



Quick Reference Card

ELD Diagnostics & Malfunction Events: BigRoad Mobile App

Note: These enhancements only apply to an ELD equipped fleet and is only supported on BigRoad Mobile App versions 29.0 and above.

What are Data Diagnostics & Malfunction

ELD Technical Requirements

According to the ELD Technical Standard Section 4.6, an ELD must have the capability to monitor its compliance with the technical requirements for detectable malfunctions and data inconsistencies listed below in Table 4.

The ELD must also keep records of its malfunction and data diagnostic event detection.

ELD Malfunctions indicate that something is wrong with the device and will require you to resolve the issue. Otherwise, you will need to re-produce the last 7 days (US) of logs on paper.

- Depending on your Role in BigRoad, there are additional responsibilities that must be followed.
- These malfunctions will show during roadside inspections on the Mobile App and can also be sent during an audit to the FMCSA.

Data Diagnostics are active warnings that indicate something may be wrong, but you do not need to switch to paper logs.

- Some events will start as a data diagnostic event and progress to a malfunction, if not corrected.
- Data diagnostics represent an issue that happened in a specific moment and can auto correct when that moment has passed.

Malfunction/Diagnostic Code	Description
P	Power compliance malfunction
E	Engine synchronization compliance malfunction
T	Timing compliance malfunction
L	Positioning compliance malfunction
R	Data recording compliance malfunction
S	Data transfer compliance malfunction
O	Other ELD detected malfunction
1	Power data diagnostic event
2	Engine synchronization data diagnostic event
3	Missing required data elements data diagnostic event
4	Data transfer data diagnostic event
5	Unidentified driving records data diagnostic event
6	Other ELD identified diagnostic event

Driver & Motor Carrier Responsibilities

Drivers and the Motor carriers of ELD equipped Fleets have the following responsibilities, in the event an ELD Malfunctions:

BigRoad Applications: Enhancements

An ELD equipped fleet must monitor its compliance with the ELD technical requirements and detect Malfunctions and Data inconsistencies. These are related to *power, data synchronization, missing data, timing, positioning, data recording, data transfer, and unidentified driver records requirements.*

If an ELD malfunctions, a Motor Carrier must:

1. Correct, repair, replace or service the malfunctioning ELD within 8 days of discovering the condition.
2. If the malfunction cannot be resolved by BigRoad Support, a new MGS or DashLink will be provided. This will depend on your type of account.
3. Require the driver to maintain paper record of duty status (RODS) until the ELD is back in service.
4. If more time is required to resolve the issue, the carrier must notify their State FMCSA Division

To ensure compliance with the ELD technical requirements, the BigRoad Web & Mobile Applications have enhanced the monitoring of Data Diagnostics and Malfunction events.



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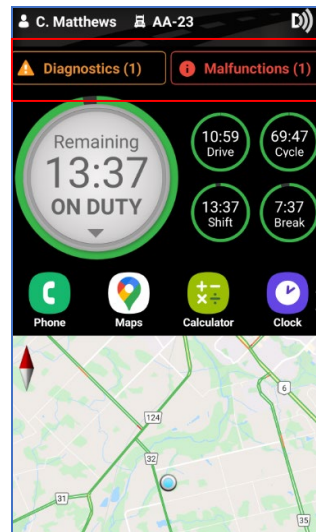
Administrator as part of S395.34(2). For non-US operators, this can be the nearest State.

Home Screen Notification

The Home Screen displays two tabs to show active **Diagnostic and Malfunction** events as soon as they are detected by the Mobile App.

If an ELD malfunctions, a Driver must:

1. Call BigRoad Support to troubleshoot the issue.
2. Note the malfunction of the ELD and provide written notice of the malfunction to their motor carrier within 24 hours.
3. Reconstruct paper records of the duty status (RODS) for the current 24-hour period and the previous 7 consecutive days.
4. Continue to manually prepare RODS in accordance with 49 CFR 395.8 until the ELD is serviced and back in compliance



Note: The above responsibilities are also listed on the ELD Driver Card.

BigRoad Mobile App: Enhancements

As already discussed, the BigRoad mobile application now monitors and displays **ELD Data Diagnostic and Malfunction events** using enhanced methods. Drivers will see on screen notifications when a Data Diagnostic or Malfunction event has been detected or reported. The App also provides details on these events and instructions on how to resolve them.

Let's now look at how Drivers are notified of Data Diagnostics & Malfunction Events on the Mobile App.

The numbers on each tab indicate how many active events have been detected for each category.

For example: On the screen above, 1 active event for Diagnostics and Malfunctions were detected respectively.

If either Diagnostic or Malfunction events were detected, only one tab will display for the event category that was detected.

Once you select the **Diagnostics/Malfunctions** tab, the next screen provides more details on the active event or warning.

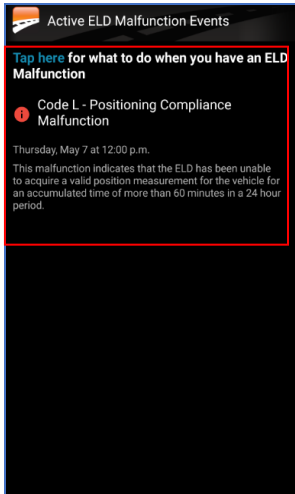
The tabs disappear once the issue has been cleared by the application.



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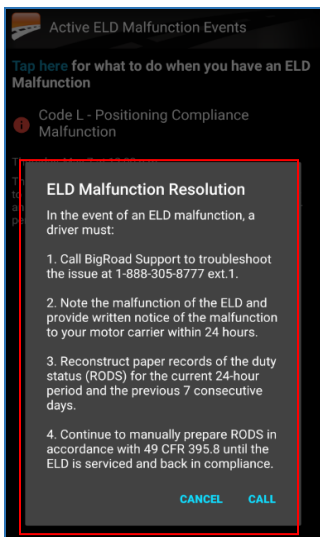
Active ELD Malfunction Events

If the **Malfunctions** tab was selected from the Home Screen, the following screen displays:



In the **Active Events Malfunctions** screen above, the Driver can see the active malfunction events with their Code, Description and a more detailed explanation of what they mean.

Select **Tap here** to see possible suggestions on how to resolve them.



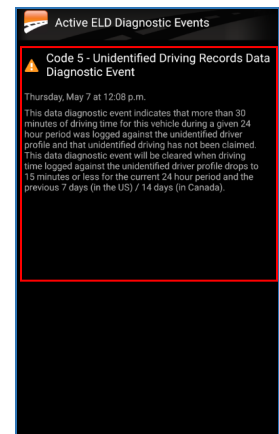
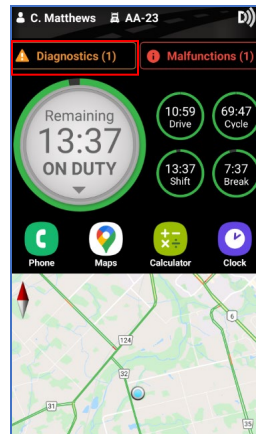
Note: It is the Driver's responsibility to resolve an active malfunction by following the instructions shown on the ELD Malfunction Resolution screen

Additionally, they can choose to **Call** our BigRoad Support team for further assistance

Tap the **CALL** button on the Resolution screen to call BigRoad Technical Support

Active ELD Diagnostics Events

If the **Diagnostics** tab was selected from the Home Screen, the following screen displays:



The **Active ELD Diagnostics Events** screen above shows any active diagnostic events with their Code, Description, a more detailed explanation of what they mean and suggestions on how these warnings can be cleared.

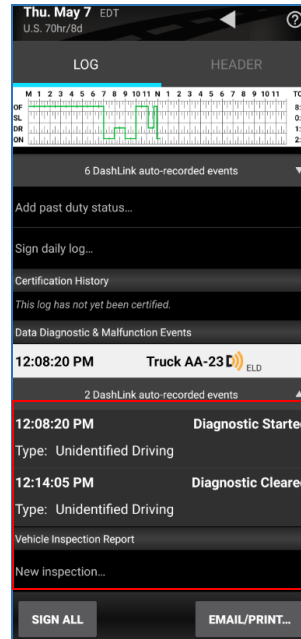
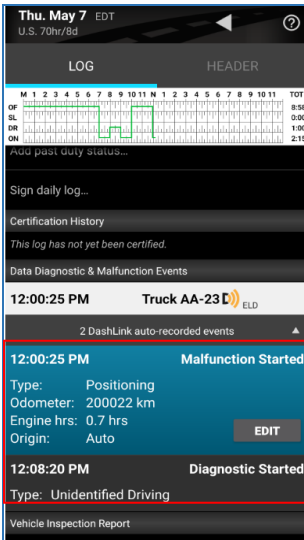
Note: Since Data Diagnostics are active warnings that something may be wrong and there are no legally required actions on the Driver's end, they do not need to switch to paper logs. However, some warnings will start as a data diagnostic event and progress to a malfunction, if not resolved in a timely manner.



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Daily Logs Screen

All Data diagnostics and/or Malfunction events are also displayed in the **Daily Logs** section for each day they were detected.



On the events section, Drivers can tap the **Edit** button and add an annotation to the event.

For e.g: The Driver can add a note saying the issue has been notified to the carrier or that the ELD provider is resolving the issue.

Note: Adding the annotation in the Note field helps maintain a record of troubleshooting the events that were detected. This field also displays during Inspection mode.

Once the device detects the Diagnostic and/or Malfunction events as **cleared**, the Daily Logs screen automatically updates itself.

Select the Diagnostic/malfunction event for a day to see when the event was **Started** and **Cleared**.



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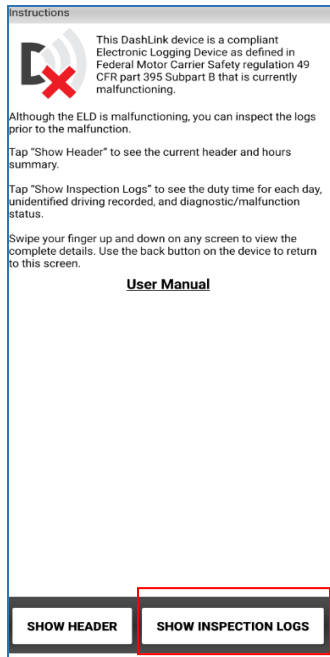
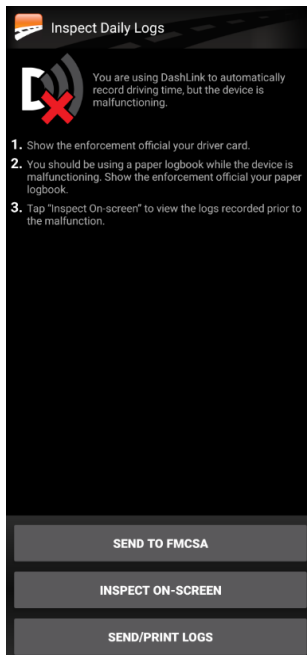
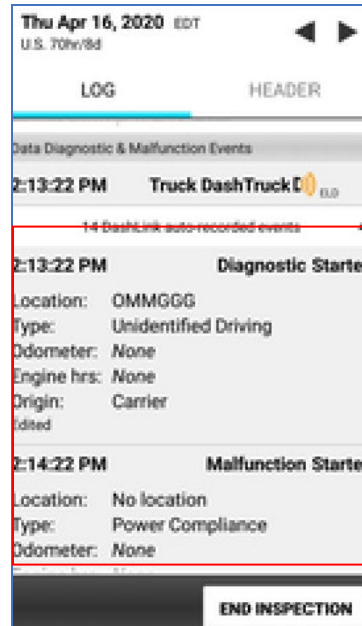
Notifications During Roadside Inspections

All Diagnostics and Malfunction events will also display during **Inspection mode** for an Inspector's visibility.

In the event of active malfunctions during Roadside Inspection, the inspector will expect to see paper logs for the current day and previous seven days.

Inspectors may also ask for evidence from the driver that the motor carrier has been notified.

During Inspection mode, the **X** on the Dashlink symbol indicate that there are active malfunctions with the vehicle's ELD.



Note: Please refer to the ELD Diagnostics & Malfunction Events user guide for an in-depth knowledge on the different types of events and what they indicate.

When the Inspector selects **Show Inspection logs**, the app will provide more details on the Diagnostic and/or Malfunction events: