

(This Service Letter is FAA Designee Approved)

SERVICE BULLETIN M20-66

DATE: 4-18-60  
 SUBJECT: P/N 3087 INSPECTION AND REPAIR INSTRUCTIONS  
 MODELS AFFECTED: M-20 AND M-20A. ALL SERIAL NUMBERS  
 TIME OF COMPLIANCE: AS SOON AS POSSIBLE BUT NOT LATER THAN THE NEXT PERIODIC INSPECTION AND AT SUBSEQUENT 12-MONTH INTERVALS. THIS INSPECTION MAY BE DISCONTINUED IF KIT S.L. 20-66 IS INSTALLED.

INTRODUCTION

Some reports have been received concerning small cracks in P/N 3087 Stiffener located on the aft side and at the bottom of the tail cone aft bulkhead (Sta. 194.5). It is therefore necessary that the following inspection be accomplished.

INSPECTION - (See Figure 1 (b))

1. Remove P/N 3273 fairings (both sides) between tail cone and stinger.
2. Remove dirt and inspect P/N 3087 in the bend radius just outboard of line Y-Y for cracks using a ten power glass. If cracks are found, replace or repair P/N 3087. See instructions below. Kit S.L. 20-66 (P/N 3496-7 & -8, 3497, 3608, and hardware) is available at no cost from the Spare Parts Department, Mooney Aircraft, Inc., Box 72, Kerrville, Texas. Give airplane serial or registration number with order.
3. Please complete and return the enclosed compliance card.

REWORK INSTRUCTIONS -

1. The following procedure applies if cracks are found in P/N 3087. See Figure 1 (b).
  - a. If crack extends inboard of line Y-Y or is longer than 3/16 of an inch, replace P/N 3087.
  - b. If crack is outboard of line Y-Y and is 3/16 inches or less in length, it may be stop drilled with a 1/32 to 3/64 diameter drill and P/N 3087 repaired in accordance with the following instructions. (Items 2-10) & (Figure 1 (a)).
2. Remove stinger.
3. Remove empennage (detaching P/N 7049 link at the bulkhead).
4. Detach P/N 3146 (bracket holding P/N 7107) from P/N 3087.
5. Drill out top two rivets (AN 470 AD4) attaching P/N 3103-1 to P/N 3087.
6. Bolt P/N 3608 and P/N 3497 in place using the two lower AN 3 bolts.
7. Check hole alignment and drill out to #20(.161)D the two #30 diameter holes thru P/N 3497, 3608, 3087, and 3103-1 and install the two AN 470 AD5 rivets.
8. Locate P/N 3496-7 with the top edge even with the aft edge of flange on P/N 3497 and bearing flat against P/N 3497 and P/N 3102-1. Drill out 3/32 D holes (2) in P/N 3496-7 and thru P/N 3497 to #40(.098). Install AN 470 AD3 rivet (2). Drill #12(.189)D hole in P/N 3496-7 to match hole in P/N 3102-1. Install P/N 3496-8 in a similar manner drilling out the 1/8D hole in P/N 3496-8 and thru P/N 3102-2 to a #12(.189)D for the AN 3-5A bolt.
9. Attach P/N 3146 and P/N 7107 removed in item 4.
10. Install empennage. Attach P/N 7049 to bulkhead with hardware shown picking up P/N 3496-7 with bolt. Install remaining parts.
11. Please complete and return the compliance card enclosed with the parts.

FIGURE 1  
 REAR TAIL COME BULKHEAD (STA. 194.5)

