

Air Brake Theory Assessment

1. The low air pressure warning signal will come on before the pressure in the air tanks falls below:
 - a. 75-80 psi
 - b. 55-75 psi
 - c. 70-75 psi
 - d. 90-100 psi
2. With air brake vehicles, the parking brake should be used:
 - a. As little as possible
 - b. Only during pre-trip inspections
 - c. Whenever you leave the vehicle unattended
3. The proper use of the brakes when going down a long steep grade after selecting a proper gear is to brake until your speed is about ___ below the posted speed limit and release your brake.
 - a. 15 mph
 - b. 10 mph
 - c. 5 mph
4. To check the free play of manual slack adjusters of S-cam brakes, you should park on:
 - a. Level ground and apply the parking brakes, then apply service brakes
 - b. Level ground and drain off air pressure before checking adjustment
 - c. Level ground, chock the wheels and release the parking brakes
5. The most important thing to do when a low air pressure warning comes on is:
 - a. Stop and safely park as soon as possible
 - b. Downshift
 - c. Up-shift
6. Excessive use of the service brakes results in overheating which can lead to:
 - a. Proper adjustment of s-cam
 - b. Increase contact between the brake drums and linings
 - c. Expansion of the brake drums
7. Modern air brakes combine three different systems. They are the service, the parking, and the ___ brakes.
 - a. Drum
 - b. Emergency
 - c. Foot
8. How should you check that your service brakes are working properly?
 - a. Park on level ground, wait until normal air pressure is reached, release the parking brake and move forward slowly at about 5 mph. Then apply the brakes firmly
 - b. Park on slight grade, drain off air pressure, set parking brake and check to the movement.
 - c. Park on level ground, chock the wheels, engage the parking brakes when you have the correct amount of air pressure to do so and shut the engine off.

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9. Some air brake systems have an alcohol evaporator. What may happen if you don't keep the proper level of alcohol?
 - a. Ice may form in the air brake valves and cause brake failure
 - b. The s-cam may not take back when you release the brake pedal
 - c. Ice may form on the brake drums and wear them out.
10. Your truck or bus has a dual air brake system. If a low air pressure warning comes on for only one system, what should you do?
 - a. Reduce your speed and drive to the nearest garage for repairs
 - b. Reduce your speed and test the remaining system while under way
 - c. Stop right away and safely park. Continue only after the system is fixed.
11. Emergency stab braking is:
 - a. When you press hard on a brake pedal and apply hand valve while you stop
 - b. Press on the brake pedal as hard as you can, release the brakes when the wheels lock, put on the brakes again when the wheels start rolling
 - c. Use light steady pressure on the brake pedal
12. What is a "wig wag"
 - a. A mechanical arm that signals low air pressure
 - b. Part of the stop light system
 - c. A spring mount for hair pieces
13. The brake system that applies and releases the brakes when the driver uses the brake pedal is the ___ brake system.
 - a. Service
 - b. Emergency
 - c. Parking
14. Your truck has a dual air system and one of the system loses its pressure. What will happen?
 - a. Brake drums will not be fully pressurized
 - b. The manual slack adjusters of the s-cam brakes will not be set properly
 - c. Either the front or back brake will not be fully operational
15. Your brakes are fading when:
 - a. The brake pedal feels spongy when you apply pressure
 - b. You have to push harder on a brake pedal to control your speed on a downgrade
 - c. Less pressure is needed on the brake pedal for each stop
16. Which of the following will be true about your brake function if your ABS fails?
 - a. It may cause problems with other mechanical systems and possibly pose a huge fire risk
 - b. You will still have normal brake function and will just need to get the ABS repaired soon
 - c. It will slow your truck or bus and force you to pull over
17. Which of these is NOT a proper time to apply the parking brakes?
 - a. If you are going to test the parking brake to make sure that it holds the vehicle
 - b. If the brakes are very hot (e.g. just after coming down a steep grade)
 - c. If you will be stopping for only one hour

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18. The air compressor governor controls:
 - a. The speed of the air compressor
 - b. When air is pumped into the air tanks
 - c. Air pressure applied to the brakes
19. The safety valve discharges automatically at the pressure of:
 - a. 100 psi
 - b. 150 psi
 - c. 50 psi
20. All air brake equipped vehicles have:
 - a. An air usage gauge
 - b. A supply pressure gauge
 - c. A backup hydraulic system