

## 7250A Series MSD and MassHunter GC/MS Acquisition Familiarization Checklist

Thank you for purchasing an Agilent GC/MS System Solution. This checklist is used to provide a guide of the aspects of your instrument and software that will be covered when Familiarization service has been included in your order. This checklist will be completed at the end of the service and provided to you as a record of the familiarization.

### Customer Information

Familiarization is intended to give operators a basic overview of the operation and maintenance of new instruments and software systems and is not designed to be a substitute for a full operator-training course.

Further training, advice and consultation can be found at [www.agilent.com/chem/education](http://www.agilent.com/chem/education).

The manuals/media delivered with the system will be used as a guide during familiarization.

- Please make sure they are available.
- Please confirm that checklist tasks are covered during familiarization.

Specifically, not Included in the Familiarization service (unless explicitly ordered):

- Training on basic PC operation, peripherals and/or operating systems.
- Training to groups larger than five people.
- Customized method/application development and/or testing of customer samples.
- Macro programming, customized reports, databases etc. unless explicitly stated.
- Fundamentals/theory of instrument techniques unless explicitly stated.

### Service Engineer's Responsibilities

- Install all user manuals and tools relevant to the system before starting Familiarization:  
*Agilent GC and GC/MS User Manuals & Tools*  
*Agilent 7250A Series Hardware User Manuals*  
*Agilent GC/MS Software Information and Manuals*
- Print out all pages of the document and complete sections that relate to the system being installed.
- Discuss the familiarization topics and agree upon the focus areas based on the customer's level of experience with GC/MS:
- Complete empty fields with the relevant information.
- Complete the relevant checkboxes in the checklist using a "X" or tick mark "✓" in the checkbox.
- Check the "Not Applicable" check boxes or specify "N/A" (where appropriate) to indicate optional services or product functionality not included.
- Complete the "Service Review" and "Service Completion" sections together with the customer.

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### Additional Instruction Notes

Familiarization is broken out into three separate checklists based on the user's experience level. Use **only** the checklist that matches the customer's level of experience with GC/MS. If time is available after relevant checkboxes have been completed from one checklist, additional checkboxes from the other two checklists can be included.

This checklist covers the following model(s):

Description	Bundle	Tracking
7250 GC/MS-High Resolution QTOF Bundle	G7250AA	G7250A

### User Familiarization

#### General Familiarization

- Provide customer with overview of their system and its components, including QTOF, GC (if applicable), and auto sampler (if applicable), barcode reader (if applicable), vacuum gauging (if applicable), PC configuration, peripherals.
- Identify associated instrument and PC hardware connections (e.g. power, gases, communications, keyboard, mouse, display connections, and printer and LAN interface connections).
- Show where to find resources available (e.g. manuals, guides, Online Help, and videos) for the QTOF and software.
  - Demonstrate how to use "7250 User Manual" (hardware) and "7250 MSD" (software) manual, including the Online Help. Explain benefits of using HTML to search across multiple manuals/guides.
  - Show list of videos available on basic instrument and software how-to tasks.

#### Instrument Start-up and Overview

- Explain how to start up and close down the instruments/modules in the correct order.
- Give overview of QTOF and modes of operation (e.g. Status and Menus).
- Give brief overview of the GC Control Panel. Inform the Customer that all method specific set points can be controlled from the MassHunter GC/MS Acquisition software.
- If an ALS is installed, give a brief overview of the Injector, Tray, and Controller.

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### GC/MS Configuration

- Demonstrate how to configure Online instruments (e.g. QTOF, GC, and Sampler) from Agilent GC/MS Instrument Configuration window.
  - Explain difference between Online and Offline instruments.
- Show desktop icons (Data Acquisition/Instrument Control/QTOF Conditioning) that are created after an instrument has been configured.  
Briefly describe types of data analysis packages available.

### Software Start-up

- Using Windows Explorer, show location of MassHunter GC/MS Acquisition software **C:\GCMS\** and directories for instrument, default data, method, and sequence **D:\MassHunter\GCMS\**
- Demonstrate how to start MassHunter GC/MS Acquisition software.
- Describe method resolution and importance of starting with a Default method.
- Describe the different portions of a method and the importance.
- Demonstrate the Online Help **Help > Help Topics** in MassHunter GC/MS Acquisition.
- Show how to "View demonstration videos" (*under Getting Started*).
- Show location of release notes **Help > View Revision Readme File** and Software Status Bulletin (*see release notes*) in MassHunter GC/MS Acquisition.
- Show where to find which default data analysis package (MassHunter) is to be used for automated data analysis **Help > About**.
- Explain menus and icons in MassHunter GC/MS Acquisition.
- Demonstrate how to switch views between "Instrument Control" and "Tune and Vacuum Control" (*under View menu*).

### EI Tuning

- Describe Autotune and the importance of retaining tuning records.  
Show location of manufacturer-generated Tune Report specific for the customer's MS.
- Demonstrate where to find Tune history.
- Show how to run Autotune.
- Explain how to evaluate the tune report.
- Discuss how to look for signs of air leaks and ion source contamination.
- Discuss when source cleaning is required.
- Demonstrate how to run Manual Tune.

