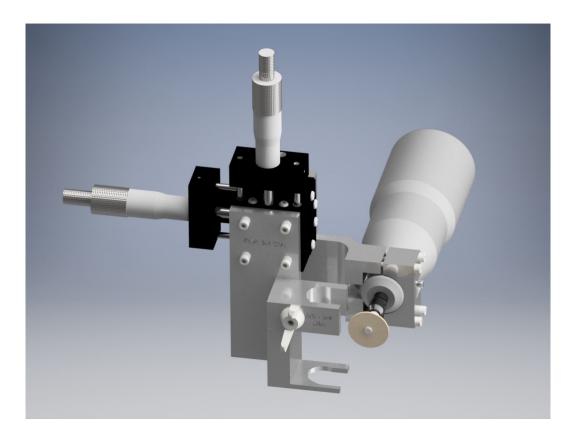
# **MASTER-LEE ENGINEERED PRODUCTS, INC.**





## HIGH PRESSURE SEAL CUTTER

## **USER MANUAL**

PART NUMBER: D1902

Revision: 0



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## **INTRODUCTION**

The Master-Lee High Pressure Seal Cutter is designed to precisely cut the Swagelok ferrules from a flux thimble or a stub on the Seal Table. Once attached to a thimble or stub the rotary cutting tool can be moved in .001" increments to cut through the ferrule without causing damage to the sealing surface. The tool is equipped with adapters to use on a Flux Thimble, 5/8" Diameter Stub, and 3/4" Diameter Stub.

## PARTS LIST

Part Number	Part Description	Quantity
D1902	High Pressure Seal Cutter Assembly	1
C3007	5/8" Tube Support Bracket	1
C1908	3/4" Tube Support Bracket	1
C1904	Flux Thimble Tube Support Bracket	1
C1910	5/8" & 3/4" Tube Tool Mount	1
C1903	Flux Thimble Tube Tool Mount	1
N/A	Dremel Rotary Tool	1
N/A	Fiber Cutting Wheel (20 pack)	1
N/A	Rotary Mandrel	2
N/A	Pelican Case	1

### **OPERATION INSTRUCTIONS**

## **WARNING**

#### Ensure cutting wheel is securely fastened and centered on the mandrel.

Ensure mandrel is securely fastened in the Dremel Tool collet.

**PROPER PPE MUST BE USED WHILE PERFORMING FERRULE CUTTING OPERATIONS.** 

USERS MUST STAY OUT OF "LINE OF FIRE" IN CASE OF ABRASIVE WHEEL FAILURE.

#### **1.1. Adapter Change Out**

- 1.1.1. The High Pressure Seal Cutter already comes with the 3/4" adapters installed on the tool.
- 1.1.2. Remove the four (4) 6-32 Socket Head Cap Screws from the face of the tool and remove Tube Support Bracket as shown in Figure 1.
- 1.1.3. Pick desired Tube Support and attach with the four (4) 6-32 Socket Head Cap Screws.
- 1.1.4. If a Thimble Tube Support is used, make sure the Tool Support labeled "FOR THIMBLE TUBE" is installed. It is attached with two (2) 6-32 Socket Head Cap Screws and Nylon Lock Nuts as shown in Figure 2.

1.1.5. If a 5/8" or 3/4" Tube Support is used, make sure the Tool Support labeled "FOR 5/8 AND 3/4 DIA" is installed. It is attached with two (2) 6-32 Socket Head Cap Screws and Nylon Lock Nuts as shown in Figure 2.

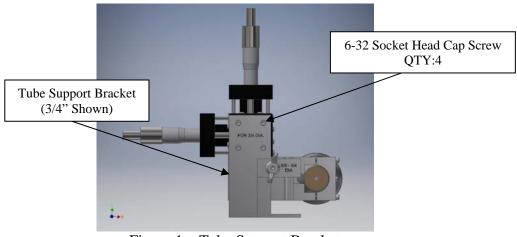


Figure 1 – Tube Support Bracket

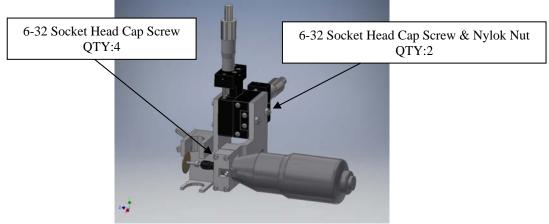


Figure 2 - Tool Support Bracket and Tool Mount

## **1.2. Dremel Tool Attachment**

- 1.2.1. Clamp Dremel Tool to Tool Mount using four (4) 6-32 Socket Head Cap Screws as shown in Figure 2.
- 1.2.2. Install Fiber Cutting Wheel onto Rotary Mandrel.
- 1.2.3. Attached Rotary Mandrel to Dremel Tool.

## **1.3.** Cutting Ferrules on a 5/8" or 3/4" Stub.

- 1.3.1. Ensure proper attachments are installed for the diameter stub you are working on.
- 1.3.2. Position ferrule between the upper and lower guide on the Tube Support Bracket.
- 1.3.3. Once attached, tighten wing nut on the upper guide.
- 1.3.4. Use the X & Y dials to move the Dremel Tool close to the ferrule.
- 1.3.5. Turn on the Dremel Tool and use the X dial to feed the cutting blade into the ferrule.
- 1.3.6. Use the Y dial as needed to make a vertical cut in the ferrule.

1.3.7. Once the ferrule is almost completely cut through use a flat head screw driver to split the ferrule to prevent damage to the stub.

## **1.4. Cutting Ferrules on a Thimble Tube**

- 1.4.1. Ensure Thimble Tube attachments are installed.
- 1.4.2. Position ferrule above the upper and lower guide on the Tube Support Bracket.
- 1.4.3. Once attached, tighten wing nut on the upper guide.
- 1.4.4. Use the X & Y dials to move the Dremel Tool close to the ferrule.
- 1.4.5. Turn on the Dremel Tool and use the X dial to feed the cutting blade into the ferrule.
- 1.4.6. Use the Y dial as needed to make a vertical cut in the ferrule.
- 1.4.7. Once the ferrule is almost completely cut through use a flat head screw driver to split the ferrule to prevent damage to the stub.