



Agilent 8890GC Firmware

## Release Notes – Revision 3.2.5.4

# Notices

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## Firmware/Software Revision

This guide is valid for the 3.2.5.4  
revision of *Agilent 8890GC Firmware*

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# 1

## Document History

The table below lists all changes that have been made to this document.

| Date                            | Version   | Description                             |
|---------------------------------|-----------|-----------------------------------------|
| 6th Feb 2020                    | Rev 1.00  | Initial release.                        |
| 29th May, 2020                  | Rev 1.1   | Added 2.1.0 details.                    |
| 14th August, 2020               | Rev 1.2   | Added 2.1.1.7 details.                  |
| 28th Sep, 2020                  | Rev 1.2.1 | Modified for external use.              |
| 23rd Nov, 2020                  | Rev 1.3   | Added 2.2.0.287 details.                |
| 6th January, 2021               | Rev 1.4   | Added 2.2.1.4 details.                  |
| 28th January 2021               | Rev 1.5   | Added 2.2.2.4 details                   |
| 17th March 2021                 | Rev 1.6   | Added 2.3.0.203                         |
| 20th April 2021                 | Rev 1.7   | Added 2.3.1.6                           |
| 19th July 2021                  | Rev 1.7.1 | Added SR 2.3.2.11                       |
| 30th July 2021                  | Rev 1.7.2 | Added SR 2.3.3.6                        |
| 1st November 2021               | Rev 1.7.3 | Added 2.4.0.307                         |
| 27 <sup>th</sup> January 2022   | Rev 1.7.4 | Added 2.4.1.10                          |
| 13 <sup>th</sup> May 2022       | Rev 2.0   | New document format.<br>Added 2.5.0.258 |
| 13 <sup>th</sup> October 2022   | Rev 2.01  | Added 2.5.1.9 Hot Fix                   |
| 9 <sup>th</sup> January 2023    | Rev 2.02  | Added 2.6.0.306                         |
| 8 <sup>th</sup> May 2023        | Rev 2.03  | Added 2.7.0.207                         |
| 15 <sup>th</sup> September 2023 | Rev 2.04  | Added 2.8.0.219                         |
| 23 <sup>rd</sup> January, 2024  | Rev 2.05  | Added 2.8.1.6                           |
| 13 <sup>th</sup> May, 2024      | Rev 2.06  | Added 2.9.0.345                         |
| 13 <sup>th</sup> September 2024 | Rev 2.07  | Added 3.0.0.181                         |
| 31 <sup>st</sup> January 2025   | Rev 2.08  | Added 3.0.3                             |
| 17 <sup>th</sup> June 2025      | Rev 2.09  | Added 3.1.0.380                         |
| 10 <sup>th</sup> September 2025 | Rev 2.10  | Added 3.2.0.130                         |
| 7 <sup>th</sup> January 2026    | Rev 2.11  | Added 3.2.2.3                           |
| 26 <sup>th</sup> March 2026     | Rev 2.12  | Added 3.2.3.3                           |
| 31 <sup>st</sup> July 2026      | Rev 2.13  | Added 3.2.5.4                           |

## 2

## Introduction

The purpose of this document is to provide users of the Agilent *8890 Gas Chromatograph* guidance to relevant support documentation that contains further levels of information and detail

**Table 1** Terms and abbreviations used in this document

| Terms | Description                               |
|-------|-------------------------------------------|
| SSB   | Software Status Bulletin                  |
| CDS   | Chromatographic Data System               |
| U     | Update                                    |
| SP    | Service Pack                              |
| HF    | Hotfix                                    |
| SR    | Service Release                           |
| [xx]  | Final Build Numbers of a released product |
| DSA   | Data System Adapter                       |

# 3

## Compatibility

### Supported Agilent Data Systems

OpenLab CDS (2.4 or higher) – current 3.0

OpenLab CDS ChemStation Edition (C.01.10, C.01.09, LTS)

GC/MS MassHunter Acquisition (10.2,10.1, 10.1 SR1 or higher) current 13.1  
(MassHunter 10.0 required to configure 8890 and 8860 GCs)

OpenLab CDS EZChrom Edition (A.4.10, A.04.09.)

### Supported Agilent GC Driver

Agilent GC Driver Current version 4.5.

## 4

## Support Information

- Agilent recommends using always the latest firmware revision of a firmware in order to avoid interoperability issues.
- Generally, Agilent recommends keeping the GC instrument firmware always current.

### **Notes for Agilent 8890 controlled by non-Agilent Chromatography Data Systems (CDS)**

- The 3rd-party CDS software vendor is responsible for compatibility testing with the respective CDS revision.
- The 3rd-party CDS software vendor defines the minimum firmware revision required for CDS compatibility.
- The 3rd-party CDS release notes issued by the respective CDS vendor may use different terminology for the firmware requirements such as "tested firmware", "supported firmware", "firmware requirements", "minimum tested firmware", etc.

### **Waters**

Waters have recently released their latest Agilent driver, instrument Control Framework

(ICF) Version 2.6 Update 2 in Empower 3

For GC Control: This release adds support for Agilent GC and the 7697A Headspace sampler. The supported GCs are:

- 8860 GC
- **8890 GC**
- Intuvo 9000 GC
- 6850 GC
- 6890N GC (Note that 6890A and 6890+ must have had LAN cards added)
- 7820 GC
- 7890A & 7890B GCs
- 7697A Headspace Sampler

NOTE - Be careful to not confuse the Agilent driver, Instrument Control Firmware, (ICF) with the Waters Native driver, ICS, Instrument Control Software. Both are allowed by Waters and both can be installed on the same system at the same time.

### **Thermo Fisher**

Thermo Fisher have recently released their latest Agilent driver, instrument control software  
Chromeleon 7.2

This release adds support for Agilent GC and the 7697A Headspace sampler. The supported GCs are:

- Intuvo 9000 GC
- 6850 GC
- 6890N GC (Note that 6890A and 6890+ must have had LAN cards added)
- 7820 GC
- 7890A & 7890B GCs
- 8860 GC
- **8890 GC**
- 7697A Headspace Sampler

### **OQ/PV - Validation Information**

- If a firmware upgrade has been performed, normally no revalidation of the module/system is required. This is stated in the released Service Note applicable to the release.
- In addition, this information is stated further on in this document.



# 5

## Agilent 8890 GC Firmware – What's new?

What's new in 8890 GC Firmware 3.2.5.4

## 6

## Resolved Issues in revision 3.2.5.4

**The current shipping firmware for the 8890A is 3.2.3.3.**

**Revision 3.2.5.4 is Hot Fix incorporating fixes that were also included in 3.2.4.5.**

*Released 31<sup>st</sup> July 2026*

[http://download.chem.agilent.com/firmware/8890\\_FW\\_3.2.5.4.tgz.gpg](http://download.chem.agilent.com/firmware/8890_FW_3.2.5.4.tgz.gpg)

To download this version, use GC Firmware Update Utility 3.2.8.0 or greater.

*Updating to this firmware does not require instrument revalidation.*

**Service Note Number: D0151342**

| Issue Id | Current Behaviour                                                                                                           | Resolution |
|----------|-----------------------------------------------------------------------------------------------------------------------------|------------|
| 047112   | 8697 sequence aborted after vial 2 complete vial pressurization                                                             | Resolved   |
| 047873   | Align the 8697 sample overlap behavior with 7697                                                                            | Resolved   |
| 048093   | Gather Logs Should Include MF Command Error Info When Headspace Configured                                                  | Resolved   |
| 048561   | Developer Exceptions shown in user logs                                                                                     | Resolved   |
| 048668   | 8890A method parameters are not actually downloaded and applied to GC(with 8697 HS connection but no 8697 HS configuration) | Resolved   |
| 048876   | New style EPC is missing the SF09 Reference rawSTP value in EEPROM, causing 8890A Gas Identification error                  | Resolved   |
| 048911   | New style N2 SSL EPC w/HS High Flow Noise                                                                                   | Resolved   |
| 048912   | New style N2 MMI EPC w/HS High Flow Noise                                                                                   | Resolved   |
| 048920   | PID Updating Incorrectly                                                                                                    | Resolved   |

## 7

## Previous Versions

### 3.2.3.3 8890A Firmware

*This release is installed on currently shipped GCs.  
However both 3.3.4.5 and 3.3.5.4 Hot Fixes have since been released but  
not installed on any 8890 GCs released from the factories.*

Released 26<sup>th</sup> March 2026

[http://download.chem.agilent.com/firmware/8890\\_FW\\_3.2.3.3.tgz.gpg](http://download.chem.agilent.com/firmware/8890_FW_3.2.3.3.tgz.gpg)

To download this version, use GC Firmware Update Utility 3.2.8.0 or greater.

*Updating to this firmware does not require instrument revalidation.*

**Service Note Number: D0145866**

| Issue Id | Current Behaviour                                                                                                                                                                                          | Resolution |
|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| 048135   | New design EPC module sensor error "Pressure Sensor Fault" with vacuum detectors connected when the pressure goes below -6.5psig                                                                           | Resolved   |
| 048182   | Uploading New PID File to be used when connected to a Headspace Sampler using Nitrogen as the carrier/purging gas. The new PID XML file will not initially be available on the GC Firmware Update Utility. | Resolved   |

### 3.2.2.3 8890A Firmware

Released 7<sup>th</sup> January 2026

[http://download.chem.agilent.com/firmware/8890\\_FW\\_3.2.2.3.tgz.gpg](http://download.chem.agilent.com/firmware/8890_FW_3.2.2.3.tgz.gpg)

To download this version, use GC Firmware Update Utility 3.2.8.0 or greater.

*Updating to this firmware does not require instrument revalidation.*

**Service Note Number: D0142458**

| Issue Id | Current Behaviour                                                          | Resolution |
|----------|----------------------------------------------------------------------------|------------|
| 047366   | Gather Logs Does not Work from BrowserUI                                   | Resolved   |
| 047371   | System Checkout is listed under Diagnostic Tests for the 3.2.0.130 release | Resolved   |
| 047495   | Mainframe Test Broken, doesn't turn on relay or flaps                      | Resolved   |
| 047502   | The Max Event number is inconsistent between Datasheet and DSA             | Resolved   |
| 047518   | System Fault in 3.2.0.133 when running sequence                            | Resolved   |

|        |                                                                   |          |
|--------|-------------------------------------------------------------------|----------|
| 047524 | "New Style" EPC pressure sensor fault under vacuum                | Resolved |
| 047525 | Delete invalid HSS messages in Empower Run Log                    | Resolved |
| 047526 | 8890 GC System Fault - Code: 0x00000200                           | Resolved |
| 047530 | H2 Sensor Calibration check not functioning correctly.            | Resolved |
| 047534 | Chassis Fan Fault Error Reported with Fan Rotating Well           | Resolved |
| 047619 | The Max Event number is inconsistent between Datasheet, LUI & BUI | Resolved |

### 3.2.0.130 8890A Firmware

*Released 10<sup>th</sup> September 2025*

[http://download.chem.agilent.com/firmware/8890\\_FW\\_3.2.0.130.tgz.gpg](http://download.chem.agilent.com/firmware/8890_FW_3.2.0.130.tgz.gpg)

To download this version, use GC Firmware Update Utility 3.2.8.0 or greater.

*Updating to this firmware does not require instrument revalidation.*

**Service Note Number: D0137577**

| Issue Id | Current Behaviour                                                                                        | Resolution |
|----------|----------------------------------------------------------------------------------------------------------|------------|
| 045612   | LUI incorrectly displaying text in inlet method pressure check diagnostic test                           | Resolved   |
| 046212   | Printing Peak Evaluation Report- works on edge not on chrome GC                                          | Resolved   |
| 046664   | Headspace EPC Module FW Update Support                                                                   | Resolved   |
| 046665   | Hydrogen Sensor State Machine Refactoring                                                                | Resolved   |
| 046759   | SCD shutdown/quick start not displayed on LUI screen                                                     | Resolved   |
| 046771   | 8697- Lost connection during sequence run even ALS sequence run on another inlet leading to system abort | Resolved   |
| 046828   | Allow user to disable SMB Share                                                                          | Added      |
| 046832   | LUI-'apply' button does not work on the SCD Change Oil EMF                                               | Resolved   |
| 046867   | Flowpath not displayed correctly on the BUI                                                              | Resolved   |
| 046875   | System Checkout-Detector signal not displayed on real-time plot                                          | Resolved   |
| 046880   | Power Fail Automated Blank Run should only try once                                                      | Resolved   |
| 046883   | Set Headspace Inlet to back apply failed                                                                 | Resolved   |
| 046895   | Rename mass spec transfer line signals                                                                   | Resolved   |

|        |                                                                                                                                                        |          |
|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| 046906 | BrowserUI: update code to add the y-axis label on RT plot                                                                                              | Resolved |
| 046910 | 8850/8890/9000 LUI - Disable start button when instrument is in sleep mode                                                                             | Resolved |
| 046918 | BrowserUI_One event type not display                                                                                                                   | Resolved |
| 046943 | BrowserUI: In Method\Events 'Front Detector - undefined' is a Setpoint option for AO Signal Source. Unclear - Confusing.                               | Resolved |
| 046959 | PreRun Flow Test Log Message                                                                                                                           | Resolved |
| 046973 | Request signal for oven door sensor.                                                                                                                   | Added    |
| 047014 | BUI Column holdup time is incorrectly reporting out of range                                                                                           | Resolved |
| 047015 | 8890 LUI - Unconfiguring a column results in missing fields                                                                                            | Resolved |
| 047037 | Detector Evaluation Report not present - undefined error fw 3.0.3.21                                                                                   | Resolved |
| 047062 | LUI configuration allows invalid characters for hostname                                                                                               | Resolved |
| 047067 | Typo in MS configuration high vacuum pump type                                                                                                         | Resolved |
| 047080 | BUI doesn't load, instruments in broken state after FW update.                                                                                         | Resolved |
| 047089 | Request to show inlet pressure during column bakeout maintenance procedure                                                                             | Resolved |
| 047096 | Unable to change GC hostname from LUI                                                                                                                  | Resolved |
| 047107 | Include instrument name in Browser title bar                                                                                                           | Added    |
| 047114 | Lower range request for out segment of composite columns configuration                                                                                 | Resolved |
| 047201 | LUI/BUI missing Solvent Wash Mode A-A2, B-B2 for SCV Transfer turret                                                                                   | Resolved |
| 047218 | Ability for PSE to open GC logs                                                                                                                        | Resolved |
| 047249 | Update PID values for the thermal desorption                                                                                                           | Resolved |
| 047251 | GC Firmware update tool revision 3.1.30.0 report error "Nothing to update ...." when upgrade 7697 firmware                                             | Resolved |
| 047253 | 8697 pressure unit is always Psi even after changing GC unit                                                                                           | Resolved |
| 047262 | False displayed message during Inlet Pressure zeroing                                                                                                  | Resolved |
| 047283 | 8890 Inlet EPC: Improvement to the auto-zero process within the diagnostic test to properly account for the septum purge valve being not bubble tight. | Resolved |
| 047328 | Automation Team requests feature to reset ALS programmatically                                                                                         | Resolved |

### 3.1.0.380 8890A Firmware

Released 16<sup>th</sup> June 2025

[http://download.chem.agilent.com/firmware/8890\\_FW\\_3.1.0.380.tgz.gpg](http://download.chem.agilent.com/firmware/8890_FW_3.1.0.380.tgz.gpg)

To download this version, use GC Firmware Update Utility 3.1.30 or greater.

