

Instructions for Frame Mounting of Haldex PLC-Select Anti-Lock Brake Electronic Control Unit (ECU)

The following instructions are to mount the Electronic Control Unit (ECU) for Haldex PLC-Select Anti-lock Brake System (ABS) on the vehicle frame. Additional installation instructions are in the Haldex ABS Installation and Service Manual number L30030HBS.

Step 1: Weld the ECU bracket to the trailer frame as shown:

- Weld along the outer edges of the bracket to secure the bracket to the trailer frame. See figures 1 and 2.
- Bracket must be level with the ground.

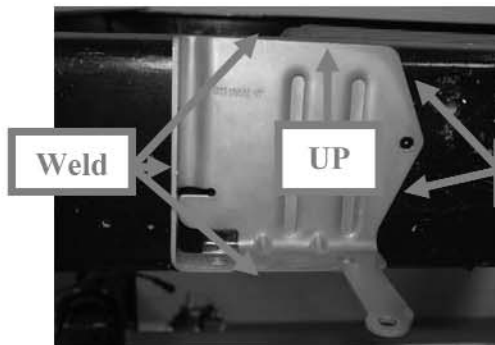


Figure 1



Figure 2

Step 2: Drill the ECU Mounting Hole through the Trailer Frame

Drill a hole of the appropriate size for a self-tapping screw or the through-bolt through the trailer frame (see below). The newly drilled hole must align with the bolt slot in the ECU bracket. You may use the ECU as a template to determine the exact location for the hole. However, DO NOT drill the hole with the ECU in place because the ECU may be damaged. See figure 3.

A 6 mm or 1/4" grade 5 (minimum) self-tapping screw is recommended to mount the ECU to the bracket. The screw must have a protective coating that is electrically conductive. This will assure a good electrical ground for the ECU. As an alternate fastener, use a 6 mm or 1/4" grade 5 bolt of sufficient length to reach through the ECU, bracket and trailer frame.

Remove any paint and contamination from the ECU bracket and trailer frame in the area where the bolt, nut and washer will make contact to assure a good electrical ground. If the ECU is not properly electrically grounded, ABS failure may result.

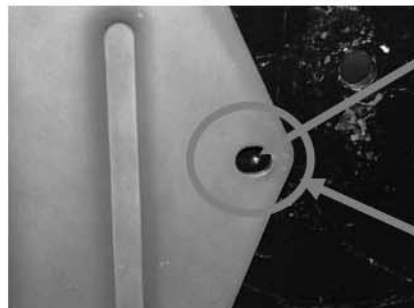


Figure 3

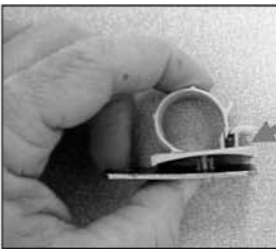
Drill bolt hole through frame aligned with ECU mounting hole.
Use the ECU as a template for hole location, but DO NOT drill with ECU in place.

This area must be clean and free of paint before mounting ECU.
(Required for electrical grounding of ECU)

Instructions for Frame Mounting of Haldex PLC-Select Anti-Lock Brake Electronic Control Unit (ECU)

Step 3: Assemble and Install Power Cable Support Clamp

- Install the Power Cable Clamp to the Power Cable Bracket by snapping the tab of the Clamp into the small hole on the Bracket as shown. See figure 4.
- Mount the Power Cable Bracket to the Valve Bracket with the provided bolt, lockwasher, and flat washers as shown in figure 5.



Snap
tab into
bracket

Figure 4



Mount cable
bracket to
valve bracket

Figure 5

Step 4: Apply dielectric grease to the ECU ground strap. See figures 6A and 6B.



