

CloudHawk ELD Driver Guide

Compliant with the Technical Standard for Electronic Logging Devices (ELD) in the United States and Canada.



Version Approval

Version	Date	Author	Reviewer
1	01/05/2021	David Seijo	Aurelio Espantoso
2	02/15/2021	David Seijo	Llana Shatova
3	07/30/2021	Aurelio Espantoso	David Seijo
8	02/17/2022	Aurelio Espantoso	David Seijo
9	05/31/2024	Jimmy Everett	Jeffrey Farrington

Table of Contents

WHO SHOULD USE THIS GUIDE?	5
WHAT ELD AND OPERATING SYSTEM CAN I USE?	5
IOS OPERATING SYSTEM	5
Android Operating System	5
CHAPTER 1: INSTALLING AND CONFIGURING THE ELD	6
CONFIGURING THE ELD BEFORE OPERATION	6
WHAT DO YOU NEED BEFORE OPERATING THE ELD?	6
INSTALLING THE ECM DEVICE	6
CONFIGURING THE ELD WITH THE RIGHT ASSET	7
ESTABLISHING ECM CONNECTION	7
REINSTALLING THE ELD APP	8
CHAPTER 2: ELD DRIVER OPERATION	9
DRIVER AUTHENTICATION	g
LOGIN	S
Co-Driver Authentication and Remarks	10
SELECTING A VEHICLE PROFILE	10
ENGINE SYNCHRONIZATION (ECM CONNECTION)	12
ELD DIAGNOSTICS	12
BLUETOOTH AND ECM CONNECTION STATUS	12
DRIVER PROFILE PREFERENCES	13
PERSONAL USE (PU) AND YARD MOVES (YM)	13
ELD Main Operation Screen	14
CHANGING ON DUTY STATUS	14
TIME REMAINING	15
RECAP	15
FALSE VIOLATIONS	16
ANNOTATIONS AND REMARKS	16
RULESET AND EXCEPTION/EXEMPTION USAGE?	16
FUEL PURCHASE CAPTURE (STATE MILEAGE REPORTING)	16
ROADSIDE INSPECTION MODE	17
SENDING FILES TO DOT/MTO	17
CERTIFYING YOUR RECORDS AND LOG EDITS	18
Adding, Deleting, and Editing an Existing Record (Log)	20
Unidentified Logs	21
CHAPTER 3: MOTOR CARRIER SUGGESTIONS	21

CHAPTER 4: ELD GENERAL MESSAGES & NOTIFICATIONS		
Unidentified Driving	23	
AUTOMATIC DRIVING STATUS WITH MULTIPLE DRIVERS AUTHENTICATED	23	
CARRIER-PROPOSED LOG EDITS	23	
CHAPTER 5: ELD DIAGNOSTICS AND MALFUNCTIONS (RESOLUTION)	24	
DIAGNOSTICS	24	
MALFUNCTIONS	24	
CHAPTER 6: DRIVER VEHICLE INSPECTION REPORTS (DVIR)	25	
CHAPTER 6: SHIPMENTS (CONNECTING TO BROKERS, SHIPPERS, RECEIVERS, AND CARRIERS)	27	
CREATING A SHIPMENT	28	
GoHighway	29	
HOW TO OBTAIN HOSCLIENTAPIKEY		

Who Should Use This Guide?

Drivers, Support Personnel and Back-Office Personnel

What ELD and Operating System can I use?

Supported ELD Devices/ECMs can be found at the following link for the listed Operating Systems. https://assuredtechmatics.com/supported-ecm-devices/

iOS Operating System

- US: See our list of Supported ECM Devices
- Canada: Geometris 800 Series Devices

Android Operating System

- US: See our list of Supported ECM Devices
- Canada: See our list of Supported ECM Devices

Chapter 1: Installing and Configuring the ELD

Configuring the ELD before Operation

In some instances, this manual uses "Icon Keys" to direct your attention to specific and important information. See the different icons in the table below:

icon key

- Important information
- Take Notes
- Online support account
- Appears on Logbook
- Read this chapter before operating the ELD!
- Confirm you have received all required components, make sure your account was created and you have access to the ELD online portal.
- To save time in the future, we recommend you print a copy of this document and keep it inside the cab. This document contains critical information to properly operate your ELD and a list of malfunctions and how to resolve them. It is also recommended to write down your ECM device's identifier (shown below) in a separate location in case you lose this document.

What do you need before operating the ELD?



Your mobile device (where the ELD app is running) must:

- 1. Have Bluetooth enabled.
- 2. Be connected to the internet either with a cellular data plan or connected to a hotspot.

Installing the ECM device

Plug the ECM device into the vehicle's diagnostic port. In some cases, you might need to use the ECM adapter to plug the device onto the J1939 port.

Locate the diagnostic port (see image below for possible locations depending on vehicle's make, model and year.)

For the ELD to remain compliant, it must remain connected to the ECM device and read engine data. Engine data is only available when the vehicle's engine is turned on. Engine data is only available when the vehicle's engine is turned on.



The initial configuration is only required right after installing the ELD app for the first time and it is no longer needed after. The objective is to initially configure a vehicle profile (tractor number, VIN number) and connect/test the ECM device connection.

Configuring the ELD with the right asset

The ELD must be linked to a carrier asset (vehicle).

Please tap on the truck or trailer image on the application to pick from the asset list downloaded during login (see *list below*) or to manually enter (*if allowed* by your carrier/company) a new truck or trailer.

Once you select a tractor or trailer from the downloaded list, the ELD will always use the VIN number, license plate, and

registration state displayed on the list:

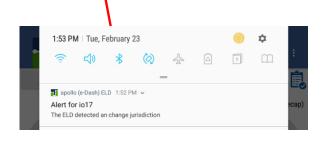


Enter the vehicle's dashboard odometer value twice for the ELD to adjust discrepancies between dashboard and engine odometer. The image to the left shows the vehicle profile.

Establishing ECM Connection

Before a driver can operate an ELD, the ELD must be synchronized to the vehicle's engine using what is known as an Electronic Control Module (ECM) which is very common on GPS trackers.

Before scanning and connecting to an ECM device, make sure the ELD has Bluetooth enabled as seen below:



We highly recommend installing a label or decal on the vehicle's dashboard with the ID of the ECM device installed on the

vehicle as noted in the below figure. Also, write down this ECM ID.





To connect to the ECM device, tap on "Scan Devices" and wait for the device to show up (make sure the correct ECM ID is displayed.)

For the ECM device to work properly and the ELD to be able to connect to the device and read engine data, the engine must be turned on. Keep this in mind when operating the ELD. Duty status changes, as an example, require engine parameters when generated. Make sure the engine is still running when making duty status changes.

Some ELD configurations lock an ELD to a specific ECM device, in which case the Scan Devices screen is not shown and the ELD will automatically run the diagnostic. A diagnostic is performed to make sure the ELD is fully compliant and ready for driver operation.

Reinstalling the ELD App

If an ELD App reinstall is required, (or needed to install it on a different device) please delete the old application and then search the app Store for "CloudHawkELD" and reinstall the app. When you open the ELD app for the first time, approval the following permissions is required:

- 1. Access device elements. (Camera, etc)
- 2. Access your location.
- 3. Use the network.

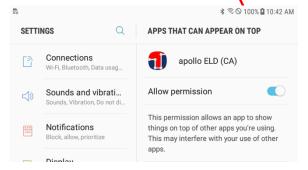






The application must also be allowed to show over other

applications.



Synchronization of the ELD with the portal is required at least once. Tap on "CONFIGURE" as in the below figure:



Wait until the ELD is synchronized with the server and the following message is received: Tap OK.

ELD has been successfully configured

OK

Chapter 2: ELD Driver Operation

Driver Authentication

The ELD has three (3) different accounts:

- 1. <u>Driver</u>: Unique, per-driver account used by drivers Hours of Service and ELD regulations. This account records duty status changes (RODS) and allows the export of driver records for printout, display, and agent output file generation.
- 2. <u>Support</u>: Account used by the carrier and ELD manufacturer to setup, configure, update, and troubleshoot the ELD. No duty status changes are recorded with this account and no access to driver record of duty status (RODS) changes is permitted under the support account.
- 3. Non-authenticated: All operation of a commercial motor vehicle (CMV) is recorded under this account (a.k.a Unidentified Driver) if no driver has logged into the ELD. Non-authenticated records (vehicle movement and on-duty time) are stored on the ELD as well as the carrier and should be assumed by a driver account.

Login

Log in using your driver's credentials.

- △ Login IDs, and the driver's license associated with the login ID, cannot be duplicated and are unique in the ELD system.
- The username cannot be altered once created.

Each driver using the system will have a unique login ID. This login name and password is for the specific driver's use **only** and must not be shared with any other person (driver or not.) The login name belongs to the driver and is linked to the driver's personal information (e.g. driver's license, etc.)

If the driver changes carriers and is driving for a different carrier, the login name, under certain circumstances, will remain the same and it is the driver's obligation to ask the home base carrier to update the carrier's name and DOT number on the system.

Login is restricted to only one ELD at a time. For the driver to logon to a different mobile device, the driver must change to off duty status and logout from the previous device.

<u>Driver Unlock</u>: In the event a driver is still logged on an ELD, but the device ceased to function or gets lost, the driver must call the home base carrier and ask for the login name to be "unlocked." *The unlock process will change the driver's status to "Off Duty."*

Co-Driver Authentication and Remarks

A co-driver can authenticate by tapping on the currently active driver button (*which brings up the login screen*) or the co-driver can go to the menu and select the Co-Driver Login option.

Selecting a Vehicle Profile

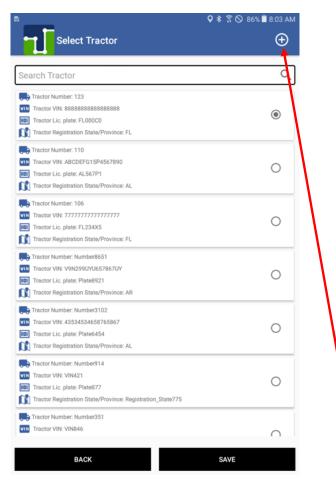
Before a driver's logs can be exported and shared with an authorized agent, the driver must update the correct vehicle information.

Tap on the truck or trailer image to pick from the downloaded asset list during the login process. (See list below) Or, if allowed by your carrier, manually enter a new truck or trailer. Once a tractor or trailer is selected from the downloaded list, the ELD will always use the VIN number, license plate, and registration state displayed on the list.



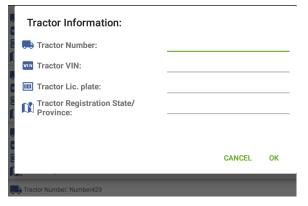
△ IMPORTANT: Enter your vehicle's dashboard odometer value twice, for the ELD to adjust discrepancies between the dashboard and engine odometer.

Make Tractor and Trailer Selection



If allowed by your carrier/company, a new tractor or trailer can be added by selecting the "+" button located on the top

right of the screen:



Once a new asset is created on the ELD, the asset information is broadcasted to the ELD portal and to other ELDs operating under the same carrier.

Engine Synchronization (ECM Connection)

To connect to the ECM device, tap on "Scan Devices" and wait for the device to display (make sure the correct ECM ID displays as discussed earlier in the configuration section.)

For the ECM device to work properly and the ELD to be able to connect to the device and read engine data, the engine must be turned on. Keep this in mind when operating the ELD. Duty status changes, as an

example, require engine parameters when generated. Make sure the engine is still running when making duty status changes. Some ELD configurations lock an ELD to a specific ECM device, in which case the Scan Devices screen is not shown and the ELD will automatically run the diagnostic.

ELD Diagnostics

Once connected to the ECM device, one can run an ELD diagnostics (accessible from the top-right menu.)

The diagnostic checks critical components on your ELD and all areas must pass the test for you to remain compliant. See below for a compliant representation:



Bluetooth and ECM Connection Status

The ELD must always be able to read engine data. Make sure the Bluetooth and ECM connection indicators remain green. If the indicator turns red, please go to "Scan Devices", and connect to the ECM-linked device.



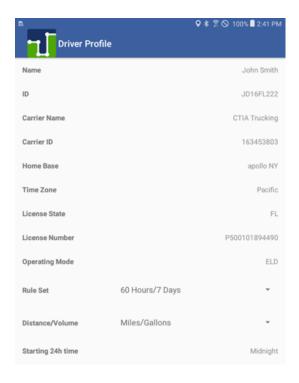


Driver Profile Preferences

We recommend verifying the driver's profile. Please make sure the information is correct:

- Carrier name.
- Proper rule set. (60-hour or 70-hour)
- Home base time zone.

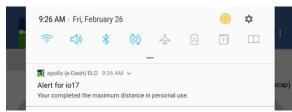
- Select the ruleset drop-down to change the rule set from 60h to 70h and vice versa.
- Select the units of measurement (miles, gallons, kilometers, or liters.)
- Starting 24h time is set by your carrier but could be changed at any time. Just keep in mind that the new 24h starting time will take effect on your next cycle (after the 36h restart.)



Personal Use (PU) and Yard Moves (YM)

Current regulations allow a driver up to 75 Kilometers/46.60 miles of driving for personal use (PU). For example, this provision allows driving to the nearest rest area or drive home among other reasons. The ELD will prompt you to add a pre-defined remark or type a different reason for either identifying status.

The ELD must be connected to the ECM device for the "Personal Use" provision (button) to be available.



Once you have reached the 75 Kilometer/46.60 mile limit, a notification will register and will automatically switch to "Driving Duty" status:

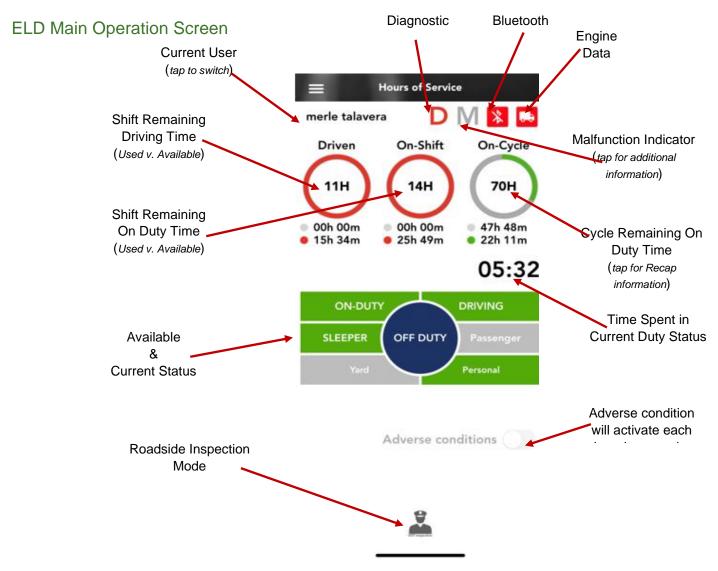
If the ELD shuts down (e.g. power loss) or restarts, a prompt to either exit or continue the Personal Use status displays.

The ELD also allows driving the vehicle inside a "Yard."



Switch to the Yard Move (YM button) <u>before putting the vehicle in motion</u>. If the vehicle's speed exceeds **32 Kmph/20 mph**, the ELD will automatically switch to "Driving Duty" status.

Similar to Personal Use, if the ELD is restarted, you will be prompted to either remain in the Yard Move status or exit the status.



Changing On Duty Status

To change the duty status, tap on the desired duty status button.

- Changing to and out of ON-DUTY, YARD, and PERSONAL, will prompt a selection for a pre-defined remark or enter a custom remark.
- When coming out of ON-DUTY status, the number of gallons fueled may be entered which are required for proper IFTA reporting.

Time Remaining

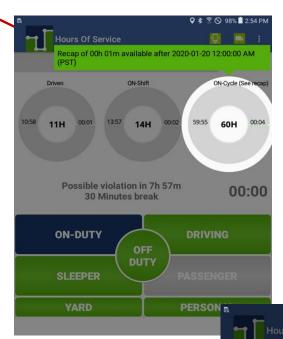
The three "donuts" constantly show the actual time spent on each status (driving, ON-Duty and cycle ON-Duty). The corresponding donut will turn yellow or red to indicate proximity to the time limit.

Recap

Tap on the "ON-Cycle (see recap)" donut to see how much ON-Duty time will be removed once the 7th or 14th day is reached.

The recap summary message also communicates the day and time when the next available recap will take place.

This information has great value for the driver, enabling planning for the weekly cycle and stay abreast of how much time gained back each day, after the 7th or 14th day (according to the currently selected ruleset).

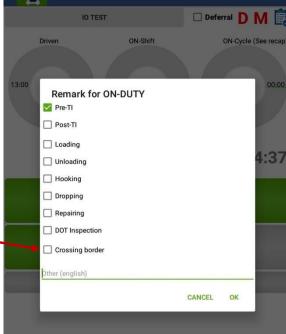


False Violations

This area shows the closest **possible** violation. It also triggers a notification pop-up one hour before the violation and another alert thirty minutes before the next possible violation.

Annotations and Remarks

When changing to and out of ON-DUTY, YARD, and PERSONAL duty statuses, the ELD will show you the pre-defined remarks to simplify the use of the ELD. You can also type your own remark. See the image:

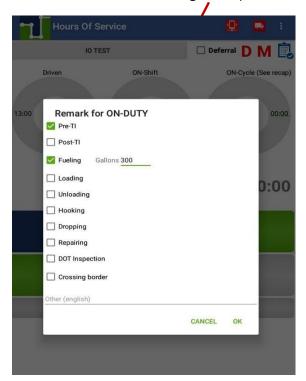


○ 12% B 3:34 PM

RULESET AND EXCEPTION/EXEMPTION USAGE?

Fuel Purchase Capture (State Mileage Reporting)

Please, enter the number of gallons put in the vehicle (when refueling) for an accurate IFTA report.



Roadside Inspection Mode

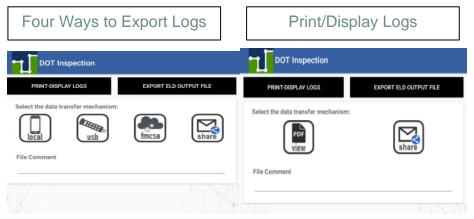
If you are stopped on the road, we recommend you enter the Roadside Inspection Mode by tapping



This mode allows you to export the "Printout/Display" document as well as exporting the ELD data file:



SENDING FILES TO DOT/MTO

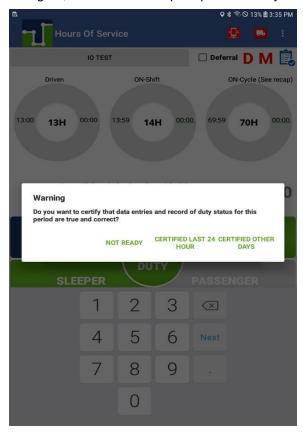


PDF Print/Display Logs



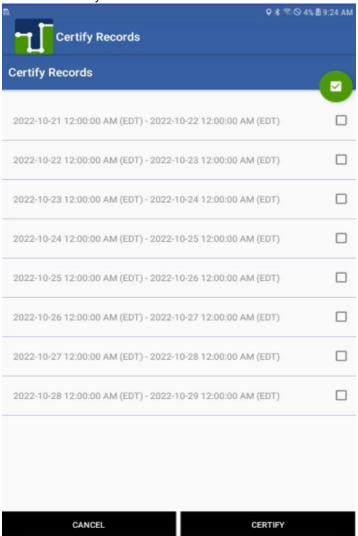
Certifying Your Records and Log Edits

- Every duty status change must be certified before exporting the driver's logs.
- 1. Select the "Certify Logs" option from the menu to list all unverified logs.
- 2. Select each day and tap on the "Certify" button.
- At the end of each 24-hour period, the ELD will automatically prompt the driver to certify logs for the last 24 hours period.
- During the driver login and logout, the driver will be prompted to certify the logs.



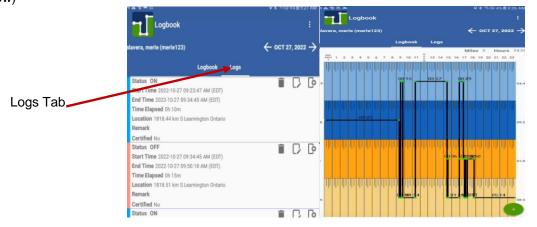
Log Certification can also be accomplished at any time by going to the Main Menu and selecting "Certify Logs."

Select the day or days you would like to certify:



Select the 24-hour period you want to certify then tap on the CERTIFY button. You will need to agree to the statement that presents when prompted.

To view your Logbook, edit your logs or export Logs/ELD data file, go to the "Logbook" option in the menu. (See Inset Below)



Moving to a different day is easily accomplished by selecting the left and right arrows by this selector:

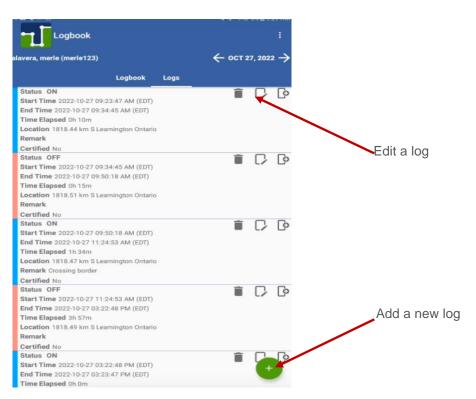
← Nov 01, 2017 →

The Logbook tab shows the logbook for the selected day. Also, the Logs tab has a list with all the logs for that day, where an existing log may be edited.

Use the mobile device's swipe option to move between the Logbook and the Logs tabs.

Adding, Deleting, and Editing an Existing Record (log)

- 1. On the LOGS tab select the edit icon.
- 2. Make the necessary changes.
- 3. Input the mandatory remark explaining the reason of the change.
- 4. Confirm Changes.
- A Remember, driving time can only be increased on automatically recorded records. Driving time can be deleted, reduced, or increased on manually recorded records.
- The ELD must be synchronized to the tractor's Engine Control Unit (ECU) (via ECM device). Failure to read engine values will change the driver to being non-compliant.
- Daily ON-DUTY, cycle ON-DUTY and possible violations will be calculated according to the new record change.

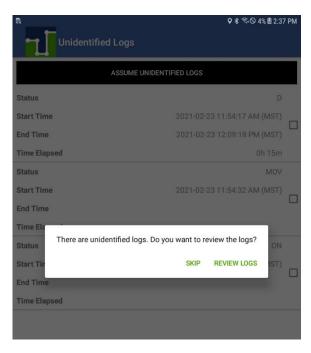


Unidentified Logs

During the login process, the system will prompt for a review of existing unidentified logs. If the unidentified logs do not belong to you, tap "SKIP".

If some, or all, unidentified logs belong to you,

- 1. Select REVIEW LOGS
- 2. Select the checkbox associated to the logs that belong to you.
- 3. Assume the logs.



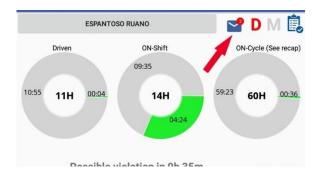
The carrier/company can later revert those logs back to unidentified, if needed, for which you will be asked to confirm.

Chapter 3: Motor Carrier Suggestions

For time to time, the carrier may suggest changes to your logs.

The driver is responsible for assuming or rejecting those suggestions.

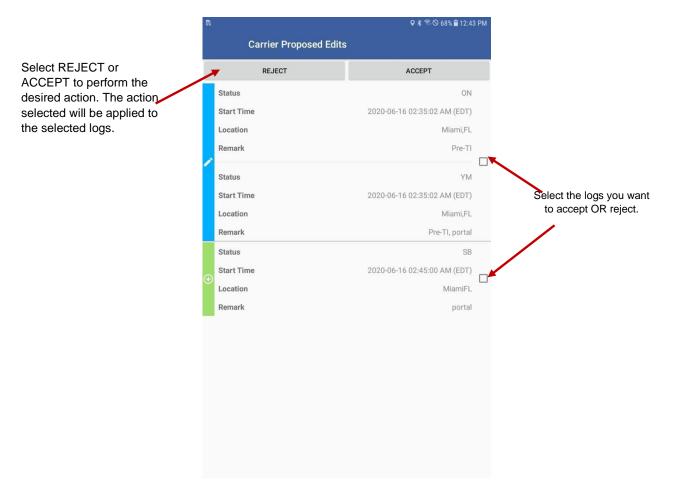
Carrier-proposed edits will show on the driver's ELD at different times. They will show during login and logout process, and will also be shown as a new ELD messages on the main screen:



Please make sure:

- You are not driving while attending to carrier-proposed log edits.
- You re-certify your ELD records if a carrier-proposed log edit is assumed.

Once you tap on the ELD message button, a list of carrier-proposed log changes will display:



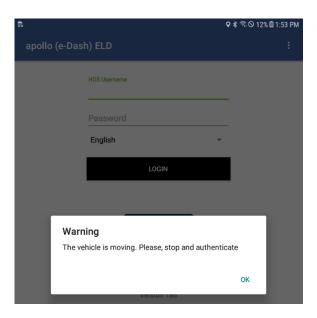
Chapter 4: ELD General Messages & Notifications

Some notifications are shown while operating the ELD. These represent errors, warnings, or specific information regarding an operational change. The most common notifications are:

- During authentication:
 - o "You are logged on a different device."
 - A driver can only use credentials to log in to one ELD. The same driver account cannot be used on multiple ELDs. If you lost your ELD while authenticated, contact your company and ask them to Unlock your account. You will be able to log in after your account is unlocked.
- "Wrong authentication."
 - Make sure your Username and Password are correct. Also, make sure you have internet access and good upload/download speed.
- "Downloading (e.g. shipments, events, violations, etcetera) error."
 - Make sure you have internet access and good upload/download speed.

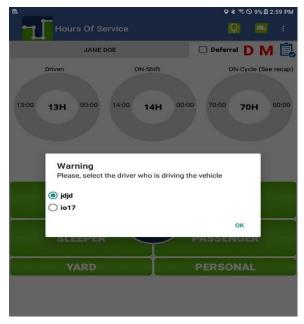
Unidentified Driving

Once the vehicle, to which the ELD is connected to begins moving, a driving event is created. The ELD will show a visual and audible notification indicating the driver to stop and authenticate on the ELD. The driver could continue to the destination, authenticate later, and review/accept unidentified events.



Automatic Driving Status with Multiple Drivers Authenticated

If the vehicle moves, there is more than one driver authenticated on the ELD and no driver is on Driving duty status, the ELD shows an audible and visual notification prompting the drivers to select the driver currently operating the vehicle.



Carrier-proposed Log Edits

If the carrier's back-office personnel propose a change to the driver's logs, a notification is shown on the ELD. The driver can assume or reject the carrier-proposed edits during login, logout, or by tapping the new message icon. Notification of carrier-proposed edits during normal ELD operation.



Chapter 5: ELD Diagnostics and Malfunctions (Resolution)

Diagnostics

1- **Power Data/Compliance Diagnostic** (ECM parameters must be available within 1 minute of powering on the vehicle's engine.)

Resolution: Make sure you are connected to the ECM device. On the menu, go to Scan Devices and select your ECM device. Make sure all engine parameters pass the diagnostics. (all green)

2- Engine Synchronization Data Diagnostic (Not all ECM parameters are available when the ELD records an event: e.g. duty status change.)

Resolution: Make sure you are connected to the ECM device. On the menu, go to Scan Devices and select your ECM device. Make sure the diagnostic passes all engine parameters (all green)

3- Missing Required Data Elements Data Diagnostic (Other required data, i.e. location, coordinates, not available when recording an event.)

Resolution: Make sure the GPS module is enabled on the ELD.

- 4- Data Transfer Data Diagnostic (An ELD must verify this functionality at least once every seven (7) days.)
 Resolution: Verify that you have an active cellular or wifi connection all the time. Confirm that your logs are always updated on the ELD portal.
- 5- **Unidentified Driving Records Data Diagnostic** (More than 30 minutes of driving without a driver logged on the ELD.)

Resolution: You are not logged on the ELD and the vehicle moves for an extended period. Login and select your Driving time.

6- Other ELD identified Diagnostic (The ELD provider may implement additional, technology-specific malfunction and data diagnostic detection schemes.)

Malfunctions

Most malfunctions relate to a Diagnostic, but a malfunction is generated when the same diagnostic occurs for at least 30 minutes in the last 24 hours.

- P- Power Compliance (Related to diagnostic 1.)
- E- Engine Synchronization Compliance (Related to diagnostic 2, for instance multiple periods of no ECM data that, when added together, are more than 30 minutes in the last 24 hours.)
- T- Timing Compliance (The time on the ELD, compared to an external time source is different.)

Resolution: Make sure the date and time on your mobile device is properly set. DO NOT (manually) change the date or the time on the ELD.

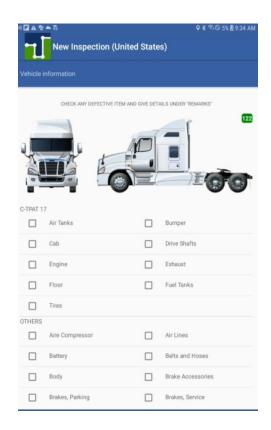
- L- Positioning Compliance (No location available. Related to diagnostic 1.)
- R- Data Recording Compliance (Monitor storage capability to store records.)

 Resolution: Make sure you have sufficient internal storage on your ELD. Delete files if necessary.
- S- Data Transfer Compliance (ELD records not able to be uploaded.)
 Resolution: You probably don't have internet access. Restart the ELD (if needed) and confirm you reconnect to the network.

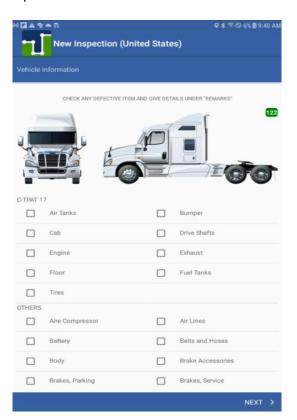
Chapter 6: Driver Vehicle Inspection Reports (DVIR)

- 1. Select the DVIR button on the main screen.
- 2. Go to the menu and select DVIR to select the applicable region. (A compliant checklist is shown.)
- 3. Select any defect you might have found during the vehicle and trailer inspections.
- 4. On the last step, enter a remark and indicate if the defects were corrected or not.





5. Select the item with defects and tap "NEXT."



- 6. We have separated items under the C-TPAT 17 agreement to help you reduce border delays (if applicable) and minimize risks.
- 7. Check all, minor and major, defects accordingly.
- 8. Take pictures of defects which are uploaded to the ELD portal and could be shared later.
- 9. Enter the remark and sign the inspection report.
- 10. If defects were found and corrected, the mechanic can be asked for a signature. (*There is a third, optional signature which some carriers require before a vehicle leaves the yard.*)
- 11. Nine (9) unique pictures can be filed with the DVIR.
- 12. Once done, select "Upload."

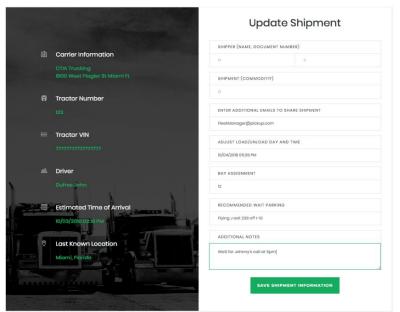


Chapter 6: Shipments (Connecting to Brokers, Shippers, Receivers, and Carriers)

Addressing two of the biggest complaints from drivers using an ELD, the "Shipment Sync" feature, targets those specific needs by allowing drivers, motor carriers, brokers, shippers, and receivers to be connected and share shipment information in real-time.

Shippers and receivers can confirm exact arrival time, bay number assigned to the driver, safe parking instructions, and additional notes. This information is shared (instantly) with drivers, allowing them to better plan their routes, rest times, and minimize dock waiting time.

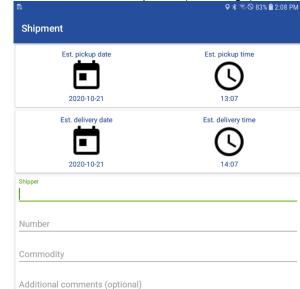
This is a general overview of Shipment Sync:



CREATING A SHIPMENT

First you need to create the shipment (see image).

Once the



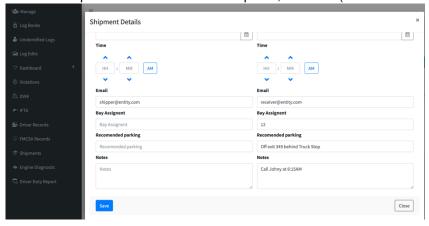
shipment is uploaded to the ELD portal, the carrier can share the shipment with brokers, shippers, and receivers.

On the new Shipments tab (*online portal*), motor carrier personnel can see all shipments created by drivers.

A pop-up window is displayed once the Details link is clicked. The motor carrier can share these ETAs with the broker and pickup/delivery warehouses.

To do so, the motor carrier just needs to input the email address of every entity they want to share the shipment information with and save the shipment.

Once the shipment is saved on the ELD portal, an email (from domain: shipment-sync.com) is sent to each destination.



Shippers and receivers (independently) can input the specific warehouse arrival, bay number, safe parking information, and additional notes. Information about the motor carrier, driver's first and last name, shipping document, last known location is shown on the left pane. The last known location is updated every time the page is loaded.

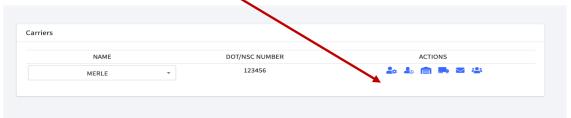
Once the shipment information is saved, an instant notification is sent to the driver including all the details added by the pickup/delivery personnel, keeping the driver updated.

GoHighway

How to obtain HOSClientApiKey

1. Login to your ELD Account Portal

2. On the Manage screen, Select "Details" under the Actions header. The Carrier Pop Up will display.



Select "Generate" API Key and then Select "Save"

