



# US16 MAX DRILL OPERATED JACKET AND INSULATION REMOVAL TOOL

**US16-7010**



**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.

**WARRANTY:** RIPLEY warrants its products against defective materials and workmanship for a period of two years from date of shipment from the RIPLEY factory provided the product is utilized in accordance with instructions and specified ratings.

## Product Overview

The Ripley US16 MAX Drill Operated Jacket Removal Tool is used to remove outer jackets on medium voltage power cable with the assistance of drill power. The drive body is powered by a battery powered variable speed drill. The cable is guided through the tool by means of a reducing bushing sized to the cable's overall diameter. The US16 MAX is both an efficient and ergonomic method for jacket removal. It is especially useful for removing long lengths of JCN cable jacket, as often needed with terminator installation.

The US16 MAX can also be used to remove longer lengths of insulation from insulated overhead cables for cable pulling and dead ending.

## Product Features

- URD jacket is cleanly removed to expose cable shielding
- overhead cable insulation removal to expose bare conductor
- micro indexing blade depth control to protect cable shielding
- self feeding design with greatly reduced operator fatigue
- one tool adjustment: blade depth adjustment for the cable being stripped
- cable capacity: up to 2.625" cable diameter
- size: 13" x 11.5" x 5" (330.2 x 292.1 x 127 mm)
- weight: 8.5 lbs (3.86 kg)



## Operating Instructions

To reduce the risk of injury, user must read and understand these operating instructions.

### Operating Instructions - URD Jacket Removal

#### 1. Bushing sizing and selection and tool capacity

The US16 MAX tool relies on an appropriate bushing fit and clearance to a cable's actual outer diameter. The bushings are made of impact resistant Delrin. They are made in two profiles. The necked down version is shown here. Generally, the cable allowance will be 1/32 - 1/16" clearance. The tool will accept a jacketed cable diameter up to 2.625". The tool is capable of stripping all URD primary cable jacket from sizes #2 15kv 175 mil thru 1000 mcm 35kv 420 mil. Consult the factory for 1250 and 1500 mcm cables. For bushing sizing, we recommend a 1 to 3 foot cable sample sent to the Ripley Tools engineering department for review. A cable data sheet with dimensions will also assist in the sizing. Ripley will best-size a bushing size that will allow for typical over/under cable variation.

The bushing is stamped with the bore size and part number for ease of re-ordering.



US16 MAX bushing



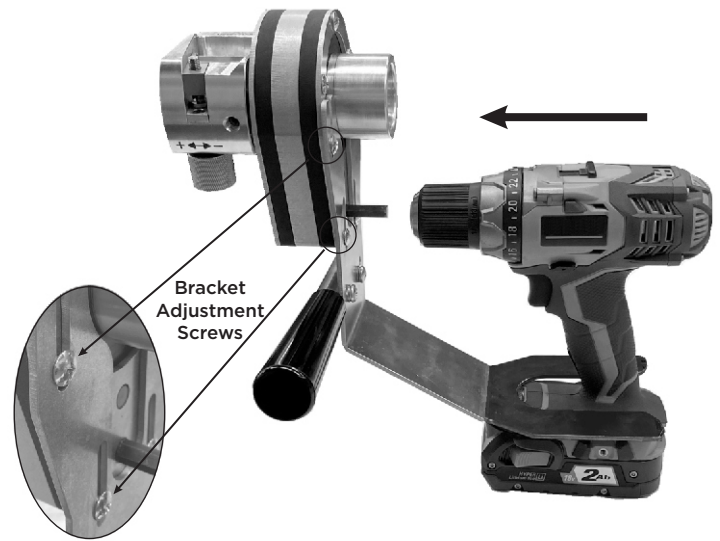
Ripley Tools  
46 Nooks Hill Road  
Cromwell, CT 06416



**US16 MAX**

## 2. Attach the drill

Only use a variable speed, non-impact style drill. Use a Flex 24V 1/2" Drill Driver, Milwaukee M18 1/2" Drill Driver, or equivalent. Lock the drill chuck onto the 3/8" drive stud in the US16 MAX tool. Note that the lower bracket has up and down adjustment to obtain a proper fit with the drill and also provide maximum hand space to operate the tool. Loosen the (4) bracket adjustment screws, position the bracket until it meets and touches the top of the drill pack, then secure them tight.



