

DATE: January 19, 1973

TITLE: Canopy Trim Accessory Kit ('73 Canopy Interior for '72 Aircraft)

MODELS AFFECTED: AA5-0001 through AA5-0154

WEIGHT AND BALANCE CHANGE: Negligible

Parts List

<u>Quantity</u>	<u>Part Number</u>	<u>Description</u>
1	5102344-53	Cover - Center
1	5102344-54	Cover - Canopy Latch
1	5102344-55	Moulding (LH)
1	5102344-56	Moulding (RH)
1	5803007-23	Placard - Canopy Latch
1	5803007-24	Placard - Canopy Latch
1	5102277-14	Grip
2	AES413-2-86	Seal
8	5102282-501	Clip Assembly
8	AES1021Z6-6	Screw
6	AES1023A4-8C	Screw
6	C15263-4Z-1	Clip Nut
20	1601-0410	Rivet
10	AN960-4	Washer
12	AES1021A4-6	Screw

Description of Modification

This kit provides the material and instructions required to update 1972 Model AA-5 canopy interior trim to 1973 appearance. Part I instructions are for installation in conjunction with Service Kit No. SK-123 (Headliner Replacement), and Part II instructions are for separate installation.

NOTE: SERVICE BULLETIN NO. 134 MUST HAVE BEEN COMPLIED WITH PRIOR TO OR IN CONJUNCTION WITH THE INSTALLATION OF THIS KIT.

## PART I - MODIFICATION INSTRUCTIONS (FOR INSTALLATION WITH SERVICE KIT NO. SK-123)

A. General

1. Use the following instructions in place of "G. Canopy Headliner Installation" instructions in SK-123.
2. Verify that modification instructions "A", "B" and "E" of Service Kit No. SK-123 have already been completed.

**B. Canopy Modifications**

1. Install 5102277-14 grip on latch box cover as shown in Figure 1.
2. Drill and countersink 12 holes in forward canopy bow as shown in Figure 2.
3. Drill ten .136" diameter (no. 29 drill) holes in aft canopy bow as shown in Figure 4 for window moulding attach rivets.
4. Trim .200 off forward and aft window retainer lips and remove 1" from aft end of upper window retainers as shown in Figure 3. This provides proper clearance for the installation of the window mouldings.

**C. Window Installation**

1. Remove and replace felt around window edges.
2. Slide windows in place.
3. 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.
4. Install the lower window retainers.

**D. Headliner Installation**

1. Place the new headliner pad assemblies and window mouldings (one side at a time), in the canopy. Position headliner pad assemblies against canopy center stringers for left-right location and center in window mouldings for fore and aft location. Remove window mouldings while holding pads in place and mark pad locations on inside of canopy with a pencil.
2. Apply a coat of Uniroyal #6306 adhesive to the back of the headliner pads and to the mating surfaces of the canopy interior.
3. When the adhesive has dried to a "tacky" condition, carefully place the 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 above the windows and at the front and rear canopy bows.

**E. Window Moulding Installation**

1. Install the 5102282-501 clip assemblies on the upper window retainers per the dimensions shown in Figure 3.
2. Place the window mouldings in the canopy and position for best fit. "Custom trim" moulding as required to obtain final fit.
3. With moulding in position mark locations of four (4) attaching screw holes that need to be drilled in the moulding above the window. These holes must line up with the four (4) clip assemblies installed in step D-1. Drill four (4) .093" diameter holes in each moulding.
4. Install the AES102126-6 screws in these locations and lightly draw the moulding into place.
5. Hold the window moulding "out" tight against the canopy at each rivet location along the rear canopy bow and drill the five (5) .136" diameter attachment holes in the moulding on each side to match the canopy bow holes. Drill and rivet one hole at a time.

NOTE: IT IS IMPORTANT TO HOLD THE MOULDING FIRMLY AGAINST THE CANOPY TO PROVIDE MAXIMUM FUSELAGE SIDE CLEARANCE DURING CANOPY OPERATION.



5. (cont'd.) The rivets, with an AN960-4 washer under each head, are installed from the inside out (so that the washer is against the moulding).
6. Trim moulding flush with inside edge of rear canopy bow as required.
7. Remove rubber canopy stops, slot mouldings for canopy stop brackets and reinstall rubber canopy stops.
8. At the forward canopy bow, hold moulding flush with inside edge of bow and drill the three (3) screw and three (3) rivet attaching holes in the moulding to match the holes in the bow.
9. Spring the moulding in away from the forward canopy bow and install the three (3) #C15263-4Z-1 clip nuts on the moulding on each side as shown in Figure 2. Trim moulding as required for clip nut installation.
10. Install the three (3) AES1023A4-8C screws and three (3) 1601-0410 rivets in the forward canopy bow to hold the moulding in place on each side as shown in Figure 2 and Figure 4. The rivets must be installed from the inside with the heads against the moulding.
11. Final tighten the four (4) AES1021Z6-6 screws in the moulding above the window on each side.
12. Trim bottom of mouldings even with the bottom of the canopy.
13. Drill seven (7) .187" diameter holes in each moulding for the canopy track attach screws.

