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HARTING ix Industrial® assembly tool		
Part number: 09 45 800 0181		
www.HARTING.com		

Assembly instruction



1. General remarks – Usage and design of the tool

- The HARTING ix Industrial® assembly tool is intended to be used for the assembly of the HARTING ix Industrial® plugs with solder or isolation displacement connection (IDC). Using this hand-tool for any other purpose, or for crimping of any other object, can result in damaging the tool and the objects being crimped and prevention of its normal further functioning, for what manufacturer cannot be held responsible.

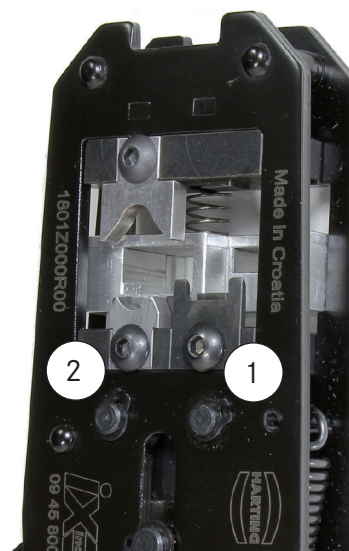
- The HARTING ix Industrial assembly tool 09 45 800 0181 is delivered ready to use and no adjustment is needed for the first use.
- The assembly tool is equipped with full cycle ratchet mechanism which with optimized leverage system within the tools make working with these tools easy and simple. In case of improper crimp, ratchet release mechanism allows you to easily open the hand-tool and remove obstruction before work is continued. Check unblocking procedure.
- For removal of dust, moisture and other contaminants usage of clean brush or soft, lint-free cloth is recommended. Do not use aggressive agents (thinner, alcohol, ...) or hard objects that could damage the tool.
- Make sure that, during the work, bearing surfaces, shafts and pivot points are protected with thin coat of quality machine or motor oil. Do not oil excessively.
- When the tool is not in use, store it in a closed position – with handles closed. That will keep other objects from becoming stuck between crimping dies and damaging them. Keep the tool in a dry and clean area.
- Tool itself also incorporates possibility of periodical adjustment of the crimping force and tool recalibration via eccentric axle to maintain correct crimp performance. Check item recalibration procedure.

2. Terminating procedure

- Wire lead ends organized and trimmed according to plug assembly instruction for the HARTING ix Industrial® plugs with solder or isolation displacement (IDC) connection.

The assembly tool die consists of two assembly sections.

- Section on the right side is used for IDC contacts crimping (1).
- Section on the left side is used for cable shielding crimping (2).



2.a IDC Contact terminating

- Insert the plug assembly in the right assembly tool opening. The plug insert must be fully inserted. For more details see the assembly instruction of the IDC plug.



- Slowly close tool handles completely to perform full cycle to press in the wire manager with the single wire to the IDC's.



In case the tool becomes block for any reason, please follow the unblocking procedure.

- After the full IDC assembly cycle is done, open the tool fully in order to remove assembled plug insert. The tool is ready for next assembly cycle.

2.b Shielding crimping

- Insert the plug assembly in the left area of the crimping tool. The plug insert must be fully inserted according to the plug assembly instruction.



- Slowly close tool handles completely to perform full cycle crimping.



In case the tool becomes block for any reason, please follow the unblocking procedure.

- After the full crimping cycle is done, open the tool fully in order to remove crimped plug. The tool is ready for next crimping cycle.

3. Unblocking the tool

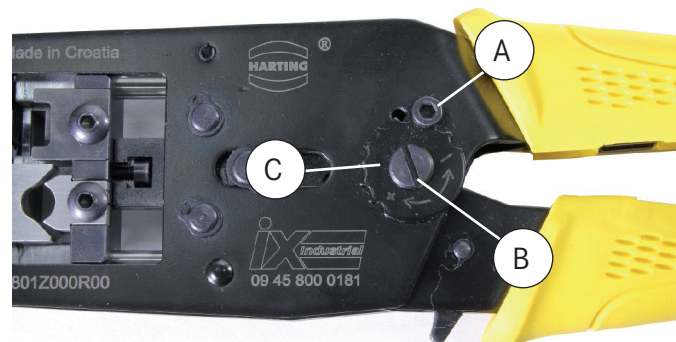
- **IMPORTANT: Apply working force on the tool handles while unblocking. It will prevent hurting yourself and possible damages on the tool.**
- In case of improper crimp, push the ratchet relief (A) in direction shown to unblock the tool and remove obstruction before continuing with the work.

With this tool only plugs of appropriate type have to be used. Crimping plugs of unsuitable type may result with unsatisfactory characteristics of crimped connections and eventually with damaging of the tools and is to be strictly avoided.



4. Tool regulation procedure

- After prolonged work period, tool crimping performance can change slightly due to final self-adjustment of the tools' components. This hand-tool is equipped with eccentric axle which allows periodical adjustment of crimping force and tool recalibration to maintain correct crimp performance.
 1. Loosen and remove allen head screw (A) using a 2.5 mm allen wrench.
 2. Using a screw driver turn eccentric axle (B) and toothed adjustment wheel (C) into new position. direction + for enlarging crimping force and reducing gap between crimping dies direction - for reducing crimping force and enlarging gap between crimping dies
 3. Reinstall allen head screw (A) and tighten it.



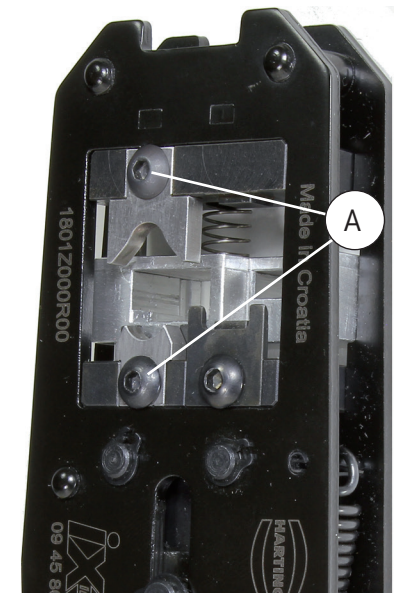
5. Maintenance and repair

- For removal of dust, moisture and other contaminants usage of clean brush or soft, lint-free cloth is recommended. Do not use aggressive agents (thinner, alcohol, ...) or hard objects that could damage the tool.
- Make sure that, during the work, bearing surfaces, shafts and pivot points are protected with thin coat of quality machine or motor oil. Do not oil excessively.
- When the tool is not in use, store it in a closed position – with handles closed. That will keep other objects from becoming stuck between crimping dies and damaging them. Keep the tool in a dry and clean area.
- Tool itself also incorporates possibility of periodical adjustment of the crimping force and tool recalibration via eccentric axle to maintain correct assembly performance. Check item recalibration procedure.

6. Change of the shielding crimping insert

- The tool comes with two sets of exchangeable shielding crimping inserts.
- Set A for crimping cable diameters 5-6,5 mm
- Set B for crimping cable diameters 6,5-7,5 mm

In order to exchange crimping insert unscrew fixing screws (A) and remove shielding inserts from the crimping die. Insert other pair of shielding inserts and tighten fixing screws (A)



Instruction Number 09 45 800 0181/99.00
Errors and technical changes excepted.