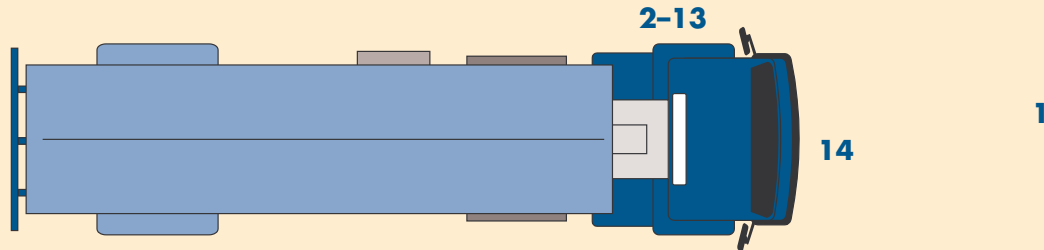


North American Standard Level I Inspection Procedure



For Levels II, III, IV, and V, omit steps that do not apply.

For more detailed information, see the written procedures contained in the CVSA Operations Manual.



STEP 1 Choose the Inspection Site

- Select a safe location, paved, level, away from traffic, visible to traffic, and able to support the weight of the vehicle.
- Avoid hills, curves, soft shoulders and construction sites.
- You must be visible to oncoming traffic.

STEP 2 Approach the Vehicle

- Observe the driver.
- Adhere to officer/inspector safety policies.
- Be alert for leaks, unsecured cargo.

STEP 3 Greet and Prepare Driver

- Identify yourself.
- Ensure that the driver is capable of communicating sufficiently to understand and respond to official inquiries and directions.
- Place chock blocks on the driver's side.
- Explain this inspection procedure.
- Ensure engine is off.
- Check seat belt usage and condition.
- Observe the driver's overall condition for illness, fatigue or other signs of impairment.
- Check for illegal presence of alcohol, drugs, weapons or other contraband.

STEP 4 Interview Driver

- Ask for the following from the driver: starting location, final destination, load description, time traveled, most recent stop, fueling location(s).
- Talk to the driver about the trip.

STEP 5 Collect the Driver's Documents

- Medical Examiner's Certificate (if applicable).
- Skill Performance Evaluation (SPE) Certificate (if applicable).
- Driver's license, CDL, record of duty status.
- Shipping papers.
- Periodic inspection certificates, CVIP.
- Supporting documents: bills of lading, receipts, other documents used to verify record of duty status.

STEP 6 Check for the Presence of Hazardous Materials/Transportation of Dangerous Goods

- Check shipping papers, placards, any leaks or spills, unsecured cargo, markings and labels.

STEP 7 Identify the Carrier

- Identify carrier using the following: vehicle identification, vehicle registration, insurance, operating authority, driver interview.

STEP 8 Examine Driver's License

- Expiration date
- Class
- Endorsements
- Restrictions
- Status

STEP 9 Check Medical Examiner's Certificate and Skill Performance Evaluation (SPE) Certificate (If Applicable)

- Check certificate date (may be valid for up to 24 months).
- Check corrective lens requirement.
- Check hearing aid requirement.
- Check physical limitations.

Note: In Canada and Mexico proper class indicates adequate medical.

STEP 10 Check Record of Duty Status

- Hours of Service verification.
- If driver claims to be exempt, check that driver meets all criteria for said exemption(s).
- Check accuracy of record.

STEP 11 Review Driver's Daily Vehicle Inspection Report (If Applicable)

- Review the required vehicle inspection report to verify that listed safety defects have been certified as corrected.
- Check for driver signature on previous inspection reports.

STEP 12 Review Periodic Inspection Report(s)

- Ensure vehicle has passed the required inspection and has the required documents and decals.

STEP 13 Prepare Driver for Vehicle Inspection

- Explain the vehicle inspection procedure.
- Advise the driver in the use of hand signals.
- Check chock blocks.
- Prepare the vehicle, vehicle transmission in neutral. Engine off, key must be in the "on" position, and release all brakes.
- Instruct driver to remain at the controls.

STEP 14 Inspect Front of Tractor

- Check headlamps, turn signals (do not use four way flashers to check turn signals) and all other required lamps for improper color, operation, mounting, and visibility.
- Check windshield wipers for improper operation (two wipers are required unless one can clean the driver's field of vision).



