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I am an attorney licensed to practice law in the State of Texas. I graduated from Texas Tech University Law School with a Doctorate of Jurisprudence with High Honors in 1977 and licensed to practice law in Texas in 1977. I have maintained my license to practice law from then to the I was board certified in Personal Injury Trial Law by the Texas Board of Legal Specialization in 1982 and have maintained my certification to the present. In 1986, I was board certified as a Civil Trial Advocate by the National Board of Trial Advocacy and have likewise maintained that certification to the present. In 2012, I became board certified in Civil Pretrial Practice Advocacy by the National Board of Civil Pretrial Practice Advocacy. In 1996, I received the AV Preeminent Rating for the highest possible peer review rating in legal ability and ethical standards and have maintained that rating to the present. I was voted in with the rank of Advocate by the American Board of Trial Advocates (ABOTA) in 1998 and have maintained that rank to the present. I am a Senior Counsel member of the College of Master Advocates and Barristers and a member of the Trial Lawyer Honorary Society of the Litigation Council of America. I was voted into the Outstanding Lawyers of America in 2003. I have been named one of Texas' Super Lawyers® for 13 consecutive years (2003 - 2014, inclusive). I am a member of the Million Dollar and Multi-Million Dollar Advocates Forum. I was named one of the Top 100 Trial Lawyers by the National Trial Lawyers Association in 2011. I am a Life Fellow of the Texas Bar Foundation. I am also a member of the American Association for Justice (formerly American Trial Lawyers Association) and the Texas Trial Lawyers Association. I served on the District 5 Grievance Committee between 2006 and 2011. I am admitted to practice law before all Texas state courts, the Southern, Eastern and Western District federal courts, and the Supreme Court of the United States. I am a member of the Texas Bar Association and the American Bar Association. I have been actively practicing law, specializing in personal injury litigation for virtually all of my 37 plus years of practice. I currently have an active private practice in both pretrial and trial related activities. My main law office is located at 1520 E. Highway 6, Alvin, Texas 77511.

IMPORTANT DOT REGULATIONS
PART 396: INSPECTION, REPAIR AND
MAINTENANCE AND SELECTED OTHER
RELATED PROVISIONS

I. INTRODUCTION

"Safety is the highest priority of the FMCSA [Federal Motor Carrier Safety Administration]" Since 2000, the FMCSA, an agency within the Department of Transportation (DOT) has been responsible for overseeing the safety of, among others, motor carriers, their employees, drivers and agents while in interstate commerce.² With the all inclusive nature of the FMCSRs, collisions and other incidents involving motor carriers and commercial motor vehicles (CMV) will almost always implicate the FMCSRs. (Intrastate motor carriers and drivers may be bound only by the state DOT-adopted regulations that may or may not be consistent with the FMCSRs. It is mandatory for the attorney to confirm interstate versus intrastate regulations' applicability on a case-by-case basis.) Counsel representing the motor carrier or driver and the injured victim or family must have extensive knowledge and familiarity with all applicable FMCSRs; it is a virtual certainty that these regulations will be the focus of plaintiffs' allegations and/or defendants' While state and local laws (presumably defenses. including the motor carrier's internal policies and procedures) may be established and enforced, they may not "prevent full compliance with these [federal] regulations by the person subject thereto."3 Emphasizing the preemptive-type nature of the FMCSRs is § 392.2 Applicable Operating Rules requiring that every commercial motor vehicle must be operated in accordance with the laws, ordinances and

regulations of the jurisdiction in which it is being operated; "[h]owever, if a regulation of the [FMCSA] imposes a higher standard of care than [the state or local law, ordinance or regulation], the [FMCSRs] must be complied with."

As demonstrated by the following FMCSRs, the motor carrier (and employees) along with its drivers have both concurrent and independent duties and responsibilities to know and comply with the Federal Motor Carrier Safety Regulations (FMCSR) applicable to their job duties.

Section 390.3(e) <u>Knowledge of and Compliance With</u> the Regulations

- (1) Every **employer** shall be knowledgeable of and comply with all regulations contained in this subchapter which are applicable to that motor carrier's operations.
- (2) Every **driver and employee** shall be instructed regarding, and shall comply with, all applicable regulations contained in this subchapter.
- (3) All **motor vehicle** equipment and accessories required by this subchapter shall be maintained in compliance with all applicable performance

¹49 CFR § 390.3, Interpretations - Memorandum February 8, 2000.

²49 CFR § 390, 390.3(a) and 390.5.

³49 CFR § 390.9.

and desgncriteria set forth in this subchapter.⁴ (emphasis added)

Section 390.11 Motor Carrier to Require Observance of Driver Regulations mandates, in applicable part, that whenever "a duty is prescribed for a driver or a prohibition is imposed upon the driver, it shall be the duty of the motor carrier to require observance of such duty or prohibition." Strengthening these requirements is § 390.13 Aiding or Abetting Violations requiring that "no person shall aid, abet, encourage, or require a motor carrier or its employees to violate the rules of this chapter." And, per § 392.1 Scope of the Rules in this Part [392 - Driving of Commercial Motor Vehicles], "Every motor carrier, its officers, agents, representatives, and employees responsible for the management, maintenance, operation, or driving of commercial motor vehicles, or the hiring, supervising, training, assigning or dispatching of drivers, shall be instructed in and comply with the rules in this part."5

⁴49 CFR § 390.3(f) contains exceptions for school bus operations, transportation performed by the federal, state and political subdivisions of state governments, occasional transportation of personal property by individuals not for commercial purposes, transportation of human corpses or sick and injured persons, operation of fire trucks and rescue vehicles involved in emergency operations, commercial motor vehicles transporting between 9 and 15 passengers not for commercial enterprises and drivers of CMVs transporting propane winter heating fuel or responding to a pipeline emergency (as more fully defined therein).

⁵Similar provisions requiring knowledge and compliance, concurrently and independently by the motor carrier and its drivers, can be found in other parts of the FMCSRs applicable to specific functions.

II. PART 396 INSPECTION, REPAIR AND MAINTENANCE AND SELECTED OTHER RELATED PROVISIONS

Improperly inspected, repaired and maintained 75 feet long and up to 80,000 lb. 18-wheeler rigs (tractors and trailers) on interstate, state and local roads and highways traveling highway speeds can reek havoc. In 1979, the core provisions of what is now known as Part 396: Inspection, Repair and Maintenance provisions of the FMCSRs were enacted applicable, at that time, to motor carriers and commercial motor vehicles in interstate commerce. In 2009, Part 396's applicability was updated to include intermodal equipment providers.⁶

Section 396.1 Scope

Except for "covered farm vehicles", every motor carrier ("carrier") and intermodal equipment provider ("provider"), their officers, drivers (motor carrier only), agents, representatives and employees directly concerned with the inspection or maintenance of the equipment "must be knowledgeable of and comply with the rules of this part."

