Agilent CrossLab Start Up Services

# Agilent G5563A/AA/GA, G5562A G5296AA/GA Bravo Platform Installation Checklist

Thank you for purchasing an instrument from **Agilent Technologies**. CrossLab Start Up is focused on helping customers shorten the time it takes to start realizing the full value of their instrument investment. Installation, Introduction and First Run Assist are service engagements to get your new instrument system on track for lab productivity. Success starts here.

This CrossLab Start Up Installation Checklist is used as an activity guide for setting up your new system. A signed copy of this checklist is provided for your records.

# Introduction

## Customer Responsibilities

- Customers should leave the instrument shipment for the engineer to unpack.

- Customers should provide all necessary operating supplies upon request of the engineer.

- A customer representative should be available to the engineer while performing the installation.

- While Agilent is delivering **Installation and Introduction** services, users of the instrument should be present throughout these services; otherwise, they will miss important operational, maintenance and safety information. Specific activities are noted with *(Customer presence recommended)* to indicate the especially important tasks for the customer.

- Some installation tasks will be beneficial to you if you are present – refer to sections in this checklist.

- If Option #020 is specified, the *Bravo Safety and Liability Waiver Agreement for Stand-alone Sales without Safety Light Curtains* (part number D0006132) must be completed before the Bravo installation is completed. If an authorized customer representative does not sign this waiver and does not plan to implement their own Bravo safety protection, the Agilent Field Engineer may not install the Bravo Platform.

<span style="color:red">To prevent potential injury and damage to the equipment, ensure that all operators are trained in the correct and safe operation of the Bravo Platform.</span>

The following guides, which are shipped with the Bravo Platform, describe the potential safety hazards and how to avoid them.

- *Automation Solutions Products General Safety Guide* (part number G5500-90015)

- *Bravo Platform Safety and Installation Guide* (part number G5563-90002)

## Not Included at Installation

- Training on LAN.

- Connecting the instrument to the customer's network (available as an additional service).

- PC/Software backup recovery (unless it has been purchased or available upon time/material).

## Important Customer Web Links

- To access Agilent training and education, visit http://www.agilent.com/chem/training to learn about training options, which include online, classroom and onsite delivery. A training specialist can work directly with you to help determine your best options.

- To access the **Agilent Resource Center** web page, visit https://www.agilent.com/en-us/agilentresources. The following information topics are available:

  - Sample Prep and Containment

  - Chemical Standards

  - Analysis

  - Service and Support

  - Application Workflows

- The **Agilent Community** is an excellent place to get answers, collaborate with others about applications and Agilent products, and find in-depth documents and videos relevant to Agilent technologies. Visit https://community.agilent.com/welcome

- Videos about specific preparation requirements for your instrument can be found by searching the **Agilent YouTube** channel at https://www.youtube.com/user/agilent

- **Need to place a service call?** Flexible Repair Options | Agilent

## Service Engineer's Responsibilities

- If Option #020 is specified on the sales order, ensure that the *Bravo Safety and Liability Waiver Agreement for Stand-alone Sales without Safety Light Curtains* form is signed by all parties before you complete the installation.

- Only complete/printout pages that relate to the system being installed.

- Complete empty fields with the relevant information.

- Complete the relevant checkboxes in the checklist using a tick mark "✓".

- Check **"Section not applicable"** check boxes to indicate services/tasks not delivered, as appropriate.

- Complete the **Service Review** section together with the customer.

- Complete the fields for page numbers at the foot of each selected page.

- Add relevant page numbers to selected pages and complete the total number of pages field in the Service Verification section.

- Complete Signature Page and attach Signature Page to Service Order.

## Additional Instruction Notes

- Follow the unpacking instructions specified in the *Bravo Platform Unpacking Guide* (part number G5523-90000A), which is attached to the shipping container.

- Save the packing materials and shipping container in case you are required to move or ship the device. Packing the Bravo Platform using other materials might damage the device and void your warranty.

