# Hand Termination Tool For RJ-45 Modular Plugs



# **Application Tooling Specification Sheet**



Order No. 62202-0500

#### **FEATURES**

- A full cycle ratcheting hand tool ensures complete crimps
- Ergonomic soft grip handles for comfortable operation
- For a low cost field repair tool, use the 64016-0044 ServiceGrade™ hand tool.

#### **SCOPE**

<u>Products</u>: RJ-45 Modular Plugs, Category 6 with Load Bars, shielded or unshielded. Use with 22-28 AWG solid or stranded wires. Maximum insulation O.D. 1.07mm (.042 in).

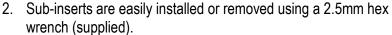
Diug Sarias No	Plug Order No.		Cable Jacket O.D		Upper Sub-Insert	Lower Sub-Insert
Plug Series No.			mm	ln.	Marking	Marking
44915	44915-0001	44915-0002	5.50 -6.50	.217256	2 stripe	1 stripe
	44915-0011	44915-0012				
	44915-0021	44915-0022				



Please read this entire document before using the tool for the first time.

#### **DESCRIPTION**

1. With this tool, only plugs of appropriate type and cable size should be used. Using the inappropriate combination of sub-inserts and cable size (O.D.) may result in a bad termination, and tool damage.



- 3. Both the upper and lower sub-inserts are marked with stripes. See Figure 2. Each may have one or more stripes. Select appropriate upper and lower sub-insert according to Product chart above.
- 4. After installation of the inserts reattach the guide plate. See Figure 1. Failing to do so may influence normal tool function.
- 5. Unshielded Plugs Remove the "sub-Inserts" for easier operation.

#### **OPERATION**

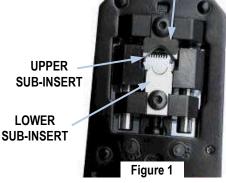
4

**WARNING**: Make sure that the cable is **DISCONNECTED** from any power supply.



CAUTION: Always keep hands and fingers out of the crimping area!

Make sure work area is clean and dry and wear approved eye protection.



**GUIDE PLATE** 

location of cable size stripes

Figure 2

>**9** 

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# Preparing the Cable with the Load Bar and Modular Plug



Wire, load bar, and plug.



Strip the outer jacket of the cable approximately. 20mm long.



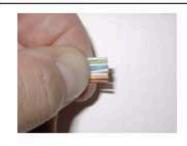
Separate the pairs.



4 Straighten and separate the wires into individual leads.



5 Organize the leads together and trim the edges evenly.



6 Wire lead ends shown look like this



7 Insert the Load Bar over the wire ends.



8 Slide the Load Bar into position against the cable jacket.



9 Trim leads so the ends of wires are 0.34 inch from edge of the load bar.



10 Or 8.64 mm from the edge of the load bar.



11 Insert the wires and Load Bar into the Plug and push forward.



12 Terminate the plug assembly with the Hand Crimp Tool Order no. 62202-0500.

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# **Crimping the Plug Assembly**



- 1. Load the plug according to the plug manufacturer's instructions.
- **IMPORTANT:** During wire insertion the plug-cable assembly may bend, straighten the cable by lifting up on the shield straightening tab. See Figure 3.
- 3. Insert the plug assembly into the tool, an audible click is heard when the plug locking tab is in place. See Figure 4.
- 4. Slowly close the tool handles until the assembly is terminated. See Figure 5. In case the tool becomes jammed for any reason, please follow the instructions in the Miscrimps or Jams section.

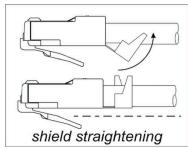


Figure 3

5. Open the tool handles and remove the crimped plug. Press the release button on the back of the tool and pull out the plug assembly. See Figure 6.







Figure 5



# Miscrimps or Jams

- 1. If the tool ever becomes jammed in a partially closed position, **DO NOT** force the handles open or closed.
- 2. While applying pressure on the tool handles, push the ratchet release (A) located inside the moving handle, in the direction shown. See Figure 7. **INSIDE TOOL HANDLE**
- 3. Allow the tool handles to open.



CAUTION: Molex crimp specifications are valid only when used with Molex terminals and tooling.



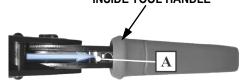


Figure 7

This hand tool is set from the factory to a preload that will fully close the tool jaws without excessive force from the operator. Over the life of the tool the tool linkage can wear and handle preload force may decrease and preload can be adjusted. A loss in preload may result in the plug contacts not being fully seated.

This hand tool is equipped with eccentric axle which allows periodical adjustment of crimping force and tool recalibration to maintain correct crimp specifications. Follow the steps below:

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- 1. Loosen and remove the small socket head screw using a 2.5mm hex wrench.
- 2. Using a screw driver turn eccentric axle and toothed adjustment wheel into new position. See Figure 8.
  - <u>Direction +</u> for increasing crimping force and reducing gap between crimping dies
  - <u>Direction –</u> for reducing crimping force and enlarging gap between crimping dies
- 3. Reinstall and tighten the small socket head screw.

# ADJUSTING WHEEL SOCKET HEAD SCREW 62202-0500 TOOTH ADJUSTMENT ECCENTRIC AXLE

### **Maintenance**

It is recommended that each operator of the tool be made aware of, and responsible for, the following maintenance steps:

- 1. Remove dust, moisture, and other contaminants with a clean brush, or soft, lint free cloth.
- 2. Do not use any abrasive materials that could damage the tool.
- 3. Make certain all pins; pivot points and bearing surfaces are protected with a thin coat of high quality machine oil. Do not oil excessively. Light oil (such as SAE30W oil) applied at the oil points, every 5,000 crimps or 3 months, is recommended.
- 4. Wipe excess oil from hand tool, particularly from crimping area. Oil transferred from the crimping area onto certain terminations may affect the electrical characteristics of an application.
- 5. When tool is not in use, keep the handles closed to prevent objects from becoming lodged in the crimping dies, and store the tool in a clean, dry area.

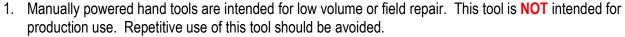
# Warranty

This tool is for electrical terminal crimping purposes only. All tools are warranted to be free of manufacturing defects for a period of 30 days. Should such a defect occur, we will repair or exchange the tool free of charge. This repair or exchange will not be applicable to altered, misused, or damaged tools. This tool is designed for hand use only. Any clamping, fixturing, or use of handle extensions voids this warranty.



**CAUTION:** Repetitive use of this tool should be avoided.

# **CAUTIONS:**





Insulated rubber handles are not protection against electrical shock. NEVER perform crimps on active electrical circuits.



- Wear eye protection at all times.
- 4. Use only the Molex terminals specified for crimping with this tool.



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Visit our Web site at http://www.molex.com

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