## **Troubleshooting Guide for GO Devices**

This document aims to guide Partners through the troubleshooting process for issues related to Geotab GO devices and MyGeotab. Partners should document as much information as possible to assist with the resolution.

### Step 1 — Identifying the issue

Before contacting Geotab Support, please identify whether the issue is hardware-related (i.e. a problem with the GO device); or application-related (i.e. a problem with MyGeotab). For account or sales-related issues, please contact your Partner Account Manager.

### Step 2 — Gathering information & troubleshooting the issue

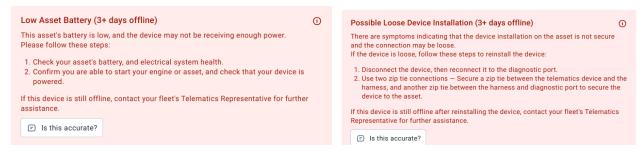
Before troubleshooting, please follow the steps below to gather all the necessary information related to the issue.

#### Hardware-related issues

If the issue is hardware-related, follow these steps:

- 1 Record the information of any hardware that is currently in use:
  - GO device serial number (12 characters, visible on the device, starts with G);
  - Auxiliary hardware connections (e.g. IOX-AUX, T-Harness, third-party accessories, etc.); and
  - Make, model, year, and VIN of the vehicle in which the hardware is installed.
- 2 Check for connectivity and installation issues:

Review the Asset page, where known reasons for device not communicating are displayed, if applicable. For example:



Follow the recommended steps to further troubleshoot and contact Geotab Support if not resolved.

- If the reason for not communicating is Unknown Reason, follow these steps:
  - Is the device (s) accessible physically?
    - Check to ensure the device is securely mounted and installed according to instructions. Is it loose or missing a zip tie?
    - Power cycle the device by removing it from the diagnostic port or harness, then reinserting it. Does the issue persist? Take note of which GO device lights are on.
    - If multiple components are connected to the asset (e.g. IOX expander), unplug all devices except the GO device. Plug each device back in, one at a time, to determine which device is causing the problem (i.e. does the problem occur after a specific device is plugged in?).
    - Install the device in a second asset ideally, an asset with functioning hardware. Does the issue persist? Take note of which GO device lights are on. Installing the device in a second asset can help Geotab Support accurately diagnose the issue.
  - Is the device (s) not easily accessible? (For example, is it installed behind the dashboard, requiring labor-intensive effort to reach the device?)
    - If multiple components are connected to the asset, check each and every connection including harness and or the IOX, if applicable via:
      - List the tool available for Partners to check
- \* NOTE: Regardless of hardware issues, always make sure the user has checked each and every connection including harnesses and/or the IOX, if applicable. The vast majority of issues result from insecure connections.
- For more detailed troubleshooting steps and the GO Device Troubleshooting Matrix,

! IMPORTANT: When entering information into support tickets, please do not include any sensitive or personal information. This includes information such as driver name, driver's license number, employee identification number, account passwords, government identification numbers, or other sensitive or personal data. For security reasons, Geotab employees cannot set passwords.

### **GO device LED definitions**

On initial power-up, all three LEDs on the GO device will flash once in unison, indicating that the device is receiving power. If none of the LEDs flash, this is an indicator that the device is not powered on.

After the initial flash, the Green LED will briefly turn solid, indicating that the modem is connected to our servers. The **blue** LED will also briefly turn solid, indicating that the GPS is working. Both LEDs will eventually shut down if ignition is turned off.

Once ignition is turned on, the following common light sequences indicate an issue: no lights, red only, red and blue only (most common), or red and green only.

### **GO device troubleshooting matrix**

Issue	Symptom	Possible causes	Troubleshooting
Installation or Power Issues	Device falls out of port or device rattles/moves while driving.	Device not fully inserted or not properly secured with zip tie.	Reinstall the device and use a zip tie to ensure secure and proper installation.
	No LEDs are on.	<ul><li>No power from OBDII/JBUS power supply.</li><li>Low vehicle battery.</li></ul>	<ul> <li>Check Engine Faults report for power-related issues. Refer to the <u>power issues</u> section.</li> <li>Reinstall device in a different asset with a functioning harness to reproduce the issue.</li> <li>Open support ticket if issue persists.</li> </ul>
		<ul><li>Device or harness not fully inserted.</li><li>Device unplugged.</li></ul>	Reinstall the device and use a zip tie to ensure secure and proper installation.
		Water damage or heat exposure.	Replace device.
		Faulty GO device.	Reinstall the device in a different asset with a functioning harness to determine if the same issue(s) persists. Log support ticket if issue persists.

