# DUIT CT-901HP

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# HYDRAULIC COMPRESSION SYSTEM OPERATION and MAINTENANCE INSTRUCTIONS

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Read and understand all of the instructions and safety information in this manual prior to operating or servicing this tool.

Retain this manual for future reference.

Email: techsupport@panduit.com



Technical Support Tel: 888-506-5400, ext. 83255

#### **PRECAUTIONS**



# **DANGER**

# THE USER SHOULD BE PROPERLY TRAINED IN THE CORRECT PROCEDURES REQUIRED FOR WORK AROUND ELECTRICAL LINES



Safety glasses must be worn at all times when using the tool.



WARNING: Keep fingers clear of crimping tool head area

during tool operation.



WARNING: DO NOT USE THIS TOOL ON LIVE ELECTRICAL

**CIRCUITS** 



CAUTION - When using CT-980CH Crimp Head

SECURE LATCH BEFORE OPERATING
FAILURE TO SECURE LATCH CAN RESULT IN SEVERE TOOL DAMAGE
AND PERSONAL INJURY.



CAUTION – When using CT-930CH or CT-940CH Crimp Heads

# DO NOT OPERATE WITHOUT DIES

#### INTRODUCTION

The CT-901HP is a hydraulic pump capable of providing 10,000 PSI (700 bar). Panduit recommends using their CT-901HP Hydraulic Pump with CT-900HPH Hydraulic Pump Hose, which can crimp #8 AWG thru 1500 MCM Panduit Copper Compression Connectors and #6 AWG thru 1000 MCM Panduit Aluminum Compression Connectors. Refer to the product packaging for wire size and crimp designations.

This manual will guide you step-by-step in operation and maintenance of your Hydraulic Pump. If you have problems not covered, call:

1-888-506-5400, 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

Hydraulic Pump pressure is factory preset at 10,000 PSI ± 200 PSI (700 bar), and is **CT-901HP Hydraulic Pump** 

to be used with the following Remote Hydraulic Crimp Heads: CT-930CH, CT-940CH and Dieless CT-980CH. Pump shuts off when cycle is complete. Will not release until down

switch is activated.

178 L x 152 W x 356 H (mm) Dimensions:

7.0 L x 6.0 W x 14.0 H in.

Weight:: 15 (kg) / 33.0 lbs.

Housing: Color - Orange

Pump

Tank Capacity: 2 Liters

Fluid Type: Shell Tellus Hydraulic Oil S2 V 15

Motor

Type: Commutator R.P.M.: 1200 Voltage: 120 V Watts: 600

50/60 Hz Frequency: Current: 6.5 Amps

Horsepower:

157 cubic inches/minute Delivery @ 200 psi Delivery @ 10,000 psi 19 cubic inches/minute

Air Vent PANDUIT CT-901HP Lever

**CT-901HP** 

PANDUIT

В Toggle

Switch

#### OPTIONAL ACCESSORIES

CD-920 / CD-940 Refer to product packaging for wire size and crimp designations; or

Α

**Compression Dies** Panduit Sales Office for specific die application information.

CT-900HPH Electrically non-conductive 10 ft. hose. Supplied pre-filled with hydraulic fluid

**Hydraulic Pump Hose** for fast start up.

CT-901RCH To ease operation of the Hydraulic Tool System

**Remote Control Handle** Dimensions: 155 L x 167 H x 34 W (mm)

6.1 L x 6.6 H x 1.4 W in.

3.0 (kg) / 6.6 lbs. Weight:

**CT-901RFS** Remote Foot Switch allows for hands free operation

**Remote Foot Switch** Dimensions: 243 L x 173 H x 180 W (mm)

9.6 L x 6.8 H x 7.1 W in.

Weight: 3.5 (kg) / 7.7 lbs.

PG-1 Verifies the PSI reading of the CT-901HP Hydraulic Pump.

Dimensions: 228 L x 114 H x 38 W (64 dial face) (mm) **Pressure Gauge** 

9.0 L x 4.5 H x 1.5 W (2.5 dial face) in.

Weight: 1.4 (kg) / 3.0 lbs.

CG-920 / CG-940 / CG-980 **Compression Gauges** 

Verifies the compression force of Panduit compression tools and

remote crimp heads.

Dimensions: 228 L x 102 H x 38 W (102 dial face) (mm)

9.0 L x 4.0 H x 1.5 W (4.0 dial face) in.

1.6 (kg) / 3.5 lbs. Weight:

#### **GENERAL GUIDELINES FOR MAINTENANCE OF TOOLS**

- 1. Always verify the proper size connector for the conductor, by checking the color code and the printing on the connector.
- 2. NOTE: CONNECTIONS UTILIZING THIS TOOL ARE U.L. LISTED AND C.S.A. CERTIFIED ONLY WHEN PANDUIT COMPRESSION CONNECTORS ARE USED. USE OF ANY OTHER BRAND OF COMPRESSION CONNECTORS IS NOT RECOMMENDED.

Consult product packaging, Panduit catalog or website for information on recommended connectors.

- 3. Daily maintenance is important to keep the tool in good working condition. Keep the tool head portion clean and free from debris. Excessive dirt and grit can contribute to the premature wear of the tool's internal parts. Always replace the dust cap on the coupler, and store the tool in its clean, dry carrying case when not in use. Particular attention should be made in keeping the tool head openings free of foreign matter and debris. When using the tool, regularly check that no foreign matter or debris exists in the open areas between the piston and tool head. Solvent can be used on the tool head to remove any foreign matter or debris. A tool that is dirty with excessive foreign matter may jam and become damaged during operation.
- 4. The hydraulic system has been calibrated and sealed at the factory. Consult our Tool Service Department or your local distributor if hydraulic problems are experienced.
- 5. As long as the daily maintenance procedures are adequately carried out, the tool will provide quality service for years. However, if problems are experienced, please contact our Tool Service Department at: 1-888-506-5400, ext. 83255.
- 5. Avoid dropping the tool. Extreme shock may damage the hydraulic circuit or tool head, and result in malfunction of the tool.
- 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.

# **PUMP OPERATION**

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- 1. Connect male hose fitting to female tool fitting. (Panduit Part No. for hose is: CT-900HPH.)

  Vent tank by turning air vent lever (A) [see photo on Page 2] to upright position (replace cotter pin).

  Leave vent open during tool operation.
- 2. Insert electric cord (3 prong plug) into 110V AC outlet.
- 3. Depress the "DOWN" button on remote control switch to determine if solenoid is operational. (A "clicking" sound will be heard.)
- 4. The "UP" button activates motor to generate hydraulic pressure. Depress and hold for ram advance.
- 5. To stop ram advance, release "UP" button. Oil pressure will remain constant until "DOWN" button is depressed to relieve pressure. The pump will automatically shut off when the maximum pressure is reached.
- 6. To retract ram, depress and hold in the "DOWN" button. Oil in tool cylinder will return to tank and tool will be ready to begin next cycle. Retraction of the ram may be stopped by releasing the "DOWN" button.
- 7. The toggle switch (B) on the pump motor [see photo on Page 1] may be used instead of the remote control switch. The toggle in the "UP" position corresponds to depressing the "UP" button; and the toggle in the "DOWN" position corresponds to depressing the "DOWN" button.

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# **PREVENTIVE MAINTENANCE**

Maintenance should be performed monthly, whenever possible damage has occurred, or as often as operating conditions warrant.

- 1. Operate pump on 110 volts AC only or voltages between 95 and 110. Do not operate pump on voltages less than 95 volts or on DC current.
- 2. Level of oil is to be maintained above the red dot in center of port window. To add oil, unscrew entire oil vent fitting from tank with a wrench. Using a funnel, pour oil into the tank opening. Recommended hydraulic oil: Shell Tellus Hydraulic Oil S2 V 15 or approved equivalent. Replace fitting.
- 3. When attaching hoses, be sure all couplers are securely fastened. Always keep couplers clean by wiping oil and debris from surfaces before connecting hoses to pump or tool.
- 4. Never move pump by pulling on the electrical cords.
- 5. Always store pump with the air vent in the closed position.

# **TROUBLESHOOTING**

# If system locks up under pressure, perform the following steps:

- Verify that the solenoid on pump is making an audible "click".
- If above step checks out, determine which fitting needs to be tightened.
- When pump is released, does the hose stay rigid or flex back down?
- If the hose stays rigid, the problem is in the connection from pump to hose.
- If the hose flexes down, the problem is in the connection from hose to tool head.
- To tighten couplers, use channel lock pliers or pipe wrench; (wrap couplers to avoid causing damage).
- When you feel the couplers tighten, depress the release on the pump; (pressure should be released).
- Tool head should retract. Finish tightening couplers by hand.

# **CONTACT INFORMATION** • For Technical Support:

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