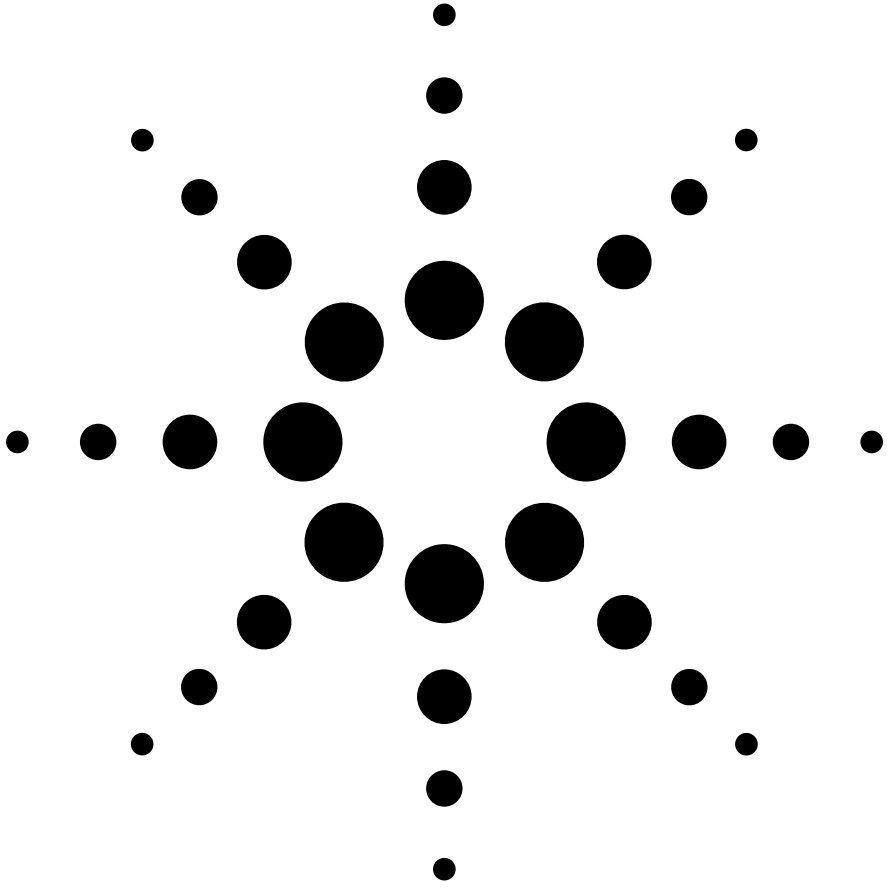


Installation Guide
Cryogenic Oven Cooling
Accessory 19239A/B

Agilent Technologies

Part number 19239-90137

First Edition, DEC 2000

Replaces Part No. 19239-90130 Operating and Service Manual.

Printed in USA

Safety Information

The Agilent Technologies Cryogenic Oven Cooling meets the following IEC (International Electrotechnical Commission) classifications: Safety Class 1, Transient Overvoltage Category II, and Pollution Degree 2.

This unit has been designed and tested in accordance with recognized safety standards and designed for use indoors. If the instrument is used in a manner not specified by the manufacturer, the protection provided by the instrument may be impaired. Whenever the safety protection of the Agilent 19239 has been compromised, disconnect the unit from all power sources and secure the unit against unintended operation.

Refer servicing to qualified service personnel. Substituting parts or performing any unauthorized modification to the instrument may result in a safety hazard. Disconnect the AC power cord before removing covers. The customer should not attempt to replace the battery or fuses in this instrument.

Safety 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.

WARNING
A warning calls attention to a condition or possible situation that could cause injury to the user.

CAUTION
A caution calls attention to a condition or possible situation that could damage or destroy the product or the user's work.

Sound Emission Certification for Federal Republic of Germany

Sound pressure Lp < 68 dB(A)

During normal operation
At the operator position
According to ISO 7779 (Type Test)

Schallemission

Schalldruckpegel LP < 68 dB(A)
Am Arbeitsplatz
Normaler Betrieb
Nach DIN 45635 T. 19 (Typprüfung)

Agilent Technologies, Inc.
2850 Centerville Road
Wilmington, DE 19808-1610
USA

Installing Cryogenic Oven Cooling Accessory 19239A/B

This manual describes how to install the following cryogenic oven cooling accessories:

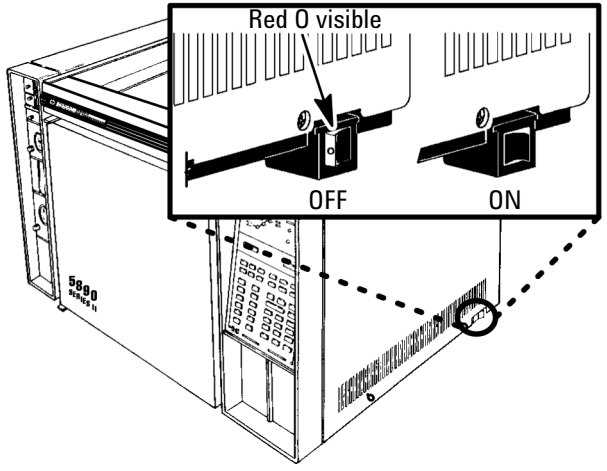
19239A – Cryogenic Oven Cooling, CO_2

19239B – Cryogenic Oven Cooling, N_2

Prepare the GC

WARNING Hazardous voltages are present in the instrument whenever the power cord is connected. Avoid a potentially dangerous shock hazard by disconnecting the power cord before working on the instrument.

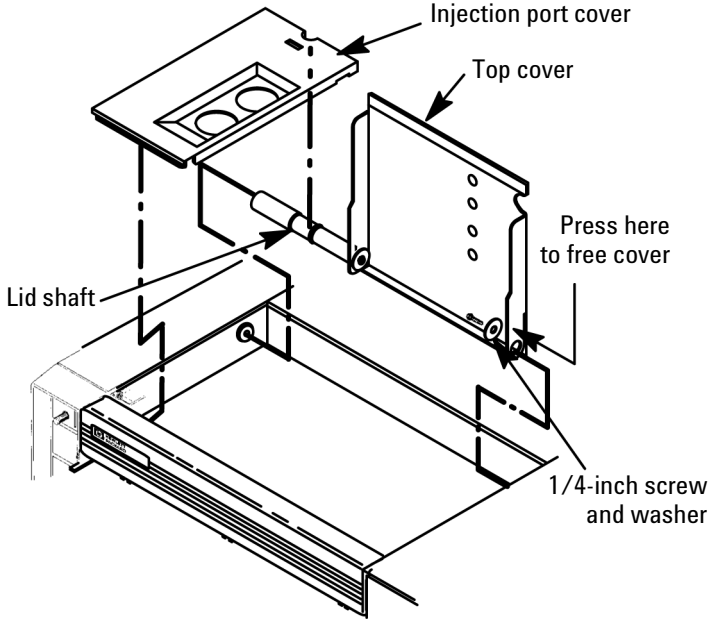
1. Set the main power line switch to the off position.



2. Disconnect the power cable from its receptacle.
3. Allow time for the oven and heated zones to cool.
4. When the heated zones are cool, turn off all gas supplies at the source.

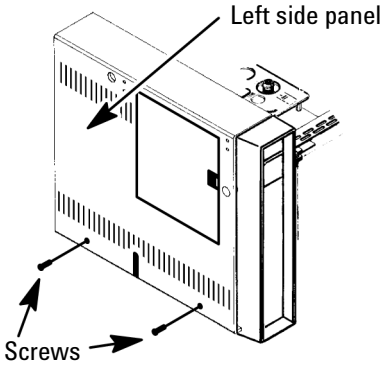
Printed in USA Dec 2000
Agilent Part No. 19239-90137

5. Remove the injection port cover by grasping its back edge and lifting it upward. If an autosampler is installed, the injection port cover will not be present.

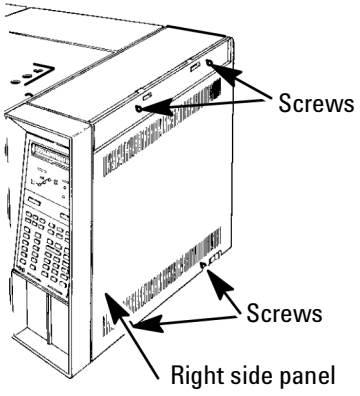


6. If an autosampler is installed on the instrument, it will be necessary to remove it and its mounting bracket to allow removal of the left side cover.
   a. Remove the autosampler tray from its mounting bracket by simultaneously lifting and turning the two tray locks that hold it in position, then sliding the tray away from the instrument.
   b. Lift the autosampler tray from its mounting bracket and set it aside.
   c. Remove the autosampler bracket by removing the six screws securing it to the instrument.

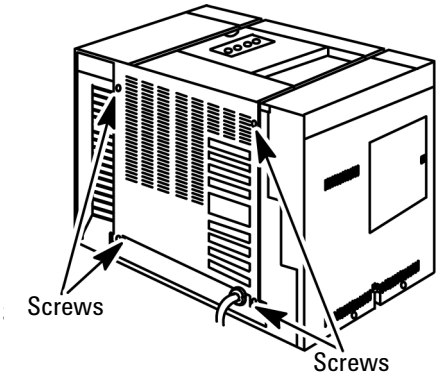
7. Remove the two screws securing the left side panel along its bottom edge.



8. Slide the left side panel towards the rear of the instrument and lift.
9. Remove the right side panel by removing four screws: two each along its top and bottom edges.



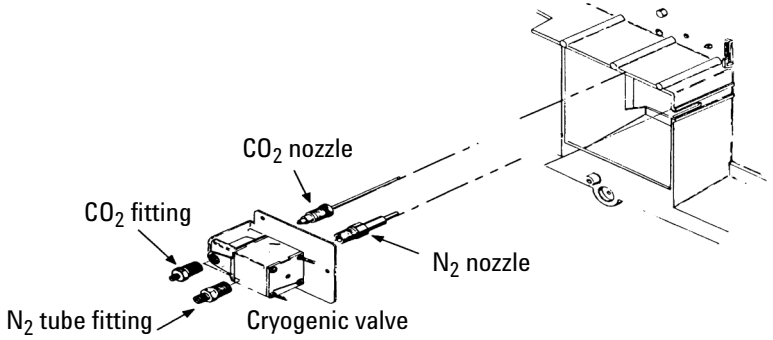
10. Remove the back cover of the instrument by removing four screws and sliding the cover off the rear of the instrument.



Install the Cryogenic Valve

Caution The insulation on the GC is made of refractory ceramic fibers (RCF). Ventilate your work area. Wear long sleeves, gloves, safety glasses, and a disposable dust/mist respirator. Dispose of insulation in a sealed plastic bag.

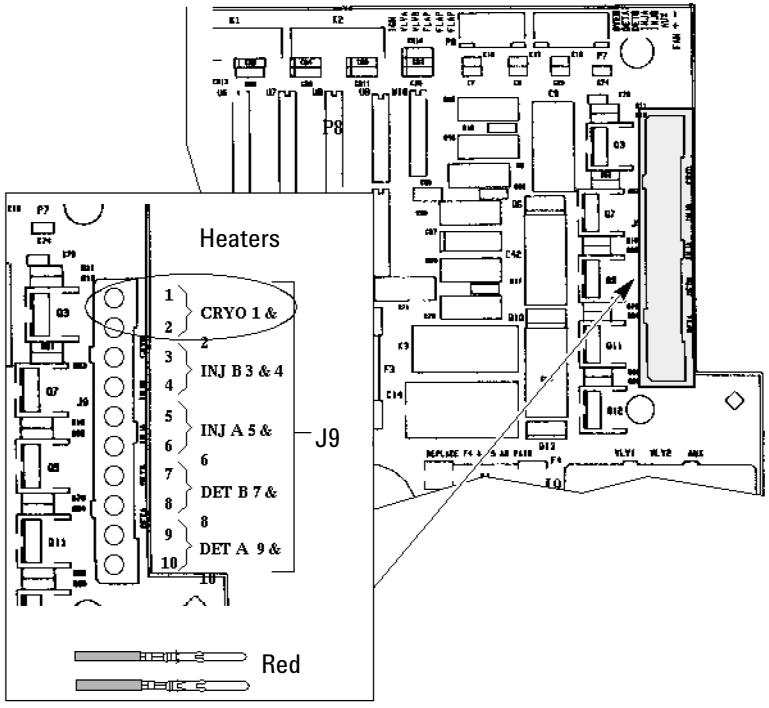
1. Using a screwdriver, pierce the oven insulation covering the cutout for the cryo nozzle.
2. Cover the open end of the cryo nozzle tubing, then carefully insert the cryo valve assembly so that the nozzle slides into the oven. Secure the valve assembly onto the three mounting studs using a flat washer and an M4 nut on each.



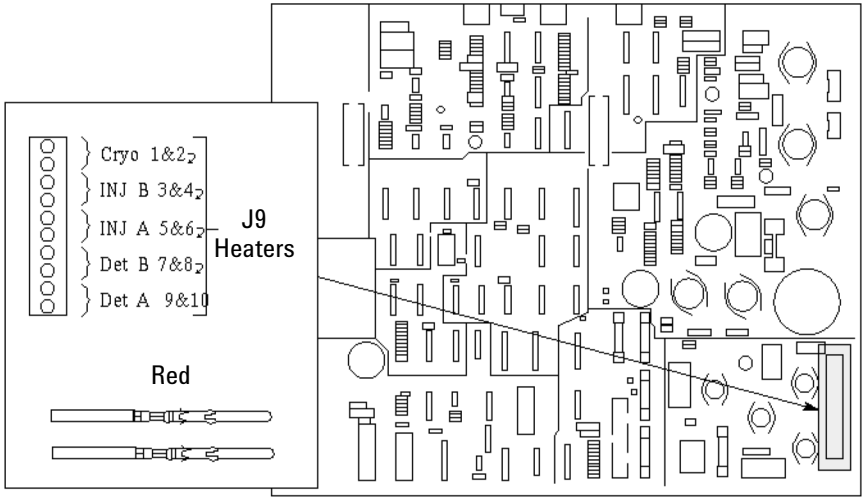
3. Route the two valve leads through the space between the oven and the mainframe, across the rear of the instrument, to the main circuit board.

Insert lead pins into the plug connected at receptacle J9; disconnect the plug, then insert the pins in the cryo locations on J9.

J9 Location, 4890 and 5890 GCs

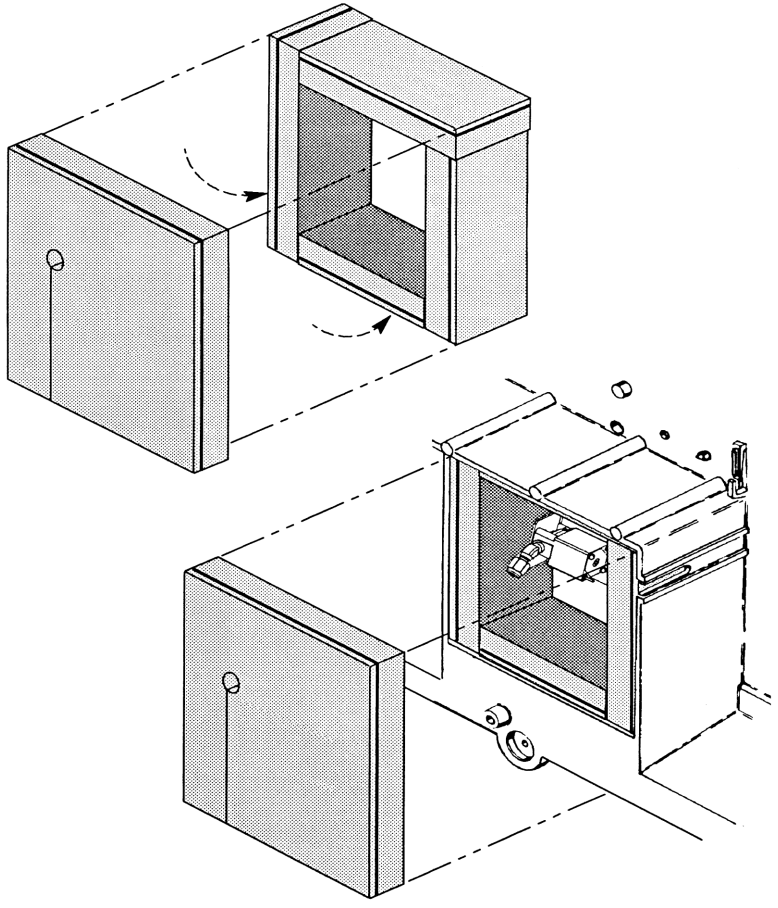


J9 Location, 5890 GC



4. Position the pieces of insulation into the cryogenic valve cavity as shown.

WARNING The plastic-coated side tags faces toward the valve.



Restore Your GC to Operating Condition

1. Reinstall the covers.
2. Connect the cryo valve to your cryogenic source as described in your *Getting Started* (4890 Series GC), *Agilent 5890 Shelf Reference*, or *Site Prep/Installation* (5890 SERIES II GC) manual.

Agilent Technologies

Printed on recycled paper.

This product is recyclable.

Agilent Technologies, Inc.
Printed in USA Dec 2000

19239-90137