

## Malfunctions and Data Diagnostics

According to FMCSA requirements, each ELD device must monitor its compliance with the ELD technical standards and detect malfunctions and data diagnostics. The ELD output will identify these data diagnostic and malfunction events and their status as either "detected" or "cleared."

If there are any malfunctions or data diagnostic issues detected, the M/D icon at the top of the app screen will change its color from green to red. The red M letter will signal a malfunction, and the red D letter will indicate a data diagnostic.

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

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 in accordance with § 395.8 until the ELD is serviced and brought back into compliance with this subpart.

Note: If you are facing any issues during the DOT inspection, please be ready to provide the manually kept and filled RODS (records of duty status) to the roadside inspector.

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### Malfunctions:

**Engine Synchronization** — no connection to the Engine Control Module (ECM). Contact the motor carrier and arrange for the ECM link to be restored. Check and correct the logs if needed, and restart the engine after that.

**Positioning Compliance** — no valid GPS signal. Can be fixed automatically by restoring the GPS signal.

**Data Recording Compliance** — device's storage is full. Delete some unnecessary files from your smartphone or tablet to provide at least 5 MB of free space.

**Unregistered Odometer Change** — odometer readings changed when a vehicle was not moving. Recheck the odometer data in the app or contact the motor carrier.

**Timing compliance** — ELD provides an incorrect timeframe for the events. Contact the motor carrier or the Orion ELD Support Team.

**Power compliance** — occur when an ELD is not powered for an aggregated in-motion driving time of 30 minutes or more over a 24-hour period across all driver profiles. Can be fixed automatically when aggregated in-motion driving time will be less than 30 minutes in 24-hour period

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### Data diagnostic events:

**Engine synchronization** — ECM to ELD connection is lost. Contact the motor carrier and arrange for the ECM link to be restored.

**Missing data elements** — a temporary or permanent loss of the GPS/Internet connection or the ECM disconnection. Reconnect and reload the ELD device.

**Unidentified driving records** — unidentified driving lasts more than 30 minutes. Manage unidentified events until their duration drops to 15 minutes or less during a 24-hour period.

**Data transfer** — driving data cannot be transferred to the FMCSA server. Contact the motor carrier or the Orion ELD Support Team.

**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. Can be fixed automatically once ELD is turned on or contact the motor carrier.

If you still have any questions regarding **ELD Malfunctions** or **Data Diagnostics**, please contact the Orion ELD Customer Service Team via: phone: **+1 334 245 54 42** or email: **general.orion.eld@gmail.com**