

## Agilent G5591A Bravo BenchCel Workstations – Familiarization Checklist

Thank you for purchasing an Agilent **G5591A Bravo BenchCel Workstation**. This checklist is used to provide a guide on what aspects of your instrument should be covered when the Familiarization service has been included in your order. This checklist will be completed at the end of the service and provided to you as a record of the familiarization.

### Customer Information

- Familiarization is intended to give operators a basic overview of the operation and maintenance of new instruments and is not designed to substitute for a full operator-training course.
- Further training, advice and consultation can be obtained upon request.
- The manuals/media delivered with the system will be used as a guide during familiarization. Please make sure they are available.
- Not Included in the Familiarization Service (unless explicitly ordered):
  - Training on basic PC operation, peripherals and/or operating systems
  - Training to groups larger than five people
  - Customized method/application development and/or testing or testing of customer samples
  - Fundamentals/theory of instrument techniques unless explicitly stated.

### Service Engineer's Responsibilities

- Discuss familiarization topics and agree upon focus areas with customer within the allotted time.
- Only complete/printout sections or pages that relate to the system that has been installed.
- Complete empty fields with the relevant information.
- Complete the relevant checkboxes in the checklist using a "X" or tick mark "✓" in the checkbox.
- Complete 'Not Applicable' check boxes to indicate optional services or product functionality not included.
- Complete the Service Review section together with the customer.

### Additional Familiarization Notes

This checklist should be used with the following:

- [Automation Solutions Product General Safety Guide](#) (part number G5500-90015)
- [G5562A, G5563A Bravo Platform Safety and Installation Guide](#) (part number G5562-90001)
- [Bravo Platform User Guide](#) (part number G5562-90000)
- [BenchCel Microplate Handler User Guide](#) (part number G5580-90000)
- If applicable, [Labware MiniHub Safety and Installation Guide](#) (part number G5584-90004)
- If applicable, [Microplate Centrifuge with Loader User Guide](#) (part number G5405-90002)
- If applicable, [Microplate Labeler User Guide](#) (part number G5404-90003)
- If applicable, [PlateLoc Thermal Microplate Sealer User Guide](#) (part number G5402-90001)

Note: These links are online. Local copies of these guides and the quick start guides for the Bravo, BenchCel, PlateLoc, MiniHub, and Centrifuge with Loader devices are also installed with the VWorks software.

## Agilent G5591A Bravo BenchCel Workstations – Familiarization Checklist

### General Familiarization

- Provide an overview of the G5591A Bravo BenchCel Workstation and its devices.
- Identify the instrument connections, including power connections, communications and LAN interface connections, and emergency-stop pendants.
- Show the ways to locate the device and software user guides:
  - Go to Literature Library page in the **BenchCel Workstations software**.
  - To open the **VWorks Knowledge Base** within the software, select **Help > Knowledge Base** or press F1. (Alternatively, from the Windows desktop, select **Start > All Apps > Agilent Technologies > VWorks Knowledge Base**.) Demonstrate how to use the context-sensitive help.
  - For the online version of the **VWorks Knowledge Base**, go to [www.agilent.com/chem/askb](http://www.agilent.com/chem/askb).

### **Guidance**

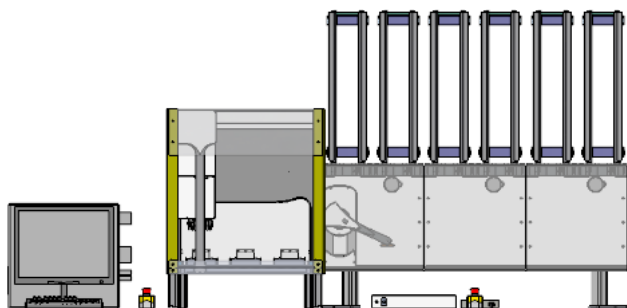
The following sections may include optional system components which may/may not be applicable during familiarization.

### System Start-up

- Explain how to power up the instruments and turn on and off the air in the correct order.
- Explain where to find the system status indicators lights and the significance of the colors.
- Explain how to start and log in to the VWorks software.

### Section 1: Basic Workstation hardware familiarization

- Review workstation safety:



- Identify safety labels and potential hazards (moving parts, pinch-points, and burn hazards).
- Demonstrate emergency-stop pendants and the Light Curtain. Show how this equipment differs from the Pause behavior in the VWorks and BenchCel Workstations software.

