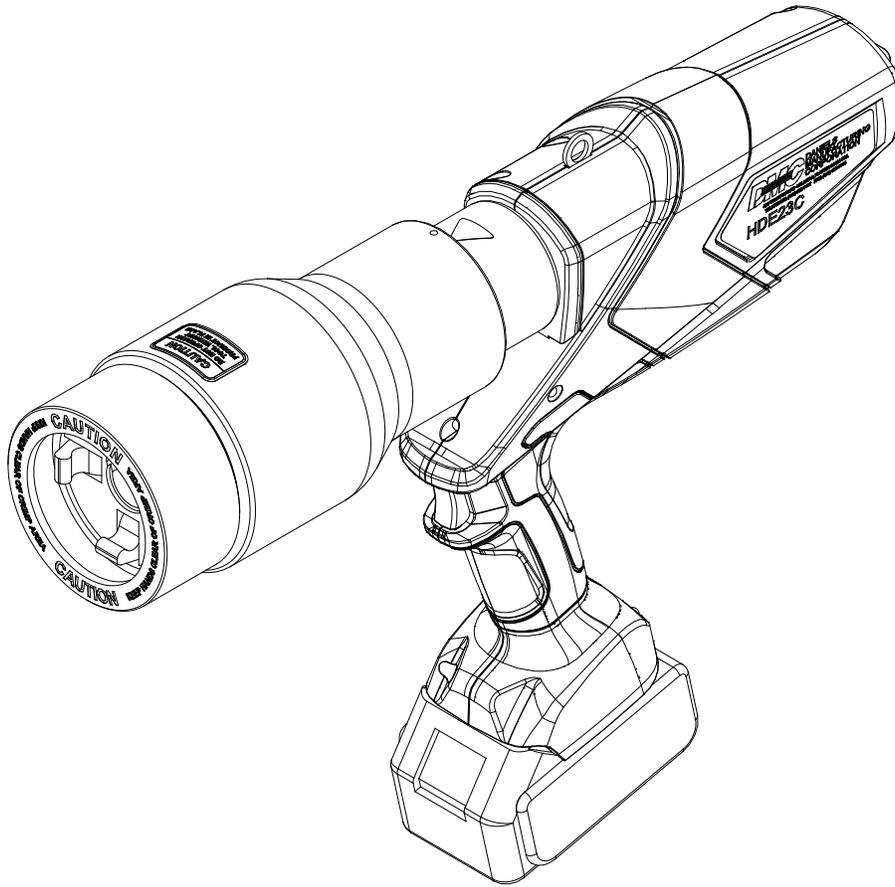


HDE23C

BATTERY ELECTRIC HYDRAULIC CRIMP TOOL

DMC DANIELS
MANUFACTURING
CORPORATION

DATASHEET



SEE PAGE 11 FOR
IMPORTANT INFORMATION
REGARDING LIMITED
WARRANTY AND LIMITATION
OF LIABILITY

GENERAL INFORMATION

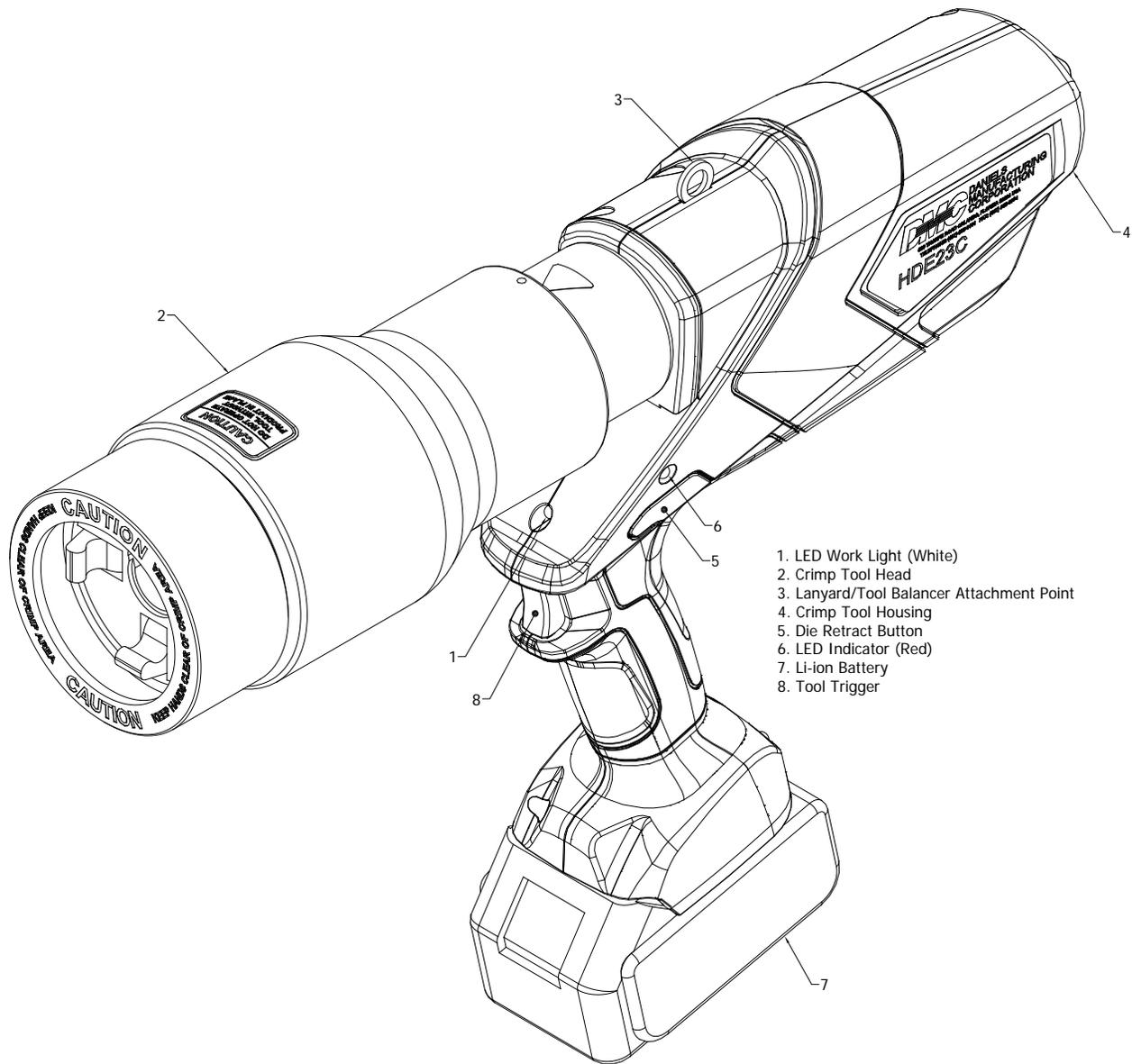
1. The DMC HDE23C is a heavy duty battery electric operated hydraulic crimp tool, designed to produce four indent crimps on M39029 and similar contacts, sizes 8 thru 4/0 AWG. Various sizes and types of contacts are accommodated by changing indenter die assemblies and locators.
2. This tool is a battery electric operated hydraulic equivalent to DMC tool part number WA23 (M22520/23-01) Heavy Duty Pneumatic Crimp Tool. It accepts all die assemblies and locators designed for part number WA23. However this tool is **NOT** Mil Qualified at the time of this writing.
3. The tool's hydraulic pump is filled with biodegradable hydraulic fluid at the factory and does not need to be bled or primed.

SAFETY

1. Safety is essential in the use and maintenance of DMC tools and equipment. This datasheet and 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.

HDE23C BATTERY ELECTRIC HYDRAULIC CRIMP TOOL

DATASHEET



SPECIFICATIONS

Crimping Tool

Length	17.9" (454.7mm)
Height	13.3" (337.8mm)
Width	4.0" (101.6mm)
Mass/Weight	13.9lb (6.3kg)
Hydraulic Oil	.1pt (50ml) Biodegradable Hydraulic Fluid

Crimping Capacities

Crimping Range	8 to 4/0
Pump Force Output	4.5 tons (40.03kN)