Figure 6A

Lightly apply
dielectric
grease here

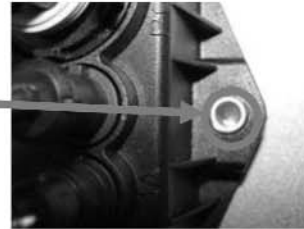


Figure 6B

Step 5: Install ECU into the bracket

- Install the ECU onto the bracket by sliding the tab of the ECU into the slot on the bracket as shown.
- Secure the ECU to the bracket with a 6 mm or 1/4" grade 5 (minimum) self-tapping screw or a 6 mm or 1/4" grade 5 bolt of sufficient length to reach through the ECU, bracket, and trailer frame. Tighten to 85-130 in-lbs (9.6 – 14.6 Newton-Meters).



Figure 7A

Slide tab into
bracket slot

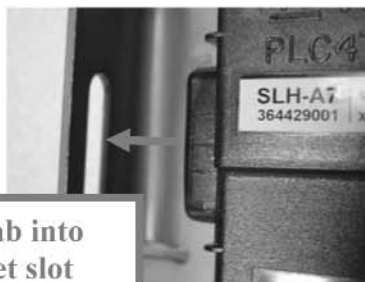


Figure 7B



Tighten to
85 to 130 in-lbs
(9.6 to 14.6
Newton-Meters)

Figure 8

Instructions for Frame Mounting of Haldex PLC-Select Anti-Lock Brake Electronic Control Unit (ECU)

Step 6: Connect Valve Cable Extension See figure 9.

- Remove the 3-pin valve solenoid cable from the blue plastic holder.
- Lightly coat the pins of the connector with dielectric grease.
- Plug onto the Valve Extension Cable.
- Hand-tighten the collar onto the connector.

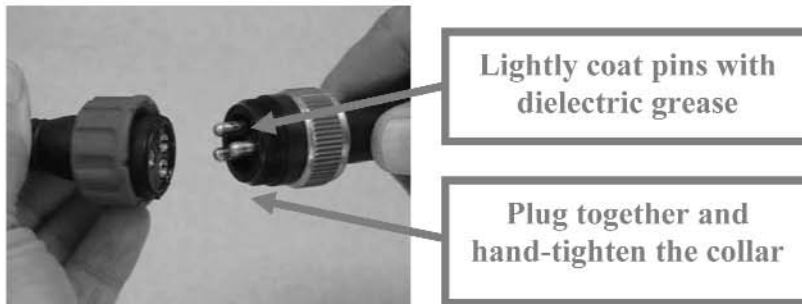


Figure 9

Step 7: Connect Sensor and Power Cables to ECU. See figures 10 and 11.

- Unsnap the blue plastic holder from the sensor connectors on the ECU. It should remain attached to the valve solenoid wire and will be used as a cable clasp to secure the sensor cable connections to the ECU.
- Lightly coat the pins of the sensor connectors and power connector with dielectric grease.
- Connect the curb side sensor to the “S1A” plug (the upper of the two sensor plugs) on the ECU. Also see ABS Manual L30030HBS for sensor locations.
- Connect the road side sensor to the “S1B” plug (the lower of the two sensor plugs) on the ECU. Also see ABS Manual L30030HBS for sensor locations.
- Snap the cable clasp over the sensor connections at the ECU to secure them.
- Route the Power Cable through the Power Cable Support Clamp and plug into the five-pin connector on the ECU. Make certain the tab on the Power Cable plug locks onto the tab on the ECU.

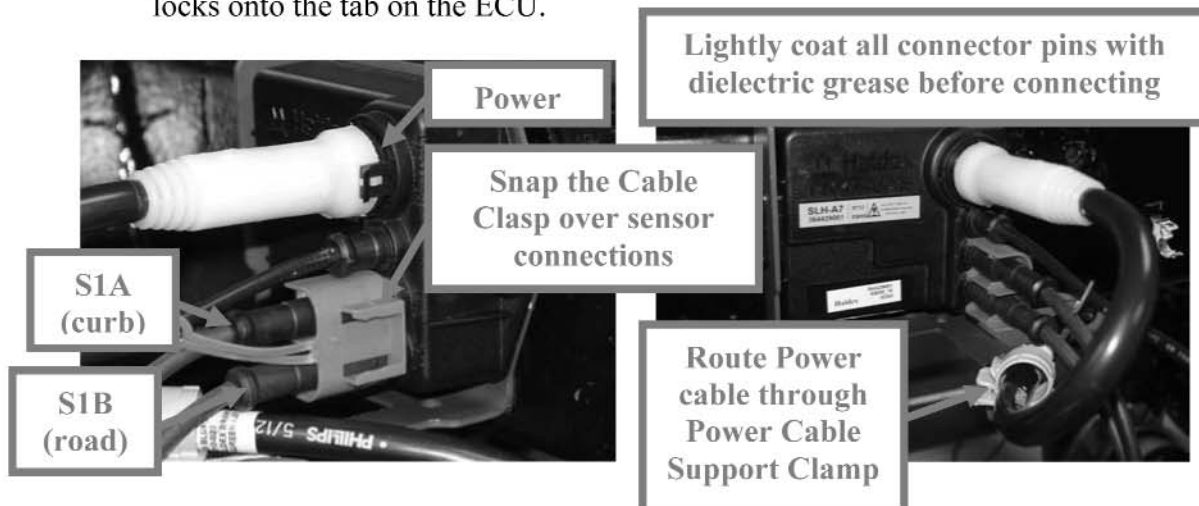


Figure 10

Figure 11

Instructions for Frame Mounting of Haldex PLC-Select Anti-Lock Brake Electronic Control Unit (ECU)

Step 8: Mount the Full Function ABS Valve onto the air tank according to the instructions in Haldex ABS Installation Manual number L30030HBS.

Step 9: Connect the Valve Cable Extension to the Valve Solenoid

- Lightly coat the pins of the valve solenoid connector with dielectric grease.
- Plug the valve cable extension onto the solenoid of the Full Function ABS Valve. See figure 12.
- Hand-tighten the thumb screw of the cable onto the threads of the solenoid. See figure 13.

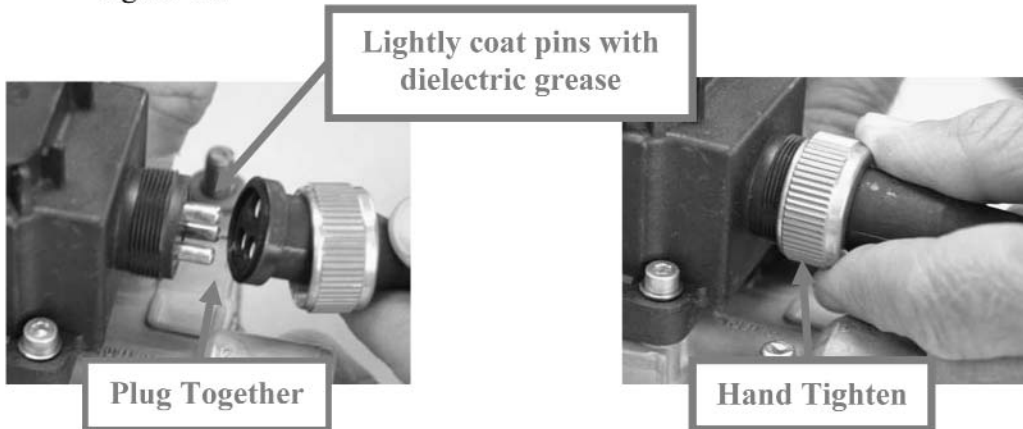


Figure 12

Figure 13

Step 10: Complete the installation and test the ABS according to the instructions in Haldex ABS Installation Manual Number L30030.



6/04 2.5M ART L31219

Haldex Commercial Vehicle Systems

North American Sales Division
Haldex Brake Products Corporation
10707 N.W. Airworld Drive
Kansas City, MO 64153-1215
Phone: (816) 891-2470
Fax: (816) 801-4198

North American Sales Division
Haldex Limited
525 Southgate Drive, Unit 1
Guelph, Ontario CANADA N1G 3W6
Phone: (519) 826-7723
Fax: (519) 826-9497

www.haldex.com - www.hbsna.com