

**PRE-TRIP INSPECTION CHECKLIST**  
**SEMI-TRACTOR TRAILER-AIR BRAKES**

**NOTE:** CDL Specialists, LLC provides this information as a courtesy to our trainees. All information is presumed to be accurate and up-to-date. The company assumes no responsibility for misprints, out-of-date, or otherwise inaccurate information. The only difference between this list and the current CDL manual is this list is in the order in which the inspection should be conducted vs. being in alphabetical order. Please refer to the current Indiana CDL manual for all CDL skills testing requirements.

**Re-production is strictly prohibited!**

**ESTIMATED TIME:** If done properly, this should take approximately 15-20 min from start to finish.

**AIR BRAKE CHECK**

Start with the air pressure below 90 PSI. **(This is done to check air governor "cut in" pressure.)**

**STEP 1**

- Watch the air pressure gauge to make sure the pressure builds to a range between **120 – 140 PSI**. At this time the air governor should cut out.

**(wait for gauges to stop moving)**

**STEP 2**

- Turn the engine off. Turn the key to the on position without starting the engine.
- Push in brake valves to release the brakes.
- Allow the air pressure to stabilize.
- Firmly apply and hold the service brake pedal down for 1 minute.
- Watch your air gauges to make sure there is **no more than a 3 PSI** drop in air pressure in one minute for a combination vehicle equipped with **ELECTRIC** brakes on the trailer OR **no more than a 4 PSI** drop in air pressure in one minute for a combination vehicle equipped with **AIR** brakes on the trailer

**STEP 3 (Make Sure key is ON!)**

- "Fan" the brakes or "pump down" the air pressure to verify that the low air warning buzzer and/or light comes on before **55 PSI**.

**STEP 4**

- "Fan" the brakes again until the air pressure drops far enough for the brake valves to pop out. Verify that **both brake valves** pop out at **between 20-45 PSI**. **(Do not touch or assist the valves!)**

**INTERNAL INSPECTION**

**LIGHTING INDICATORS ON DASH**

- Left turn, Right Turn, 4-ways, High beam, ABS on dash, DEF indicator **(If Equipped)** all work properly
- ABS Light comes on and goes out indicating my ABS is working correctly

**EMERGENCY EQUIPMENT**

- Spare electrical fuses
- **3** Red reflective triangles, **6** fuses or **3** liquid burning flares
- Properly charged, Mounted securely fire extinguisher

**WINDSHIELD & TRAFFIC MONITORING DEVICES. (MIRRORS / CAMERAS)**

- Windshield is clean, no cracks or flaws
- Mirrors are clean and adjusted properly **(If Equipped)**
- Cameras are clean and working

**WIPERS & WASHERS (Must Operate Both)**

- Mounted securely to wiper arm
- Not broken or cracked
- Both operate and work properly

**HEATER & DEFROSTER (Must Operate Both)**

- Both operate and work properly

**HORNS (Must Operate Both)**

- Both operate and work properly

**PARKING BRAKE VALVES / TUG TEST**

**Release the truck brakes**

**(Yellow valve ONLY IF AIR EQUIPPED TRAILER)**

Slowly pull against the trailer brakes to ensure they will hold. Pull the tractor valve out.

**Release trailer brakes**

**(Red valve ONLY IF AIR EQUIPPED TRAILER)**

Slowly tug against the tractor brakes to ensure they work.

### **SERVICE BRAKE TEST**

(When ready for this, inform the examiner. For SAFETY and Vehicle location restrictions, you may be performing this later or at a different location before the backing skills are performed. Your examiner will instruct you at that point on where/when you will perform this.)

- Place vehicle in a forward gear
- Pull forward slowly to 5MPH
- Apply the brake and stop

Vehicle shouldn't pull to either side

### **EXTERNAL LIGHT CHECK**

**(Must tell examiner to assist)**

- ❑ **LIGHT OPERATION CHECK (FRONT & REAR)**
  - Left turn, Right Turn, 4-ways, Clearance, High beam, Low beam, Taillights, Brake lights.

### **FRONT OF VEHICLE/ENGINE AREA**

- ❑ **LENSES**
  - Proper color, clean, not broken or missing

### **ENGINE COMPARTMENT**

- ❑ **FLUID LEVELS**
  - Oil, Coolant, and Power Steering, fluids are all full (*If Hydraulic Brakes*) Checks Brake Fluid
- ❑ **FLUID & AIR LEAKS**
  - Check for puddles and drips on the ground
  - Inspect all hoses and air lines for condition and leaks, both fluid and air.
- ❑ **STEERING GEAR BOX, HOSES, ALL VISIBLE CONNECTING LINKS, ARMS, & RODS FROM THE STEERING BOX TO THE WHEEL**
  - Mounted securely
  - Not cracked or broken
  - Not leaking fluid
  - No missing nuts, bolts, or cotter keys
  - All visible connecting links, arms, rods, joints, & sockets are not worn or loose.

### **STEERING AXLE (FRONT AXLE)**

- ❑ **TIRES (ICD)**
  - **(I)nflation** – Check for proper inflation using a tire gauge
  - **(C)ondition** – no bulges or cuts
  - **(D)epth** –checked with depth gauge
  - Minimum of 4/32" Tread Depth
  - Valve stems are accessible
  - Not broken or cracked
  - Valve cap present
- ❑ **RIMS**
  - Not cracked or broken
  - No welding repairs
  - Stud holes are not elongated (out of round)

- ❑ **LUG NUTS & STUDS**

- None are missing or lose
- No shiny threads or rust trails
- No broken studs

### **FRONT SUSPENSION**

- ❑ **SPRING MOUNTS-Front & Back, LEAF SPRINGS, (If Equipped) AIR BAGS, & SHOCK ABSORBER**
  - Mounted securely
  - Not cracked or broken
  - All aligned and not shifted
  - Shocks not leaking hydraulic fluid
  - (If Equipped) Air bags not leaking air
  - Vehicle is sitting Level, front to back, side to side

### **FRONT BRAKES**

- ❑ **BRAKE LINES or HOSES**
  - Mounted securely
  - Not cracked, broken, or leaking air
- ❑ **BRAKE CONTAMINATES**
  - No grease or oil on the brake linings

### **SIDE OF VEHICLE (TRUCK & TRAILER)**

- ❑ **LENSES & REFLECTORS**
  - Proper color, clean, not broken or missing
- ❑ **REFLECTIVE TAPE (SIDE AND REAR OF TRAILER)**
  - Present, Secure and not torn
- ❑ **TRAFFIC MONITORING DEVICES (CAMERAS or MIRRORS & BRACKETS)**
  - Mounted securely
  - Clean, not cracked or bent
  - No Missing Parts
- ❑ **BATTERY, CABLES, & BOX/COVER**
  - Mounted securely
  - Not cracked or worn
  - No excessive corrosion
  - Box cover or door is secure
- ❑ **FUEL TANK & (If Equipped) DEF TANK**
  - Mounted securely
  - Cap is tight
  - No leaking from Tanks or Lines
- ❑ **FRAME(S) (TRUCK, TRAILER, TANDEM(S))**
  - No cracks, breaks, or broken welds
  - No Holes in the cargo floor
  - Trailer tandem release lever and pins are secure

## **COUPLING SYSTEM**

- ❑ **AIR & ELECTRICAL LINES, CONNECTORS**  
*(Must mention both ends.)*
  - Seated, Sealed, Locked in place
  - Not cracked, broken, or leaking air
  - Electrical line not spliced
  - All lines are not tangled or dragging
- ❑ **5<sup>TH</sup> WHEEL SKID PLATE**
  - Securely Mounted by the platform
  - Not cracked, broken, or excessively worn
  - Properly lubricated
- ❑ **KINGPIN, APRON, GAP**
  - Kingpin is in place
  - Not bent or broken
  - No gap between apron and 5<sup>th</sup>-wheel
  - Apron is properly lubricated
- ❑ **LOCKING & SAFETY DEVICES**  
*(Jaws, Release arm, Locking pins)*
  - Locking jaws are secured around the kingpin
  - No play between kingpin and jaws/lever
  - Release arm is in the locked position and safety latch is in place
  - Locking pins are not damaged and fully engaged

## **TRAILER**

- ❑ **LANDING GEAR & CLEARANCE**  
*(Support Frame, Handle, Pads)*
  - Landing gear is fully raised
  - Not damaged
  - No missing parts
  - Handle secure
  - Clearance-Enough space between landing gear and tractor so they do not hit each other during turns.

## **REAR OF TRAILER**

- ❑ **LENSES & REFLECTORS**
  - Proper color, clean, not broken or missing
  - Reflective tape on trailer sides and rear is present, secure, not torn