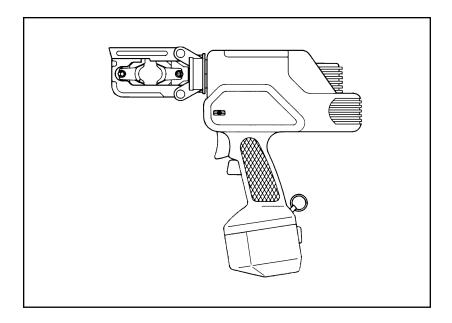
HYDRAULIC COMPRESSION SYSTEM OPERATING INSTRUCTIONS

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INTRODUCTION

The CT-2001 Hydraulic Compression System can crimp #8 AWG to 500 kcmil copper lugs & splices for copper code conductor, #8 AWG to 350 kcmil copper lugs for copper flex conductor; #8 AWG to 300 kcmil aluminum lugs & splices for copper or aluminum code conductor, #8 AWG to 2 AWG Copper CTAP taps for copper code conductor; and #16 AWG to 3/0 AWG Copper CTAPF taps for copper code conductor. The Hydraulic Compression Tool develops up to 6 tons (5.5 metric tons) of compressive force. NOTE: CONNECTIONS UTILIZING THIS TOOL ARE U.L. LISTED AND C.S.A. CERTIFIED ONLY WHEN *PANDUIT* COPPER COMPRESSION CONNECTORS ARE USED. USE OF ANY OTHER BRAND OF COMPRESSION CONNECTORS IS NOT RECOMMENDED.

This manual will guide you step-by-step in the set-up, operation, and maintenance of your CT-2001 System. Proper maintenance is vital to the continued trouble-free operation of the tool. If you have a problem not covered in the manual, call:

(888) 506-5400, Ext. 3255

Ask for one of our Tool Service Technicians

The information contained in this literature is based on our experience to date and is believed to be reliable. It is intended as a guide for use by persons having technical skill at their own discretion and risk. We do not guarantee favorable results or assume any liability in connection with its use. Dimensions contained herein are for reference purposes only. For specific dimensional requirements consult the factory. This publication is not to be taken as a license to operate under, or a recommendation to infringe any existing patents. This supersedes and voids all previous literature, etc.

SYSTEM SPECIFICATIONS

CT-2001 Hydraulic Compression Tool

Output: 6 tons / 5.5 (metric tons) of compressive force

Applicable Range: #8AWG to 500 kcmil copper lugs & splices for copper code conductor

#8AWG to 350 kcmil copper lugs for copper flex conductor

#8AWG to 300 kcmil aluminum lugs & splices for copper or aluminum

code conductor

#8AWG to 2AWG Copper CTAP taps for copper code conductor #16AWG to 3/0AWG Copper CTAPF taps for copper code conductor

Motor: 14.4 V DC motor

Dimensions: 330 L x 311 H x 63 W (mm)

13" L x 12.3" H x 2.5" W (in)

Weight: 3.8 kg / 8.5 lbs. (with battery)

CT-NLBC25 Battery Cartridge

Type of battery: Sealed Nickel Cadmium

Output: 14.4 V DC Rated Current: 2.0 AH Charging time: 25 minutes

Dimensions: 89 L x 135 H x 69 W (mm)

3.5" L x 5.3" H x 2.7" W (in)

Weight: 0.82 kg / 1.8 lbs.

CT-CHR25 Battery Charger

Input: 120 V AC Single Phase 60 HZ, 60W

Dimensions: 197 L x 95 H x 115 W (mm)

7.75" L x 3.75" H x 4.53" W (in)

Weight: 0.87 kg / 1.9 lbs.

CT-2001 SYSTEM

The CT-2001 System includes:

1 - Hydraulic Compression Tool

2 - CT-NLBC25 Battery Cartridge (no LED indicator)

1 - CT-CHR25 Battery Charger1 - CA21414B01 Shoulder Strap

1 - PC2001 Plastic Carrying Case

OPTIONAL ACCESSORIES

CD-2001 Compression Dies Consult *PANDUIT* catalog for part numbers and specific die appli-

cation information.

CT-BC25 Rechargeable NiCd battery cartridge with LED battery charge

indicator.

