

CDL Pre-Trip Inspections

Study Guide

Class A

Front of Vehicle

Approach Vehicle: As you approach the vehicle look underneath for any leaks or hanging or loose items. Look to see that know obvious damage has been done.

Lights and Reflectors: Check high and low beam headlights, turn signals, clearance lights, and 4-way flashers/hazards for proper operation and if any are broken or missing. Make sure lenses are not damaged and are the proper color.

Mirrors: Check any fender mounted mirrors to make sure they are securely mounted, clean and not damaged or broken.

Engine Compartment

Oil Level: Indicate where the dipstick is located and either demonstrate or explain that the oil should be checked by pulling the dipstick out, wiping it off, reinserting and rechecking the level.

Coolant Level: Check either by looking at the sight glass or explaining how you would check the coolant level in the radiator. DO NOT remove the radiator cap.

Power steering fluid: Check the reservoir for the proper level by explaining that you would pull the dipstick out, wipe it off, reinsert the dipstick and recheck the level.

Water Pump: Identify the water pump. Make sure that it is securely mounted, not leaking and it is gear driven.

Alternator: Identify alternator. Check that it is secure. Check belts for cracks, frays, and proper tension. Check wires are secure.

Leaks and Hoses: Make sure all hoses are not cracked and securely attached. Check to make sure there are no puddles on the ground.

Air Compressor: Identify Air Compressor. Make sure that it is securely attached, not damaged, no leaks, and is gear driven.

Steering

Steering box and hoses: Check the steering column is not cracked, damaged, and it is tight. Make sure that it is mounted securely and not leaking. Make sure power steering hoses are not cracked or leaking.

Steering Linkage: No wear, cracks or looseness. No missing nuts, bolts or cotter pins.

Front Wheel

Tires: Check with inflation gauge. No cuts or damage to the tread or sidewalls. Minimum tread depth is 4/32nds on steering tires. Make sure valve stem are not cracked and the stem cap is on.

Rims: No cracks, no welded repairs or bent rims.

Lug Nuts: Check for loose or missing nuts. Rust streaks may indicate loose lug nuts.

Hub Oil Seal: Not leaking and has a proper oil level.

Front Suspension

Springs: No loose, cracked or broken leaf springs.

Shocks: Securely mounted and not leaking.

U-bolts: Not broken or missing. No loose nuts.

Spring Mounts: Check both ends of the spring. No loose, cracked or missing spring mounts. No loose or missing bushings.

Front Brake

Brake Hoses: Not cracked, worn, frayed or leaking. All couplings and fittings are secure.

Brake Chamber: Securely mounted. Not leaking, cracked or dented. No loose or missing clamps.

Slack Adjustor: Securely mounted. No bent, broken or missing parts. No more than 1 inch of movement when pulled by hand. Parking brakes must be released, and wheels chocked to check slack adjustor travel.

Push-rod: Not bent or damaged. Securely attached.

Brake Drum: No cracks, dents or holes.

Brake Linings: Not dangerously thin and had a minimum of ¼ inch of wear material left. Not broken or saturated with oil or grease.

Driver/Fuel Area

Door: Door opens and closes properly, hinges are intact.

Mirrors: Clean, not broken, securely attached.

Fuel Tank: Tank, lines and fuel tank door are all mounted securely and not leaking. Check gasket on fuel cap for cracks or leakage.

Catwalk: Securely mounted, solid, clear of objects, debris or tripping hazards.

Steps: Securely mounted, solid, clear of objects, debris or tripping hazards.

Batteries: Connections tight with no excessive corrosion.

Battery Box: Box and door secure, not missing.

Lights: Signals and flashers on side work.

Reflectors: Reflectors on the back of the cab (white L's) are clean and securely attached.

Under Vehicle

Drive Shaft: Not bent, broken, twisted or loose. No foreign objects in the u-joints. U- joints secure.

Exhaust System: Securely mounted, no leaks. No loose clamps, cracks or holes.

Frame: No cracks or broken welds. No evidence of twisting. No missing cross frame members.

Rear Axles:

Tires: Correct inflation with a tire gauge, no cuts or bulges to the tread or sidewall. Minimum of 2/32nds tread depth. Valve caps and stems are not missing or damaged. Check inside and outside tires.

Rims: No cracks, welded repairs or dents.

Lug Nuts: Not loose or missing. No signs of rust that may indicate loose lug nuts.

Hub Oil Seal: Not leaking and all bolts are there.

Budd Spacing: Nothing stuck between duels, evenly spaced.

Rear Suspension:

Springs: No loose, cracked, broken or missing leaf springs.

Shocks: Securely mounted and not leaking.

Air Bags: Not damaged or leaking. Not weather checked.

U-bolts: Not broken or missing. No loose nuts.

Spring mounts: No loose, missing or cracked spring mounts. No loose or Missing bushings.

Air Mounts: No cracked, loose or broken air mounts or bolts.

Rear Brakes:

Brake Hoses: Not cracked, worn, frayed or leaking. All couplings are fit and secure.

Brake Chamber: Securely mounted. No leaks, cracks or dents. No loose or missing clamps.

Slack adjustor: Securely mounted. No bent or broken parts. No more than one-inch push rod travel when pulled by hand. Parking brakes must be released, and wheels chocked when checking for push rod travel.

Push rod: Not bent or damaged. Securely attached.

Brake Drum: No cracks dents or holes.

Brake Linings: Not excessively thin and have at minimum ¼ inch of wear material. Not broken or saturated with oil or grease.

Rear of Vehicle:

Splash Guards: Securely mounted, not damaged.

Lights: Taillights, turn signals, 4 ways/flashers and brake lights all work, are securely attached and not broken.

Reflectors: check reflective tape on mud flaps. Must be secure and clean.

Tractor:

Air Hoses: Are attached to the back of the tractor and front of the trailer. Hoses are not worn, cut, crimped or rubbing on anything. Hoses are not leaking. Glad hands are properly connected, and hoses are properly supported.

Electric Connectors and Lines: Electric line are properly supported and not frayed. They are not rubbing on anything. Electrical boxes on tractor and trailer are secure.

Coupling System:

Mounting Bolts: No loose or missing bolts, brackets or nuts.

Platform: No cracks or breaks. Must be securely attached.

Locking Jaws: Jaws must be securely closed around the kingpin.

Release Arm: Secure and all the way in. (engaged)

5th Wheel Skid Plate: Properly lubricated, securely mounted to the platform and bolts and/or pins are not missing.

Slide 5th Wheel Pins: Check for loose or missing pins and they are fully locked.

Semi-Trailer:

Air Hoses: Hoses are securely attached to the back of the tractor and the front of the trailer. Hoses are not worn, frayed, crimped or rubbing anything. Glad hands are properly connected, and hoses are properly supported.

Electric Connectors and Lines: Electric lines are not frayed and properly supported, not rubbing on anything. Electrical box on trailer is secure and working.

Inside Vehicle:

Safety Belt: Secured and mounted, not ripped or frayed.

Emergency Equipment: Fire extinguisher – properly rated and property charged.

Spare fuses – in dash.

Three emergency triangles - not broken, in side compartment.

****Safe Start**:** Depress clutch, transmission in neutral, check that parking brake is on. Start engine. Check that anti-lock brake light comes on and goes off.

Temperature gauge: is functioning and should slowly climb to normal range.

Oil Pressure Gauge: Pressure should be reading normal.

Volt Gauge: Shows alternator is charging.

Speedometer: State that it works. Will demonstrate it during air loss test.

Air gauges: Shows that pressure is rising.

Light Indicators: Right, left, 4-way/hazards, hi beam on dash.

Horns: Air horn and city horn. (Ask if they want you to test aloud)

Heater: Turn on heater, place fan to full. Feel the floor by your feet to make sure heat is coming out.

Defroster: Turn on defroster, place fan on full. Feel the dash by the front window to make sure the defroster is working.

Windshield: Should be clean, not broken or cracked.

Mirrors: Clean and not cracked. Properly adjusted.

Wipers and Washer: Arms runs smoothly, and rubber wiper is not damaged. Show that washer will pump fluid.

Air Brake Test

1. Start the engine to fully charge the tanks.
2. Place transmission in a low gear and shut down engine while in gear. Turn ignition key to "on" position.

OR

Shut engine down and place chocks under tractor drive tires. Turn ignition key to "on" position.

3. Push the tractor parking brake and the trailer air supply buttons IN to release the brakes. Then allow the air system to stabilize. The needles on the air gauge should stop moving down,
4. Apply the service brakes and hold for one minute to make sure there is no more than a 4 psi loss. Listen for leaks.
5. Pump the service brake slowly until the "Low Pressure Signal" comes on. (around 60 psi)
6. Pump the brake faster until the Trailer Air Supply and The Tractor Parking Brake buttons pop out. (about 40-20 psi) Keep pumping until they pop, do not touch buttons with your hand to help!!!
7. Remove chocks at this time if used. Depress clutch, start engine and gently pull against the parking brakes to make sure they will hold the vehicle from moving.
8. Place transmission in neutral, release the clutch and build up air pressure to 120-130 psi.
9. Place the transmission in a low gear, push in the Trailer Air Supply/Trailer Parking Brake button, and check the Tractor Parking Brake by gently pulling against the brake.
10. Pull out the Trailer Air Supply/Trailer Parking Brake button, push in the Tractor Parking Brake button and gently pull against the Tractor Parking Brake to see if they will hold the vehicle AND to make sure the 5th wheel connection is secure.
11. With all the brakes released, pull forward a few feet (approx. 5 mph), ease in the clutch and apply the service brake to check that they are working properly. Not pulling to the right or left, no delay, no noise, and a solid stop. While you are moving forward, it is the time to make sure your speedometer is working.

L – Listen (#4)

A – Alarms (#5)

B – Buttons (#6)

S – Service (#11)