



PLC Select System ABS for Trailers

Single Axle Trailers

2S/1M Trailer System (2 Sensor / 1 Modulator Valve)



Haldex Brake Products

10930 North Pomona Ave
Kansas City, Missouri 64153

Phone: 816-891-2470
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(www.haldex.com)

(See Website www.haldex.com for additional
ABS Product Technical Information)

ABS Valves



2-Port ABS Relay Valve

Applications:
2S/1M System
(Single Axle)

Service Brake Delivery Ports - (2)

Installation/Service Manual "L30041"

"For Technical and Engineering Support
United States - 1-800-643-2374
Canada - 1-519-826-7723"

PC Diagnostic
Interface

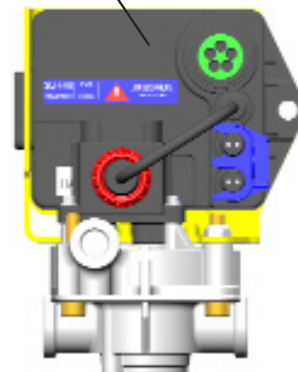


PLC Info Center



J1708 PLC Adapter

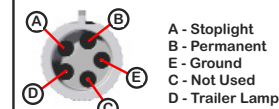
ABS ECU
(Electronic Control Unit)



2-Port ABS Relay Valve

Note: Apply Dielectric Grease to
all Electrical Components.

Pin-Out for Power Cord



ABS Power Cable - "IN"

Sensor (S1B)
(Bottom-RoadSide)

Sensor (S1A)
(Top-CurbSide)

Diagnostic Tools



PC Diagnostic



PLC Info Center



Blink Codes

7-Way Diagnostic
Interface
Connector

J1708 PLC Adapter

ABS Cables



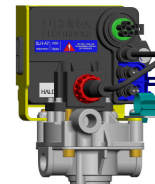
Trailer ABS Power Cable



Sensor
Extension Cable

"See Haldex Trailer ABS Service
Components Catalog L20243 for additional
information on Haldex ABS Products"

Haldex Supplied Items



2-Port ABS Relay Valve
(Service Brake)

Note: When an ABS Relay Valve is used,
a Spring Brake Control Valve is required
such as a Haldex - Trailer Brake Control
Valve (TBCV) or a Haldex - RT4 Valve.

Optional Supplier Section



ABS Lamp



90° Degree Sensor



Trailer Brake Control Valve
(TBCV)



Sensor Block
Clip



3-Way Clip



Sensor Cable Hose Clip



Sensor Extension
Retainer Clip



Tie Strap

Optional Installation Aids

System Plumbing

Legend:

Service/Control Line

Emergency/Supply Line

Sensor Line

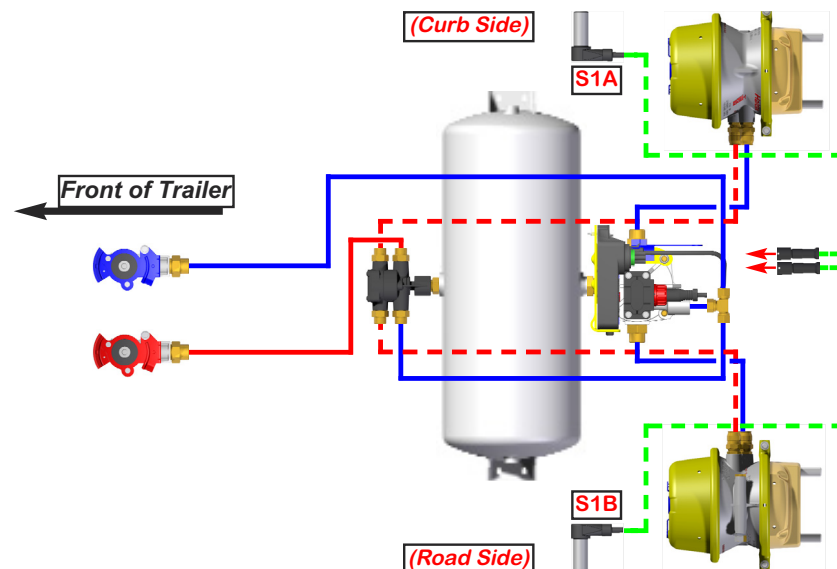
2S/1M System
2-Port ABS Relay Valve w/ECU
and (TBCV)

