

Agilent G5573A Bravo NGS Option A – Installation Checklist

Thank you for purchasing an Agilent **G5573A Bravo NGS Option A**. 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.

Customer Information

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

Service Engineer's Responsibilities

- 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 “✓” in the checkbox.
- Complete Not Applicable check boxes to indicate services not delivered, as needed
- Complete the Service Review section together with the customer

Additional Instruction Notes

- **IMPORTANT:** 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 follow the detailed unpacking and installation instructions in the following guides:
 - [Bravo Platform Unpacking Guide](#) (part number G5523-90000)
Note: This guide is attached to the shipping container.
 - **Bravo NGS Option A Installation Guide** (part number G5573-90000)
 - [G5562A, G5563A Bravo Platform Safety and Installation Guide](#) (part number G5562-90001)
 - [Bravo Platform User Guide](#) (part number G5562-90000)

The following figure and table show the installation configuration.

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Figure. Bravo NGS Option A configuration (front view)

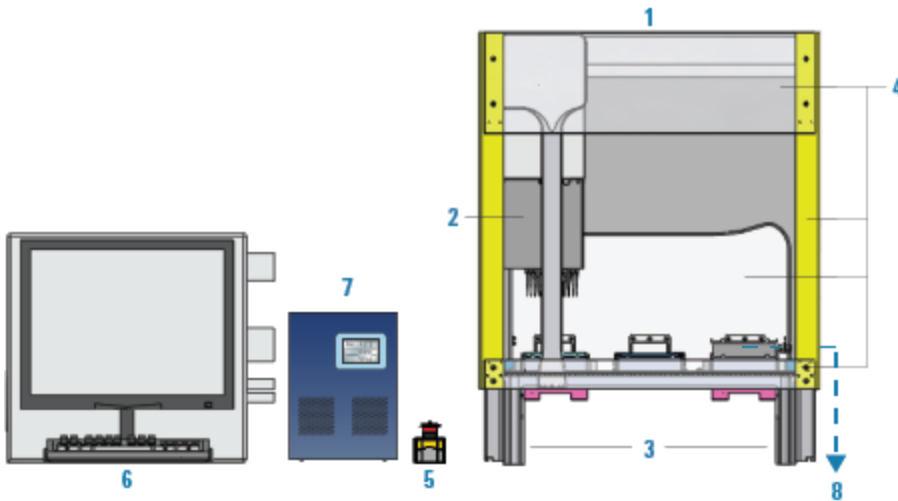


Figure item	Component name
1.	Bravo Platform with gripper preinstalled
2.	Liquid-handling head (96LT Head, standard)
3.	Bravo risers
4.	Bravo Light Curtain and Shields
5.	Emergency-stop pendant
6.	Computer and monitor
7.	Inheco MTC Controller
8.	Thermo Cube (not shown - typically installed underneath the table)

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System Information

Guidance

- 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.	1.
2.	2.
3.	3.
4.	4.
5.	5.
6.	6.
7.	7.
8.	8.
9.	9.
10.	10.
11.	11.
12.	12.
13.	13.

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General Preparation

- Verify that the Site Preparation Checklist has been followed and fully completed.
- Measure the main outlet line voltage _____ VAC.
- Unpack/verify the condition and completeness of shipment. For discrepancies, use the table below.

Product or part description	Observation	Action

CAUTION Ensure that the y-axis shipping stop remains installed on the Bravo head mount until after you install the risers to prevent potential equipment damage.

- Discuss any specific questions or issues with the customer prior to starting.
- Discuss any configuration options with the customer prior to starting
- Check for required service note applicability and firmware updates if connecting to instruments.
- Check that customer-supplied PC hardware meets minimum requirements e.g. Site Preparation Tool <http://www.chem.agilent.com/en-US/Technical-Support/Software-Informatics/Utilities/Pages/SWSitePrepTool.aspx>
- Upgrades only – Ensure with customer that instrument control settings, data, methods, and so forth have been properly saved or archived prior to starting any installation procedures.

Task 1 - Install and set up the computer

See the **G5573A Bravo NGS Option A Installation Guide** (part number G5573-90000).

- Connect the computer, monitor, mouse, and keyboard.
- Turn on the computer.
- Verify that the computer is running Microsoft Windows 10 64-bit operating system and has VWorks software version 13.1 installed.
- Verify the NGS Option A folder structure:
The FSE Test Option A folder, typically installed at
C:\VWorks Workspace\NGS Option A\FSE Testing Option A

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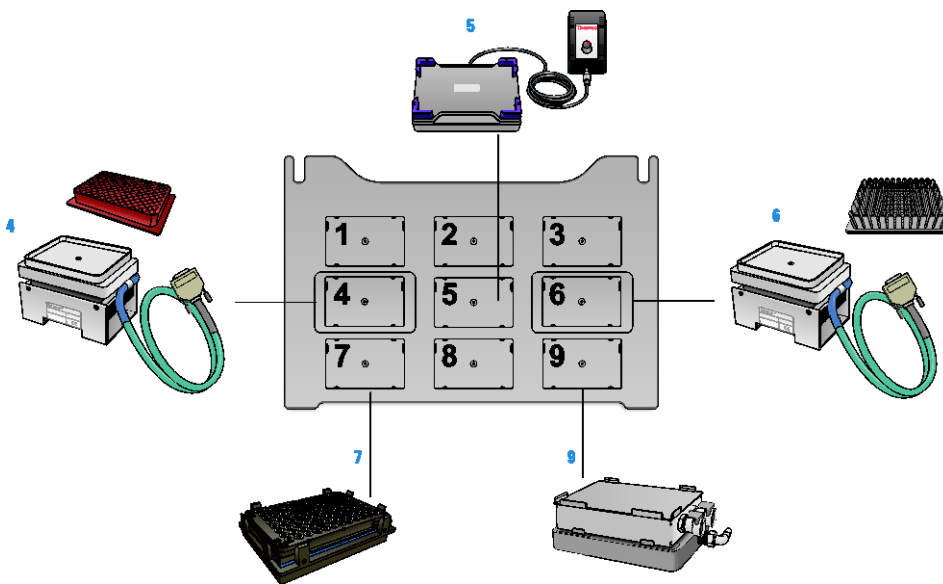
Task 2 - Install the Bravo Platform

See the **G5573A Bravo NGS Option A Installation Guide** (part number G5573-90000).

- Install the 146-mm risers.
- If present, remove the y-axis shipping stop from the head mount.
- Connect the Bravo power cord and emergency stop pendant.
- Connect the Ethernet cable.

Task 3 - Install the accessories and the pipette head

Figure. Bravo deck configuration (top view)



- Install the Thermal Station (cooling pad) at deck location 9. Connect and fill the Thermo Cube, and turn on the power.
- Install the two Peltier Thermal Stations (CPAC2) at deck locations 4 and 6. Do not install the plate inserts at this stage.
- Install the PCA boards in the Inheco MTC Controller for the Peltier Thermal Stations. Connect and turn on the power.
- Install the Orbital Shaking Station at deck location 5. Connect and turn on the power.
- Prepare the Magnetic Bead Accessory for installation at deck location 7. Do not install the accessory at this stage.
- Ensure pipette head is ready to install (tip box stripper pins are retracted), and install the head. For instructions, see the **Bravo Platform User Guide** (part number G5562-90000).

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Task 4 - Verify VWorks device files and Bravo profiles

See the **G5573A Bravo NGS Option A Installation Guide** (part number G5573-90000).

- Turn on all the devices.
- In the VWorks software, check the device file: **Bravo_round_magnet.dev**.
- In Bravo Diagnostics, verify the **Bravo-Mag and Shaker** profile settings and initialize the profile.
- Verify the deck configuration in the profile and test the accessories.
- Set and verify the pipette head teachpoints for the profile:
 - Use single pipette tip to set teachpoint at location 2.
 - Remove single tip and mount full column of tips.
 - Using a feeler gauge set teachpoints at locations 1, 3, 8; at locations 4 and 6; at location 5 using a teaching plate; and at location 7.
 - Verify the teachpoint z-axis values. Mount full head of pipette tips. Verify location 7 teachpoint.
- Save the profile and remove the pipette tips from the head.
- Verify the gripper y-axis offset and test the pick-and-place operations.
- Close Bravo Diagnostics, and close the device file.
- Create the second device file, **Bravo_round_magnet_wash.dev**, and create new **Bravo-2 Inserts Mag and Shaker** profile:
 - Adjust the z-axis teachpoint at Bravo deck location 4 for the Red PCR Plate Insert.
 - Adjust the z-axis teachpoint at Bravo deck location 6 for the Deepwell Plate Insert.
- In the device file, relink the Bravo-2 Inserts Mag and Shaker profile and save the changes.

Task 5 - Install and test the safety equipment

See the **G5562A, G5563A Bravo Platform Safety and Installation Guide** (part number G5562-90001).

- Install the Light Curtain.
- Install the front top and bottom shields.
- Install the side and rear shields, if applicable.
- Ensure that all accessory cabling and tubing is routed off the deck at the rear or sides.
- Test the Light Curtain and the pendant to ensure that they function correctly.

Task 6 - Validate the setup

See the **G5573A Bravo NGS Option A Installation Guide** (part number G5573-90000).

- Perform a simulated run of the test protocol.
- Perform a mock run of the test protocol.

**Agilent G5573A Bravo NGS Option A -
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- Attach available reports/printouts to this documentation.
- Record the time/date of installation or upgrade completion in the customer's records/logbook.
- Complete the Service Engineer Comments section below 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, FAQs from the web.
- Explain how to log an instrument service call, support services 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 below 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.

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Other Important Customer Web Links

- For additional information about Agilent Automation Solutions, please visit <http://www.agilent.com/en-us/products/automation-solutions>
- Need to get information on your product?
 - NGS Sample Preparation Automation product page - <http://www.agilent.com/en-us/products/automation-solutions/ngs-sample-preparation-automation>
 - VWorks Knowledge Base - <http://www.agilent.com/chem/askb>
- Agilent Library - <http://www.agilent.com/en-us/library/literature>
- Need Support Services?
 - www.agilent.com/crosslab
 - Field Engineer GSCA Support Center - <https://fsg-assist.chem.agilent.com>

Service Completion

Service request number _____ Date service completed _____

Agilent signature _____ Customer signature _____

Number of pages in this document _____

Document part number: G5573-90002