

Tracker Management, Insights & Troubleshooting

TennaU July 2023



**But
First...**

ANNOUNCEMENTS

Firmware “Over the Air” (FOTA) Updates

TennaCAM 2.0

- To enable this update, the camera will boot twice.
- LED lights will flash from 3-5 minutes.
- The camera will update following the next ignition "ON" event.
- No footage will be captured during the update (a few minutes).

TennaFLEET II

- Trackers will update automatically when located in an area with adequate cellular coverage.
- While the update is downloading, the tracker will still send its 3-hour scheduled HEARTBEAT report.

Please share this information with your teams.

Meet the Team



Sunil Puranik
Product



Enrique Alfaro
Hardware

Moderator: Gina Setzer | Director, Customer Experience

Agenda

Tracker Management

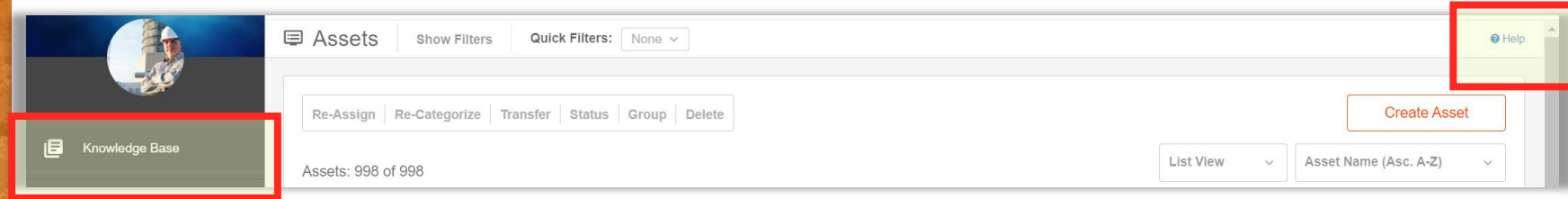
Tracker Details

Tracker Insights

Tracker Troubleshooting

Camera Troubleshooting

Help Resources



Tenna Knowledge Base

Resources on these topics can be found in our help library

- Trackers
- Trackers > Management & Insights
- Trackers > Troubleshooting
- Trackers > Tracker Verification

Trackers > Management & Insights

Learn how to monitor your tracker health

- [Tracker Insights Overview](#)
- [How to View Tracker Insights](#)
- [Tracker Details Page Overview](#)
- [Tracker Status Report](#)

Trackers > Troubleshooting

Tips for troubleshooting offline trackers.

- [Tracker Troubleshooting Guide](#)
- [Cellular Coverage FAQ and Troubleshooting](#)
- [Cellular Repeaters: What They Are and How They're Used](#)
- [Hours or Miles Discrepancies Troubleshooting](#)

Trackers > Tracker Verification

Verify each tracker is reporting correctly to Tenna after installation.

- [Tracker Verification Overview](#)
- [Tracker Verification Report](#)
- [TennaBLE Beacon Tracker Verification](#)
- [TennaCANbus Tracker Verification](#)
- [TennaFLEET Tracker \(JBUS\) Verification](#)
- [TennaFLEET Tracker \(OBD-II\) Verification](#)
- [TennaMINI \(Solar | Battery\) Tracker Verification](#)

Tracker Management

Overview

Tracker Management is made up of two components:

- Tracker Verification
- Tracker Status

Installation Status >	Tracker Identification >	Tracker Firmware & Configuration				E	Actions
Certification Decision	Tracker Type	Tracker Serial No.	ICCID No. ↓↑	Current Firmware Version ↓↑	Current Configuration Version ↓↑		
Verified	TennaFLEET II	87X111390085	89011703278558706951	187051722:159:55	E0CA:3119	1	👁
Verified	TennaFLEET II	87X111390081	89011703278558700608	187051722:159:55	E0CA:3119	1	👁
Verified	TennaFLEET II	87X111390136	89011703278558718873	187051722:159:55	E0CA:3119	1	👁
Verified	TennaFLEET II	87X111460010	89011703278558716190	187051722:159:55	E0CA:3119	1	👁
Verified	TennaFLEET II	87X111390272	89011703278558718840	187051722:159:55	E0CA:3119	1	👁
Verified	TennaFLEET II	87X111390266	89011703278558704022	187051722:159:55	E0CA:3119	1	👁
Verified	TennaFLEET II	87U011300001		187021422N:167:55	E6E7:E119	1	👁
Verified	TennaFLEET II	87X111390150	89011703278558699263	187051722:159:55	E0CA:3119	1	👁
Verified	TennaFLEET II	87X111390284	89011703278558717404	187051722:159:55	E0CA:3119	1	👁
Verified	TennaFLEET II	87X111460056	89011703278558704212	187051722:159:55	E0CA:3119	1	👁

Asset Details >							
Tracker Status	Fleet No.	Asset Name	Tracker Type	GPS Lock	Installer	Installation Date/Time	Actions
Installation Pending Verifica	1081MB,2	WANCO WTLMB MESSAC	TennaMINI Battery	N/A	Marc Montanaro	01/17/23 - 12:05 PM (EST)	👁
Installation Pending Verifica	1044ADT,2	VOLVO A45G 6X6 ARTICL	TennaCANbus	34.40065, -77.676848	Jim George	07/14/23 - 02:06 PM (EDT)	👁

Tracker Management

Tracker Verification

First step towards managing your tracker.

- Quality control step to ensure your tracker was installed correctly and properly reporting information to the platform.
- Different verification parameters for different tracker types.
- Records stored and accessible at the tracker level in Tracker Details.

The screenshot displays a tracker verification interface. At the top, it shows the start and end location addresses. Below this, a yellow warning banner indicates a 'VIN Mismatch'. A table provides trip statistics, and a map shows the route. A 'Verification' panel on the right allows users to confirm various trip details.

Start Location Address
180 Camelback Rd
Tannersville PA 18372 US
06/22/23 - 06:28 AM (EDT)

End Location Address
3511 Glover Rd
Easton PA 18040 US
06/22/23 - 07:06 AM (EDT)

VIN Mismatch
The VIN manually entered (dummyeaston2), does not match the VIN provided by your tracker (1GCPYBEK6MZ187954). Click the link below to update your manually entered VIN.
[Use the edit asset page to modify the VIN](#)

Last Trip Duration	Fuel Consumed	Last Trip Length (Miles)	Idle Duration	Idle Fuel Used
00:37:58	0.50	28.4	00:05:18	0.00 Gallons
Fuel Level	Fuel Economy			
60%	26.5 MPG			

Map | Satellite

Verification

Trip Report Fail Verify
An accurate trip start, trip end, duration, total miles, assignee and fuel consumption are presented.

Accurate Address Fail Verify
The trip start and trip end addresses are accurate.

Accurate Position Fail Verify
The position is accurately represented on the map.

Accurate Path Fail Verify
The dots on the map connecting Point A and Point B provide an accurate estimate of the path of the vehicle's first trip.

