

CERTIFIER MODEL 912

CERTIFIER 912 Brake Timing Test



Revision History:

Name	Date	Changes	Version #
Gene Ambacher	October 5, 2013	Initial Draft	1.0.0
Gene Ambacher	October 14, 2013	Final Draft	2.0.0

CERTIFIER 912 Brake Timing Test

Entering the Vehicle Information

1. Input the VIN # of the vehicle
2. Input the OPERATOR name
3. (Option) Input the CUSTOMER name
4. (Option) Input the ORDER#
5. (Option) Input up to 6 USER DEFINED FIELDS identifying type of trailer, # of axles, ABS, brake system, and etc..

Setting up for 121 brake testing

Non-Towing style trailer

1. Insert a minimum of 1 transducer in the Service Brake chamber, and 1 transducer in the Emergency Brake chamber *furthest* from the relay valve.

Towing style trailer

1. Insert a minimum of 1 transducer in the Service Brake chamber, and 1 transducer in the Emergency Brake chamber *furthest* from the relay valve.
2. With a 50 c.i. canister connected to both of the output glad hands, connect a transducer in the Service output.

In the CERTIFIER software, go to the HUB tab and label the transducers by their location. EMERGENCY, SERVICE, or DOLLY, 1,2,3, and etc.

*If it can be proven through engineering analysis that other brake chambers are closer to valve or have less air fittings than the chamber being tested, then it is sufficient.

**If there are more axles, lift axles, or any other reason why there would be additional hose length or air fittings required, then additional transducers should be inserted into those brake chambers.

A calibration test should be performed at least once a week. This file may be used, in addition to final trailer reports, to prove compliance of the tester and the trailer.

Note: These instructions are assuming that the CERTIFIER 912 is powered on, properly calibrated to meet 121 standards (see Calibration and Self-Test of CERTIFIER 912), and the "Vehicle Information" tab has been completed.

Performing a full test on a “Trailer or Dolly Designed to Tow another Trailer”

Note: If you are testing a “non-towing” trailer, skip steps 2 and 3

Required Tests:

- Air System Leak Test
- Park Brake Set Test of Supply Line at Emergency brake chambers and at rear supply line glad hand with 50” canister
- Apply/Release Test of the control line at the service brake chambers and at the rear service glad hand with a 50’ canister
- Control Signal Differential Test on the Service Control Line (Differential Test) with the testing manifold at the front service glad hand and the 50” canister with sensor at rear service glad hand

1. Place sensors and HUB at the rear axles of the trailer to be tested.



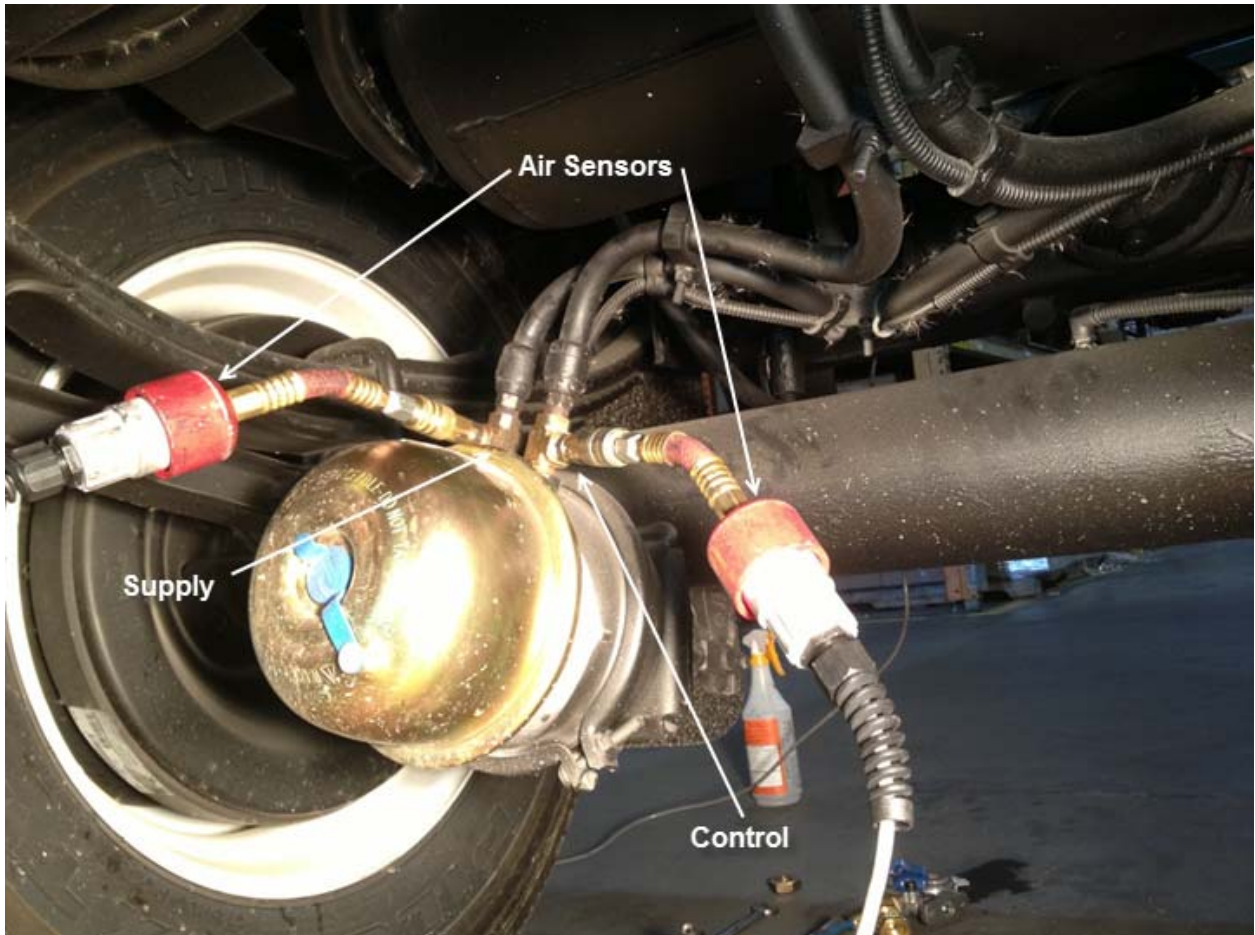
2. Connect a 50c.i. canister to the supply line (Emergency) at the rear of the trailer.