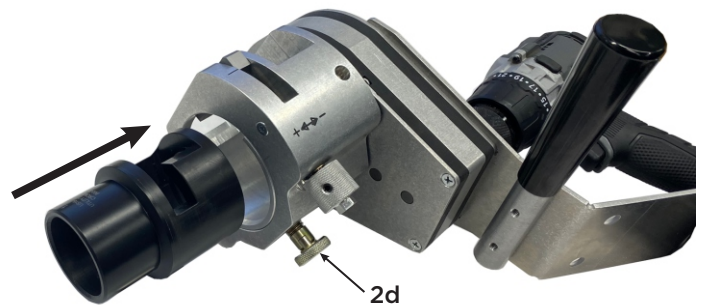
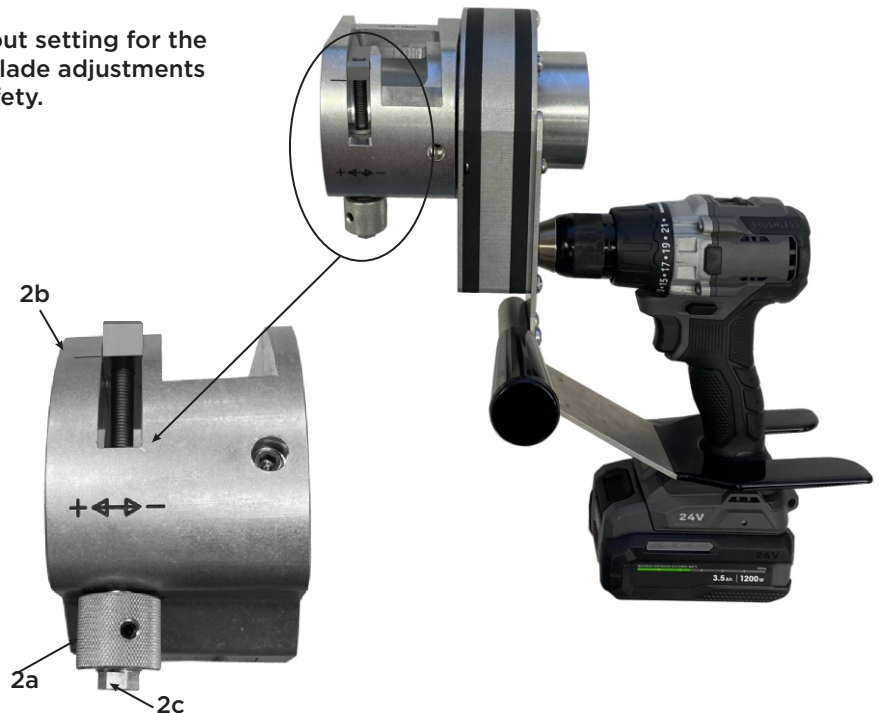
### **Safety note**

Most variable speed drills are built with a lock out setting for the trigger switch. Use this drill feature when making blade adjustments or bushing change outs to help ensure personal safety.

## 3. Attach the bushing

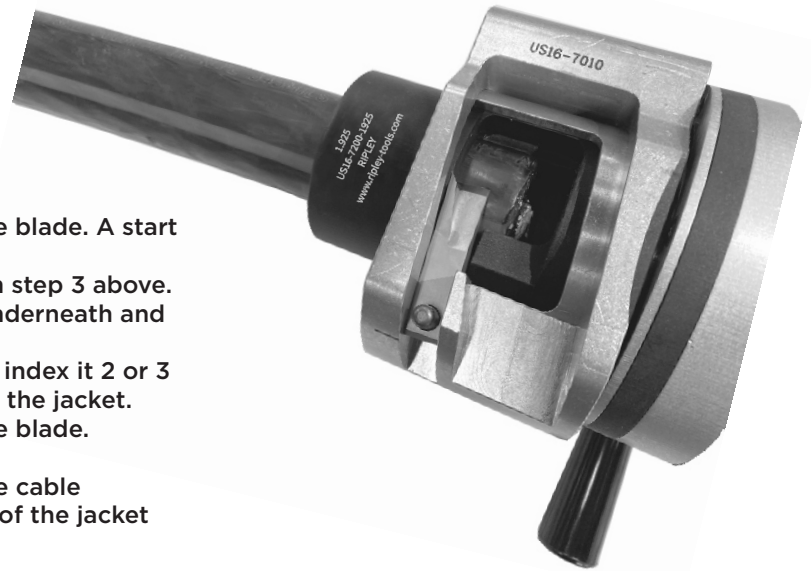
To insert the bushing into the US16 MAX tool, the stripping blade must be fully retracted out of the front opening in the tool. The blade adjustment is the large knurled knob on the rotating head at the front of the tool (Fig 2a). A right hand rotation, toward the - mark, will raise the blade. Left hand rotation toward the + mark will drop the blade deeper. Adjust the blade upward for clearance with the bushing. Raise the blade until its bottom edge is at or above the indicator mark (Fig 2b) on the rotating head. The blade adjustment screw has a fine thread. To move the blade up faster, the adjusting knob has an optional 7/16 speed nut (Fig 2c) to power the blade up.

