

INSTALLATION GUIDE FOR AEROSTAR ENGINE COWL ANTI-CHAFING LINER

This document provides guidance pertaining to the installation of the MB Aviation AeroLas-White Anti-Chafing polymer liner to specified surfaces on the inside of the engine cowl.



WARNING

SOLVENT CLEANERS ARE FLAMMABLE. KEEP AWAY FROM OPEN FLAME OR HEAT SOURCE.



WARNING

SOLVENT CLEANERS ARE A SKIN AND EYE IRRITANT. USE APPROPRIATE PPE WHEN HANDLING.



WARNING

SOLVENT CLEANERS ARE A RESPIRATORY IRRITANT. USE APPROPRIATE PPE IN A WELL VENTELATED SPACE.



WARNING

EPOXY ADHESIVES ARE A SKIN IRRITANT. USE APPROPRIATE PPE WHEN HANDLING.

PREAMBLE

The AeroLas-White ANTI-CHAFING LINERS installed in the defined locations provide protection of the interior surface the engine cowl where the engine airframe seals contact the UPPER ENGINE COWLING ASSEMBLY.

Trimming of the ANTI-CHAFING LINERS may be required on fit-up. Any trimming required is to be accomplished using hand shears/scissors or similar sharp cutting tool.

REQUIRED MATERIALS

The following consumable materials are required to support the installation of the ANTI-CHAFING LINERS:

- MB Aviation Kit P/N M-1036-3 (Kit contains qty(4) pieces of anti-chafing liners 2IN x 18IN x 0.033IN).
- 3M DP420 2-part epoxy adhesive.
- Solvent cleaner – Acetone or isopropyl alcohol.
- Abrasive pad or brush or fine sandpaper – Non-metallic recommended.
- 120 Grit sand paper (for roughing the bonding side of the anti-chafe strips)
- Lint-free wipes/shop towels.
- Disposable spatula or paint brush (for epoxy application).
- Plastic spreader.
- Hand roller.
- Hand shears or scissors.
- Additional tools and materials as required to accomplish the engine cowl removal/reinstallation in accordance with the AMM.

PROCEDURE

The following procedure provides guidance on the cleaning and application/bonding of the AeroLas-White anti-chafing liners only.

Any guidance provided below for locating the anti-chafing liners is guidance only. THE INSTALLER SHALL DETERMINE THE OPTIMAL LOCATION BY OBSERVING RUBBING AND CHAFFING INDICATIONS ON THE INNER SURFACE OF THE UPPER ENGINE COWL.

PREPARE THE AIRCRAFT FOR WORK IN ACCORDANCE WITH THE AMM.

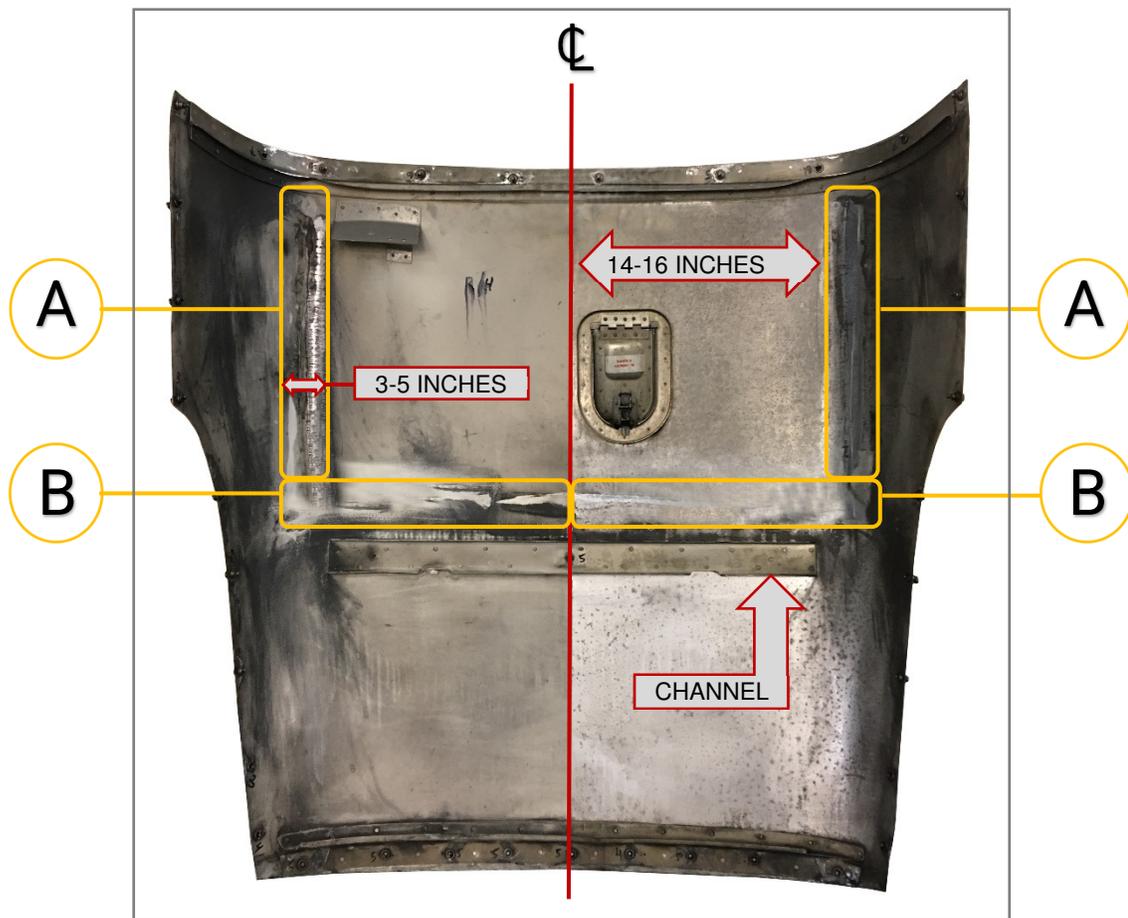


FIGURE 1 – Locating anti-chafing strips (Upper Engine Cowl)

STEP 1

- a) Remove upper engine cowling assembly to be worked on in accordance with the AMM.



NOTE

Bond anti-chafing strips soon after cleaning the cowl. Excessively long dwell time between cleaning and bonding may allow recontamination of cleaned surfaces.

- b) Clean areas A and B indicated in Figure 1, using solvent cleaners and abrasive pad/brush to remove all oil, grease, dirt, etc.

STEP 2



CAUTION

CONTAMINATION OF ANTI-CHAFFING LINER MAY ADVERSELY AFFECT BOND INTEGRITY. BEFORE REMOVING FROM PACKAGING ENSURE WORK AREA IS CLEAN AND FREE OF OIL, GREASE, ETC.



NOTE

For best results it is recommended to work with one liner segment at a time.

- a) Prepare anti-chafing liners for application by removing from packaging.
- b) Check fitment of each liner with each location and trim the anti-chafing liner as/if required.

REF. FIGURE 2 FOR EXAMPLE OF INSTALLED ANTI-CHAFFING LINERS.

VERIFY PLACEMENT OF EACH ANTI-CHAFFING LINER BY ENSURING THAT IT ADEQUATELY COVERS THE AREA OF COWL WHERE THE WEAR MARKS ARE EXHIBITED.

A small gap where liner pieces butt up against each other is acceptable, however the gap should be kept to a minimum to ensure adequate coverage.

- c) Lightly abrade side of anti-chafing liner to be bonded using 120 grit sand paper to ensure a rougher/textured surface is created to promote adhesion.

Clean with lint-free wipes to remove abrading residue.

- d) Mix and apply 3M DP epoxy in accordance with manufacturers instructions.



NOTE

For best results it is recommended to apply a uniform layer of epoxy to cover the entire area to a thickness of 1/8th to 1/16th of an inch.

- e) Apply epoxy to surface of cowl where anti-chafing liner is to be applied, ensuring uniform coverage using the plastic spreader.



NOTE

For best results it is recommended to roll the anti-chafing liner once positioned to ensure the removal of air bubbles from the epoxy, working from the center of the strip to the ends.

- f) Locate ANTI-CHAFING LINERS as shown in Figure 2. Firmly press anti-chafing liners onto upper engine cowling assembly to ensure full contact with epoxy adhesive and remove any air bubbles.

- g) Cure epoxy in accordance with manufacturers requirements.



FIGURE 2 – Completed cowl

STEP 3

- a) Reinstall engine cowling assembly in accordance with AMM requirements.
- b) Return aircraft to service in accordance with AMM requirements.

END OF TASK