

customer manual

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Safeguards are designed into this application equipment to protect operators and maintenance personnel from most hazards during equipment operation. However, certain safety precautions must be taken by the operator and repair personnel to avoid personal injury, as well as damage to the equipment. For best results, application equipment must be operated in a dry, dust-free environment. Do not operate equipment in a gaseous or hazardous environment.

Carefully observe the following safety precautions before and during operation of the equipment:

- ALWAYS wear appropriate ear protection.
- ALWAYS wear appropriate eye protection.
- ALWAYS wear approved eye protection when operating powered equipment.
- ALWAYS keep guard(s) in place during normal operation.
- NEVER wear loose clothing or jewelry that may catch in moving parts of the application equipment.
- NEVER insert hands into installed application equipment.
- NEVER alter, modify, or misuse the application equipment.

SAFETY PRECAUTIONS -- IMPORTANT SAFETY INFORMATION

	DANGER Electric shock hazard: This tool is not insulated. When using this unit near energized electrical lines, use proper personal protective equipment. Failure to observe this warning could result in severe injury or death.
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	DANGER Skin injection hazard: Do not use hands to check for oil leaks. High pressure oil easily punctures skin causing serious injury, gangrene, or death. If injured, seek medical help immediately to remove oil.
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	DANGER Do not use solvents or flammable liquids to clean the crimping tool. Solvents or flammable liquids could ignite and cause serious injury or property damage.
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DANGER Do not dispose of batteries in a fire. They will vent fumes and may explode. Failure to observe this warning could result in severe injury from harmful fumes or burns from flying debris.
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DANGER Inspect tool and dies before use. Replace any worn or damaged parts. A damaged or improperly assembled tool can break and strike nearby personnel. Failure to observe this warning could result in severe injury or death.
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DANGER 	<i>This unit should only be used by trained competent personnel.</i>
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	<i>Read and understand the entire manual before using the equipment.</i>
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	<i>Always wear approved eye protection when using the equipment.</i>
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CAUTION - Do not place the tool in a vise. The crimping tool is designed for hand-held operation. - Protect the crimping tool from rain and moisture. Water will damage the crimping tool and battery. - Use this tool for the manufacturer's intended purpose only. Failure to observe these precautions may result in injury or property damage.

CAUTION Do not allow anything to contact the battery terminals. - Do not immerse the batteries in liquid. Liquid may create a short circuit and damage the battery. If batteries are immersed, contact your service center for proper handling. - Do not place the battery into a pocket, tool pouch, or tool box with conductive objects. Conductive objects may create a short circuit and damage the battery. - Do not place a battery on moist ground or grass. Moisture may create a short circuit and damage the battery. Failure to observe these precautions may result in injury or property damage.

CAUTION - Do not store the battery at more than 60 °C (140 °F). Damage to the battery can result. - Do not use another manufacturer's charger. Other manufacturers' chargers may overcharge and damage the battery. - Do not attempt to open the battery. It contains no user-serviceable parts. Failure to observe these precautions may result in injury or property damage.

CAUTION Do not perform any service or maintenance other than as described in this manual. Injury or damage to the tool may result. Failure to observe this precaution may result in injury and property damage.
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NOTE: Keep all decals clean and legible, and replace when necessary.

TOOLING ASSISTANCE CENTER

CALL TOLL FREE 1-800-722-1111 (CONTINENTAL UNITED STATES AND PUERTO RICO ONLY)

The **Tooling Assistance Center** offers a means of providing technical assistance when required.

In addition, Field Service Specialists are available to provide assistance in the adjustment or repair of the application equipment when problems arise which your maintenance personnel are unable to correct.

INFORMATION REQUIRED WHEN CONTACTING THE TOOLING ASSISTANCE CENTER

When calling the Tooling Assistance Center regarding service to equipment, it is suggested that a person familiar with the device be present with a copy of the manual (and drawings) to receive instructions. Many difficulties can be avoided in this manner.

