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

Created: Dec. 6, 2017
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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 5.

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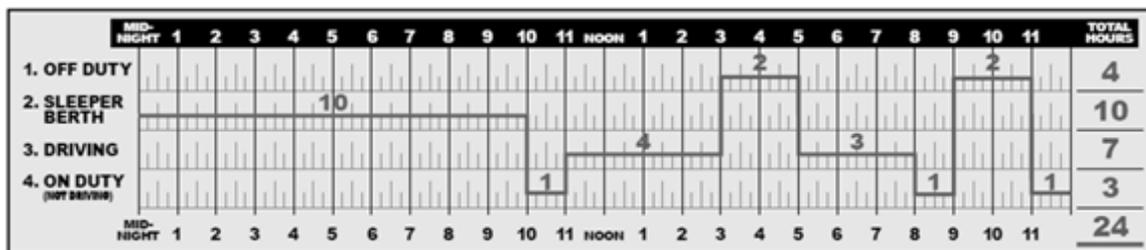
- Total hours – in working day so far
- Off duty (includes personal conveyance)
- Sleeper berth
- Driving
- On duty not driving (includes yard move)

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.

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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.

If an ELD malfunctions in a manner that no longer accurately records the driver's hours of service, the driver must use paper records of duty status.

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.

ELD Inspection Guidance

If a driver cannot produce hours-of-service records using any of the options described in this document and the device is not in an active malfunction, the driver shall be placed out of service for no record of duty status. See Footnote 12 in the CVSA North American Standard Out-of-Service Criteria before citing or placing a driver out of service.

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The primary method to verify a driver's hours of service is electronic data transfer.

- Telematics (web services and email) or
- Local (USB and Bluetooth)

If the data transfer does not work, use the display screen of the ELD or a printout from the ELD to verify the driver's hours of service.

Note: Retrieve the instruction manual/instruction sheets from the driver or use the FMCSA ELD registration list describing the eRODS transfer process.

eRODS

ELDs must transmit ELD records electronically to an authorized safety official upon request. eRODS analyzes and reads the electronic RODS file that will be generated on the ELD 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 must be populated by the driver with the information that an authorized safety official will 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.

Roadside Inspections

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

- Verify that the ELD is registered with FMCSA, either by going to the FMCSA list or retrieving the ELD data during the file transfer.
- 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.

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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.
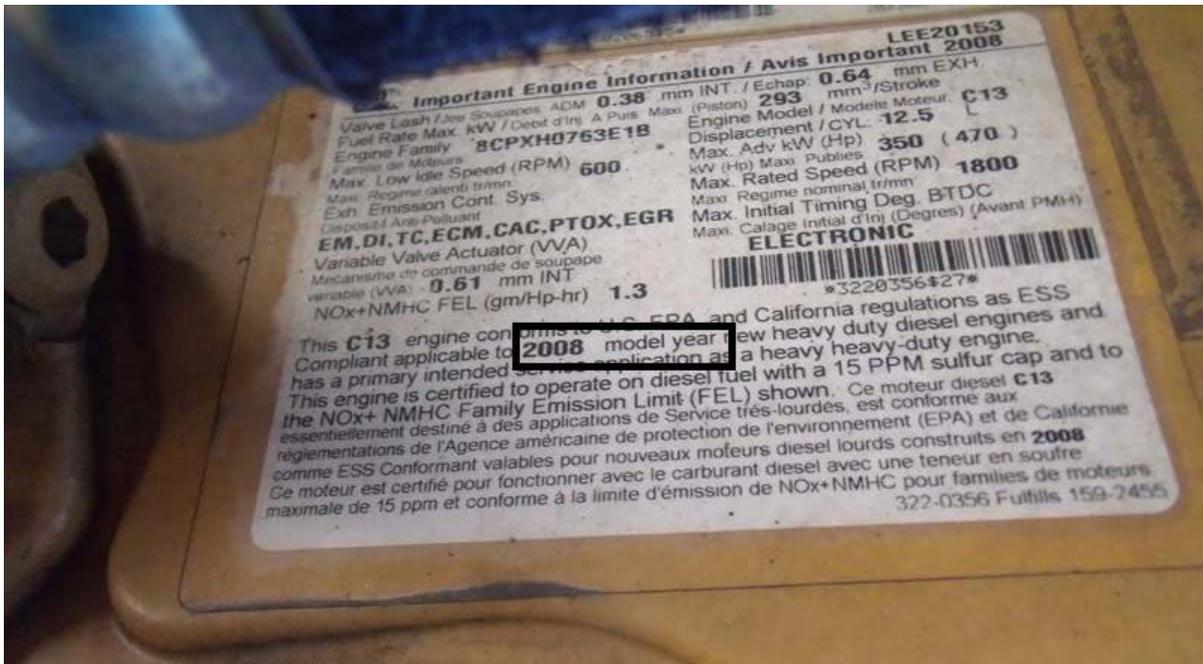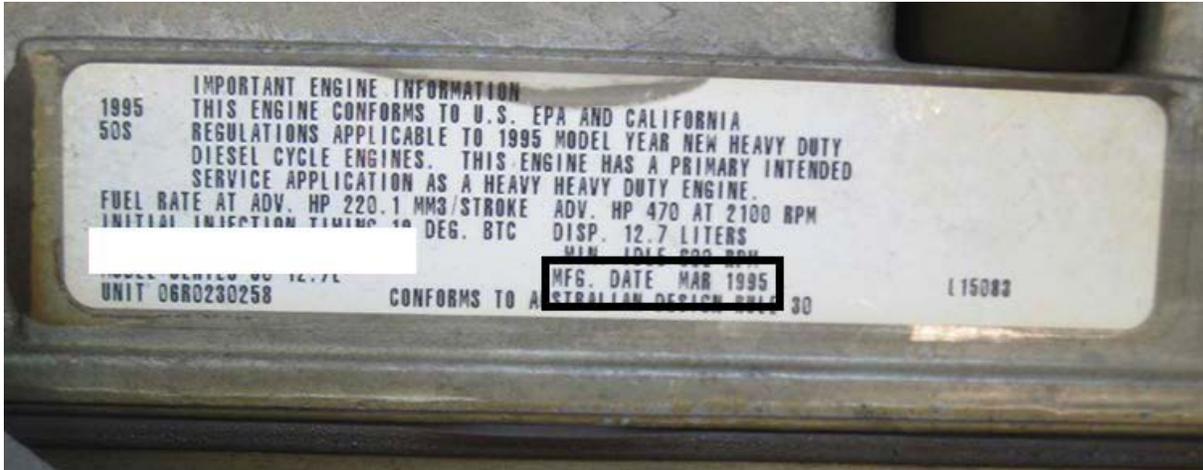
Step 1: Locate the Engine Control Label

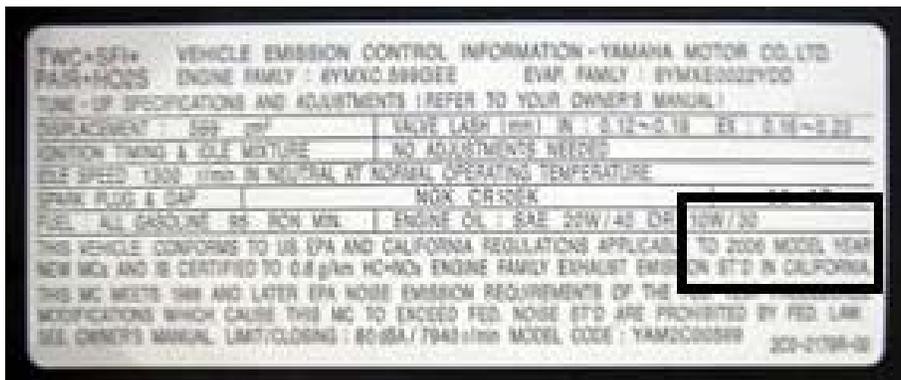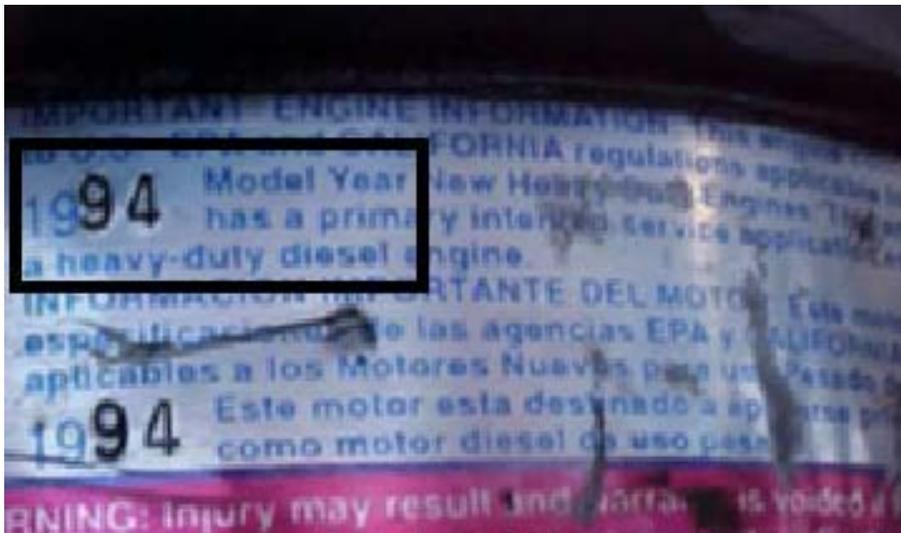# 2017-05 – Hand-Held and Electronic Logging Devices (ELDs)

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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.

Inspection Bulletin
North American Standard Inspection Program

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Inspection Bulletin
North American Standard Inspection Program

HOURS-OF-SERVICE INSPECTION FLOWCHART
FOR ALL RECORDS OF DUTY STATUS

COMMERCIAL VEHICLE SAFETY ALLIANCE
CVSA

ALL TYPES OF RECORD OF DUTY STATUS (RODS)

Once you determine the driver needs a RODS, ask the driver to surrender the RODS

ELECTRONIC DEVICE SURRENDERED

- Ask the driver if he/she has an ELD or "grandfathered" AOBRD
- Ask the driver for the instruction card/manual/visor card for the device (may be electronic) – the information should indicate whether it is an AOBRD or ELD

If the driver is unsure of what type of device he/she has:

- Ask the driver if the device has an option to transfer the RODS to eRODS via local (Bluetooth/USB) or telematics (email or web service) transfer
- Ask the driver if the device logs driving time without driver input
- Look at the device display for ELD identifiers in the header information

PAPER RODS SURRENDERED (395.8)

- Determine if the driver meets an exemption from ELD requirements
  - o Does not need RODS more than 8 days in 30 days
  - o Engine year older than 2000
  - o Driveaway-towaway (vehicle driven or recreational)
  - o The ELD/AOBRD does not function and the driver is within the 8-day allowance or has an extension
  - o The driver is under a temporary exemption or waiver

ELD (395.22)

- Ensure the driver has a sufficient number of blank log pages (may be electronic)
- Ensure the ELD is registered with FMCSA
- Examine the RODS on the device and request the driver to transfer the files
- After transfer, access the eRODS file and examine the RODS further. If there are discrepancies in the file, examine the RODS on the display or printout.
- Look at potential violations the eRODS software may identify and verify them in the RODS (Ask the driver about any exemptions under which he/she may be operating)

AOBRD (395.15)

- Ensure the driver has a sufficient number of blank log pages (may be electronic)
- Examine the RODS on the device
- If available, have the driver get a copy of the RODS emailed or faxed, if necessary (this is not a regulatory requirement)
- A fleet must have been using AOBRDs prior to Dec. 18, 2017, to continue to use AOBRDs or to be able to add additional AOBRDs to the fleet after that date
- If you believe that a fleet does not qualify for a grandfathered AOBRD, send the information to FMCSA for investigation

NOTE: A registered ELD (hardware) may be running AOBRD software

LOGGING SOFTWARE (395.8)

- The device is neither an ELD or AOBRD
- Determine if the driver meets an exemption from the ELD mandate (see paper surrendered section of flowchart)

IF EXEMPT

- Ensure the RODS can be printed and signed on paper or electronically signed
- Inspect the RODS for compliance

IF EXEMPT

- Inspect the RODS for compliance

IF NOT EXEMPT

- Cite the violation for no RODS and place the driver OOS

IF NOT EXEMPT

- If the driver has not been cited on this trip for no RODS, cite the violation for no RODS and place the driver OOS
- If the driver has been cited and placed OOS on this trip, allow the driver to proceed until his/her final destination