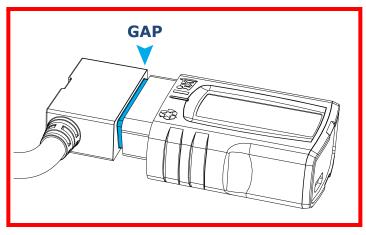
		Faulty harness.	Plug the device directly into the diagnostic port or replace the harness with a functioning harness.  Log support ticket if issue persists.
	Unauthorized Device Removal Exception.	Unplugged device.	Reinstall the device and use a zip tie to ensure secure and proper installation.
	Battery Drain Exception (Low power supply).	<ul><li>No power from OBDII/JBUS power supply.</li><li>Low vehicle battery.</li></ul>	Check Engine Faults report for power-related issues. Refer to the <u>power issues</u> section.
GPS Issues	Blue LED is off (Red LED is on).	Asset has an obstructed view of the sky.	Move the asset to another location. Log support ticket if issue persists.
		<ul> <li>Device is surrounded by metal.</li> <li>Lead/metallic filaments in window tint (very rare).</li> </ul>	Move the device to another location. Log support ticket if issue persists.
Carrier Issues	Green LED is off (Red LED is on).	<ul> <li>Poor or no data coverage.</li> <li>Billing issue due to a suspended or canceled account.</li> </ul>	Refer to the troubleshooting steps in the connectivity issues section. Log support ticket if issue persists.
	Device appears frozen on the map and assets appear black and gray.		
Server Issues	Device appears frozen on the map and the assets retain designated colors.	<ul><li>Service outage.</li><li>Server maintenance.</li></ul>	Wait for the server to come online.
Physical Issues	Rust/water stains or discoloration.	Water damage.	Replace device.
	Device case appears melted.	Heat exposure.	Replace device.

**\* NOTE**: Water damage and heat exposure are not covered under warranty.

## **Proper GO device installation**

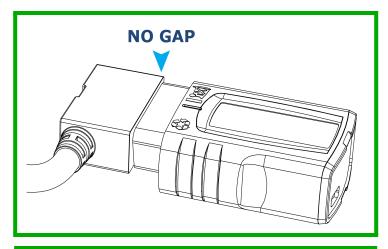
The images below display proper installation of the GO device. For proper installation, ensure there is no gap between the device and the port, then secure the connection with a zip tie.

#### **Incorrect Installation**





#### **Correct Installation**





## **Advanced troubleshooting**

For more advanced issues, please refer to the steps below.

\* NOTE: To perform the advanced troubleshooting steps in this section, your devices must be on the Pro or ProPlus plan.

### **GO Device power issues**

- 1 Check for signs of power-related issues in the Engine Faults report:
  - 1. From the main menu, navigate to **Maintenance** > **Diagnostics** > **Faults**.
  - 2. On the Faults page, select the Filter at the top of the page.
  - 3. From the window, select the desired **Date Period** and **Assets**.
  - 4. Click Apply changes.
  - 5. Review the results to identify any power-related issues (e.g. Code 130, Code 136, etc.).
- 2 If identified, check engine measurements for telematics device voltage levels:
  - From the main menu, navigate to Maintenance > Diagnostics > Measurements.
  - On the Measurements page, select the desired Date Period and Vehicles. For Diagnostics, type Telematics device voltage in the box.
  - Click Apply changes.
  - Review Range of Voltage Readings:
    - If the readings are below 12 Volts, brownouts can occur.
    - If the readings are below 9 Volts, blackouts can occur.
  - If the issue persists while the battery voltage is greater than 12 Volts, refer to the <u>GO Device troubleshooting matrix</u> section for solutions. Otherwise, contact Geotab Support.

### **GO** device connectivity issues

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- Check for signs of connectivity-related issues on Faults page:
  - 1. From the main menu, navigate to **Maintenance** > **Diagnostics** > **Faults**.
  - 2. On the Faults page, select the Filter at the top of the page.
  - 3. From the window, select the desired **Date Period** and **Assets**.
  - 4. Click Apply changes.
  - 5. Review the results to identify any connectivity-related issues.

