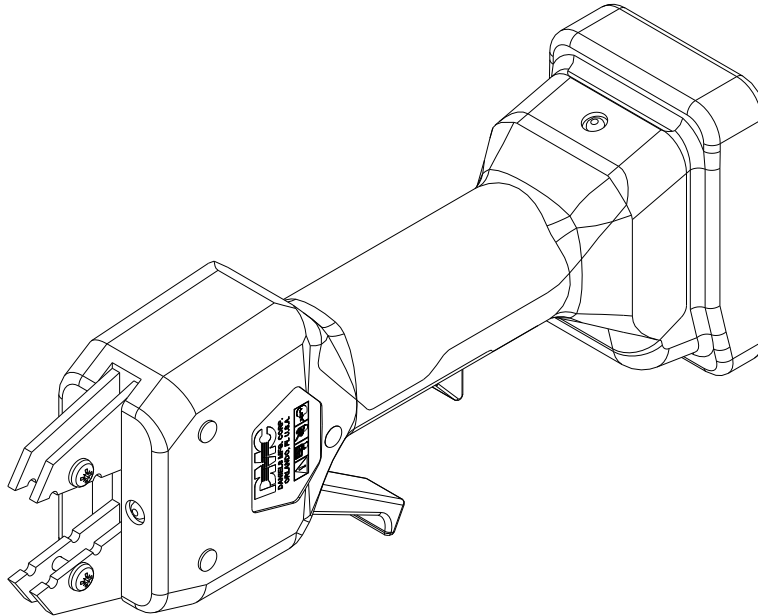


EMC3300 ELECTRO-MECHANICAL CRIMP TOOL



Description

The EMC3300 Electro-Mechanical Crimp Tool is a handheld, self contained crimp tool intended to crimp contacts/terminals onto copper and aluminum cable.

Safety

Safety is essential in the use and maintenance of DMC tools and equipment. This 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 DMC tool:


EMC3300 Electro-Mechanical Crimp Tool


Keep this manual available to all personnel. Replacement manuals are available upon request at no charge.

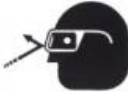
All specifications are nominal and may change as design improvements occur. DMC shall not be liable for damages resulting from misapplication or misuse of its products.

KEEP THIS MANUAL

Important Safety Information

	<p>⚠ WARNING</p> <p>Read and understand all of the instructions and safety information in this manual before operating or servicing this tool.</p> <p>Failure to observe this warning can result in severe injury or death.</p>
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	<p>⚠ WARNING</p> <p>Electric shock hazard:</p> <p>This tool is not insulated. When using this unit near energized electrical lines, use proper personal protective equipment.</p> <p>Failure to observe this warning can result in severe injury or death.</p>
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	<p>⚠ WARNING</p> <p>Wear eye protection when operating or servicing this tool.</p> <p>Failure to wear eye protection can result in serious eye injury from flying debris or hydraulic oil.</p>
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Important Safety Information

	⚠ WARNING
	<p>Skin injection hazard:</p> <p>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.</p>

	⚠ WARNING
	<p>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.</p>

⚠ WARNING
<p>An incomplete crimp can cause a fire.</p> <ul style="list-style-type: none"> • Use proper die, connector, and cable combinations. Improper combinations can result in an incomplete crimp. • The relief valve will sound to indicate a completed crimp. If you do not hear the sound of the relief valve, the crimp is not complete. <p>Failure to observe these warnings can result in severe injury or death.</p>

	⚠ WARNING
	<p>Keep hands away from the crimping head when crimping.</p> <p>Failure to observe this warning can result in severe injury or death.</p>

⚠ WARNING
<p>Do not dispose of batteries in a fire. They will vent fumes and may explode.</p> <p>Failure to observe this warning can result in severe injury from harmful fumes or burns from flying debris.</p>

⚠ WARNING
<p>Inspect tool and dies before use. Replace any worn or damaged parts. A damaged or improperly assembled tool can break and strike nearby personnel.</p> <p>Failure to observe this warning can result in severe injury or death.</p>

⚠ CAUTION
<ul style="list-style-type: none"> • Do not operate the tool without dies. Damage to the ram or crimping head can result. • Do not operate with the crimping head open. Damage to the ram or seals can result. • This tool is not designed for continuous use. After 100 crimping cycles, allow the crimping tool to cool for 15 minutes. • 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. <p>Failure to observe these precautions can result in injury or property damage.</p>

DO NOT REMOVE TOOL HEAD

***DO NOT OPERATE TOOL
WITHOUT HEAD INSTALLED***

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Important Safety Information

⚠ 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 can 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 can result in injury or property damage.