*Updating to this firmware does not require instrument revalidation.*

**Service Note Number: D0132925**

| Issue Id | Current Behaviour                                                                              | Resolution |
|----------|------------------------------------------------------------------------------------------------|------------|
| 043007   | Peak Evaluation: SCD Burner and Reactor Cell Pressure in reference Chromatogram                | Resolved   |
| 043673   | Restricted split vent and resulting inlet overpressure does not shut down inlet                | Resolved   |
| 045168   | Selecting new pneumatic PID's from Browser User Interface (BUI) crashes BUI                    | Resolved   |
| 045581   | MPV control code doesn't try to recover from BCD error state                                   | Resolved   |
| 045606   | Wake/Sleep methods don't save new disable H2 sensor method setting                             | Resolved   |
| 045685   | Update the BUI wake/sleep method editor to make the configuration items read only              | Resolved   |
| 045831   | Inlet Pre Shutdown Warning in Split Operation                                                  | Resolved   |
| 046188   | Label Detector type on GC online plot 2.9 fw                                                   | Resolved   |
| 046206   | Instrument Status could include actual for Vial heater temp, countdown for Wait time, Mix time | Resolved   |
| 046209   | 8890 LUI Service Mode for PSD missing PID field                                                | Resolved   |
| 046237   | Oven Cryo appears in configuration after FW update                                             | Resolved   |
| 046260   | Investigate Buffer Reduction in Signal Path                                                    | Resolved   |
| 046280   | Add error signals associated with thermal and pneumatic setpoint/actual signals                | Resolved   |
| 046303   | No way to see or edit user-defined EMFs from the LUI                                           | Resolved   |
| 046304   | No way to see or edit user-defined EMFs from the Browser UI                                    | Resolved   |
| 046316   | Add diagnostic signals for GC, HS, and APG line readiness                                      | Resolved   |
| 046349   | Leak and Restriction test fails with 10 meter 100 um column                                    | Resolved   |
| 046384   | Leak and Restriction test fails with 10 meter 100 um column                                    | Resolved   |
| 046408   | MMI and SSL have different pressure decay test instructions - fw 2.9.0.345                     | Resolved   |
| 046452   | Changes for "HS install transferline to VI" maintenance procedure                              | Resolved   |

|        |                                                                                                                                                                              |          |
|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| 046457 | Pressure needed for Leak and Restriction Test cannot be achieved.                                                                                                            | Resolved |
| 046480 | Cannot download gathered logs from BUI on 8890                                                                                                                               | Resolved |
| 046482 | 8890 GC System Fault - Code: 0x00000800                                                                                                                                      | Resolved |
| 046491 | Flow limits for PPIP                                                                                                                                                         | Resolved |
| 046504 | Gas ID with PPIP needs more purge flow/time                                                                                                                                  | Resolved |
| 046507 | Instantaneous gas ID feature implemented as part of flow sensor auto-zero                                                                                                    | Resolved |
| 046509 | 8890 Septum Purge Zero also turns off the Total Flow.                                                                                                                        | Resolved |
| 046511 | Different PCM Configuration in WebUI and ChemStation                                                                                                                         | Resolved |
| 046585 | Failed new hardware configuration displays "new aux heater" message before showing user what parts are available                                                             | Resolved |
| 046590 | [8890 with TD] High Flow Time isn't displayed after setting External Sampler as Thermal Desorber.                                                                            | Resolved |
| 046591 | [8890 with TD] 'Direct Injection' mode and TD Transfer Line temperature aren't displayed in Brower Interface.                                                                | Resolved |
| 046608 | FID shown as 'not lit' on BUI when the flame is 'on'                                                                                                                         | Resolved |
| 046666 | GC FW to ignore H2 Sensor reported Gas IDs other than 0 (no gas), 1 (hydrogen) and 2 (hydrogen mixture)                                                                      | Resolved |
| 046676 | LUI 'Column' maintenance tab is not working                                                                                                                                  | Resolved |
| 046687 | H2 Sensor (Salus) intermittently giving error messages reporting "Hydrogen Sensor: Not Functioning" and "Hydrogen Sensor: Invalid Environment": may need more than one retry | Resolved |
| 046691 | Sample Overlap for Prepare sample after end of GC run is not working Correctly                                                                                               | Resolved |
| 046693 | LUI_ Big Start and Stop Buttons not show if press Pre-Run Icon not on Flow UI                                                                                                | Resolved |
| 046751 | Request to create a new Run Time Event for TCD filament lifetime prolong test                                                                                                | Resolved |
| 046808 | Hydrogen shutdown not displayed on LUI                                                                                                                                       | Resolved |
| 046822 | Intermittent error occurs System Fault - Code: 0x00000800                                                                                                                    | Resolved |
| 046843 | LUI configuration items for 5977C were never setup, did not auto identify or present to user                                                                                 | Resolved |
| 046857 | 8890 with Helium Conservation delivers 100ml/min to PSD purge when He configured as gas to use.                                                                              | Resolved |
| 046866 | Instrument run control timeout fault on 8890-8697XL instrument                                                                                                               | Resolved |
| 046873 | "Install column" maintenance procedure does not wait for 5977C vent cycle to complete                                                                                        | Resolved |
| 046879 | ALS Error #137 causes injection to abort.                                                                                                                                    | Resolved |

|        |                                                                                                 |          |
|--------|-------------------------------------------------------------------------------------------------|----------|
| 046881 | 8890-8697(XL): The actual total flow in Leak & Restriction test with HS configured jumped a lot | Resolved |
| 046927 | Some 8890 LUI Maintenance buttons not working                                                   | Resolved |
| 046931 | Inlet Pre-Run Flow Test has variability in setpoint                                             | Resolved |
| 046937 | Aborting maintenance procedure does not re-apply method setpoints                               | Resolved |
| 046955 | Peak Evaluation Method Comparison shows oven temperature program units as pressure units.       | Resolved |
| 046956 | Peak Evaluation Method Comparison does not show changes in a ramped flow                        | Resolved |
| 046970 | Remove EPC and H2 sensor module FW revision from the System Health Report                       | Resolved |

### 3.0.3.21 8890A Firmware

Released 31<sup>st</sup> January 2025

[http://download.chem.agilent.com/firmware/8890\\_FW\\_3.0.3.21.tgz.gpg](http://download.chem.agilent.com/firmware/8890_FW_3.0.3.21.tgz.gpg)

To download this version, use GC Firmware Update Utility 3.0.1 or greater.

*Updating to this firmware does not require instrument revalidation.*

**Service Note Number: D0126905**

| Issue Id | Current Behaviour                                                                | Resolution |
|----------|----------------------------------------------------------------------------------|------------|
| 0496366  | GC system fault-Fault code, 0x00000200, Error code, 1000600a, sequence abort     | Resolved   |
| 046522   | 8890 GC Fault 1000600a//0x00000200 with FW 2.8                                   | Resolved   |
| 046425   | 8890 PP Inlet - post run defect in flow control mode                             | Resolved   |
| 046421   | GC with Modi connected showing MSD Diagnostic Tests                              | Resolved   |
| 046327   | LCOMM Communication Issues with 5977                                             | Resolved   |
| 046544   | H2 Sensor appears to be zeroing after each run. Adding time to the GC Cycle time | Resolved   |
| 046364   | [Keypad support] Request to enable the support to 88xx auxiliary keypad on 8890  | Resolved   |
| 046554   | Cannot connect to browser for GCs with SCD                                       | Resolved   |
| 046606   | Phone BrowserUI Stuck on Loading Wheel Upon Startup                              | Resolved   |
| 046586   | Latest VICI actuator requires GC FW changes to pass EFT                          | Resolved   |

|        |                                                                                                                                         |          |
|--------|-----------------------------------------------------------------------------------------------------------------------------------------|----------|
| 046607 | H2 Sensor (Salus) giving error messages reporting "Hydrogen Sensor: Not Functioning" and "Hydrogen Sensor: Invalid Environment".        | Resolved |
| 046579 | Waters: They report a need for 500 mL flow rate.                                                                                        | Resolved |
| 046682 | 8890 GC System Fault - Code: 0x00000800                                                                                                 | Resolved |
| 046634 | 8890A screen will be freeze and makes a System Fault code: 0x00000800 when configure or unconfigure the NPD on the column configuration | Resolved |
| 046633 | Can't Download Diagnostic Data Collection csv                                                                                           | Resolved |
| 046716 | Phone UI: Instrument firmware revision is empty                                                                                         | Resolved |
| 046717 | Phone UI: Attempting to change language does not bring up language selection menu                                                       | Resolved |

### 3.0.0.181 8890A Firmware

Released 12<sup>th</sup> September 2024

[http://download.chem.agilent.com/firmware/8890\\_FW\\_3.0.0.181.tgz.gpg](http://download.chem.agilent.com/firmware/8890_FW_3.0.0.181.tgz.gpg)

To download this version, use GC Firmware Update Utility 3.0.1 or greater.

*Updating to this firmware does not require instrument revalidation.*

**Service Note Number: D0119953**

**Serial Number CN2438A003 and US2439A023**

| Issue Id | Current Behaviour                                                                                                                 | Resolution |
|----------|-----------------------------------------------------------------------------------------------------------------------------------|------------|
| 037566   | 5977B transfer line will NOT cool down for maintenance (eg. replace liner) when connected with 8890 and 8860                      | Resolved   |
| 041981   | Detector Evaluation Enhancement - Detector Evaluation initial and final baseline should not fail because user selects Zero Signal | Resolved   |
| 043867   | Option to enter maintenance mode and not cool the transferline if there is an MS                                                  | Resolved   |
| 044109   | Consider adding sleep/wake button to LUI power menu                                                                               | Added      |
| 044226   | Request to add Gas Supply Pressure check back - in addition to method supply pressure check                                       | Added      |
| 044562   | Pulsed Pressure Help updates - available in English only for GC FW 2.7                                                            | Added      |
| 044756   | Enhancement request-print the serial number of the main parts                                                                     | Resolved   |
| 044877   | System fault on 8890                                                                                                              | Resolved   |
| 045091   | UI: Inlet and Detector Name Rendering                                                                                             | Resolved   |

|        |                                                                                                              |          |
|--------|--------------------------------------------------------------------------------------------------------------|----------|
| 045129 | Local UI_add the Thermal Aux 1 name to new added SP1 HW-Aux column oven                                      | Resolved |
| 045387 | 8697: System reported "flow not ready" and "Pressure not ready" after every injection when purge time starts | Resolved |
| 045411 | NPD bead adjustment LUI popup                                                                                | Resolved |
| 045527 | [8890 Touchscreen] When the inlet mode is direct injection,there is a blank page in Inlet tab.               | Resolved |
| 045541 | Maintenance Mode Options- remain cool or return to previous operating conditions                             | Resolved |
| 045796 | Remove support for old 8890 A&P boards                                                                       | Resolved |
| 045899 | 8890-8697: System report "Index was out of range... and sequence cannot run if change GC and PC clock        | Resolved |
| 045903 | PSD pressure does not turn off during guided GC maintenance tasks 2.8.1.6 firmware                           | Resolved |
| 045915 | Hydrogen sensor initializing issue under MPS FW Rev.3.1.0.2                                                  | Resolved |
| 045925 | 8697: Appended line on a sequence doesn't start                                                              | Resolved |
| 045936 | Air oven cryo not working/cannot be configured.                                                              | Resolved |
| 045942 | LUI method screen jumps back to original screen after making changes.                                        | Resolved |
| 046020 | Add message to turn off split flow for thermal desorber in inlet leak and restriction test                   | Resolved |
| 046024 | 8890 TouchScreen-keypad locked during runs                                                                   | Resolved |
| 046027 | Change EPC Setpoint resolution to 0.001 psi throughout 0 - 150 psi range                                     | Resolved |
| 046124 | EMF issue causing GC/MS instrument to disconnect                                                             | Resolved |
| 046139 | Add Health Report section chooser for Serial Numbers                                                         | Resolved |
| 046143 | 8890 system fault code 0x01000000 MS communication lost                                                      | Resolved |
| 046153 | Helium Conservation Module declared as 'broken' if range for uninstalled pressure sensor is not in EEPROM    | Resolved |
| 046173 | Display flickers during boot up before the backlight is turned on                                            | Resolved |
|        |                                                                                                              | Resolved |
| 046211 | Chromatographic Trend Plot- Peak Evaluation (BUI) Cannot select analyte in dropdown                          | Resolved |
| 046232 | LUI displays incorrect value after resetting EMF counter                                                     | Resolved |
| 046249 | Browser: Method Not Valid Using PTV with No Heater                                                           | Resolved |
| 046288 | Function: Run starts without the correct value during set Oven Standby                                       | Resolved |

|        |                                                                                |          |
|--------|--------------------------------------------------------------------------------|----------|
| 046311 | 8697: Instrument is stuck in the Aborting state after a HS sequence is aborted | Resolved |
|--------|--------------------------------------------------------------------------------|----------|

## 2.9.0.345 8890A Firmware

Released 28<sup>th</sup> May 2024

[http://download.chem.agilent.com/firmware/8890\\_FW\\_2.9.0.345.tgz.gpg](http://download.chem.agilent.com/firmware/8890_FW_2.9.0.345.tgz.gpg)

To download this version, use GC Firmware Update Utility 2.9.12 or greater.