- Ensure that you have access to the following installation and configuration guides that are referenced throughout this checklist.

| Title | Part Number | Comments |
|---|---|---|
| *Bravo Platform Unpacking Guide* | G5523-90000 | Affixed to the Bravo shipping container |
| *Bravo Platform Safety and Installation Guide* | G5563-90002 | Printed copy included in the shipment |
| *If installing VWorks 14.3* | | |
| *VWorks Automation Control 14.3 Software Site Preparation Checklist* | D0006693 | Explains the site requirements |
| *VWorks Automation Control 14.3 Software Installation Checklist* | D0006694 | Summarizes the installation and configuration procedures |
| *VWorks Automation Control 14.3 Installation Guide* | D0025966 | Included on the software installation media |

- **IMPORTANT** Ensure the specific installation instructions in the *Bravo Platform Safety and Installation Guide* are followed. Failure to perform the setup instructions in the order given may result in damage to the Bravo Platform.

# Instrument Installation

## System Information

☐ Check this box if an instrument configuration report is attached instead of completing the table.

| | |
|---|---|
| **Instrument System Name and ID** | |
| **Instrument System Site and Location** | |

## System Components

☐ Check this box if an instrument configuration report is attached instead of completing the table

| List System Component Product Numbers | List the Serial Numbers of each Component |
|---|---|
| 1. | |
| 2. | |
| 3. | |
| 4. | |
| 5. | |
| 6. | |
| 7. | |
| 8. | |
| 9. | |

# Preparation

☐ Discuss any specific questions or issues with the customer before starting.

☐ Verify that the *G5563A/AA/GA, G5562A, G5296AA/GA Bravo Platform Site Preparation Checklist* has been followed and fully completed. Verify that the installation location meets the site requirements.

☐ Refer to the *Bravo Platform Unpacking Guide* and unpack/verify the condition and completeness of shipment. For discrepancies, use the following table and appropriate process for resolution

**If installing the Bravo on risers, ensure that the y-axis shipping stops remain installed on the head mount until after you install the risers to prevent potential equipment damage. When tilting the Bravo device backwards to rest its backplate on the EPE foam, the head mount can slide back rapidly along the y-axis and collide with the backplate. Use the facility's assistance for lifting the Bravo after the riser installation is complete.**

| Product or Part Description | Observation | Action |
|---|---|---|
| | | |
| | | |

☐ Discuss any configuration options with the customer before starting.

☐ If the PC is customer-supplied, check that the PC meets the minimum requirements specified for the VWorks software:

   ☐ VWorks 14.3 -- See the *VWorks Automation Control 14.3 Software Site Preparation Checklist.*

   ☐ VWorks 13.x -- See the software release notes.

   **Note: additional time and labor may be required for non-Agilent provided PCs**

☐ Ensure that the required administrator account is on the PC for future use. It may be needed to update certain files. Customer IT or administration resources may be required.

☐ Discuss any configuration options with the customer before starting.

   ☐ LAN connections. The Agilent-computer has two Ethernet ports. One connects to the Bravo instrument. The second Ethernet port may be used to connect to the customer's company LAN.

**IMPORTANT**: Always verify the computer LAN connection to the Bravo Platform  before connecting any other networks.

□  *VWorks 14.3 only*: Determine user management authentication type and indicate selection here.

| Authentication Type | Description | Type Selected? |
|---|---|---|
| Internal (default) | Users are created in OpenLab Control Panel. | |
| Windows Domain | Users are imported from Windows Domain and assigned to VWorks groups in OpenLab Control Panel. | |

□  *VWorks 14.3 only*. Locate appropriate license authorization codes and/or license certificates and verify against sales order.

□  Check for required service note applicability and firmware updates if connecting to instruments.

□  **Upgrades only** – Ensure with the customer that instrument control settings, data, methods etc. have been properly saved or archived before starting any installation procedures.

□  Measure the main outlet line voltage _____ VAC.

# Installation Procedure

Except where noted, refer to the *G5562A, G5563A Bravo Platform Safety and Installation Guide* (part number G5562-90002) for the following tasks

## Computer Workstation

☐ **Section not applicable**
☐ Install the Agilent-supplied computer.
☐ Install VWorks Automation Control software:

> ☐ If installing VWorks 14.3 - Refer to the *Agilent G5263AA, G5264AA VWorks Software 14.3 Installation Checklist* (part number D0006694).
> ☐ If installing VWorks 13.1.x - Refer to the software release notes for details.