Retract the spring plunger (Fig 2d). Insert the bushing into the tool and secure it with the spring plunger.



#### 4. Cable preparation

⚠ The cable condition is important when stripping with the US16 tool. Train the cable as straight as possible and ensure the cable end is cut off clean and square with a band saw, hack saw, or good pair of cable cutters that keeps a round form on the cable.



#### 5. Set the blade depth

If available, use a scrap piece of the cable to set the blade. A start depth can be established by following these steps.

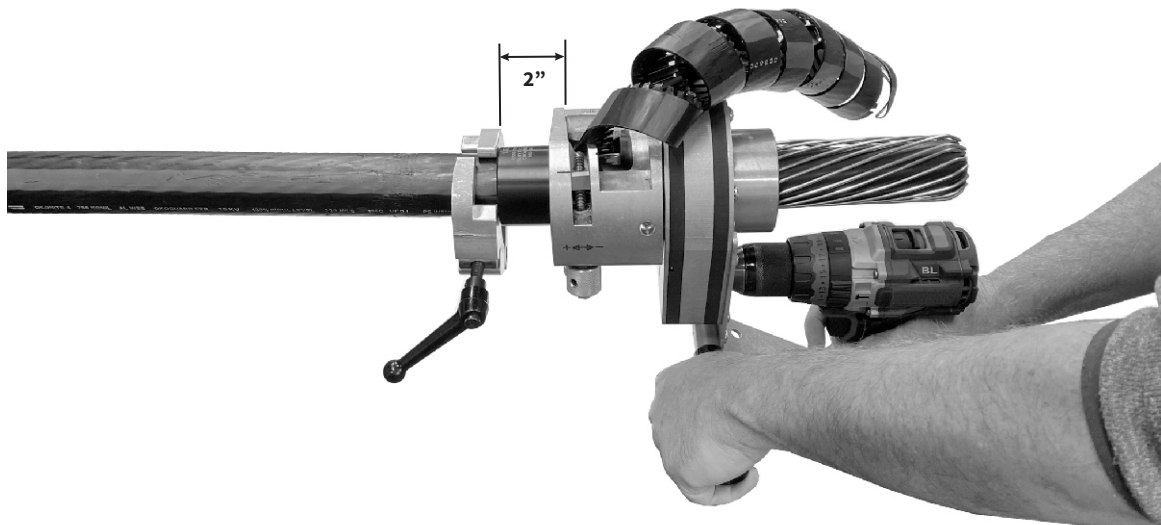
- A. The blade will be out of the working zone from step 3 above.
- B. Insert the cable into the bushing and slide it underneath and past the blade.
- C. Drop the blade until it touches the cable. Then index it 2 or 3 more depth clicks deeper so there is some pressure on the jacket.
- D. Remove the cable. Drag should be felt from the blade.

The blade is typically set to around .020" above the cable shielding. This will allow the tool to make a clean strip of the jacket and also protect the shielding from damage.

#### 6. Operation

Re-insert the cable up to the blade. Run the tool slowly with light forward pressure to start the stripping operation. Carefully observe the strip performance. Re-set the blade to get the most reliable strip result. For long strips, stop the tool and trim the insulation chip. The tool can be manually backed off or run up against a stop clamp to end the stripping operation. For an accurate strip length, note that the bushing extends exactly 2" past the blade cut. Add this 2" to the desired strip back length to locate the stop clamp on the cable.

