



June 20, 2023

Subject: Change to SAE/USCAR-2, Rev 8 (Change letter #8)

Changes have been made to the USCAR-2 specification sections on measuring voltage drop. These changes take effect today and are applicable to USCAR-2 revision 8. Comments and questions can be sent to [EWCAP@uscar.org](mailto:EWCAP@uscar.org).

Concern and proposed fix:

The “Applied current” for assessing the Voltage Drop per section 5.3.2.3, Step 5 is excessive for large wires. For example, a 95mm<sup>2</sup> cable would be tested at 475A. The proposed fix is to create a limit for current of **50A**.

**CHANGES TO USCAR-2** (changes in RED):

Section 5.3.2.3 Step 5 now reads:

Assemble the test circuit shown in Figure 5.3.2.3. Adjust the power supply to provide a test current at the lower of 50 Amps or 5 A/mm<sup>2</sup> of conductor cross section. (Refer to ISO 19642-3, SAE J1127, or SAE J1128 for assistance to determine the cross-sectional area of the conductor if needed.) More than one terminal or connector pair may be tested in series. See Figure 5.3.1.3 for placement of the millivolt test leads. Record the test current used.