Note: Assure glad hand valve is in the open position.

3. Connect an air sensor into the 50c.i. canister that is on the rear Control line Glad-Hand. Connect this air sensor into PORT 2 on the HUB.



4. Connect air sensors into the control line (service) brake chamber and supply line (Emergency) brake chambers (as close to the chambers as possible) for the apply/release test. Connect these air sensors to PORTS 3, 4, 5, 6, 7, or 8.



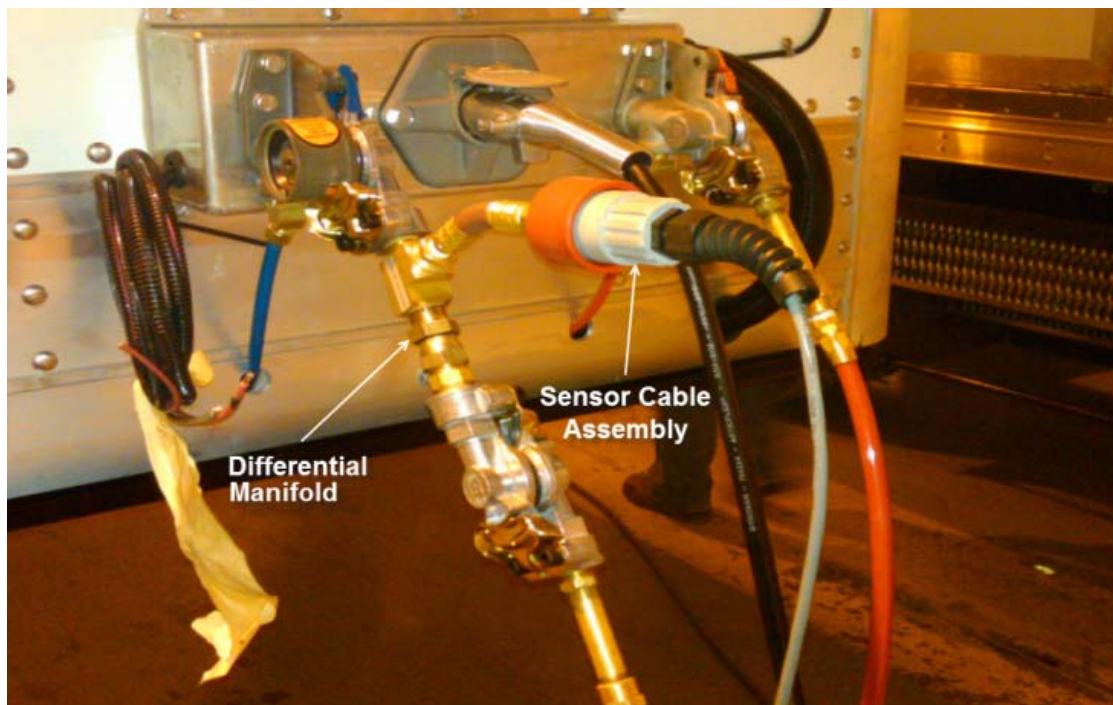
5. **UPDATE** or **REBOOT** the tester so it re-acquires the sensors connected to the HUB. On the HUB tab pull down the selection box on each Hub port number being used, and select **CURB/ROAD** for Service control line testing; or **EMER** for park supply line testing. Dolly for rear canister control line testing, describing what each air sensor is measuring.
6. On the “**Main Test**” tab, select “**Auto Electrical, Auto Load, Auto Air Leak, Auto 121, and Auto Print** (if you have a printer connected)
7. Select **AUTO TEST** and to run the selected tests.

