

# Malfunctions and Data Inconsistencies

The FMCSA ELD (Electronic Logging Device) technical standards outline specific requirements for detecting malfunctions and data inconsistencies to ensure the accuracy and reliability of driver logs. The ELD must be able to monitor its own compliance and alert drivers of any issues. The ELD output will identify these data diagnostic and malfunction events and their status as "detected" or "cleared."

When any malfunctions or data diagnostic issues are detected, the ELD provides clear visual indicators. The **M/D** icon at the top of the app screen will change from green to red, with the red **M** letter indicating a malfunction, and the red **D** letter indicating a data inconsistency. This straightforward system ensures that drivers can easily identify and respond to any issues.

According to FMCSA requirements (49 CFR § 395.34 ELD malfunctions and data diagnostic events), in the event of an ELD malfunction, a driver must:

1. Note the malfunction of the ELD and provide written notice of the malfunction to the motor carrier within 24 hours.
2. Reconstruct the record of duty status for the current 24-hour period and the previous 7 consecutive days, and record the records of duty status on graph-grid paper logs that comply with §395.8, unless the driver already possesses the records or the records are retrievable from the ELD.
3. Continue to manually prepare a record of duty status by § 395.8 until the ELD is serviced and brought back into compliance with this subpart.

It's important to note that if you encounter any issues during the DOT inspection, you should be prepared to provide the manually kept and filled RODS (records of duty status) to the roadside inspector. This preparation will ensure a smooth inspection process and demonstrate your commitment to compliance.

# Malfunctions

## **Engine Synchronization:**

There is no connection to the Engine Control Module (ECM). Please contact the motor carrier to restore the ECM link. Check and correct the logs if necessary, and restart the engine afterward.

## **Positioning Compliance:**

There is no valid GPS signal. This can be fixed automatically by restoring the GPS signal.

## **Data Recording Compliance:**

The device's storage is full. Please delete unnecessary files from your smartphone or tablet to free up at least 5 MB of space.

## **Unregistered Odometer Change:**

Odometer readings change when a vehicle is not moving. Please review the odometer data in the app or contact the motor carrier.

## **Timing Compliance:**

The ELD provides an incorrect timeframe for the events. Please contact the motor carrier or the Zenith Support Team.

## **Power Compliance:**

This occurs when an ELD is not powered for an aggregated in-motion driving time of 30 minutes or more over 24 hours across all driver profiles. This can be fixed automatically when the aggregated in-motion driving time is less than 30 minutes in a 24-hour period.

## **Data Transfer Compliance:**

Failure to communicate for three days following a data transfer data diagnostic event. The malfunction will resolve itself when the device begins to communicate successfully. Check your internet connection and contact your carrier if the problem persists.

# Data Diagnostic Events

## Engine Synchronization:

The ECM to ELD connection is lost. Contact the motor carrier and arrange for the ECM link to be restored.

## Missing Data Elements:

This indicates a temporary or permanent loss of the GPS/Internet connection or the ECM disconnection. Reconnect and reload the ELD device.

## Unidentified Driving Records:

The unidentified driving lasts more than 30 minutes. Manage unidentified events until their duration drops to 15 minutes or less during 24 hours.

## Data Transfer:

Driving data cannot be transferred to the FMCSA server. In this case, it's best to contact the motor carrier or the Zenith's Support Team, who can provide further assistance in resolving this issue.

## Power Data Diagnostic:

The Engine was started while the device was off, and the ELD took more than 60 seconds to power up after turning the engine on. It can be fixed automatically once ELD is turned on or contact the motor carrier.

## Positioning Data Diagnostic:

The ELD is temporarily unable to receive valid positional data from the GPS. The issue may be resolved once the GPS signal is restored.

If you still have any questions regarding ELD malfunctions or data inconsistencies, please contact the Zenith Support Team via: phone: [+1 \(737\) 277 99 93](tel:+17372779993) or email: [zenitheld@gmail.com](mailto:zenitheld@gmail.com).