



Agilent A-Line Electronic Crimping and Decapping Tools

Operation Guide

5191-5613

5191-5614

5191-5615

5191-5616



Notices

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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.

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The Agilent A-Line Electronic Crimping Tools 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.

This operation guide applies to the following products:

Product	Part number
A-Line 20 mm Electronic Decapper	5191-5613
A-Line 11 mm Electronic Decapper	5191-5614
A-Line 20 mm Electronic Crimper	5191-5615
A-Line 11 mm Electronic Crimper	5191-5616

Related Part	Item number
6.4 volt lithium ion battery	5190-3192

Safety and Regulatory Certifications



The A-Line Electronic Crimping Tools are 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.



Korean regulatory approval.



California Energy Commission for devices with a Battery Charger.



Environment-friendly use period. (EFUP)



Regulatory compliance mark for Australia and New Zealand.



Sound emission declaration

Sound pressure

Sound pressure LpA <70.1 dB according to EN 27779:1991.

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.

Intended use

The A-Line Electronic Crimping Tools is 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

Warnings, Intended Use, and Limits

Important safety information

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

WARNING Follow all instructions or injury may result.

WARNING Wear safety glasses when crimping or decapping.

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

Special battery warnings

WARNING Risk of burns; battery may explode or catch fire if mishandled.

WARNING Use only the manufacturer-supplied 7.5 volt DC power supply and charge the battery only in the crimping tool.

WARNING Do not heat above 60 °C.

WARNING Do not crush or modify.

WARNING Use only the replacement battery pack part number 5190-3192. Use of other batteries may cause fire during charging or use.

WARNING Do not disassemble or dispose of in fire.

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. Charge the battery

A red battery indicator appears when recharging is necessary.



Use these steps to charge the battery:

- 1 Connect the supplied power cord to an electrical outlet and to the side of the crimping tool.



A green plus symbol will be displayed inside the battery charging icon, and the green battery fill indicator will scroll across the icon



- 2 Charging is complete when the green battery fill scrolling stops and the icon is solid green. Disconnect the power cord from the crimper.

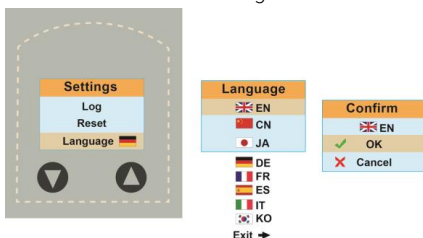
Step 2. Select a display language

- 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.



Crimping

Once you have set up your crimper (**Set Up** on page 7), you can follow these steps to crimp continuously as long as the battery remains charged and **Reset All** (**Reset** on page 18) is not applied.

Use standard aluminum, or two-part caps with aluminum sides and magnetic tops, together with seals of standard size and thickness.

Use high power e-crimper for steel caps, part numbers 5191-5617 (no jaws) or 5191-5624 (with 20 mm jaws).

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 9.



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.



Good crimp



- 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 decapper to decap (**Set Up** on page 7), you can follow these steps to decap continuously as long as the battery remains charged and **Reset All** (**Reset** on page 18) is not applied.

Decappers are only suitable for aluminum caps. For steel caps or two-part caps, the high power tool with decapper jaw set is required.

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.

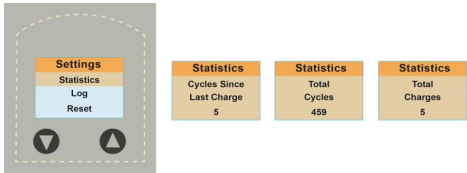
Statistics

To see the count of charges and 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 ▼ to scroll to **Statistics**.
- 3 Press the **GO** button. The count of cycles since last charge is shown.



- 4 Press ▼ to scroll to total cycles.
- 5 Press ▼ to scroll to total charges.
- 6 Press the **GO** button to exit.

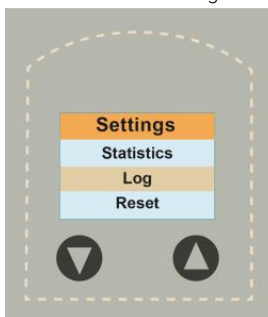
Log

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.

- 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.



Log	
Cycle	3
Setting	30%
✓	

Troubleshooting, Maintenance, and Repair

Table 1 Error indicators

Error	Possible cause	Recommendation
Stall	Stall condition - Setting is too high.	Adjust to a lower 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.
Battery low indicator	Battery needs to be charged.	Charge battery, see Step 1. Charge the battery on page 7.
Battery low indicator after charging 24 hours.	Charge circuit failure.	Please see Repair on page 20.

Table 2 Troubleshooting

Problem	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.

Table 2 Troubleshooting

Problem	Possible cause	Recommendation
Cannot find a good crimp setting.	The crimper is far out of adjustment.	Return crimper to factory setting. See Battery replacement on page 17.
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.
Battery does not get a full charge.	Charging cable disconnected early.	Leave tool on charger overnight.
	Battery is worn out. Battery is rated to deliver 60% of capacity after 1500 charges	Replace battery.

Battery replacement

WARNING

Use only the replacement battery pack part number 5190-3192. Use of other batteries may cause fire during charging or use.

To replace the battery:

- 1 Remove the screw holding the battery cover in place.



- 2 Remove the battery cover.



- 3 Without disconnecting the wire, gently pull the battery out of the case.



Do not throw the battery away. Recycle it in accordance with local regulations.

- 4 Press the connector latch and gently pull the connector apart.
- 5 Securely connect the new battery.

- 6 Push the battery into the case, bending the wires if necessary.



- 7 Replace the cover.
- 8 Replace the retaining screw.
- 9 Use the steps in [Reset](#) on page 18 to reset the battery charge count.

Reset

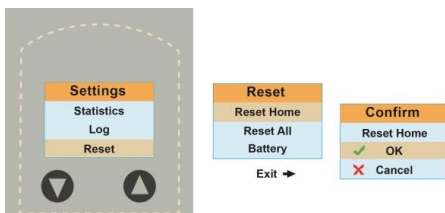
To reset the tool:

- 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**, **Reset All** or **Battery**.
 - **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.
 - **Battery** - Resets the charge count. It is important to reset the charge count when a new battery is installed.
- 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 to confirm exit.

Maintenance

Serviceable parts

The electronic crimping tool does not contain user serviceable parts.

Cleaning

Do not immerse the crimping tool 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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