



ADVANCING ETHICS, COOPERATION AND EDUCATION

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## **Commercial Vehicle Inspections and Improving Your Compliance, Safety, and Accountability Scores**

### **I. Compliance, Safety, Accountability**

The Compliance, Safety, and Accountability (CSA) program for commercial vehicle was developed by the Federal Motor Carrier Safety Administration (FMCSA) as part of the United States Department of Transportation. The FMCSA has developed the Federal Motor Carrier Safety Regulations (FMCSR) in an effort to establish safe operating requirements for drivers, carriers, vehicles, and equipment.

#### **CSA “BASICS”**

The Compliance, Safety, Accountability (CSA) Score is a system that used primarily roadside inspection and crash data to measure Motor Carriers’ safety performance, and to identify potential unsafe Motor Carriers. The CSA Behavior Analysis and Safety Improvement Categories (BASICS) are the seven categories the FMCSA uses to measure safety performance and create CSA scores. The BASICS include:

- Unsafe Driving
- Hours of Service
- Driver Fitness
- Controlled Substances
- Vehicle Maintenance
- Hazardous Materials Compliance
- Crash Indicator

Vehicle Maintenance is one of the main areas this presentation will focus on and the role of Commercial Vehicle Inspections as it relates to Vehicle Maintenance and as they relate to CSA scores.

The Federal Motor Carrier Safety Administration (FMCSA) uses the Motor Carrier’s CSA score for enforcement interventions, such as potential Fines, Penalties, etc. Including putting some Drivers ‘OOS’ (Out of Service) when necessary, due to unsafe acts such as driving while Texting, at-fault crashes, and various other violations.

## **II. Inspections**

There are inspections performed on commercial vehicles by the motor carrier, by the driver, and by other agencies.

### **Inspections by the Motor Carrier**

#### *General – Periodic and Annual Inspections*

FMCSR 396.3(a) states that every motor carrier must systematically inspect, repair, and maintain all motor vehicle in its control. FMCSR 396.17(c) states that a motor carrier must not use a commercial vehicle unless it has passed an inspection in accordance with the terms of this section during the preceding 12 months. These regulations provide the foundation for motor carriers to properly maintain their vehicles as well as to perform more in-depth annual inspections.

#### *Pre-Trip Inspections*

FMCSR 392.7 states that no commercial vehicle shall be driven unless the driver is satisfied that parts are in good working order. FMCSR 396.13 states that before driving a motor vehicle, the driver shall be satisfied that the motor vehicle is in safe operating condition and review the last driver vehicle inspection report. These regulations provide the foundation for commercial vehicle drivers to perform pre-trip inspections on the vehicle that he or she will be driving.

#### *Post-Trip Inspections*

FMCSR 396.11 states that every driver shall prepare a report at the completion of each day's work on each vehicle operated, identifying any defect or deficiency. It also states that the motor carrier shall repair any defect likely to affect safety. This regulation provides the foundation for commercial vehicle drivers to perform a post-trip inspection on the vehicle that he or she has driven as well as the foundation for motor carriers to repair any safety-related defects.

### **Inspections by Others**

FMCSR 396.9 states that agents of the FMCSA are authorized to enter upon and perform inspections.

#### *North American Standard Inspection Program*

The North American Standard Inspection Program was developed by the Commercial Vehicle Safety Alliance to promote uniformity of commercial vehicle inspections. The seven levels of inspections created include:

1. North American Standard Inspection
2. Walk-Around Driver/Vehicle Inspection
3. Driver/Credential Inspection
4. Special Instructions
5. Vehicle-Only Inspections
6. Transuranic Waste and Radio-Active Materials
7. Jurisdictional Mandated Inspections.

An exemplar section of an inspection report is shown in Figure 1.

BRAKE ADJUSTMENTS								
Axle #	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>
Right	N/M	1 1/2	1 1/2	1 3/4	1 5/8	1 7/8	2	1 3/4
Left	N/M	1 1/2	1 5/8	1 3/4	1 3/4	1 3/4	<b>2 3/8</b>	1 3/4
Chamber	L-20	C-30	C-30	C-30	C-30	C-30	C-30	C-30

  

VIOLATIONS							
Vio Code	Section	Unit	OOS	Citation #	Verify	Crash	Violations Discovered
393.47E	393.47(e)	3	N		N	N	Clamp or Roto type brake out-of-adjustment. Axle #7 left hand side out of adjustment. Maximum travel on 30 style clamp is 2 inches, actual measurement of 2 3/8.
393.53B	393.53(b)	3	N		N	N	CMV manufactured after 10/19/94 has an automatic airbrake adjustment system that fails to compensate for wear
<b>393.201A</b>	<b>393.201(a)</b>	<b>3</b>	<b>Y</b>		<b>U</b>	<b>N</b>	<b>Frame cracked / loose / sagging / broken. Frame cracked on trailer 2 near axle #5 on left side.</b>
393.9H	393.9H	1	N		N	Y	Inoperable head lamps. Headlight left side broken out due to crash
393.9TS	393.9TS	1	N		N	Y	Inoperative turn signal. Left side front and rear from crash
393.9T	393.9T	1	N		N	Y	Inoperable tail lamp. Truck out due to crash damage
393.25F	393.25(f)	1	N		N	Y	Stop lamp violations Truck out due to crash.
393.75A	393.75(a)	1	N		N	Y	Flat tire or fabric exposed. Axle #1 right and left side flat, Axle #2 left side outside dual flat.
393.75A	393.75(a)	2	N		N	Y	Flat tire or fabric exposed. Axle #4 left side outside dual flat. Inside dual right side flat. Axle #5 left outside dual flat.
393.45B2	393.45(b)(2)	1	N		N	Y	Brake hose or tubing chafing and/or kinking. Axle #3 hose ripped loose from brake chamber from crash.

  

<b>HazMat:</b> No HM Transported.	<b>Placard:</b> No	<b>Cargo Tank:</b>
<b>Special Checks:</b> Post Crash		

**Figure 1** Exemplar section of an inspection report.

The exemplar inspection report was performed on a vehicle that had been involved in a collision. The section shown includes brake measurements and a list of violations. The violations provide the specific regulation violated as well as inspector notes regarding the violation. Some violations had been deemed by the inspector as “Y” under Crash, meaning they were a result of the collision, and some were noted as “N” under Crash, meaning they likely existed prior to the collision. Each violation includes a “Y” for “Yes” or “N” for “No” under the “OOS” column, which stands for “Out-of-Service.”

#### *North American Out-of-Service Criteria*

FMCSR 396.9 which allows agents to inspect vehicles, also allows agents to declare a vehicle “Out-of-Service” indicating that it can no longer legally be driven on public roadways. The North American Out-of-Service Criteria was developed by the Commercial Vehicle Safety Alliance to promote uniformity for out-of-service criteria. The Federal Motor Carrier Safety Regulations provide general guidance for motor

carriers, however, the Out-of-Service Criteria provide the specific benchmarks to distinguish between a roadworthy vehicle and a non-roadworthy vehicle.

For example, the Out-of-Service Criteria states that a vehicle is deemed “Out-of-Service” if the number of defective brakes is equal to or greater than 20 percent of the service brakes. On a standard 18-wheeler tractor-trailer, there are 10 service brakes. If 2 or more of the 10 service brakes of the service brakes are defective, that would equate to 20 percent or more, and thus the vehicle is declared “Out-of-Service.” “Defects” of a brake could include inoperability, brake chamber slack adjusters that are out of adjustment, insufficient brake pad thickness, air leaks, or damaged drums. Alternatively, if 1 of the 10 service brakes (or 10%) were defective, then the vehicle has not met the 20% criteria and the vehicle may still be operated on the roadway, although the defect should be repaired at the next opportunity since the motor carrier has become aware of the situation.

Other OOS criteria apply to mechanical systems such as the tires, wheels, the steering system, the suspension, the frame, the exhaust system, cargo loading and securement conditions, and coupling devices like fifth wheels and kingpins.

### **III. CSA Scores**

Inspections play a major role as part of CSA Scores. The completion of the previously mentioned inspections is essential to a higher score. A Driver Vehicle Inspection Report (DVIR) covering all aspects of the vehicle must be completed daily. The report must identify any defect or deficiency that would affect the safety or operation of the vehicle. Corrective action to the safety related items must be taken prior to permitting a driver from operating the vehicle again.

There are a variety of other ways that motor carriers can improve their CSA scores. Establishing immediate and ongoing communication can be utilized to ensure that everyone is aware of the company’s emphasis on safety. Companies can consider continuous improvement to unsafe driving with retraining programs. Driver fitness awareness programs and substance abuse programs provide additional awareness to emphasize good habits.

Lastly, it should be understood that errors can exist within the CSA Scores and thus it is necessary to understand the steps necessary to correct the score errors. Monthly corrections and reviews can ensure CSA score accuracy.