When calling the Tooling Assistance Center, be ready with the following information:

1. Customer name
2. Customer address
3. Person to contact (name, title, telephone number, and extension)
4. Person calling
5. Equipment number (and serial number if applicable)
6. Product part number (and serial number if applicable)
7. Urgency of request
8. Nature of problem
9. Description of inoperative component(s)
10. Additional information/comments that may be helpful

BATTERY TOOL KIT	REGION OF USE	BATTERY CHARGER	BATTERY CHARGER VOLTAGE	RAM RETRACT SWITCH
1213840-1	North America	1725840-1	110 V	Yes
1213840-2	Europe	1725840-2	220 V	Yes
1213840-3	North America	1725840-1	110 V	No
1213840-4	Europe	1725840-2	220 V	No
1213840-5	United Kingdom	1725840-3	220 V	Yes

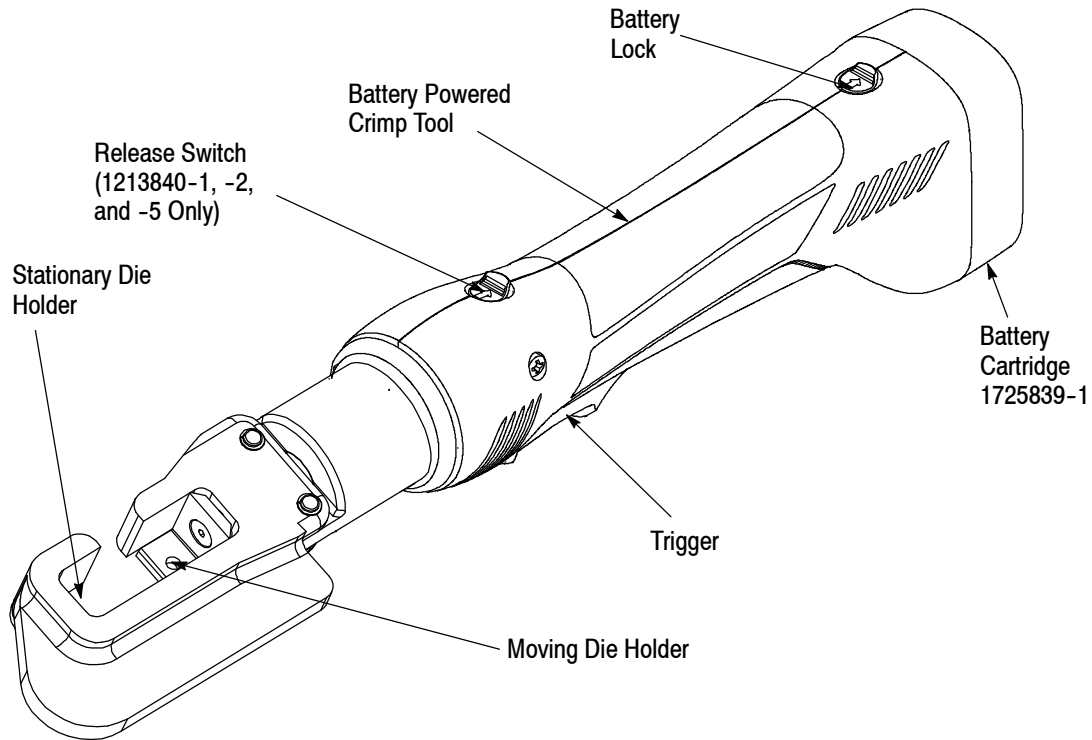


Figure 1

1. INTRODUCTION

C-Head Adapter Battery Powered Crimp Tool Kit 1213840-[] consists of the battery powered crimp tool (with the C-Head Adapter assembly installed), as well as two rechargeable battery cartridges (1725839-1) to power the tool. See Figure 1. Each kit has a battery charger. The battery charger part number, its voltage, and the kit's region of use are listed in the table below. A battery tool may have a release switch to retract the ram as listed in the table below.

The C-Head Adapter Battery Powered Crimp Tool Kit 1213840-[] is designed to accept various crimping die assemblies that are sold separately and are available from TE Connectivity. For crimping die set information concerning wire preparation, crimping procedures, maintenance, inspection, and repair, refer to the applicable instruction for the appropriate crimping die set.