Section 396.3 Inspection, Repair and Maintenance

(a) <u>General</u>. Carriers and providers "must systematically inspect, repair, and maintain, or cause [the same]" to all equipment subject to their control. "Systematic" means a "regular or scheduled program to keep vehicles in a safe operating condition." Because of the fleet and vehicle specific nature of carriers'

⁶Intermodal equipment providers are persons that provide trailing equipment (*e.g.* trailers and chassis) to be used in interstate commerce including transporting or repositioning equipment (excluding equipment leased to a motor carrier for primary use in the carrier's freight hauling operations). 49 CFR § 390.5.

business, the inspection, maintenance or repair intervals are to be determined by the carrier. However, the **post-trip inspection** reports (DVIRs) per § 396.11, **pre-trip inspections** per § 396.13 and the Appendix G, **periodic inspections** per § 396.17 are "in addition to" the "systematic" inspection, repair and maintenance requirements. Notwithstanding the above, all Part 393 and any other safety related parts and accessories "shall be in safe and proper operating condition at all times." Regardless of who performs these inspections, maintenance and repairs, the carrier remains "solely responsible for ensuring that the vehicles under its control are in safe operating condition and that defects have been corrected."

- (b) Required Records. Motor carriers, except private/non-business carriers of passengers, must maintain these records for "30 consecutive days." Providers must maintain these records for all intermodal equipment they tender or intend to tender to a carrier. All such records must include (1) the company number (if so marked), make, serial number, year and tire size and the name of the person furnishing the vehicle; (2) a means to indicate the nature and due date of inspection and maintenance operations to be performed; (3) the date and nature of the previous inspections, repairs and maintenance; and (4) bus emergency windows, doors and lights.
- (c) <u>Record Retention</u>. One year and for six months after the vehicle leaves the carrier's control where the vehicle is either housed or maintained or at the carrier's location of choice if the vehicle is not housed or maintained at a single location.⁹

Case Law:

Section 396.3 does not give rise to a negligence *per se* instruction because it simply incorporates the ordinary prudent person standard with no clearly-defined standard of conduct otherwise specified. *Omega Contracting, Inc. v. Torres*, 191 S.W.3d 828, 842 *et seq.* (Tex.App.-Fort Worth 2006, no pet.)

Third-party inspectors have an independent statutory duty under the FMCSRs to inspect vehicles subject to their control, maintain records of the inspections and resulting repairs, warn of hidden dangerous conditions and truthfully report the condition of the inspected vehicles. *Craft v. Graebel-Oklahoma Movers, Inc.*, 178 P.3d 170, 178-79 (Ok.S.Ct. 2007). Common law duties also exist for these 3rd party inspectors including the duty of care to both the owner and to the general public to assure that the repair is properly performed or the owner is warned of its dangerous condition where the dangerous condition is discoverable in the exercise of ordinary care.

Section 396.5 Lubrication

Every carrier "shall ensure" that the motor vehicle subject to its control is (a) proper lubricated; and (b) free of oil and grease leaks.

Section 396.7 Unsafe Operations Forbidden

Motor vehicles shall not be operated in a condition likely to cause an accident or a breakdown. However, if the vehicle is discovered to be in an unsafe condition while being operated, it may be driven to the nearest place for repairs only if that operation is less hazardous to the public than allowing the vehicle to remain on the highway.

⁷§ 396.3 interpretations.

⁸§ 396.3 interpretations.

⁹§ 396.3 interpretations.

Section 396.9 <u>Inspection of Motor Vehicles and Intermodal Equipment in Operation</u>

FMCSA agents are authorized to inspect and report the results of vehicle and equipment inspections. Vehicles and equipment found to be in a condition "likely to cause an accident or a breakdown" will be marked "out of service" (OOS). Carriers and providers may not operate any OOS vehicle or equipment until all repairs are completed. The Driver Vehicle Examination Reports shall immediately deliver or transmit the reports to the carrier or provider who shall perform the needed repairs and, within 15 days, certify the corrections and return the inspection form to the issuing agency. The out of service vehicles may be moved by placing them "entirely upon another vehicle" and towed away from the inspection location.¹⁰

Section 396.11 <u>Driver Vehicle Inspection Report(s)</u> [DVIRs]

This section requires the first **post-trip inspection** (at the completion of each day's work) by every carrier and its driver on each vehicle operated (except for intermodal equipment tendered by its provider) to include at least the following: service and trailer brakes, parking brakes, steering, lights and reflectors, tires, horn, windshield wipers, rear vision mirrors, coupling devices, wheels and rims and emergency equipment. The reports must be in writing, signed by the driver and identify the vehicle inspected. If any deficiencies are discovered that would affect the safety of operation or result in breakdown, those defects shall be identified. Reports must be submitted to the carrier. Both the tractor and trailer must be inspected. If more than one tractor is operated during a day's work, a separate DVIR must be prepared for each tractor. No specific form of a DVIR is mandated and the specific parts or accessories that are inspected need not be identified. One DVIR may be used for any combination of tractor

and trailer provided any identified deficiencies are separately reported. If a driver operates two or more vehicles in a 24 hour period, a separate DVIR must be prepared at the completion of the driver's tour of duty in each vehicle.¹¹

The same basic procedures are required by intermodal equipment providers except the parts and accessories to be inspected include, at a minimum, brakes, lights and markers, wheels, rims, lugs and tires, airline connections, hoses and couplers, kingpins, rails or support frames, tie down bolsters, locking pins, clevises, clamps or hooks and sliders. These reports must also be signed by the driver and include the carrier's and provider's USDOT numbers, the equipment's identifying number, the date and time of the report, all deficiencies found which would affect operational safety or result in a breakdown.

For both carriers and providers, all such defects and deficiencies must be repaired before allowing, requiring or permitting operation of the vehicle or equipment and the carrier or provider must certify, state in writing with signature, the completion of the repairs or that the repairs are unnecessary. Except for individuals performing periodic or annual inspections per § 396.19 and those performing brake-related inspections, repair and maintenance per § 396.25, no minimum qualifications exist for maintenance personnel; therefore, DVIRs may be certified by company officials who have no experience repairing or maintaining the vehicles or equipment. The reports must be retained by the carrier or provider for 3 months.

¹¹§ 396.11 interpretations.