Accurate Hours/Miles Fail Verify
Verify the accuracy of total hours: 2155.05

Hours
Select source and verify the accuracy of hours:
 ECU Provided Data: 2155.05
 Baseline + Trip Time: 2155.05
[Learn More](#)

Miles
Select source and verify the accuracy of miles:
 ECU Provided Odometer: N/A
 Baseline + Trip Distance: 2420.1
[Learn More](#)

Total Idle Time
Select source and verify the accuracy of idle time:
 ECU Provided Total Idle Time: N/A
 Baseline (0) + Trip Total Idle Time: 23.23
[Learn More](#)

Asset Battery Voltage
12.181V - Last voltage captured during trip.

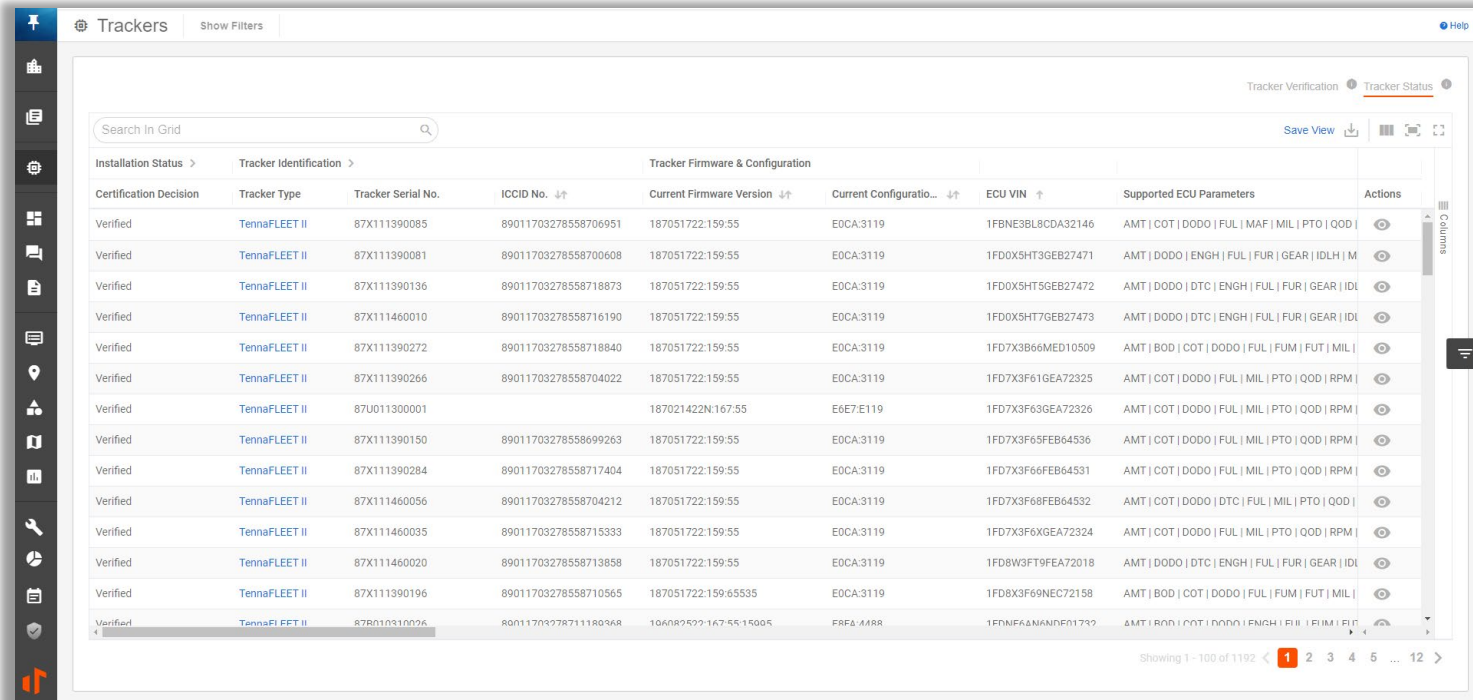
Tracker Battery Voltage
3.549V - Last voltage captured during trip.

Tracker Management

Tracker Status

High level overview of all trackers in your account.

- Installation Status
- Tracker Identification
- Tracker Firmware & Configuration
- Tracker Health
- Last Reading vs. Last Location
- What's offline (troubleshooting)



The screenshot displays a web application interface for managing trackers. The main content is a table with the following columns: Installation Status, Tracker Identification, and Tracker Firmware & Configuration. The table lists 15 trackers, all with a status of 'Verified'. The data is as follows:

Installation Status	Tracker Identification	Tracker Firmware & Configuration						
Certification Decision	Tracker Type	Tracker Serial No.	ICCID No.	Current Firmware Version	Current Configuration	ECU VIN	Supported ECU Parameters	Actions
Verified	TennaFLEET II	87X111390085	89011703278558706951	187051722:159:55	E0CA:3119	1FBNE3BL8CDA32146	AMT COT DODO FUL MAF MIL PTO QOD	
Verified	TennaFLEET II	87X111390081	89011703278558706608	187051722:159:55	E0CA:3119	1FD0X5HT3GEB27471	AMT DODO ENGH FUL FUR GEAR IDLH M	
Verified	TennaFLEET II	87X111390136	89011703278558718873	187051722:159:55	E0CA:3119	1FD0X5HT5GEB27472	AMT DODO DTC ENGH FUL FUR GEAR IDL	
Verified	TennaFLEET II	87X111460010	89011703278558716190	187051722:159:55	E0CA:3119	1FD0X5HT7GEB27473	AMT DODO DTC ENGH FUL FUR GEAR IDL	
Verified	TennaFLEET II	87X111390272	89011703278558718840	187051722:159:55	E0CA:3119	1FD7X3B66MED10509	AMT BOD COT DODO FUL FUM FUT MIL	
Verified	TennaFLEET II	87X111390266	89011703278558704022	187051722:159:55	E0CA:3119	1FD7X3F61GEA72325	AMT COT DODO FUL MIL PTO QOD RPM	
Verified	TennaFLEET II	87U011300001		187021422N:167:55	E6E7:E119	1FD7X3F63GEA72326	AMT COT DODO FUL MIL PTO QOD RPM	
Verified	TennaFLEET II	87X111390150	89011703278558699263	187051722:159:55	E0CA:3119	1FD7X3F65FEB64536	AMT COT DODO FUL MIL PTO QOD RPM	
Verified	TennaFLEET II	87X111390284	89011703278558717404	187051722:159:55	E0CA:3119	1FD7X3F66FEB64531	AMT COT DODO FUL MIL PTO QOD RPM	
Verified	TennaFLEET II	87X111460056	89011703278558704212	187051722:159:55	E0CA:3119	1FD7X3F68FEB64532	AMT COT DODO DTC FUL MIL PTO QOD	
Verified	TennaFLEET II	87X111460035	89011703278558715333	187051722:159:55	E0CA:3119	1FD7X3F6XGEA72324	AMT COT DODO FUL MIL PTO QOD RPM	
Verified	TennaFLEET II	87X111460020	89011703278558713858	187051722:159:55	E0CA:3119	1FD8W3FT9FEA72018	AMT DODO DTC ENGH FUL FUR GEAR IDL	
Verified	TennaFLEET II	87X111390196	89011703278558710565	187051722:159:65535	E0CA:3119	1FD8X3F69NEC72158	AMT BOD COT DODO FUL FUM FUT MIL	
Verified	TennaFLEET II	87R010310026	80011703278711180368	1060R292:167:55:15005	F8FA:418R	1FDNF6ANMDF01732	AMT BOD COT DODO ENGH FUL FUM FUT	

Tracker Management

Tracker Status – Sneak Peek!