*Updating to this firmware does not require instrument revalidation.*

**Service Note Number: D0115806**

**Serial Number CN2426A029 and US2431A028**

| Issue Id | Current Behaviour                                                                                                                  | Resolution                                                          |
|----------|------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|
| 40912    | Troubleshooting-revert troubleshooting changes                                                                                     | Resolved                                                            |
| 42742    | Troubleshooting wizard does not clear previous changes after restarting Troubleshooting                                            | Resolved                                                            |
| 43245    | 8890/9000 LUI Should Show QQQ MAC Address                                                                                          | Resolved                                                            |
| 43442    | HydroInert Ion Source collision gas flow defaults needed for 7000E                                                                 | Resolved                                                            |
| 43479    | Review High Inlet Pressure Maintenance and Diagnostics                                                                             | Resolved                                                            |
| 43759    | HydroInert: Allow configuration of HydroInert ion source on SQ and prevent runs if configured carrier gas is Helium                | Message informs user that H2 must be configured as the carrier gas. |
| 43760    | HydroInert: Allow configuration of HydroInert ion source on TQ and prevent runs if configured carrier gas is Helium                | Message informs user that H2 must be configured as the carrier gas  |
| 44218    | Method Supply pressure check not found in 'help'.                                                                                  | Resolved                                                            |
| 44357    | If 8890 has HeCon the GC should be able to offer turning on He when doing different troubleshooting steps requiring inlet pressure | Resolved                                                            |
| 44372    | BCR Mismatch Stuck in Loop                                                                                                         | Resolved                                                            |

|       |                                                                                                              |                                                                                |
|-------|--------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|
| 44357 | Investigate Helium Conservation Module Purge Time                                                            | Purge time added to allow gas to be equilibrated.                              |
| 44431 | Troubleshooting - No Peaks - No Flame is OK                                                                  | System will now check to see if Flame is lit                                   |
| 44838 | BrowserUI Events Do not work through Reverse Proxy                                                           | Resolved                                                                       |
| 44850 | Download button not working with gather log files-BUI                                                        | Resolved                                                                       |
| 44867 | [G4567A ALS: Solvent Wash Mode: A-A2,B-B2 and A-A6,B-B6 are not supported in G4567 ALS.                      | A-A2,B-B2 and A-A6,B-B6 are not supported. No action taken.                    |
| 44894 | Trend Plotting-Last data point cut off on the LUI                                                            | Resolved                                                                       |
| 44915 | 8890 BUI solvent wash radio buttons get unselected                                                           | Resolved.                                                                      |
| 44926 | CDS Blank Eval Failure/Abort on Failure holds instrument Not Ready until cleared from Browser or Touchscreen | Resolved                                                                       |
| 44936 | Headspace PID Change during Diagnostic                                                                       | Resolved                                                                       |
| 44944 | BUI: The Performance Evaluation Report does not include the vial position.                                   | Resolved                                                                       |
| 44988 | System Health Report: Add Oven Configuration Details                                                         | Resolved                                                                       |
| 45053 | Oven going into Standby mode after a run has been started.                                                   | The Oven Standby parameters should not apply once a run has started. Resolved. |
| 45085 | H2 Sensor: add ability to disable the use of an installed, configured module                                 | Function added                                                                 |
| 45101 | Large Volume Syringe Carriage Air Gaps                                                                       | Resolved                                                                       |
| 45219 | BUI/LUI: User Zero Calibration Values for QQQ Quench and Collision Gas                                       | Parameters removed from screen.                                                |

|       |                                                                                                                          |                                                                                                                  |
|-------|--------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| 45239 | Incorrect max ramped column flow value                                                                                   | Resolved                                                                                                         |
| 45256 | 8697 & 8697 XL - The function of vial vent between extractions does not work in Multiple extraction mode                 | Resolved                                                                                                         |
| 45261 | 8890:LTM Unable to override column max temp in Data System but have the ability in Browser.                              | Read only set in BUI.                                                                                            |
| 45318 | PSD Calibration Purge Title                                                                                              | Parameter set to Purge Flow.                                                                                     |
| 45327 | "Setpoint Changed During Run" in run log at the end of HS Sequence                                                       | Ability to change a parameter during the run carries over the Run Log incorrectly during the next run. Resolved. |
| 45361 | Request to provide driver interface to "Park / Unpark" HeadSpace for 8697                                                | Park parameter added to OL.                                                                                      |
| 45381 | 88xx system setup wizard unexpectedly happens after new instruments installation                                         | Resolved.                                                                                                        |
| 45402 | For 8860/8890 with Gas sample selector, the Equilibrium can't be displayed in Web UI and LUI                             | Resolved.                                                                                                        |
| 45408 | Valve time in runtime event is longer than GC run time                                                                   | Resolved<br>999.99 allowed in both BUI and LUI.                                                                  |
| 45444 | 8890: GC LUI and Browser displays incorrect column configuration.                                                        | Resolved                                                                                                         |
| 45475 | H2 Sensor: Error with plotting H2 concentration in the LUI instrument signals                                            | Resolved                                                                                                         |
| 45476 | Disable H2 sensor checked but also greyed out in the LUI                                                                 | Resolved.                                                                                                        |
| 45481 | When disable H2 sensor box is checked, user should not be able to run the H2 sensor diagnostic test to check calibration | Resolved.                                                                                                        |
| 45508 | H2 Sensor: Oven purge and sensor zero routine should start as soon as sensor is enabled in configuration (LUI)           | Resolved                                                                                                         |
| 45563 | Browser Run Time Events table is not holding the selected Event Type                                                     | Resolved.                                                                                                        |

|       |                                                                                                         |                                                                        |
|-------|---------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|
| 45607 | BUI wake method loads the wrong one when the Wake Up button is pressed                                  | Resolved.                                                              |
| 45608 | Disable H2 sensor box is checked even when He conservation module is used and set to H2 as gas type out | Resolved.                                                              |
| 45616 | System Health Report provides the wrong syringe size in the report                                      | Resolved                                                               |
| 45618 | H2 Sensor: LUI shows sensor is disabled but actual configuration still has the sensor on                | Resolved                                                               |
| 45632 | H2 Sensor: Calibration routine does not work when sensor is disabled (in LUI)                           | Resolved                                                               |
| 45699 | Touchscreen EMF Reset screen will not close; multiple pages are being opened on double click            | Resolved                                                               |
| 45755 | LUI: Initial Startup Screens - Hide if not new instrument                                               | Resolved                                                               |
| 45764 | 8890 - allow customers calibrate the TCD when the cell is replaced.                                     | TCD Calibration moved from Diagnostic tests to BUI > Calibration menu. |
| 45770 | HSS Transferline can now be edited.                                                                     | Resolved                                                               |
| 45779 | Convert inlet EPC module temperature units to degrees C in low level signal                             | Resolved                                                               |
| 45787 | BrowserUI's "Start System Setup" doesn't start System setup on the BrowserUI                            | Resolved.                                                              |
| 45793 | Possible security risk exposing devmem2 to non-root users                                               | Resolved                                                               |
| 45803 | 88xx Browser pressure units don't download to instrument                                                | Resolved                                                               |
| 45808 | Browser: User Input Ranges Not Rejected For User Interaction                                            | Resolved                                                               |
| 45810 | SCD with Hydrogen carrier gas has trouble when oxidizer gas not present                                 | Resolved.                                                              |
| 45827 | Change default Inlet Settings to reduce helium usage                                                    | Default valves changed to splitless                                    |
| 45828 | Update Open Source License Text available via BrowserUI                                                 | Resolved                                                               |
| 45868 | 8890 HCM: Inlet carrier config changes from N2 to He unexpectedly                                       | Resolved                                                               |
| 45884 | Browser Injection Mode Total syringe Volume used has wrong max: 50%, should be 75%                      | Resolved                                                               |
| 45886 | TCD calibration routine leaves detector hot at 250C                                                     | Resolved                                                               |

|       |                                                                                        |          |
|-------|----------------------------------------------------------------------------------------|----------|
| 45898 | 8890-8697 : The time remaining on the HS sequence run is wrong after changing GC clock | Resolved |
| 45904 | H2 Sensor - Uncalibrated Message                                                       | Resolved |
| 45926 | MSD parameters not present on LUI                                                      | Resolved |

### 2.8.1.6 8890A Firmware

Released 23rd January 2024

[http://download.chem.agilent.com/firmware/8890\\_FW\\_2.8.1.6.tgz.gpg](http://download.chem.agilent.com/firmware/8890_FW_2.8.1.6.tgz.gpg)

To download this version, use GC Firmware Update Utility 2.8.10.0 or greater.

*Updating to this firmware does not require instrument revalidation.*

**Service Note Number: D0110081**

**Serial Number CN2409A011 and US2410A034**

| Issue Id | Current Behaviour                                                                               | Resolution |
|----------|-------------------------------------------------------------------------------------------------|------------|
| 044977   | Ignore Blank Start Requests While Already Running                                               | Resolved   |
| 045273   | 8697 - Intermittently report "Headspace Sequence Stopper by User" when connect 8890-8697 system | Resolved   |
| 045242   | Blue color seen on 8890GC LUI under firmware Rev.2.8.0.219                                      | Resolved   |
| 045243   | Events information cannot be changed in FW 2.8.0.219                                            | Resolved   |

### 2.7.1.2 8890A Firmware

Released 25<sup>th</sup> August, 2023.

*Updating to this firmware does not require instrument revalidation.*

8890A 2.7.1.2 firmware was released as a Hot Fix to resolve one issue.

The firmware was to fix an error with an 8890/8797 Headspace sampler combination. The error "Waiting for Shutter" was reported.

The fault was an erroneous one that would occur during a sequence which would then abort with the Shutter error.

In all instances the issue was not related to the Shutter but, in most cases, a failing inlet Prerun flow test.

The firmware was not released to manufacturing and only delivered to customers that reported the issue.

This Hot Fix will be included in all future firmware revisions such as 2.8.0.219

## 2.8.0.219 8890A Firmware

*Released 20<sup>th</sup> September, 2023*

[http://download.chem.agilent.com/firmware/8890\\_FW\\_2.8.0.219.tgz.gpg](http://download.chem.agilent.com/firmware/8890_FW_2.8.0.219.tgz.gpg)

To download this version, use GC Firmware Update Utility 2.8.10.0 or greater.

*Updating to this firmware does not require instrument revalidation.*

**Service Note Number: D0036786**

**Serial Number CN2343A101 and US2348A022**

| Issue Id      | Current Behaviour                                                                                     | Resolution |
|---------------|-------------------------------------------------------------------------------------------------------|------------|
| 041095        | Argon for Carrier gas and TCD make up gas                                                             | Added      |
| <b>041468</b> | Trend Analysis-Implement color coding for the 'filter chips' in the legend                            | Resolved   |
| 041840        | Multiple failure reports about Internal Error with Error code 10006013 with two ALS Towers connected. | Resolved   |
| <b>042024</b> | Translation Issue                                                                                     | Resolved   |
| 042487        | Make Browser interface Home screen mimic Touchscreen home screen                                      | Resolved   |
| <b>043339</b> | HW missing error and operations stopped if no detector selected                                       | Resolved   |
| 043484        | Firmware Update Utility-add error if the 'temp' file starts to fill up                                | Resolved   |
| <b>043554</b> | Firmware update while instrument in maintenance mode not allowed. Display message.                    | Resolved   |
| 043773        | Peak Evaluation Integrate should not clear all Peak Names and CAS #s                                  | Resolved   |
| 043856        | BrowserUI Startup Time improved.                                                                      | Resolved   |
| 043916        | Dash missing for connected PC name on BUI and LUI                                                     | Resolved   |
| 044000        | Request new diagnostic test "QA: Thermal Runaway Test"                                                | Added      |

|        |                                                                                                                     |           |
|--------|---------------------------------------------------------------------------------------------------------------------|-----------|
| 044020 | Unable to view or set column outlet pressure when column outlet set to other on column configuration screen on LUI. | Resolved  |
| 044107 | Customer requests run time elapsed on LUI during run. Elapsed time and time left can be toggled.                    | Added     |
| 044122 | Option to load method from GC or a method saved to the GC for Sleep or wake method in the scheduler                 | Added     |
| 044162 | TCD Warning, detector Temperature < 130C message confusing.                                                         | Modified  |
| 044227 | Inlet leak and restriction test failing due to restriction being too large                                          | Resolved  |
| 044230 | 8890 touchscreen response goes slowly when the online signals are displayed in a long time.                         | Resolved  |
| 044319 | Support HYDROINERT_EI MS source type                                                                                | Added     |
| 044343 | Translation Issue                                                                                                   | Resolved  |
| 044363 | HEC control over TCD configuration in user interfaces. TCD gas config should be greyed out if HEC enabled           | Resolved  |
| 044384 | Headspace: No detail info for headspace after abort running                                                         | Resolved  |
| 044387 | Gas ID test was pass, but no information added to System Health Rerport                                             | Resolved  |
| 044412 | Need to change GC parameters during a run. New feature in GC Feature Selection. Change is method dependent.         | Added     |
| 044416 | EMF Alert: Unknown Device Component                                                                                 | Resolved  |
| 044427 | Add a sleep and a wake button to Browser much like DSA functionality                                                | Resolved  |
| 044440 | PDHID units changed                                                                                                 | Modified. |
| 044462 | Browser System Fault after Editing Running Sequence, saving, Editing again and saving.                              | Resolved  |
| 044549 | NCD Install Instructions- Not two 7/16 wrenches at 51% complete                                                     | Modified  |
| 044552 | Reported column calibration date when installing column key reports future date                                     | Modified  |
| 044550 | 8890/8355 Ozone Pneumatic Check modified                                                                            | Modified. |
| 044565 | LUI Method Tab Missing Syringe Size                                                                                 | Resolved  |
| 044592 | PSD rate set to 150psi/min.                                                                                         | Modified  |
| 044631 | Subnet Mask Validation. Invalid Subnet could be entered                                                             | Resolved  |
| 044641 | Remove LTM modules diagnostic does not work (on instrument startup)                                                 | Resolved  |
| 044667 | Browser Perform Maintenance for Inlets does not include Replace Septum when HS is configured                        | Resolved. |
| 044681 | 8890 Method parameters not locked with Empower.                                                                     | Resolved. |
| 044689 | EMF/Diagnostics cannot be viewed on the Browser                                                                     | Resolved  |
| 044708 | Arsine/Phosphine modified PCM module not being recognised                                                           | Resolved  |

|         |                                                                                                  |          |
|---------|--------------------------------------------------------------------------------------------------|----------|
| 044710  | TCD Filament calibration not working correctly.                                                  | Resolved |
| 0447329 | 8697 - Reporting ""sample probe restriction" warning while leak and restriction test passed well | Resolved |
| 044770  | Manufacturing Data Location Creation for SP1 Analyser info                                       | Added    |
| 044725  | Shutter Error erroneously occurring                                                              | Resolved |
| 044831  | 8890/9000 LUI: Display Client Proxy URL                                                          | Added.   |
| 044834  | Venting MSD/powering down GC cleared MS venting method from GC                                   | Resolved |

