

Agilent CrossLab Start Up Services

Agilent 7697A Headspace Sampler Site Preparation Checklist

Thank you for purchasing an instrument from **Agilent Technologies**. CrossLab Start Up is focused on helping customers shorten the time it takes to start realizing the full value of their instrument investment.

Correct site preparation is the key first step in ensuring that your instruments and software systems operate reliably over an extended lifetime. This document is an **information guide and checklist** prepared for you that outlines the supplies, space, and utility requirements for the system set up in your lab.

Introduction

Customer Information

- If you have questions or problems in providing anything described as part of *Customer Responsibilities* below, please contact your local Agilent or partner support / service organization for assistance prior to delivery. In addition, Agilent and/or its partners reserve the right to reschedule the installation dependent upon the readiness of your laboratory.
- Should your site not be ready for whatever reasons, please contact Agilent as soon as possible to re-schedule any services that have been purchased.
- Other optional services such as additional training, operational qualification (OQ) and consultation for user-specific applications may also be provided at the time of installation when ordered with the system but should be contracted separately.
- Please refer to the other peripheral products (i.e., sampling devices, etc.) for site preparation requirements.

Customer Responsibilities

Ensure that your site meets the following specifications before the installation date.
For details, see specific sections within this checklist, including:

- The necessary laboratory or bench space is available.
- The required **environmental conditions for the lab** as well as laboratory gases, tubing.
- The **power requirements** related to the product (e.g. **number & location** of electrical outlets).
- The **required operating supplies** necessary for the product and installation.
- While Agilent is delivering **Installation and Introduction** services, users of the instrument should be present throughout these services; otherwise, they will miss important operational, maintenance and safety information.
- Please consult the **Special Requirements and Other Considerations** section below for other product-specific information
- For more details, please consult the product-specific site preparation or pre-installation manual.

Important Customer Web Links

- To access **Agilent training and education**, visit <http://www.agilent.com/chem/training> to learn about training options, which include online, classroom and onsite delivery. A training specialist can work directly with you to help determine your best options.
- To access the **Agilent Resource Center** web page, visit <https://www.agilent.com/en-us/agilentresources>. The following information topics are available:
 - Sample Prep and Containment
 - Chemical Standards
 - Analysis
 - Service and Support
 - Application Workflows
- The **Agilent Community** is an excellent place to get answers, collaborate with others about applications and Agilent products, and find in-depth documents and videos relevant to Agilent technologies. Visit <https://community.agilent.com/welcome>
- Videos about specific preparation requirements for your instrument can be found by searching the **Agilent YouTube** channel at <https://www.youtube.com/user/agilent>
- **Need to place a service call?** [Flexible Repair Options | Agilent](#)

Site Preparation

Dimensions and Weight

Identify the laboratory bench space before your system arrives based on the table below. Pay special attention to the total height and total weight requirements for all system components you have ordered and avoid bench space with overhanging shelves. Also pay special attention to the total weight of the modules you have ordered to ensure your laboratory bench can support this weight.

Special notes

- The second measurement listed in 'depth' and 'width' included the transfer line dimension.
- See images on last page.

The following table provides dimensions and weight requirements.

Instrument Description	Weight		Height		Depth		Width	
	Kg	lbs.	cm	in	cm	in	cm	in
G4556A, 7697A Headspace Sampler	37	84	60.6*	23.9*	63.6 68	25 26.8	50.9 62.9	20 24.8
G4557A, 7697A Headspace Sampler with Tray	46	101	80*	31.5*	63.6 68.9	25 27.1	50.9 66.5	20 26.2

*The 12 vial model headspace sampler requires 23 cm (9 in.) clearance above the unit for operational access, and the 38 cm (15 in.) clearance above the unit for maintenance access. The 111 vial model requires 11 cm (5 in.) above the unit for maintenance access.

Equipment Positioning on the Bench



Environmental Conditions

Operating your instrument within the recommended temperature ranges ensures optimum instrument performance and lifetime.

Special notes

- Performance can be affected by sources of heat & cold, e.g. direct sunlight, heating/cooling from air conditioning outlets, drafts and/or vibrations.
- The bench or supporting surface must be vibration free.
- The sites ambient temperature conditions must be stable for optimum performance.

The following table may help you calculate the additional BTUs of heat dissipation from this new equipment. Maximums represent the heat given off when heated zones are set for maximum temperatures.

Instrument Description	Operating Temperature Range °C (F)	Operating Humidity Range %	Heat Dissipation (BTU)
G4556A, 7697A Headspace Sampler	10 to 40 °C (50 to 104 °F)	5 to 95% (noncondensing)	2900 BTU
G4557A, 7697A Headspace Sampler with Tray	10 to 40 °C (50 to 104 °F)	5 to 95% (noncondensing)	2900 BTU

Exhaust Venting Requirements

- During normal operation of the instrument, some of the carrier gas and sample vents outside the instrument through a vent on the back panel. If any sample components are toxic or noxious, or if hydrogen is used as the carrier gas, the exhaust must be vented to a fume hood. Place the instrument in the hood or attach a large diameter venting tube to the outlet for proper ventilation. To further prevent contamination from noxious gases, attach a chemical trap to the vent(s).

Power Consumption

Special notes

- If a computer system is supplied with your instrument, be sure to account for those electrical outlets.