New fields coming soon!

- **Offline Reasons:** Available in Tracker Status and Tracker Details.
- **Warranty End Date:** Different trackers have different Limited Warranties. We'll provide the warranty end date for each of your devices for visibility.

Offline Tracker - Possible Reasons

Below is a table outlining possible reasons for your tracker's offline status. The table has been designed specifically for this tracker and its potential problems.

Reason	Definition
Poor Network Coverage	The tracker is possibly located in an area where the cellular network signal is weak or nonexistent. This can happen in rural areas, underground, or in buildings with thick walls. Please ensure the carrier has good coverage in your area. You can check the carrier's coverage map to see if they have good coverage in the area where your tracker is located.
Installation / Wiring Issue	There is possibly a problem with the way the tracker is installed or wired. This could be a loose connection, a damaged wire, or a faulty installation.

Tracker Management

Upgrade your Hardware

Proactively manage your trackers by upgrading them periodically. We have new products you may not have taken advantage of yet!

Our newest hardware includes:

- **TennaCANbus:** The next level of vehicle data consumption is here with deeper insights.
 - TennaCANbus + AEMP **coming soon!**
- **TennaMINI 2.0 Plug-In Solar:** The TennaMINI 2.0 comes in plug-in and solar options. Tenna's latest MINI device charges from solar energy and asset power for the most reliable data and tracking.

Contact your Tenna Account Manager to order new hardware.



Tracker Details

New! Tracker Info at a Glance

Important information about your tracker, its current status, its supported data fields, installation details, and latest insights – in one place.

Includes

- General Info
- Installation Information
- Tracker Insights

The screenshot displays the 'Trackers' web interface for a 'TennaMINI Plug-In'. The interface is organized into several sections:

- Header:** 'Trackers' logo and 'Help' link.
- Tracker Overview:** Includes a small image of the tracker, the name 'TennaMINI Plug-In', a 'Remove Tracker from Asset' button, the serial number 'BTEAE16202218119114', the model 'BEW-MIOT-GA', and the last data received timestamp '07/25/2023 - 12:37 PM (EDT)'. A green 'ONLINE' status indicator is present.
- Navigation:** Three tabs are visible: 'General Info' (selected), 'Installation Info', and 'Tracker Insights'.
- Assigned Asset:** A photo of a crane and the text '3395 - LINK BELT LS238H Cranes / Heavy Lift Cranes'.
- Last Tracker Location:** A map showing the location at '611 Springbranch Rd, Dunn, NC, 28334, US' with a timestamp of '07/25/2023 - 12:36 PM (EDT)'.
- General Info Table:** A table listing various data points and their values.

General Info	
Tracker Battery Voltage	3.8 V
Cellular Signal Strength	-84 dBm
GPS Fix Quality	Previous Fix
GPS HDOP	0.87
GPS NumSV	10
Last Known Humidity	48%

Tracker Details

General Info

Basic info on the current status of the tracker parameters, including:

- **Asset Assignment Details** (Asset Image, Fleet No., Asset Name, Asset Category)
- **Last Tracker Location** (Interactive Map and Timestamp)
- **General Info** (Tracker Insights and Tracker 2 Details – if applicable)
- **Battery Life** (for applicable trackers)
- **ECU Provided Data Points** (Timestamp, Various Data Points ECU provides: True Odometer, VIN, RPM, Throttle, etc.)
 - *TennaCANbus and TennaFLEET II*
- **Coming Soon!** Warranty tracking and why trackers go offline.

The screenshot displays the TennaFLEET II tracker details interface. It features several key sections:

- Assigned Asset:** A photograph of a white semi-truck on a road at sunset. Below the image, the asset name is "si-tenna-mini-plugin-01 d - Cat - C1.7 d" and the category is "Heavy Trucks / Vac Truck".
- Last Tracker Location:** An interactive map showing the truck's current location at "I-90, Phelps, NY, 14532, US". The map includes a "Map" and "Satellite" view toggle and a timestamp of "05/19/2023 - 06:55 AM (HST)".
- ECU Provided Data Points:** A list of real-time data points from the engine control unit, including "Cruise Control", "Coolant Temperature", "Diagnostic Message 1 (DM1)", "Diagnostic Message 2 (DM2)", "Fuel Rate", "MIL", "PTO State", "RPM", "Speed", "Throttle", and "True Odometer". A tooltip for "Fuel Rate" indicates "The amount of fuel injected into the engine per unit of time."
- General Info:** A summary of tracker status and performance metrics:
 - Warranty End Date: 06/18/2022 - 11:24 AM (HST)
 - Cellular Signal Strength: -140 dBm
 - GPS Fix Quality: Previous Fix
 - GPS HDOP: 1.41
 - GPS NumSV: 6
 - Last Known Humidity: 34%
 - Last Known Temperature: 67 °F
- Tracker Status:** The tracker is currently "OFFLINE" with "2 Possible Reasons". The last data received was on "05/03/2023 - 11:31 AM (CDT)".
- Navigation:** A bottom bar with three tabs: "General Info" (selected), "Installation Info", and "Tracker Insights".

Tracker Details

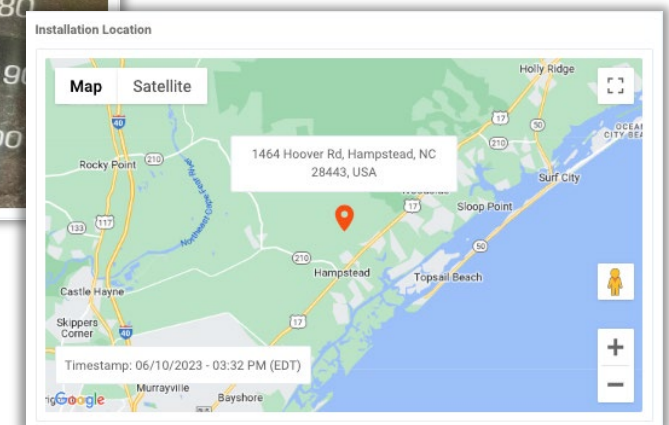
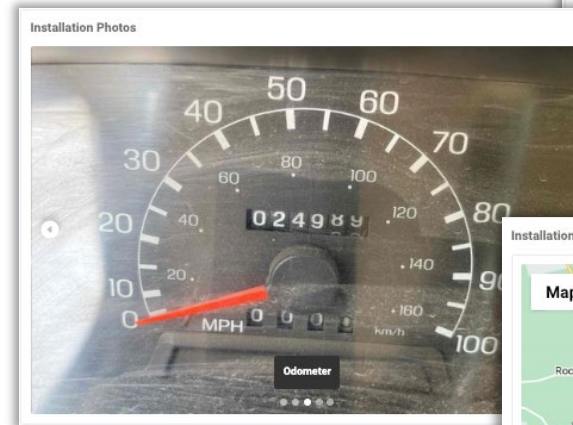
Installation Information

See information recorded at the time of installation.

