Agilent

Agilent A-Line High Power Electronic Crimping Tool

Operation Guide

Notices

Manual Part Number

5191-5627

Edition

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Safety Notices

CAUTION

A CAUTION notice denotes a hazard. It calls attention to an operating procedure, practice, or the like that, if not correctly performed or adhered to, could result in damage to the product or loss of important data. Do not proceed beyond a CAUTION notice until the indicated conditions are fully understood and met.

WARNING

A WARNING notice denotes a hazard. It calls attention to an operating procedure, practice, or the like that, if not correctly performed or adhered to, could result in personal injury or death. Do not proceed beyond a WARNING notice until the indicated conditions are fully understood and met.

Contents

The Agilent A-Line High Power Electronic Crimping Tool can be used to crimp and decap standard crimp caps on laboratory sample vials. Jaw sets are available to accommodate the most popular sizes.

Please read through this entire guide to familiarize yourself with the operation of the tool before proceeding. Use the same degree of care as you would with any precision instrument.

Product	Part number
A-Line High Power Electronic Crimping Tool	5191-5617
A-Line High Power Electronic Crimping Tool with 20 mm crimper and decapper jaw sets	5191-5624

Related parts	Part number
Crimper jaw set, 11 mm	5190-4062
Crimper jaw set, 20 mm	5190-4064
Decapper jaw set, 11 mm	5190-4063
Decapper jaw set, 20 mm	5190-4065
Base for electronic crimping tool	5190-4066

Safety and Regulatory Certifications

CE

The A-Line High Power Electronic Crimping Tool is designed and manufactured under a quality system registered to ISO 9001.

Symbols

Warnings in the manual or on the instrument must be observed during all phases of operation, service, and repair of this instrument. Failure to comply with these precautions violates safety standards of design and the intended use of the instrument. Agilent Technologies assumes no liability for the customer's failure to comply with these requirements.

See accompanying instructions for more information.

Wear safety glasses when crimping or decapping.

The crimper or decapper jaws can pinch severely.

Never insert fingers into the crimping tool jaws.

Do not discard this electrical/electronic product in domestic household waste.

Environment-friendly use period. (EFUP)

Regulatory compliance mark for Korea.

Regulatory compliance mark for Australia and New Zealand.

Sound emission declaration

Sound pressure

Sound pressure LpA = 79 dB(A)

Class A EMC declaration

This equipment has been evaluated for its suitability for use in a commercial environment. When used in a domestic environment, there is a risk of radio interference.

사 용 자 안 내 문
이 기기는 업무용 환경에서 사용할 목적으로 적합성평가를 받은 기기로서 가정용 환경에서 사용하는 경우 전파간섭의 우려가 있습니다.

Warnings, Intended Use, and Limits

Important safety information

Keep the following important safety notices in mind when using the A-Line High Power Electronic Crimping Tool.

WARNING **Follow all instructions or injury may result.**

WARNING **Always wear safety glasses when crimping or decapping.**

WARNING **Never insert fingers into the crimper or decapper. The crimper or decapper jaws can pinch severely.**

WARNING **Use only the 12 volt DC power supply supplied with the crimping tool.**

WARNING **Only change jaws after the power supply has been disconnected or the tool is in Settings mode.**

Intended use

Electronic crimping tools are intended for use in a laboratory environment. All other uses are prohibited.

Limits

Temperature: 15 °C to 35 °C

Maximum humidity: 75%

Pressure: 0.75 to 1 bar

Set Up

Remove the tool, power supply, cable, and USB drive from the shipping container. Inspect the crimping tool and any jaw sets. If there is any visible damage, contact your supplier immediately.

Step 1. Connect the power supply

Connect the supplied power cord to an electrical outlet and to the top of the crimping tool.

Step 2. Select a display language

1 Press and hold the **GO** button for three seconds to enter the Settings mode. Alternatively, press the **Settings** button on the side of the crimper with a pen or small tool.

