

Installation Guide

**Heater Interface Cable for Mass Sensitive Detector
Accessory G1590A**



Agilent Technologies

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*Installation Guide - Heater Interface Cable
for the HP Mass Selective Detector.*

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Safety Information

The Agilent Technologies 6890 Gas Chromatograph 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 6890 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. The battery contained in this instrument is recyclable.

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.



Indicates a hot surface



Indicates earth (ground) terminal

Sound Emission Certification for Federal Republic of Germany

Sound pressure $L_p < 68$ 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)

Overview

This document describes the procedure for installing a heater interface cable for the Agilent 5973 Mass Selective Detector (MSD) on the Agilent 6890 Gas Chromatograph (GC). Before following this procedure, refer to the safety information on the inside front cover.

Parts list

- Actuator solenoid bracket
- Two screws for attaching the actuator solenoid bracket to the GC
- Auxiliary zone/valve box harness
- Heated zone extension cable
- APG remote cable, 9M/9M
- MSD ship kit

Tools

- T-20 Torx driver
- Electrostatic protection such as a grounded wrist strap (part no. 9300-0969 for small wrists, 9300-0970 for large wrists)

Steps

If you do not have a valve box, complete all five steps. If your GC has a valve box, you can skip step 3.

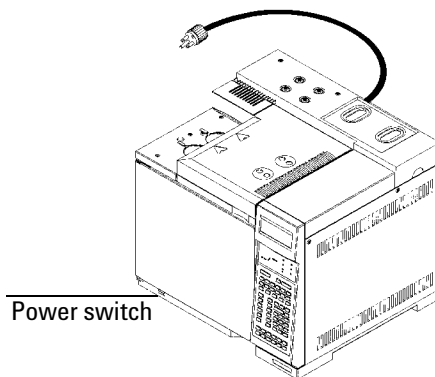
1. Preparing the GC
2. Preparing the bracket
3. Installing the bracket assembly on the main board
4. Routing the heated zone extension cable
5. Restoring the GC to operating condition

Preparing the GC

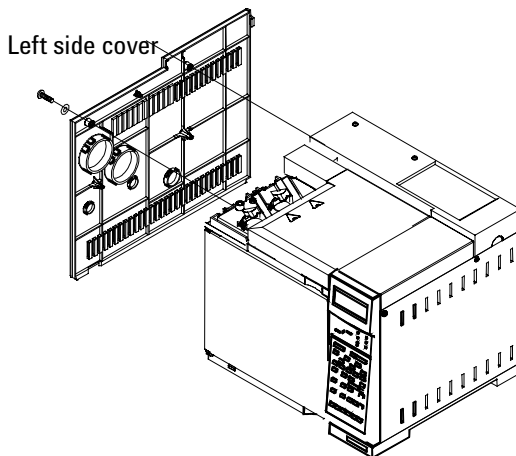
WARNING

Hazardous voltages are present in the mainframe when the GC power cord is plugged in. Avoid a potentially dangerous shock hazard by unplugging the power cord before removing the side panels.

1. Turn off the GC and unplug the power cord. Allow time for all heated zones to cool, then turn off supply gases at their sources.



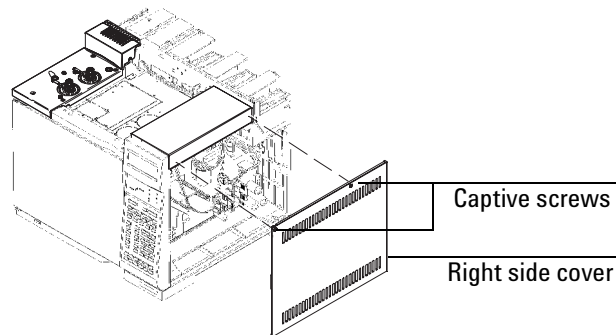
2. Remove the left side cover. Loosen the two captive screws on the top edge with a T-20 Torx driver. Slide the cover to the rear, then lift it up and off.



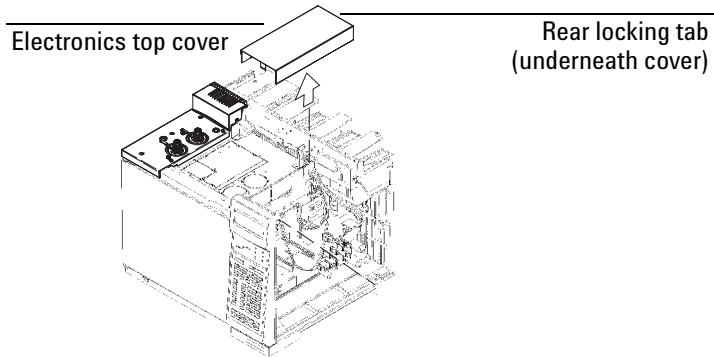
Caution

Board components can be damaged by static electricity. Use a properly grounded static control wrist strap when removing the electronics covers.