- **General Info** (Latest Values for Certification Decision, Installer, Verifier, Verification Time, External PTO)
- **Miles and Hours Call Out** (Miles at Installation and Hours at Installation – with option to view Meter Photo) – *if applicable*
- **Installation Photos** (carousel of attached photos with annotations and options to download)
- **Installation Location** (interactive map and timestamp of installation)
 - *Note: Installations completed prior to June 2023 will not show a location on the Installation Information tab map*

General Info	
Certification Decision	Verified
Installer	Jim George
Verifier	Sunil Puranik
Verification Time	06/10/2023 - 04:00 PM (EDT)
External PTO	Yes

Miles at Installation	Hours at Installation
24,989	1

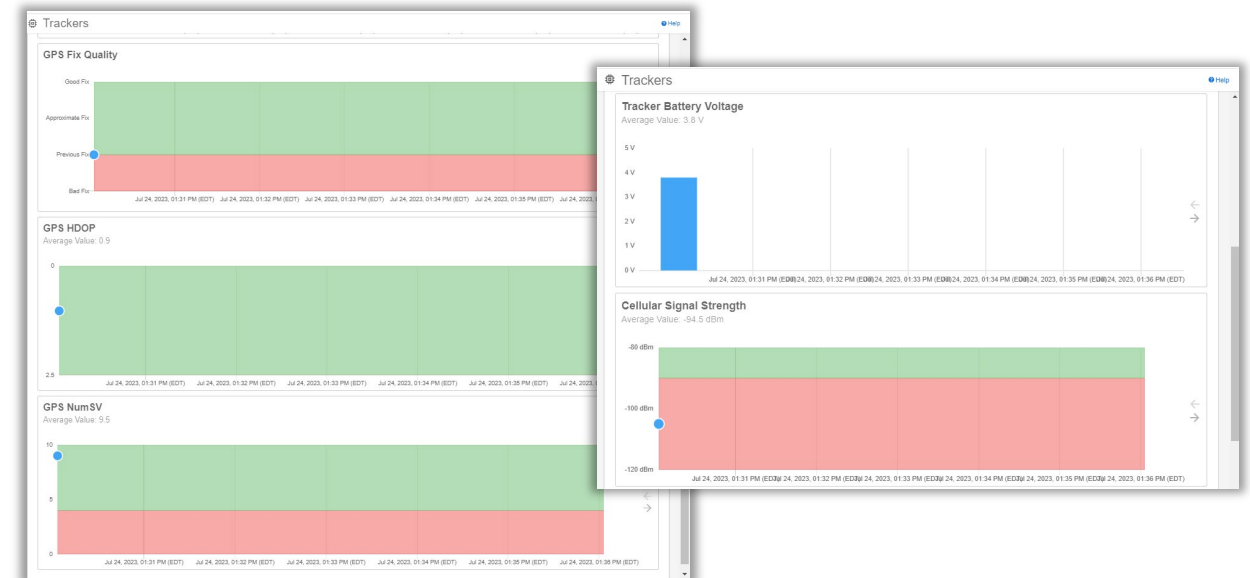
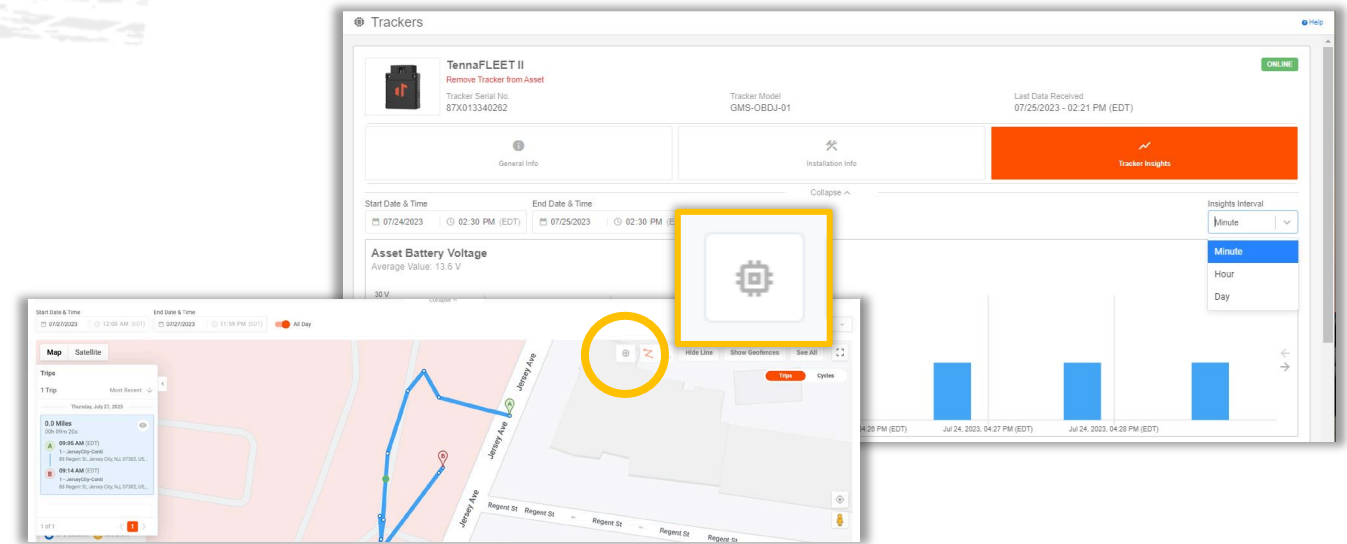


Tracker Insights

Tracker Insights

Review insights for a specific trip or a holistic picture about your tracker's health.