Figure 2 contains specifications of the C-Head Adapter Battery Powered Crimp Tool Kit 1213840-[].

2. RECEIVING/INSPECTION

The C-Head Adapter Battery Powered Crimp Tool Kit 1213840-[] is thoroughly inspected during and after assembly. Prior to packaging and shipping, a final series of tests and inspections is made to ensure proper function of the tool. The following inspection should be performed as a safeguard against potential problems generated in transit.

1. In a well-lighted area, carefully uncrate the tool and inspect each component as it is removed from the crate.
2. Thoroughly inspect each component for evidence of damage that may have occurred in transit. If any of the components are damaged, file a claim against the carrier and notify TE immediately.
3. Keep this manual and all drawings and product samples with the tool for the benefit of operation and maintenance personnel.

The crimp tool should be inspected at regularly scheduled intervals, depending on care, degree of operator skill, the type and size of product being crimped, and environmental conditions. At a minimum, the tool should be inspected after every 40 hours of use.

CRIMP TOOL (with Battery Installed)	
Length	381 mm [15 In.]
Width	60 mm [2 3/8 In.]
Depth	80 mm [3 1/8 In.]
Mass/Weight (w/Battery)	1.6 kg [3.5 lb.]
Sound Level	75 dBA at 1 Meter
Vibration	< 2.5 m/s ²
Hydraulic Oil	Shell Tellus® T 15
CRIMPING CAPACITIES	
Maximum Crimping Force	15.6 kN [1.75 Tons]
Average Crimping Time	2 Seconds
Average Crimps Per Charge	Approximately 150
BATTERY	
Charging Voltage	9.6 V
Charging Time	40 Min

Figure 2

3. DIE INSTALLATION AND REMOVAL



Do not operate the tool without the C-Head Adapter Installed. Damage to the ram or seals can result.



Do not operate the tool without a die set installed. Damage to the adapter can result.

C-Head Adapter Battery Powered Crimp Tool Kit 1213840-[] comes with the C-Head already installed on the battery-powered hand tool. The only installation required is the installation of the dies.



To avoid personal injury, be sure to exercise extreme caution when handling the crimp tool. Remove the battery before installing or removing the dies.

3.1. Die Set Installation (Figure 3)

If dies to be installed in the tool require insulation adjustment, refer to the instruction sheet packaged with the dies for adjustment, then proceed as follows:

Each set of dies consists of a moving die and a stationary die. Most moving dies have square corners and the stationary dies have chamfered corners. See Figure 3. Exceptions to this feature will be shown on instruction sheets covering the the use of the particular dies.

1. Remove the battery from the tool.
2. Position the stationary die in the stationary die holder. Turn the die retaining screw sufficiently to hold the die in place. Do not tighten the screw.
3. Position the moving die in the moving die holder. Turn the die retaining screw sufficiently to hold the die in place. Do not tighten the screw.

Typical Dies

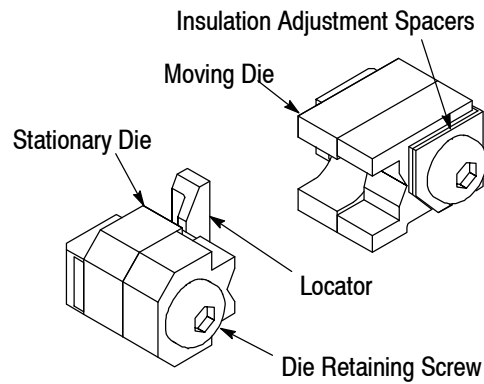


Figure 3

4. Replace the battery and check the alignment by pulsing the trigger to (slowly) close the dies, making sure the anvil and indenter are properly aligned.
5. With the dies closed, tighten the die retaining screws.

3.2. Die Set Removal

To remove or change the dies, simply loosen the die retaining screws and remove the dies.

4. OPERATION

4.1. Battery Installation and Removal (Refer to Figure 1)

NOTE



The Batteries Directive 2006/66/EC introduces new requirements from September 2008 on removability of batteries from waste equipment in EU Member States. To comply with this Directive, this device is designed to allow the rechargeable battery pack to be easily removed by the end-user when it needs to be replaced.

