

Pre-trip Vehicle Inspection Test

During the pre-trip inspection, you must show that the vehicle is safe to drive. You may have to walk around the vehicle and point to or touch each item and explain to the examiner what you are checking and why. You will NOT have to crawl under the hood or under the vehicle.

All Vehicles

Study the following vehicle parts for the type of vehicle you will be using during the CDL skills tests. You should be able to identify each part and tell the examiner what you are looking for or inspecting.

Engine Compartment (Engine Off)

Leaks/Hoses

Look for puddles on the ground. Look for dripping fluids on underside of engine and transmission. Inspect hoses for condition and leaks.

Oil Level

Indicate where dipstick is located.

See that oil level is within safe operating range.

Level must be above refill mark.

Coolant Level

Inspect reservoir sight glass, or, remove radiator cap and check for visible coolant level. (If engine is not hot)

Power Steering Fluid

Indicate where power steering fluid dipstick is located.

Check for adequate power steering fluid level.

Level must be above refill mark.

Engine Compartment Belts

Check the following belts for snugness (up to ¼ inch play at center of belt), cracks, or frays:

- Power steering belt.
- Water pump belt.
- Alternator belt.
- Air compressor belt.

Note: If any of the components listed above are not belt driven, you must:

Tell the examiner which component(s) are not belt driven.

Make sure component(s) are operating properly, are not damaged or leaking, and are mounted securely.

Steering

Steering Box/Hoses

Check that the steering box is securely mounted and not leaking. Look for any missing nuts, bolts, and cotter keys. Check for power steering fluid leaks or damage to power steering hoses.

Steering Linkage

See that connecting links, arms, and rods from the steering box to the wheel are not worn or cracked. Check that joints and sockets are not worn or loose and that there are no missing nuts, bolts, or cotter keys.

Suspension

Springs/Air/Torque

Look for missing, shifted, cracked, or broken leaf springs. If vehicle is equipped with torsion bars, torque arms, or other types of suspension components, check that they are not damaged and are mounted securely. Air ride suspension should be checked for damage and leaks.

Mounts

Look for cracked or broken spring hangers, missing or damaged bushings, and broken, loose, or missing bolts, u-bolts or other axle mounting parts. (The mounts should be checked at each point where they are secured to the vehicle frame and axle[s]).

Shock Absorbers

See that shock absorbers are secure and that there are no leaks.

Note: Be prepared to perform the same suspension components inspection on every axle (power unit and trailer, if equipped).

Brakes

Slack Adjustors and Pushrods

Look for broken, loose, or missing parts, and connected securely. For manual slack adjustors, the brake pushrod should not move more than one inch (with the brakes released) when pulled by hand.

Brake Chambers

See that brake chambers are not leaking, cracked, or dented and are mounted securely.

Brake Hoses/Lines

Look for cracked, worn, or leaking hoses, lines, and secure connection.

Drum / Rotor

Check for cracks, dents, or holes. Also check for loose or missing bolts.

Check for contaminants such debris or oil/grease.

Brake linings (where visible) should not be worn dangerously thin.

Brake Linings / Disks

On some brake drums, there are openings where the brake linings can be seen from outside the drum. For this type of drum, check that a visible amount of brake lining is showing. Note: Be prepared to perform the same brake components inspection on every axle (power unit and trailer, if equipped).

Wheels

Rims

Check for damaged or bent rims. Rims cannot have welding repairs.

Tires

The following items must be inspected on every tire:

- Tread depth: Check for minimum tread depth (4/32 on steering axle tires, 2/32 on all other tires).
- Tire condition: Check that tread is evenly worn and look for cuts or other damage to tread or sidewalls. Also, make sure that valve caps and stems are not missing, broken, or damaged.
- Tire inflation: Check for proper inflation by using a tire gauge, or inflation by striking tires with a mallet or other similar device. Note: You will not get credit if you simply kick the tires to check for proper inflation.

