

Braking safety

Joseph Doerr discusses why performing brake inspections is so important.

Let's talk brake safety for a minute. We all know that improperly installed or poorly maintained brake systems can reduce the braking capacity and stopping distance of trucks or buses, which poses a serious safety risk, but perhaps not everyone knows that out-of-adjustment brakes and brake-system violations – when combined – represent half of all out-of-service violations issued to commercial motor vehicles on the road. And perhaps not everyone knows that brake-related violations actually make up the largest percentage of out-of-service violations cited during roadside inspections.

Clearly, brake-related violations are an issue, which means brakes, or rather the maintenance of brakes can be an issue – and that's a huge safety concern. CMV brakes are certainly designed to hold up under tough conditions, but in order to do so they need to be inspected and maintained carefully and consistently so they operate and perform properly throughout a vehicle's life.

As an active member of The Commercial Vehicle Safety Alliance (CVSA), a nonprofit association comprised of local, state, provincial, territorial and federal commercial motor vehicle safety officials and industry representatives, I am always working to stay on top of the myriad commercial motor vehicle safety concerns that surround our industry – and there are quite a few of them. The good news, however, is that CVSA's mission is simple: to improve commercial motor vehicle safety and uniformity throughout the U.S., Canada and Mexico by providing guidance and education to enforcement, industry and policy makers.

As a member of three CVSA committees – the Information Systems Committee, the Policy and Regulatory Affairs Committee

and the Size and Weight Committee, I can keep a finger on the pulse of the transportation sector. And right now, the pulse is all about brake safety.

Operation Airbrake

CVSA's Operation Airbrake Program is a comprehensive program dedicated to improving commercial motor vehicle brake safety throughout North America by reducing the number of highway crashes caused by faulty braking systems on commercial motor vehicles. CVSA does this by conducting roadside inspections and educating drivers, mechanics, owner-operators and others on the importance of proper brake inspection, maintenance and operation.

On May 3, 2017, CVSA, as part of the Operation Airbrake Program, held an unannounced Brake Safety Day, where more than 9,500 commercial motor vehicles were inspected. Enforcement personnel throughout North America conducted surprise inspections on large trucks and buses to identify out-of-adjustment brakes and brake-system and antilock braking system (ABS) violations. (More than 3.4 million brakes have been inspected since the program's inception in 1998 and it's widely considered to be a highly effective and successful program.)

The goal of Brake Safety Day is to conduct roadside inspections and identify and remove vehicles with critical brake violations from our roadways in an effort to reduce the number of crashes caused by, or made more severe by, poorly maintained braking systems on commercial motor vehicles. The event also seeks to evaluate how well ABS are maintained in accordance with federal regulations.

After examining the results of the May event, which can be viewed in full on CVSA's website, I thought I'd highlight a few of the most notable results:

- A total of 43 jurisdictions participated – 33 U.S. states and 10 Canadian provinces/territories.
- The United States conducted 8,140 commercial motor vehicle inspections; Canada conducted 1,384.
- In all, 9,524 inspections were conducted as part of Brake Safety Day.



Brake-related violations actually make up the largest percentage of out-of-service violations cited during roadside inspections.

- 79 percent of the vehicles inspected did not have any critical item vehicle violations.
- 21 percent (1,989) of all inspections conducted resulted in a vehicle being placed out of service for vehicle violations of any kind.
- 12 percent (1,146) of all inspections conducted resulted in a vehicle being placed out of service for brake-related violations.

Many participating jurisdictions were also able to survey ABS compliance. Here are some of the more notable results:

- 4,635 air-braked trucks and tractors were identified as requiring ABS; 8 percent (391) had ABS violations.
- 3,222 trailers were identified as requiring ABS; 15 percent (487) had



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ABS violations.

- 723 hydraulic-braked trucks required ABS; 6 percent (41) had ABS violations.
- 57 buses required ABS; 11 percent (6) had ABS violations.

Understanding FMCSR requirements

Since we’ve established that brake safety is an issue, the logical next question is: What now? Before I answer that, it makes sense to understand what, exactly, the Federal Motor Carrier Safety Regulations (FMCSRs) require.

Break inspections fall under the Federal Motor Carrier Safety Regulations 49 CFR Part 393 Parts and Accessories Necessary for Safe Operation. 49 CFR Part 393 establishes the minimum standards for commercial motor vehicles as defined in 49 CFR section 390.5.

According to 49 CFR Part 393, motor carriers need to systematically inspect, maintain and repair all motor vehicles for which they control. Motor carriers are also required to maintain proper documentation. When they fail to do so, they can be held responsible for any injury caused by a failure to properly inspect, maintain or repair any equipment in their control. So if the brakes of your CMV are

discovered to be out of adjustment after an accident, your trucking company can be found liable for failing to properly conduct a pre-trip inspection and failing to properly adjust the brakes to keep them within federal limits. Even the prior owner of a tractor trailer who sells the vehicle to another trucking company can be held responsible for negligent maintenance of the vehicle in violation of the FMCSR resulting in an accident.

What can you do?

So how does a motor carrier best protect itself? By understanding what’s expected of them and training their employees on the requirement found in Sections 393 & 396 of the FMCSR. With that in mind, here are three things you should be doing right now.

1. Keep proper documentation:

Recordkeeping Requirements (396.3)

Motor carriers must maintain the following information for every vehicle they have controlled for 30 days or more.

- Identifying information, including company number, make, serial number, year and tire size
- A schedule of inspections to be performed, including type and due date
- Inspection, repair and maintenance records
- Records of tests conducted on buses with push-out windows, emergency doors and marking lights

2. Keep proper records for the proper amount of time:

The following records must be retained for one year at the location where the vehicle is garaged and maintained for six months after the vehicle leaves the carrier’s control (e.g., sale, trade-in, scrap).

- Pre- and post-trip Inspections by the drivers (396.11):
- Service brakes (including trailer brake connections)
- Parking (hand) brake
- Steering mechanism
- Lighting devices and reflectors
- Tires
- Horn
- Windshield wipers
- Rearview mirrors
- Coupling devices
- Wheels and rims
- Emergency equipment

3. Designate a Qualified Brake Inspector:

Every motor carrier is responsible for ensuring that all inspections, maintenance, repairs and service to brakes of commercial motor vehicles comply with these regulations. The carrier must ensure that the employees responsible for brake inspection, maintenance, service, or repairs meet minimum brake-inspector qualifications. The brake inspector must:

- Understand and be able to perform the brake service and inspection;
- Know the methods, procedures, tools and equipment needed; and
- Be qualified to perform brake service or inspection by training and/or experience.

Understanding what’s required of commercial motor vehicles can be daunting, but that’s why the NBIS risk management team is ready to help you make sense of them. Talk to your insurance agent to Experience the Difference™ and NBIS, or call 1-877-860-RMSS, or visit us online at www.NBIS.com.

Maintaining evidence of Brake Inspector Qualifications (396.25)

- Motor carriers must maintain evidence of brake inspector qualification at the principal place of business or the location where the inspector works.
- Evidence must be retained for the period during which the brake inspector is employed in that capacity and for one year thereafter