

FFY23012

Clincher Hand Press

User's Manual



Revision : 04
Date : March 2013



www.foehrenbach.be

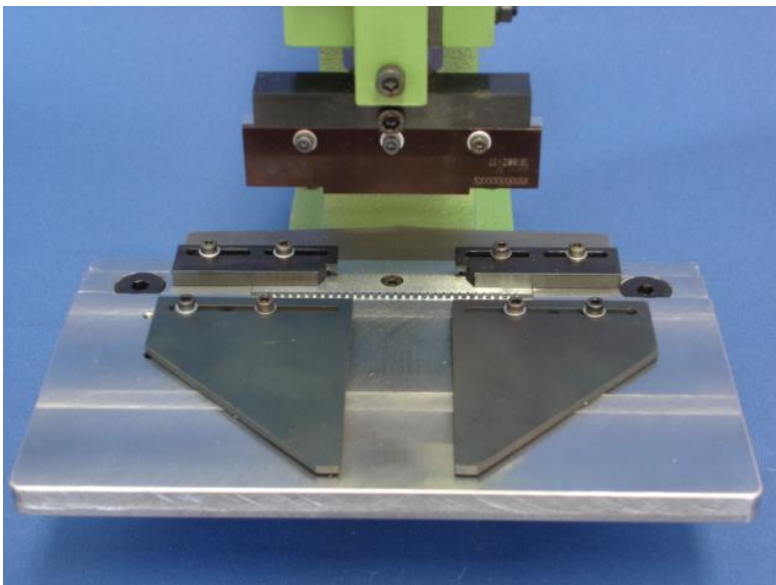
1. Purpose

Termination of dedicated flex-foils with FCI Clincher female or male connectors.



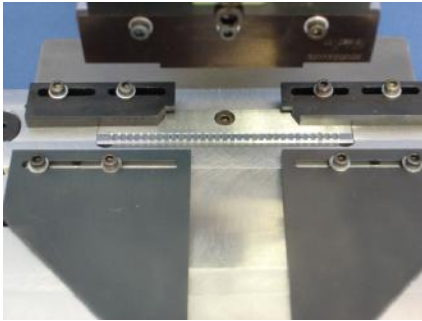
2. Tool description

- Cat. No.: FFY23012
- Single head clinch tool. The tool terminates one connector per cycle.
- The tool is equipped with an anvil that can support up to 32 way Clinch connectors.
- Short set-up times.
- The tool kit consists of:
 - The bench press plus applicator
 - This user's manual



3. The process

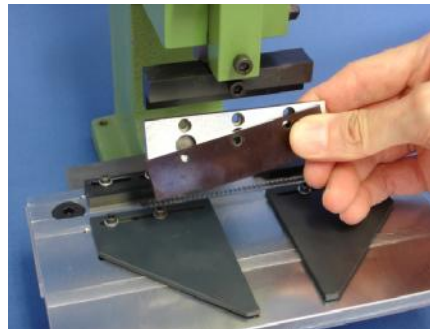
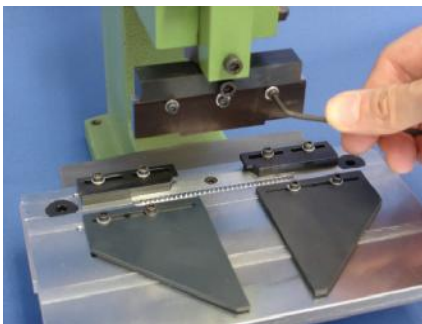
In order to accommodate the applied size of Clincher connector, the tool is featuring replaceable clamp- and clinch plates, and adjustable housing- and cable guides. Before starting the termination process, please be sure that the mentioned devices are correctly installed and adjusted.



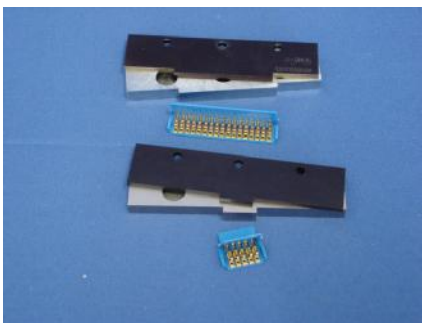
Attention!
Do not apply the tool without a connector on the anvil!