#### F. Center Moulding Installation

1. Fit center moulding in place on canopy.
2. "Custom trim" as required to obtain best fit. Be sure moulding cutout is clear of canopy latch arms, etc.
3. Mark location of and drill six (6) .093" diameter holes through moulding to match existing holes in clip brackets along top of canopy where the two original mouldings were attached. Install the six (6) AES1021A4-6 screws as shown in Figure 4.

#### G. Canopy Latch Moulding Installation

1. Fit canopy latch moulding in place over latch box assembly.
2. Custom trim as required to obtain best fit.
3. Drill .093" diameter holes as follows: four (4) through the moulding into the back of the grip and two (2) up through the forward corners of the moulding into the box support angle as shown in Figure 4. Locate the side holes  $\frac{1}{2}$ " down from the top edge of the moulding sides and  $1\frac{5}{8}$ " and  $4\frac{1}{2}$ " forward of the aft lip respectively.
4. Install six (6) AES1021A4-6 screws in the sides and back and two (2) AES1021A4-10 screws in the front corners of the latch moulding.
5. Check for positive clearance between the moulding and all canopy latch arms.

#### H. Placards Installation

1. Install the 5803007-23 placard ("Close Canopy then Cycle Latch", "Pull to Open" and "Push to Latch"), on the left forward side of the center moulding just above the latch handle as shown in Figure 4. The "Push to Latch" arrow should point forward.
2. Install the 5803007-24 placard ("Flap Indicates Unlatched Canopy") on the left side of the latch cover just behind the latch handle cutout. (Same position as on original moulding).

NOTE: BE SURE SURFACES ARE CLEANED WITH ISOPROPYL ALCOHOL PRIOR TO INSTALLING PLACARDS.

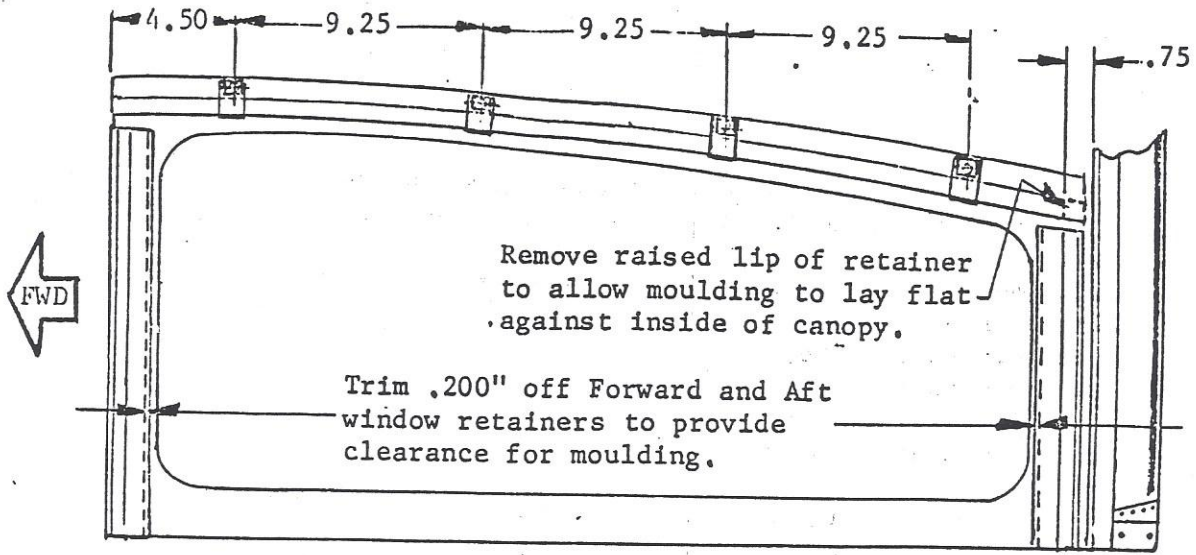


FIGURE 3. CANOPY WINDOW RETAINER TRIMMING  
Inside View of Right Hand Side of Canopy Looking Out

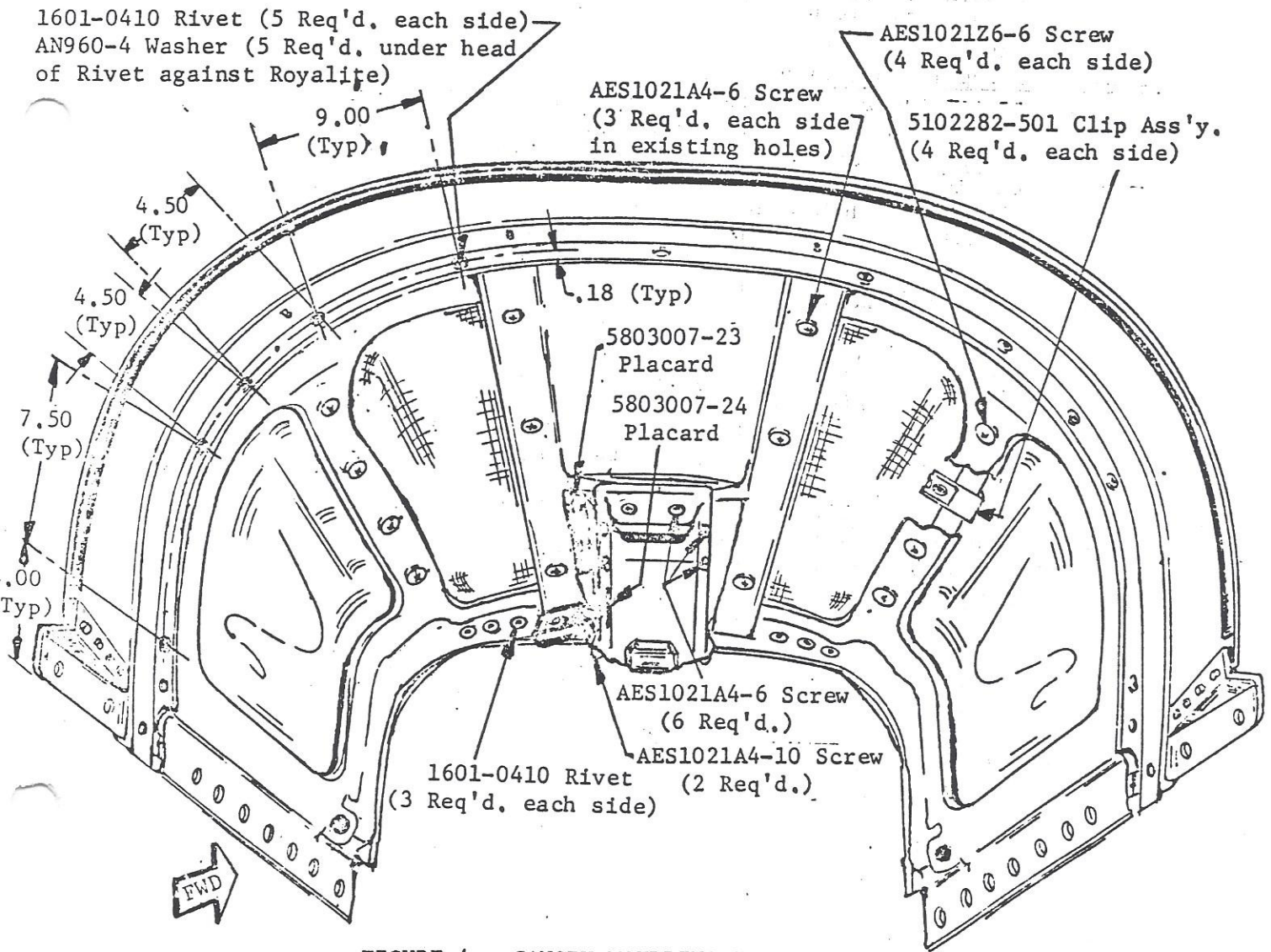


FIGURE 4. CANOPY MOULDING INSTALLATION  
Inside View Looking Forward





Drill .136" Dia.  
(4) Holes.  
Install 1601-0410 Rivets  
(4) Req'd.