- **Time & Date Selection** (Option to select a PAST date to view Tracker Insights) *(default is for last 24 hours)*
- **Insights Interval Dropdown** (Update the Tracker Insights Graph to interval options - Minute, Hour, Days)
- **Tracker Insights Graphs** (Asset Battery Voltage, Tracker Battery Voltage, Cellular Signal Strength, GPS Fix Quality, GPS HDOP, GPS NumSV, Ignition Wiring)



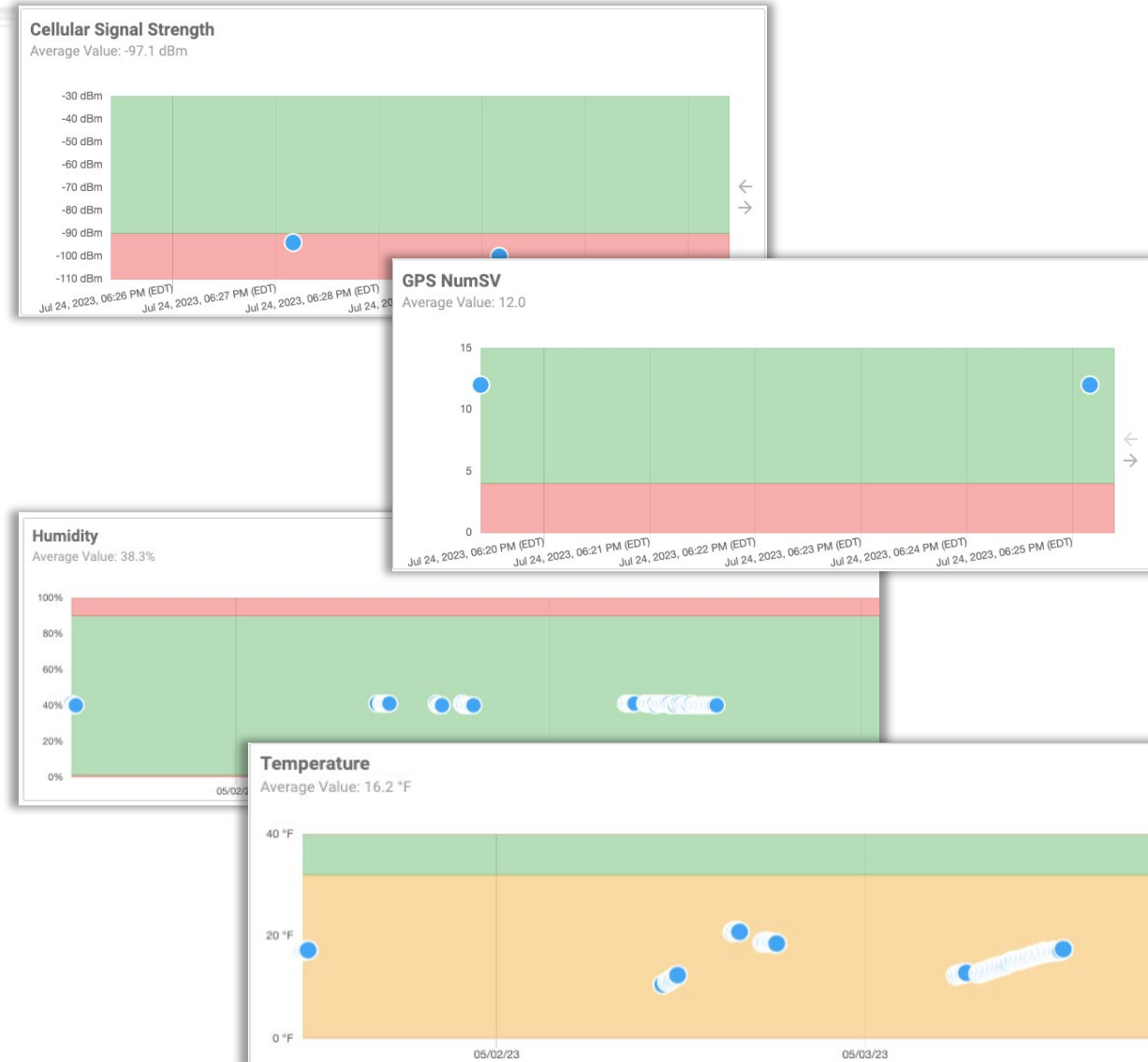
Refer to our **Tracker Insights Material** in the **Tenna Knowledge Base** for other possible offline reasons:
<https://help.tenna.com/article/437-tracker-insights-overview>

Tracker Insights

How to Interpret Insights

- **Cellular Signal Strength:** Average and daily – the smaller the negative number, the better the strength
- **GPS Number of Satellites in View:** how many satellites are providing the current location information (minimum of 4 is necessary)
- **GPS Horizontal Dilution of Precision:** the lower the GPS HDOP, the more precise
- **Asset Battery Voltage:** Varies per tracker type
- **Tracker Battery Voltage:** Varies per tracker type
- **Sneak Peek!** Temperature & Humidity

NOTE: Supported Tracker Insights data points vary by Tracker. All available tracker insights for the Tracker will be shown in the Tracker Insights section.



Tracker Troubleshooting

Tracker Offline

A tracker is marked as offline if it has not reported to the platform in 48 hours.

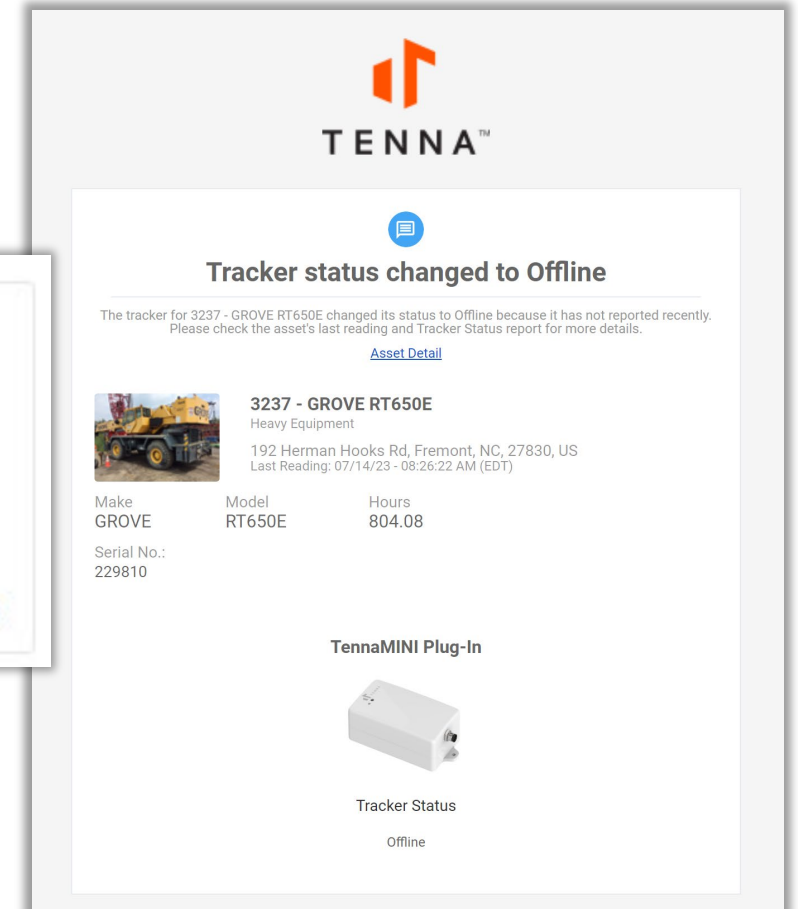
Trackers may go offline for a few reasons, most commonly including:

- Improper installation
- Tracker unplugged
- Out of cellular service
- Battery levels or disconnect
- Damaged tracker
- Improper location

Verify that these issues are not present in your installation.