PRECAUTIONS AND GENERAL GUIDELINES

HYDRAULIC COMPRESSION TOOL

1. WARNING: DO NOT USE THIS TOOL ON LIVE ELECTRICAL CIRCUITS.

- 2. When operating the CT-2001 Tool, <u>do not actuate</u> the tool with the latch and yoke open. The tool head latch and yoke must be completely closed before cycling the tool.
- 3. Be sure to select appropriate dies to suit the terminal to be crimped. Improper combinations result in inferior connections of conductors.

NOTE: DIES ARE DESIGNED TO PRODUCE THE HIGHEST QUALITY CONNECTIONS WITH *PANDUIT* CONNECTORS. CONNECTIONS UTILIZING THIS TOOL ARE LISTED PER U.L. 486A AND C.S.A. CERTIFIED ONLY WHEN *PANDUIT* COPPER COMPRESSION CONNECTORS ARE USED. USE OF ANY OTHER BRAND OF COMPRESSION CONNECTORS IS NOT RECOMMENDED.

- 4. **DO NOT** press trigger and release button simultaneously. Damage to trigger linkage may result.
- 5. Always point tool away from others.
- 6. If the tool is kept in cold temperatures below 23°F/-5°C for any extended time, it is advisable to return the tool to room temperature for 1 hour before using.
- 7. If the tool "BATTERY LOW" LED remains on when the trigger is activated, the battery should be recharged or incomplete crimping may result. See attached battery cartridge instructions.
- 8. Avoid dropping the tool. Extreme shock may damage the hydraulic circuit and result in malfunction of the tool.
- 9. Keep head portion clean and free from debris.

CRIMPING CYCLES

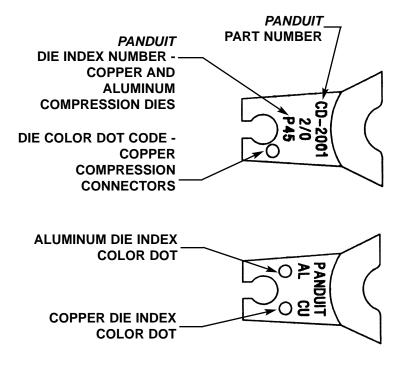
Depending on connector size and type, the number of crimp cycles may be increased significantly if the piston is only retracted enough to remove the assembly from the dies.

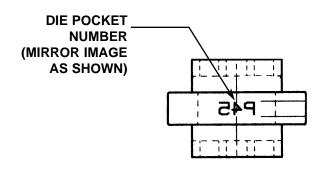
DIE SELECTION

Match index number and color on die (See Figure 1) to index number and color band on connector.

FIG. 1 DIE IDENTIFICATION FOR USE WITH MATCHED CONNECTOR

NOTE: DIES ARE DESIGNED TO PRODUCE THE HIGHEST QUALITY CONNECTIONS WHEN USED WITH *PANDUIT* COMPRESSION CONNECTORS. USE OF ANY OTHER BRAND OF CONNECTORS IS NOT RECOMMENDED WITH CD-2001 DIES.





- 1. Always verify correct die set by die part number.
- Color coding dot for verification may be found on the front and/or back of die set (not applicable to die sets with a letter suffix).

INSTALLATION

DIE INSTALLATION (See Figure 2 on Page 6)

- 1. **NOTE:** Remove battery from tool before removing or installing dies in the crimp head.
- 2. Remove any current dies from the tool ram by depressing both of the related die release buttons (nearest the die half to be removed) and pull die out of tool.

CAUTION: DO NOT let the ram contact the crimp head.

DIE INSTALLATION (continued)

- 3. Select the appropriate dies to match the connector to be crimped.
- 4. Align one of the die halves in the die cavity contour of crimp head. While pressing both of the appropriate die release buttons on the crimp head, slide the die half in so that it is centered in the die cavity of the crimp head. Release the die release buttons and verify that the die is locked in place.
- 5. Align the remaining die half in the die cavity contour of the ram. While depressing both of the appropriate die release buttons on the ram, slide the die half in so that it is centered in the die cavity of the ram. Release the die release buttons and verify that the die is locked in place.

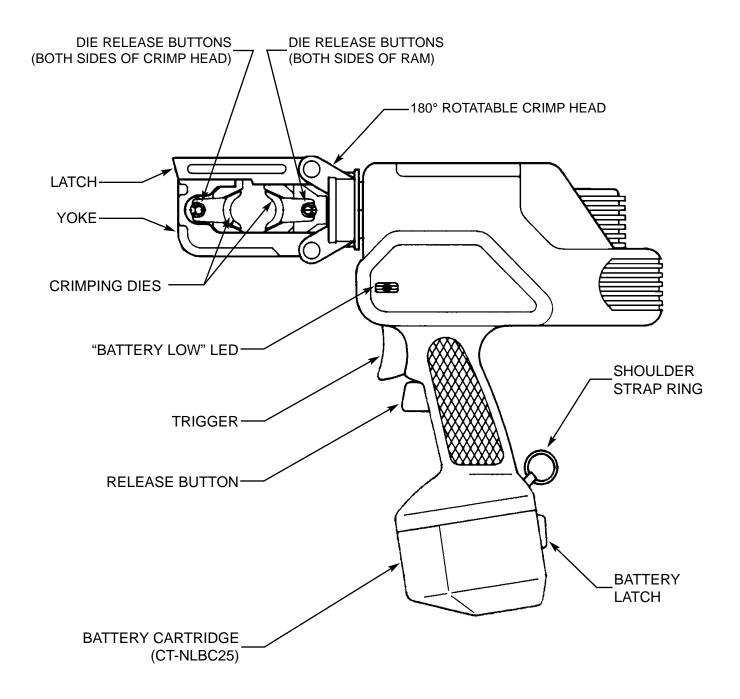
BATTERY INSTALLATION (See Figure 2 on Page 6)

Position battery below tool handle and slide into place (a "clicking" sound will occur). Check to ensure battery is securely installed before tool operation. To remove battery, depress battery latch and pull downward.

TOOL OPERATION (See Figure 2 on Page 6)

- 1. To simplify operation, the head of the compression tool may be rotated by hand 180° relative to the tool body, as indicated by the arrow on tool head.
- 2. Depress release button 2-3 times to ensure that piston is fully retracted.
- 3. Carefully place connector between dies so that the dies will crimp between the color bands on the connector. Activate trigger until connector is held by dies.
 - **CAUTION:** Do not crimp connector.
- 4. Check to ensure conductor size and dies properly match the connector size being used. Insert the conductor completely into the connector.
- 5. Depress the trigger until the crimp is completed. A "clicking" sound will be made by the tool during the crimping cycle. When the piston release pressure is attained, the piston will not advance further and the clicking sound will cease.
- 6. Depress the release button to retract the piston to reposition or remove the assembly.
 - **CAUTION: DO NOT** press trigger and release button simultaneously. Damage to trigger linkage may result.
- 7. To facilitate support of the tool during operation, the shoulder strap can be attached to the compression tool by snapping hook on shoulder strap ring. Strap length can be adjusted for individual comfort.

FIG. 2 CT-2001 TOOL



PERIODIC MAINTENANCE

- 1. Daily maintenance is important to keep the tool in good working condition. Keep the tool head and tool body clean. Store dies in a clean and dry place.
- 2. Avoid humidity wherever possible for smooth operation and for the prevention of corrosion.

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BATTERY CARTRIDGE OPERATING INSTRUCTIONS

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PRECAUTIONS AND GENERAL GUIDELINES:

- 1. WARNING: NEVER SHORT CIRCUIT BATTERY TERMINALS.
- 2. Avoid water, oil or solvent near the battery cartridge.
- 3. NEVER DISASSEMBLE OR MODIFY THE BATTERY.
- 4. NEVER DISPOSE OF BATTERY IN FIRE, OR DISPOSE IN GARBAGE. Batteries can be returned to *Panduit* Tool Division for disposal. Contact *Panduit* Tool Service at (888) 506-5400, Ext. 3255.
- 5. AVOID DROPPING THE BATTERY CARTRIDGE.
- 6. NEVER STORE BATTERY ABOVE 140°F (60°C).
- 7. Battery cartridge self-discharges. It is recommended to charge battery at least every 3 months if tool is not regularly used.
- 8. Only charge the CT-NLBC25 Ni-Cd rechargeable battery with the CT-CHR25 Battery Charger (provided with tool).
- 9. It is recommended to fully discharge battery before recharging to maximize battery life (see CT-CHR25 Battery Charger operating instructions).