To install the battery, slide the battery into the bottom of the crimp tool until it can go no further. There will be an audible “click” of the battery lock to indicate that the battery has been properly installed.

To remove the battery, disengage the battery lock by applying pressure on the lock toward the bottom of the tool and slide the battery away from the tool.

DANGER



Always dispose of the old battery pack in an environmentally-responsible way, in accordance with local waste regulations. Where possible, please recycle the battery cartridge. Contact your local authority for details of battery recycling locations in your area.

4.2. Crimping

The following procedure provides only general information concerning crimping. Refer to the instructions packaged with the dies for detailed information, including wire stripping dimensions and instructions for positioning terminals and splices in the dies.

DANGER



To avoid personal injury, keep fingers clear of the crimping area.

To operate the C-Head Adapter Battery Powered Crimp Tool 1213840-[]:

1. Insert the terminal into the dies.
2. Depress the trigger to advance the moving jaw in order to hold the terminal in place. Do NOT deform the terminal body.
3. Place a pre-stripped wire in the barrel of the terminal.

4. Depress and hold the trigger to complete the crimp. The crimp tool returns automatically to the first position of its cycle when the crimp is complete.

NOTE


If it is necessary to retract the ram before a crimping cycle is completed, push the release switch. Pushing the release switch will result in the complete retraction of the ram. Only kits 1213840-1, -2, and -5 have a ratchet release switch.

CAUTION


This tool is not designed for continuous operation. After 100 cycles, allow the crimp tool to cool for 15 minutes.

5. PREVENTIVE MAINTENANCE

5.1. Daily Maintenance

Perform the following maintenance on a daily basis:

1. Inspect the die set, adapter assembly, and C-Head Battery Powered Crimp Tool for wear or damage such as cracks, gouges, or chips.
2. Inspect the crimp tool for damage or leaks. If damage is detected, return the tool to TE for repair.
3. Clean the tool, removing accumulations of dirt and grease on the head, particularly in areas where the dies are installed and terminals are crimped. Wipe the entire tool frequently with a clean, lint-free cloth. DO NOT use objects that could damage the tool.
4. Make sure that the dies are aligned and the die retaining screws are in place and are tight. Check at least twice daily.

5.2. Yearly Maintenance

Once a year, or every 10,000 cycles (whichever comes first) The C-Head Adapter Battery Powered Crimp Tool should be returned to TE for inspection.

6. SPARE PARTS

- Battery: 1725839-1
- Charger: 1725840-1 (120 V, US), 1725840-2 (220 V, EU), 1725840-3 (220 V, UK)

7. TROUBLESHOOTING (Figure 4)

Prior to beginning troubleshooting procedures, be sure the battery is operational.

1. Be sure that the battery is charged. Recheck the battery after several minutes to ensure that the battery is holding its charge.
2. Use a nonflammable contact cleaner or pencil eraser to clean the the electrical contacts on the battery and crimp tool.
3. Reinstall the battery and check the crimp tool again.

PROBLEM	PROBABLE CAUSE	REMEDY
Tool is inoperative.	Dirt, contaminants, etc, in ram area of tool	Return tool to TE.
	Crimp tool battery contacts damaged	Reform the contacts.
	Tool components are worn or damaged.	Return tool to TE.
Dies stop during operation.	Oil level is low.	Return tool to TE.
	Air in the hydraulic system.	Pull the trigger and hold the retract button simultaneously. Hold for approximately 10 seconds.
Crimp tool loses oil.	Damaged internal seal.	Return tool to TE.

Figure 4

8. RETURN

Order replacement parts through your TE Representative, or call 1.800.526.5142; or send a facsimile of your purchase order to 1.717.986.7605; or write to:

CUSTOMER SERVICE (38-35)
TYCO ELECTRONICS CORPORATION
PO BOX 3608
HARRISBURG PA 17105-3608

9. REVISION SUMMARY

- Updated document to corporate requirements
- Added new text to Section 4, OPERATION