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### Create/Edit Method

- Using **Method > Edit Entire Method** demonstrate how to create a GC/MS method to acquire data in Scan mode.
- Describe steps involved in Edit Entire Method to configure GC and MS parameters.
- Explain benefits of using Gain Factor vs. Relative or Absolute EMV.
- Save method and show directory where the newly created method is saved by default.
- Explain how to modify a GC/MS method in MS versus MS/MS – TOF versus QTOF.
- Demonstrate how to set MS Timed Events to a method.
- Demonstrate how to switch from Standard to Low-Energy EI operation.
- Demonstrate how to import method components from another method (Under Method Menu).

### Run Method

- Demonstrate how to run method to acquire Scan data of OFN sample. If installed, use the autosampler.
- Demonstrate how to run method from amu range 50:300 using OFN sample.
- Explain the benefits of Retention Time Locking (RTL).
- Explain how to create a Retention Time (RT) Locked Method.

### Create/Edit Sequence

- Explain difference between a method and a sequence.
- Demonstrate how to create a sequence.
  - Demonstrate how to add or remove columns in the Sequence Table (if applicable).
- If a barcode reader is installed, show how to enter barcodes in the Expected Barcode column.
- Explain how to use Keywords in a sequence.
  - Add 'Keyword' column to the sequence table and show the list of keywords available.
  - Show how to use MassCal (Mass Calibration) as a keyword.
- Explain how to setup a dual injection sequence (if applicable).

### Run Sequence

- Demonstrate how to run a sequence.
- Demonstrate how to pause and restart a sequence.
- Demonstrate how to edit the sequence during a run.

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- Demonstrate how to position and run a sequence.
- Explain the benefits of 'Append Sequence'.

### Resource Conservation

- Section Not Applicable.**
- Demonstrate how to set up Resource Conservation *Instrument > GC Configuration* and explain its benefits.
  - Show how to synchronize GC and PC clocks. Explain why this is important.
  - Show the different instrument schedule options available.
  - Explain Sleep, Wake, or Conditioning methods and how the GC handles Sleep and Wake.
  - Explain use of *Instrument > Wake* or *Instrument > Sleep* compared to scheduling Wake or Sleep.
  - Explain where to find instrument sleep status (*Instrument Actuals window and GC control panel*).

### Set QTOF Vent Method

- Demonstrate how to create a GC Method on MS Vent *Instrument > Maintenance > Maintenance Actions*.
- Explain how this GC method automatically loads when MS goes into vent mode.

### Parts Finder

- Show how to access Parts Finder (Help > Run Parts Finder) and demonstrate how to use it.

### Maintenance and Diagnostics

- Show how to register on Agilent SubscribeNet to download and order the latest software revision.
- Discuss the safe storage of the software media provided with the system.
- Describe the importance of data back-up and computer image backup.
  - Discuss using Microsoft Backup and Restore as an option.
- Discuss the importance of disabling power management options and utilities that run automatically.
  - Power Options: Put the computer to sleep = **Never**
  - **Turn on** Windows Firewall
  - Notify me when Windows Firewall blocks a new program = **Checked**
  - Windows Update: Check for updates but let me choose whether to download and install them.
- Explain steps required to capture problems/error messages to send to Agilent Technical Support.
- Select **Help > Problem Steps Recorder**.
  - Turn logging on by typing SLOG in the command line and press enter on keyboard. For problems with sequence, also type FULLSEQDEBUG=1 in the command line and press enter on keyboard.
  - Performs steps to reproduce the problem (e.g. run method, run sequence, etc.)
  - After problem, has occurred, type ENDLOG in the command line and press enter on keyboard.



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- Click Stop Record button in the Problem Steps Recorder window.
  - Select **Help > Gather Diagnostic Files** and select the data file, method, and sequence you want to include.
  - Email the compressed diagnostic file to Agilent Technical Support.
- Show where to access the Troubleshooting and Maintenance Manual.
- Show how to access eFamiliarization software and the workflow.
- eFamiliarization is a good overview for Qualitative and Quantitative Analysis.
- Discuss when to perform maintenance on the QTOF and vacuum system.
- Describe how to set EMF counters.
- Describe differences in installing and removing the ion source. (*Refer to the Operation Manual*).
- Describe how to clean ion source.
- Explain importance of the monitors.

### **Service Review**

- Complete the Service Engineer Comments section below, if applicable.
- Explain how to log a software service call, support services available.
- Perform a review of Agilent's web site and web links listed below (if internet is available).
- Explain Agilent's software warranty policy.
- Explain software licensing or authorization codes applicable to the software.
- Advise customer of additional software training options available.

### **Other Important Customer Web Links**

- How to get information on your product: Literature Library <http://www.agilent.com/chem/library>
- Need to know more? [www.agilent.com/chem/education](http://www.agilent.com/chem/education)
- Need technical support, FAQs? [www.agilent.com/chem/techsupp](http://www.agilent.com/chem/techsupp)
- Need supplies? [www.agilent.com/chem/supplies](http://www.agilent.com/chem/supplies)
- Software Status bulletins, patches, drivers, software utilities [www.agilent.com/chem/techsupp](http://www.agilent.com/chem/techsupp)



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**Service Engineer Comments (optional)**

*If there are specific points you wish to note as part of the installation or items of interest for the customer, please write in this box.*

Empty box for service engineer comments.

**Service Completion**

Service request number \_\_\_\_\_ Date service completed \_\_\_\_\_

Agilent signature \_\_\_\_\_ Customer signature \_\_\_\_\_

Number of pages \_\_\_\_\_