Basic Air Brakes Inspection

Cut In	• With full air tanks, (or with needle stopped) pump the service brake to reduce air pressure by approximately a maximum of 10 psi (1 pump) and wait 20 seconds. • Step on the accelerator to 1500 rpm's and see if the needle of the air gauge begins to rise denoting the compressor has turned on. If not, repeat the procedure until the needle of the air gauge begins to rise denoting the compressor has turned on. • **CUT IN** must occur before the minimum of 100 psi. • Inform the examiner at what psi the needle began to rise and the compressor turned on. • If cut in doesn't happen by 100 psi, turn the vehicle in for repair.
Cut **O**ut	• Watch the needle rise and stop, (denoting the compressor has turned off). • **CUT OUT** must occur by the maximum 140. • Inform the examiner at what psi the needle stopped and the compressor turned off • If cut out doesn't happen by 140 psi, turn the vehicle in for repair
Applied Air Leakage	• With full pressure in the air tanks (cut out) • Shut the engine off • Turn the key to "accessory" • Release the parking brake (s) • Apply the service brake • Let the gauges settle • After initial air loss, wait for 1 minute • **APPLIED AIR LEAKAGE** must not drop more than 3 psi for a straight truck or 4 psi for a combination tractor/trailer. • Inform the examiner what psi is acceptable to loose and how much psi the vehicle has lost. • If the truck loses more than the allotted psi, turn the vehicle in for repair.
Low Pressure	• Pump the service brake until the red light appears and the alarm sounds. • **LOW PRESSURE** must occur between 75 and 55 psi. • Inform the examiner at what psi the audio and visual alarms appeared. • If the low pressure alarms have not come on by 55 psi, turn the vehicle in for repair.
Spring Brake	• With the parking/emergency brake, and/or tractor protection (class A) valve in the off position (open), pump the service brake to reduce air pressure until the parking brake/tractor protection valve pops out (closes) • **SPRING BRAKE TEST** must occur between 45 and 20 psi • If the spring brake does not pop on by 20 psi turn the vehicle in for repairs

Parking Brake

- With the parking brake engaged, and the engine on, place the tractor in drive, testing the vehicle's forward movement.

- On a combination tractor/trailer with the parking brake set on the tractor, and off on the trailer, place the vehicle in drive and see if the combination allows forward movement. Repeat the process with the tractor brake off and the trailer brake set.

- If the tractor or trailer move, turn the vehicle(s) in for repair.

Service Brake

- With the parking brake and the trailer protection valve in the off (closed) position, put the vehicle in drive, accelerate to 5 mph and apply the service brake to see if the vehicle(s) stops and/or pulls to one side or the other.

- If the vehicle does not stop or pulls to one side or the other, turn the vehicle in for repair

Anti-lock Brake System (ABS) Check

- On all ABS equip vehicles, when starting the vehicle, check to ensure the ABS lighting indicator illuminates and promptly turns off.

- On combination vehicles when starting the vehicle, check the driver's side of the trailer to ensure the ABS light indicator illuminates and promptly turns off.

- If the ABS light remains illuminated, turn the vehicle in for repairs.

Air Pressure Build Up Test

- Engine must be running at normal operating idle.

- With air pressure below 80 psi, watch the gauge when the gauge reads 85 psi time the compressor build up to 100 psi.

- The compressor must build the air from 85 psi to 100 psi within 45 seconds.

- Inform the examiner how many seconds it took for the air pressure to build from 85 psi to 100 psi

- If the buildup doesn't happen within 45 seconds, turn the vehicle in for repair