

# SERVICE

ACCESSORY KIT NO. AK-119B (Supersedes AK-119A)

DATE:

February 1, 1974

TITLE:

SHOULDER HARNESS ACCESSORY KIT

MODELS AFFECTED:

AA1-0001 through AA1-0432

WEIGHT AND BALANCE CHANGE:

AK-119B-1 Weight Increase:

3.30 lbs. 126.49 in.

AK-119B-2 Weight Increase: Arm: 2.26 lbs. 121.72 in.

PARTS LIST - Kit Number AK-119B-1 (AA1-0001 thru AA1-0100) \*

Arm:

Kit Number AK-119B-2 (AA1-0101 and up)

· QUANTITY	PART NUMBER	DESCRIPTION	
2 4 2 2 8 6 8 2 8 2 8 2	804035-3 AES1022A-8-8B 8769517 1601-0410 1601-0410 804035-1 MS20364-524 MS20364-1032 AN960-516 AN960-10 AN5-6A AN3-5A 447399	Cover Screw Clip - Retainer (Midla Rivet (Avex) Rivet Plate Nut Nut Washer Washer Bolt Bolt Shoulder Harness Assy.	(Cummings &
2 1 1 * 1 * 1 4 Required for	804037-3 804037-2 804037-1 803007-40 102367-501 AES1300 AK-119B-1 (Serials AA1-0001	Plate - Support Plate - Mounting R.H. Plate - Mounting L.H. Placard Stiffener - Horizontal Washer thru AAl-OlOO), only.	Sanders)

### DESCRIPTION OF INSTALLATION

- Installation of shoulder harness assembly, horizontal stiffener (A/C 0001 thru 0100), and attaching hardware.
- Estimated time to accomplish installation of Kit AK-119B-1 is three (3) man hours, time for Kit AK-119B-2 is two (2) man hours.

#### INSTALLATION INSTRUCTIONS

- Remove and discard the hat shelf by pulling downward on the four (4) white plastic fasteners located under the shelf.
- Remove the left and right seats and existing seat belts. See Seat Removal Section 3, Page 3-3, in the Service Manual.

#### NOTE

## EXISTING SEAT BELTS AND HAT SHELF ARE NOT REUSABLE.

3. Remove the aft window mouldings and the right and left side panel upholstery.
3.1 When installing horizontal stiffener on A/C 0001 thru 0100, removal of the aft right and left side panels and the upper and lower baggage compartment panels is necessary. Also, remove angle stiffener, using #30 drill for removing rivets. Install channel stiffener (102367-501), horizontally on the aft face of the fuselage side angle stiffeners with flanges facing aft and the eight (8) predrilled holes in one flange on the top, see Figure 1. Hold or clamp channel into position and using predrilled holes in channel, back drill sixteen (16) .136" dia. holes through the longitudinal and vertical stiffeners flanges. Secure channel in place using 1601-0410 rivets supplied. Reinstall upper and lower baggage compartment panels and the aft right and left panels.

4. Position the 804037-1 mounting plate, as shown on Figure 2, with the center of the forward hole  $4\frac{1}{4}$  inches forward of the bulkhead. Use the mounting plate as a template and mark the hole locations. Drill the four (4) holes .193"

diameter.

5. Install the 804037-1 mounting plate and the 804037-3 support plate and secure with four (4) AN3-4A bolts, four (4) AN960-10 washers, and four (4) MS20364-1032 nuts. Install the 803037-2 mounting plate on the right side in the same manner.

Cut a .125" wide x 4.00" long slot in Royalite mouldings to match the 804037-1

and -2 mounting plates. Reinstall mouldings.

7. Position the 804035-1 plate as shown in Figure 3 with the center of the plate 21" from the aft face of the windshield bow, and 9/16" down from the bottom edge of the canopy outer track to the centerline of the holes. Use the plate as a template and mark the hole location. Drill one (1) .136/.139 diameter hole through the inside of the honeycomb skin only.

Install the 804035-1 plate and secure with one (1) 1601-0410 (Avex) rivet.

Position and install the opposite side in the same manner.

9. Reinstall right and left side panel upholstery.

10. Position the 8769517 clip retainer also shown in Figure 3 with the center of the clip 21 inches from the aft face of the windshield bow, and 3 9/16 inches down from the top edge of the canopy outer track to the centerline of the holes. Use clip retainer as a template and mark the hole locations. Drill two (2) .128/.130 diameter holes through upholstery material, 804035-1 plate, and inside honeycomb skin.

11. Install the 8769517 clip retainer with two(2) AES1022A-8-8B screws and two (2) AES1300 washers. Position and install the opposite side in the same manner.

12. Install the 447399 shoulder harness assembly, see Figure 2. Use one (1) AN5-6A bolt, three (3) AN960-516 washers, one (1) MS20364-524 nut and attaching hardware from seat belts. Install opposite side in the same manner.

NOTE

BELTS WITH BUCKLES TO BE INSTALLED ON INBOARD SIDE OF SEATS.

13. Reinstall left and right seats.
14. Replace placard which states "Baggage Capacity 100 Lbs. Max, No Heavy Objects On Hat Shelf", with 803007-40 placard.

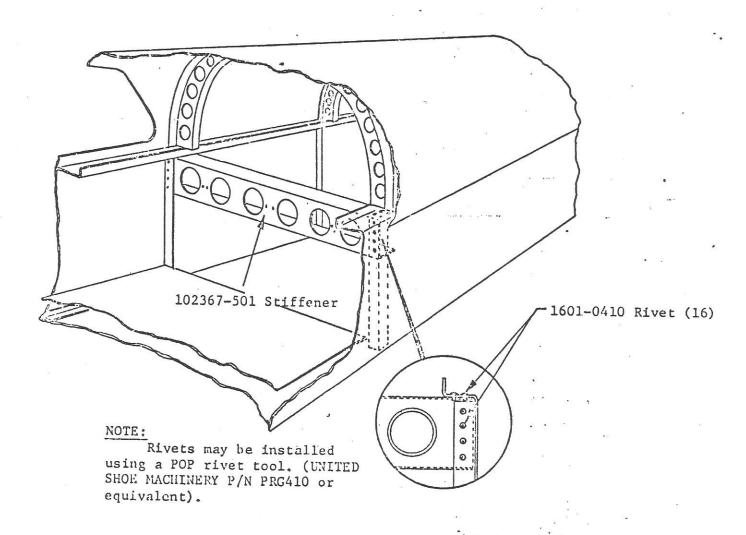
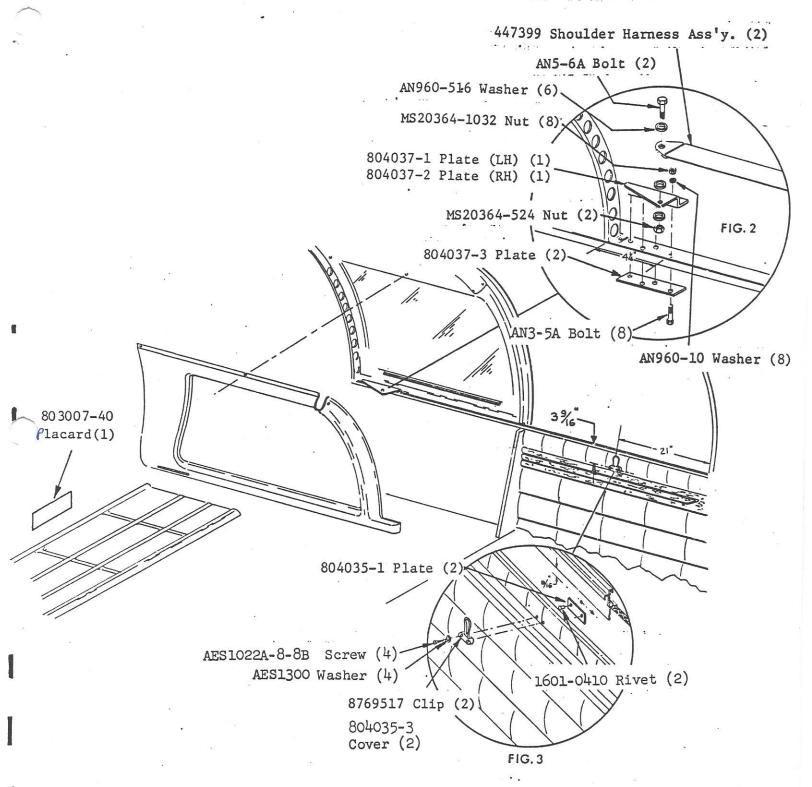


FIGURE 1.



NOTE: REV. "B" CHANGES AES1022A-8-8 SCREW TO AES1022A-8-8B SCREW (4) AND 804035-2 PLACARD (1) TO -40 PLACARD (1). ADDED 804035-3 COVER (2). RIVET QUANTITY WAS (4) IS NOW (2). AN3-4A BOLT IS AN3-5A BOLT (8). AES 1300 WASHER REPLACES A3135-017-24A (4).

GRUMMAN AMERICAN AVIATION CORPORATION