



TruckingHR Canada  
**Learning and  
Development  
Centre**

Commercial Transport Truck Operator  
**TRAINING GUIDE**  
Tractor-Trailer Inspection



 **TruckingHR  
Canada**

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As a national, non-profit organization, Trucking HR Canada (THRC) advances modern HR solutions for the trucking and logistics workforce. One of our strategic priorities is to make a company's job easier by delivering a comprehensive collection of up-to-date guides, reports, templates and more to support effective human resources management and recruitment and retention efforts.

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## BACKGROUND

Trucking HR Canada (THRC) publishes a National Occupational Standard for Commercial Transport Truck Operators (NOS-O). The NOS-O defines the knowledge, skills, and abilities ("competencies") required for this occupation.

This document is a supplemental resource to the NOS-O. For the full suite of supplemental resources visit **[truckinghr.com](http://truckinghr.com)**.

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## PURPOSE OF THIS GUIDE

The purpose of this training guide is to provide a standard approach to **instructing vehicle inspection methods** to commercial transport truck operators based on the competencies of the National Occupational Standard for Commercial Transport Truck Operator (NOS-O).

## WHO CAN USE THIS GUIDE

This guide is designed to be used by instructors, trainers, mentors, and coaches to teach commercial transport truck operators at companies or at training facilities.

## HOW TO USE THIS GUIDE

Use this guide during entry-level training and occupational-level training

It lists tasks required for instructing learners in conducting tractor-trailer inspections and details the sub-tasks involved to help identify possible errors learners may be making. The sub-tasks listed are consistent with what a driver is required to know to obtain a commercial driver's licence in many jurisdictions.

## LIMITATIONS OF THIS GUIDE

As vehicles and operational settings are different, you may need to make some alterations or additions to the sub-tasks listed in this document. Use this guide as a base and add or alter it as appropriate for your circumstances. If changes are made, you and or your team may wish to review the NOS-O to ensure it continues to align with your updated version.

If you have questions or are interested in more information, contact [info@truckinghr.com](mailto:info@truckinghr.com)



## BEFORE TRAINING BEGINS

Review the training record of your trainee(s) before the lesson to ensure your training will meet their needs.

You can demonstrate and teach the skills in this guide in any off-road location that has adequate space and is reasonably free of distractions and hazards. A hard surface is preferred but not required.

Trainers and trainees need to wear clothing and footwear that is suitable for outdoor work and for weather conditions typical of the season. High visibility clothing or a safety vest over their clothing is also necessary to increase their visibility.

## TRAINING METHODS

Your goal is to help the learner develop effective, competent, and safe driving behaviours.

Instruction and feedback must be constructive and consistent.

During training, provide regular guidance and calmly deliver short messages. Don't distract, confuse, intimidate, or frustrate the trainee. Stop the task if necessary to provide more extensive feedback or instruction. Stop the lesson if the trainee needs to calm down or take a break. Resume the task when the trainee is ready.

## DEMONSTRATING THE TASKS

You may need to demonstrate a task, especially during entry-level training.

### Elements to consider for demonstrations:

- The number of trainees that can reasonably and safely participate.
- Location in a yard with enough space for a tractor and trailer and one or more trainees.
- Location for trainees to stand where they can see and hear you during the demonstration

Fully engage with the trainees and ensure that they understand all the steps being demonstrated.



## INSPECTION TRAINING

Different types of vehicle checks and inspection activities are carried out by commercial transport truck operators at different times and are based on regulatory and operational needs. Pre-operation inspections, enroute inspections, and post-trip inspections are carried out in different ways and at different times by most companies — operators must learn each workplace-specific requirement. Vehicle inspections often involve a type of “circle check” in most workplaces and may vary between companies.

A training guide for pre-operation checks is provided as **Task 1** in this document and serves as a basic starting point for training as well as road test readiness. You can add items and alter as needed to suit your workplace needs.

The regulatory model for daily inspections of commercial vehicles by operators in most Canadian jurisdictions is set out in National Safety Code Standard 13 (NSC 13). NSC 13 includes schedules of defects that operators are expected to be able to identify and respond to. The schedules are lists of defective vehicle conditions but are not designed to create a framework for inspection methods, practices, or routines. Commercial transport truck operators must understand the conditions listed in NSC 13 - Schedule 1, which applies to trucks and trailers.

A training guide to ensure commercial transport truck operators are familiar with Schedule 1 defects is provided as **Task 2** in this document.



# TASK 1 PRE-OPERATION VEHICLE CHECKS

## INSPECTION TASK 1 – Pre-Operation Vehicle Checks

This inspection involves the tasks that are frequently performed at the start of a work shift, before departing for a trip, or while getting a vehicle and its load ready for the road. Since workplace requirements are often specific to a particular operation, the training needs to be conducted according to these specific requirements. Additional resources – such as equipment or procedural checklists – are encouraged and will support the development of operators.

SUB-TASK		ERRORS	MINOR	MAJOR
PPE usage	Uses PPE according to workplace requirements.	Fails to have required PPE available as needed.	x	
		Fails to use required PPE.	x	
Operating components	Inspects vehicles and operating components according to workplace requirements.  <i>Note: This excludes daily inspection items, which are covered separately.</i>	Fails to conduct inspection before starting a trip.		x
		Fails to identify required conditions.	x	
		Fails to check all required items.	x	
		Fails to top up fluid when required.	x	
		Fails to report vehicle conditions.	x	
Emergency equipment	Confirms emergency equipment required for the workplace is carried and ready for use.	Fails to check an emergency item properly.	x	
		Fails to use an emergency item when required.		x
		Fails to carry or properly secure an emergency item.		x
Vehicle controls	Confirms proper operation of vehicle controls.	Is not able to locate or properly operate a listed control item.		x
		Fails to confirm when a listed control item is working properly and in good condition.	x	
		Fails to identify when a listed control item malfunctions or is damaged.	x	
Start-up and warm-up	Warms up engine according to workplace requirements.	Fails to follow workplace procedure for warming an engine.	x	
		Idles engine when it is unnecessary or prohibited.	x	



SUB-TASK		ERRORS	MINOR	MAJOR
<b>Mirror set up</b>	Sets up mirrors properly.	Fails to recognize potential blind spots.		<b>x</b>
		Fails to set up mirrors to achieve maximum vision.		<b>x</b>
<b>Secure vehicle</b>	Always secures vehicle before exiting and uses wheel chocks if required in the workplace.	Fails to apply parking brakes before exiting a vehicle.		<b>x</b>
		Fails to double check vehicle is secure after delayed exit from vehicle.	<b>x</b>	
		Fails to use wheel chocks properly when part of workplace requirements.		<b>x</b>
<b>3-point contact</b>	Always enters and exits vehicle properly.	Does not maintain 3-point contact on exit or entry.	<b>x</b>	
<b>ADDITIONAL FOR TRACTOR-TRAILER (Does not apply to straight truck.)</b>				
<b>Vehicle set up</b>	Ensures vehicle is properly set up for compliance with weight and dimension compliance and according to workplace requirements.	Is unable or unwilling to attempt sliding the fifth wheel.		<b>x</b>
		Fails to properly position the fifth wheel.	<b>x</b>	
		Is unable or unwilling to attempt repositioning of trailer axles.		<b>x</b>
		Fails to properly position trailer axles. Fails to properly lock or ensure the assembly is locked.	<b>x</b>	
		Is unable to access the resources to confirm weight or dimension requirements.	<b>x</b>	
		Incorrectly identifies weight or dimension requirements.	<b>x</b>	
<b>Time</b>	Conducts pre-check procedure in a reasonable time. (TBD)	Takes too long to complete the procedure.	<b>x</b>	
<b>Total Demerits</b>				



## TASK 2 NSC 13 - SCHEDULE 1 DEFECT IDENTIFICATION

In the workplace, most companies want operators to recognize the importance of NSC 13 - Schedule 1 items. Companies may add additional inspection items or processes to the operator's responsibilities, as well as establishing methods, practices, and routines for circle checks or other similar activities. Newly licenced operators may have adequate understanding of NSC 13 - Schedule 1 and only need to learn about other workplace requirements.

Commercial transport truck operators must be able to identify each of the relevant 75 minor and major defects listed in NSC 13 Schedule 1 on their vehicle. Since it is difficult to provide examples of these defects, they can be asked to confirm their ability to identify each defect by demonstrating the method they use to inspect vehicle components. Some NSC 13 - Schedule 1 defects are difficult to demonstrate; operators should be able to verbally describe how they would inspect to detect any defects for these items.

The suggested approach is to randomly select items for operators to demonstrate or verbally explain. Over a longer period, all items can be covered. In all cases, operators should be able to describe the major or minor defects they are looking for and the appropriate response to each.

The table below provides the suggested breakdown of the NSC 13 - Schedule 1 defects and if they should be verbally explained or demonstrated. Items that aren't applicable are marked N/A. Following the table, a series of smaller tables describes each of the inspection items in more detail and describes what the operator should be able to do.

<b>NSC 13 - SCHEDULE 1</b>		
<b>SCHEDULE 1 DEFECT</b>	<b>Description or identification method</b>	
	<b>VERBAL</b>	<b>DEMO</b>
<b>1. Air Brake System</b>		
1.1 audible air leak	x	
1.2 slow air pressure build-up rate		x
1.3M pushrod stroke of any brake exceeds the adjustment limit		x
1.4M air loss rate exceeds prescribed limit		x
1.5M inoperative towing vehicle (tractor) protection system		x
1.6M low air warning system fails or is activated	x	x
1.7M inoperative service, parking, or emergency brake	x	
<b>2. Cab</b>		
2.1 occupant compartment door fails to open		x
2.2M any cab or sleeper door fails to close securely	x	

SCHEDULE 1 DEFECT		Description or identification method	
		VERBAL	DEMO
<b>3.</b>	<b>Cargo Securement</b>		
3.1	insecure or improper load covering (e.g. wrong type or flapping in the wind)	x	
3.2M	insecure cargo	x	
3.3M	absence, failure, malfunction, or deterioration of required cargo securement device or load covering	x	
<b>4.</b>	<b>Coupling Devices</b>		
4.1	coupler or mounting has loose or missing fastener		x
4.2M	coupler is insecure or movement exceeds prescribed limit	x	
4.3M	coupling or locking mechanism is damaged or fails to lock		x
4.4M	defective, incorrect, or missing safety chain/cable		x
<b>5.</b>	<b>Dangerous Goods</b>		
5.1M	dangerous goods requirements not met	n/a	n/a
<b>6.</b>	<b>Driver Controls</b>		
6.1	accelerator pedal, clutch, gauges, audible and visual indicators or instruments fail to function properly	n/a	n/a
<b>7.</b>	<b>Driver Seat</b>		
7.1	seat is damaged or fails to remain in set position		x
7.2M	seatbelt or tether belt is insecure, missing, or malfunctions		x
<b>8.</b>	<b>Electric Brake System</b>		
8.1	loose or insecure wiring or electrical connection	n/a	n/a
8.2M	inoperative breakaway device	n/a	n/a
8.3M	inoperative brake	n/a	n/a
<b>9.</b>	<b>Emergency Equipment and Safety Devices</b>		
9.1	emergency equipment is missing, damaged or defective		x
<b>10.</b>	<b>Exhaust System</b>		
10.1	exhaust leak		x
10.2M	leak that causes exhaust gas to enter the occupant compartment	x	
<b>11.</b>	<b>Frame and Cargo Body</b>		
11.1	damaged frame or cargo body		x
11.2M	visibly shifted, cracked, collapsing, or sagging frame member(s)	x	



SCHEDULE 1 DEFECT		Description or identification method	
		VERBAL	DEMO
<b>12.</b>	<b>Fuel System</b>		
12.1	missing fuel tank cap		x
12.2M	insecure fuel tank		x
12.3M	dripping fuel leak		x
<b>13.</b>	<b>General</b>		
13.1M	serious damage or deterioration that is noticeable and may affect the vehicle's safe operation	n/a	n/a
<b>14.</b>	<b>Glass and Mirrors</b>		
14.1	required mirror or window glass fails to provide the required view to the driver as a result of being cracked, broken, damaged, missing, or maladjusted.		x
14.2	required mirror or glass has broken or damaged attachments onto vehicle body		x
<b>15.</b>	<b>Heater/Defroster</b>		
15.1	control or system failure		x
15.2M	defroster fails to provide unobstructed view through the windshield	x	
<b>16.</b>	<b>Horn</b>		
16.1	vehicle has no operative horn		x
<b>17.</b>	<b>Hydraulic Brake System</b>		
17.1	brake fluid level is below indicated minimum level	n/a	n/a
17.2M	parking brake is inoperative	n/a	n/a
17.3M	brake boost or power assist is not operative	n/a	n/a
17.4M	brake fluid leak	n/a	n/a
17.5M	brake pedal fade or insufficient pedal reserve	n/a	n/a
17.6M	activated (other than ABS) warning device	n/a	n/a
17.7M	brake fluid reservoir is less than ¼ full	n/a	n/a
<b>18.</b>	<b>Lamps and Reflectors</b>		
18.1	required lamp does not function as intended		x
18.2	required reflector is missing or partially missing		x
<b>When use of lamps is required:</b>			
18.3M	failure of both low-beam headlamps	x	
18.4M	failure of both rearmost tail lamps	x	



SCHEDULE 1 DEFECT		Description or identification method	
		VERBAL	DEMO
<b>At all times:</b>			
18.5M	failure of a rearmost turn-indicator lamp	X	
18.6M	failure of both rearmost brake lamps	X	
<b>19. Steering</b>			
19.1	steering wheel lash (free-play) is greater than normal		X
19.2M	steering wheel is insecure or does not respond normally	X	
19.3M	steering wheel lash (free-play) exceeds prescribed limit	X	
<b>20. Suspension System</b>			
20.1	air leak in air suspension system		X
20.2	broken spring leaf		X
20.3	suspension fastener is loose, missing, or broken		X
20.4M	damaged* or deflated air bag <i>*patched, cut, bruised, cracked to braid, mounted insecurely</i>		X
20.5M	cracked or broken main spring leaf or more than one broken spring leaf		X
20.6M	part of spring leaf or suspension is missing, shifted out of place, or in contact with another vehicle component	X	
20.7M	loose U-bolt		X
<b>21. Tires</b>			
21.1	damaged tread or sidewall of tire		X
21.2	tire leaking (if leak can be felt or heard, treat tire as flat)	X	
21.3M	flat tire	X	
21.4M	tire tread depth is less than wear limit		X
21.5M	tire is in contact with another tire or any vehicle component other than mud-flap	X	
21.6M	tire is marked "Not for highway use"	X	
21.7M	tire has exposed cords in the tread or outer sidewall area	X	
<b>22. Wheels, Hubs, and Fasteners</b>			
22.1	hub oil below minimum level (when fitted with sight glass)		X
22.2	leaking wheel seal		X
22.3M	wheel has loose, missing, or ineffective fastener	X	
22.4M	damaged, cracked, or broken wheel, rim or attaching part	X	
22.5M	evidence of imminent wheel, hub, or bearing failure	X	



SCHEDULE 1 DEFECT		Description or identification method	
		VERBAL	DEMO
<b>23.</b>	<b>Windshield Wiper/Washer</b>		
23.1	control or system malfunction		X
23.2	wiper blade damaged, missing, or fails to adequately clear driver's field of vision	X	
<b>When use of wipers or washer is required:</b>			
23.3M	wiper or washer fails to adequately clear driver's field of vision in area swept by driver's side wiper	X	



# INSPECTION TASK 1 – SCHEDULE 1 DEFECT IDENTIFICATION

Operators must know their responsibility for identifying and responding to minor and major defects.

## Respond to identifying a defect – Verbal

When the vehicle has a minor defect, the operator must:

- Notify the operator of the defect
- Enter the defect on the daily inspection report
- Be permitted to continue driving the vehicle

When a vehicle has a major defect, the operator must:

- Notify the operator of the defect
- Enter the defect on the daily inspection report
- Not drive the vehicle

## 1.1 Audible air leak – Verbal

Operators must know that air leaks are potential defects.

### Sub-Task – Describe Action

Operators must regularly check for air leaks.

### Sub-Task – Test Results

An air leak that can be heard requires attention.

### Sub-Task – Compliance Status

When an air leak is heard at any time, conduct the air-loss rate test to identify whether the defect is minor or major.

## 1.2 Slow air pressure build-up rate – Demonstration

Operators must know the proper method for testing the air-loss rate.

### Sub-Task – Demonstration Steps

- Ensure the trailer supply valve is closed (pulled out when equipped).
- Pump brakes to reduce air pressure to 552 kPa (80 psi or less).
- Maintain engine speed of 600 to 900 RPM.
- **Note time for pressure to rise from 587 to 690 kPa (85 to 100 psi) while maintaining engine speed of 600 to 900 RPM.**

**Note:** Different pressures are required in some jurisdictions.

### Sub-Task – Test Results

How long did it take for the air pressure to rise from 587 to 690 kPa (85 to 100 psi)?

### Sub-Task – Compliance Status

When the time is longer than 2 minutes, the vehicle has a minor defect.

## 1.3M Pushrod stroke of any brake exceeds adjustment limit – Demonstration

Operators must know the proper method for checking brake pushrod stroke.

### Sub-Task – Demonstration Steps

- Secure the vehicle with wheel chocks or blocks.
- Ensure air pressure is above 621 kPa (90 psi) and release the spring brakes.
- Mark the pushrod at the brake chamber or a suitable fixed reference point
- Raise or lower the air pressure by running the engine or pumping the brake pedal until both the primary and display 621 to 690 kPa (90 to 100 psi).
- Shut off the engine.
- Press and hold the brake pedal in the fully applied position and use a suitable means to hold the brakes applied to be able leave the cab and inspect the brake.
- Measure the distance from the brake chamber or fixed reference point to the mark on the pushrod.
- Identify the size and the adjustment limit for the brake chamber.

### Sub-Task – Test Results

Compare the applied pushrod stroke measurement to the adjustment limit.

### Sub-Task – Compliance Status

When the pushrod stroke measurement is longer than the stroke limit of the brake chamber, the vehicle has a major defect.





## 1.4M Air-loss rate exceeds the prescribed limit – Demonstration

Operators must know the proper method for testing the air-loss rate.

### Sub-Task – Demonstration Steps

- Ensure the vehicle is secured by wheel chocks.
- Release spring parking/emergency brakes.
- Ensure the air-system pressure is between cut-in and cut-out values (80-145 psi); shut off the engine and turn the key on (if required).
- Hold the brake pedal in the fully applied position.
- Observe the air pressure gauges for one minute and note any change. (Disregard the initial pressure drop and begin test after the pressure has stabilized.)

### Sub-Task – Test Results

Compare pressure drop to allowable limit.

### Sub-Task – Compliance Status

Vehicle has a minor defect when pressure drop is:

- 3 psi in one minute for a straight truck or tractor
- 4 psi in one minute for a tractor with 1 trailer
- 6 psi in one minute for a tractor with 2 or more trailers

## 1.5M Inoperative towing vehicle (tractor) protection system – Demonstration

Operators must know the proper method for testing the air-loss rate.

### Sub-Task – Demonstration Steps

- Ensure air pressure is within its normal operating pressure range, cut-in and cut-out values (80 -145 psi).
- Ensure the trailer supply valve is closed (pulled out).
- Remove the trailer service-line coupler (glad-hand) from the trailer or its storage location and place it where it can be observed.
- Apply the service brakes.

### Sub-Task – Test Results

Check if any air is exhausting from the trailer service-line coupler (glad-hand).

### Sub-Task – Compliance Status

When air is exhausting from the trailer service-line gladhand, the vehicle has a major defect.



## 1.6M Low air warning system fails, or system is activated – Demonstration

Operators must know the proper method for testing the low air warning.

### Sub-Task – Demonstration Steps

- Ensure air pressure is above 621 kPa (90 psi).
- Turn ignition key on. Engine may be running or shut off.
- Press and release the brake pedal (to lower pressure) several times until warning activates.

### Sub-Task – Test Results

Watch the pressure gauges and note the pressure when the low-air warning device activates.

### Sub-Task – Compliance Status

When the low air pressure warning fails to activate before pressure drops to 380 kPa (55 psi), the vehicle has a major defect.

## 1.7M Inoperative service, parking, or emergency brake – Verbal

Operators must know the proper method for checking and confirming that brakes are working properly.

### Sub-Task – Describe Action

The operator must routinely check and confirm that brakes are working properly.

### Sub-Task – Test Results

Any brake abnormality requires follow up by a qualified technician.

### Sub-Task – Compliance Status

A vehicle has a major defect when any service, parking, or emergency brake fails to produce brake force when it is applied.



## 2.1 Occupant compartment door fails to open – Demonstration

Operators must know that occupant doors must be able to be opened in an emergency.

### Sub-Task – Demonstration Steps

- Open the door from the outside and enter the vehicle.
- Test that the door is closed securely.
- Open the door from inside and exit the vehicle.

### Sub-Task – Test Results

Door operation.

### Sub-Task – Compliance Status

When the door fails to open normally, the vehicle has a minor defect.

## 2.2M Any cab or sleeper door fails to close securely – Demonstration

Operators must know that doors must remain securely closed when a vehicle is moving.

### Sub-Task – Demonstration Steps

- Open the door from the outside and enter the vehicle.
- Test that the door is closed securely.
- Open the door from inside and exit the vehicle.

### Sub-Task – Test Results

Door operation.

### Sub-Task – Compliance Status

When the door fails to open normally, the vehicle has a minor defect.



### 3.1 Insecure or improper load covering – Verbal

Operators must know that some cargo requires covering during transport.

#### Sub-Task – Describe Action

Load covering is inspected visually.

#### Sub-Task – Test Results

Confirm that load covering is used properly.

#### Sub-Task – Compliance Status

The vehicle has a minor defect when covering missing or is loose enough that cargo could be lost.

### 3.2M Insecure cargo – Verbal

Operators must know the requirements for properly securing the cargo being transported.

#### Sub-Task – Describe Action

Visual inspection of cargo and securing devices.

#### Sub-Task – Test Results

Verify condition and securement.

#### Sub-Task – Compliance Status

The vehicle has a major defect when cargo could:

- leak, spill, blow off, fall from, fall through, or otherwise become dislodged from the vehicle, or
- shift upon or within the vehicle to such an extent that the vehicle's stability or maneuverability is adversely affected.



### 3.3M Absence, failure, malfunction, or deterioration of required cargo securement device or load covering – Verbal

Operator s must respond to any insecure cargo.

#### Sub-Task – Describe Action

Cargo and securing devices are inspected visually.

#### Sub-Task – Test Results

Inspect to verify condition and securement.

#### Sub-Task – Compliance Status

The vehicle has a major defect when cargo could:

- leak, spill, blow off, fall from, fall through, or otherwise become dislodged from the vehicle, or
- shift upon or within the vehicle to such an extent that the vehicle's stability or maneuverability is adversely affected.

### 4.1 Coupler or mounting has loose or missing fastener – Demonstration

Operators must know that the condition of couplers and mounting structures need to be inspected visually.

