te.com

TE Connectivity
Producción #14080
Parque Internacional Industrial Tijuana
22454 Tijuana, B.C., México

September 18, 2023

Attn: Purchasing and Quality Departments

Subject: Quality Alert / NOSP-23-023 / Notice of Suspect Product / Stop Shipment Notification

Dear Valued Customer,

We regret to send you this notice of a suspected escapement on the Shield Terminators Devices under MIL-SPEC SAE AS83519/2 as well as Crimp Splices under MIL-SPEC SAE AS81824/1 and AS81824/6, covering the TE part number families listed below. See Appendix A for a complete list of impacted part numbers.

TE Part Number Families

M83519/2-1 through -20	S02-XX-R (-01 through -20)
M81824/1-1 through -3	D-436-XX (36 thru 38)
M81824/6-1 through -3	D-436-XX (82 thru 84)

There is the possibility that all supplied Shield Terminators supplied from **March 15, 2019 to July 2023** and Crimp Splice Devices supplied from **February 20, 2014 to July 2023** are non-conformant. Further investigation into the scope of this escape is underway, and the date range may be reduced once testing is complete.

Description of Non-Compliance

As a result of a material formulation change on heat shrink tubing and meltable sealing rings used in the manufacture of the listed Shield Terminators and Crimp Splice Devices, test articles were subjected to a qualification process consisting of testing to various test groups in accordance with SAE AS83519 and AS81824 specifications.

The qualification of material change for Shield Terminators included test group VI (Temperature Cycling), VII (Moisture Resistance), and VIII (Fluid Immersion) in accordance with SAE AS83519. Although test articles successfully met the requirements outlined for test groups VI and VIII, failures were detected when tested for Insulation Resistance (M83519/2) after conditioned for Moisture Resistance.

TE Connectivity is also qualified to other slash sheets within SAE AS83519 Specification. The construction and the materials used on these slash sheets are different. AS83519/1 does not contain a preinstalled wire lead. AS83519/3 and /5 contain a pre-installed un-insulated braid, which is not subjected to Insulation Resistance Test. Testing has shown these slash sheets products are not impacted, and performance is in accordance with the SAE AS83519 specification requirements.

The qualification of material change for Crimp Splices was limited to Group B Inspection Testing (Altitude Immersion) in accordance with SAE AS81824. Although test articles successfully met the requirements outlined for Group B Inspection, based on failures detected during Shield Terminators testing, TE Connectivity decided to test for Moisture Resistance, followed by Altitude Immersion, Insulation Resistance, and Dielectric Withstanding Voltage, in accordance with SAE AS81824.

Failures have been detected when tested for Insulation Resistance after Moisture Resistance, and they were limited to the medium size of the crimp splices (AS81824/1-2). The smallest size (AS81824/1-1) and the largest size (AS81824/1-3) successfully met requirements. None of the tested articles have shown failures to Dielectric Withstanding Voltage.

AS81824/1 and AS81824/6 contain the same Sealing Sleeve component; hence, failures also impact AS81824/6-1 through -3.

TE Connectivity is also qualified to other slash sheets within SAE AS81824 Specification. The construction and the materials used on these slash sheets are different, based on the number of wires splices (/7 through /10), or the operating temperature requirements (/11). Additional testing has shown these products are not impacted and performance is in accordance to the SAE AS81824 specification requirements.

Additional testing on control Shield Terminators and Crimp Splices test articles prior to the material formulation change confirmed the failure is not a consequence of the material formulation.

Containment and Corrective Action

TE Connectivity has notified the Qualifying Agency, NAVAIR, of the issue and voluntarily placed all affected part numbers, as listed in Appendix A, on ship hold. We are in the process of conducting a thorough investigation of the issue and will provide an update as soon as testing is completed. TE Connectivity has determined there is a potential impact to TE products already shipped to customers.

Disposition of Non-conformity

TE recommends that you conduct a risk assessment to determine what impact, if any, this NOE has on your end-applications. To assist you in completing this assessment, we will share Technical Risk Evaluation, Qualification Test Report, and QC Test Reports as they become available.

Risk Assessment

TE Connectivity is performing additional testing intended to determine the potential impact on the performance of Shield Terminators and Crimp Splices Devices in the field or final application. Testing will consist of the following:

1. Voltage Drop and Tensile Strength. Test intended to determine the impact on electrical and mechanical performance.
2. Insulation Resistance and Dielectric Withstanding Voltage between 2 adjacent spliced wires on cable bundles or 2 adjacent shield terminators to determine potential arcing or electrical connection.
3. Vibration
4. Heat Aging
5. Voltage Drop and Tensile Strength

When this evaluation is complete, TE will provide an updated risk assessment. As a next step, TE Connectivity advises that you quarantine the products listed in Appendix A at location and await further instructions from TE.

Qualified Products List (QPL) Products are Affected

Upon completion of your risk assessment, if your product is ultimately destined for the U.S. Government and you wish to use the existing inventory, TE can assist you with your waiver application to the Contracting Officer for the Program.

If your application does not require QPL Listed product, please contact your TE Customer Service representative to disposition the inventory and receive TE's commercially equivalent product, listed in the table below.

If neither option addresses your needs and you wish to return the impacted product, please contact your TE Customer Service representative.

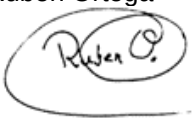
Future Communication

If you need additional information or have any questions, please contact your TE account manager or the following TE team members:

Product Engineering Manager	Luis E. Rodriguez	lerodriguez@te.com
Principal R&D/Product DVL Engineer	Craig L. Reeder	craig.reeder@te.com
Product DVL Engineer	Arnell Rey	arey@te.com
EPS Product Manager	Chauvin Chhay	chauvin.chhay@te.com
Customer Quality Engineer	Brent Diaz	brent.diaz@te.com

We apologize for any inconvenience this issue may cause. TE is committed to providing our customers with high quality products and solutions, and we are grateful for your business.

Sincerely,
Ruben Ortega



Ruben Ortega
Tijuana Plant Quality Manager

Appendix A: Insert Products Impacted – Part Number List

AS83519

MIL Spec PN	TCPN	TE Part Description	Commercial Equivalent (Identical)	
M83519/2-1	970677N002	S02-01-RCS453	ER6851-000	S02-01-RCS9376
M83519/2-1	970677-000	S02-01-R	ER6851-000	S02-01-RCS9376
M83519/2-1	EP6625-000	S02-01-R-CS4532	ER6851-000	S02-01-RCS9376
M83519/2-10	669507N004	S02-10-RCS453	ER6862-000	S02-10-RCS9376
M83519/2-10	669507-000	S02-10-R	ER6862-000	S02-10-RCS9376
M83519/2-10	EP6608-000	S02-10-R-CS4532	ER6862-000	S02-10-RCS9376
M83519/2-11	611394-000	S02-11-R	ER6864-000	S02-11-RCS9376
M83519/2-11	611394N004	S02-11-RCS453	ER6864-000	S02-11-RCS9376
M83519/2-11	EP6601-000	S02-11-R-CS4532	ER6864-000	S02-11-RCS9376
M83519/2-12	744861-000	S02-12-R	ER6866-000	S02-12-RCS9376
M83519/2-12	744861N003	S02-12-RCS453	ER6866-000	S02-12-RCS9376
M83519/2-12	EP6614-000	S02-12-R-CS4532	ER6866-000	S02-12-RCS9376
M83519/2-13	346108-000	S02-13-R	ER6867-000	S02-13-RCS9376
M83519/2-13	346108N004	S02-13-RCS453	ER6867-000	S02-13-RCS9376
M83519/2-13	EP6593-000	S02-13-R-CS4532	ER6867-000	S02-13-RCS9376
M83519/2-14	588742-000	S02-14-R	ER6869-000	S02-14-RCS9376
M83519/2-14	588742N005	S02-14-RCS453	ER6869-000	S02-14-RCS9376
M83519/2-14	EP6600-000	S02-14-R-CS4532	ER6869-000	S02-14-RCS9376
M83519/2-15	219271-000	S02-15-R	ER6871-000	S02-15-RCS9376
M83519/2-15	219271N005	S02-15-RCS453	ER6871-000	S02-15-RCS9376
M83519/2-15	EP6589-000	S02-15-R-CS4532	ER6871-000	S02-15-RCS9376
M83519/2-16	812793N004	S02-16-RCS453	ER6873-000	S02-16-RCS9376
M83519/2-16	812793-000	S02-16-R	ER6873-000	S02-16-RCS9376
M83519/2-16	EP6618-000	S02-16-R-CS4532	ER6873-000	S02-16-RCS9376
M83519/2-17	405545N002	S02-17-RCS453	ER6875-000	S02-17-RCS9376
M83519/2-17	405545-000	S02-17-R	ER6875-000	S02-17-RCS9376
M83519/2-17	EP6596-000	S02-17-R-CS4532	ER6875-000	S02-17-RCS9376
M83519/2-18	901727N003	S02-18-RCS453	ER6877-000	S02-18-RCS9376
M83519/2-18	901727-000	S02-18-R	ER6877-000	S02-18-RCS9376
M83519/2-18	EP6621-000	S02-18-R-CS4532	ER6877-000	S02-18-RCS9376

Continued on the following pages.