8. Upon completion of **AUTO TEST**, check results to assure reading are within allowable Parameters (Pass)

Note: Park supply line air sensors should show no more than 3 PSI under **EMER Set PSI** heading.

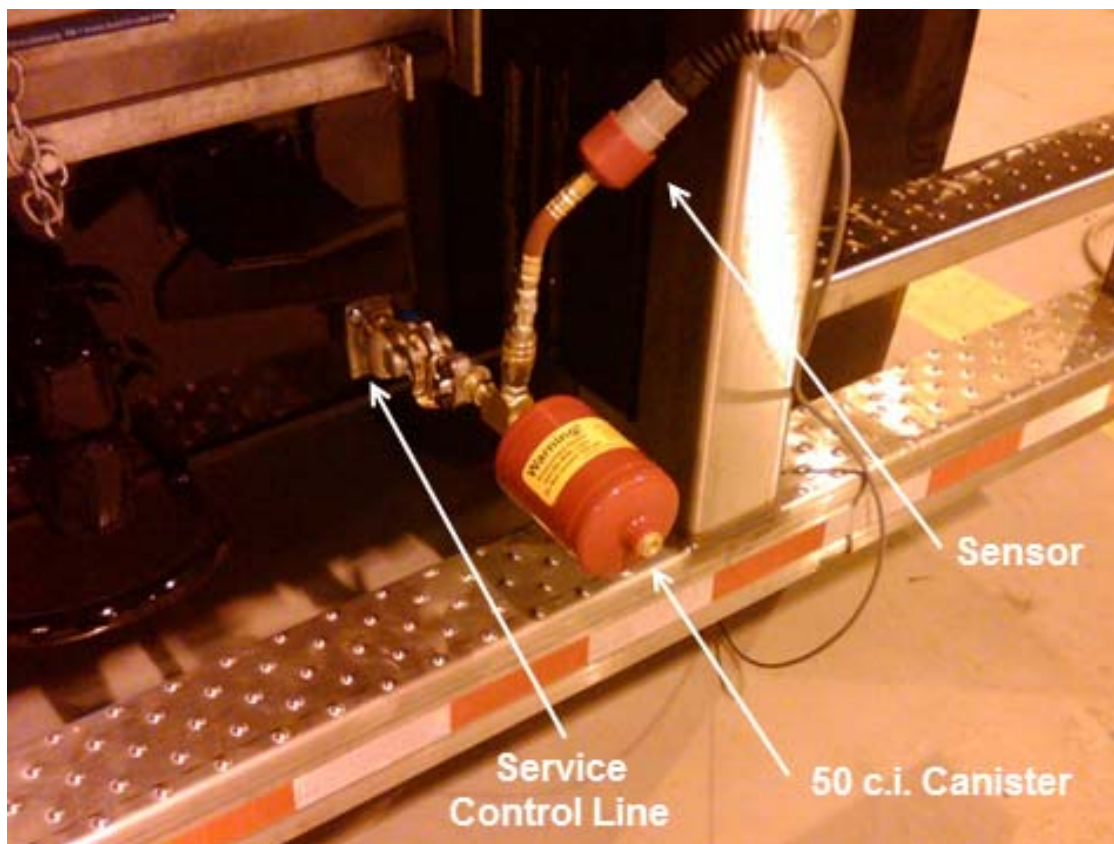
Differential Testing (see also Differential Test Setup)

1. Connect the Differential Manifold (in the proper orientation) to the control line (service glad-hand) at the front of the trailer and connect this sensor to PORT 1



on the HUB.

2. Connect the 50c.i. canister to the control line (**SERVICE**) at the rear of trailer and connect the sensor into PORT 2 on the HUB. Note: glad hand valve is Open.



3. Click on the “**Diff Pressure Test**” tab. Click **Run Test**.
4. Verify the Differential Test is completed successfully (**PASS**)