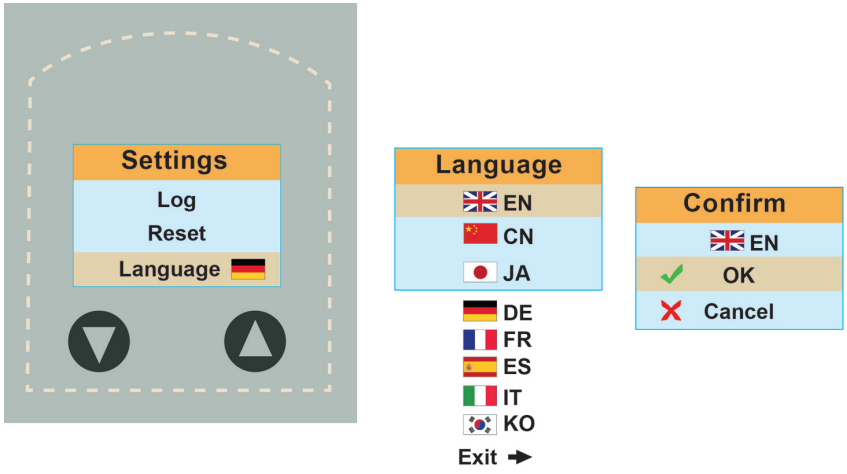
2 Press ▼ and ▲ to scroll to **Language**.

3 Press the GO button.

4 Press ▼ and ▲ to scroll to your preferred language.

5 Press the **GO** button to select your language.

6 Press the **GO** button again to confirm your language selection and exit the Settings mode.



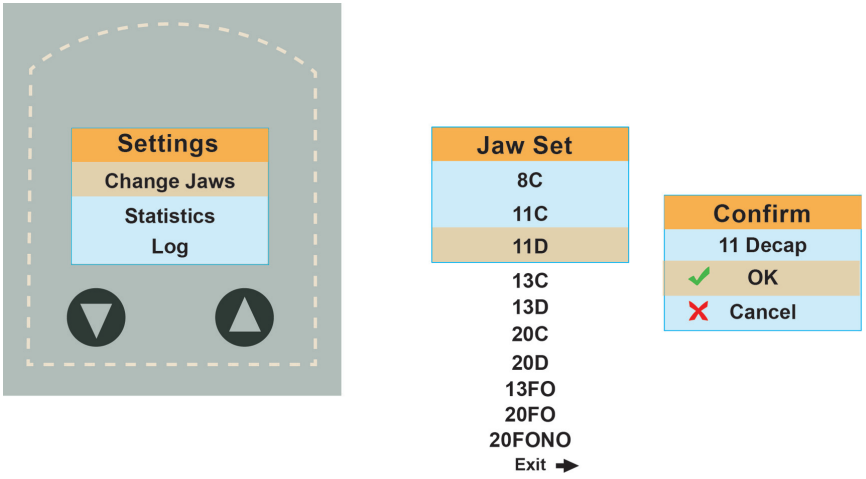
Step 3. Install a jaw set

1 Press and hold the **GO** button for three seconds to enter the Settings mode. Alternatively, press the **Settings** button on the side of the crimper with a pen or small tool.

2 Press the **GO** button to select **Change Jaws**.

NOTE **The jaws are locked. They will not activate in this state.**

3 A list of jaw sizes will appear.



4 Use the ▼ and ▲ buttons to highlight the desired size.

5 To remove a jaw set, see **Remove a jaw set** on page 10. To attach a jaw set, see **Attach a jaw set** on page 10.

6 Press the **GO** button to select.

7 Press the **GO** button again to confirm.

For example, to set the tool to decap 11 mm vials, select **Settings Mode > Change Jaw Sets > 11D > Confirm.**

Attach a jaw set

To attach a jaw set:

1. Begin with **Step 3. Install a jaw set** on page 9 to lock the jaws before continuing.
2. Insert the jaw set into the bushing at the bottom of the tool.
3. Push up against the spring load.
4. Twist until the jaw set locks into position.

Remove a jaw set

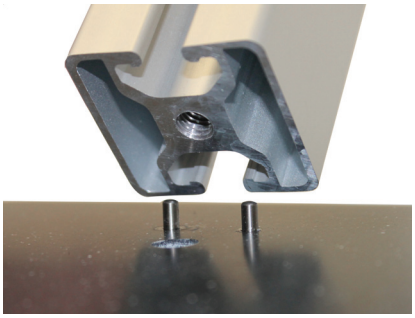
To remove a jaw set:

1. Begin with **Step 3. Install a jaw set** on page 9 to lock the jaws before continuing.
2. Press the button on the outside of the supporting cup.
3. Rotate the cup.
4. Pull down.

Step 4. Assemble crimping tool base

To assemble the crimping tool base:

1 Attach the support column into the base foundation with two bolts as shown. Hand tighten both bolts with the hex key provided.



2 Attach the crimper to the adjustable mount as shown. Hand tighten both bolts with the hex key provided.

3 Thread the power cord through the base as shown.

Crimping

Once you have set up your crimper (**Set Up** on page 7), you can follow these steps to crimp continuously without changing settings as long as the power is connected and the reset function has not been applied.