## 2.7.0.207 8890A Firmware

Released 5<sup>th</sup> May, 2023

**Service Note Number: D0032457**

**Serial Number CN2321A012 and US2317A045**

- Added support for the new Headspace XL
- Added support the new Hydrogen sensor
- Added support for the new Hydrogen switch (Helium Conservation Module)
- Added capability to print the maintenance log from the Browser Interface
- Added retention time on the peak evaluation chromatogram
- Added display of baselines in peak evaluation reference chromatograms within the browser
- Added use of headspace as an injection source for peak evaluation
- Modified the Browser Interface handling of Detector evaluation/peak evaluation check boxes to be similar to the GC Driver (DSA)
- Added Pre-run flow test information into Help and user manuals
- Defect Fixes and Enhancements

| Issue Id      | Current Behaviour                                                   | Resolution |
|---------------|---------------------------------------------------------------------|------------|
| 034857        | Ability to use/create a composite columns in browser UI             | Resolved   |
| <b>039520</b> | Troubleshooting: Diagnostic Test for Detector Checkouts             | Resolved   |
| 041955        | Plotted Signals not aligning on the Browser                         |            |
| <b>042323</b> | DSA shows config change upon GC reboot if connected to DSA          | Resolved   |
| 042753        | Gateway will change if the last group of numbers is larger than 127 | Resolved   |

|                                                                    |                                                                                                                                                                  |           |
|--------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| 043166                                                             | Peak Evaluation - Display baseline features in Manage Reference Chromatogram Plot                                                                                | Resolved  |
| 042322                                                             | New limits for XCD Vacuum check                                                                                                                                  | Modified  |
| 043628                                                             | Pulsed Split Injection with HS. System does not have enough total flow to reach their pulse pressure when the system starts preparing.                           | Resolved  |
| 043661                                                             | 8697 HS: Tray FW not downgradable.                                                                                                                               | Resolved  |
| 043667                                                             | Firmware download to selector. Progress remains at 0%                                                                                                            | Resolved  |
| 043677                                                             | Column Install/Bakeout modes improved                                                                                                                            | Resolved  |
| 043705                                                             | View Error text added to warning bar                                                                                                                             | Modified  |
| 043762                                                             | Temperature Equilibration Time added to MMI parameters                                                                                                           | Modified  |
| 043799<br>043814<br>043816<br>043821<br>043822<br>043841<br>043862 | Peak Evaluation Bug Fixes.                                                                                                                                       | Resolved  |
| 043815                                                             | Gas ID Check added to Helium Conservation Module                                                                                                                 | Modified  |
| 043824                                                             | Pulsed Inlet Parameters added to GCxGC                                                                                                                           | Modified  |
| 043877                                                             | Valve Box Limit Not Implemented                                                                                                                                  | Resolved  |
| 043881                                                             | User Configurable Heater minimum rate issue                                                                                                                      | Resolved  |
| 043888                                                             | MMI Cryo Configuration Mismatch                                                                                                                                  | Resolved  |
| 043890                                                             | XCD Burner PIDs changed                                                                                                                                          | Modified  |
| 043902                                                             | Unable to print Sleep/Wake Methods                                                                                                                               | Resolved  |
| 043917                                                             | PPIP Inlet Flow changes after Oven Program is edited.                                                                                                            | Resolved  |
| 043935                                                             | Number of Runs should not be resettable after factory reset.                                                                                                     | Resolved  |
| 043939                                                             | GC will not allow user to change carrier gas configuration on LUI, Browser, or OpenLab                                                                           | Resolved  |
| 043973                                                             | HSS. Run aborted when system is not ready                                                                                                                        | Resolved  |
| 043998                                                             | Helium Conservation Module; BUI shows incorrect gas type                                                                                                         | Resolved  |
| 044016                                                             | 8890 PPIP; Changing Septum Purge Value will affect Flow parameters of the inlet. Only when no column is configured. Parameter name changed to reflect situation. | Modified. |
| 044052                                                             | User Troubleshooting added to FID ignition failure                                                                                                               | Modified  |
| 044053                                                             | Allo GC to monitor pressure during maintenance tasks                                                                                                             | Modified  |
| 044121                                                             | APG Stop signal not sent at end of run                                                                                                                           | Resolved  |

|        |                                                                                               |                                                      |
|--------|-----------------------------------------------------------------------------------------------|------------------------------------------------------|
| 044127 | FW 2.6.0.306 allows the selection of 5977 and 5977B but not 5977C                             | Resolved.                                            |
| 044154 | Valve State added to Diagnostic Signal                                                        | Modified                                             |
| 044161 | Helium Conservation Module; If installed but not plumbed, this leads to pneumatics shutdowns. | Resolved                                             |
| 044210 | 8890 with PDHID loses communication to OLCDS when FW is updated.                              | Resolved                                             |
| 044221 | LUI actuals do not show Inlet Total Flow and Pressure as Setpoint OFF when they are.          | Resolved                                             |
| 044248 | XCD Burner Temperature report incorrectly                                                     | Resolved.                                            |
| 044249 | Configuration of a 7697 Transferline causes the 8890 to lock up                               | Resolved.                                            |
| 044356 | Front/Back mounted XCD and side mounted FID cannot easily be configured.                      | Configure XCD first, reboot, manually configure FID. |

## 2.6.0.306 8890A Firmware.

### *Released January 2023*

- Updated peak evaluation functionality for DSA and OLCF plugin 1.3 support
- Enhanced Maintenance procedures with daisy-chained capability
- Upgraded BrowserUI framework version to latest supported version
- Added Service Mode to BrowserUI
- Enhanced log gathering support
- Defect Fixes and Enhancements

### **Service Note D0028241**

### **Serial Number CN2303A119 and US2310A014**

| Issue Id | Current Behaviour                                                                             | Resolution      |
|----------|-----------------------------------------------------------------------------------------------|-----------------|
| 032606   | 8890 LUI does not display currently running Sequence, Method, or Sample Names if run from DSA | Issue corrected |

|               |                                                                                                                    |                                      |
|---------------|--------------------------------------------------------------------------------------------------------------------|--------------------------------------|
| <b>039003</b> | Detector Evaluation does not support 8697 headspace OQPV checkout                                                  | Now supported                        |
| <b>040878</b> | Ability to add notes to a reference chromatogram                                                                   |                                      |
| <b>041982</b> | Inaccurate composite column flow on TD. There is no way to set a temp for xfer line configured as "In-Segment".    | Corrected                            |
| <b>042302</b> | Web UI Gasifier disappear in method when loading an old method w/o Gasifier                                        | Corrected                            |
| <b>042310</b> | Sleep/Wake methods give error when associated with a Blank Evaluation                                              | Corrected                            |
| <b>042322</b> | MSD Configuration: Provide option to correctly configure MS Transfer Line if it was missed during First Time Setup | Corrected                            |
| <b>042339</b> | Put Inlet/Detector type in the diagnostic Tabs                                                                     | Corrected                            |
| <b>042707</b> | Instruments stuck in diagnostic mode                                                                               | Corrected                            |
| <b>042863</b> | BUI-saving a method hanging if method name contains a /                                                            | Corrected                            |
| <b>042885</b> | XCD e-Introduction on 8890 if XCD present                                                                          | Supported                            |
| <b>042896</b> | Allow a sample to be run in conditioning method- need a place to put the sample vial location.                     | Related to Peak Evaluation. Resolved |
| <b>042915</b> | "Clear Peak Evaluation" Behavior                                                                                   | Resolved                             |
| <b>043019</b> | Vacuum Control quick tasks in Browser Interface with SCD are not working properly                                  | Browser refresh issue. Resolved.     |
| <b>043020</b> | SCD Off Function says it turns off oxidizer flow but it does not turn off oxidizer flow                            | Resolved                             |
| <b>043032</b> | XCD Ozone Pneumatic leak test on the BUI requires a browser refresh during the test                                | Resolved                             |
| <b>043046</b> | Add Trim Column to COC inlet maintenance                                                                           | Resolved                             |
| <b>043047</b> | Limit the number of peaks those can exists in Reference chromatogram.                                              | Only 100 peaks allowed. Resolved.    |

|        |                                                                                                |                                                                     |
|--------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|
| 043054 | 8860 and 8890 do not show the tray / Bar code reader firmware in the Health Report             | Resolved.                                                           |
| 043070 | LUI: MSD Config Screen Update on Changes                                                       | Resolved.                                                           |
| 043071 | GC LUI is not updated with the latest MS firmware                                              | Resolved.                                                           |
| 043073 | GC LUI takes awhile before it shows MS is disconnected                                         | Resolved.                                                           |
| 043074 | Maintenance task - change column with SCD does not turn off H2 before cooling                  | Previous behaviour changed. Resolved                                |
| 043085 | Browser does not update method setpoints                                                       | Resolved.                                                           |
| 043151 | Uncheck DHCP should clear IP address fields                                                    | Resolved.                                                           |
| 043152 | 8890 BUI - Can't save sequence                                                                 |                                                                     |
| 043160 | GC auto configuration doesn't handle multiple simultaneous EPC changes                         | Cannot add a module to an invalid configuration. Issue resolved.    |
| 043163 | XLSI does not properly auto configure                                                          | Resolved.                                                           |
| 043169 | Browser: Missing Inlet Transfer Line Heater Configuration                                      | Resolved.                                                           |
| 043170 | Changes to MMI maintenance procedure for 'Clean bottom seal'                                   | Manual updated.                                                     |
| 043183 | Unable to reconnect to 8890 after Reference Chromatogram is completed by the Peak Eval Plug-in | Resolved                                                            |
| 043217 | MSD communication will not disable-7010                                                        | Resolved                                                            |
| 043228 | Browser Service Mode for 8890 has no listing; only HW Config setup                             | Resolved                                                            |
| 043258 | Collision cell aux channel gas type not set correctly                                          | Resolved                                                            |
| 043267 | 8890 GC Lockup issue when removing and reconnecting 8697 headspace sampler                     | Used when customer wants to turn off HSS and only use GC. Resolved. |
| 043284 | Unit with 2 PSDs configured such that one was inoperative.                                     | Resolved.                                                           |
| 043333 | Manual configuration of New Hardware such as an EPC module is cleared if cancel is evoked.     | Resolved.                                                           |

|        |                                                                                                                 |                                                                                                       |
|--------|-----------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| 043364 | Install column button on the BUI is not installing the correct column                                           | Resolved.                                                                                             |
| 043406 | 8890 - 2.5.0.258 lock up if the leak test fails                                                                 | Issue due to no presence of an ALS. Resolved.                                                         |
| 043418 | XCD Does not auto configure or unconfigure                                                                      | Issue due to XCD/FID Heater configuration. Resolved.                                                  |
| 043440 | MS Serial number not shown when LVDS is configured for 7000E/7010C GCMS TQ                                      | Resolved.                                                                                             |
| 043456 | Inlet Total Flow Actual shows 0mL/min                                                                           | Resolved.                                                                                             |
| 043485 | LUI-screen jumbled with 3 columns configured                                                                    | Resolved.                                                                                             |
| 043541 | Revisit Tank Pressure Test                                                                                      | Method Pressure/Tank Pressure tests redefined.                                                        |
| 043573 | System Health Report does not include Maintenance Information                                                   | Resolved.                                                                                             |
| 043578 | Sequence did not start when using the Browser UI                                                                | Resolved.                                                                                             |
| 043580 | Diagnostic tests have two close buttons that do different things.                                               | Resolved.                                                                                             |
| 043582 | Closing diagnostic tests leaves them running and the GC status in Diagnostic Mode.                              | Resolved.                                                                                             |
| 043583 | Maintenance Log should inform which column was installed or trimmed                                             | Information to be added to Log File.                                                                  |
| 043623 | Purge flow to split vent parameter not available on BUI                                                         | Resolved.                                                                                             |
| 043653 | Remove Tank Pressure Test for 2.6.0                                                                             | Tank pressure test replaced with Method pressure test. Will look into better test in future firmware. |
| 043665 | 7000E/7010C: When DHCP is enabled checkbox becomes grayed out and unchecked, and sometimes disappears entirely. | Resolved.                                                                                             |
| 043694 | Browser does not show Blank Eval reports; sometimes Peak and Detector Eval also are empty                       | Resolved.                                                                                             |
| 043700 | Incorrect cryo cooling liquid shown in inlet method on LUI                                                      | Resolved.                                                                                             |

|        |                                                                   |                                                                            |
|--------|-------------------------------------------------------------------|----------------------------------------------------------------------------|
| 043727 | Progress always display 99% when the maintenance are done.        | Resolved.                                                                  |
| 043776 | Oven On Safety Delay Not Implemented                              | Five second delay added to purge H2 from oven during shutdown as per 7890. |
| 043851 | Instrument: Line voltage zero cross out of range error            | Resolved.                                                                  |
| 043863 | High CPU usage issue due to automated split vent restriction test | Resolved.                                                                  |
| 043999 | GCxGC Inject time cannot be set above 99 seconds                  | Resolved.                                                                  |

### 2.6.0.303 8890A Firmware.

*Released December 20022*

A handful of 8890 GCs may have been released with the above firmware. This firmware is identical to version 2.6.0.306 with the exception of one fix for oven zero cross. This fix was later removed from 2.6.0.306 due to quality concerns causing premature oven failures when customer power is poor. We have chosen not to display this firmware on A.com.

### 2.5.1.9 8890A Firmware.

*Released October 20, 2022*

[http://download.chem.agilent.com/firmware/8890\\_FW\\_2.5.1.9.tgz.gpg](http://download.chem.agilent.com/firmware/8890_FW_2.5.1.9.tgz.gpg)

To download this version, use GC Firmware Update Utility 2.6.3.0 or greater.

*Updating to this firmware does not require instrument revalidation.*

**Service Note Number: D0026234**

| Issue Id | Current Behaviour                                                                                                   | Resolution      |
|----------|---------------------------------------------------------------------------------------------------------------------|-----------------|
| 043399   | ALS starts to prepare for run when oven is in standby mode                                                          | Issue corrected |
| 043539   | Certain EPC modules can have EEPROM ID Code corruption after power cycle - and module is no longer recognized by GC | Issue corrected |

## 2.5.0.258 8890A Firmware

**Released May 20022**

[http://download.chem.agilent.com/firmware/8890\\_FW\\_2.5.0.258.tgz.gpg](http://download.chem.agilent.com/firmware/8890_FW_2.5.0.258.tgz.gpg)

To download this version, use GC Firmware Update Utility 2.6.3.0 or greater.

*Updating to this firmware does not require instrument revalidation.*

**Service Note Number: D0022311**

| Issue Id | Current Behaviour                                                                                      | Resolution                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|----------|--------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 042393   | Unable to turn off PCM backpressure during run                                                         | Run Time event added to turn PCM backpressure off during run.                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 042593   | 1000600a error reported                                                                                | Issue caused by incorrect column configuration. Issue fixed.                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 042746   | 8890 with LTM reports Invalid Flow path, but is functional, works correctly                            | Issue resolved.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 042787   | Excessively high flow coming out of the FID during inlet maintenance when using H2 as the carrier gas. | Inlet maintenance now works using the following steps.<br>Splitting: Column Flow of 4mL/min with high split flow (controls in forward pressure and split vent is opened via a set duty cycle to avoid building up inlet pressure) to purge the inlet volume (26 seconds)<br>Pressurizing: Splitless mode with 5mL/min column flow (or the user method column flow, whichever is higher) to build up pressure in inlet (20 seconds)<br>Purging: Keep the settings if under control, otherwise lower |

|        |                                                                              |                                                                                                                                                                                                                                                                                                                                                                 |
|--------|------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|        |                                                                              | <p>the column flow. Hold for 3 void times, capped at 15 minutes.</p> <p>The exceptions to these rules are as follows:</p> <ul style="list-style-type: none"> <li>• If there is no column installed on the inlet, only step one is performed</li> <li>• If a MSD is connected, steps 2 &amp; 3, use constant flow of 4mL/min instead of high pressure</li> </ul> |
| 042937 | Inlet pressure target value is incorrect when tried PPIP Pressure decay test | Correct values entered. Issue resolved.                                                                                                                                                                                                                                                                                                                         |
| 042938 | 8890 5977, the MS configuration ""goes away" when LVDS is connected.         | Invalid network strings coming from the MS. Issue resolved                                                                                                                                                                                                                                                                                                      |
| 042975 | Multiple failure reports that 8890 inlet EPCs failed for pressure decay test | Problem caused by misunderstanding regarding the septum purge valve. New instructions being supplied to the Pressure Decay Test procedure.                                                                                                                                                                                                                      |

### 2.4.1.10 8890A Firmware

*Released December 2021*

[http://download.chem.agilent.com/firmware/8890\\_FW\\_2.4.1.10.tgz.gpg](http://download.chem.agilent.com/firmware/8890_FW_2.4.1.10.tgz.gpg)