- Review the various connections for the workstation (Ethernet, serial, emergency-stop pendants, air-input fitting, and power switches).
- Bravo Platform: See the **Bravo Platform User Guide** (part number G5562-90000).
  - Explain how to install, uninstall, and store the liquid-handling head.
  - Explain the nine deck locations for labware and their corresponding numbers (1 -9).

## Agilent G5591A Bravo BenchCel Workstations – Familiarization Checklist

- BenchCel Microplate Handler: See the **BenchCel Microplate Handler User Guide** (part number G5580-90000).
  - Demonstrate how to properly handle a labware rack and how to fill and empty the labware racks.
  - Demonstrate how to install and uninstall a labware rack.

### **Section 2: PlateLoc Sealer hardware familiarization**

- Section NOT Applicable, device not installed.



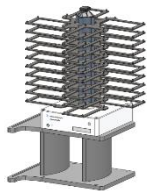
Perform the following tasks for the PlateLoc Sealer.

See the **PlateLoc Thermal Microplate Sealer User Guide** (part number G5402-90001).

- Discuss the PlateLoc consumables requirements. See [PlateLoc Thermal Microplate Sealer Consumables Selection Guide](#) (part number 5990-3659EN).
- Demonstrate how to tilt and stow the touch screen.
- Demonstrate how to load and unload a roll of seal.
- Demonstrate how to load an insert and a microplate, set the sealing parameters, and start and stop the seal cycle using the touch screen.

### **Section 3: Labware MiniHub hardware familiarization**

- Section NOT Applicable, device not installed.

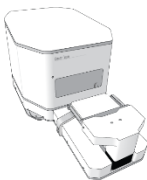


See the **Labware MiniHub Safety and Installation Guide** (part number G5584-90004).

- Explain how to add and remove shelves.

### **Section 4: Microplate Centrifuge with Loader hardware familiarization**

- Section NOT Applicable, device not installed.



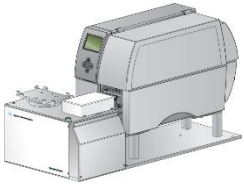
See the **Microplate Centrifuge with Loader User Guide** (part number G5405-90002).

- Demonstrate how to manually unlock and open the Centrifuge door.
- Demonstrate how to install and remove the Centrifuge buckets.
- Explain that the buckets are a weighted, matched set and they may not mix buckets between matched sets.

## Agilent G5591A Bravo BenchCel Workstations – Familiarization Checklist

### Section 5: Microplate Labeler hardware familiarization

- Section NOT Applicable, device not installed.

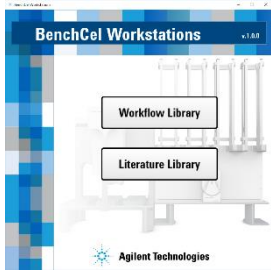


See the **Microplate Labeler User Guide** (part number G5404-90003).

- Show and explain the various instrument components (Printer service display, Service navigator pad, Air pressure regulator and Pressure gauge).
- Demonstrate how to load the ribbon and labels.
- Demonstrate how to adjust the vertical plate stage height, if necessary.

### Section 6: BenchCel Workstations software familiarization

- Section NOT Applicable, BenchCel Workstations software not installed.
- Explain how to start the BenchCel Workstation protocols and access the protocol guides.



### Section 7: VWorks software familiarization

- Demonstrate how to open VWorks protocols, forms, and device files.
- Demonstrate how to set task parameters in a protocol/form.
- Demonstrate how to simulate protocol runs.
- Demonstrate how to open device diagnostics.
- Bravo Diagnostics
  - Explain the profiles and demonstrate how to initialize the profile in diagnostics.
  - Demonstrate how to set and manage teachpoints (part of profile).
  - Demonstrate how to verify the gripper setup (part of profile).
  - Demonstrate how to configure accessories (part of profile).
- BenchCel Diagnostics
  - Explain the profiles and demonstrate how to initialize the profile in diagnostics.
  - Demonstrate how to set and manage teachpoints.
  - Demonstrate how to set sensor thresholds.
  - Demonstrate how to calculate the plate presence threshold, optimum orientation threshold, and the orientation threshold.
  - Demonstrate how to adjust the stacker gripper pressure.

