

Worksite: _____ Instructor: _____ Date/Time: _____

Topic C642: Tractor-Trailer (Pre-trip Inspection)

Introduction: Following is an inspection checklist to ensure the semi is safe for driving on the road and highways:

Pre-trip inspection for tractor/trailers: Have all defects corrected before departure.

- When approaching the semi, look for leakage of water, fuel, or lubricants under the vehicle.
- Check under the hood for water and crankcase levels.
- Check the fan and compressor belts for cracks, excessive slack and wear. Check the engine's general condition.
- Start engine and set at fast idle for warm-up. Check for abnormal engine noise. Check steering wheel action.
- Check gauges for normal readings. Low air warning should operate if air pressure is below 60 pounds.
- Anti-lock warning light should light briefly and then go out (vehicles with 121 air brakes and operable anti-lock).
- Check emergency equipment, horn(s), and wipers.
- Turn on all lights including 4-way flasher switch for turn signals.
- Switch headlights on and check both beams. Leave cab to check headlights and turn signals. Then turn off headlights only. Leave all other lights on.
- Check front clearance and identification lights.
- Check left and right front wheels, tires, lugs or studs.
- Check for leaks around hubs.
- Check right side of cab, door, mirrors, etc. and check lights and reflectors on right side.
- Check right rear tractor tires, wheels, lugs, or studs. Check for thrown lubricant.
- Check trailer light and brake lines for secure connections.
- Be sure manual petcocks are open.
- Be sure lines are properly secured to prevent entangling or chafing.
- Check hook-up, fifth-wheel, jaws, and release lever on tractor trailer.
- Check pintle hook, tow bar, safety chains, and converter gear on full-trailer unit.
- Check right trailer tires, wheels, lugs, or studs. Check for thrown lubricant.
- Check rear of body, mud flaps, rear lights, rear reflectors, rear end protection.
- Check left trailer tires, wheels, lugs, or studs. Check lights and reflectors on left side.
- Check left rear tractor tires, wheels, lugs, or studs. Check for thrown lubrication.
- Re-enter cab. Re-check all gauges. Air pressure should be at maximum.
- Check parking brake.
- Check brakes and stoplights.

Older tractors (pre-121 brakes): With fully charged system, check air brakes as follows:

- Put trailer air supply valve in normal. Use treadle valve to apply and release.
- Release treadle valve and put trailer air supply valve in Emergency. Trailer brakes should come on and stay on.
- Return trailer air supply valve to normal and fan down brakes. Recheck low air warning at 60 PSI. Between 45 and 20 PSI, the trailer brakes should come on.

New tractors (equipped with 121 brakes): WARNING: Because many of the following checks must be performed with parking brake(s) released, driver must remain in vehicle ready to reapply parking brakes if necessary.

- Release all parking brakes.
- Push trailer air supply valve to supply. Use treadle valve to apply and release brakes.
- Release treadle valve. Place tractor park valve in park. Tractor brakes, only, should apply.
- Apply tractor-trailer park valve. Trailer brakes should apply.
- Release all parking brakes and turn off engine. Use treadle valve to fan down brakes. At 60 PSI on primary reservoir, low air warning should operate and pressure in secondary reservoir should apply.

All tractors: Recharge system to check for leaks.

- Apply service brakes and hold for 1 minute. After initial pressure drop of 5-10 PSI, pressure drop should be under 4 PSI.
- If audible leaks or rapid pressure drops are noted, have leakage corrected before departure.
- Turn off 4-way flasher and actuate left and right turn signals. Proper operation can be ascertained by checking front ones.
- Make a test stop before leaving the yard. Drain air tanks daily. Check tires twice daily or every 100 miles.

Conclusion: Stay alert and drive safe. Utilize this inspection checklist before heading off down the road.

Employee Attendance: (Names or signatures of personnel who are attending this meeting)

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These guidelines do not supersede local, state, or federal regulations and must not be construed as a substitute for, or legal interpretation of, any OSHA regulations.