

# **100/ US01** Adjustable Cable Stripper

**Instruction Sheet** 

Part # US01-7000 Page 1 of 5

**Patent Pending** 

WARNING: THIS TOOL SHOULD NOT BE USED ON LIVE ELECTRICAL CIRCUITS. IT IS NOT PROTECTED AGAINST ELECTRICAL SHOCK! ALWAYS USE OSHA/ANSI/CE OR OTHER INDUSTRY APPROVED EYE PROTECTION WHEN USING TOOLS. THIS TOOL IS NOT TO BE USED FOR PURPOSES OTHER THAN INTENDED. READ CAREFULLY AND UNDERSTAND INSTRUCTIONS BEFORE USING THIS TOOL.

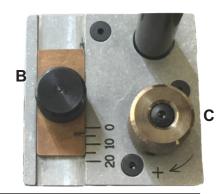
#### **Features**

- adjustable from 0.5" to 2.5" cable diameter
- 600v-35kv cables
- insulation thickness .060" to .420"
- adjustable blade pitch
- unique clamping design
- belleville springs for secure clamping
- adjustable blade depth
- end strip capability
- midspan stripping capability
- concentric jacket remover capable
- nylatron bearing surfaces for smooth turning
- Insulation chip deflector
- XLPE, PE, EPR insulation removal
- universal single blade
- ergonomic handles for turning leverage
- removable handles to strip in tight locations
- easy blade change out *Glovable*™ EASY USE WITH GLOVES



### **Operating features**

- 1. Adjustable for different cable diameters
  - Rotate thumb knob (A) to draw the jaws together around cable diameter
- 2. Blade Pitch Adjustment
  - Loosen the Blade Pitch lock screw (B) 1/4 turn, slide to the desired blade pitch angle, and re-tighten.
- 3. Blade Depth Adjustment
  - Rotate the Blade Depth screw (C) for the desired depth setting.



# **Stripping functions**

Jacket Removal Insulation Removal

**Overhead Insulation Removal** (Midspan Stripping)

# Jacket stripping underground distribution cable

To strip jacketing off concentric neutral, flat strap, or copper tape shield cable, these steps are recommended.

- 1. Cut the cable end clean and round with quality cable cutters or a hack saw.
- 2. Secure the tool onto the cable. Clamp the tool on the cable with the blade's leading cutting edge slightly overhanging the cable end. Fig.1
- 3. Set the blade depth .015-.020" above the concentric wires or metallic shielding. Fig.1
- **4. Set the blade angle.** Set the angle in the range of 3° to 9°. Large diameter cables should be set to the lower angle, small cables to the steeper angle. Fig.2



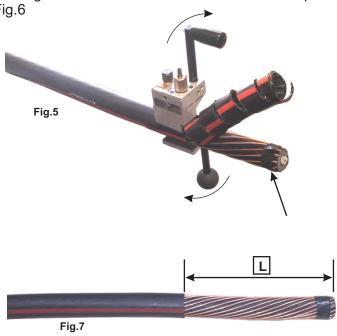


Fig.2

Measure the jacket strip dimension from the inner side of the tool.(L) Mark this location on the cable (Fig.3) or place a tool stop there like the *Utility Tool* QC-2 Clamp. (Fig.4)

- **6. Start the cut.** Rotate the tool around the cable to start the cut. Carefully observe the blade depth and adjust if necessary.
- 7. After approx. 2" of stripping, tape down the neutral wires or shielding at the end of the cable to control spring back. See Fig.5

8. To end the cut, continue to rotate the tool up to end point. Using a stop clamp helps ensure a clean cut. Rotate the tool against the clamp or a gloved hand to break off the insulation chip and end the cut. Fig.6



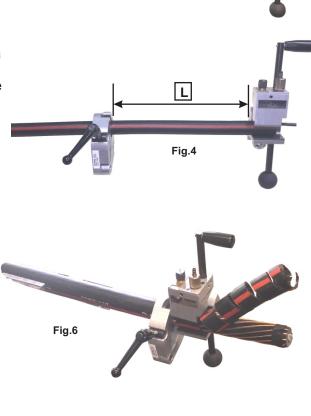


Fig.3

## **Insulation End Stripping**

To end strip insulation these steps are recommended.