Refer to the [Tracker Troubleshooting Guide](https://help.tenna.com/article/516-tracker-troubleshooting-guide) in the Tenna Knowledge Base for other possible offline reasons and other troubleshooting steps:

<https://help.tenna.com/article/516-tracker-troubleshooting-guide>



Tracker Troubleshooting

Tracker Offline

Improper installation

- Improper wiring
- Incorrect fastening
- Bad connector
- Improperly located
- Solution(s): Make sure that the installation is correct:
 - All connections are good (ground to ground, Batt+ to Batt+, etc.)
 - The tracker has a clear view to the sky

Improper Location



(Bad) Connector with bent pins

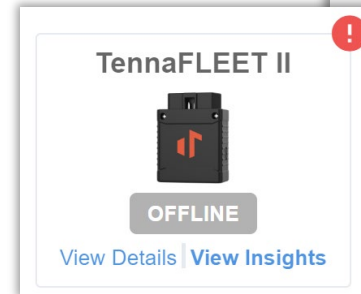
Refer to the Knowledge Base Troubleshooting Guide

Tracker Troubleshooting

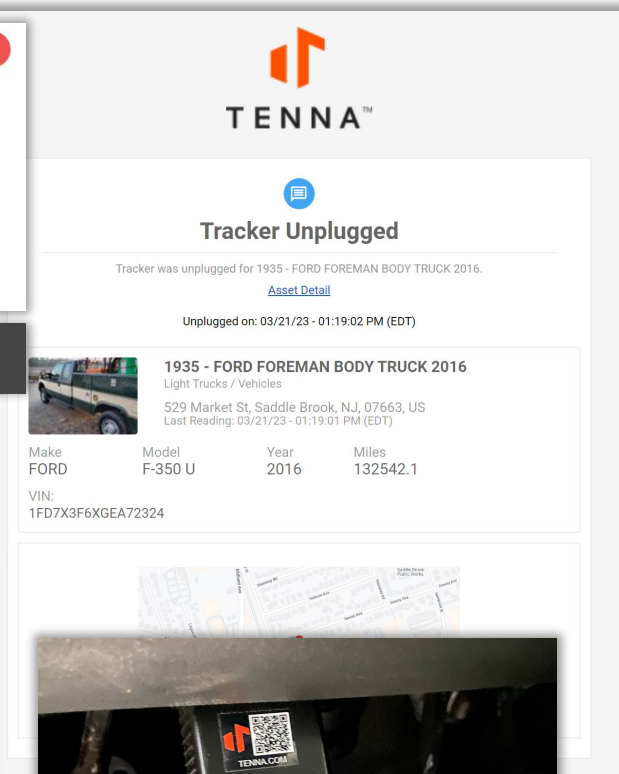
Tracker Offline

Tracker Unplugged

- Why:
 - Poor connector fit (pins loose, bent, or corroded)
 - Dangling/unfastened tracker or cables
 - Kill switch in asset
 - Damaged tracker
 - User unplugged it
- Solutions:
 - Ensure that the adapter is fully seated in the Data Link Connector (DLC) and fastened
 - Ensure that Tenna cables are used
 - Fix corroded/loose pins
 - Disengage the kill switch (so power is always present at the tracker)



Tracker Unplugged: 07/27/23 - 10:13 AM (EDT)



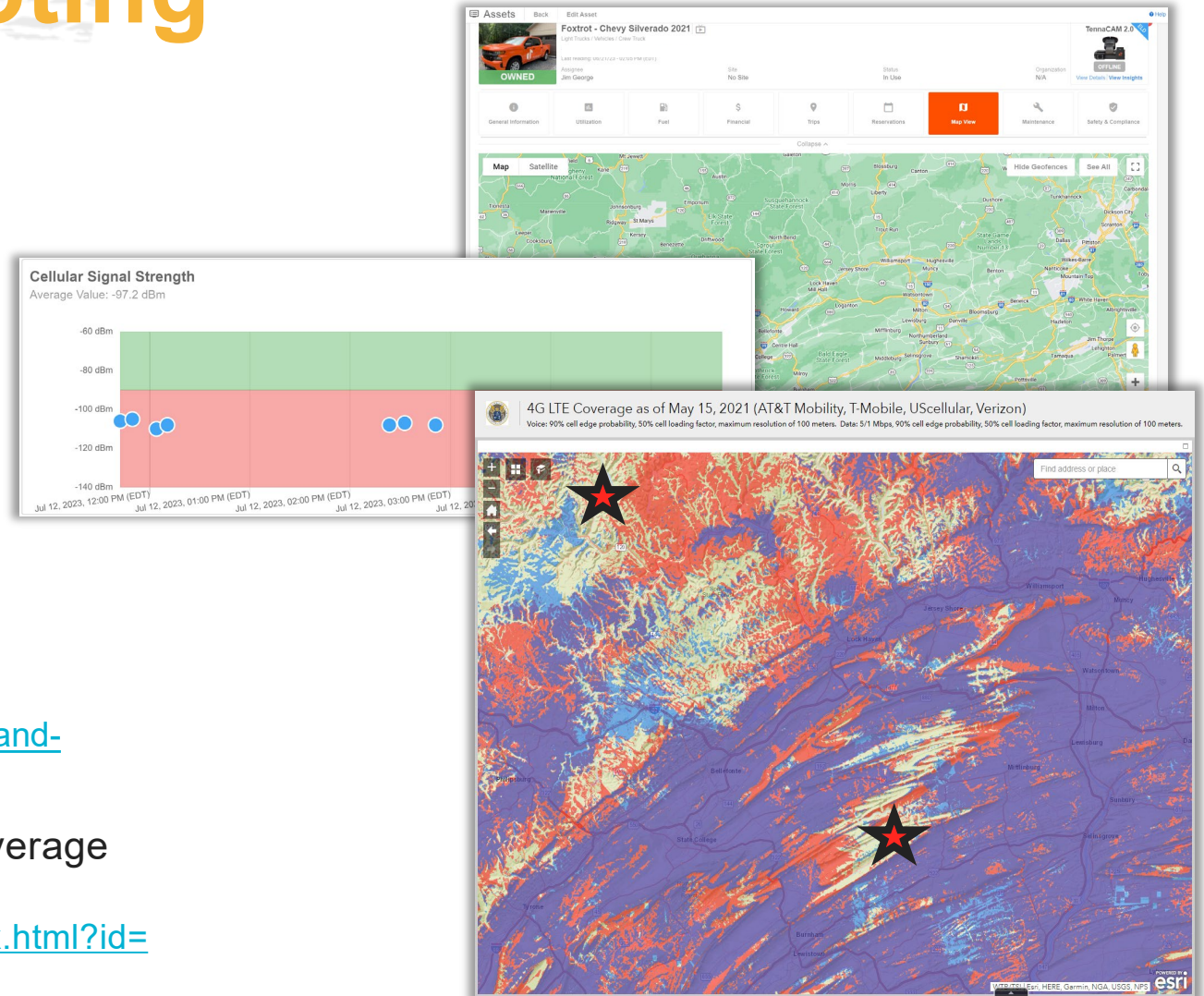
Refer to the Knowledge Base Troubleshooting Guide

