The Kelvar Stripping Tool is a rugged lever-action hand tool designed to remove any length of Kelvar reinforced protective sleeving from fibre optic bundles. The tool comprises of two independently adjustable cutting blades set in opposition within the jaw housing. The depth of cut is regulated by knurled blade adjusters, situated on either side of the tool, which allows infinitely variable blade penetration from 0-3mm. Provision has been made for inserting sleeve guides into the top and bottom halves of the Kelvar Strip jaw; these simply clip into position and ensure correct location of the lead throughout the stripping operation.

**Setting**
- Select pair of sleeve guides corresponding to lead diameter and locate into upper and lower halves of tool jaw.
- With tool in closed position adjust blade depth by turning the adjusters and observing the gap between the cutters. Note that the blades should NOT cut all the way through the outside insulation, so as to ensure no damage to the optical leads inside.
- Make a trial cut by inserting the lead into the front entry slot of the tool, depress handle, and pull the tool to the end of the lead maintaining an even pressure on the tool handle.
- Remove lead, inspect result and make final adjustments to cutting depth if necessary.

**Operation**
- Insert lead into side entry slot of the tool. (Figure 2)
- Depress handle and rotate the Kevlar Strip back and forth over the protective sleeving, release handle and remove lead. (Figure 3)
- Insert lead into front entry slot ensuring blades come together at the point of the circular incision. Depress handle and pull the Kevlar Strip along the full length of sleeving. (Figure 4 and 5) This creates two longitudinal cuts allowing the Kevlar reinforced protective sleeve to be split and removed with ease. The remaining strands of Kevlar may be trimmed using a pair of precision cutting nippers.

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**Figure 1**
Operating lever
Blade adjusters
Blade captivating screws
Cutting blades
Replaceable sleeve guides

**Figure 2**

**Figure 3**
**Cutting Blade Replacement:**

- To replace both upper and lower blade cartridges, remove upper and lower sleeve guides.
- Release blade captivating screws, and turn each blade adjuster clockwise. The blades may be prevented from rotating by using finger pressure or a small spanner if necessary.
- Insert new blade cartridges and re-assemble.
- **Note:** Do not overtighten blade captivating screws as these also serve to centralise the blade in the jaw housing.

**Stripping of Optical Fibres**

Capacity: All fibre optic leads from 15-1000 microns. P.T.F.E. coated wires 0.5-3.0mm O.D.

The optical fibre stripper comprises two blades mounted on spring-loaded tensioning arms which are in turn fixed on either side of a hollow spindle. The depth of cut is regulated by the conical adjusting nut situated behind the blades. The blade adjuster is equipped with a retention screw so that once set the cutting depth may be permanently locked in position. Provision is made for inserting a guide bush into the barrel of the tool, directly behind the blades and also one immediately in front of the cutters. This ensures that the fibre optic lead is correctly held in position throughout the stripping operation.

**Setting**

1. Select correct pair of guide bushes corresponding to lead diameter. Fit the internal guide bush by depressing the tension arms and inserting into the opening directly behind the cutting blades.

<table>
<thead>
<tr>
<th>Colour</th>
<th>Front Bush</th>
<th>Back Bush</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yellow</td>
<td>Drilled to 0.7mm</td>
<td>1.05mm</td>
</tr>
<tr>
<td>Red</td>
<td>1mm</td>
<td>1.05mm</td>
</tr>
<tr>
<td>Blue</td>
<td>1.4mm</td>
<td>1.5mm</td>
</tr>
<tr>
<td>White</td>
<td>1.9mm</td>
<td>2mm</td>
</tr>
<tr>
<td>Green</td>
<td>2.4mm</td>
<td>2.5mm</td>
</tr>
<tr>
<td>Black</td>
<td>3.2mm</td>
<td>3.2mm</td>
</tr>
</tbody>
</table>

2. Set cutting depth approximately by turning the blade adjuster and observing the gap between the cutters. Slip external guide bush over the blade assembly.

3. Open the blades by depressing the tensioning arms, insert the fibre optic lead, release tensioning arms and take a trial cut by spinning the handle. Remove lead and inspect result.

4. Make final adjustment to cutting depth and lock blade adjuster in position.
Operation

To operate simply depress tensioning arms, insert lead, (Fig.7), release tension, spin handle and pull off the sheathing (Fig 8). The stripped slug is cleared via the hollow spindle of the optic-strip through the rear of the barrel.

Optics of 15 microns or less do not require rotation of the tool when stripping.

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**Internal Guide Bush Extraction**

Remove external guide bush and insert extractor (supplied) through the rear of the barrel. Depress blade tensioning arms and eject internal guide bush through the front of the tool.

**Silicon Stripping**

Once the P.T.F.E. fibre coating has been removed as above, a thin coating of primary silicone has to be removed from the optical fibres. The silicon stripping tool (fig. 9) is a fast effective method of achieving this.

**Operation**

Light pressure to the spring loaded handles, whilst gently pulling along the length of the bare fibre, smoothly removes the silicone coating.

**Setting**

The stripping blades are made of Delrin and are permanently set at an angle which causes no damage to the light guide even when excessive pressure is applied during the stripping operation.

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**Cutting Blade Replacement**

Undo blade retaining screws, remove worn blades and replace.

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**Figure 7** Insert optic lead

**Figure 8** Spin tool handle

**Figure 9** Silicon stripping tool