3.1. Installation of the clinch- and clamp plate

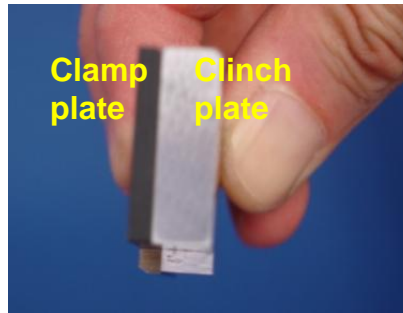
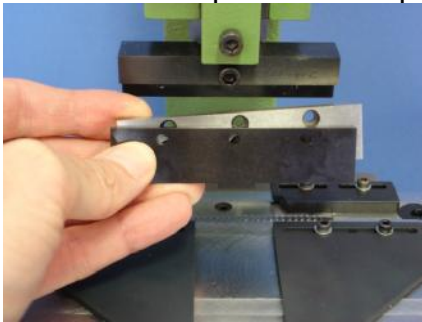
Be sure that the ram of the press is positioned in its top position. Unlock the 3 screws as indicated on the picture.



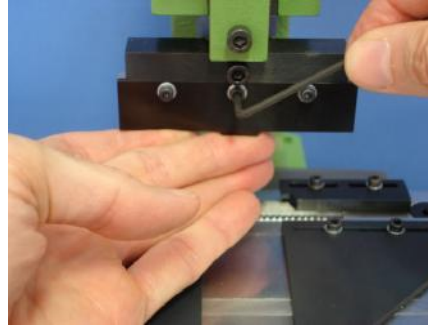
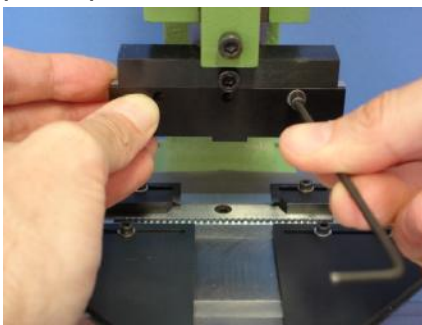
Each size of Clincher connector requires its own set of clinch- and clamp plate. Based on your application, select the correct one.



Install the clamp- and clinch plate as shown on the picture.

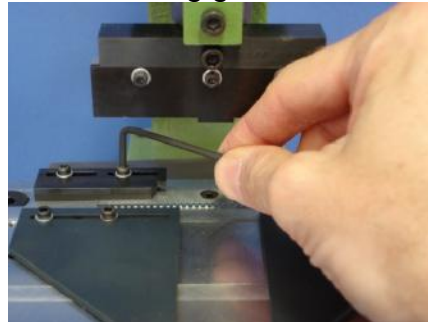
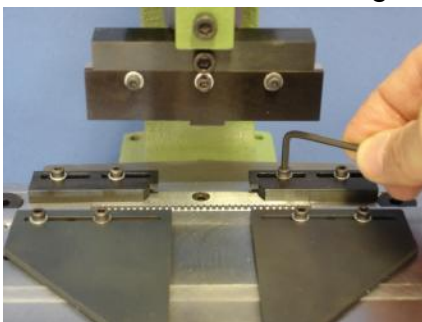


Lock the 3 screws. In order to warrant a proper seating of the clamp- and clinch plate, pouch underneath them during locking of the screws.

