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Instruction Sheet

IS-43

Archer M50 IDC Termination Hand Tools



CRIMP CONTACT INFORMATION

These IDC Termination Hand Tools are intended for use with the following Kontrol 1.27mm pitch cable connectors:

- Z50-020..... M50-330XX42 (Archer M50 1.27mm Pitch IDC Connector, Female)
- Z50-030..... M50-380XX42 ((Archer M50 1.27mm Pitch IDC Connector, Male)

Important Note:

Both tools will crimp Male & Female connectors, but must be set to the appropriate crimp settings as shown on sheet 3.

GENERAL INFORMATION

The Z50-020 IDC Termination Hand Tool is used to ensure the complete and secure assembly of IDC connectors. The tool uses a ratchet mechanism and press plate to assemble the connector onto the ribbon cable. The tool is also supplied with a desk clamp, for secure fastening during operation.

The connector is fully assembled once the tool is free to open fully to its original position, i.e. when the ratchet releases. The ratchet releases once the handles have been compressed to the fully closed position.

TOOL PART IDENTIFICATION



**Table
Clamp**

**Ratchet Tool
with clamp
jaws fitted**

ASSEMBLY PROCEDURE

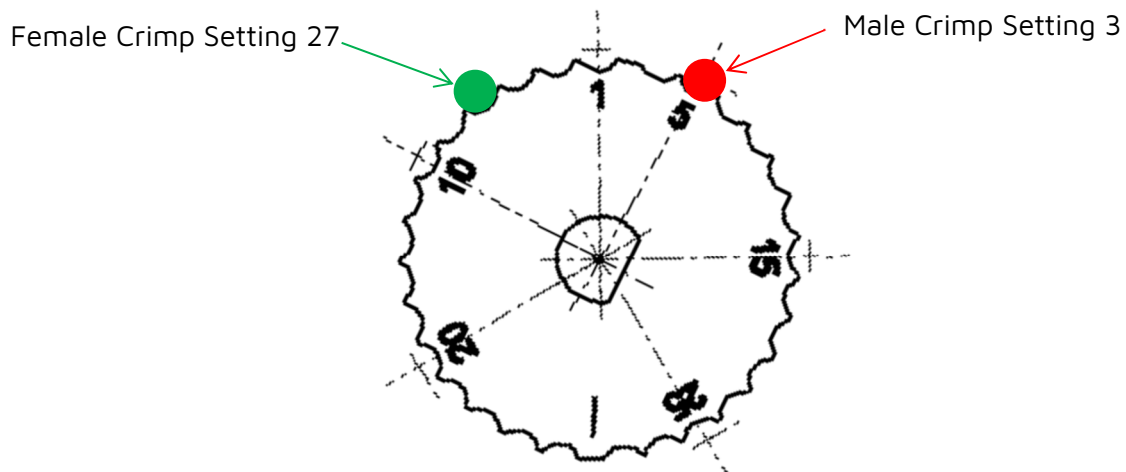
1. Ensure that the crimp tool is on the correct tool setting, depending on which component you are crimping. Female is setting 27 & Male is setting 3 (Mark 5). The settings are counted from the number 1 mark going around the dial clockwise.



Figure A - Female Crimp Setting



Figure B - Male Crimp Setting



2. Decide whether you will clamp the tool to the desk or use the tool in hand. If clamping the tool to a desk, make sure the tool is securely fastened before use.