#### Sub-Task – Demonstration Steps

- Point out all the couplers and mounting fasteners.
- Confirm that no fasteners are missing.
- Check 2 or 3 accessible fasteners by hand to determine if they are loose.

#### Sub-Task – Test Results

Identify defects.

#### Sub-Task – Compliance Status

The vehicle has a minor defect when a coupler or the mounting structure that supports a coupler has a fastener that is loose or missing.



## 4.2M Coupler insecure or movement exceeds prescribed limit – Verbal

Operators must know the symptoms of couplers that are loose or are developing abnormal amounts of movement, methods to measure the amount of movement, or having it measured.

### Sub-Task – Describe action

- Apply and release the trailer brakes.
- Using the power train, gently pull the tractor as far forward as possible.
- Mark the fifth wheel and upper coupler.
- Using the power train, gently reverse the tractor as far backward as possible.
- Check the distance between the marks on the fifth wheel and upper coupler.

### Sub-Task – Test Results

Verify distance.

### Sub-Task – Compliance Status

The vehicle has a major defect when:

- Movement between the upper and lower coupler of a fifth wheel is more than 1/2 in (13mm) in the forward-rearward direction.
- Movement between the pintle hook and a drawbar eye is more than 3/8 in (10mm) in the forward-rearward direction.

## 4.3M coupling or locking mechanism is damaged or fails to lock – Demonstration

Operators must know the importance of having couplers properly locked, the locking methods used by couplers, and how to visually inspect these locks.

### Sub-Task – Demonstration Steps

- Position to be able to see the coupler assembly.
- Visually verify the position of the fifth wheel release handle.
- Visually check the position of any exposed mechanism on the fifth wheel.

### Sub-Task – Test Results

Identify defects.

### Sub-Task – Compliance Status

The vehicle has a major defect when any coupler is damaged or not properly locked.



#### 4.4M Defective, incorrect, or missing safety chain/cable – Demonstration

Operators must know the importance of safety chains and cables, the types that must be used, as well as the condition they need to be in.

##### Sub-Task – Demonstration Steps

Visually inspect safety chain or cable.

##### Sub-Task – Test Results

Identify defects.

##### Sub-Task – Compliance Status

The vehicle has a major defect when a safety chain or cable is missing, is the wrong type or size, or is noticeably damaged or worn out.

#### 7.1 Driver seat is damaged or fails to remain in set position – Demonstration

Operators must know that the driver seat must be properly positioned to be able to control the vehicle, methods for confirming the seating positions, as well as the locking methods.

##### Sub-Task – Demonstration Steps

Test operation of seat controls and locks. Adjust seat to proper driving position.

##### Sub-Task – Inspection Results

Identify any abnormal condition.

##### Sub-Task – Compliance Status

The vehicle has a minor defect when the seat is damaged, or won't stay in the position needed to drive.

#### 7.2M Seatbelt or tether belt is insecure, missing, or malfunctions – Demonstration

Operators must know the importance of seatbelts, how to properly wear them, and the condition they must be in to function properly.

##### Sub-Task – Demonstration Steps

Test operation of seat belts, tether belts, and seat belt latches.

##### Sub-Task – Inspection Results

Identify any abnormal condition.

##### Sub-Task – Compliance Status

The vehicle has a major defect when any seatbelt or tether belt is insecure, missing, or malfunctions.



## 9.1 Emergency equipment is missing, damaged, or defective – Demonstration

Operators must know what emergency equipment is required for the type of transport they are involved in and how to check it.

### Sub-task – Demonstration Steps

Check for required emergency equipment and visually confirm condition.

### Sub-Task – Test Results

Identify any abnormal condition.

### Sub-Task – Compliance Status

The vehicle has a minor defect when any necessary emergency equipment is missing, damaged, or doesn't work properly.

## 10.1 Exhaust leak – Demonstration

Operators must know how to visually inspect the exhaust system.

### Sub-task – Demonstration Steps

- With the vehicle running, open the hood or engine compartment cover.
- Visually inspect the complete exhaust system to ensure there are no signs of exhaust leaks.

### Sub-Task – Test Results

Identify any sign of leakage.

### Sub-Task – Compliance Status

The vehicle has a minor defect when any exhaust leak is detected.

## 10.2M Leak that causes exhaust gases to enter the occupant compartment – Verbal

Operators must know the hazard of prolonged exposure to engine exhaust gases.

### Sub-Task – Describe Action

Check for any sign that leaking exhaust may enter the occupant compartment.

### Sub-Task – Test Results

Describe abnormal conditions.

### Sub-Task – Compliance Status

The vehicle has a major defect when exhaust gases from an exhaust system leak are getting into the cab or sleeper.



## 11.1 Damaged frame or cargo body – Demonstration

Operators must know that the condition of the vehicle and any cargo body frame need to be inspected visually.

### Sub-Task – Demonstration Steps

- Open the hood.
- Visually inspect the frame and cargo body on one side of the vehicle, including the portion under the hood.
- Check for damage such as a cracked, bent, or deformed part or section, or any frame component that has shifted, is cracked, collapsing, or sagging.

### Sub-Task – Test Results

Identify any sign of damage or deterioration.

### Sub-Task – Compliance Status

The vehicle has a minor defect when any frame or cargo body has damage such as a cracked, bent, or deformed part or section.

## 11.2M Visibly shifted, cracked, collapsing, or sagging frame member(s) – Verbal

Operators must know that some conditions of the frame or cargo body can be very serious safety concerns.

### Sub-Task – Describe Action

- Open the hood.
- Visually inspect the frame and cargo body on one side of the vehicle, including the portion under the hood.
- Check for damage such as a cracked, bent, or deformed part or section, or any frame component that has shifted, is cracked, collapsing, or sagging.

### Sub-Task – Test Results

Identify any sign of damage or deterioration.

### Sub-Task – Compliance Status

The vehicle has a major defect when it is visible that any frame component has shifted, is cracked, collapsing, or is sagging.



## 12.1 Missing fuel tank cap – Demonstration

Operators must know the hazards of fuel spillage and fuel contamination.

### Sub-Task – Demonstration Steps

Check the fuel tank cap.

### Sub-Task – Test Results

Identify missing parts.

### Sub-Task – Compliance Status

The vehicle has a minor defect when a fuel tank cap is missing.

## 12.2M Insecure fuel tank – Demonstration

Operators must know that fuel tanks must be securely attached.

### Sub-Task – Demonstration Steps

Visually check the fuel tank mounting and straps.

### Sub-Task – Test Results

Identify missing, damaged, or deteriorated parts.

### Sub-Task – Compliance Status

The vehicle has a major defect when a fuel tank isn't securely mounted.

## 12.3M Dripping fuel leak – Demonstration

Operators must know the hazards of fuel that is flammable and an environmental hazard.

### Sub-Task – Demonstration Steps

Check under the vehicle for leaking fuel.

### Sub-Task – Test Results

Identify signs of dripping.

### Sub-Task – Compliance Status

The vehicle has a major defect when there is fuel dripping anywhere from it.



### **13.1M Serious damage or deterioration that is noticeable and may impact the vehicle's safe operation – Verbal**

Operators must know that the items listed in Schedule 1 do not cover all possible safety defects and that they must use their experience and training to identify additional conditions that are serious safety risks.

#### **Sub-Task – Describe Action**

Routinely inspect vehicle condition and monitor operation while driving or working around it.

#### **Sub-Task – Test Results**

Identify any sign of serious damage or deterioration that may impact safe operation.

#### **Sub-Task – Compliance Status**

The vehicle has a major defect when there is noticeable damage or deterioration that may impact the vehicle's safe operation.

### **14.1 Required mirror or window glass fails to provide the required view to the driver as a result of being cracked, broken, damaged, missing, or maladjusted. – Demonstration**

Operators must know the importance of always having a clear view of the conditions around their vehicle, and the windows and mirrors that are required on the vehicle they operate.

#### **Sub-Task – Demonstration Steps**

Confirm the condition of glass and mirrors, adjustment, and mounting position.

#### **Sub-Task – Test Results**

Identify any sign of damage or deterioration.

#### **Sub-Task – Compliance Status**

The vehicle has a minor defect when there is mirror or window glass damage that reduces required visibility.



## 14.2 Required mirror or glass has broken or damaged attachments onto vehicle body – Demonstration

Operators must know that the windows and mirrors that are necessary for safe operation must also be securely attached to vehicle.

### Sub-Task – Demonstration Steps

Visually and manually inspect the condition of glass and mirrors and test the security of mounting hardware.

### Sub-Task – Test Results

Identify any sign of damage or deterioration.

### Sub-Task – Compliance Status

The vehicle has a minor defect when the attachments for any required mirror or other glass are broken or damaged.

## 15.1 Heater/defroster control or system failure – Demonstration

Operators must know the importance of the heater/defroster for keeping the windshield clear of condensation.

### Sub-Task – Demonstration Steps

Test the heater/defroster in all speeds and positions.

### Sub-Task – Test Results

Identify any sign of damage or malfunction.

### Sub-Task – Compliance Status

The vehicle has a minor defect when the heater/defroster system operates incorrectly.

## 15.2M Defroster fails to provide unobstructed view through the windshield – Verbal

Operators must know the hazard of operating when the heater/defroster fails to keep the windshield clear of condensation that blocks the driver's view of the roadway.

### Sub-Task – Describe Action

Failure of the defroster to keep the windshield clear requires urgent attention.

### Sub-Task – Test Results

Describe abnormal conditions.

### Sub-Task – Compliance Status

The vehicle has a major defect when the defroster can't keep the windshield clear.

## 16.1 Vehicle has no operative horn – Demonstration

Operators must know that the horn can be an important hazard warning to others.

### Sub-Task – Demonstration Steps

Test operation of all horns.

### Sub-Task – Test Results

Listen for sound.

### Sub-Task – Compliance Status

The vehicle has a minor defect when it doesn't have at least one working horn.

## 18.1 Required lamp does not function as intended – Demonstration

Operators must know that lamps required by regulations must operate.

### Sub-Task – Demonstration Steps

Operate lamp controls and visually check lamp status.

### Sub-Task – Test Results

Confirm operation.

### Sub-Task – Compliance Status

The vehicle has a minor defect when any required lamp doesn't operate the way it is supposed to.

## 18.2 Required reflector is missing or partially missing – Demonstration

Operators must know that reflectors required by regulations must be present and fully reflective.

### Sub-Task – Demonstration Steps

Operate lamp controls and visually check lamp status.

### Sub-Task – Test Results

Confirm condition.

### Sub-Task – Compliance Status

The vehicle has a minor defect when a reflector is partially or completely missing.



### 18.3M Failure of both low-beam headlamps – Verbal

Operators must know that headlamps must be turned on and operating from ½ hour before sunset to 1/2 hour after sunrise, and when driving in inclement weather.

#### Sub-Task – Describe Action

Visually check status.

#### Sub-Task – Test Results

Confirm operation.

#### Sub-Task – Compliance Status

The vehicle has a major defect when both headlamps fail to operate.

### 18.4M Failure of both rearmost taillamps – Verbal

Operators must know the importance of being clearly visible from the rear.

#### Sub-Task – Describe Action

Visually check status.

#### Sub-Task – Test Results

Confirm operation.

#### Sub-Task – Compliance Status

The vehicle has a major defect when both rearmost taillamps fail to operate.

### 18.5M Failure of a rearmost turn indicator lamp – Verbal

Operators must know the importance of turn signal indicators.

#### Sub-Task – Describe Action

Visually check status.

#### Sub-Task – Test Results

Confirm operation.

#### Sub-Task – Compliance Status

The vehicle has a major defect when either of the rearmost turn indicator lamps fail to operate.

### 18.6M Failure of both rearmost brake lamps – Verbal

Operators must know the importance of making others aware when a vehicle being followed is braking.

#### Sub-Task – Describe Action

Visually check status.

#### Sub-Task – Test Results

Confirm operation.

#### Sub-Task – Compliance Status

The vehicle has a major defect when both rearmost brake lamps fail to operate.

### 19.1 Steering wheel lash (free-play) is greater than normal – Demonstration

Operators must know the amount of steering wheel lash (or free-play) that is normal for the vehicle they operate.

#### Sub-Task – Demonstration Steps

With engine running, turn the wheel slightly to the left and right.

#### Sub-Task – Test Results

Confirm normal operation.

#### Sub-Task – Compliance Status

The vehicle has a minor defect when it has more steering wheel lash (or free-play) than normal, or more than comparable vehicles.

### 19.2M Steering wheel is insecure or does not respond normally – Verbal

Operators must know how to confirm the security of the steering wheel and monitor the steering response while driving.

#### Sub-Task – Describe Action

Monitor steering for normal response.

#### Sub-Task – Test Results

Describe abnormal conditions.

#### Sub-Task – Compliance Status

The vehicle has a major defect when the steering wheel is not securely attached to the vehicle or the steering doesn't respond in the normal way.

### 19.3M Steering wheel lash (free-play) exceeds required limit – Verbal

Operators must know that there are set standards for steering wheel free-play.

#### Sub-Task – Describe Action

With engine running, turn the wheel slightly to the left and right.

#### Sub-Task – Test Results

Describe who to ask to confirm when steering wheel free-play is excessive.

#### Sub-Task – Compliance Status

The vehicle has a major defect when the steering wheel is not securely attached to the vehicle or the steering doesn't respond in the normal way.

### 20.1 Air leak in air suspension system – Demonstration

Operators must know that air suspension systems get their air supply from the air brake system and leakage is a concern.

#### Sub-Task – Demonstration Steps

Listen for leaks near suspension components.

#### Sub-Task – Test Results

Audible check.

#### Sub-Task – Compliance Status

If you can hear an air leak in the air suspension system, the vehicle has a minor defect.

### 20.2 Broken leaf spring– Demonstration

Operators must recognize visual evidence of broken leaf springs.

#### Sub-Task – Demonstration Steps

Visually inspect leaf springs.

#### Sub-Task – Test Results

Identify any sign of damage, deterioration, and broken leaf springs.

#### Sub-Task – Compliance Status

The vehicle has a minor defect when any spring has a single broken leaf.





### 20.3 Suspension fastener is loose, missing, or broken – Demonstration

Operators must recognize visual evidence of loose, missing, or broken suspension components.

#### Sub-Task – Demonstration Steps

Visually inspect suspension components.

#### Sub-Task – Test Results

Identify a loose, missing, or broken suspension component.

#### Sub-Task – Compliance Status

The vehicle has a minor defect when any suspension fastener is loose, missing, or broken.

### 20.4M Damaged (patched, cut, bruised, cracked to braid, or deflated) air bag – Demonstration

Operators must recognize visual evidence of loose, missing, or broken suspension components.

#### Sub-Task – Demonstration Steps

Visually inspect suspension air bags.

#### Sub-Task – Test Results

Identify a suspension air bag that is deflated due to damage.

#### Sub-Task – Compliance Status

The vehicle has a major defect when any air bag is damaged and is deflated.

### 20.5M Cracked or broken main leaf spring or more than one broken leaf spring– Verbal

Operators must know which leaves in a spring are “main” leaves.

#### Sub-Task – Describe Action

Visually inspect leaf springs.

#### Sub-Task – Test Results

Identify broken leaves.

#### Sub-Task – Compliance Status

The vehicle has a major defect when either a main leaf or more than one other leaf is broken.

## 20.6M Part of leaf spring or suspension is missing, shifted out of place, or in contact with another vehicle component – Verbal

Operators must recognize the normal condition of suspension components and the evidence of serious conditions.

### Sub-Task – Describe Action

Visually inspect suspension.

### Sub-Task – Test Results

Identify abnormal conditions.

### Sub-Task – Compliance Status

The vehicle has a major defect when any part of a leaf spring or suspension part is missing, has shifted out of place, or is in contact with another vehicle component.

## 20.7M Loose U-bolt – Demonstration

Operators must locate and identify suspension u-bolts, know the importance of ensuring they remain tight, and the signs of loose U-bolts.

### Sub-Task – Demonstration Steps

Visually inspect U-bolts.

### Sub-Task – Test Results

Identify abnormal conditions.

### Sub-Task – Compliance Status

The vehicle has a major defect when any spring U-bolt is loose.

## 21.1 Damaged tread or sidewall of tire – Demonstration

Operators must be able to distinguish between the tread and sidewall of a tire and know the visual signs of tread and sidewall damage.

### Sub-Task – Demonstration Steps

Visually inspect tires.

### Sub-Task – Test Results

Identify abnormal conditions.

### Sub-Task – Compliance Status

The vehicle has a minor defect when there is damage to the tread or sidewall.

## 21.2 Tire leaking (if leak can be felt or heard, tire is to be treated as flat) – Verbal

Operators must know the difference between a tire that has low inflation and a tire with an active leak.

### Sub-Task – Describe Action

Visually inspect tires, listen, and feel for leaks when a tire appears under-inflated.

### Sub-Task – Test Results

Identify abnormal conditions.

### Sub-Task – Compliance Status

The vehicle has a minor defect when a tire leak appears evident but cannot be felt or heard.

## 21.3M Flat tire – Verbal

Operators must know the difference between a tire that has low inflation and a tire that is flat or has an active leak.

### Sub-Task – Describe Action

Visually inspect tires, listen, and feel for leaks.

### Sub-Task – Test Results

Identify abnormal conditions.

### Sub-Task – Compliance Status

The vehicle has a major defect when any tire is flat, or when a leak can be felt or heard in any tire.

## 21.4M Tire tread depth is less than wear limit – Demonstration

Operators must know how to check tire tread depth and the minimum allowable depth in vehicle safety regulations for various tire positions.

### Sub-Task – Demonstration Steps

Visually inspect tire tread and measure tread depth.

### Sub-Task – Test Results

Identify abnormal conditions.

### Sub-Task – Compliance Status

The vehicle has a major defect when any tire's tread depth is below the allowable wear limit.

### 21.5M Tire is in contact with another tire or any vehicle component other than mud-flap – Verbal

Operators must know tires should never contact other vehicle components, but contact with a mudflap is not a safety defect.

#### Sub-Task – Describe Action

Visually inspect tires.

#### Sub-Task – Test Results

Identify abnormal conditions.

#### Sub-Task – Compliance Status

The vehicle has a major defect when any tire is in contact with another tire or any other vehicle component.

### 21.6M Tire is marked “Not for highway use” – Verbal

Operators must know that certain tires are designed and constructed for slow speed or off-road use only, and are marked to indicate their intended purpose.

#### Sub-Task – Describe Action

Visually inspect tires.

#### Sub-Task – Test Results

Look for sidewall marking.

#### Sub-Task – Compliance Status

The vehicle has a major defect when it has a tire installed on it that is marked as being “not for highway use.”

### 21.7M Tire has exposed cords in the tread or outer sidewall – Verbal

Operators must know that tires are constructed with steel cords inside their casings, and that cords are covered in rubber for protection.

#### Sub-Task – Describe Action

Visually inspect tire tread and sidewall.

#### Sub-Task – Test Results

Look for abnormal conditions.

#### Sub-Task – Compliance Status

The vehicle has a major defect when cords are exposed in the tread or sidewall of the any tire.

## 22.1 Hub oil below minimum level (when fitted with sight glass) – Demonstration

Operators must know that wheel hubs use bearings that require lubrication, that oil is often used as a bearing lubricant, and that the hub caps used with oil lubricated bearings often have a clear window allowing a visual inspection of the oil fill level.

### Sub-Task – Demonstration Steps

Visually inspect hub oil level.

### Sub-Task – Test Results

Confirm oil fill level.

### Sub-Task – Compliance Status

The vehicle has a minor defect when hub oil level is below minimum.

## 22.2 Leaking wheel seal – Demonstration

Operators must know that wheel hubs require seals to keep the lubricant inside the hub and that when a wheel seal is leaking, the wheel bearing can fail.

### Sub-Task – Demonstration Steps

Visually inspect wheels, particularly the inside and lower portion of the tire.

### Sub-Task – Test Results

Look for abnormal conditions.

### Sub-Task – Compliance Status

The vehicle has a minor defect when there is evidence of a leaking wheel seal.



### 22.3M Wheel has loose, missing, or ineffective fastener – Demonstration

Operators must know the visual features of different types of wheel systems, the importance of keeping wheel fasteners (normally nuts and bolts) properly tightened, are able to detect missing fasteners, and recognize the visual signs of loose or ineffective fasteners.

#### Sub-Task – Demonstration Steps

Visually inspect wheels and wheel fasteners.

#### Sub-Task – Test Results

Look for abnormal conditions.

#### Sub-Task – Compliance Status

The vehicle has a major defect when any wheel has a loose, missing, or ineffective fastener.

### 22.4M Damaged, cracked, or broken wheel, rim, attaching part – Verbal

Operators must know the visual features of different types of wheel systems and the normal appearance of the individual components.

#### Sub-Task – Describe Action

Visually inspect wheels.

#### Sub-Task – Test Results

Look for abnormal conditions.

#### Sub-Task – Compliance Status

The vehicle has a major defect when any wheel, rim, or any part used to attach the wheel or rim is damaged, cracked, or broken.



## 22.5M Evidence of imminent wheel, hub, or bearing failure – Verbal

Operators must know the normal appearance of wheel and hub components and the visual indications of unsafe conditions.

### Sub-Task – Describe Action

Visually inspect wheels.

### Sub-Task – Test Results

Look for abnormal conditions.

### Sub-Task – Compliance Status

The vehicle has a major defect when there is visual evidence that a wheel, hub, or bearing failure could occur.

## 23.1 Windshield wiper/washer control or system malfunction – Demonstration

Operators must know how to operate the windshield wipers and washers and ensure they are always available by periodic testing.

### Sub-Task – Demonstration Steps

Operate wiper and washer control in all speeds.

### Sub-Task – Test Results

Look for abnormal conditions.

### Sub-Task – Compliance Status

The vehicle has a minor defect when the control or any part of the windshield wipers and washers system fails to function properly.



### **23.2 Wiper blade damaged, missing, or fails to adequately clear driver's field of vision – Verbal**

Operators must know the normal condition and function of wiper blades and recognize when they do not function well.

#### **Sub-Task – Describe Action**

Operate wiper and washer control at all speeds.

#### **Sub-Task – Test Results**

Look for abnormal conditions.

#### **Sub-Task – Compliance Status**

The vehicle has a minor defect when a wiper blade is damaged or missing, or when it won't clear the area of the windshield in front of the driver.

### **23.3M Wiper or washer on driver's side fails to adequately clear driver's field of vision – Verbal**

Operators must know that being able to see the roadway clearly in poor weather is very important, and that this visibility depends on the wipers being able to clear water, snow, and ice from the windshield.

#### **Sub-Task – Describe Action**

Operate wiper and washer control at all speeds.

#### **Sub-Task – Test Results**

Look for abnormal conditions.

#### **Sub-Task – Compliance Status**

The vehicle has a major defect when the prevailing weather conditions require use of the wipers or washers, and they are not able to keep the area swept by the driver's side wiper clear.







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