



**MONTGOMERY COUNTY FIRE AND RESCUE SERVICE
DRIVER/OPERATOR TRAINING PROGRAM**

Practical Examination Guide Sheet

MCFRS Brake Test

Practical Examination: Brake Test/Air Brakes - Conduct a DOT Brake Test. Note: this test is ONLY to be used on apparatus with air brakes. This test is NOT to be used on EMS units. This brake test must be performed in the order shown below:

1. Chock the wheels of the vehicle. _____(6)
2. Turn the ignition on and verify that all gauges/warning devices are in working order. _____(6)
3. Air brake protection valve should be in the Applied (out) position. This takes the air out of the system and allows the spring brakes to hold the rear brakes. _____(6)
4. Push air brake protection valve into the off position (in). This charges the air brake system. _____(6)
5. Allow the air tanks to settle. _____(6)
6. Observe the air gauge for one minute, look for air loss no greater than 3psi in that one minute. (4psi for TDA)_ _____(6)
7. After one minute has elapsed, place your foot on the brake pedal and apply a steady, holding pressure. Continue to hold steady pressure for one minute after air tanks settle. _____(6)
8. Observe the air gauge during that minute, look for air loss no greater than 3psi. (4 psi for TDA) _____(6)
9. Begin “fanning” the brakes. As air tanks deplete you should get a low air alarm, warning light and visible activation when air pressure gauge reaches 60-90psi, _____(8)

Continue “fanning” the brakes until the air protection valve activates.
The protection valve should activate between 20-40 psi on the gauge.
Stop fanning the brakes if the protection valve activates _____(6)
10. When the protection valve activates, stop “fanning” the brakes. _____(6)
11. If the valve does not activate, the apparatus fails the test and is OOS. _____(6)

12. NEVER FAN THE BRAKES WITH THE PARKING BRAKE APPLIED. **Automatic Failure**

Air Compressor Test

13. Start the engine and monitor the air pressure gauge. The air pressure MUST return from 50 psi to 90 psi within 3 minutes at 1200rpm.
(COMAR 11.22.02.06) (Daily Check) _____(6)

14 . The quick air build up system shall provide sufficient air pressure so that the apparatus has no brake drag and is able to stop under operating conditions following the 60 seconds build up time.
(Weekly check after draining air tanks completely.) NFPA Chapter 12.3.1.5.1 _____(6)

15. Check all gauges for working pressures, shut down engine, remove wheel chock and place unit back in service. _____(6)

16. Use the acronym: COLA _____(8)

C = Cut In Pressure-A Cut In Pressure will be approximately 100 PSI. Any compressor that does not cut in before 95 PSI must be reported to the shop immediately. Any compressor that does not cut-in before 80 psi is OOS.

O = Cut Out Pressure-Cut Out Pressure will be between 120-135 PSI. Any higher than 135 PSI must be reported to the shop immediately and is OOS.

L = Low Pressure Warning-Low Pressure devices will activate at approximately 60- 90 PSI. Any device that activates below 60PSI must be reported to the shop immediately.

A = Air Leakage-with foot on or off the brake pedal, air leakage should be less than 3psi per minute (4psi per minute for a Tiller Truck).

Possible 100 points

TOTAL POINTS _____

PASS

FAIL

MCFRTA Driver Training Coordinator

Date