

Installation Guide

Split/Splitless Inlet with Manual Pneumatics Control on 6890 GC Accessory G1574A



© Agilent Technologies 2001

All Rights Reserved. Reproduction, adaptation, or translation without permission is prohibited, except as allowed under the copyright laws.

Part number G1574-90307

First Edition, APR 2001

Replaces Part No. G1574-90300, Installation Guide, Split/Splitless Inlet with Manual **Pneumatics Control.**

Printed in USA

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 Dearee 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 earth (ground) terminal

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

Overview

This section reviews the procedure for installing a nonEPC split/splitless inlet on an Agilent 6890 Gas Chromatograph (hereafter referred to as the GC). Before you begin, review the safety information found on the inside of the front cover.

A G1585A must be installed prior to this installation.

Parts List

- One nonEPC split/splitless inlet
- Two machine screws (M4 × 12 mm long)
- Two hex nuts with lockwashers
- Three pieces of insulation
- One lower insulation cover
- One split/splitless label plate

Required Tools

- 7-mm nut driver
- T-20 Torx screwdriver

Steps

- 1. Preparing the GC
- 2. Installing the inlet
- 3. Installing the flow manifold
- 4. Installing the insulation cup
- 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.



2. Remove the injection port cover. Loosen the five captive screws with a T-20 Torx screwdriver until you are able to lift off the cover.

or

Remove the tray mounting bracket by loosening the six screws at the top of the bracket and the two screws on the left side of the GC and lifting it off.

- 3. 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.
- 4. Remove the left side cover. Loosen the two captive screws and lift it off.

Installing the inlet

1. From the front of the instrument, locate the inlet chassis.



2. Remove the round metal cutout in the front or back inlet position, if necessary. Insert a screwdriver blade into the slot in the cutout and move it back and forth until the cutout breaks free from the sheet metal.



3. Remove the die-cut insulation plug from the front or back inlet position, if necessary.



4. Carefully remove the scribed circle of insulation from the oven top to create an opening into the oven, if necessary.

Method 1: Use a sharp knife to cut out the insulation using the scribed circle as a guide.



Method 2: Pierce the insulation with a screwdriver. Rotate the screwdriver around the scribed circle to remove excess insulation.

Clean up any pieces of insulation that fall inside the oven.

5. Place the inlet in the front or back position so that the large nut and the heater/sensor cable are in the troughs in the inlet chassis and the three captive screws line up with the holes in the oven top. Tighten each screw once with the T-20 Torx screwdriver until the inlet is properly aligned. Tighten each screw again until snug.



6. From the left side of the GC, locate the heater/sensor wire and its corresponding connector. Tuck the heater/sensor wire underneath the clip at the side of the GC and connect it to the nearest square connector.



Installing the flow manifold

1. If you are installing an inlet in the back position, remove the flow bezel bracket. Remove the hex nut at the bottom of the bezel support bracket using a 7-mm nut driver. Set it aside.



2. Remove the flow-control label plate from the inlet front or back position on the flow bezel. The plate is glued in place and is removed by pushing through the openings in the back of the flow bezel and then pulling off the loosened plate.



- 3. Remove the (25-mm) screw from the flow carrier. Position the flow module so that the hole in its bracket lines up with the holes in the carrier.
- 4. Place the flow module on the two threaded studs on the back of the flow bezel.
- 5. Secure the flow manifold to the flow carrier with the screw you removed in Step 3. Tighten with a T-20 Torx screwdriver until snug.
- 6. Secure the manifold to the flow bezel by installing two hex nuts. Tighten using the 7-mm nut driver. Refer to step 1 for mounting in the back position.



Installing the flow manifold

7. Locate the 1-by-2 solenoid cable and its corresponding connector and plug the cable into the connector.



- 8. Place the chemical filter in the bracket.
- 9. Route the stainless steel tubing and the solenoid valve cable.



10. Attach the self-adhesive split/splitless flow label plate to the front of the flow bezel in either the front or the back position.



11. If you removed the bezel bracket in Step 1, replace it.

Installing the insulation cover

1. Place the insulation in the insulation cup.



2. From inside the oven, install the two heat-resistant screws in the cutouts adjacent to the inlet. Do not tighten the screws. Push the insulation cup over the front or back inlet until it is flush with the oven top and rotate it until the slots in the cup hook over the screws. Tighten the screws with a Torx T-20 screwdriver.



Restoring the GC to operating condition

- 1. Reinstall the flow carrier cover and replace the two screws.
- 2. Replace the fan cover.
- 3. Reinstall the injection port cover or tray bracket.
- 4. Plug in and turn on the GC.

The GC is aware that a nonEPC inlet is present—it looks for the heater/ sensor connections—but does not know what kind. You must supply this information through configuration:

a. Press [Config], select Instrument, and [Enter].

CONFIG INSTRUMENT		
Serial#	US00100001	
Auto prep run	Off	
F inlet type:	<u>S/SL <</u>	
B inlet type:	S/SL	

b. Select the inlet and press [Mode/Type].

FRONT INLET TYPE
Purged packed
*Split/splitless
Cool on-column <
Unknown
None

- c. Select a type and [ENTER].
- d. Press [Config][Front Inlet] or [Back Inlet].

CONFIG FRONT IN	LET	<u> </u>
Gas type	He	<
		- I
L		

e. Press [Mode/Type], select a gas, and [Enter].

Restoring the GC to operating condition





This product is recyclable.

Agilent Technologies, Inc. Printed in USA APR 2001