Instrument Description	Line Voltage and Frequency V, Hz	Maximum Power Consumption VA	Maximum Power Consumption W
G4556A, 7697A Headspace Sampler	Americas: 120 single phase (-10% / +10%) 50/60 Hz	850	
G4556A, 7697A Headspace Sampler	200/220/230/240 single/split phase (-10% / +10%) 50/60 Hz	850	
G4557A, 7697A Headspace Sampler, with Tray	Americas: 120 single phase (-10% / +10%) 50/60 Hz	850	
G4557A, 7697A Headspace Sampler with Tray	200/220/230/240 single/split phase (-10% / +10%) 50/60 Hz	850	

Required Operating Supplies by Customer for Installation

Special notes

- For information on Agilent consumables, accessories, and laboratory operating supplies, please visit: <https://www.agilent.com/en-us/agilentresources>

Item Description (including Dimensions etc.)	Vendor's Part Number (if applicable)	Recommended Quantity
Universal/External split vent trap for vent line	Agilent / RDT-1020	1
Tubing cutter for 1/8 copper tubing for gas supplies	Agilent / 8710-1709	1
Tubing, copper, 1/8-inch, precleaned, 12 ft for gas supplies	Agilent / 5021-7107	1
1/8 Union Tee Brass Swagelok	Agilent / 0100-0090	2
1/8 Nut & Ferrule Set Brass Swagelok	Agilent / 5181-7489	2
1/8" Ball Valve	Agilent / 0100-2144	2

Special Requirements and Other Considerations

GC Inlet Compatibility

	Inlet Type	GC Type							
		8890	8860	7890	Intuvo	6850	7820	5975T	6890
Recommended	S/SL	A,F,G	A,F,G	A,C,D	A,E	A	A	A,C	A
	MMI	A,F,G	X	A,C,D	A,E	X	X	X	X
	VI	A	X	A	X	X	X	X	A
Supported/ Not Recommended	S/SL	B	B	B	X	B	B	B	B
	MMI	B	X	B	X	X	X	X	X
	CoC	B	B	B	X	B	X	X	B
	PP	A,B	A,B	A,B	X	A,B	A,B	X	A,B
Not Supported	PTV	X	X	X	X	X	X	X	X

Key

- A. – Fused silica thru septum or connected to interface, GC controlling carrier (PP inlet operated in flow control ONLY).
 - B. – Fused silica thru septum, HSS controlling carrier (Op200 or G4562A).
 - C. – G3521A, 7890 S/SL MMI Weldments for HSS (pre-cut inlet weldment assembly for through-the-septum connection)
 - D. – G3520A, 7890 Transfer Line Interface Accessory (side-connection scheme enables 7693A Tower and HSS transfer line on one inlet)
 - E. – G3969A, Intuvo 9000 Transfer Line Interface Accessory (side-connection scheme enables 7693A tower and HSS transfer line on one inlet)
 - F. G3449A, 8890/8860 Transfer Line Interface Accessory (side-connection scheme enables 7693A Tower and HSS transfer line on one inlet)
 - G. G3552A, 8890/8860 S/SL MMI Weldment for HS (pre-cut inlet weldment assembly for through-the-septum connection)
- X – Not Applicable

SPECIAL INTERFACE NOTE:

- G3520A/G3969A/G3449A interface option is required to allow both HSS transfer line connection and operation of a 7683, 7693, or 7650 on the same S/SL or MMI inlet. The G3520A is only compatible with the 7890A/B GC S/SL and MMI inlet and can be installed on the front or rear inlet. (For Intuvo the accessory is G3969A. For 8890/8860 the accessory is G3449A)

- G3520A/G3449A interface option is required to allow the 7650 to be in the rear position and the HSS in the front position. Otherwise, the 7650 must in the front position with the HSS in the rear position.
- G3521A/G3552A interface requires that the 7697 transfer line goes through the inlet septa and replaces the on-site FSE hardware modification make to inlet insert assembly.

GC Selection

Carrier Gas Type and Purity: Special Notes

1. Agilent recommends that carrier gases be 99.9995% pure. See the table below for acceptable carrier types.
2. Agilent also recommends using high quality traps to remove hydrocarbons, water, and oxygen.
3. When using hydrogen (H₂) as the carrier gas or fuel gas, be aware that hydrogen gas can flow into the GC oven and create an explosion hazard. Therefore, be sur that the supply is turned off until all connection is made and ensure the inlet and detector column fittings are either reconnected to a column or capped at all times when hydrogen gas is supplied to the instruments.
4. Hydrogen is flammable. Leaks, when confined in an enclosed space, may create a fire or explosion hazard. In any application using hydrogen, leak test all connections, lines and valves before working on the instrument.

Carrier gas requirements	Purity	Notes
Helium	99.9995%	Hydrocarbon free
Hydrogen	99.9995%	SFC grade
Nitrogen	99.9995%	
Argon (95%) / Methane (5%)	99.9995%	

Vial Pressurization Gas Type and Purity: Special Notes

1. Never use flammable gas for vial pressurization. Flammable gases, such as hydrogen and argon/methane, can create an explosion hazard when used for vial pressurization. The 7697A Headspace Sampler does not support use of flammable gases for vial pressurization.
2. Agilent recommends that vial pressurization gases be 99.9995% pure. See the table below for acceptable vial pressurization gas types.
3. Agilent also recommends using high quality traps to remove hydrocarbons, water and oxygen.

Carrier gas requirements	Purity	Notes
Helium	99.9995%	Hydrocarbon free
Nitrogen	99.9995%	

Service Engineer Review (Optional)

Service Engineer Comments

If the Service Engineer completed a review of the Site Preparation requirements with the customer, the Service Engineer should complete the following Comments section. Both the Service Engineer and the customer should complete the Site Verification section below.

If there are any specific points that should be noted as part of performing the site preparation review or other items of interest for the customer, please write in this box.

Site Preparation Verification

Service Request Number:

Date of Review:

Service Engineer Name:

Customer Name:

Service Engineer Signature:

Customer Signature:

Total number of pages in this document: