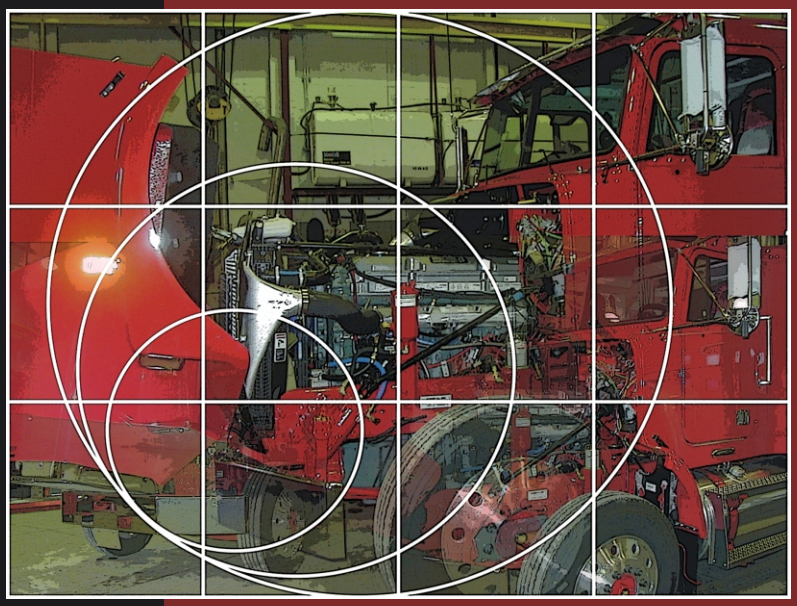
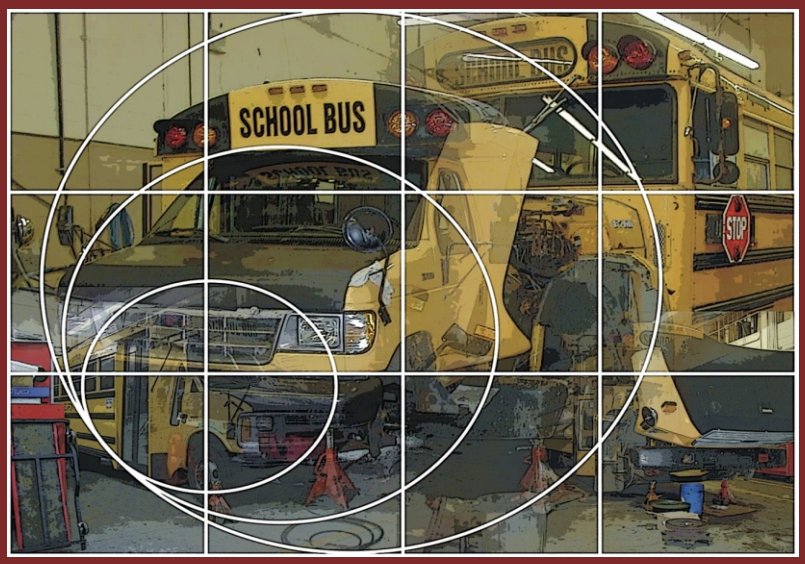
COMMERCIAL





VEHICLE INSPECTION MANUAL

Version 2.0 October 2016

Alberta Government

COMMERCIAL VEHICLE INSPECTIONS

IN ALBERTA

CANADIAN MOTOR TRANSPORT ADMINISTRATORS

2014 NATIONAL SAFETY CODE STANDARD 11, PART B

(Periodic Commercial Motor Vehicle Inspections – PMVI)

FOR COMMERCIAL VEHICLE INSPECTIONS OF:

TRUCK/TRUCK TRACTOR, LIGHT TRUCK, CONVERTER, TRAILER, SCHOOL BUS, COMMERCIAL BUS, MOTOR COACH

ALBERTA TRANSPORTATION

Version 2.0

INFORMATION FOR INSPECTION TECHNICIANS

Thank you for participating in Alberta's Commercial Vehicle Inspection Program.

Alberta has adopted the Canadian Council of Motor Transport Administrators 2014 National Safety Code STANDARD 11, Part B (NSC11B) for the Periodic Commercial Motor Vehicle Inspections of vehicles in Alberta.

The NSC11B is part of Alberta's Commercial Vehicle Inspection manual. The usage of the NSC11B is legislated by Alberta's *Vehicle Inspection Regulation*, section 22, Adoption of manuals.

The purpose of the NSC11B is to establish mechanical vehicle inspection criteria for trucks, trailers, and buses. It provides a description of the vehicle inspection criteria and procedures to ensure that quality inspections are performed.

The NSC11B has been adopted across Canada and harmonizes every inspection to the same criteria. The result of this harmonization is that every province recognizes other jurisdiction's inspections on commercial vehicles. This controls and ensures all inspections relating to commercial vehicles are performed at the same level across Canada.

CHANGES TO THE COMMERCIAL VEHICLE INSPECTION MANUAL

All technicians authorized to complete Commercial Vehicle Inspections must undertake the responsibility of reviewing the changes to Alberta's Commercial Vehicle Inspection Manual (Version 2.0 October 2016). It is recommended to compare the previous Commercial Vehicle Inspection Manual to the current Commercial Vehicle Inspection Manual for additions and changes to both.

The 2014 NSC11B inspection criteria is similar in format and design to the previous version. It has been updated in a number of sections and provides additional methods of vehicle inspection options. Some of these changes are a direct reflection of the questions which have been submitted and questions raised by our partners in Alberta and across Canada.

The 2014 NSC11B has now been updated to include all vehicle types listed on the same page. There will no longer be a need to go section to section regarding vehicle types
Questions which had been submitted these past years were brought forward to the CCMTA for review and clarification.

The 2014 NSC11B provides extensive clarification and explanation on internal brake inspections. This information is found for each vehicle type in the front of the hydraulic brake section and air brake section.

IMPORTANT - The 2014 NSC 11B contains some requirements not currently reflected in Alberta legislation, but will be contained in future amendments to the Commercial Vehicle Safety Regulation. The following inspection criteria are exempt from inspection until such time that regulation is amended to support:

- Emission Controls: sections B, C,D, and E
- Exterior Sun Visor: section A and Figures 1 - 4

Technicians will mark "NA" in these sections on the Record of Inspection until amendments to the regulation are made.

COMPLIANCE

As of **January 1, 2017**, licensed technicians are to complete commercial vehicle inspections in accordance with the Commercial Vehicle Inspection Manual (Version 2.0).

ADDITIONAL INFORMATION

Record of Inspection

A Record of Inspection (ROI) is required with each commercial vehicle inspected. You may obtain ROI's from Alberta Transportation eFacility system or at www.transportation.alberta.ab.ca/vipinfo

An ROI must be issued with each and every inspection completed (passed or failed). It is recommended that a copy of the Record of Inspection be attached to the "Facility Copy" of the Commercial Vehicle Inspection Certificate.

Out of Province Inspections for Commercial Vehicles

A Commercial Vehicle Inspection Certificate can be used in lieu of an Out of Province Inspection Certificate if the vehicle is being registered as a Commercial Vehicle. A Commercial Vehicle Inspection is to be performed and the completed certificate given to the vehicle owner. If the vehicle is not registered at the time of the inspection, the technician enters "Not Registered" in the licence plate field.

The owner will then take the Commercial Vehicle Inspection Certificate to the Registry Agent **WITHIN 14 DAYS of the DATE RECORDED on the certificate**. The registry agent will photocopy the Commercial Vehicle Inspection Certificate for the purposes of registration and return the Original Commercial Vehicle Inspection Certificate to the vehicle owner.

VEHICLE SAFETY SECTON CONTACTS

Commercial Vehicle Inspection Specialist
Telephone: 780-644-8949
Toll Free: 310-0000
Email: vehicle.safety@gov.ab.ca

Manager Vehicle Inspection Program
Telephone: 780-422-4229
Toll Free: 310-0000
Email: vehicle.safety@gov.ab.ca

NSC STANDARD 11, PART B

Periodic Commercial Motor Vehicle Inspections (PMVI)

Contents

Part B of NSC Standard 11 contains the mandatory **Periodic Motor Vehicle Inspection** (PMVI) standards for commercial vehicles, the standards to which a vehicle will be inspected by an authorized technician at an authorized facility at a scheduled frequency, as evidence by a decal of compliance.

Introduction

Goals of the Standard
The objectives of the PMVI standard are to reduce collisions due to mechanical defects on vehicles, improve highway safety, and ensure the consistency of periodic inspections across Canada. The PMVI requirements represent one of the most significant amendments to the *National Safety Code* (NSC) since its inception.

Background
In 1988, CCMTA began work on a reciprocal agreement to promote uniformity and reciprocity among jurisdictions with inspection programs, and to encourage those provinces and territories without mandatory inspections for commercial vehicles to develop and implement such programs. In September 1991, the Council of Ministers Responsible for Transportation and Highway Safety signed a Memorandum of Understanding (MOU) on periodic motor vehicle inspections, which was designed to address the lack of uniformity and reciprocity with respect to mandatory periodic commercial vehicle inspection programs in Canada.

Under the MOU, all Canadian jurisdictions agreed to work towards implementing compulsory periodic inspection programs for commercial vehicles, and all committed to implementing the uniform PMVI standard which appears in the following pages. All jurisdictions further extend recognition and reciprocity to vehicles inspected pursuant to this standard from other jurisdictions party to the PMVI agreement. While Quebec was not a signatory to the agreement, it participated in the development of the standard and has entered into separate bi-lateral arrangements with the other Canadian jurisdictions to give effect to the reciprocity provisions contained in the agreement.

Application
This standard generally applies to all commercial vehicles as defined by the NSC: trucks, truck-tractors, semi- trailers, trailers and combinations thereof exceeding a registered gross vehicle weight of 4,500 kg (approximately 10,000 lbs), as well as buses designed, constructed and used for the transportation of passengers with a designated seating capacity of more than 10, including the driver, but excluding the operation for personal use.

It is important to note that for the purposes of the national PMVI program the above definition of a commercial vehicle applies. A number of jurisdictions may exempt or include specific types of vehicles from the requirements of their particular PMVI programs, (e.g. farm vehicles).

General Requirements
All commercial trucks, truck-tractors, semi-trailers, trailers and combinations thereof are required to be inspected to the standard at least annually. Buses are required to be inspected to the standard at least semi- annually.

Inspections must be conducted by an authorized inspector in a government establishment, or at an inspection facility approved by a government agency.

The status of implementation of the program including inspection cycles and weight thresholds appears below.

Mandatory Periodic Commercial Motor Vehicle Inspection Programs

Inspection Cycles by Jurisdiction

		Inspection Interval (months)		
Jurisdiction	**Weight Threshold (kg)**	**Truck**	**Trailer**	**Bus**
BC	8,201	6	6/12[1]	6
AB	11,794[2]	12	12	6
SK	11,794[2]	6/12[3]	12	6/12[4]
MB	4,500	12	12	6
ON	4,500	12	12	6[5]
QC	4,500	12	12	6
NB	4,500	12	12	6
NS	4,500	12	12	6
PE	4,500	12	12	6
NL	4,500	12	12	6
YT	4,500	6	12	6
NT[6]	4,500	12	12	6
NU[7]				

1 For BC – log & dump trailers: 6 months, other trailers: 12 months

2 For AB and SK – 11,794 kg for vehicles that operate solely within the province; vehicles travelling in other jurisdictions must comply with the inspection requirements applicable in the jurisdiction in which they are travelling.

3 For SK – truck-tractors: 6 months, other trucks: 12 months

4 For SK – school buses: 12 months, other buses: 6 months

5 For ON – Accessible vehicles and vehicles used for school purposes are inspected using the bus criteria

6 For NT – The program is administered by Alberta

7 For NU – PMVI Regulation yet to be implemented.

Procedures for Compliance

Jurisdictions which have mandatory inspection requirements for vehicles at the 4,500 kg level (**refer to the chart** *Mandatory Periodic Commercial Motor Vehicle Inspection Programs - Inspection Cycles by Jurisdiction*, above) expect all vehicles 4,500 kg and above to be inspected and PMVI-certified prior to departing from the base, or plate, jurisdiction. A unique feature of the agreement is that it permits vehicles from jurisdictions which have not yet legislated to the lower weight threshold to be voluntarily inspected in the base jurisdiction, or alternatively the vehicles can be inspected in another jurisdiction, and either inspection will be accepted by every other signatory jurisdiction.

All jurisdictions recognize inspections of each participating province or territory, and, except in rare circumstances, will accept the host jurisdiction's inspection to be equivalent to the inspection mandated by their legislation. This feature was built into the agreement to address the situation where a vehicle or trailer is not in its base jurisdiction when an inspection is due. The reciprocity provisions may be limited to six months for trucks and trailers which are base-plated in a jurisdiction with a six-month inspection cycle. Trucks and trailers base-plated or registered in a jurisdiction with a twelve-month inspection cycle do not have to be reinspected in jurisdictions with six-month inspection cycles. The twelve-month inspection decal will be recognized as satisfying the requirements of jurisdictions with six-month programs.

Following a "passed" inspection, a report will be provided to the operator and a decal will be affixed to the vehicle. The inspection report should be carried in the vehicle at all times (please check with jurisdiction). A copy of the completed inspection report should also be kept at the carrier's principal place of business. If a vehicle fails an inspection, jurisdictions generally permit the vehicle to be repaired on-site and re-inspected, or the vehicle can be towed or transported to another facility for repair and re-inspection.

The previous PMVI decal must then be removed and a current decal indicating compliance with the standard will be placed on the vehicle. The inspection decal will indicate either the date of inspection or the month and year of expiry. As per Canadian Council of Motor Transport Administrators agreed/approved policy, CCMTA policy, jurisdictions will be moving to a system where the month/year of expiry will be indicated on the decal.

CCMTA jurisdictions have further agreed the inspection decals issued pursuant to the PMVI program will be placed in the following locations:

- **for trucks and truck-tractors** – on the left-hand corner of the windshield or in a conspicuous position on the left-hand side of the cab;
- **for trailers and converter dollies** – on the left-hand side as close as practicable to the front of the equipment;
- **for buses** – on the lower right-hand corner of the windshield, to a fixed side window as close as practicable to the right front of the vehicle, or in a conspicuous position on the right side of the vehicle body close to the front of the vehicle.

In the event the vehicle fails the inspection, the necessary repairs must be undertaken to bring the vehicle into compliance with the standard prior to a decal being placed on the vehicle.

Canada/U.S. Reciprocity Issues

On September 23, 1991 the U.S. Federal Highway Administration (now the Federal Motor Carrier Safety Administration) recognized the inspection programs of every Canadian jurisdiction as being equivalent to the U.S. PMVI requirements. Canadian vehicles bearing a valid inspection decal from any Canadian jurisdiction already meet U.S. standards and are not required to be reinspected to U.S. requirements. Canadian carriers who have experienced any problems with having their Canadian PMVI inspection report or decal accepted by U.S. enforcement personnel are encouraged to report this problem to a jurisdictional representative.

All vehicles registered in Canada must be inspected to the Canadian PMVI inspection standard to benefit from the reciprocity provisions contained in the PMVI agreement. Canadian-registered vehicles bearing U.S. compliance stickers are not eligible for the reciprocity provisions contained in the Canadian agreement on PMVI. Some Canadian jurisdictions permit equipment, (i.e. trailer) which is out of the country when an inspection is due to be inspected to the U.S. standard. These vehicles have to be re- inspected to the Canadian standard in order for the inspection to be recognized by other Canadian jurisdictions.

For U.S. base-plated vehicles, Canadian jurisdictions will accept inspections conducted to the FMCSA standard, or an inspection conducted in a state which meets or exceeds the FMCSA standard. The FMCSA has determined the following have mandatory periodic inspection programs that are comparable to or as effective as the FMCSA program:

> Arkansas*, California, Connecticut, District of Columbia, Hawaii, Illinois, Louisiana, Maine, Maryland, Michigan, Minnesota, New Hampshire, New Jersey, New York, Ohio, Oklahoma*, Pennsylvania, Rhode Island, Texas, Utah, Vermont, Virginia, West Virginia, Wisconsin and the Alabama Liquified Petroleum (LPG) Board.

U.S. carriers should ensure the inspection report and/or certificate of compliance with U.S. federal requirements or a recognized state program is carried in the vehicle at all times.

U.S. carriers are advised that a CVSA decal and/or inspection report based on a roadside inspection will not be accepted as proof of compliance with the requirements of the annual PMVI programs which have been implemented in Canada.

Canadian rules require buses to be inspected on a semi-annual basis. U.S. buses entering Canada should ensure their PMVI inspection was conducted in the previous six months.

Enforcement
Enforcement of the requirements of the PMVI program occurs on-road and during facility audits. For record keeping, proof of PMVI inspections, (i.e. inspection reports) may have to be kept up to a maximum of four years. Vehicle owners are reminded they should keep all proof of repair, (i.e. bill or invoice showing parts replaced) as these are required and verified during a facility audit when the maintenance program implemented by a vehicle owner is evaluated (see Maintenance Standard – 11A). In addition, the invoices are required in order to benefit from alternate inspection requirements for internal brake components.

It is an offence to operate a vehicle which has not been inspected pursuant to the PMVI program. Fines are imposed for non-compliance.

The Standard
The PMVI standard which has been agreed to by all jurisdictions appears below.

The standard contains 10 Sections organized by major vehicle systems, and an appendix on alternate fuel systems. A check mark (√) appears in the right column to indicate whether the inspection method and "reject if" criteria apply to a truck, trailer or bus. Trailer converter dollies must comply with the trailer requirements. For school bus inspections all of the applicable bus inspection criteria apply along with the additional requirements which are identified throughout the standard.

Within each of these sections the item and method of inspection are listed in the left column. The corresponding "reject if" criteria to be used by the inspecting mechanic/technician appears in the right column. The term "reject if" means a condition is observed or present which causes the vehicle to fail the inspection and no decal can be issued until the condition is corrected. Under the criteria of some items in the right column the words "hazardous condition" appear with some descriptive text in bold. The hazardous condition criteria are meant to alert the inspection mechanic/technician to a potentially dangerous or unsafe condition for which corrective action should be taken prior to the vehicle being returned to service.

The vehicle owner should be advised of the unsafe condition and that immediate repairs are required before the vehicle goes back on the road. In most jurisdictions the owner is allowed to have the repairs conducted at the inspection facility or garage or permitted to have the vehicle towed or transported to another facility for repairs. In some jurisdictions a "condemned" vehicle decal or sticker will be affixed to the vehicle. In other jurisdictions the rules require the garage to report the situation when an owner attempts to leave the facility with the vehicle without the necessary repairs being conducted. Please check jurisdictional policy and procedures if this situation is encountered.

Instructions for Technician-Inspector Conducting Inspections

Workplace Safety
Some of the inspection procedures described in this standard require the use of tools and equipment, and may involve safety hazards. It is assumed that the individual performing inspections according to this standard is fully familiar with all relevant workplace safety requirements and protocols.

No specific safety warnings are provided within this document. All relevant and appropriate safety precautions are the responsibility of the inspector/mechanic/technician and the workplace where the inspection is conducted.

Inspection Outcome Based on Current Vehicle Condition

A vehicle is to be inspected and determinations made about the pass or fail outcome of the inspection based on the condition of the vehicle at the time of inspection. The inspection is not intended to ensure that a vehicle remains in a safe condition for any particular period after the inspection.

Inspection Methods

The inspection of vehicle components and systems conducted to determine compliance with this standard consists mainly of visual inspection activities.

An inspection will also involve testing, removal and/or disassembly of components, measurements and other actions in certain cases. Whenever inspection of an item requires more than a visual inspection, additional inspection procedures are specifically provided for each item. These are displayed with the heading *"Additional Inspection Procedure(s):" "Optional Additional Inspection Procedure(s)" or Optional Inspection Procedure(s)",* appearing before the text describing the necessary steps.

The items that require inspection on any particular vehicle are based on the specific components and systems that were required by any applicable regulations, (e.g.: CMVSS or Provincial/Territorial legislation/regulation) applicable to the vehicle at the time it was manufactured, are ordinarily present on a vehicle; were present on a vehicle when that vehicle was manufactured, or are required for normal and safe vehicle operation. This standard is not meant to be used to identify all of the components or systems that are present on that vehicle.

Informational Notes

In many cases additional information is provided to clarify the inspection procedure or assist in consistent interpretation of the standard. These are displayed with the heading *"Note:"* appearing before the text.

Definitions

Various terms and acronyms are used throughout this standard. These terms have specific and consistent meanings as they relate to conducting periodic inspections, and identifying defective conditions. The purpose of defining these terms is to support consistent interpretation and application of the language used in this standard. The terms that are defined below are highlighted whenever they appear in each section to remind the reader that the condition is one of those that is specifically defined. This reminder also appears in the footer of each page of this document.

The meaning of each of the terms, for the purposes of conducting inspections according to this standard, is as follows:

"abnormally worn" – means unusual, excessive or exceptional wear of a vehicle component, indicative of the presence of some deterioration or defect in that component, or in a related part of a vehicle. This term is used selectively in this standard for a component or system where some wear is normal, and does not directly have any effect on vehicle safety. It is expected that the inspector knows the amount of wear, and the type of wear, that is typical (normal) based on the age and operation of a vehicle.

"ANSI" – means the American National Standards Institute, and standards developed by ANSI which have been adopted in jurisdictional equipment regulations.

"applicable requirements"– means the applicable requirements of the relevant jurisdiction, (i.e.: province or territory). This phrase is used in situations where one or more provinces, or territories, have a different standard, requirement or criteria. It is expected that the inspecting technician will know what the requirements are in the jurisdiction where they perform inspections.

"CMVSS" – means the Canadian Motor Vehicle Safety Standards (CMVSS) and their supporting Technical Standards Documents. These are Canadian manufacturing standards for vehicles which are developed and updated by Transport Canada and which are referenced in jurisdictional equipment regulations.

"CSA" – means the Canadian Standards Association, an association that develops standards that apply to vehicles, (i.e.: CSA B51, B109, B620, D250, D409, D435, D436 etc.). These standards are updated on a periodic basis and are often referenced in jurisdictional equipment regulations.

"CVSA" – means the Commercial Vehicle Safety Alliance, a voluntary organization comprised primarily of on-road enforcement officers from Canada, United States and Mexico. The CVSA administers the North American Standard Out-of-Service Criteria (OOSC) that are similar, but not identical, to the Hazardous Conditions defined in this standard. The basis for any differences in these conditions stems from the fact that the OOSC apply at a road side inspection while the Hazardous Conditions apply in a shop setting.

"damaged" – means any unintended condition, or condition caused by means other than normal use, that is likely to impair normal function.

"**FMVSS**" – means Federal Motor Vehicle Safety Standards. These are U.S. manufacturing standards for vehicles which are developed and updated by the National Highway Traffic Safety Administration of the Department of Transport.

"Hazardous Condition" – means a condition that is so dangerous or unsafe that it requires corrective action before the vehicle can return to service and be permitted to operate. A vehicle with a hazardous condition is considered too unsafe to be driven and in some jurisdictions driving a vehicle with a hazardous condition is prohibited. (*Note:* In most cases driving a vehicle with a condition that causes it to fail an inspection is a violation. Driving a vehicle with a hazardous condition is an additional and more serious offence.)

"industry standard" – means installation, modification or repair methods described in industry-accepted recommended practices published by the Society of Automotive Engineers (SAE), recommended practices published in the Technology and Maintenance Council (TMC) of the American Trucking Associations, standards developed and published by Canadian Standards Association (CSA), and other similar documents from similar organizations.

"inoperative" – means a vehicle component or system does not operate the way: it ordinarily operates; it operated when the vehicle was manufactured, or it is required to operate for normal and safe vehicle operation.

"insecure" – means that an item is beginning to become detached due to deterioration of the means of mounting. This can also mean that a method of attachment has been used that is in itself unsafe by being unable to withstand normal vehicle operation, or is not at least equivalent to the OEM standard method of attachment.

"**loose**" - means that an item is detached, or no longer fully attached, due to failure or deterioration of one or more means of attachment.

"**missing**" – means that an item is absent (such as 'removed' or 'detached') that: is ordinarily present on the vehicle; was present on the vehicle when the vehicle was manufactured, or is required for normal and safe vehicle operation.

"**manufacturer**" – means the manufacturer of the vehicle, the manufacturer of a major vehicle component or system, or manufacturer of aftermarket parts that are direct replacements for OEM parts. Examples of major components or systems include, but are not limited to: engines, transmissions, axles, brake systems, steering systems, suspension systems, etc.

"OEM" – means 'original equipment manufacturer' and refers to the 'brand name' manufacturer of the vehicle.

"OEM standard" – means the manufacturing methods, component or assembly quality, and performance level, set by the manufacturer of a vehicle, or vehicle component, to ensure a vehicle is able to safely perform at its intended level, and to ensure the vehicle complies with the relevant CMVSS (or FMVSS) requirements. It includes component quality, performance levels, repair methods, durability, safety, and the service methods outlined in the warranty and service literature provided for the use and maintenance of a vehicle. Parts supplied by OEM, and established aftermarket manufacturers of parts intended for direct replacement of OEM parts, are generally considered to meet OEM standard.

"operate as intended" – means the manner in which a vehicle component or system ordinarily operates; it operated when the vehicle was manufactured, or is required to operate for normal and safe vehicle operation.

"reject if" – means a condition if present at time of inspection, or if present after repairs, results in a failed inspection.

"**rust jacking**" – means a build up of rust that results in lifting, separation or bulging of components originally designed to remain in contact with each other, (i.e.: brake linings, suspension, frame and body components).

"SAE" – means the Society of Automotive Engineers.

Categorization of Fluid (Liquid) Leaks

Every reference to a fluid (or liquid) leak listed as a reject condition is categorized with respect to the level of severity of the leak. The level of severity is categorized as either level 1, level 2, or level 3, and each category is defined below. A vehicle with a leak that meets the defined level, or leaking more severely than this level, will cause the vehicle to fail inspection.

"level 1 leak" – means seepage of fluid that is not great enough to form drops

"level 2 leak" – means seepage of fluid that is great enough to form drops, but not great enough to cause the drops to fall during inspection

"level 3 leak" – means seepage of fluid that forms drops and those drops fall during inspection

Illustrations and Diagrams used in the Standards

In an effort to improve the consistency and uniformity of the inspection process a series of diagrams and illustrations are used in this version of the standard. When a diagram or illustration is in conflict with a legislated or regulatory requirement the latter prevails.

Measurements and Tolerances

Many of the inspection items and reject conditions involve measurements of mass or weight, pressure and distance. To achieve consistent application of each criterion that involves such a measurement, it is necessary to address the degree of precision associated with such measurements. In determining the appropriate level of precision or tolerance, it is also necessary to consider the measuring tools that will be commonly used to make each of these measurements.

The level of precision associated with any measurement is defined by the tolerance stipulated for that measurement. Tolerance is expressed as a plus or minus (+/-) value. The actual window of precision is double the value of the tolerance. For example 20 kg with a tolerance of +/- 0.5 kg, means that the precision of the measurement is to the nearest 1 kg. Similarly, 50 mm (+/- 1 mm), means a value of 49 to 51 mm. The measurement tolerance of 1 mm renders a measurement precision of within 2 mm.

Given the similarities in the measurements that appear most frequently in this standard, standard tolerances are given for most of these measurements. The standard tolerances that are listed below apply in all cases where no additional tolerance is provided. In cases where the standard tolerance does not apply, the tolerance for that criterion is provided adjacent to the measurement. Whenever a tolerance is provided adjacent to a measurement, the tolerance stipulated with the measurement is to be used in place of the standard tolerance listed below.

Measurements of distance are the most common in this standard and also have a significant variance in terms of the range of distance that is used. Four different standard tolerance values are used for distance.

Pressure

Metric ("SI" or "International System of Units") pressure value = *kilopascals (kPa)*,
Imperial (American) pressure value = *pounds per square inch or pounds/inch^2 (psi)*
Conversion Factors: *1 kPa = 0.145 psi, 6.9 kPa = 1 psi*
Standard tolerance for all pressure values: *+/- 5 kPa (0.5 psi)*

Mass (weight)

Metric (SI) mass value: *kilogram (kg)*
Imperial (American) mass value: *pound (lb.)*
Conversion Factors: *1 kg = 2.2 lb., 0.454 kg = 1 lb.*
Standard tolerance for all mass (weight) values: *+/- 0.5 kg (1 lb.)*

Distance

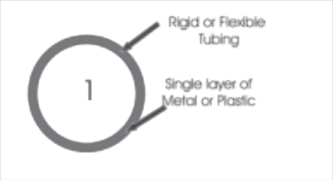
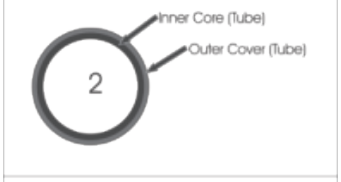
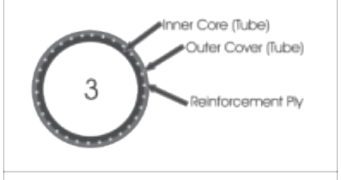
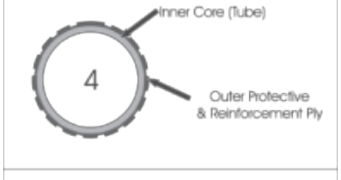
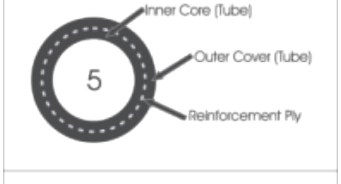
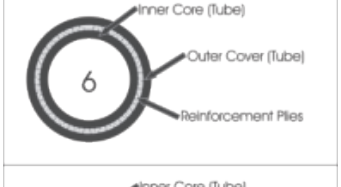
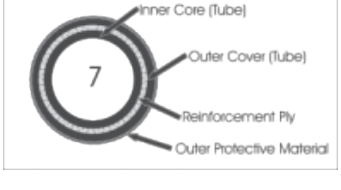
Metric (SI) distance value: *millimetre (mm)*
Imperial (American) distance value: *inch (in.)*
Conversion Factors: *1 mm = 0.039 in., 1 in. = 25.4 mm*
Standard tolerance for distance value ranges
Tolerances for distance measurements vary based on the type and precision of the criterion as follows:

1. **Large distance measurements of greater than 25 mm:** tolerance is +/- 5 mm (accuracy is to the nearest 10 mm)
2. **Short distance measurements of 1 to 25 mm, where the distance value is expressed as a whole mm:** *tolerance is +/- 0.5 mm (accuracy is to the nearest 1 mm)*
3. **Precise short distance measurements of 1.0 to 25.0 mm, where the distance value is expressed as one-tenth of a mm:** *tolerance is +/- 0.05 mm (accuracy is to the nearest 0.1 mm)*
4. **Micro distance measurements of less than 1 mm:** *tolerance is +/- 0.005 mm (accuracy is to the nearest 0.01 mm)*
5. For the purpose of these tolerances, the following equivalent values are used:

Comparable Measurement Tolerances

Tolerance in metric measurements	Tolerance in Imperial measurements
+/- 5 mm	+/- 0.125 (1/8) in.
+/- 0.5 mm	+/- 0.02 in.
+/- 0.05 mm	+/- 0.002 in.
+/- 0.005 mm	+/- 0.0005 in.

Identification of Defective Conditions of the Types of Hose, Tubing and Lines used on Vehicles

	Characteristics	Defective Condition
	Type 1 – Copper, Steel or plastic tubing used for liquid or vapour. Made of a single layer of material.	Damage is visible on the outside that is reducing the wall thickness.
	Type 2 – Plastic (usually Nylon) tubing commonly used in air brake systems. No reinforcement ply. Inner core and outer cover are usually different color.	Inner core becomes visible from the outside, as shown by color change.
	Type 3 – Plastic (usually Nylon) tubing commonly used in air brake systems. With reinforcement ply. Inner and outer core are different color. (*Note:* Type 2 and 3 may appear identical externally.)	Reinforcement ply or inner core is visible from the outside, as shown by color change.
	Type 4 – Stainless steel outer cover with inner layer of tubing.	Damage through the outer cover.
	Type 5 – Synthetic rubber hose with inner reinforcement ply.	Wear or damage exposing the reinforcement ply.
	Type 6 – Synthetic rubber hose with multiple reinforcement plies.	Wear or damage exposing the outer reinforcement ply.
	Type 7 – Flexible hose with one or more reinforcement plies that may be fabric or steel, and an outer protective layer.	Wear or damage through the outer protective layer and outer cover, exposing a reinforcement ply.

Section 1 – Power Train

ITEM AND METHOD OF INSPECTION:	REJECT IF:
1. Accelerator Pedal/Throttle Actuator *Additional Inspection Procedure(s):* With engine running, press and release the accelerator pedal. Check engine response.	**Truck|✓|** Trailer| | **Bus|✓|**
a) pedal/actuator	a) binding, ***inoperative***, ***missing***, or engine fails to respond normally modified, or repaired by welding
b) anti-slip feature	b) ineffective, ***loose*** or ***missing***
c) throttle position sensor and connections	c) corroded, ***inoperative***, ***insecure*** or improperly connected
d) mount	d) deteriorated or weakened by corrosion, or ***insecure***
e) linkage/cable	e) binding, broken or ***insecure*** deficient part is used that is not equivalent to ***OEM standard*** throttle cable is binding, frayed or seized
f) springs	f) broken, corroded, deteriorated, ***missing***, stretched or improper type
	Hazardous Condition(s) **i. engine fails to return to idle** **ii. throttle position sensor is *inoperative*** **iii. pedal is *missing***
2. Exhaust System *Additional Inspection Procedure(s):* Inspect with engine running. *Note*: Minor leaking and resulting soot tracks are normal at joints in diesel exhaust systems.	**Truck|✓|** **Trailer|✓|** **Bus|✓|**
a) manifold	a) broken, cracked, leaking, ***loose*** or ***missing***
b) muffler *Note*: The ***OEM*** muffler or one that meets the ***OEM standard*** is required on every vehicle.	b) cracked, perforated or leaking bypassed, disabled, ***missing*** or removed deficient part is used that does not meet ***OEM standard*** patched in any manner other than by welding

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
c) resonator	c) cracked, leaking, ***missing*** or perforated patched in any manner other than by welding
d) exhaust pipe	d) cracked, collapsed or pinched, ***missing***, perforated or leaking patched in any manner other than by welding
e) mounting hardware	e) broken, ***insecure*** or ***loose***, or ***missing*** deficient part is used that does not meet ***OEM standard***
f) heat shields *Note:* All heat shields provided by the ***manufacturer***, installed as part of a retrofit for certain fuels, or installed for specialty applications, are considered required and must remain functional as intended.	f) a required heat shield is broken, ***insecure*** or ***loose***, or ***missing***
g) location	g) any part of the exhaust system is less than 50 mm away from a brake system component, any combustible material, or any part of the fuel system except a diesel or gasoline fuel tank, and is not protected by a heat shield any part of the exhaust system is less than 25 mm away from a diesel or gasoline fuel tank and is not protected by heat shield any exhaust component passes through an occupant compartment
h) turbocharger	h) leaking exhaust gases ***level 2 leak*** of engine oil
i) exhaust system and pipe termination *Note:* Also applies to the exhaust system of any auxiliary equipment. On a school bus, inspection must be conducted according to the ***applicable requirements*** and the applicable ***CSA*** D250 Standard.	i) exhaust gases are expelled into cab, passenger compartment, and/or sleeper exhaust gases are expelled within the perimeter of the cab, passenger compartment, and/or sleeper on a school bus, does not terminate as required by jurisdiction and applicable ***CSA*** D250 Standard

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
	Hazardous Condition(s) **i. exhaust leak, other than a minor leak at a joint, within the perimeter of the cab, passenger compartment, and/or sleeper** **ii. perforation or separation of any exhaust system component** **iii. any part of the exhaust system has caused, or is likely to cause, burning or charring damage to electrical wiring, fuel system or any other combustible part** **iv. on a bus with a gasoline fuel system, the exhaust system is leaking or discharging more than 160 mm forward of the rear most part, and discharging forward of any door or window designed to be opened (except door or window intended solely for emergency use)** **v. on a bus with a diesel, pressurized, or liquefied fuel system, the exhaust system is leaking or discharging more than 400 mm forward of the rear most part, and discharging forward of any door or window designed to be opened (except door or window intended solely for emergency use)**
3. Emission Control Systems and Devices *Note:* **Requirements Vary** - The emission control devices and system required on any particular vehicle will vary based on the vehicle's date of manufacture. **Possible Roadside Violation** - In some jurisdictions a vehicle will fail an inspection if the vehicle is not equipped with either a National Emissions Mark (Canada) or U.S. Emissions Control Information Label. If the emission label is not present, advise vehicle owner that the vehicle may violate a roadside inspection requirement based on jurisdictional regulation. Further questions or issues are to be directed to the relevant jurisdictional authorities.	
a) engine malfunction indicator lamp (MIL) ("check engine lamp") *Additional Inspection Procedure(s):* Cycle the ignition off and on and check the status displayed by the lamp.	a) **lamp fails to illuminate during bulb-check, is ***missing*** or has been disabled **lamp remains on after bulb-check to indicate a malfunction **Each of the conditions above marked with a double asterisk (**) are to be recorded on the inspection report, however a vehicle is not rejected for this condition alone.**

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
b) exhaust gas recirculation (EGR) system *Additional Inspection Procedure(s):* Visually inspect system using ***OEM*** service information as a guide.	b) there is evidence that any part of the EGR system has been bypassed, defeated, disabled, improperly modified, removed, or ***missing***
c) catalytic converter	c) cracked, leaking, ***missing***, or perforated attached in any manner other than by welding there is evidence that the catalytic converter has been defeated or disabled
d) diesel particulate filter (DPF) and regeneration system *Additional Inspection Procedure(s):* Visually inspect system using ***OEM*** service information as a guide.	d) there is evidence that any part of the DPF or any related regeneration system has been bypassed, defeated, disabled, improperly modified, removed, or ***missing***
e) diesel exhaust fluid (DEF) system *Additional Inspection Procedure(s):* Visually inspect system using ***OEM*** service information as a guide.	e) storage tank is ***damaged***, ***insecure*** or ***missing*** ***full 2 tank*** of DEF at any location in the DEF system storage tank filler cap is ***missing***
	Hazardous Condition(s) **i. any part is in a condition where it appears likely to become detached, or imminent failure appears likely**
4. Drive Shaft *Additional Inspection Procedure(s):* Inspect using hand pressure and suitable tools.	**Truck**|✓| Trailer| | **Bus**|✓|
a) u-joint/CV joint	a) rotational free-play is present horizontal or vertical movement within the u-joint can be detected by hand u-joint cap, cap fastener or fastener locking device is ***loose*** or ***missing*** u-joint bearing seal is ***damaged***, ***missing*** CV joint protective boot is ***loose***, ***missing***, or torn lubricant is leaking from CV joint

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
b) drive shaft yoke *Note:* This includes: slip yoke, shaft yoke, input yoke, output yoke, tube yoke and end yoke.	b) cracked mounting hardware is loose yoke can be moved by hand vertically or horizontally more than 3 mm yoke end fitting has broken, ***loose***, or ***missing*** fastener
c) drive shaft tube	c) crack in weld or tube twisted tube
d) drive line attaching hardware	d) ***loose***, ***missing*** or stripped
e) centre (carrier) bearing and mount	e) cracked, ***damaged***, ***loose***, ***missing*** or ***abnormally worn*** ***insecure*** mounting or mount is abnormally deteriorated
f) slip joint	f) radial wear at joint exceeds ***manufacturer*** specification
g) hanger bracket and hardware, and metal guard or catch	g) cracked, ***loose***, ***missing*** mounted in a manner that fails to prevent drive shaft from falling to ground on a bus, metal floor guard is ***missing*** or fails to protect occupant compartment
	Hazardous Condition(s) **i. any part is in a condition where it appears likely to become detached, or imminent failure appears likely** **Driveline/Driveshaft** **ii. a yoke end has a visible crack** **iii. yoke mounting, or end fitting fastener hardware, is broken, *loose*, or *missing*** **Universal Joint** **iv. vertical movement between opposing yoke ends is greater than 3.0 mm** **v. bearing cap, or bearing cap bolt, is broken, *loose*, or *missing*** **Centre Bearing (Carrier Bearing)** **vi. mounting bracket, bracket bolt or hardware is broken, *loose*, or *missing*** **vii. mounting bracket has a crack longer than one-half of the original bracket width** **viii. vertical movement of the shaft in the centre bearing carrier is greater than 13 mm** **Drive Shaft Tube** **ix. twisted, or has a crack in the metal or any weld longer than 6 mm**

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
5. Clutch and Clutch Pedal *Additional Inspection Procedure(s):* Inspect clutch operation and adjustment according to ***manufacturer*** service instructions.	**Truck**|✓| Trailer| | **Bus**|✓|
a) operation	a) fails to operate in the manner prescribed by the ***manufacturer***
b) adjustment	b) is not adjusted according to ***manufacturer*** instructions
c) pedal and linkage	c) broken, cracked, ***loose***, ***missing*** or ***abnormally worn*** welded or repaired in a way that does not meet ***OEM standard*** deteriorated or weakened by corrosion, or ***insecure*** anti-slip feature is ineffective, ***loose*** or ***missing***
d) clutch pedal hydraulic system	d) fluid reservoir is below minimum level indicated by ***manufacturer*** or ***level 2 leak*** of fluid at any point
	Hazardous Condition(s) **i. clutch fails to disengage transmission**
6. Engine/Transmission Mount	**Truck**|✓| Trailer| | **Bus**|✓|
a) condition/attachment	a) bent, ***loose*** or ***missing*** a bolt or insulator is ***loose*** or ***missing*** an insulator is broken, deteriorated or swollen abnormally a mount or part of a mount is replaced with a product or material that is not equivalent to ***OEM standard***
	Hazardous Condition(s) **i. imminent failure of a mount or bolt appears likely**

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
7. Engine Shut Down *Additional Inspection Procedure(s):* Test operation according to ***manufacturer*** service instructions.	**Truck**|✓| Trailer| | **Bus**|✓|
a) ignition switch	a) engine fails to shut down when ignition switch is turned off
b) mechanical shut down	b) engine fails to shut down when device is actuated
8. Engine Start Safety Feature *Additional Inspection Procedure(s):* Test operation to confirm engine start is prevented according to ***manufacturer*** service instructions.	**Truck**|✓| Trailer| | **Bus**|✓|
a) ignition interlock operation *Note*: This includes neutral and clutch safety switches. Effective May 30, 2005 ***CMVSS*** 102 (2) requires all vehicles (including buses) equipped with an automatic transmission to be equipped with a neutral safety switch. ***CMVSS*** 102 (7) requires trucks (excluding buses) with a GVWR at or below 4,536 kg to be equipped with a clutch safety switch.	a) fails to prevent engine start as designed
9. Gear Position Indicator	**Truck**|✓| Trailer| | **Bus**|✓|
a) location	a) cannot be viewed by a person seated in driver position
b) operation	b) indicator fails to indicate selected gear on a vehicle equipped with an automatic transmission
c) gear shift or gear selector pattern illustration label (embossment etc.)	c) illegible or ***missing***
10. Engine or Accessory Drive Belt *Note:* This section applies only to a drive belt directly connected to the engine.	**Truck**|✓| Trailer| | **Bus**|✓|
a) condition	a) broken, frayed, ***missing*** or oil-contaminated crack exceeds ***OEM standard*** or ***industry standard***
b) adjustment/tension *Additional Inspection Procedure(s):* Check the tension of drive belt(s) according to ***OEM*** service instructions, or when no particular instructions are given, as shown below. *Note:* Normal belt deflection should result in 1 mm of deflection for each 60 mm of span length, when 5 to 10 kg of force is applied to the belt.	b) belt is so loose it is likely to slip, or so tight it is likely to cause bearing damage
c) drive belt pulley	c) bent, broken, cracked or out of alignment

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
11. Hybrid Electric Vehicle & Electric Vehicle Power Train System *Additional Inspection Procedure(s):* Only a person who is trained on the operation and potential hazards of hybrid or electric vehicle systems can safely conduct an inspection of the items listed below. Visually inspect all accessible parts according to the vehicle ***manufacturer*** service instructions.	
Additional Inspection Procedure(s): Disassembly of system components may be required. *Note:* Consult with the ***manufacturer*** service instructions and vehicle maintenance records to confirm inspection and maintenance has been performed as recommended by the ***manufacturer***. No disassembly of the system is required to complete this inspection when records of recommended maintenance and inspection are provided. When any damage or abnormal condition is found, refer to the ***manufacturer*** service instructions to determine whether or not to reject the vehicle or identify a Hazardous Condition. When records of recommended maintenance or inspection are not provided, system components must be disassembled as necessary by a qualified person to conduct a full inspection.	
a) electrical system connections *Additional Inspection Procedure(s):* Visually inspect all accessible electrical connections using manufacturer service information as a guide.	a) connector is ***damaged*** or corroded in a way that exposes any conductor connector is ***damaged*** or ***insecure*** connector is unable to properly connect or lock into place
b) wiring *Additional Inspection Procedure(s):* Visually inspect all accessible electrical wiring using ***manufacturer*** service information as a guide.	b) corroded or ***damaged*** in a way that exposes any conductor insulation is chafing due to abrasive contact with any vehicle part
c) traction motor/generator *Additional Inspection Procedure(s):* Visually inspect the drive motor/generator using ***manufacturer*** service information as a guide.	c) ***damaged***, ***insecure*** or ***loose*** indication of burning or overheating drive component abnormally worn

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
d) traction battery *Additional Inspection Procedure(s):* Visually inspect the battery using ***manufacturer*** service information as a guide.	d) ***damaged***, ***insecure*** or ***loose*** indication of burning or overheating
e) battery storage area *Additional Inspection Procedure(s):* Visually inspect the battery storage area using ***manufacturer*** service information as a guide.	e) ***damaged*** or structurally weakened
f) self-diagnostic/status indicator *Additional Inspection Procedure(s):* Visually inspect the system indicator(s) using ***manufacturer*** service information as a guide.	f) there is any condition indicated by the system that is defined by the ***manufacturer*** as being unsafe
	Hazardous Condition(s) **i. any sign of shorting, arcing, or hot spot, at or near, any electrical component or wiring** **ii. traction battery is *damaged* or leaking**
12. Gasoline or Diesel Fuel System *Note:* This includes the fuel system for any auxiliary equipment or device.	**Truck|✓| Trailer|✓| Bus|✓|**
a) filler cap	a) allows spillage, improper type or ***missing***
b) tank, filler neck/tube and vent tube	b) cracked, ***insecure*** mounting or weld is broken not intended for the storage of automotive fuel improper vent repair to any non-metallic tank
c) tank mount and strap	c) broken, cracked, ***loose*** or ***missing*** deficient part is used that does not meet ***OEM standard*** fastener is ***loose*** or ***missing***
d) line, hose, fitting and connection *Note*: Refer to correct type of hose or tube and the related defective condition(s) as defined in the chart in the definition section of this standard.	d) chafing, cracked or ***insecure*** deficient product is used that does not meet ***OEM standard*** any section of a line, hose or tube is worn or ***damaged*** as shown in the chart on page 55*
e) fuel pump	e) ***damaged*** or ***insecure***

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
f) leakage	f) ***level 1 leak*** of gasoline anywhere in a gasoline fuel system ***level 2 leak*** of diesel fuel anywhere in a diesel fuel system
	Hazardous Condition(s) **i. *level 1 leak* of gasoline in gasoline fuel system** **ii. *level 2 leak* of diesel fuel in diesel fuel system** **iii. fuel cap is *missing*** **iv. fuel tank is *insecure* (a tank mounted with cushioning devices will have some movement)**
13. Pressurized or Liquefied Fuel System (LPG, CNG and LNG)	
Additional Inspection Procedure(s): Inspect pressurized fuel systems according to the items listed below unless additional inspection is required by the applicable requirements of the jurisdiction where the inspection is being conducted. In some jurisdictions a full inspection of a pressurized fuel system may be conducted at a different time, as part of a different inspection program, or by a person with different qualifications. *Note:* **Refer to Appendix A for detailed criteria for inspecting Liquefied Petroleum Gas (LPG or Propane), Compressed Natural Gas (CNG) and Liquefied Natural Gas (LNG).** When such an inspection is conducted, follow the applicable requirements of the relevant jurisdiction, or refer to the appropriate sections in Appendix A, as required.	**Hazardous Condition(s)** **Any cause for rejection of a LPG, CNG or LNG system, except those shown with a double asterisk, will also mean an automatic "Hazardous Condition" of that vehicle. The cause for rejection must be corrected and the vehicle "passed" before it may be operated on the highway.**
a) regulatory authority decal	a) **decal is not displayed **an incorrect decal is affixed to vehicle **information on decal is not readable **Despite the note above, the conditions listed here with a double asterisk (**) are not Hazardous Conditions**

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
b) pressure vessel (tank or cylinder) and valves, location and mounting	b) pressure vessel (tank or cylinder) is ***insecure*** or ***loose***, or welds are broken welding has been done anywhere on a pressure vessel (tank or cylinder) except on saddle plates or bracket tank or cylinder valves and their connections are ***insecure*** or ***loose*** tank or cylinder valves and their connections are not protected from damage due to stationary objects, or objects from the road pressure vessel (tank or cylinder) is located above the vehicle or projects beyond vehicle side, ahead of front axle or behind rear bumper any part of exhaust system is less than 200 mm away from any part of the fuel system and is not protected by shields a heat shield is less than 25 mm away from any fuel system component
c) pressure vessel (tank or cylinder) ground clearance *Note:* Includes any attached fitting or valve the appropriate sections in Appendix A, as required.	c) distance to ground from bottom of pressure vessel (tank or cylinder) is less than minimum ground clearance shown below pressure vessel (tank or cylinder) located between axles wheelbase of 3225 mm or less: minimum ground clearance = 170 mm wheelbase over 3225 mm: minimum ground clearance = 220 mm pressure e vessel (tank or cylinder) located behind rear axle minimum ground clearance = 200 mm any portion of the tank or cylinder protrudes past the plane formed by the bottom of the rear most tires and the lowest most rearward part of the vehicle.
d) pressure vessel (tank or cylinder) sub-frame	d) any modification has been made to pressure vessel (tank or cylinder) carrier or sub-frame, that does not meet ***OEM standard*** or ***industry standard***
e) pressure vessel (tank or cylinder) information plate and data *Note:* Pressure vessel installed as part of an ***OEM*** vehicle gaseous fuels installation may not have an information plate affixed to it.	e) name plate is missing or illegible, or data is not shown on plate (see note below) *Note:* When information plate is illegible or missing, record it on the inspection report, however do not reject the vehicle for this condition alone.
f) pressure vessel (tank or cylinder) filler cap	f) protective filler cap not secured to filler valve or vehicle

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
g) pressure vessel (tank or cylinder) remote filler box	g) not adequately sealed to prevent vapour migration into vehicle interior (trunk etc.)
h) main shut-off valve	h) valve is not readily accessible (cannot be reached)
i) corrosion protection	i) protective coating or material is ***damaged***, or is missing from externally mounted pressure vessel (tank) or attachment
j) fitting, hose, piping and tubing	j) is ***insecure***, or any anchor support is ***damaged*** or ***missing*** is not protected against corrosion grommet is ***damaged*** or ***missing*** components in trunk area not protected against luggage
k) fuel system leakage	k) any fuel system leak is detected
l) pressure relief valve	l) incorrectly installed or ***missing***
m) supply lock off valve (LPG)	m) does not operate as originally intended
n) excess flow valve (LPG) and cap	n) ***missing***
o) vehicle chassis and under-body	o) a structural member has been altered in any manner that does not meet ***OEM standard*** or ***industry standard***
	Hazardous Condition(s) **Any cause for rejection of a LPG, CNG or LNG system, except those shown with a double asterisk, will also mean an automatic "Hazardous Condition" of that vehicle. The cause for rejection must be corrected and the vehicle "passed" before it may be operated on the highway.**

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

Section 2 – Suspension

ITEM AND METHOD OF INSPECTION:	REJECT IF:
1. Suspension & Frame Attachments *Note*: This section applies to all types of suspension. ***Manufacturer*** welding of components is a normal part of many manufacturing processes and is distinct from welding to modify or repair a part. *Additional Inspection Procedure(s):* Raise the vehicle as necessary to access the suspension components.	**Truck|✓|** **Trailer|✓|** **Bus|✓|**
a) vehicle ride height *Additional Inspection Procedure(s):* Check ride height while vehicle is parked on a flat level surface.	a) suspension is sagged so that the vehicle ride height, on a vehicle other than a bus, is more than 50 mm from manufacturer specified height when measured at the tire centreline one side of the vehicle is more than 50 mm, higher or lower than the other when measured at the tire centreline on a bus, step height at an entrance door is 25 mm above or below the range of step height specified by the ***manufacturer***
b) frame bracket, mounting bracket and hanger *Note*: Some trailer suspension systems use a "cross tube brace", consisting of a pipe positioned between the spring hangers on either side of the vehicle. The "cross tube brace" is used to position the suspension for shipment and installation and has no bearing on the alignment or the function of the suspension.	b) broken, cracked, ***damaged***, ***loose***, ***missing***, or perforated due to corrosion or deterioration welded or repaired in a way that does not meet ***OEM standard***
c) mounting fasteners	c) broken, cracked, ***loose*** or ***missing***
	Hazardous Condition(s) **i. an axle has shifted or is able to shift from its normal position** **ii. any attaching component is broken, cracked, *loose* or *missing*** **iii. the condition of the suspension system allows a tire to contact any part of the vehicle frame or body**

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
2. Axle Attaching & Tracking Components *Note*: This section applies to all types of suspension. *Additional Inspection Procedure(s):* Raise the vehicle as necessary to access the suspension components. Inspect using hand pressure and suitable tools.	**Truck|✓|** **Trailer|✓|** **Bus|✓|**
a) axle attachment, axle saddle	a) bent, broken, cracked, ***loose*** or ***missing*** axle has shifted from its normal position
b) bushing (rubber or composite material)	b) ***loose*** or shifted out of place, ***missing***, worn beyond ***manufacturer*** specification wear or damage permits axle or wheel to shift out of position
c) suspension connecting component, (e.g.: arm, torque rod, radius rod, strut, track rod, control arm) *Note*: Some suspension connecting components are supplied as unfinished two-piece assemblies that require welding once the required length is established. This type of welding is not cause for rejection.	c) bent, broken, cracked, ***loose***, ***missing***, worn beyond ***manufacturer*** specifications, or perforated due to corrosion or deterioration welded or repaired in a way that does not meet ***OEM standard*** wear or damage permits axle or wheel to shift out of position
d) stabilizer/anti-sway bar or link	d) bent, broken, cracked, ***loose***, ***missing*** or worn beyond ***manufacturer*** specification welded or repaired in a way that does not meet ***OEM standard***
e) equalizer or "walking" beam	e) broken, cracked or bushing mounting holes are elongated welded or repaired in a way that does not meet ***OEM standard*** wear in suspension allows tires to contact frame axles do not align correctly on a truck or truck-tractor, "walking" beam cross tube bushing has more than 7 mm clearance
	Hazardous Condition(s) **i. an axle has shifted or is able to shift from its normal position** **ii. any attaching component is broken, cracked, *loose* or *missing*** **iii. the condition of the suspension system allows a tire to contact any part of the vehicle frame or body**

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
3. Axle & Axle Assembly	**Truck|✓| Trailer|✓| Bus|✓|**
a) condition	a) axle is bent or ***damaged***
	axle material or a weld is cracked
	loose or shifted out of normal position
	welded or repaired in a way that does not meet ***OEM standard***
	Hazardous Condition(s)
	i. axle has shifted or is able to shift from its normal position
	ii. axle material or a weld is cracked
4. Spring & Spring Attachment	**Truck|✓| Trailer|✓| Bus|✓|**
a) leaf spring	a) any spring leaf is broken, cracked, ***missing***, or is shifted out of place
	any spring leaf is worn more than 3 mm in the hanger contact area or where leaves are in contact with each other
	leaf is shifted and contacting another vehicle part
b) composite spring *Note*: Some change in the appearance of a composite spring, described as "fuzzing" is normal as the spring ages. A crack of a composite spring is a separation in any axis which passes completely through the spring.	b) worn more than 3 mm in load bearing area
	broken, crack of any length visible on both sides of a spring, splintered, delaminating or not the same type on each side of vehicle
c) shackle, pin, bushing *Additional Inspection Procedure(s):* Check the wear of the spring pins according to ***manufacturer*** service instructions.	c) broken, ***loose*** or ***missing***
	shifted out of normal position
	fastener ***loose*** or ***missing***
	vertical movement of a spring or shackle against a spring pin exceeds *OEM standard* or if not available; wear exceeds limit below
	For pin size of 12.5 mm to 25 mm: wear limit is 2.0 mm
	For pin size of 25 mm to 45 mm: wear limit is 3.0 mm
d) U-bolt & hardware	d) broken, cracked, ***loose, missing***, or shifted out of normal position
	welded or repaired in a way that does not meet ***OEM standard***

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
e) spring contact area of hanger (slipper) *Note*: Wear plates are permitted by some manufacturers in the spring contact (slipper) area of fabricated hangers.	e) repaired by welding (except installation of wear plates) spring load bearing area is worn more than 3 mm
f) coil spring	f) broken or shifted out of normal position spacer is used between the coils of a spring
g) torsion bar	g) broken, cracked or ***missing*** ***repaired by welding***
h) bump pad	h) ***loose, missing*** or split
i) rubber load cushion	i) rubber block or vertical pin is broken, ***loose***, ***missing*** or split
	Hazardous Condition(s) **i. any metal spring leaf is *missing*, or has leaves shifted out of place** **ii. the main leaf or more than 25% of the leaves of a metal leaf spring are cracked** **iii. spring leaf is shifted and in contact with a rotating part** **iv. a composite spring is broken, has a crack of any length intersecting with another crack, or a crack longer than ¾ the length of the spring** **v. torsion bar is broken or cracked** **vi. coil spring is broken** **vii. a rubber load cushion is *missing* or separated**
5. Air Suspension *Note*: This section applies to fixed axle and liftable axle suspension systems. *Additional Inspection Procedure(s)*: Check with air system at normal operating pressure, liftable suspension in lowered position, and with supports placed under the vehicle to protect against dropping of the vehicle in the event of air loss. Maintain appropriate air pressure in any liftable axle system.	**Truck|✓| Trailer|✓| Bus|✓|**

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
a) ride height	a) height is 50 mm above or below ***OEM*** specification vehicle leans to one side or air spring pressure is unequal
b) air spring (air bag)	b) improperly seated, ***missing***, patched or reinforcing ply is exposed due to damage or deterioration air leak
c) air spring base, mounting plate	c) broken, cracked or ***missing*** perforated by corrosion or deterioration welded or repaired in a way that does not meet ***OEM standard***
d) air system *Additional Inspection Procedure(s):* Inspect the function and operation of the air suspension system and controls in accordance with ***manufacturer*** service instructions.	d) pressure protection valve is ***inoperative*** or ***missing*** control, pressure regulator or gauge, is ***inoperative*** or ***missing***
e) air line, connection and fitting *Note*: Refer to correct type of hose or tube and the related defective condition(s) as defined in the chart in the definition section of this standard.	e) fitting, line, repair method, installation or modification does not meet ***OEM standard*** tubing or hose is defective as defined in the chart on **page 55** fitting or connection is broken, cracked, flattened or leaking ***damaged*** in a way (such as: melting, flattening, deformation or kinking) that can restrict air flow
f) height control valve	f) ***inoperative*** a system originally equipped with 2 valves has a valve ***missing*** or has been converted to a single valve a system with only one valve has the valve positioned in a location other than near the centre of an axle
g) kneeling feature on a bus *Additional Inspection Procedure(s):* Use the control to operate the kneeling feature. Confirm the system operates as intended.	g) ***fails to operate as intended*** audible or visual warning ***fails to operate as intended***
	Hazardous Condition(s) **i. an air spring (air bag) is *missing*, deflated or has an air leak**

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
6. Self-Steer and Controlled-Steer Axle *Note*: The suspension components on a self-steer or controlled steer axle must be inspected according to items 1-4 in this section. The steering components must be inspected according to Section 4.	**Truck|✓| Trailer|✓| Bus|✓|**
7. Shock Absorber/Strut Assembly	**Truck|✓| Trailer|✓| Bus|✓|**
a) condition	a) ***damaged***, detached, or ***missing*** binding strut bearing/mount prevents free rotation of the steering wheel
b) mount & hardware	b) broken, ***loose*** or ***missing***
c) oil leak	c) ***level 2 leak*** of oil
	Hazardous Condition(s) **i. a shock absorber on air ride suspension is broken, detached, or *missing***

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

Section 3 – Brake Systems

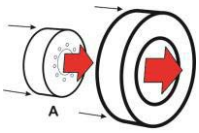
A. OPTIONS FOR INSPECTING INTERNAL BRAKE COMPONENTS OF HYDRAULIC AND AIR BRAKE SYSTEMS

1. **Types of Brake Inspections**

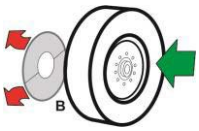
This standard supports several different types of brake inspections depending on the age of a vehicle, the type of brakes being inspected, the required cycle of inspections that applies to a vehicle, i.e.: 12 month or 6 months, and the type of inspection previously completed.

There are three types of inspection for drum brakes:

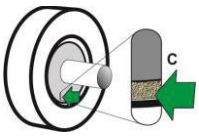
A. *Full inspection with drum removed* (this is a detailed inspection of all internal components {listed in Section 3H 12 and 3A 15 & 16} and includes measuring drums and shoe lining)



B. *Wheel-on full inspection* (this is only available for cam-type drum brakes with removable dust shields and involves an inspection of the internal components {listed in Section 3A 15 & 16} with the dust shields removed, it includes measuring drums and shoe lining)

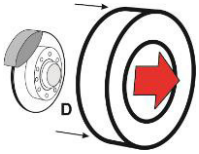


C. *Limited-inspection of drum brake* (this is an inspection through inspection holes and involves a measurement of shoe lining only)

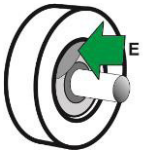


There are two types of inspection for disc brakes

D. *Full inspection with wheel(s) removed* (this is a detailed inspection of all internal components {listed in Section 3H 13 and 3A 18} and includes measuring rotor and pad friction material thickness)



E. *Limited-inspection of disc brake* (this is an inspection of visually accessible components and measurement of the friction material of one brake pad)



To determine what inspection must be conducted, refer to the following instructions.

2. **Disassembly of Wheels and/or Drums for Inspection**

Disassembly of brakes provides access to ensure all components are fully inspected. Full inspection with either drum or wheel removal is required when any defect is suspected or found during an inspection.

Suspecting a defect of any wheel brake must be based on some visible evidence that could indicate the presence of a problem or abnormal condition. The following conditions are those that should cause a technician-inspector to suspect a brake defect:

- abnormal wear of friction material
- signs of overheating
- evidence of negative effects of corrosion ("rust-jacking", friction material lifting due to rust build- up, shoe table deformation, friction material separating from backing material)

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

- abnormal wear of the brake drum or rotor
- abnormal appearance, glazing, discolouration or contamination of brake friction material
- damage, distortion or shifting out of place of any brake component
- abnormal noise or response upon application or release of the brakes
- the age of the brake components, or the previous measurements of wear compared to current measurements, indicate that a drum or rotor, or friction material, is likely to be worn beyond the allowable limit

Note: When any of these conditions is evident or is suspected, that brake does not qualify for a "wheel-on full inspection" or a "limited inspection". A "full inspection with drum removed" is required in the case of drum brakes and a "full inspection with wheel(s) removed" is required in the case of disc brakes.

3. **Exemptions from Brake Disassembly for Drum Brakes**

When a "full inspection with drum removed ('A')" is conducted on a truck or trailer having drum brakes, and the proper documentation is completed, the brake can qualify for a "limited inspection ('C')" for a period of 19 months. Buses with drum brakes, only qualify for a limited inspection for 7 months following a "full inspection with drum removed". A "limited inspection ('C')" can only be conducted during the respective 7 or 19 month qualifying period after completing a "full inspection with drum removed"; but only when such inspection is properly documented.

A cam-type drum brake with removable dust cover/shields also qualifies for a "*wheel-on full inspection ('B')*" at each inspection. This option is only available for cam type drum brakes; but only when the dust cover/shields are left off the vehicle or are removed to facilitate the inspection.

4. **Exemptions from Wheel Disassembly for Disc Brakes**

Disc brakes require a "full inspection with wheel(s) removed ('D')" at least every 12 months. When a "full inspection with wheel(s) removed ('D')" is conducted on a disc brake, and the proper documentation is completed, the brake can qualify for a "*limited inspection ('E')*" for a period of 7 months.

5. **Exemptions from Brake/Wheel Disassembly for New Vehicles**

Brakes are exempt from the requirement to disassemble when vehicles are new. The exemption period depends on the type of brake used and is based on the vehicle manufacture date or in-service date. Trucks and trailers using drum brakes qualify for a "*limited inspection ('C')"* for a period of 19 months. Trucks and trailers with disc brakes, and all buses qualify for a "*limited inspection ('C') or ('E')"* for a period of 7 months.

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

6. **Summary of Inspection Requirements for Trucks and Trailers on 12-Month Inspection Cycle**

INSPECTION REQUIRED FOR NEW TRUCKS AND TRAILERS on 12 month inspection cycle		
	Inspection required when vehicle is	
Brake used	**12 mo. old**	**24 mo. old**
Drum with removable dust shields	C	A or B
Drum with rigid backing plate	C	A
Disc	D	D

ONGOING BRAKE INSPECTION OPTIONS for Truck & Trailer on 12 month inspection cycle			
		Inspection required[1]	
Brake used	**Type of inspection last completed (Starting Month)**	**12 mo. later**	**24 mo. later**
Drum with removable dust shields	*full inspection with drum removed (A)*	C[2]	A or B
	wheel-on full inspection (B)	B	B
Drum with rigid backing plate	*full inspection with drum removed (A)*	C[2]	A
Disc	*full inspection with wheel(s) removed (D)*	D	D

1 This is the minimum inspection that is permitted. A full inspection is always permitted.

2 A *limited inspection* is only permitted when proper documentation of a *full inspection with drum or wheel(s) removed* is provided.

Types of inspections		
Drum	*full inspection with drum removed*	'A'
Brakes	*wheel-on full inspection*	'B'
	limited-inspection of drum brake	'C'
Disc	*full inspection with wheel(s) removed*	'D'
Brakes	*limited-inspection of Disc brake*	'E'

7. **Summary of Inspection Requirements for Trucks on 6-Month Inspection Cycle**

Note: Only applicable in YK, BC, SK & MB.

INSPECTION REQUIRED FOR NEW TRUCK on 6 month inspection cycle				
	Inspection required when vehicle is			
Brake used	**6 mo. old**	**12 mo. old**	**18 mo. old**	**24 mo. old**
Drum with removable dust shields	C	C	C	A or B
Drum with rigid backing plate	C	C	C	A
Disc	E	D	E	D

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ONGOING BRAKE INSPECTION OPTIONS for Truck on 6 month inspection cycle

Brake used	Type of inspection last completed (Starting Month)	Inspection required[1] 6 mo. later	12 mo. later	18 mo. later	24 mo. later
Drum with removable dust shields	*full inspection with drum removed (A)*	C[2]	C[2]	C[2]	A
	wheel-on full inspection (B)	B	B	B	B
Drum with rigid backing plate	*full inspection with drum removed (A)*	C[2]	C[2]	C[2]	A
Disc	*full inspection with wheel(s) removed (D)*	E[2]	D	E[2]	D

1 This is the minimum inspection that is permitted. A full inspection is always permitted.

2 A *limited inspection* is only permitted when proper documentation of a *full inspection with drum or wheel(s) removed* is provided.

8. **Summary of Inspection Requirements for Buses**

INSPECTION REQUIRED FOR NEW Bus

Brake used	Inspection required when vehicle is 6 mo. later	12 mo. later	18 mo. later	24 mo. later
Drum with removable dust shields	C	A	C	A
	C	B	B	B
Drum with rigid backing plate	C	A	C	A
Disc	E	D	E	D

ONGOING BRAKE INSPECTION OPTIONS for Buses

Brake used	Type of inspection last completed (Starting Month)	Inspection required[1] 6 mo. later	12 mo. later	18 mo. later	24 mo. later
Drum with removable dust shields	*full inspection with drum removed (A)*	C[2]	A	C[2]	A
	wheel-on full inspection (B)	B	B	B	B
Drum with rigid backing plate	*full inspection with drum removed (A)*	C[2]	A	C[2]	A
Disc	*full inspection with wheel(s) removed (D)*	E[2]	D	E[2]	D

1 This is the minimum inspection that is permitted. A full inspection is always permitted.

2 A *limited inspection* is only permitted when proper documentation of a *full inspection with drum or wheel(s) removed* is provided.

Types of inspections		
Drum	*full inspection with drum removed*	'A'
Brakes	*wheel-on full inspection*	'B'
	limited-inspection of drum brake	'C'
Disc	*full inspection with wheel(s) removed*	'D'
Brakes	*limited-inspection of Disc brake*	'E'

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

B. REQUIRED MEASUREMENT OF BRAKE COMPONENTS

Brake inspections require certain components to be measured and these measurements are required to be recorded on a record/report of the inspection. The items that must be measured for each type of brake are as follows:

1. **Drum Brake Systems**
   For drum brakes, the brake shoe lining thickness and brake drum diameter must be measured during every "*full inspection with drum removed ('A')"* and every "*wheel-on full inspection ('B')*".

   When a *"limited-inspection ('C')"* of drum brakes is conducted, the lining thickness of one brake shoe must be recorded. The measurement must be taken of the thinnest accessible portion of the thinnest brake shoe lining.

2. **Disc Brake Systems**
   For disc brakes, the rotor thickness and pad friction material thickness of the inner and outer brake pad must be measured and recorded at every inspection, unless the brake qualifies for a *'limited-inspection ('E')'*.

   When a *'limited-inspection ('E')'* of disc brakes is conducted, the thickness of the friction material of one of the pads must be recorded. Normally this will be the inner pad.

   Friction material thickness can be determined by measuring the friction material itself or by measuring the combined thickness of the friction material and pad backing plate, then deducting the thickness of the backing plate. Always record the thickness of the friction material only.

C. DOCUMENTS REQUIRED FOR QUALIFYING A PRIOR INSPECTION OF INTERNAL BRAKE COMPONENTS

Qualifying a prior inspection with respect to a wheel brake requires an original of a document containing the information listed below to be submitted to the inspecting technician and inspection facility conducting a current inspection. A legible copy of the required document must also be submitted to the inspection facility for attachment to the inspection report. The technician-inspector and inspection facility must be satisfied with the documentation provided.

Information to be Included on the Proof of Brake Inspection Document:

The information that must be included on a document used to prove a prior inspection includes information common to all brakes and information specific to drum and disc brakes, as follows:

1. **Common Information**
   - Date of inspection
   - Odometer reading (Optional for trailers. Record either the hub-odometer or ABS ECU mileage, if either is available, including which source was used.)
   - VIN
   - Authorized technician/inspector's name and/or number and signature (in written or electronic form).
   - Inspection station name and number, or name and location of repair facility (based on jurisdictional requirements).

2. **Additional Information Required for Drum Brakes**
   - If new brake shoe lining and/or brake drums were installed, the document must show them as 'new' and be supported by documentation, such as purchase invoice, work order, etc.
   - Internal diameter of the brake drum.
   - Thickness of the brake shoe lining taken at the edge of the lining near the centre of the brake shoe. The measurement must be taken of the thinner brake shoe lining, when there is a difference in thickness.
   - The document must include a declaration stating that the brake drum was removed and a "*full inspection with drum removed ('A')"* was conducted, and that no defective component was present at the completion of the inspection.

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

3. **Additional Information Required for Disc Brakes**
   - If new brake pads and/or rotor were installed, the document must show them as 'new' and be supported by documentation, such as purchase invoice, work order, etc.
   - Thickness of the rotor.
   - Thickness of the thinnest pad friction material.
   - Brake pad friction material measurements must be taken at the thinnest point of the material.
   - The document must include a declaration stating that the wheel(s) was/were removed and a "full inspection with wheel(s) removed ('D')" was conducted, and that no defective component was present at the completion of the inspection.

D. PROHIBITION ON REMOVAL OF BRAKES FROM A VEHICLE

Axles fitted with brakes by the ***manufacturer*** as original equipment must have those brakes in proper working order, and the brakes must be inspected in accordance with this standard. Brakes must not be disabled or removed from a vehicle.

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

Section 3H – Hydraulic Brakes

ITEM AND METHOD OF INSPECTION:	REJECT IF:
1. Hydraulic System Components	**Truck|✓| Trailer|✓| Bus|✓|**
a) metal line and fittings *Additional Inspection Procedure(s):* Inspect lines and fittings for leaks while brakes are fully applied with heavy force on the brake pedal, (i.e.: panic stop). Operate engine if necessary to maintain power-assist. *Note:* All connections between brake system components must be proper flared type. *Note:* Surface rust and corrosion is normal on metal lines and fittings, and is not cause for rejection.	a) heavy rust, corrosion or scaling, is present on any metal line or fitting that reduces or increases the thickness, or compromises the structural integrity of the material ***level 1 leak*** of brake fluid chafing, cracked, flattened or restricting section ***insecure*** mounting causing line to shift out of its normal position repaired by welding or soldering repaired using material or method does not meet ***OEM standard***
b) flexible line/hose *Additional Inspection Procedure(s):* Inspect flexible hoses while brakes are applied with heavy force on the brake pedal, (i.e.: panic stop). Operate engine if necessary to maintain power-assist.	b) bulged or swells under pressure, flattened, twisted, restricting section or ***insecure*** mounting outer composite material is cracked or chafed exposing an inner layer as shown in hose and tube condition chart in introduction deficient product is used that does not meet ***OEM standard***
c) master cylinder	c) ***damaged*** or ***insecure*** mounting fluid is contaminated ***level 1 leak*** of brake fluid fluid level is below indicated minimum level, or if not indicated, more than 13 mm from top filler cap is ***damaged***, ***loose*** or ***missing***, vent holes are plugged, or gasket is ***missing*** or swollen
d) pressure differential switch	d) switch or electrical connection is ***damaged***, ***insecure*** or ***loose*** ***level 1 leak*** of brake fluid ***inoperative***
e) variable or proportioning system *Additional Inspection Procedure(s):* Check links for mechanical defects. Test when there is evidence of a problem. Refer to ***manufacturer*** service instructions and confirm that the valve is functioning properly.	e) link is ***damaged***, ***missing***, or seized ***inoperative*** ***level 1 leak*** of brake fluid

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
f) auxiliary or work brake (line-lock device) *Note*: Line-lock devices block brake fluid from returning to the master cylinder as a means of holding a vehicle stationary. Improperly installed they can interfere with normal service brake operation.	f) any device is installed that interferes with normal service brake operation
	Hazardous Condition(s) **i. a brake hose or line swells under pressure** **ii. *level 2 leak* in any part of the brake system** **iii. brake pedal moves downward when brakes are held applied** **iv. a brake hose is broken, crimped, restricted, or cracked exposing any inner layer** **v. master cylinder fluid level is below indicated minimum level or less than ¼ full** **vi. brake fluid is contaminated in a way that prevents normal brake operation**
2. Brake Pedal/Actuator	**Truck|✓|** Trailer| | **Bus|✓|**
a) pedal	a) broken, cracked, ***loose***, ***missing*** or ***abnormally worn*** welded or repaired in a way that does not meet ***OEM standard***
b) mount	b) cracked, deteriorated, ***insecure*** or weakened by corrosion
c) anti-slip feature	c) ineffective, ***loose*** or ***missing***
	Hazardous Condition(s) **i. pedal is *missing***
3. Vacuum Assist (Boost) System on Truck or Bus	**Truck|✓|** Trailer| | **Bus|✓|**
a) line, hose and clamp	a) broken, chafed, collapsed, cracked, leaking, ***loose*** or ***missing*** ***insecure*** mounting, incorrect type, or positioned within 50 mm of any exhaust system component and not protected by a heat shield
b) check valve	b) incorrectly installed or ***inoperative***, leaking or ***missing***
c) tank	c) ***damaged***, structurally deteriorated from corrosion, ***insecure*** or ***loose***, leaking or ***missing***

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
d) operation *Additional Inspection Procedure(s):* Test system operation as described below. Stage 1 – Start engine, build to full vacuum, shut engine off, make two (2) full brake applications. Stage 2 – With engine off, press brake pedal several more times to eliminate remaining vacuum. Apply a light force on brake pedal and then start engine.	d) during stage 1 - vacuum reserve is insufficient to assist two full brake applications during stage 2 - downward movement of brake pedal is not felt when engine is started
e) vacuum pump *Additional Inspection Procedure(s):* Confirm proper operation of the vacuum pump to ***manufacturer*** specifications. When no specification is available, check with engine running at 1200 rpm using vehicle gauge, or connect external gauge.	e) vacuum pump does not operate within ***manufacturer*** specifications, or when no specification is available, is unable to achieve and maintain 4.5 kPa of vacuum *Note*: High altitude can reduce achievable vacuum level.
	Hazardous Condition(s) **i. a brake hose or line swells under pressure** **ii. *level 2 leak* in any part of the brake system** **iii. applied pedal travel exceeds 80% of total pedal travel** **iv. power assist unit is *inoperative*** **v. a check valve is *inoperative* or *missing*** **vi. the brake pedal does not move downward when the engine is started with the brakes applied**
4. Hydraulic Assist (Boost) System on Truck or Bus	**Truck**|✓| Trailer| | **Bus**|✓|
a) engine-driven pump, reservoir and belt *Additional Inspection Procedure(s):* Check with engine stopped and with engine running. Inspect drive belt according to Section 1. Power Train, Item 10. Engine or Accessory Drive Belt.	a) ***level 2 leak*** of hydraulic boost fluid fluid level is below indicated minimum level, or if not indicated, more than 25 mm from top filler cap is ***damaged***, ***loose*** or ***missing***
b) line and hose *Additional Inspection Procedure(s):* Check with engine stopped and with engine running.	b) ***level 2 leak*** of hydraulic boost fluid broken, chafed, collapsed, cracked, ***loose*** or ***missing*** ***insecure*** mounting or incorrect type

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
c) operation *Additional Inspection Procedure(s):* Confirm proper operation of the hydraulic assist (boost) system according to ***manufacturer*** service instructions. When no ***manufacturer*** service instructions are available, check as described below. Test Method 1 - For a system with electrically-driven back-up pump. Operate brakes with engine running and engine stopped with ignition off. Observe system operation and status of indicator lamps. Test Method 2 – For a system with gas-accumulator back-up. Stop engine and deplete pressure reserve. Then apply a moderate force on brake pedal and start engine.	c) hydraulic assist (boost) is not available or system malfunctions system does not operate as described in ***manufacturer*** service instructions warning or indicator lamp is activated, showing a system malfunction during Test Method 1 - system does not operate as described in ***manufacturer*** service instructions or electric driven pump fails to operate as intended during Test Method 2 - on a system with gas- accumulator back-up - pedal fails to sink down and then push back up again
	Hazardous Condition(s) **i. a brake hose or line swells under pressure** **ii. *level 2 leak* in any part of the brake system** **iii. applied pedal travel exceeds 80% of total pedal travel** **iv. power assist unit is *inoperative*** **v. a check valve is *inoperative* or *missing*** **vi. the brake pedal does not move downward when the engine is started with the brakes applied**
5. Air Assist (Boost) System on Truck or Bus	**Truck|✓|** Trailer| | **Bus|✓|**
a) operation *Additional Inspection Procedure(s):* Confirm proper operation of the air assist (boost) system according to ***manufacturer*** service instructions. When no ***manufacturer*** service instructions are available, check as follows: Stop engine and deplete pressure reserve. Then apply moderate force on the brake pedal and start the engine.	a) system does not operate as described in ***manufacturer*** service instructions downward movement of brake pedal is not felt when engine is started
	Hazardous Condition(s) **i. a brake hose or line swells under pressure** **ii. *level 2 leak* in any part of the brake system** **iii. applied pedal travel exceeds 80% of total pedal travel** **iv. power assist unit is *inoperative*** **v. a check valve is *inoperative* or *missing*** **vi. the brake pedal does not move downward when the engine is started with the brakes applied**

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
6. Air-Over-Hydraulic Brake System *Note:* An Air-Over-Hydraulic Brake System is a brake system that uses compressed air to transmit force from the driver control to a hydraulic brake fluid system that actuates the service brakes. The brake pedal is connected to an air valve that delivers air pressure to hydraulic pressure converters. *Note:* The air system of an air-over-hydraulic brake system must comply with ***CMVSS*** 121.	**Truck|✓| Trailer|✓| Bus|✓|**
a) operation *Additional Inspection Procedure(s):* Inspect system operation according to ***manufacturer*** service instructions. When no ***manufacturer*** service instructions are available, inspect the air supply system for compliance with the items 1 – 6 in Section 3A Air Brakes. Inspect the hydraulic system components for compliance with all relevant items listed in this Section.	a) system does not operate as described in manufacturer service instructions a vehicle manufactured after 1975 does not have a dual-circuit air system and two independent air-to- hydraulic pressure converters any system defect or malfunction is detected
	Hazardous Condition(s) **i. a brake hose or line swells under pressure** **ii. *level 2 leak* in any part of the brake system** **iii. applied pedal travel exceeds 80% of total pedal travel** **iv. power assist unit is *inoperative*** **v. a check valve is *inoperative* or *missing*** **vi. the brake pedal does not move downward when the engine is started with the brakes applied**

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
7. Surge Brake Controller on Trailer	Truck| | **Trailer|✓|** Bus| |
a) controller operation *Additional Inspection Procedure(s):* Check the operation of the surge brake controller according to the manufacturer service instructions. Actuate the controller using suitable means and confirm brake operation at each wheel. Test operation of any backing mechanism.	a) controller is ***damaged*** or defective controller is seized, or fails to operate brakes when actuated manually backing/towing function fails to ***operate as intended***
b) brake fluid reservoir	b) ***insecure*** mounting or ***loose*** ***level 1 leak*** of brake fluid brake fluid level is below 'fill' or 'min.' mark or less than 75% of capacity when reservoir is not marked reservoir filler cap ***damaged, loose*** or ***missing***
c) break-away device *Note*: A break-away device is not required in all jurisdictions. Inspect according to the ***applicable requirements.*** *Additional Inspection Procedure(s):* When a break-away device is present, it must be inspected according to the service instructions provided by the ***manufacturer*** and it must be functional.	c) ***missing*** from a trailer required to have a break-away device ***damaged***, improperly installed or ***inoperative***
	Hazardous Condition(s) **i. brakes are *inoperative* or fail to *operate as intended*** **ii. required break-away device is improperly installed, *inoperative* or *missing***
8. Vacuum System on Trailer *Additional Inspection Procedure(s):* When inspecting a trailer that uses vacuum to actuate or boost braking, inspect the system according to the service instructions provided by the ***manufacturer***.	Truck| | **Trailer|✓|** Bus| |
a) condition and operation	a) ***damaged*** or fails to ***operate as intended***
	Hazardous Condition(s) **i. brakes are *inoperative* or fail to *operate as intended***

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

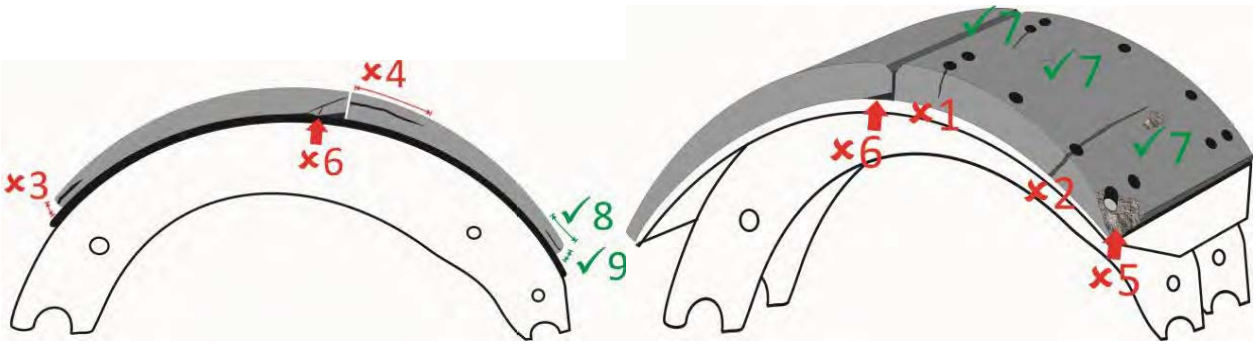
ITEM AND METHOD OF INSPECTION:	REJECT IF:
9. Air-Boosted Trailer Brake System *Additional Inspection Procedure(s):* When inspecting a trailer that uses an air-boosted brake system, inspect the system according to the service instructions provided by the ***manufacturer***.	Truck| | **Trailer|✓|** Bus| |
a) condition and operation	a) ***damaged*** or fails to ***operate as intended***
	Hazardous Condition(s) **i. brakes are *inoperative* or fail to *operate as intended***
10. Electric Brake System on Trailer *Additional Inspection Procedure(s):* Wheels and drums must be disassembled on all electric brake systems. *Note*: Inspect the wheel-end (drum or disc) brake system components, on a trailer with electric brakes, according to the relevant requirements for drum or disc brake system as outlined in this section below.	Truck| | **Trailer|✓|** Bus| |
a) wheel magnet and actuator *Additional Inspection Procedure(s):* When the ***manufacturer*** of the brake system provides a test procedure for confirming the operation of the electromagnet used to actuate the brake, the test procedure must be conducted as part of the inspection.	a) any part is broken, ***damaged***, ***loose***, or ***missing*** magnet is ***inoperative*** or seized
b) wiring	b) shorted, insulation is cracked or peeled improperly spliced or connected not secured at least every 1800 mm
c) break-away device *Note*: A break-away device is not required in all jurisdictions. Inspect according to the ***applicable requirements.*** *Additional Inspection Procedure(s):* When a break-away device is present, it must be inspected according to the service instructions provided by the ***manufacturer*** and it must be functional.	c) ***missing*** from a trailer required to have a break-away device ***damaged*** or ***inoperative***

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
d) battery and controller *Additional Inspection Procedure(s):* Test the battery and controller according to the service instructions provided by the ***manufacturer***.	d) ***damaged*** or fails to ***operate as intended***
	Hazardous Condition(s) **i. brakes are *inoperative* or fail to *operate as intended*** **ii. required break-away device is *inoperative* or *missing***
11. Brake System Indicator Lamps	**Truck|✓|** Trailer| | **Bus|✓|**
a) operation *Additional Inspection Procedure(s):* Confirm the location and labeling of brake indicator lamps according to ***manufacturer*** service instructions. Check operation of brake indicator lamps according to ***manufacturer*** service instructions. When no ***manufacturer*** service instructions are available, begin with engine stopped, then turn ignition on. Lamps must turn on when ignition is first turned on. Lamps may go out after 2 – 3 seconds or may stay on until the engine is started. *Note:* Some indicator lamps may stay on, after a repair or system malfunction, until vehicle speed reaches 8 – 16 km/h.	a) ***missing***, not red or amber in colour does not operate according to ***manufacturer*** service instructions indicates a brake system malfunction or defect
	Hazardous Condition(s) **i. any brake indicator is *inoperative* or fails to *operate as intended*** **ii. an active brake failure is indicated**
12. Drum Brake System Components *Additional Inspection Procedure(s):* When an inspection reveals evidence of a defect or abnormal condition, drum disassembly is mandatory. Refer to the instructions in Section 3 when an inspection reveals no evidence of a defect or abnormal condition. The instructions indicate when disassembly of wheel(s) and drum(s) is optional, and what measurements are required to be taken and recorded.	**Truck|✓| Trailer|✓| Bus|✓|**

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
a) brake operation	a) a required brake is ***missing*** a brake is ***inoperative***
b) brake shoe lining condition (service brakes) *Note*: Cracks in the surface of the lining, surface erosion and minor spalling of the contact face of the lining are normal. Also inspect lining for damage caused by "rust-jacking". This includes lining material cracking, lifting or separating from backing metal, due to rust build- up. When the lining protrudes outside of the brake drum, drum removal is necessary to obtain lining thickness.	b) a crack extending partially through, or completely through the lining from the friction surface to the metal backing, passing from any rivet hole to the edge a crack in the edge of the lining that is wider than 1 mm or longer than 38 mm a piece of the lining is broken off exposing a rivet lining is distorted or separating from shoe, (e.g.: an object 1 mm thick can be inserted more than 10 mm between the lining and the backing metal) lining is contaminated by brake fluid, oil or grease (Also see section 9 item 5 for wheel seal leaks) lining protrudes outside of drum more than 3 mm lining or any lining fastener is ***loose*** - shim is used between lining and shoe shoe or lining is installed incorrectly (such as primary and secondary shoes reversed)



Examples of Brake Shoe Lining Pass and Reject Conditions:

Reject condition 1 – a partial crack in the lining, extending from a rivet hole to the edge

Reject condition 2 – a crack completely through the lining, extending from a rivet hole to the edge

Reject condition 3 – a crack in the edge of the lining wider than 1 mm

Reject condition 4 – a crack in the edge of the lining longer than 38 mm

Reject condition 5 – a piece of the lining is broken off exposing a rivet

Reject condition 6 – lining is distorted or separating from shoe

Pass condition 7 – minor crack or spalling of the lining material

Pass condition 8 – crack in edge of lining shorter than 38 mm

Pass condition 9 – crack in edge of lining less than 1 mm wide

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
c) brake shoe lining thickness *Additional Inspection Procedure(s):* Lining thickness must be measured at each inspection and the measurement must be recorded on the inspection report. *Note*: For minimum allowable thickness, lining measurements are taken at the thinnest point of the lining. For the purposes of recording lining thickness on the inspection report, lining thickness measurements are taken at the edge of the lining, near the centre of the brake shoe. The measurement must be taken of the thinner brake shoe lining, when there is a difference in thickness.	c) bonded brake shoe lining thickness is less than 2 mm at any point bolted or riveted brake shoe lining thickness is less than 3 mm at any point *2 mm = 0.08 in., 3 mm = 0.12 in.*
d) brake drum condition *Note:* Heat checks and some surface cracks on the friction surface are normal. A heat check has a width less than 0.5 mm and a depth less than 0.5 mm. A surface crack is at least 0.5 mm wide and 0.5 mm deep. Any surface crack, groove or worn area that is deeper than the drum wear limit is a structural weakness.	d) surface crack longer than 75% of the width of the friction surface surface crack within 25 mm of the open edge surface crack, groove or worn area that is a structural weakness external crack friction surface is ***abnormally worn***, or is hardened and blackened due to overheating ("martensite") friction surface is contaminated by grease or oil (Also see section 9 item 5 for wheel seal leaks)
e) brake drum diameter (wear) *Additional Inspection Procedure(s):* Brake drum diameter must be measured unless an exemption applies, and the measurement must be recorded on the inspection report. See Introduction to Section 3 for details and exceptions. *Note*: Drum diameter measurements must be taken using a suitable tool and with the level of accuracy defined by the measurement tolerance.	**e) measured drum diameter exceeds limit indicated on the brake drum, *OEM standard* or *industry standard*, or if limit is not available:** for nominal drum size of 350 mm (14 in.) or less: 2.3 mm more than original drum diameter for nominal drum size greater than 350 mm (14 in.): 3.0 mm more than original drum diameter *2.3 mm = 0.09 in.* *3.0 mm = 0.12 in.*
f) self-adjuster mechanism	f) ***abnormally worn***, incorrect thread direction, ***inoperative***, ***missing*** or seized

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
g) anchor pin and return spring	g) ***abnormally worn***, bent, broken, ***loose*** or ***missing*** spring stretched
h) backing plate	h) bent, ***damaged*** or ***loose*** shoe contact area is grooved or worn in a manner that restricts free movement of shoes
i) axle and spindle	i) cracked
j) wheel cylinder	j) ***damaged***, ***inoperative*** or seized, ***loose*** or ***insecure*** mounting ***level 2 leak*** of brake fluid dust seal is cracked, ***damaged***, deteriorated, ***missing***, or split
k) wheel seal	k) ***level 2 leak*** of bearing lubricant
	Hazardous Condition(s) **i. any part is binding, broken, *missing*, seized, or mounted incorrectly** **ii. a brake drum is in a condition where an imminent failure appears likely** **iii. *level 2 leak* of brake fluid at wheel cylinder** **iv. a brake is *inoperative*** **v. brake lining thickness is less than 2 mm** **vi. a piece of the lining is broken off exposing a rivet or bolt** **vii. a crack in the edge of the lining wider than 1 mm** **viii. a crack in the edge of the lining longer than 38 mm** **ix. broken or *missing* return spring, anchor pin, or spider** **x. brake lining or brake drum friction surface is contaminated by brake fluid, grease or oil** ***Note:* Also see section 9, item 5 for wheel seal leaks**

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
13. Disc Brake System Components *Additional Inspection Procedure(s):* When an inspection reveals evidence of a defect or abnormal condition, wheel disassembly is mandatory.	**Truck|✓|** **Trailer|✓|** **Bus|✓|**
Refer to the instructions in Section 3 and ***manufacturer*** service instructions when an inspection reveals no evidence of a defect or abnormal condition. The instructions indicate when disassembly of wheel(s) is optional and what measurements are required to be taken and recorded.	
a) brake operation	a) a required brake is ***missing*** a brake is ***inoperative***
b) disc (rotor) condition *Note:* Heat checks and some surface cracks on the friction surface are normal. A heat check has a width less than 0.5 mm and a depth less than 1 mm. A surface crack is at least 0.5 mm wide and 1 mm deep. *Note*: Lateral run-out and parallelism only need to be checked only where there is evidence of a problem.	b) section is broken off or ***missing*** crack extends from the friction surface through to the cooling vent any surface crack is longer than 75% of the radial width, within the friction surface any surface crack extends to an outer edge groove or pitted area in rotor that reduces rotor thickness below minimum allowable value contact pattern of the pad on solid rotor material (i.e.: not rusted) is less than 75% of the radial width, around the entire rotor, on one side lateral run-out or out-of-parallelism exceeds 0.3 mm friction surface of the rotor is contaminated by brake fluid, grease or oil (Also see section 9 item 5 for wheel seal leaks) 0.3 mm = 0.01 in.
c) disc (rotor) thickness *Additional Inspection Procedure(s):* Disc (rotor) thickness must be measured. Measurements must be recorded on inspection report.	c) thickness at any point across the friction surface is less than the minimum indicated on the brake rotor, ***OEM standard*** or ***industry standard***, if limit is not available: less than 39.0 mm (+/- 0.05 mm)
d) caliper	d) any part is binding, broken, ***missing,*** seized or mounted incorrectly or inferior attaching bolt is used slide pin/slider or pad slider is binding, ***damaged***, seized, mounted incorrectly, or not equivalent to ***OEM standard*** caliper movement within the anchor plate exceeds ***manufacturer*** specification, guide is welded or repaired in a way that does not meet ***OEM standard*** ***level 2 leak*** of brake fluid pad retainer is bent, ***damaged***, ***insecure*** or ***missing*** boot or bellows is cracked or deteriorated, ***damaged***, or ***missing***

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
e) anchor plate	e) ***loose*** or bolt is ***missing***
f) pad condition	f) broken, cracked, ***damaged***, or ***abnormally worn*** friction material is contaminated by brake fluid, oil or grease (Also see section 9 item 5 for wheel seal leaks) friction material ***loose*** on pad, pad is ***missing***, or pad is installed incorrectly
g) pad (friction material) thickness *Additional Inspection Procedure(s):* Pad (friction material) thickness of both inboard and outboard pad must be measured and measurement of the thinnest pad must be recorded on the inspection report. *Note*: Pad (friction material) thickness can be determined by measuring the friction material itself or by measuring the combined thickness of the friction material and pad backing plate, then deducting the thickness of the backing plate. Record the thickness of the friction material only.	g) Pad (measured friction material) thickness is less than ***manufacturer*** specification, or ***industry standard***, or if limit is not available: • bonded friction material thickness is less than 3 mm • riveted friction material thickness is less than 5 mm • difference between inboard and outboard friction material thickness is greater than ***OEM standard*** or ***industry standard***, or if limit is not available: difference is greater than 3 mm *3 mm = 0.12 in., 5 mm = 0.20 in.*
h) clearance between pads and rotor (caliper adjustment)	h) does not meet ***manufacturer***'s specifications
	Hazardous Condition(s) **i. any part is binding, broken, *missing*, seized or mounted incorrectly** **ii. a rotor (disc) friction surface shows metal to metal contact with brake pad or severe rusting** **iii. a rotor (disc) has a crack that extends to the hub or through to the vented section** **iv. caliper movement within the anchor plate exceeds 3 mm** **v. any brake component is in a condition where an imminent failure appears likely** **vi. a brake is *inoperative*** **vii. brake pad friction material is worn to less than 2 mm** **viii. friction material of the pad or friction surface of the rotor is contaminated by brake fluid, grease or oil** ***Note:* Also see section 9 item 5 for wheel seal leaks.**

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
14. Mechanical Parking Brake	**Truck|✓|** Trailer| | **Bus|✓|**
a) operation *Additional Inspection Procedure(s):* Refer to manufacturer service instructions for test procedure. When such instruction is not available, test as described below. With a manual transmission – Apply the parking brakes and place the transmission in the second or third lowest gear. Engage the clutch slowly without applying the throttle. Vehicle may rock and shake, but it should not roll, and engine may stall. With an automatic transmission – Apply the parking brake and place the transmission in forward gear. Raise engine speed to no more than 800 rpm. Vehicle may shift due to torqueing of the suspension, but it should not roll forward or backward. *Note:* Some vehicles with automatic transmissions use an interlock that prevents a vehicle from being placed into gear when the parking brake is applied. Inspect such a vehicle according to the test method provided by the manufacturer.	a) parking brake does not hold as required
b) indicator lamp	b) parking brake indicator lamp does not activate when control is placed in the applied position
c) control	c) binds, broken or ***missing*** ***inoperative*** or fails to lock
d) cable and/or linkage	d) broken, frayed, improperly secured, ***missing***, seized or equalizer is ***missing***
e) adjustment	e) any part of the system is improperly adjusted
f) friction material *Additional Inspection Procedure(s):* Inspecting the condition of the parking brake friction material is necessary in cases when shoes are visually accessible, or the brake is disassembled.	f) **thickness is less than specified by the *OEM*, or when not specified is less than:** • 3 mm on riveted lining • 2 mm on bonded lining *2 mm = 0.08 in., 3 mm = 0.12 in.*
	Hazardous Condition(s) **i. vehicle rolls forward or backward with little or no resistance when parking brake is applied**

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
15. Spring-Applied Air-Released (SAAR) Parking Brake *Note:* A spring-applied air-released (SAAR) Parking Brake System uses a mechanical spring to apply the parking brake. Compressed air is used to compress the spring and release the parking brake. The parking brake control is similar to the valve used in an air brake system.	**Truck**|✓| Trailer| | **Bus**|✓|
a) operation *Additional Inspection Procedure(s):* Refer to manufacturer service instructions for test procedure. When such instruction is not available, test as described below. With a manual transmission – Apply the parking brakes and place the transmission in the second or third lowest gear. Engage the clutch slowly without applying the throttle. Vehicle may rock and shake, but it should not roll, and engine may stall. With an automatic transmission – Apply the parking brake and place the transmission in forward gear. Raise engine speed to no more than 800 rpm. Vehicle may shift due to torqueing of the suspension, but it should not roll forward or backward. *Note:* Some vehicles with automatic transmissions use an interlock that prevents a vehicle from being placed into gear when the parking brake is applied. Inspect such a vehicle according to the test method provided by the manufacturer. *Note:* SAAR systems include a low air pressure warning and air pressure gauge. The air system components are not subject to ***CMVSS*** 121 and must be inspected according to ***manufacturer*** service instructions.	a) parking brake does not hold as required

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
b) indicator lamp	b) parking brake indicator lamp does not activate when control is placed in the applied position
c) air line, connection and fitting	c) fitting, line or repair method does not meet ***OEM standard*** tubing or hose is defective as defined in the chart on page 55 fitting or connection is broken, cracked, flattened or leaking ***damaged*** in a way (such as: melting, flattening, deformation or kinking) that can restrict air flow
d) air tank	d) tank does not meet ***OEM standard*** tank is ***damaged***, ***loose***, welded other than factory weld, or corroded to the extent that structural integrity is compromised
e) leakage *Additional Inspection Procedure(s):* Monitor system for leaks.	e) air leak at any location
f) friction material *Additional Inspection Procedure(s):* Inspecting the condition of the parking brake friction material is necessary in cases when shoes are visually accessible, or the brake is disassembled.	f) **thickness is less than specified by the *OEM*, or when not specified is less than:** • 3 mm on riveted lining • 2 mm on bonded lining *2 mm = 0.08 in., 3 mm = 0.12 in.*
	Hazardous Condition(s) **i. brake is *inoperative* or fails to *operate as intended*** **ii. vehicle rolls forward or backward with little or no resistance when parking brake is applied**
16. Spring-Applied Hydraulic-Released (SAHR) Parking Brake *Note:* A spring-applied hydraulic-released (SAHR) Parking Brake System uses a mechanical spring to apply the parking brake. Pressurized hydraulic fluid is used to compress the spring and release the parking brake.	**Truck|✓|** Trailer| | **Bus|✓|**

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
a) operation • refer to manufacturer service instructions for test procedure. When such instruction is not available, test as described below. • a manual transmission – Apply the parking brakes and place the transmission in the second or third lowest gear. Engage the clutch slowly without applying the throttle. Vehicle may rock and shake, but it should not roll, and engine may stall. • an automatic transmission – Apply the parking brake and place the transmission in forward gear. Raise engine speed to no more than 8 00 rpm. Vehicle may shift due to torqueing of the suspension, but it should not roll forward or backward. *Note:* Some vehicles with automatic transmissions use an interlock that prevents a vehicle from being placed into gear when the parking brake is applied. Inspect such a vehicle according to the test method provided by the manufacturer.	a) parking brake does not hold as required
b) indicator lamp	b) parking brake indicator lamp does not activate when control is placed in the applied position
c) line and hose *Additional Inspection Procedure(s):* Check with engine stopped and with engine running.	c) ***level 2 leak*** of hydraulic fluid broken, chafed, collapsed, cracked, leaking, ***loose*** or ***missing*** ***insecure*** mounting or incorrect type
d) release canister	d) ***damaged***, ***inoperative***, ***insecure***, or ***loose*** ***level 2 leak*** of hydraulic fluid
e) friction material *Additional Inspection Procedure(s):* Inspecting the condition of the parking brake friction material is necessary in cases when shoes are visually accessible, or the brake is disassembled.	e) **thickness is less than specified by the *OEM*, or when not specified is less than:** • 3 mm on riveted lining • 2 mm on bonded lining *2 mm = 0.08 in., 3 mm = 0.12 in.*
	Hazardous Condition(s) **i. brake is *inoperative* or fails to *operate as intended*** **ii. vehicle rolls forward or backward with little or no resistance when parking brake is applied**

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
17. Anti-Lock Brake System (ABS) on a Truck or Bus	**Truck|✓|** Trailer| | **Bus|✓|**
Note: Every truck or bus manufactured on or after April 1, 2000, with a GVW above 4,536 kg must be equipped with ABS. Every vehicle equipped with ABS that was not mandatory for the vehicle when it was manufactured must have ABS in good working order.	
a) indicator lamp *Additional Inspection Procedure(s):* Cycle the ignition off and on while monitoring the ABS indicator lamp.	a) ***inoperative*** or ***missing*** fails to turn on during bulb-check cycle when ignition is turned on indicates the presence of an active malfunction by staying on after the bulb-check cycle any visual evidence that the system has been tampered with or defeated
b) electronic control unit (ECU)	b) ***insecure*** mounting, ***missing*** or connector corroded
c) wiring *Additional Inspection Procedure(s):* Visually inspect accessible portions of the wiring. Inspect all repairs and damaged areas.	c) ***insecure*** mounting, ***missing***, or connector corroded, conductor is exposed due to damage, improper repair or other condition of wire connection or repair does not meet ***OEM standard***
d) ABS modulating valve	d) ***missing***, ***insecure*** mounting to ECU, ***level 1 leak*** of brake fluid or abnormal corrosion
e) wheel speed sensor *Note*: Different configurations of sensors and modulators are permitted by ***CMVSS***. Be sure to confirm the ***OEM*** configuration of the ABS before rejecting a vehicle due to missing wheel speed sensors.	e) ***inoperative***, ***insecure*** mounting, ***missing***, connectors corroded
	Hazardous Condition(s) **i. any malfunction of the ABS system that prevents normal brake operation**
18. Stability Control System	**Truck|✓|** Trailer| | **Bus|✓|**
a) indicator lamp/system status *Additional Inspection Procedure(s):* Check for indication of any fault or malfunction by cycling the ignition off and on while monitoring the indicator lamp.	a) lamp fails to illuminate during bulb-check or lamp remains illuminated fault or malfunction is indicated any visual evidence that the system has been tampered with or defeated

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
19. Brake Performance *Optional Additional Inspection Procedure(s):* These test methods can be used when one of the following types of performance-based brake tester (PBBT) is available. Test equipment must be calibrated and used according to ***manufacturer*** instructions. Testing a brake with non-burnished friction material may produce inconsistent test results.	**Truck|✓|** **Trailer|✓|** **Bus|✓|** *Note*: Rated wheel weight = one-half of GAWR.
a) service brake force - using a roller-type performance- based brake tester (PBBT) *Optional Additional Inspection Procedure(s):* Determine the maximum service brake force at each wheel by slowly applying the service brake pedal and increasing the pedal force until the tester terminates the test, or brake force reaches its maximum value.	a) service brake fails to lock the wheel and the maximum service brake force is less than 40% of the rated wheel weight service brake force on one side of the axle is less than 70% of the service brake force on the other side, at the point in time just prior to first wheel lockup, or test termination, whichever occurs first
b) rolling resistance force - using a roller-type performance-based brake tester (PBBT) *Optional Additional Inspection Procedure(s):* Determine average rolling resistance force of each wheel, with the brakes fully released, for one full revolution of the wheel. Discount the initial spike at start-up of the rolls.	b) average rolling resistance force of a wheel is greater than 6% of the weight of the wheel imparted on the test device
c) required brake force or stopping distance - using a decelerometer *Optional Additional Inspection Procedure(s):* Test vehicle stopping ability in a suitable area following the instructions provided by the manufacturer/supplier of the test device.	c) deceleration is below the requirement of the relevant jurisdiction balance of brake force between left and right side fails to comply with the requirement of the relevant jurisdiction *Note*: Brake force balance (left and right) cannot be measured with all types of decelerometers.