5102277-14 Grip  
Latch Box

FIGURE 1. CANOPY GRIP INSTALLATION

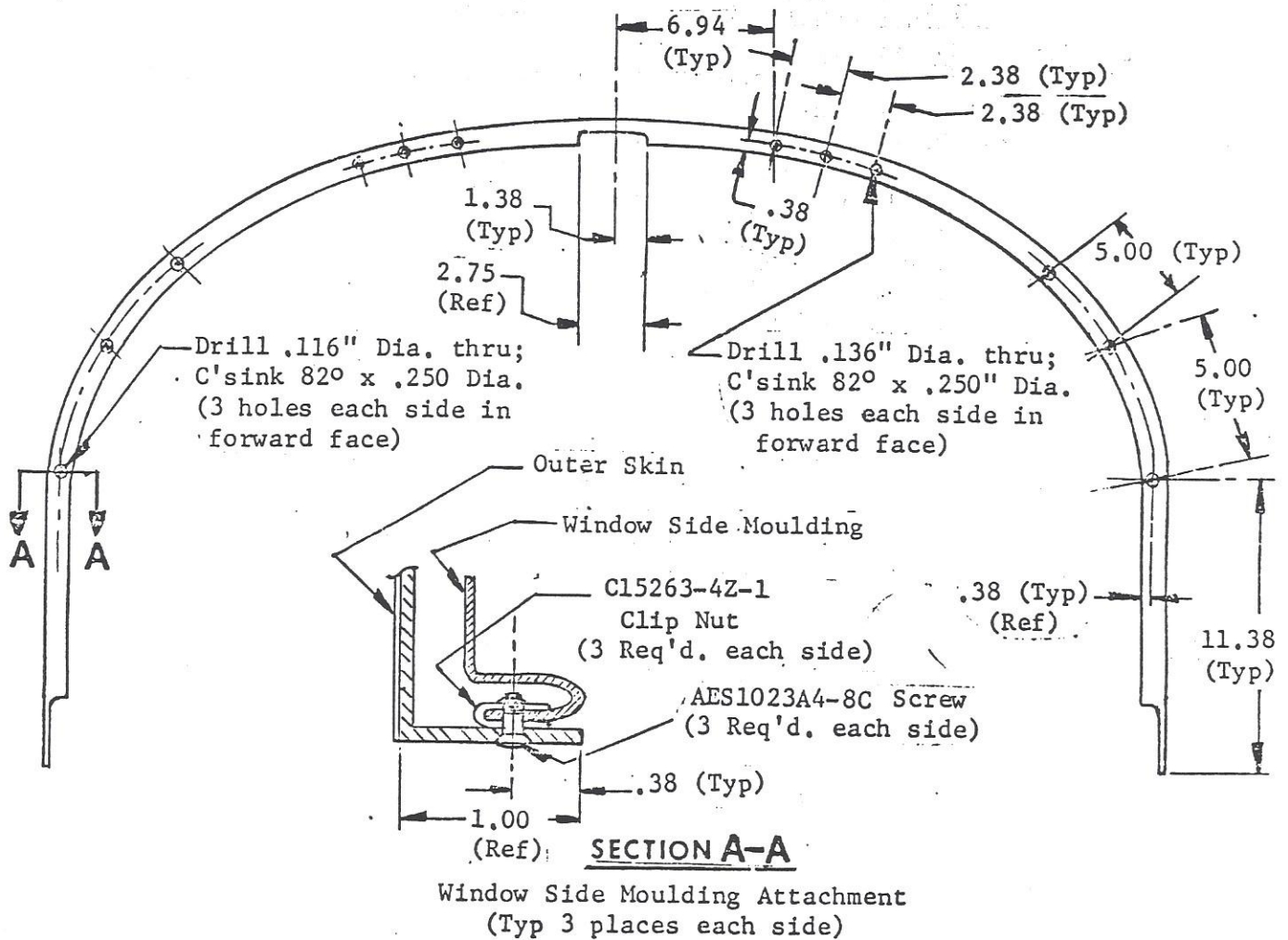


FIGURE 2. FORWARD CANOPY BOW DRILLING AND COUNTERSINKING INSTRUCTIONS  
View of Forward Face

I. Canopy Installation on Aircraft

1. Install canopy on aircraft in the reverse of the removal procedure.
2. Do not try to close canopy until instruction "J" below is completed.

J. Fuselage Seal Plate Trimming

1. Trim the outside edge of the lower half of the fuselage/aft canopy seal plate as required, to clear the aft end of the canopy window mouldings. This will require removal of approximately  $\frac{1}{4}$ " of material at the bottom tapering to the original size about half way around the periphery of the seal plate.

## PART II - MODIFICATION INSTRUCTIONS (WHEN INSTALLED WITHOUT SERVICE KIT NO. SK-123)

A. Canopy Removal

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 workbench, and remove the two (2) center moulding strips, the canopy latch cover moulding and the center headliner upholstery/insulation pad assembly and discard.

B. Canopy Modifications

1. Follow Part I instructions of this kit with the following exceptions:
  - a. Delete instructions "A".
  - b. Delete (at owner's discretion), the first part of B-4 "Trim .200 off forward and aft window retainer lips". This will delete the need to remove the side windows, but will allow approximately  $\frac{1}{8}$ " of the forward and aft window retainers to stick out beyond the new side mouldings.
  - c. Delete all of instruction "C" if windows are not removed per above.
  - d. Delete all of instruction "D".

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