Tracker Troubleshooting

Tracker Offline

Cellular Coverage

- No coverage or borderline coverage
- Move tracker to a good coverage location
- Solution:
 - Make sure the tracker is unobstructed
- **Review the Knowledge Base Cellular Coverage FAQ:**
<https://help.tenna.com/article/510-cellular-coverage-faq-and-troubleshooting?tenna>
- Verify on the FCC map if you should expect coverage at your location
<https://fcc.maps.arcgis.com/apps/webappviewer/index.html?id=6c1b2e73d9d749cdb7bc88a0d1bdd25b>



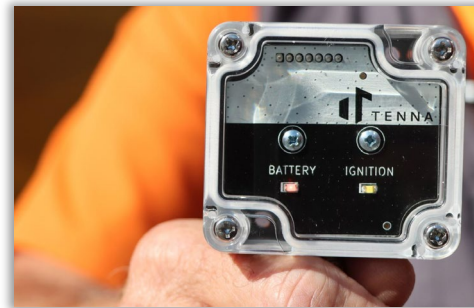
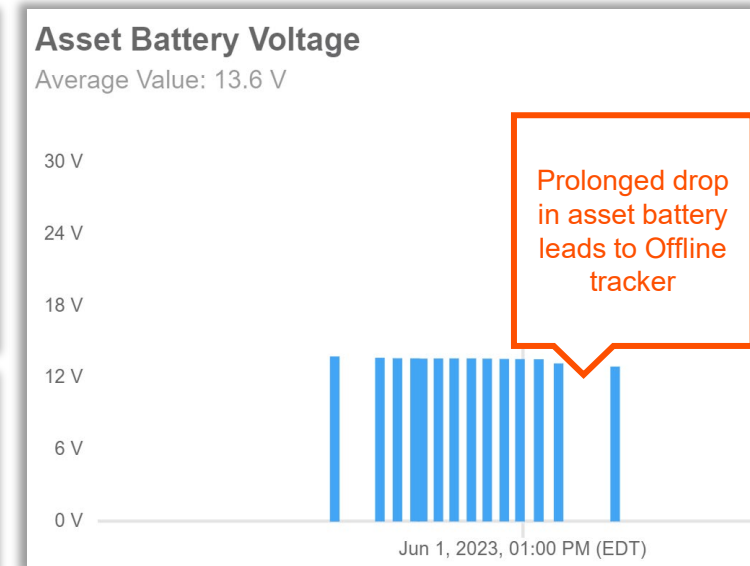
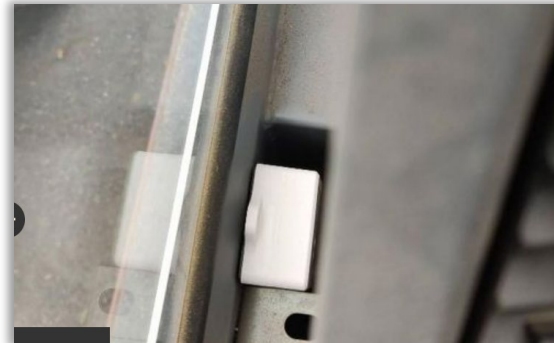
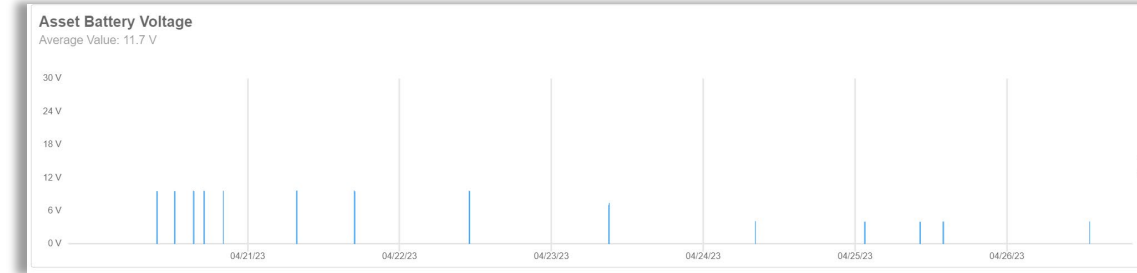
 **Poor Coverage**

Tracker Troubleshooting

Tracker Offline

Low / Dead Battery Level

- The asset battery has been disconnected
- A kill switch is present between the asset battery and the tracker
- A tracker is not allowed to charge
 - Incorrect wiring
 - No sunshine on tracker
- Solutions:
 - Make sure that the asset battery is good
 - Ensure proper wiring
 - Use TennaTEST for plug-ins
 - Ensure proper installation location



Refer to the Knowledge Base Troubleshooting Guide

Tracker Troubleshooting

Tracker Offline

Damaged Tracker

- The tracker has been run into and is now broken and noticeably damaged
- The tracker case is is:
 - A. Broken
 - B. Cracked or bowed
 - C. Punctured
- Solutions:
 - Inspect the tracker visually for any damage
 - Ensure tracker's wires are secured and out of the way (to avoid damage)



Refer to the Knowledge Base Troubleshooting Guide

Tracker Troubleshooting

Tracker Offline

Improper Location


Location in Tenna does not match the asset's physical location


- Tracker mounted against metal
- Tracker stored inside of a shop
- Tracker sending stored information
- Tracker's battery is dead
- New tracker location (or tracker has been "obscured" for a long period of time)
- Solutions:
 - Make sure that the tracker has a clear/unobstructed view of the sky.
 - Allow the tracker GPS to locate itself (up to 10-15 minutes).

Tracker Verification - Pending

Tracker has been installed on the following asset and is currently pending verification:
[123569815 - SECO s990A 2020](#)

Installed By




Site Mechanic (Mechanic)
contifieldmanager@gmail.com
(508) 847-4459

 **123569815 - SECO s990A 2020**
Specialty Equipment
Last Reading: 07/28/22 - 08:33:22 AM (EDT)


Make	Model	Year	Hours
SECO	s990A	2020	1000.00

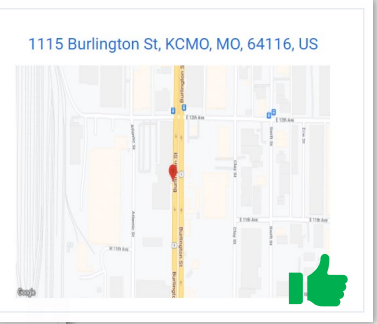
Serial No.:
38192749192847

Tenna BLE Beacon

 **N/A** 

Tracker Status
Installation Pending Verification







Refer to the Knowledge Base Troubleshooting Guide

Tracker Troubleshooting

Hours/Miles Discrepancies

- How: The asset's odometer or hour meter does not match the Current Miles or Current Hours values shown in Tenna.
- Why this may happen:
 - ECU vs. Odometer/Hour Meter
 - Poor Cellular Coverage
 - Asset Errors/Damages: Odometer/Hour Meter was Reset, Damaged Odometer/Hour Meter, Alternator, Wiring, Blown Fuse, Key switches left in run position, battery disconnect wired incorrectly, back-to-back ignition sequences
 - Operator or Installation Errors: Incorrect hours/miles value entered during install/verification, incorrect wiring, incomplete trip or cycle.