If any connectivity-related issues are identified, continue driving in an area known to have sufficient coverage (i.e. where other assets are not experiencing connectivity issues). To check carrier coverage in your area, click the appropriate link below:

U.S. coverage:

Canada coverage:

Australia coverage:

• Telstra

- Sprint
- <u>Telus</u>
- <u>T-Mobile</u>
- Rogers
- AT&T
- Bell
- <u>Verizon</u>

\* NOTE: The coverage maps are maintained by the mobile carriers and are subject to change. For Telefonica coverage in the U.S. and Canada, there is no public map available. If you notice any discrepancies, please contact the Geotab Support team via MyAdmin.

- 3 If the device does not start communicating, examine the installation and ensure the device is not located too deep under the dash or encased in metal.
- 4 If the installation appears correct, contact Geotab Support.

### **Diagnostic flow clock for GO devices**

For the full version, click here.

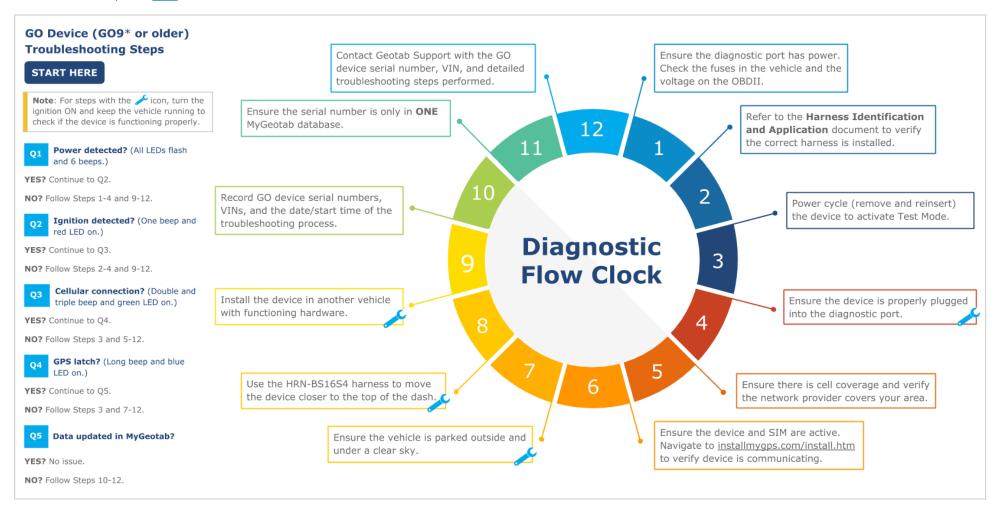


Figure 2 — Diagnostic Flow Clock

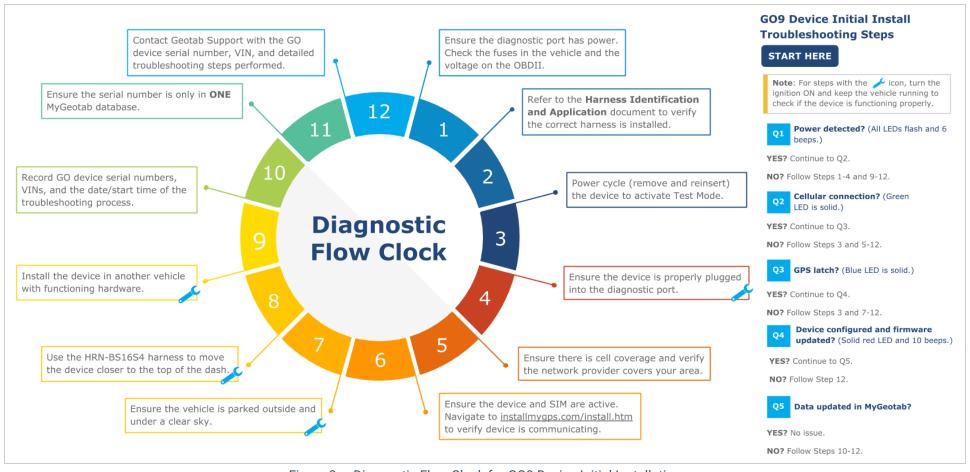


Figure 3 - Diagnostic Flow Clock for GO9 Device Initial Installation

\* NOTE: The installation process for the GO9 device is different from previous GO devices and requires separate troubleshooting steps for the initial installation. The GO9 device initial installation is complete when the device is configured and the firmware has updated, i.e. the device displays a solid red LED and beeps 10 times. After the initial GO9 device installation, follow the GO device (GO9 or older) Troubleshooting Steps above to troubleshoot.

# **Contacting the Geotab Support team**

For the most current information on how to engage with Geotab Support for troubleshooting, refer to the <u>Comprehensive Guide to Support at Geotab</u>, which describes all available support channels.

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