



## Pre/ Post Trip Inspections

Monthly Training Topic  
NV Transport Inc.  
Safety & Loss  
Prevention



# INTRODUCTION

*Driver vehicle inspections are an important part of the overall safe operation of a commercial vehicle. A quality pre-trip inspection can identify defective equipment before it fails. This saves the driver, his company and expensive roadside repairs, down time and fines.*

*Repairing a flat tire at the home terminal results in a much faster and less expensive repair vs. having the tire repaired at an interstate weigh station. A proper pre-trip inspection will help you to avoid being placed out of service during a DOT roadside inspection.*



# PURPOSE

***Pre/ Post trip inspections must be conducted to:***

- ***Prevent accidents caused by vehicle deficiencies.***
- ***Ensure the vehicle is in safe operating condition.***
- ***Prevent loss to persons and property.***
- ***Meet regulatory requirements of the US DOT and Canada.***



# REGULATIONS

## ***The following regulations pertain to vehicle inspections:***

- **Part 392 Driving of Commercial Motor Vehicles**
  - 392.7 – *Equipment, Inspection and Use*
  - 392.8 – *Emergency Equipment, Inspection and Use*
  - 392.9 – *Inspection of Cargo, Cargo Securement Devices and Systems*
- **Part 393 Parts & Accessories Necessary for Safe Operation\*\*\***
  - *All subparts are applicable to vehicle inspections*
  - *These include (but not limited to) lighting devices, reflective devices, brakes, windows, coupling devices, tires, steering, body components, etc.*
- **Part 396 Inspection, Repair, and Maintenance\*\*\***
  - *All subparts are applicable to vehicle inspections*
  - *These include (but not limited to) driver inspections vehicle repairs and vehicle maintenance*
- **Part 399 Employee Safety & Health Standards**
  - *These include (but not limited to) truck and tractor access requirements, vehicle steps and handholds*

## WHILE APPROACHING THE VEHICLE

***While approaching the vehicle, ask yourself these questions:***

- *Does anything look out of place?*
- *Do you see any damage?*
- *Is there anything in the surrounding area?*
- *Is the vehicle sagging?*
- *Is the cargo secured?*
- *Are there any leaks or fluids on the ground?*
- *Are there any low hanging wires or tree branches?*



# INSPECTION OVERVIEW

## ***Pre/ Post Trip Inspection Overview***

*Proper Inspections will identify if the vehicle's systems and parts are working, failing, and/or missing*

*All drivers should perform 3 types of inspections:*

- ***Pre- Trip Inspection***
- ***On-The-Road Inspection***
- ***Post-Trip Inspection***

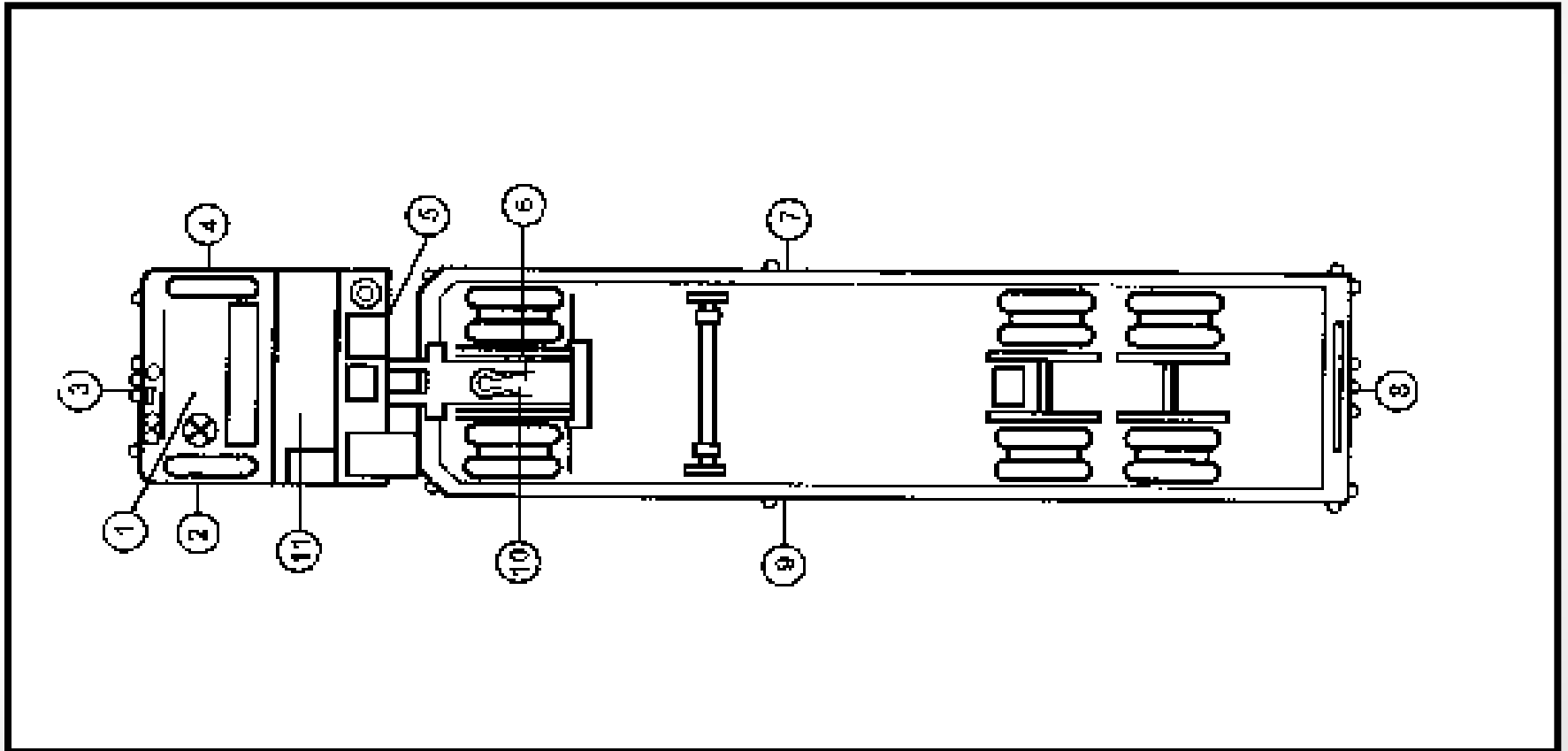
*The eleven step pre trip inspection process includes these components:*

- ***Vehicle Overview***
- ***Engine Compartment***
- ***Inside the Cab***
- ***Lights***
- ***Walk Around***
- ***Signal Lights***
- ***Brake System***



## PRE-TRIP INSPECTION

*This figure displays the recommended sequence for inspection  
See subsequent slides for detailed information on each step*



## PRE-TRIP INSPECTION

### ***Start the Pre-trip When Approaching Vehicle. The driver should:***

- *Establish that this is the proper vehicle for inspection by checking the VIN (vehicle identification number)*
  - *Check for visible leaks, and determine if the vehicle is level.*

### ***Step 1 – Engine Compartment***

#### ***The driver should check the following items on both sides of the tractor engine compartment:***

- fire wall (wiring, hoses, fluids, etc.)
- coolant hoses
- radiator tank (coolant level)
- water pump
- radiator and fan
- filters (air drier, fuel/water separator)
- suspension (hangers, u-bolts, leaves)
- shock absorbers
- steering linkage
- brakes (air line, chamber, push rod, slack adjuster, drum, shoes)
- rim/wheel seal (inside)
- tires (inner sidewall, face, tread, outer sidewall)
- outside rim (lugs, oil level)

#### ***The driver should check the following items on the driver's side of the tractor engine compartment:***

- air conditioner compressor & hoses
- power steering reservoir (fluid and hoses)
- steering box
- air compressor
- ECM (Electronic Control Module) or throttle linkage

#### ***The driver should check the following items on the passenger's side of the tractor engine compartment:***

- alternator belts
- oil leaks
- oil level (dip stick, filler cap)
- air cleaner/"FilterMinder"
- exhaust system (manifold, turbocharger, etc.)



# PRE-TRIP INSPECTION

## ***Step 2 – Driver side of the tractor (opposite side of step 4)***

*The driver should inspect the following items :*

- mirrors and windows
- vehicle identification (name/address, motor carrier number, fuel decals)
- door operation, grab handles
- compartments, emergency equipment
- fuel tank (damage, straps, cap, fuel level)
- steps
- lights (park, turn, reflectors)
- hood latch
- equipment damage

## ***Step 3 – Front of tractor***

*The driver should inspect these items on the front of the tractor:*

- fairing
- lights (clearance/ID)
- antennas
- windshield/wipers
- lights (headlights [high and low beams], turn, four-ways, park)
- license plate/ID number

## ***Step 4 – Passenger side of the tractor (opposite side as step 2)***

*The driver should inspect the same items as in step 2 now on the passenger side of the tractor*

# PRE-TRIP INSPECTION

## ***Step 5 – Rear of the tractor***

*The driver should inspect the following items in the outside rear area of the tractor:*

- **fairing**
- **exhaust system**
- **transmission, drive shaft**
- **air/electrical lines**
- **frame/catwalk**

## ***Step 6 – Coupling system of the tractor (passenger side)***

*The driver should inspect the following items in the coupling system area from the passenger side of the vehicle:*

- **fifth wheel (lower coupler, mounting bracket, slider)**
- **differential**
- **suspension (springs, air bags, etc.) wheel ends**
- **brakes (air lines, foundation parts)**
- **lugs**
- **mud flaps**
- **back-up alarm**
- **rims**
- **axle seals**
- **wheel ends, including tires (inner/outer, side-walls, face, between inflation)**
- **king pin/locking jaws**
- **lights (tail, stop, turn, four-way)**

# PRE-TRIP INSPECTION

## **Steps 7, 8 and 9 – Sides and rear of trailer**

*The driver should inspect the following items on the driver's side, passenger's side and rear of the trailer:*

- equipment damage
- lights and reflectors
- landing gear
- suspension (springs, air bags, etc.)
- brakes (foundation parts, air lines, reservoirs)
- axle seals
- rims
- wheel ends, including tires (inner/outer, side-walls, face, between inflation)
- lugs
- mud flaps
- trailer door latch and closure

## **Step 10 – Coupling system (driver side)**

*The driver should inspect the following items in the coupling system area from the driver's side of the vehicle:*

- fifth wheel (lower coupler, mounting bracket, slider, release handle and lock)
- differential
- brakes (air lines, foundation parts)
- suspension (springs, air bags, etc.)
- axle seals
- rims
- wheel ends, including tires (inner/outer, side-walls, face, between inflation)
- lugs
- air lines, electrical cord (connection & suspension)

# PRE-TRIP INSPECTION

## **Step 11 – Inside the tractor**

***On the left side, the driver should inspect the following items:***

- air horn
- window
- mirrors (clean and adjusted)
- DVCR (Driver Vehicle Condition Report)
- paperwork (permit book, etc.)
- fire extinguisher
- **seat belt**

***On the right side, the driver should inspect the following items:***

- window
- mirrors (clean and adjusted)

***In the front of the tractor, the driver should inspect the following items:***

- windshield
- wipers (condition and operation)
- heater/defroster
- steering wheel (free-play)
- horn
- gauges (engine off)
- turn signal indicator lights
- control levers (power divider, fifth wheel, air suspension)
- clutch (free play)
- pedals
- shift lever
- seat (attachment, adjustment)
- OBC (On-board Computer)



# PRE-TRIP INSPECTION

## ***Final Step***

***The driver should demonstrate proper engine start procedures and then check the following items:***

- warning lights
- gauges (especially ammeter/volt meter, oil pressure)
- back-up alarm (should sound as soon as vehicle placed in reverse)

***While in the tractor, the driver should perform the following air brake checks:***

- static air loss (less than 3 PSI per minute for combination vehicles.)
- pressurized air loss (less than 4 PSI per minute for combination vehicles)
- low air warning device (must come on when air pressure falls below 60 PSI.)
- emergency brake system
- park brake ( should pop out when pressure is in the 20-40 PSI range.)
- service brake
- trailer brake

***Important: When entering or exiting the cab, the driver must maintain three points of contact with the vehicle.***



## POST TRIP INSPECTIONS

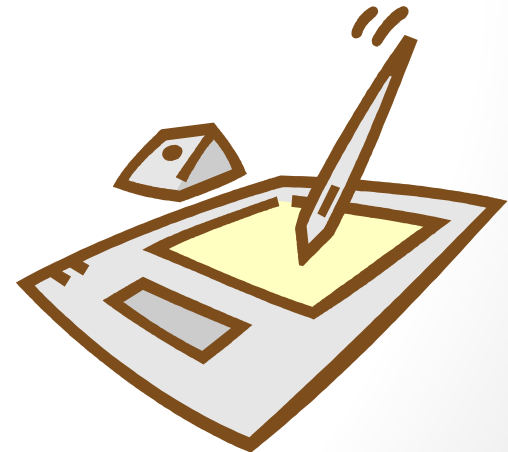
***Post-trip inspections serve the purpose of requiring drivers to have defective equipment repaired before starting the next day. Regulations require that any deficiency that would affect the safe operation of the vehicle must be repaired before the vehicle can be driven again. To continue running with an unsafe vehicle is a safety hazard no one can afford.***