HDE23C BATTERY ELECTRIC HYDRAULIC CRIMP TOOL

DATASHEET

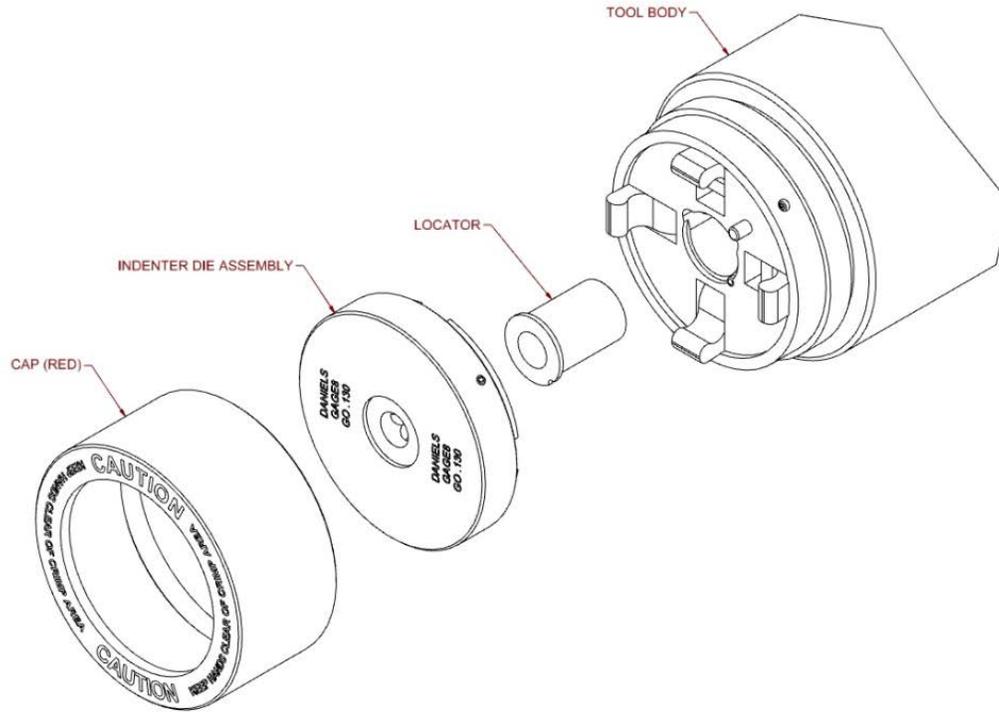


Figure 1

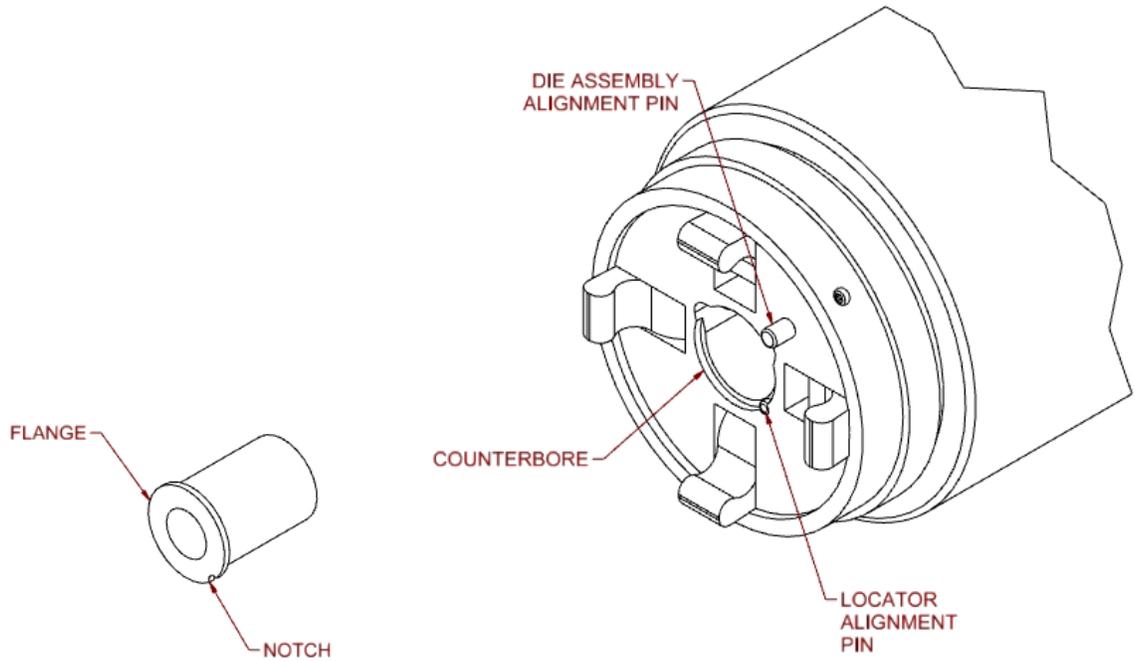


Figure 2

Figure 3

HDE23C

BATTERY ELECTRIC HYDRAULIC CRIMP TOOL

TOOL SET UP

INSTALLATION OF LOCATOR

1. Unscrew the red cap and remove die assembly, if installed. Insert the locator in the center hole, See Figure 1.
2. Verify that the flange on the locator is seated in the counter bore, and the notch on the flange, See Figure 2, is aligned with the locator alignment pin, See Figure 3.

INSTALLATION OF THE DIE ASSEMBLY

1. Press the die retract button on the side of the crimp tool housing to make sure that the indenter activation arms are fully open.
2. Place the indenter die assembly, as shown in Figure 1, onto the tool body. The die assembly alignment pin, See Figure 3, must fit into the corresponding hole in the die assembly. Align the indenter heads with the activation arms. **THE DIE ASSEMBLY MUST SIT FULLY FLUSH AGAINST THE TOOL BODY.** Place the red cap over the die assembly, See Figure 1, and tighten **FULLY** to hold the die assembly **FLUSH** with the tool body.
3. Press the tool trigger until the die assembly's indenters come in fully, the tool reaches full pressure and the pressure release trips.
4. When the tools internal pressure release trips the indenters will retract automatically. Confirm that the indenters move freely.

USE OF THE SHOULDER STRAP

1. Attach both ends of the shoulder strap to the Lanyard / Tool Balancer Attachment Point.
2. Place the strap, with tool attached, over one shoulder of the user.