**1. Insulation materials.** For XLPE and PE insulated cable, use any of the US01 tool models. It is recommended to remove the semi-con first and then strip the insulation from the conductor. For EPR insulated cable, we recommend the US01-7005 tool model with the EPR optimized blade. For best results, remove the semi-con and insulation together.



XLPE cable - remove semi-con first



EPR cable - remove semi-con and insulation together

- 2. Secure the tool onto the cable.
- **3. Set the blade depth** approx 1/32" 1/16" above the conductor. Fig.8
- **4. Set the blade angle.** 10° is a typical starting point for setting the blade angle. The angle can be re-set based on cable size and insulation thickness. Fig.9



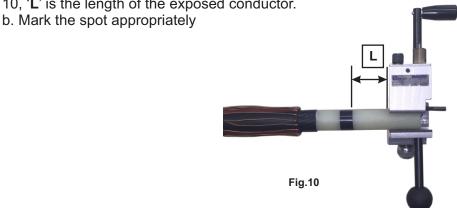


Fig.9

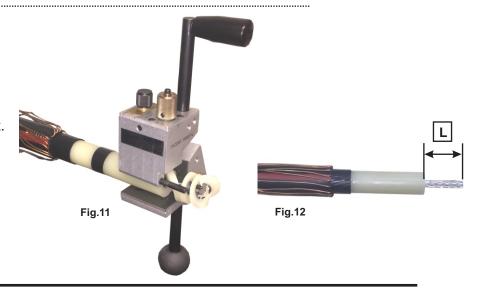
#### 5. Establish the conductor strip length (L)

a. Similar to jacket stripping, determine where the tool will finish the end strip cut. As shown in Figure

10, 'L' is the length of the exposed conductor.



- 6. Start the cut. Rotate the tool around the cable to start the cut. (Fig.11) Carefully observe the blade depth and adjust if necessary. Continue stripping until the tool edge reaches the end point.
- 7. End the cut. Adjust the blade angle to 0°. Rotate the tool one additional turn to end the cut and square off the insulation.(Fig.12)



Midspan Stripping - the US01-7000 tool is a versatile midspan stripper for 5-35kv rated overhead cables. To midspan strip, these steps are recommended

#### 5Kv and 15kv overhead cable

#### 1. Establish the blade depth.

a. If a scrap piece of cable is available, set the depth about 1/32" above the conductor similar to the end stripping instruction.

The blade depth can be set on an active wire in the following way:

- b. Before securing the tool on the cable, retract the blade fully upward and set the blade angle at 0°.
- c. Position the tool on the wire at the strip location and clamp tool on securely.
- d. Turn the blade depth knob 1 to 2 turns to drop the blade. Rotate the tool to remove a thin segment of insulation. Continue dropping the blade incrementally and cut a deeper channel until the conductor is exposed. Fig.13
- **2. Operation**. The tool is now ready for operation.
  - a. Set the blade angle at approx 10°. Rotate the tool to start the stripping action Fig.14. Carefully observe the blade depth and readjust if necessary.
  - b. Stop the tool by re-adjusting the blade angle to 0° degrees and turn until the insulation chip breaks off.
- **3. Repeat operation.** The blade depth is now OK for repeat work.
  - a. Clamp the tool on the cable at 0° degree blade angle
  - b. Rotate the tool to make the channel cut and expose the conductor.

The insulation can be channel cut in one full piece on 5 and 15kv cable.

