AIR BRAKES PRACTICE TEST

1. Air brakes use \_\_\_\_\_\_\_\_\_\_ to make the brakes work.

1. Oil
2. Hydraulic fluid
3. Air

2. Air brakes are really three different braking systems:

1. Service brake, parking brake, Jake brake
2. Parking brake, service brake, emergency brake
3. Emergency brake, foot brake, hand brake

3. The \_\_\_\_\_\_\_\_ system applies and releases the brakes when you use the brake pedal during normal driving.

1. Service brake
2. Emergency brake
3. Parking brake

4. The \_\_\_\_\_\_\_ system applies and releases the parking brakes when you use the parking brake control.

1. Service brake
2. Emergency brake
3. Parking brake

5. The \_\_\_\_\_\_\_\_\_\_ system uses parts of the service and parking brake systems to stop the vehicle in a brake system failure.

1. Service brake
2. Emergency brake
3. Parking brake

6. The \_\_\_\_\_\_\_\_\_\_ pumps air into the air storage tanks (reservoirs).

1. Air pump
2. Air compressor
3. Air conditioner

7. The \_\_\_\_\_\_\_\_\_\_ controls when the air compressor will pump air into the air storage tanks.

1. Governor
2. Air compressor
3. Air pump

8. When air tank pressure rises to the "cut-out" level (around \_\_\_\_\_\_\_\_\_\_ or psi), the governor stops the compressor from pumping air.

1. 90
2. 100
3. 125

9. When the tank pressure falls to the "cut-in" pressure (around \_\_\_\_ psi), the governor allows the compressor to start pumping again.

1. 60
2. 100
3. 125

10. \_\_\_\_\_\_\_\_\_\_ are used to hold compressed air.

1. Air storage tanks
2. The air compressor
3. Brake chambers

11. Compressed air usually has some \_\_\_\_\_\_\_\_\_\_ in it, which is bad for the air brake system.

1. water and some compressor oil
2. water
3. compressor oil

12. The \_\_\_\_\_\_\_\_\_\_ protects the tank and the rest of the system from too much pressure.

1. Air compressor
2. Air storage tank
3. safety valve

13. Pressing and releasing the pedal unnecessarily can let air out faster than the compressor can replace it. If the pressure gets too low, the \_\_\_\_\_\_\_\_\_\_ won't work.

1. Brakes
2. Air compressor
3. Safety valve

14. Foundation brakes are used at each wheel. The most common type is the \_\_\_\_\_\_\_\_\_\_ brake.

1. Air over disk
2. s-cam drum
3. wedge

15. All vehicles with air brakes have a pressure gauge connected to the \_\_\_\_\_\_\_\_\_\_.

1. Air compressor
2. air tank
3. brake chamber

16. This gauge shows how much air pressure you are applying to the brakes.

1. Air pressure gauge
2. Air compressor gauge
3. Application pressure gauge

17. A warning signal you can see must come on before the air pressure in the tanks falls below \_\_\_\_\_\_ psi.

1. 40
2. 60
3. 90

18. \_\_\_\_\_\_\_\_\_\_ are most often used for emergency and parking brakes.

1. Hydraulic
2. Manual
3. spring

19. Tractor and straight truck spring brakes will come fully on when air pressure drops to a range of \_\_\_\_\_\_\_\_\_ psi.

1. 20 – 45
2. 45 – 60
3. 60-75

20. The braking power of spring brakes depends on the brakes being in adjustment. If the brakes are not adjusted properly, \_\_\_\_\_\_\_\_\_\_ will work right.

1. the regular brakes
2. the emergency/parking brakes
3. neither the regular brakes nor the emergency/parking brakes

21. In newer vehicles with air brakes, you put on the \_\_\_\_\_\_\_\_\_\_ using a diamond-shaped, yellow, push-pull control knob.

1. service brakes
2. parking brakes
3. s-cam brakes

22. \_\_\_\_\_\_\_\_\_ does not necessarily shorten your stopping distance, but it does help you keep the vehicle under control during hard braking

1. The spring brake system
2. ABS
3. The emergency brake system

23. When making a normal stop in a manual transmission vehicle you should engage the clutch \_\_\_\_\_\_\_\_\_\_.

1. just before coming to a stop.
2. wait until the engine rpm is down close to idle.
3. at the same time you press the parking brake.

24. ABS \_\_\_\_\_\_\_\_\_\_\_.

1. helps you avoid wheel lock up.
2. does not assist on wet roads..
3. effects normal braking when malfunctioning.

25. If somebody suddenly pulls out in front of you, you should brake in a way that will keep your vehicle in a straight line and allow you to turn if it becomes necessary. You can use the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

1. controlled braking method
2. or the stab braking method
3. Both - "controlled braking" method or the "stab braking" method

26. With this method, you apply the brakes as hard as you can without locking the wheels.

1. Controlled braking
2. Stab braking
3. ABS braking

27. With this method, you apply your brakes all the way. Release brakes when wheels lock up. As soon as the wheels start rolling, apply the brakes fully again.

1. Controlled braking
2. Stab braking
3. ABS braking

28. This is the time required for the brakes to work after the brake pedal is pushed.

1. Brake lag
2. Reaction time
3. Stopping distance

29. Total Stopping Distance =

1. Perception Distance + Reaction Distance + Brake Lag Distance + Braking Distance
2. Perception Distance + Reaction Distance + Brake Lag Distance
3. Perception Distance + Reaction Distance + Braking Distance

30. So at 55 mph for an average driver under good traction and brake conditions, the total stopping distance \_\_\_\_\_\_\_.

1. is approximately 300’
2. is approximately 400’
3. is over 450 feet.

31. Brakes \_\_\_\_\_\_\_\_\_\_ from excessive heat caused by using them too much and not relying on the engine braking effect.

1. can fade
2. can fail
3. can fade or fail

32. The use of brakes on a long and/or steep downgrade is only a supplement to the\_\_\_\_\_\_\_\_\_\_.

1. braking effect of the engine
2. spring brake
3. natural drag of the weight of the vehicle

33. Once the vehicle is in the proper low gear, the following is the proper braking technique:

Apply the brakes just hard enough to feel a definite slowdown. When your speed has been \_\_\_\_\_\_\_\_\_\_ your "safe" speed, release the brakes.

1. slowed
2. reduced to approximately five mph below
3. reduced to approximately ten mph below

34. If the low air pressure warning comes on, \_\_\_\_\_.

1. Slow down and use your brakes sparingly
2. stop and safely park your vehicle as soon as possible.
3. Drive normally while keeping an eye on your gauges.

35. Don't use the parking brakes \_\_\_\_\_\_\_\_\_\_.

1. if the brakes are very hot.
2. if the brakes are very wet in freezing temperatures.
3. if the brakes are very hot, or if the brakes are very wet in freezing temperatures.

# Answer Word Answer

1 c Air

2 b Parking brake, service brake, emergency brake

3 a Service brake

4 c Parking brake

5 b Emergency brake

6 b Air compressor

7 a Governor

8 c 125

9 b 100

10 a Air storage tanks

11 a water and some compressor oil

12 c safety valve

13 a Brakes

14 b s-cam drum

15 b air tank

16 c Application pressure gauge

17 b 60

18 c spring

19 a 20-45

20 c neither the regular brakes nor the emergency/parking brakes

21 b parking brakes

22 b ABS

23 b wait until the engine rpm is down close to idle.

24 a helps you avoid wheel lock up.

25 c "controlled braking" method or the "stab braking" method

26 a Controlled braking

27 b Stab braking

28 a Brake lag

29 a Perception Distance+Reaction Distance + Brake Lag Distance + Braking Distance

30 c is over 450 feet.

31 c can fade or fail

32 a braking effect of the engine

33 b reduced to approximately five mph below

34 b stop and safely park your vehicle as soon as possible

35 c if the brakes are very hot, or if the brakes are very wet in freezing temperatures.