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

Section 3A – Air Brakes

ITEM AND METHOD OF INSPECTION:	REJECT IF:
Note: **Inspect Air System at Normal Operating Pressure** - Unless noted otherwise below, all operational checks of air brake system components are conducted with the system at its normal operating pressure (between compressor cut-in and cut-out values). ***OEM*** **Vehicle Gauge Accuracy** - The gauges on a vehicle's instrument panel showing pressure in the airbrake system are required to be accurate within plus or minus 7% of the compressor cut-out pressure. **Use Accurate Test Gauge** - When there is any doubt about any test or inspection results obtained, use of a gauge accurate to +/- 2% to confirm pressure values is recommended.	
1. Air Compressor	**Truck|✓|** Trailer| | **Bus|✓|**
a) operation	a) ***inoperative***
b) belt	*Note:* Inspect drive belt according to Section 1. Power Train, Item 10. Engine or Accessory Drive Belt.
c) mounting	c) broken, cracked, ***loose*** or bolts ***missing***
d) air filter	d) contaminated sufficiently to restrict air flow, ***missing***
e) pulley	e) bent, broken, cracked, ***damaged***, ***loose***, out of alignment
	Hazardous Condition(s) **i. belt or pulley is in a condition where an imminent failure appears likely** **ii. compressor mounting or mounting bolt is broken, cracked, *insecure*, or *loose*, or compressor is shifted from its normal position**
2. Air Supply System *Additional Inspection Procedure(s):* Test either "a) air pressure build up time" or "b) air pressure build-up/loss rate" as described below.	**Truck|✓|** Trailer| | **Bus|✓|**
a) air pressure build-up time	a) exceeds two (2) minutes

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
Optional Inspection Procedure(s): With spring brakes released and wheels chocked, reduce system pressure to 552 kPa (80 psi) or less. Run engine at 600-800 rpm and observe the time needed for air pressure to rise from 85 to 100 psi.	
b) air pressure build-up/loss rate *Optional Inspection Procedure(s):* With air pressure at 552 kPa (80 psi) or less, spring brakes released and service brakes fully applied and released, allow the engine to run at idle speed and observe the air pressure gauge to confirm air pressure rises.	b) air compressor is unable to cause pressure to rise during test
c) governor *Additional Inspection Procedure(s):* Determine the governor cut-in and cut-out pressure values.	c) ***inoperative***, ***missing*** or ***loose*** air leak evident at governor or connecting air lines governor cut-in pressure is below 690 kPa (100 psi) governor cut-out pressure is below 828 kPa (120 psi) or above 1000 kPa (145 psi)
d) low pressure warning *Additional Inspection Procedure(s):* Test the operation of the low air pressure warning device(s). *Note*: A visible warning device is mandatory (lamp or wig- wag). An audible warning device (buzzer or alarm) is optional, but must remain functional when ***OEM*** installed.	d) visible warning is ***inoperative*** or ***missing*** visible warning is not clearly identified, lamp lens is ***missing*** audible warning is ***inoperative*** or ***missing*** warning device fails to activate or operate continuously when air pressure is lowered below 414 kPa (60 psi)
e) air pressure gauge	e) gauge is ***inoperative*** or has inaccurate reading
f) pressure drop/reserve *Additional Inspection Procedure(s):* Observe air pressure gauges while making a full service brake application.	f) pressure drops more than 138 kPa (20 psi) when a full service brake application is made
g) air leakage *Additional Inspection Procedure(s):* Monitor the system for leaks during the inspection by listening for leaks.	g) pressure drops more than 7 kPa (1 psi) per minute detectable leak at any location

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
	Hazardous Condition(s) **i. brake system air pressure cannot be maintained between 560 and 620 kPa (80 and 90 psi), with service brakes applied or released and engine idling, during air pressure build-up/loss rate test** **ii. air pressure drops more than 20 kPa (3 psi) per minute during air leakage test** **iii. *inoperative* or inaccurate air pressure gauge** **iv. low air pressure warning is *inoperative* or fails to operate continuously when ignition is on and air pressure is below 380 kPa (55 psi)**
3. Air System Leakage on a Trailer	Truck| | **Trailer|✓|** Bus| |
a) air leakage *Additional Inspection Procedure(s):* Monitor the system for leaks during the inspection by listening for leaks.	a) detectable leak at any location
b) air loss rate *Additional Inspection Procedure(s):* Step 1. Fill the supply circuit to normal operating pressure. Shut off the air supply and seal the circuit while monitoring air pressure. Step 2. While keeping the supply circuit filled, also fill the service circuit to the same pressure. Shut off the air supply and seal the circuits while monitoring air pressure. Step 3. Supply air to all other air systems and/or accessory devices. Shut off the air supply and seal the circuits while monitoring air pressure.	b) trailer is attached to a towing vehicle and total leakage exceeds 28 kPa (4 psi) in one minute trailer is connected to non-vehicle air source and total leakage exceeds 20 kPa (3 psi) in one minute
	Hazardous Condition(s) **i. air pressure drops more than 40 kPa +/- 5 kPa (6 psi) per minute during air leakage test**
4. Air Tank	**Truck|✓| Trailer|✓| Bus|✓|**
a) contamination *Additional Inspection Procedure(s):* Open the drain valve on each tank and drain all fluid.	a) the quantity of oil or sludge, (i.e.: oil and water mixture) expelled from an air tank exceeds manufacturer service recommendations **the quantity of water expelled from an air tank exceeds ***manufacturer*** service recommendations
	Note: **Record excessive water on the inspection report, but do not reject the vehicle for this condition alone.

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
b) air tank condition	b) corroded or ***damaged*** to the extent that structural integrity is compromised, leaking or ***loose*** welding other than original factory weld on air tank tank does not meet ***OEM standard***
c) air tank bracket and/or strap	c) broken, cracked or ***missing*** does not meet ***OEM standard***
d) air tank drain valve	d) ***inoperative***, leaking, ***loose*** or ***missing*** does not meet ***OEM standard***
e) moisture ejector	e) ***inoperative***, leaking
	Hazardous Condition(s) **i. air tank is *loose*, allowing movement of more than 25 mm in any direction**
5. Air Tank Check Valves *Additional Inspection Procedure(s):* Test as outlined below, the operation of air tank check valves on each vehicle using a supply (wet) tank and primary/secondary tank arrangement. Inspect a vehicle using an integral-type air dryer (and having no supply {wet} tank) according to ***manufacturer*** service instructions. *Note*: A "***CMVSS*** '121'system" is one with a dual circuit brake system generally manufactured after 1976. A vehicle with single circuit brake system is to be inspected according to ***manufacturer*** service instructions.	**Truck|✓|** Trailer| | **Bus|✓|**
Additional Inspection Procedure(s): For a vehicle with a "CMVSS '121'system". This inspection is to ensure proper function of the check valves which isolate the circuits and provide service and emergency braking in the case of a failure in one of the circuits. Inspect for proper operation as follows: **Step 1 –** Begin with air system at normal operating pressure. Open the drain valve on the supply (wet) tank.	

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
a) one-way check valve (between supply (wet) tank and service tanks)	a) air pressure drops in either the primary or secondary air tank
Step 2 - Open the drain valve on either the primary or secondary service tank.	
b) two-way check valve (between service tanks and brake system control valves)	b) air pressure drops on both the primary and secondary air tanks
Step 3 - Close all drain valves and increase air system to normal operating pressure. Open the drain valve on the remaining service tank (primary or secondary) that was not drained in Step 2.	
c) two-way check valve (between service tanks and brake system control valves)	c) air pressure drops on both the primary and secondary air tanks
	Hazardous Condition(s) **i. air tank check-valve is *inoperative* or *missing***
6. Brake Pedal/Actuator	**Truck|✓|** Trailer| | **Bus|✓|**
a) pedal	a) broken, cracked, ***loose***, ***missing*** or ***abnormally worn*** welded or repaired in a way that does not meet ***OEM standard***
b) mount	b) deteriorated or weakened by corrosion, or ***insecure***
c) anti-slip feature	c) ineffective, ***loose*** or ***missing***
	Hazardous Condition(s) **ii. pedal is *loose* or *missing*, or an imminent failure appears likely**
7. Treadle Valve and Trailer Hand Valve	**Truck|✓|** Trailer| | **Bus|✓|**
a) operation *Additional Inspection Procedure(s):* Test the operation of the treadle valve and trailer hand valve by fully applying and then releasing the service brakes.	a) ***inoperative*** pivot or plunger is binding or seized (fails to fully release brakes)
b) condition	b) cracked, ***insecure*** or ***loose*** mounting, mounting bracket or mounting fastener ***damaged***, ***missing*** or stripped

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
8. Brake Valves & Controls	**Truck|✓|** Trailer|✓| **Bus|✓|**
a) operation *Additional Inspection Procedure(s):* Test the operation of all valves and controls.	a) any valve is ***inoperative***
b) condition *Additional Inspection Procedure(s):* Check the condition and security of all air brake system components.	b) broken, ***damaged***, repaired in a way that does not meet OEM standard ***loose***, ***insecure*** mounting, mounting bracket or mounting fastener ***damaged***, stripped or ***missing***
c) quick release valve, relay valve *Note:* It is important that any repair or replacement of a brake valve retains brake functionality according to original ***OEM*** design. *Additional Inspection Procedure(s):* Apply and release the service brakes and check system operation. Check for signs of improper installation or replacement of the wrong type of valve. *Note:* It is important that the inspector be familiar with the design and operating requirements of the vehicle being inspected. This is a visual inspection only.	c) ***inoperative***, air is not released quickly through exhaust port when brakes are released air leaks from valve back into the system an improper valve is visually identified
d) air system or accessory device, (e.g.: suspension, tire inflation system, pintle hook damper, tail gate, landing gear, tarp system, etc.) *Note:* The pressure protection valve must be installed so that it prevents a failure in such a system or accessory from depleting all of the pressure from the brake system.	d) any system or accessory device that draws air from the air brake system is not equipped with a functioning pressure protection valve
	Hazardous Condition(s) **i. quick release valve or relay valve is *inoperative* or *missing***

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
9. Proportioning, Inversion or Modulating Valve	**Truck|✓|** Trailer| | **Bus|✓|**
a) type of limiting or proportioning valve	a) improper valve is used for vehicle type *Note*: For example: a tractor converted to a straight truck or vice versa, is not properly configured for current vehicle use.
b) operation	b) ***inoperative*** or ***missing***
c) mounting	c) broken bracket, ***insecure*** or ***loose***
	Hazardous Condition(s) **i. improper valve is used for vehicle type, (e.g.: bobtail system is used on a straight truck** **ii. required valve is *inoperative* or *missing***
10. Towing Vehicle (Tractor) Protection System	**Truck|✓|** Trailer| | **Bus|✓|**
a) towing vehicle (tractor) protection valve operation *Additional Inspection Procedure(s):* Ensure that the trailer supply valve is closed (pulled out). Place the trailer service line where it can be observed. Make a service brake application and inspect for air exhausting out of the trailer service line.	a) air flows out of the trailer service line during the test
b) trailer supply valve operation *Additional Inspection Procedure(s):* **Stage 1** - Connect trailer supply line to suitable closure, open (push in) the trailer supply valve and make a service brake application. Air will exhaust rapidly out of the trailer service line and air pressure will drop. Monitor the air pressure gauges and note the pressure when the trailer supply valve automatically closes. **Stage 2** - Increase air system to normal operating pressure, open (push in) the trailer supply valve and allow air to vent quickly from trailer supply line by removing it from the closure. Monitor the air pressure gauges and note the pressure when the trailer supply valve automatically closes.	b) both air pressure gauges are not between 140 and 300 kPa (20 and 45 psi) when the trailer supply valve closes during Stage 1 *Note*: In a case where the trailer supply valve closes with pressure above 300 kPa (45 psi), record it on the inspection report, but do not reject the vehicle for this condition alone. the trailer supply valve fails to close automatically during Stage 2 *Note:* Most valves will close with only a small drop in pressure during Stage 2. Others may allow pressure to drop to around 414 kPa (60 psi) before closing. Check ***manufacturer*** specifications if pressure drops below 414 kPa 60 psi.
	Hazardous Condition(s) **i. towing vehicle (tractor) protection system is *missing* or fails to *operate as intended***

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
11. Parking Brake and Emergency Application on Truck or Bus	**Truck|✓|** Trailer| | **Bus|✓|**
a) parking brake application *Additional Inspection Procedure(s):* Actuate the parking brake control as necessary. Check parking brake function at each wheel.	a) brake does not apply on any wheel required to have parking brake
b) parking brake release	b) parking brake releases slowly, hangs or drags
c) manual application *Additional Inspection Procedure(s):* Apply the parking (spring) brakes by closing the parking (spring) brake control valve.	c) parking (spring) brakes do not immediately apply automatically
	Hazardous Condition(s) **i. parking brake does not *operate as intended***
12. Parking Brake and Emergency Application on Trailer	Truck| | **Trailer|✓|** Bus| |
a) parking brake application *Additional Inspection Procedure(s):* Actuate the parking brake control as required. Check parking brake function at each wheel.	a) brake does not apply on any wheel required to have parking brake
b) parking brake release	b) parking brake releases slowly, hangs or drags
c) emergency application *Additional Inspection Procedure(s):* Actuate emergency application of the parking brakes by exhausting the trailer supply/emergency line, using the trailer supply valve, by removing the gladhand, or by using a suitable test device.	c) parking brakes do not immediately apply automatically time required for air pressure in the chambers to fall to atmospheric pressure is more than 3 seconds *Note:* For this test, atmospheric pressure is considered 21 kPa (3 psi) or less.
	Hazardous Condition(s) **i. parking brake does not *operate as intended***

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

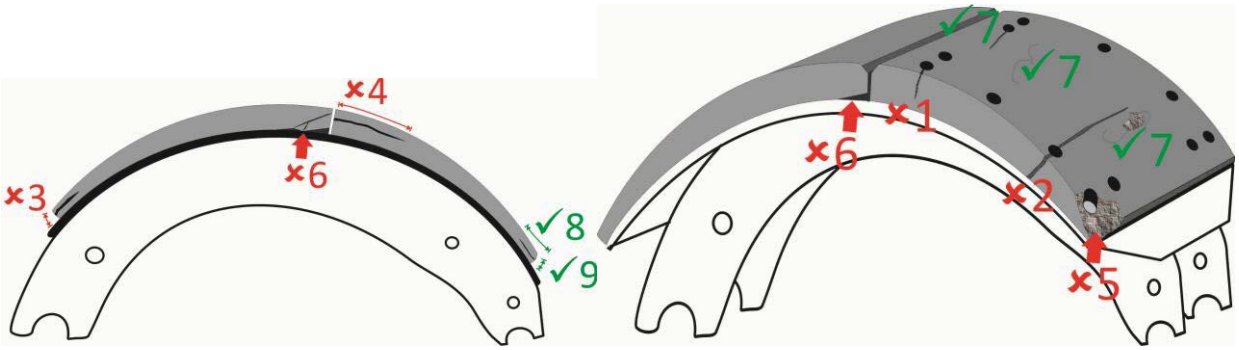
ITEM AND METHOD OF INSPECTION:	REJECT IF:
13. Air System Components	**Truck|✓| Trailer|✓| Bus|✓|**
a) gladhand	a) corroded or ***insecure*** mounting, cracked or ***damaged*** seal ***damaged*** or ***missing***
b) gladhand screen *Note*: Gladhand screens are required on certain trailers in certain jurisdictions. Inspect according to the ***applicable requirements***.	b) on a trailer, required screens are ***missing*** plugged or ruptured
c) air line, connection and fitting *Note:* Improper installation, repairs and modifications can negatively affect brake operation, and particularly brake timing. Improper use of fittings, additional elbows, and replacing an air line with one that is too small, are examples of improper procedures. *Additional Inspection Procedure(s):* Check for improper installations, modifications or repairs.	c) fitting, line, repair method, installation or modification does not meet ***industry standard*** or ***OEM standard*** tubing or hose is defective as defined in the chart on page 55 fitting or connection is broken, cracked, flattened or leaking ***damaged*** in a way (such as: melting, flattening, deformation or kinking) that can restrict air flow
d) air system or accessory device, (e.g. suspension, tire inflation system, pintle hook damper, tail gate, landing gear, tarp system) *Additional Inspection Procedure(s):* Visually inspect for presence of correct type of valve.	d) any system or accessory device that draws air from the air brake system is not equipped with a functioning pressure protection valve
e) leakage *Additional Inspection Procedure(s):* Monitor system for leaks.	e) an air leak at any location
	Hazardous Condition(s) **i. an air line bulges under pressure** **ii. air line modification or repair does not meet *industry standard* or *OEM standard*** **iii. air line has damage extending through the outer reinforcement ply** **iv. an inner layer of an air line is exposed due to abrasion or rubbing** **v. air leak at other than a proper connection** **vi. air line is *damaged* by heat, broken, or crimped in such a manner as to restrict airflow**

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
14. Brake Chamber	**Truck|✓| Trailer|✓| Bus|✓|**
a) brake chamber *Note*: Includes DD3 chamber on a bus.	a) improper type or size brake chamber is used corroded, cracked, ***damaged***, ***insecure*** mounting, ***loose***, ***missing***, or leaking drain hole is not directed downward or is plugged mixed long-stroke and standard stroke chambers on an axle mismatched chamber size on an axle piston return spring is broken or binding
b) spring brake chamber	b) park brake-apply spring is caged by caging bolt or made ***inoperative*** by other mechanical means chamber caging plate is misaligned or hung up preventing installation of caging bolt park brake-apply spring is broken
c) chamber mounting bracket	c) broken, cracked, deformed, ***loose*** or ***missing***
d) type DD3 chamber *Additional Inspection Procedure(s):* Apply the parking brake and deplete system pressure starting with the supply (wet) tank.	d) brake fails to remain fully applied at any wheel with Type DD3 chamber
	Hazardous Condition(s) **i. air leak at a chamber** **ii. caging plate in a chamber is out of position or 'hung up'** **iii. non-manufactured hole or crack in a chamber** **iv. *insecure*, *loose* or *missing* chamber** **v. mismatched chamber type or size on active or passive steer axle** **vi. improper type or size brake chamber is used on a steer axle**
15. Drum Brake System Components *Additional Inspection Procedure(s):* When an inspection reveals evidence of a defect or abnormal condition, disassembly of wheel(s) and drum(s) is mandatory. Refer to the instructions in Section 3 when an inspection reveals no evidence of a defect or abnormal condition. The instructions indicate when disassembly of wheel(s) and drum(s) is optional, and what measurements are required to be taken and recorded.	**Truck|✓| Trailer|✓| Bus|✓|**

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
a) brake operation	a) a required brake is ***missing*** a brake is ***inoperative***
b) brake shoe lining condition (service brakes) *Note*: Cracks in the surface of the lining, surface erosion and minor spalling of the contact face of the lining are normal. Also inspect lining for damage caused by "rust-jacking". This includes lining material cracking, lifting or separating from backing metal, due to rust build- up. When the lining protrudes outside of the brake drum, drum removal is necessary to obtain lining thickness.	b) a crack extending partially through, or completely through the lining from the friction surface to the metal backing, passing from any rivet hole to the edge a crack in the edge of the lining that is wider than 1 mm or longer than 38 mm a piece of the lining is broken off exposing a rivet or bolt lining is distorted or separating from shoe, (e.g.: an object 1 mm thick can be inserted more than 10 mm between the lining and the backing metal) lining is contaminated by oil or grease (Also see section 9 item 5 for wheel seal leaks) lining protrudes outside of drum more than 3 mm lining or any lining fastener is ***loose*** shim is used between lining and shoe shoe or lining is installed incorrectly (such as primary and secondary shoes reversed)



Examples of Brake Shoe Lining Pass and Reject Conditions:

Reject condition 1 – a partial crack in the lining, extending from a rivet hole to the edge

Reject condition 2 – a crack completely through the lining, extending from a rivet hole to the edge

Reject condition 3 – a crack in the edge of the lining wider than 1 mm

Reject condition 4 – a crack in the edge of the lining longer than 38 mm

Reject condition 5 – a piece of the lining is broken off exposing a rivet

Reject condition 6 – lining is distorted or separating from shoe

Pass condition 7 – minor crack or spalling of the lining material

Pass condition 8 – crack in edge of lining shorter than 38 mm

Pass condition 9 – crack in edge of lining less than 1 mm wide

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
c) brake shoe lining thickness *Additional Inspection Procedure(s):* Lining thickness must be measured at each inspection and the measurement must be recorded on the inspection report. *Note*: For minimum allowable thickness, lining measurements are taken at the thinnest point of the lining. For the purposes of recording lining thickness on the inspection report, lining thickness measurements are taken at the edge of the lining, near the centre of the brake shoe. The measurement must be taken of the thinner brake shoe lining, when there is a difference in thickness.	c) bonded or riveted continuous strip brake shoe lining thickness is less than 5 mm at any point bolted or riveted block type brake shoe lining thickness is less than 8 mm at any point 8 mm = 0.3 (5/16) in., 5 mm = 0.2 (3/16) in.
d) brake drum condition *Note:* Heat checks and some surface cracks on the friction surface are normal. A heat check has a width less than 0.5 mm and a depth less than 0.5 mm. A surface crack is at least 0.5 mm wide and 0.5 mm deep. Any surface crack, groove or worn area that is deeper than the drum wear limit is a structural weakness.	d) surface crack longer than 75% of the width of the friction surface surface crack within 25 mm of the open edge surface crack, groove or worn area that is a structural weakness external crack friction surface is ***abnormally worn***, or is hardened and blackened due to overheating ("martensite") friction surface is contaminated by grease or oil (Also see section 9 item 5 for wheel seal leaks)
e) brake drum diameter (wear) *Additional Inspection Procedure(s):* Brake drum diameter must be measured at most inspections and the measurement must be recorded on the inspection report. See Introduction to Section 3A for details and exceptions. *Note*: Drum diameter measurements must be taken using a suitable tool and with the level of accuracy defined by the measurement tolerance.	e) **measured drum diameter exceeds limit indicated on the brake drum, *OEM standard* or *industry* standard, or if limit is not available:** • for nominal drum size of 350 mm (14 in) or less: 2.3 mm more than original drum diameter • for nominal drum size greater than 350 mm (14 in): 3.0 mm more than original drum diameter 2.3 mm = 0.09 in., 3 mm = 0.12 in.

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
f) wheel seal	f) ***level 2 leak*** of bearing lubricant
g) return spring	g) ***missing***, broken or stretched (fails to hold both rollers against cam)
h) spider	h) bent, broken, ***loose***, welded or repaired in a way that does not meet ***OEM standard*** mounting bolt ***missing***
	Hazardous Condition(s) **i. any part is binding, broken, *missing*, seized, or mounted incorrectly** **ii. a brake drum is in a condition where an imminent failure appears likely** **iii. a brake is *inoperative*** **iv. bonded or riveted continuous strip brake shoe lining thickness is less than 5 mm at centre of shoe** **v. bolted or riveted block type brake shoe lining thickness is less than 7 mm, at centre of shoe** **vi. brake shoe lining is less than 1 mm at any point** **vii. a piece of the lining is broken off exposing a rivet or bolt** **viii. a crack in the edge of the lining wider than 1 mm** **ix. a crack in the edge of the lining longer than 38 mm** **x. broken or missing return spring, anchor pin, or spider** **xi. brake lining or drum friction surface is contaminated by grease or oil** ***Note:* Also see section 9 item 5 for wheel seal leaks** 5 mm = 0.2 (3/16) in., 7 mm = 0.25 in. (1/4) in.
16. S-Cam Drum Brake System *Note*: Also applies to T-Cam brake system.	**Truck|✓| Trailer|✓| Bus|✓|**
a) camshaft condition *Additional Inspection Procedure(s):* Check the condition and mounting of each brake camshaft, and check for movement in the bushings.	a) camshaft is bent, twisted, repaired by welding, incorrectly installed or incorrect type movement of camshaft in bushing exceeds 2.0 mm

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
b) camshaft mounting	b) mounting bracket broken or ***loose***
c) pushrod, clevis yoke, clevis pin and locking device *Note*: Brake pushrod stroke indicators are required by CMVSS 121 on vehicles manufactured on and after May 31, 1996. These indicators normally consist of markings on the brake chamber pushrod, but can also be mounted on, or adjacent to, the brake linkage. They must be capable of showing an over- stroke condition.	c) bent, binding, broken, cracked, ***missing***, welded or repaired in a way that does not meet ***OEM standard*** clevis yoke lock nut is ***loose*** linkage is misaligned to slack adjuster or brake chamber does not form correct angle with slack adjuster when brakes are applied brake stroke indicator is ***missing***
d) brake adjuster *Note*: Self-adjusting brake adjusters are required by ***CMVSS*** 121 on vehicles manufactured on and after May 31, 1996. They cannot be replaced with manual brake adjusters.	d) not equipped with self-adjuster as required adjuster is ***inoperative*** or improperly installed improper type or size brake adjuster is used any part is bent, broken or ***abnormally worn*** the self-locking sleeve on a manual slack adjuster is seized or fails to lock
e) slack adjuster effective length	e) the distance from the centre of a camshaft to the centre of the clevis pin is not the same on all brakes of an axle
f) brake shoe roller	f) flat spots, ***missing***, wrong size
g) brake shoe anchor pin	g) ***missing***, wear allows the lining to protrude beyond outside edge of brake drum
h) brake stroke *Additional Inspection Procedure(s):* Measure and record the applied push rod stroke of each brake with 620 to 690 kPa (90 to 100 psi) in the air tanks, the spring brakes released, the engine shut off and service brakes fully applied. *Note*: The stroke measurements of all brakes are to be recorded on the inspection report. When the stroke of a self-adjusting brake adjuster is found to be at or beyond the stroke limit, the brake requires repairs. A manual adjustment will not correct the problem.	h) stroke is at or beyond the limit of the brake chamber as shown in the chart below difference between stroke measurements is greater than 6 mm on an axle

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
	Hazardous Condition(s) **i. camshaft is incorrectly installed, incorrect type, or mounting is *insecure*** **ii. improper type or size camshaft roller is used** **iii. improper type or size brake adjuster is used on a steer axle** **iv. broken or missing cam roller, camshaft, pushrod, yoke, clevis pin, clevis pin retainer, (e.g., cotter pin),** **v. stroke of any brake is beyond the limit of the brake chamber as shown in the chart below**

Brake Stroke Limits for Clamp-Type Brake Chambers

Note:
Measurement tolerance is +/- 1 mm

Chamber Type (Size)	Stroke Limit (mm)	Stroke Limit (in.) +/- 1/32 in.
6	32 mm	1- 1/4 in.
9	35 mm	1 -3/8 in.
12	35 mm	1 -3/8 in.
12 LS	44 mm	1 -3/4 in.
16	44 mm	1- 3/4 in.
16 LS	51 mm	2 in.
20	44 mm	1-3/4 in.
20 LS	51 mm	2 in.
24	44 mm	1-3/4 in.
24 LS	51 mm	2 in.
30	51 mm	2 in.
30 LS	64 mm	2-1/2 in.
30 DD3	57 mm	2-1/4 in.
36	57 mm	2-1/4 in.

17. Brake Shoe Travel (Wedge Brakes)	**Truck|✓| Trailer|✓| Bus|✓|**
a) brake shoe movement *Additional Inspection Procedure(s):* Inspect wedge brakes according to item 15 above and then check brake operation and measure shoe movement. Brake shoe movement must be measured and measurements must be recorded on the inspection report.	a) brakes fail to operate, shoes do not move or shoe movement exceeds 2 mm

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
	Hazardous Condition(s) **i. shoe movement is greater than 2 mm** **ii. any wedge brake is *inoperative***
18. Disc Brake System Components *Additional Inspection Procedure(s):* When an inspection reveals evidence of a defect or abnormal condition, wheel disassembly is mandatory. Refer to the instructions in Section 3 and ***manufacturer*** service instructions when an inspection reveals no evidence of a defect or abnormal condition. The instructions indicate when disassembly of wheel(s) is optional and what measurements are required to be taken and recorded.	**Truck|✓|** **Trailer|✓|** **Bus|✓|**
a) brake operation	a) a required brake is ***missing*** a brake is ***inoperative***
b) disc (rotor) condition *Note:* Heat checks and some surface cracks on the friction surface are normal. A heat check has a width less than 0.5 mm and a depth less than 1 mm. A surface cracks is at least 0.5 mm wide and 1 mm deep. *Note*: Lateral run-out and parallelism only need to be checked only where there is evidence of a problem.	b) section is broken off or missing crack extends from the friction surface through to the cooling vent any surface crack is longer than 75% of the radial width, within the friction surface any surface crack extends to an outer edge groove or pitted area in rotor that reduces rotor thickness below minimum allowable value contact pattern of the pad on solid rotor material, (i.e.: not rusted) is less than 75% of the radial width, around the entire rotor, on one side lateral run-out or out-of-parallelism exceeds 0.3 mm friction surface of the rotor is contaminated by grease or oil (Also see section 9 item 5 for wheel seal leaks) 0.3 mm = 0.01 in.
c) disc (rotor) thickness *Additional Inspection Procedure(s):* Disc (rotor) thickness must be measured. Measurements must be recorded on inspection report.	c) thickness at any point across the friction surface is less than the minimum indicated on the brake rotor, or ***manufacturer*** specification, or equivalent industry standard, if limit is not available: less than 39.0 mm (+/- 0.05 mm)

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
d) caliper	d) any part is binding, broken, seized, missing, or mounted incorrectly or inferior attaching bolt is used slide pin/slider or pad slider is binding, ***damaged***, seized, mounted insecurely, or not equivalent to OEM standard. caliper movement within the anchor plate exceeds ***manufacturer*** specification, guide is welded or repaired in a way that does not meet ***OEM standard*** pad retainer is bent, ***damaged***, ***insecure*** or ***missing*** boot or bellows is cracked or deteriorated, ***damaged***, or ***missing***
e) anchor plate	e) ***loose*** or bolt is ***missing***
f) pad condition	f) broken, cracked, ***damaged***, or ***abnormally worn*** friction material is contaminated by oil or grease (Also see section 9 item 5 for wheel seal leaks) rivet ***loose*** on pad, pad ***loose*** on bonded lining, pad is ***missing***, or pad is installed incorrectly
g) pad (friction material) thickness *Additional Inspection Procedure(s):* Pad (friction material) thickness of both inboard and outboard pad must be measured and measurement of the thinnest pad must be recorded on the inspection report. *Note*: Pad (friction material) thickness can be determined by measuring the friction material itself or by measuring the combined thickness of the friction material and pad backing plate, then deducting the thickness of the backing plate. Always record the thickness of the friction material only.	g) **measured friction material thickness is less than *OEM standard* or *industry standard*, or if limit is not available:** bonded friction material thickness is less than 3 mm riveted friction material thickness is less than 5 mm difference between inboard and outboard friction material thickness is greater than amount indicated in ***manufacturer*** service instruction or equivalent industry standard, or if limit is not available: difference is greater than 3 mm 3 mm = 0.12 (1/8) in., 5 mm = 0.20 (3/16) in.
h) clearance between pads and rotor (caliper adjustment)	h) does not meet ***manufacturer*** specifications

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
	Hazardous Condition(s) **i. any part is binding, broken, *missing*, seized, or mounted incorrectly** **ii. a rotor (disc) friction surface shows metal to metal contact with brake pad or severe rusting** **iii. a rotor (disc) has a crack that extends to the hub or through to the vented section** **iv. caliper movement within the anchor plate exceeds 3 mm** **v. any brake component is in a condition where an imminent failure appears likely** **vi. a brake is *inoperative*** **vii. brake pad friction material worn to less than 2 mm or a portion of the friction material is *missing*** **viii. *loose* or *missing* brake chamber or caliper mounting bolt** **ix. friction material of the pad or friction surface of the rotor is contaminated by grease or oil** ***Note:* Also see section 9 item 5 for wheel seal leaks** 2 mm = 0.08 in., 3 mm = 0.12 (1/8) in.
19. Anti-Lock Brake System (ABS) on Truck and Bus *Note*: Every truck and truck-tractor with air brakes manufactured on or after April 1, 2000 must be equipped with ABS. Every towing vehicle with air brakes manufactured on or after March 1, 2001 must be capable of PLC communication with any towed trailer. Every vehicle equipped with ABS that was not mandatory for the vehicle when it was manufactured must have ABS in good working order.	**Truck**|✓| Trailer| | **Bus**|✓|
a) indicator lamp *Additional Inspection Procedure(s):* Cycle the ignition off and on while monitoring the ABS indicator lamp.	a) ***inoperative*** or ***missing*** fails to turn on during bulb-check cycle when ignition is turned on indicates the presence of an active malfunction by staying on after the bulb-check cycle any visual evidence that the system has been tampered with or defeated

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
b) wiring *Additional Inspection Procedure(s):* Visually inspect accessible portions of the wiring. Inspect all repairs and damaged areas. *Note:* Also see requirement for towing vehicle to supply constant power to trailer for trailer ABS. See Section 7 item 4.	b) ***insecure*** mounting, ***missing***, or connector corroded • conductor is exposed due to damage, improper repair or other condition of wire • connection or repair does not meet ***OEM standard***
c) electronic control unit (ECU)	c) ***missing***, ***insecure*** mounting, connectors corroded
d) relay/ABS modulating valve	d) ***missing***, leaking, ***insecure*** mounting to ECU, abnormal corrosion
e) wheel speed sensor *Note*: Different configurations of sensors and modulators are permitted by ***CMVSS***. Be sure to confirm the ***OEM*** configuration of the ABS before rejecting a vehicle due to missing wheel speed sensors.	e) ***missing***, ***insecure*** mounting, ***inoperative***, connectors corroded
f) PLC communication *Additional Inspection Procedure(s):* Connect the vehicle to a suitable test device or a trailer that has an active ABS malfunction to confirm PLC communication.	f) PLC signal from trailer or test device fails to activate the trailer ABS indicator lamp on instrument panel
	Hazardous Condition(s) **i. any malfunction of the ABS system that prevents normal brake operation**
20. Anti-Lock Brake System (ABS) on Trailer *Note*: Every trailer with air brakes manufactured on or after April 1, 2000 must be equipped with ABS. *(see exceptions below) Every vehicle equipped with ABS that was not mandatory for the vehicle when it was manufactured including those listed in the exceptions below must have ABS in good working order.	Truck| | **Trailer|✓|** Bus| |

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
a) indicator lamp (trailer-mounted) *Additional Inspection Procedure(s):* Proper operation of the ABS must be confirmed using one of the methods listed below: Test Method #1. Connect to towing vehicle manufactured after March 1, 2001 that has been verified to have a properly functioning ABS. Test Method #2. Using suitable test equipment, confirm that trailer ABS control module sends required signal to operate dash mounted ABS lamp in towing vehicle. * *Exceptions for ABS* ABS is not required by ***CMVSS*** 121 for: trailers with width greater than 2.6 m, any vehicle equipped with an axle that has a GVWR greater than 13,154 kg; GVWR greater than 54,332 kg – "heavy hauler trailer"; and any load divider dolly.	a) ***missing***, not amber in colour is not marked "ABS" on the lamp itself, or not marked "ABS" within 150 mm of the lamp is not between 150 mm and 600 mm away from the left rear red side marker lamp fails to turn on during bulb-check cycle when power is supplied to auxiliary circuit (centre pin, blue wire) indicates the presence of an active malfunction by staying on after the bulb-check cycle any visual evidence that the system has been tampered with or defeated
b) wiring *Additional Inspection Procedure(s):* Visually inspect accessible portions of the wiring. Inspect all repairs and damaged areas.	b) ***insecure*** mounting, ***missing***, or connector corroded conductor is exposed due to damage, improper repair or other condition of wire connection or repair does not meet ***OEM standard***
c) electronic control unit (ECU)	c) ***missing***, ***insecure*** mounting, connectors corroded
d) relay/ABS modulating valve	d) ***missing***, leaking, ***insecure*** mounting to ECU, abnormal corrosion
e) wheel speed sensor *Note*: Different configurations of sensors and modulators are permitted by ***CMVSS***. Be sure to confirm the ***OEM*** configuration of the ABS before rejecting a vehicle due to missing wheel speed sensors.	e) ***missing***, ***insecure*** mounting, ***inoperative***, connectors corroded
f) PLC Signal to towing vehicle *Note*: Power Line Carrier (PLC) communication is required for all trailers built on or after March 1, 2001.	f) PLC signal is not transmitted by trailer ABS *Note*: When using Test Method 1 for the indicator lamp (trailer-mounted) above, PLC communication from the trailer is verified when the dash-mounted trailer ABS lamp in the towing vehicle turns on during bulb- check, and then turns off or stays on, to show the presence of a malfunction in conjunction with the trailer-mounted indicator lamp. (A malfunction may be described as a Fault, Diagnostic Fault Code, or Diagnostic Trouble Code.)

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
	Hazardous Condition(s) **i. any malfunction of the ABS system that prevents normal brake operation**
21. Stability Control System on Truck or Bus *Additional Inspection Procedure(s):* Check the ECU for indication of any fault or malfunction.	**Truck|✓|** Trailer| | **Bus|✓|**
a) indicator lamp	a) **fails to illuminate or lamp remains illuminated **fault or malfunction is indicated
Additional Inspection Procedure(s): Cycle the ignition off and on while monitoring the indicator lamp.	*Note*: Each of the conditions above marked with a double asterisk (**) are to be recorded on the inspection report, however a vehicle is not rejected for this condition alone.
b) operation	b) any visual evidence that the system has been tampered with or defeated (see note below) *Note*: The condition above is to be recorded on the inspection report, however a vehicle is not rejected for this condition alone.
22. Stability Control System (Electronic Stability Control [ESC] or Roll Stability System [RSS]) on Trailer *Additional Inspection Procedure(s):* Check the ECU for indication of any fault or malfunction in conjunction with inspection of the ABS as described in item 20 above.	Truck| | **Trailer|✓|** Bus| |
a) operation	a) **there is evidence that the system has been tampered with or defeated **the system has an active fault (light or indicator) *Note*: Each of the conditions above marked with a double asterisk (**) are to be recorded on the inspection report, however a vehicle is not rejected for this condition alone.

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

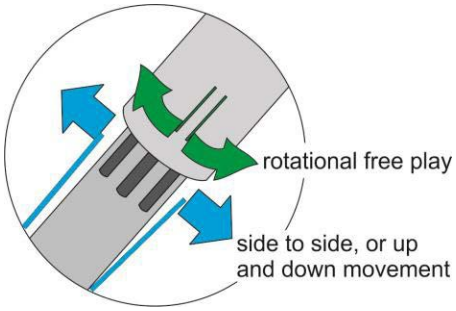
ITEM AND METHOD OF INSPECTION:	REJECT IF:
23. Brake Performance *Optional Additional Inspection Procedure(s):* These test methods can be used when one of the following types of performance-based brake tester (PBBT) is available. Test equipment must be calibrated and used according to ***manufacturer*** instructions. Testing a brake with non-burnished friction material may produce inconsistent test results.	**Truck|✓|** **Trailer|✓|** **Bus|✓|** *Note*: Rated wheel weight = one-half of GAWR.
a) service brake force - using a roller-type performance- based brake tester (PBBT) *Optional Additional Inspection Procedure(s):* Determine the maximum service brake force at each wheel by slowly applying the service brake pedal and increasing the pedal force until the tester terminates the test, or brake force reaches its maximum value.	a) service brake fails to lock the wheel and the maximum service brake force is less than 40% of the rated wheel weight service brake force on one side of the axle is less than 70% of the service brake force on the other side, at the point in time just prior to first wheel lockup, or test termination, whichever occurs first
b) parking brake output force - using a roller type brake tester *Optional Additional Inspection Procedure(s):* For wheels equipped with spring-brake type chambers used for parking. Determine the maximum parking force at each wheel by fully applying the parking brake control until the tester terminates the test, or parking brake force reaches it maximum value.	b) parking brake fails to lock the wheel and the maximum parking brake force is less than 20% of rated wheel weight parking brake force on one side of the axle is less than 50% of the force on the other side, at the point in time just prior to first wheel lockup, or test termination, whichever occurs first
c) rolling resistance force - using a roller-type performance-based brake tester (PBBT) *Optional Additional Inspection Procedure(s):* Determine average rolling resistance force of each wheel, with the brakes fully released, for one full revolution of the wheel. Discount the initial spike at start-up of the rolls.	c) average rolling resistance force of a wheel is greater than 6% of the weight of the wheel imparted on the test device
d) required brake force or stopping distance - using a decelerometer *Optional Additional Inspection Procedure(s):* Test vehicle stopping ability in a suitable area following the instructions provided by the manufacturer/supplier of the test device.	d) deceleration is below the requirement of the relevant jurisdiction balance of brake force between left and right side fails to comply with the requirement of the relevant jurisdiction *Note*: Brake force balance (left and right) cannot be measured with all types of decelerometers.

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

Section 4 – Steering

ITEM AND METHOD OF INSPECTION:	REJECT IF:
1. Steering Control and Linkage *Additional Inspection Procedure(s):* Check the steering components listed below using tools and methods according to ***manufacturer*** service instructions.	**Truck|✓|** **Trailer|✓|** **Bus|✓|**
a) steering box or rack and pinion unit	a) ***loose*** or ***insecure*** mounting, mounting bolt ***loose*** or ***missing*** housing broken, cracked, or ***level 2 leak*** of oil or fluid
b) bellow, clamp and boot	b) ***insecure***, ***missing***, split or torn clamp ***missing***
c) tie rod	c) bent, broken, cracked or welded, or repaired in a way that does not meet ***OEM standard***
d) tie rod end, drag link and ball and socket joint	d) bent, ***insecure***, ***loose*** or worn threads stripped or repaired a ball and socket joint is worn beyond ***manufacturer*** specifications ***damaged***, welded or repaired in a way that does not meet ***OEM standard*** part is used that does not meet ***OEM standard***
e) pitman arm	e) bent, ***damaged***, ***insecure*** or ***loose*** on spline ***repaired by welding***
f) ball-joint in upper or lower control arm	f) ***loose*** in knuckle or control arm wear exceeds limit shown by wear-indicator, ***OEM standard*** limit or ***industry standard*** limit, or is injected with repair material ***insecure*** or ***loose*** improper or ***loose*** retainer
g) cotter pin or similar retaining device	g) ***missing***, or deficient part is used that does not meet ***OEM standard***
h) steering dampener	h) ***inoperative*** or ***missing*** ***level 2 leak*** of dampener fluid

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
i) steering column	i) ***insecure*** mounting or ***loose*** mounting fastener ***loose*** or ***missing***
j) telescopic/tilt steering *Additional Inspection Procedure(s):* Check the operation of locking device(s). With unit locked, grasp the steering column and attempt to move it horizontally and vertically on its mounts.	j) movement exceeds ***manufacturer*** specification, or when specification is not available, is greater than 6 mm
k) steering shaft universal joint and yoke	k) binding, ***loose***, seized, welded or repaired in a way that does not meet ***OEM standard*** clamp bolt ***loose*** or ***missing***, or spline ***loose*** or stripped
l) steering column slip joint *Additional Inspection Procedure(s):* Grasp the sections of the slip joint and check rotational free play by twisting in opposite directions. Then check the total side to side, or up and down movement of the slip joint perpendicular to the line of rotation.	l) rotational free play between splines exceeds 1.0 mm total side to side, or up and down movement exceeds 6 mm 
m) adjusting sleeve	m) bent, ***loose*** or welded or repaired in a way that does not meet ***OEM standard*** tightening bolt is in a position that interferes with normal steering
n) remote (right hand) steering control	*Note*: Inspect as described in Section 5 - Instruments and Auxiliary Equipment

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
	Hazardous Condition(s) **i. any crack, modification or other condition that interferes with free movement of any steering component, or repair that does not meet** *OEM standard* **Steering Box or Rack & Pinion Unit** **ii. cracked, *loose* or *insecure* mounting, mounting bolt *loose* or *missing* or has been repaired in way, (e.g.: welded) that does not meet *OEM standard*** **Steering Linkage** **iii. any ball and socket joint has looseness in line with the shank or neck of the ball greater than** *manufacturer* **specification, or when specification is not available, greater than 3.0 mm** **iv. the socket of a ball and socket joint is injected with any repair material, or a ball and socket joint has been repaired in way, (e.g.: welded) that does not meet *OEM standard*** **v. pitman arm is *loose* on steering gear output shaft spline or has been repaired in way, (e.g.: welded) that does not meet *OEM standard*** **vi. any nut is *loose* or *missing*** **vii.** *loose* **clamp, clamp bolt or nut on tie rod, drag link, pitman arm, or steering arm** **viii. any looseness in any threaded joint** **Steering Column and Related Parts** **ix. adjusting sleeve is *loose* or *insecure*** **x. *loose* or *insecure* mounting, mounting bolt *loose* or *missing*** **xi. column fails to lock into position** **xii. a universal joint has been repaired in way, (e.g.: welded) that does not meet *OEM standard*** **xiii. any looseness of the yoke-coupling at the steering gear input shaft**
2. Power Steering System (Hydraulic and Electric) *Additional Inspection Procedure(s):* Inspect the power steering components with the engine stopped. Then with engine running, turn wheels fully to the left and right and check system operation.	**Truck|✓|** Trailer| | **Bus|✓|**
a) fluid	a) below indicated minimum level or fluid is contaminated

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ITEM AND METHOD OF INSPECTION:	REJECT IF:
b) belt	*Note:* Inspect drive belt according to Section 1. Power Train, Item 10. Engine or Accessory Drive Belt.
c) hose	c) cracked, worn by or is in contact with moving parts distance to exhaust system component is less than 25 mm ***level 2 leak*** of power steering fluid
d) pump	d) ***inoperative***, ***insecure*** mounting, or ***loose*** ***level 2 leak*** of power steering fluid
e) cylinder	e) ***inoperative***, ***insecure*** mounting, or ***loose*** ***level 2 leak*** of power steering fluid
f) mounting bracket	f) broken, cracked or ***loose*** bolt ***loose*** or ***missing***
g) assist	g) does not ***operate as intended*** (i.e.: power-assist provided is noticeably reduced requiring more than normal steering effort to turn the wheels left or right)
	Hazardous Condition(s) **i. power steering does not *operate as intended*** **ii. any steering component is in a condition where imminent failure appears likely** **iii. *level 3 leak* of power steering fluid** **iv. auxiliary power assist cylinder is** *loose*
3. Steering Operation (Active Steer Axle) *Note:* An active steer axle is one that is directly controlled by the steering wheel. Check steering operation after inspecting steering control and linkage, and checking power steering as described above.	**Truck**|✓| Trailer| | **Bus**|✓|
a) steering wheel	a) broken, ***damaged***, ***loose*** on spline or modified diameter is not ***OEM*** or equivalent
b) rotation and travel *Additional Inspection Procedure(s):* Turn wheels fully to the left and right and check system operation.	b) binds or jams during rotation number of rotations from centre to full left does not equal the number of rotations from centre to full right, +/- ½ turn

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ITEM AND METHOD OF INSPECTION:	REJECT IF:
c) steering lash or free-play *Additional Inspection Procedure(s):* Check vehicle having power steering with engine running. Measure lash or free-play beginning with wheels in straight-ahead position. Then turn steering wheel just until turning motion can be observed at the front wheels. Mark rim of steering wheel and turn the steering wheel in the opposite direction until motion can just be observed. Measure the distance of steering wheel rotation that does not cause turning of the wheels.	c) steering lash or free-play is greater than the distance shown below **Maximum permissible lash (free play) for power steering system** steering wheel diameter of 500 mm & less: 75 mm steering wheel diameter over 500 mm: 87 mm **Maximum permissible lash (free play) for manual steering system** steering wheel diameter of 500 mm & less: 87 mm steering wheel diameter over 500 mm: 100 mm
d) tire clearance	d) space between tire and frame, fender or other vehicle part is less than 25 mm at any point in turn
e) steering stop	e) improperly adjusted or ***missing***
	Hazardous Condition(s) **i. steering binds or jams during rotation** **ii. steering lash or free-play is greater than the distance shown below:** **power steering system** **steering wheel diameter of 500 mm & less:** 87 mm **steering wheel diameter over 500 mm:** 100 mm **manual steering system** **steering wheel diameter of 500 mm & less:** 140 mm **steering wheel diameter over 500 mm:** 196 mm
4. Kingpin *Additional Inspection Procedure(s):* Raise the axle to unload the kingpin. Turn the wheels through a full right and left turn.	**Truck|✓|** **Trailer|✓|** **Bus|✓|**
a) lateral movement *Additional Inspection Procedure(s):* Rock the wheel in and out, by hand or using a bar, to check for kingpin movement. Measure lateral movement at the outer edge of the tire. Use a dial gauge if necessary.	a) **not within *manufacturer* specification or when *manufacturer* specification is not available:** • for wheels under 20 in.: lateral movement is more than 3 mm • for wheels 20 in. or larger: lateral movement is more than 5 mm

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Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
b) vertical movement *Additional Inspection Procedure(s):* Place a bar under the tire and check for vertical movement between spindle support and axle. Use a dial gauge if necessary.	b) not within ***manufacturer*** specification or when ***manufacturer*** specification is not available, greater than 2.5 mm
c) condition	c) binding or jamming is detected while turning wheel
	Hazardous Condition(s) **i. binding or jamming caused by the kingpin or thrust bearings**
5. Self-Steer and Controlled-Steer Axle *Note*: These are passive steer axles. A passive steer axle responds only to lateral force to turn wheels. The suspension components on a self-steer or controlled steer axle must be inspected according to Section 2, items 1-4. The steering components must be inspected according to items 1 & 4 above. *Additional inspection procedure(s):* Additional items may require inspection than those listed below. Refer to ***manufacturer*** service instructions related to the particular axle - for items in addition to those listed below - that are required to be inspected as part of a periodic safety inspection.	**Truck|✓|** **Trailer|✓|** **Bus|✓|**
a) operation *Additional Inspection Procedure(s):* Raise the vehicle and turn the wheels through a full right and left turn.	a) binding or jamming is detected while turning wheels
b) clearance	b) there is less than 25 mm between the tire and frame, fender or other vehicle part
c) steering stop	c) ***missing*** or not adjusted properly
d) air pressure regulator	d) ***inoperative*** or ***missing***
e) pressure gauge	e) inaccurate, ***inoperative*** or ***missing*** not equipped with legible instruction indicating the minimum centering force pressure requirement

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
f) operating instruction label	f) not equipped with legible instruction indicating safe operation (such as: stating the speed at which the axle locks)
	Hazardous Condition(s) **i. cracked, *loose* or *insecure* mounting, mounting bolt *missing* or *loose*, or has been repaired in way that does not meet *OEM standard*** **ii. *inoperative* or *missing* steering lock on a C-dolly** **iii. steering locks in any position except centred** ***Note:*** **Also see Hazardous Conditions for items 1 to 4 in this section above**

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

Section 5 - Instruments & Auxiliary Equipment

ITEM AND METHOD OF INSPECTION:	REJECT IF:
1. Fire Extinguisher	**Truck**|✓| **Trailer**|✓| **Bus**|✓|
a) presence and type *Note:* Fire extinguisher requirements vary by jurisdiction. Inspection must be conducted according to the ***applicable requirements***. On a school bus, inspect to the applicable ***CSA*** D250 Standard.	a) ***missing*** or incorrect type not in a quick-release holder within reach of driver not F.M., U.L. or U.L.C. approved and labelled ***missing*** on a vehicle required to meet ***CSA*** B620, D409, D435 or D436 standards on a school bus, does not meet requirements of jurisdiction and applicable ***CSA*** D250 Standard
b) condition *Additional Inspection Procedure(s):* Check mounting security. Remove unit from holder and shake contents.	b) ***insecure*** or ***loose*** seal is broken or gauge shows less than minimum charge no movement of chemical is detected when unit is shaken nozzle or hose is clogged, defective or ***missing*** safety pin is ***missing***
2. Hazard Warning Kit *Note:* Hazard warning kit requirements vary by jurisdiction. Inspection must be conducted according to the ***applicable requirement***s.	**Truck**|✓| Trailer| | **Bus**|✓|
a) presence and type	a) ***missing*** on a vehicle wider than 2.05 m incorrect type where triangle reflectors are required; they are broken, ***damaged*** and ***inoperative***, ***missing*** or ***insecure*** mounting
3.Horn *Additional Inspection Procedure(s):* Test horn operation. *Note:* Every vehicle must have at least one operating horn.	**Truck**|✓| Trailer| | **Bus**|✓|
a) operation	a) ***inoperative*** or not clearly audible
b) control	b) not identified and readily accessible to the driver does not function as intended not a pressure-type switch

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
4. Instruments and Gauges on a Bus	Truck| | Trailer| | **Bus|✓|**
a) required gauges and/or indicators *Additional Inspection Procedure(s):* Inspect indicator lamp operation (bulb check) when ignition is on and engine stopped. *Note:* Inspect according to ***OEM*** vehicle design.	a) engine temperature gauge or indicator is ***inoperative*** oil pressure gauge or indicator is ***inoperative*** ammeter, voltmeter or charge indicator is ***inoperative*** on a school bus, fuel gauge is ***inoperative*** or ***missing***, or fails to provide accurate information
5. Speedometer	**Truck|✓|** Trailer| | **Bus|✓|**
a) operation	a) ***inoperative*** or ***missing*** not clearly visible from the primary driving position
6. Odometer	**Truck|✓|** Trailer| | **Bus|✓|**
a) operation *Note:* ***OEM*** odometer must be operative. A functional test is not required.	a) ***inoperative*** or ***missing***
7. Windshield Wiper/Washer	**Truck|✓|** Trailer| | **Bus|✓|**
a) operation *Additional Inspection Procedure(s):* Confirm that the windshield wipers and control operate in all modes and positions.	a) fail to operate properly in any speed or position fail to park
b) wiper blade	b) hardened, ***missing*** or torn swept area is less than ***OEM*** wiper blades fails to contact windshield properly
c) wiper arm	c) bent, broken or ***missing***
d) windshield washer *Additional Inspection Procedure(s):* Test the operation of the windshield washer and control.	d) ***inoperative*** or ***missing*** fails to direct sufficient washer fluid at correct position on windshield
	Hazardous Condition(s) **i. wiper on the driver's side is *inoperative, missing*, or has damage that renders it ineffective**

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
8. Heater & Windshield Defroster	**Truck|✓|** Trailer| | **Bus|✓|**
a) operation *Additional Inspection Procedure(s):* Test the operation of the heater/defroster and control in all operating modes and positions.	a) ***inoperative*** at any setting low air flow or fails to deliver heated air
b) heater core	b) ***level 2 leak*** of coolant
9. Fuel-burning Auxiliary Heater	**Truck|✓|** Trailer| | **Bus|✓|**
a) condition *Additional Inspection Procedure(s):* Inspect the exhaust system and fuel system, according to the appropriate type of fuel used, as described in Section 1.	a) ***insecure*** or ***loose***
10. Chain/ "Headache" Rack	**Truck|✓|** Trailer| | Bus| |
a) condition	a) ***insecure*** or ***loose***, mounting fastener ***loose*** or ***missing*** broken or weld cracked
11. Auxiliary Controls and Devices	**Truck|✓|** Trailer| | **Bus|✓|**
Note: This includes equipment that is primarily inside a vehicle and includes controls for devices such as: PTO, wet lines, tarp systems, vehicle-mounted lifting and transporting devices, snow plow, dump box, front- mount hydraulic pump, roll-on roll-off, packer, etc.	
a) condition *Additional Inspection Procedure(s):* Check security of controls and devices visually, manually and using suitable tools as necessary. No functional test is to be conducted.	a) device is in such an unsafe condition that could be a risk to the driver or a passenger device is ***insecure*** or ***loose***, or in danger of shifting in a way that could impede normal operation of the vehicle ***level 2 leak*** of oil or other operating fluid
	Hazardous Condition(s) **i. control or device is in such an unsafe condition that is an imminent risk to the driver or a passenger** **ii. control or device is *insecure* or *loose*, or in imminent danger of shifting in a way that impedes normal operation of the vehicle**

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
12. Auxiliary Drive Controls *Additional Inspection Procedure(s):* Inspect according to ***manufacturer*** service and safety instructions. When such instruction is not available, inspect and test auxiliary drive control devices according to the relevant steering, brake and power train items, and the relevant additional items below.	**Truck|✓|** Trailer| | Bus| |
a) auxiliary steering station *Note:* An auxiliary steering station normally uses a "tee type" gear box at the primary steering station and a "90-degree type" gear box at the secondary steering station(s).	a) gear box is ***insecure*** or ***loose*** connecting shaft or u-joint is ***loose***, or u-joint is out of phase lash (free play) is greater at the auxiliary station than at the main steering wheel
b) auxiliary brake control	b) any service or parking brake control fails to ***operate as intended*** two-way check valve is leaking or ***inoperative***
c) auxiliary lamp control	c) any lamp control at the auxiliary control position fails to ***operate as intended***, or interferes with any other normal lamp operation
d) auxiliary throttle control	d) throttle control fails to ***operate as intended***
13. On-board Auxiliary Equipment on a Bus *Note:* The requirements for the specific auxiliary equipment that must be carried on board a particular vehicle vary by jurisdiction. (For example: axe, spare tire, shovel, tools, tire chains.) Inspection must be conducted according to the ***applicable requirements***.	Truck| | Trailer| | **Bus|✓|**
a) presence and type	a) incorrect or ***missing*** equipment
b) securement	b) ***insecure*** or ***loose*** on a school bus, does not meet requirements of jurisdiction and applicable ***CSA*** D250 Standard
14. First Aid Kit on a Bus *Note:* The requirements for first aid kits vary by jurisdiction. Inspection must be conducted according to the ***applicable requirements***. Inspection of contents is not required.	Truck| | Trailer| | **Bus|✓|**
a) presence and location	a) does not meet requirements of jurisdiction on a school bus, does not meet ***applicable requirements*** and applicable ***CSA*** D250 Standard

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
15. Accessibility Features and Equipment on a Bus *Note:* Accessibility features are items that are provided on "accessible vehicles" specifically designed for entry, accommodation and exiting of persons with various physical conditions that may limit their mobility. Many of these features are designed to provide access to the vehicle by means of a mobility assistive device (such as a cane, walker, wheel chair or scooter). The items listed in this section apply only to those features on this type of accessible vehicle.	Truck| | Trailer| | **Bus|✓|**
a) door on entrance for person with mobility assistive device *Additional Inspection Procedure(s):* Test the operation of all accessible doors. Check that the door is held in the open position by a detent or latch. Test the operation of a power door and check the closing safety feature.	a) door fails to hold in open position power door fails to stop closing and/or reverse when stopped by an object
b) entrance for person with mobility assistive device (with no ramp or lift)	b) contrasting colour stripe on step or floor edge is worn off or not readily visible has no light above or beside each entrance door illuminating the steps and actuating automatically when the door opens
c) entrance/exit handle and grab bar	c) has no grab bar or handle accessible from ground level at the side of each entrance that remains inside vehicle when the door is closed has no grab bar or handle at any seat intended for accessible passenger handle or grab bar, located away from seat or door, is smaller than 20 mm, or larger than 50 mm when unpadded, or larger than 75 mm when padded
d) seat belt in location designated as an accessible seating position	d) any seat does not have a fully functioning Type 1 (lap) or Type 2 (3-point) seat belt
e) ramp condition	e) not fully covered in anti-skid material anti-skid material is not fully secured to ramp surface not fitted with a raised guard (edge) on each side in a contrasting colour, or colour is worn off

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
f) powered ramp or lift operation *Additional Inspection Procedure(s):* Operate device into the fully deployed and stowed positions to confirm it operates as intended by the ***manufacturer***.	f) any moving part of the power mechanism is not protected by a guard ***inoperative*** or fails to operate in the manner intended by the manufacturer device fails to operate smoothly
g) interlock and over-ride of power ramp or lift device *Additional Inspection Procedure(s):* Operate device to confirm it operates as intended by the ***manufacturer***. Attempt to operate the vehicle to confirm operation is prohibited as intended.	g) ***inoperative***, ***missing*** or fails to operate in the manner intended by the ***manufacturer***
h) mobility assistive device securement system	h) ***inoperative***, ***missing*** or fails to operate in the manner intended by the ***manufacturer***
i) occupant restraint for person in mobility assistive device	i) ***inoperative***, ***missing*** or fails to operate in the manner intended by the ***manufacturer***
	Hazardous Condition(s) **i. fails to fully retract or store as intended by the *manufacturer***

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

Section 6 – Lamps

ITEM AND METHOD OF INSPECTION:	REJECT IF:
1. Required Lamps	**Truck|✓| Trailer|✓| Bus|✓|**
a) operation of all required lamps *Note*: See (page 143 to 148) for details on CMVSS 108 requirements for lamps, lamp location and colour. *Additional Inspection Procedure(s):* Test the operation of all required lamps, lamp switches and controls, and lamp indicators.	a) fails to illuminate fully and correctly in response to the switch or control fails to turn off in response to the switch or control broken, cracked, ***insecure*** mounting or ***missing***, lens is clouded or reduces transmission of light is not clearly visible or is covered in any manner does not meet ***CMVSS***, DOT or SAE standards 25% or more of LEDs of any one lamp assembly are ***inoperative***
b) headlamp *Note*: This applies to truck and bus only. "HID" = high-intensity discharge lamp	b) broken, cracked, ***inoperative*** or ***missing*** moisture is present inside the lamp assembly headlamp beam pattern is not directed toward right hand side of roadway *Note:* A crack is acceptable in a lamp assembly with a replaceable bulb if no moisture is present inside the lamp assembly. a non-functional diode in LED headlamp HID bulb is installed in an incandescent headlamp housing HID assembly does not display either HG, DC, DR or DCR codes headlamp switch, or beam (high and low) selector, is broken, ***inoperative***, ***missing***, does not meet ***OEM standard*** high beam indicator lamp on instrument panel is ***inoperative*** vehicle modification or installation of lamp causes headlamp to be higher or lower than permitted by ***CMVSS*** 108 (see page 143 to 148) **the headlamps fail to meet any of the following requirements:** • two or four facing front as far apart as practical • white (correlated color temperature (CCT) rating of 2854K-5000K) • illuminate correctly when operated by headlamp control on high and low beam

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
c) tail lamp	c) broken, cracked, ***inoperative*** or ***missing*** vehicle modification or installation of lamp causes tail lamp to be higher or lower than permitted by ***CMVSS*** 108 **the tail lamps fail to meet any of the following requirements:** • minimum of two lamps facing the rear, located at rear of vehicle and as far apart as practical, red in colour • illuminate correctly when operated by headlamp control
d) stop (brake) lamp	d) broken, cracked, ***inoperative*** or ***missing*** **the stop lamps fail to meet any of the following requirements:** • minimum of two lamps facing the rear, located at rear of vehicle and as far apart as practical, red in colour • illuminate correctly when service brakes are applied
e) centre high mount stop lamp *Note:* Required on every truck with a width under 2.05 m, and GVWR of 4,536 kg and less, built after January 10, 1997. Not required on trailers.	e) broken, cracked, ***inoperative*** or ***missing*** **the centre high mount stop lamp fails to meet any of the following requirements:** • facing rear of vehicle • red in colour, illuminates correctly when service brakes are applied
f) turn signal lamp *Note:* Not required on front of trailers.	f) broken, cracked, ***inoperative*** or ***missing*** control is broken, ***inoperative*** or ***missing*** control fails to hold selected position on a vehicle less than 2.05 m wide, control fails to cancel automatically when steering returns to centre turn signal indicator lamp on instrument panel is ***inoperative*** **the turn signal lamps fail to meet any of the following requirements:** • minimum of two facing the front, as far apart as practical, amber in colour • minimum of two facing the rear, as far apart as practical, amber or red in colour • illuminate correctly when operated by turn signal control

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
g) hazard warning lamp *Note:* Can operate same lamps as turn signals.	g) broken, cracked, ***inoperative*** or ***missing*** control is broken, ***inoperative*** or ***missing*** hazard warning indicator lamp on instrument panel is ***inoperative*** **the hazard warning lamps fail to meet any of the following requirements:** • minimum of two facing the front, as far apart as practical, amber in colour • minimum of two facing the rear, as far apart as practical, amber or red in colour • illuminate correctly and flash simultaneously when operated by hazard warning control
h) side marker lamp *Note:* A single lamp may serve as both a side marker and a clearance lamp, provided it is clearly visible from both the side and the rear. Vehicles 9.1 m or more in length require amber intermediate lamps. Intermediate side marker lamps are not required on vehicles less than 9.1 m in length.	h) broken, cracked, ***inoperative*** or ***missing*** amber intermediate side marker lamps are ***inoperative*** or ***missing*** on a vehicle over 9.1 m in length **the side marker lamps fail to meet any of the following requirements:** • minimum of four in total, two at the rear and two at the front, facing the side, • located as close to corners as practical • front are amber in colour • rear are red in colour
i) clearance lamp *Note:* Clearance lamps are required at the front and rear on all vehicles 2.05 m or more in width. Rear clearance lamps are not required on truck-tractors.	i) broken, cracked, ***inoperative*** or ***missing*** **the clearance lamps fail to meet any of the following requirements:** • minimum of four in total, located as far apart as practical at the widest point of the vehicle • two facing the front, as high as practical, amber in colour • two facing the rear, red in colour
j) identification lamp *Note:* Identification lamps are required at the front and rear on all vehicles 2.05 m or more in width, except as noted below. Rear identification lamps are not required on truck- tractors. Front identification lamps are not required on trailers.	j) broken, cracked, ***inoperative*** or ***missing*** **the identification lamps fail to meet any of the following requirements:** • minimum of six in total • three facing the front, amber in colour • three facing the rear, red in colour

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
k) back up lamp *Note:* Back up lamps are required on all trucks, truck-tractors and buses manufactured after January 1, 1971. Back up lamps are not required on trailers.	k) broken, cracked, ***inoperative*** or ***missing*** not white in colour or not located at rear fail to illuminate with engine running and transmission in reverse gear
l) licence plate lamp *Note:* A licence lamp may not be required in cases where no licence plate is required to be displayed.	l) broken, cracked, ***inoperative*** or ***missing*** not white, fails to illuminate licence plate
m) daytime running lamp *Note:* Required on all trucks and buses manufactured after December 1, 1989.	m) broken, cracked, ***inoperative*** or ***missing*** **the daytime running lamps fail to meet any of the following requirements:** • located on front of vehicle • white or yellow in colour • operate continually when engine is operating and master lighting switch is not in the "ON" position
n) fog lamp *Note:* These are not required lamps, unless specifically required by a particular jurisdiction. Fog lamps must comply with these requirements if the lamps are operational.	**n) the fog lamps fail to meet any of the following requirements:** • lens designation is "F" • located on front and/or rear of vehicle • white or amber in colour on front, red in colour on rear • illuminate correctly and only when headlamp control is switched to low beam
o) high beam driving lamp *Note:* These are not required lamps, unless specifically required by a particular jurisdiction. Driving lamps must comply with these requirements if the lamps are operational.	**o) the high beam driving lamps fail to meet any of the following requirements:** • lens designation "Y" • located on front of vehicle • white in colour • illuminate correctly and only when headlamp control is switched to high beam

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
p) low beam driving lamp *Note:* These are <u>not required</u> lamps, unless specifically required by a particular jurisdiction. Driving lamps must comply with these requirements if the lamps are operational.	p) **the low beam driving lamps <u>fail to meet</u> any of the following requirements:** • lens designation "Y" • located on front of vehicle • white in colour • illuminate correctly and only when headlamp control is switched to low beam
q) special equipment lamp *Note:* Some jurisdictions require or prohibit certain lamps in certain operations. Inspector must be familiar with the ***<u>applicable requirements</u>***.	q) a lamp required for vocational or specialized operation is ***<u>inoperative</u>*** or ***<u>missing</u>*** a lamp that is prohibited by the ***<u>applicable</u>*** ***<u>requirements</u>*** installed a lamp that is required to be covered when not in use, has no cover
	<u>Hazardous Condition(s)</u> **i. <u>not</u> at least one <u>head lamp</u> is operative on a power unit** **ii. <u>not</u> at least one <u>tail lamp</u> is operative on the rear visible from 150 m** **iii. <u>not</u> at least one <u>stop lamp</u> is operative on the vehicle visible from 150 m** **iv. <u>not</u> at least one <u>turn signal lamp</u> is operative on each side at the rear, visible from 150 m** **v. <u>not</u> at least one <u>turn signal lamp</u> is operative on each side at the front, visible from 150 m** **vi. any required lamp is ***<u>inoperative</u>*** or obstructed during times when the lamp is required**
<u>2. Reflex Reflector</u> *Note:* A lamp's lens may also function as a reflex reflector.	
a) required reflectors *Note:* See (page 143 to 148) for details on ***<u>CMVSS</u>*** 108 requirements for reflex reflector location and colour.	a) any required reflex reflector, or part of a reflex reflector, is broken, ***<u>missing</u>***, obscured or <u>not</u> clearly visible <u>not</u> labelled to show compliance with ***<u>CMVSS</u>***, DOT or SAE standards
b) rear reflector	b) **rear reflectors <u>fail to meet</u> any of the following requirements:** minimum of two, located as far apart as practical, red in colour, between 380 and 1530 mm from centre of reflector to the ground

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***<u>in this manner</u>*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
c) front and rear side, and intermediate reflex reflector *Note:* Amber intermediate reflectors are required on all vehicles over 9.1 m in length.	c) amber intermediate reflex reflector is ***missing*** on a vehicle over 9.1 m in length **front and rear reflex reflectors fail to meet any of the following requirements:** • minimum of four in total, located as far apart as practical, between 380 and 1530 mm from centre of reflector to the ground • two at the front, amber in colour • two at the rear, red in colour
3. Retro-Reflective Marking *Note:* Required on all truck-tractors manufactured after November 19, 2001. Required on all trailers manufactured after January 10, 1997. In some jurisdictions applies retroactively to all trailers with a width of 2.05 m or more, and GVWR of 4,536 kg or more, regardless of manufacture date. Inspector must be familiar with the ***applicable requirements***. See (page 143 to 148) for details on ***CMVSS*** 108 requirements for retro-reflective markings.	**Truck|✓|** **Trailer|✓|** **Bus|✓|**
a) presence	a) any required section is ***missing***
b) type/markings	b) consist of anything other than alternating red and white retro-reflective sheeting that is marked DOT- C2 (50 mm wide), DOT-C3 (75 mm wide) or DOT-C4 (100 mm wide)
c) condition	c) peeling off or reflective properties are compromised on an area exceeding 77 cm^2 (12 in.2) of the entire surface of the required reflective material *Note:* On 50 mm wide material, this means a total length of 15 cm having some loss of reflective property.
d) location and type	d) retro-reflective markings fail to meet the requirements of ***CMVSS*** 108 as shown on page 143 to 148.
e) location of retro-reflective material voluntarily applied to straight truck *Note:* Having the retro-reflective material too close to a lamp makes it more difficult to see the lamp.	e) red coloured retro-reflective marking is located closer than 75 mm to the edge of the lens of any amber lamp white coloured retro-reflective marking is located closer than 75 mm to the edge of the lens of any lamp

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
	Hazardous Condition(s) **i. more than 50% of retro-reflective material of any required section is compromised or *missing***
4. Instrument Panel Lamp	**Truck|✓|** Trailer| | **Bus|✓|**
a) operation *Note:* Inspect according to ***OEM*** vehicle design. Minor loss of illumination of some parts of the instrument panel is not cause for rejecting a vehicle. Illumination is required on the speedometer, and the vehicle operating status gauges required by this standard, and originally illuminated by the ***OEM***.	a) ***inoperative*** or no illumination is provided on required instrument or gauge
5. Headlamp Aim	**Truck|✓|** Trailer| | **Bus|✓|**
a) aim *Additional Inspection Procedure(s):* Check headlamp aim using an aiming screen or using equipment specifically designed for such use, following the equipment ***manufacturer*** instructions. *Note*: Headlamp aim must be checked when vehicle is unloaded.	a) not within ***manufacturer*** specification, or when specification is not available, when positioned 7.6 m from aiming screen does not comply with the requirements below **for low beam lens marked as type 2:** • left edge of beam must be within 100 mm left or right of straight ahead • top edge of beam must not be above, and no more than 100 mm below the horizontal line **for high beam lens marked as type 1 and any unmarked lens:** • centre of beam must not be above, and no more than 100 mm below the horizontal line • centre of beam must be no more than 100 mm left or right of straight ahead
b) headlamp aim adjusters	b) broken, ***inoperative***, ***insecure*** mounting or ***missing***

Visual Screen Method of Headlamp Aiming–Setting Up an Aiming Screen

A. Aiming Area Required

It is desirable to have a specific aiming area in a darkened location. This should be sufficient for the vehicle plus an additional 7.6 m measured from face of lamps to the front of the visual screen.

The floor on which the motor vehicle rests must be flat and level with the bottom of the screen.

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
B. Aiming Screen If a regular commercial aiming screen is not available, the screen may consist of a vertical wall having a clear uninterrupted area approximately 1.8 m high and 3.6 m wide. The surface should be finished with washable non-gloss white paint. Adjustable black tapes should be provided for use as guidelines. After the aiming screen has been set up in its permanent location, it is necessary to paint a reference line on the floor directly under the lens of the lamps to indicate the proper location of the headlamps when they are being aimed. This reference line should be parallel to the aiming screen and exactly 7.6 m from it.	
	Hazardous Condition(s) **i. aiming of headlamp is so severely out of alignment that it is likely to impair the vision of the driver or other motorists**
6. Interior Lamps on a Bus *Note*: Inspection must be conducted according to the requirements of the relevant jurisdiction and applicable ***CSA*** D250, D409, D435 & D436 Standard. Inspector must be familiar with the ***applicable requirements***. *Additional Inspection Procedure(s):* Activate interior lamps, then operate each entrance door. Emergency exit doors are excluded.	Truck| | Trailer| | **Bus|✓|**
a) step well lamp	a) not white in colour, ***inoperative*** or ***missing*** fails to illuminate step well area stays on when door is closed
b) aisle and overhead lamps	b) more than 10% of the lamps on any lamp circuit are ***inoperative***
c) accessible vehicle lighting	c) lamp installed for accessibility device (such as a ramp or lift) is ***inoperative*** or ***missing***

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
7. School Bus Additional Lamps *Note*: Applies to school bus only. Inspection must be conducted according to the requirements of the relevant jurisdiction and applicable ***CSA*** D250 Standard. Inspector must be familiar with the ***applicable requirement***s.	Truck| | Trailer| | **Bus|✓|**
a) alternating warning lamps *Additional Inspection Procedure(s):* Activate warning system in pre-stop phase (stop arm not deployed) and then with warning system in full stop phase (stop arm deployed). "LED" = light emitting diode	a) not equipped, or do not operate as required by the relevant jurisdiction and applicable ***CSA*** D250 Standard one or more diode(s) of LED lamp fail(s) to illuminate alternating warning lamp indicator on instrument panel or switch is ***inoperative*** or ***missing***
b) strobe lamp	b) ***inoperative*** where required by jurisdiction strobe lamp indicator on instrument panel or switch is ***inoperative*** or ***missing***
c) service door exterior lamp *Additional Inspection Procedure(s):* Open and close service door as required to test operation of exit lamp.	c) not equipped, or does not operate as required by the relevant jurisdiction and applicable ***CSA*** D250 Standard
	Hazardous Condition(s) **i. on a school bus, alternating overhead warning lamps are *inoperative* or obstructed**

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

IMPORTANT NOTE: Every lamp, reflex reflector, and conspicuity treatment must be permanently attached in the location specified below and must comply with all applicable requirements prescribed for it by FMVSS/CMVSS 108. The face of any device on the front/rear and sides should be, respectively perpendicular and parallel to the vehicle's centerline, unless it is photometrically certified at installation angle. No part of the vehicle shall prevent any device from meeting its prescribed requirements unless an auxiliary device meeting all prescribed requirements is installed.

IN CANADA: Manufacturers and importers of vehicles must have the proper certification test records demonstrating compliance of lighting components with all prescribed requirements.

BASIC EQUIPMENT REQUIRED ON ALL TRUCKS, BUSES & MPVs

DESCRIPTION				MANDATORY REQUIREMENTS			
Area	Equipment	SAE Lens Coding	Functional Purpose	Quantity	Color	Location	Height mm(in.) from the ground
1	Headlamps - Lower Beam US requires "DOT" lettering on lens US&Canada - light source code required on lens	(H, HR)	Forward road illumination	Minimum 2	White	On the front - symmetrical as far apart as practicable If 4 lamp system - outboard or above upper beams	560-1370 (22-54)
	Headlamps - Upper Beam US requires "DOT" lettering on lens US&Canada - light source code required on lens	(H, HR)	Forward road illumination	Minimum 2	White	On the front - symmetrical If 4 lamp system - inboard or below lower beams	560-1370 (22-54)
	Parking Lamps Vehicles less than 2032mm wide	(P)	Indicate parked vehicle	Minimum 2	White or amber	On the front - symmetrical as far apart as practicable	380-1830 (15-72)
	Daytime Running Lamps (DRL) Canada - required / US - option US requires "DRL" lettering on lens if not headlamp	(Y2)	Indicate in use vehicle	Minimum 2	White or amber	On the front - symmetrical as far apart as practicable	380 (15) min. Max. depends on type of DRL
	Front Turn Signal/ Hazard Warning Lamps	(I)	Indicate direction of turn/ identify disabled vehicle	Minimum 2	Amber	On the front- symmetrical as far apart as practicable	380-2110 (15-83)
2	Front Clearance Lamps Vehicles 2032mm wide or wider *photometrically certified at installation angle	(P2, PC* or P3, PC2*)	Show vehicle's width	Minimum 2	Amber	At widest point - symmetrical on the front or near the front facing forward	As high as practicable
3	Front Identification Lamps (ID) Vehicles 2032mm wide or wider	(P2 or P3)	Indicate presence of a wide vehicle	Exactly 3	Amber	On the front - center horizontally spaced 150 mm (6 in.) to 300 mm (12 in.) apart	As high as practicable or on top of the cab
4a	Front Side Marker Lamps *photometrically certified at installation angle	(P2, PC* P3, PC2*)	Front and rear side marker lamps / side reflex reflectors indicate vehicle's presence and length	Minimum 2	Amber	Each side at front as far forward as practicable	380 (15) minimum
4b	Front Side Reflex Reflectors	(A)		Minimum 2	Amber	Each side at front as far forward as practicable facing sideward	380-1530 (15-60)
5a	Rear Side Marker Lamps ** *photometrically certified at installation angle	(P2, PC* or P3, PC2*)		Minimum 2	Red	Each side at rear as far back as practicable	380 (15) minimum
5b	Rear Side Reflex Reflectors ** **not required on Truck Tractors	(A)		Minimum 2	Red	Each side at rear as far back as practicable facing sideward	380-1530 (15-60)
6	Rear Clearance Lamps Vehicles 2032mm wide or wider Not required on Truck Tractors *photometrically certified at installation angle	(P2, PC* or P3, PC2*)	Show vehicle's width MAY NOT be combined with tail lamps	Minimum 2	Red	At widest point - symmetrical on the rear or near the rear facing rearward	As high as practicable may be lower only if rear ID lamps are at the top
7	Rear Identification (ID) Lamps Vehicles 2032mm wide or wider Not required on Truck Tractors	(P2 or P3)	Indicate presence of a wide vehicle	Exactly 3	Red	On the rear - center horizontally spaced 150mm (6 in.) to 300mm (12 in.) apart facing rearward	At the top may be lower if door header narrower than 25mm
8	Tail Lamps	(T)	Indicate vehicle's presence and width	Minimum 2	Red	On the rear - symmetrical as far apart as practicable	380-1830 (15-72)
	Stop Lamps	(S)	Indicate braking	Minimum 2	Red	On the rear - symmetrical as far apart as practicable	380-1830 (15-72)
	Rear Turn Signal/ Hazard Warning Lamps	(I)	Indicate direction of turn/ identify disabled vehicle	Minimum 2	Red or amber	On the rear - symmetrical as far apart as practicable	380-2110 (15-83)
	Rear Reflex Reflectors	(A)	Show vehicle's presence and width	Minimum 2	Red	On the rear - symmetrical as far apart as practicable	380-1530 (15-60)
9	Backup Lamp	(R)	Illuminates ground behind the vehicle and alert road users	Minimum 1	White	Rear	No requirement
10	License Plate Lamp(s)	(L)	Illuminates license plate	Minimum 1	White	On the rear - above or at the sides of license plate	No requirement
11	Center High Mounted Stop Lamp Vehicles less than 2032mm wide and 4536kg	(U3)	Indicates braking	1	Red	On the rear - centerline of the vehicle	860 (34) minimum

ADDITIONAL EQUIPMENT FOR SPECIFIC VEHICLES

VEHICLES 9.1m (30 ft.) LONG OR LONGER

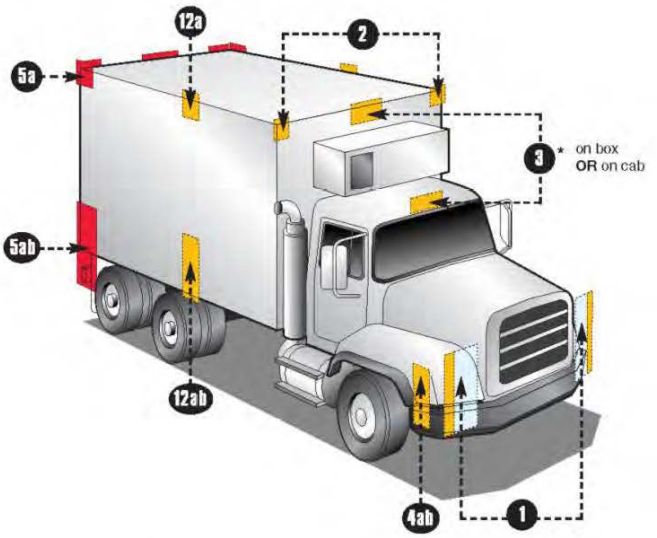
DESCRIPTION				MANDATORY REQUIREMENTS			
Area	Equipment	SAE Lens Coding	Functional Purpose	Quantity	Color	Location	Height mm(in.) from the ground
12a	Intermediate Side Marker Lamps	(P2 or P3)	Indicate presence of a long vehicle	Minimum 2	Amber	Each side near center	380 (15) minimum
12b	Intermediate Side Reflex Reflectors	(A)	Indicate presence of a long vehicle	Minimum 2	Amber	Each side near center facing sideward	380-1530 (15-60)

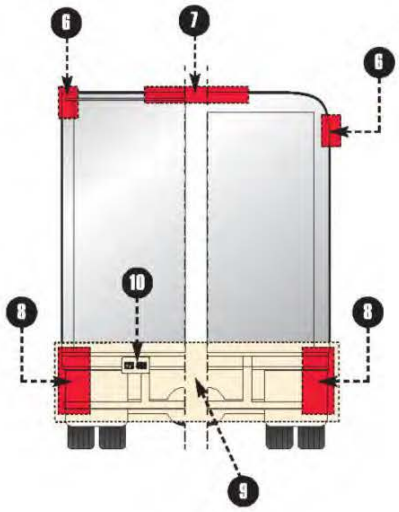
Truck Tractors

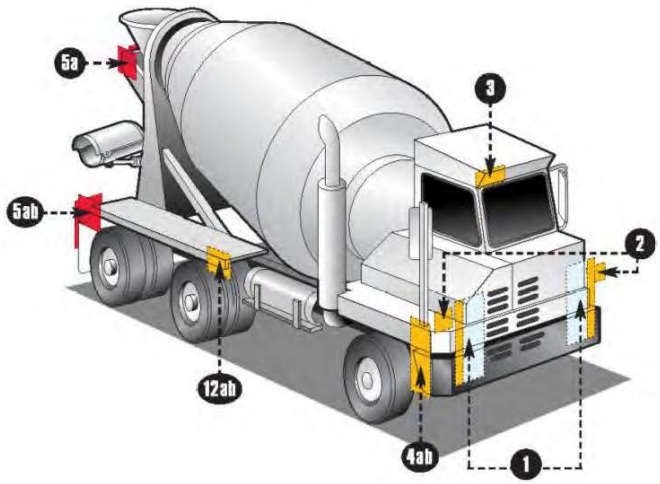
DESCRIPTION		MANDATORY REQUIREMENTS					
Area	Conspicuity Treatment	DOT Coding	Quantity	Color	Location	Height	Options
13	Rear Upper Body Markings	DOT-C DOT-C2 DOT-C3 DOT-C4	Exactly 2 pairs of 300mm long strips	White	Rear upper corners of cab facing rearward	As high as practicable excluding fairings	
14	Rear Marking		Exactly 2 sections of min. 600mm each	Red/ White	Rear - facing rearward - on fenders, on mud flap brackets, or within 300mm below the top of mud flaps	As horizontal as practicable and not higher than 1525mm from the ground	If mud flaps not used - on the cab or frame mounted brackets

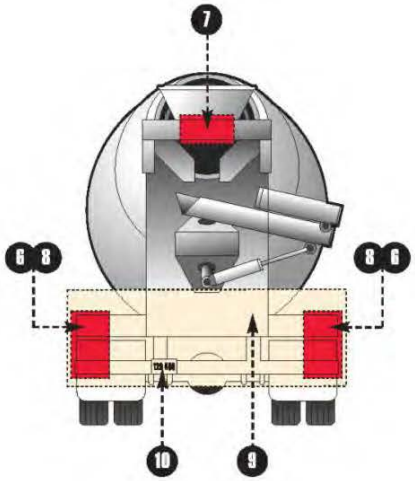
NOTE: The edge of red conspicuity tape shall not be closer than 75 mm to the edge of any amber lamp and the edge of white conspicuity tape shall not be closer than 75 mm to the edge of any lamp

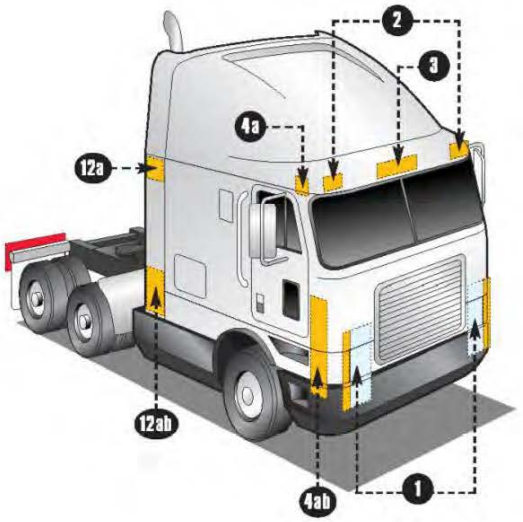
Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

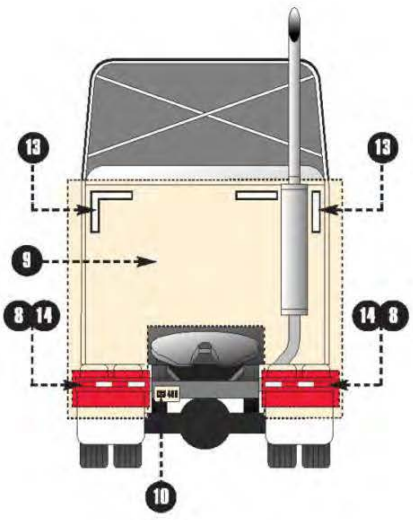




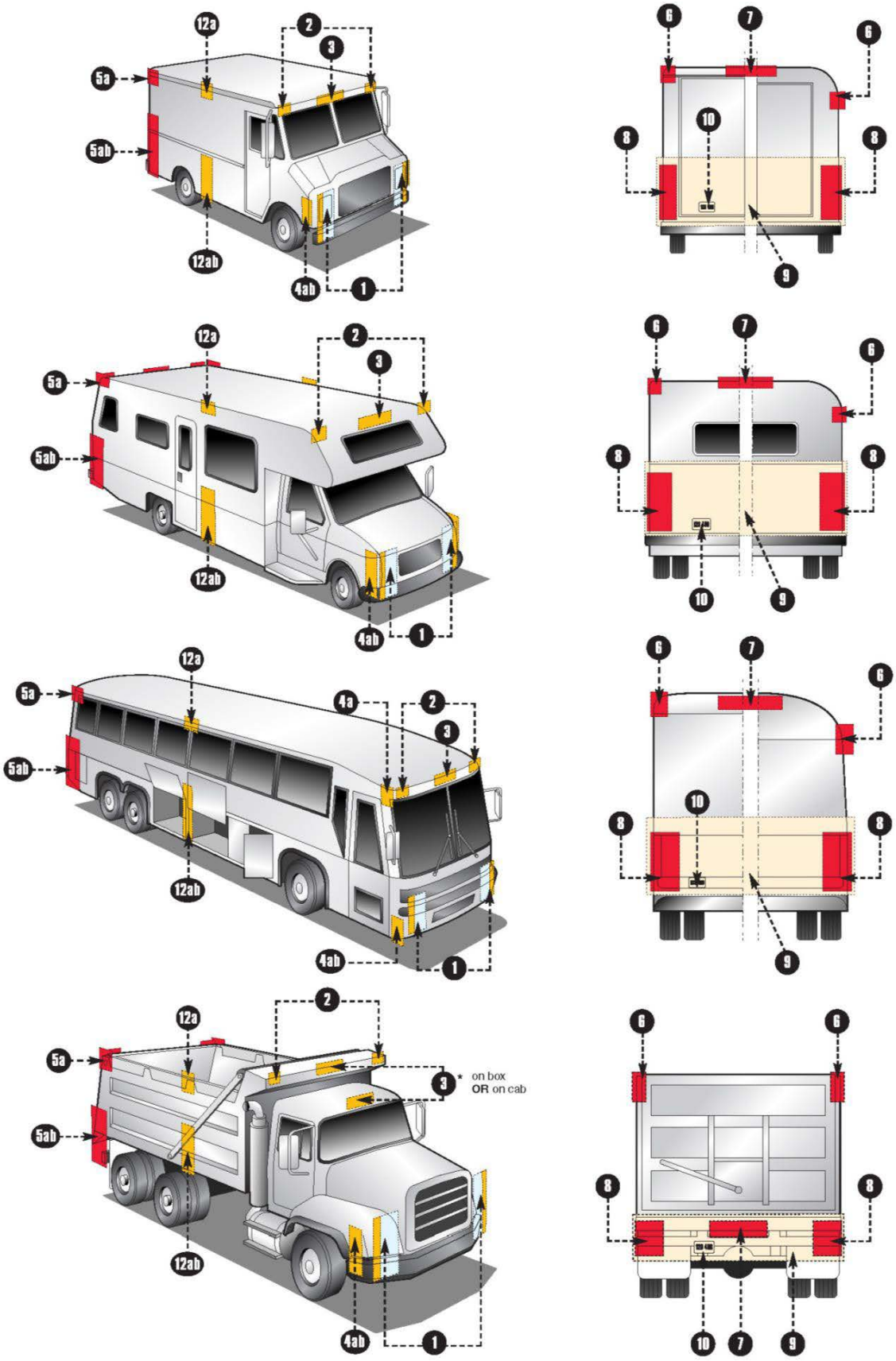








Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.



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IMPORTANT NOTE: Every lamp, reflex reflector, and conspicuity treatment must be permanently attached in the location specified below and must comply with all applicable requirements prescribed for it by FMVSS/CMVSS 108. The face of any device on the front/rear and sides should be, respectively perpendicular and parallel to the vehicle's centerline, unless it is photometrically certified at installation angle. No part of the vehicle shall prevent any device from meeting its prescribed requirements unless an auxiliary device meeting all prescribed requirements is installed.

IN CANADA: Manufacturers and importers of vehicles must have the proper certification test records demonstrating compliance of lighting components with all prescribed requirements.

BASIC EQUIPMENT REQUIRED ON ALL TRAILERS

DESCRIPTION				MANDATORY REQUIREMENTS			
Area	Equipment	SAE Lens Coding	Functional Purpose	Quantity	Color	Location	Height mm(in.) from the ground
1	Tail Lamps	(T)	Indicate vehicle's presence and width	Minimum 2	Red	On the rear - symmetrical as far apart as practicable	380-1830 (15-72)
	Stop Lamps	(S)	Indicate braking	Minimum 2	Red	On the rear - symmetrical as far apart as practicable	380-1830 (15-72)
	Rear Turn Signal Lamps	(I)	Indicate direction of turn	Minimum 2	Red or Amber	On the rear - symmetrical as far apart as practicable	380-2110 (15-83)
	Rear Reflex Reflectors	(A)	Indicate vehicle's presence and width	Minimum 2	Red	On the rear - symmetrical as far apart as practicable facing rearward	380-1530 (15-60)
2	License Plate Lamp(s)	(L)	Illuminates license plate	Minimum 1	White	On the rear - above or at the sides of license plate	No requirement
3	Rear Side Marker Lamps *photometrically certified at installation angle	(P2, PC* or P3, PC2*)	Front and rear side marker lamps / side reflex reflectors indicate vehicle's presence and length	Minimum 2	Red	Each side at rear as far back as practicable	380-1530 (15-60) no max. for veh. under 2032mm (80") wide
	Rear Side Reflex Reflectors	(A)		Minimum 2	Red	Each side at rear as far back as practicable facing sideward	380-1530 (15-60)
4a	Front Side Marker Lamps *photometrically certified at installation angle	(P2, PC* or P3, PC2*)		Minimum 2	Amber	Each side at front as far forward as practicable	380 (15) minimum
4b	Front Side Reflex Reflectors	(A)		Minimum 2	Amber	Each side at front as far forward as practicable facing sideward	380-1530 (15-60)

ADDITIONAL EQUIPMENT FOR TRAILERS EXCEEDING THE FOLLOWING PARAMETERS

Length 9.1m (30 ft.) or longer

DESCRIPTION				MANDATORY REQUIREMENTS			
Area	Equipment	SAE Lens Coding	Functional Purpose	Quantity	Color	Location	Height mm(in.) from the ground
5a	Intermediate Side Marker Lamps *photometrically certified at installation angle	(P2, P3, PC* or PC2*)	Indicate presence of a long vehicle	Minimum 2	Amber	Each side near center facing sideward	380 (15) minimum
5b	Intermediate Side Reflex Reflectors	(A)	Indicate presence of a long vehicle	Minimum 2	Amber	Each side near center facing sideward	380-1530 (15-60)

Width 2032mm (80 in.) or wider

DESCRIPTION			MANDATORY REQUIREMENTS				
Area	Equipment	SAE Lens Coding	Functional Purpose	Quantity	Color	Location	Height
6	Rear Clearance Lamps *photometrically certified at installation angle	(P2, PC* or P3, PC2*)	Show vehicle's width MAY NOT be combined with tail lamps	Minimum 2	Red	At widest point - symmetrical on the rear or near the rear facing rearward	As high as practicable may be lower only if ID lamps are at the top
7	Rear Identification (ID) Lamps	(P2 or P3)	Indicate presence of a wide vehicle	Exactly 3	Red	On the rear - center horizontally spaced 150mm (6 in.) to 300mm (12 in.) apart facing rearward	At the top - may be lower if door header narrower than 25mm
8	Front Clearance Lamps *photometrically certified at installation angle	(P2, PC* or P3, PC2*)	Show vehicle's width	Minimum 2	Amber	At widest point - symmetrical on the front or near the front facing forward	As high as practicable

Width 2032mm (80 in.) or wider AND GVWR 4536 kg (10,000 lb.) or more

DESCRIPTION		MANDATORY REQUIREMENTS						
Area	Conspicuity Treatment	DOT Coding	Quantity	Color	Location	Height	Options
9	Rear Upper Body Markings	DOT-C DOT-C2 DOT-C3 DOT-C4	Exactly 2 pairs of 300mm long strips	White	On the rear upper corners facing rearward	At the top	Reflex reflectors may not be required if they are replaced in their required location with conspicuity treatment. **Optional in Canada:** Rear lower body and side conspicuity treatment may also be solid white, solid yellow, or white and yellow.
10	Bumper Bar Marking		Continuous	Red/White	On the rear bumper bar's horizontal element full width - facing rearward	No requirement	
11	Rear Lower Body Marking		Continuous	Red/White *(see options)*	On the rear full width of the vehicle facing rearward	As horizontal as practicable and as close as practicable to the range of 375 to 1525mm from the ground	
12	Side Marking		(see location)	Red/White *(see options)*	Each side - facing sideward continuous, or evenly spaced over minimum of 50% of length starts and ends as close to the front and rear of the vehicle as practicable	As horizontal as practicable and as close as practicable to the range of 375 to 1525mm from the ground	

NOTE: The edge of red conspicuity tape shall not be closer than 75 mm to the edge of any amber lamp and the edge of white conspicuity tape shall not be closer than 75 mm to the edge of any lamp

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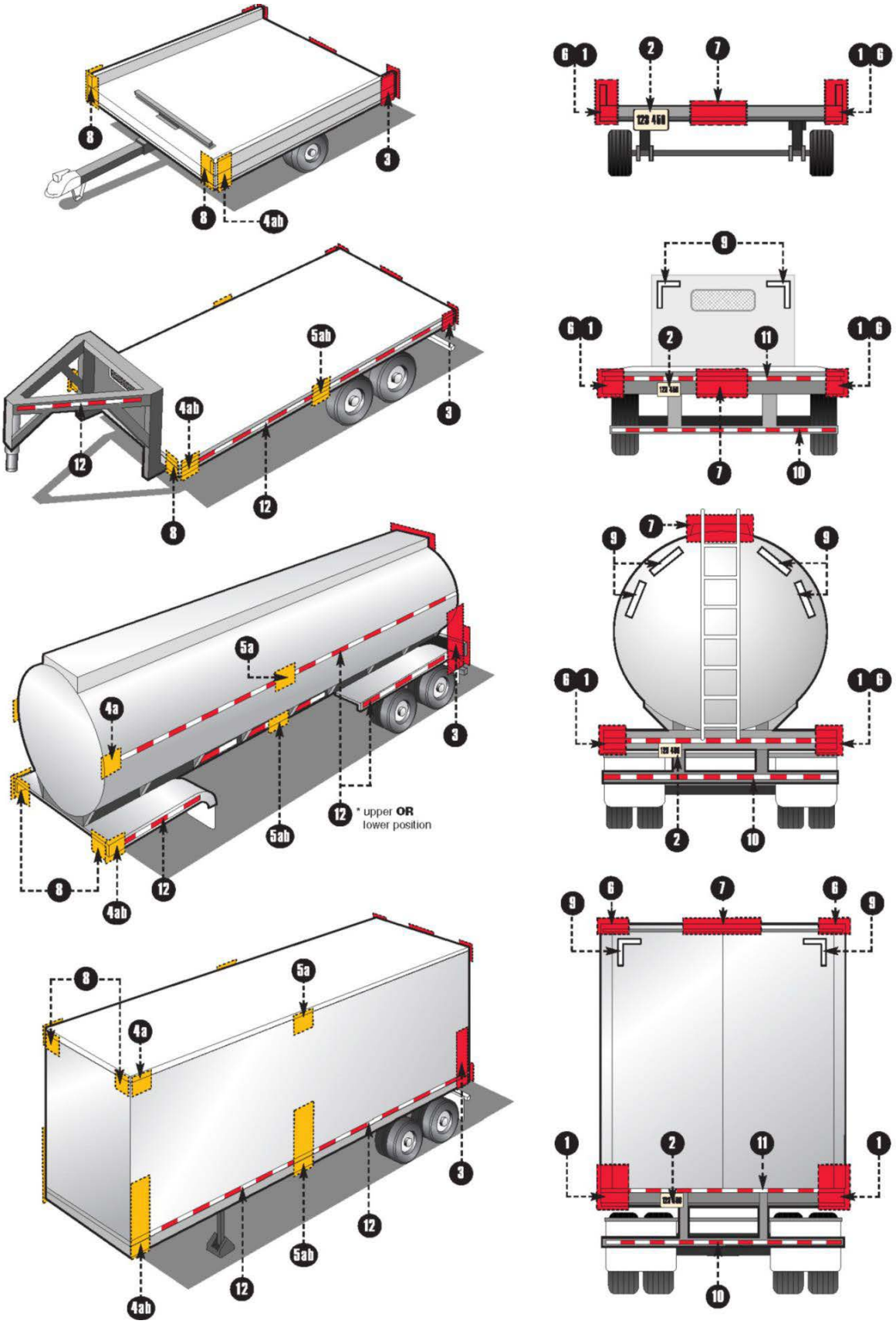

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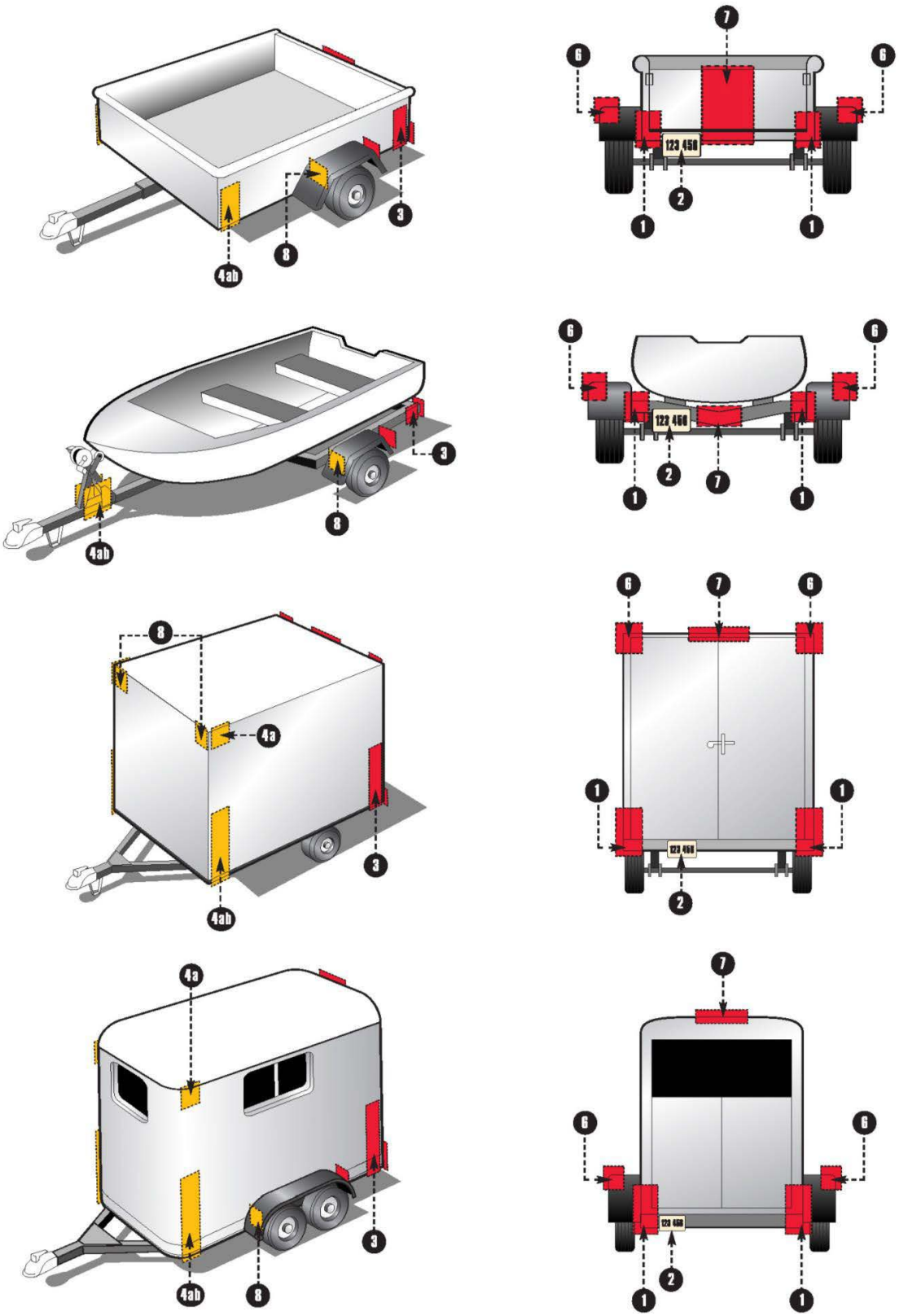

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
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Section 7 – Electrical System

ITEM AND METHOD OF INSPECTION:	REJECT IF:
1. Wiring *Additional Inspection Procedure(s):* Inspect wiring, harnesses and connections that are accessible and visible. Pay particular attention to battery, starter and charging system circuits.	**Truck|✓|** **Trailer|✓|** **Bus|✓|**
a) security	a) ***loose*** or improperly supported, and able to contact moving parts chafed section resulting from contact with vehicle parts not secured at least every 1800 mm
b) insulation	b) conductor is exposed, other than at a proper connector
c) condition	c) cut, shorted or deteriorated connection is ***loose***, abnormally corroded, burnt
d) circuit loading *Note:* Circuit protection requirements are based on ***manufacturer*** design and specifications. Circuit testing is not required. Inspection is visual and based on knowledge of the normal design and specifications.	d) circuit load protection is ***missing*** or bypassed circuit is overloaded beyond normal circuit capacity circuit protection device (fuse, circuit breaker or fusible link) exceeds circuit capacity circuit is improperly grounded
	Hazardous Conditions **i. any electrical component or wiring shows signs of shorting, arcing, or a hot spot** **In the engine compartments of a bus:** **ii. electrical cable insulation is burnt, chafed, *damaged*, or frayed, exposing the conductor** **iii. protective grommet insulating an electrical cable through metal is *damaged* or *missing*** **iv. electrical component is broken or mounting is *insecure*** **v. electrical cable is unsupported, or a clamp is *missing*, causing chafing or fraying** **vi. lubricating oil is leaking from an electrical component such as the alternator or auxiliary heater**

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
2. Battery	**Truck|✓| Trailer|✓| Bus|✓|**
a) posts and connections	a) corrosion or deterioration is present that prevents proper electrical contact, ***loose*** or burnt
b) mount	b) cracked or ***missing***, perforated or weakened due to corrosion
c) cover and hold down	c) ***insecure***, ***missing***, does not meet ***OEM standard*** battery is not secured in place
d) condition	d) ***level 2 leak*** of battery fluid
	Hazardous Conditions **i. any electrical component or wiring shows signs of shorting, arcing, or a hot spot** **In the battery compartments of a bus:** **ii. electrical cable insulation is burnt, chafed, *damaged*, or frayed, exposing the conductor** **iii. protective grommet insulating an electrical cable through metal is *damaged* or *missing*** **iv. electrical component is broken or mounting is *insecure*** **v. electrical cable is unsupported, or a clamp is *missing*, causing chafing or fraying**
3. Trailer Cord (output to towed vehicle)	**Truck|✓| Trailer|✓| Bus|✓|**
a) insulation	a) cut, cracked, deteriorated or melted through to wire conductor
b) connection *Note*: A trailer cord must be repaired only by using ***industry standard*** methods.	b) cracked, ends split, improper repair or connection
c) constant ABS power on auxiliary circuit *Note:* Also refer to Section 3A, Item 18 f) PLC communication). Every vehicle equipped for towing another vehicle with air brakes, manufactured after April 1, 2000, must supply constant power to the trailer auxiliary circuit (center pin, blue wire) while the ignition is in the "on" position. *Additional Inspection Procedures(s):* Confirm that voltage is present at the auxiliary pin in the trailer cord when the ignition is 'on' by one of the following methods: Option 1 – Test with a voltmeter. Option 2 – Connect to a test device.	c) power is not continuously supplied to the auxiliary circuit when ignition is "on" a switch is installed that can interrupt power to the auxiliary circuit voltage is below required minimum when circuit is loaded to ***industry standard*** value

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
4. Alternator Output on a School Bus *Note*: Applies to school bus only. Inspection must be conducted according to the requirements of the relevant jurisdiction and applicable ***CSA*** D250 Standard.	
a) output rate *Additional Inspection Procedure(s):* Test alternator output using test method #1 or test method #2. Test method #1 – Test alternator using a load test device. Test Method #2 - Test the output of the charging system with all lamps, heaters, defrosters, and other electrical accessories on at highest settings, with engine operating at 1500 rpm.	a) during test method #1, fails to produce 70 amps at idle or fails to produce 130 amps at 1500 rpm during test method #2, voltage drops below 12.4 volts, or charge indicator shows a discharge condition charge indicator is ***inoperative***

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

Section 8 – Body

ITEM AND METHOD OF INSPECTION:	REJECT IF:
1. Hood or Engine Enclosure *Additional Inspection Procedure(s):* Test the operation of the hood or engine enclosure doors, attachment, latches and safety devices.	**Truck|✓|** Trailer| | **Bus|✓|**
a) condition	a) ***damaged***, ***insecure***, or deteriorated in a manner that it is likely to become detached or ***missing***
b) latch (primary or secondary)	b) broken, ***inoperative***, ***insecure*** mounting, ***missing*** or seized effectiveness is compromised due to deteriorated condition, (e.g.: rubber or similar type of latch) fails to open or close normally welded or repaired in a way that does not meet ***OEM standard***
c) safety cable, assist spring, support/dampener	c) broken, insecurely attached or ***missing***
d) hinge and support spring	d) hinge or hinge part is broken, cracked, ***missing***, seized or ***abnormally worn***
	Hazardous Condition(s) **i. both primary and secondary latch are *inoperative***
2. Tilt Cab *Additional Inspection Procedure(s):* Test the operation of the tilt cab operation, its attachment, latches and safety devices.	**Truck|✓|** Trailer| | Bus| |
a) latch (primary or secondary)	a) broken, ***insecure*** mounting, ***missing*** or seized fails to open or close normally welded or repaired in a way that does not meet ***OEM standard***
b) hinge	b) hinge or hinge part is broken, cracked, ***missing***, seized or ***abnormally worn*** parts do not align correctly

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
	Hazardous Condition(s) **i. latch fails to secure the cab (latch is incapable of holding cab from moving forward)**
3. Air-Suspended Cab *Additional Inspection Procedure(s):* Check the cab with air system at normal operating pressure.	**Truck|✓|** Trailer| | Bus| |
a) air bag	a) leaking, cracked to reinforcing layer, ***damaged*** or patched not properly inflating or cab tilts to one side
b) air line, connection and fitting	b) fitting, line or repair method does not meet ***OEM*** or ***industry standard***, tubing or hose is defective as defined in the chart on page 55 fitting or connection is broken, cracked, flattened or leaking ***damaged*** in a way (such as: melting, flattening, deformation or kinking) that can restrict air flow
c) mount, rod and attachment	c) bent, broken, ***loose*** or welded or repaired in a way that does not meet ***OEM standard***
d) pressure protection valve	d) ***missing*** or improper type
e) height control valve	e) ***inoperative*** (as indicated by cab height being above or below its normal position) equipped with a single valve which is not in ***OEM*** location, or not near centre of cab
f) shock absorber	f) broken, ***damaged***, disconnected, ***loose*** or ***missing*** ***level 2 leak*** of oil
	Hazardous Condition(s) **i. any component is so *insecure* or *loose* that it is an imminent hazard or it could become detached from vehicle**

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Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
4. Cab and Passenger-Vehicle Body	**Truck|✓|** Trailer| | **Bus|✓|**
a) condition	a) any section is in a condition that could be hazardous to driver, passenger, pedestrian or cyclist due to being: loose, protruding, torn or having an exposed sharp edge corroded or torn in a manner that reduces structural integrity of a panel or floor, or allows exhaust gases to enter the occupant compartment modified in a manner that may reduce structural integrity (unless the condition or the repair is approved by the ***OEM***, ***manufacturer*** or an engineer) body component integrity is reduced due to a ***loose*** body component, broken weld, missing fastener or failed adhesive hole is present in panel or floor body panel or floor is welded or repaired in a way that does not meet ***OEM standard***
b) body mount/support	b) allows abnormal amount of movement broken, cracked, ***loose*** or ***missing*** parts improper mount used support cracked, broken or bulging welded or repaired in a way that does not meet ***OEM standard***
c) body moulding or trim	c) Is in a condition that could be hazardous to driver, passenger, pedestrian, or cyclist due to being: loose, protruding, torn or having an exposed sharp edge
d) fender	d) ***missing***, section torn away, section ***missing*** or corroded so that road spray is not controlled corroded or ***damaged*** in a manner that ***OEM*** type lamps cannot be properly secured not the full width of the tire(s)
	Hazardous Condition(s) **i. any component is so *insecure* or *loose* that it is an imminent hazard or it could become detached from vehicle** **ii. any section has exposed sharp edge, is torn or protrudes out in a manner that is hazardous to driver, passenger, pedestrian or cyclist** **iii. any body part or attachment is broken, cracked perforated, or sagging, in a manner that permits the body to contact any moving part**

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
5. Cargo Body *Additional Inspection Procedure(s):* Where any sheet metal, structural item or fastener is suspected of being ***loose*** or perforated, determine the integrity of the suspect item or area by lightly tapping it with a hammer. *Note*: Minor surface rust and corrosion is normal.	**Truck**|✓| **Trailer**|✓| Bus| |
a) sheet metal	a) any section has exposed sharp edge, is torn or protrudes out in a manner that could be hazardous to driver, passenger, pedestrian or cyclist panel is ***insecure***, ***loose*** or corroded through rivet is ***loose***, ***missing*** welded or repaired in a way that does not meet ***OEM standard***
b) floor & deck	b) has any condition that allows a person or cargo to fall through has a hole larger than 200 mm across the longest dimension welded or repaired in a way that does not meet ***OEM standard***
c) frame & sub-frame	c) bulge caused by corrosion resulting in distortion of 10 mm or more (unless the condition or the repair is approved by the ***OEM***, ***manufacturer*** or an engineer) stress crack at side rail or rub-rail rivet is ***loose***, ***missing***, dimpled by corrosion bent, broken, cracked or ***insecure*** welded or repaired in a way that does not meet ***OEM standard***
d) cross-member	d) bent, broken, collapsed, cracked or ***missing*** perforated or weakened by corrosion

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Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
e) inner or outer side rail and body-long sills	e) bulge caused by corrosion resulting in distortion of 10 mm or more (unless the condition or the repair is approved by the ***OEM***, ***manufacturer*** or an engineer) rivet is ***loose***, ***missing*** bent, broken, cracked or ***insecure*** welded or repaired in a way that does not meet ***OEM standard***
f) stake pocket/tiedown, cargo securing point or cargo securing device	f) broken, cracked or ***insecure*** elongated or distorted *Note*: When a cargo securing point or device is in any of the conditions described above, record the condition on the inspection report, do not reject the vehicle for this condition alone.
g) tailgate, hopper, or end-dump door	g) broken, cracked or ***missing*** hinge is broken, cracked or ***missing***, or pin lock is ***missing*** ***insecure***, or will not close and latch properly any gap exists that would allow leakage, loss or spillage of cargo welded or repaired in a way that does not meet ***manufacturer*** standard
h) body to frame attachment *Note:* Includes body to frame attachment device such as 'U- bolt', pivot hinge, cheek plate mount, flex-mount hardware, body clamp and 'J-Bar'.	h) bent, broken, cracked, ***loose*** or ***missing*** spring is broken spacer or insulator is abnormally worn, crushed, dislodged or missing
i) body rail and structural member	i) upper or lower cargo body rail is bent, buckled, has a crack longer than 25 mm, or has a fastener ***loose*** or ***missing*** floor cross member is bent, ***loose*** or sagging roof support is bent, ***loose*** or sagging
j) body panel	j) any section has exposed sharp edge, is torn or protrudes out in a manner that could be hazardous to driver, passenger, pedestrian or cyclist panel or panel fastener is ***insecure***, ***loose***, ***missing***, or corroded through rivet is ***loose*** repaired in a way that does not meet ***OEM standard*** any gap exists that would allow leakage, loss or spillage of cargo

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
	Hazardous Condition(s) **i. any component is so *insecure* or *loose* that it is an imminent hazard or it could become detached from vehicle** **ii. any section has exposed sharp edge, is torn or protrudes out in a manner that is hazardous to driver, passenger, pedestrian or cyclist** **iii. any body part or attachment is broken, cracked perforated, or sagging, in a manner that permits the body to contact any moving part, or imminent collapse appears likely** **iv. any gap exists allowing leakage, loss or spillage of cargo** **v. a cargo body upper or lower rail is buckled, bowed, cracked through, sagging or has two or more adjacent *loose* or missing fasteners** **vi. two or more adjacent floor cross members are bent, *loose* or sagging** **vii. two or more adjacent roof supports are bent, *loose* or sagging**
6. Frame, Rails & Mounts	**Truck|✓| Trailer|✓| Bus|✓|**
a) condition *Note*: Some rust and corrosion on the outer surface of exposed metal parts is normal. When a high amount of rust or corrosion is present and visibly reduces the thickness of the material, structural deterioration is possible.	a) welded, modified or repaired in a way that does not meet ***OEM standard*** bent, broken or cracked perforated or separated due to corrosion between mount and frame member rusted or corroded to a depth sufficient to become weakened bulge caused by corrosion resulting in distortion of 10 mm or more (unless the condition or the repair is approved by the ***OEM***, ***manufacturer*** or an engineer) any condition of the frame assembly allows a frame component, or a part of the body or power train, to be more than 25 mm out of its normal position, or to contact a moving part

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
b) frame fastener	b) ineffective, ***loose*** or ***missing***
c) cross-member	c) bent, broken, cracked, ***loose*** or ***missing*** cut, notched, rusted or corroded to a depth sufficient to cause weakness repaired using material or method, that does not meet ***OEM standard*** or ***industry standard*** any condition of a cross member allows a frame component, or a part of the body or power train, to be more than 25 mm out of its normal position, or to contact a moving part
d) sub-frame assembly *Note:* This only applies to a structural frame assembly that is not part of the main frame assembly, and carries a load or provides strength to the vehicle structure, i.e.: engine cradle, or suspension sub-frame.	d) bent, broken, cracked, ***loose*** or ***missing*** cut, notched, rusted or corroded to a depth sufficient to cause weakness repaired using material or method that does not meet OEM standard or industry standard any condition of the sub-frame assembly allows a frame component, or a part of the body or power train, to be more than 25 mm out of its normal position, or to contact a moving part
	Hazardous Condition(s) **i. any frame side-rail or cross-member is cracked as follows:** **• longer than 38 mm** **• longer than 25 mm in the bottom flange** **• from the web extending around the radius and into the bottom flange** **ii. any condition of the frame allows a frame component, or a part of the body or power train, to be more than 38 mm out of its normal position, or to contact a moving part** **iii. imminent failure appears likely due to a frame member that is *damaged* or deteriorated, or has been repaired using material or method, that does not meet *OEM standard* or *industry standard*** **Note: All inspection procedures are visual unless additional inspection procedures are indicated.** **Conditions shown *in this manner* are defined conditions. The definitions can be found in the introduction section.**

ITEM AND METHOD OF INSPECTION:	REJECT IF:
7. Unitized Body Elements	**Truck|✓| Trailer|✓| Bus|✓|**
a) load carrying panel, bulkhead, structural element and mounts *Note*: Some rust and corrosion on the outer surface of exposed metal parts is normal. When a high amount of rust or corrosion is present and visibly reduces the thickness of the material, structural deterioration is possible.	a) bent, broken, cracked, ***loose*** or ***missing*** cut or notched more than 25 mm, or rusted or corroded to a depth sufficient to cause weakness welded or repaired in a way that does not meet ***OEM standard*** any rivet is ***loose*** or ***missing*** any condition of the unitized body allows a part of the body or power train, to be more than 25 mm out of its normal position, or to contact a moving part
	Hazardous Condition(s) **i. any component is so *insecure* or *loose* that it could become detached from the vehicle** **ii. structural body component has a crack, cut or notch longer than 38 mm** **iii. any condition of a unitized body component allows a part of the body or power train to be more than 38 mm out of its normal position, or to contact a moving part** **iv. imminent failure appears likely due to a body component that is *damaged* or deteriorated, or has been repaired using material or method, that does not meet *OEM standard* or *industry standard*** **Truck|✓| Trailer|✓|** Bus| |
8. Cab or Cargo Door	
a) condition and operation *Additional Inspection Procedure(s):* Test the operation of each door. *Note*: This includes a partition door between the occupant and cargo area.	a) binds or fails to lock securely ***insecure*** mounting to hinge, ***insecure*** hinge or severely corroded in hinge area panel is corroded through welded or repaired in a way that does not meet OEM standard door fails to operate or latch on both primary and secondary latches gap exists that may allow exhaust gases to enter cab, passenger compartment, and/or sleeper seal is out of position, ***damaged*** or ***missing***, and is able to allow exhaust gases to enter cab, passenger compartment, and/or sleeper any gap exists that would allow leakage, loss or spillage of cargo

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
b) door openers and handles	b) broken, ***inoperative*** or ***missing*** catch or latch is broken, ***loose*** or ***missing***
	Hazardous Condition(s) **i. cab door fails to latch on both primary and secondary latches** **ii. cargo door fails to latch** **iii. gap exists and exhaust gases are entering cab, passenger compartment or sleeper** **iv. any gap exists allowing leakage, loss or spillage of cargo**
9. Cargo Tank or Vessel *Note*: Code, (e.g.: dangerous goods ***CSA*** B620, edible product, dry bulk) cargo tanks are frequently subject to additional inspection requirements. Inspections conducted in accordance with this standard address only a limited portion of the compliance requirements. This inspection does not include any procedure that requires operation of any valve, hatch or product handling item. Technician-inspector must take precautions to avoid exposure to any cargo or residual material.	**Truck|✓|** **Trailer|✓|** Bus| |
a) condition	a) welded or repaired in a way that does not meet ***OEM standard*** ***loose*** on mounts ***level 2 leak*** of any liquid transported by the tank or vessel crack or broken weld in tank, frame or support movement, bulge or weakness caused by corrosion between tank and frame
b) valve	b) cap ***loose*** or ***missing*** ***level 2 leak*** of any liquid transported by the tank or vessel
c) hose	c) ***loose*** or improperly secured
d) hatch	d) ***insecure***, ***loose*** or ***missing*** latch ***inoperative*** hinge, broken or ***inoperative***

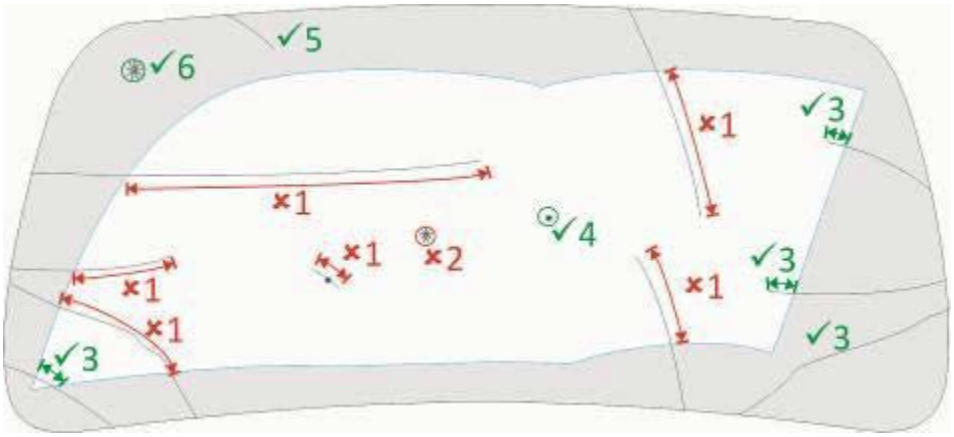
Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
	Hazardous Condition(s) **i. any component is so *insecure* or *loose* that it could become detached from vehicle** **ii. required internal valve is *missing*** **iii. internal valve remains open when it is required to be closed** **iv. access/fill/inspection opening cover is improperly secured or *missing*** **v. required venting device, emergency device, or discharge valve, is *missing***
10. Body, Device or Equipment Attached or Mounted to the Vehicle	**Truck|✓| Trailer|✓| Bus|✓|**
Note: This section applies primarily to external devices or equipment attached to a vehicle. Examples include a crane, cargo lifting and transporting machine, load covering equipment, cargo dispensing equipment, APU, refrigeration-heater (reefer) unit, generator, ready-mix unit, sander body, feed & grain body, snow plow, service/ utility body, vacuum tank, flatbed, roll- on/roll-off, lugger, ISO container chassis, etc. The criteria in this section only apply to a mounted body, device or equipment to the extent that the condition could affect the safe operation of the vehicle on the highway. The functionality of the mounted equipment does not need to be tested or inspected.	
a) security and condition *Additional Inspection Procedure(s):* Check security of attached body, device or equipment visually, manually and using suitable tools as necessary. No functional test is to be conducted.	a) equipment or device is in such an unsafe condition that is a risk to other motorists, the driver, a passenger, pedestrian or cyclist equipment or device is ***insecure*** or ***loose***, or in danger of shifting in a way that could impede normal operation of the vehicle any section has an exposed sharp edge, is torn or protrudes out in a manner that could be hazardous to the driver, a passenger, pedestrian or cyclist ***level 3 leak*** of any oil, hydraulic fluid or liquid product

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
	Hazardous Condition(s) **i. any article, component or device is so *insecure* or *loose* that it could become detached from vehicle** **ii. equipment or device is in such an unsafe condition that is a risk to other motorists, the driver, a passenger, pedestrian or cyclist** **iii. any section has an exposed sharp edge, is torn or protrudes out in a manner that could be hazardous to the driver, a passenger, pedestrian or cyclist**
11. Refrigeration/Heater Unit Fuel System (Reefer or Auxiliary Power Unit [APU])	**Truck|✓|** **Trailer|✓|** **Bus|✓|**
Note: Inspect the condition and security according to item 10 above. Inspect the exhaust system and fuel system, according to the appropriate type of fuel used, as described in Section 1 – Power Train.	
12. Bumper *Note*: Applies only to the front bumper on a truck or truck- tractor. Applies to the front and rear bumper on a bus.	**Truck|✓|** Trailer| | **Bus|✓|**
a) condition	a) broken, ***loose*** or ***missing*** any section has exposed sharp edge, is torn or protrudes in a manner that could be hazardous to the driver, a passenger, pedestrian or cyclist
b) design	b) replacement part does not meet ***OEM standard***, or is weaker than ***OEM*** design solid portion does not extend from one frame rail to the other (except for a unitized body design)
	Hazardous Condition(s) **i. imminent failure appears likely** **ii. any section has exposed sharp edge, is torn or protrudes in a manner that could be hazardous to the driver, a passenger, pedestrian or cyclist**

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
13. Windshield	**Truck**|✓| Trailer| | **Bus**|✓|
a) obstruction *Note*: Forward/rearward facing camera safety devices may be mounted up to 50 mm from the outer edge of the area swept by ***OEM*** wipers.	a) decal or device obscures vision in the area swept by ***OEM*** windshield wipers clouded, ***damaged*** or deteriorated in such a way that driver's normal vision is materially impaired in the area swept by ***OEM*** windshield wipers
b) crack *Note*: See image below for examples of pass and fail windshield crack conditions.	b) a crack extends through both layers of glass a crack of any length extends more than 50 mm within the area swept by ***OEM*** windshield wipers
 **Examples of Windshield Pass and Reject Conditions:** Reject condition 1 - Crack through one layer that extends more than 50 mm into the area swept by wipers Reject condition 2 - Star chip larger than 13 mm in diameter in area swept by wipers Pass condition 3 - Crack extends less than 50 mm into the area swept by wipers Pass condition 4 - Star chip smaller than 13 mm in diameter in area swept by wipers Pass condition 5 - Crack through one layer that is more than 50 mm long, but outside the area swept by wipers Pass condition 6 - Star chip larger than 13 mm in diameter, but outside the area swept by wipers	
c) chip	c) a chip that is larger than 13 mm in diameter within the area swept by ***OEM*** windshield wipers
d) discolouration	d) more than 10% of total glass area is discoloured due to age or other deterioration

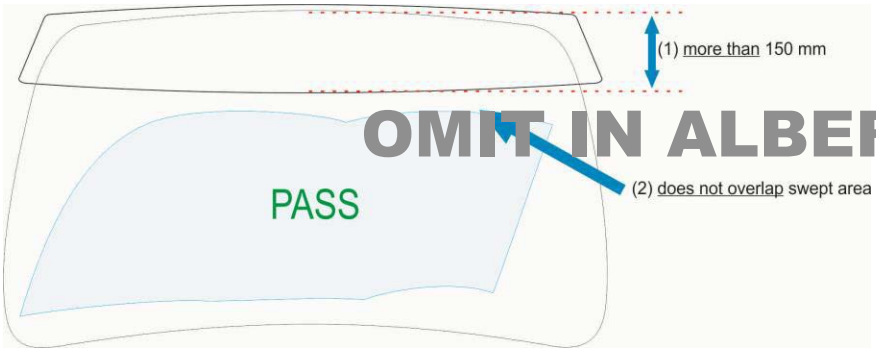
Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
e) tinting *Note:* OEM tinting does not block more than 30% of light. This is rated and expressed as minimum 70% light transmittance. "AS" = American National Safety Standard and (***ANSI***/SAE Z26.1)	e) any after-market tint is applied driver's normal vision is materially impaired tint or sunscreen other than that allowed by ***ANSI***/SAE Z26.1 standards tinting extends more than 75 mm from top of windshield, or beyond AS line
f) material type	f) is not marked as type AS-1 or AS-10
g) condition	g) ***missing*** vision is obscured or limited due to surface condition
	Hazardous Condition(s) **i. windshield is missing** **ii. windshield is *damaged* or deteriorated in such a way that driver's normal vision is materially impaired in the area swept by *OEM* windshield wipers**
14. Side Windows	**Truck|✓|** Trailer| | **Bus|✓|**
a) operation *Additional Inspection Procedure(s):* Test the operation of the driver's (left) side window.	a) fails to open or close normally
b) condition *Note:* Applies to any window forward of the driver's seat back.	b) clouded, ***damaged*** or deteriorated in such a way that normal driver vision is materially impaired window has an exposed sharp edge, is broken or part of window is missing window originally fitted with metal banding has any ***damaged*** or missing banding
c) material type *Note:* Applies to every side window.	c) is not marked as type AS-1, AS-2, AS-10 or AS-11
d) tinting (where tinting is prohibited by the jurisdiction) *Note:* Applies to any window forward of the driver's seat back.	d) any after-market tint is applied
e) tinting (where tinting is permitted by the jurisdiction) *Optional Additional Inspection Procedure* Where aftermarket tinting is applied to any side window forward of the driver's seat back, test the light transmittance using a suitable test device.	e) light transmittance value is less than 70% (more than 30% of light is blocked)

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
15. Rear Window	**Truck**|✓| Trailer| | **Bus**|✓|
a) condition	a) broken or exposed sharp edge
b) material type *Note:* Rigid material may be used in place of glass or rigid plastic, when the vehicle is equipped with an outside rear-view mirror on each side.	b) is not marked as glass type AS-1, AS-2, AS-10 or AS- 11, or rigid plastic AS-4 or AS-5
16. Interior Sun Visor	**Truck**|✓| Trailer| | **Bus**|✓|
a) location	a) ***missing*** on driver's side
b) attaching parts	b) bent, broken, ***loose*** or ***missing***
c) adjustment	c) cannot be maintained in a set position
d) modified or non-***OEM*** sun visor on a school bus	d) does not meet ***applicable standard***
17. Exterior Windshield Sun Visor	**Truck**|✓| Trailer| | **Bus**|✓|
a) obstructed view	a) any part of an exterior visor, at any point: 1. extends more than 150 mm below the upper edge of the windshield; and 2. overlaps the portion of the windshield swept by the ***OEM*** wiper arm and wiper blade

Fig 1.



Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:

Fig 2.

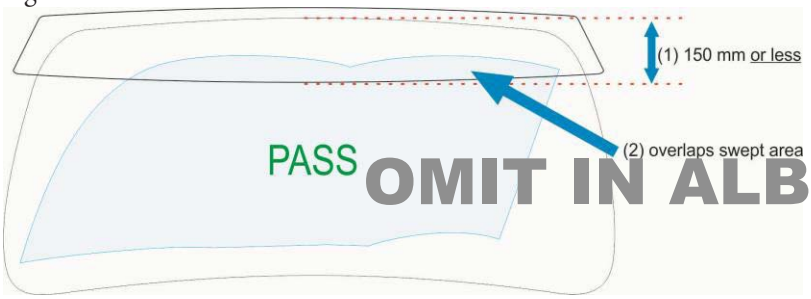


Fig 3.

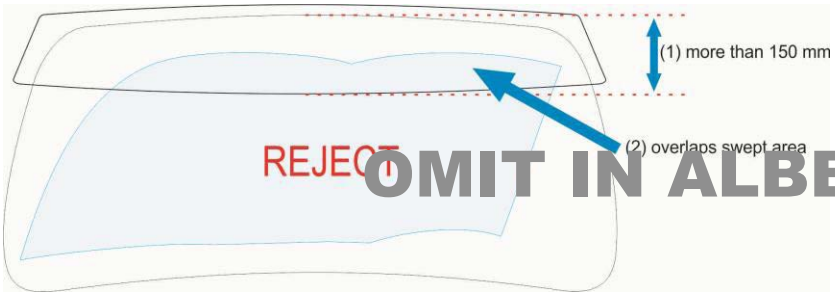
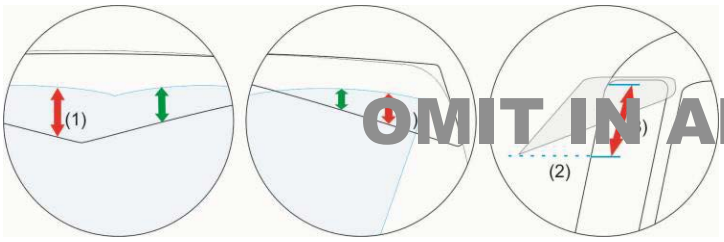


Fig 4.



Sun Visor Measurement Location and Method:

1. Identify the location where the sun visor vertically overlaps furthest over the swept area of the wiper.
2. Extend a level line to the surface of the windshield from the location identified in step (1).
3. Measure upwards along the surface of the windshield. Reject if measurement is greater than 150 mm.

Note:
"Swept area" means the portion of the windshield swept by an ***OEM*** wiper blade attached to an ***OEM*** wiper arm.

	Hazardous Condition(s) **i. any part of an exterior visor, at any point:** • **extends more than 150 mm below the upper edge of the windshield; and** • **overlaps the portion of the windshield swept by the *OEM* wiper arm and wiper blade**

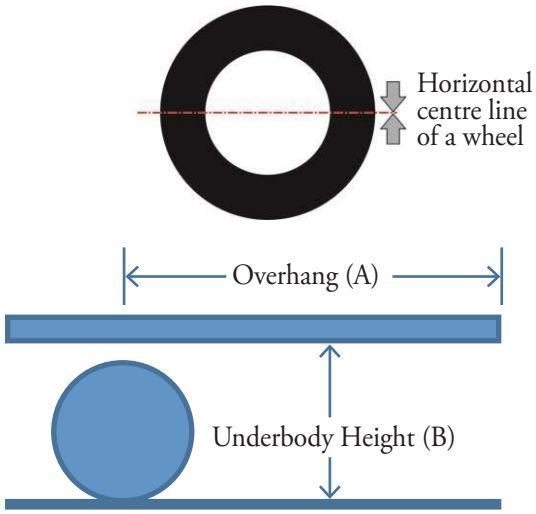
Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
18. Rear-view Mirror	**Truck|✓|** Trailer| | **Bus|✓|**
a) location *Note:* Every vehicle requires an external rear-view mirror on the left side. When a vehicle does not have an interior rear-view mirror that provides an unobstructed view through a rear window, an external mirror is also required on the right side.	a) required rear-view mirror is ***missing***
b) view	b) view to the rear is obstructed on a required mirror
c) mount	c) broken, ***insecure*** or ***loose*** fails to hold mirror in correct position
d) glass condition	d) cracked vision is obscured due to condition of glass or reflective surface, over 5% of total surface area of mirror
e) surface area of external mirror *Note:* ***OEM*** mirrors are required to meet these same area requirements as per ***CMVSS*** 111. When a convex mirror is installed onto a rear-view mirror, its area is included.	**e) when non-*OEM* mirror is used, surface area of mirror is less than:** for a vehicle with GVWR of 4536 kg or less: 125 cm^2 for a vehicle with GVWR of more than 4536 kg: 325 cm^2
	Hazardous Condition(s) **i. an external rear view mirror is *missing*, obscured, *insecure* or adjustment is seized**
19. Seat *Note:* Excludes passenger seats on a bus. (See item 32 below for bus passenger seat requirements.)	**Truck|✓|** Trailer| | **Bus|✓|**
a) condition *Additional Inspection Procedure(s):* Test the operation of the driver seat position controls.	a) ***loose*** or ***insecure*** mounting frame broken covering material torn and exposing a metal component or spring driver seat cannot be adjusted forward or backward driver seat back recline mechanism fails to adjust - driver seat pedestal removed or seat assembly does not meet ***OEM standard***

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
b) seat position lock *Additional Inspection Procedure(s):* Test the operation of the driver seat position locking function.	b) driver seat adjustment fails to lock into position
	Hazardous Condition(s) **i. driver's seat *loose*, insecure or fails to lock into position**
20. Seat Belt/Occupant Restraint *Additional Inspection Procedure(s):* Confirm the operation of each seat belt latch and retractor.	**Truck|✓|** Trailer| | **Bus|✓|**
a) type and condition	a) ***missing*** or not equipped at each seating position as originally required to meet applicable ***CMVSS*** webbing material is broken, cut frayed or torn air ride, hydraulic or spring seat does not have lap belts attached to the seat, or is not equipped with a secondary belt from the seat to the floor
b) anchor	b) broken, ***insecure*** mounting or ***missing***
c) retractor	c) broken, ***insecure*** mounting or ***missing*** fails to allow belt to extend to its maximum length or fails to retract properly
d) belt release and buckle *Additional Inspection Procedure(s):* Buckle each seatbelt assembly and extend the belt to test the belt retractor.	d) broken, ***insecure*** mounting or ***missing*** any part is not properly attached to the belt material latch fails to lock in position or fails to release easily when belt is under tension
e) supplemental restraint system (SRS) *Additional Inspection Procedure(s):* Cycle the ignition off and on and check the status of the SRS indicator lamps.	e) an air bag is disconnected, ***inoperative***, ***missing*** or not re-installed to ***OEM*** service instructions the air bag indicator (SRS) lamp indicates a malfunction or fails to operate according to ***OEM*** service instructions air bag has been deactivated permanently without a provision to turn off and on by a key lock, or does not have an illuminated message to indicate when the air bag has been switched off
f) pre-tensioner and load limiter	f) pre-tensioner has been activated and system not repaired or replaced to meet ***OEM standard*** load limiter has been activated and system not repaired or replaced to meet ***OEM standard***
	Hazardous Condition(s) **i. a required seat belt is *inoperative* or *missing***

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
21. Fender/Mud Flap	**Truck|✓|** **Trailer|✓|** **Bus|✓|**
Note: A mud flap is required behind every wheel or axle group, where the full width of the tire is not enclosed by a body element, such as a fender, down at least as far as the wheel's horizontal centre line. Unless exempt as noted below, the mud flap must meet the following dimensions. Mud flap width - at least as wide as the tires. Bottom of mud flap - no more than 210 mm from the ground. Top of mud flap - must extend upward at least as high as the top of the tire(s), or up to a body element that extends below the top of the tire. Mud flap exemptions: A mud flap is not required where the body overhang is more than three times the underbody height. *Overhang* = (A) the distance from the vertical centre line of the tire to the end of the body *Underbody height* = (B) the distance from the bottom of the body overhang to the ground Mud flap location and dimensions may vary on a vocational vehicle, where the mud flap will interfere with vehicle operation, and on a vehicle with movable suspension, where there is inadequate room for a full size mud flap.	
a) condition and location	a) fender or mud flap is broken, has ***insecure*** mounting, is ***loose*** or ***missing*** fender or mud flap has a tear or wear hole exists that is larger than 100 mm across the longest dimension, or the aggregated longest dimensions of multiple holes in a single mud flap equal more than 100 mm the distance from the bottom of the mud flap to the ground exceeds 210 mm the mud flap does not cover the full tread width of the tire(s) the top of the mud flap does not reach up to the top of the tires or a body element

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
	Hazardous Condition(s) **i. required mud flap is missing**
22. Landing Gear on Trailer	Truck| | **Trailer|✓|** Bus| |
a) operation *Additional Inspection Procedure(s):* Test the operation of the landing gear in all speed settings.	a) binding, ***inoperative*** or seized
b) condition	b) landing gear or brace is bent, broken or cracked ***insecure*** mounting pad broken, ***insecure*** or ***loose***, or ***missing***
c) crank handle	c) cannot be stowed or secured so that it remains within the outer dimensions of the vehicle
	Hazardous Condition(s) **i. any part of the landing gear is *insecure* or *loose* or so as to become detached from vehicle**
23. Sliding Axle Assembly (Sliding Bogie) on Trailer	Truck| | **Trailer|✓|** Bus| |
a) frame and sub-frame rail	a) welded or repaired in a way that does not meet ***OEM standard*** bent, broken or cracked any attaching weld is broken or cracked perforated or separated due to corrosion between mount and frame member rusted or corroded to a depth sufficient to become weakened
b) slider-guide/hold-down bracket & locking device	b) cracked or ***missing*** ***inoperative*** or fails to lock securely any lock pin is broken, cracked, disengaged or ***missing*** locking device (pin) is worn causing 25% or greater reduction in diameter locking-pin hole measures more than 25 mm larger than its original size

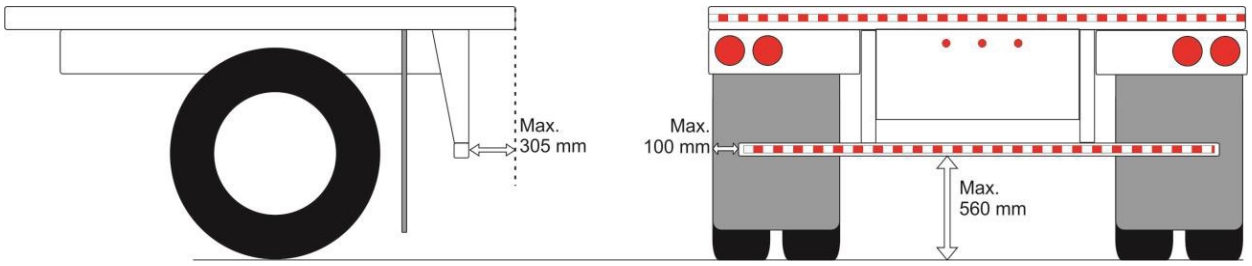
Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
c) stop	c) bent, cracked, ***loose*** or ***missing***
	Hazardous Condition(s) **i. more than one-fourth of the slider locking pins or locking pin holes that are in use have any one of the following conditions:** **• locking pin is missing or not engaged** **• locking-pin hole measures more than 25 mm larger than its original size** **• the material from the hole in use to an adjacent hole, or the material from the hole in use to the edge of the rail, is torn or split** **ii. more than one-fourth of the slider-guide/hold- down brackets are missing or disengaged** **iii. the sliding suspension attachment member (undercarriage body rail) on either side has a crack of any length in more than 50 percent of its attachment welds** **iv. a sliding suspension member's (undercarriage body rail) attachment welds are cracked completely through along a 1.2 m continuous length of the body rail** **v. a sliding suspension attachment member (undercarriage body rail) is cracked completely through along a 1.2 m continuous length**
24. Aerodynamic Device and Attachment	**Truck|✓| Trailer|✓| Bus|✓|**
a) condition and security	a) ***insecure*** or ***loose*** any section has exposed sharp edge, is torn or protrudes out in a manner that could be hazardous to driver, passenger, pedestrian or cyclist
	Hazardous Condition(s) **i. aerodynamic device is so *insecure* or *loose* it is likely to become detached from the vehicle** **ii. any section has exposed sharp edge, is torn or protrudes out in a manner that could be hazardous to driver, passenger, pedestrian or cyclist**

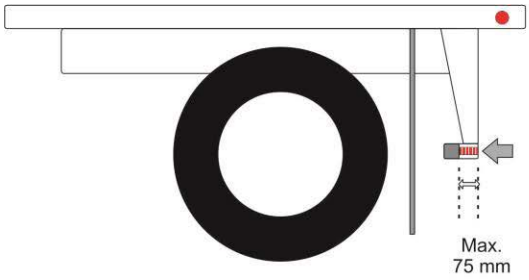
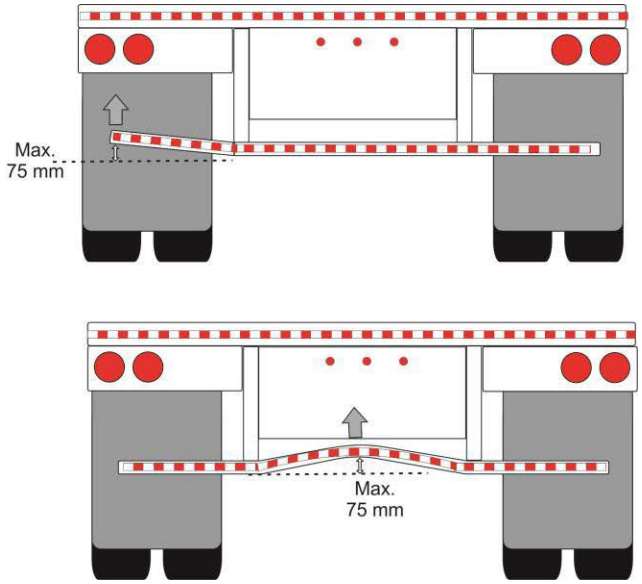
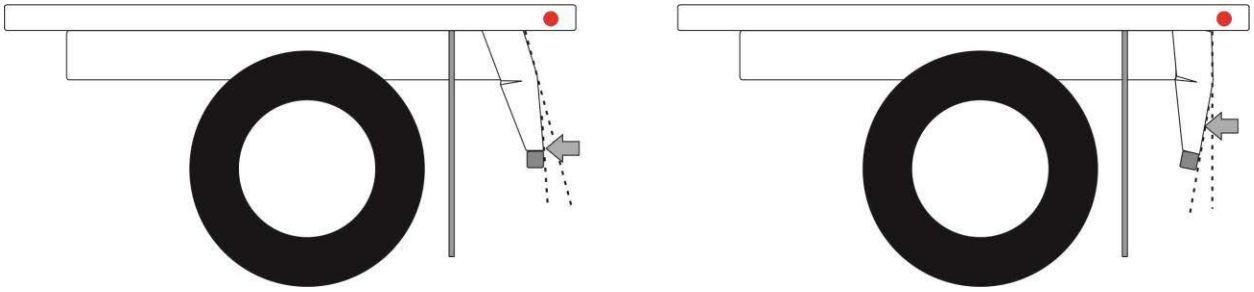
Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
25. Rear Impact Guard (RIG) on Trailer	Truck| | **Trailer|✓|** Bus| |
Note: Every trailer with a GVWR of 4,536 kg or greater manufactured on or after September 23, 2007, except as noted below, must be fitted with a rear impact guard (RIG) that meets the requirements of ***CMVSS*** 223. Trailers not required by ***CMVSS*** to have RIG include: • pole trailer • pulpwood trailer • wheels-back trailer • trailer designed to be used as temporary living quarters • low chassis trailer • trailer designed to interact with, or having, work performing equipment located in or moving through the area that would be occupied by a RIG	
a) dimensions *Note:* All RIG dimensions are based on the trailer being in an unloaded condition, suspension at normal ride height and tires properly inflated.	a) RIG does not conform to dimensions shown in figure 1 below (based on ***industry standard*** - TMC RP 732)
b) condition *Note:* Multiple bends are permitted. When there is visible damage to the RIG, also carefully inspect the trailer frame and floor for structural damage.	b) broken, ***loose*** or ***missing*** has cracked welds in the horizontal or vertical member or in the supporting structure or any attachment to vehicle structure the horizontal member is bent inward, downward, upward or outward, beyond 75 mm as shown in figure 2 below the vertical supports and/or supporting structure are weakened, bent or distorted (See figure 3 below)

Figure 1 – Rear Impact Guard Dimensions



Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
Figure 2 – Limits of Damage to Horizontal RIG Member   Figure 3 – Example of Damaged Vertical RIG member 	**Hazardous Condition(s)** **i. any part of the RIG is so *insecure* or *loose* it is likely to become detached from the vehicle**

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
26. Floor Pan/Baggage Floor/Step Well on a Bus	Truck| | Trailer| | **Bus|✓|**
a) floor condition	a) bent or deformed in a way that causes unevenness in any aisle, improper attachment of any seat or interferes with any system or control cracked, split or has any non-manufactured hole that is not properly patched rusted or corroded sufficiently to result in structural weakness allows exhaust gases to enter occupant compartment any rivet is ***loose*** or ***missing***
b) floor covering *Note:* Slip resistant covering is required on the passenger compartment floors and aisles of all buses. Floor covering is not required in baggage areas.	b) cracked, torn or worn through, or not sealed at seams ***loose*** or curled and posing a tripping hazard missing or improper type not a smooth surface material under the seats on a school bus, not a ribbed surface material in the aisle, or required ribbed surface of floor covering is worn smooth
c) step well condition *Note:* Slip resistant covering is required on all step tread surfaces.	c) bent or deformed in a way that causes unevenness on any step surface cracked, split or has any non-manufactured hole that is not properly patched rusted or corroded sufficiently to result in structural weakness nose of tread does not have band of contrasting colour (only applicable where a contrasting colour was originally equipped by ***OEM***)
27. Interior Body and Fixtures on a Bus	Truck| | Trailer| | **Bus|✓|**
a) stanchion and guard rail	a) ***OEM*** equipped stanchion is ***missing*** ***loose***, support or fastener ***missing*** energy absorbing material is ***missing*** and exposing any area of metal with the longest dimension greater than 25 mm energy-absorbing material deeper than 6 mm, is ***missing*** on any one element, on one or more sections that equal more than 100 mm, when the longest dimension of all such areas are added together
b) grab handle	b) ***OEM*** equipped grab handle is ***missing*** broken or ***loose*** on a school bus, drawstring block or security block (that prevents draw strings from being caught) is ***missing***

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
c) retainer barrier on a school bus *Note:* A school bus must be equipped with a seat or retainer barrier forward of each passenger seat. A seat acts as a retainer barrier to the seat immediately behind it.	c) ***missing***, not located forward of any seat any part is not padded on the rear face on the upper 300 mm
d) metal condition	d) any metal is torn in a way that could be hazardous to a person
28. Service and Exit Door on a Bus	Truck| | Trailer| | **Bus|✓|**
a) condition and operation *Additional Inspection Procedure(s):* Test the operation of each door.	a) binds or fails to lock securely ***insecure*** mounting, or severely corroded in hinge area panel is corroded through welded or repaired in a way that does not meet ***OEM standard*** door fails to operate or fails to latch on both primary and secondary latches gap exists that allows exhaust gases to enter occupant compartment
b) door openers and handles	b) broken, ***inoperative*** or ***missing*** catch or latch is broken, ***loose*** or ***missing***
c) remote door operator	c) ***inoperative***, ***missing*** or not equipped binds, jams or malfunctions manual override device on power operated door is ***inoperative*** or ***missing*** control is not accessible from seated driving position
d) door edge material	d) material is ***loose*** or torn strip seal along the bottom edge of the door is ***missing*** or torn ***missing*** or improper type of material
e) window of school bus door *Note*: Applies to school bus only.	e) has fog or visible moisture between panes fails to meet any of the following requirements: OEM type and size double paned or equipped with a means of keeping glass clear of frost marked as type AS-1, AS-2,AS-10 or AS-11
	Hazardous Condition(s) **i. door is *inoperative* or fails to remain in the closed position**

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
29. Emergency Exit (Door, Window and Roof Hatch) on a Bus *Note:* Inspection must be conducted according to the ***applicable requirements***.	Truck| | Trailer| | **Bus|✓|**
a) condition and operation *Additional Inspection Procedure(s):* Confirm that each exit (door, window and roof hatch) opens, closes and latches as intended.	a) passage to any door is blocked release or latch fails to operate normally from the inside or outside hinge fails to operate normally fails to open fully and smoothly
b) label and signage *Note:* Inspection must be conducted according to the ***applicable requirements.***	b) fails to display required label or sign identifying emergency exit fails to display required label or sign displaying operating instructions
c) emergency door and roof hatch	c) interlock system on emergency door or roof hatch fails to ***operate as intended***
d) emergency exit window warning on a school bus	d) warning device ***inoperative*** or ***missing*** on emergency window
	Hazardous Condition(s) **i. required and or marked emergency exits are *inoperative*, *missing*, or obstructed** **ii. vehicle operates with emergency door locked**
30. Passenger Compartment Window on a Bus (Except Emergency Exit Window) *Note:* Items a), b) & c) below apply to all passenger compartment side windows.	Truck| | Trailer| | **Bus|✓|**
a) operation *Additional Inspection Procedure(s):* Test the operation of each opening side window.	a) fails to open, close or latch as intended

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
b) condition	b) broken, exposed sharp edge, single pane glass is cracked or dual pane window is cracked on inside exposed edge is not banded on a school bus, double-paned windows or windows equipped with frost shields, are not fitted where required by the ***applicable requirements***
c) material type	c) **not marked as one of the two material listed below:** • glass type AS-1, AS-2, AS-3, AS-10 or AS-11 • rigid plastic type AS-4, AS-5 or AS-12
d) window tint *Note:* This item applies only to the windows directly to the left and right of the driver.	d) aftermarket tint or sun screen is applied to the windows directly to the left and right of the driver (including windows in doors)
e) window tint on a school bus	e) aftermarket tint or sun screen is applied to any window that is required to be double-paned by the ***applicable requirements***
31. School Bus Exterior Mirror (Except Standard Left and Right Side Mirror) *Note*: Applies to school bus only.	Truck| | Trailer| | **Bus|✓|**
a) left and right side convex rear-view mirror	a) required convex mirror is broken, ***insecure***, ***loose***, ***missing***, or fails to meet any applicable requirement of the relevant jurisdiction
b) cross-over convex mirror *Note*: A school bus manufactured after Nov. 29, 1997 requires two cross-over mirrors.	b) not equipped with required one, or two, fender- mounted ***OEM*** or equivalent, cross-over mirrors mirrors fail to provide the driver with the required view of the front, and front-left and front-right sides of the school bus mirror, or mirror mounting, is ***insecure*** or ***loose***, or fails to maintain adjustment power operated mirror fails to ***operate as intended*** mirror is broken, cracked or pitted, on an aggregated area larger than 5% of the mirror surface, has any condition that deteriorates, or interferes with, the normal view from the mirror
c) mirror heating and controls	c) does not function as intended

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
Additional Inspection Procedure(s): Test the operation of exterior mirror heaters. *Note:* Confirm compliance based on vehicle age with the ***applicable requirements***. Any amount of heat produced by the mirror is sufficient to indicate functionality.	
	Hazardous Condition(s) **i. mirror is *insecure*, *loose* or *missing***
32. Passenger Seat on a Bus *Additional Inspection Procedure(s):* Manually check the condition and security of each passenger seat.	Truck| | Trailer| | **Bus|✓|**
a) frame and mounting	a) broken, ***loose*** or not securely attached to the floor or wall as required
b) seating surface	b) covering material is torn, exposing the seat base or springs padding or energy absorbing material thickness is reduced by more than 25%, over an aggregated area greater than 10% of the seating surface a tear in the covering is longer than 75 mm covering has a hole, or covering is ***missing***, where the longest measurement across the area is more than 100 mm on a school bus, seat bottom is not secured to the frame
c) seat back and barrier surface	c) ***loose*** or ***missing*** a tear in the covering is longer than 75 mm covering has a hole, or covering is ***missing***, where the longest measurement across the area is more than 50 mm energy-absorbing material is reduced in thickness by more than 25%, where the longest measurement across the area is more than 75 mm

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
33. School Bus Body Exterior *Note*: Applies to school bus only.	Truck| | Trailer| | **Bus|✓|**
a) paint	a) body is not the required colour hood is not the required colour bumper is not the required colour
b) rub rail	b) broken, corroded, cracked, ***loose*** or torn sections, ***missing*** or removed any rivet is ***loose*** or ***missing*** bent and protruding from the side of the bus
c) signs	c) any required sign is ***missing***, not clearly visible and legible, ***damaged***, or fails to comply with an applicable requirement of the relevant jurisdiction
d) stop arm and control *Additional Inspection Procedure(s):* Actuate the stop arm control to confirm it operates in the manner intended by the ***manufacturer***.	d) fails to operate in the intended manner red paint has faded to less than 70% of original intensity (minimum intensity is equivalent to Pantone® PMS 7607U) *Note*: Use an industry standard colour-reference chart as necessary.
e) stop arm lamp *Additional Inspection Procedure(s):* Check in conjunction with stop arm.	e) ***inoperative*** or fails to comply with an applicable requirement of the relevant jurisdiction
f) pedestrian crossing arm *Additional Inspection Procedure(s):* Actuate the pedestrian crossing arm to confirm it operates in the manner intended by the ***manufacturer***.	f) bent, broken or ***inoperative*** incorrect length
	Hazardous Condition(s) **i. rub rail is protruding from the side of the bus** **ii. any section has exposed sharp edge, is torn or protrudes out in a manner that could be hazardous to driver, passenger, pedestrian or cyclist**

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
34. Auxiliary Compartment on a Bus	Truck| | Trailer| | **Bus|✓|**
a) access and baggage doors *Additional Inspection Procedure(s):* Operate all baggage compartment doors.	a) fails to open or close normally latch fails to hold hinge is broken, ***inoperative***, ***missing*** or seized hinge mounting area is ***insecure*** counter balance cable is frayed or will not maintain open position
b) passenger compartment baggage area partition	b) does not have a securely attached barrier, separating baggage from occupant seating area
c) overhead shelf/parcel rack	c) ***insecure*** or ***loose*** mounting fastener is broken, ***insecure*** or ***missing*** has no means of preventing articles from unintentionally falling out
	Hazardous Condition(s) **i. access or baggage door latch fails to hold door in closed position**

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

Section 9 – Tires and Wheels

ITEM AND METHOD OF INSPECTION:	REJECT IF:
1. Tire Tread Depth *Additional Inspection Procedure(s):* Inspect the tire tread to locate the area where the tread depth is lowest. Measure the tread depth at a major tread groove using a suitable tread depth gauge. Do not measure tread depth on a wear bar. Tread depth measurements are to be recorded on an inspection report. The tread depth that is recorded must reflect the lowest tread depth measurement used to determine pass/fail condition. *Note*: When any tire is replaced after a failed-inspection, the tread depth of both the original ('before') and replacement ('after') tire(s) are to be recorded. A "major tread groove" is one of several of the deepest moulded grooves around a tire through the full thickness of tread rubber that include wear bars.	**Truck|✓| Trailer|✓| Bus|✓|**
a) front tire	a) tread depth is less than 3 mm
b) rear tire *Note:* Some jurisdictions require tread depth on certain vehicles to be at least 3 mm on all tires. Inspect according to ***applicable requirements***.	b) tread depth is less than 2 mm
	Hazardous Condition(s) **i. tread depth is less than 2 mm on a front tire** **ii. tread depth is less than 1 mm on a rear tire**
2. Tire Tread Condition	**Truck|✓| Trailer|✓| Bus|✓|**
a) retread (re-capped or rebuilt tire) installation *Note*: An active steering axle is one that is directly controlled by the steering wheel. A passive steering axle responds to lateral force to turn wheels. Retreaded tires are permitted on a tag axle of a bus having either active or passive steering.	a) retreaded tire is installed on an active steering axle
b) retread condition	b) retread material is ***loose***, ***missing***, or separated at the interface where the retread is bonded to the tire casing

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
c) tread condition	c) crack or cut, that is greater than 25 mm long, that extends deeper than a major tread groove crack or cut, extends into body cord, or any body cord is exposed any piece of original tire tread is ***missing*** and the longest dimension across the missing section is greater than 25 mm
d) regrooving	d) regrooving has been performed on a tire not marked "Regroovable"
	Hazardous Condition(s) **i. any part of a belt, breaker strip or casing ply is visible in the tread area** **ii. visible bump or bulge in the tread area indicating tread separation** **iii. regrooved, recapped, or retreaded tire on front steering axle of any bus** **iv. retread material is *loose*, *missing*, or separated at the interface where the retread is bonded to the tire casing and the longest dimension across the section is greater than 50% of the tread width** **v. any piece of tire tread is *missing* and the longest dimension across the missing section is greater than 50 mm** **vi. tire contacts any part of the vehicle**
3. Tire Sidewall and Manufacturer Markings	**Truck|✓| Trailer|✓| Bus|✓|**
a) matching and application *Note*: Nominal tire size is based on the size designation and marking provided by the tire ***manufacturer***. Tire diameter is determined by measuring the tire.	a) nominal tire size difference on an axle is greater than 25 mm dual-mounted tire diameters differ by more than 13 mm wheel/rim size does not match tire size required tire is ***missing*** radial tire is mixed with non-radial on an axle any tire is labelled "Not for Highway Use" or in any way that indicates the tire is not intended for on-road use

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
b) condition *Note*: A bulge of up to 9 mm in height, due to a sidewall repair, is acceptable. This bulge may sometimes be identified by a blue triangular label in the immediate vicinity.	b) ply separation is evident or body cords are exposed tire has a bump or bulge caused by tread or sidewall separation casing is broken or distorted presence of plug-type repair, or rubber coated or cured rubber plug is used in the sidewall UV degradation damage more than 3 mm deep
	<u>Hazardous Condition(s)</u> **i. sidewall is cut or *<u>damaged</u>* exposing the cord** **ii. bias and radial tires are used on the same axle** **iii. visible bump or bulge in the sidewall area greater than 9 mm in height** **iv. dual tires make contact or any tire makes contact with any vehicle component** **v. rubber coated or cured rubber plugs are used in the sidewall** **vi. tire contact with any part of the vehicle** **vii. any tire is labelled «Not for Highway Use» or in any way that indicates the tire is <u>not</u> intended for on-road use**
<u>4. Tire Inflation Pressure</u> *Additional Inspection Procedure(s):* Measure tire inflation pressure using a suitable gauge. Record pressure values on the inspection report. *Note:* If a tire fails inspection due to over/under inflation condition, it is acceptable to remove/add air prior to completing the inspection. When inflation pressure is corrected, record found ('before') and adjusted ('after') pressure values on the inspection report.	**Truck|✓| Trailer|✓| Bus|✓|**
a) inflation pressure *Note*: Recommended tire inflation pressure is based on data provided by the vehicle ***<u>manufacturer</u>***, or tire ***<u>manufacturer</u>*** relevant to tire application and load.	a) more than 10% above or below recommended pressure difference between dual-mounted tires is more than 10% leaking or inflation cannot be maintained within recommended pressure

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***<u>in this manner</u>*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
b) valve stem	b) cracked, ***damaged*** or inaccessible preventing gauging of pressure or re-inflation, or leaking valve stem cap is ***damaged*** or ***missing***
c) tire inflation system	c) is in a condition that any part of it could be hazardous to a person, or is in danger of falling off leaking air
	Hazardous Condition(s) **i. any tire is inflated to 50% or less of the maximum inflation pressure marked on the sidewall** **ii. tire is leaking** **iii. tire inflation system is in a condition that any part of it is hazardous to a person, or is in danger of falling off**
5. Wheel Hub	**Truck|✓| Trailer|✓| Bus|✓|**
a) condition *Note*: Bearing fit in the hub is checked only when disassembled.	a) repaired by welding bent, broken, cracked, ***damaged*** or distorted bearing cup is loose in hub bore
b) stud/bolt hole	b) any stud/bolt hole is enlarged or ***damaged*** in a way that prevents proper fitting and retention of studs
c) wheel seal	c) ***level 2 leak*** of bearing lubricant from oil lubricated hub seal is allowing grease to be lost from hub seal is out of position
d) lubricant (oil lubricated) *Note*: Some hub/wheel-end assemblies use pre-set, unitized or extended service bearings, with sealed hubs. When contaminated lubricant is suspected, refer to the service literature provided by the ***manufacturer***. Confirm that a proper diagnosis is carried out before rejecting the vehicle, opening or disassembling this type of hub/wheel-end assembly.	d) lubricant level is below indicated minimum lubricant is contaminated with moisture or metal fragments ***level 2 leak*** of bearing lubricant from hub or hub cap
e) lubricant (grease lubricated)	e) grease is leaking from hub hub cap is cracked, ***loose*** or ***missing***

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
	Hazardous Condition(s) **i. any condition that exposes the internal components** **ii. any evidence of overheating of the hub or lubricant** **iii. lubricant not visible or measurable in hub** **iv. wheel seal is leaking and contaminating the tire or the brake friction material or surface**
6. Wheel Bearing *Additional Inspection Procedure(s):* Check wheel bearing with axle raised sufficiently to rotate the wheel and hub assembly. Rotate the wheel by hand through several full revolutions to check for bearing roughness or binding. Check wheel bearing end-play/adjustment by pushing wheel assembly or hub inward and outward parallel to axle centreline. *Note:* Checking in this manner may reveal movement in the hub and bearing that is additional to the bearing axial end play, e.g. a radial play between the bearings and spindle components may also be felt. Confirm bearing axial end-play/adjustment on a non-sealed type hub with dial gauge if necessary. For pre-set, unitized or extended service bearings see additional note. *Note*: Some hub/wheel-end assemblies use pre-set, unitized or extended service bearings, with sealed hubs. When there is evidence of bearing damage, excessive wear, or excessive bearing end play, refer to the service literature provided by the ***manufacturer***. Confirm that a proper diagnosis is carried out before rejecting the vehicle, opening or disassembling this type of hub/wheel-end assembly.	**Truck|✓|** **Trailer|✓|** **Bus|✓|**
a) axial end play/adjustment	a) does not meet ***OEM standard*** or ***industry standard***, or when specification is not provided, is less than 0.02 mm, or more than 0.13 mm 0.02 mm = 0.001 in., 0.13 mm = 0.005 in.
b) condition	b) binding or roughness is detected while rotating the bearing

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
c) locking device *Optional Inspection Procedure(s):* Must be inspected when the locking device is visually accessible at the time of inspection.	c) bearing adjustment locking device is ***missing***, not engaged or non-functional
d) damage *Optional Inspection Procedure(s):* Must be inspected when the bearing is disassembled at the time of inspection.	d) race or roller is ***damaged*** or shows evidence of overheating
e) spindle or axle stub *Optional Inspection Procedure(s):* Must be inspected when the bearing is disassembled at the time of inspection. *Note*: Spindle or axle stub cracks or damage may involve non-destructive test/inspection to detect.	e) bearing fit onto spindle or axle stub does not meet OEM standard or industry standard spindle or axle stub is cracked, or ***damaged*** in a way that does not meet ***OEM standard*** or ***industry standard*** bearing condition or fit of the bearing onto the spindle prevents proper end play or adjustment from being maintained
	Hazardous Condition(s) **i. axial end play is so excessive that imminent failure seems likely** **ii. any evidence of overheating** **iii. lubricant not visible or measurable in hub** **iv. binding or roughness is detected while rotating the bearing**
7. Wheel/Rim (Applies to all wheel types)	**Truck|✓| Trailer|✓| Bus|✓|**
a) condition	a) wheel/rim is bent, broken, cracked, ***damaged*** or distorted wheel/rim has been welded or repaired in a way that does not meet ***OEM standard*** wheel/rim is ***damaged*** or discoloured as a result of heating
b) matching	b) wheel/rim size does not match tire size
	Hazardous Condition(s) **i. wheel/rim, or any weld, is broken or cracked** **ii. any welded repair on an aluminum wheel** **iii. wheel/rim has been welded or repaired in a way that does not meet *OEM standard***

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
8. Multi-Piece Wheel/Rim	**Truck|✓| Trailer|✓| Bus|✓|**
a) condition	a) a component is bent, cracked, ***damaged***, distorted, improperly assembled or shifted out of position, severely corroded or pitted ***damaged*** due to heating any component has been ***repaired by welding***
b) lock ring	b) there is less than 3 mm clearance between butt ends of the lock ring
c) matching	c) mismatched wheel/rim component
	Hazardous Condition(s) **i. a lock ring is bent, broken, cracked, sprung, mismatched or improperly seated** **ii. wheel/rim, or any weld, is broken or cracked** **iii. wheel/rim has been welded or repaired in a way that does not meet *OEM standard***
9. Spoke Wheel/Demountable Rim System	**Truck|✓| Trailer|✓| Bus|✓|**
a) condition *Additional Inspection Procedure(s):* Elevate the axle so that the tire(s) are clear of the floor and rotate the wheel(s) to check alignment.	a) there is damage in the 28° mounting area resulting from rim slippage, wear, corrosion or pitting there is evidence of rim slippage or incorrect positioning of rim on spokes lateral run-out exceeds 6 mm at sidewall of tire
b) rim clamp	b) any rim clamp is broken, cracked, ***missing***, repaired by welding, mismatched, twisted or worn out in the 28° mounting area any heelless clamp is bottomed or gap between clamp and spoke is more than 10 mm gap between clamp and spoke of a heel type clamp is more than 6 mm
c) spacer band	c) any spacer is collapsed, cracked, distorted, ***missing***, the incorrect size or type, welded or repaired in a way that does not meet ***OEM standard***
	Hazardous Condition(s) **i. wheel/rim, or any weld, is broken or cracked** **ii. any welded repair on an aluminum wheel** **iii. wheel/rim has been welded or repaired in a way that does not meet *OEM standard***

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
10. Disc Wheel System	**Truck|✓| Trailer|✓| Bus|✓|**
a) installation	a) incompatible wheel or component is used on a wheel system wheel is incorrectly installed
b) condition	b) there is evidence of a ***loose*** or ineffective fastener there is evidence of damage or deterioration, foreign material, excessive or uncured paint on a hub, drum or wheel mounting face bolt/stud hole is elongated
	Hazardous Condition(s) **i. bolt/stud hole is elongated** **ii. wheel/rim, or any weld, is broken or cracked** **iii. any welded repair on an aluminum wheel** **iv. wheel/rim has been welded or repaired in a way that does not meet *OEM standard***
11. Wheel Fasteners (Nuts, Bolts and Studs)	**Truck|✓| Trailer|✓| Bus|✓|**
a) installation	a) incorrect fastener type, thread direction or style is installed any nut is not fully engaged with the stud or bolt
b) condition	b) any fastener is bent, broken, ***damaged*** or ***missing***
c) fastener security *Additional Inspection Procedure(s):* Using a torque wrench set to the torque value specified by ***OEM*** or ***industry standard***, attempt to rotate each wheel nut to the set value. *Note:* A fastener that requires less than 1/6-turn to reach the specified torque value should be considered slightly loose. A fastener that requires more than 1/6- turn to reach the specified torque value should be considered very loose. Wheels should be disassembled for a full inspection when: • any fastener is very loose • two adjacent wheel fasteners are slightly loose • three wheel fasteners on a single wheel are slightly loose	c) any fastener rotates before the torque value specified by ***OEM standard*** or ***industry standard*** is applied
	Hazardous Condition(s) **i. wheel is *loose*** **ii. any wheel nut or stud is broken, cracked,** *loose*, *missing*, **or threads are stripped**

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

Section 10 – Coupling Devices

ITEM AND METHOD OF INSPECTION:	REJECT IF:
1. Hitch Assembly, Structure and Attaching Components *Note:* This applies to all types of hitching systems and coupling devices. Some rust and corrosion on the outer surface of exposed metal parts is normal. When an excessive amount of rust or corrosion is present and has visibly reduced the thickness of the material, structural deterioration is possible. *Additional Inspection Procedure(s):* Inspect using suitable tools.	**Truck|✓|** **Trailer|✓|** **Bus|✓|**
a) hitch assembly, receiver, drawbar or draw beam, slider, supporting structure and attachment to vehicle chassis	a) part is bent, broken or cracked weld is broken or cracked welded or repaired in a way that does not meet ***OEM standard*** fastener is ineffective, ***loose*** or ***missing*** any part of hitch assembly is worn beyond ***manufacturer*** specifications, abnormally deteriorated or perforated by corrosion hinged drawbar bushing is worn beyond ***manufacturer*** specifications air leak, or ***level 2 leak*** from hydraulic components on any slider system any slider system has a ***missing*** or ineffective stop
	Hazardous Condition(s) (when in use) **i. any crack, break or damage in the stress or loading area of the coupling device or structure** **ii. any component is *damaged* or worn to the degree that it is no longer effective** **iii. welded or repaired in a way that does not meet *OEM standard* and an imminent failure appears likely** **iv. air leak, or *level 2 leak* from hydraulic components on any slider system** **v. any slider system has a *missing* or ineffective stop**

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
2. Secondary Attachment (Safety Chain or Cable)	**Truck|✓| Trailer|✓| Bus|✓|**
a) condition	a) bent, broken, cracked, ***missing***, ***abnormally worn***, or worn beyond ***manufacturer*** specifications any part is ineffective, ***insecure***, ***loose***, or ***missing*** improper length
	Hazardous Condition(s) (when in use) **i. any component is broken, cracked, or *missing*** **ii. bent, *damaged*, improperly repaired, *loose*, or worn to the degree that it is no longer effective** **iii. improper type or inadequate capacity**
3. Pintle Hook, Pin Hitch, or Coupler Hitch	**Truck|✓| Trailer|✓| Bus|✓|**
a) condition and operation *Additional Inspection Procedure(s):* Test the operation of the pintle hook and latch.	a) cracked, or fails to close or latch normally
b) mounting	b) fastener or any structural part is cracked, ineffective, ***loose*** or ***missing*** a fastener is less than SAE grade 8 or ISO class 10.9
c) cast or forged part	c) cracked, or has been repaired by welding material is worn more than 5 mm from original dimension
d) air chamber cushion (no-slack or snubber) *Additional Inspection Procedure(s):* Apply air pressure to air chamber and inspect according to hitch ***manufacturer*** service instructions and specifications.	d) ***damaged*** or leaking air chamber leak at air line or fitting pressure protection valve is not installed in air supply to prevent depletion of air from the brake system
e) lunette (or drawbar eye) on trailer	e) cracked, or is worn more than 5 mm from original dimension
	Hazardous Condition(s) (when in use) **i. wear on hitch or lunette (eye) exceeds 10 mm** **ii. any component is broken, cracked, or *missing*** **iii. bent, *damaged*, improperly repaired, *loose*, or worn to the degree that it is no longer effective** **iv. improper type or inadequate capacity** **v. missing or ineffective fastener** **vi. insecure latch**

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
4. Ball Type Hitch	**Truck|✓| Trailer|✓| Bus|✓|**
a) ball, neck and stem	a) bent, cracked or ***loose*** ball is worn more than 3.0 mm from original dimension welded, or repaired in a way that does not meet ***OEM standard*** 3.0 mm = 0.12 in.
b) ball deck area	b) part is bent, broken or cracked weld is broken or cracked welded or repaired in a way that does not meet ***OEM standard***
c) ball coupler	c) bent, cracked or ***loose*** abnormally deteriorated or perforated by corrosion
d) latch *Additional Inspection Procedure(s):* Test the operation of the latch.	d) bent, broken or cracked ***inoperative*** or fails to adjust properly weld is broken or cracked
	Hazardous Condition(s) (when in use) **i. wear on ball exceeds 3.0 mm** **ii. any component is broken, cracked, or *missing*** **iii. bent, *damaged*, improperly repaired, *loose*, or worn to the degree that it is no longer effective** **iv. improper type or inadequate capacity** **v. missing or ineffective fastener** **vi. insecure latch**
5. Roll-Coupling Hitch	**Truck|✓| Trailer|✓| Bus|✓|**
a) condition	a) part is bent, broken or cracked weld is broken or cracked welded or repaired in a way that does not meet ***OEM standard*** fastener is ineffective, ***loose*** or ***missing*** any fastener is smaller than specified by the ***manufacturer*** or less than SAE grade 8 or ISO class 10.9 any load bearing structural part of the hitch assembly is deteriorated or perforated by corrosion

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
b) operation *Additional Inspection Procedure(s):* Test the operation of the coupling and controls according to the ***manufacturer*** service instructions.	b) fails to operate in the intended manner
	Hazardous Condition(s) (when in use) **i. fails to operate in the intended manner** **ii. any component is broken, cracked, or *missing*** **iii. bent, *damaged*, improperly repaired, or *loose*** **iv. improper type or inadequate capacity** **v. missing or ineffective fastener**
6. Automated Coupling Device	**Truck|✓| Trailer|✓| Bus|✓|**
a) condition *Additional Inspection Procedure(s):* Test the operation of the coupler according to the ***manufacturer*** service instructions.	a) ***inoperative*** • welded or repaired in a way that does not meet manufacturer standard
	Hazardous Condition(s) (when in use) **i. fails to operate in the intended manner** **ii. any component is broken, cracked, or *missing*** **iii. bent, *damaged*, improperly repaired, *loose*, or worn to the degree that it is no longer effective** **iv. improper type or inadequate capacity** **v. *missing* or ineffective fastener**
7. Fifth Wheel Coupler	**Truck|✓| Trailer|✓|** Bus| |
a) upper coupler (pick up plate) on trailer *Additional Inspection Procedure(s):* Check the condition and flatness of the upper coupler plate using a tool specifically intended for that purpose or an equivalent measuring device.	a) cracked, ***loose***, warped or worn so that the area in contact with the lower fifth wheel is less than 75% of the surface of the lower coupler bent upward or downward more than specified by ***manufacturer*** lubricant is contaminated with an abrasive material upper coupler's attachment or a structural member is corroded, ***damaged*** or in a condition that the plate or king pin is weakened mounting bolt or rivet is broken, corroded, ***loose*** or ***missing*** (also refer to Section 8, Body, item 6. Frame, Rails & Mounts) bulge is present in attaching and mating surface due to corrosion rivet is dimpled due to corrosion rivet area bulged due to corrosion

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
b) kingpin on trailer (or on towing vehicle) *Additional Inspection Procedure(s):* Check the wear and condition of the kingpin using a gauge specifically intended for that purpose or an equivalent measuring device. *Note:* In some jurisdictions remanufacturing of kingpins is permitted when the remanufacturing is done using a process certified by a professional engineer. In such a case the kingpin must be permanently marked to identify the remanufacturer and marked to indicate the date the process was completed.	b) bent, broken, cracked, deformed or ***loose*** worn more than 3.0 mm repaired by welding length is incorrect to properly fit into fifth wheel jaws *Note:* A fifth wheel intended for use with a material installed on the lower coupler, instead of applying grease, requires a longer king pin length. A king pin intended for use with a material installed on the lower coupler, instead of applying grease, does not properly couple with a standard fifth wheel.
c) lower coupler (fifth wheel) top plate	c) any part is broken, cracked, ***damaged***, distorted, ***missing*** or welded, or repaired in a way that does not meet ***manufacturer*** standard surface is worn beyond ***manufacturer*** specified limit wear in pivot pin is beyond ***manufacturer*** specified limit lubricant is abnormally contaminated, (e.g. sand, gravel) not properly lubricated (unless equipped with ***manufacturer-supplied*** no-lube top plate coupling surface)
d) latching mechanism *Additional Inspection Procedure(s):* Test the operation of the latch, and wear in the fifth wheel assembly, using a test device specifically designed for that purpose or a suitable equivalent.	d) broken, cracked or ***inoperative*** stiffness or seizing of the latch mechanism is felt free-play, slack or wear is beyond manufacturer specified limit improperly adjusted modified or improperly repaired release handle is bent, modified or has anything attached to it
e) lower coupler pivot ('fifth wheel saddle') *Additional Inspection Procedure(s):* Check for wear in the fifth wheel pivot area according to ***manufacturer*** service instructions.	e) wear exceeds ***manufacturer*** specification

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
f) slider assembly and locking mechanism	f) any part is bent, broken, cracked, ***damaged*** or ***inoperative*** fore/aft movement of fifth wheel in slider exceeds ***manufacturer*** specification fails to lock securely slider stop is ***missing*** or ***insecure***
g) air-operated control or feature	g) does not ***operate as intended*** by the ***manufacturer***
h) upper and lower coupler attachment to frame	h) any part is broken, cracked, ***damaged***, distorted, ***missing***, or welded or repaired in a way that does not meet ***manufacturer*** standard any fastener is cracked, ineffective, ***loose*** or ***missing*** fasteners used to attach coupler assembly to frame do not meet the minimum requirements shown in the table below:

Minimum Number of Bolts per Side Based on Type & Size* of Bolt

	ASTM A325 Type 1,2 & 3 (metric 5.8)		SAE J429 Grade 5 (metric 8.8)		SAE J429 Grade 8 (metric 10.9)	
Maximum trailer GVWR	**1/2" (12mm)**	**5/8" (16mm) or larger**	**1/2" (12mm)**	**5/8" (16mm) or larger**	**1/2" (12mm)**	**5/8" (16mm) or larger**
67,999 lb (30,845 kg) or less	6	4	6	4	5	4
68,000 - 84,999 lbs (30,846 - 38,556 kg)	8	5	8	5	7	5
85,000 - 105,000 lbs (38,557 - 47,628 kg)	10	6	10	6	8	5

*Bolt size refers to the outside diameter of the thread.

- 1/2 inch bolts have 3/4 inch heads and nuts
- 5/8 inch bolts have 15/16 inch heads and nuts
- 12 mm bolts have 19 mm heads and nuts
- 16 mm bolts have 24 mm inch heads and nuts

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
	Hazardous Condition(s) (when in use) **i. adjustable fifth wheel has 25% or more of the locking pins *missing*** **ii. any observable movement between the fifth wheel, or upper coupler, mounting components and/or the frame** **iii. more than 9 mm fore/aft movement of the fifth wheel in its sliding track** **iv. any sliding fifth wheel locking mechanism does not remain in the locked position** **v. any crack, break or damage in the stress or loading area of the coupling device** **vi. slider stop is *insecure* or *missing*** **vii. more than 25 percent of latching fasteners on either side of slider are ineffective** **viii. pivot bracket pin *missing* or not secured** **ix. any parent metal cracked** **x. any repair weld cracking, well defined (especially open) cracks in stress or load-bearing areas, cracks through 20% or more original welds or parent metal** **xi. operating handle not in closed or locked position** **xii. more than 20 percent of mounting fasteners on either side *missing* or ineffective** **xiii. locking mechanism parts broken, *missing*, or deformed to the extent that the kingpin is not securely held** **xiv. kingpin is bent, broken, cracked, deformed or *loose*** **xv. any trailer with a bolted upper coupler, which has fewer effective bolts than shown in table above**
8. Oscillating Fifth Wheel Coupler *Note:* Inspect fifth wheel coupler parts as described above in item 6, and inspect additional oscillating items as listed below. Inspect all frame and structural elements as described above in item 1.	**Truck|✓|** **Trailer|✓|** Bus| |
	Hazardous Condition(s) (when in use) refer to hazardous conditions in item # 7 above.

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
a) oscillating components and structure *Additional Inspection Procedure(s):* Check for wear and defects according to ***manufacturer*** service instructions.	a) cracked, ***damaged***, defective or ***inoperative*** wear exceeds ***manufacturer*** specification
9 Ball-Bearing Type Turntable on Trailer a) condition *Additional Inspection Procedure(s):* Check for wear and defects according to ***manufacturer*** service instructions.	Truck| | **Trailer|✓|** Bus| | a) bolt ***loose*** or ***missing*** cracks in weld or parent metal wear exceeds ***manufacturer*** specification
	Hazardous Condition(s) **i. top flange has less than 6 effective bolts** **ii. bottom flange has less than 6 effective bolts** **iii. itwenty percent or more of original welds (or repaired original welds), or parent metal cracked** **iv. upper flange half touching lower flange half** **v. cracked flanges**

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

Appendix A

ITEM AND METHOD OF INSPECTION:	REJECT IF:
1. Liquefied Petroleum Gas (LPG or Propane) Fuel System	**Truck|✓| Trailer|✓| Bus|✓|**
Note: For additional compliance information, please see Canadian Gas Association Code.	**Hazardous Condition** **Any cause for rejection of a Liquefied Petroleum Gas (LPG or Propane) system will also mean an automatic "Hazardous Condition" for that vehicle. The cause for rejection must be corrected and the vehicle "passed" before it may be operated on the highway.**
a) regulatory authority decal	a) decal is not displayed an incorrect decal is affixed to vehicle information on decal is not readable
b) pressure vessel (tank) location and mounting	b) pressure vessel (tank) is ***insecure*** or ***loose,*** or welds are broken welding has been done anywhere on a pressure vessel (tank) except on saddle plates or brackets correct mounting bolts not used correct reinforcing plates are not used under mounting nuts pressure vessel (tank) is located above the vehicle or projects beyond vehicle side, ahead of front axle or behind rear bumper any part of exhaust system is closer than 200 mm to any part of the fuel system and is not protected by shields a heat shield is closer than 25 mm from a fuel system component
c) pressure vessel (tank) ground clearance *Note:* Includes any attached fitting.	c) distance to ground from bottom of pressure vessel (tank) is less than minimum ground clearance shown below **pressure vessel (tank) located between axles** wheelbase of 3220 mm or less: minimum ground clearance = 180 mm wheelbase over 3220 mm: minimum ground clearance = 230 mm **pressure vessel (tank) located behind rear axle** minimum ground clearance = 200 mm Any portion of the tank protrudes past the plane formed by the bottom of the rear most tires and the lowest most rearward part of the vehicle.

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
d) pressure vessel (tank) information plate and data	d) name plate is ***missing***, or illegible, or data is not shown on plate
e) pressure vessel (tank) located within the body shell of the vehicle	e) stop fill valve, remote fill, or gauging line not fitted
f) pressure vessel (tank) filler cap	f) protective filler cap not secured to filler valve or vehicle
g) pressure vessel (tank) check valve	g) double check valve on the remote fill is ***missing***, or valve is not an approved type
h) pressure vessel (tank) interconnection	h) individual pressure vessels (tanks) are not protected by soft seat back-check valves
i) pressure vessel (tank) remote filler box	i) not adequately sealed to prevent vapour migration into vehicle interior (trunk etc.)
j) main shut-off valve	j) valve is not readily accessible (cannot be reached)
k) damage protection	k) tank valves and their connections are not mounted securely tank valves and their connections are not protected from damage due to stationary objects, or objects from the road
l) corrosion protection	l) protective coating or material is ***damaged***, or is ***missing*** from externally mounted pressure vessel (tank) or attachment
m) fitting, hose, piping and tubing *Note:* Only the following types of piping and tubing are permitted for use in LPG fuel systems. Piping – must be black or galvanized steel w/ steel fittings (schedule 40 vapour and schedule 80 liquid) Tubing – must meet SAE J527, may be steel or copper with steel or brass fittings Minimum tubing wall thickness: ¼ in. tubing = 0.71 mm ½ in. tubing = 0.76 mm	m) improper tubing or piping is used hose assembly is not CGA approved and labelled supply line is not secure, or any anchor or support is damaged or missing any joint is not flared or compression type specifically designed for LPG use a bushing other than steel or brass is used piping and tubing is not protected against corrosion tubing or hose in trunk area is not protected against luggage piping between fuel pump and gasoline solenoid valve is non-metallic material

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
n) system leakage *Additional Inspection Procedure(s):* Check for leaks using a leak detector.	n) any system leak is detected
o) hydrostatic relief valve	o) incorrectly installed or ***missing*** outlet is not piped downward to outside of any enclosed space pipeaway is not secured to valve, or if installed after May 1, 1985, is aluminum or non-metallic material, or is a range connector type
p) propane supply lock off valve	p) does not operate as originally intended
q) excess flow valve	q) incorrectly installed or ***missing***
r) vaporizer	r) is not mounted securely on engine, chassis, fender apron or firewall
s) vehicle chassis and under-body	s) a structural member has been altered during installation of the system in any manner that does not meet ***industry standard*** or ***OEM standard***
t) pressure vessel sub-frame	t) any modification has been made to pressure vessel (tank) carrier, or sub-frame, in a manner not approved by pressure vessel ***manufacturer***
u) air/fuel ratio feedback control system *Note:* Applies to a vehicle originally equipped with air/fuel ratio control, converted to operate on LPG on or after October 1993, as indicated on the regulatory authority decal. *Additional Inspection Procedure(s):* Connect the positive lead of a digital voltmeter to the O_2 sensor signal wire. Connect the meter negative lead to battery ground. Start the engine and run at 2,500 RPM allowing 30 seconds to warm up the O_2 sensor, voltage should vary rapidly between 0.3 and 0.7 volts. Each time the voltage reading crosses 0.45 volts is defined as one cross-count. On dual fuel applications this test must be performed when operating on both fuels.	u) The number of cross-counts observed during a ten-second period is less than 6

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
2. Compressed Natural Gas (CNG) Fuel System	**Truck|✓| Trailer|✓| Bus|✓|**
Note: For additional compliance information, see Canadian Gas Association Code.	**Hazardous Condition** **Any cause for rejection of a Compressed Natural Gas system will also mean an automatic "Hazardous Condition" for that vehicle. The cause for rejection must be corrected and the vehicle "passed" before it may be operated on the highway.**
a) regulatory authority decal	a) decal is not displayed an incorrect decal is affixed to vehicle information on decal is not readable
b) pressure vessel (tank) location and mounting	b) pressure vessel (tank) is ***insecure*** or ***loose,*** or welds are broken welding has been done anywhere on a pressure vessel except on saddle plates or brackets correct mounting bolts not used (10 mm (3/8 in.) for over 100L tank capacity) correct reinforcing plates are not used under mounting nuts pressure vessel (tank) is located above the vehicle or projects beyond vehicle side, ahead of front axle or behind rear bumper any part of exhaust system is closer than 200 mm from any part of the fuel system and is not protected by shields a heat shield is closer than 25 mm from a fuel tank
c) pressure vessel (tank) ground clearance *Note:* Includes any attached fitting.	c) distance to ground from bottom of pressure vessel (tank) is less than minimum ground clearance shown below **pressure vessel (tank) located between axles** wheelbase of 3220 mm or less: minimum ground clearance = 180 mm wheelbase over 3220 mm: minimum ground clearance = 230 mm **pressure vessel (tank) located behind rear axle** distance from rear axle to pressure vessel (tank) is 1140 mm or less: minimum ground clearance = 200 mm distance from rear axle to pressure vessel (tank) is more than 1140 mm: minimum ground clearance = 0.18 x distance

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
d) pressure vessel (tank) information plate and data	d) name plate is ***missing***, or illegible, or data is not shown on plate
e) pressure vessel (tank) located within the body shell of the vehicle	e) tank fittings not in a gas-tight enclosure vented to the outside of the vehicle body shell
f) relieving device	f) pressure vessel does not have a burst disc installed burst disc is incorrectly installed, or not the correct value burst disc is not vented outside the body shell
g) damage protection	g) piping or tubing is not of corrosion resistant material piping or tubing is not protected from exterior corrosion line is not positioned for reasonable protection or not shielded grommet is ***missing*** or ***damaged***
h) corrosion protection	h) piping or tubing is not made of corrosion-resistant material or is not protected from exterior location
i) pressure gauge	i) no gauge is installed lines to gauge are within the passenger compartment
j) fitting, hose, piping and tubing Only the following types of piping and tubing are permitted for use in LPG fuel systems. Piping – must be black or galvanized steel w/ steel fittings (schedule 40 vapour and schedule 80 liquid) Tubing – must meet SAE J527, may be steel or copper with steel or brass fittings Minimum tubing wall thickness: ¼ in. tubing = 0.71 mm ½ in. tubing = 0.76 mm	j) piping upstream of a first-stage regulator is not rated at 4 times working pressure, or piping downstream of first-stage regulator not rated at 5 times the working pressure piping, tubing and hose fail to make adequate allowance for vibration; is not protected against damage or breakage due to strain or wear a fitting not an approved type a joint is inaccessible improper hose, tubing or piping is used

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
k) system leakage *Additional Inspection Procedure(s):* Check for leaks using a leak detector.	k) any system leak is detected
l) pressure regulator	l) regulator <u>not</u> securely mounted <u>not</u> protected as required
m) gasoline lock-off	m) where located downstream of the engine fuel pump, connection of gasoline fuel line to the inlet side of lock-off valve, or any other upstream connections, <u>not</u> made with flare-type fittings or other approved fittings slip-on clamped type hose connection is used
n) vehicle chassis and under-body	n) a structural member has been altered during installation of the system in any manner that does <u>not</u> substantially meet or exceed ***OEM*** strength requirements
o) pressure vessel sub-frame	o) any modification has been made to pressure vessel (tank) carrier, or sub-frame, in a manner <u>not</u> approved by pressure vessel ***manufacturer***
p) air/fuel ratio feedback control system *Additional Inspection Procedure(s):* Connect the positive lead of a digital voltmeter to the O_2 sensor signal wire. Connect the meter negative lead to battery ground. Start the engine and run at 2,500 RPM allowing 30 seconds to warm up the O_2 sensor, voltage should vary rapidly between 0.3 and 0.7 volts. Each time the voltage reading crosses 0.45 volts is defined as one cross-count. On dual fuel applications this test must be performed when operating on both fuels.	p) the number of cross-counts observed during a ten-second period is less than 6
<u>3. Liquefied Natural Gas (LNG) Fuel System</u>	**Truck|✓| Trailer|✓| Bus|✓|**
Note: For additional compliance information, see Society of Automotive Engineers (SAE) Standard J2343 titled "Recommended Practice for LNG Medium and Heavy Duty Powered Vehicles", and the National Fire Protection Association (NFPA) Standard 52 "Vehicular Gaseous Fuel Systems Code"	**Hazardous Condition** **Any cause for rejection of a Liquefied Natural Gas (LNG) system will also mean an automatic "Hazardous Condition" for that vehicle. The cause for rejection must be corrected and the vehicle "passed" before it may be operated on the highway.**

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
a) regulatory authority decal	a) decal is not visible or information on decal is not readable incorrect decal is affixed to the vehicle or fuel is not correctly identified
b) supply/container marking *Note:* As required by National Fire Protection Association (NFPA) 52.	b) ***missing***, not visible directly or by use of mirror no indication of set-to-discharge pressure no indication of working pressure of fuel supply remote filling inlets not visibly marked with the lowest working pressure of any fuel supply container in system
c) methane gas detection system *Additional Inspection Procedure(s):* Test the system in accordance with the ***manufacturer*** service instructions.	c) disconnected, ***inoperative*** or ***missing*** sensor is not located in engine, driver, and passenger compartment alarm is not visual and audible to the driver before entering the drivers compartment and while seated in the normal driving position system does not function continuously at all times
d) LNG container (all types) *Note:* No LNG container shall be repaired unless authorized by a certified inspector. The replacement of valves, fittings and accessories with compliant parts intended for the same purpose is not considered a repair.	d) not oriented and mounted as specified by the ***manufacturer*** not located in a protected location as designed by the vehicle ***manufacturer*** or as determined by a qualified professional engineer any portion of the container or container valves in communication with the liquid or vapour are not located behind the rear frame cross member any part of the container is welded *Note:* Only saddle plates, brackets or non- pressure components that were provided and installed by the ***manufacturer*** may be field welded.
e) roof-mounted LNG container *Note:* This condition applies to a roof-mounted LNG container in addition to those listed above for all types of containers.	e) vehicle was not manufactured or originally designed to have roof mounted containers *Note:* After-market modification of a vehicle to accept roof-mounted containers is not permitted.

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
f) LNG container on a bus or motor coach *Note:* These conditions apply in addition to those listed above for all types of containers.	f) located in or above the passenger compartment container is installed so that gas from fuelling or gauging operation or from a relief valve can be released inside a driver, passenger or luggage compartment
g) service valve emergency access port *Note:* Emergency access ports are used only on certain buses and are intended for access to the service valve in an emergency situation.	g) not located on vehicle sidewall not hinged and latched is locked
h) vent line and outlet *Note:* All safety devices that may discharge to atmosphere must be vented to the outside of the vehicle.	h) any safety device does not vent to the outside of the vehicle vent line is made of aluminum or copper discharge line port size is not equal or greater than the main automatic or manual shut off valve line installed inside a compartment does not extend to the outside not located as far as practicable from the engine exhaust outlet does not direct escaping gas upward within 45 degrees escaping gas impinges fuel supply directed into wheel well directed at engine air intake inlets direction of escaping gas may cause a hazard to other road users not at least 1.5 times the maximum allowable working pressure (MAWP) of the container they are connected to. (When discharged into a manifold or line of increased diameter, the pressure requirement of that manifold or line must be calculated by a professional engineer to determine compliance.) fuel exiting the vaporizer has not been completely converted to a gaseous state at a temperature suitable for introduction to the remainder of the fuel system as Compressed Natural Gas (CNG) any vent line from the LNG fuel system is combined with CNG vent line on a bus the vent line from the safety relief valve is not located at the rear of the vehicle, directed upward and extended to the top of the vehicle roof

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
i) manual shut-off valve *Note:* Valves, valve packing, gaskets and seats must be specifically designed for LNG service. If a manual shut-off valve cannot be readily installed due to the compact design of the LNG fuel container, an automatic shut-off valve meeting section j) automatic shut-off valve can be used providing it is located downstream in the CNG portion of the fuel system. *Note:* Decals and stencils are acceptable means of marking.	i) not installed in the outlet of the manifold not suitable for the maximum allowable pressure of the container leakage occurs at less than 1.5 times (MAWP) not marked with "MANUAL SHUT-OFF VALVE" not clearly marked with working pressure
j) automatic shut-off valve *Note:* Decals and stencils are acceptable means of marking.	j) not installed in the outlet of the manifold does not shut off when the engine is stopped or ignition switch is in the off or at accessory positions low engine oil pressure is not sensed does not shut off when engine vacuum is not present not suitable for the maximum allowable pressure of the container leakage occurs at less than 1.5 times (MAWP) not marked with "AUTOMATIC SHUT-OFF VALVE" not clearly marked with working pressure
k) pressure relief valve *Note:* Any device used for leak testing of a LNG fuel system must have an accuracy of +/- 2% of the MAWP of the system.	k) leaks at pressure below highest relief valve pressure setting
l) automatic fuel supply shut-off valve	l) not adjacent to the manual shut-off valve not protected as required not activated by the absence of engine rotation or oil pressure

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
m) pressure gauge	m) is not readily visible by the driver when the engine enclosure is removed or when standing on either side of the vehicle is not located outside driver or passenger compartment is not equipped with a limiting orifice is not equipped with a shatter-proof dial lens is not equipped with a body relief
n) pressure regulator	n) not securely mounted not protected as required to prevent malfunction from low ambient air temperatures (- 40 degrees)
o) supply line *Note:* A damaged line must be replaced.	o) sagging or not supported at least every 610 mm ***damaged*** or repaired
p) pipe, tubing, hose and fitting *Note:* All materials and assemblies must be designed for the widest pressure and temperature ranges to which they may be subjected with a pressure safety factor of at least four.	p) aluminum or copper is used between the container and first-stage regulator pressure safety factor of material is not at least four
q) piping installation	q) installed without adequate allowance for vibration installed without adequate protection against damage or breakage due to strain or wear
r) pipe thread sealant *Note:* Suitable thread sealant is required on all male pipe threads prior to assembly upon initial installation and for component repair or replacement.	r) sealant used is not impervious to the action of fuel sealant is not applied to male pipe threads prior to assembly
s) pipe and thread condition	s) threading burrs or scaling are present pipe or fitting ends are not reamed
t) gaseous fuel cut-off for dual fuel system *Note:* Used in applications where a small amount of diesel fuel is injected into the cylinder of the engine during pre 'ignition'.	t) no means is provided to prevent the flow of gaseous fuel to the carburetor or injector fuel rail when diesel fuel is used in pre 'ignition' when ignition switch is in the off or accessory position, or from the carburetor when engine vacuum is not present

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

ITEM AND METHOD OF INSPECTION:	REJECT IF:
u) bypass relief device *Note:* A standalone bypass relief device is required when a vehicle is not equipped with a fuel pump containing a bypass relief device by the ***OEM*** or ***manufacturer***.	u) does not function in accordance with ***OEM*** design is not located between the fuel pump and automatic shut off valve in the liquid fuel line to carburetor is not located between the fuel pump and automatic shut off valve in injector fuel rail on a vehicle with dual fuel system
v) vehicle fuelling connection	v) does not have an approved fuelling connection for each pressure-based fuel system is not protected from moving parts, lift-able cab enclosure, engine cover, hinge or direct side impact
w) fuel-carrying component (excluding service valves, tubing and fittings)	w) **is not labeled or stamped to show all of the following:** • ***manufacturer's*** name or symbol • model designation • maximum allowable working pressure • design temperature range • direction of flow of fuel • capacity or electrical rating as applicable • scheduled replacement date if applicable
x) road clearance	x) lowest part of any component in the system, including protective guards, is below the lowest edge of the wheel rim
y) fuel system protection	**y) any system component is not protected from:** • any moving part in engine compartment • lift-able cab enclosure • engine cover, hinge or support device • direct side impact

Note: All inspection procedures are visual unless additional inspection procedures are indicated.
Conditions shown ***in this manner*** are defined conditions. The definitions can be found in the introduction section.

Vehicle Inspection Program Administration
COMMERCIAL VEHICLE INSPECTION

Table of Contents

1. Administration

1.1 Terminology

Definition of Key Terms

1.1.1 A number of key terms are used in this Manual:

- "Department" means the Government of Alberta Department of Transportation.
- "Licensee" means the holder of a vehicle inspection facility licence. A reference to a Licensee includes any person who acts on behalf of the Licensee or is associated with the Licensee, such as a manager, operator, officer, partner, director and employee of the Licensee.
- "Contractor" means a service provider contracted by The Department to provide Inspection Facility auditing and certificate distribution services.
- "May" is used to denote an action that is permissive in nature and where a Licensee or a Technician, as the case may be, has the discretion to act or not to act.
- "Must" or "shall" is used to denote an action that is mandatory in nature and that a Licensee or a Technician, as the case may be, must comply with. The Registrar may apply sanctions against the Licensee or the Technician for failure to comply with such a mandatory requirement.
- "Should" is used to denote an action that is recommended to be carried out by a Licensee or a Technician, as the case may be, to fulfill the objectives of the regulation and this manual. If a problem occurs with the vehicle inspection activities under this Regulation and the Licensee or Technician did not follow the recommended action that could have prevented such a problem, the Licensee or the Technician may be required to provide an explanation to the Registrar.

Abbreviations and Terms

1.1.2 A number of abbreviations and terms are used in this manual. They have the following meanings:

- AMVIC: Alberta Motor Vehicle Industry Council
- Certificate: Vehicle Inspection Certificate
- Commercial Vehicle Inspection (CVI)
- Decal: Vehicle Inspection Decal (for CVI)
- Facility: Vehicle Inspection Facility
- Facility Manual: Facility Operating Manual
- MVI: Motor Vehicle Inspection
- OEM: Original Equipment Manufacturer
- Regulation: Vehicle Inspection Regulation
- ROI: Record of Inspection
- Technician: Vehicle Inspection Technician
- VIN: Vehicle Identification Number
- VIP: Vehicle Inspection Program (consisting of CVI and MVI)
- VSI: Vehicle Safety Investigator.

1.2 Purpose of the VIP and the Manual

Purpose and Legal Authority of the Vehicle Inspection Manual

1.2.1 This Vehicle Inspection Manual of the Vehicle Inspection Program is issued by the Registrar pursuant to section 22 of the *Vehicle Inspection Regulation* (Alberta Regulation 211/2006). It is intended to provide a one-source document to vehicle inspection technicians on the administrative requirements and inspection methods and standards of the Vehicle Inspection Program (VIP).

Legal Effects of the Vehicle Inspection Manual

1.2.2 The *Vehicle Inspection Regulation* (Regulation) includes a number of provisions that address the legal authority of the Vehicle Inspection Manual:

- Technician must acquire an applicable Vehicle Inspection Manual; and must inspect vehicles in accordance with the Vehicle Inspection Manual [Alberta Regulation 211/2006 Sections 47(1)(d) and (e)]
- Registrar may commence an investigation of a Technician if the Registrar has reason to believe the Technician did not inspect vehicles, complete Certificates and affix a vehicle inspection decal in accordance with the Vehicle Inspection Manual, and may suspend or cancel the licence of a Technician if the Technician is found to have contravened the Vehicle Inspection Manual. [Alberta Regulation 211/2006 Sections 56(3)(d)(v), 57(2)(d) and 57(3)(a)]
- Technician must comply with the Vehicle Inspection Manual when completing a Certificate and an ROI. [Alberta Regulation 211/2006 Sections 1(1)(p), 27(3), (4) and (5)]
- Registrar may revoke a Certificate that was issued contrary to the Vehicle Inspection Manual. [Alberta Regulation 211/2006 Sections 35(1)(a)]

Facility Manual

1.2.3 The guidelines in the Facility Operating Manual must be followed. The Licensee of a Facility is ultimately responsible for any Certificates and ROI's completed by a Technician. In order to comply with the Facility Operating Manual, a Licensee may direct a Technician to carry out vehicle inspection in a certain manner. Failure to follow the guidelines of the Facility Operating Manual may result in disciplinary action.

Purpose of the Vehicle Inspection Program (VIP)

1.2.4 The Department is responsible for the administration of the VIP. The VIP is one of the programs administered by The Department with the objective of enhancing the safety of vehicles, carriers and drivers on Alberta highways. The VIP has two components: Motor Vehicle Inspection (MVI) and Commercial Vehicle Inspection (CVI).

Motor Vehicle Inspection (MVI)

1.2.5 MVI deals with the inspection of out-of-province motor vehicles, salvage motor vehicles and unsafe motor vehicles. These vehicles must pass an inspection under the MVI before they are authorized to operate on the highway. In summary, MVI includes a number of key features aimed at enhancing road safety:

- A motor vehicle last registered in a jurisdiction other than Alberta must meet the applicable inspection standards before it can be registered in Alberta.
- A salvage vehicle must meet the applicable inspection standards before it can be registered or re-registered in Alberta.

An unsafe motor vehicle must meet the inspection standard specified by a Peace Officer.

Commercial Vehicle Inspection Program

1.2.6 The CVIP requires the periodic inspection of commercial vehicles in accordance with the National Safety Code Standard 11, Part B. The periodic inspection is intended to ensure the effectiveness of each carrier's vehicle preventative maintenance program, and to reduce collisions due to mechanical defects on commercial vehicles. In Alberta, trucks, truck-tractors, semi-trailers, trailers and converter dollies are required to be inspected at least annually. Buses are required to be inspected at least semi-annually.

1.3 Department Contact Information

Department Contact Information

1.3.1 Specific Program information and support may be obtained from:

Email: Vehicle.Safety@gov.ab.ca

Web: http://www.transportation.alberta.ca/vipinfo

Alberta Government offices can be reached toll free within Alberta by first dialing 310-0000.

Commercial Vehicle Inspection Specialist
Ph. 780-644-8949 Fax 780-988-7628

Motor Vehicle Inspection Specialist
T: 780-427-6798, F: 780-988-7628

Vehicle Inspection Program Records Analyst
T: 780-422-9135, F: 780-422-2721
E: trans.efacility@gov.ab.ca

Vehicle Inspection Program Licensing Analyst
T: 780-427-6782, F: 780-989-7235
E: viplicensing@gov.ab.ca

Vehicle Safety Investigations
T: 780-427-7873, F: 780-988-7629
E: vsi@gov.ab.ca

Switchboard 780-427-8901

2. Administrative Responsibilities for Inspection Technicians

2.1 Code of Practice

Code of Practice - Vehicle Inspection Technicians

2.1.1 A licensed Technician must conduct vehicle inspections according to the requirements of the *Traffic Safety Act* and the *Vehicle Inspection Regulation*. The Code of Practice for Vehicle Inspection Technicians outlines the overall obligations for Technicians under the Act and the regulation, and is supplemented by the Vehicle Inspection Manual.

The Code of Practice for Vehicle Inspection Technicians will be part of the on line application package when applying for a technicians licence in the Commercial Vehicle Inspection Program.

2.2 Information Privacy and Confidentiality

Information in Vehicle Inspection Certificate and Record of Inspection

2.2.1 The information in the Certificate and ROI is collected under the authority of the *Vehicle Inspection Regulation* for the purpose of The Department's VIP. The Technician must not use such information for any purposes except for the inspection of the related vehicle, or disclose such information to persons other than the Licensee, the Licensee's personnel, the Registrar or the Registrar's representatives. Contravention of this requirement may lead to sanctions up to and including the cancellation of the licence.

NOTE: In addition to 2.2.1, the Licensee is also subject to the *Personal Information Protection Act.* As such, the Licensee may provide further directions to the Technicians regarding information privacy and security. If there are questions about the use, security, disclosure and disposal of information contained in a Certificate and a ROI, contact The Department as soon as possible.

Request for Information by Registered Owner or Other Persons

2.2.2 If a customer requests a copy of the Certificate or ROI for insurance purposes, or to provide to a prospective purchaser, etc, refer the person to the Licensee. There are directions in the Facility Operating Manual on how a Licensee should deal with such information request.

2.3 General Administrative Responsibilities

Technician – General Administrative Responsibilities

2.3.1 The following is a list of general administrative responsibilities for an Inspection Technician:

- The Technician must conduct inspections as outlined in this manual.
- Produce a copy of the Inspection Technician licence at the request of the person who requested the vehicle inspection, the VSI and the Contractor.
- Keep and maintain the required hand tools at the Facility.
- Have access to or possession of the current inspection manual.
- Notify The Department immediately if the trade certificate is suspended, cancelled or reinstated.

Charge /conviction of Criminal Code or Excise Act

2.3.2 A Technician must notify the Registrar immediately if the Technician has been charged or been convicted of an offence under the *Criminal Code* (Canada) or the *Excise Act* (Canada), or of an offence in an Act or regulation of another country that is similar to the *Criminal Code* (Canada) or the *Excise Act* (Canada).

Technician Continuing Competency

2.3.3 A Technician must maintain their technical skills, and update their knowledge when vehicle manufacturers introduce new technology such as antilock brake systems (ABS), supplemental restraint systems (SRS), electronic stability control (ESC), Emission Control Systems, etc. This may be done through attending formal training and or obtaining information from sources such as internet, trade magazines, manuals and specifications.

Cease Inspection When Directed by The Department

2.3.4 When notified by The Department of a licence suspension or licence cancellation, or when notified by a VSI Directive to stop conducting vehicle inspections, the Technician and/or Facility must immediately stop inspecting vehicles.

Any Certificates issued subsequent to such a notification will be revoked, and the Technician and / or Facility may be subject to further sanctions.

Return Documents When Directed by The Department	2.3.5	When directed to do so, the Technician must return one or more of the following to The Department, in the event of a licence suspension, licence cancellation, licence expiry, or withdrawal from the program: • Technician Licence • Any other documents specified by The Department.
Change of Information	2.3.6	If there is a change in contact information, the Technician must notify The Department of the change immediately by email, or fax (see 1.3 for contact information)
Replacement Licence	2.3.7	If a Technician Licence is lost, destroyed, or becomes unreadable, the Technician must contact the Licensing Analyst to arrange for a replacement licence.

2.4 Vehicle Inspection Certificates

Certificates

2.4.1 The Certificates/ Decals as relevant are purchased by the Licensee from the Contractor.

Inspection Certificates are Numbered

2.4.2 Certificates/Decals are individually numbered and assigned to the Facility that purchased them.

Technician must use assigned Certificates

2.4.3 A Licensee can only provide a Technician with an unissued certificate/decal that was sold to that Licensee for the use in a vehicle inspection. If a Technician has reason to believe that the certificate/decal was not originally sold to the Licensee immediately report the concern to the Vehicle Inspection Program Records Analyst.

Voiding of Inspection Certificates

2.4.4 To "void" a paper Certificate, write the word "VOID" and draw a diagonal line on the original and all copies of the Certificate. Give all copies to the Licensee to handle according to the Facility Operating Manual.

Lost/stolen Inspection Certificates

2.4.5 If a Technician determines an unissued Certificate or Decal is stolen, lost, destroyed, etc., the Technician must immediately report the facts, circumstances, and the certificate number to the Licensee to handle according to the Facility Operating Manual.

Lost/stolen Inspection Certificate Recovered

2.4.6 If an unissued Certificate/Decal which has been reported as stolen, lost, destroyed, etc. is subsequently recovered by the Technician, the Technician must report the recovery, circumstances, and certificate number to the Licensee to handle according to the Facility Operating Manual.

3. Issuance of inspection Certificates and ROI's

3.1 Getting Started

Confirm Facility and Technician Requirements

3.1.1 The Technician must ensure the following requirements are met:

- Facility must have a subsisting Facility licence specifying the type(s) of vehicle(s) being inspected.
- Technician must have a subsisting Technician licence for the type of vehicle being inspected.
- Technician and Facility must possess and maintain the proper tools to perform the inspection.
- Technician must have access to or be in possession of the applicable Vehicle Inspection Manual at the worksite to conduct the inspection.
- Certificate/Decal to be used must be purchased by the Licensee of the Facility. The Certificate used must not be loaned, given, or sold to the Facility by another Licensee.

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Commercial Vehicle

3.1.2 Commercial Vehicle Inspections are performed following the Item and Method of Inspection criteria as listed in the National Safety Code 11B

Vehicle Types

3.1.3 The VIP Vehicle Inspection Certificates identify a number of vehicle types, The following are vehicle types a Technician may inspect in the CVI programs:

Vehicle Types, continued

- Commercial Bus: means a vehicle having a designated seating capacity of more than 11 including the driver, and is not a School Bus or a Motor Coach
- Converter: means a conversion chassis that is equipped with one or more axles, a lower half of a fifth wheel coupling and one or two drawbars.
- Light Truck: means a truck or van style motor vehicle that has no more than 2 axles and is equipped with hydraulic brakes.
- Motor Coach: means a commercial bus of monocoque design manufactured with underfloor baggage storage.
- School Bus: means a bus that is designed and equipped primarily to transport students to and from school
- Semi-Trailer: means an air brake equipped vehicle designed primarily for the transportation of cargo and drawn by a truck or truck-tractor by means of a fifth wheel coupling or drawbar and hook
- Trailer: means an electric or hydraulic brake equipped vehicle designed primarily for the transportation of cargo and drawn by a truck or bus by means of a fith wheel coupling, drawbar and hook, or ball hitch
- Truck, Truck-tractor: means a truck style motor vehicle with 2 or more axles, and/or is equipped with air brakes, designed primarily for the transportation of cargo and/or for drawing a trailer transporting cargo.

3.2 Vehicle Inspection

Conducting an Inspection

3.2.1 The Technician **must** conduct the vehicle inspection **within** an Inspection Facility licenced by The Department, and according to the applicable Vehicle Inspection Manual.

- Confirm - items that do not require a specific measurement. Inspect and confirm if they comply with the inspection standards.
- Ensure - items are within the tolerance limit of inspection standards. Measure and record the item if it shows signs of wear or maintenance concern.
- Measure - some critical items must be measured and recorded regardless of the condition.

Confirm Vehicle Inspection Number (VIN)

3.2.2 The Technician must verify the accuracy of the VIN and the following requirements:

- VIN plate number is consistent with the VIN displayed on the door decal.
- If the VIN's do not match contact the appropriate Program Specialist
- VIN has not been tampered with.

Vehicle Inspection – Worn Components

3.2.3 During a vehicle inspection, if the Technician determines that a component meets the inspection criteria but is likely to be worn to the degree of failure within a short time of the inspection being completed, the Technician should make reference to this in the notes field of the Record of Inspection.

Motor Vehicle Inspection reveals Structural Damage

3.2.4 If during a vehicle inspection a Technician discovers structural damage to a vehicle, the Technician must inform the Licensee, who in turn, must contact The Department for direction.

3.3 Completing Certificates and ROI's

Completing an ROI

3.3.1 After completing the inspection, the Technician must complete a ROI in the following manner:

- Fill out the ROI and clearly indicate which item(s) passed or failed the inspection of the vehicle. Do not leave any area blank. If the requirement is not applicable mark N/A in the area.
- Sign the ROI only after the inspection is complete.

Completing a Certificate

3.3.2 The Technician must complete the applicable Certificate if the vehicle passes all requirements of the applicable Inspection Manual.

- Do not leave any area of the Certificate blank. If the requirement is not applicable, include N/A in the area. By issuing a Certificate, the Licensee and the Technician certify that the vehicle is safe for operation on highways.
- Ensuring the information provided on a Certificate is accurate and legible will minimize any chance of a certificate being rejected or revoked.
- Sign and date the Certificate only after the inspection is complete.
- Technician affixes the Inspection Decal to the vehicle following the guidelines in the applicable inspection manual.

WARNING: It is an offence for a Technician to sign a Certificate prior to the completion of an inspection.

Double Check

3.3.3 The Technician should double check the completeness and accuracy of the Inspection Certificate and the ROI. Special attention should be made to ensure:

- Decal number is same on CVI Certificate
- Decal and Certificate as placed on and in the correct vehicle
- Correct VIN number
- Correct licence plate number
- Odometer reading
- Technicians Signature on all copies of Records of Inspections and Certificates
- Correct date.

Provide documents to the Licensee for distribution and file

3.3.4 The Technician must provide the Licensee with the following documents for distribution and filing:

- ROI
- Inspection Certificate, if the vehicle passed the inspection
- Any other documents submitted by the customer.

- The Licensee, and <u>not</u> the Technician, is responsible for the distribution of the ROI and the Inspection Certificate to the person who presented the vehicle for inspection.

3.4 Rejected and Revoked Certificates

Rejection of a Certificate

3.4.1 The Department may reject a Certificate when any required information is missing, incorrect, or not legible. The rejected Certificate will be returned to the Licensee. The Licensee will be required to rectify the problem and re-submit the Certificate to The Department. If the mistake was made by the Technician, the Licensee may require the Technician to address the issue.

Automatic Revocation of a Certificate

3.4.2 The Department may revoke a Certificate for one of the following reasons:

- Facility was not licensed to inspect the type of vehicle.
- Technician was not licensed to inspect the type of vehicle.
- Facility or Technician licence was canceled or suspended at the time of inspection.
- Certificate issued was reported missing, destroyed, or otherwise invalid.
- Certificate issued was originally sold to another Facility.

Revocation of a Certificate based on investigation results

3.4.3 The Department may revoke a Certificate, if upon investigation, it is determined that the Certificate is subject to one or more of the following circumstances:

- Date of the inspection on the Certificate is different than the actual date of the inspection.
- Technician signed the Certificate prior to completing the inspection.
- Certificate was issued for which the inspection was not conducted in accordance with any of the following:
    1. The Vehicle Inspection Regulation
    2. The Facility Operating Manual,
    3. The applicable Inspection Manual.
- Certificate was otherwise issued under fraudulent or false pretenses.

Licensee and Technician Responsibilities

3.4.4 A rejected or revoked Certificate will be recorded in the files of the Licensee and Technician who issued that certificate. It is The Department's position that all parties involved in the issuance of a Certificate will be held accountable and may be sanctioned for any infraction.

4. Monitoring and Discipline

4.1 Monitoring

Monitoring

4.1.1 To ensure the quality and integrity of the VIP, The Department monitors the activities of Technicians through:

- Review of issued Certificates submitted by Licensees.
- Review of Technician compliance by the Contractor during the verification of the Facility during the Facility licensing process.
- Investigation of complaints.
- Conducting spontaneous audits of activities and inspections of Facilities and their Technicians pursuant to The Department's VIP audit procedures.
- Conducting reviews of the records and profiles of Technicians pursuant to The Department's VIP record review procedures.

Verification of Technician Compliance

4.1.2 For every Technician who is present in the Facility and will inspect vehicles, a person appointed by the Registrar may confirm that:

- A Technician can produce the Inspection Technician licence.
- A Technician has the hand tools required to inspect the type(s) of vehicles under the Technicians licence.
- A Technician will be required to have access to or be in possession of the current inspection manual.

4.2 Discipline

Contravention Leading to Disciplinary Actions

4.2.1 The Department may sanction or penalize a Technician for committing the following:

- Certificate rejected.
- Certificate revoked.
- Failure to comply with the *Traffic Safety Act*, the *Vehicle Inspection Regulation*, the Vehicle Inspection Manual, and terms and conditions of the licence.

Types of Sanction and Penalty

4.2.2 Depending on the nature, severity, urgency, and frequency of the contravention, the sanction and penalty imposed may include one or more of the following:

- Intervention actions by The Department (interview, investigation, review by the VSI or other personnel authorized by the Registrar).
- Verification of the compliance of the Technician by personnel authorized by the Registrar.
- Requirement to take a training course, competency test, or other remedial action
- Additional Licence terms and conditions.
- VSI Directives.
- Administrative penalties.
- Licence suspension.
- Licence cancellation.

VSI Directive Compliance and Review	4.2.3	A Technician who is given a Directive by a VSI must comply with the Directive but may request the Registrar review the VSI Directive as follows: • A request to the Registrar to review a VSI Directive must be made in writing (mail, email, Fax, etc) with the reasons why the Directive should be cancelled or changed, along with any supporting documents. • While a request has been made to the Registrar to review the Directive, the Technician must continue to comply with the Directive until a decision has been made by the Registrar. • The Registrar will review the VSI Directive and advise the Technician of the decision as soon as possible. • The Registrar may, but is not required to, conduct an oral hearing. • The Registrar may, but is not required to, obtain additional information from the Technician by one or more of the following methods: • Meeting in person • Telephone or video conference • Written communications such as mail, email, and fax • Another method directed by the Registrar.
Appeal against Administrative Penalties, Licence Suspension and Licence Cancellation	4.2.4	An Administrative penalty, a licence suspension or a licence cancellation by The Department may be appealed to the Transportation Safety Board. The notice of Administrative penalty, licence suspension or licence cancellation will provide the procedures for the appeal.
Records	4.2.5	All contraventions, penalties, and sanctions will be recorded in the Technician Profile.

5. Forwarding Complaints or Concerns

Vehicle With Significant Structural/Mechanical Defects

5.1.1 A Technician may come across in the course of their work vehicles that have significant structural and/or mechanical defects. The Technician should inform the Licensee so that the Licensee could take appropriate action.

Reporting is Optional

5.1.2 The *Traffic Safety Act* and the *Vehicle Inspection Regulation* do not contain any mandatory provisions requiring a Licensee to report "problematic" vehicles to The Department or to any other agencies. However, The Department and law enforcement agencies have procedures to act on information received pertaining to problematic vehicles.

Where to Submit Complaints or Concerns

5.1.3 A Licensee determines if complaints or concerns are forwarded to the local police agency or to Vehicle Safety Investigations. The local police agency should be contacted directly if the matter appears to a significant safety hazard presenting immediate danger to the health or safety of other road users.

Complaints or Concerns Must be in Writing

5.1.4 A Licensee forwarding complaints or concerns to The Department must do so in writing (letter, email, or fax) and should contain the following information where available and applicable:

- Name and licence of the Technician.
- Name and location of the Facility where the vehicle was determined to be problematic.
- Date of the submission.
- Licence plate, VIN number, model, make, colour, and year of the vehicle.
- Copy of the ROI and the Certificate.
- Nature of the complaint or concern.
- Description of the event that lead to the discovery concern.
- Date, time, location, of the event and witnesses.
- Photo showing the nature of the problem.
- Any other information which may illustrate the problem.

Confidentiality

5.1.5 Complaints or concerns received by The Department are governed by the *Traffic Safety Act* and other information and privacy legislation.

6. Technician Licensing

When a Technician Licence Application is Required

6.1 An application for a Technician licence is required for the following:

- New Technician
- Licence renewal
- Licence re-instatement after suspension
- Adding another Program or vehicle type.

Trade Certification Requirement

6.2 Trade Certification Requirement	Can Inspect if Licensed
Heavy Equipment Technician	Trucks Light Trucks Truck-Tractors Trailers Converters Commercial Bus School Bus Motor-Coach

NOTE:
A Heavy Equipment Technician licence is required if:

- Inspecting a truck with 3 axles or more, or if the unit is equipped with an air brake system
- Inspecting a School Bus, Commercial Bus or Motor Home equipped with an air brake system

6.3 Technician Application Process

Technician Licence Application Form

6.3.1 A person who wishes to obtain a Technician licence for the first time or whose Technician licence is no longer subsisting, may complete the Technician application on The Department's website.

Notice of Technician Licence Renewal

6.3.2 For an existing Technician that has a subsisting Licence, The Department will send a licence renewal notice to the Technician via email approximately 120 days prior to the expiry of the current licence.

Vehicle Inspection Manual

6.3.3 An applicant must obtain and acknowledge they have a Vehicle Inspection Manual for the type(s) of vehicle(s) to be inspected under the licence.

Submit Technician Application to The Department

6.3.4 Submit the following to The Department:

- A copy of the relevant trade certificate (not required if renewing and have previously submitted notarized copies)*.
- Criminal record check completed within the past 90 days. **NOTE** – Details of any convictions appearing on the criminal record check must be provided in writing on the letterhead of the agency providing the criminal record check*.
- Application fee.

**Can be submitted via email to viplicensing@gov.ab.ca*

Licence Application Fee – Methods of Payment

6.3.5 Technician licence application fees can only be made with a credit card. The following credit cards are accepted:

- VISA
- MasterCard
- American Express

6.4 Department Review and Decision

Department Decision

6.4.1 The Department will make the decision on the licence application based on a number of factors including:

- Information included in the application
- Results of the criminal record check.
- Other pertinent information.

NOTE: The Department will provide the Technician with its decision in writing.

Decision is Final

6.4.2 The decision of The Department on a licence application is final. There is no appeal allowed for the decision.

Alberta Government

Transportation Safety Services Division
Vehicle Safety & Carrier Services Branch

Room 109, Twin Atria Building
4999 - 98 Avenue
Edmonton, Alberta T6B 2X3

Telephone 780-427-8901
Fax 780-422-2721
Toll-Free 310-0000

Code of Practice
for
Vehicle Inspection Program Technicians

2.1 The licensed technician must conduct a thorough inspection of each vehicle that is submitted for inspection. The inspection must be conducted to determine whether the vehicle meets the Vehicle Standards and Safety Regulation in relation to defective vehicles.

2.2 The licensed technician must inspect only the classes of vehicles for which approval has been given. No other class of vehicles may be inspected.

2.3 Upon completion of each inspection, **and not before**, the licensed technician must ensure the certificate is completed, sign and must also ensure that the vehicle has been described correctly.

2.4 A licensed technician is permitted to have assistance when necessary; for instance, another person may apply the brake pedal while the examiner checks the operation of brake actuators. Where a vehicle is returned for re-inspection after rectification of faults found by one technician, it is permissible for the re-inspection to be carried out by another technician at the same site if the original technician is absent.

2.5 The licensed technician must maintain a good knowledge of the inspection requirements, procedures and any relevant standards, including all AT Information Sheets and vehicle inspection procedures that are issued from time to time, relevant to the inspection of vehicles.

2.6 The licensed technician should consult and be familiar with a vehicle manufacturer's technical data to assist in determining whether components such as brakes, suspension and steering are serviceable or defective.

2.7 The licensed technician must ensure that all vehicle identification information recorded on the Inspection Certificate or Record of Inspection is taken directly from the vehicle inspected, and is accurate and legible.

2.8 A licensed technician may inspect vehicles only at a licensed inspection facility.

2.9 A licensed technician must maintain a professional level of knowledge with respect to technical requirements related to the types of vehicles for which he or she is licensed, and must demonstrate continuing competency through the completion of any examinations or standards set by AT as required.

2.10 A licensed technician will recognize that this is a position of public trust and the safety of the motoring public may depend upon his or her decisions.

2.11 A licensed technician will act according to the highest standards of ethics, professionalism and public service in carrying out all duties under the auspices of Alberta Transportation.

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Code of Practice
for
Vehicle Inspection Program Facilities

1.1 The licensee is responsible for making sure that a facility is operated strictly in accordance with the Act and Regulation. This Code of Practice provides details on how compliance with the requirements of the Act and Regulation may be achieved.

1.2 The licensee is responsible to ensure that inspections are performed in accordance with the Act, Regulation and appropriate Facility and Technician Manuals, and that no unsafe, fraudulent or illegal practices are carried on while the facility is being operated under the licence issued by Alberta Transportation (AT).

1.3 The licensee must make sure that all of the facility's inspection equipment is kept in a good and serviceable order; the inspection area must be kept clean and Requests for Inspections should be accepted promptly and dealt with as quickly as possible. Also, it is the responsibility of the Inspection Facility Licensee to ensure that licensed inspection technicians have access to such technical data and workshop manuals as are needed to enable the verification of a vehicle manufacturer's specifications as required.

1.4 The minimum equipment maintained during the currency of the inspection facility licence. If the prescribed inspection equipment is not available at the facility or becomes unserviceable, inspections for which that equipment is needed are not to be carried out (and inspection certificates are not to be issued) until the equipment is either repaired or replaced.

1.5 The facility may only inspect the category of vehicle for which it is approved, and the licensee must not allege or otherwise represent that the facility is capable of inspecting vehicles that fall outside of its authorization.

1.6 The facility must have a valid and subsisting licence. The licence must be posted conspicuously within the facility, along with the shop rates. The rates charged to customers must not be more than the posted rates. If the facility licence is expired, suspended or revoked, it must be taken down and may no longer be displayed until reinstated.

1.7 The Inspection Facility Licensee must supervise licensed inspection technicians employed at the facility and ensure that these persons properly discharge their duties under the Act.

1.8 The Inspection Facility Licensee must ensure that the provisions of the Act and Regulation relating to inspections, decals and certificates of inspection are observed. Additionally, the Inspection Facility Licensee is required to report all instances of bribery, conflict of interest or unethical behavior on the part of any licensed technician as soon as possible to Alberta Transportation.

1.9 Whenever a vehicle passes an inspection at a licensed facility, and the correct type of inspection report has been prepared, the licensee must ensure that the inspection document is signed and that the vehicle that was inspected has been described correctly.

1.10 The Inspection Facility Licensee must make sure that records of the vehicles inspected at the facility and the examiners employed there are maintained, and that all books of certificates are kept at the facility during normal working hours and are stored in a secure place at all times.

1.11 The Inspection Facility Licensee must furnish to Alberta Transportation completed forms relating to the vehicles inspected at the licensed facility as required.

1.12 A person must not inspect vehicles or certify to the condition of vehicles unless that person is also a licensed inspection technician.

1.13 The Inspection Facility Licensee must ensure that only licensed inspection technicians sign inspection forms.

1.14 Alberta Transportation must be notified immediately if any unused inspection certificates issued to the person are lost, destroyed or stolen. This advice must be confirmed in writing within 7 days.

Province of Alberta

TRAFFIC SAFETY ACT

VEHICLE INSPECTION REGULATION

Alberta Regulation 211/2006

With amendments up to and including Alberta Regulation 12/2015

Office Consolidation

Alberta Queen's Printer
7th Floor, Park Plaza
10611 - 98 Avenue
Edmonton, AB T5K 2P7
Phone: 780-427-4952
Fax: 780-452-0668

E-mail: qp@gov.ab.ca
Shop on-line at www.qp.alberta.ca

Note

All persons making use of this consolidation are reminded that it has no legislative sanction, that amendments have been embodied for convenience of reference only. The official Statutes and Regulations should be consulted for all purposes of interpreting and applying the law.

(Consolidated up to 12/2015)

ALBERTA REGULATION 211/2006

Traffic Safety Act

VEHICLE INSPECTION REGULATION

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93 Coming into force

Schedule

Interpretation

1(1) In this Regulation,

(a) "Act" means the *Traffic Safety Act*;

(b) "bus" means a bus as defined in section 130(1)(a) of the Act;

(c) "carrier" means a carrier as defined in section 130(1)(b) of the Act;

(d) "certificate" means a vehicle inspection certificate issued under section 27 and includes a commercial vehicle inspection certificate, an out of province motor vehicle inspection certificate or a salvage motor vehicle inspection certificate, as applicable;

(e) "commercial vehicle" means

(i) a commercial vehicle as defined in the Act, or a combination of commercial vehicles, that is registered for a gross weight of 11 794 kilograms or more and that is not a bus,

(ii) a converter dolly, or

(iii) a bus;

(f) "converter dolly" means a trailer converter dolly as defined in the *Motor Vehicle Safety Regulations*, CRC c.1038;

(g) "date of inspection" means the date an inspection certificate is issued;

(h) "decal" means a vehicle inspection decal referred to in section 27;

(i) "facility" means a vehicle inspection facility that is licensed under this Regulation;

(j) "facility licence" means a vehicle inspection facility licence issued by the Registrar under this Regulation;

(k) "Facility Operating Manual" means a Vehicle Inspection Facility Operating Manual adopted under section 22,

respecting the operation of a vehicle inspection facility for the type of vehicle being inspected;

(l) "handi-bus" means a bus that meets the Canadian Standards Association Standard D409 applicable at the time it was manufactured and that is used primarily for the purpose of providing transportation for persons with physical disabilities;

(m) "investigator" means a vehicle safety investigator authorized by the Registrar to carry out investigations, audits and reviews of licensees, technicians and facilities;

(n) "licensee" means the holder of a facility licence and includes an agent, manager or employee of the holder of the licence;

(o) "out of province motor vehicle" means a motor vehicle that is not registered under the Act and was last registered in a jurisdiction other than Alberta;

(p) "record of inspection" means a record issued by a vehicle inspection technician in accordance with the requirements set out in the Facility Operating Manual and the applicable Vehicle Inspection Manual;

(q) "subsisting", when used in relation to a certificate or licence under this Regulation, means that, at the relevant time, the certificate or licence is current and has not expired nor been revoked, suspended or cancelled;

(r) "technician" means a vehicle inspection technician who holds a vehicle inspection technician licence issued under this Regulation;

(s) "technician licence" means a vehicle inspection technician licence issued by the Registrar under this Regulation;

(t) "trade certificate" means a trade certificate as defined in the *Apprenticeship and Industry Training Act*;

(u) "transit bus" means a bus that is operated

(i) under the management of an urban area when the bus is operated within the boundaries of that urban area or between that urban area and an abutting urban area, and

(ii) at regular intervals, in accordance with a set time schedule or over a specified route,

but does not include a handi-bus;

(v) "unsafe vehicle" means a vehicle that has been assigned status as an unsafe vehicle by the Registrar under section 8;

(w) "Vehicle Inspection Manual" means a Vehicle Inspection Program Manual of Inspection Methods and Standards adopted under section 22.

(2) For the purposes of the Act and this Regulation, "non-repairable vehicle" means a salvage motor vehicle that is a non-repairable vehicle as set out in Part 1.

(3) For the purposes of the Act and this Regulation, "salvage motor vehicle" means a motor vehicle that is a salvage motor vehicle as set out in Part 1.

(4) This Regulation does not apply to an off-highway vehicle.

(5) Sections 19 and 21 of this Regulation do not apply to the following:

(a) a commercial vehicle that is being used primarily to transport an agricultural product where the driver of the vehicle

(i) is a bona fide farmer who owns or produced that agricultural product, or

(ii) is an employee of that farmer;

(b) a 2- or 3-axle vehicle that is used for the transport of primary products on a forest, lake or river, where the driver or driver's employer is the producer of those primary products;

(c) a transit bus.

AR 211/2006 s1;49/2010

Part 1
Declaration and Sale of Vehicles

Division 1
Declaration

Declaration by insurance company

2(1) A motor vehicle is a salvage motor vehicle if

(a) it is damaged and an insurance company under a contract of insurance does any of the following:

(i) replaces the motor vehicle;

(ii) pays an amount determined under a contract of insurance for the damaged motor vehicle and acquires ownership of it;

(iii) pays an amount determined under a contract of insurance for the market value of the motor vehicle before it was damaged, less its value before any repairs are made to it, and does not acquire ownership of it,

(b) after being stolen,

(i) it is recovered and is found to have been damaged while it was stolen, and

(ii) an insurance company under a contract of insurance replaces the motor vehicle or pays an amount determined under the contract of insurance for the motor vehicle and acquires ownership of it,

or

(c) an insurance company would have been required to do one of the things set out in clause (a) or (b)(ii) but did not do so because the insured person breached the contract of insurance or did not accept the payment determined under the contract of insurance for the market value of the motor vehicle.

(2) Subsection (1) does not apply to a motor vehicle if the sole damage to the motor vehicle is hail damage to the outer body sheet metal.

Declaration by self-insured

3(1) If a financial responsibility card has been issued to a person under section 825 of the *Insurance Act* and

(a) the person is liable for damage to a motor vehicle that is not owned or operated by the person, the motor vehicle is a salvage motor vehicle if the person

(i) replaces the motor vehicle,

(ii) pays an amount for the motor vehicle and acquires ownership of it, or

(iii) pays an amount for the damage that takes into account the market value of the motor vehicle before

it was damaged, less its value before any repairs are made to it, and does not acquire ownership of it,

or

(b) damage occurs to a motor vehicle that is owned or operated by the person, the motor vehicle is a salvage motor vehicle if the person

(i) is of the opinion that the cost of repairing the motor vehicle is more than the value of the motor vehicle before it was damaged, and

(ii) sells or disposes of the motor vehicle instead of repairing it.

(2) Subsection (1)(b) does not apply to a motor vehicle

(a) if the sole damage to the motor vehicle is hail damage to the outer body sheet metal, or

(b) the motor vehicle was stolen but was not recovered.

Declaration by the Registrar

4 A motor vehicle is a salvage motor vehicle if it is assigned salvage motor vehicle status by the Registrar under section 8.

Salvage motor vehicle from outside Alberta

5 If a jurisdiction outside Alberta designates a motor vehicle as a salvage motor vehicle or assigns it a substantially similar status and the motor vehicle is brought into Alberta, the motor vehicle is deemed to be a salvage motor vehicle for the purposes of this Regulation.

Non-repairable vehicle

6 A salvage motor vehicle is a non-repairable vehicle if it has no resale value except as a source of parts or scrap metal, including, without limitation, a salvage motor vehicle that

(a) has been recovered after being stolen but with substantially all the body panels or interior components missing,

(b) has been submerged in water that reached the bottom of the vehicle's dash panel,

(c) has been burned or damaged by heat in 2 or more compartments or burned or damaged by heat to the extent that high-strength steel components are affected,

(d) has, in the case of a full frame motor vehicle, extensive damage requiring replacement of both cab and frame, or

(e) has, in the case of a unibody motor vehicle,

(i) collision or other damages to the passenger compartment floor, cowl or A-pillar,

(ii) collision or other damages to the rocker panel and B-pillar extending into the floor, or

(iii) an opening made anywhere in the unibody as part of a rescue or recovery operation.

Notice to the Registrar

7(1) The following shall notify the Registrar or a person appointed by the Registrar that a motor vehicle is a salvage motor vehicle not more than 6 days after it becomes a salvage motor vehicle:

(a) an insurance company referred to in section 2;

(b) a person who does one of the things referred to in section 3(1).

(2) Notification under subsection (1) must include the following:

(a) if the person is an insurance company,

(i) the company's name and address and the name, address and telephone number of the company's contact person, and

(ii) the number of the insurance policy, the number of the claim and the date the claim was paid or, if the claim was not paid, the reason for not paying it;

(b) if the person is not an insurance company, the person's name, address and telephone number;

(c) the name, address and telephone number of the owner of the motor vehicle;

(d) the following information about the motor vehicle:

(i) its make, model and year of manufacture;

(ii) the manufacturer's serial number;

(iii) the type of motor vehicle;

(iv) the licence plate number of the motor vehicle and the jurisdiction in which it was issued;

(v) the odometer reading;

(e) the cause of damage to the motor vehicle;

(f) a brief description of the damage to the motor vehicle;

(g) whether as a result of the damage the motor vehicle is a non-repairable vehicle;

(h) any other information that may be required by the Registrar.

(3) The Registrar may direct the insurance company referred to in subsection (1)(a) or the person referred to in subsection (1)(b) to reimburse the Registrar or the person appointed by the Registrar for the costs of administering this section and section 8.

Assignment of vehicle status

8 If the Registrar is of the opinion that the operation of a vehicle may pose a safety hazard to persons or other vehicles on the highway by reason of structural or other defects, the Registrar may assign the vehicle status in one of the following categories:

(a) salvage motor vehicle;

(b) non-repairable motor vehicle;

(c) unsafe vehicle, whether or not the vehicle is subject to a direction under section 66 of the Act;

(d) another category determined by the Registrar to be appropriate.

Return of certificate of registration

9 If a motor vehicle becomes a salvage motor vehicle, the person in possession of the motor vehicle's certificate of registration shall return the certificate to the Registrar not more than 14 days after the motor vehicle becomes a salvage motor vehicle.

End of salvage motor vehicle or unsafe vehicle status

10(1) A motor vehicle is no longer a salvage motor vehicle when a subsisting salvage motor vehicle inspection certificate for the motor vehicle is filed with the Registrar.

(2) A vehicle is no longer an unsafe vehicle when

(a) a subsisting salvage motor vehicle inspection certificate for the vehicle is filed with the Registrar, or

(b) when the Registrar for any other reason has determined that the vehicle is no longer an unsafe vehicle and has changed its status to another category under section 8 or 33(7).

Reinstatement of salvage motor vehicle or unsafe vehicle status

11(1) Subject to subsection (2), if a salvage motor vehicle inspection certificate is filed with the Registrar for a motor vehicle and the certificate is later revoked under this Regulation, the motor vehicle becomes a salvage motor vehicle again, unless it has been assigned to another category by the Registrar under section 8 or 33(7).

(2) If a salvage motor vehicle inspection certificate is filed with the Registrar for a vehicle that was previously assigned unsafe vehicle status by the Registrar and the certificate is later revoked under this Regulation, the vehicle becomes an unsafe vehicle again, unless it has been assigned to another category by the Registrar under section 8 or 33(7).

Notification regarding non-repairable vehicle

12(1) A person who purchases a salvage motor vehicle for scrap or parts or who destroys or dismantles a salvage motor vehicle for scrap or parts shall notify the Registrar that the motor vehicle is a non-repairable vehicle not more than 6 days after it becomes a non-repairable vehicle.

(2) A salvage motor vehicle under subsection (1) becomes a non-repairable vehicle on the date of purchase, if the vehicle was purchased for scrap or parts, or at the time when the person commences to destroy or dismantle the vehicle.

Division 2
Sale of Salvage, Out of Province, Used Motor Vehicles

Sale of salvage motor vehicle

13 A person shall not sell a motor vehicle that is a salvage motor vehicle unless, before the sale,

(a) the person provides the buyer with a subsisting salvage motor vehicle inspection certificate for the motor vehicle, or

(b) the person provides the buyer with a written statement advising that the vehicle is a salvage motor vehicle for which there is no subsisting salvage motor vehicle inspection certificate.

Sale of out of province motor vehicle

14 A person shall not sell a motor vehicle that is an out of province motor vehicle unless, before the sale,

(a) the person provides the buyer with a subsisting out of province motor vehicle inspection certificate for the motor vehicle, or

(b) the person provides the buyer with a written statement advising that the motor vehicle is an out of province motor vehicle for which there is no subsisting out of province motor vehicle inspection certificate.

Sale of used motor vehicle

15(1) Subject to subsection (2), a dealer in used motor vehicles shall, before entering into a contract to sell a motor vehicle, give to the buyer a used motor vehicle mechanical fitness assessment that contains the following:

(a) a statement identifying the type of motor vehicle as a truck, motorcycle, bus, van, light truck, automobile or other type of motor vehicle;

(b) a statement showing the make, model, year, vehicle identification number, odometer reading in kilometres or miles, licence plate number and province of registration of the vehicle;

(c) the name and address of the dealer selling the vehicle and the name of the technician who issued the mechanical fitness assessment;

(d) a statement that the mechanical fitness assessment expires 120 days after the date on which it was issued;

(e) a statement certifying that at the time of sale the motor vehicle

(i) complies with the *Vehicle Equipment Regulation* (AR 122/2009), or

(ii) does not comply with the *Vehicle Equipment Regulation* (AR 122/2009) and containing a description of the items of equipment that are missing or do not comply with the *Vehicle Equipment Regulation* (AR 122/2009);

(f) the signature of the technician who conducted the mechanical fitness assessment;

(g) the date the mechanical fitness assessment was issued.

(1.1) Despite section 1(1)(r), for the purposes of subsection (1), "technician" means a person who,

(a) in the case of a mechanical fitness assessment of passenger vehicles and light trucks, holds a subsisting trade certificate in the designated trade of automotive service technician under the *Apprenticeship and Industry Training Act*, or

(b) in the case of a mechanical fitness assessment of heavy vehicles and equipment, holds a subsisting trade certificate in the heavy equipment technician branch or the truck and transport mechanic branch of the designated trade of heavy equipment technician under the *Apprenticeship and Industry Training Act*.

(2) Subsection (1) does not apply to a used motor vehicle sold by a dealer

(a) to another dealer,

(b) to a person or partnership engaged in the business of repairing, dismantling or wrecking motor vehicles, or

(c) through a sale by public auction within the meaning of section 119 of the *Fair Trading Act*.

AR 211/2006 s15;49/2010;12/2015

Expiry of mechanical fitness assessment

16 A dealer's mechanical fitness assessment provided under section 15(1) for a used motor vehicle expires 120 days after the date on which it was issued.

AR 211/2006 s16;49/2010

Application

17 Sections 14 and 15 do not apply to a salvage motor vehicle.

Part 2
Vehicle Inspection

Division 1
Requirements for Vehicle Inspection Certificates

Registration of salvage or out of province motor vehicle or unsafe vehicle

18(1) A person who applies to the Registrar for a certificate of registration for a salvage motor vehicle shall provide a subsisting salvage motor vehicle inspection certificate in respect of that motor vehicle.

(2) A person who applies to the Registrar for a certificate of registration for an out of province motor vehicle shall provide a subsisting out of province motor vehicle inspection certificate in respect of that motor vehicle.

(3) A person who applies to the Registrar for a certificate of registration for an unsafe vehicle shall provide a subsisting salvage motor vehicle inspection certificate in respect of that vehicle.

(4) A person shall not register a salvage or out of province motor vehicle or an unsafe vehicle if there is no subsisting certificate issued for the vehicle.

Operation of commercial vehicle

19(1) A person shall not operate a commercial vehicle on a highway unless

(a) the vehicle has been inspected under this Regulation and a certificate and decal have been issued for that vehicle,

(b) the original copy of the certificate is located within the commercial vehicle for which it was issued,

(c) the decal is securely affixed to the commercial vehicle for which it was issued in accordance with the procedures set out in the applicable Vehicle Inspection Manual, and

(d) the certificate and decal have not expired, in accordance with section 30(1)(b) in the case of a commercial vehicle that is not a bus or section 30(1)(c) in the case of a bus, or been revoked, suspended or cancelled.

(2) Notwithstanding subsection (1)(b), in the case of a vehicle that is a converter dolly, the original copy of the certificate shall be located

(a) at the principal place of business of the owner of the converter dolly for which it is issued, or

(b) within the vehicle that is towing the converter dolly.

Other vehicles

20(1) A person shall not operate a vehicle under an Operating Authority Certificate issued pursuant to the *Commercial Vehicle Certificate and Insurance Regulation* (AR 314/2002) on a highway unless

(a) the vehicle has been inspected under this Regulation and a commercial vehicle inspection certificate and decal have been issued for that vehicle,

(b) the original copy of the certificate is located within the vehicle for which it was issued,

(c) the decal is securely affixed to the vehicle for which it was issued in accordance with the procedures set out in the applicable Vehicle Inspection Manual, and

(d) the certificate and decal have not expired in accordance with section 30(1)(c) or been revoked, suspended or cancelled.

(2) This Regulation, subject to any necessary modifications, applies

(a) to the vehicle and to the owner, operator and driver of the vehicle referred to in subsection (1), and

(b) to the completion and affixing of a commercial vehicle inspection certificate, decal and record of inspection by a technician and the issuing of the certificate and decal by a licensee for a vehicle referred to in subsection (1) as a result of the inspection required under that subsection.

Production of certificate on request

21(1) On the request of the Registrar, an investigator or a peace officer, the driver of a commercial vehicle shall forthwith produce for inspection by the Registrar, the investigator or the peace officer, as the case may be, the original certificate issued for that vehicle.

(2) Notwithstanding subsection (1) and section 19 or 20, a person may operate a commercial vehicle on a highway without a subsisting certificate or decal for the sole purpose of taking the commercial vehicle directly to a facility in order to have it inspected and a certificate issued for it.

(3) Where the commercial vehicle referred to under subsection (1) is a converter dolly and the original of the certificate is not located in the vehicle that is towing the converter dolly, the driver of the commercial vehicle shall produce the original certificate for inspection by the Registrar, the investigator or the peace officer as soon as practicable.

Division 2
Vehicle Inspection Requirements

Adoption of manuals

22(1) The Vehicle Inspection Program Manuals of Vehicle Inspection Methods and Standards established and amended from time to time by the Registrar are adopted and apply to the conducting of inspections and the completing and issuing of certificates under this Regulation.

(2) The Facility Operating Manuals established and amended from time to time by the Registrar are adopted and apply to the operation of a facility and the issuing of certificates by a facility under this Regulation.

Compliance with vehicle inspection manuals

23(1) A technician shall conduct the appropriate inspections set out in the applicable Vehicle Inspection Manual for the type of vehicle before completing a certificate for and, if applicable, affixing a decal to the vehicle.

(2) A vehicle shall pass the appropriate inspections set out in the applicable Vehicle Inspection Manual for the type of vehicle before a technician may complete a certificate for and, if applicable, affix a decal to the vehicle.

Prohibition

24 A person shall not conceal damage to or inadequate repair of the parts of a vehicle that are required to be inspected under this Regulation.

Supplying certificates

25(1) The Registrar may provide one or more types of sequentially numbered certificates and decals to the licensee of a facility.

(2) The Registrar may direct a licensee to purchase printed materials specified by the Registrar from a person authorized by the Registrar to provide those materials.

(3) A person shall not issue a certificate or a decal at a facility that has not been provided to the facility by the Registrar under subsection (1) or purchased from a person authorized by the Registrar in accordance with subsection (2).

(4) Any payment made under subsection (2) is not refundable.

Unissued certificate

26(1) A person shall not have an unissued certificate or decal in the person's possession unless the person is the licensee of the facility to which the certificate or decal has been provided by the Registrar or supplied by a person authorized by the Registrar.

(2) Notwithstanding subsection (1), a licensee may provide a technician with an unissued certificate or decal for the purpose of completing the certificate or affixing the decal.

Issuing a certificate

27(1) A licensee shall not issue a certificate or decal for a vehicle unless the vehicle has passed an inspection conducted in accordance with the applicable Vehicle Inspection Manual and this Regulation.

(2) A licensee shall ensure that a technician completes a certificate or affixes a decal only in accordance with the procedures set out in the Facility Operating Manual, the applicable Vehicle Inspection Manual and this Regulation.

(3) A technician shall conduct an inspection of a vehicle in accordance with the applicable Vehicle Inspection Manual and must be satisfied that the items required to be inspected are safe to operate on a highway before the technician completes a certificate for or affixes a decal to the vehicle.

(4) If, on completion of a vehicle inspection, the technician is not satisfied that the vehicle complies with the requirements of the applicable Vehicle Inspection Program Manual, the technician shall refuse to complete a certificate for or affix a decal to the vehicle.

(5) A technician shall not complete a certificate for a vehicle if

(a) the person submitting the vehicle for inspection does not provide the technician with the information required by the technician,

(b) the technician is not authorized under the technician's licence to inspect that type of vehicle,

(c) the technician does not have the proper tools needed to conduct the inspection on that type of vehicle, or

(d) the facility at which the inspection was conducted is not licensed to inspect that type of vehicle.

(6) Without limiting the generality of subsection (5)(a), a licensee shall not allow a technician to complete, and a technician shall not complete, a salvage motor vehicle or an out of province motor vehicle inspection certificate for a motor vehicle if the person submitting the motor vehicle for inspection does not provide the technician with a Request for Inspection Form issued by an Alberta registry agent.

(7) A technician shall not

(a) sign a blank certificate, or

(b) complete or sign a certificate for a vehicle before concluding the inspection of the vehicle.

(8) Where a vehicle is inspected or re-inspected under this Regulation, a technician may conduct tests in respect of the vehicle or any component of the vehicle.

Completing a certificate

28(1) A technician who completes a certificate pursuant to section 27 shall

(a) legibly complete the information required on the certificate according to the procedures set out in the applicable Vehicle Inspection Manual,

(b) state the date on which the certificate comes into effect,

(c) sign the original certificate,

(d) give the original certificate to the licensee to issue to the person who submitted the vehicle for inspection, and

(e) in the case where the certificate is being issued for a commercial vehicle, affix a decal bearing the date on which the certificate expires to the vehicle in the manner set out in the applicable Vehicle Inspection Manual.

(2) The licensee shall retain a copy of the certificate issued pursuant to section 27 on file in the facility and send a copy of the certificate to the Registrar not more than 7 days after the date of inspection, in the manner provided by the Registrar.

Issuing record of inspection

29(1) On completing the inspection of a vehicle, whether or not the vehicle has passed the inspection, the technician shall

(a) complete a record of inspection for the vehicle in accordance with the applicable Vehicle Inspection Manual,

(b) sign the original record of inspection, and

(c) give the original of the record of inspection to the licensee to give to the person who submitted the vehicle for inspection.

(2) The licensee shall

(a) give to the person who submitted the vehicle for inspection the original of the record of inspection, and

(b) retain a copy of each issued record of inspection in the facility.

Expiry of certificate

30(1) A certificate and the decal associated with it, if applicable, come into effect on the date that the certificate is issued and expire at the conclusion of

(a) 14 days in the case of a salvage motor vehicle or an out of province motor vehicle,

(b) in the case of a commercial vehicle other than a bus, the 12th month from the month in which the certificate and decal were issued, or

(c) in the case of a bus, the 6th month from the month in which the certificate and decal were issued.

(2) A decal is not subsisting during the period that the certificate in respect of which it was issued is not subsisting.

Re-inspection

31(1) A technician may complete a certificate for and affix a decal, if applicable, to a vehicle that failed an inspection under section 27(4), 33 or 34 if

(a) the vehicle and the record of inspection are submitted for re-inspection to the technician not more than 10 days after the failed inspection or the revocation of the certificate, as the case may be,

(b) the items that failed inspection as noted on the record of inspection have been repaired, replaced or otherwise rectified, and

(c) the technician has re-inspected the items that failed inspection and is satisfied that they meet the requirements of the relevant Vehicle Inspection Manual and that the vehicle is safe to operate on a highway.

(2) A technician is not required to re-inspect any item that did not fail inspection according to the record of inspection for the purpose of completing a certificate for and affixing a decal, if applicable, to a vehicle under subsection (1).

(3) Sections 27 to 29 apply to a re-inspection of a vehicle under this section.

Direction to be inspected

32(1) The Registrar may direct the owner or driver of a vehicle to have the vehicle inspected by a technician or an investigator if

(a) a certificate has been issued for the vehicle, and

(b) the Registrar is of the opinion that the vehicle is not safe to operate on a highway or the certificate should not have been issued for any reason.

(2) The Registrar may direct a technician or an investigator to inspect a vehicle if

(a) a certificate has been issued for the vehicle, and

(b) the Registrar is of the opinion that the vehicle is not safe to operate on a highway or the certificate should not have been issued for any reason.

(3) An owner or driver of a vehicle shall have the vehicle inspected by a technician or an investigator, as directed by the Registrar, not more than 5 days after the Registrar gives a direction under subsection (2).

Revocation of salvage or out of province motor vehicle inspection certificate

33(1) Where a vehicle for which a salvage motor vehicle or an out of province motor vehicle inspection certificate has been issued is inspected by an investigator pursuant to a direction given under section 32(1) or (2) and the vehicle does not pass the inspection, or if an investigator concludes that the certificate should not have been issued, the investigator may revoke the certificate, if the

certificate is subsisting, or if the certificate is no longer subsisting, may deem the certificate never to have been issued, and shall advise the owner or driver of the vehicle of the decision.

(2) Where a vehicle for which a salvage motor vehicle or an out of province motor vehicle inspection certificate has been issued is inspected by a technician pursuant to a direction given under section 32(1) or (2) and the vehicle does not pass the inspection, the technician shall

(a) report the result of the inspection to an investigator immediately, and

(b) complete a record of inspection in accordance with section 29.

(3) On receipt of a report from a technician under subsection (2), an investigator may, if the certificate is subsisting, revoke the certificate issued in respect of the vehicle, or if the certificate is no longer subsisting, deem the certificate never to have been issued, and shall notify the technician of the decision.

(4) On receipt of a notice from the investigator under subsection (3) that the certificate issued in respect of a vehicle is revoked, or deemed never to have been issued, the technician shall advise the owner or driver of the vehicle of the decision of the investigator.

(5) Where a direction has been given under section 32(2) in respect of a vehicle for which a salvage motor vehicle or an out of province motor vehicle inspection certificate has been issued and the Registrar is satisfied that the vehicle has not been submitted to a technician or an investigator within the 5-day period, the Registrar may, if the certificate is subsisting, revoke the certificate issued in respect of the vehicle, and if the certificate is no longer subsisting, deem the certificate never to have been issued, and shall advise the owner or driver of the vehicle of the decision.

(6) If a certificate is revoked or deemed never to have been issued under this section, the owner or driver must return the certificate to the Registrar immediately.

(7) If a certificate is revoked or deemed never to have been issued under this section, or is revoked or declared invalid under section 35, the Registrar may change the status of the motor vehicle that appears on its registration

(a) to the status assigned to it prior to the issuing of the certificate, or

(b) to a status in another category listed in section 8 that in the opinion of the Registrar is appropriate in the circumstances.

Revocation of commercial vehicle inspection certificate

34(1) Where a vehicle for which a commercial vehicle inspection certificate has been issued is inspected by an investigator pursuant to a direction given under section 32(1) or (2) and the vehicle does not pass the inspection, or if an investigator concludes that the certificate should not have been issued, the investigator may revoke the commercial vehicle inspection certificate issued in respect of the vehicle and, if the certificate is revoked, shall advise the owner or driver that the certificate for the vehicle has been revoked.

(2) Where a vehicle for which a commercial vehicle inspection certificate has been issued is inspected by a technician pursuant to a direction given under section 32(1) or (2) and the vehicle does not pass the inspection, the technician shall

(a) report the result of the inspection to an investigator immediately, and

(b) complete a record of inspection in accordance with section 29.

(3) On receipt of a report from a technician under subsection (2), an investigator may revoke the commercial vehicle inspection certificate issued in respect of the vehicle and, if the certificate is revoked, shall notify the technician of the revocation.

(4) On receipt of a notice from the investigator under subsection (3) that the certificate issued in respect of a vehicle is revoked, the technician shall advise the owner or driver of the vehicle of the revocation of the certificate.

(5) Where a direction has been given under section 32(2) in respect of a vehicle for which a commercial vehicle inspection certificate has been issued and the Registrar is satisfied that the vehicle has not been submitted to a technician or an investigator for inspection within 5 days from the day on which the direction was given, the Registrar may revoke the certificate issued in respect of that vehicle and, if the certificate is revoked, shall advise the owner or driver of the vehicle of the revocation.

(6) Where a certificate is revoked, an investigator, or a technician at the request of an investigator, shall

(a) take possession of the certificate and send it to the Registrar within 25 days of the date of revocation, and

(b) remove from the vehicle and destroy the decal affixed to the vehicle in respect of the certificate.

(7) Notwithstanding subsection (6), where a certificate is revoked and an investigator or a technician, as the case may be, is unable to take possession of it or to remove and destroy the decal, the owner or operator of the vehicle in respect of which the revocation is made shall, at the request of the Registrar, the investigator or the technician,

(a) deliver the certificate to the person making the request, and

(b) remove from the vehicle and destroy the decal affixed to the vehicle in respect of the certificate.

(8) The revocation of a certificate is not affected by any failure of an investigator or a technician, as the case may be, to take possession of the certificate or to remove and destroy the decal.

Revocation of a certificate

35 The Registrar may revoke or declare invalid a certificate if

(a) it was issued contrary to this Regulation, the applicable Vehicle Inspection Manual or the Facility Operating Manual,

(b) it was issued under fraudulent or false pretences, or

(c) it is reported missing or stolen.

Recognition of other certificates

36(1) If the Registrar is satisfied that a jurisdiction outside Alberta operates a vehicle inspection program for salvage motor vehicles or out of province motor vehicles that is substantially similar to the vehicle inspection program established under this Regulation and the applicable Vehicle Inspection Manual for the type of motor vehicle being inspected, a subsisting document issued in the other jurisdiction that is substantially similar to a salvage motor vehicle inspection certificate or an out of province motor vehicle inspection certificate is deemed to be a certificate issued under this Regulation for the same type of vehicle, subject to any terms and conditions that the Registrar considers appropriate.

(2) Subsection (1) does not apply to a document issued by another jurisdiction if that jurisdiction is not the jurisdiction in which the vehicle is registered.

(3) The Registrar may deem a subsisting certificate issued under this Regulation, subject to any terms and conditions that the Registrar considers appropriate, to be an out of province motor vehicle inspection certificate issued under this Regulation for the same type of vehicle.

(4) For the purposes of this Regulation, a document that is deemed to be a certificate under subsection (1) or (3) expires on the earlier of

(a) 90 days from the date on which the document was originally issued, and

(b) the date on which the document is scheduled to expire.

Recognition of other certificates for commercial vehicles

37(1) If the Registrar is satisfied that a jurisdiction outside Alberta operates an inspection program for commercial vehicles that is substantially similar to the vehicle inspection program established under this Regulation and the applicable Vehicle Inspection Manual for the type of vehicle being inspected, a subsisting certificate and decal issued in the other jurisdiction that is substantially similar to a commercial vehicle inspection certificate and decal is deemed to be a commercial vehicle inspection certificate and decal issued under this Regulation for the same type of vehicle, subject to any terms and conditions that the Registrar considers appropriate.

(2) Where a commercial vehicle is operated in Alberta pursuant to subsection (1), this Regulation, subject to any necessary modifications, applies in respect of the certificate and decal, or either of them, in the same manner as if they were a certificate or decal, as the case may be, that was issued under this Regulation.

Part 3
Licences

Division 1
Background Check

Background check

38(1) In this Part, "background check" means an inquiry or investigation, including a criminal record check, to enable the Registrar to determine the eligibility of an applicant to be approved for, or a licensee or technician to hold, a facility licence or technician licence under this Regulation and includes but is not

limited to an inquiry or investigation relating to the honesty and integrity and competence of any of the following:

(a) the applicant for a facility licence or the licensee, or a director, officer, partner, manager or employee of the applicant or licensee, or any person who may exercise direction, control or management of the facility;

(b) the applicant for or the holder of a technician licence.

(2) The Registrar may require or conduct any background check that the Registrar considers necessary or appropriate and may collect relevant information about the person subject to the background check from any person or organization.

(3) A person fails to pass a criminal record check component of a background check if the person has at any time been charged or convicted of

(a) an offence under the *Criminal Code* (Canada) or the *Excise Act* (Canada), or

(b) an offence under a foreign Act or regulation that, in the Registrar's opinion, is substantially similar to an offence referred to in clause (a),

and in the Registrar's opinion the offence is sufficiently serious that it may detract from the integrity with which vehicle inspections are to be conducted in Alberta or may be detrimental to the orderly or lawful conduct of activities authorized by a licence issued under this Regulation.

(4) A person fails to pass a background check if

(a) the person fails to pass a criminal record check under subsection (3),

(b) the person has at any time been charged with or convicted of an offence under the Act or any other enactment and in the Registrar's opinion the offence is sufficiently serious that it may detract from the integrity with which vehicle inspections are to be conducted in Alberta or may be detrimental to the orderly or lawful conduct of activities authorized by a licence issued under this Regulation, or

(c) the Registrar, based on the results of the background check, is of the opinion that the person does not have the honesty, integrity or competence to perform vehicle inspections in accordance with this Regulation.

Division 2
Vehicle Inspection Facilities

Facility licences

39(1) A person shall not operate a facility as a vehicle inspection facility unless

(a) the Registrar has issued a licence in respect of the facility for one or more types of vehicle,

(b) the facility licence is subsisting, and

(c) the facility meets the requirements set out in the Schedule.

(2) A facility licence authorizes the licensee to operate a facility in accordance with this Regulation and the terms and conditions of the licence.

Application

40(1) On receiving an application for a facility licence from an applicant in the form and manner provided for by the Registrar, the Registrar may issue a facility licence to the applicant if the Registrar is satisfied that

(a) the proposed facility is suitable and inspections of the type of vehicle specified in the application can be properly conducted in the proposed facility,

(b) the proposed facility meets the requirements set out in the Schedule,

(c) the persons referred to in subsection (2) have passed the background check referred to in section 38,

(d) the proposed facility has been granted the relevant automotive business licence under the *Automotive Business Regulation* (AR 192/99),

(e) the applicant has acquired the applicable Facility Operating Manual and registered the Manual with the Registrar, and

(f) the applicant will operate the facility in accordance with the Facility Operating Manual and this Regulation.

(2) The Registrar may require a person who applies for a facility licence, or a director, officer, partner, manager or employee of the person making the application, to submit a copy of a criminal record check to the Registrar.

(3) The Registrar may issue a facility licence under subsection (1) that authorizes the licensee to conduct inspections of the type or types of vehicle specified in the facility licence.

(4) The Registrar may issue a facility licence under subsection (1) subject to the terms and conditions the Registrar considers appropriate.

(5) Subsection (1)(d) does not apply to a carrier that is applying for a facility licence for the sole purpose of inspecting vehicles operated by the carrier.

(6) The Registrar may refuse to issue a facility licence to an applicant or to allow a licensee to continue to hold a facility licence if the applicant or the licensee, or a director, officer, partner, manager or employee of the applicant or licensee, or any person who may exercise direction, control or management of the facility, fails to pass a background check.

(7) The Registrar may suspend or cancel a facility licence if the facility fails to meet the requirements set out in the Schedule.

Renewal, addition or deletion

41(1) A licensee whose facility licence is subsisting may apply in the form provided by the Registrar

(a) to renew the facility licence, or

(b) to add to, or delete from, the facility licence a type of vehicle.

(2) If the Registrar is satisfied that the licensee and the facility meet the requirements under section 40, the Registrar may

(a) renew a facility licence, or

(b) add a type of vehicle to the facility licence.

(3) The Registrar may delete a type of vehicle from a facility licence if requested to do so under subsection (1) by a licensee whose licence is subsisting.

(4) Section 40 applies to the renewal of a facility licence or to the addition of a type of vehicle to a facility licence by the Registrar under this section.

Expiry

42(1) A facility licence expires on a date that is determined by the Registrar, whether the licence is issued for the first time or is renewed.

(2) The expiry date of a facility licence does not change only because a type of vehicle is added to or deleted from the licence by the Registrar under section 41.

Facility requirements

43(1) The Registrar may direct an applicant under section 40 or 41 to allow a person approved by the Registrar to enter and determine whether the facility that is the subject of the application meets the requirements of this Regulation.

(2) The Registrar may direct the applicant to pay the cost of work carried out under subsection (1).

Posted licence

44(1) The licensee shall post the facility licence in a conspicuous place to which the public has access.

(2) The licensee shall make the terms and conditions under which the facility licence is issued available to the public on request.

(3) The licensee shall remove a posted facility licence if it is not subsisting.

Posted shop rate

45(1) The licensee of a salvage motor vehicle inspection facility or an out of province motor vehicle inspection facility shall post a schedule of rates charged by a licensee for an inspection or re-inspection of a salvage motor vehicle or an out of province motor vehicle.

(2) The schedule of rates shall be posted in the facility in a conspicuous place to which the public has access.

(3) The licensee shall not charge more than the posted rate for an inspection or re-inspection of a salvage motor vehicle or an out of province motor vehicle.

Division 3
Vehicle Inspection Technicians

Technician licences

46(1) A person shall not

(a) inspect a vehicle for the purpose of completing a certificate for or affixing a decal to the vehicle, or

(b) sign or complete a certificate for or affix a decal to a vehicle,

unless the person

(c) holds a subsisting technician licence issued by the Registrar as a vehicle inspection technician for that type of vehicle, and

(d) has inspected the vehicle in accordance with section 27.

(2) A technician licence authorizes the licence holder to inspect a vehicle in accordance with this Regulation and the terms and conditions of the licence.

Application

47(1) On receiving an application for a technician licence from a person in the form provided for by the Registrar, the Registrar may issue a technician licence to the person if the Registrar is satisfied that the person

(a) has complied with any requirements of the Registrar under subsection (2) regarding training and competency,

(b) holds a subsisting trade certificate that in the opinion of the Registrar qualifies the person to conduct inspections of the type of vehicle specified in the application for the technician licence,

(c) has passed the background check referred to in section 38,

(d) has acquired the Vehicle Inspection Manual for the type of vehicle specified in the application for the licence, and registered the Manual with the Registrar, and

(e) will inspect vehicles in accordance with the Vehicle Inspection Manual referred to in clause (d) and this Regulation.

(2) Before issuing a technician licence under subsection (1), the Registrar may require the applicant for the technician licence to provide proof acceptable to the Registrar of the applicant's ability to inspect the type of vehicle specified in the application in one or more of the following ways:

(a) successful completion of a vehicle inspection training program that has been approved by the Registrar in respect of the type of vehicle specified in the application;

(b) achievement of at least a minimum score set by the Registrar in an examination that has been approved by the Registrar to determine competency to inspect the type of vehicle specified in the application;

(c) demonstration of continuing competency according to criteria that may be established by the Registrar under section 74 in respect of the type of vehicle specified in the application.

(3) The Registrar may require an applicant for a technician licence under subsection (1) to submit a copy of a criminal record check to the Registrar.

(4) The Registrar may issue a technician licence under subsection (1) authorizing a person to conduct inspections and complete certificates and affix decals in respect of the type of vehicle specified in the licence.

(5) The Registrar may issue a technician licence under subsection (1) subject to the terms and conditions the Registrar considers appropriate.

Background check

48 The Registrar may refuse to issue a technician licence to an applicant under section 47, or to allow a technician to continue to hold a licence under that section, if the applicant or technician fails to pass a background check.

Renewal, addition and deletion

49(1) A technician who holds a subsisting technician licence under this Regulation may apply in the form provided by the Registrar

(a) to renew the technician licence, or

(b) to add to, or delete from, the technician licence a type of vehicle.

(2) If the Registrar is satisfied that the applicant meets the requirements under section 47 and can demonstrate continuing competency under section 74, the Registrar may

(a) renew the applicant's technician licence, or

(b) add a type of vehicle to the applicant's technician licence.

(3) The Registrar may delete a type of vehicle from a technician licence as requested by an applicant under subsection (1).

(4) Section 47 applies to the renewal of a technician licence or to the addition of a type of vehicle to a technician licence by the Registrar under this section.

Expiry

50 A technician licence expires,

(a) if the licence is the technician's first licence and the technician's next birthday is 6 months or less after the effective date specified in the licence, 5 years from the technician's next birthday,

(b) if the licence is the technician's first licence and the technician's next birthday is more than 6 months after the effective date specified in the licence, 4 years from the technician's next birthday, and

(c) if the technician licence is renewed, 5 years after the expiry date of the original licence.

Training and examination

51(1) The Registrar may require an applicant under section 47 or 49 to

(a) successfully complete a vehicle inspection training program approved by the Registrar in respect of a type of vehicle, or

(b) pass an examination approved by the Registrar to determine competency in respect of a type of vehicle.

(2) The Registrar may require an applicant to pay the cost of a training program or examination under subsection (1).

Production of licence

52 A technician shall carry his or her technician licence and produce it immediately for inspection when requested to do so by

(a) the Registrar,

(b) an investigator,

(c) a person approved by the Registrar to conduct an audit of a facility under section 43,

(d) a person who submits a vehicle to be inspected under this Regulation, or

(e) a licensee who engages or proposes to engage the services of the technician.

Division 4
Facility and Technician Application Fees

Fees

53(1) The Minister may by order set the application fee for a facility licence or a technician licence under this Regulation.

(2) Any application fee paid under this Regulation is not refundable.

Exemption from fee

54 The following are exempt from paying an application fee under this Regulation if the licence that would otherwise be subject to the fee is used solely for the purpose of inspecting vehicles operated by the organization:

(a) the Crown in right of Canada;

(b) the Crown in right of Alberta;

(c) a municipal authority as defined in the *Municipal Government Act*;

(d) a board as defined in the *School Act*;

(e) a band as defined in the *Indian Act* (Canada);

(f) the General Council or a settlement as defined in the *Metis Settlements Act.*

Part 4
Administration and Enforcement

Division 1
Licence Suspension and Cancellation

Automatic suspension and reinstatement

55(1) A technician licence is automatically

(a) suspended, or

(b) restricted with respect to the inspection of a type of vehicle,

on the date that the trade certificate the technician is required to hold to inspect that type of vehicle is suspended or cancelled under the *Apprenticeship and Industry Training Act.*

(2) A technician licence suspended under subsection (1) is reinstated, and a technician licence that has been restricted under subsection (1) has its restriction removed, on the date that the trade certificate the technician is required to hold under the *Apprenticeship and Industry Training Act* is reinstated, unless the licence expires before that date.

(3) A technician shall notify the Registrar in writing immediately if the technician's trade certificate is suspended, cancelled or reinstated.

Criminal offences

56(1) The Registrar may suspend a facility licence or a technician licence for one or more specified periods or pending the final disposition of an appeal by the courts if

(a) the licensee of the facility or a director, officer, partner, manager or employee of the licensee, or the technician, is charged with

(i) an offence under the *Criminal Code* (Canada) or the *Excise Act* (Canada), or

(ii) an offence under a foreign Act or regulation that, in the Registrar's opinion, is substantially similar to an offence referred to in subclause (i),

and

(b) the Registrar is of the opinion that the licence should be suspended.

(2) The Registrar may suspend or cancel a facility licence or a technician licence, or prohibit a person from holding a facility licence or technician licence, if

(a) the licensee of the facility or a director, officer, partner, manager or employee of the licensee, or the technician, is convicted of

(i) an offence under the *Criminal Code* (Canada) or the *Excise Act* (Canada), or

(ii) an offence under a foreign Act or regulation that, in the Registrar's opinion, is substantially similar to an offence referred to in subclause (i),

and

(b) the conviction is final by reason of the expiry of the time for appeal without an appeal's having been made or the final disposition of the appeal by the courts.

(3) The Registrar may suspend or cancel a facility licence or a technician licence, or prohibit a person from holding a facility licence or technician licence, if

(a) the licensee or the technician made a false statement in the application for the licence or an application for an addition to or renewal of the licence,

(b) the licensee or the technician provides false information to the Registrar,

(c) the licensee or the technician refuses to provide information to the Registrar as required under this Regulation, or

(d) the licensee or the technician contravenes

(i) this Regulation, the Act or any other enactment,

(ii) a direction of the Registrar made under this Regulation,

(iii) a term or condition of the licence,

(iv) the Facility Operating Manual in the case of a licensee or an employee of the licensee, or

(v) the Vehicle Inspection Manual in the case of a technician.

(4) The Registrar may at any time require or conduct a background check on a person referred to in subsection (1), (2) or (3) in any manner determined to be appropriate by the Registrar, including the collection of relevant information about the person subject to the background check from any person or organization.

Investigation of facility or technician

57(1) The Registrar may authorize one or more persons to carry out the functions of an investigator under this Regulation.

(2) The Registrar may direct an investigator to investigate a facility and the work carried out in the facility and to report the results of the investigation to the Registrar if, in the opinion of the Registrar,

(a) the facility is no longer suitable or equipped to perform inspections for the types of motor vehicles specified in the licence,

(b) the licensee is not operating the facility in accordance with the licence or the Facility Operating Manual,

(c) the facility's licensee profile, or carrier profile if the facility is a carrier, shows evidence of unacceptable safety risk,

(d) a technician at the facility is failing to carry out inspections in accordance with the applicable Vehicle Inspection Manual or this Regulation,

(e) the licensee of the facility is failing to comply with this Regulation, or

(f) an investigation should be performed for any reason relating to motor vehicle safety that appears to the Registrar to be sufficient.

(3) The Registrar may direct that an investigator investigate the work done by a technician and report the results of the investigation to the Registrar if, in the opinion of the Registrar,

(a) the technician has not carried out or is not carrying out inspections of motor vehicles in accordance with the terms of the technician's licence, the applicable Vehicle Inspection Manual and this Regulation,

(b) the technician does not hold a subsisting trade certificate that is required for the inspections the technician is carrying out,

(c) there is evidence of potential safety risk shown in the technician's profile,

(d) the technician is not complying with this Regulation, or

(e) an investigation should be performed for any reason relating to motor vehicle safety that appears to the Registrar to be sufficient.

(4) An investigator may, without prior notice, during a facility's business hours, enter and investigate the facility or a technician in accordance with the direction of the Registrar under subsection (2) or (3).

Audit

58(1) The Registrar or an investigator at the direction of the Registrar may without prior notice, during a facility's business hours, enter and audit the facility or a technician to determine whether the facility or the technician is complying with this Regulation.

(2) An investigator who enters and audits a facility or audits a technician under subsection (1) shall report the results of the audit to the Registrar.

Submission of information

59(1) The Registrar may by written notice direct the licensee of a facility to submit any relevant information to a person authorized by the Registrar for the purpose of reviewing and reporting the licensee's and the facility's compliance with the terms and conditions of the licence or this Regulation.

(2) The Registrar may by written notice direct a technician to submit any relevant information to a person authorized by the Registrar for the purpose of reviewing and reporting the technician's continuing competency to hold a licence or compliance with the terms and conditions of the licence or this Regulation.

Cooperation with directions

60 A licensee or a technician shall comply with a direction given by the Registrar, an investigator or a person authorized by the Registrar who is conducting an investigation, an audit or a review under this Regulation.

Suspension, cancellation or prohibition

61(1) The Registrar may suspend or cancel a licence or prohibit a person from holding a licence under this Regulation

(a) on receiving a report under section 57, 58 or 59, and

(b) after considering the representations, if any, that may be made by the holder of the licence or the person under section 62.

(2) The Registrar may include any terms and conditions that the Registrar considers appropriate in the licence suspension, cancellation or prohibition.

Show cause

62(1) On receiving

(a) information pertaining to circumstances set out in section 56(1), (2) or (3), or

(b) a report under section 57, 58, 59 or 68(2),

and if the Registrar is of the opinion that a facility licence or technician licence should be suspended or cancelled, or a person should be prohibited from holding a licence under this Regulation, the Registrar shall give notice in writing to the licence holder or the person of the opportunity for the licence holder or person to show cause why the licence should not be suspended or cancelled, or the person should not be prohibited from holding a licence, at the time and place specified in the notice.

(2) Subsection (1) does not apply if, in the opinion of the Registrar, the time required to effect the written notice and the opportunity to show cause may result in danger to the health or safety of the public.

Notice to licence holder

63(1) If the Registrar under section 62 suspends or cancels a facility licence or technician licence or prohibits a person from holding a licence, the Registrar shall give 15 days' notice in writing to the licensee or technician or the person of the Registrar's decision.

(2) The Registrar shall include in the notice the reasons for the suspension, cancellation or prohibition and shall advise the licensee or technician or the person to whom the notice is given of the right to appeal to the Board under section 42.1 of the Act.

(3) Despite subsection (1), the Registrar may order that the suspension or cancellation of the licence takes effect immediately or sooner than 15 days if in the opinion of the Registrar the requirement for 15 days' notice of the decision may result in danger to the health or safety of the public.

Return of documents

64(1) A licensee whose facility licence has been suspended or cancelled shall return the following items to the Registrar or a person authorized by the Registrar not more than 7 days after being notified of the suspension or cancellation:

(a) the facility licence;

(b) all unissued certificates and decals issued to and in the possession of the licensee;

(c) all issued certificates revoked under this Regulation in the possession of the licensee;

(d) copies of other records maintained by the licensee under this Regulation, the Facility Operating Manual or Vehicle Inspection Manual as directed by the Registrar.

(2) A technician whose technician licence has been suspended or cancelled shall return the following items to the Registrar or a person authorized by the Registrar not more than 7 days after being notified of the suspension or cancellation:

(a) the technician licence;

(b) all blank certificates in the possession of the technician;

(c) all completed certificates in the possession of the technician;

(d) all decals in the possession of the technician;

(e) copies of other records maintained by the technician under this Regulation, the Facility Operating Manual or Vehicle Inspection Manual as directed by the Registrar.

(3) This section applies notwithstanding the right of a technician or a licensee to appeal the decision of the Registrar to the Board.

Removal of suspension, cancellation or prohibition

65(1) The Registrar may remove the suspension or cancellation of a licence or the prohibition against holding a licence if the Registrar is satisfied that

(a) the reason for which the licence was suspended or cancelled or the prohibition was imposed no longer exists,

(b) in the case of a facility licence, the facility is suitable to conduct inspections for the types of vehicles specified in the facility licence,

(c) in the case of a technician licence, the technician is competent to conduct inspections for the types of vehicles specified in the technician licence, and

(d) the period of suspension or prohibition has expired.

(2) For the purpose of satisfying the Registrar that the conditions set out in subsection (1)(b) and (c) have been met, the Registrar may require a licensee or technician to comply with

(a) sections 40(2) and 43 in the case of a facility licence, or

(b) sections 47(3) and 51 in the case of a technician licence.

Division 2
Vehicle Safety Investigator Directive

Issuance of directive by investigator

66(1) An investigator may issue a directive to a licensee of a facility or to a technician if the investigator has reason to believe the licensee or an employee of the licensee or the technician has contravened this Regulation.

(2) A directive issued by an investigator shall be in writing and shall specify

(a) the nature of the contravention,

(b) the action that the licensee or technician shall take or cease, and the time period for doing so,

(c) whether or not the licensee or technician may continue to inspect vehicles under this Regulation while the directive is in effect,

(d) any other terms and conditions imposed by the investigator, and

(e) the right of the licensee or technician to whom the directive is issued to request a review of the directive by the Registrar.

(3) An investigator shall specify a time limit up to a maximum of 14 days in a directive under subsection (2)(b) requiring a licensee or technician to take or cease an action.

(4) An investigator shall ensure that a copy of the directive is served on the licensee or the technician, or on the agent of the licensee, and shall provide a copy to the Registrar.

Compliance with directive

67(1) Subject to subsection (2), a person who is served with a directive under section 66 shall comply with the directive.

(2) The Registrar may confirm, vary or cancel a directive issued by an investigator.

Disposition of a directive

68(1) If an investigator is satisfied that a directive issued under section 66 has been complied with, the investigator may, by notice in writing to the licensee or technician to whom the directive was issued, cancel the directive.

(2) If an investigator finds that a licensee or technician to whom a directive was issued under section 66 has failed to comply with the directive, the investigator shall provide a report of this finding to the Registrar, and if the investigator does so, the investigator shall forward a copy of the report to the licensee or technician immediately.

(3) On receiving a report of an investigator's findings under subsection (2), the Registrar may cancel or suspend a licence or prohibit a person from holding a licence under this Regulation, subject to any terms and conditions the Registrar considers appropriate, in accordance with sections 62 and 63.

Division 3
Administrative Penalties

Contents of notice

69(1) A notice of an administrative penalty imposed under section 143 of the Act shall contain at least the following information:

(a) the name of the person on whom the administrative penalty is imposed;

(b) the section of this Regulation the person has contravened or failed to comply with;

(c) a brief description of the nature of the contravention or failure to comply identified under clause (b);

(d) the amount of the administrative penalty to be imposed;

(e) whether the penalty is fixed or accumulates for each day or part of a day that the contravention or failure to comply occurs or continues;

(f) the date on which the notice is issued;

(g) the date by which the penalty must be paid, unless the penalty is an accumulating penalty;

(h) a statement explaining the right of the person on whom the administrative penalty is imposed to appeal the administrative penalty to the Board, including the addresses to which the appeal is to be sent, how the appeal is to be made and the deadline for making the appeal.

(2) The form of the notice of the administrative penalty referred to in subsection (1) shall be approved by the Registrar.

Determination of penalty amount

70(1) The Registrar shall determine the amount of the administrative penalty to be imposed on a person after considering the following specific factors and the general considerations set out in subsection (2):

(a) the seriousness of the contravention;

(b) the nature of the facility or technician operation;

(c) whether a collision occurred or the danger that a collision could have occurred as a result of the contravention;

(d) the history of contraventions of this Regulation by the person on whom the administrative penalty is imposed;

(e) any other factor considered relevant by the Registrar.

(2) The Registrar shall be guided by the following general considerations:

(a) the amount of the administrative penalty imposed should reflect the seriousness of the contravention;

(b) the greater the danger that a collision could have occurred, or the greater the degree of risk to people or property that did occur, or the fact that a collision did occur, as a result of the contravention, the higher the penalty should be;

(c) the more times a person has previously been issued an administrative penalty, the higher the penalty should be;

(d) the greater the degree of wilfulness or neglect in the contravention, the higher the penalty should be;

(e) any other consideration determined relevant by the Registrar.

Limitation period

71 An administrative penalty may be imposed only within 6 months of the date the Registrar first becomes aware of the contravention of this Regulation in respect of which the administrative penalty is to be imposed.

Part 5
Licensee and Technician Profiles

Definitions

72 In this Part,

(a) "automotive business" means an automotive business as defined in section 1 of the *Designation of Trades and Businesses Regulation* (AR 178/99) under the *Fair Trading Act*;

(b) "jurisdiction outside Alberta" means any jurisdiction of Canada, the United States of America and Mexico.

Establishing and maintaining profiles

73 For the purpose of monitoring the activities and history of compliance of licensees and technicians with respect to the inspection of vehicles, the Registrar may establish a program under which profiles are created and maintained for each licensee and technician relating to the licensee's or technician's compliance with

(a) the Act, this Regulation and other regulations under the Act, and

(b) other enactments of Alberta or laws of a jurisdiction outside Alberta with respect to

(i) inspection of vehicles and the operation of an automotive business, or

(ii) activities that are, in the opinion of the Registrar, substantially equivalent to those set out in subclause (i).

Contents of profiles

74(1) The Registrar may include the following information in the profile of a licensee or a technician:

(a) information relating to the applicable licence under this Regulation, including the status of the licence, terms and

conditions attached to the licence, expiry, prohibitions, renewals, suspensions and cancellations of the licence;

(b) information relating to licences, permits or certificates required to be held by the licensee or technician under another enactment, including the status of the licence, permit or certificate, terms and conditions attached to the licence, permit or certificate, expiry, prohibitions, renewals, suspensions and cancellations of the licence, permit or certificate;

(c) information relating to vehicle inspections;

(d) copies of any directive issued by an investigator with respect to the actions of the licensee or technician and information regarding the disposition of the directive;

(e) information regarding any administrative penalty imposed by the Registrar for a contravention of this Regulation;

(f) rejections or revocations of certificates issued by a licensee or completed by a technician;

(g) information regarding warnings, notices or directives given by the Registrar, investigators or other persons authorized by the Registrar;

(h) information regarding audits performed by an investigator or another person authorized by the Registrar;

(i) the results of an inspection conducted by a peace officer or the Registrar under the Act, or by a governmental authority in a jurisdiction outside Alberta;

(j) written reports regarding contraventions by the licensee or technician of other enactments of Alberta or laws or a jurisdiction outside Alberta by the governmental authority responsible for the enforcement or administration of the enactment or law;

(k) any other information that the Registrar considers appropriate and relevant.

(2) For the purposes of this Part, the Registrar may

(a) provide information regarding a licensee or technician that is in the possession of the Registrar, and

(b) request, collect or otherwise obtain information from the licensee or technician, as the case may be, or from any other person or organization that has such information in the person's or organization's possession.

(3) In addition to subsection (1), the profile of a licensee may contain information regarding

(a) the dates on which inspections were conducted and the technicians who conducted them,

(b) the names and licence numbers of technicians employed by the licensee to conduct inspections at the facility,

(c) information regarding registration of the licensee's Facility Operating Manual,

(d) a record of vehicle inspection certificates submitted late, and

(e) where the licensee is a carrier, information relating to the carrier's performance and compliance with the Act and regulations.

(4) In addition to subsection (1), a technician profile may include

(a) the results of any background check of the technician,

(b) proof of the technician's ability or continuing competency under section 47(2) to conduct inspections as authorized by the technician licence, and

(c) information regarding registration of the Vehicle Inspection Manual.

(5) A profile for a licensee or a technician may be maintained in electronic or paper form, or both.

(6) Subject to the payment of a fee as set by the Registrar, a licensee or a technician may obtain a copy of the profile pertaining to that licensee or technician, as the case may be, in a form provided by the Registrar.

(7) This Part applies to a licensee or a technician whether or not the facility licence or technician licence is subsisting.

(8) The authority to create and maintain records in licensee and technician profiles includes the authority to update, add, correct and delete information in the profiles.

Part 6
General

Terms and conditions

75(1) The Registrar may at any time make a licence under this Regulation subject to the terms and conditions that the Registrar considers appropriate.

(2) The terms and conditions referred to under subsection (1) may be imposed on a specific facility or technician or on a class or group of facilities or technicians.

Registrar's exemption

76(1) The Registrar may at any time exempt a facility or a technician from any of the requirements under this Regulation, subject to any terms and conditions that the Registrar considers appropriate.

(2) The Registrar may at any time exempt a vehicle from the vehicle inspection certificate and decal requirements under this Regulation, subject to any terms and conditions that the Registrar considers appropriate.

(3) An exemption under subsection (1) or (2) may apply to a specific vehicle, facility or technician or to a class or group of vehicles, facilities or technicians.

Continuing competency

77(1) The Registrar may establish requirements for continuing competency to hold a technician licence under this Regulation and may at any time require a technician to demonstrate that the technician has met those requirements.

(2) Without limiting the generality of subsection (1), the Registrar may include one or more of the following in the criteria for determining the continuing competency of a technician:

(a) successful completion of an approved training program;

(b) achievement of at least a minimum score set by the Registrar in an examination approved by the Registrar;

(c) inspection of at least a minimum number of vehicles of a specified type in a given time period specified by the Registrar;

(d) have no more than the maximum number or percentage of issued certificates revoked in a given time period set by the Registrar;

(e) any other requirement established by the Registrar.

Crown property

78(1) A facility licence, technician licence, certificate or decal is the property of the Crown in right of Alberta.

(2) A person in possession of a facility licence, technician licence, certificate or decal shall return it to the Registrar or a person authorized by the Registrar when the Registrar requests its return.

Accuracy of records

79(1) A person shall not mutilate, deface, alter, falsify or destroy a record required to be maintained under this Regulation.

(2) A person shall not

(a) make or participate in or acquiesce in the making of a false or deceptive statement in a record made or required by or under this Regulation, or

(b) omit or assent to or acquiesce in the omission of an entry in a record made or required by or under this Regulation.

Examination of records

80(1) The Registrar or an investigator may, during the business hours of a facility, enter the facility and direct the licensee of the facility to produce for examination:

(a) all unissued certificates and decals held by the licensee;

(b) copies of all certificates issued by the facility within the current calendar year and the 4 calendar years immediately preceding;

(c) copies of all records of inspection issued by the facility within the current calendar year and the 4 calendar years immediately preceding;

(d) a list of the technicians who completed the certificates and affixed the decals during the time period set out in clause (b).

(2) The licensee of a facility shall produce the documents and information as directed by the Registrar or the investigator.

Records and information

81(1) The Registrar may direct a licensee to provide any information and records in the possession or control of the licensee that, in the opinion of the Registrar, are pertinent to the administration of this Regulation.

(2) A licensee of a facility shall keep copies of all certificates, decals and records of inspections issued by each technician at that facility within the current calendar year and the 4 calendar years immediately preceding.

(3) The Registrar or an investigator may examine or copy the records or documents kept by a licensee of a facility under this Regulation.

Vehicle safety investigator

82(1) The Registrar may in writing authorize a person who is not a vehicle safety investigator to carry out any of the functions of an investigator under this Regulation.

(2) An authorization made under subsection (1) may be:

(a) general or applicable to a specific case;

(b) subject to any terms and conditions that the Registrar considers appropriate.

(3) An authorization made under subsection (1) terminates on the date specified in the authorization, unless terminated earlier by the Registrar in writing.

(4) A person who is authorized under subsection (1) may exercise the functions and perform the duties of an investigator, subject to any terms and conditions specified in the authorization.

(5) A person who is required under this Regulation to forward a licence, certificate, decal, record of inspection or other document or record to the Registrar shall, at the request of an investigator, deliver that item to the investigator instead of forwarding it to the Registrar.

Missing certificate

83(1) If an unissued certificate or decal that should be in the possession of the licensee of a facility is missing or destroyed, the licensee shall immediately report in writing that fact, the surrounding circumstances and the identification number of the certificate or decal to the Registrar.

(2) If a subsisting certificate or decal issued to the owner of a vehicle is missing or destroyed, the owner or driver of the vehicle for which the certificate or decal was issued shall immediately report in writing that fact, the surrounding circumstances and the identification number of the certificate or decal to the Registrar.

(3) A person who finds a certificate or decal reported lost under this section shall immediately send the certificate or decal to the Registrar.

(4) Where a report is made to the Registrar under subsection (1) or (2) and the missing certificate or decal once again comes into that person's possession, the person shall forward to the Registrar the certificate or decal that had been missing.

Missing licence

84(1) If a facility licence or a technician licence is lost or destroyed, the licensee or technician shall immediately report in writing that fact and the surrounding circumstances to the Registrar.

(2) The licensee of a facility may apply to the Registrar, in a form and manner approved by the Registrar, for a duplicate of the facility licence if the licence is lost or destroyed or becomes unreadable.

(3) A technician may apply to the Registrar, in a form and manner approved by the Registrar, for a duplicate of the technician licence if the licence is lost or destroyed or becomes unreadable.

(4) If a licensee or technician obtains a duplicate licence and later finds the original licence, the licensee or technician, as the case may be, shall destroy the original licence.

Non-transferability

85(1) A certificate or decal is not valid if it is transferred from the vehicle in respect of which it was issued to another vehicle.

(2) A facility licence is not valid if it

(a) is transferred from the person who is the licensee of the facility in respect of which it was issued to another person, or

(b) purports to apply to a facility other than the facility in respect of which it was issued.

(3) A technician licence is not valid if it is transferred from the person to whom it was issued to another person.

Offences

86 A person who contravenes or fails to comply with any of the following provisions is guilty of an offence:

section 7(1)(a) and (b), (2)
section 9
section 12(1)
section 13(a) and (b)
section 14(a) and (b)
section 15(1)(a), (b), (c), (d), (e), (f) and (g)
section 19(1)(a), (b), (c) and (d), (2)(a) and (b)
section 20(1)(a), (b), (c) and (d)
section 21(1) and (3)
section 24
section 25(3)
section 26(1)
section 27(1), (2), (3), (4), (5)(a), (b), (c) and (d), (6), (7)(a) and (b)
section 28(1)(a), (b), (c), (d) and (e), (2)
section 29(1)(a), (b) and (c), (2)(a) and (b)
section 32(3)
section 33(6)
section 34(7)
section 39(1)
section 44(1), (2) and (3)
section 45(1) and (2)
section 46(1)(a), (b), (c) and (d)
section 52(a), (b), (c) and (d)
section 55(3)
section 60
section 64(1)(a), (b), (c) and (d), (2)(a), (b), (c), (d) and (e)
section 78(2)
section 79(1), (2)(a) and (b)
section 81(2)
section 82(5)
section 83(1) and (2)
section 84(1) and (4)

Part 7
Transitional Provisions, Consequential Amendments, Repeals, Expiry and Coming into Force

Transitional provisions

87(1) In this section, "previous regulation" means

(a) *Bus Safety Regulation* (AR 235/82),

(b) *Commercial Vehicle Inspection Regulation* (AR 414/91),

(c) *Commercial Bus Inspection, Equipment and Safety Regulation* (AR 428/91), and

(d) *Motor Vehicle Inspection Regulation* (AR 318/2002).

(2) A vehicle inspection facility licence, an inspection mechanic's licence, a vehicle inspection certificate or a commercial vehicle inspection decal issued under a previous regulation that is subsisting immediately before the coming into force of this Regulation is a facility licence, technician licence, certificate or decal, as the case may be, for the same type of vehicle under this Regulation and subject to the same terms and conditions, if any, for the remainder of its term.

(3) A person who is authorized as or who discharges the functions of a vehicle safety inspector, vehicle safety auditor or vehicle examiner under a previous regulation immediately before the coming into force of this Regulation is a vehicle safety investigator under this Regulation.

(4) An authorization granted under section 3.1 of the *Commercial Vehicle Inspection Regulation* (AR 414/91) and that is subsisting immediately before the coming into force of this Regulation remains in effect for the remainder of its term, subject to any terms and conditions attached to it, unless revoked earlier by the Registrar.

(5) An extension granted under section 4.1 of the *Commercial Bus Inspection, Equipment and Safety Regulation* (AR 428/91) and that is subsisting immediately before the coming into force of this Regulation remains in effect for the remainder of its term, subject to any terms and conditions attached to it, unless revoked earlier by the Registrar.

(6) A vehicle inspection program manual adopted by the Registrar under a previous regulation is a Vehicle Inspection Manual under this Regulation, until it is rescinded by the Registrar or replaced by a new manual adopted by the Registrar under this Regulation.

(7) A record or other information established and maintained, in whatever form, under a previous regulation for the purpose of monitoring the activities of a licensee or a technician with respect to compliance with the Act and that previous regulation constitutes the profile of a licensee or a technician in accordance with Part 5 of this Regulation.

Consequential Amendments

Commercial Vehicle Certificate and Insurance Regulation

88(1) This section amends the *Commercial Vehicle Certificate and Insurance Regulation* (AR 314/2002).

(2) Section 43(1) is amended by striking out "*Commercial Bus Inspection, Equipment and Safety Regulation* (AR 428/91)" **and substituting** "*Vehicle Inspection Regulation*".

Operator Licensing and Vehicle Control Regulation

89(1) This section amends the *Operator Licensing and Vehicle Control Regulation* (AR 320/2002).

(2) Section 1 is amended by adding the following after clause (z):

(aa) "unsafe vehicle" means an unsafe vehicle as defined in the *Vehicle Inspection Regulation*.

(3) Section 56(1) is repealed and the following is substituted:

Vehicle not registrable

56(1) If the Registrar has reason to believe that a vehicle is an out of province motor vehicle, a salvage motor vehicle or an unsafe vehicle under the *Vehicle Inspection Regulation,* the Registrar shall not issue a certificate of registration in respect of the vehicle unless the applicant provides to the Registrar a subsisting vehicle inspection certificate issued for the vehicle under the *Vehicle Inspection Regulation* as follows:

(a) in the case of an out of province motor vehicle, an out of province motor vehicle inspection certificate;

(b) in the case of a salvage motor vehicle or an unsafe vehicle, a salvage motor vehicle inspection certificate.

(4) Section 75(1) is amended by striking out "or" **at the end of clause (c), adding** "or" **at the end of clause (d) and adding the following after clause (d):**

(e) is an unsafe vehicle.

Procedures Regulation

90(1) This section amends the *Procedures Regulation* (AR 233/89).

(2) Part 30 and Part 31 in Schedule 2 are repealed.

Repeals, Expiry and Coming into Force

Repeals

91 The following regulations are repealed:

(a) *Commercial Vehicle Inspection Regulation* (AR 414/91);

(b) *Motor Vehicle Inspection Regulation* (AR 318/2002).

Expiry

92 For the purpose of ensuring that this Regulation is reviewed for ongoing relevancy and necessity, with the option that it may be repassed in its present or an amended form following a review, this Regulation expires on April 1, 2017.

AR 211/2006 s92;64/2012

Coming into force

93 This Regulation comes into force on January 1, 2007.

Schedule

Premises and Equipment Requirements for Vehicle Inspection Facilities

Responsibility of licensee

1 The licensee of a facility shall ensure that the facility is equipped, and that the premises and equipment are maintained, in accordance with this Schedule.

Requirements regarding premises

2 The premises of a licensed vehicle inspection facility shall

(a) have sufficient interior space to accommodate the type of vehicles the facility is licensed to inspect,

(b) have hard surface flooring that conforms to the standards set out in the Facility Operating Manual and that is capable of supporting the heaviest type of vehicle that the facility is licensed to inspect,

(c) have adequate lighting for the purpose of conducting vehicle inspections,

(d) have adequate and appropriate space to display vehicle inspection program signage in a conspicuous manner and as required in the Facility Operating Manual,

(e) be in a clean and safe condition, and

(f) comply with applicable federal and provincial requirements relating to workplace safety.

Requirements regarding equipment

3 A facility that is licensed as a vehicle inspection facility shall have the following equipment available:

(a) standard mechanical service equipment and tools for the inspection, repair and maintenance of the types of vehicles the facility is licensed to inspect;

(b) lift equipment capable of safely raising the heaviest type of vehicle the facility is licensed to inspect;

(c) safety stands capable of supporting the heaviest type of vehicle the facility is licensed to inspect;

(d) a brake drum diameter gauge accurate to within 0.25 millimetres and capable of measuring the largest brake drum used on the types of vehicles the facility is licensed to inspect;

(e) micrometers or rotor gauges that are accurate to within 0.010 millimetres and that are capable of measuring rotors on the types of vehicles the facility is licensed to inspect;

(f) a dial indicator that is accurate to 0.010 millimetres;

(g) headlight aiming equipment maintained and calibrated to the manufacturer's specifications or a headlight aiming screen in a level stall large enough to allow a distance of 7.62 metres between the vehicle's headlights and the screen;

(h) a torque wrench capable of measuring the torque requirements of the types of vehicles the facility is licensed to inspect;

(i) a tire tread gauge capable of measuring in 0.80 millimetre increments;

(j) a tire pressure gauge capable of measuring tire pressures in the ranges required for the types of vehicles the facility is licensed to inspect.

Requirements for out of province and salvage motor vehicles

4(1) In addition to the equipment listed in section 3, a facility in which out of province or salvage motor vehicles are inspected shall have

(a) computerized 4-wheel alignment equipment that is capable of printing the results of alignment procedures, and

(b) on-board diagnostic equipment and software for testing supplemental restraint systems and antilock braking systems for the types of vehicles the facility is licensed to inspect.

(2) Subsection (1)(a) does not apply if the licensee of the facility has an arrangement that has been approved by the Registrar with the licensee of another facility to perform computerized 4-wheel alignment procedures at that facility.

Requirements for salvage motor vehicles

5 In addition to the equipment listed in sections 3 and 4, a facility in which salvage motor vehicles are inspected shall have

(a) standard autobody equipment and tools for the inspection, repair and maintenance of the types of vehicles the facility is licensed to inspect,

(b) frame straightening equipment with a 4-point anchoring system designed to hold a vehicle in a stationary position that is suitable for the types of vehicles the facility is licensed to inspect,

(c) measuring devices that are suitable for symmetrical and asymmetrical bodies and frames for the types of vehicles the facility is licensed to inspect, and

(d) frame specification manuals or software for the type of vehicles the facility is licensed to inspect.

Mechanical equipment

6 Without limiting the generality of section 3(a), a facility in which commercial vehicles are inspected shall have

(a) wheel and hub removal and installation tools,

(b) a wheel dolly,

(c) wheel seal installation tools,

(d) a magnetic based dial indicator,

(e) a feeler gauge,

(f) a depth gauge,

(g) fifth wheel locking test tools,

(h) a flat surface square,

(i) a brake cam rotation protractor,

(j) a pry bar,

(k) air system timing equipment,

(l) a vacuum gauge, and

(m) an electrical test light.

School buses

7 In addition to the equipment listed in sections 3 and 6, a facility in which school buses are inspected shall have

(a) a voltmeter,

(b) an ammeter, or

(c) a battery load tester.

Condition of equipment

8(1) All gauges and measuring devices required to be used in a facility under this Schedule shall be properly calibrated at all times.

(2) All equipment and tools required to be used in a facility under this Schedule shall be kept clean and in good working order.