Standard aluminum, steel caps or two-part caps with aluminum sides and magnetic tops, together with seals of standard size and thickness are appropriate.

Crimping operation

To crimp a cap on a vial:

1. Place a seal and a cap on a vial.
2. Rest the crimper on top of the cap.
3. Press and hold the **GO** button lightly until the crimp is complete.
   If the cap is too tight or too loose, see **Adjust crimping tightness** on page 13.

Adjust crimping tightness

The numerical setting of the crimping tool sets a stop position that determines the amount of cap compression. This setting is precise and consistent. There may be some drifting in the setting over time due to stretching or wearing-in of tool components, but generally, the reproducibility of the crimp is as good as the consistency of the vials and seals. Some adjustment for different lots of caps and seals is to be expected.

Use the same type and size of vials, caps, and seals for the purpose of setting the crimp tightness as you will for production crimping.

To adjust crimp tightness:

1 Place a seal and a cap on a vial.

2 Rest the crimper on top of the cap.

3 Press and hold the **GO** button lightly until the crimp is complete.

4 Examine the crimp for adequate sealing.

5 Use the ▼ and ▲ buttons to adjust the tightness of the crimp. If the cap spins easily, press the ▲ button two or three times. If it is too tight, press the ▼ button.

6 Try the new setting with a new vial, seal and cap.

Decapping

Once you have set up your crimper to decap (**Set Up** on page 7), you can follow these steps to decap continuously without changing settings as long as the power is connected and the reset function has not be applied.

Decapping operation

To decap:

1. Rest the jaws on top of the cap to be removed.
2. Press and hold the **GO** button lightly until the cap is removed.

   If the decap failed, use the ▼ and ▲ buttons to adjust the decap motion, and retry the procedure.

Statistics and Log

Use the statistics and log displays to see information about the history of your tool.

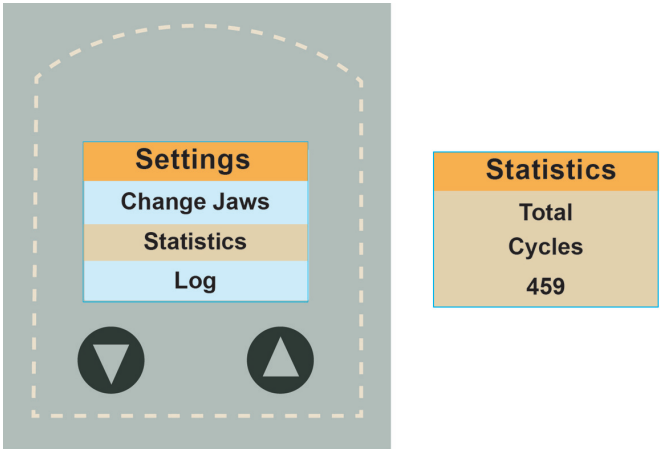
Statistics

To see the count of total crimp and decap cycles:

1 Press and hold the **GO** button for three seconds to enter the Settings mode. Alternatively, press the **Settings** button on the side of the crimper with a pen or small tool.

2 Press ▼ and ▲ to scroll to **Statistics**.

3 Press the **GO** button. The total number of crimp and decap cycles is shown.



4 Press ▼ to scroll to **Exit**.

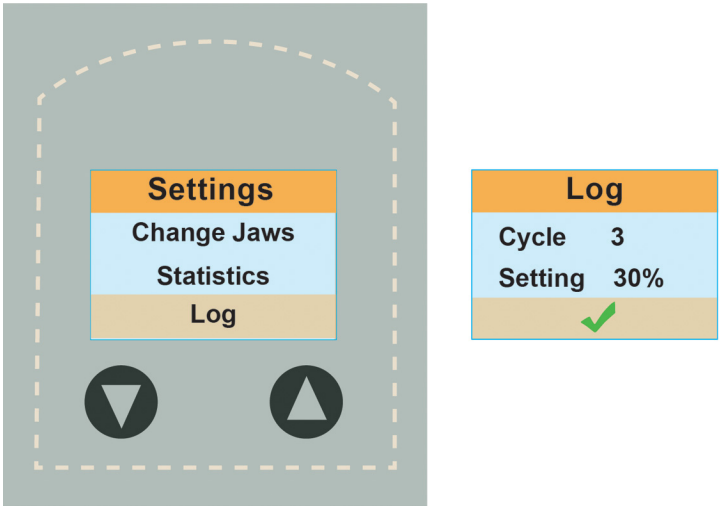
5 Press the **GO** button to confirm exit.