¹²§ 396.11 interpretations.

¹⁰§ 396.9 interpretations.

Section 396.12 <u>Procedures for Intermodal Equipment</u> <u>Providers to Accept Reports Required by Section</u> 390.42(b) of this Chapter

Providers are required to establish a system for carriers and their drivers to report any deficiencies discovered in the intermodal equipment which would affect the operational safety of the equipment or result in breakdown. The content of these reports, corrective actions and retention periods are substantially the same as set out in § 396.11.

Section 392.7 Equipment, Inspection and Use

This section of Part 392: Driving of Commercial Motor Vehicles contains the one of eight different FMSCR sections mandating pre-trip inspections. It prohibits a CMV from being driven unless the driver is satisfied that the service and trailer brakes, parking brakes, steering mechanism, lights and reflectors, tires, horn, windshield wipers, mirrors and coupling devices are in good working order. Likewise, drivers preparing to transport intermodal equipment must inspect the readily visible service brake components, lights and markers, wheels, rims, lugs and tires, airlines, hoses and couplers, kingpins, rails or support frames, tie down bolsters, locking pins, clevises, clamps, hooks and sliders to confirm they are in good working order before the equipment is operated over the road. No written reports are required.¹³

Case Law:

Drivers have an independent FMCSR statutory duty imposed upon them to perform inspections and make reports that is "clearly separate from that imposed on motor carriers." The driver must "be satisfied that the motor vehicle is in safe operating condition" prior to driving it. *Indian Trucking v. Harber*, 752 N.E.2d 168, 173 (Ind.App., 2001).

Section 390.42 What Are the Responsibilities of Drivers and Motor Carriers Operating Intermodal Equipment?

Part 390: Federal Motor Carrier Safety Regulations; General provides this second **pre-trip inspection** section confirming that drivers accepting and operating intermodal equipment over the road must comply with the inspection requirements for the equipment components listed in § 392.7(b) and be satisfied they are in good working order. Any damage, defects or deficiencies must be reported to the provider to include, at a minimum, the reporting requirements in § 396.11(b)(2).

Section 393.1 Scope of the Rules in this Part

Part 393: <u>Parts and Accessories Necessary for Safe Operation</u> identifies and establishes minimum standards for the parts and accessories of CMVs. As a 3rd **pretrip inspection** section, this rule requires every motor carrier and their employees along with all intermodal equipment providers and their employees responsible for the inspection, repair and maintenance of the equipment exchanged with the motor carrier to be knowledgeable of and comply with the provisions of this part. No carrier or provider may operate, cause or permit the vehicle or equipment to be operated, as applicable, unless equipped as required by this part.

Section 392.8 Emergency Equipment, Inspection and Use

This fourth **pre-trip inspection** section mandates that no CMV shall be driven unless the driver is satisfied that § 393.95 Emergency Equipment (fire extinguishers, spare fuses and warning devices) are in place and ready for use.

Section 396.13 Driver Inspection

In addition to being satisfied that the vehicle is in safe operating condition, this fifth section mandating a **pre-**

¹³§ 392.7 interpretations.

trip inspection requires the driver to review the last DVIR (post-trip inspection) and sign the report only if defects or deficiencies were noted to acknowledge the driver's review and certification that the required repairs were performed. The driver may sign the certification of repairs as an agent of the carrier if the driver is satisfied that the repairs have been performed. Otherwise, the driver is prohibited from operating the vehicle until the required certification is made. The regulations do not require the driver submit the copy of the previous DVIR to the motor carrier. Likewise, there is no retention requirement for the carrier.

Case Law:

Section 396.3 does not give rise to a negligence *per se* instruction because it simply incorporates the ordinary prudent person standard with no clearly-defined standard of conduct otherwise specified. *Omega Contracting, Inc. v. Torres*, 191 S.W.3d 828, 842 *et seq.* (Tex.App.-Fort Worth 2006, no pet.)

Drivers have an independent statutory duty imposed upon them under the FMCSRs to perform inspections and make reports that is "clearly separate from that imposed on motor carriers." The driver must "be satisfied that the motor vehicle is in safe operating condition" prior to driving it. *Indian Trucking v. Harber*, 752 N.E.2d 168, 173 (Ind.App., 2001).

Section 396.15 <u>Driveaway-Towaway Operations and Inspections</u>

Operations involving an empty or unladen motor vehicle with one or more sets of wheels on the roadway is being transported between manufacturer's facilities, manufacturer and dealership/purchaser, between dealership and purchaser or lessee, to a carrier's terminal or repair facility for repair or by means of a saddle-mount or tow bar require the sixth **pre-trip** and

second **post-trip inspection** limited to the tow bar or saddle-mount connections. As with other **pre-** and **post-trip inspections**, the vehicles may not be operated unless the vehicles are found in safe operational condition and any defects or deficiencies are corrected.¹⁵

Section 392.9 <u>Inspection of Cargo, Cargo Securement</u> Devices and Systems

The seventh section of the FMCSRs mandating another **pre-trip inspection** requires that a driver may not operate a CMV and a motor carrier may not require or permit a driver to operate a CMV unless the vehicle's cargo is properly distributed and adequately secured per §§ 393.100 - 393.136, (1) the vehicle's tailgate, tailboard, doors, tarpaulins, spare tire, other operational equipment and "the means of fastening the [CMV's] cargo are secured", (2) neither the cargo nor any other object (a) obscures the driver's view ahead or to the side, (b) otherwise interferes with the free movement of his body or free and ready access to emergency accessories or (c) prevents the free and ready exit of any person from the vehicle's cab. If a shipper has loaded and sealed the trailer, the driver and motor carrier remain responsible for its proper loading and may determine safe loading "a number of ways" including supervising the loading, obtaining a notation on the Bill of Lading that the cargo was properly loaded or obtain approval to break the seal to permit inspection.¹⁶ Except when a driver has been ordered not to open a sealed CMV to inspect its cargo or when the cargo has been loaded in such a manner that it makes inspection impractical, the driver has an independent duty to assure that the above provisions have been complied with before the vehicle is driven. If a driver has a key to a locked cargo compartment, the driver has ready access to the compartment and would

 $^{^{15}}$ § 396.25 interpretations.

¹⁶§ 392.9 interpretations.

¹⁴§ 396.13 interpretations.

be required to perform the examinations of the cargo and securement devices mandated by this section. Although there is no requirement that the driver personally load, block, brace or tie down the cargo, the driver is still required to be familiar with the methods and procedures for securing and adjusting the cargo and may have to adjust the cargo or securement devices.¹⁷

Subject to the same exceptions, en route inspections are required (1) within the first 50 miles after the beginning of a trip (2) mandatory reexaminations whenever (a) the driver makes a change in duty status or (b) has been driving the vehicle for 3 hours or 150 miles, whichever occurs first and (3) thereafter as necessary. The driver must make any adjustments to the cargo or securement devices necessary to ensure that the cargo cannot shift on or within or fall from the vehicle.

Section 397.2 <u>Compliance With Federal Motor</u> Carrier Safety Regulations

Part 397 regulates the transportation, driving and parking, of hazardous materials. Not surprisingly, in addition to numerous other specific rules and regulations surrounding the safety requirements for transporting hazardous materials, all motor carriers and other persons bound under the auspices of Part 397 are required to comply with all FMCSRs for Parts 390 thru 397, inclusive, including, of course, providing for the 7th **pre-trip**, 3rd **post-trip** and 2nd **en route inspections** referenced above.

Section 396.17 Periodic Inspection

Annual inspections are required for all commercial motor vehicles and intermodal equipment to include, at a minimum, all parts and accessories set forth in Appendix G.¹⁸ Vehicles and equipment that do not pass this inspection must not be used. Documentation is required for each such inspection in accordance with the requirements of § 396.21(a) or other forms of documentation which contain the date of inspection, the identity of the carrier or provider or other entity where the inspection report is maintained, information uniquely identifying the vehicle or equipment and certification that the vehicle or equipment passed inspection. A carrier or provider may self-inspect or may have a third-party garage or similar business perform the inspection, provided that the inspector's qualifications comply with § 396.19. As an alternative, vehicles that have passed an FMCSA roadside inspection or a state government periodic inspection meeting the minimum standards contained in Appendix G are considered to have met the requirements of this periodic (annual) inspection. Regardless, the carrier or provider is responsible to ensure that all parts and accessories are maintained at or properly repaired to the minimum standards of Appendix G. A CMV is still subject to a roadside inspection, however, even if it has had a periodic annual inspection conducted in the past twelve months. 19

Case Law:

Third-party inspectors have an independent statutory duty under the FMCSRs to inspect vehicles subject to their control, maintain records of the inspections and resulting repairs, warn of hidden dangerous conditions and truthfully report the condition of the inspected vehicles. *Craft v. Graebel-Oklahoma Movers, Inc.*, 178 P.3d 170, 178-79 (Ok.S.Ct. 2007). Common law duties also exist for these 3rd party inspectors including the duty of care to both the owner and to the general public to assure that the repair is properly performed or the

¹⁸Appendix G is attached for ease of reference.

¹⁷§ 392.9 interpretations.

¹⁹§ 396.17 interpretations.

owner is warned of its dangerous condition where the dangerous condition is discoverable in the exercise of ordinary care.

Section 396.19 Inspector Qualifications

Motor carriers and intermodal equipment providers must ensure that individuals performing annual inspections under § 396.17 are qualified: understand the inspection criteria in Part 393 and Appendix G, can identify the defective components, are knowledgeable of and have mastered the methods, procedures, tools and equipment used to perform an inspection and are capable of performing an inspection by reason of experience, training or both from either successfully completing a federal or state sponsored training program or a combination of training or experience totaling at least one year. This training or experience may consist of participation in a CMV manufacturersponsored training program or similar training program or experience as a mechanic or inspector in a carrier or equipment maintenance program or similar experience in a third-party commercial maintenance garage or experience as a CMV inspector for a state or federal Carriers and providers must retain government. evidence of these qualifications during the time the individual is performing annual inspections and for one vear thereafter. Third-party commercial garage inspectors' evidence of qualifications may be kept by the third-party commercial garage. No specific form is required to satisfy the evidentiary standard.²⁰

Case Law:

Third-party inspectors have an independent statutory duty under the FMCSRs to inspect vehicles subject to their control, maintain records of the inspections and resulting repairs, warn of hidden dangerous conditions and truthfully report the condition of the inspected vehicles. *Craft v. Graebel-Oklahoma Movers, Inc.*, 178

P.3d 170, 178-79 (Ok.S.Ct. 2007). Common law duties also exist for these 3rd party inspectors including the duty of care to both the owner and to the general public to assure that the repair is properly performed or the owner is warned of its dangerous condition where the dangerous condition is discoverable in the exercise of ordinary care.

Section 396.21 <u>Periodic Inspection Record Keeping</u> Requirements

Annual inspection reports must identify the individual performing the inspection, identify the motor carrier or the intermodal equipment provider, date of inspection, vehicle inspected, the vehicle components inspected and the results of the inspection to include, at a minimum, those standards in Appendix G and certify the accuracy and completeness of the inspection. If the annual inspection is reported by the carrier's or provider's inspector, the original or a copy of the inspection report must be retained where the vehicle is either housed or maintained for a period of 14 months from the date of the inspection. If a third-party commercial garage inspector performs the annual inspection, the carrier or provider is responsible for obtaining the original or a copy of the last annual inspection upon demand by an authorized federal, state or local official.

Section 396.23 Equivalent to Periodic Inspection

The annual inspection required by § 396.17 may be met through a state or federal roadside inspection performed during the preceding 12 months if performed in accordance with the minimum periodic inspection standards of Appendix G. The carrier or provider is responsible to ensure that the report is in compliance with the standards of Appendix G. If it is not, the carrier or provider must otherwise comply with the annual inspection requirements of § 396.17.

 $^{^{20}}$ § 396.19 interpretations.

Section 396.25 Qualifications of Brake Inspectors

All carriers and providers must ensure that all inspections, maintenance, repairs or service to the brakes of CMVs are performed by brake inspectors that meet the qualifications of this section. No carrier or provider may require or permit any person not so qualified to perform any inspection, maintenance, repairs or service to the brakes of any vehicle. qualified brake inspector must understand the brake service or inspection tasks to be accomplished and can perform those tasks, be knowledgeable of and have mastered the methods, procedures, tools and equipment used to perform the brake services and inspections and be capable of performing the assigned brake service or inspection by reason of experience, training or both. This may be accomplished by successfully completing an apprenticeship program sponsored by a state, federal or labor union or other approved training program or otherwise obtaining a certificate confirming qualifications or by brake related training or experience or a combination thereof totaling at least 1 year consisting of participating in a training program sponsored by a brake or vehicle manufacturer or similar program or experience performing brake maintenance or inspections similar to the service or inspection tasks required or experience performing brake maintenance or inspection similar in nature at a commercial garage or similar facility. Evidence of the brake inspector's qualifications must be maintained during the period when the brake inspector is employed in that capacity and for 1 year thereafter. A CDL driver with an airbrake endorsement does not qualify a person as a brake inspector. However, a driver who does not have the necessary experience to perform adjustments of the brakes may do so under the directions issued (even by telephone) from a qualified inspector as long as the carrier is willing to assume responsibility for the proper Mechanics employed by a leasing company that only work on CMVs that the company leases to other motor carriers are not qualified brake inspectors; they are not employed by a motor carrier.

III. CONCLUSION

Proper and complete inspections, maintenance and repairs of CMVs are but a part of the entire system of regulations designed to promote safety and reduce highway injuries and fatalities. The purpose of the FMCSRs is, among other things, to promote the safe operation of commercial motor vehicles, minimize dangers to the health of operators of commercial motor vehicles, and enhance commercial motor vehicle safety and thereby reduce highway fatalities, injuries and property damage.²¹ The DOT's 2010 Compliance, Safety, Accountability (CSA) program (the CSA is the FMCA's safety, compliance and enforcement program) established certain categories under which motor carriers and their employees and drivers are to be evaluated and reported - the Behavior Analysis Safety Improvement Categories (BASICS). The 7 BASICS' categories are:

- (1) Unsafe driving (implicating Parts 392 and 397);
- (2) Hours of service (HOS) (implicating Parts 392 and 395);
- (3) Driver fitness (implicating Parts 383 and 391);
- (4) Controlled substances/alcohol (implicating Parts 382 and 392);
- (5) Vehicle maintenance (implicating Parts 392, 393 and 396);
- (6) Hazardous materials (HM) (implicating Part 397 and numerous hazardous materials regulations); and
- (7) Crash indicator (implicating histories, patterns, frequency and severity of state-reported crashes).

The CSA program uses this safety measurement system (SMS) to analyze data to rank motor carriers with safety performance problems and to prioritize them for interventions. A motor carrier's measurement for each of the BASICS categories depend on the

²¹49 USC § 31131; *Omega Contracting, Inc. v. Torres*, 191 S.W.3d 828, 840 (Tex.App.-Fort Worth 2006, no pet.)

number of adverse safety events (violations or crashes), the severity and timing of these events. After the measurement is determined, the motor carrier is placed in a "peer group" with other carriers with similar numbers of inspections and a 0 to 100 percentile is

determined by comparing the BASICS measurements of the carrier to those of the other carriers in that peer group. The larger the percentile, the worse the performance rating.



Ch. III, Subch. B, App. G

Sec. 44 Commercial zones determined generally, with exceptions.

The commercial zone of each municipality in the United States, with the exceptions indicated in the note at the end of this section, within which the transportation of passengers or property, in interstate or foreign commerce, when not under a common control, management, or arrangement for a continuous carriage or shipment to or from a point without such zone, is exempt from all provisions of Part II, Interstate Commerce Act, except the provisions of section 204 relative to the qualifications and maximum hours of service of employees and safety of operation or standards of equipment shall be deemed to consist of:

- (a) The municipality itself, hereinafter called the base municipality;
- (b) All municipalities which are contiguous to the base municipality;
- (c) All other municipalities and all unincorporated area within the United States which are adjacent to the base municipality as follows:
- (1) When the base municipality has a population less than 2,500 all unincorporated areas within two miles of its corporate limits and all of any other municipality any part of which is within two miles of the corporate limits of the base municipality,
- (2) When the base municipality has a population of 2,500 but less than 25,000, all unincorporated areas within 3 miles of its corporate limits and all of any other municipality any part of which is within 3 miles of the corporate limits of the base municipality.
- (3) When the base municipality has a population of 25,000 but less than 100,000, all unincorporated areas within 4 miles of its corporate limits and all of any other municipality any part of which is within 4 miles of the corporate limits of the base municipality, and
- (4) When the base municipality has a population of 100,000 or more, all unincorporated areas within 5 miles of its corporate limits and all of any other municipality any part of which is within 5 miles of the corporate limits of the base municipality, and
- (d) All municipalities wholly surrounded, or so surrounded except for a water boundary, by the base municipality, by any municipality contiguous thereto, or by any municipality adjacent thereto which is included in the commercial zone of such base municipality under the provisions of paragraph (c) of this section.

NOTE: Except: Municipalities the commercial zones of which have been or are hereafter individually or specially determined.

49 CFR Ch. III (10-1-10 Edition)

Sec. 45 Controlling distances and population

In the application of § 372.241:

- (a) Air-line distances or mileages about corporate limits of municipalities shall be used
- (b) The population of any municipality shall be deemed to be the highest figure shown for that municipality in any decennial census since (and including) the 1940 decennial census.
- [53 FR 18058, May 19, 1988, as amended at 62 FR 49942, Sept. 24, 1997]

APPENDIX G TO SUBCHAPTER B OF CHAP-TER III—MINIMUM PERIODIC INSPEC-TION STANDARDS

A vehicle does not pass an inspection if it has one of the following defects or deficiencies:

- 1. Brake System.
- a. Service brakes. (1) Absence of braking action on any axle required to have brakes upon application of the service brakes (such as missing brakes or brake shoe(s) failing to move upon application of a wedge, S-cam, cam, or disc brake).
- (2) Missing or broken mechanical components including: shoes, lining, pads, springs, anchor pins, spiders, cam rollers, push-rods, and air chamber mounting bolts.
- (3) Loose brake components including air chambers, spiders, and cam shaft support brackets.
- (4) Audible air leak at brake chamber (Example-ruptured diaphragm, loose chamber clamp, etc.).
- (5) Readjustment limits. The maximum stroke at which brakes should be readjusted is given below. Any brake ¼" or more past the readjustment limit or any two brakes less than ¼" beyond the readjustment limit shall be cause for rejection. Stroke shall be measured with engine off and reservoir pressure of 80 to 90 psi with brakes fully applied.

BOLT TYPE BRAKE CHAMBER DATA

Турө	Effective area (sq. in.)	Outside dia. (in.)	Maximum stroke at which brakes should be readjusted
Α	12	615/1e	13/6
В	24	93/16	13/4
C	16	81/10	13/4
D	6	51/4	11/4
E	9	63/16	13/6
F	36	11	21/4
G	30	97/8	2

ROTOCHAMBER DATA

Туре	Effective area (sq. in.)	Outside dia. (in.)	Maximum stroke at which brakes should be readjusted
9	9	49/32	11/2
12	12	413/16	11/2
16	16	513/32	2
20	20	515/16	2
24	24	613/32	2
30	30	71/16	21/4
36	36	75/a	23/4
50	50	87/a	3

CLAMP TYPE BRAKE CHAMBER DATA

Туре	Effective area (sq. in.)	Outside dia. (in.)	Maximum stroke at which brakes should be readjusted
6	6	41/2	11/4
9	9	51/4	13/B
12	12	511/16	13/8
16	16	63/a	13/4
20	20	625/32	13/4
24	24	77/32	113/4
30	30	83/32	2
36	36	9	21/4

1 (2" for long stroke design).