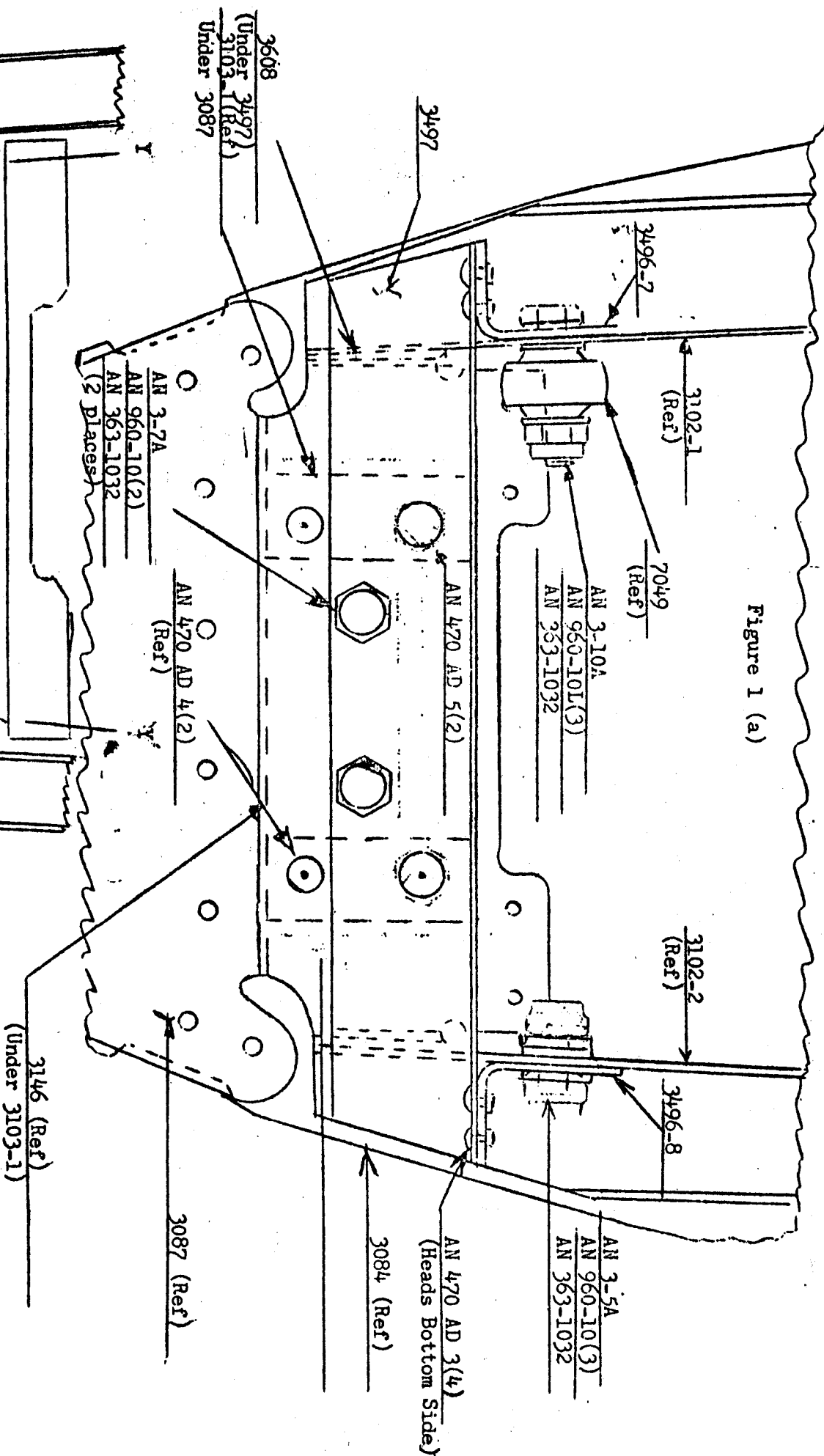


Figure 1 (a)

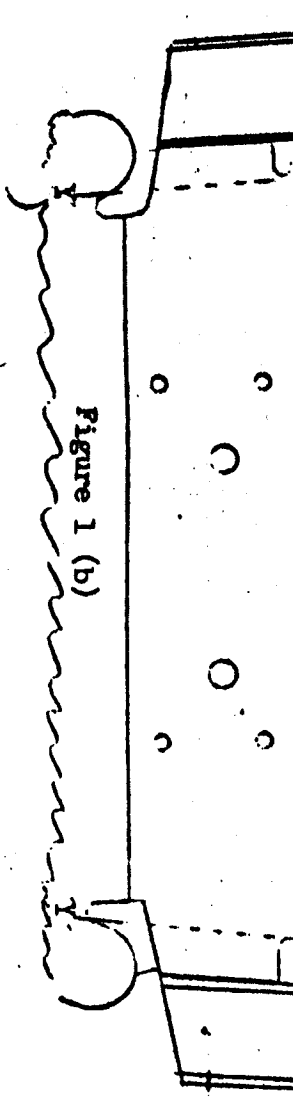


Figure 1 (b)