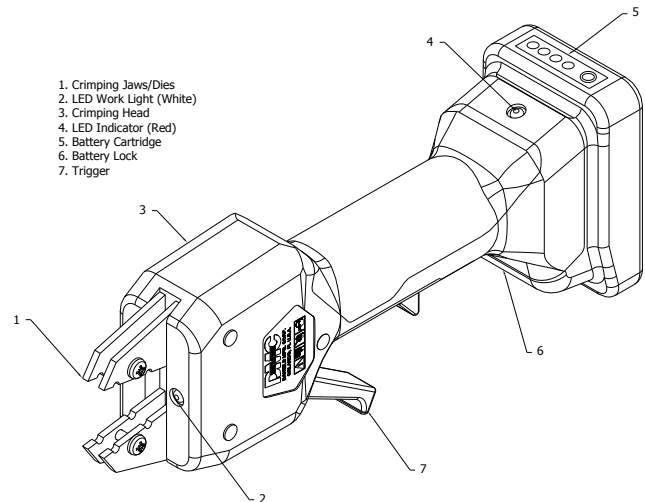
⚠ CAUTION

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 can result in injury and property damage.

Note: Keep all decals clean and legible, and replace when necessary.

Identification



Specifications

Crimp Tool

Length=9.93" (252.22mm)

Width=2.5" (63.5mm)

Depth=3.6" (91.44mm)

Weight=2.18lb (0.98kg)

Crimp Capacities

Max Crimp Force=1.53 tons (15kN)

Battery

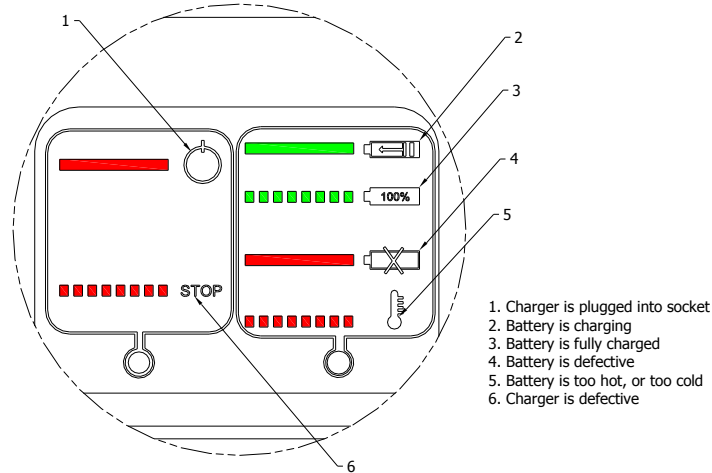
Charging Time=40 minutes

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Battery and Charger Indicator Lights

Charger Indicators

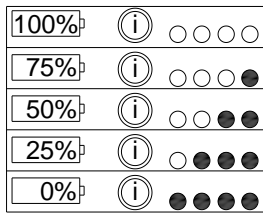


Remove battery only after unplugging charger from wall outlet.

Battery Charge Indicator

Press the "i" button on the battery to check charge left while battery is installed on tool.

% Charge Remaining



Operation

LED Work Light (White)

This LED automatically turns on when the trigger is pulled. It remains on for 10 seconds after the trigger is released.

LED Indicator (Red)

This tool is equipped with a special circuit board incorporating several important features to inform the user about the current status of the unit. The Red LED on the side of the tool signals in the following cases:

White LED	Red LED	When	What it Means
	Flashes Twice	After inserting the battery	Battery is inserted in tool
	Illuminates for 20 sec	After Crimp Cycle	Low Battery
	Flashes for 20 sec		Contact DMC Service
Flashes for 20 sec.	Flashes for 20 sec.		Tool has become too hot
Flashes Once	Flashes Once	After Interruption	Error-manual interruption of crimp cycle prior to completion
Flashes Three Times	Flashes Three Times	After Crimp Cycle	Error-automatic opening of tool due to exceeding crimp force

Installing Dies

1. Select the proper dies for the intended crimp.
2. Slide the die into the crimping head and secure with screw.
3. Properly position the second die. Repeat step 2.

Preparing Cable

Follow the lug/connector manufacturer's instructions for appropriate cable strip length, and contact/wire assembly.

Crimping Cable

1. Insert the properly assembled connector and wire into the crimping head.
2. Pull the trigger to make the crimp.
3. Hold the trigger down until the crimp tool automatically completes the cycle.
4. The crimp cycle automatically stops when complete, and the jaws automatically retract when the trigger is released.
5. Position the crimp tool for the next crimp. Repeat steps 2 & 3 for the number of crimps required.

Note:

If crimp jaws get jammed during crimp cycle, or need to be opened for any other reason, pull the trigger away from the tool body to activate the release.