Wedge Brake Data—Movement of the scribe mark on the lining shall not exceed 1/16 inch.

- (6) Brake linings or pads.
- (a) Lining or pad is not firmly attached to the shoe;
- (b) Saturated with oil, grease, or brake fluid; or
- (c) Non-steering axles: Lining with a thickness less than ¼ inch at the shoe center for air drum brakes, ¼6 inch or less at the shoe center for hydraulic and electric drum brakes, and less than ¼ inch for air disc brakes.
- (d) Steering axles: Lining with a thickness less than $\frac{1}{1}$ inch at the shoe center for drum brakes, less than $\frac{1}{1}$ inch for air disc brakes and $\frac{1}{1}$ 6 inch or less for hydraulic disc and electric brakes.
- (7) Missing brake on any axle required to have brakes.
- (8) Mismatch across any power unit steering axle of:
 - (a) Air chamber sizes.
 - (b) Slack adjuster length.
- b. Parking Brake System. No brakes on the vehicle or combination are applied upon actuation of the parking brake control, including driveline hand controlled parking
- c. Brake Drums or Rotors.
- (1) With any external crack or cracks that open upon brake application (do not confuse short hairline heat check cracks with flexural cracks).

- (2) Any portion of the drum or rotor missing or in danger of falling away.
 - d. Brake Hose.
- (1) Hose with any damage extending through the outer reinforcement ply. (Rubber impregnated fabric cover is not a reinforcement ply). (Thermoplastic nylon may have braid reinforcement or color difference between cover and inner tube. Exposure of second color is cause for rejection.
- (2) Bulge or swelling when air pressure is applied.
- (3) Any audible leaks.
- (4) Two hoses improperly joined (such as a splice made by sliding the hose ends over a piece of tubing and clamping the hose to the tube).
- (5) Air hose cracked, broken or crimped.
- e. Brake Tubing.
- (1) Any audible leak.
- (2) Tubing cracked, damaged by heat, broken or crimped.
- f. Low Pressure Warning Device missing, inoperative, or does not operate at 55 psi and below, or ½ the governor cut-out pressure, whichever is less.
- g. Tractor Protection Valve. Inoperable or missing tractor protection valve(s) on power unit.
- h. Air Compressor.
- (1) Compressor drive belts in condition of impending or probable failure.
- (2) Loose compressor mounting bolts.
- (3) Cracked, broken or loose pulley.
- (4) Cracked or broken mounting brackets, braces or adapters.
 - i. Electric Brakes.
- Absence of braking action on any wheel required to have brakes.
- (2) Missing or inoperable breakaway braking device.
- j. Hydraulic Brakes. (Including Power Assist Over Hydraulic and Engine Drive Hydraulic Booster).
- (1) Master cylinder less than 1/4 full.
- (2) No pedal reserve with engine running except by pumping pedal.
- (3) Power assist unit fails to operate.
- (4) Seeping or swelling brake hose(s) under application of pressure.
- (5) Missing or inoperative check valve.
- (6) Has any visually observed leaking hydraulic fluid in the brake system.
- (7) Has hydraulic hose(s) abraded (chafed) through outer cover-to-fabric layer.
- (8) Fluid lines or connections leaking, restricted, crimped, cracked or broken.
- (9) Brake failure or low fluid warning light on and/or inoperative.
- k. Vacuum Systems. Any vacuum system which:
- (1) Has insufficient vacuum reserve to permit one full brake application after engine is shut off.
- (2) Has vacuum hose(s) or line(s) restricted, abraded (chafed) through outer cover to cord

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ply, crimped, cracked, broken or has collapse of vacuum hose(s) when vacuum is applied.

- (3) Lacks an operative low-vacuum warning device as required.
 - 2. Coupling devices.
 - a. Fifth Wheels.
 - (1) Mounting to frame.
- (a) Any fasteners missing or ineffective.
- (b) Any movement between mounting components.
- (c) Any mounting angle iron cracked or broken.
- (2) Mounting plates and pivot brackets.
- (a) Any fasteners missing or ineffective.
- (b) Any welds or parent metal cracked.
- (c) More than % inch horizontal movement between pivot bracket pin and bracket.
- (d) Pivot bracket pin missing or not secured.
- (3) Sliders.
- (a) Any latching fasteners missing or ineffective.
- (b) Any fore or aft stop missing or not securely attached.
- (c) Movement more than % inch between slider bracket and slider base.
- (d) Any slider component cracked in parent metal or weld.
- (4) Lower coupler.
- (a) Horizontal movement between the upper and lower fifth wheel halves exceeds ½ inch.
- (b) Operating handle not in closed or locked position.
 - (c) Kingpin not properly engaged.
- (d) Separation between upper and lower coupler allowing light to show through from side to side.
 - (e) Cracks in the fifth wheel plate.
- Exceptions: Cracks in fifth wheel approach ramps and casting shrinkage cracks in the ribs of the body of a cast fifth wheel.
- (f) Locking mechanism parts missing, broken, or deformed to the extent the kingpin is not securely held.
 - b. Pintle Hooks.
 - (1) Mounting to frame.
- (a) Any missing or ineffective fasteners (a fastener is not considered missing if there is an empty hole in the device but no corresponding hole in the frame or vice versa).
- (b) Mounting surface cracks extending from point of attachment (e.g., cracks in the frame at mounting bolt holes).
 - (c) Loose mounting.
- (d) Frame cross member providing pintle hook attachment cracked.
- (2) Integrity.
- (a) Cracks anywhere in pintle hook assembly.
- (b) Any welded repairs to the pintle hook.
 (c) Any part of the horn section reduced by more than 20%.
- (d) Latch insecure.
- c. Drawbar/Towbar Eye.
- (1) Mounting.
- (a) Any cracks in attachment welds.

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- (b) Any missing or ineffective fasteners.
- (2) Integrity.
- (a) Any cracks.
- (b) Any part of the eye reduced by more than 20%.
- d. Drawbar/Towbar Tongue.
- (1) Slider (power or manual).
- (a) Ineffective latching mechanism
- (b) Missing or ineffective stop.
- (c) Movement of more than 1/4 inch between slider and housing.
- (d) Any leaking, air or hydraulic cylinders, hoses, or chambers (other than slight oil weeping normal with hydraulic seals).
 - (2) Integrity.
 - (a) Any cracks.
- (b) Movement of ¼ inch between subframe and drawbar at point of attachment.
- e. Safety Devices.
- (1) Safety devices missing.
- (2) Unattached or incapable of secure attachment.
 - (3) Chains and hooks.
- (a) Worn to the extent of a measurable reduction in link cross section.
- (b) Improper repairs including welding, wire, small bolts, rope and tape.
- (4) Cable.
- (a) Kinked or broken cable strands.
- (b) Improper clamps or clamping.
- f. Saddle-Mounts.
- (1) Method of attachment.
- (a) Any missing or ineffective fasteners.
- (b) Loose mountings.
- (c) Any cracks or breaks in a stress or load bearing member.
- (d) Horizontal movement between upper and lower saddle-mount halves exceeds 1/4 inch.
 - 3. Exhaust System.
- a. Any exhaust system determined to be leaking at a point forward of or directly below the driver/sleeper compartment.
- b. A bus exhaust system leaking or discharging to the atmosphere:
- (1) Gasoline powered—excess of 6 inches forward of the rearmost part of the bus.
- (2) Other than gasoline powered—in excess of 15 inches forward of the rearmost part of the bus.
- (3) Other than gasoline powered—forward of a door or window designed to be opened. (exception; Emergency exits).
- c. No part of the exhaust system of any motor vehicle shall be so located as would be likely to result in burning, charring, or damaging the electrical wiring, the fuel supply, or any combustible part of the motor vehicle.
- 4. Fuel System.
- a. A fuel system with a visable leak at any point.
- b. A fuel tank filler cap missing.
- c. A fuel tank not securely attached to the motor vehicle by reason of loose, broken or missing mounting bolts or brackets (some

fuel tanks use springs or rubber bushings to permit movement).

- 5. Lighting Devices. All lighting devices and reflectors required by Section 393 shall be operable.
 - 6. Safe Loading.
- a. Part(s) of vehicle or condition of loading such that the spare tire or any part of the load or dunnage can fall onto the roadway.
- b. Protection Against Shifting Cargo—Any vehicle without a front-end structure or equivalent device as required.
- c. Container securement devices on intermodal equipment—All devices used to secure an intermodal container to a chassis, including rails or support frames, tiedown bolsters, locking pins, clevises, clamps, and hooks that are cracked, broken, loose, or missing.
- 7. Steering Mechanism.
- a. Steering Wheel Free Play (on vehicles equipped with power steering the engine must be running).

Steering wheel diameter	Manual steering system	Power steering system
16"	2"	41/2"
18"	21/4"	43/4"
20"	21/2"	51/4"
22"	23/4"	53/4"

- b. Steering Column.
- (1) Any absence or looseness of U-bolt(s) or positioning part(s).
- (2) Worn, faulty or obviously repair welded universal joint(s).
- (3) Steering wheel not properly secured.
- c. Front Axle Beam and All Steering Components Other Than Steering Column.
 - (1) Any crack(s).
 - (2) Any obvious welded repair(s).
 - d. Steering Gear Box.
- (1) Any mounting bolt(s) loose or missing.
- (2) Any crack(s) in gear box or mounting brackets.
- e. Pitman Arm. Any looseness of the pitman arm on the steering gear output shaft.
- f. Power Steering. Auxiliary power assist cylinder loose.
 - g. Ball and Socket Joints.
- (1) Any movement under steering load of a stud nut.
- (2) Any motion, other than rotational, between any linkage member and its attachment point of more than 1/4 inch.
 - h. Tie Rods and Drag Links.
- (1) Loose clamp(s) or clamp bolt(s) on tie rods or drag links.
- (2) Any looseness in any threaded joint.
- i. Nuts. Nut(s) loose or missing on tie rods, pitman arm, drag link, steering arm or tie rod arm.
- j. Steering System. Any modification or other condition that interferes with free movement of any steering component.
 - 8. Suspension.

- a. Any U-bolt(s), spring hanger(s), or other axle positioning part(s) cracked, broken, loose or missing resulting in shifting of an axle from its normal position. (After a turn, lateral axle displacement is normal with some suspensions. Forward or rearward operation in a straight line will cause the axle to return to alignment).
- b. Spring Assembly.
- (1) Any leaves in a leaf spring assembly broken or missing.
- (2) Any broken main leaf in a leaf spring assembly. (Includes assembly with more than one main spring).
 - (3) Coil spring broken.
 - (4) Rubber spring missing.
- (5) One or more leaves displaced in a manner that could result in contact with a tire, rim, brake drum or frame.
- (6) Broken torsion bar spring in a torsion bar suspension.
- (7) Deflated air suspension, i.e., system failure, leak, etc.
- c. Torque, Radius or Tracking Components. Any part of a torque, radius or tracking component assembly or any part used for attaching the same to the vehicle frame or axle that is cracked, loose, broken or missing. (Does not apply to loose bushings in torque or track rods.)
- 9. Frame.
- a. Frame Members.
- (1) Any cracked, broken, loose, or sagging frame member.
- (2) Any loose or missing fasteners including fasteners attaching functional component such as engine, transmission, steering gear, suspension, body parts, and fifth wheel.
- b. Tire and Wheel Clearance. Any condition, including loading, that causes the body or frame to be in contact with a tire or any part of the wheel assemblies.
- c. (1) Adjustable Axle Assemblies (Sliding Subframes). Adjustable axle assembly with locking pins missing or not engaged.
- 10. Tires.
- a. Any tire on any steering axle of a power unit.
- (1) With less than ½2 inch tread when measured at any point on a major tread groove.
- (2) Has body ply or belt material exposed through the tread or sidewall.
- (3) Has any tread or sidewall separation.
- (4) Has a cut where the ply or belt material is exposed.
- (5) Labeled "Not for Highway Use" or displaying other marking which would exclude use on steering axle.
- (6) A tube-type radial tire without radial tube stem markings. These markings include a red band around the tube stem, the word "radial" embossed in metal stems, or the word "radial" molded in rubber stems.
- (7) Mixing bias and radial tires on the same axle.