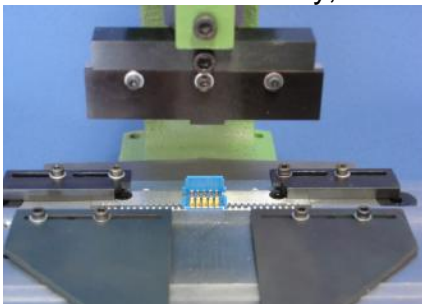


3.2. Adjustment of the housing guide

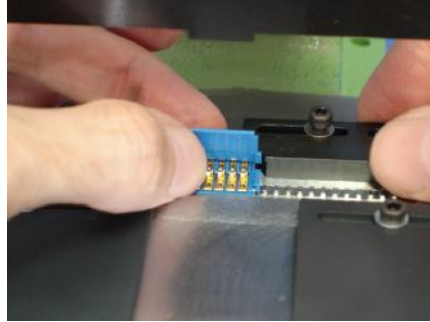
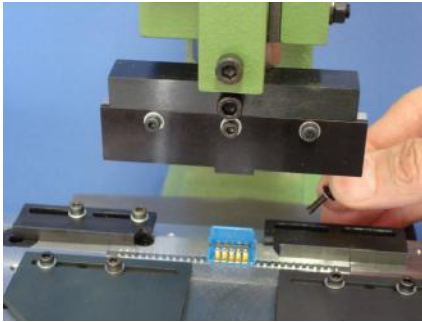
Unlock the screws of the right and left housing guide.



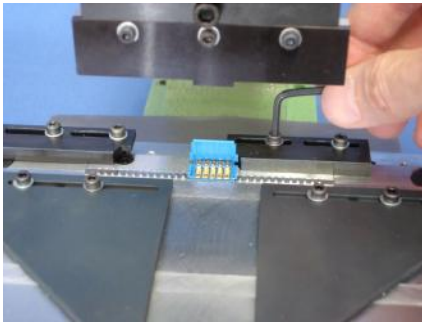
Put a connector on top of the anvil and in the centre of the clinch- and clamp plate. The support areas of the anvil should penetrate into the 'windows' of the connector. If necessary, lower the press in order to check the centre position.



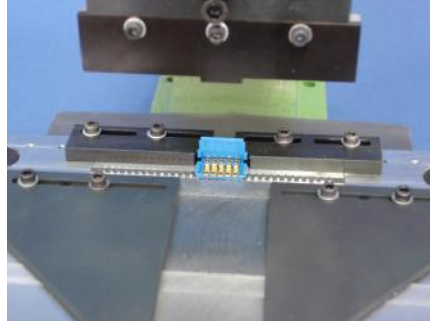
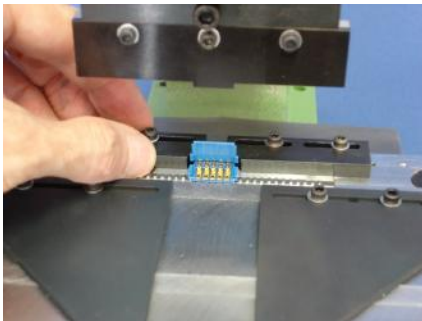
Slide the housing guide towards the corner of the connector. If you can reach the connector, unlock the screws and put them in an other set of holes.



Lock the screws.

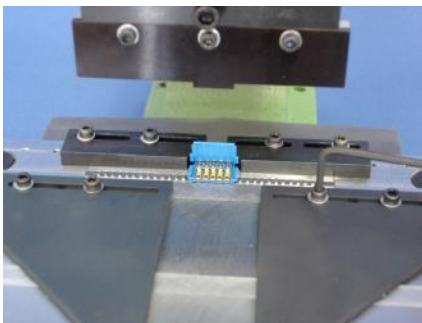


Repeat the same procedure for the left housing guide.

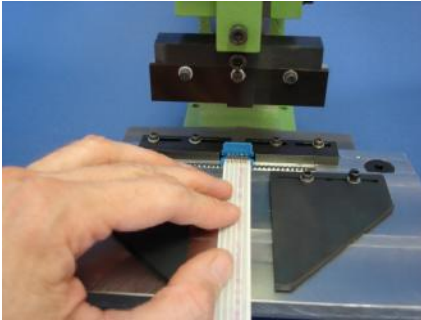


3.3. Adjustment of the cable guide

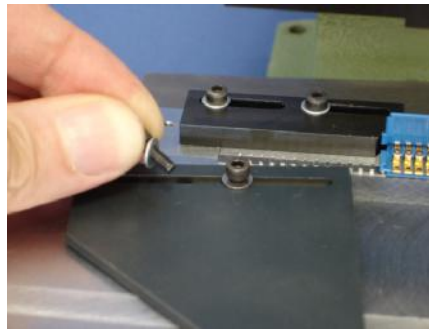
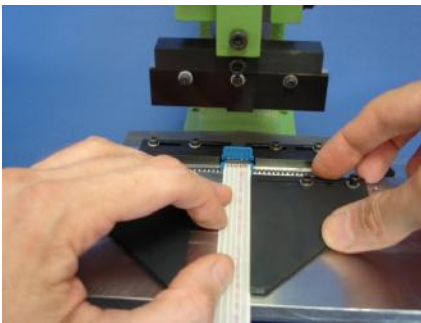
Unlock the screws of the right and left cable guide.



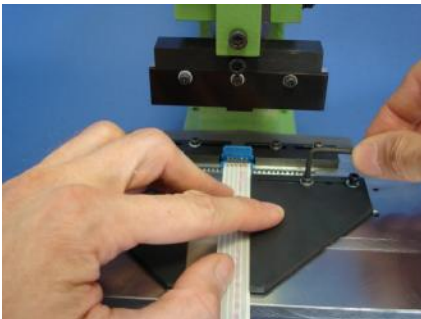
Put a flex cable in line with the connector.



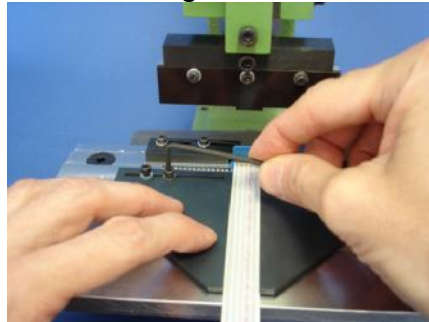
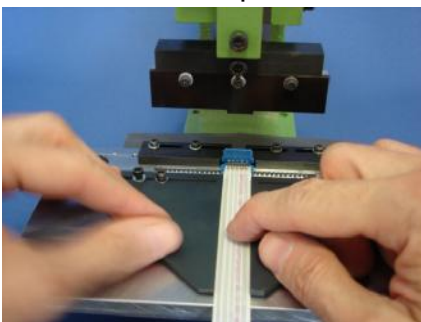
Slide the cable guide to the edge of the flex-foil. In case that you can't reach the edge of the cable re-position the screws.

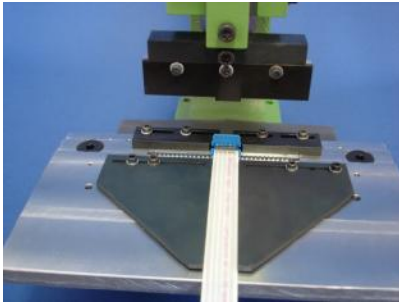


Lock the screws.



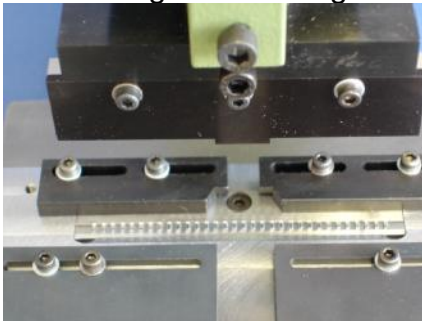
Follow the same procedure for the left cable guide.





3.4. Terminating a flex-foil

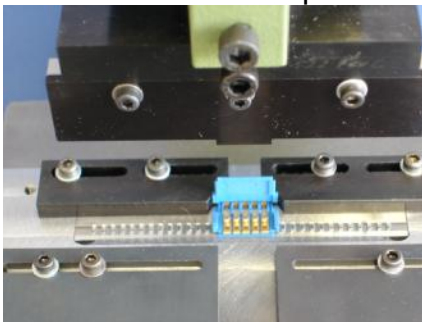
After a proper installation of the clamp- and clinch plate and the adjustment of the housing- and cable guides, the tool is ready for terminating flex-foils.