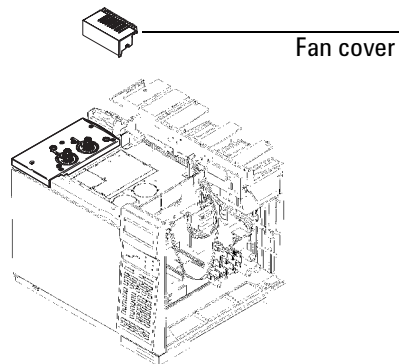
3. Raise the Detector cover (gray plastic top cover with the holes and ventilation slots) to the vertical position. Examine the hinge in the right rear corner.
 - If the hinge is a metal bracket attached to the oven top, pull the clip at its top toward you to release the hinge pin. Push the pin to the left to release the cover. Raise the right side of the cover and remove it.
 - If there is no metal hinge bracket, raise the right side of the cover and remove it.
4. Remove the right side cover. Loosen the two captive screws on the top edge with a T-20 Torx driver. Slide the cover to the rear and lift it off.



5. Remove the electronics top cover. Press the rear locking tab toward the front of the GC while lifting the back of the cover. Slide the cover back, up, and out of the GC.

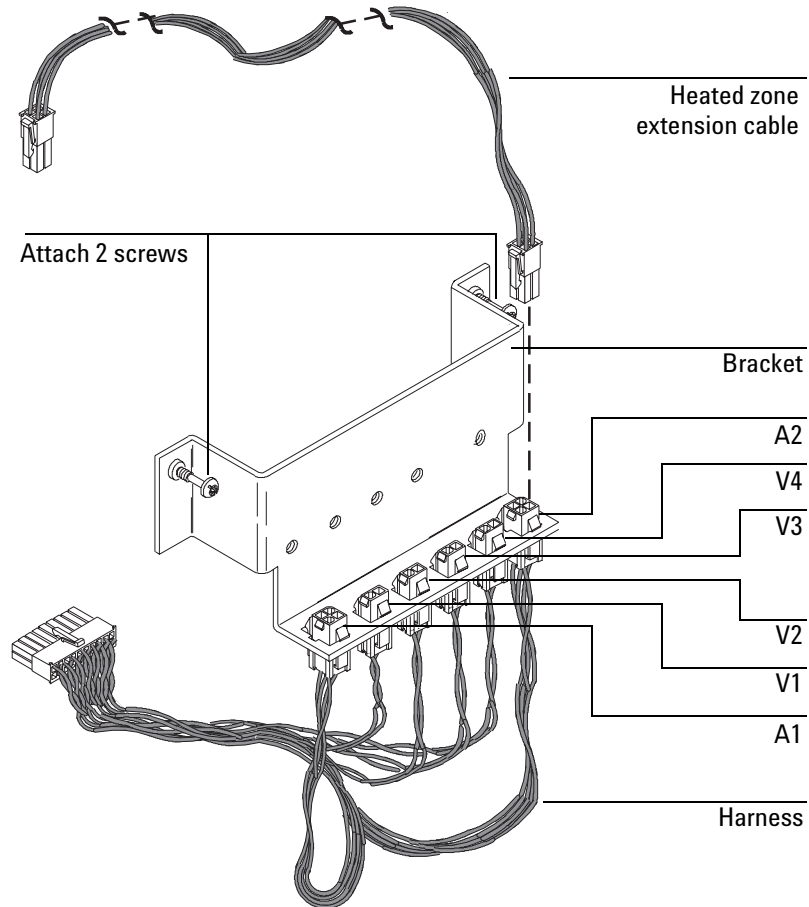


6. Remove the fan cover.
 - a. Loosen the screw on the right side of the fan cover.
 - b. Slide the cover to the right to disengage it from the left mounting post.
 - c. Lift the cover up and off.



Preparing the bracket

1. If not installed, attach two screws to the solenoid bracket as shown.
2. Attach the heated zone extension cable to the A2 connector on the actuator solenoid bracket.



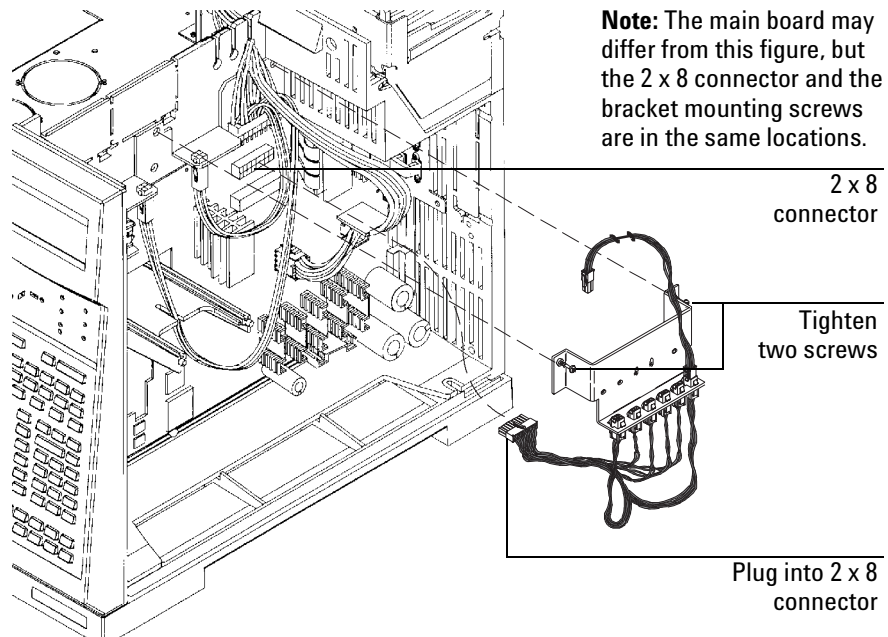
Installing the bracket assembly on the main board

If your GC has a valve box installed, you can skip this section.

Caution

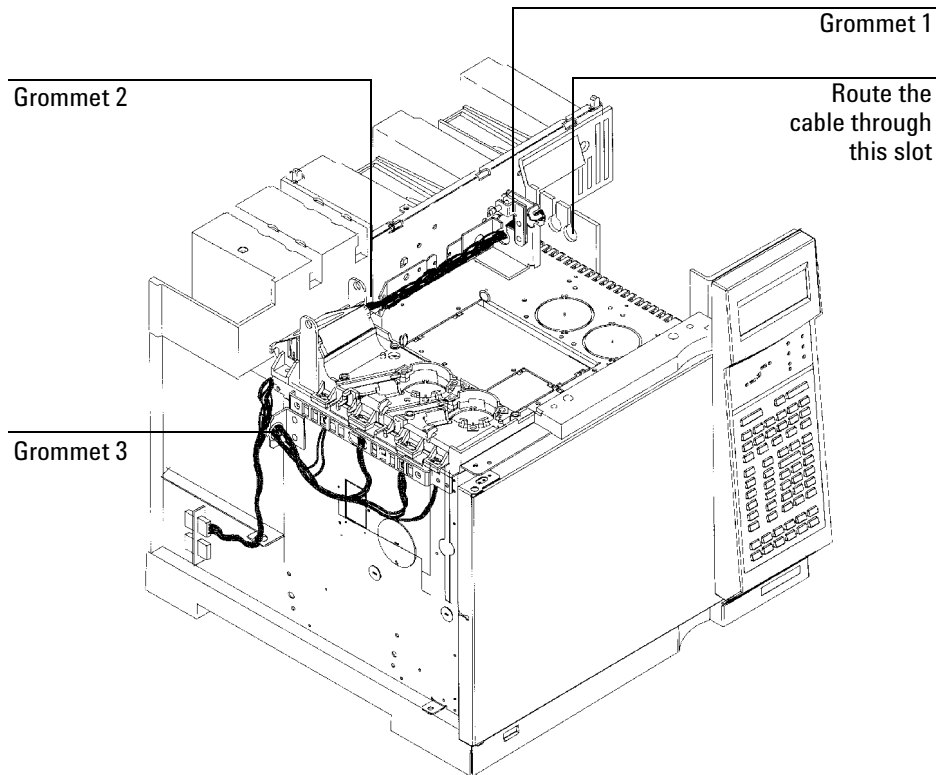
Board components can be damaged by static electricity. Use a properly grounded static control wrist strap when removing the electronics covers.

1. Connect the solenoid bracket assembly to the GC by installing and tightening the two screws with a T-20 Torx driver. Be careful not to crimp or break any of the wires connected to the mainboard.
2. Locate the 2 × 8 connector on the main board. Plug the harness into the connector.



Routing the heated zone extension cable

1. Route the heated zone extension cable through the slot shown.
2. Route the cable through the three plastic grommets. Grommets 1 and 2 are on the oven top; grommet 3 is on the left side of the GC.
 - a. Squeeze the lipped end of grommet 1 and pull it away from the bracket.
 - b. Locate the slit in the grommet.
 - c. Place the heated zone extension cable in the grommet.
 - d. Push the grommet into the bracket.
 - e. Repeat these steps for grommets 2 and 3.



Restoring the GC to operating condition

1. Reinstall the fan cover.
2. Reinstall the left side cover.
3. Reinstall the detector cover.
4. Reinstall the right side cover.
5. Reinstall the electronics top cover.
6. Plug in the power cord and turn on the GC.



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This product is recyclable.

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