

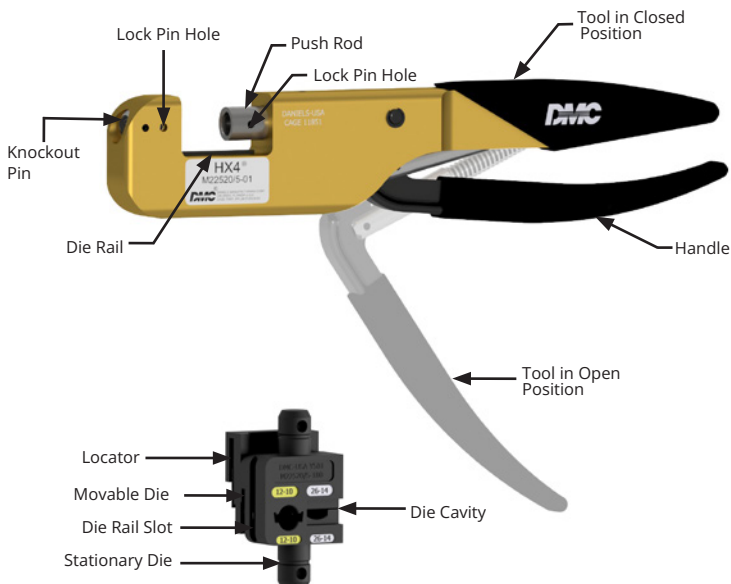
HX3 • HX4® UDT3 • UDT5

Instruction Manual



DMC **DANIELS
MANUFACTURING
CORPORATION** ®

www.dmctools.com



GENERAL INFORMATION

This instruction manual provides technical information for a series of manual form crimp tools designed to yield a secure connection perfectly suited for mission-critical applications. Each of these tools can adapt to different die sets that are interchangeable and often feature multiple cavities, effectively broadening their utility and eliminating the need for additional tooling. Available crimp styles include hexagonal, circular, nest and indent, B crimp, and more. A positive ratchet mechanism guarantees the completion of the full crimp cycle before the tool can be reopened, promoting consistent performance and process integrity. The tools covered in this document are suitable for use in high-reliability environments where consistent, repeatable crimps are critical.

The information in this data sheet pertains to the HX3, HX4®, UDT3, UDT5, and HX4-MG.

Crimp Application	Ferrules, coax connectors, stamped and formed contacts, splices and terminals
Power Supply	Manual
Ratchet Configuration	Full-cycle, not releasable
Frame Type	Open Frame, C- Head Crimp Tools

TOOL SPECS



HX3

 26 to 10 AWC

 M22520/10-01

 X Dies

Length	9"
Width	1.5"
Height	.8"
Weight	11 oz



HX4[®]

 26 to 10 AWC

 M22520/5-01

 Y Dies

Length	11"
Width	3.2"
Height	.9"
Weight	1.3 lbs



UDT3

 26 to 10 AWC

 X Dies

Length	9"
Width	1.5"
Height	.8"
Weight	11 oz



UDT5

 26 to 10 AWC

 Y Dies

Length	11"
Width	3.2"
Height	.9"
Weight	1.3 lbs

Benefits	HX3	UDT3	HX4	UDT5
Compact/Lightweight Design	✓	✓		
Enhanced Access	✓		✓	
Mixed Environment (Table-Top Leverage/Production)		✓		✓
Maximum Mechanical Advantage				✓
X-Die Platform, Optimized for Small Components	✓	✓		
Y-Die Platform, Supports Large Components			✓	✓

INSTALLATION / REMOVAL OF ACCESSORIES

DIE INSTALLATION

1. Squeeze the handles to fully open the tool. (Fig. 1)
2. Locate the die rail and align the die rail slot on the stationary die to the tool. (Fig. 2)
3. Push the shank of the die into place until you hear it click. Repeat this step for the movable die. *Optional: Insert the pins supplied with the die set through the tool body and push rod to permanently lock the dies in place.* (Fig. 3)
4. Close the handles to ensure that the dies are properly seated. (Fig. 4)



