

## **Electric Brake Testing**

We have been asked many times if this product tests electric brakes. The direct answer is No. We considered including testing electric brakes. The problem with testing electric brakes with any electronic device is that only the electrical components can be tested. However, there are many other components involved with electric brakes that can not be tested electronically. Even if the electrical components are working properly does not ensure that your total brake system is working properly.

Components that must be inspected include:

- Magnets
- Brakes shoes
- Brake drums
- Springs, levers and linkage.
- Battery for emergency break-away system

Even if the electrical components (wiring and magnets) are operating properly, failure of any of the other components may render your electric brake system inoperative.

### **A simple electric brake system test**

Raise the wheels up with a jack so you can turn the wheels by hand. You will likely do this one side at a time. Pull the switch that activates your emergency break-away brake system and try to turn the wheels. If all the wheels are locked (brakes fully engaged), the brakes are working properly. An alternative is to pull the switch that activates your emergency break-away brake system and attempt to pull the trailer with your towing vehicle.

If one or more wheel still turns freely, you know you have a problem with your electric brake system.

Testing your electric brakes this way ensures that all components (both electrical and mechanical) are working properly, including the emergency break-away switch and battery. Remember, if everything is working properly but the emergency break-away battery is too weak or dead, your emergency break-away brake system will not work.

### **Know your trailer**

If you have a tandem or triple axle trailer, not all wheels will necessarily have electric brakes. For example, a tandem axle trailer may have electric brakes only on the front axle. So if you test the electric brakes as described here, only the front wheels would not turn.

### **What else to inspect**

The condition of the drums, shoes, shoe return springs and hardware should also be inspected. Broken or badly corroded return springs and shoe hardware should be replaced. Adjusters should turn easily. Shoes or drums that are too thin should also be replaced.

Also, try turning the wheels without the brakes applied. If the wheel does not turn freely, there could be other problems such as bad bearings, broken or misadjusted brake shoes or drums, or corroded or broken components that do not allow full release of brakes.

### **Summary**

Trailer lights are totally electrical. Light Check provides a simple, cost effective method to test your trailer lights without a towing vehicle or another person to assist. Also, most single axle trailers do not have electric brakes. Light Check, therefore, provides a complete solution for testing the electrical components of your trailer.

A future version of Light Check may include electric brake testing. However, it will only be able to test the electrical components of the electric brake system.

Remember, any electronic device that claims to test electric brakes is only testing the electrical components, but not the mechanical components. As mentioned earlier, even if the electrical components are working properly does not ensure that your total brake system is working properly.

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