

06/07/2023

Subject: Change to SAE/USCAR-21, Rev 4 (Letter #7)

Changes have been made to the USCAR-21 specification that adds criteria for insulation crimps specific to multi-wire crimps and welds.

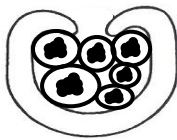
Comments and questions can be sent to EWCAP@uscar.org.

Situation:

The visual criteria for insulation crimps show single wire crimps only. Historically, this has been sufficient but now multi-wire crimps are being validated and specific multi-wire criteria and graphics are needed.

Resolution:

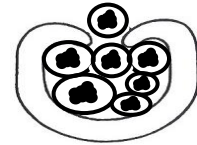
Create a new illustration “4.3.5D” that is specific to multi wire crimps.



ACCEPTABLE: Insulation crimp captures and restricts motion of all wires. Air gaps are allowed if wires are not free to move.



NOT ACCEPTABLE: Any instance of a wire being free to move (not supported by other wires or insulation crimp wings).



NOT ACCEPTABLE: Wires outside of the insulation wings. Any gap in the insulation wings must not be large enough to allow a wire to escape.

NOTES:

- 1) Cross-section is intended to show wire position only. It does not describe what the cross-section of a terminal is at in the insulation crimp zone. Terminal maker defines terminal's insulation crimp wing shape requirements.
- 2) Crimp cross sections are not required or evaluated by USCAR-21. Typically, not-acceptable conditions of wires that are free to move or are outside of the insulation wings can be found in inspection.

FIGURE 4.3.5-3D – DETAILS FOR MULTI-WIRE INSULATION CRIMPS