CDL Air Brakes Cheat Sheet

Study Section 5 of the commercial driver handbook. Use the manual for your state to prepare for its tests.

Know the three braking functions

Service brakes slow the vehicle during ordinary driving. Parking brakes hold a stopped vehicle. The emergency system uses components of the other systems to provide braking if air pressure falls.
California CDL Handbook, Section 5.1

Use the right leak-test procedure

A released-brake check and a sustained applied-brake check measure different conditions. Use the applicable time and pressure-loss limit for your vehicle and the test prescribed by your state.
California CDL Handbook, Section 5.3

Practice the warning and spring brakes

Use the pressure criteria in your current skills-test material and the manufacturer specifications for your vehicle. Secure the vehicle against movement before releasing parking brakes for a test.
FMCSA state manual directory

Quick review

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

1. What is the function of the air compressor governor in an air brake system?

Answer: It controls when the air compressor pumps air into the storage tanks (cut-in and cut-out pressure)

The air compressor governor monitors tank air pressure, cutting in the compressor around 100 psi and cutting it out around 120-125 psi. CDL Manual §5.1.2 — Air Compressor Governor

2. Under federal air brake standard FMVSS 121, at what pressure must the warning signal be on with the ignition in the run position?

Answer: When service reservoir pressure is below 60 psi

FMVSS 121 requires a continuous warning when service reservoir pressure falls below 60 psi with the ignition on. Some older vehicles are covered by a separate in-service rule. 49 CFR §571.121, S5.1.5

3. During the California CDL spring brake check, in what pressure range do the controls on a typical air-brake tractor-trailer pop out?

Answer: Between 20 and 45 psi

The handbook gives 20 to 45 psi as the normal range. Follow the manufacturer’s specified pressure for the vehicle you test. CDL Manual §5.3.3.3, Spring Brake Test