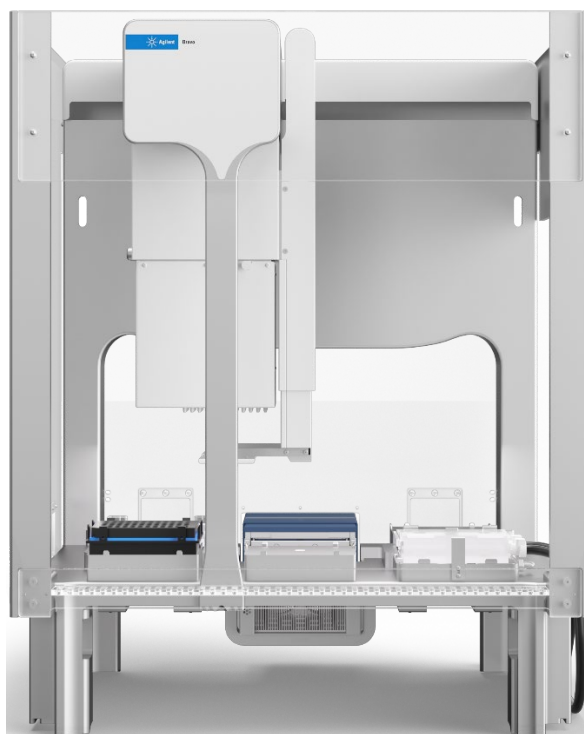Agilent CrossLab Start Up Services

Agilent G5297AA/GA ODTC with Bravo Deck Upgrade
Introduction 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 and lab productive. Success starts here.

The CrossLab Start Up Introduction is delivered after the installation and introduces the operation, ownership, maintenance and troubleshooting of the new system.

This Checklist guides you through the key aspects of owning and operating your instrument. A signed copy of this checklist is provided for your records.

The CrossLab Start Up First Run Assist is an optional customer driven activity performed under the guidance of the Agilent engineer and reinforces operational understanding. After the first result is reviewed, the service engineer recommends next steps in the path to success and optimum results.

Introduction

Customer Information

Introduction is intended to give operators a basic overview of the operation and maintenance of new instruments and software systems and is not designed to be a substitute for a full operator-training course.

Further training, advice, and consultation can be found at [Training & Events | Agilent.](#)

The following are **NOT** included in Introduction service **(unless explicitly ordered):**

- Training on basic PC operation, peripherals, and/or operating systems

- Training of groups larger than five people

- Customized method/application development or method optimization.

- Method transfer from other instrumentation

- Comprehensive training

- Troubleshooting and Maintenance training

- Macro programming, customized reports, databases, etc.

- Fundamentals/theory of instrument techniques

- First Run Assist – used to demonstrate the system workflow.

Customer Responsibilities

The manuals/media delivered with the system will be used as a guide during Introduction.

- Please make sure that they are available.

- Please follow along to confirm that applicable checklist tasks are executed during Introduction.

User Documentation

The user documentation is installed with the software and will be used as a guide during Introduction. In particular, the following guides are referenced in this checklist.

Title	Part number	Where to find this guide*
Bravo Platform Safety and Installation Guide	G5563-90002	Printed copy included with shipment. PDF included in VWorks Knowledge Base.
Bravo Platform User Guide	D0004797	VWorks Knowledge Base
Bravo Platform Quick Guide	SD-V1000642	VWorks Knowledge Base
Bravo ODTC (On-Deck Thermal Cycler) User Guide	D0024535	VWorks Knowledge Base
96 Channel Wash Station Maintenance Guide If wash station and Pump Module accessories are included.	SD-V1000098	VWorks Knowledge Base
VWorks Knowledge Base	—	From Windows desktop, go to Start > Apps > Agilent Technologies > VWorks Knowledge Base. In the VWorks, click Help > Knowledge Base.
Agilent VWorks Automation Control 14.3 Software Introduction Checklist	D0006695	Provided upon software installation
* You can also find PDFs of the guides installed at C:\Program Files (x86)\Agilent Technologies\VWorks\UserGuides\		

Important Customer Web Links

- To access **Agilent University**, visit http://www.agilent.com/crosslab/university/ 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 Responsibilities

☐ Provide a printed copy of the checklist to the customer to look at during Introduction.