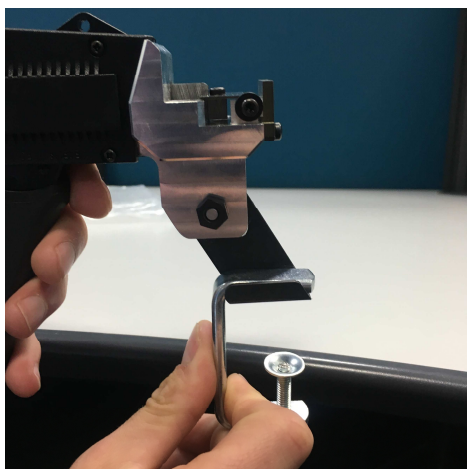


Figure C - Hook the clamp onto the undercarriage of the tool

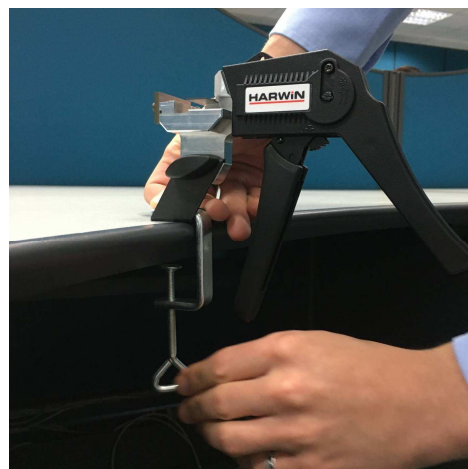


Figure D - Tighten the clamp onto the designated desk

3. Select a suitable ribbon cable for the connector. Harwin recommends:
 - Wire Type UL2678
 - Wire Pitch 0.635mm
 - Wire Thickness 30AWG
4. Feed the cable into the back of the connector, ensuring it is the correct width and cut to the desired length.
5. Make certain that the termination hand tool is in the fully open position, and that the jaws are free from dirt and debris.
6. Feed the cable through the slot and securely place the connector within the locating feature (Female) or flush against the stop washer situated to the right of the tool (Male). See figures E, F and G.

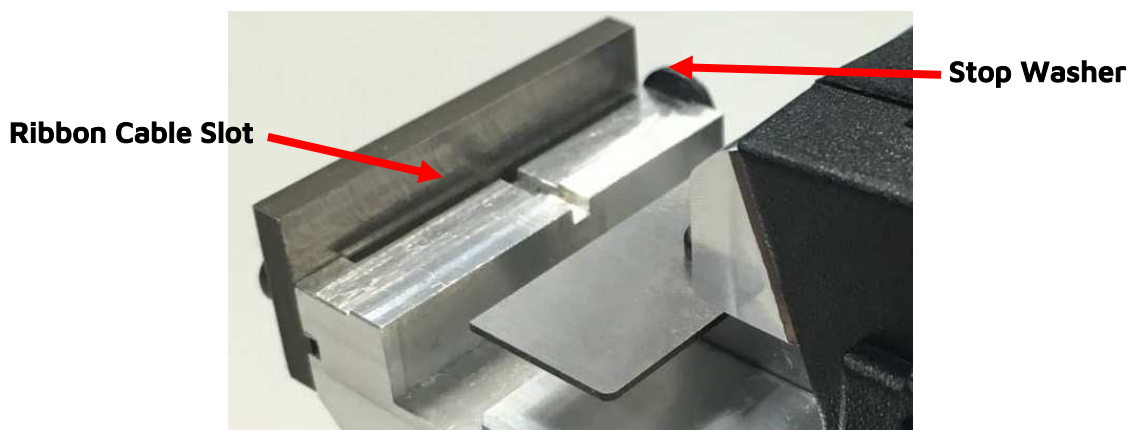


Figure E - Empty Tool Jaws

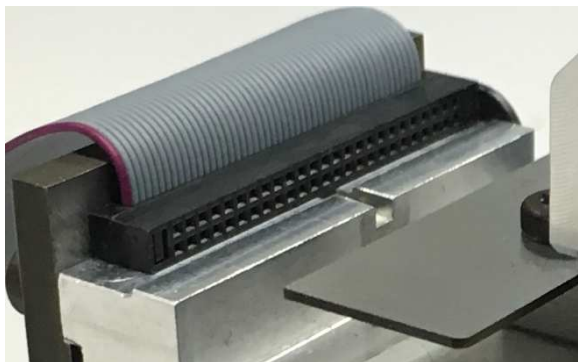


Figure F - Female Connector Position



Figure G - Male Connector Position

7. Once the connector is in the correct position and secure, slowly compress the handle until the connector is fully shut and the ratchet within the tool has released.
8. If assembling a second connector to the cable, it is not recommended to feed the wire through the slot. Instead, assemble the cable into the connector from above. This way, you will be able to terminate the connector, and still be able to remove the finished assembly from the tool. Please see figures H & J below as examples



Figure H - Correct Position



Figure G - Incorrect Position

TOOL MAINTENANCE

1. Keep the tool clean and free from dirt and foreign matter. Ensure that all pins and clips are in place before use, and that signs of wear are not visible. If the pivots are worn, the tool must be replaced, or integrity of assembly will be compromised.
2. Oil at all pivots and bearings using light cycle oil.
3. At regular intervals, check the assembly tool jaws for wear or damage, and inspect sample connector assemblies for form and function.

If you have any questions about this instruction sheet, or the Archer M50 IDC range of connectors, please contact technical@harwin.com.