

Pre-Trip Inspection Checklist

This checklist covers different parts of the vehicle you would check before a trip.

Note that some specifications described in the following content may not be the same as the specifications followed by your agency. Always check with your State agency's standards and specifications when using these guidelines.

Sections

- **Front of the Vehicle**
- **Engine Compartment**
- **Engine Start and Cab Check**
- **Steering**
- **Suspension**
- **Brakes**
- **Wheels**
- **Side of Vehicle**
- **Back of Vehicle**
- **Trailer**

Front of the Vehicle

- Check to make sure the vehicle is not leaning to one side or the other**
- Look for any leaks or puddles on the ground**

☐ Headlights

- Check headlight assembly on left and right side of the vehicle for properly mounted and secure, clean, not missing, and functional.

☐ Signal Lights

- Check that the left and right turn signals are properly mounted and secure, clean, not cracked, functional, not missing and amber in color.

☐ Cab Lights and Dump Body Lights

- Cab lights and dump body lights must be securely mounted, clean, functional, none missing, and amber in color.

Engine Compartment**☐ Leaks and Hoses**

- Look for puddles on the ground
- Look for dripping fluids on underside of engine and transmission
- Inspect hoses for condition (wear and cracks) and leaks

☐ Oil Level

- Indicate where dipstick is located
- Check oil level by pulling out stick, observing level and wiping off stick and reinserting
- Oil level must be within the safe operating range and above the refill mark

☐ Coolant Level

- Check to make sure the coolant level is at proper level by inspecting reservoir sight glass
- If vehicle does not have sight glass, you must say “if the engine was cool I would remove radiator cap and check for visible coolant level”

❑ Power Steering Fluid

- Indicate where power steering fluid dipstick is located
- Check for adequate power steering fluid level with a dipstick
 - Level must be above refill mark
- Can check level by sight glass if equipped

❑ Alternator, Water Pump, and Air Compressor

- Check alternator, water pump and air compressor for no missing bolts and that the units are properly mounted and secure

❑ Alternator/ Water Pump Belts

- Check alternator and water pump belt for any cracks, frays and worn areas
- Check alternator and water pump belt for snugness and that it does not have more than ½ to ¾ inch of play

❑ Air Compressor

- These air compressors are gear driven and not belt driven and you must tell the examiner that
- Make sure the air compressor is securely mounted and not missing any bolts
- Check hoses for any damage or leaks

Engine Start and Cab Check**❑ Safe Start – Manual Transmission**

- Make sure the parking brake is set
- Depress clutch
- Place gearshift lever in neutral
- Start engine and release clutch slowly
- Leave engine running for air pressure to rise to 100-125 psi and start the rest of the check

☐ Safe Start – Automatic Transmission

- Place foot on brake and make sure vehicle parking brake is set before starting engine
- Start engine and remove foot from the brake
- Leave engine running for air pressure to rise to 100-125 psi and start the rest of the check

☐ Oil Pressure Gauge

- Make sure the oil pressure gauge is working
- Check that pressure gauge shows increasing or normal oil pressure or that the warning light goes off
 - If equipped, oil temperature gauge should begin a gradual rise to the normal operating range

☐ Ammeter/Voltmeter

- Check that gauges show alternator and/or generator is charging or that warning light is off

☐ Mirrors and Windshield

- Check that mirrors are clean and adjusted properly from the inside of the vehicle
- Mirrors must be free of obstructions and securely mounted
- Windshields shall be clean with no illegal stickers, no obstructions, or damage to the glass

☐ Wipers/Washers

- Check the wiper arms and blades are secure, not damaged, and operate smoothly
- Demonstrate that wiper fluid works properly if equipped

☐ Emergency Equipment

- Check for spare electrical fuses
- Check for three red reflective triangles
- Check for a properly charged and rated fire extinguisher

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

Steering Wheel Play

— Non-power steering: Check for excessive play by turning steering wheel back and forth

- Play should not exceed 10 degrees

— Power steering: With the engine running, check the excessive play by turning the steering wheel back and forth

- Play should not exceed 10 degrees

Lighting Indicators

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

- Left turn signal - look for the flashing light;
- Right turn signal - look for the flashing light;
- Four-way emergency flasher (some trucks have button on side, or a toggle switch on the panel by the door) - look for the flashing lights on dash; and
- High beam Headlight indicator - look for the blue headlight to appear.

Horn

— Check the air horn and/or electric horn work

Heater and Defroster

— Test that the heater and defroster work

Parking Brake Check

— Apply parking brake only and make sure that it will hold the vehicle by shifting into a lower gear and gently pulling against the brake (the air pressure must be at least 100 psi)

☐ Air Brake Check L/A/B (Air Brake Equipped Vehicles Only)

- Procedure designed to ensure that any safety device operates correctly as air pressure drops from normal to low air condition
 - For safety purposes, in areas where an incline is present, you will use chocks during the air brake check
- With the engine running, build the air pressure to governed cut-out
- Once it reaches that level, shut off the engine
- Release the tractor protection valve and push in parking brake
- Fully apply the foot brake and hold it for one minute
- Check the air gauge to see if the air pressure drops more than three pounds in one minute (single vehicle) or four pounds in one minute (combination vehicle)
- Without re-starting the engine, turn the key to the on position or battery charge position
- Begin fanning off the air pressure by rapidly applying and releasing the foot brake
- The low air warning devices should activate before the air pressure drops below 60 psi
- Continue to fan off the air pressure and at approximately 20 to 40 psi on a combination vehicle the tractor protection valve and parking brake valve should pop out (On single vehicle types only the parking brake valve will pop out)

☐ Safety Belts

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

☐ Lights/Reflectors

- Check that all external lights and reflective equipment are clean, functional and not missing
- Checks of brake, turn signal and four-way flasher functions must be done separately

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
- Look for broken or distorted coil springs if equipped
- 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

Spring Mounts

- Look for cracked or broken spring hangers, broken, loose or missing bolts, and U-bolts

- You can refer to this acronym to assist you:
 - F- Front- inspect the front of the spring first and look for any broken or cracked spring hangers and any missing, loose or broken bolts.
 - U- U-bolt- check the U bolt to make sure it is not broken, missing, or loose.
 - R- Rear-inspect the rear of the spring last and look for any broken or cracked spring hangers and any missing, loose or broken bolts.

Shock Absorbers

- See that shock absorbers are secure and that there are no leaks
- Perform the same suspension components inspection on every axle (power unit and trailer, if equipped)

Brakes

Front Brakes - Slack Adjuster

- Look for broken, loose, or missing parts
- The angle between the push rod and adjuster arm should be a little over 90 degrees when the brakes are released, and not less than 90 degrees when the brakes are applied
- When pulled by hand, the brake rod should not move more than one inch when the brakes are released

Front Brakes - Brake Chambers

- See that brake chamber is not leaking, cracked, and is mounted securely

Front Brakes - Brake Hoses/Lines

- Look for cracked, worn, or leaking hoses (audible), lines and couplings.

Front Brakes - Brake Drum

- Check for cracks or warps. Also check for loose or missing bolts
- Brake linings (where visible) should not be worn dangerously thin

— Components such as linings and drums should be free of grease, oil, etc.

Front Brakes - Brake Linings

- Check that a visible amount of brake lining is showing
- If the brake drum and linings are enclosed by a backing plate, explain to the examiner the name of these components and what you would inspect them for if you could see them clearly

Rear Brakes - Slack Adjuster

- Look for broken, loose, or missing parts
- The angle between the push rod and adjuster arm should be a little over 90 degrees when the brakes are released, and not less than 90 degrees when the brakes are applied
- When pulled by hand, the brake rod should not move more than one inch when the brakes are released

Rear Brakes - Brake Chambers

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

Rear Brakes - Brake Hoses/Lines

- Look for cracked, worn, or leaking hoses (audible), lines and couplings.

Rear Brakes - Brake Drum

- Check for cracks or warps
- Check for loose or missing bolts
- Components such as linings and drums should be free of grease, oil, etc.

Rear Brakes - Brake Linings

- Check that a visible amount of brake lining is showing
- If the brake drum and linings are enclosed by a backing plate, explain to the examiner the name of these components and what you would inspect them for if you could see them clearly

Wheels **Rims**

- Check for damaged or bent rims and any illegal welds
- Rims cannot have welding repairs

 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

 Tread Depth

- Check for minimum tread depth
 - 4/32" on steering axle tires (front)
 - 2/32" on the rear tires

 Tire Condition

- Check that tread is evenly worn and look for cuts or other damage to tread or sidewalls (cuts, ripped, torn, bulged)

 Tire Inflation

- Check for proper inflation by using a tire gauge, or by striking tires with a mallet or other similar device (kicking tires will not get you credit)

 Spacers or Bud Wheels

- Spacers should be evenly centered, with the dual wheels and tires evenly separated and no objects stuck between them
- Bud wheels or spacers should not have any cracks or excessive rust
- Be prepared to perform the same wheel inspection on every axle (power unit and trailer, if equipped)

Side of Vehicle **Doors and Mirrors**

- Check that doors are not damaged and that they open and close properly from the outside
- Check that mirrors and mirror brackets are not damaged and are mounted securely with no loose fittings
- Hinges should be secure with seals intact

 Fuel Tank

- Check that tanks are secure, caps are tight, and that there are no leaks

 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 cracks, holes, etc.
- 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

Back of Vehicle **Lights and Tailgate**

- Check tail lights to make sure they are clean and that none are missing.
- Check running lights to make sure they are clean and free of cracks or any other damage and that none are missing.
- Make sure the tailgate is securely mounted

Combination Vehicles

- Make sure glad hand rubber gaskets are in good condition with no cracks or signs of leaking
- Check:
 - Electrical plug to make sure it is secure
 - Electrical wire for cuts or damage that could cause sparks
 - Mounting bolts to make sure they are secure
 - Catwalk is solid, clear of objects, and securely bolted to the frame

Pintle Hook and Pintle Eye

- Check for properly mounted and secure pintle hook and pintle eye
 - No stress cracks or broken welds
 - The hook must not be bent or twisted
- Safety latch properly mounted and secure
 - Cotter pin is in place
- Hitch release lever is secure

Safety Chains

- Make sure safety chains are in place and securely mounted
- Make sure that the tongue drawbar is not bent or twisted
 - Check for broken welds or stress cracks

Trailer

Front of Trailer – Air/Electrical Lines

- Trailer air connectors sealed and in good condition
 - Listen for audible leaks
- Glad hands locked in place, free of damage, and air leaks
- Trailer electrical plug firmly seated and locked in place

❑ Front of Trailer – Header Board

— Header board secure, free of damage, and strong enough to contain cargo

❑ Front of Trailer – Lights/Reflectors

— Lights on the front and the reflector tape clean and functional and not missing any parts or cracked

❑ Side of Trailer

— Landing gear

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

— Lights/reflector/tape

- Check the lights and reflectors on the side of the trailer for any damage, cracks, or missing parts
- Trailer must be marked with clean, reflective tape

❑ Frame and Bed of Trailer

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

— Check that ties, straps, chains, and binders are secure

❑ Rear Wheels of Trailer

— Inspection procedures for the rear wheels of the trailer are the same as those for the rear wheels of the vehicle

— Basic components:

- Rims
- Axle seals
- Lug nuts
- Tread depth
- Tire condition
- Tire inflation
- Spacers or bud wheels

❑ Rear Suspension of Trailer

— Springs/air/torque

- Look for missing, shifted, cracked, or broken leaf springs
- Look for broken or distorted coil springs if equipped
- 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

— Spring mounts

- Look for cracked or broken spring hangers, broken, loose or missing bolts, and U-bolts
- FUR:
 - Front
 - U-bolt
 - Rear

— Torsion bars/shocks

- 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

❑ Rear Brakes of Trailer

— Inspection procedures for the rear brakes of the trailer are the same as those for the rear brakes of the vehicle

— Basic components:

- Slack adjuster
- Axle seals
- Lug nuts
- Tread depth
- Tire condition
- Tire inflation
- Spacers or bud wheels

Back of Trailer – Lights/Reflectors/Tape

- Lights and reflectors
 - Clean
 - Functional
 - Not missing any parts
 - Red in color
- Reflective tape
 - Clean
 - Visible
 - Not damaged

 Back of Trailer – Lifts or Ramps

- Lifts or ramps
 - Securely mounted