☐ Discuss Introduction topics and agree upon focus areas with customer.

☐ Only complete and print out sections 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 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.

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

☐ **Ask the customer to sign the Service Verification section including the customer's and your signature.**

User Introduction

General Introduction

☐ Ensure that all user manuals, documentation, tools, etc. provided by or relevant to the system were installed during installation and before starting Introduction. These are excellent reference tools for the customer – both during the Introduction, and after the Installation and Introduction has been completed.

☐ Show where to find resources available (e.g. manuals, guides, Online Help, and videos) on the instrument system.

☐ **Note:** Indicate what may be loaded onto other PCs not directly interfaced with the instrument.

☐ Provide customer with **overview of their system** and its components, including hardware, Software configuration, PC configuration, and, if purchased, peripheral devices such as Sampler, Barcode Reader, etc.

☐ Identify associated instrument and PC hardware connections (e.g. power, gases, communications, keyboard, mouse, display connections, and printer and LAN interface connections).

☐ Demonstrate how to use manuals, including the Online Help. If available, explain benefits of using HTML to search across multiple manuals/guides.

☐ If available, show list of videos available on basic instrument and software how-to tasks.

System Introduction

System Information

Instrument System Name and ID				
Instrument System Site and Location				
OpenLab Control Panel Authentication Type		Internal		Windows Domain

Instrument Overview

Refer to the *Bravo Platform Quick Guide* or *Bravo Platform User Guide* for this section.

☐ Identify primary hardware components:

 ☐ Bravo head and gripper.
 ☐ Deck locations and their corresponding numbers (1 -9).
 ☐ Accessories, such as Wash Station and Pump Module, On-Deck Thermal Cycler (ODTC), if applicable.
 ☐ Front-panel status indicators, explain the color coding.
 ☐ Light Curtain and emergency-stop pendant.

☐ Identify associated instrument and PC hardware connections (AC power entry, Ethernet port, pendant, pump I/O port).
☐ Explain how to install and uninstall the Liquid-Handling Head. Refer to *Bravo Platform Safety and Installation Guide*.
☐ Explain the Bravo axes of motion (x, y, and z axes) and the gripper (Zg and G axes).
☐ If applicable, demonstrate how to properly connect the tubing from Pump Module 2.0 to the wash station. Refer to the *96 Channel Wash Station Maintenance Guide*.

 ☐ Demonstrate tubing quick-release connectors.
 ☐ Show how to install the tubing in the pump head to prevent tubing damage.
 ☐ Explain that releasing the pump heads when not in use will cause liquid to drain out of wash station chimneys, resulting in potential contamination. In this case, the tubing lines must be primed before use.

System Startup

☐ Explain how to start up the instruments/modules in the correct order:

    ☐ If applicable, turn on the accessories, for example, Pump Module.

    ☐ Turn on the computer.

    ☐ Turn on the Bravo instrument.

Note: Ensure that you establish the computer LAN connection to the Bravo device before connecting any other networks. Otherwise, the device may not initialize.

    ☐ Show how to start VWorks and explain how to log on.

    ☐ Explain the steps to follow when the system is first initialized, e.g., the normal w-axis warnings.

Bravo Safety Equipment

☐ **Section not applicable**

Refer to the *Bravo Safety and Installation Guide* for this section.

☐ Review the potential safety hazards.

☐ Explain the safety shields.

☐ Demonstrate the emergency-stop pendant and Light Curtain.

☐ Explain differences between pausing or aborting a VWorks protocol versus an emergency stop.

Instrument Control Software

The following sections may include instrument options, which may or may not be applicable during familiarization. Check the not applicable boxes, as appropriate.

VWorks software 14.3

☐ **Section not applicable**

Refer to the *Agilent VWorks Automation Control 14.3 Software Introduction Checklist* (part number D0006695).

☐ **VWorks window**

Refer to the *VWorks Software Quick Start* for this section.

- ☐ Identify the Device and Task panes, and Device file and Protocol or Forms areas.
- ☐ Identify the log area and explain the Main Log, Pipetting Log
- ☐ Show how to open Labware Editor, view labware entries, and create new entries.
- ☐ Show how to open Liquid Library Editor to specify pipetting speed and accuracy.
- ☐ Demonstrate how to create a device file:
- ☐ Demonstrate how create a simple protocol.
- ☐ Demonstrate how to simulate a protocol run.
- ☐ Explain how to pause or abort a protocol.
- ☐ Explain difference between initialization in the VWorks window versus in diagnostics.
- ☐ Demonstrate how to open device diagnostics.

☐ **Bravo Diagnostics**

Refer to the *Bravo Platform User Guide* for this section.

- ☐ Demonstrate how to create and initialize a Bravo profile in Bravo Diagnostics.
- ☐ Demonstrate how to set and manage teachpoints.
- ☐ Demonstrate how to verify the gripper setup, if applicable.
- ☐ Demonstrate how to specify the deck locations any external robots will access, if applicable.
- ☐ Demonstrate how to configure accessories and use accessory diagnostics, if applicable.
- ☐ Demonstrate how to use the Processes tab.

Protocol Run

☐ **Section not applicable** (not on sales order, or not qualified or covered during the Instrument Introduction).

☐ Guide the customer to perform the following steps to complete their *first protocol run:*

☐ Open the VWorks protocol for their application.

☐ Set up the labware on the Bravo deck for their run.

☐ Run the protocol.

☐ Pause and continue the protocol.

Instrument Maintenance and Diagnostics

Bravo instrument

☐ **Section not applicable**

☐ Show where to access the Troubleshooting and Maintenance topics in *Bravo Platform User Guide.*

☐ Review the following basic instrument maintenance and troubleshooting procedures.

　☐ Inspect the moving parts for wear or rub marks.

　☐ Clean the instrument (except for the gripper pads) with isopropyl alcohol or ethanol.

　☐ Verify teachpoint accuracy.

☐ Explain how to check the grippers and gripper assembly for wear or rub marks.

☐ Explain how to inspect the gripper assembly moving parts for wear or rub marks.

Bravo accessories

☐ **Section not applicable**

　☐ Pump Module: Explain how to inspect the tubing for kinks and wear.

　☐ Weigh Station: Explain how to calibrate the station.

General maintenance

☐ **Section not applicable**

☐ Show how to register on Agilent SubscribeNet to download and order the latest software revision.

☐ Discuss the safe storage of the software media provided with the system.

☐ Describe the importance of data back-up and computer image backup.

☐ Discuss using Microsoft Backup and Restore as an option.

☐ Discuss the importance of disabling power management options and utilities that run automatically.

☐ Determine any Windows Firewall requirements with the customer IT department. Ensure that Windows Firewall is **Turned on** and the "Notify me when Windows Firewall blocks a new program" = **Checked.**

☐ Windows Update: Check for updates but let me choose whether to download and install them.

☐ Explain steps required to capture problems/error messages to send to Agilent Technical Support.

Service Review

☐ Attach available reports/printouts to this documentation.

☐ Complete the Service Engineer Comments section below, if applicable.

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

☐ If not covered during the Installation, explain the Agilent Warranty policy.

☐ Perform a review of Agilent's website and web links listed in "Important Customer Web Links".

☐ Discuss with the customer their training needs and present additional training options available through Agilent University and custom on-site consulting.

☐ **Complete the Signature Page with both the Service Engineer and Customer signatures.**

Signature Page

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 Verification

Service Request Number:

Date Service Completed:

Service Engineer Name:

Customer Name:

Service Engineer Signature:

Customer Signature:

Total number of pages in this document: