

CP-871

OPERATION MANUAL



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TABLE OF CONTENTS

Α.	SAFETY REGULATIONS ENGLISH4
A1.	Symbols4
A2.	Product description4
A3.	Responsibilities4
A4.	Personal qualifications4
A5.	Danger areas4
A6.	Safety requirements4
1.	ABOUT THIS OPERATOR MANUAL
1.1.	Important Information5
1.1.1.	Manufacturer and Contact Address5
1.1.2.	Target Market5
1.1.3.	Obligation to Read5
1.1.4.	Validity5
1.1.5.	Contents and Purpose5
1.1.6.	Location5
1.1.7.	Symbols6
1.1.7.1.	Security Tags
1.1.7.2.	Security Tag6
1.2.	Product Description
1.2.1.	Tag7
1.2.2.	Application7
1.2.3.	Application Limits7
1.2.4.	Conformance
1.2.5.	Danger Areas

CP-871 OPERATION MANUAL

1.2.6.	Technical Data	8
2.	OPERATING ELEMENTS	9
2.1.	Main Switch	9
2.2.	Control Panel	9
2.2.1.	Display	9
2.2.2.	Keyboard	10
2.3.	Monitors, Menus	10
3.	OPERATION	11
3.1.	Production	11
3.1.1.	Display	11
3.1.2.	Activate Cycle	11
3.1.3.	Settings	12
3.1.4.	Menu Counters	12
3.1.4.1.	Reset Counter	
3.1.4.2.	Programming Batch	13
3.1.4.3.	Total Counter	13
3.1.5.	Functions	14
3.1.5.1.	Crimp Speed	
3.1.5.2.	Crimp Force	
3.1.5.3.	Pneumatic Valve (Option)	15
3.1.5.4.	Split Cycle	
4.	TOOL REPLACEMENT	17
4.1.	Roller Carrier	17
4.2.	Contact guide plate	18
4.3.	Applicator Assembly	19
4.4.	Setting the Crimp Height	20
5.	CRIMP FORCE MONITORING ACO05	21
6.	ERROR MESSAGES	21

7.	MAINTENANCE
7.1.	Daily Maintenance22
7.1.1.	Cleaning Processing Room
7.2.	Lubrication
7.3.	Machine Preparation
7.4.	Slide24
7.5.	Tool Base Plate
8.	SETTINGS
8.1.	Setting Crimping Height at 135.788mm25
9.	REPAIRS
9.1.	Replace Main Fuse
10.	APPENDIX
10.1.	EU-Safety Data Sheet KLÜBER27

A. SAFETY REGULATIONS ENGLISH

A1. Symbols



Please follow exactly the work and processes marked with this pictogram. Failure to do so may result in death or severe injury.



Please follow exactly the work and processes marked with this pictogram. Failure to do so may lead to minor injuries and to damage to the machine.

A2. Product description

The *PANDUIT* CP-871 is a crimping machine for the processing of all terminal, disconnect and butt splice crimping contacts up to a cross section of 6mm2 (AWG10). The CA-800EZ and CA9 applicators can be fit in. The operator interface consists of membrane keypad and a display. Functions such as speed control, split cycle, pneumatic valve control, and various counter functions are selectable over the interface.

The CP-871 may only be used as described in the enclosed operating manual. Any deviation of the operation mode, additions and extensions must first be discussed with Panduit.

A3. Responsibilities

The machine operator is responsible for ensuring that every employee who uses the *PANDUIT* CP-871 has received training in accordance with these operating instructions (initial operation, operation, maintenance). The training of the operating personnel must include the following:

- Purpose of the machine (see section A2 Product description).
- Danger areas (see section A4 Personal qualifications).
- Safety instructions (see Default A6 Safety requirements).
- Operating the machine in accordance with these operating instructions.

A4. Personal qualifications

To ensure that all instructions are understood, training must take place in the language of the operating personnel. This means that the following personnel qualifications are required:

Assembly, initial operation, instruction	Technical specialist staff who have a good command of English and/or German as well as of the language of the operating personnel.
Operation	Trained staff in accordance with A3 Responsibilities.
Maintenance, service	Technical specialist staff who have a good command of English or German.

A5.



Danger areas

- The whole area of the processing space underneath the Plexiglas cover
- Danger due to the Crimp process of the applicator
- Danger from Crimp stroke
- The entire interior area of the machine and the metal casing:
 - Danger from electrical current
 - Danger from mechanical moving parts

A6. Safety requirements



This machine has been designed in accordance with the European Standard EN294.

- The machine must only be operated in rooms that are dry and free from dust. Never operate the machine without its protective covers.
- Never work on the machine without wearing eye protection.
- Disconnect the machine from the electrical and/or compressed air supply before carrying out any maintenance work.
- Never operate the machine with the mains earth disconnected.
- Do not make any modifications to the machine and only utilise it for its intended purpose according to Paragraph A2 Product description. Other applications are only permitted with the written approval of the manufacturer. The manufacturer will accept no liability for damage resulting from the disregard of this regulation.
- Never operate the machine without first having read through and understood all instructions.
- Repair work may only be carried out by authorised persons who have been specially trained for this work.
- Ensure if you work on the machine that long hair is not worn loose, and do not wear loose clothing or ornaments that could become caught in the moving parts of the machine.
- Only use the lubricant that was delivered with this machine according to these operating instructions.

1. ABOUT THIS OPERATOR MANUAL

Thank you for trusting the *PANDUIT* Technology.

With the *PANDUIT* CP-871, you have acquired a semi-automatic crimping machine for the processing of all terminal, disconnect and butt splice crimping contacts up to a diameter of 6mm² (AWG 10).

1.1. Important Information

1.1.1. Manufacturer and Contact Address

See Cover Page

1.1.2. Target Market

Technical Specialists (Team Leader, fitter) See Chapter A4 Personal qualifications on Page 4

1.1.3. Obligation to Read

As operator and user one is obliged to read and understand this Reference Manual before the initial operation, especially the chapter on safety regulations. Your safety is at stake! Should there be any questions or lack of clarity, please contact your local Panduit representative.

1.1.4. Validity

This User Manual is valid for the PANDUIT CP-871 only.

1.1.5. Contents and Purpose

This Reference Manual contains all relevant information regarding the assembly, function, commissioning and operation of the CP-871.

This Reference Manual is part of the client documentation and void without the Operating Manual and the Maintenance Manual.

1.1.6. Location

This Reference Manual must be available to the team leader / fitter at the working place.

1.1.7. Symbols

1.1.7.1.Security Tags

Please read the following security advice with the tagged warnings thoroughly to avoid possible injuries or material damage.

STOP DANGER / GEFAHR STOP
This symbol warns of immediate danger that could lead to severe injuries or death.
This symbol warns of a possibly dangerous situation that could lead to serious injury or
death.
This symbol warps of a possibly dangerous situation that could lead to injury or material
damage.
Notice / Hinweis
This symbol points to important information with regards to usage. Disregard can lead to malfunction.

1.1.7.2. Security Tag



1.2. Product Description

1.2.1. Tag

The nameplate is situated on the left side of press and contains the following information:

Model: CP-871

Voltage information:

110 VAC bis 230 VAC 50/60 Hz T10A T 6A 255 VA

CE

1.2.2. Application

The *PANDUIT* CP-871 may only be used for processing crimping contacts and cables, i.e. to activate the applicators.

1.2.3. Application Limits

Enviromental Temperature:	+5°C to +40°C
Storage and Transport Temperature:	-25°C to +55°C
Relative humidity:	90% on 20°C 50% on 40°C

1.2.4. Conformance

The CP-871 conforms entirely with the CE and EMV guidelines (mechanic and electric security, electromagnetic tolerance.)

1.2.5. Danger Areas





Danger through moving parts in the working area



1.2.6. Technical Data

Force	3.7 Tons / (33 kN)
Power	(0.75 KW)
Cross Section Range	Up to approx. AWG 10 / (6mm ²). Material thickness up to .039 in. / (1mm) length of the crimping zone, up to .315 in. / (8mm)
Stroke	1.57 in. / (40 mm); Optional 1.18 in. / (30 mm)
Shut Height	5.345 in. / (135.788 mm)
Height Adjustment Range	± .0098 in. / (0.25 mm), in increments
Cycle Time	Adjustable from 350ms to 1 s
Press Activation	Foot Pedal
Noise Level	< 70 dB (A)
Power Connector	115 VAC bis 230 VAC
Net Frequency	50/60 Hz
Capacity	255 VA
Dimensions [mm] (W x H x D)	13" x 30" x 16" / (320 x 750 x 400 mm)
Weight	176 lbs. / (80 kg)
Dimensions in () are metric	

2. OPERATING ELEMENTS

2.1. Main Switch

The CP-871 has no main switch. The power supply is cut off by removing the power cord from the machine or by using the emergency stop button.



Picture 2.1: Main Switch

2.2. Control Panel



Picture 2.2: Control Panel with Keyboard

2.2.1. Display

1234567891234567
1234567891234567

Picture 2.3: Display

2.2.2. Keyboard

esc	Escape Key: Leave the entry mask or the menus	6	Creeping Speed Key –Left: Moves the machine with reduced speed against the machining direction
enter	Enter Key: Activate the entry mask or confirm the entry	C	Creeping Speed Key – Right: Moves the machine with reduced speed in the machining direction
-	Minus Key: Minimize the value in a input field or scroll in the selection menu or in the sub-menus.	•	Operational LED: The LED indicates that the machine is in the upper dead center and ready for use.
+	Plus Key: Increase value in the input field or or scroll in the selection menu or in the sub-menus.		

2.3. Monitors, Menus



3. OPERATION

The user's task is as follows:

- Installing the tools
- Installing and setting the contact roller/retooling the contact guide plate
- Programming the counter functions and settings
- Producing cable



3.1. Production

Start the CP-871 by plugging the power cable and/or unlocking the emergency-stop button.

3.1.1. Display

Entries may always be made once the prompt in the display flashes.

3.1.2. Activate Cycle



• The machine gets started with the foot pedal

3.1.3. Settings

Set the menu language

Counter: 999999 Batch: 009999	Main Menu
Menu: Counters	enter, Selection menu "Counters"
Menu: Settings	• With 2 x + change to "Settings" in the menu
Password #### Password 0###	 With energiese log into the sub-menu password enter, Password entry is activated (the first figure flashes) <i>Password 0200.</i> Change the numerical value + or Once the wanted value is reached, confirm enter. (the second figure flashes). Repeat the procedure until all four figures have been entered
Language English	 + , Sub-Menu language setting (if the password was incorrectly entered the sub-menu cannot be accessed. enter, Function Language setting gets activated. With + or - choose the language (German, English, French, Italian, Spanish) enter, Confirm language.
Counter: 999999 Batch: 009999	• 2 x 🔤 , back to main menu.

3.1.4. Menu Counters

Counter: 999999 Batch: 009999	•	Main menu
Menu: Counters	•	enter , Selection menu "Counters"
Reset Counter 990900	•	With enter change to menu "Counters".

3.1.4.1. Reset Counter

Reset Counter 990900	•	enter , Activate "Reset Counter" (figures flash).
Reset Counter 000000	•	enter , Reset Counter
Counter: 999999 Batch: 009999	•	2 x 🖦, back to the main menu or directly to the submenu "Set Batch" with +.

3.1.4.2. Programming Batch

Set Batch 000900	 +, Submenu "Set Batch". Activate function "Set Batch".
Set Batch 002500	 With + or - Enter Batch. enter , Confirm entry.
Counter: 999999 Batch: 009999	 2 x sec, back to main menu or directly to sub-menu "Total Counter" with +
	Once the Batch is reached "Batch
Counter: 999999 Batch Processed	Processed" will appear. By pressing enter the new Batch is activated. To deactivate the Batch function, programm a Batch value of "000000".

3.1.4.3. Total Counter

Total Counter 99090000	•	2 x + , sub-menu "Total Counter" (Information)
Counter: 9999999 Batch: 009999	•	2 x •••• , back to main menu. With - into
		sub-menu "Reset Counter".

3.1.5. Functions

Counter: 999999 Batch: 009999	Main Menu
Menu: Counters	enter, Selection menu "Counters"
Menu: Functions	With + go to menu "Functions"
Crimp Speed 100%	• With go to sub-menu "Functions".

3.1.5.1. Crimp Speed

Crimp Speed 100%	•	enter, "Crimp Speed" function is activated (figures are flashing).
Crimp Speed 080%	•	With + and - one can adjust the pressing speed in percentage. 100% ⇔max. speed ⇔ ca. 350ms 5% ⇔min .speed ⇔ ca. 1s
Counter: 9999999 Batch: 009999	•	2 x see, back to main menu or with + direct into the sub-menu "Crimp Force" (Crimp Force monitoring).

3.1.5.2. Crimp Force

This feature does not function with *PANDUIT* product and is not supported by *PANDUIT*.

3.1.5.3. Pneumatic Valve (Option)





A badly set feeder timing may damage the machine. Always install pneumatic tools without contact material, until the feeder timing is properly set.

	2 x + , sub-menu "Pneumatic Valve".	
	With enter, "Pneumatic Valve" function is	
	activated (figures are flashing).	
Pneumatic Valve	With + and - activation of the "Pneumation	С
ON 220ms	Valve" function and by pressing the enter key timing of the valve can be programmed.	
	The length of time the valve is engaged is permanently programmed and can not be changed.	
Counter: 9999999 Batch: 009999	2 x 🔜 , back to the main menu or with + g directly into the sub-menu "Split Cycle".	0
	Connect the compressed air on the pressure gauge. Assemble the tool according to Chapter 4.3 Applicator Assembly on page 19.	
	Connect both pneumatic attachments at the valve	
	Switch on the air pressure unit using the mair switch at the pressure gauge. Set gage at 6 bar processing pressure	<u></u> ו

3.1.5.4. Split Cycle

Split Cycle OFF Split Cycle ON 120°	 3 x + , sub-menu "Split Cycle". "Split Cycle" function is activated (figures are flashing). With + and - the "Split Cycle" function can be activated and by press the enter key, the breakpoint can be programmed.
Upper dead center Break point	 The "Split Cycle" is used mainly for end sleeve contacts, to centre the contact in the crimping stamp and to ensure easier handling for the operator.
Split Cycle Speed 75%	 Change to the sub-menu "Split Cycle Speed" with +
Split Cycle Speed 45%	 With + and - the pressing speed can be adjusted in percent. The speed is programmed from the upper dead center to the breakpoint. 100% ⇔ max. Speed. 5% ⇔ min. Speed. accept entry.
Counter: 9999999 Batch: 009999	 2 x ••• , back to the main menu or with – back into the previous menu. Press the ••• key to initialise the machine (min. 3s)

4. TOOL REPLACEMENT

4.1. Roller Carrier



• Loosen both inner hexagon bolts of the pipe clamp on the left side of the machine.



• Turn the roller carrier 90° to the right for side banded contacts.



4.2. Contact guide plate



- Loosen both of the knurled screws and lift the sheet plate.
- Pull the sheet plate to the right and then remove it.



- Assemble the sheet plate onto the distance bolt at the left for side feed applicators.
- Attach the sheet plate using the knurled screws.



- The contact material must be fed through the black leading bracket
- Feed material into the applicator.

4.3. Applicator Assembly



• Open the front guard and remove the contact material.



- Move the clamping lever on the left downwards until the clamps are open.
- Assemble / disassemble the tool in the nut and after remove at the bottom from the retaining clamps of the applicator ground plate.
 Where the clamping lever upwards until the clamping fingers clamp the tool in their respective grooves.
 Check that the tool is properly fastened and close the protective cover.
 Set the tool according to the operating guidelines set out by the manufacturer.

4.4. Setting the Crimp Height

The crimping height of the CA-800EZ and CA9 applicators can be adjusted within the applicator. Further crimp height adjustments can be made to the press itself.



5. CRIMP FORCE MONITORING ACO05

This feature does not function with *PANDUIT* product and is not supported by *PANDUIT*.

6. ERROR MESSAGES

Fault	Acti	Action	
Open Protection Cover	•	Connect protection cover to CP-871.	
<i>Machine not in Home Position</i>	•	With the help of f or return to Home Position. The green LED glows By activating the f key in the main menu (minimum 3x), the machine returns to the home position. The machine changes the turning direction automatically as soon as it is in contact with a resistor.	
CFM not ready	•	Turn on CFM and check the connection of the cable. Set the CFM to the production menu.	
No display on the monitor	•	Disengage the emergency-off button or plug into power. Check the fuse	

7. MAINTENANCE



7.1. Daily Maintenance

Clean the machine and the operating unit with a brush or a clean cloth

7.1.1. Cleaning Processing Room



• Open protection cover and disassemble tool.



7.2. Lubrication

Lubricate the guide and all movable parts on the tool faceplate.

Lubricating interval: Lubricating Grease: at least every 3 months Microlub GBU Y 131 (Will be delivered with the unit)



7.3. Machine Preparation



- Open protection cover.
 Disassemble applicator.
- Take machine down to the bottom
 - death centre with or keys
- Open safety cover.
- Activate Emergency-Off button and separate the machine from the power supply system.

CAUTION / VORSICHT



Press the Emergency-Off button and unplug the power supply. Lubricating work may only be carried out by trained personnel (*PANDUIT* personnel or trained personnel at the user)



7.4. Slide



- Open safety cover
- Clean the slide's guides (A / B) with a lint free cloth.
- Lubricate the left guide (A) and the right guide (B) on all three faces.

7.5. Tool Base Plate



- Clean the clamping claws of the tool base plate with lint free cloth and the delivered brush.
- Lightly lubricate the clamping claws of the three bolts.
- Open and close the clamping claws a few times

- Close safety cover
- Deactivate Emergency-Off button and connect the machine to the power supply system.
- Bring the machine through operate exc key (min. 1x) in the main menu automatically into the upper dead center.

8. SETTINGS

8.1. Setting Crimping Height at 135.788mm



CAUTION / VORSICHT



The crimping height may only be set by trained personnel (*PANDUIT* personnel or trained personnel at the User) who have a SLM crimping height gage or a similar device at their disposal.



- Set the height with help of the fine adjustment on the crimping machine until the display in the window lies within the range of ± 005µ
- Turn the ring at the edged surface.
- Plus direction to the right, crimping height increases (e.g. (1.27 => 1.30)
- Minus direction to the left, crimping height decreases (e.g. 1.27 => 1.24)



• Now loosen the adhesives with the scale and assemble them in such a way that the reference "0"corresponds again with the white line.





- Remove the limitation pin and assemble into the hole above the reference position. This will make sure that the limitations are again symmetrical.
- Remove the SLE CM gage. The machine is now set onto a crimp height of 135.788.

9. REPAIRS



9.1. Replace Main Fuse

• Lift out the fuse holder with a screwdriver. Always replace both main fuses.



Picture 5.1: Replace main fuse

• Place the fuse holder back into the CP-871 and plug the line cord.

- 10. APPENDIX
- 10.1. EU-Safety Data Sheet KLÜBER



MICROLUBE GBU-Y 131

Safety Data Sheet

1.1	Productname: MICROLUBE GBU-Y 131 Code-No.: 017 117 45 11 2001	9.	Physical and chemical properties Form paste
\vdash	15.11.2001		Colour beige Odour dearacteristic
1.2	Klüber Lubrication München KG Emergens v telephone no.:		Drop point > 250 °C. DIN ISO 2176
	Geisenhausenerstraße 7 +49 89 7 876-0		Flash point > 200 °C (base oil)
	81379 München, Germany		Ignition temperature not applicable
	Telefax+49.89.7876-0.333		Lower explosion limit not applicable
			Upper explosion limit not applicable
2	Composition / information on ingredients		Density access 0.95 c/cm ² 20 °C
- I	Chemical characterization (preparation): Mneral oil, synthetic hydro-		Water solubility insoluble
1	carbon oil, barium complex soap		pH value not applicable
	Hazardous ingredients		Kinematic viscosity not applicable
1	CAS-No. Components Value Symbols R-phrases		Further information none
	Banum soap < 20% 52/53	$ \vdash$	
3.	Hazards identification	10	Stability and reactivity
	Probliged skin contact may calcase skin Initiation and/or dermastic		Materials to avoid: Stress coldision a center
4	Einst aid measures		Hazardous decomposition products: None under pormal use
· ·	After inhalation: Not applicable		Additional information: Non e
1	After contact with skin: Wash off with mild cleaners and plenty of water.		
1	If symptoms persist, call a physician		
	After contact with eyes: Rinse with plenty of water. If symptoms persist,	11	1. Toxicological information
	call a physician		Prolonged skin contact may cause skin irritation and/or dermatitis
1	Advice to doct or: Transf supreferentiacity	$ \bot$	
	www.elio.cod.or. Treat symptomatically		Ended a ferration
5	Fire/inhting measures	12	 Ecological information Information on elimination (paraintense and descedability): Product in
۳.	Suitable extinguishing media: Water spray, foam, dry powder, carbon		insoluble in water. May be separated out mechanically in purification
	dioxide (CO2)		plants
	Unsuitable extinguishing media: High volume water jet		Behaviour in environmental compartments: Ecological injuries are not
1	Special Hazards: In case of fire the following can be released: Carbon		known or expected under normal use
	monoxide, hydrocarbons		Ecotoxic effects: Barium complex soap: Toxic to aquatic organisms, may
	Special protective e quipment for firefighters: Standard procedure for chemical firms		Additional information: Should not be missed into the environment
	Additional information: Water mist may be used to cool closed		
	containers. In the event of fire and/or explosion do not breathe fumes		
		13	3. Advice on Disposal
6.	Accidental release measures		Code of waste: 120 112. Wastes from shaping and surface treatment of
	Personal precautions: Not required		pressing, drawing, turning, cutting and filing); spent waxes and fats
1	Environmental precautions: Do not flush into surface water or sankary sewer system		Disposal: The code of waste has to correspond to the Council Directive
1	Methods for cleaning up / taking up: Use mechanical handling equip-		75/442/EEC and be specific as far as the related sector and process are
	ment. Dispose of absorbed material in accordance with the regulations		concerned. Can be incinerated when in compliance with local, state and federal modelations
	Additional information: None		Dispose of contaminated packaging and recommended cleaning: Offer
			rinsed packaging material to local recycling fadilities
7.	Handling and storage		
1	Advice on safe handling: No special handling advice required		
	Advice on protection against fire and explosion: No special precautions required	14	Transport information Oracle LOOVE
1	Requirements on storage rooms and vessels; Store at room temperature		ADN / ADNR: not applicable
1	in the original container		IMDG-Code: not applicable
1	incompatible materials: incompatible with oxidising agents. Do not store		ICAO / IATA DGR: not applicable
	together with food		Further information: Not classified as dangerous in the meaning of the same dissociations
	Further information on storage conditions: None		and and a second s
8	Exposure controls / personal protection		
<u>^</u> ا	Additional advice on system design: Not applicable	1	5. Regulatory information
	Ingredients and specific control parameters: None		Labelling according to EU-guidelines: The product does not require
1	Respiratory protection: No special protective equipment required		a nazaro warning laberin accordance with EC-directives/German regu- lations on diangerous substances
1	Hand protection: No special protective equipment required		National regulations: Labeling according to the Swiss regulations: No
1	Eye protection: No special protective equipment required		toxicological class, BAGT-no. 88650
1	Body protection: No special protective equipment required		
1	Other protection measures: No special protective equipment required		
1	General protection and hygiene measures: Avoid prolonged and/or	1	5. Other information
	repeated consect with skin. Remove solid or soaked clothing im- mediately. Clean skin thoroughly after work a only skin omain		issue-department of safety Data Sheet: Chemical Documentation, +49 89 7876-564
	messenery, once and anonogery and much, apply and creating		
The st		of the	time of adaptive and is intended to also information of searching and self-sectors to a

In the uses in this product momenton is based on our general experience and knowledge at the time of printing and is intended to give information of possible applications to a reader with technical experience. It constitutes neither an assurance of product properties nor does it release the user from the obligation of performing preliminary tests with the selected product. We recommend contexting our technical Consulting Start to discuss your specific application. If required and possible we will be preseded to provide a sample for testing. Klibber products are continually improved. Therefore, Klibber Lubrication reserves the right to change all the technical data in this product information at any time without notice.

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Index

A

Activate Cycle	11
Appendix	27
Applicator Assembly	19

С

CFM not ready	21
Cleaning Processing Room	22
Contact Lead	18
Control Panel	9
Crimp Force	14
Crimp force monitoring	21
Crimp Speed	14

D

Daily Maintenance	22, 23
Danger Areas	
Display	9

Ε

_
EU- safety Data Sheet KLÜBER27
F
Functions14
κ
Keyboard10
L
Lubricating Grease:23
М
Machine

Main Switch
Ν
No display on the monitor21
0
Open Protection Cover 21
P
Pneumatic Valve
R
REPAIRS26Replace Main Fuse26Reset Counter13Roller Carrier17
S
Security Tag
Tool Base Plate



CP-871

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REFERENCE MANUAL



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TABLE OF CONTENTS

Α.	SAFETY REGULATIONS ENGLISH
A1.	Symbols4
A2.	Product description4
A3.	Responsibilities4
A4.	Personal qualifications4
A5.	Danger areas4
A6.	Safety requirements
1.	ABOUT THIS OPERATOR MANUAL
1.1.	Important Information5
1.1.1.	Manufacturer and Contact Address5
1.1.2.	Target Market5
1.1.3.	Obligation to Read5
1.1.4.	Validity5
1.1.5.	Contents and Purpose5
1.1.6.	Location5
1.1.7.	Symbols6
1.1.7.1.	Security Tags6
1.1.7.2.	Security Tag6
1.2.	Product Description7
1.2.1.	Tag7
1.2.2.	Application7
1.2.3.	Application Limits7
1.2.4.	Conformance7
1.2.5.	Danger Areas
1.2.6.	Technical Data8

CP-871 REFERENCE MANUAL

2.	FUNCTIONS
2.1.	Processing9
2.2.	Crimping Connections9
3.	CIRCUIT POINTS
3.1.	Overview
3.1.1.	Crimp Force Monitoring (Optional)10
3.1.2.	Pneumatic Valve (Optional)10
3.1.3.	FOOT PEDAL
3.1.4.	Fuse Holder10
3.1.5.	Power Supply 10
4.	OPERATING ELEMENTS
4.1.	Main Switch
4.2.	Control Panel11
4.2.1.	Display12
4.2.2.	Keyboard12
5.	MONITORS, MENUS
5.1.	Main Menu14
5.2.	Settings14
5.2.1.	Menu language14
5.2.2.	Contrast Setting
5.2.3.	Endurance Test
5.3.	Menu Counters17
5.3.1.	Reset Counter
5.3.2.	Programming Batch
5.3.2.1.	Total Counter
5.4.	Functions
5.4.1.	Crimp Speed
5.4.2.	Crimp Force

CP-871 REFERENCE MANUAL

5.4.3.	Pneumatic Valve (Option)	19
5.4.4.	Split Cycle	20
6.	TOOL REPLACEMENT	21
6.1.	Roller Carrier	21
6.2.	Contact guide plate	22
6.3.	Applicator Assembly	23
6.4.	Remove lateral cover	24
6.5.	Setting the Crimp Height	25
7.	START-UP	
7.1.	Connect Compressed air	27
8.	PRODUCTION	
8.1.	Production start	28
9.	FAULT MESSAGES	
10.	DISPOSAL	
10.1.	Packaging	
10.2	Machine	30

SAFETY REGULATIONS ENGLISH

A1. Symbols



Please follow exactly the work and processes marked with this pictogram. Failure to do so may result in death or severe injury.

Please follow exactly the work and processes marked with this pictogram. Failure to do so may lead to minor injuries and to damage to the machine.

A2. Product description

The PANDUIT CP-871 is a crimping machine for the processing of all terminal, disconnect and butt splice crimping contacts up to a cross section of 6mm2 (AWG10). The CA-800EZ and CA9 applicators can be fit in. The operator interface consists of membrane keypad and a display. Functions such as speed control, split cycle, pneumatic valve control, and various counter functions are selectable over the interface.

The CP-871 may only be used as described in the enclosed operating manual. Any deviation of the operation mode, additions and extensions must first be discussed with Panduit.

A3. Responsibilities

The machine operator is responsible for ensuring that every employee who uses the PANDUIT CP-871 has received training in accordance with these operating instructions (initial operation, operation, maintenance). The training of the operating personnel must include the following:

- Purpose of the machine (see section A2 Product . description).
- Danger areas (see section A4 Personal qualifications).
- Safety instructions (see Default A6 Safety requirements).
- Operating the machine in accordance with these operating instructions.

A4. Personal qualifications

To ensure that all instructions are understood, training must take place in the language of the operating personnel. This means that the following personnel qualifications are required:

Assembly, initial operation, instruction	Technical specialist staff who have a good command of English and/or German as well as of the language of the operating personnel.
Operation	Trained staff in accordance with A3 Responsibilities.
Maintenance, service	Technical specialist staff who have a good command of English or German.

A5. Danger areas STOP applicator

- The whole area of the processing space
 - underneath the Plexiglas cover
 - Danger due to the crimp process of the
- Danger from crimp stroke The entire interior area of the machine and
- the metal casing:
- Danger from electrical current
- Danger from mechanical moving parts

A6.



Safety requirements

This machine has been designed in accordance with the European Standard EN294.

- The machine must only be operated in rooms that are dry and free from dust.
- Never operate the machine without its protective covers.
- Never work on the machine without wearing eye protection.
- Disconnect the machine from the electrical and/or compressed air supply before carrying out any maintenance work
- Never operate the machine with the mains earth disconnected.
- Do not make any modifications to the machine and only utilise it for its intended purpose according to Paragraph A2 Product description. Other applications are only permitted with the written approval of the manufacturer. The manufacturer will accept no liability for damage resulting from the disregard of this regulation.
- Never operate the machine without first having read through and understood all instructions
- Repair work may only be carried out by authorised persons who have been specially trained for this work.
- Ensure if you work on the machine that long hair is not worn loose, and do not wear loose clothing or ornaments that could become caught in the moving parts of the machine.
- Only use the lubricant that was delivered with this machine according to these operating instructions

1. ABOUT THIS OPERATOR MANUAL

Thank you for trusting the *PANDUIT* Technology.

With the *PANDUIT* CP-871, you have acquired a semi-automatic crimping machine for the processing of all terminal, disconnect and butt splice crimping contacts up to a diameter of 6mm² (AWG 10).

1.1. Important Information

1.1.1. Manufacturer and Contact Address

See Cover Page

1.1.2. Target Market

Technical Specialists (Team Leader, fitter) See Chapter A4 Personal qualifications on Page 4

1.1.3. Obligation to Read

As operator and user one is obliged to read and understand this Reference Manual before the initial operation, especially the chapter on safety regulations. Your safety is at stake! Should there be any questions or lack of clarity, please contact your local Panduit representative.

1.1.4. Validity

This User Manual is valid for the PANDUIT CP-871 only.

1.1.5. Contents and Purpose

This Reference Manual contains all relevant information regarding the assembly, function, commissioning and operation of the CP-871. This Reference Manual is part of the client documentation and void without the Operating Manual and the Maintenance Manual.

1.1.6. Location

This Reference Manual must be available to the team leader / fitter at the working place.

1.1.7. Symbols

1.1.7.1. Security Tags

Please read the following security advice with the tagged warnings thoroughly to avoid possible injuries or material damage.



1.1.7.2. Security Tag



- Danger moving parts
- Attention danger through electric power
- Attention, warning of dangerous area
- Qualified Personnel Only

1.2. Product Description

1.2.1. Tag

The nameplate is situated on the left side of press and contains the following information:

Model:	CP-871	C€
Voltage information:	110 VAC bis	T10A
	230 VAC	T 6A
	50/60 Hz	255 VA

1.2.2. Application

The *PANDUIT* CP-871 may only be used for processing crimping contacts and cables, i.e. to activate the applicators.

1.2.3. Application Limits

Enviromental Temperature:	+5°C to +40°C
Storage and Transport Temperature:	-25°C to +55°C
Relative humidity:	90% on 20°C 50% on 40°C

1.2.4. Conformance

The CP-871 conforms entirely with the CE and EMV guidelines (mechanic and electric security, electromagnetic tolerance.)

1.2.5. Danger Areas



Danger through moving parts in the working area

1.2.6. Technical Data

Force	3.7 Tons / (33 kN)
Power	(0.75 KW)
Cross Section Range	Up to approx. AWG 10 / (6mm ²). Material thickness up to .039 in. / (1mm) length of the crimping zone, up to .315 in. / (8mm)
Stroke	1.57 in. / (40 mm); Optional 1.18 in. / (30 mm)
Shut Height	5.345 in. / (135.788 mm)
Height Adjustment Range	± .0098 in. / (0.25 mm), in increments
Cycle Time	Adjustable from 350ms to 1 s
Press Activation	Foot Pedal
Noise Level	< 70 dB (A)
Power Connector	115 VAC bis 230 VAC
Net Frequency	50/60 Hz
Capacity	255 VA
Dimensions [in] (W x H x D)	13" x 30" x 16" / (320 x 750 x 400 mm)
Weight	176 lbs. / (80 kg)

Dimensions in () are metric

2. FUNCTIONS

2.1. Processing

The stripped conductor is held in the connector. Processing is activated with the foot pedal. The crimping press moves the tool down to the lower dead center and thereafter to the upper dead center. The tool separates the connector from the carrier strip, crimps the connector with the conductor and feeds a new connector into position. The carrier strip is cut by the applicator die.

2.2. Crimping Connections

The term crimping comes from the English word "to crimp" which means press, impress, fold or fold deform.

In the electrical installation language, crimping means to mechanically fold or press the connector onto the conductor.



3. CIRCUIT POINTS

3.1. Overview



Picture 3.1 Connections

3.1.1. Crimp Force Monitoring (Optional)

The crimp force monitor option does not work with *PANDUIT* product and is not supported by *PANDUIT*.

3.1.2. Pneumatic Valve (Optional)

By means of this connection the valve for feeding pneumatic tools gets activated. Pneumatic connections see chapter 7.1 Connect Compressed air on page 27.

3.1.3. FOOT PEDAL

The crimping process can be started with the foot pedal.

3.1.4. Fuse Holder

The fuse holder contains both main fuses.

3.1.5. Power Supply

One-Phase with protective earth (2P+E)		
100/115 VAC, Fuse T10A		
230/240 VAC, Fuse T6A	50/ 60 HZ, 255 VA	

4. OPERATING ELEMENTS

4.1. Main Switch

The CP-871 has no main switch. The power supply is cut off by removing the power cord from the machine or by using the emergency stop button.



Picture 4.1: Main Switch

4.2. Control Panel



Picture 4.2: Control Panel with Keyboard

4.2.1. Display

1234567891234567
1234567891234567

Picture 4.2.1: Display

4.2.2. Keyboard

esc	Escape Key: Leave the entry mask or the menus	5	Creeping Speed Key – Left: Moves the machine with reduced speed against the machining direction
enter	Enter Key: Activate the entry mask or confirm the entry	C	Creeping Speed Key – Right: Moves the machine with reduced speed in the machining direction
-	Minus Key: Minimize the value in a input field or scroll in the selection menu or in the sub-menus.		Operational LED: The LED indicates that the machine is in the upper dead center and ready for use.
+	Plus Key: Increase value in the input field or or scroll in the selection menu or in the sub-menus.		



Escape Key in the main menu:

By activating the Escape key in the main menu (minimum 1x), the machine returns to the home position as soon as the machine hits high resistance (e.g. contact material) the rotational direction changes.

5. MONITORS, MENUS



5.1. Main Menu

Counter: 999999 Batch: 009999	Lot CounterPiece Counter
SAFETY COVER OPEN	 Error Message Display Safety cover open, crimping error, machine not at home position, activating device not ready.
Counter: 999999 Batch Processed	Information DisplayLot processed

5.2. Settings

5.2.1. Menu language

Counter: 999999 Batch: 009999	Main Menu
Menu: Counters	enter , Selection menu "Counters"
Menu: Settings	• With 2 x + change to "Settings" in the menu
Password #### Password 0###	 With enter log into the sub-menu password Password entry is activated (the first figure flashes) <i>Password 0200.</i> Change the numerical value + or Once the wanted value is reached, confirm enter . (the second figure flashes). Repeat the procedure until all four figures have been entered
Language English	 + , Sub-Menu language setting (if the password was incorrectly entered the sub-menu cannot be accessed. enter, Function Language setting gets activated. With + or - choose the language (German, English, French, Italian, Spanish) enter, Confirm language.
Counter: 999999 Batch: 009999	• 2 x esc , back to main menu.



5.2.2. Contrast Setting

Counter: 9999999 Batch: 009999	Main Menu
Menu: Counters Menu: Settings	 enter, Selection menu "Counters" With 2 x + change to "Settings" in the menu
Password #### Password 0###	 With enter log into the sub-menu password enter, Password entry is activated (the first figure flashes) <i>Password 0200</i>. Change the numerical value + or Once the wanted value is reached, confirm enter. (the second figure flashes). Repeat the procedure until all four figures have been entered
Contrast Setting	 2 x + ,Sub-Menu "contrast setting" (if the password was incorrectly entered the sub-menu cannot be accessed. enter, Function contrast setting gets activated. Set with + or - the contrast enter, Confirm settings.
Counter: 999999 Batch: 009999	• 2 x esc , back to main menu.



5.2.3. Endurance Test

Counter: 9999999 Batch: 009999	Main Menu
Menu: Counters	enter , Selection menu "Counters"
Menu: Settings	• With 2 x + change to "Settings" in the menu
P a s s w o r d # # # # P a s s w o r d 0 # # #	 With ever log into the sub-menu password Password entry is activated (the first figure flashes) <i>Password 0200.</i> Change the numerical value + or Once the wanted value is reached, confirm ever. (the second figure flashes). Repeat the procedure until all four figures have been entered
Endurance Test 000900	 3 x + , sub-menu "Endurance Test" (if password was entered incorrectly, the menu cannot be selected). enter, Function "Endurance Test" is activated. With + or - the number of cycles get chosen. enter, Confirm entry. the Endurance Test is activated and the number of cycles chosen are processed. By pressing e. Endurance Test can be discontinued
Counter: 999999 Batch: 009999	• 2 x esc , back to main menu.



5.3. Menu Counters

Counter: 9999999 Batch: 009999	Main menu
Menu: Counters	Selection menu "Counters"
Reset Counter 990900	• With enter change to menu "Counters".

5.3.1. Reset Counter

Reset Counter 990900	•	enter, Activate "Reset Counter" (figures flash).
Reset Counter 000000	•	enter , Reset Counter
Counter: 999999 Batch: 009999	•	2 x esc , back to the main menu or directly to the submenu "Set Batch" with + .

5.3.2. Programming Batch

Set Batch 000900	 + , Submenu "Set Batch". enter , Activate function "Set Batch".
Set Batch 002500	 With + or - Enter Batch. enter, Confirm entry.
Counter: 9999999 Batch: 009999	 2 x esc , back to main menu or directly to sub- menu "Total Counter" with +
Counter: 9999999 Batch Processed	Once the Batch is reached "Batch Processed" will appear. By pressing anter the new Batch is activated. To deactivate the Batch function, programm a Batch value of "000000".

5.3.2.1. Total Counter

Total Counter 99090000	•	2 x + , sub-menu "Total Counter" (Information)
Counter: 999999 Batch: 009999	•	2 x •••• , back to main menu. With - into sub- menu "Det Batch" or with 2x - into sub-menu "Reset Counter".

5.4. Functions

Counter: 999999 Batch: 009999	Main Menu
Menu: Counters	enter, Selection menu "Counters"
Menu: Functions	With + go to menu "Functions"
Crimp Speed 100%	• With enter go to sub-menu "Functions".

5.4.1. Crimp Speed

Crimp Speed 100%	 "Crimp Speed" function is activated (figures are flashing).
Crimp Speed 080%	 With + and - one can adjust the pressing speed in percentage. 100% ⇔max. speed ⇔ ca. 350ms 5% ⇔min .speed ⇔ ca. 1s accept entry.
Counter: 999999 Batch: 009999	 2 x sec, back to main menu or with + direct into the sub-menu "Crimp Force" (Crimp Force monitoring).

5.4.2. Crimp Force

This feature does not function with *PANDUIT* product and is not supported by *PANDUIT*.

5.4.3. Pneumatic Valve (Option)



5.4.4. Split Cycle

Split Cycle OFF	 3 x + , sub-menu "Split Cycle". enter, "Split Cycle" function is activated (figures are flashing).
Split Cycle ON 120°	• With + and - the "Split Cycle" function can be activated and by press the enter key the breakpoint can be programmed.
Upper dead center Break point	• The "Split Cycle" is used mainly for end sleeve contacts, to centre the contact in the crimping stamp and to ensure easier handling for the operator.
Split Cycle Speed 75%	 Change to the sub-menu "Split Cycle Speed" with enter, "Split Cycle Speed" function is activated (figures are flashing).
Split Cycle Speed 45%	 With + and - the pressing speed can be adjusted in percent. The speed is programmed from the upper dead center to the breakpoint. 100% ⇒ max. Speed. 5% ⇒ min. Speed. enter, accept entry.
Counter: 9999999 Batch: 009999	 2 x esc , back to the main menu or with - back into the previous menu. Press the esc key to initialise the machine (min. 3s)

6. TOOL REPLACEMENT

6.1. Roller Carrier



• Loosen both inner hexagon bolts of the pipe clamp on the left side of the machine.



• Turn the roller carrier 90° to the right for side banded contacts.



6.2. Contact guide plate



- Loosen both of the knurled screws and lift the sheet plate.
- Pull the sheet plate to the right and then remove it.



- Assemble the sheet plate onto the distance bolt at the left for side feed applicators.
- Attach the sheet plate using the knurled screws.



- The contact material must be fed through the black leading bracket
- Feed material into the applicator.

6.3. Applicator Assembly



6.4. Remove lateral cover

To use large tools on the machine a part of the lateral safety cover can be removed.



CAUTION / VORSICHT

As part of the tools may protrude laterally from the machine's guard, these may come in touch with movable mechanical parts.

If this happens, the machine may no longer conform to the CE standard rules. Therefore removal of the lateral part of the guard is at ones own risk.



- Open the front guard (safety cover) and remove contact material
- Loosen both knurled screws and lift the sheet plate.
- Pull the sheet plate to the right and remove.



• Loosen both inside hexagonal screws.



- Remove the lateral cover piece.
- Assemble the tool and the contact lead.



6.5. Setting the Crimp Height

The crimping height of the CA-800EZ and CA9 applicators can be adjusted within the applicator. Further crimp height adjustments can be made to the press itself.



7. START-UP



• After unpacking use the included lifting column and lift the machine with a crane or another auxiliary device onto a leveled working area (table, workbench, etc.)



- Open the safety cover and remove any packaging residuals.
- Connect the foot pedal.
- Plug in the line cord.

7.1. Connect Compressed air



- Connect the compressed air to the service unit.
- Adjust the operating pressure. To do so pull the setting button from the interlock and turn clockwise until the manometer shows 4-5 bar (0.4-0.5 MPa). Press the setting button downward until it engages.



Picture 7.1: Connect Compressed air

8. PRODUCTION

- Engage the CP-871 by plugging the line cord and/or unlocking the Emergency-Off button. The CP-871 activates itself.
- Set the menu language according to the instructions in chapter 5.2.1 Menu language on page 14.
- Assemble the contact material according to the instructions in chapter 6.1 Roller Carrier on page 21 and chapter 6.2 Contact guide plate on page 22.
- Assemble the applicator according to the applicator instructions in chapter 6.3 Applicator Assembly on page 23.

8.1. Production start

• Lead the cable through the opening of the protection cover to the applicator's wire stop or using the plug connection as a reference.



Picture 8.1: Production start

- The cycle will be activated only when the green LED is on.
- Processing is activated with the foot pedal.
- The crimping press moves the tool into the bottom dead center and after that to the upper dead center.
- The tool separates the plug connection from the belting band, crimps the plug connector onto the conductor and feeds a new plug connector into position. The belting band gets cut by the tool.
- Remove the cable with the crimped connector.
- As soon as the LED on the control panel turns green the next cycle can be activated.

9. FAULT MESSAGES

Fault	Diagnosis	Action	
Message: Protection Cover open	Protection cover open	Connect protection cover to CP-871.	
<i>Message: Machine not in home Position</i>	Machine is not in the upper dead center or blocked	With the help of or return to Home Position. The green LED glows	
		• By activating the exc key in the main menu (minimum 3x), the machine returns to the home position. The machine changes the turning direction automatically as soon as it is in contact with a resistor.	
Message: Crimp Drive not ready	 15 V Error Over current fault Over temperature fault Watchdog fault 	 Check fuse on print machine over-loaded replace drive 	
Message: CFM not ready	 Crimp force monitoring without function. 	 Turn on CFM and check the connection of the cable. Set the CFM to the production menu. 	
No display on the monitor	Power supply not connectedFuse defectEmergency stop activated	 Disengage the emergency-off button or plug in power. Check the fuse 	
<i>Machine does not switch on</i>	 Power supply not connected Fuse defect Emergency stop activated 	 Disengage the emergency-off button Plug in power Check fuse on the power supply. 	
Wrong crimping height	Crimp height not adjusted	Adjust the crimp height on the machine adjustment.	
Contact material does not feed correctly	 Roller carrier wrong adjusted Contact break wrong adjusted Contact guide plate wrong mounted 	 Adjust the position of the roll on the roller carrier. Set the contact break. Mount the contact guide right. The contact material must be fed trough the black leading bracket. 	

10. DISPOSAL

The equipment must be properly disposed of according to the local and legal regulations.

10.1. Packaging

The packaging consists of environment friendly materials such as wood, nails, cardboard, paper and synthetics and can be disposed of as regular waste.

10.2. Machine

The machine is made up of 90% aluminium and steel, 5% other metals and up to 5% electric materials and synthetics.

The environmentally friendly disposal of the machine must be done according to each country legal regulations.

Index

Α

Application	7
Application Limits	7
Applicator Assembly	23

С

CFM not ready	29
CIRCUIT POINTS	10
Connect Compressed air	27
Connector	9
Contact guide plate	22
Contact material does not feed correct	:tly 29
Contrast Setting	
Control Panel	11
Crimp Drive not ready	29
Crimp Force	18
Crimp Speed	18
Crimping Connections	9

D

Danger Areas	8
Display	12
Disposal	30

Ε

Endurance Test	16
F	
Fault Messages Functions Fuse Holder	29 18 10
К	
Keyboard	12
М	
Machine	30
Machine does not switch on	29
Machine not in home Position	29

Main Menu	14
Main Switch	11
Menu Counters	17
Menu language	14
Monitors, Menus	13

Ν

No display on the monitor 29

Ρ

Packaging	30
Pneumatic Valve	19
Power Supply	10
Processing	9
Production	
Programming Batch	17
Protection Cover open	29

R

Remove lateral cover	. 24
Reset Counter	. 17
Roller Carrier	. 21

S

Socurity Tog	6
Security Tag	0 6
Setting the Crimp Height	0 25
Settings	
software-Version	13
Split Cycle	20
START-up	26
Τ	
Tag	
Technical Data	
Total Counter	18
W	

Wrong crimping height	eight
-----------------------	-------



SPARE PARTS MANUAL

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Technical Support: 888-506-5400, ext. 3255 Fax: (630) 759-7532



Part Number	Name	
CA32147A01	Pneumatic feed	
CA32148A01	Lamp 230 VAC	
CA32149A01	Lamp 115 VAC	
TP25130B01	Finger protection	
TP25131B01	Hole Cover	
CA32152A01	Power Cord Europe	

Part Number	Name	
CA32153A01	Power Cord USA	
CA32154A01	Fuses 6.3 A/T 5x20 (230V)	
CA32155A01	Fuses 10A/T SPT 5x20 (115V)	
CA32156A01	Foot pedal	
CA32157A01	Grease Microlube GBUY 131	F
CA32158A01	Hex Key Set	
CA32159A01	Packaging	