Fig. 1



Fig. 2



Fig. 3



Fig. 4

DIE REMOVAL

1. Squeeze the handles to fully open the tool. (Fig. 5)
2. Use the HX3-82 die removal tool to apply pressure to the knockout pin on the top of the tool to release the stationary die. Remove the stationary die by hand. (Fig. 6)
3. Squeeze the handles to close the tool and slide the removal tool between the bottom of the die and the body of the tool. (Fig. 7)
4. Cycle the tool and pull the handle to the fully open position to release the movable die from the tool. Remove the movable die by hand. (Fig. 8)



Fig. 5



Fig. 6



Fig. 7



Fig. 8

CRIMPING INSTRUCTIONS

1. With the tool in the open position, place the terminal in the cavity, utilizing the locator on the die when available. (Fig. 9)
2. Insert the prepared wire into the terminal's wire barrel. (Fig. 10)
3. Squeeze the handles together until the ratchet releases. The handle will return to the open position once fully crimped. (Fig. 11) *When using the UDT tools, utilize a flat surface and depress the handle until the ratchet releases. (Fig. 12)*



Fig. 9



Fig. 10

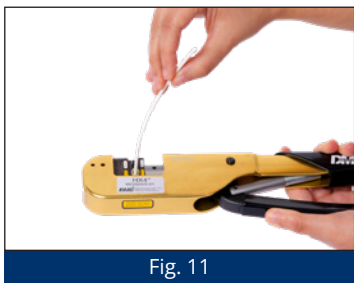


Fig. 11



Fig. 12



SCAN FOR A VIDEO TUTORIAL.

<https://qrco.de/hx3hx4>

DIE GAUGING INSTRUCTIONS

Go/No-Go Gage selection depends on the die cavity type. Hex, square, and circular cavities require double-flat pin gages; nest and indent cavities require single-flat pin gages. B-crimp cavities are verified by crimping a solder sample and measuring it with a blade caliper. Dies with unique or irregular cavities require custom gages matched to the cavity geometry.



GO

1. With the dies installed, actuate the tool to the fully closed position.
2. With firm hand pressure on the tool handles, insert the "GO" gage end through the die face as shown. The gage must pass freely between the die set.



DO NOT crimp the gage.



NO-GO

1. With the dies installed, actuate the tool to the fully closed position.
2. With firm hand pressure on the tool handles, attempt to insert the "NO-GO" gage end through the die face as shown. The "NO-GO" gage may partially enter the die set, but must not pass completely through.



DO NOT crimp the gage.

B-Crimp Gauging

- 1 Crimp on a solder sample



- 2 Measure with blade caliper



TOOL CARE

Virtually no maintenance is required for this tool; however, it's good practice to keep tools free of residual deposits and other debris by using a small wire brush. We strongly recommend that you:

- ☐ DO NOT immerse tools in cleaning solution.
- ☐ DO NOT spray oil into tool to lubricate.
- ☐ DO NOT attempt to disassemble tool or make repairs.
- ☒ Only use tools for their intended purposes.

CALIBRATION & REPAIR

We offer comprehensive calibration and repair services. Our technicians will inspect the tools, replace worn components, and ensure it meets factory specifications.

To begin the calibration or repair process, scan the QR code. U.S. Customers will be directed to the appropriate forms to initiate service through DMC. Customers outside of the U.S. may contact authorized repair centers near them.

<https://qrco.de/Calibrate>



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 these tools. Observe all of the safety information provided below:



Use proper connector and cable combinations. Improper combinations can result in an incomplete crimp. Failure to observe this warning could result in severe injury or death.



Inspect tool before use. If any parts are worn or damaged, send the tool for repair.



Avoid use of any powered “press” as defined by OSHA CFR 1910.211 (46).

Limitation of Liability

DANIELS MANUFACTURING CORPORATION (DMC) IS NOT LIABLE FOR CONSEQUENTIAL OR SPECIAL DAMAGES OF ANY NATURE OR KIND RESULTING FROM THE USE, 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

Daniels Manufacturing Corporation (DMC) 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 or workmanship, it being understood that DMC products are not consumer products. This warranty shall not cover any damage to any products 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 DMC other than those herein set forth.



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