

Agilent G5563A/G5562A Bravo Platform

Installation Checklist

Thank you for purchasing an Agilent **G5563A/G5562A Bravo Platform**. This checklist is used by the installing engineer to ensure that the instrument and associated systems are correctly installed, upgraded, and functioning as designed in your facility. This checklist will be completed at the end of the service and provided to you as a record of the installation.

Introduction

Customer Responsibilities

- 1 Customers should leave the instrument shipment for the engineer to unpack.
- 2 Customers should provide all necessary operating supplies upon request of the engineer.
- 3 A customer representative should be available to the engineer while performing the installation.
- 4 Some installation tasks will be beneficial to you if you are present – refer to sections in this checklist.
- 5 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.

Important Customer Web Links

- For consumables, see <https://www.agilent.com/en/product/automated-liquid-handling/consumables-for-lab-automation> and <https://www.agilent.com/en/product/microplates>
- You can find the product pages here: <https://www.agilent.com/en/product/automated-liquid-handling>
- An online VWorks Knowledge Base is posted at <https://www.velocity11.com/techdocs/openingpage.html>

- An *Agilent Resource Center* web page is available at <https://www.agilent.com/en-us/agilentresources>
- Need technical support, FAQs, supplies? – visit our *Support Home page* at <http://www.agilent.com/search/support>
- Get answers. Share insights. Build connections:
Join the *Agilent Community* at <https://community.agilent.com/welcome>

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 "X" or 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
- Complete the total number of pages field in the Service Completion section
- Ask the customer to sign the Service Completion section including the customer's and your signature.

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.
- The *G5562A, G5563A Bravo Platform Safety and Installation Guide* (part number G5562-90001B) is required for installing a Bravo Platform. Ensure the specific installation instructions stated in the guide are followed.

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	

List System Component Product Numbers	List the Serial Numbers of each Component
1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	

Preparation

- Verify that the Site Preparation Checklist has been followed and fully completed. Verify that the installation location meets the site requirements.
- Unpack/verify the condition and completeness of shipment. For discrepancies, use the table below. Refer to [Bravo Platform Unpacking Guide](#) (part number G5523-90000A) for instructions on how to unpack the Bravo Platform.

CAUTION 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 specific questions or issues with the customer before starting.
- Discuss any configuration options with the customer before starting.
- 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 G5562-90001B) for the following tasks.

Computer Workstation

- [Section not applicable](#)
- Install the Agilent-supplied computer.
- Install VWorks Automation Control software:
 - If installing VWorks 13.1.x - Refer to the software release notes for details.
 - If installing VWorks 14 - Refer to the [Agilent G5263AA, G5264AA VWorks Software 14.0 Installation Checklist](#) (part number D0006694) for details.

Bravo Risers

- [Section not applicable](#)
- Install the Bravo on the risers.

Main Installation Tasks

- [Section not applicable](#)
- Connect the Bravo Platform power cord, Light Curtain and emergency-stop pendant.
- Connect the Ethernet cable to the controlling computer.
- At the 9 deck locations, install the platypads or other deck accessories, as applicable. Refer to the [Bravo Platform User Guide](#) (part number D0004797).
- Install the liquid-handling head.
- If applicable, install Pump Module 2.0. Refer to [Pump Module User Guide](#) (part number G5406-90001).

Bravo Profile and Accessory Setup

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

- [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 settings.
Note: You will initialize the profile to establish communication with the device.
 - 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.

Safety Equipment

- Section not applicable because Bravo. Safety Waiver completed instead.*
- Install the Light Curtain. See [G5562A, G5563A Bravo Platform Safety and Installation Guide](#).
- Verify the Light Curtain and emergency-stop pendant function correctly. See [Bravo Platform User Guide](#).
- Install all applicable shields and the shield access covers.

Installation Checkout (Customer present)

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.

Signature Page

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 use manuals, guides, and online help.
- 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.

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.

Service Completion

Service request number _____

Date service completed _____

Agilent signature _____

Customer signature _____

Total number of pages in this document _____