INSTRUCTION MANUAL

Read and understand all of the instructions and safety information in this manual before operating or servicing this tool.

1981 Mechanical Crimping Tool

Register this product at www.greenlee.com
Description

The 1981 Mechanical Crimping Tool is intended for crimping copper color-coded lugs and splices from 8 AWG through 250 kcmil and aluminum color-coded lugs and splices from 6 AWG through 4/0 AWG.

Safety

Safety is essential in the use and maintenance of Greenlee tools and equipment. This instruction manual and any markings on the tool provide information for avoiding hazards and unsafe practices related to the use of this tool. Observe all of the safety information provided.

Purpose of this Manual

This manual is intended to familiarize all personnel with the safe operation and maintenance procedures for the following Greenlee tool:

1981 Mechanical Crimping Tool

Keep this manual available to all personnel.

Replacement manuals are available upon request at no charge at www.greenlee.com.

Important Safety Information

**WARNING**

Electric shock hazard:
This tool is not insulated. Do not use on live circuits.
Contact with live circuits could result in severe injury or death.

**WARNING**

An incomplete crimp can cause a fire.
Use proper connector and cable combinations.
Improper combinations can result in an incomplete crimp.
Failure to observe this warning could result in severe injury or death.

**WARNING**

Wear eye protection when operating or servicing this tool.
Failure to wear eye protection could result in serious eye injury from flying debris.

**CAUTION**

- This tool is intended for two-handed operation. Maintain a firm grip on both handles when using this tool.
- Inspect tool before use. If any parts are worn or damaged, send the tool to an authorized Greenlee service center.
- Do not perform any service or maintenance other than as described in this manual.
- Do not exceed the rated capacity of this tool.
Failure to observe these precautions may result in injury or property damage.

All specifications are nominal and may change as design improvements occur. Greenlee Tools, Inc. shall not be liable for damages resulting from misapplication or misuse of its products.

Blackburn is a registered trademark of Thomas & Betts.

**KEEP THIS MANUAL**
Identification

Operation

1. Refer to the connector manufacturer’s instructions for preparing the cable and connector.
2. Set the nest (adjustable die) of the crimping tool to the proper cable size by turning the adjusting screw at the top of the crimping tool until the match line on the nest is aligned with the proper cable size.
3. Consult the Connector Selection chart for recommended number of crimps.
4. Insert cable and connector assembly from either side of the crimping tool and indent as instructed by the connector manufacturer. To ensure a proper crimp, close the handles until the movable handle rests against the stop of the other handle.

Calibration Check

Set the match line on the nest to indicate 1/0 wire. To determine if the crimping tool is properly calibrated, insert a metal rod that fits snugly between the nest and indicator. If the metal rod is within the range shown on the Calibration Table, the crimping tool is correctly calibrated.

If the diameter is not within this range, send the tool to an authorized Greenlee service center.

Calibration Table

<table>
<thead>
<tr>
<th>Set 1/0 CU to</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metal Rod</td>
<td>0.353&quot;</td>
<td>0.373&quot;</td>
</tr>
<tr>
<td></td>
<td>9.0 mm</td>
<td>9.5 mm</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Set 1/0 AL to</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metal Rod</td>
<td>0.422&quot;</td>
<td>0.442&quot;</td>
</tr>
<tr>
<td></td>
<td>10.7 mm</td>
<td>11.2 mm</td>
</tr>
</tbody>
</table>
## Connector Selection

<table>
<thead>
<tr>
<th>CONNECTOR TYPE</th>
<th>BARREL TYPE</th>
<th>ANDERSON</th>
<th>BLACKBURN®</th>
<th>BURNDY</th>
<th>ILSCO</th>
<th>PANDUIT</th>
<th>T&amp;B</th>
<th>PENN-UNION</th>
<th>NUMBER OF CRIMPS*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>COPPER SPLICE</strong></td>
<td>SHORT</td>
<td>VHSS</td>
<td>CSP</td>
<td>YS-L</td>
<td>CT</td>
<td>SCSS/SCS</td>
<td>54504–54513</td>
<td>BCU</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>LONG</td>
<td>VHS</td>
<td>CU</td>
<td>YS-L</td>
<td>CTL</td>
<td>SCL</td>
<td>54804–54813</td>
<td>BBCU</td>
<td>A</td>
</tr>
<tr>
<td><strong>COPPER LUG</strong></td>
<td>SHORT</td>
<td>VHCS</td>
<td>CTL</td>
<td>YA-L/YA-L-2TC YA-2LN/YA-L-2NT</td>
<td>CSWΔ</td>
<td>CRA/CRB/CRC</td>
<td>54104–54174 54204–54275</td>
<td>BLU</td>
<td>A</td>
</tr>
</tbody>
</table>

### Tool Range—COPPER: 8 AWG to 250 kcmil (except as noted Δ)

### Tool Range—ALUMINUM: 6 AWG to 4/0 AWG

<table>
<thead>
<tr>
<th>AL SPLICE</th>
<th>AL LUG</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
</table>

*Use the number of crimps listed in the last column instead of the number provided with the connector:

- **A** — 8–1 AWG: 1 crimp
- **B** — 6–4 AWG: 1 crimp
- 1/0 AWG–250 kcmil: 2 crimps
- 2–4/0 AWG: 2 crimps

Δ ILSCO Capacity: 8 AWG to 4/0 AWG