Log

The Log displays the tightness setting, whether the crimp set point was reached, and if there was an error for each of the last 25 completed cycles.

To see the Log:

1. Press and hold the **GO** button for three seconds to enter the Settings mode. Alternatively, press the **Settings** button on the side of the crimper with a pen or small tool.
2. Press ▼ and ▲ to scroll to **Log**.
3. Press the **GO** button to view the log.
4. Press ▼ and ▲ to scroll through the log for each of the last 25 cycles.
5. Press the **GO** button again to exit.



Troubleshooting, Maintenance, and Repair

Error conditions and display codes

Error	Possible cause	Recommendation
Stall	Stall condition - Crimp setting is too high.	Adjust crimper to a lower crimp setting by pressing the ▼ button.
Early Button Release	Early trigger release - The tool retracted before completing a cycle.	Try again, hold the **GO** button down until the tool is returning to the home position.
Stall, but tool does not cycle.	Motor drive failure.	For repair service information, see **Repair** on page 20.

Troubleshooting

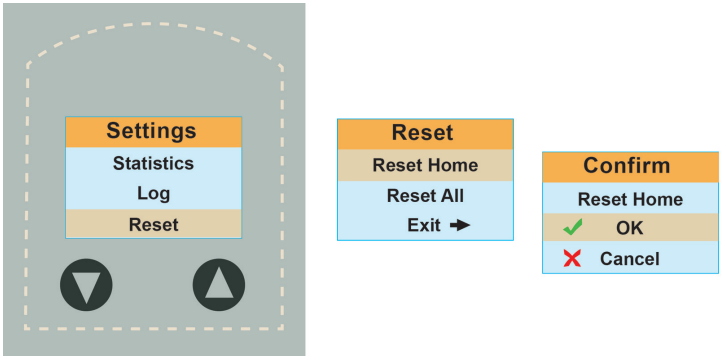
Condition	Possible cause	Recommendation
Side of cap is indented. Seal is deformed in hole.	Crimp setting is too high. The crimp is too tight.	Adjust crimper to a lower crimp setting by pressing the ▼ button.
Cap spins easily.	Crimp setting is too low. The crimp is too loose.	Adjust crimper to a higher setting by pressing the ▲ button.
Cannot find a good crimp setting.	The crimper is far out of adjustment.	Return crimper to factory setting. See **Reset** on page 19.
Crimping is inconsistent. Some vials are good and some are not.	Vials, caps or seals are inconsistent.	Check crimper by using some standard, approved, vials caps and seals.
	Electronic failure in crimper.	Please see instructions in **Repair** on page 20.
11mm decapper leaves caps hanging on vials.	Decapper adjustment is too low.	Adjust the decapper to a higher setting by pressing the ▲ button.
	Jaws are worn or broken.	Please see **Repair** on page 20.
Motor does not come on or moves in one direction only.	Drive circuit failure.	Please see **Repair** on page 20.

Reset

The **Settings** button is on the side of the crimping tool.

To reset the tool:

1. Press and hold the **GO** button for three seconds to enter the Settings mode. Alternatively, press the **Settings** button on the side of the crimper with a pen or small tool.
2. Use the ▼ and ▲ buttons to scroll through the menu to **Reset**.
3. Press the **GO** button.



4 Use the ▼ and ▲ buttons to scroll to either **Reset Home** or **Reset All**.
   - **Reset Home** - Sends the crimper back to its home position. No settings, logs, or statistics are changed.
   - **Reset All -** Sends the crimper back to its home position and returns the tightness setting to the original factory default of 50%. No logs or statistics are changed.

5 Press the **GO** button to make the selection.

6 Press the **GO** button to confirm.

7 Use the ▼ and ▲ buttons to scroll to **Exit**.

8 Press the **GO** button.

9 Use the ▼ and ▲ buttons to scroll to **Exit**.

10 Press the **GO** button again to confirm exit.

Maintenance

Serviceable parts

The A-Line High Power Electronic Crimping Tool does not contain user-serviceable parts.

Cleaning

The crimping tool may not be immersed in water or solvent. To clean the unit, disconnect the power and wipe down with a damp, lint-free cloth. Do not get the electronics wet.

Avoid permitting metal parts of the crimping tool to come into contact with corrosive material during use. If they do, try to wipe them clean with a suitable mild neutralizing solution.

Repair

If the crimping tool is still in the warranty period, contact your Agilent office or dealer. If the warranty period has expired, please visit **www.agilent.com/chem/crimper-repair** for information about the crimper repair service.

Recycling

For recycling, contact your local Agilent sales office.

www.agilent.com

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