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- (8) Tire flap protrudes through valve slot in rim and touches stem.
- (9) Regrooved tire except motor vehicles used solely in urban or suburban service (see exception in 393.75(e).
- (10) Boot, blowout patch or other ply repair.
- (11) Weight carried exceeds tire load limit. This includes overloaded tire resulting from low air pressure.
- (12) Tire is flat or has noticeable (e.g., can be heard or felt) leak.
- (13) Any bus equipped with recapped or retreaded tire(s).
- (14) So mounted or inflated that it comes in contact with any part of the vehicle.
- b. All tires other than those found on the steering axle of a power unit:
- (1) Weight carried exceeds tire load limit. This includes overloaded tire resulting from low air pressure.
- (2) Tire is flat or has noticeable (e.g., can be heard or felt) leak.
- (3) Has body ply or belt material exposed through the tread or sidewall.
- (4) Has any tread or sidewall separation.
- (5) Has a cut where ply or belt material is exposed.
- (6) So mounted or inflated that it comes in contact with any part of the vehicle. (This includes a tire that contacts its mate.)
- (7) Is marked "Not for highway use" or otherwise marked and having like meaning.
- (8) With less than $\%_2$ inch tread when measured at any point on a major tread groove.
 - 11. Wheels and Rims.
- a. Lock or Side Ring. Bent, broken, cracked, improperly seated, sprung or mismatched ring(s).
- b. Wheels and rims. Cracked or broken or has elongated bolt holes.
- c. Fasteners (both spoke and disc wheels). Any loose, missing, broken, cracked, stripped or otherwise ineffective fasteners.
- d. Welds.
- Any cracks in welds attaching disc wheel disc to rim.
- (2) Any crack in welds attaching tubeless demountable rim to adapter.
- (3) Any welded repair on aluminum wheel(s) on a steering axle.
- (4) Any welded repair other than disc to rim attachment on steel disc wheel(s) mounted on the steering axle.
- 12. Windshield Glazing. (Not including a 2 inch border at the top, a 1 inch border at each side and the area below the topmost portion of the steering wheel.) Any crack, discoloration or vision reducing matter except: (1) coloring or tinting applied at time of manufacture; (2) any crack not over ¼ inch wide, if not intersected by any other crack; (3) any damaged area not more than ¾ inch in diameter, if not closer than 3 inches to any other such damaged area; (4) labels,

stickers, decalcomania, etc. (see 393.60 for exceptions).

13. Windshield Wipers. Any power unit that has an inoperative wiper, or missing or damaged parts that render it ineffective.

COMPARISON OF APPENDIX G, AND THE NEW NORTH AMERICAN UNIFORM DRIVER-VEHICLE INSPECTION PROCEDURE (NORTH AMERICAN COMMERCIAL VEHICLE CRITICAL SAFETY INSPECTION ITEMS AND OUT-OF-SERVICE CRITERIA)

The vehicle portion of the FMCSA's North American Uniform Driver-Vehicle Inspection (NAUD-VIP) Procedure requirements. CVSA's North American Commercial Vehicle Critical Safety Inspection Items and Out-Of-Service Criteria and appendix G of subchapter B are similar documents and follow the same inspection procedures. The same items are required to be inspected by each document. FMCSA's and CVSA's out-of-service criteria are intended to be used in random roadside inspections to identify critical vehicle inspection items and provide criteria for placing a vehicle(s) out-of-service. Avehicle(s) is placed out-of-service only when by reason of its mechanical condition or loading it is determined to be so imminently hazardous as to likely cause an accident or breakdown, or when such condition(s) would likely contribute to loss of control of the vehicle(s) by the driver. A certain amount of flexibility is given to the inspecting official whether to place the vehicle outof-service at the inspection site or if it would be less hazardous to allow the vehicle to proceed to a repair facility for repair. The distance to the repair facility must not exceed 25 miles. The roadside type of inspection, however, does not necessarily mean that a vehicle has to be defect-free in order to continue in service.

In contrast, the appendix G inspection procedure requires that all items required to be inspected are in proper adjustment, are not defective and function properly prior to the vehicle being placed in service.

DIFFERENCES BETWEEN THE OUT-OF-SERVICE CRITERIA & FMCSA'S ANNUAL INSPECTION

1. Brake System.

The appendix G criteria rejects vehicles with any defective brakes, any air leaks, etc. The out-of-service criteria allows 20% defective brakes on non-steering axles and a certain latitude on air leaks before placing a vehicle out-of-service.

2. Coupling Devices.

Appendix G rejects vehicles with any fifth wheel mounting fastener missing or ineffective. The out-of-service criteria allows up to 20% missing or ineffective fasteners on frame mountings and pivot bracket mountings and 25% on slider latching fasteners. The out-of-

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service criteria also allows some latitude on cracked welds.

3. Exhaust System.

Appendix G follows Section 393.83 verbatim. The CVSA out-of-service criteria allows vehicles to exhaust forward of the dimensions given in Section 393.83 as long as the exhaust does not leak or exhaust under the chassis.

4. Fuel System.

Same for Appendix G and the out-of-service criteria.

5. Lighting Devices.

Appendix G requires all lighting devices required by Section 393 to be operative at all times. The out-of-service criteria only requires one stop light and functioning turn signals on the rear most vehicle of a combination vehicle to be operative at all times. In addition one operative head lamp and tail lamp are required during the hours of dark-

6. Safe Loading.

Same for both Appendix G and the out-ofservice criteria.

7. Steering Mechanism

Steering lash requirements of appendix G follows the new requirements of § 393.209.

8. Suspension

Appendix G follows the new requirements of §393.207 which does not allow any broken leaves in a leaf spring assembly. The out-ofservice criteria allows up to 25% broken or missing leaves before being placed out-ofservice.

The out-of-service criteria allows a certain latitude in frame cracks before placing a vehicle out-of-service. Appendix G follows the new requirements of 393.201 which does not allow any frame cracks.

10. Tires

Appendix G follows the requirements of 393.75 which requires a tire tread depth of 1/32 inch on power unit steering axles and 2/32 inch on all other axles. The out-of-service criteria only requires 3/32 inch tire tread depth on power unit steering axles and 1/32 inch on all other axles.

11, Wheel and Rims

The out-of-service criteria allows a certain amount latitude for wheel and rim cracks and missing or defective fasteners. Appendix G meets the requirements of the new 393.205 which does not allow defective wheels and rims non-effective nuts and bolts.

12. Windshield Glazing

The out-of-service criteria places in a restricted service condition any vehicle that has a crack or discoloration in the windshield area lying within the sweep of the wiper on the drivers side and does not address the remaining area of the windshield. Appendix G addresses requirements for the whole windshield as specified in 393.60.

13. Windshield Wipers

Appendix G requires windshield wipers to be operative at all times. The out-of-service criteria only requires that the windshield wiper on the driver's side to be inspected during inclement weather.

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