The screenshot displays the Tenna Fleet Tracker OBDII interface. At the top right, there is a 'Tracker Verification' tab. Below it, the 'Tenna Fleet Tracker OBDII' section shows the 'Tracker Status' as 'Installation Pending Verification'. Under the 'Miles' section, there are two radio button options: 'ECU Provided Odometer: 124267.4' (which is selected) and 'Baseline + Trip Distance: 124267.4'. A yellow arrow points from this section down to the 'Miles / Hours' table in the main interface.

The main interface shows 'General Information' for a '2015 Ford F-250'. The 'Miles / Hours' table is highlighted with a yellow border and contains the following data:

Miles / Hours	ECU Odometer Provided	Ignore ECU Odometer	ECU Hours Provided	Ignore Hours
Current Miles 29209.0 ↻	Yes	No ↻	No	No ↻

Refer to the Knowledge Base Hours/Miles Discrepancies Troubleshooting Guide:

<https://help.tenna.com/article/511-hours-or-miles-discrepancies-troubleshooting>

Tracker Troubleshooting

Hours/Miles Discrepancies

- Solution:
 - Utilize the Tenna Knowledge Base to troubleshoot the discrepancy.
 - [Hours or Miles Discrepancies Troubleshooting](#)

The screenshot shows the Tenna Knowledge Base interface. The top navigation bar is orange with the Tenna logo and links for 'Tenna Online', 'Tenna App', and 'Contact'. A search bar is located below the navigation. The left sidebar contains a 'CATEGORIES' menu with various topics like 'Getting Started', 'Onboarding', 'Tenna Platform', 'Answers', 'Assets', 'Dashboard', 'Geofences', 'Integrations', 'Live Launch', 'Maintenance', 'Maps', 'Release Notes', 'Reports', 'Reserve It', 'Resource Management', 'Safety & Compliance', and 'Safety & Compliance > Driver Scorecard', 'Safety & Compliance > ELD', 'Safety & Compliance > Inspections', and 'Safety & Compliance > Safety Camera'. The main content area displays the article 'Hours or Miles Discrepancies Troubleshooting' with a 'View in Help Scout' button. The article text includes a 'What:' section explaining that there are several possible problems and solutions related to Hour Meter or Odometer values not matching Current Hours or Current Miles in Tenna. An 'Important!' callout box states that there will never be a 100% match between Tenna and the odometer/hour meter, and that manually matching the odometer/hour meter to Tenna is important for the discrepancy to be as small as possible. The article also lists 'What are possible reasons for hours or miles in Tenna not matching my odometer or hour meter?' and provides a table of reasons categorized into 'Asset Errors or Damages' and 'Incorrect Installation or Verification'.

Asset Errors or Damages	ECU Provided Data vs. Odometer/Hour Meter
	Hour meter or odometer was reset
	Damaged hour meter or odometer
	Key switches are left in the "run" position after the engine is turned off
	Battery disconnect wired incorrectly, causing a floating ground
	Back-to-back ignition sequences
	Damaged alternator, damaged wiring or blown fuse
Incorrect Installation or Verification	Incorrect miles or hours entered during Tracker Verification
	Incorrect wiring by installer
	Incomplete Trip or Cycle

Camera Troubleshooting

Camera Troubleshooting

Camera Confusion

- Difference between Tracker Status and Tracker 2 Status (Camera Status)
 - There is a common misconception that if the tracker is "online", the camera is online.
 - The status badge on the Asset Details page indicates the TennaFLEET status (Tracker 1)
 - TennaCAM 2.0 is Tracker 2
 - Refer to TennaCAM 2.0 Health Report for information on camera health (subscribe to this report under Settings)

Refer to the Knowledge Base Troubleshooting Guide and TennaCAM 2.0 FAQs:

<https://help.tenna.com/article/403-tennacam-2-0-faqs>

The image shows two screenshots from the TennaCAM 2.0 interface. The top screenshot displays the 'General Info' section for a Tracker 2 device, listing various technical specifications. A yellow box highlights the 'Tracker 2 Status' field, which is currently set to 'Online'. The bottom screenshot shows the 'Tracker 1: Fleet Tracker' section, which includes a table for Tracker 1 status and a section for Tracker 2: Camera health. The Tracker 1 status table shows the device is 'Offline' with the last data received on 03/09/23. The Tracker 2: Camera section shows the Tracker 2 Status as 'Online' with the last data received on 04/30/23.

Tracker Status	Last Data Received	Last Tracker Location
Offline	03/09/23 - 11:49 AM (CST)	26.21965, -80.139451

Tracker 2 Status	Tracker 2 Last Data Rec...
Online	04/30/23 - 12:13 PM (CDT)

Camera Troubleshooting

Camera Troubleshooting

- Camera LEDs do not come on when asset is running.
 - The camera's power source connector may have been installed upside down. This will cause the camera to not power up.
 - Make sure a fuse isn't blown and that the camera is being fed with battery power.



	Device Bootup. The device will flash the 3 LEDs several times during bootup (max 30 seconds).
	Device Ready. Device shows 3 solid LED lights (after the bootup). The device is ready to be installed for the first time.
	Pairing Mode. Flashing Yellow. The device is in pairing mode during the installation process.
	Recording and Connected. Steady Green light. Normal recording status.
	Recording but Not Connected. Flashing Green light. The camera is recording but it is not connected to Tenna. This typically happens in areas of low cellular service.
	Non-Serviceable Errors. Steady Yellow and Green lights or steady Red and Green lights. Errors that cannot be solved by user intervention. Contact Tenna Technical Support at 888.836.6269.
	Upgrading Firmware. Flashing Red and/or Green lights. Device is upgrading and may take 1-2 minutes.

Refer to the **Tracker Troubleshooting Guide** in the Tenna Knowledge Base:
<https://help.tenna.com/article/516-tracker-troubleshooting-guide>

**Stay
Connected**

TennaSHOP

The TennaSHOP LinkedIn Group is a place for Tenna users to connect with one another to:

- Ask questions
- Talk about new and unique use cases
- Share best practices
- Share information about integrations
- Swap success stories

TENNA
SHOP



Come see us! We'll be exhibiting, speaking, or sponsoring at the following events:

NAWIC Annual Conference
August 9-12
Portland, OR

AGC IT Annual Conference
August 22-24
Chicago, IL

**More
Chances
To Learn**

Live Launch

****THURSDAY****

August 17, 2023

1 p.m. EDT

We will be unveiling all the details of our newest hardware products and exciting software enhancements.

This is a must see!

Questions?

Thank You

