# AIR BRAKE

1. MODERN AIR BRAKE SYSTEMS COMBINE THREE DIFFERENT SYSTEMS. THE SYSTEMS ARE

THE SERVICE, PARKING AND \_\_\_\_\_\_\_ BRAKE SYSTEMS

1. EMERGENCY
2. FOOT
3. DRUM

D.HYDRAULIC

 2. THE DRIVER MUST BE ABLE TO SEE A WARNING BEFORE AIR PRESSURE IN THE SERVICE AIR TANK FALLS BELOW \_\_\_\_\_\_\_\_ PSI.

1. 40
2. 50
3. 60
4. 80

3. THE BRAKE PEDAL IN AN AIR BRAKE SYSTEM

1. NEEDS TO BE HELD DOWN HALFWAY DURING NORMAL DRIVING
2. CONTROLS THE AMOUNT OF AIR PRESSURE TO THE TRACTOR
3. CONTROLS THE AMOUNT OF AIR PRESSURE TO ALL BRAKES
4. CONTROL THE SPEED OF THE AIR COMPRESSOR

4. AIR BRAKES TAKE MORE TIME TO REACT THAN HYDRAULIC BRAKES, BECAUSE AIR:

1. BRAKES USE DIFFERENT DRUMS
2. TAKE MORE TIME TO FLOW THROUGH THE LINES THAN HYDRAULIC FLUID
3. USUALLY LEAVES THROUGH THE AIR LINE FITTINGS
4. FREEZES UP AND HAS TO UNFREEZE BEFORE IT APPLIES THE PRESSURE

5. IF YOUR VEHICLE HAS AN ALCOHOLIC EVAPORATOR, IT IS THERE TO:

1. REDUCE THE RISK OF ICE IN THE AIR BRAKE VALVE IN COLD WEATHER
2. LUBRICATE THE RUBBER SEALS IN THE AIR SYSTEM
3. ELIMINATE THE NEED FOR DAILY TANK DRAINING
4. RID THE WET TANK OF ALCOHOL THAT CONDENSES AND SIT AT THE BOTTOM

6. IF YOUR TRUCK OR BUS HAS DUAL PARKING CONTROL VALVES, YOU CAN USE PRESSURE FROM A SEPARATE TANK:

A. RELEASE THE SPRING EMERGENCY PARKING BRAKE TO MOVE A SHORT DISTANCE

B. APPLY MORE PRESSURE TO THE SERVICE BRAKE TO HOLD THE TRUCK TOO STEEP INCLINES

1. STAY PARKED TWICE AS LONG WITH YOUR SERVICE AIR PRESSURE
2. APPLIED MORE BRAKE PRESSURE IF THE MAIN TANK IS GETTING LOW

7. TO CHECK THE FREEPLAY OF MANUEL SLACK ADJUSTERS ON S-CAM BRAKES YOU SHOULD PARK ON:

1. LEVEL GROUND WITH THE PARKING BRAKE ON THEN APPLY THE SERVICE BRAKE
2. LEVER GROUND CHOCKS THE WHEELS AND TURN OFF THE PARKING BRAKES
3. LEVEL GROUND AND DRAIN OFF AIR PRESSURE BEFORE ADJUSTING
4. ON A SLIGHT INCLINE WITH THE PARKING BRAKES ON

8. OF THE CHOICES BELOW, THE FIRST THING TO DO WHEN A LOW AIR WARNING COMES ON IS:

1. STOP AND SAFELY PARK AS SOON AS POSSIBLE
2. SHIFT TO THE NEXT HIGHER GEAR
3. OPEN THE AIR SUPPLY CONTROL VALVE
4. DRIVE TO THE NEXT TOWN WITH A SERVICE STATION AND GET IT FIXED

9. THE AIR COMPRESSOR GOVERNOR CONTROLS:

1. WHEN AIR PRESSURE IS RELEASED FROM THE SUPPLY TANK
2. AIR PRESSURE APPLIED TO THE BRAKES
3. WHEN AIR IS PUMPED INTO THE AIR TANKS
4. HOLD COMPRESSED AIR UNTIL IT IS NEEDED

10. THE BRAKING POWER OF YOUR SPRING BRAKES:

1. IS NOT AFFECTED BY THE CONDITION OF THE SERVICE BRAKES
2. CAN ONLY BE TESTED BY HIGHLY TRAINED BRAKE SERVICE PEOPLE
3. DEPENDS ON WHETHER THE SLACK ADJUSTERS ARE IN ADJUSTMENT D. IS IN DIRECT PROPORTION WITH THE WEIGHT OF THE LOAD

11. ALL VEHICLES EQUIPPED WITH AIR BRAKES HAVE:

1. A HYDRAULIC SYSTEM IN CASE THE AIR SYSTEM FAILS
2. A SUPPLY PRESSURE GAUGE
3. AN AIR USE GAUGE
4. MODULATING CONTROL VALVE

12. IF YOU MUST MAKE AN EMERGENCY STOP, BREAK SO YOU:

1. USE THE FULL POWER OF THE BRAKES AND LOCK THEM
2. CAN STEER AND YOUR VEHICLE STAYS IN A STRAIGHT LINE
3. USE THE HANDBRAKE FIRST SO YOU CAN JACK KNIFE
4. CAN HEAR THE AIR LEAKING OUT OF THE SYSTEM AND THE BREAKS SCREECHING
5. IF YOU DO NOT HAVE AUTOMATIC TANK DRAINS, HOW OFTEN SHOULD YOU DRAIN THE OIL AND WATER FROM BOTTOM OF COMPRESSED AIR STORAGE TANK
6. AT THE END OF EACH DAY ARE DRIVING OF DRIVING
7. ONCE A WEEK
8. BEFORE EVERY DAY OF DRIVING
9. EVERY OTHER WEEK

14. THE APPLICATION PRESSURE GAUGE SHOWS HOW MUCH AIR PRESSURE:

1. YOU HAVE USED IN THIS TRIP
2. YOU HAVE IN THE AIR TANK
3. YOU ARE APPLYING TO THE BRAKES

D. THAT IS CONSTANTLY APPLIED TO THE BRAKES

15. YOUR BRAKES ARE FADING:

1. YOU HAVE TO PUSH HARDER ON THE BRAKE PEDAL TO CONTROL YOUR SPEED ON A DOWNGRADE
2. THE BRAKE PEDAL FEEL SPONGY WHEN YOU APPLY PRESSURE
3. YOU RELEASE PRESSURE ON THE BRAKE PEDAL AND YOUR SPEED INCREASES
4. YOU HAVE NOT USED THEM FOR AT LEAST AN HOUR

16. IF YOU’RE TRUCK HAS AN ALCOHOL EVAPORATOR, EVERY DAY DURING COLD WEATHER YOU SHOULD

1. CHECK THE ALCOHOL LEVEL AND REFILL IF NEEDED
2. CHANGE THE ALCOHOL
3. CLEAN THE AIR FILTER WITH ALCOHOL
4. CHANGE THE ALCOHOL AND OIL

17. WHEN SHOULD YOU DRAIN WATER FROM COMPRESSED AIR TANKS

1. THE LOW BOILING PINT OF WATER REDUCES BRAKING POWER
2. WATER CAN FREEZE IN COLD WEATHER AND CAUSE BRAKE FAILURE
3. TO KEEP THE AIR COMPRESSOR OIL CLEAN
4. TO KEEP IT FRESH AND READY FOR USE

18. YOUR VEHICLE HAS A DUAL AIR BRAKE SYSTEM. IF A LOW AIR PRESSURE WARNING COMES ON FOR THE SECONDARY SYSTEM, YOU SHOULD

1. BRING THE VEHICLE TO A SAFE STOP AND CONTINUE ONLY WHEN THE SYSTEM IS FIXED
2. REDUCE YOUR SPEED AND TEST THE REMAINING SYSTEM WHILE DRIVING THE VEHICLE ON THE SHOULDER OF THE ROAD
3. REDUCE YOUR SPEED AND DRIVE TO THE NEAREST GARAGE OR REPAIR STATION D. CONTINUE DRIVING TO YOUR DESTINATION BECAUSE YOUR PRIMARY SYSTEM WORKS

19. DURING NORMAL DRIVING, SPRING BRAKES ARE USUALLY HELD BACK BY:

1. BOLTS FOR CLAMPS
2. AIR PRESSURE
3. SPRING PRESSURE
4. HYDRAULIC FLUID

20. IN AIR BRAKE VEHICLES, THE PARKING BRAKES SHOULD BE USED:

1. AS LITTLE AS POSSIBLE
2. ANYTIME THE VEHICLE IS PARKED
3. WHERE AJUSTING YOUR BRAKES
4. TO HOLD YOUR SPEED GOING DOWNHILL

21. EMERGENCY STAB BRAKING IS WHEN YOU:

1. PRESS HARD ON THE BRAKE PEDAL AND APPLY HAND VALVE FULLY UNTIL STOPPED
2. APPLY THE HAND VALVE FOR ONE SECOND, THEN PUSH HARD ON THE PEDAL
3. BRAKE AS HARD AS YOU CAN, RELEASE THE BRAKE WHEN THE WHEEL LOCKS, THEN PUT ON THE

BRAKES AGAIN WHEN THE WHEELS START ROLLING

1. APPLY THE BRAKES AS HARD AS YOU CAN AND LOCKING THE WHEEL UNTIL STOPPED

22. A STRAIGHT TRUCK AIR BRAKE SYSTEM SHOULD NOT LOSE MORE THAN \_\_\_\_\_\_\_\_ PSI PER MINUTE WHEN THE ENGINE OFF AND BRAKES RELEASED

1. 6
2. 3
3. 4

D.2

23. THE AIR LOSS RATE FOR A STRAIGHT TRUCK WITH THE ENGINE OFF IN THE BRAKE APPLIED SHOULD NOT BE MORE THAN

1. 1 PSI IN 30 SECONDS
2. 2 PSI IN 45 SECONDS
3. 2 PSI IN ONE MINUTE
4. 3 PSI IN ONE MINUTE

24. TO SUPPLY PRESSURE GAUGE SHOWS HOW MUCH PRESSURE

1. YOU HAVE USED IN THIS TRIP IT
2. IN THE AIR TANK
3. IS GOING TO THE BRAKE CHAMBER
4. D. YOU ARE APPLYING TO THE BRAKES

25. THE BRAKE SYSTEM THAT APPLIES AND RELEASES THE BRAKES WHEN THE DRIVER USES THE FOOT PEDAL IS THE \_\_\_\_\_\_\_\_\_SYSYTEM

1. SERVICE
2. SUPPLY
3. SPRING
4. PARKING

26. HOW MUCH AIR MUST BE IN YOUR SUPPLY CHAIN BEFORE MOVING YOUR VEHICLE ON THE

ROAD OR HIGHWAY

A. 60 PSI

 B. 90PSI

1. 75 PSI
2. 100 PSI

27. WHICH OF THE FOLLOWING MAKES TOTAL STOPPING DISTANCE LONGER FOR AIR BRAKES THEN FOR HYDRAULIC BRAKES

1. REACTION TIME DISTANCE
2. PERCEPTION DISTANCE
3. BRAKE LAG
4. ROAD CONDITIONS

28. THE MOST COMMON TYPE OF FOUNDATION BRAKE FOUND ON HEAVY VEHICLE IS THE:

1. DISC BRAKE
2. WEDGE BREAK
3. S CAM BRAKE
4. HYDRAULIC BRAKE

29. IF THE AIR COMPRESSOR DEVELOPS A LEAK, WHAT KEEPS THE AIR IN TANKS?

1. THE ONE WAY CHECK VALVE
2. THE EMERGENCY RELAY VALVE
3. THE TRACTOR PROTECTION VALVE
4. THE MODULATING CONTROL VALVE

30. WHICH OF THE FOLLOWING SYSTEMS SUPPLIES THE TRAILER WITH AIR?

1. PRIMARY AND SECONDARY
2. PRIMARY
3. SECONDARY
4. NONE OF THESE

31. WHICH VALUE ALLOWS YOU TO RELEASE THE SPRING BREAKS IN CASE OF AN EMERGENCY

1. MODULATING CONTROL VALVE
2. FRONT BRAKE LIMITING VALVE
3. DUAL PARKING CONTROL VALVE
4. SAFETY VALVE

32. WHICH VALVE ALLOWS YOU TO APPLY THE SPRING BREAK GRADUALLY

A. MODULATING CONTROL VALVE

B. FRONT BRAKE LIMITING VALVE

1. DUAL PARKING CONTROL VALVE
2. SAFETY VALVE