Commercial Vehicle Safety Alliance

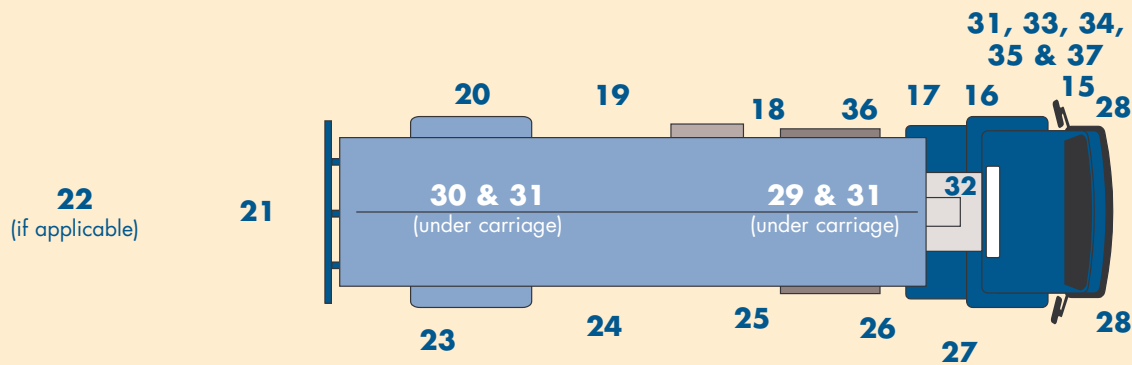
6303 Ivy Lane, Suite 310, Greenbelt, MD 20770

Phone: 301-830-6143 • Fax: 301-830-6144

www.cvsa.org

Promoting Commercial Motor Vehicle Safety and Security

© 2010 Commercial Vehicle Safety Alliance All rights reserved.



STEP 15 Inspect Left Front Side of Tractor

- Check front wheel, rim, hub, and tire.

STEP 16 Inspect Left Saddle Tank Area

- Check fuel tank area.
- Check exhaust system.

STEP 17 Inspect Tractor Front

- Check air and electrical lines.

STEP 18 Check Left Rear Tractor Area

- Check wheels, rims, hubs, and tires.
- Check lower fifth wheel.
- Check upper fifth wheel.
- Check sliding fifth wheel.
- Check all required lamps.

Caution: Never place yourself in between tires of tandem axles.

STEP 19 Inspect Left Side of Trailer

- Check frame and body.
- Check condition of hoses.
- Check van and open-top trailer bodies.
- Check cargo securement.

STEP 20 Inspect Left Rear Trailer Wheels

- Check wheels, rims, hubs, and tires.
- Check sliding tandem.

STEP 21 Inspect Rear of Trailer

- Check tail, stop, turn signals, all other required lights and lamps/flags on projecting loads.
- Check external ABS malfunction lamp.
- Check cargo securement.

STEP 22 Inspect Double, Triple and Full Trailers

- Check safety devices on full trailers/converter dollies.
- Check the safety devices (chains/wire rope) for sufficient number, missing components, improper repairs, and devices that are incapable of secure attachments. Inspect pintle hook, eye and drawbar for cracks, excessive movement, and improper repairs.

STEP 23 Inspect Right Rear Trailer Wheels

- Check as in step 20.

STEP 24 Inspect Right Side of Trailer

- Check as in step 19.

STEP 25 Inspect Right Rear Tractor Area

- Check as in step 18.

STEP 26 Inspect Right Saddle Tank Area

- Check as in step 16.

STEP 27 Inspect Right Front Side of Tractor

- Check as in step 15.

STEP 28 Inspect Steering Axle(s)

- Check steering system (both sides).
- Check front suspension (both sides).
- Check front axle.
- Check frame and frame assembly.
- Check front brake components (both sides).
- Mark pushrods (both sides).

Note: Inform the driver that you are going under the vehicle. Enter the under carriage in view of the driver. (At front of power unit, rear of power unit, and in front of trailer axle(s).

STEP 29 Inspect Axles 2 and/or 3

- Check suspension (both sides).
- Check frame and frame assembly.
- Check brake components (both sides).
- Mark pushrods (both sides).
- Exit under carriage in view of driver.

STEP 30 Inspect Axles 4 and/or 5

- Same as step 29.

STEP 31 Check Brake Adjustment

- Ensure air pressure is 90–100 psi.
- Have driver fully apply brakes and hold.
- Measure and record all pushrod travel.
- Identify size and type of brake chambers.
- Ensure brake lining to drum contact.
- Listen for air leaks.

STEP 32 Inspect Tractor Protection System (This procedure tests both the tractor protection system and the emergency brakes.)

- Have driver release brakes and disconnect both brake lines.
- Full brake application.
- Listen for air leaks.

STEP 33 Inspect Required Brake System Warning Devices

- Observe the dash panel area when the key is turned “on” for the function test of the ABS malfunction lamp(s) (if applicable).
- Observe dash gauges while ignition is “on” and the driver is pumping the foot valve to approximately 55 psi for the function test of a low air pressure warning device.

STEP 34 Test Air Loss Rate

- Apply brakes while the engine is idling, the governor has cut in, and pressure is 80-90 psi.

STEP 35 Check Steering Wheel Lash

- Measure steering wheel lash while wheels are straight and the engine is running.

STEP 36 Check Fifth Wheel Movement

- Prepare the driver and vehicle.
- Check for excessive movement.

Caution: If conducted improperly, this method of checking for fifth-wheel movement can result in serious damage to the vehicle. Use caution and instruct the driver carefully.

STEP 37 Complete the Inspection

- Complete documentation.
- Conclude with driver.
- Follow correct and current OOS procedures (if applicable).
- Issue CVSA decal(s) (if applicable).

North American Standard Inspection Procedure for Performance-Based Brake Testing

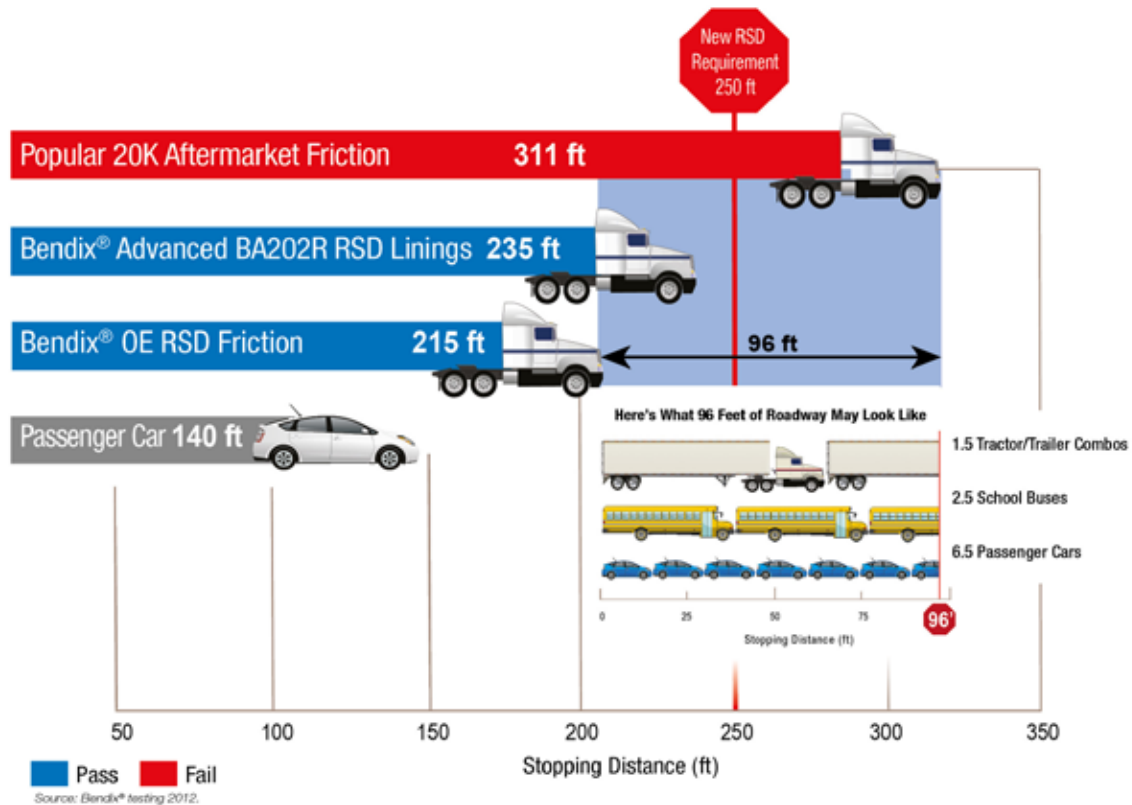


DURING TESTING:

- **STEP 1** Greet the driver and obtain driver and vehicle documentation.
- **STEP 2** Enter unique vehicle identifier into the PBBT software.
 - This would typically be license plate number. Also enter the Inspector ID number.
- **STEP 3** Briefly explain the purpose of the test and describe what will be expected of them during the test.
 - Wheelbase too long.
 - Deceleration-sensitive cargo.