⚠ Avoid freewheeling with the tool. When the insulation chip breaks off, immediately stop the drill. Then extract the tool off the cable.



## Operating Instructions - Overhead Insulation Removal

In general, insulation removal is accomplished by the same procedure as jacket removal. Refer to the URD jacket removal steps 1-6.

1. **Bushing selection.** The cable allowance will normally be about 1/32" clearance. Contact factory for assistance with sizing.

2. **Attach the bushing to the tool and set the blade depth.** Insert the cable up to the cutting blade. Adjust the cutting blade to 1/32 - 1/16" above the highest point of the conductor (Fig. 4A). ⚠ On the initial blade setting, set the blade toward a conservative, shallow depth to avoid personal injury, tool damage and cable damage. Make a short strip. Then, re-adjust appropriately if needed. A stripped cable remnant can be inserted into the tool to serve as a gage to assist in setting the depth (Fig. 4B).

3. **Operation.** Run the tool at a slow speed (75-150 RPM). As the insulation chip becomes too long, stop the tool and trim the chip. To end the strip process, manually back off the tool or use a stop clamp as mentioned on page 3.

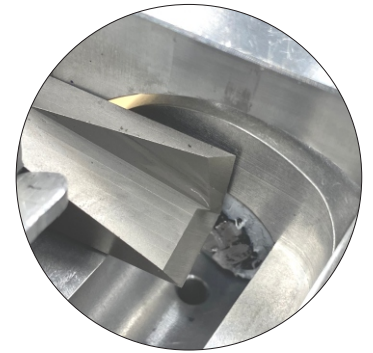
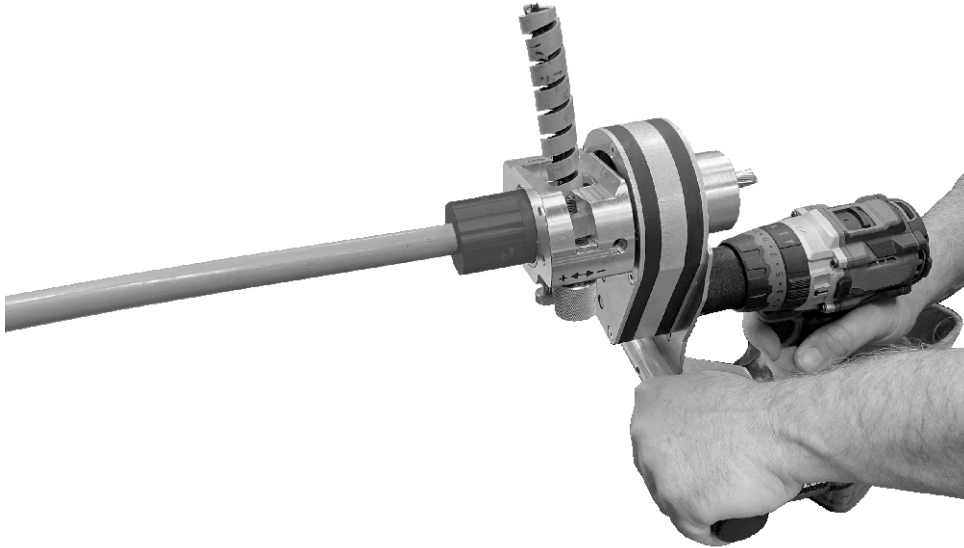


Fig. 4A



Fig. 4B



4. **Stripping over head cable.** On a few particular overhead conductors, the insulation chip may birdnest in the bushing window. If this becomes evident, grasp the end of the insulation chip with needlenose pliers and train it away from the bushing and blade. Stripping can then resume uninterrupted. (Fig. 4C)



Fig. 4C



### Blade Replacement

Rotate the blade adjustment knob in the “ - ” direction to continuously raise the blade until it unthreads off the adjustment screw. ⚠ ⚠ Carefully thread the new blade onto the screw.

### Ordering Information

Description	P/N
US16 MAX tool	US16-7010
US16 MAX replacement blade	US16-7510
US16 MAX Bushing	US16-7200-XXXX

