

SERVICE BULLETIN NO. 136

DATE: February 20, 1973
SUBJECT: Elevator Trim Tab Hinge Inspection
SERIALS AFFECTED: AA5-0001 through AA5-0284
TIME OF COMPLIANCE: Within the next 100 hours of operation

GENERAL

Some aircraft in the above serial number range may have been produced with insufficient hole edge margin in the elevator trim tab outboard forward hinge halves. To prevent possible detachment of the hinge half, the following inspection and modification, if required, must be accomplished within 100 hours of operation.

INSPECTION

Measure the distance from the center of the trim tab hinge pin to the center of the three (3) mounting screws in the elevator tip on each elevator. The maximum allowable dimension is .56" (see Figure 1). If the dimension is larger than .56", the forward hinge half must be modified or replaced. If the dimension is less than .56", no further action is required and the aircraft can continue in service.

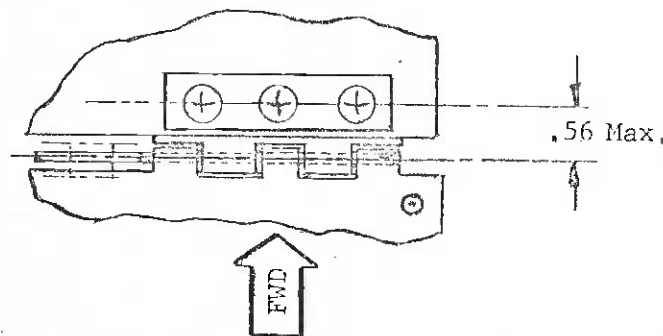


FIGURE 1. ELEVATOR TRIM TAB HINGE INSPECTION

MODIFICATION OR REPLACEMENT (IF REQUIRED)

NOTE: IF EXISTING HINGE HALF IS REMOVED FROM THE AIRCRAFT, BE SURE TO NOTE THE LOCATIONS OF THE SHIMS IN RELATION TO THE HINGE HALF (NUMBER ABOVE AND/OR BELOW), FOR CORRECT REASSEMBLY.

1. MODIFICATION

Remove the three (3) hinge half mounting screws in the elevator tip, the cotter pin retaining the hinge pin and remove the hinge pin. Remove the hinge half from the tip. Reinstall hinge pin to support trim tab. Fabricate a doubler of 2024-T3 clad aluminum, .040" thick x 1.00" x 2.50". Assemble the doubler to the hinge half as shown in Figure 2. Match drill mounting holes through tip and doubler. Assemble in reverse order and compensate for the added doubler thickness by eliminating shims as required during reassembly in tip.

2. REPLACEMENT

- a. Alternate repair method no. 1 is to order a replacement hinge half, part no. 5901034-4 (one for each elevator tip - if required). This hinge half has a longer flange, can be drilled to match the existing tip holes and will directly replace the old hinge half.
- b. Alternate repair method no. 2 is to fabricate a new hinge half (one for each elevator tip - if required), to match the existing hinge half from locally procured MS20257-5 hinge stock material.

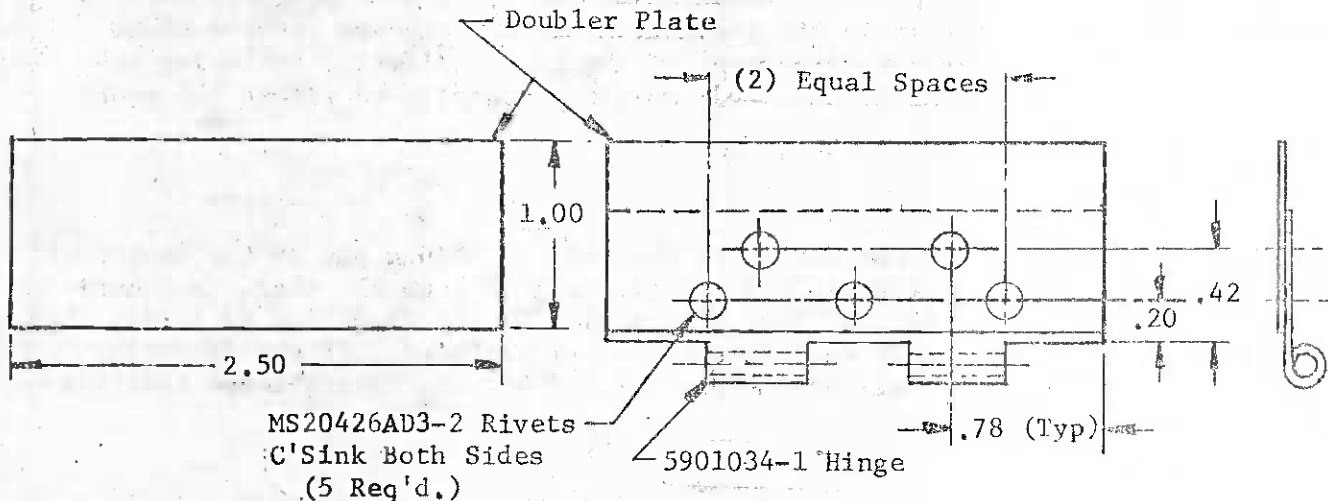


FIGURE 2. HINGE HALF DOUBLER PLATE ASSEMBLY

CREDIT ALLOWANCE

A labor credit of 1.0 hour per aircraft at the dealer's prevailing shop rate will be available for modifying all affected aircraft, if required, in or out of warranty.

Part no. 5901034-4, hinge half will be available at no charge from your authorized Grumman American Aviation Corporation Dealer until August 31, 1973. After that date, it will be available at normal price.

All work must be performed or authorized by a Grumman American Aviation Corporation Dealer or representative and a completed Warranty Claim, Form AA-740, submitted to the factory prior to August 31, 1973 for credit allowance.

Prices subject to change without notice.

GRUMMAN AMERICAN AVIATION CORPORATION

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