Compensate for exceptions using techniques described in appropriate appendix.
- **STEP 7** Position vehicle relative to the tester.
 - For roller testers:**
 - Position axle on the tester.
 - Make sure vehicle's tires are not rubbing on tester body.
 - Advise the driver to hold the steering wheel firmly when testing the steer axle, to avoid the vehicle moving sideways.
 - For flat plate tester:**
 - Position vehicle in front of tester.
 - Line up vehicle so that tires will not overhang off side of plates.
- **STEP 8** Perform the test.
 - For roller testers:**
 - Advise driver to place vehicle in neutral and release all brakes.
 - Ensure the vehicle has settled into the rollers and is not rocking.
 - Start the test.
 - After rolling resistance measurement is completed, instruct the driver to gradually apply brakes to full brake application.
- **STEP 4** Visually check for under inflated tires.
 - If tire air pressure is too low as defined by the *North American Standard Out-of-Service Criteria*, have driver inflate tires to correct pressure. If not possible, the test is invalid and take the appropriate out-of-service action for flat tires.
- **STEP 5** Verify that the reservoir air pressure is between 90 and 100 psi prior to testing each axle.
 - Axle test is complete when maximum brake force is achieved or test stops automatically due to lock-up.
 - For flat plate testers:**
 - Drive forward onto tester at 4-8 mph.
 - Signal driver to stop when in position.
 - Driver to apply brakes as hard as possible, without locking the wheels.
 - Tester will indicate when to proceed with next axle or vehicle.
- **STEP 9** Observe test closely while in progress. Look for the following:
 - Driver not applying brakes fully.
 - Other improperly conducted tests such as pumping, non-steady or erratic application of brakes.
 - Vehicle shift during testing, possibly coming in contact with tester frame.
 - Vehicle moving off test surfaces.
 - Worn parts, components, or unsecured loads that may become dangerous during the test process.
- **STEP 10** After each axle test:
 - Review the results.
 - If an individual axle shows BF/WL less than 43.5%, retest the axle to ensure proper test.
 - Advise the driver to move to the next axle.
- **STEP 6** Check the vehicle for locked inter-axle differential or other potential exceptions (as provided by PBBT manufacturer). General guidelines listed below:
 - For roller testers** (See appendix A for details):
 - Spread-axle tandems.
 - Four-spring suspension tandems.
 - Kwik Loc add-on axles.
 - For flat plate testers** (See appendix B for details):
 - Track width too wide.
 - Verify 90 and 100 psi air pressure prior to starting the rollers or conducting the next stop on a flat plate tester.
- **STEP 11** After completion of all axles:
 - Review the pass or fail results/criteria according to the applicable Federal, State, Provincial or Territorial laws and refer to the *North American Standard Out-of-Service Criteria* for appropriate out-of-service action.
 - Present and review results with driver.
- **STEP 12** If the vehicle passes:
 - Continue with remainder of the inspection.
 - Document the PBBT test results and complete the required inspection paperwork.
- **STEP 13** If the vehicle fails:
 - Complete the inspection.
 - As a courtesy, provide driver with fault tree list of defects for finding problem(s), (e.g. RP 649).
 - Document the PBBT test results and complete the required inspection paperwork.
 - Follow correct and current OOS procedures.

Stopping Distance Performance of Bendix® RSD Friction vs. Top Selling FMVSS – 121 Dyno-Approved Friction



Don't Forget the Laws on Emergency Equipment

Federal Motor Carrier Safety Regulations: § 393.95 Emergency equipment on all power units.

Each truck, truck tractor, and bus (except those towed in driveaway-towaway operations) must be equipped as follows:

Fire extinguishers

A power unit that is not used to transport hazardous materials must be equipped with either:

A fire extinguisher having an Underwriters' Laboratories rating of 5 B:C or more; or

Two fire extinguishers, each of which has an Underwriters' Laboratories rating of 4 B:C or more.

Spare fuses

Power units for which fuses are needed to operate any required parts and accessories must have at least one spare fuse for each type/size of fuse needed for those parts and accessories.

Warning devices for stopped vehicles

(1) Three bidirectional emergency reflective triangles that conform to the requirements of Federal Motor Vehicle Safety Standard No. 125, § 571.125 of this title; or

(2) At least 6 fuseses or 3 liquid-burning flares.

Requirements for red flags

Red flags shall be not less than 12 inches square, with standards adequate to maintain the flags in an upright position.