Hub Oil Seals/Axle Seals

See that hub oil/grease seals and axle seals are not leaking and, if wheel has a sight glass, oil level is adequate.

Lug Nuts

Check that all lug nuts are present, free of cracks and distortions, and show no signs of looseness such as rust trails or shiny threads. Make sure all bolt holes are not cracked or distorted.

Spacers (Spacing)

If equipped, check that spacers are not bent, damaged, or rusted through. Spacers should be evenly centered, with the dual wheels and tires evenly separated. No Spacers- Check that tires and wheels are evenly spaced and nothing lodged between them.

Side of Vehicle

Door(s) Mirror(s)

Check that door(s) are not damaged and that they open and close properly from the outside. Hinges should be secure and seals intact.

Check that mirror(s) and mirror brackets are not damaged and are mounted securely with no loose fittings.

Fuel Tank

Check that tank(s) are secure, cap(s) are tight, and that there are no leaks from tank(s) or lines.

Battery/Box

Wherever located, see that battery(s) are secure, connections are tight, and cell caps are present.

Battery connections should not show signs of excessive corrosion. Battery box and cover or door must be secure.

Drive Shaft

See that drive shaft is not bent or cracked.

Couplings should be secure and free of foreign objects.

Exhaust System

Check system for damage and signs of leaks such as rust or carbon soot. System should be connected tightly and mounted securely.

Frame

Look for cracks, broken welds, holes or other damage to the longitudinal frame members, cross members, box, and floor.

Catwalk

Check that the catwalk is solid, clear of objects, and securely bolted to tractor frame.

Rear of Vehicle

Splash Guards

If equipped, check that splash guards or mud flaps are not damaged and are mounted securely.

Tractor/Coupling

Air/Electric Lines

Listen for air leaks. Check that air hoses and electrical lines are not cut, chafed, spliced, or worn (steel braid should not show through). Make sure air and electrical lines are not tangled, pinched, or dragging against tractor parts. (From rear of truck to front of the trailer)

Air/Electrical Connections

Check that trailer air connectors are sealed and in good condition. Make sure glad hands are locked in place, free of damage or air leaks. Make sure the trailer electrical plug is firmly seated and locked in place.

Apron/Gap

Make sure the visible part of the apron is not bent, cracked, or broken. Check that the trailer is laying flat on the fifth wheel skid plate (no gap).

5th Wheel Skid Plate

Check for proper lubrication and that 5th wheel skid plate is securely mounted to the platform and that all bolts and pins are secure and not missing.

Release Arm (Fifth Wheel)

If equipped, make sure the release arm is in the engaged position and the safety latch is in place.

Platform (Fifth Wheel)

Check for cracks or breaks in the platform structure which supports the fifth wheel skid plate.

Mounting Bolts

Look for loose or missing mounting brackets, clamps, bolts, or nuts. Both the fifth wheel and the slide mounting must be solidly attached.

Locking Pins (Fifth Wheel)

If equipped, look for loose or missing pins in the slide mechanism of the sliding fifth wheel. If air powered, check for leaks.

Make sure locking pins are fully engaged.

Check that the fifth wheel is positioned properly so that the tractor frame will clear the landing gear during turns.

Kingpin

Check that the kingpin is not bent. Does not appear to be damaged.

Locking Jaws

Look into fifth wheel gap and check that locking jaws are fully closed around the kingpin.

Trailer

Trailer Front

Header Board

If equipped, check the header board to see that it is secure, free of damage, and strong enough to contain cargo. On enclosed trailers, check the front area for signs of damage such as cracks, bulges, or holes.

Side of Trailer

Landing Gear

Check that the landing gear is fully raised and has no missing parts, crank handle is secure, and the support frame is not damaged.

Frame

Look for cracks, broken welds, holes or other damage to the frame, cross members, box, and floor.

Tandem Release Arm/Locking Pins

If equipped, make sure the locking pins are locked in place and release arm is secured.

Remainder of Trailer

Please refer to suspension, brake, tire systems mentioned earlier for detailed inspection procedures.

Rear of Trailer

Doors/Ties/Lifts

If equipped, check that doors are not damaged.

Check that doors open, close, and latch properly from the outside.

Lights/Reflectors

Check that all external lights and reflective equipment are clean and functional. Light and reflector checks include:

- Clearance lights (red on rear, amber elsewhere).
- Headlights (high and low beams).
- Taillights.
- Backing lights.
- Turn signals.
- Four-way flashers.
- Brake lights.
- Red reflectors (on rear) and amber reflectors (elsewhere).

Note: Checks of brake, turn signal and four-way flasher functions must be done separately. (lighting indicators)

Drivers Seat - Check for seat to be securely mounted and adjusted properly.

Safety Belt

Check that the safety belt is securely mounted, adjusts, and latches properly.

Safe Start

Depress clutch.

Place gearshift lever in neutral.

Start engine, then release clutch slowly.

Oil Pressure Gauge

Make sure oil pressure gauge is working.

Check that pressure gauge shows increasing or normal oil pressure or that the warning light goes off.

Temperature Gauge

Make sure the temperature gauge is working.

Temperature should begin to climb to the normal operating range or temperature light should be off.

Air Gauge

Make sure the air gauge is working properly.

Build air pressure to governor cut-out, roughly 120psi.

Ammeter/Voltmeter

Check that gauges show alternator is charging.

Mirrors and Windshield

Mirrors should be clean and adjusted properly from the inside.

Windshield should be clean with no illegal stickers, no obstructions, or damage to the glass.

Emergency Equipment

Check for spare electrical fuses.

Check for three red reflective triangles.

Check for a properly charged & rated fire extinguisher

Note: If the vehicle is not equipped with electrical fuses, you must mention this to the examiner.

Steering Play

Power steering: With the engine running, check for excessive play by turning the steering wheel back and forth. Play should not exceed 10 degrees (or about two inches on a 20-inch wheel) before front left wheel barely moves.

Wipers/Washers

Check that wiper arms and blades are secure (good tension on windshield), not damaged, and operate smoothly. Windshield washer operates correctly.

Lighting Indicators

Test that dash indicators work when corresponding lights are turned on:

- Left turn signal.
- Right turn signal.
- Four-way emergency flashers.
- High beam headlight.
- Anti-lock Braking System (ABS) indicator.

Horn

Check that air horn and/or electric horn work.

Heater/Defroster

Test that the heater and defroster work.

Parking Brake Check

• With the parking brake engaged (trailer brakes released on combination vehicles), check that the parking brake will hold vehicle by gently trying to pull forward with parking brake on. With the parking brake released and the trailer parking brake engaged; check that the trailer parking brake will hold vehicle by gently trying to pull forward with the trailer parking brake on.

Air Brake- Check

Failure to perform an air brake check will result in an automatic failure of the vehicle inspection test.

Air brake safety devices vary. However, this procedure is designed to see that any safety device operates correctly as air pressure drops from normal to a low air condition. For safety purposes, in areas where an incline is present, you will use wheel chocks during the air brake check. The proper procedures for inspecting the air brake system are as follows:

1. Shut off the engine, turn key back on, release the tractor protection valve and parking brake (push in Yellow and Red knobs), fully apply the foot brake and hold it for one minute. Check the air gauge to see if the air pressure drops more than 4 pounds in one minute.
2. Begin fanning off the air pressure by rapidly applying and releasing the foot brake. Low air warning devices (buzzer, light) should activate before air pressure drops below 60 psi.
3. Continue to fan off the air pressure. At approximately 40 psi on a tractor-trailer combination vehicle, the tractor protection valve and parking brake valve should close (pop out). On other combination vehicle types and single vehicle types, the parking brake valve should close (pop out).

Test Service Brakes

Wait for normal air pressure, release the parking brakes, move the vehicle forward slowly (about 5mph), and apply the brakes firmly using the brake pedal. Note that any pulling to one side, unusual feel, or delayed stopping may indicate a problem.