EWCAP
ELECTRICAL WIRING COMPONENT APPLICATION PARTNERSHIP

08/07/2023

Subject: Change #10 to SAE/USCAR-2, Rev 8

Changes have been made to the USCAR-2 specification section 5.4.3 to eliminate an unneeded test. These changes takes effect today and are applicable to USCAR-2 Revision 8. Comments and questions can be sent to EWCAP@uscar.org.

Concern:
A typing error was found in footnote 2 of Table 5.9.8/5.9.9.

Resolution:

Correct as shown.

5.9.8 Unsealed Connection System Environmental Test Sequence

5.9.9 Stand-Alone Sealing Performance Test Sequence

TABLE 5.9.8: UNSEALED CONNECTION SYSTEM ENVIRONMENTAL TEST SEQUENCE

TABLE 5.9.9: STAND-ALONE SEALING PERFORMANCE TEST SEQUENCE

			5.9.8	5.9.9			
	Test Name		Temp/Humidity	Pressure/Vacuum Standalone	Submersion Standalone	High Pressure Spray Standalone	Pressure/Vacuum Standalone for Cavity Plugs
	Test Sequence ID		V	W	AC	AD	AF
	Sample Size minimum (See individual procedures)	Connector	10	10 (2)	10 (2)	10 (2)	10 (3)
		Terminal	Note 1	Note 1	Note 1	Note 1	10 (3)
	Applicable Cable Size		Largest	Smallest(2)	Smallest(2)	Smallest(2)	Smallest
5.1	General		1	1 (2)	1 (2)	1 (2)	1 (2)
5.1.8	Visual Inspection		2,7	2,7	2,7	2,7	2,9
5.1.7	Connector and/or Terminal Cycling		3	3	3	3	3
5.1.9	Circuit Continuity Monitoring						
5.3.1	Dry Circuit Resistance						
5.3.2	Voltage Drop						
5.4.1	Terminal-Connector retention force		8				
5.4.6	Vibration/Mechanical Shock						
5.5.1	Insulation Resistance		4, 6	4, 6	4, 6	4, 6	4, 6
5.6.1	Thermal Shock						
5.6.2	Temperature/Humidity Cycling		5				
5.6.3	High Temperature Exposure						
5.6.4	Fluid Resistance						
5.6.5	Submersion				5		6
5.6.6	Pressure/Vacuum Leak			5			5
5.6.7	High Pressure Spray					5	7

NOTES:

(1) The number of terminals is determined by the number required to fully populate the total number of connector samples.

(2) Connectors with multi-cavity (mat) conductor seals require one additional set of ten CUTs per multi-cavity (mat) conductor seals sample preparation (5.1.10) making a total of two sets required. This applies to all 5.9.7 tests except Test Path Q (fluid resistance).

(3) Testing of cable plugs for connectors requires one additional set of ten CUTs. Prepare samples fully populated with cavity plugs except for a minimum of two adjacent terminal cavities populated with terminals with wires for insulation resistance testing.

Change “5.9.7” to “5.9.8/5.9.9”

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