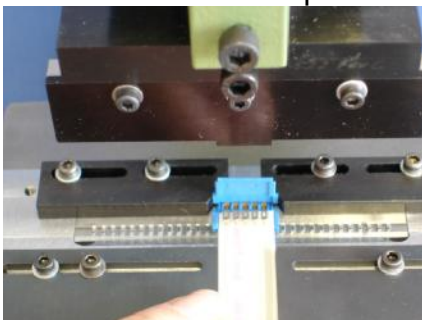
Attention!
**Do not apply the tool without
a connector on the anvil!**

Attention! In case that you apply a machine that is dedicated for latched Clincher connectors, please refer also to appendix A

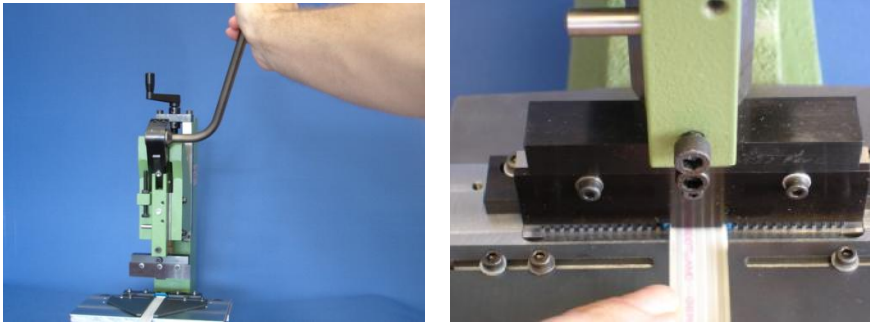
Put a connector on top of the anvil as shown on the picture.



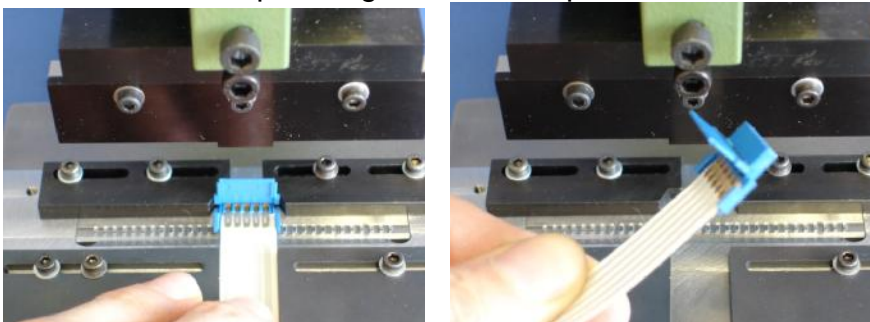
Install the cable. Be sure that the plastic cover of the connector is not in line with the clinch area of the press.



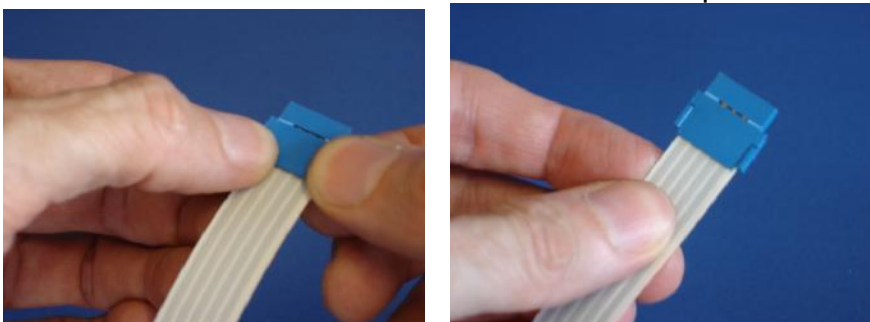
Lower the ram of the press till it reach its end position.



Lift the ram of the press again till its end position and take the cable assembly.



Close the cover of the connector as shown on the picture.



Attention!

In order to warrant the termination quality, verify constantly the clinch quality and clinch height in order to verify the quality and take the responsibility related to the produced terminations.

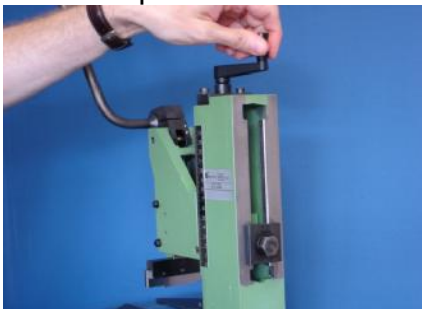
This manual is describing only a production means. For all termination and connector related issues, please follow the instructions of the connector manufacturer.

4. Adjustments

- The tool is adjusted by Föhrenbach Application Tooling engineers for the characteristics of a test flex-foil. In order to warrant a proper operation, the crimp height must be adjusted for the applied flex-foil. The crimp height and quality criteria in relation with the applied flex-foil are described in the application note TA-372 or any update issued by FCI.
- The crimp height can be adjusted as follows. Unlock the screw at the back of the press with a key Nr 19.



In order to adjust the height of the press ram, turn on the hand crank on top of the press.



In case the press is equipped with a fine adjustment, you can adjust the clinch height by turning on the fine adjustment.



With this screw you can lock or unlock the fine adjustment.

Lock the screw at the back of the press before testing. Repeat this process till you have adjusted the correct crimping height.

- For any support, please contact Föhrenbach Application Tooling:

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Belgium

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Fax : +32 (0)3 216 15 07
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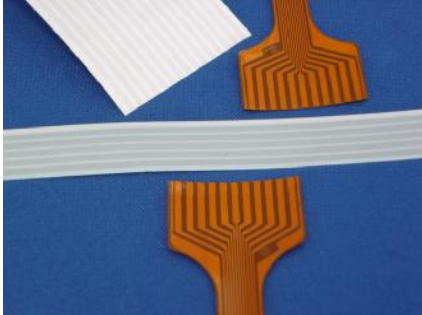
5. General specifications

- Colour : depending the applied bench press.
- Weight of tool : +/- 27 kg
- Size : l: 295 mm x w: 200 mm x h: 570 mm

6. Input material and functional requirements

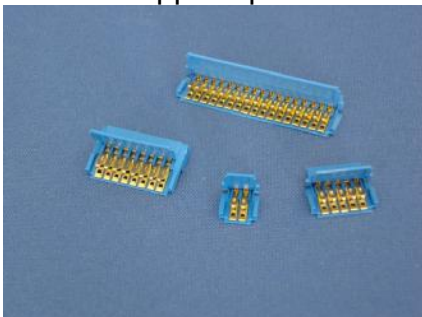
6.1. Cable

- Flex-foil cable that fits to the applied Clincher connectors.



6.2. Components

- Female and male Clincher connectors. The anvil can accept connectors up to 32 ways. The maximum applicable connector size depends on the power of the applied press.



- On request, this machine is available in a version that accepts latched clincher connectors.

7. Process output

- Due to the manual process, the output capacity is highly depended on the skills of the operator.

8. Safety and ergonomics

- Apply the tool only for the target as mentioned in chapter 1. Purpose.
- For operator safety, it's necessary to apply eye protection.
- Apply the tool only in a dry and clean environment.

- Apply the tool only in a well lighted environment (1000 Lux).
- Only skilful operators who are trained by Föhrenbach Application Tooling engineers are allowed to apply the tool.

9. Environmental conditions

9.1. Ambient temperature

The ambient temperature is measured at a height of 1.5 m above the floor.

- | | | |
|----|--|-----------------|
| a. | Normal range | : + 15 to +30°C |
| b. | Average value | : ± 23°C |
| c. | Maximum variation within a 5 min. period | : ± 5°C |

9.2. Humidity

- | | | |
|----|---|------------------|
| a. | Normal range (no condensation) | : 40 to 70% R.H. |
| b. | Range not resulting in constantly reduced operation | : 10 to 90% R.H. |

9.3. Atmospheric pressure

Normal range: 533 - 1060 m bar.

10. Power connections

10.1. Electrical

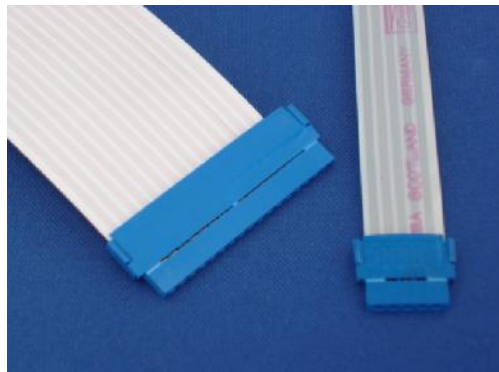
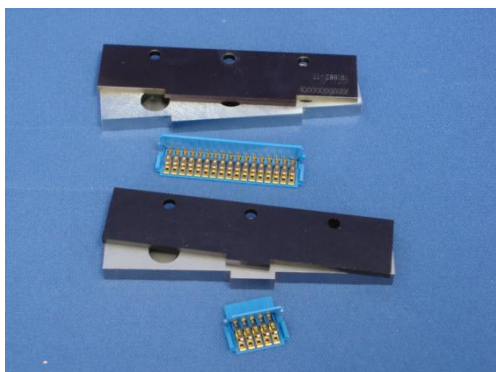
No electrical supply required.

10.2. Pneumatic

No air supply required.

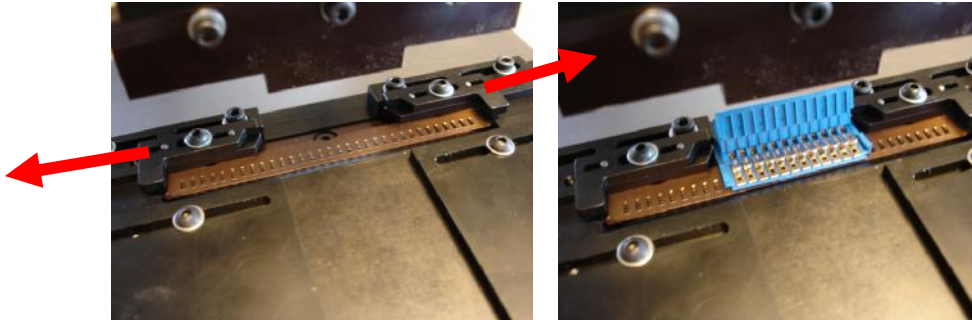
11. Accessories

In order to terminate a range of Clincher connectors, the appropriate claming- and clincher plates are available.

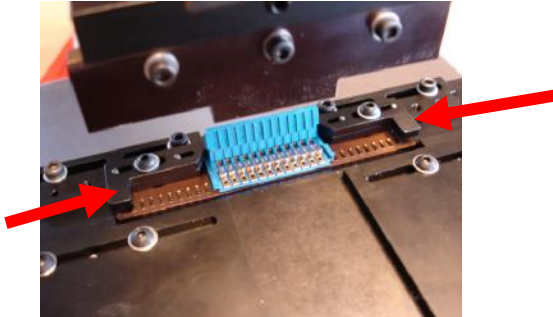


Appendix A

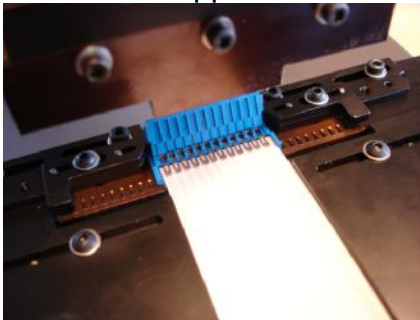
Before positioning the connector, be sure that the locks are slid in the direction of the arrows.



In order to fix the connector, slide the locks in position of the arrows.



Position the applied flex-foil.



After the termination is completed, slide the locks away in order to release the connector assembly.

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