AS83519

MIL Spec PN	TCPN	TE Part Description	Commercial Equivalent (Identical)	
M83519/2-19	062806N001	S02-19-RCS453	ER6878-000	S02-19-RCS9376
M83519/2-19	062806-000	S02-19-R	ER6878-000	S02-19-RCS9376
M83519/2-19	EP6579-000	S02-19-R-CS4532	ER6878-000	S02-19-RCS9376
M83519/2-2	646506-000	S02-02-R	ER6852-000	S02-02-RCS9376
M83519/2-2	646506N003	S02-02-RCS453	ER6852-000	S02-02-RCS9376
M83519/2-2	EP6605-000	S02-02-R-CS4532	ER6852-000	S02-02-RCS9376
M83519/2-20	762712-000	S02-20-R	ER6879-000	S02-20-RCS9376
M83519/2-20	762712N001	S02-20-RCS453	ER6879-000	S02-20-RCS9376
M83519/2-20	EP6616-000	S02-20-R-CS4532	ER6879-000	S02-20-RCS9376
M83519/2-3	450705-000	S02-03-R	ER6723-000	S02-03-RCS9376
M83519/2-3	450705N003	S02-03-RCS453	ER6723-000	S02-03-RCS9376
M83519/2-3	EP6597-000	S02-03-R-CS4532	ER6723-000	S02-03-RCS9376
M83519/2-4	656537-000	S02-04-R	ER6726-000	S02-04-RCS9376
M83519/2-4	656537N002	S02-04-RCS453	ER6726-000	S02-04-RCS9376
M83519/2-4	EP6606-000	S02-04-R-CS4532	ER6726-000	S02-04-RCS9376
M83519/2-5	958166-000	S02-05-R	ER6854-000	S02-05-RCS9376
M83519/2-5	958166N003	S02-05-RCS453	ER6854-000	S02-05-RCS9376
M83519/2-5	EP6624-000	S02-05-R-CS4532	ER6854-000	S02-05-RCS9376
M83519/2-6	704613N002	S02-06-RCS453	ER6856-000	S02-06-RCS9376
M83519/2-6	704613-000	S02-06-R	ER6856-000	S02-06-RCS9376
M83519/2-6	EP6612-000	S02-06-R-CS4532	ER6856-000	S02-06-RCS9376
M83519/2-7	163665N003	S02-07-RCS453	ER6858-000	S02-07-RCS9376
M83519/2-7	163665-000	S02-07-R	ER6858-000	S02-07-RCS9376
M83519/2-7	EP6586-000	S02-07-R-CS4532	ER6858-000	S02-07-RCS9376
M83519/2-8	866259N005	S02-08-RCS453	ER6703-000	S02-08-RCS9376
M83519/2-8	866259-000	S02-08-R	ER6703-000	S02-08-RCS9376
M83519/2-8	EP6619-000	S02-08-R-CS4532	ER6703-000	S02-08-RCS9376
M83519/2-9	169750N002	S02-09-RCS453	ER6860-000	S02-09-RCS9376
M83519/2-9	169750-000	S02-09-R	ER6860-000	S02-09-RCS9376
M83519/2-9	EP6587-000	S02-09-R-CS4532	ER6860-000	S02-09-RCS9376

AS81824

MIL Spec PN	TCPN	TE Part Description	Commercial Equivalent (Identical)	
M81824/1-1	650074-000	D-436-36	ER6599-000	D-436-36CS9376
M81824/1-1	650074N006	D-436-36CS454	ER6599-000	D-436-36CS9376
M81824/1-2	650075N003	D-436-37CS454	ER6593-000	D-436-37CS9376
M81824/1-2	650075-000	D-436-37	ER6593-000	D-436-37CS9376
M81824/1-3	6500760004	D-436-38CS454	ER6595-000	D-436-38CS9376
M81824/1-3	650076-000	D-436-38	ER6595-000	D-436-38CS9376
M81824/6-1	650126-000	D-436-82	ER6729-000	D-436-82CS9376
M81824/6-2	650127-000	D-436-83	ER6594-000	D-436-83CS9376
M81824/6-3	650128-000	D-436-84	ER6730-000	D-436-84CS9376