

SERVICE KIT NO. SK-123A
(Supersedes SK-123)K
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DATE: March 1, 1973

TITLE: Headliner Replacement - 1972 AA-5

SERIALS AFFECTED: AA5-0001 through AA5-0154

WEIGHT AND BALANCE CHANGE: Negligible

Parts List

<u>Quantity</u>	<u>Part Number</u>	<u>Description</u>
1	5102344-57	Headliner
2	5102344-25	Tube
1	5102344-31	Insulation
1	5102344-59	Headliner
1	5102344-44	Insulation
1	5102344-58	Headliner
1	5102344-30	Insulation
1	5102344-60	Headliner
1	5102354-1	Channel
1	902020-501	Bracket Assembly
208"	7402	Felt (Johns Mansville)
208"	579.6	Extruded Sealant (Presstite Engrg.)
1	-	Tongue Depressor
22	AES1021A4-6	Screw
2	AES1021A6-6C	Screw
2	A1784-6Z-1	Nut Clip
1	AN970-3	Washer
1/2 pint	A851B	Adhesive (B.F.G.)
1/2 pint	6306	Adhesive (Uniroyal)
8	1601-0410	Rivet

Description of Modification

This kit provides the material and instructions required to:

1. Remove canopy and aft cabin headliners in which the fire resistant chemicals have been determined to be corrosive.
2. Remove corrosion from and corrosion proof any areas affected by corrosion.
3. Install new headliners in the canopy and the aft cabin.

Modification InstructionsA. Canopy Removal and Disassembly

1. Remove canopy from aircraft by removing the 12 canopy track attach screws on each side of the canopy.
2. Place canopy upside down on a padded work bench, and remove in sequence, the canopy latch moulding, the center mouldings and the lower window retainers.

3. Carefully remove the two (2) windows.
4. Remove the three (3) headliners and insulation pads and lay aside for reference.

B. Canopy Inspection for Corrosion

1. Inspect the interior of the canopy in all areas where the headliner fabric was in contact for signs of corrosion.
2. Pay particular attention to the upper window retainer groove area where the headliner fabric was held in place by the window.

C. Aft Cabin Headliner Removal

1. Remove seal plates at forward fuselage bulkhead.
2. Remove map and dome light moulding.
3. Remove the coat hook.
4. Remove rear shoulder belts.
5. Remove side window mouldings.
6. Remove rear compartment panel.
7. Remove headliner as follows:
 - a. Pull material loose at the front, sides and rear.
 - b. Remove screw at the center of each support tube by pulling aside headliner to expose this attach point. Remove crimp at forward ends of tubes.
 - c. Pull the support tubes down in the middle and remove the headliner assembly from the aircraft. Lay aside headliner assembly for reference.

D. Aft Cabin Inspection for Corrosion

1. Inspect all surfaces of the cabin, where the headliner material was in contact, for signs of corrosion. Pay particular attention to the forward and aft cabin bulkheads, the map and dome light mounting bracket and light socket clips, the coat hook washer and mounting bracket, the side window upper retainers and attaching screws, and the area on the fuselage stringer directly behind and in line with the upper window retainers.

E. Corrosion Removal and Corrosion Proofing Procedures - Canopy and Aft Cabin

If corrosion is found, use AC43.13-1, par. 143(b) as a guide and remove corrosion per the following steps:

1. Mechanically remove as much corrosion as possible using a soft stainless steel wire brush.
2. Apply a metal conditioner such as Turco #WO-1 or DuPont #5717S (or equivalent) per the manufacturer's directions. Wear rubber gloves.
3. Neutralize metal conditioner per manufacturer's instructions.
4. Wipe all uncorroded areas that were in contact with headliner with a clean cloth dampened with a baking soda and water solution, followed by wiping with a clean cloth dampened with clean water.
5. Thoroughly inspect all areas cleaned to confirm that corrosion has been completely removed. If corrosion still exists, repeat steps 1 thru 3.

6. Once corrosion is completely removed and surfaces are dry, spray with zinc chromate to seal and corrosion proof. Use masking to protect glass and finished surfaces from overspray.
7. Any parts that are severely corroded should be replaced with parts supplied with kit or repaired using normal repair procedures.

F. Aft Cabin Headliner Installation

1. Form a 1" long flat starting at 16-3/4" from the forward end of each headliner support tube. Drill a no. 40 hole in the center of this flat (located at 17-1/4" from the forward end) in each tube.
2. Slit the headliner material support loop around the tube 2" back from each end and 2" at the tube flat. (Be sure tubes are correctly installed with flats 16-3/4" from the wide forward end of the headliner.) This allows a smooth headliner transition from the tubes to the bulkheads at each end and provides an opening for the support screw at the tube flat. See old headliner for reference.
3. Install the headliner support tubes (with the headliner on them) per the original installation. After the support screws are installed in the tube flats, crimp the forward ends of the tubes to provide additional mounting security.
4. Apply a light coat of B.F. Goodrich #A851B adhesive to the surfaces of the aft cabin where the headliner assembly will be glued in place, i.e., the forward and aft cabin bulkheads, the side window upper retainers and the fuselage directly behind of and in line with the upper window retainers.
5. Apply a light coat of adhesive to the mating surfaces of the headliner.
6. When the surfaces of the adhesive have dried to a tacky condition, center the headliner on the support tubes (fore and aft), and firmly press the headliner in place along the aft bulkhead.
7. Once the aft end of the headliner is firmly in place stretch the forward end over the forward bulkhead and firmly press in place.
8. Press the sides in place along the side window upper retainers and aft along the fuselage side directly in line with the retainers.
9. Trim off the excess headliner material at the forward bulkhead (3/8" of material should remain on bulkhead), and along the side windows. Cut out as required for the map and dome light. Refer to original headliner for pattern.
10. Install rear compartment panel.
11. Install side window mouldings.
12. Install rear shoulder belts.
13. Install coat hook and flat washer (pierce hold through headliner).
14. Install map and dome light housing.
15. Coat the forward cabin bulkhead and the seal with Uniroyal No. 6306 adhesive and when the surfaces dry to a tacky condition, install seal.
16. Install the seal plates on the forward cabin bulkhead.

G. Canopy Headliner Installation

NOTE: CANOPY MUST HAVE HAD ALL CORROSION REMOVED AND BEEN CORROSION PROOFED PER ABOVE STEPS BEFORE PROCEEDING WITH THE FOLLOWING STEPS.

1. Lay new headliner and insulation pad assemblies in canopy and position in place. Mark location of pads on inside of canopy.
2. Coat back side of insulation pads and mating surfaces of the canopy with Uniroyal #6306 adhesive.
3. When adhesive has dried to a tacky condition, install headliner and insulation pads. Be sure to position properly at start as the adhesive is a contact type adhesive.
4. Trim excess headliner material along window retainers to provide 1/2" of extra material beyond retainer.
5. Trim excess headliner as required along the two (2) canopy center mouldings and around latch. Refer to old headliner for pattern.
6. Install the canopy center moulding strips and the latch moulding.
7. Remove and replace felt on windows.
8. Slide the canopy windows in place being sure to fold headliner material in place inside the upper retainers.
9. Seal the windows in the canopy by applying extruded sealant between the windows and the canopy skin along the bottom and 3" up the ends. Enough sealant is supplied to seal the entire window periphery if required. This is accomplished by springing the window away from the canopy skin, with the wooden tongue depresser, far enough to allow the sealant to be pressed into place.
10. Install lower window retainers.

H. Canopy Installation on Aircraft

1. Install canopy on aircraft in the reverse of the removal procedure.
2. Check canopy for proper operation.

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NOTE: Revision "A" changes quantity of #7402 Felt and #579.2 extruded Sealant from 104" to 208".