

## **Seven Step Brake System Check Guide:**

**(Adapted from the Utah CDL handbook)**

### **1. Test low-pressure warning**

With the engine off, electrical power on, and enough air pressure that the low-pressure signal is not on. Step on and off of the brake pedal to reduce air pressure to the point that the low air alarm activates. This should be before the air pressure drops below 60 psi.

### **2. Testing the spring brakes**

Continue to step on and off the brake pedal to reduce the air pressure. The yellow parking brake knob should pop out when the air pressure reaches the 20-40 psi range.

### **3. Test air pressure build up**

Start the engine and engage the fast idle (900-1100 RPM). Air pressure should build into the 85-100 psi range within 45 second in a dual air system.

*Larger air systems may take longer, check the manufacturer's specs.*

### **4. Test for air leaks**

With the air system fully charged, turn off the engine and release the parking brake. After the initial pressure drop, observe air pressure for one minute. Pressure drop of >2 psi in one minute may be a problem or indicate a leak.

Apply moderate braking pressure and hold for one minute, after the initial pressure drop, observe air pressure for one minute. Pressure drop of >3 psi in one minute may be a problem or indicate a leak.

### **5. Test air compressor governor operation**

Start engine and engage the fast idle. (900-1100 RPM). Observe air pressure rise until the compressor cuts out. (Typically 125 psi.). With the engine still running, slowly step on and off the pedal to reduce the air pressure to the point where the air compressor starts building air again. (Typically 100 psi.)

*Check manufacturer's specs for exact pressures.*

### **6. Test parking brake**

Apply the parking brake and remove the wheel chocks. Place transmission in gear and gently raise engine RPM's to a fast idle to see if the parking brake holds. The apparatus should not move.

### **7. Test service brakes**

Release the parking brakes, move the apparatus forward at about 5 mph.

Firmly apply the brakes, note any pull to one side, unusual feel or delay in stopping.