CDL Combination Vehicles Cheat Sheet

Study Section 6 of the commercial driver handbook. Use the manual for your state to prepare for its tests.

Identify the air lines by function

The service line carries the control signal for trailer service braking. The emergency or supply line charges the trailer reservoirs. Inspect the seals and match the connections before a trip. California CDL Handbook, Section 6.2

Verify fifth-wheel engagement

Inspect the connection after backing under the trailer. Check that the locking jaws grip the kingpin shank and there is no gap between the upper and lower fifth-wheel surfaces. Follow the full coupling procedure in your handbook. California CDL Handbook, Section 6.4

Slow before curves

Keep heavy cargo low and centered and slow before turns. Steering changes can amplify through multiple trailers, especially at high speed. California CDL Handbook, Section 6.1

Quick review

Cover the answers as you review, or take the interactive practice test.

1. Why are combination vehicles (tractor-trailers) more likely to roll over than single straight trucks?

Answer: High center of gravity combined with the crack-the-whip rearward amplification effect

High cargo center of gravity plus lateral acceleration amplified toward the rear of the trailer (crack-the-whip) causes trailers to tip over easily in fast turns or lane changes. CDL Manual §6.1.1 — Rollover Risks

2. Why should you avoid using the trailer hand valve as a parking brake?

Answer: Air pressure can bleed off over time, releasing the trailer brakes and allowing the rig to roll away

The trailer hand valve applies the trailer’s service brakes with air pressure that can leak away. Set the parking brakes and chock the wheels if the trailer lacks spring brakes. CDL Manual §6.2.1, Trailer Hand Valve

3. Before backing under a semi-trailer during coupling, how high should the trailer nose be relative to the tractor's fifth wheel?

Answer: Slightly lower than the center of the fifth wheel so the fifth wheel lifts the trailer slightly when backing under

The trailer apron must sit slightly below the center of the tilted fifth wheel so the fifth wheel picks up the trailer smoothly without striking the kingpin above the plate. CDL Manual §6.4.1 — Coupling Steps