

AIR BRAKE

1 Repeatedly partially pressing and releasing the brake pedal may result in:

A A loss of brake air pressure.

B A build up of brake air pressure.

C No change of brake air pressure.

2. If you must make an emergency stop, brake so you:

A Can steer hard while braking hard.

B Can steer and so your vehicle stays in a straight line.

C Use the hand brake first.

3. The most common type of foundation brake found on heavy vehicles is the:

A Wedge drum.

B S-cam drum.

C Disc brake.

4. You have a major leak in the service line and put on the brakes. Service air pressure will escape and cause the:

A trailer tank pressure to be lost.

B tractor spring brakes to lock on.

C trailer emergency brakes to come on.

5. If your truck has a properly functioning dual air brake system and minimum size air tanks the air pressure should build up from 85 to 100 psi within how many seconds?

A 30

B 45

C 60

6. 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 ___mph below the posted speed for your safety and release your brakes.

A 5

B 10

C 15

7. To check the free play of manual slack adjusters of S-cam brakes, you should park on:

A Level ground. chock the wheels and release the parking brakes.

B Level ground and apply the parking brakes. then apply service brakes.

C Level ground and drain off air pressure before checking the adjustment.

8. If your vehicle has an alcohol evaporator, ifs there to: your brakes.

A Eliminate the need for daily tank draining.

B Boost tank pressure the same way that turbocharges boost engine.

C Reduce the risk of icing in air brake valves in cold weather.

9. 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 Etither the front or back brake will not be fully operational.

10. Why should you drain water from compressed air tanks?

A Water low boiling point reduces braking power.

B Water can freeze in cold weather and cause brake failure.

C To keep heat from air compressor oil.

11 If your truck or bus has dual parking control valves, you can use pressure from a separate tank to:

A Balance the service brake system when you are parked.

B Stay parked twice as long without using up service air pressure.

C Release the spring emergency/parking brakes to move a short distance.

12. If you must make an emergency stop, you should brakes so yoy:

A Use the hand brake before the brake pedal.

B Can steer and so your vehicle stays in a straight line.

C Use the full power of the brakes to lock them. Lip

13. The supply pressure gauge shows how much pressure:

A Is in the air tanks.

B You have used in this trip.

C Is going to the brake chambers.

14. The application pressure gauge shows how much air pressure you:

A Have in the air tanks.

B Are applying to the brakes

C Have in a modulating control valve.

15. The spring brakes used on tractors and straight trucks will bring your truck to a stop when the air pressure drops below ____psi.

A 20

B 60

C 100

16. The air leakage rate for combination vehicles (engine off, brakes on) should be less than ____ psi per minute.

A 2

B 3

C 4

17. How should you check that your service brakes are working properly?

A Park on slight grade, drain off air pressure, set parking brake and check to the movement.

B Park on a 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.

C 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 using the brake pedal.

18. Excessive use of the service brakes results in overheating which can lead to:

A Improper adjustment of the S-cam.

B Increased contact between the brake drums and brake linings.

C Expansion of the brake drums.

19. The supply pressure gauge shows how much pressure:

A Is in the air tanks.

B Tractor brake lines.

C Trailer brake lines.

20. Total stopping distance for air brakes is longer than that for hydraulic brakes due to _____ distance.

A brake lag

B reaction

C effective braking

21. The use of air brakes on a long and steep downgrade under normal conditions is only a supplement to:

A The use of the spring brakes.

B The use of the front brakes limiting valve.

C The braking effect of the engine.

22. Any time you park, use the parking brakes, except:

A If the brakes are very hot (e.g., after just coming down a steep grade).

B If you are going to test the parking brake make sure that it holds the vehicle.

C If you will only be stopped for less than one hour. IA

23. If your vehicle gets stuck on a raised railroad-highway crossing, you should:

A Get out of the vehicle and away from the tracks.

B Turn on your four-way flashers.

C Use reverse gear to back up off the crossing.

24. 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.

25. 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 Bring your vehicle to a complete stop right away and safely park. Continue only after the system is fixed.

B Reduce your speed, and test the remaining system while under way.

C Reduce your speed, and drive to the nearest garage for repairs.

26. The safety valve is set to automatically reduce pressure at _____psi.

A 50

B 100

27. Some air brake systems have an alcohol evaporator. What may happen if you don't keep the proper level of an alcohol?

A The S-cam may not take back when you release the brake pedal.

B Ice may form in the air storage tank and cause a brake failure.

C Ice may form on the brake drums and wear them out.

C 150

28. Under normal conditions in order to engage the parking brakes driver:

A Turn off the engine

B Let the air out of air brake system.

C Be sure that the air brake system is fully pressurized.

29. Parking or emergency brakes of trucks and buses can be legally held on by _____pressure.

A spring

B air

C fluid

30. All air brake equipped vehicles have:

A A supply pressure gauge.

B An air usage gauge.

C A backup hydraulic system.

31. The modulating control valve allows you to control: Answers

A Spring brakes.

B Front brakes.

C Amount of air pressure in the brake system.

32. A slack adjusters free play needs to be adjusted if it is more than about how _____ many inches when you pull hard on it?

A One fourth inch.

B One half inch.

C One inch.

33. Emergency stab braking is:

A Press hard on a brake pedal and apply hand valve until you stop.

B Use light steady pressure on the brake pedal.

C Brake as hard as you can; release the brakes when the wheels locked; put on the brakes again when the wheels start rolling.

34. In ideal conditions, a truck or bus with an air brake going at 55 mph would require stopping distance of:

A Less than 100 feet.

B 100-300 feet.

C More than 300 feet.

35. To test air service brakes, you should:

A Stop the vehicle, put it in a low gear, depress the service brakes, and then gently pull against the brakes.

B Brake firmly while slowly moving forward.

C Brake slowly while slowly moving backward.

36. The S-cam:

A Controls the flow air to each of the brake chambers.

B Pulls the brake shoes away from the drum and allow the wheels to roll freely.

C Forces the brake shoes against the inside of the brake drum.

37. Why should you drain water from compressed air tanks?

A The boiling point reduces braking power.

B Water can freeze in cold weather and cause brake failure.

C Water cools the compressor too much.

38. The air brake lag distance at 55 mph on dry pavement adds about ____ feet.

A 12 feet.

B 32 feet.

C 52 feet.

39. When is it OK to leave your truck unattended without applying the parking brakes and choking the wheels?

A Never.

B If you will be away from the truck for a few minutes.

C If you are conducting a pre-trip inspection.

40. The brake system that applies and releases the brakes when the driver uses the brake pedal is the brake ____ system.

A emergency

B service

C Parking

41. Which of these is NOT a proper time to apply the parking brakes?

A To brake vehicle very hard, in other word when coming down the steep grade.

B To use parking brakes if you park for less than 1 hour.

C If you are going to use the parking brakes you need to make sure that they will hold the vehicle.

42. Air braking takes more time than hydraulic braking because air:

A Brakes use different brake drums.

B Takes more time to flow through the lines than hydraulic fluid.

C Brakes require heavier return springs.

43. A straight truck or bus air brake system should not leak at the rate of more than _____psi per minute with the engine off and the brakes released.

A One.

B Three.

C Two.

44. Why should you drain water from compressed air tanks?

A The low boiling point of water reduces braking power.

B Water can freeze in cold weather and cause brake failure.

C To keep from fowling the air compressor oil.

45. If the spring brakes are on, when should you push the brake pedal?

A Only when driving down a hill.

B Only on the slippery road

C Never.

46. With air brake vehicles, the parking brakes should be used:

A Whenever you leave the vehicle unattended.

B As lithe as possible.

C Only during pre- and post-trip inspections.

47 The most important thing to do when a low air pressure warning comes on is

A Upshift.

B Downshift.

C Stop and safely park as soon as possible.

48. During normal driving, spring brakes are usually held back by:

A Bolts.

B Air pressure.

C Spring pressure.

49. If you are driving down a steep downgrade and you have reached your "safe" speed of 40 mph, you would apply the service brakes until your speed drops to _____mph.

A 25

B 30

C 35

50. There are two things that a driver can do to prevent a rollover. They are: (1) Keep the cargo as close to the ground as possible; and(2):

A Go slow around turns.

B Keep both hands firmly on the steering wheel.

C Make sure that the brakes are properly adjusted.

51. Emergency controlled braking is when you:

A Apply the brakes as hard as you can without locking the wheels.

B Brake as hard as you can, release the brakes when wheels locking, brakes back on again when the wheels start rolling.

C Apply the hand valve for one second, then push hard on the brakes.

52. When brakes are applied the brake shoes (or linings) will align to press against the:

A Brake drum or disc.

B Slack adjuster.

C S-cam

53. The stop light switch:

A Tells you when the air brake system is low on air pressure.

B Tells you when you need to use your emergency brakes.

C Turns on your brake lights to warn drivers behind you.

54. If your vehicle has an alcohol evaporator, every day during cold weather you should:

A Check and fill the alcohol level.

B Change the alcohol from a new bottle.

C Check the oil for alcohol content.

55. The brake pedal in an air brake system:

A Controls the speed of the air compressor.

B Controls the air pressure applied to put on the brakes.

C Is connected to slack adjusters by a series of rods and linkages.

56. It is not safe to drive a vehicle that has brake drums with cracks that are longer than _____ of the width of the friction area.

A One half

B One fourth.

C One eighth.

57. Before driving a truck or bus with a dual air brake system, the air pressure must be at least _____ psi.

A 80

B 100

C 120

58. An air brake system is fully charged at _____ psi.

A 75

B 100

C 125

59. A straight truck or bus air brake system should not leak at the rate of more than _____ psi per minute with the engine off and the brakes released.

A 1

B 2

C 3

60. The air compressor governor controls'

A The speed of the air compressor.

B Air pressure applied to the brakes.

C When air is pumped into the air tanks.

61. Why drain water from compressed air tanks?

A 0 The low boiling point of water reduces braking power.

B Water can freeze in cold weather and cause brake failure.

C Water cools the compressor too much.

62. Excessive heat caused by using your brakes too often can also cause:

A Modulating control valve to wear out.

B Brake lines to plug.

C Brakes to fade or fail.

63. The air compressor should stop pumping air when pressure reach _____psi.

A 100

B 125

C 150

64. The air loss rate for a straight truck or bus with the engine off and the brakes on should not be more than:

A 1 psi in one minute.

B 2 psi in 45 seconds.

C 3 psi in one minute.

65. The safety valve discharges automatically at the pressure of:

A 50

B 100

C 150

66. Your brakes are fading when:

A You have to push harder on the brake pedal to control your speed on a downgrade.

B Less pressure is needed on the brake pedal for each stop.

C The brake pedal feel spongy when you apply pressure.

67. In air brakes vehicles, the parking brakes should be used:

A As lithe as possible.

B Any time when vehicle is parked.

C To hold your speed when going downhill.

68. The braking power of the spring brakes:

A Is not affected by the condition of the service brakes.

B Depends on the service brakes being in adjustment.

C Increases when the service brakes are hot.

69. If air pressure is not built up within the correct amount of time. then:

A You should be ready to use your parking brakes to help stop.

B The alcohol container may be low

C Your air pressure may drop too a low during driving, requiring an emergency stop.

70. The safety valve reduces pressure at ____psi?

A 50

B 100

C 150

71. When brakes are applied the brake shoes will press against the:

A Brake drum or disc

B Slack adjuster.

C S-cam

72. The driver must be able to see a low air pressure warning which comes on before pressure in the service air tanks falls below ____psi.

A 40

B 60

C 80

73. The parking or emergency brake on a heavy vehicle can only be held in position by something that cannot leak away, like:

A Spring pressure.

B Air pressure.

C Hydraulic pressure.

74. It is accepted that too much heat caused by using your brakes too often can also cause:

A Modulated control valve to wear out.

B Brake linings to split up.

C Brake to fade or fail.

75. A slack adjuster probably needs to be adjusted if it moves more than inches when you pull hard on it?

A 1/4

B 1/2

C 1

76. Modern air brake systems combine three different systems. They are the service, the parking and the_____brakes.

A emergency

B foot

C S-cam

77. If you do not have automatic tank drains, how often should you drain the oil and water from the bottom of compressed air storage tanks?

A After every four hours of service.

B At the end of each day of driving.

C Once a week.

78. Your vehicle has a dual air brake system. If a low air pressure warning comes on for only one system, you should:

A Bring the vehicle to a safe stop and continue only after the system is fixed.

B Reduce your speed, and test the remaining system while under way.

C Reduce your speed. and drive to the nearest garage for repairs.