***Drivers must conduct post-inspection as required in:***

- ***U.S. FMCSR 396.11 & 396.13***
- ***Canadian CNSCR 575, Part 1,2***

***FMCSR Part 396.11 Driver Vehicle Inspection Reports: “Every driver shall prepare a report in writing at the completion of each day’s work on each vehicle operated and the report shall cover at least the following parts and accessories”:***

- **Service brakes**
- **Parking brakes**
- **Lighting devices and reflectors**
- **Tires**
- **Horn**
- **Windshield wipers**
- **Rear vision mirrors**
- **Coupling devices**
- **Wheels and rims**
- **Emergency equipment**



# DOCUMENTATION

***Ryder uses the Driver Vehicle Condition Report, Form No. S4-09 to fulfill the reporting requirements. Are you using this form or something similar?***

***These reports/ forms must be retained for three months from the date the report was written.***

***The form requires three signatures when defects are noted:***

- ***Driver Signature when vehicle is brought in***
- ***Ryder Employee Signature certifying repairs***
- ***Driver Acknowledgement when vehicle is taken out. Driver review to ensure that the vehicle repairs have been completed***

The image shows a 'Ryder Driver's Vehicle Condition Report' form. At the top left is the Ryder logo. The title is 'Driver's Vehicle Condition Report'. Below the title, there are fields for 'To' (Lessee Name), 'Truck/Tractor Number', 'Trailer Number', 'Date In', and 'Time In'. A 'Remember the Maintenance Promise!' note is also present. The form is divided into several sections for inspection: Engine, Brakes, Tires, Clutch, Rear Axle, Instrument Panel, Steering, Springs/Suspension, Electrical, and Emergency Equipment. Each section contains a list of items to check with checkboxes. A 'Preventive Maintenance Inspection due?' section has 'Yes' and 'No' options. At the bottom, there are fields for 'Date Out', 'Time Out', and 'Mileage Out', along with a 'Driver Acknowledgment Out' section. The form number 'S4-09 (9/2009)' and 'COPY 1 - LESSEE' are printed at the bottom.

## RECOMMENDATIONS & TIPS

***Establish a routine. A consistent step-by-step process of the vehicle inspection will allow you to complete the inspection faster, more efficiently and without leaving anything out.***

***Inspections are only useful if the vehicle defects/ deficiencies are noted and corrected. If problems are found, notify someone.***

***It is OK to double check or triple check the pre/post trip inspection items if you are unsure of what you previously checked.***

***Inspect yourself (how are you feeling? How is your attitude? Are you distracted?)***

***Ensure your cab is clean and secure all loose items.***





# SAFETY PRECAUTIONS

## ***Safety Precautions while performing the inspection:***

- ***Do not get under, in front of or behind the vehicle if there is any chance of it moving.***
- ***Keep the ignition key under his control at all times.***
- ***Use wheel chocks on inclines.***
- ***Use three points of contact while entering and exiting the vehicle.***
- ***Never jump out of or off of, a vehicle or a trailer.***
- ***Be alert and conscious to other vehicles traveling in the surrounding the area***
- ***Select a safe and clear location to do the inspection.***



## COMPLIANCE, SAFETY, ACCOUNTABILITY (CSA)

### ***The relationships between pre/ post vehicle inspections and CSA:***

- ***Vehicle Pre/ Post Trip Inspections are directly related to the Vehicle Maintenance and Cargo BASICS.***
- ***Roadside inspectors will hold drivers accountable for vehicle deficiencies, it is important for drivers to find the problems before roadside inspectors do.***
- ***Although YOU may be confident with minor defects with the vehicle, roadside inspectors will not be as confident or forgiving.***
- ***Proper pre/ post trip inspections will significantly reduce the chances of receiving violations during roadside inspections.***



# Quiz

**1. All drivers should perform which type of inspection(s)?**

- A. Pre-Trip Inspection
- B. Post-Trip Inspection
- C. On-The-Road Inspection
- D. All the above

**2. True or False? An important part of any Pre/Post-Trip inspection is ensuring the cab is clean and all items are secure.**

**3. Pre/Post-trip inspections must be conducted to:**

- A. Prevent accidents caused by vehicle deficiencies
- B. Ensure the vehicle is in safe operating condition
- C. Prevent losses to persons and property
- D. Meet regulatory requirements of the U.S. DOT and Canada
- E. All the above

# Quiz

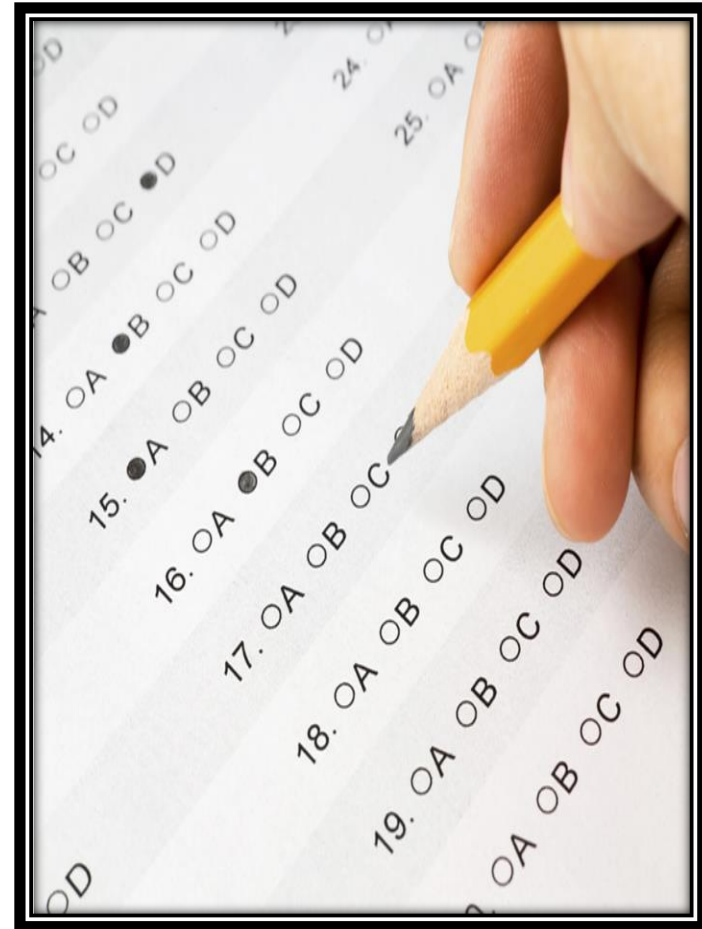
- 4. If a deficiency is found during a pre/post-trip inspection you should:**
- A. Continue driving the vehicle if capable
  - B. Call the DOT
  - C. Note the deficiency on the DVCR and notify the shop
  - D. Try to fix it yourself
- 5. True or False?** When entering or exiting a vehicle you should always do it as quickly as possible.
- 6. When testing the air brake system, the low pressure warning device should sound when the air pressure is below:**
- A. 100 PSI
  - B. 1,000 PSI
  - C. 65 PSI
  - D. 60 PSI

# Quiz

7. **True or False?** To control the hazardous energy during a Pre/Post-Trip inspection, you should disconnect the air system from the trailer.
8. **When doing an inspection of the suspension system, what items should you inspect?**
  - A. Hangers
  - B. U Bolts
  - C. Leaf Springs
  - D. Shock Absorbers
  - E. All the above
9. **When testing the air brake system, the parking brake should pop out when the air pressure drops below:**
  - A. 20 PSI
  - B. 40 PSI
  - C. 92 PSI
  - D. 5 PSI
10. **What equipment has to be verified in the cab in case there is an emergency?**
  - A. Flashlight
  - B. Fire Extinguisher
  - C. Aspirin
  - D. Three reflective triangles
  - E. Both B and D

# Quiz Answers

1. **D**
2. **True**
3. **E**
4. **C**
5. **False**
6. **D**
7. **True**
8. **E**
9. **A**
10. **E**



# Question or Comments?



# Additional Information on Rules and Regulations

*This document is intended to be a guide on applicable rules and regulations. Although it may be used as a guide/reference for your training needs, this document is not intended to be used as the standard for FMCSA rules and regulations.*

***Additional information can be found on the FMCSA website.***

*The FMCSA website will contain the most accurate and up-to-date information on any and all applicable rules and regulations.*

<http://www.fmcsa.dot.gov>