Trailer Configuration:
Single Axle

AIR BRAKE COMPONENTS AND SYSTEM SCHEMATIC ARE DESIGNED
TO ALLOW COMPLIANCE WITH FMVSS 121.

THIS SCHEMATIC IS FOR INFORMATION PURPOSE ONLY. IT IS THE
VEHICLE MANUFACTURERS ULTIMATE RESPONSIBILITY TO CERTIFY
THEIR SYSTEM MEETS ALL APPLICABLE REGULATIONS.

PIPE NIPPLES USED TO MOUNT BRAKE VALVES MUST BE HEAVY
WALL TYPE PER SAE J614.



Diagnostics

Recommended Production Testing:

Caution: **Do Not use battery charger to power up ABS**

On Line (Chassis) ABS Check
This step will ensure the ABS system (less power cable and warning lamp)
is functioning properly.

Test Equipment: 12VDC power source, ABS power cable with ABS light
connected, PLC Info Center and Info Center test cable and/or Haldex PC
Diagnostics.

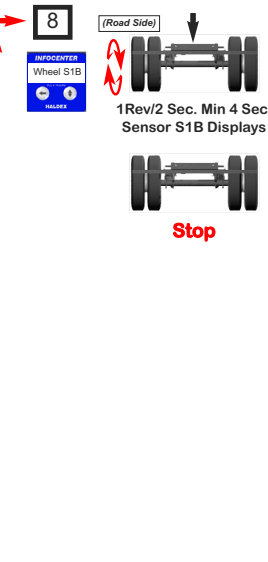
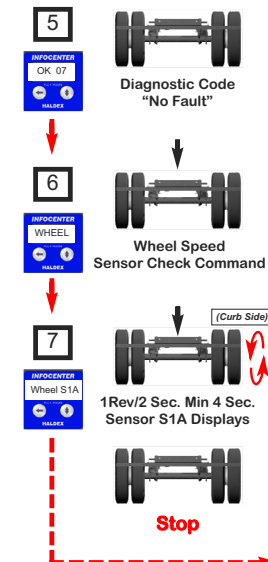
Procedure for 2S/1M:

1. Connect test power cable to power lead.
2. Charge the Emergency and Service air systems.
3. Apply ABS Permanent power source.
4. ABS valve should "blow-down" a brief shot of exhaust air.
5. ABS test light should flash "ON" for about 3 seconds and then go out, PLC Info Center or PC Diagnostic should display "OK 07".
6. If using the Info Center press the right button to display "WHEEL".
7. Rotate the front sensed "Curb" side wheel (1 Rev/2 Sec) 4 seconds minimum: test equipment should display S1A Sensor.
8. Rotate the front sensed "Road" side wheel (1 Rev/2 Sec) 4 seconds minimum: test equipment should display S1B Sensor.

Recommended Production Testing:

Test Equipment 12VDC power source, PLC Info Center or PC Diagnostic

1. Charge the Emergency and Service air systems.
2. Apply ABS Permanent Power source to 7-way receptacle.
3. ABS valve should "blow-down" a brief shot of exhaust air.
4. ABS light should flash "ON" then "OFF".
5. PLC Info Center or PC Diagnostic should display "OK 07".
(Optional 7-Way Diagnostic interface connector cable is available)



Push Double Arrow
to move down



If ABS Lamp stays illuminated during
ABS checks, see codes on the
Info Center and reference
"Diagnostics"
Section of Manual
(Reference Manual L30041)

Commercial Vehicle Systems

Innovative Vehicle Technology

www.haldex.com

L60072W US 02/09 Web Only