To download this version, use GC Firmware Update Utility 2.4.3.0 or greater.  
(Current version 2.5.5.0)

*Updating to this firmware does not require instrument revalidation.*

Service Note Number: D0016596

**Changes/Fixes made since the last version. (2.4.0.307)**

| Issue ID | Title                                                                                                                                        |
|----------|----------------------------------------------------------------------------------------------------------------------------------------------|
| 041950   | Adding firmware support for GigaDevice QSPI                                                                                                  |
| 042255   | 8890 starts before IRD.                                                                                                                      |
| 042318   | GCMS: Allow Missing configuration condition to be dismissed if MS is not available over LVDS on GC start up                                  |
| 042319   | GCMS LDVS: Provide a mechanism for the user to manually re-trigger connection attempt to establish LVDS communication.                       |
| 042320   | GCMS: Enhancement request to periodically poll MS to establish LVDS communication                                                            |
| 042321   | GCMS: When the IP address of MS is changed over LVDS from 8860 warn the user to not power cycle until the network config change is complete. |
| 042301   | Column Outlet pressure value ignored, and ambient pressure used.                                                                             |
| 042340   | 2.4.0.307 firmware incompatible with 3.3 SR1 Driver                                                                                          |
| 042382   | Add classifier database content to the Trend Analysis Database content when gather logs.                                                     |
| NA       | Improve Gasifier/ Sample Selector II performance.                                                                                            |
| 042309   | Localisation Updates                                                                                                                         |
| 042344   | 8890 freezes using Helium Conservation Module with "Use Nitrogen".                                                                           |
| 042371   | Firmware update fails if environment needs to be updated                                                                                     |
| 042396   | Inlet pressure is large negative value in 8860 Inlet OQPV Pressure Decay test                                                                |
| 042443   | User Configurable Heater cannot be set to 450 degC                                                                                           |

## 2.4.0.307 8890A Firmware

Released November 2021

[http://download.chem.agilent.com/firmware/8890\\_FW\\_2.4.0.307.tgz.gpg](http://download.chem.agilent.com/firmware/8890_FW_2.4.0.307.tgz.gpg)

To download this version, use GC Firmware Update Utility 2.4.3.0 or greater.  
(Current version 2.5.5.0)

*Updating to this firmware does not require instrument revalidation.*

**Service Note Number:**

### **Enhancements**

new functionality for Trend Analysis

updates for Peak Evaluation

updates for Troubleshooting

Touchscreen Sequences

Feature Selection

LUI branding updates

Remove support for use of Microsoft Internet Explorer (IE) client browser to access GC Browser UI

### **Changes/Fixes made since the last version. (2.3.3.6)**

| Issue ID | Title                                                                                                     |
|----------|-----------------------------------------------------------------------------------------------------------|
| 037946   | HEC gas selection change freezes GC if updated in the Browser                                             |
| 038060   | Inlet labelling incorrect.                                                                                |
| 038124   | H2 Sensor calibration check - Not displayed                                                               |
| 038449   | Method Download fails after rebooting GC.                                                                 |
| 039545   | Automatic Gas Identification feature for 8890/9000 Diagnostics                                            |
| 040586   | Chiller cannot be enabled in 8890 touchscreen                                                             |
| 040953   | Remote software needs to lock out the user from remotely restarting an offending zone after a H2 shutdown |
| 041020   | Browser Run Log does not include entry about Blank Evaluation failure                                     |
| 041140   | Browser with VI in Direct Injection mode offers Gas Saver invalidly                                       |
| 041141   | Browser UI - Post Run is not available for Packed Columns.                                                |
| 041152   | VI Split Vent Trap Injections EMF is not incrementing                                                     |
| 041260   | Browser, Signal Plot view, there are multiple 'Start Run' indication lines for a single start             |

|        |                                                                                                                                                |
|--------|------------------------------------------------------------------------------------------------------------------------------------------------|
| 041261 | Browser signal display not matching OpenLab display                                                                                            |
| 041715 | Browser EMF Details always require browser hard refresh to display any new information in EMF Details Trend Plot                               |
| 041747 | Detector Evaluation Report Modelling Results                                                                                                   |
| 041756 | Browser System Log uses internal terms 'LUI', 'BrowserUI' after Feature Selection application                                                  |
| 041757 | Touchscreen System Log uses internal terms 'LUI', 'BrowserUI' after Feature Selection application                                              |
| 041758 | 8890 GC does not reboot after disabling/enabling GC Features; requests seem to be honored anyway                                               |
| 041759 | Browser System Setup\Date and Time Changes are not disabled after Feature Selection disables this function                                     |
| 041760 | Browser displays unclosable outsized method listing on selecting Load Reference Chromatogram from method's disabled Peak Evaluation            |
| 041761 | Browser running Troubleshooting for disabled Peak Evaluation method just disappears, Status shown as 'Cancelled'                               |
| 041762 | Touchscreen does not enable Start button for CDS Manual Injection when Feature Selection is disabled for Touchscreen Start button              |
| 041763 | Browser method's Config\Columns has unnecessary lock badge with Peak Evaluation (only) disabled in GC Feature Selection; does not block access |
| 041764 | Browser Run and Sequence Logs do not mention that a previously Peak Eval enabled method has had Peak Eval disabled                             |
| 041765 | Browser will not Print method                                                                                                                  |
| 041766 | Touchscreen Help for Enabled Local Sequence needs a specific topic                                                                             |
| 041767 | Browser Help topic System Settings needs to address new feature 'Local Sequence'                                                               |
| 041768 | Touchscreen with Local Sequence enabled will not show sequence created after enabling                                                          |
| 041769 | Browser Sequence Log logs nothing about browser Pause or Resume events                                                                         |
| 041789 | Inconsistent displays of logged-on user                                                                                                        |
| 041792 | Peak Evaluation - Acquisition/Reference Chromatogram method comparison shows active method as "CurrentMethod_dynmc_name"                       |

|        |                                                                                                                                   |
|--------|-----------------------------------------------------------------------------------------------------------------------------------|
| 041795 | 7650A injector: "Injection timeout" pops up when the plunger speed is 20 ul/min.                                                  |
| 041797 | Installing column with smart key causes LUI to crash                                                                              |
| 041801 | Blank Evaluation Trend Plot sees no valid methods                                                                                 |
| 041811 | Ignore Ready Screen disappearing while performing maintenance task                                                                |
| 041813 | Peak Evaluation - Update Reference Chromatogram should not require a ref chrom name input to proceed                              |
| 041821 | TCD: TCD should be "Reference flow", not "air flow".                                                                              |
| 041824 | Browser FID Leakage Current Check diagnostic test does not proceed                                                                |
| 041825 | Browser Start maintenance from Diagnostic Plot does not Start anything                                                            |
| 041829 | Browser Maintenance Replace Septum is either not running Leak & Restriction Test or it is not logging                             |
| 041831 | Troubleshooting - Peak Resolution Issue                                                                                           |
| 041852 | Browser Perform maintenance to replace inlet Septum states incorrectly that it will run the Septum Purge test                     |
| 041853 | Perform maintenance to Replace Inlet Septum reads '100% Complete' throughout the process                                          |
| 041861 | Troubleshooting - verification run using wrong ALS                                                                                |
| 041866 | Browser and Touchscreen do not show any badge indicators when Gas Identification Test detects a mismatch                          |
| 041876 | BUI - Tables not displaying properly                                                                                              |
| 041878 | Browser UI - Column Configuration page is blank.                                                                                  |
| 041879 | BUI - Cannot change column outlet from dropdown                                                                                   |
| 041887 | Browser plot remains active when disabled from (CDS) Feature Selection                                                            |
| 041888 | Disable Touchscreen/Browser Sequence continues to allow display of a disabled Touchscreen Sequence tab                            |
| 041893 | System Fault - Please Reboot; High CPU Usage                                                                                      |
| 041894 | Browser Diagnostics Inlet Gas ID test disappears after updating Gas Type                                                          |
| 041896 | Browser Maintenance EMF Details plot displays legend oddly and differently between module types; reopens without any text or plot |
| 041902 | 7693ALS: ALS light change back to ON status after power cycling.                                                                  |

|        |                                                                               |
|--------|-------------------------------------------------------------------------------|
| 041983 | 8355 Does not Turn off Ozone Power when Insufficient Flow Detected            |
| 041984 | For Markes Control, doesn't keep the High Flow value after any configuration  |
| 041986 | BUI Help: Table of checkout parameters for FPD+ doesn't appear (again)        |
| 042019 | Instrument Method/Config changes parameters untranslated on trend plot report |
| 042038 | 8890 LUI: Four buttons in Sequence should function as BUI                     |
| 042174 | Low vial pressure allows leaky vial to pass.                                  |
| 042181 | Peak Evaluation: Peak resolution trend plot can not display correctly         |
| 042233 | 8890 not injecting                                                            |

### 2.3.3.6 8890A Firmware

Released July 2021

[http://download.chem.agilent.com/firmware/8890\\_FW\\_2.3.3.6.tgz.gpg](http://download.chem.agilent.com/firmware/8890_FW_2.3.3.6.tgz.gpg)

To download this version use GC Firmware Update Utility 2.4.3.0 or greater.

*Updating to this firmware does not require instrument revalidation.*

**Service Note Number: D0012805**

Changes/Fixes made since the last version. (2.3.2.11)

| Issue ID | Title                                                                                                                                                                 |
|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 040619:  | Multiple TCD filament broken cases are reported                                                                                                                       |
| 041452:  | Selector: when selector is loading sample, after pressing Stop button on the 8890 touchscreen, the warning message under the selector maintenance should be modified. |
| 041694:  | Strange status happen on 8890 LUI                                                                                                                                     |
| 041693:  | UTC +9:30 time zone unavailable for selection in GC 3.5                                                                                                               |
| 041836   | System Setup froze on Headspace Configure Interface                                                                                                                   |

### 2.3.2.11 8890A Firmware

Released July 2021

[http://download.chem.agilent.com/firmware/8890\\_FW\\_2.3.2.11.tgz.gpg](http://download.chem.agilent.com/firmware/8890_FW_2.3.2.11.tgz.gpg)

To download this version use GC Firmware Update Utility 2.4.3.0 or greater.

*Updating to this firmware does not require instrument revalidation.*

**Service Note Number**

Changes/Fixes made since the last version. (2.3.1.6)

Add Support of the Pyrolizer

| Issue ID | Title                                                                                                   |
|----------|---------------------------------------------------------------------------------------------------------|
| 041487:  | Invalid Leap Year Handling in WSDL                                                                      |
| 041407:  | The applied Bead Current reported in the EMF is different from the Bead current reported in diagnostics |
| 041630:  | Column connection error caused infinite loop in code                                                    |
| 041448:  | Inlet Sampler: LUI shows empty screen after reboot                                                      |
| 041597:  | System fault n- please reboot - Error code 1000600a and System fault 0x00100000                         |
| 041601:  | Manual Injection data remains on the instrument                                                         |
| 041362:  | 8890/8860 "Electronics Fault" Error code 1000600b -> System Fault Error code 1000600a                   |
| 041376:  | NCD with 8890 Quick Start Wizard "Heater and Flow stabilization" timeout too short (5 sec)              |
| 041447:  | Inlet Sampler: LUI Shows Config Setpoints that should be invisible                                      |

### 2.3.1.6 8890A Firmware

Released March 2021

[http://download.chem.agilent.com/firmware/8890\\_FW\\_2.3.1.6.tgz.gpg](http://download.chem.agilent.com/firmware/8890_FW_2.3.1.6.tgz.gpg)

To download this version use GC Firmware Update Utility 2.4.3.0 or greater.

*Updating to this firmware does not require instrument revalidation.*

**Service Note Number**

Changes/Fixes made since the last version. (2.3.0.203)

| Issue ID | Title                                                                  |
|----------|------------------------------------------------------------------------|
| 41086    | Multiple feedback received for Electronics Fault - Error code 1000600b |
| 41233    | APG remote on 8890 does not send stop signal when run is done          |
| 41188    | Problems with CryoTrap operation                                       |

### 2.3.0.203 8890A Firmware

Released March 2021

[http://download.chem.agilent.com/firmware/8890\\_FW\\_2.3.0.203.tgz.gpg](http://download.chem.agilent.com/firmware/8890_FW_2.3.0.203.tgz.gpg)

To download this version use GC Firmware Update Utility 2.4.3.0 or greater.

*Updating to this firmware does not require instrument revalidation.*

**Service Note Number D0009076**

#### Enhancements.

Support for the 8697 Headspace Sampler

Instrument Intelligence: Troubleshooting

Support 32 oven ramps and 33 plateaus. Negative ramps will continue to be allowed.

Changes/Fixes made since the last version. (2.2.2.4)

| Issue ID | Title |
|----------|-------|
|----------|-------|

36059 AO events always seem to Signal Zero at time of first AO event  
38233 Request addition of BUI method to individual results folders for documentation purposes  
38332 Lost connection on downloading detector compensated signal or running sample with this signal  
38383 Blank and Detector Evaluation Reports from Browser do not factor in time zone of the browser  
39228 Is Hydrogen Sensor Auto schedule calibration feature support  
39547 Customer reported that front NCD showing wave baseline periodically about 3~4 weeks  
39620 Web Browser: Gas Sampling valve set up in Position 4 does not show up in the injection list  
39624 Web Browser UI: Valved injections are not working correctly  
39735 8890 disconnects from system when column compensation (FID) is selected.  
40062 The screen display freeze happened sometimes on multiple GCs when the online signal on touch screen is selected  
40178 WebUI: next line in sequence should be locked during sample overlap runs  
40213 LUI maintenance cannot finish normally  
40242 Method\Performance\Peak Evaluation, reference chromatogram timestamp are not consistent with original one  
40284 Nexus touchscreen should not accept IP's with leading zeroes  
40344 8890 Oven Fan doesn't slow down after timeout  
40396 Record multiple fan failure logs  
40498 ONLY Valve 1 (GSV) and Valve 2 (GSV) can be displayed as Injection Source under sequence table.  
40552 8890 can't set "sample depth" with a decimal point  
40746 ALS Tray X-Bind Test is not available on 8890  
40765 GatherLogs Status not always returning proper value  
40651 Firmware 2.2.1.4, cant "ADD" a LTM (AUX4) if there is an existing LTM (AUX3)  
40789 8890A FID makeup gas flow can't reach setpoint using PPIP  
40858 Browser not upload Sleep/Wake changed methods to the browser after changes are made in Sleep/Wake method in driver  
40899 Browser Run Status Injections column shows multiple ALS injections oddly: first is 1 of 1; second is 0 of 1  
41077 OLCDS Sequence table ignores Sample type 'Sample' if injection source is Blank; runs Blank Evaluation invalidly

#### 2.2.2.4 8890A Firmware

*Released January 2021*

[http://download.chem.agilent.com/firmware/8890\\_FW\\_2.2.2.4.tgz.gpg](http://download.chem.agilent.com/firmware/8890_FW_2.2.2.4.tgz.gpg)

To download this version use GC Firmware Update Utility 2.3.3.0 or greater.

*Updating to this firmware does not require instrument revalidation.*

Service Note Number 8890 Series GC 028

Changes/Fixes made since the last version. (2.2.1.4)

| Issue ID | Title |
|----------|-------|
|----------|-------|

|        |                                  |
|--------|----------------------------------|
| 039547 | Front NCD showing Baseline wave. |
|--------|----------------------------------|

|        |                                                       |
|--------|-------------------------------------------------------|
| 039735 | 8890 Disconnects when Column Compensation is selected |
|--------|-------------------------------------------------------|

|        |                                                            |
|--------|------------------------------------------------------------|
| 038332 | 8890 Disconnects on download of Column Compensated signal. |
|--------|------------------------------------------------------------|

#### 2.2.1.4 8890A Firmware

*Released December 2020*

[http://download.chem.agilent.com/firmware/8890\\_FW\\_2.2.1.4.tgz.gpg](http://download.chem.agilent.com/firmware/8890_FW_2.2.1.4.tgz.gpg)

To download this version use GC Firmware Update Utility 2.3.3.0 or greater.

*Updating to this firmware does not require instrument revalidation.*

Service Note Number 8890 Series GC 027

Changes/Fixes made since the last version. (2.2.0.287)

| Issue ID | Title |
|----------|-------|
|----------|-------|

|        |                                     |
|--------|-------------------------------------|
| 040402 | LTM cannot be connected using Aux 4 |
|--------|-------------------------------------|

|        |                                                 |
|--------|-------------------------------------------------|
| 040502 | OS Crash when installing Collision Cell module. |
|--------|-------------------------------------------------|

#### 2.2.0.287 8890A Firmware

*Released November 2020*

[http://download.chem.agilent.com/firmware/8890\\_FW\\_2.2.0.287.tgz.gpg](http://download.chem.agilent.com/firmware/8890_FW_2.2.0.287.tgz.gpg)

To download this version use GC Firmware Update Utility 2.3.3.0 or greater.

*Updating to this firmware does not require instrument revalidation.*

Service Note Number 8890 Series GC 025

#### Enhancements.

##### **Peak Evaluation.**

The self-aware and GC intelligence features of the Agilent Intuvo 9000 and 8890 GC systems continue to be expanded. With firmware 2.2, an initial version of Peak Evaluation that expands the GC Performance section of the methods to allow users to enter chromatographic attributes for monitoring on up to 10 peaks in sample chromatograms is released.

## Easy SamplePrep and Menu-Driven SamplePrep

### Easy Sample Prep

- **Automates** basic sample preparation techniques
- **Simplifies** building and execution of sample prep program with easy drag and drop programming
- Available for 8890 (7890, 6890 too) with OpenLAB CDS and OpenLAB ChemStation

### Menu-Driven Sample Prep

- **Standard sample preparation control, displayed in list form**
- **Available for 8890 (7890, 6890 too) with MassHunter and OpenLAB EZChrom**

### GC Browser Phone Interface

A browser interface optimized for mobile viewing on either iOS or Android phones now provides status information including remaining run time and a static plot of the last 20 minutes of detector data.

### Phone Interface Home Screen

### New Updated GC Specifications

The following GC specifications for Intuvo 9000, 8890 and 8860 have been updated to help make you more competitive in bids/tenders. Note: MMI is for Intuvo 9000 and 8890 only.

|                                  | OLD Agilent GC Spec | NEW Agilent GC Spec | Shimadzu 2030 | Thermo 1310 |
|----------------------------------|---------------------|---------------------|---------------|-------------|
| Max Inlet Split Ratio (SSL, MMI) | 7,500:1             | 12,500:1            | 9,999.9:1     | 12,500:1    |
| Max ECD Data Rate                | 50 Hz               | 500 Hz              | 500 Hz        | 300 Hz      |

|                           |        |        |        |        |
|---------------------------|--------|--------|--------|--------|
| <b>Max FPD+ Data Rate</b> | 200 Hz | 500 Hz | 500 Hz | 300 Hz |
|---------------------------|--------|--------|--------|--------|

### Added Security to Set Browser UI PIN At Touchscreen

A PIN must be used at the Browser to enable it to connect to a GC. The PIN is set at the GC touchscreen.

- The previous GC firmware allowed up to 4 numerical digits to be entered for a PIN
- The new firmware (rev. 2.2) allows up to 4-8 numerical digits to be entered for a PIN if additional security is desired

Changes/Fixes made since the last version. (2.1.1.7)

| <b>Issue ID</b>        | <b>Title</b>                                                                                                          |
|------------------------|-----------------------------------------------------------------------------------------------------------------------|
| <a href="#">035788</a> | Oven cryo timeout can only be cleared by power cycling the GC.                                                        |
| <a href="#">034968</a> | 8890 BUI does not upload signal events from the instrument.                                                           |
| <a href="#">035046</a> | User validation of Static IP information.                                                                             |
| <a href="#">035646</a> | Nexus analog out signal goes high when TCD filament is turned off.                                                    |
| <a href="#">035882</a> | 8890 BUI: Unable to configure settings for user config thermal aux.                                                   |
| <a href="#">036034</a> | BUI missing User Configurable parameters for both Inlets and Thermal Zones.                                           |
| <a href="#">036069</a> | Add copy/paste functionality to BUI sequence editor.                                                                  |
| <a href="#">037001</a> | 8890 Channel Partner PCM inlet rate is possibly incorrect.                                                            |
| <a href="#">037171</a> | 8890 touchscreen and Browser Actuals for Column 1 and 2 Flow shows setpoint 0.000 mL/min for Scheduler methods.       |
| <a href="#">037235</a> | Add or insert sequence line during sequence running BUI                                                               |
| <a href="#">037468</a> | Minor adjustment for button on IE browser.                                                                            |
| <a href="#">037775</a> | 8890 Browser is not checking for max volume of 75% syringe size when using sandwich modes.                            |
| <a href="#">037988</a> | 8890 touchscreen inconsistent in display of H2 Sensor's H2 Concentration: ppm in Actuals and Plot, % in Service Mode. |
| <a href="#">038094</a> | Sequence Name not displayed on LUI for CDS Headspace Sequences.                                                       |
| <a href="#">038216</a> | Request addition of 'pause sequence' button in BUI.                                                                   |
| <a href="#">038335</a> | WebUI: column dimensions displayed incorrectly after being changed.                                                   |
| <a href="#">038635</a> | Using Signal Events from Browser causes no data at all to be collected for that signal (Freeze and Resume).           |
| <a href="#">038653</a> | LTM-Override column max not working.                                                                                  |
| <a href="#">038738</a> | Data not integrating in DA Express.                                                                                   |

038959 Customers complain "Prerun", "Start" and "Stop" key are too small and not sensitive on 8890 touchscreen.

039097 8890 Browser UI - Real time Event to change the Thermal Aux Temperature is not available..

039100 BrowserUI and LUI do not show Readiness setting for LTM.

039134 Could not connect 8890 by DSA happen again.

039243 Excessive Safety Flow Shut off with all gasses needs to apply just to H2.

039280 LUI live plot of detector signal eventually causes high CPU usage.

039286 8890 Oven Fan Failures not Reported.

039327 8890 - customer requests t be able to turn the warning beep off, like the 7890.

039386 Method save fails to display tab with errors when changing column flow.

039462 The "Tools" menu is missing in firmware revision 2.1.0.626.

039504 Browser does not support configuration of 2 FPD and 2 ECD detectors.

039534 ENHANCEMENT REQUEST - 8890 - Customer wants to set the Blos bead current to 50 pA.

039536 Change MS network setting behavior from the LUI.

039543 8890 2.1 firmware gives Error on Quick start for SCD.

039610 8890 is locked in a loop with Diagnostics, Automated Blank Run.

039615 SCD Diagnostic Signal - Reactor, Pressure Setpoint does not plot.

039617 There is zero information in the Help system for the 8890 "Disc Storage full" message or how to recover.

039675 8890 Touchscreen - Service Mode Valve Box is not correctly showing the Actual Value or Duty Cycle values.

039678 8890 Touchscreen: Service Mode : Detector : FID : Thermal shows Castle Temperature for the FID on the 8890.

039711 8890 Frozen LUI when adding/removing PCM.

039749 Modify GC Access PIN to allow for 4 to 8 digits.

039878 Customer Complaint that the Start button on the LUI of the 8890 is small and difficult to push during a manual injection.

039968 Aborting sequence from LUI while a vial is in the heater will cause subsequent runs to fail with tray error.

039992 8890 drives APG Stop line at normal end of run.

040052 8890 MMI: Inlet bleeding pressure at end of run even if Purge time is set to 999.99.

040168 Browser UI- Unable to select Load Default Setpoints.

040171 Split Vent Restriction Test - wrong valve appears to be controlled.

040212 NO "Resume" button display after click "Pause".

040292 8890 "Host System Not Ready" should remain as long as the data system (MH) does not have a sequence running.

040383 8890 - Ambient Pressure Diagnostic Signal is test plot not Ambient Pressure.

040410 BUI Help\_some linkage are wrong linked

## 2.1.1.7 8890A GC Firmware

*Released August 2020 (not released to manufacturing - Service Fix only)*

[https://download.chem.agilent.com/firmware/8890\\_FW\\_2.1.1.7.tgz.gpg](https://download.chem.agilent.com/firmware/8890_FW_2.1.1.7.tgz.gpg)

To download this version use GC Firmware Update Utility 2.2.23.0 or greater.

*Updating to this firmware does not require instrument revalidation.*

Service Note Number 8890 Series GC 020

Changes/Fixes made since the last version. (2.1.0.626)

| Issue ID | Title |
|----------|-------|
|----------|-------|

|        |                                                                                                                                                                                                                                                                                               |
|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 039345 | Inlet bleeding pressure at end of run even if Purge time is set to 999.99. In version 2.1.0.626, if the purge time was set to 999.99, the inlet would bleed pressure at the end of the run. This was causing issues with the Markes Thermal Desorber. Inlet now does not bleed at end of run. |
|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|        |                                                                                                                                                                   |
|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 039367 | User is unable to enter the Inlet Maintenance from the LUI. Selecting the Inlet tab will revert you back to the previously entered field and not the inlet field. |
|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|        |                                                                 |
|--------|-----------------------------------------------------------------|
| 039370 | Browser: User Configurable Heater Parameters under Service Mode |
|--------|-----------------------------------------------------------------|

|        |                                          |
|--------|------------------------------------------|
| 039401 | 8890A Inlets Maintenance screen is wrong |
|--------|------------------------------------------|

|        |                                            |
|--------|--------------------------------------------|
| 039427 | Unable to download inlet PID from the LUI. |
|--------|--------------------------------------------|

|        |                                            |
|--------|--------------------------------------------|
| 039458 | Help does not find any hits when searching |
|--------|--------------------------------------------|

## 2.1.0.626 8890A GC Firmware

*Released May 2020*

*Updating to this firmware does not require instrument revalidation.*

Service Note Number 8890 Series GC 012

Changes/Fixes made since the last version. (2.0.0.391)

To download this version use GC Firmware Update Utility 2.2.23.0 or greater.

Enhancements

Added chromatographic attributes for the DSA and Browser.

Improved phone UI features.

Added support for the Gasifier II

Updated Help and Localisation (Chinese, Russian, Japanese, Brazilian Portuguese)

Changes/Fixes made since the last version. (2.1.0.626)

| Issue ID | Title |
|----------|-------|
|----------|-------|

- 032864 8890 Browser Diagnostics\ Available Tests lists Back Inlet before Front Inlet
- 033244 Icon for GC Power On and Communication is misleading
- 033908 8890 PTV no options for choosing inlet liner in browser UI
- 034293 8890 LUI and browser are not showing the correct Status when a Manual run is started from browser sequence: should be Prerun (purple)
- 034716 8890 SSL no provisions for installing a liner in BUI
- 034827 8890 Browser fails to update Real Time Plot, unless the cache is cleared
- 034895 8890 Browser Sequence table allows Valve injection Source when no GSV's are configured;
- 035024 FW does not appear to be rejecting out of spec thermal aux zones
- 035114 8890 does not completely release ownership to DSA if DSA connects during a run; Monitor mode persists even after closing session
- 035367 Improve image quality in user documentation
- 035513 Pre-run flow test should report observed leak rate.
- 035713 Not ready message pointing to the wrong zone.
- 035736 NCD- add a message to remind user to turn on pump in order to set detector gases like hydrogen/oxygen
- 035914 8890 Browser has no way to Lock Columns
- 035915 8890 Browser has no way to Calibrate a column
- 036100 GC Status is showing column flow rates for packed columns configured to a PCM
- 036228 BI/F and LUI signal descriptions on status listing are different
- 036269 8890 touchscreen offers Back ALS Calibration when none exists
- 036286 The green circle hint won't disappear even when you have reviewed all of the logs entries under Logs on 8890 LUI
- 036543 The Date/Time should be displayed entirely under Instrument Service Mode on 8890 LUI
- 036572 8890 DSA does not show 'No BCD' when no MPV BCD cable is present
- 036619 8890 Clock table should offer the user-entered Valve Name instead of a number
- 036688 The sample name on 8890LUI and BUI only show the front sample name when running dual injection sequence by driver on Chemstation C0110
- 036978 LUI: ECD method missing read only column flow

- 036982 LUI: Events table Position column truncated when used for signal selection
- 037041 [8890][LUI] Actuals plot doesn't respond correctly to pressure units change
- 037042 [8890][LUI][English] Signal list shows cropped signal name
- 037048 LUI: Cannot change MSD Setpoint
- 037055 8890 PSD: Invalid range on LUI
- 037068 LUI converts pressure ramp rate to supposedly invalid value
- 037076 8890 PSD Browser: No Ramped Pressure, includes invalid Constant Flow
- 037124 8890 BUI: Thermal Aux listed incorrectly in method/config/misc
- 037131 8890SCD0400- FID-SCD: Pump purging for 100 counts not implemented
- 037160 GC0260 -NCD: Browser actual did not have right 'Hydrogen Flow'
- 037193 Gas configuration with channel partner detectors
- 037265 DSA Signal "None" converted to "Test Plot" on GC
- 037282 The Confirmation info dialog of Reset All is missing with FPD detector under Maintenance on 8890
- 037283 8890 Browser Plot Signal list for PSD Diagnostics includes invalid Purge Pressure options, extra Flow Duty Cycle; inconsistent with DSA
- 037285 8890 Browser Method Edit Signals list of PSD Diagnostics lists all PSD Pressure and PSD Purge options twice
- 037291 8890 SCD0400 (FID-SCD): Title of SCD should be read as [Aux SCD on front or back FID], missing the word front or back (LUI and Browser)
- 037294 8890 SCD0400-FID-SCD: System health report for the SCD lacks hydrogen (Upper) flow (LUI, Browser & Chemstation) [8890 & 8860]
- 037303 When reset the EMF value of "Photomultiplier tube injection", only one log entry "Back detector, photomultiplier tube on Maintenance" occur on 8890BUI and data system.
- 037304 When the EMF value of "Photomultiplier tube on" is 0, reset the value again, no Maintenance log will show on 8890.
- 037310 8890 touchscreen Valve screen shows no setpoint for MPV: should be position or 'No BCD' if not cabled
- 037351 8890: Browser UI signal source table can't retrieve some diagnostics settings from DSA signal source table
- 037360 8890 CO2 MMI Cryo can't reach -70°C

- 037372 8890 AO Signal events do not seem to execute from browser
- 037381 Method Name not cleared on LUI at the end of a sequence
- 037443 Response not consistent between Browser Ui and DSA for Performance: Enable Blank Evaluation enable is inactive
- 037542 Auto Prep Run not available on the LUI
- 037559 Intermittently reports system error " 0x0000400"
- 037580 Overlap issue will happen if expand the table of contents too long
- 037604 8890 - Cannot reconfigure a 120 volt 8890 to have a 220 volt oven
- 037620 Set/Clear Syringe missing on 8890 Method Editor OLCDS 2.4
- 037631 8890 there is no "Apply" on the screen when you update modules.
- 037639 Vial location display in Sample Queue are not correct for actual
  
- 037645 9000 or 88xx Browser method activates Blank Evaluation Enable boxes for all detectors, though only a single detector signal is selected
- 037659 Instrument Thermal Fault, Current on Circuit Too High an Inlet Fan Fault on 8890
- 037661 Additional 8890 browser sessions not working after Mass Hunter sequence started
- 037683 WebUI: Oven Ramp Editor missing labels after changing Hold Time
- 037713 8890 split/splitless abbreviation
- 037715 8890 Hydrogen sensor : Hydrogen sensor calibration record is not updated in diagnostic test result under system health report.
- 037716 8890 Hydrogen sensor: after the hydrogen sensor is calibrated, there are no records under maintenance log/ system log.
- 037717 8890 Hydrogen sensor: the 'ON' is not functional in Browser Interface.
- 037760 The "Age" term is untranslated on the GC 8890 LUI < Maintenance < Back Injector –PP < Details.
- 037764 The "Select Method" box dialogue is not localized on the GC 8890 LUI < DA Express
- 037772 Leaving Manual injection from Browser unstarted gives no indicator; blocks any connection from data system or data system configuration; requires GC restart
- 037795 8890 Browser method download does not honor a previously locked column
- 037801 8890 Browser Column Configuration incorrectly includes 6 different LTM column types

- 037849 WebUI: Unable to edit columns from Method Editor
- 037854 8890 Browser will not configure Columns; attempts inactivate Calibrate button
- 037858 There are always unread logs displayed on Run Log Tab
- 037910 Config screen on 8890 unresponsive during hardware upgrade
- 037919 LUI service mode values aren't always updating
- 037923 Locking column removes calibration and changes column type
- 037924 8890 DSA does not save any column calibration results, though they have been downloaded
- 037929 8890, GC driver 3.0.652 does not accept syringe sizes of 0.5 uL
- 037931 OLCDS ALS sequences display Sequence names on LUI or Browser Status bar really long with appended date, untruncated
- 037934 8890 Touchscreen Maintenance Log displays communicating HS injection count Servicing with 6 zeroes after decimal point; should be integer
- 037940 8890 Touchscreen and DSA Maintenance Logs do not log any service of 7697 EMF resets unless reset from the touchscreen
- 037941 FW update is resetting all 8890 syringe sizes to 1 uL
- 037944 Frozen 8890 LUI
- 037954 8890 System Health Report Past Instrument Alerts always seems to log state of Hydrogen Shutdowns as 'Cancelled' when they were resolved
- 037955 8890 System Health Report Diagnostic Test Results shows no details for a H2 Sensor Calibration Check
- 037959 H2 Sensor Calibration initiated from Browser completes, but does not update time stamp on System Health Report
- 037960 Initiating H2 Sensor calibration from Browser clears Bottle Log number and Expiration Date from touchscreen
- 037976 8890 touchscreen Calibration\H2 Sensor has 'Auto Schedule' checkbox that should have been removed
- 037977 8890 Browser Calibration\H2 Sensor has 'Auto Schedule' checkbox that should have been removed
- 037978 8890 Browser has no Actuals for H2 Sensor: ADC, Resistance, H2 Concentration
- 037998 8890 Status shows no change for any Calibration; should change to Not Ready: Calibration Running/ Recovering/ etc. (as 7890 does)
- 038001 8890 H2 Sensor Bottle Expiration date has no format entry pattern, though touchscreen requires YYYY-MM-DD

- 038034 8890 BUI: Not ready alerts not clearing when instrument becomes ready
- 038037 For purged splitter with PCM on 8890, column #2 flow mode is not reflected on screen and web interface of the 8890 GC, though actual behavior of the system is as if is controlling column #2 in constant flow mode
- 038074 8890 - SCD: Constant flow mode with pressure set point not matching actual value
- 038085 ALS Calibration Error 346 does not have useful message
- 038087 8890 Touchscreen: column outlet cannot be downloaded to the GC Local UI.
- 038109 Plot on 8890 LUI allows decimal point to be entered, but then no following digits are allowed
- 038129 For VI, split/spitless mode cannot be set properly
- 038141 Terminology difference: Browser Settings is 'Aux Heater'; touchscreen Settings is 'Thermal Zones'
- 038149 XCD in 'standby' causes GC fault
- 038152 Excessive Swap Usage causes signal buffer full and data system disconnection
- 038160 Communicating and Following 7697 does not sync clock to GC Clock time
- 038165 8890 Septum failure during sample overlap displays ALS 453 error in Mass Hunter
- 038202 8890 ALS error messages not logged in touchscreen run log
- 038205 MSD-D Comm not connecting properly
- 038231 8890 DSA Hydrogen Sensor Print Calibration Report info differs and is in error from info on touchscreen
- 038232 Browser IF needs to display the Pre-Run Flow Test for COC Inlet
- 038234 System broke BUI method file, currently unusable, looks empty
- 038236 Loading corrupted BUI method does not warn user, no error message
- 038237 Running a BUI sequence with corrupted method does not abort, runs default conditions
- 038265 Unable to turn blank evaluation on for Aux Det 2
- 038267 Column outlet pressure cannot be set from 8890 Touchscreen, while it works from GC Driver
- 038275 Request modification or clarification of the 'stop run / stop sequence' behaviors on LUI

- 038305 Unable to run sequences from Web Browser
- 038327 8890: GC Drive will be offline for a while (~5s) and then back to idle when loading detector compensation signal. Injection aborted.
- 038328 Removing both ALS towers on 8890 causes Instrument: Command Failed
- 038330 High CPU Usage; System Fault - Please reboot
- 038333 8890 Browser Blank Evaluation Load Default Setpoints does not load any default values
- 038335 WebUI: column dimensions displayed incorrectly after being changed
- 038340 Blank Evaluation analysis encountered an error. Missing detector signal information
- 038351 Pressing stop on LUI crashed sequence
- 038352 Stopping sequence from DSA did not stop sequence properly
- 038355 GC's dropping connection and unable to communicate
- 038358 Blank Evaluation Failure Action not set correctly
- 038373 Touchscreen Sequence Log advises of Blank run analysis when Detector Evaluation is run from Browser
- 038375 Detector Position is incorrectly reported in the Blank Evaluation Report.
- 038376 Blank Evaluation values are not in display units.
- 038380 Blank Evaluation Failed: Report column Failed Criteria is 'null' for each item from touchscreen and browser
- 038382 Blank Evaluation Action on Failure: Abort does not abort sequence on Failure
- 038391 Blank Evaluation Setpoints Error: Default Setpoints are not available from the GC
- 038393 Browser Sequence Options includes incorrect 'Skip sample' for Blank evaluation failure Recoverable Errors; should be 'Continue sequence'
- 038394 Blank evaluation Pass or Fail is not logged to touchscreen or browser Run Logs
- 038395 Detector Evaluation Report returned by FW is empty
- 038397 Browser Method does not disable Blank Evaluation or warn when non-detector signal is selected
- 038399 Browser allows enabling of Blank Evaluation for detectors that do not have a related signal selected on Signals page

- 038403 DSA does not upload Blank Evaluation state or Time window End time
- 038405 Browser saved method inconsistent with DSA-saved method for Blank Evaluation Failure Action
- 038427 8890 LUI not updating flow paths with config change
- 038457 Touchscreen offers no way to escape Shutdowns; Detector evaluation condition was present and undismissed
- 038483 When using a capillary column with a purged packed inlet the inlet control mode is incorrectly linked to the column mode.
- 038502 Touchscreen shows 'System Fault - Please Reboot'
- 038507 Browser Detector Evaluation screen is showing 2 drop-down boxes for Checkout Sample; Can select 2 signals; Cannot select Checkout for Signal #2 alone
- 038622 8890 GC going offline when downloading method with OpenLab 2.4
- 038624 Browser Blank Evaluation screen will not activate Load Default Setpoint button when enabled
- 038627 Changing filter option from 'Gas Clean Carrier Gas Filter Saturated' condition proceeds only to step 2; Dismiss leaves GC in inescapable Diagnostic Mode
- 038629 8890 touchscreen does not acknowledge presence of newly cabled Gas Clean Filter USB
- 038631 DSA shows 8890 as Offline if connecting to GC in Diagnostic Mode
- 038632 8890 slows down with High CPU when ALS is poorly seated
- 038634 Browser Signal Event Table Time range is -infinity to +infinity; should be 0-999.99 min
- 038635 Using Signal Events from Browser causes no data at all to be collected for that signal (Freeze and Resume?)
- 038655 8890 Blank Eval Analysis encountered/reported an error when told to do Blank Eval, Pass or Fail
- 038665 Browser offers competing 'Actions on Failure for Blank Evaluation': options are present in both method and Sequence Options
- 038667 Inconsistent ranges for Blank Evaluation Baseline Analysis between browser and DSA: browser is restricted, DSA is not
- 038676 BUI\_Blank line display on the signal event drop down lists
- 038707 Function Readiness for Front Inlet-S/SL not correctly upload from DSA to Touchscreen
- 038722 Test case No Perform Maintenance button on the BUI for Valve and MS

- 038768 Request to get Peak Evaluation Report returns Detector Evaluation Report
- 038785 Measured Temperature not apply correctly in oven calibration in Touchscreen
- 038794 MPV: Missing Message when MPV has never been configured on the 8890
- 038809 Could not run sequence and could not connect to GC after Connected to GC while browser sequence is running
- 038815 VAR partner JAS observes 8890 syringe speed is same w/PTV or Septumless PTV
- 038854 Prep run not function as expected
- 038878 Pressure is incorrect when perform 8890A Inlet diagnostics test using "kPa"
- 038887 [Functional] The Service due age value of ALS Syringe age on LUI is inconsistent with on data system
- 038913 Cannot edit method using the Browser on 8890 or 9000 units
- 038920 System will not switch to MSD Vent method automatically and though cannot lower down the GC temperature zone, eg, MSD transfer line, inlet temp
- 038937 BUI\_No error if download method within Air gas type for PCM or Aux PCM though they are configured in the flow
- 038938 BUI\_Forward or Backward Pressure for Aux PCM Control Mode is not translated
- 038942 No Diagnostics signals display for PCM and Aux PCM
- 038971 unsuccessful connection to GC when Gasifier is installed in 8890.
- 038985 Vial range on Reference Chromatogram Run Parameters dialog should adjust to match actual configured injectors
- 038986 Printing Preview report name not consistent with actual Peak Evaluation Report
- 039002 could not download method from BUI and DSA
- 039018 FPD+ does not seem to recognize/control to 'Lit Offset'
- 039033 Browser Sequence Log does not log anything about Sequence aborted because of DSA control during sequence
- 039040 BUI\_Setpoint for Multi-position Valve is incorrect in Event
- 039041 BUI\_Valve parameters not correct display in the status
- 039044 8890 goes offline and then to monitor mode-no data is stored.
- 039045 GC Shutdown response when configured Sample pathway's Inlet gas type to He

- 039047 GC Shutdown response when configured Sample pathway's Inlet gas type to H2
- 039056 There are no diagnostic signals for Hydrogen sensor in DSA.
- 039060 LUI\_8890\_9000\_Always freezing after change the language
- 039070 Can't connect to 8890 system
- 039071 Browser Events table offers unaccepted Setpoint option for AO Signal Zero Event type
- 039076 8890 Extend run does not correctly close data acquisition when run is complete
- 039091 LUI\_No Diagnostics Condition display when Inlet Cryo Timeout
- 039093 WebUI: Unable to Save Method because of Peak Evaluation
- 039104 The entry for Peak Evaluation if Set Action on Failure to Continue is not completely.
- 039115 Disc Storage Full Up Warning pop up with 88x0 GC

## 2.0.2.8 8890A GC Firmware

*Released January 2020*

*Updating to this firmware does not require instrument revalidation.*

Service Note Number 8890 Series GC 012

Changes/Fixes made since the last version. (2.0.0.391)

- | <b>Issue ID</b> | <b>Title</b>                                                                                                                                                                                                                                                                                                   |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 037664          | Sequence aborted by rear injection timeout.                                                                                                                                                                                                                                                                    |
| 037804          | Intermittent ALS remain in busy state and sequence aborted with GCMS system.                                                                                                                                                                                                                                   |
| 037892          | Not Able to communicate with the Injector                                                                                                                                                                                                                                                                      |
| 037922          | 8890-7000: Collision Cell Aux channel cannot work properly during post-column backflush. During the backflush process, the pressure of inlet cannot hold at about 2psi, leading to a pre-shutdown alert. Meanwhile, the pressure of Collision cell aux channel cannot reach to the setpoint as well. eg, 40psi |
| 038025          | GC not waiting for readiness prior to injection. Using an 'external device' to hold the system not ready, the instrument will not wait for readiness (i.e. wait for GC to become ready) before injecting a sample.                                                                                             |
| 038027          | BUI does not wait for readiness to begin sample prep. (related to 038028)                                                                                                                                                                                                                                      |
| 038028          | Cannot start run from BUI.                                                                                                                                                                                                                                                                                     |
| 038095          | Variable function of plunger speed cannot be set and jump back to fast/slow                                                                                                                                                                                                                                    |

automatically.

## **2.0.0.391 8890A GC Firmware**

*Released October 2019.* Changes/Fixes made since the last version. (1.2.0.13)  
Enhancements

added support for the Integrated xCD

added support for the Integrated SCD

added support for the Integrated NCD

added support for the Integrated FID-SCD

added support for the Integrated FID-NCD

added support for Clock table programming

added support for Sleep/Wake

added support for the LTM II (firmware supports this but also need hardware to support this)

### **Issue ID Title**

[034635](#) Detector Evaluation needs a way to cross reference .ch file to the corresponding filter type for dual FPDs

[034801](#) Inlet flow setpoints on LUI are not correct when no column is configured to SSL inlet.

[034996](#) On the touchscreen, tuning the thermal zone is inconvenient on the PID screen because it always returns to the top.

[035025](#) Browser UI loses its place when a change is made to valve config.

[035057](#) Overlap sequence with barcodes reads mismatched vial three times (Inactive)

[035063](#) Browser UI Sequence has "DA method, amount, Level" column even if DA express is not available.

[035149](#) LUI: Service Mode Setup: Heater 0 showing up as available

[035189](#) Browser UI Shows Heater for No Heater PTV

[035190](#) LUI shows temperature setpoints for PTV without heater.

[035234](#) Browser Interface show Remote Start for all valve positions, GC Driver for 7 through 10, and the Touch Screen 7 and 8.

