

Brake Checks

UTAH CDL
2007

Seven step brake system check:

(Adapted from the Utah CDL handbook)

1. Test low air pressure warning
2. Test the spring brakes
3. Test air pressure build up
4. Test for air leaks
5. Test governor operation
6. Test the parking brake
7. Test service brakes

1. Test low pressure warning

- With the engine off, electrical power on, and enough air pressure that the low pressure signal is not on
 - Step on and off of the brake pedal to reduce air pressure to the point that the low air alarm activates.
 - This should be before the air pressure drops below 60 psi.

2. Testing the spring brakes

- Continue to step on and off the brake pedal to reduce the air pressure.
- The yellow parking brake knob should pop out when the air pressure reaches the 20-40 psi range.

3. Test air pressure build up

- Start engine and engage the fast idle (900-1100 RPM)
- Air pressure should build into the 85-100 psi range within 45 second in a dual air system.
- Larger air systems may take longer, check the manufacturer's specs.

4. Test for air leaks

- With the system fully charged
 - Turn off the engine
 - Release the parking brake
 - After the initial pressure drop, observe air pressure for one minute. Pressure drop of >2 psi in one minute may be a problem.
 - Apply moderate braking pressure and hold for one minute
 - After the initial pressure drop, observe air pressure for one minute. Pressure drop of >3 psi in one minute may be a problem.

5. Test air compressor governor operation

- Start engine and engage the fast idle. (900-1100 RPM)
- Observe air pressure rise until the compressor cuts out. (typically 125 psi.)
- With the engine still running, slowly step on and off the pedal to reduce the air pressure to the point where the air compressor starts building air again. (typically 100 psi.)
- Check manufacturers specs for exact pressures.

6. Test parking brake

- Apply parking brake and remove the chocks.
- Place in gear and gently raise RPM's to a fast idle to see if the parking brake holds.
- The apparatus should not move.

7. Test service brakes

- Release the parking brakes, move the apparatus forward at about 5 mph.
- Firmly apply the brakes, note any pull to one side, unusual feel or delay in stopping.