## Agilent G5591A Bravo BenchCel Workstations – Familiarization Checklist

### **Section 8: PlateLoc Sealer Diagnostics familiarization**

- Section NOT Applicable, device not installed.
- Demonstrate how to start PlateLoc Diagnostics.
- Demonstrate how to create and manage profiles.

### **Section 9: Labware MiniHub Diagnostics familiarization**

- Section NOT Applicable, device not installed.
- Demonstrate how to start Labware MiniHub Diagnostics.
- Explain the profile and demonstrate how to set the home position.
- Demonstrate how to check the MiniHub's current position.

### **Section 10: Centrifuge and Loader Diagnostics familiarization**

- Section NOT Applicable, device not installed.
- Demonstrate how to start Diagnostics for the Centrifuge and Centrifuge Loader.
- Explain the Centrifuge profile and Centrifuge Loader profile.
- Demonstrate how to set the Centrifuge bucket home positions.
- Demonstrate how to load and unload microplates using Diagnostics.
- Explain the difference between labware parameters set in the VWorks Labware Editor and the labware parameters set in Centrifuge Loader Diagnostics.
- Demonstrate how to start a spin and monitor progress in Diagnostics.
- Explain how to use Centrifuge Diagnostics to test the actuators and Centrifuge Loader Diagnostics to move the gripper.

### **Section 11: Microplate Labeler Diagnostics familiarization**

- Section NOT Applicable, device not installed.
- Demonstrate how to create and edit label formats.
- Demonstrate how to change the field size and other attributes.
- Demonstrate how to remove unwanted label format data.
- Demonstrate how to perform a print and apply test.
- Explain how to adjust the robot pickup angle.

### **Section 12: Maintenance & Diagnostics**

- Bravo maintenance.** Explain the following:
  - Checking the grippers for wear.
  - Inspecting the moving parts for wear or rub marks.
  - Cleaning the instrument (except for the gripper pads) with isopropyl alcohol or ethanol.

## Agilent G5591A Bravo BenchCel Workstations – Familiarization Checklist

- BenchCel maintenance.** Explain the following:
  - Checking the robot gripper pins for wear.
  - Inspecting the moving parts for wear or rub marks.
  - Verifying the air line is in good condition.
  - Cleaning the instrument (except for the gripper pads) with isopropyl alcohol or ethanol.
- PlateLoc Sealer.** Explain the following:
  - NOT applicable. Device not installed.
  - Cleaning the hot plate with an ammonia-based cleaning product.
  - Cleaning the touch screen.
  - Cleaning the exterior metal and painted surfaces with isopropyl alcohol.
- Labware MiniHub.** Explain the following:
  - NOT applicable. Device not installed.
  - Cleaning the shelves.
- Microplate Centrifuge with Loader.** Explain the following:
  - NOT applicable. Device not installed.
  - Cleaning the Centrifuge, including inside the bucket-spinning area.
  - Inspecting the moving parts for wear or rub marks.
  - Checking the gripper pads for wear.
- Microplate Labeler.** Explain the following:
  - NOT applicable. Device not installed.
  - Checking the air- pressure level at the Microplate Labeler.
  - Cleaning the print roller and printhead.
  - Cleaning the applicator head.
  - Cleaning and inspect the vacuum pads. Replacing the vacuum pads.

### Service Review

- Complete the Service Engineer Comments section below, if applicable.
- Explain how to log an instrument service call and what support services are available.
- Perform a short review (approx. 10mins) of Agilent's web site and web links listed below.
- Explain Agilent's instrument warranty policy.
- Advise customer of additional instrument training options available.

**Agilent G5591A Bravo BenchCel Workstations –  
Familiarization Checklist****Service Engineer Comments (optional)**

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

**Other Important Customer Web Links**

- For additional information about the G5591A Bravo BenchCel Workstations, please visit our product page:  
<http://www.agilent.com/en/products/automation-solutions/benchcel-workstations/bravo-benchcel-workstation>
- Need to get information on your product?
  - VWorks Knowledge Base - <http://www.agilent.com/chem/askb>
  - Literature Library - <http://www.agilent.com/en-us/library/literature>
- Need to know more? Customer Education – <http://www.agilent.com/crosslab/university/>
- Need Support Services? - [www.agilent.com/crosslab](http://www.agilent.com/crosslab)

**Service Completion**

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

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Number of pages in this document \_\_\_\_\_

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