3. Move the shoulder pad of the strap into the proper position.
4. Adjust the length of the strap so that the tool is at a comfortable working height for the user.
5. The Lanyard / Tool Balancer Attachment Point can also be used to attach the tool to a properly sized tool balancer.

CRIMPING A CONTACT

1. Verify that the proper locator and die assembly are installed for the contact to be crimped.
2. Assemble the contact and wire to be crimped per the manufacturers instructions, and insert them into the tool.
3. Push the contact in until it bottoms out in the locator.
4. Press the tool trigger until the indenters come in fully, and automatically retract.
5. Remove the crimped contact assembly. Visually inspect the crimp to verify crimp quality and location.

WARNING: DURING THE CRIMP CYCLE, KEEP FINGERS AWAY FROM THE DIE OPENING AREA

GAGING THE DIE ASSEMBLY

1. The GO and NO-GO dimensions are marked on the face of each die assembly. The appropriate gage pins are available from DMC.
2. To check the die closure of the installed die assembly, press the tool trigger until the tool brings the indenters to the full travel (Closed) position but not to full pressure. **RELEASE** the trigger, and indenters will stay in place.
3. Insert the GO gage pin between the closed indenters. The gage must pass between the indenter tips.
4. With the indenters still closed, insert the NO-GO gage pin between the closed indenters. The gage can begin to enter, but must not pass through the indenter tips. Manually retract indenters by pressing the retract button.

CAUTION: DO NOT CRIMP GAGE PIN. THIS WILL DAMAGE THE TOOL AND VOID WARRANTY

AS22520/23 TOOL, DIE, ASSEMBLY, AND LOCATOR LIST

Military P/N	Description	DMC P/N	Contact Size*	“GO” Dim	“NO-GO” Dim	Gage P/N
M2250/23-01	Crimp Tool	WA23				
M22520/23-02	Die Assembly 8	WA23-2	8	.130	.136	G693
M22520/23-03	Die Assembly 6	WA23-3	6	.171	.178	G694
M22520/23-04	Die Assembly 4	WA23-4	4	.195	.202	G695
M22520/23-08	Die Assembly 1	WA23-8	1	.255	.265	G1299
M22520/23-05	Die Assembly 1/0	WA23-5	1/0	.325	.332	G696
M22520/23-06	Die Assembly 2/0	WA23-6	2/0	.351	.358	G697
M22520/23-07	Die Assembly 4/0	WA23-7	4/0	.425	.432	G698
M22520/23-09	Locator 8	WA23-9	8			
M22520/23-10	Locator 6, 6N, 6G	WA23-10	6, 6N, 6`G			
M22520/23-11	Locator 4	WA23-11	4			
M22520/23-12	Locator 4, 4N, 4G	WA23-12	4, 4N, 4G			
M22520/23-13	Locator 1/0	WA23-13	1/0			
M22520/23-14	Locator 1/0, 1/0N	WA23-14	1/0, 1/0N			
M22520/23-15	Locator 2/0, 2/0N	WA23-15	2/0, 2/0N			
M22520/23-16	Locator 4/0, 4/0N	WA23-16	4/0, 4/0N			

*Smaller wire gage may require the use of M39029/112-XX contact bushings.

HDE23C

BATTERY ELECTRIC HYDRAULIC CRIMP TOOL



DATASHEET

Battery Charger Operating Instructions

Operating Environment

The charger is designed for use in dry areas. All ventilation slots must be kept free of debris. If possible, keep away from heat sources and out of direct sunlight as ambient temperatures in excess of 95°F (35°C) may increase charging times significantly.

AC Connection

Before connecting the charger, check that the AC supply voltage is the same as what is indicated on the charger.

Specifications

Frequency=50Hz to 60Hz

Output Voltage=7.2 to 18VDC

Weight=2.2lb(1.0kg)

Safety Instructions

The charger is designed only for Li-ion and Ni-MH batteries with voltages ranging from 7.2VDC to 18VDC and capacities from 1.7Ah to 3.0Ah.

1. Before you use the charger, check the power cord, extension cable and connectors for any signs of damage or aging.
2. Do not open up batteries or the charger. Do not puncture or expose to heat as there is **RISK OF EXPLOSION**.
3. Only store in dry areas. Protect from moisture and dampness.
4. Do not use if the charger is defective and never insert defective batteries.
5. Observe the symbols on the charger's rating plate.
6. Do not throw old batteries into the fire or dispose of as domestic waste.
7. Keep metal objects that could cause shorts away from the charger.
8. Do not dismantle the charger or batteries.
9. PAT (Portable Appliance Testing) should be periodically performed for safety.

Operation

Green LED (Center)

If the charger is connected to the AC line the green LED will flash repeatedly until a battery is installed for charging.

Charging a Battery

When a battery is inserted on to the charger the red LED (Left) will illuminate and stay on while charging occurs.

The green LED (Center) will turn off while the battery is less than 80% charged.

Both green (Center) and red (Left) LED's will illuminate when the battery is greater than 80% charged, but not yet fully charged.

When charging is complete, the red (Left) LED will turn off, and the green (Center) LED will stay on.

If you leave the battery on the charger after it is charged, the charger will switch to its trickle charge mode for 24 hours.

The following are the possible conditions shown by the yellow (Right) LED.

Flashing indicates trouble with the cooling fan system. Ensure that all cooling vents, and the battery connections are free of dust or debris. If flashing continues, return the unit to DMC for repair.

Continuous illumination indicates that a conditioning charge is occurring. This happens when the battery being charged is at either a very low or very high temperature. This can also occur if you attempt to charge a fully charged battery. These conditions will increase charging times.

Other conditions indicated by charger LED's

Flashing Red with Green off - Charger is overheated. Unplug the charger, and allow it to cool down.

Flashing Red, with Flashing Green - This indicates a defective battery. Replace Battery.

Spare Battery Parts

120 VAC Battery Charger HDE-LI-120C
230 VAC Battery Charger HDE-LI-230C
18V Replacement Battery HDE-LI-B
120 VAC Power Adapter HDE-120AC-A
230 VAC Power Adapter HDE-230AC-A

Tool LED Lights

The tool is equipped with two LED lights, one white and one red.