## Bravo Risers

☐ **Section not applicable**
☐ Install the Bravo on the risers.

## Bravo Platform and Accessories

☐ **Section not applicable**
☐ Connect the cords and cables:

> ☐ Bravo power cord.
> ☐ Connect the Ethernet cable to the controlling computer.
> ☐ Emergency-stop pendant.
> ☐ *Note*: You will install the Light Curtain in a later section.

☐ At the 9 deck locations, install the platepads or other deck accessories, as applicable.
Refer to the *Bravo Platform User Guide* (part number D0004797) and the *ODTC User Guide* (part number D0023535).
☐ Install the liquid-handling head.
☐ If applicable, install Pump Module 2.0.
Refer to *Pump Module User Guide* (part number G5406-90001).

## Bravo Device File and Profile Setup

☐ **Section not applicable**
☐ Turn on the Bravo Platform and any accessories.

☐   In the VWorks software, verify the Bravo device file (.dev).
☐   In Bravo Diagnostics, create the Bravo profile or verify the profile settings.

    ☐   in the Profiles tab, verify the settings.
    ☐   In the Configuration tab, configure any accessories, if applicable.
    ☐   In the Configuration tab, test accessories using the Diagnose Accessory feature.

For example, verify a thermal accessory by setting the temperature at the highest and lowest set points.

    ☐   Update and save the profile.

☐   Initialize the profile.

    ☐   Ensure that no unexpected errors occur.
    ☐   Observe the head as it homes and moves above deck location 5.
    ☐   Verify that the indicator lights on the Bravo front panel change colors correctly.

☐   In the Jog/Teach tab, set and verify the teachpoints using the customer's tip box.

    ☐   Fine tune the teachpoint at each deck location.
    ☐   Update and save the profile.

☐   In the Gripper tab, verify the gripper y-axis offset.

    ☐   Test the pick-and-place feature in fast and slow mode to ensure that the gripper operation is correct.
    ☐   Ensure good gripping is possible and no abnormal sounds are present.
    ☐   Update and save the profile.

## Bravo Safety Equipment

☐   **Section not applicable. Customer signed Safety Waiver.**
☐   Install the Light Curtain and emergency-stop pendant. See *G5562A, G5563A Bravo Platform Safety and Installation Guide.*
☐   Verify the Light Curtain and emergency-stop pendant function correctly.
☐   Install all applicable shields and the shield access covers.

## Installation Checkout (Customer presence recommended)

☐ **Section not applicable**

Refer to the *Bravo Platform User Guide* (part number D0004797) for the following tasks.

☐ Perform a test/mock run of a protocol to test the following basic tasks:

> ☐ Tips On
> ☐ Mix or Aspirate and Dispense
> ☐ Tips Off

Note: You can add a loop in the protocol to do this multiple times.

# Service Review

☐ Attach available reports/printouts to this documentation.

☐ Record the time/date of installation or upgrade completion in the customer's records/logbook.

☐ Complete the following Service Engineer comments section if there are additional comments.

☐ Review the installation/upgrade with the customer.

☐ Explain Agilent warranty for instruments.

☐ Explain how to access the user guides and help in the VWorks Knowledge Base:

> ☐ From the Windows desktop, go to Start > Apps > Agilent Technologies > VWorks Knowledge Base.
>
> ☐ In the VWorks software, demonstrate the Context-Sensitive Help button .
>
> ☐ Online, go to https://automation.help.agilent.com

☐ Explain how to get self-help, and FAQs online.

☐ Explain how to log an instrument service call and support services that are available.

☐ Advise customer of additional instrument training options.

☐ If the instrument firmware was updated, record the details of the change in the service engineer's comments box or if necessary, in the customer's IQ records.

☐ Complete Signature Page and attach Signature Page to Service Order.

# Signature Page

## Service Engineer Comments (optional)

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

# Service Verification

Service Request Number:

Date of Service Completion:

Service Engineer Name:

Customer Name:

Service Engineer Signature:

Total number of pages in this document: