



Quick Reference Card

ELD Diagnostics & Malfunction Events: BigRoad Web App Enhancements

ELD Technical Requirements: Overview

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.

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

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.*

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

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 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 for 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.

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

Motor Carrier Responsibilities

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

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 DashLink will be provided. This will depend on your type of account.



Quick Reference Card

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

learn more about how these events are monitored and reported on the Mobile Application.

Let's now look Data Diagnostics & Malfunction Events are reported on the BigRoad Web App:

Drivers Daily Log Page

Data Diagnostic and Malfunction events that are detected by the BigRoad mobile application will display at the bottom of the Driver's Daily Logs page.

The Diagnostics and Malfunction events are displayed in pairs, including their Description, Odometer and Eng. Hrs.

The **Starting** events are displayed as Diagnostic or Malfunctions are detected, and the **Cleared** events show details on when these events ended.

START	EVENT	DESCRIPTION	ODOMETER	ENG. HRS
9 DashLink auto-recorded event(s) show details				
Certification History				
Certified on May 8, 2020 at 9:22am				
Data Diagnostic and Malfunction Events				
4 DashLink auto-recorded event(s) hide details				
12:00:25pm	Malfunction Started	Positioning	200022 km	0.7 hr
12:08:20pm	Diagnostic Started	Unidentified Driving	200022 km	0.7 hr
12:14:05pm	Diagnostic Cleared	Unidentified Driving	200022 km	0.7 hr
12:14:58pm	Malfunction Cleared	Positioning	200022 km	0.7 hr

Follow the steps below to review any recorded Diagnostic or Malfunction event associated with a specific Driver:

1. Login to **BigRoad Web**
2. From the **Drivers** page, select any preferred Driver for whom you would like to view the events for
3. Click the **Daily Logs** Tab
4. These events are **hidden by default**
5. To show them click the **'Show Details' button**.

Driver Responsibilities

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 Web App: Enhancements

All Data Diagnostic and Malfunction events that are reported by the BigRoad mobile application are shown to Fleet Admins/Safety Managers on the BigRoad Web App.

These events are displayed on screen to the Fleet Admins/Safety Managers and are also included in eRODS files generated and sent to the FMCSA.

Additionally, fleet admins / safety managers can generate **Data Diagnostic and Malfunction Events Reports** to review data diagnostic and malfunction events recorded in their fleet for a given time frame.

Note: Please refer to the BigRoad Mobile App: Data Diagnostics & Malfunctions Quick Reference Guide to



Quick Reference Card

Data Diagnostics & Malfunctions Occurrence

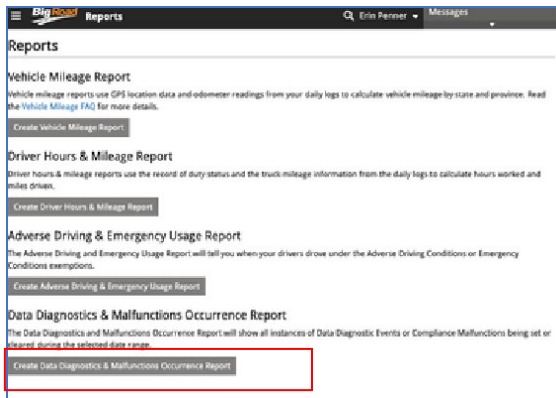
This report provides the following information for each data diagnostic or malfunction event recorded:

- Date Set
- Time Set
- Date Cleared
- Time Cleared
- Type
- Code
- Description
- Driver

The **Data Diagnostics & Malfunction Occurrence Report** allows fleet admins / safety managers to see all data diagnostic and malfunction events that have occurred in their fleet for selected vehicles in a certain time frame.

Follow the steps below to generate the report:

1. From the BigRoad Web main menu, select **Reports**
2. Click the **Data Diagnostics & Malfunction Occurrence Report** from the available options



3. On the Report page, select a **Start** and **End Date** for which you would like to review the Diagnostics and malfunction events
4. From the list of Trucks, select the **Truck(s)** for which you would like to review the events
5. Click **View Excel Spreadsheet** to view the report

The screenshot shows the 'Data Diagnostics and Malfunctions Occurrence Report' page. It includes a 'View Excel Spreadsheet (XLS)' button and a table titled 'Trucks with Data Diagnostic and Malfunction Events'. The table has columns for Date Set, Time Set, Date Cleared, Time Cleared, Type, Code, Description, and Driver.

DATE SET	TIME SET	DATE CLEARED	TIME CLEARED	TYPE	CODE	DESCRIPTION	DRIVER
AA-23							
May 7, 2020	12:00pm	May 7, 2020	12:14pm	Malfunction	L	Positioning	Cory Matthews
May 7, 2020	12:08pm	May 7, 2020	12:14pm	Data Diagnostic	5	Unidentified Driving	Cory Matthews