ANODYNE ELECTRONICS MANUFACTURING CORP.

SERVICE BULLETIN

Part No.: LSxxx

Description: Loud Speaker 300/600W External	
Service Manual: ASM-LS	Service Bulletin No.: ASM-LS-603-0004
ECO No.: ECO1190	Subject: Re-entrant tip securing inspection (Loctite® LRUs, MOD 3)

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1 Planning Information

1.1 Applicability

This modification (MOD 3) is applicable to all LS300-20x and LS600-20x units that have MOD 2 applied, and do not pass the inspection criteria listed herein.

1.2 Reason

Field inspections noted loosening of an LS600 re-entrant tip after a flight with MOD 2 applied. AEM advises to perform an inspection of the re-entrant tip and, if necessary, apply Loctite® as a temporary solution until a permanent solution is available.

1.3 Description

This service bulletin details the procedure for performing a periodic inspection and if the inspection fails, to perform a temporary Loctite® application.

1.4 Compliance

AEM recommends periodic inspection be accomplished every 250 flight hours. Existing affected MOD 2 units are suitable for MOD 3 to be applied in the field; appropriate tools and materials available from AEM.

AEM recommends any MOD 3 upgraded units to be replaced with upgraded factory units by July of 2025.

1.5 Approval

No change to existing approval.

1.6 Costing

This modification incorporates a design improvement and constitutes changes to correct a malfunction. The modification is therefore subject to warranty consideration.

1.6.1 Parts and Labour

1.6.1.1 Periodic inspection is estimated to take ten minutes every 250 flight hours.

1.6.1.2 Loctite® application is estimated to take thirty minutes.

1.7 Equipment Required

Part No.	Manufacturer	Description
WA-001	AEM	Wrench Adapter (Contact Anodyne Electronics product support to purchase)
5522A33*	McMaster-Carr	Drive Adapter, 3/8" Female x 1/2" Male Square
85555A413*	McMaster-Carr	Torque Wrench, 3/8" Square Drive, 50 - 250 in-lb
Loctite® 242	Loctite®	Medium strength thread locker

* - an approved equivalent may be substituted.

1.8 Weight and Balance

Not affected.

1.9 Electrical Load Data

Not affected.

1.10 References

For MOD 2 information, reference Service Bulletin No.: ASM-LS-603-0001

2 Procedure Instructions

2.1 Inspection Test and Loctite Procedure

2.1.1 Securing Wrench Adapter

2.1.1.1 Place Wrench Adaptor (WA-001) onto the re-entrant tip. Ensure rubber fitting of Wrench Adaptor is concentric/parallel to re-entrant tip and tightly fit.

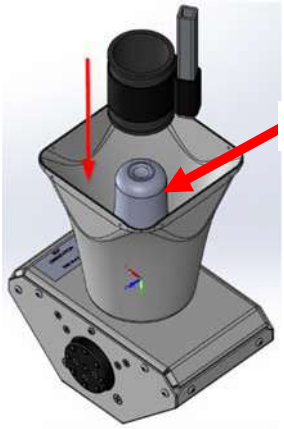

Figure 1: Seating Wrench Adapter

2.1.1.2 Ensure there is a tight fit. Wrap square tube counterclockwise. Ensure the Wrench Adaptor does not contact bell. Surface damage to the bell will occur if the Wrench Adaptor scrapes the bell during assembly.

Figure 2: Wrench Adapter Seated

2.1.2 Periodic Inspection Procedure

2.1.2.1 With WA-001 in place and a ½" drive torque wrench, apply a torque of 60 in-lb counterclockwise to attempt to remove the re-entrant tip.

If the tip remains in place, no rotation, nothing more is required.

If the tip breaks loose and begins to rotate, perform steps in Section 2.1.3 Loctite® Application Procedure.

2.1.3 **Loctite® Application Procedure**

2.1.3.1 If the periodic inspection has failed, then all proceeding steps are applicable.

2.1.3.2 Using WA-001 and a ½" drive wrench, apply sufficient counterclockwise force to loosen the re-entrant tip. The locking tab will break and become loose material. Remove the re-entrant tip.

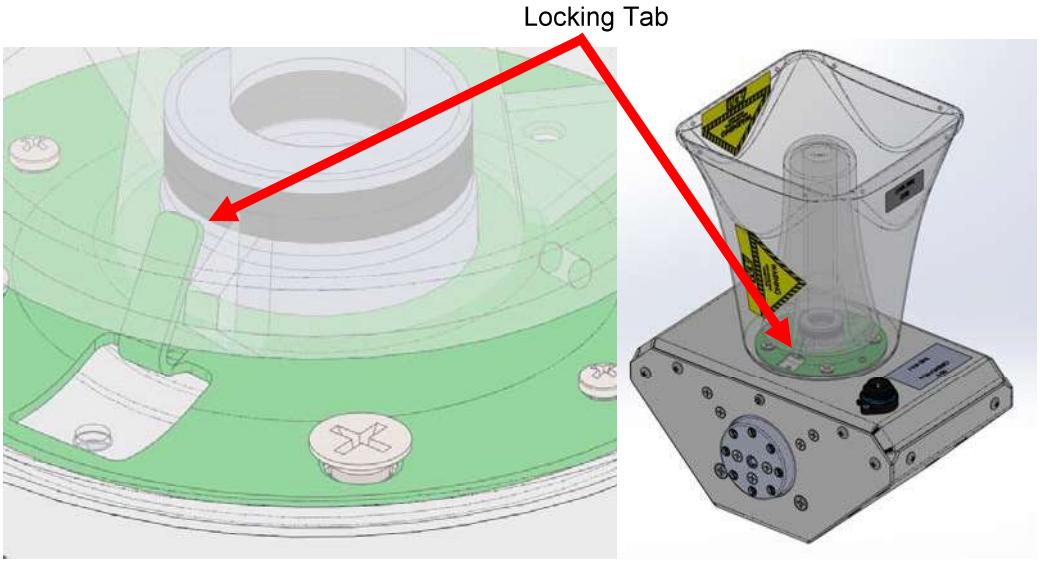

Figure 3: Breaking and removal of the locking tab

2.1.3.3 Remove and discard the broken locking tab from the previous step.

2.1.3.4 Apply Loctite® 242 to the re-entrant tip threads following all Loctite® application procedures.

Note: Loctite® 242 sets in ten minutes and cures in 24 hours.

2.1.3.5 Reinstall the re-entrant tip less than 3 minutes after applying the Loctite® 242 to avoid the setting time. Tighten with the WA-001 to a torque of 100 in-lb using the torque wrench.

2.1.3.6 Remove the WA-001 and repeat all applicable steps in Section 2 Procedure Instructions for each re-entrant tip.

Figure 4: WA-001 removal

2.2 Acceptance Test Procedure

Ensure the unit functionally works by performing an audible system test on the aircraft.

WARNING:
The system can produce high sound pressure levels. Proper personal protective equipment is required to prevent hearing damage. Stand clear, this equipment operates at an intense sound level. Personnel must be kept away from the direct loud speaker beam. Do not operate the equipment in a hangar or in confined areas.

2.3 Modification Status Marking

Locate the modification status decal on the product and apply a permanent marking on the 3 to indicate MOD 3 has been incorporated.

3 Material Information

Loctite® 242 Technical Data, Ref # 150233

4 Reference Documents

Not applicable.

End of Service Bulletin