[035247](#) Browser UI - Must press minus sign twice before combo box will accept negative sign.

[035278](#) Cannot manually zero septum purge from LUI. on the 8890 GC.

[035287](#) Touch Screen shows zero values for linear velocity and holdup time when

the column is a composite column.

035295 LUI "owner" not cleared after disconnect.

035322 Run Log is not showing the time and date stamp when accessed from the Touchscreen.

035332 On the Touch Screen Mode is blank initially on the VI when the split line is plumbed.

035459 88x0 Local Data Storage link typo.

035506 Browser Interface Locale settings change back to English after Brower Interface reopening.

035509 Column randomly un-configures itself when using column smart key.

035519 8890 Pre-run flow test running after injection.

035520 Pre-run flow test is aborting current run instead of aborting the next line in the sequence.

035524 8890 GC gets stuck in conditioning method.

035526 Browser UI: Register Column should happen before column conditioning when column is changed.

035542 Detector Gas Flow Runtime Events are missing.

035548 Parts Finder Loaded Incorrect MSD.

035604 Removing columns from the Browser UI does not work correctly.

035687 Method name display in LUI or Browser UI not displayed.

035712 Ignore ready for Aux PCM channel does not work.

035735 New PID parameters for Splitless injection with G3449A needed.

035759 PPIP Pressure Setpoint should be removed in Flow control mode in touchscreen.

035779 Need to add Chinese Input Method for Remote Advisor Input in 8890 Touchscreen.

035800 Browser UI not uploading Fast Cooldown state from GC.

035802 Entering PID values resets all settings in user configurable parameters.

035806 Diagnostic Procedure to Tune User Configurable Zone needs to be fixed.

035816 8860/8890 LUI: the status should be Not Ready when the SSL inlet is waiting for pre-run and purging under Splitless mode.

035825 8860/8890: when running an inlet Pressure Decay Test, the actual inlet pressure is different between in Browser Interface and in Touchscreen.

035826 8860 Browser Interface: In the browser, the GC has 10 available valve positions while in CDS 2 it has 8.

035836 Maintenance servicing of HS items do not log to Maintenance Logs (GC Driver, LUI, Browser)

035859 Oxygen is available to configure as gas type when a column is configured with an Aux EPC.

035877 It is not possible to set up a negative flow using Aux EPCs.

035878 TCD Switching comes on with above 130 degrees without selecting filament on or flows on.

035885 Gas type is not display for Aux EPC channels only on the Browser UI.

035888 8890 Browser UI: Unable to add a third ramp to the Aux EPC Channel when a column is not configured.-

035891 Browser UI: Ramp table values are not updated when the pressure units are switched from bar to kPa.

035923 Blank evaluation test for ECD cannot pass on parameter of "Total peak area".

035990 8890 GC Driver Instrument Actuals shows non-existent 'Tray Chiller/Heater: -327 degrees C'.

036015 The setpoint of column 1 will not change under constant flow mode no matter what the column outlet is, MSD or other detectors.

036046 Liner database access is missing when connecting to a 8890 (appears with both OpenLab CDS and OpenLab CDS ChemStation).

036079 8890 SSL liner change does not appear in maintenance log or change EMFs .

036095 Detector Pressure diagnostics signals are not working properly.

036103 8890 in ICF: HS in Follow GC/Comm mode does not turn heated zones on after selecting Turn Instrument On; does not load Wake method no matter the GC setting.

036232 APG Remote Ready line does not pull GC not ready.

036397 Ability to set inlet pressure to 100 psi from the GC Driver with MMI.

036653 High CPU Usage and slow LUI response in Diagnostics and Maintenance modes.

036914 Column outlet pressure cannot be set and resets to 0 in the GC Driver when the column outlet set to "other".

036925 When a column is configured front inlet to PSD and the pressure is turned off at the inlet, the pressure also turns off at the PSD.

036927 Abort current run from Browser interface and Touchscreen which is acquired from GC driver violate the audit requirement.

037267 Unable to add Run Table Event for NPD Detector Hydrogen in the Browser UI.

037415 When using GC Driver to acquire data, the method parameters are "editable" on Browser interface and show "Method download successful" though actually does not work.

037623 "Host not ready " is not available on 8890/60 with MassHunter software.

### **1.2.1.10 8890A GC Firmware** (Released as point patch only for certain customers - not released to manufacturing

Released August 2019.

#### **Issue ID Title**

036672: Oven Cryo will not become ready

[037086](#): QQQ Aux channel backflush goes into shutdown  
[037194](#): "Oven heating too slowly" observed at several customer sites

### 1.2.0.13 8890A GC Firmware

*Released April 2019.*

Firmware version 1.2.0.13 fixes some issues in the initial release of the 8890 firmware (version 1.0.61) as listed in the following TeamTracks. No new functionality was added in this firmware version.

#### Issue ID Title

- [35226](#) Test Case: 88xx Channel Partner Inlet System - Cryo options not present for PCM Inlet with cryo valve configured
- [35262](#) Manufacturing Utility Can't Configure Valvebox
- [35417](#) The H2 sensor cannot be autoconfigured
- [35432](#) Excess Flow Shutdown in Released 8890 FW can be invoked during normal use of the Markes Unit-xr Thermal Desorber
- [35596](#) Column outlet pressure cannot be set and resets to 0 in the GC Driver when outlet set to other
- [35599](#) 8890 display freezes when set the packed column flow
- [35602](#) Browser UI sequence and method entry fields need to be sanitized.
- [35603](#) Setting up packed columns from the browser does not work.
- [35606](#) Autoconfigure with AIB board (option 206) in B-Det position doesn't work
- [35611](#) 8890 doesn't support oven cryo autoconfiguration
- [35616](#) 8890 doesn't support DFPD autoconfiguration
- [35628](#) 8890 auto-configuration issue
- [35641](#) Analog out on LUI does not show actual output signal value
- [35650](#) Analog output signal on 8890 and 8860 GCs is very small compared to 7890 GCs.
- [35651](#) Analog output signal Zero setting is +- 5000000 instead of +-500000 like the 7890 GC.
- [35652](#) Compressed air cryo not configurable option for inlet cryo
- [35653](#) Changing the Zero value on the 8890 Analog Output does not change baseline output.
- [35670](#) Aux Detector 2 heater autoconfiguration issue
- [35685](#) User config thermal aux heating too slowly
- [35695](#) 8860 Browser Interface: Method name with a space at the end can't be loaded or deleted
- [35708](#) There needs to be a way to clear the GC back to original state as received.
- [35719](#) Oven type mismatch

- 35720 Can't clear cryo fault on Thermal Aux
- 35722 Air cryo behavior incorrect
- 35734 When packed column is configured, the user can not set the length, diameter and thickness.
- 35748 Oven cryo does not control properly: oven actual temperature oscillates +/- 1.5C
- 35749 8890: Air cryo not turning on for PCM inlet
- 35782 8890 System fault 1.2.0.9 FW
- 35783 User config thermal aux missing screens in setup
- 35786 Issues with new PCM Inlet heater config screens
- 35801 Cannot set "D" term < 1 for user config thermal aux PID's
- 35804 PCM Inlet configurations settings not saving
- 35807 User config thermal aux heating too slowly (2)
- 35851 Invalid Setpoints - Nominal Power

### **1.0.6.1 8890A GC Firmware**

**Initial release February 2019.**

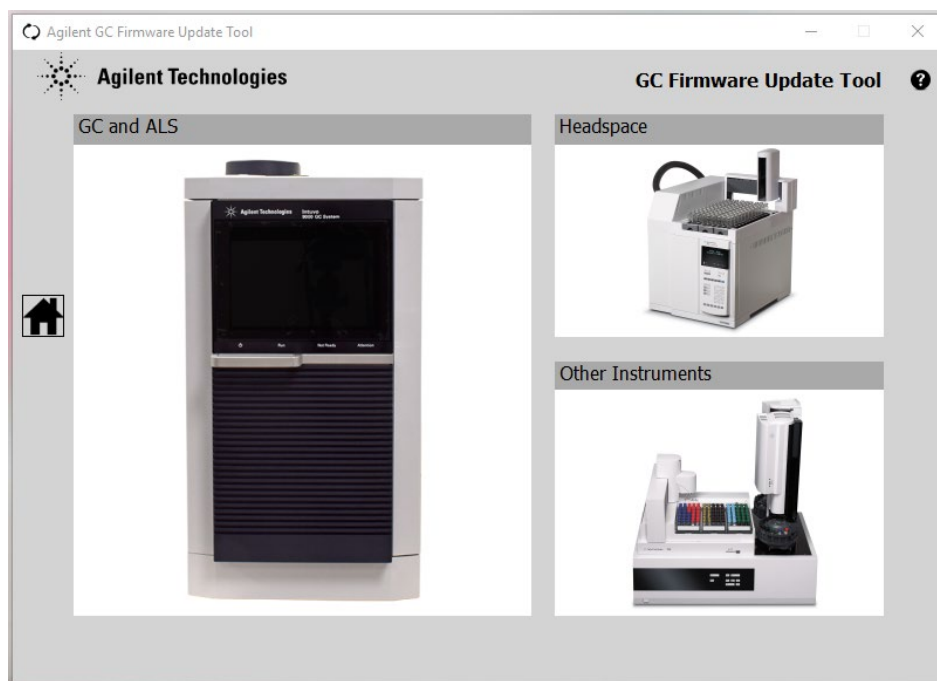
## 8

## Firmware Update Program.

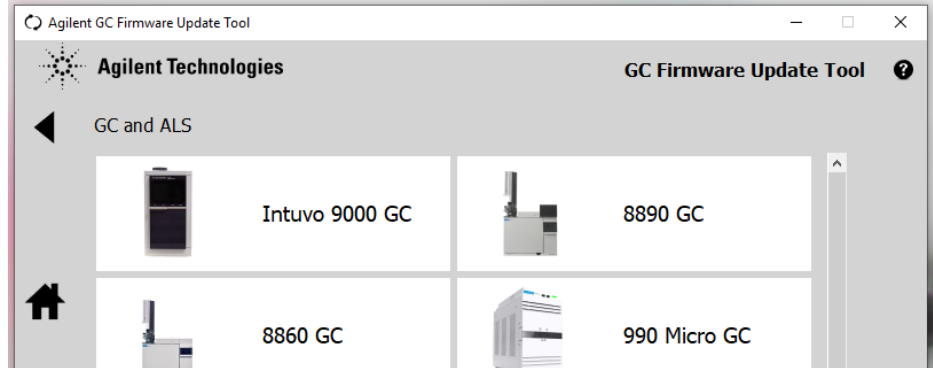
It is not possible to downgrade firmware from revision 2.X to revision 1.X  
The GC firmware update program is supplied as part of the Firmware Update Package.

Always use the latest version of the update tool. The current FW update Utility is 3.2.8.0

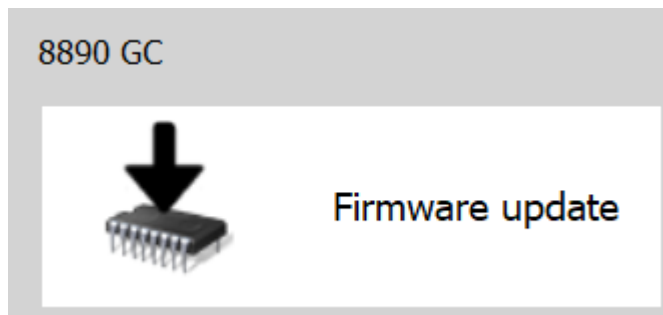
After the program has been loaded and executed the following screen appears.



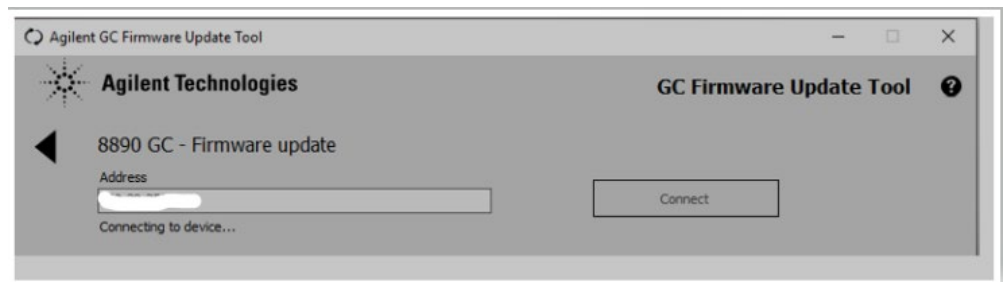
This enables the user to select which instrument type needs to have its firmware downloaded. In this case we select the GC and ALS.



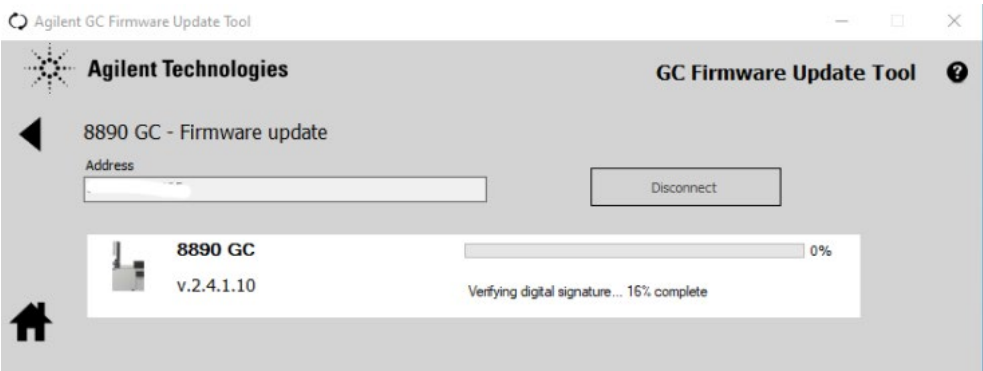
The 8890 GC is chosen from the Product menu.  
The next screen allows us to either modify firmware or PID values for the EPC modules.  
Firmware update is selected.



After choosing to update firmware, you must then enter the IP address of the 8890 that you wish to connect to and then press Connect.



Information such as current installed firmware will then be displayed.



Press Update.

A Windows Explorer directory will then appear and you must select the firmware revision that needs to be downloaded.

If the required firmware version is not displayed then you can "browse" your harddrive to find it.

The firmware file has the structure 8890\_FW\_X.X.X.tgz.gpg

| Name                              | Status | Date modified      | Type        | Size         |
|-----------------------------------|--------|--------------------|-------------|--------------|
| GC Driver 3.0.503                 |        | 6/13/2019 9:19 AM  | File folder |              |
| 8890_FW_1.2.0.13.tgz.gpg          |        | 5/2/2019 3:26 PM   | GPG File    | 1,585,266 KB |
| 8890_FW_2.0.2.8.tgz.gpg           |        | 12/3/2019 1:27 PM  | GPG File    | 1,968,109 KB |
| Firmware_Update_Program_setup.exe |        | 12/21/2018 3:29 PM | Application | 36,474 KB    |

After you have selected the correct file the firmware will automatically be downloaded.

After the download is finished the GC will reboot and the firmware update is complete.

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