

# SERVICE

SERVICE KIT NO. SK-124

DATE:

December 20, 1972

TITLE:

Headliner Replacement - 1973 AA-5

SERIALS AFFECTED:

AA5-0155 thru AA5-0160, AA5-0162 thru AA5-0164, AA5-0166 thru AA5-0182, AA5-0184, AA5-0185, AA5-0187 thru AA5-0190, AA5-0193 thru AA5-0204, AA5-0206 thru AA5-0208, AA5-0210 thru AA5-0212, AA5-0215 thru AA5-0220, AA5-0222, AA5-0223, AA5-0226, AA5-0227,

AA5-0231 thru AA5-0235 and AA5-0240.

WEIGHT AND BALANCE CHANGE: Negligible

### Parts List

Quantity	Part Number	Description
`-1	5102344-57	Headliner
• 2	5102344-25	Tube
1	5102344-31	Insulation
1	5102344-59	Headliner
· <b>1</b>	5102344-44	Insulation
1	5102344-58	Headliner
14	AES1021A4-6	Screw
8 h5	AES1021Z6-6	Screw
• 2	AES1021A6-6C	Screw
~ 2	A1784-6Z-1	Nut Clip
100 to 16	1601-0410	Rivet
<b>'1</b>	AN970-3	Washer
½ pint	#A851B (B.F. Goodrich)	Adhesive
½ pint	#6306 (Uniroyal)	Adhesive

#### 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 Instructions

#### A. Canopy Removal and Disassembly

- 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 moulding and the window mouldings.
- Remove and discard the two (2) headliners and insulation pads.

## B. Canopy Inspection for Corrosion

Inspect the interior of the canopy in all areas where the headliner fabric was in contact for signs of corrosion.

## C. Aft Cabin Headliner Removal

- 1. Remove seal plates at forward fuselage bulkhead.
- 2. Remove map and dome light moulding.
- 3. Remove 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 the headliner to expose this attach point and remove flare or crimp at forward ends.
  - c. Pull the support tubes down in the middle and remove the headliner assembly from the aircraft. Lay headliner assembly aside for reference.

## D. Aft Cabin Inspection for Corrosion

- Inspect all surfaces of the aft 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 <u>soft stainless</u> <u>steel</u> 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 through 3.
  - 6. Once corrosion is completely removed and surfaces are dry, spray with zinc chromate to seal and corrosion proof them. 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 head-liner support tube. Drill a no. 40 hole in the center of this flat (located at 17½" 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 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 #A851-B 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 <u>light</u> 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 (see original headliner for sample).
- Install rear compartment panel.
- 11. Install side window mouldings.
- 12. Install rear should belts.
- 13. Install coat hook and flat washer (pierce hole through headliner).
- 14. Install map and dome light housing.
- 15. Coat the forward cabin bulkhead and the seal with Uniroyal #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. Place new headliner pads and window mouldings (one side at a time), in canopy and position pad as required to allow side mouldings to fit in the original position. Mark location of pad on the inside of the canopy with a pencil and remove parts.
- 2. Apply a coat of Uniroyal #6306 adhesive to the back of the headliner pads and to the mating surfaces of canopy interior.
- 3. When the adhesive has dried to a "tacky" condition, carefully place headliner pads in place. Be sure to position properly at start as adhesive is a contact type adhesive.
- 4. Trim off the excess headliner material around the windows and the front and rear canopy bows.
- 5. Install the window mouldings, center moulding and canopy latch moulding, using new screws as required.

## 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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