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BATTERY CHARGER OPERATING INSTRUCTIONS

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PRECAUTIONS AND GENERAL GUIDELINES:

CAUTION:

- DO NOT expose charger to moisture.
- Immediately discontinue use if damaged cord or wires exist to prevent electric shock.
- Charging battery models other than PANDUIT CT-BC25 or CT-NLBC25 may result in personal injury due to exploding battery.

Contact *Panduit* Tool Division at (888) 506-5400, ext. 3255; and ask for a Tool Service Technician, for repair information.

- 2. The LED indicator on the battery charger changes colors to indicate the status of the recharge cycle. Refer to the label on the charger for specific status color codes.
- 3. Charger should be operated at 50°F to 95°F (10°C to 35°C).
- 4. Never operate charger continuously for more than 24 hours.
- NEVER SHORT CIRCUIT OUTPUT TERMINALS.
- 6. NEVER DISASSEMBLE OR MODIFY THE BATTERY CHARGER.
- 8. AVOID DROPPING THE BATTERY CHARGER.

CHARGING BATTERIES

Only the bottom LED on the Battery Cartridge (if LED indicator included) will flash when there is less than 10% charge remaining. Also, the tool "BATTERY LOW" LED will remain "on" continuously when the trigger is activated, to indicate that the battery cartridge requires recharging. When either of these low charge signals occurs, discontinue crimping.

NOTE: The tool "BATTERY LOW" LED may go on intermittently when the trigger is activated and can be disregarded.

The CT-CHR25 Battery Charger has a Reconditioning (automatic discharging/recharging) Feature (See Fig. 1 on Page 2). When battery requires recharging, it can be removed from the tool and placed in the charger without manually discharging the battery first. When the Reconditioning "R" Button on the charger is pressed, the battery will be completely discharged, and then automatically recharged. Discharging times for batteries with 10% of the charge remaining are approximately 1 hour. Higher charge remaining means longer discharging time. Reconditioning will help maximize battery life; up to 1000 charging cycles can be achieved.

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CT-CHR25 OPERATING INSTRUCTIONS

1. WARNING: BATTERY CHARGER IS FOR INDOOR USE ONLY.

2. **CAUTION:** Make sure input voltage is at least 100 V AC. If used with more than 120 V AC,

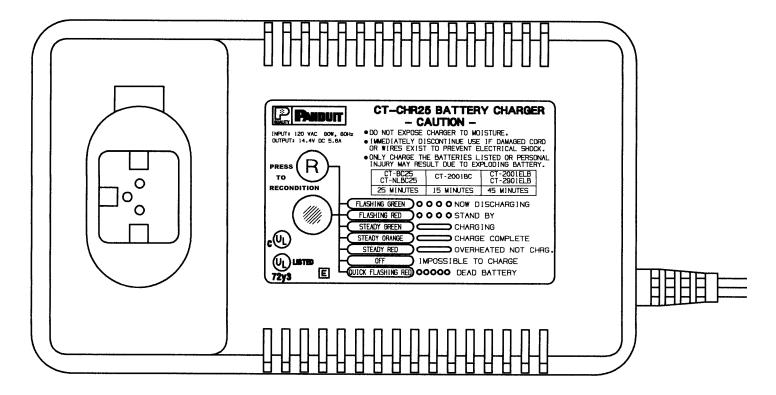
charger and battery pack may be damaged.

3. Insert the AC plug of the battery charger into a wall outlet receptacle.

4. Insert the battery cartridge into the charger cavity.

CAUTION: Keep the cavity of the charger free from foreign materials, especially metal objects.

FIG. 1 CT-CHR25 BATTERY CHARGER



- 5. When using the CT-CHR25 Battery Charger, press the Recondition "R" Button, to recondition (completely discharge and recharge) the battery. If you do not want to discharge the battery on the CT-CHR25 charger, the charger will only recharge the battery upon insertion into the charger (do not press the Recondition "R" button on the CT-CHR25 Battery Charger). The LED indicator on the battery charger changes colors to indicate the status of the recharge cycle. Refer to the label on the charger for specific status color codes.
- 6. Remove battery from charger when LED shows a completed charge. Typically, the CT-BC25 or CT-NLBC25 Battery Cartridge will recharge in 25 minutes when placed in the CT-CHR25 Battery Charger.

CAUTION: Be sure to fully recharge the battery when the tool is delivered or after 3 months of storage.