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 Service Light (Red)

As well as the Tool Information Display, 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:

What Happens...	Signal	What it Means...
Red service LED illuminates constant for 20 seconds after a tool cycle	—————	Battery charge is low, Charge Battery
Red service LED flashes for 20 seconds at rate of 2Hz after a tool cycle	••••	Return tool to DMC for Maintenance Service
Red service LED flashes for 20 seconds at rate of 5Hz after a tool cycle	••••••	Unit is too hot, let cool for 15min and try again
Red service light illuminates, White work light illuminates and an audible tone is heard	————— —————	Full tool pressure was not achieved, because the operator interrupted the crimp cycle
Red service light flashes 3 times, White work light flashes 3 times and an audible tone is heard	••• •••	Full tool pressure not achieved due to internal error, Return tool to DMC for Repair Service

Bluetooth Connectivity

This tool features Bluetooth connectivity for tool monitoring via Klauke i-press software or the Klauke i-press app. Features include:

i-press® software

- Exports all tool data, so you can check the tool status.
- In addition, i-press provides you with proof of quality in the form of a project record.
- i-press® is a desktop application, which you can download for free.

i-press® app

- Made easy - Your Next Generation tool connects to the i-press® app via Bluetooth - you can now use the comprehensive range of functions.
- Everything under control - You can, for example, display the last service date, the last five pressure values, the device temperature or the number of crimps you can still make with the connected tool.
- Record, verify and archive - Once the project is complete, you will receive an overview containing all information and pressure values as an attachment. Very clearly arranged and revamped as a PDF for printing and submitting.

The software can be downloaded at <https://www.klauke.com/de/en/ipress-connectivity-software>

HDE23C BATTERY ELECTRIC HYDRAULIC CRIMP TOOL

DATASHEET

The App can be downloaded at:



Tool Informational Display

When a battery is installed onto the tool, the following information can be accessed.

1			
2			
		ERROR CODE: ****	Error code *1
3		BT P 3 bar P 3 bar	Bluetooth (if connected) *2 Battery charging level Current pressure Pressure max.
4a		USER 3: RD3 Doppelklick	Doubleclick
4b	 3 sec.	USER SELECT 3: RD3 Einfachklick	Singleclick enter menu
4c		USER SELECT: RD3 Doppelklick	Doubleclick select
4d		USER SELECT: RD3 Doppelklick	Doubleclick confirmed
5		NEXT SERVICE: 9826 OPs	Cycles (until next service)
6		TOTAL: t = 0.07 h Q = 21.12 Ah n = 174	Since manufacturing: operating hours Capacity # crimps
7		RETURN	

HDE23C

BATTERY ELECTRIC HYDRAULIC CRIMP TOOL



DATASHEET

1. Install a charged battery onto the tool.
2. Press the tool trigger to activate the display. Any applicable error codes will be display. The 17 possible error codes are listed below. If an error code is displayed, the tool's red LED will also flash.
3. The first screen will display whether tool is connected via bluetooth, the battery charge level, current pressure & max pressure.
4. Pressing the left button once will display the firmware version, and tool serial number.
 - a. Pressing the left button again displays the current user.
 - b. Pressing and holding both button lets you select a current user.
 - c. Use the right button to select the desired user.
 - d. Press the tool trigger to confirm selection and return.
5. Pressing the left button once again will display the number of cycles and days until the next service interval.
6. Pressing the left button once again will display the total operating hours, total Amp Hours (Ah) and the total number cycles.
7. Press the right button will allow you to go back to the previous screen.

Error Codes

- | | |
|--|---------------------------------|
| 1. Overcurrent Fuse | 10. RTC Battery Low |
| 2. Overcurrent Comparator | 11. Tool Deactivated |
| 3. Overheat Board | 12. Service Necessary |
| 4. Overheat Battery | 13. RTC not Found |
| 5. Battery Empty, Operation Stop | 14. BT Unit not Found |
| 6. Faulty Crimp with Motor in Operation | 15. |
| 7. Faulty Crimp without Motor in Operation | 16. Pressure Sensor not Found |
| 8. Low Battery | 17. Burst Pressure Exceeded |
| 9. Battery Empty | 18. Battery Temperature Too Low |

HDE23C

BATTERY ELECTRIC HYDRAULIC CRIMP TOOL



DATASHEET

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.