

Work Instructions

Subject: Battery Cable Access (BCA) 29A Cable Inspection

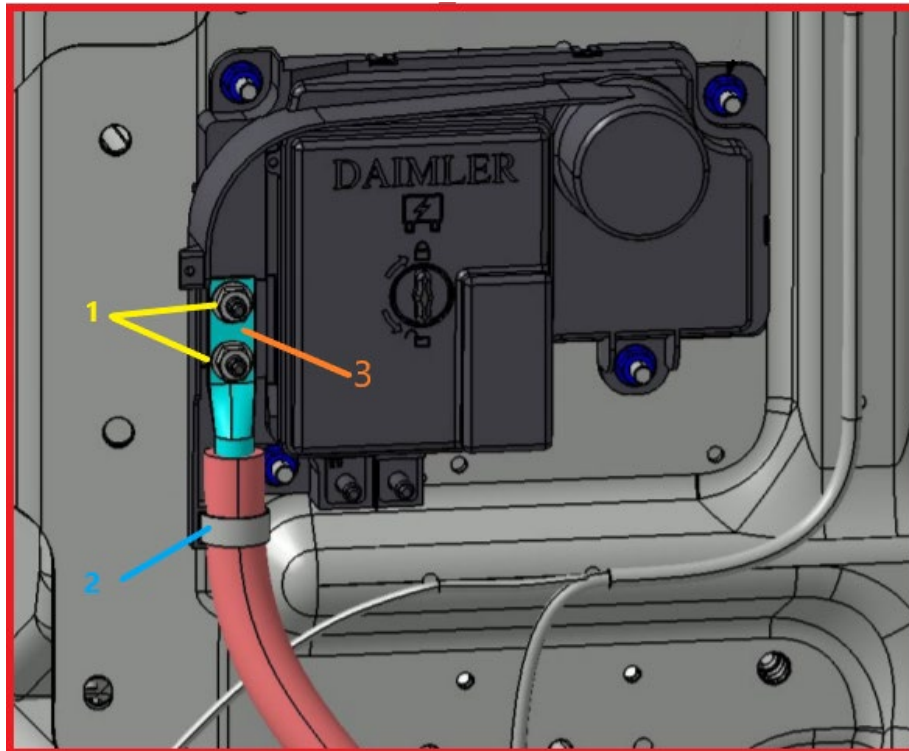
Models Affected: All New Cascadia Vehicles

General Information

NOTE: Cascadia and New Cascadia vehicles have entirely different electrical architecture. This Customer Advisory Letter addresses New Cascadia vehicles only.

Battery Cable Access (BCA) location:

The BCA is located on the passenger side of the engine wall, facing forward. See **Fig. 1**.



1. Studs Securing Main Positive 29A cable to the BCA.
2. Zip Tie Securing Cable to BCA
3. Cable End and BCA Plate Connection

Fig. 1, Battery Cable Access Location

1. Park the vehicle on a level surface, shut down the engine, and set the parking brake. Chock the tires.

WARNING: Do not leave the Battery Cable Access Box (BCA) connected to battery power if the BCA needs to be repaired or replaced. If the BCA needs to be repaired or replaced, immediately disconnect it from battery power until the repair is completed or the BCA is replaced. Failure to do so could result in fire, bodily injury, or death.

2. Disconnect the batteries.
3. Open the hood.
4. Locate the two studs that secure the main positive 29A cable to the BCA. See callout 1 in **Fig. 1**.

The nuts that secure the 29A cable to the BCA are installed at the factory with a drop of Loctite blue 242 thread locker. There should be no lock washers or other hardware installed on the BCA studs.

The 29A cable may be covered in a red dielectric coating.

5. Note that the proper torque of the 2 nuts that secure the 29A cable to the BCA is 10.3 to 11.8 lbf•ft (15±1 N•m). This is set out in the footnote to the installation diagram D06-95006-001. See **Fig. 2**.

TORQUE FOR VEHICLE ATTACHMENT 15 ± 1Nm.

Fig. 2, Proper Torque for 29A Cable Nuts

6. Before attempting to tighten the nuts, check the visual condition of the cable for any discoloring or distortion.
7. Gently manipulate the cable to determine if it appears loose.
8. **NOTE: Exercise caution when checking the torque of the nuts. These nuts have been installed with Loctite 242 and may be firmly attached to the studs.**

If a torque wrench that displays N•m is not available, best practice would be to use an lbf•in torque wrench. A value of 15±1 N•m is equivalent to 123.9 to 141.6 lbf•in.

Attempt to tighten a nut no more than *half* of the amount of 123.9 to 141.6 lbf•in. (15±1 N•m). *Stop immediately* if the nut turns freely.

- 8.1. If the nut turns freely, remove the torque wrench and, using a box end wrench, slowly attempt to tighten while watching the stud closely. If the stud is attempting to turn with the nut, stop. Any

further progression will cause the stud to rotate within its plastic boss internal to the BCA.

If either stud rotates during this inspection, this indicates the BCA internal plastic boss has failed and the complete BCA must be replaced immediately. See the *New Cascadia Workshop Manual*, Section 54.08.110 for instructions on the removal and installation of the BCA.

9. If the nut is turning while the stud remains stationary, torque each nut in two steps until the lower torque value is reached. Using a box end wrench, check between each step that the studs have not rotated.
10. It is essential that the face of the 29A cable be in tight contact with the steel plate of the BCA. See callout 3 in **Fig. 1**. If the cable feels loose on the studs after successful tightening, remove the cable and check for corrosion between the cable end and the BCA plate.
11. Verify the presence of the zip tie that secures the cable to the BCA (see callout 2 in **Fig. 1**).
Check the condition of the zip tie. If the zip tie is loose or missing, replace it, securely strapping the 29A cable to the BCA.
12. Close the hood.
13. Connect the batteries.