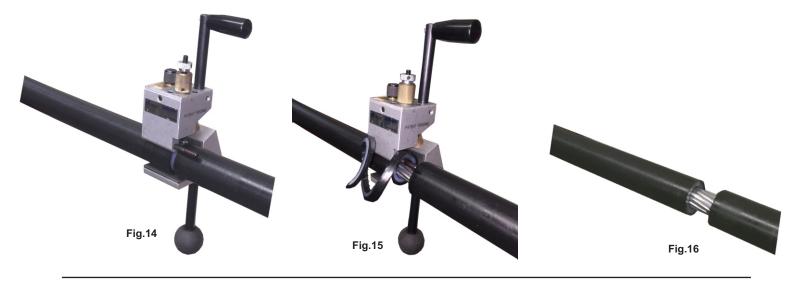
c. Proceed to strip a length of insulation by adjusting the blade angle.



25 and 35kv cable Page 4 of 5

**1. Establish the blade depth.** Similar to 15kv cable, a channel cut must be made to expose the conductor with the blade at the 0° angle. Start with the blade fully retracted, then remove the insulation in small segments, 2 to 3 blade depth turns at a time. Do not attempt to remove too thick a chip of insulation. More than 3 depth turns can break the blade. The final blade depth is approx. 1/16" above the conductor. The tool in Fig.14 is fitted with a positive depth stop. This accessory is useful for protecting the conductor and blade from damage and is detailed below.

- **2. Operation**. With the conductor exposed, pitch the blade 5°-10° to strip a length of insulation. When the length is achieved, adjust the blade angle back to 0° to end the cut.
- 3. Repeat operation. The blade must be retracted fully after every operation and a channel cut must be made in small, thin segments for every prep. The insulation on 25 and 35kv cable is too thick to channel cut in one piece. It will typically require 2 or 3 depth cuts to reach the conductor on 25kv cable and 3 or 4 depth cuts on 35kv cable.



## Blade Depth Gage Kit US01-7504

A blade depth gage is available as an accessory for the US01 stripping tool. This depth gage provides positive blade depth control. It can be used for all stripping functions. It is particularly useful when mid-span stripping while making a blind cut.

To install, turn the brass blade depth screw fully counter clockwise exposing the button head screw (Fig.17). Remove the screw with 5/64" allen wrench provided. Assemble the depth gage (Fig.18) and secure it snug with a 1/8" allen wrench.

When a blade depth has been dialed in for stripping a cable, the knurled stop is rotated clockwise against the top of the adjusting knob to act as a depth control. See Fig.15 above.







#### **Stop Bar Kit US01-7506** (07-01-23)

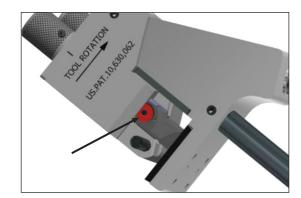
Stop Bar Kit #US01-7506 is available as an accessory for the US01 stripping tool. The Stop Bar Kit provides a positive stop to obtain a desired strip length with the tool for repeatable preps. The distance between the front blade edge to the stop plate will be the length of strip. Set the tool at a desired feed angle. When the conductor reaches the stop, continue to rotate the tool until the insulation strips off squarely.

To install the stop bar kit, secure the stop base to the bottom of the tool with the (4) screws and hex wrench provided. The stop face will be on the blade side (right side) of the tool. The Stop Bar Kit can be fitted to tools produced after 07-01-2023.



#### **Blade Replacement**

Lower the blade until the mounting screw is visible. Remove the mounting screw with a 1/8" hex key. Remove the blade and re-install the new blade



#### **Tool Models and Part Numbers**

Model / Feature	Part #	Function	Blade
US01 Tool (Standard)	US01-7000		
US01 Tool (Ball handles)	US01-7001	End or Midspan strip	US01-7501
US01 Tool w/ depth gage	US01-7002		
US01 Tool (EPR optimized)	US01-7005	End Strip	US01-7505
Blade Depth Gage Kit	US01-7504	US01 Tool Depth Stop	-
Stop Bar Kit	US01-7506	Stop Bar for repeatable strips	-