

DLA L&M, in an effort to make sure all affected parties have access to this information, requested and obtained Amphenol Aerospace's permission on 09 May to post the following on our public website. Since this data was excerpted from GIDEP document NX4-P-09, we also requested and obtained the GIDEP Program Manager's permission to take this special and urgent action in accordance with GIDEP Distribution Policy.

1. TITLE (Class, Function, Type, etc.)		2. DOCUMENT NUMBER
MIL-DTL-26482 (Series 1) Retention Testing		NX4-P-16-04
		3. DATE (DD-MMM-YY)
		11-APR-16
4. MANUFACTURER AND ADDRESS	5. PART NUMBER	6. NATIONAL STOCK NUMBER
Amphenol Aerospace	Not Available	Not Available
40-60 Delaware Ave	7. SPECIFICATION	8. GOVERNMENT PART NUMBER
Sidney, NY 13838	MIL-DTL-26482	MS311X / MS312X
	9. LOT DATE CODE START	10. LOT DATE CODE END
	1152	1352
11. MANUFACTURER'S POINT OF CONTACT	12. CAGE	13. MANUFACTURER'S FAX
Ron Williams	77820	Not Available
14. MFR. POC PHONE	15. MANUFACTURER'S E-MAIL	
(607) 563-5344	rwilliams@aao-amphenol.com	
16. SUPPLIER - Not Applicable	17. SUPPLIER ADDRESS - Not Applicable	18. SUPPLIER CAGE - Not Applicable

19. PROBLEM DESCRIPTION / DISCUSSION / EFFECT

Amphenol Aerospace (AAO) is currently delinquent on MIL-DTL-26482 group C retention testing.

Series 1 product consists of solder termination, crimp termination and hermetic designs. AAO has observed test failure for contact retention which pertains only to solder termination design (hermetics excluded - MS311XH) in groups 1, 2, 5 & 6.

AAO is unaware of any field failures related to these test failure modes.

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20. ACTION TAKEN/PLANNED

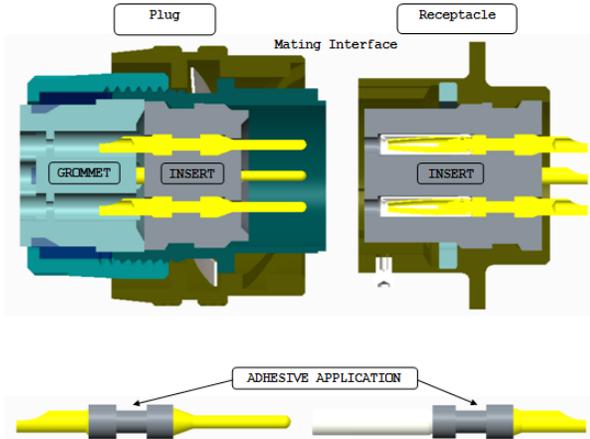
DLA imposed a stop production and stop shipment on AAO relative to the subject MIL-Spec product for delinquent retention testing. In addition, DLA requested that AAO disclose an analysis of failures observed during current testing period. Upon resolution of open actions with DLA and the lifting of their imposed stop shipment/production order, AAO plans to resume production and shipment of the subject connectors.

21. DATE MFR. NOTIFIED/ SUPPLIER NOTIFIED - Not Applicable	22. MFR./SUPPLIER RESPONSE - Not Applicable <input type="checkbox"/> REPLY ATTACHED <input type="checkbox"/> NO REPLY	23. ORIGINATOR ADDRESS/POINT OF CONTACT Ron Williams, Amphenol Aerospace 191 Delaware Ave Sidney, NY 13838-1304 rwilliams@amphenol-aao.com (607) 563-5344
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24. GIDEP REPRESENTATIVE Kyle Christoffersen	25. SIGNATURE Signature on File	26. DATE 11-APR-16
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Block 19 Continued:

Product failure analysis:



Based on DPA it was determined that there was a bond failure between several of the tested contacts and the rubber insert during contact retention testing which is para 3.6.32 of the spec.

This failure allowed for axial displacement after the contact was preloaded to 3 pounds maximum and then a load of 15 pounds for size 20 contacts and 25 pounds for size 16 contacts was applied, per para 4.6.32.

The axial load displacement allowed is .012 inches with respect to the shell measured within one minute after the load has been removed.

Axial displacement of the contact is used to confirm the ability the contacts in a connector can withstand forces that would be the result of things such as, but not inclusive of, forces produced by mating contacts during connector mating, dynamic forces produced by vibration and shock of the normal use of the connector and forces related to bundling strain on the wires.

The amount of force exerted on each contact during normal mating and un-mating is less than 22 ounces for a size 20 contact and less than 36 ounces for a size 16.

AAO process controls:

Amphenol has implemented a 100% lot check for this condition. This would include conditioning of the test samples to a temperature of -77 °F to -62 °F for at least 7 hours, allowing the connectors to revert to room temperature and then applying the specified load (15 pounds for size 20 contacts and 25 pounds for size 16 contacts) at a rate of 1 pound per minute max to confirm the contacts are not displaced from their normal position.

Corrective measures taken for this occurrence:

- Formal work center training performed and documented
- Verification audit checklist (09-CORE) performed

Other applicable testing in group 1, 2, 5 & 6 requalification testing:

Testing for this subject retention period is complete for group 1 or 2 with no

failures. Group 1, 2, 5 and 6 testing includes:

- Air leakage (all groups) of no greater than 1 atmospheric cubic inch per hour - Application of a 30 lb_f/in² pressure differential across the connectors in either direction after being exposed to -55 °C ± 3 °C for 30 minutes and allowed to return to room temperature.
- Water pressure (group 5) - after connectors are immersed in tap water to a depth of 6 feet for a period of 48 hours there is to be no leakage of receptacle inserts, panel seals, connector interface of mated connectors nor evidence of water penetration into the J class adapters of mated and unmated plugs. Mated connectors shall have insulation resistance of 100 megohms while still immersed. Unmated connectors are to have insulation resistance of 100 megohms minimum after removal from the tank and removal of all external moisture removed by shaking the connectors at room temperature and recorded within 30 minutes from removal from the water.