



Inspection Bulletin

North American Standard Inspection Program

2017-05 – Hand-Held and Electronic Logging Devices (ELDs)

Created: Dec. 6, 2017

Summary

This Inspection Bulletin reviews the requirements for devices used to record driver's hours of service (HOS) according to 49 CFR Part 395 Subpart B – Electronic Logging Devices (ELD).

Background

On Dec. 16, 2015, the Federal Motor Carrier Safety Administration (FMCSA) passed a final rule mandating the use of ELDs. As of Dec. 18, 2017, ELDs are mandatory for most carriers. Automatic on-board recording devices (AOBRDs) installed prior to Dec. 18, 2017 (grandfathered AOBRDs), may be used until Dec. 16, 2019. After Dec. 16, 2019, all AOBRDs must be ELD compliant.

Definition

As defined in 49 CFR 395.2, **electronic logging device** (ELD) means a device or technology that automatically records a driver's driving time and facilitates the accurate recording of the driver's HOS, and meets the requirements of subpart B of this part.

Exemptions

A driver who is not required to keep a record of duty status (RODS) (this could be short haul or a mechanic) is exempt from requiring an ELD. Exempt status will be indicated in the header file.

Other exemptions include the following:

- Drivers requiring completion of a RODS on not more than eight days within any 30-day period
- Drivers in a driveaway-towaway operation in which the vehicle being driven is part of the shipment being delivered
- Drivers in a driveaway-towaway operation in which the vehicle being transported is a motor home or a recreation vehicle trailer
- Drivers operating a commercial motor vehicle (CMV) that was manufactured before model year 2000, as reflected in the vehicle identification number (VIN) as shown on the vehicle's registration.*

***NOTE:** Trucks manufactured according to the VIN prior to 2000 or engines manufactured prior to 2000 are exempt from the ELD mandate. Refer to the "Verifying the Engine Model Year" information on page 6.

© 2017 Commercial Vehicle Safety Alliance All rights reserved.

2017-05 – Hand-Held and Electronic Logging Devices (ELDs)

There are many HOS exemptions in 49 CFR 395.1. A driver operating under an exemption is not required to carry any documentation for the days they operated under the exempt status.

Minimum Electronic Display Requirements

ELDs shall have the capability of displaying:

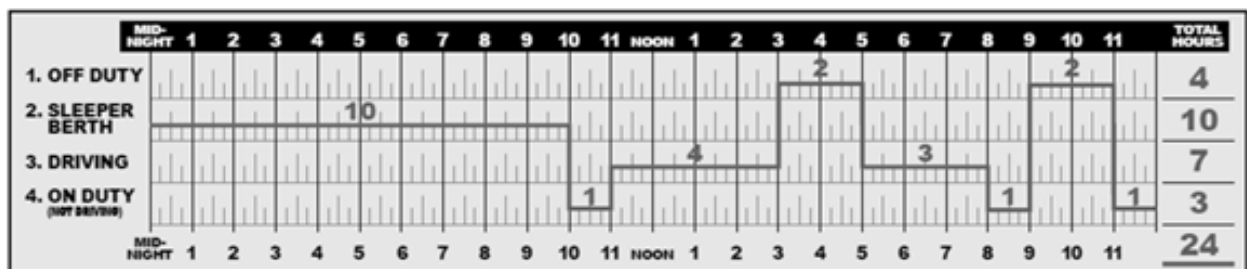
- Annotations, where applicable
- Driver’s location description
- A driver must manually input or verify the following information on the ELD:
 - CMV power unit number
 - Trailer number, if applicable
 - Shipping document number, if applicable

Location Requirements

There are location record requirements for each duty status change that need to be noted. The location description should be distance and direction from the nearest city with population of 5,000 or more. For each change of duty status (e.g., the place and time of reporting for work, starting to drive, on-duty not driving and where the driver was released from work), the name of the city, town or village, with state abbreviation shall be recorded. Motor carriers are permitted to use location codes in lieu of the name of the city, town, village or state. When using location codes, the list of codes showing all possible location identifiers must be carried in the CMV and made available to an enforcement official upon request.

Graph Grid

The graph grid should include the following information:



- Total hours – in working day so far
- Off duty (includes personal conveyance)
- Sleeper berth
- Driving
- On duty not driving (includes yard move)

In addition to the graph, the ELD must also display log detail. Note that the log details must be for each type of event and duty status.

2017-05 – Hand-Held and Electronic Logging Devices (ELDs)

ELD Data Found in the Header File (Automatically Generated or Manually Entered by the Driver)

The ELD should display the following information:

1. Record date
2. 24-hour starting time
3. Time zone offset from UTC
4. Carrier's USDOT number
5. Carrier name
6. Driver name (last name, first name)
7. Driver ID (ELD username)
8. Driver license issuing state
9. Driver's license number
10. Co-driver (last name, first name), if applicable
11. Co-driver ID (ELD username), if applicable
12. Current odometer – current/total
13. Current engine hours – current/total
14. ELD ID
15. ELD provider
16. Truck tractor ID (CMV power unit number)
17. Truck tractor VIN (CMV VIN)
18. Shipping ID (shipping document number), if applicable
19. Current location
20. Unidentified driving records, if applicable
21. Unidentified driver record/data diagnostic indicator
22. Exempt driver status
23. ELD malfunction indicator
24. Trailer number, if applicable

ELD Diagnostics and Malfunctions

In the case of an ELD malfunction, a driver must provide written notice of the malfunction to the motor carrier within 24 hours. Many telematics providers do this automatically once the driver receives the alert. A driver needs to keep graph-grid paper log sheets and reconstruct the record of duty status for the current 24 hours and previous seven days that comply with 395.8, unless the records are retrievable from the ELD or the driver already possesses the records in another form.

Support systems used in conjunction with ELDs at a driver's home terminal or a motor carrier's principal place of business can provide federal, state or local officials with summaries of a driver's HOS records.

Electronic Data Transfer

On request by an authorized safety official, a driver must produce and transfer from an ELD the driver's HOS records in accordance with the instruction sheet provided by the motor carrier.

2017-05 – Hand-Held and Electronic Logging Devices (ELDs)

eRODS

ELDs must transmit ELD records electronically to an authorized safety official upon request. eRODS is the electronic RODS file that will be generated on the mobile device and transferred at roadside. Each state will select one telematic option and one local option. Each ELD provider will support either telematics or local.

- Telematics option – email and web services
- Local option – Bluetooth® and USB

The driver is responsible for initiating the eRODS file transfer upon request. A comment field is an option when sending an eRODS file. This field may be populated with information that an authorized safety official may provide. This can be in the form of a key phrase or code which may be used to link the requested data to an inspection, inquiry or other enforcement action. If eRODS fails or is not available, then use the display as backup. Once the file is ready to be viewed in the eRODS software, the driver will receive a notification on the mobile device.

The following chart illustrates the electronic data transfer process and the responsibility of the driver and safety official during the electronic data transfer process.

Transfer Method	Web Services/Email	Bluetooth®	USB 2.0
Driver's Responsibility	Driver invokes email process on the ELD device/system and enters the SI/badge code provided by the safety official. The ELD device attaches the file to an email message and sends the message to the email address provided to the provider during the ELD registration process.	Driver ensures the safety official's device is discoverable on the ELD and enters the Bluetooth® code provided by the safety official. The driver enters the unique code and transfers file from the ELD to web services.	Driver downloads ELD data to self-encrypting USB provided by the safety official.
Safety Official's Responsibility	Safety official provides SI or badge code and retrieves the ELD data transferred by the driver/motor carrier through web services.	Safety official activates Bluetooth® on his/her computer and ensures the ELD device is discoverable. Provides Bluetooth® code and unique code to the driver for the ELD to send data from web services.	Safety official provides self-encrypting USB device to the driver, retrieves data from the USB device through eRODS.

2017-05 – Hand-Held and Electronic Logging Devices (ELDs)

Roadside Inspections

Federal, state and local officials need to check for the following when conducting roadside inspections when an ELD is being used:

- Verify the device is integrally synchronized with the CMV.
- Ensure the device can display the RODS for the last seven days, plus the current day.
- Each CMV with an ELD installed must have on-board an information packet containing an instruction sheet describing, in detail, how data may be stored and retrieved from the recording system.
- The on-board information may be any electronic device (including the ELD) or hard copies.
- Each CMV must also have a supply of blank driver's RODS graph-grids sufficient to record the driver's duty status and other related information for a minimum of eight days.
- The driver can demonstrate the use of the device.
- The ELD can display or print a copy of the driver's RODS at the time of the inspection.

ELD Inspection Guidance

ELDs must produce on demand driver's HOS records via electronic data transfer (telematics or local) or on the display screen of the ELD or a printout from the ELD showing the time and sequence of duty status changes, including the driver's starting time at the beginning of each day. A device unable to print a copy of the driver's record of duty status is not a violation if the device displays an HOS chart or electronic display of each duty status change for the current day and the previous seven days.

2017-05 – Hand-Held and Electronic Logging Devices (ELDs)

Verifying the Engine Model Year

This document is intended to assist with identifying the engine model year of a commercial motor vehicle.

Truck Body Vs. Engine Model Year

Engines are manufactured separately from the vehicle chassis and are certified to meet the standards for the year of manufacture. Due to this, engines are often certified to an earlier model year than the truck body. It is important to determine an engine's specific model year by checking the emission control label.

Engine Model Year

The engine model year is also on the emission control label. If the emission control label is missing or illegible, consider contacting the engine dealer or the manufacturer; you will need to provide the engine serial number to obtain the model year. Typically, the engine model is one year older than the chassis model year. For example, a 2007 vehicle typically has a 2006 model year engine installed. Rebuilt engines keep their original identity and engine serial number.

Remanufactured engines may lose their original serial number and will instead have an engine label identifying it as a remanufactured engine. The local installer, dealer and/or manufacturer can be contacted for more information.

The following are images of where the emission control label can be found on engines.

Step 1: Locate the Engine Control Label

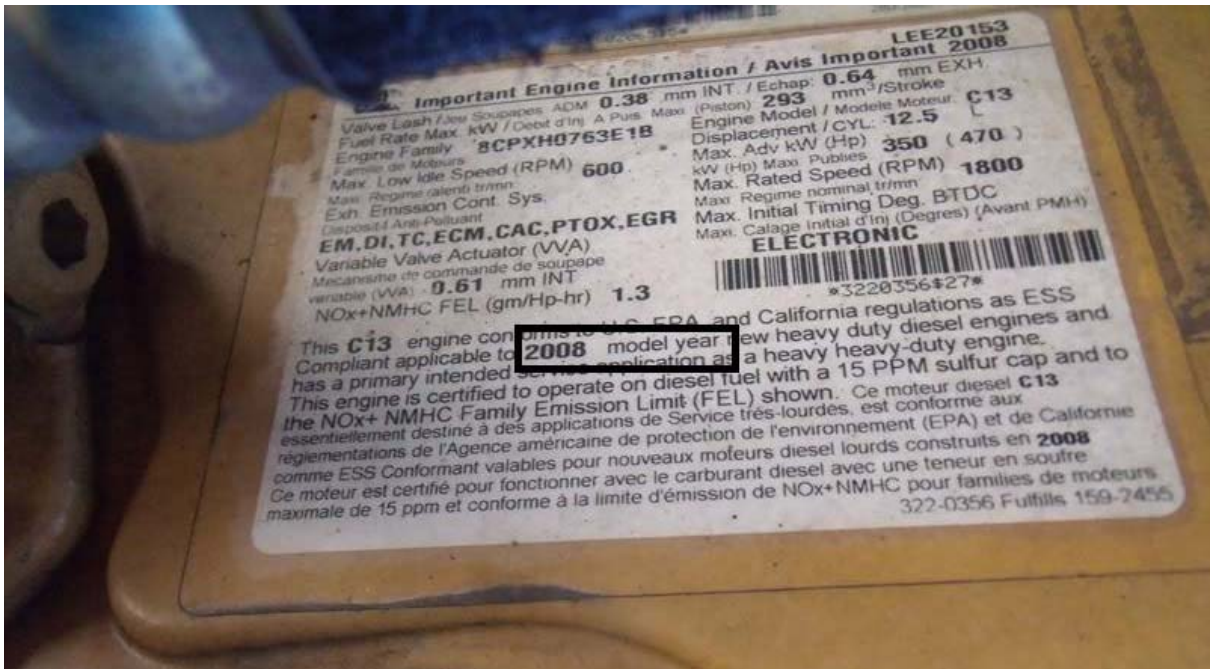
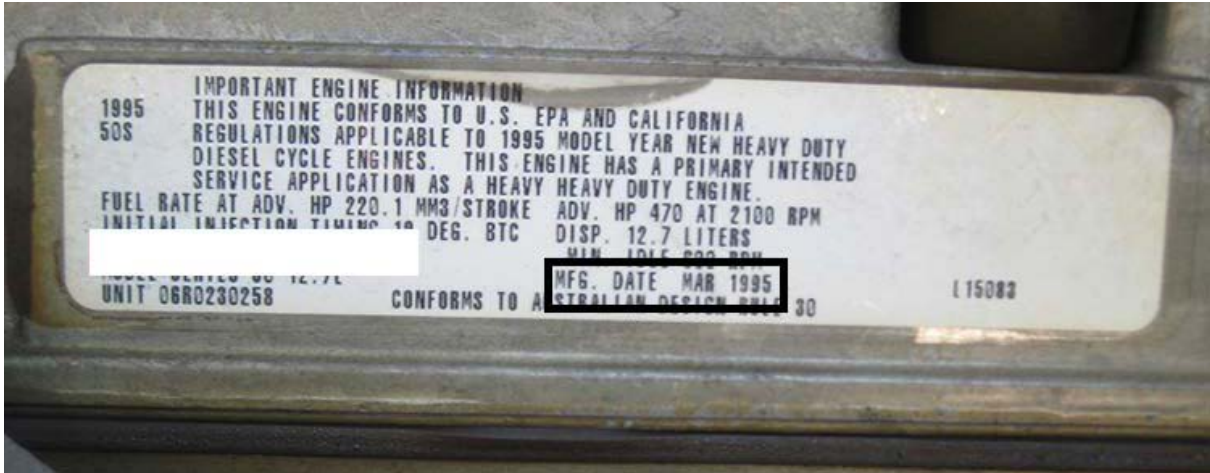


2017-05 – Hand-Held and Electronic Logging Devices (ELDs)



2017-05 – Hand-Held and Electronic Logging Devices (ELDs)

Step 2: Identify the Engine Model Year



As shown in the picture above, a barcode or QR code is often an indicator that the model year is newer than year 2000.

2017-05 – Hand-Held and Electronic Logging Devices (ELDs)

