front-HD Powerpack	1	6	02178601	Flatwasher, .190-Regular-BZ	8
43	08674612	cover, Chain-HD Powerpack	٢	8	02102001	Flatwasher, .250-Narrow-CZ	5
42	08674673	Retainer, Center Pad-HD Powerpack	٦	7	02073300	Capscrew, .750-10-2.00 SC Hex	1
41	08674549	Bushing, Retain HD-No Selftailing Capstan	1	9	02021501	Lockwasher, .250-BZ	4
40	08674543	Cover, Wire Junction-HD Powerpack	1	5	02021400	Capscrew, .250-2075-BZ Hex	3
39	08610765	Motor, w/ Plug & Cord-120 Volt AC	1	4	02020800	Capscrew, .375-16-2.00-BZ Hex	1
38	08930133	Terminal, Ring 12-10GA / .25 Stud	3	с	02010100	Nut, Hex .500-13-GR2-BZ Nyloc	1
37	12000901	Flatwasher, .375-Regular-BZ	٢	2	02247900	Terminal, Ring 12-10GA / #10 Stud	e
36	02222000	Zerk, Grease-Short Straight 1/4-28	-	-	00181700	Wire 10 GA 3 Conductor SO- 7 FT	2

#### 6. Heavy Duty CableGlider Part Numbers

#### C. Standard / Plus / HYD CableGlider Label Kit



#### D. Heavy Duty CableGlider Label Kit



#### **E.** CableGlider Specifications

CableG	lider HD	Specific	cations				
	Low S	Speed	High S	Speed			
PULLING FORCE	lbs	kN	lbs	kN			
Maximum	12,000	53.4	6,000	26.7			
Continuous	6,500	28.9	4,000	17.8			
PULLING SPEED	ft/min	m/min	ft/min	m/min			
No Load	20.1	6.1	40.9	12.5			
At 4,000 lbs (17.8 kN)	14.5 4.4 26.5 8.1						
At 6,000 lbs (26.7 kN)	11.2	—	_				
At 10,000 lbs (44.5 kN)	9.4	2.9					
	Power Requ	uirements					
08674500		115 VAC @	20 Amps				
08678075		220 VAC @	11 Amps				
PEAK POWER		4.7 HP (3	3.50 kW)				
GENERATOR		8000	Watt				

CableGlider STD Specifications								
	Low	Speed	High Speed					
PULLING FORCE	lbs	kN	lbs	kN				
Maximum	6,500 28.9 3,50		3,500	15.6				
Continuous	4,000 17.8 2		2,000	0 8.9				
PULLING SPEED	ft/min	/min m/min ft/mir		m/min				
No Load	17.5	5.3	39.2	12.0				
At 2,000 lbs (8.9 kN)	13.5	4.1	18.8	5.7				
At 4,000 lbs (17.8 kN)	9.5	2.9						
At 6,000 lbs (26.7 kN)	7.0	2.1						
Power Requirements								
08610650 & 08674300	115 VAC @ 10 Amps							
08678025 & 08678050	220 VAC @ 5 Amps							
PEAK POWER	1.9 HP (1.42 kW)							
GENERATOR	4000 Watt							

CableGlider Plus Specifications									
	Low	Speed	High S	Speed					
PULLING FORCE	lbs	kN	lbs	kN					
Maximum	6,500	28.9	3,500	15.6					
Continuous	4,000	17.8	2,000 8.9						
PULLING SPEED	ft/min	m/min	ft/min	m/min					
No Load	17.5	5.3	39.2	12.0					
At 2,000 lbs (8.9 kN)	13.5	4.1	18.8	5.7					
At 4,000 lbs (17.8 kN)	9.5	2.9	_	_					
At 6,000 lbs (26.7 kN)	7.0	2.1		_					
Power Requirements									
08610650 & 08674300	115 VAC @ 10 Amps								
08678025 & 08678050	220 VAC @ 5 Amps								
PEAK POWER	1.9 HP (1.42 kW)								
GENERATOR	4000 Watt								

All specifications are standards.

**NOTE:** Because of frequent adjustments to and fluctuation in design components, Condux International reserves the right to make minor deviations to the above listed specifications without notice, but without effect on final product performance.

Further, the above listed specifications are not absolutely relied upon for any hazard-prevention or safety criteria.

#### F. CableGlider Accessories

**!WARNING:** Using unauthorized accessories or attachments is hazardous. Use only the listed accessories with the Condux CableGlider. Failure to do so could result in serious personal injury or death.



Optional Accessories								
Standard	Plus	Heavy Duty	Description					
08674230	08674212	08674212	Running Line Tensiometer					
08674100	08674100	08674501	Amp-Type Tensiometer					
08674005	08674010	08674010	Floor/Conduit / Pole Mount Frame					
08610620	08674595	08674595	Floor Mount Frame					
08674690	08674690	08674690	Adjustable Manhole Adapter					



Running Line Tensiometer Package 2 (110 Volt) CableGlider HD



Amp-Type Tensiometer (STD & Plus on left, HD on right)



Floor/Conduit/Pole Mt Frame



Floor Mount Frame



Adjustable Manhole Adapter

#### F. CableGlider Accessories (Continued)

Duct Adapters	
All Models	Description
08610667*	Tool Box for Accessories
08610643*	2" (51 mm) Conduit Adapter
08610647	2 1/2" (64 mm) Conduit Adapter
08610644*	3" (76 mm) Conduit Adapter
08610645*	3 1/2" (89 mm) Conduit Adapter
08610646*	4" (102 mm) Conduit Adapter
08674042	4 1/2" (114 mm) Conduit Adapter
08610648	5" (127 mm) Conduit Adapter
08610649	6" (152 mm) Conduit Adapter
08674021*	Retaining Fork for 2" - 4" (51 - 102 mm) Conduit Adapters
08674022	Retaining Fork for 5" - 6" (127 - 152 mm) Conduit Adapters
08674014	4" (102 mm) 45° Elbow Adapter
08674029	2" (51 mm) Offset Adapter
08674026	3" (76 mm) Offset Adapter
08674017	Complete Tool Box, includes * items

\*Items are included with complete tool box.

#### Double Braided Cable Pulling Rope

			0 1										
									Recommended Working Loa				
Part Dia.		Length		Standard Tensile		Minimum Tensile		5:1		12:1			
Number	(in)	(mm)	(ft)	(m)	(lbs)	(N)	(lbs)	(N)	(Lbs)	(N)	(lbs)	(N)	
08090906	5/8	16	600	183	16,200	72,058	13,500	60,048	2,700	12,010	1,125	5,004	
08090912	5/8	16	1,200	366	16,200	72,058	13,500	60,048	2,700	12,010	1,125	5,004	
08090503	3/4	19	300	91	20,400	90,744	17,300	76,954	3,460	15,391	1,442	6,413	
08090506	3/4	19	600	183	20,400	90,744	17,300	76,954	3,460	15,391	1,442	6,413	
08090512	3/4	19	1,200	366	20,400	90,744	17,300	76,954	3,460	15,391	1,442	6,413	
08091103	7/8	22	300	91	28,000	124,544	25,200	112,090	5,040	22,418	2,100	9,341	
08091106	7/8	22	600	183	28,000	124,544	25,200	112,090	5,040	22,418	2,100	9,341	
08091112	7/8	22	1,200	366	28,000	124,544	25,200	112,090	5,040	22,418	2,100	9,341	

# Additional Information Factory Assistance

Condux International can provide further advise regarding any problems with the installation, service, assembly, or disassembly of the Fiber Optic Cable Puller. Call toll free at 1-800-533-2077 (USA and Canada) or 1-507-387-6576 and ask for assistance. The Fiber Optic Cable Puller can be returned to the factory at any time for service or repair; however, obtain a Return Material Authorization (RMA) must be obtained from Condux before shipping. Condux will not accept returned items without an RMA.

# Limited Warranty

Condux International, Inc. 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 one year from the date of purchase, provided such goods are installed, maintained, and used in accordance with Condux's written instructions.

#### Lack of routine maintenance as specified in the maintenance section of the User's Guide will void the warranty.

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 manufacturer's written instructions.

#### Listed wear parts as called out in the User's Guide are not covered under the warranty.

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 the goods, shall be limited to the repair or replacement of the goods that do not conform to this warranty.

To obtain repair or 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 Road 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 A PARTICULAR PURPOSE ARE LIMITED IN DURATION TO ONE YEAR FROM DATE OF PURCHASE.

CONDUX ASSUMES 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. 7.



#### Condux International, Inc.

P.O. Box 247 • 145 Kingswood Road • Mankato, MN 56002-0247 USA 1-507-387-6576 • 1-800-533-2077 • FAX 1-507-387-1442 Internet: www.condux.com • E-mail: cndxinfo@condux.com