

## PROPER USE GUIDELINES

Cumulative Trauma Disorders can result from the prolonged use of manually powered hand tools. Hand tools are intended for occasional use and low volume applications. A wide selection of powered application equipment for extended-use, production operations is available.

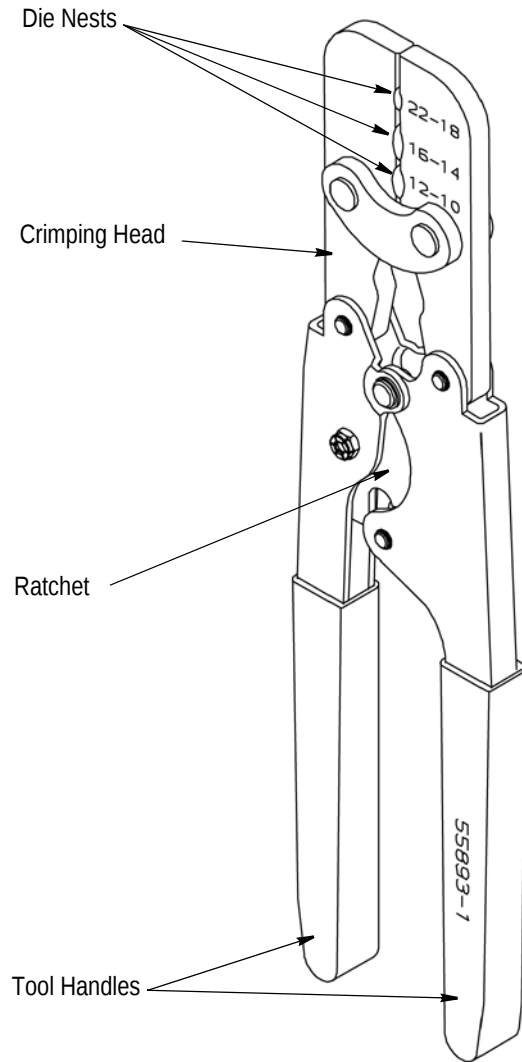


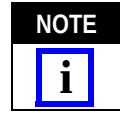
Figure 1

## 1. INTRODUCTION

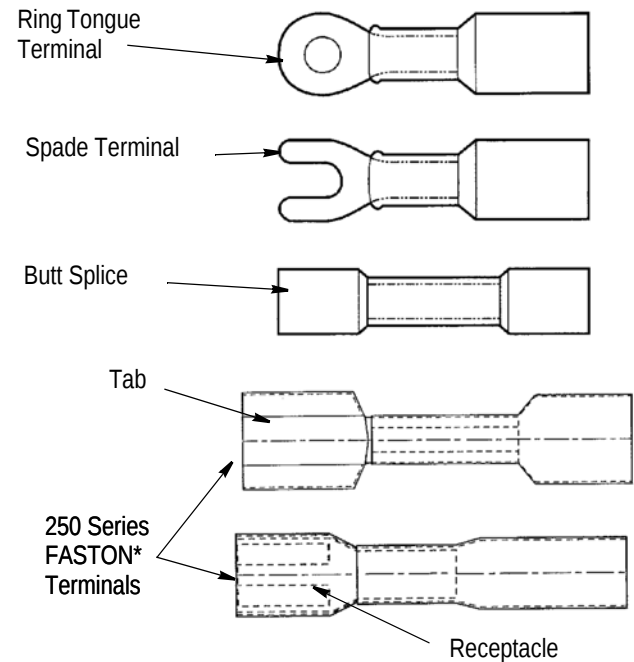
Hand Tool 55893-1 is used to crimp Pre-Insulated Heat Shrink Terminals and Splices onto 22 -10 AWG wire. See Figure 2. This hand tool is equipped with a ratchet mechanism to ensure reliable crimp terminations.

Hand Tool 55893-1 is available in a "Seal and Splice Kit" with assorted terminals and splices by ordering part number 55892-1. Information about Hand Tool 55894-1 which crimps the same terminals and splices

with a wire size range of 16-8 AWG may be found on Instruction Sheet 408-8891.



*Dimensions in this instruction sheet are in millimeters [with inches in brackets]. Figures are for reference only and are not drawn to scale.*



| TERMINAL/<br>SPICE             | WIRE SIZE,<br>AWG | STUD SIZE                  |
|--------------------------------|-------------------|----------------------------|
| Ring Tongue<br>Terminal        | 22-18             | 6, 8, 10, 1/4              |
|                                | 16-14             | 6, 8, 10, 1/4, 5/16, 3/8   |
|                                | 12-10             | 8, 10, 1/4, 5/16, 3/8, 1/2 |
| Spade Terminal                 | 22-14             | 6, 8, 10                   |
|                                | 12-10             | 8, 10                      |
| Butt Splice                    | 12-10             | ---                        |
| 250 Series<br>FASTON Terminals | 16-14             | ---                        |

Figure 2

## 2. CRIMPING PROCEDURE

Select an appropriate terminal or splice for the tool. Cut and strip the wire to the proper length. For 22-14

AWG wire, strip the length to 7.94 [.313]; for 12-10 AWG wire, strip the length to 9.52 [.375].

