

# Sheridan College

## *Air Brake Endorsement Course, Written Examination*

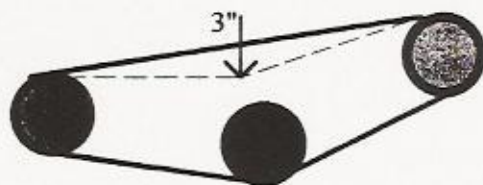
**Instructions:** Please read all the questions carefully. In some questions more than one answer may be a good choice, but only **ONE IS BEST**. To pass you **MUST** answer 80% correctly.

- 1 You are driving a Tractor Trailer along the freeway & you see that both your air pressure gauges (which were at 120psi.) are dropping about 20 lbs. per. min. & the pressure does not go back up. If you keep on driving, what will happen next?
  - A It will become a runaway truck which cannot be stopped.
  - B You can stop the truck by using the (D.D.3) back-up system.
  - C The spring brakes on the trailer will come on first to stop the truck.
  - D The spring brakes on the tractor will come on first to stop the truck.
  - E The spring brakes on the tractor & trailer will come on together to stop the truck.
- 2 Why is it necessary to drain ALL air tanks when you are finished using the truck for the day?
  - A It is nice to have fresh clean air in the tanks every morning to start the day off right.
  - B To drain the alcohol which has collected in the tanks from the alcohol injector.
  - C The parking brakes will only work when there is no air in both the air tanks.
  - D To drain the moisture (water, oil) out of the tanks which has collected during the day.
  - E None of the above.
- 3 When you are finished using the truck for the day, why is it necessary to drain the WET tank FIRST?
  - A To see if any water comes out of the tank
  - B To check if the one-way check valves are working & to avoid contamination of the dry tank.
  - C None of the above
  - D To see if any oil comes out of it.
  - E Both A & D.
- 4 What is the main reason for having a pressure safety valve on the WET TANK?
  - A To keep the air pressure constant in the tank.
  - B To stop the tank & pipes from exploding.
  - C To fill the tanks quickly to save time & money.
  - D To drain tanks quickly to save time.
  - E All of the above.
- 5 Approximately how much air should be used when you make a light brake application ?
  - A 1 lb.
  - B 3 to 10 lbs.
  - C 15 to 25 lbs.
  - D Depends on the condition of the compressor.
  - E None what so ever, only uses air when parking.

- 6 The third dry tank called the (D.D.3) system is found mostly on:
- A Large tractor trailer units.
  - B Small one piece trucks. ( class D)
  - C Pick-up trucks.
  - D Large buses. (highway coaches)
  - E Small school buses. (25 people or less)

- 7 During the circle check you see the compressor drive belt is moving approx. 3" up & down, what could happen?

- A The air pressure in the tanks will build up very slowly.
- B The air pressure in the tanks will build up very quickly.
- C The air compressor will stay nice & cool all day long.
- D The air compressor may over heat & seize.
- E All of the above.



- 8 If both parking brake buttons are out (parking brakes on), why can you still pull with your hand the front brake slack adjuster?

- A There is less weight on the steering axle.
- B Air is pumped into the rear parking brake chambers only.
- C The front wheels have only single brake chambers.
- D The front brakes only work when the vehicle is moving
- E The harmonic brake balancer is always off when the vehicle is parked.

- 9 When this yellow button is pulled out, it means:

- A The tractor & trailer parking brakes are ON
- B The trailer parking brakes are OFF
- C Only the tractor parking brakes are OFF
- D Only the trailer parking brakes are ON
- E The tractor & trailer parking brakes are OFF



- 10 When you push this button in, what happens?

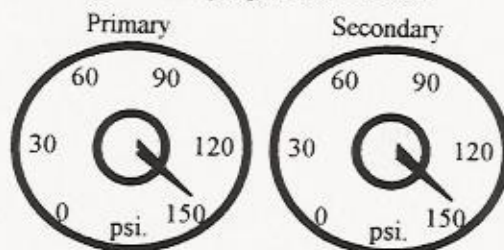
- A The tractor & trailer parking brakes come on.
- B The harmonic brake balancer is turned on
- C The trailer brake lights go on.
- D The air is returned from the trailer to the tractor.
- E The air is sent from the tractor to the trailer.





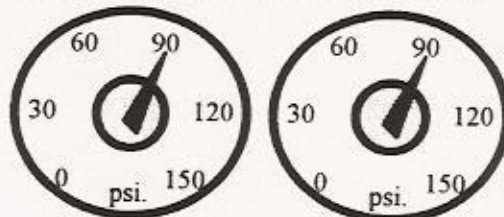
- 11 You are driving down the freeway & you see the primary & secondary air tank gauges look like this. What must happen around this pressure?

- A The tractor protection valve should open.
- B The foot valve should open.
- C The harmonic balancer valve should close.
- D The pressure safety valve should open.
- E None of the above.



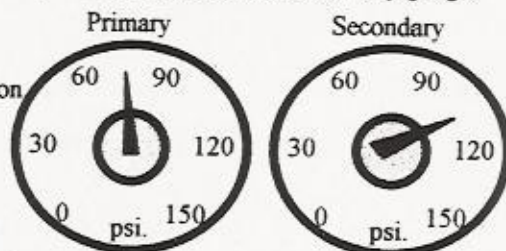
- 12 You are driving down the freeway & both the gauges are dropping. If they keep going down what should happen next:

- A The compressor should start pumping air.
- B The compressor should stop pumping air.
- C The pressure safety valve should close.
- D The low air warning should turn on.
- E All of the above.



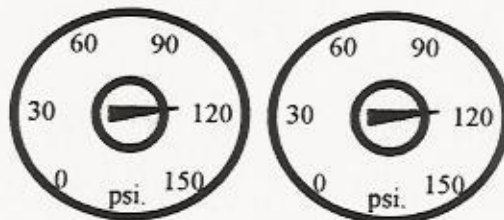
- 13 You are driving down the freeway & the PRIMARY gauge keeps DROPPING but the secondary gauge remains steady. What should happen next?

- A The pressure valve should open.
- B The low air warning light & buzzer should soon come on.
- C The compressor should stop pumping air.
- D The spring brakes should come on right now.
- E The tractor protection valve should close.



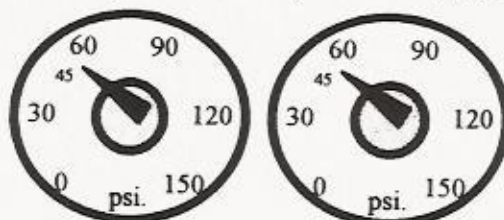
- 14 You are driving down the roadway & your primary & secondary air gauges look like this, it means?

- A The pressure valve should open soon.
- B The low air warning light should soon come on.
- C The compressor should soon stop pumping air.
- D The spring brakes should come on soon.
- E The tractor protection valve should soon open.



- 15 You are driving a tractor trailer down the highway. You are losing air pressure & both your air tank gauges look like this, in means?

- A The pressure valve should open soon.
- B The low air warning light should soon come on.
- C The compressor should stop pumping air.
- D The trailer spring brakes should come on soon.
- E The tractor spring brakes should come on soon.



- 16 A good compressor should be able to build up air pressure at fast idle from 85 psi. to 100 psi. in about:
- A 45 seconds
  - B 150 seconds
  - C 170 seconds
  - D 200 seconds
  - E 300 seconds
- 17 When the air comes out of the air compressor it first goes into:
- A The primary dry tank.
  - B The secondary dry tank.
  - C The wet tank.
  - D The parking brake chamber.
  - E The foot brake (service brake) chamber.
- 18 When the parking brakes are ON:
- A Air is put into the parking brake chamber
  - B Air is removed from the parking brake chamber
  - C Air is put back into the primary tanks to be re-used
  - D Air is put back into the secondary tanks to be re-used
  - E None of the above
- 19 The front wheels of all trucks & buses using an air brake system will have:
- A A spring brake chamber
  - B Dual brake chambers
  - C Single brake chambers
  - D Rotochambers
  - E Any combination of the above, depending on the model of the truck or bus.
- 20 The blue line from the tractor to the trailer:
- A Tells the service brakes (regular driving brakes) on the trailer to come on
  - B Acts as a back up air supply line in case the red line comes off
  - C Tells the parking brakes on the trailer to come on
  - D Transfers air from the tractor air tanks to the trailer air tanks
  - E Transfers air from the trailer to the tractor air tanks to be reused