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Maintenance

Each Operating Day

Before Use:

1. Inspect the tool for wear or damage such as cracks, gouges, or chips.
2. Inspect the tool for damage or leaks. If damage is detected, return the tool to the DMC repair center for inspection.

After Use:

1. Wipe all tool housing surfaces clean with a damp cloth and mild detergent. Allow to dry before storing.
2. Charge the battery.
3. Place the tool in the carrying case.
4. Store in a cool dry place.

Monthly

Thoroughly clean all surfaces.

Annually or after 35,000 Crimps

Send to DMC tool repair center for recommended service and calibration.

Trouble Shooting

Before You Begin

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

Problem	Possible Cause	Probable Remedy
Tool is inoperative.	Continuous use causes tool to become hot and automatically switch off.	Allow approximately 3 to 5 minutes of time to cool down.
	Dirt, contaminants, etc., in jaw area of tool.	Clean tool.
	Tool components worn or damaged.	Return to DMC repair center.
Motor is inoperative.	Low or uncharged battery.	Try known charged battery. Inoperative battery may be discharged, or may have reached life expectancy.
	Broken switch components.	Return to DMC repair center.
LED glows for 20 seconds.	Battery charge low.	Charge or replace battery.

Gaging the crimp tool

The crimp should be gaged periodically to ensure that proper crimping is being performed. Intervals between checks should be determined by the customer based on tool use and environment the tool is used in. Gaging is checked using GO/NO-GO gage pin type gages.

Gaging Instructions

1. Pull and hold down tool trigger to activate tool, and close die set.
2. While holding down the trigger, insert the GO gage pin of the gage. The GO gage pin should freely enter the crimp cavity.
3. While continuing to hold down the trigger, insert the NO-GO gage pin of the gage. The NO-GO gage pin may enter slightly, but shall not pass fully through the cavity.
4. If the GO pin does not go, or the NO-GO pin does go the die set should be replaced.

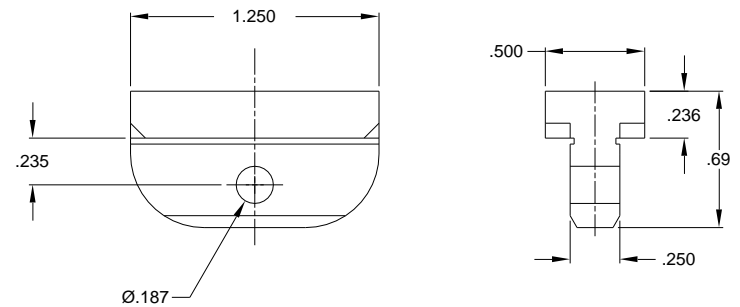
Consult DMC for the appropriate gage for the die set being checked.

Spare Battery Parts

110 VAC Battery Charger.....HDE-MBC110
 220 VAC Battery Charger.....HDE-MBC220
 10.8V Replacement Battery.....HDE-MBP108

Critical Die Set Dimensions

The following dimensions are required for die sets to function properly in the EMC3300 tool. Die sets made by other manufacturers must meet these dimensions to function correctly.



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DMC offers complete refurbishing and recalibration services.

DMC specially engineers and manufactures complete tool kits to satisfy individual customer requirements, such as total aircraft support general shop maintenance or production, on board ship and vehicle service, etc.

Limitation of Liability

DANIELS MANUFACTURING CORPORATION IS NOT LIABLE FOR CONSEQUENTIAL OR SPECIAL DAMAGES OF ANY NATURE OR KIND RESULTING FROM THE USE, OR MISUSE, OF ANY OF ITS PRODUCTS. OWNERS AND USERS OF DMC PRODUCTS ASSUME FULL RESPONSIBILITY FOR INSTRUCTING THEIR EMPLOYEES IN THE PROPER AND SAFE USE OF SUCH PRODUCTS.

Limited Warranty

DMC (Daniels Manufacturing Corporation) warrants each new product sold by it to be free from defects in material and workmanship under normal use and service. DMC's obligation under this warranty is limited to the free correction or, at DMC's option, the refund of the purchase price of any such product which proves defective in normal service within ninety (90) days after delivery to the first user, provided that the product is returned to DMC with all transportation charges prepaid and which shall appear to DMC's satisfaction, after DMC's inspection, to have been defective in material and workmanship, it being understood that DMC products are not consumer products. This warranty shall not cover any damage to any product which, in the opinion of DMC, was caused by normal wear, misuse, improper operation, tampering, neglect or accident. This warranty is in lieu of all other warranties express or implied. No warranty, express or implied, is made or authorized to be made or assumed with respect to products of Daniels Manufacturing Corporation other than those herein set forth.