To open the tool, close the handles past the ratchet release position which will allow the jaws to fully open. Proceed with the following steps as shown in Figure 3.

1. To crimp the wire barrel, center the wire barrel of the terminal or splice in the appropriate wire barrel crimp section according to the correct wire size range. Refer to Figure 2.

**NOTE** The wire barrel insulation color must match the crimp section color code. Red is for 22-18 AWG (front die nest), Blue is for 16-14 AWG (middle die nest), and Yellow is for 12-10 AWG (rear die nest).

2. Squeeze tool handles together just enough to hold wire barrel in place. See Figure 3.
3. Insert the stripped wire into wire barrel until it bottoms.
4. Holding the wire in place, squeeze tool handles until the ratchet releases and allows the jaws to spring open. The crimp is now complete. See Figure 3.

**CAUTION** Damaged terminals or splices should not be used. If a damaged terminal or splice is evident, it should be cut from the wire and replaced. Damaged products should not be re-terminated.

### 3. SHRINKING THE INSULATION

After the crimping is complete, use Heat Gun 600655-2 (reference Instruction Sheet 408-9614); or Heat Gun 606712-2 (reference Instruction Sheet 408-4085); or an other controlled heat source to shrink the insulation for a moisture-proof seal of the terminal or splice.



Overheating the terminal or splice will cause the insulation to blister or burn, which deteriorates the integrity of the heat shrink polymer.

### 4. MAINTENANCE AND INSPECTION

It is recommended that a maintenance and inspection program be performed periodically to ensure dependable and uniform terminations.

Frequency of inspection should be adjusted to suit your requirements. Frequency of inspection depends on:

- The type and size of the product crimped.
- The degree of operator skill.
- The presence of abnormal amounts of dust and dirt.
- Your own established standards.

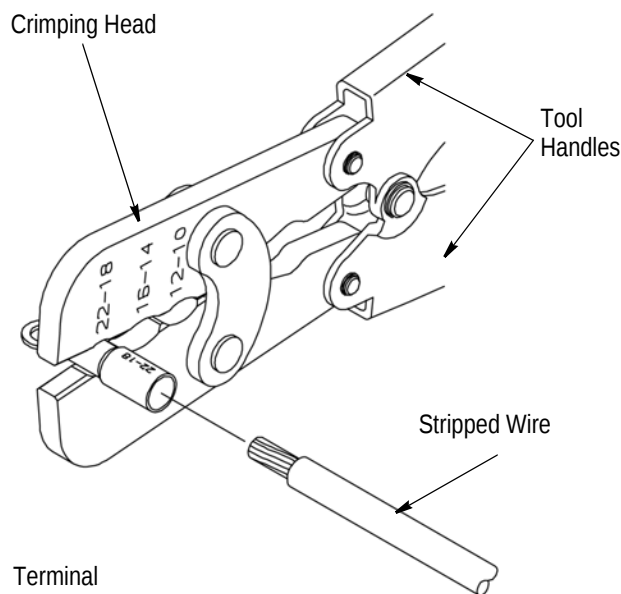
Each tool is thoroughly inspected before packaging. Since there is a possibility of damage during shipment, new tooling should be inspected immediately upon arrival at your facility.

The tool may be cleaned by immersing it in a suitable commercial solvent or cleaner which does not attack paint or plastic material. The tool should be re-lubricated after cleaning, using a light film of a medium weight oil on bearing surfaces and pivot points.

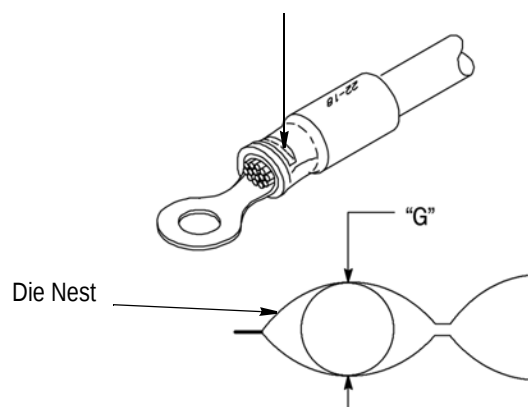
### 5. REVISION SUMMARY

Revisions to this instruction sheet include:

- Corrected Figure 3 Table.



Properly Crimped Terminal (Before Heat Shrinking of Insulation)



| NEST  | DIMENSION "G"         |
|-------|-----------------------|
| 22-18 | 2.18-2.03 [.086-.080] |
| 16-14 | 2.69-2.54 [.106-.100] |
| 12-10 | 3.73-3.58 [.147-.141] |

Figure 3