

SERVICE BULLETIN #1

May 3, 1979
Page 1 of 4

Subject: Horizontal tail to fuselage front attach tubes.

Models Affected: All M-4 and M-5 Series Aircraft.

M-4 Series: S/N 4 to 94, 1001 to 1045, 1S to 3S,
1T to 3T, 1C to 11C; M-4-210C, S/N 1001C to 1117C;
M-4-220S, S/N 2001S; M-4-220C, S/N 2001C to 2190C;
M-4-180C, 3001C to 3006C.

M-5 Series: M-5-220C, S/N 5001C to 5057C; M-5-210C,
S/N 6001C to 6206C; M-5-235C, S/N 7001C to 7283C;
M-5-180C, S/N 8001C to 8004C; M-5-210TC, S/N 9001C.

Compliance time: Within the next 25 hours of flight, or 60 days.
This Service Bulletin is mandantory.

Authority: This Bulletin is FAA approved.

Background: There is possibility that the fuselage tube attaching
the front attach point of the horizontal tail may be cracked.

Action to be taken, and instructions:

1. Inspect for cracks on the horizontal fuselage tube
and bracket that attaches to the front attachment
of the horizontal tail at the bracket weld joint.
(See attached sketches), both left and right side
of the fuselage.

This can be performed by the following procedure:

- a. From the outside of the airplane, cut the
fabric in area of the tube for clear
observation of the welded area. Observation
of the inboard side of the bracket in the
suspected area can also be performed
through the inside of the fuselage.
 - b. Clean the area around the weld and inspect
for cracks on both sides of the bracket
visually and with at least a 10-power
magnifying glass on the outboard side or
dye penetrant method per FAA AC43. 13.1A,
paragraph 296 or 300, on both sides of the
fuselage.
2. If cracks are found, contact Maule Aircraft Corporation
prior to further flight (Phone 912-985-2045). New parts
and instructions will be sent.

3. If no cracks are found, remove the horizontal tail and insert the reinforcing tube furnished with this service bulletin inside the existing fuselage tube (see sketch). This tube is to be centered inside the existing tube. Drill top holes first, then insert bolt for alignment, then drill lower holes. This new tube should remain inside the existing tube at all times. If a difficulty should arise due to weld penetration on the inside of the existing tube, remove the weld penetration by using a round file or other similar tools. Then zinc chromate tube interior prior to inserting reinforcing tube.
4. Re-install the horizontal tail and add fabric reinforcement in the area of the fabric cut per FAA AC43.13-1A. On aircraft with flying wires, install flying wires in accordance with sketch on page 4 of 4.
Note: Fabric material furnished with this service bulletin is Razorback material. On aircraft covered with linen or other types of covering material, use appropriate reinforcing material and coatings.
5. During the inspection of the front fuselage attachment of the horizontal tail inspect the horizontal tail for damage and cracks. If damage or cracks are found, replace damaged parts or repair in accordance with FAA AC43.13-1A.
6. Add a statement to the aircraft log book pertaining to compliance with this service bulletin. Also fill out the enclosed compliance record and return to Maule Aircraft as soon as possible.

Availability of parts:

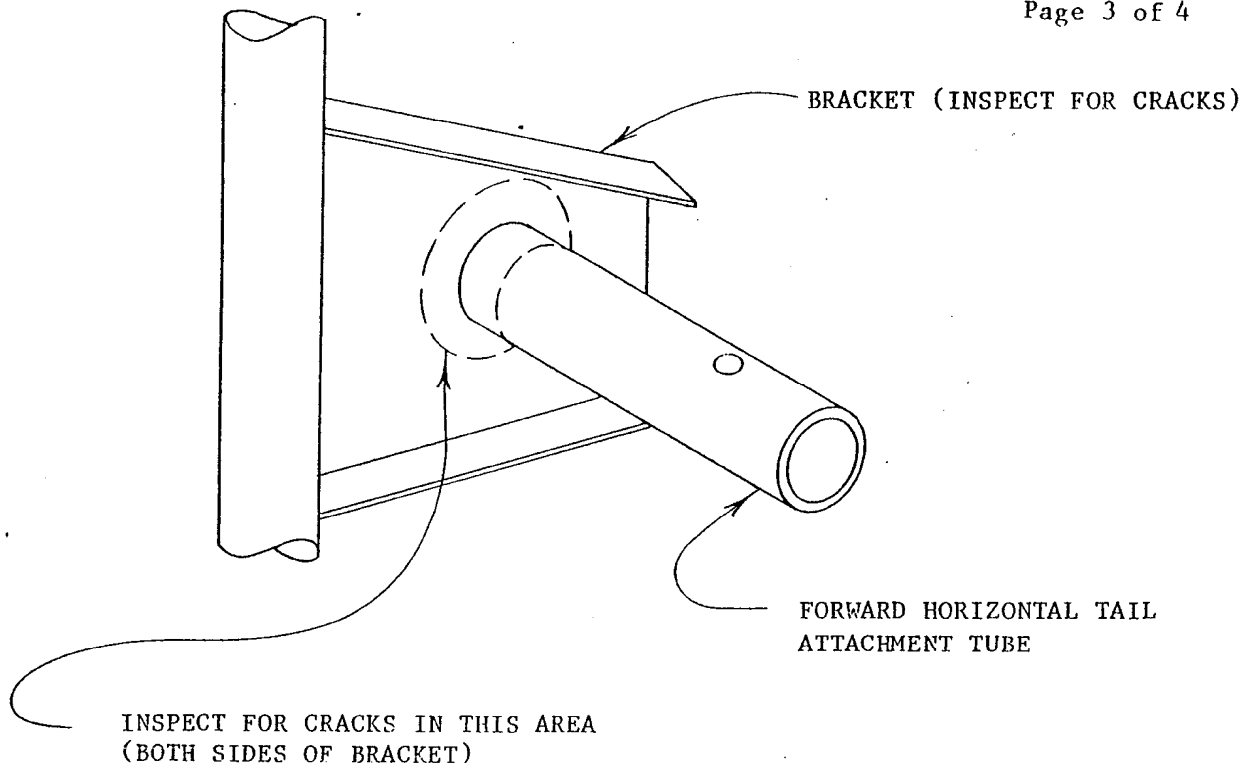
The following parts are furnished with this service bulletin.

1 ea. reinforcing tube (Part No. 1264B).

2 ea. reinforcing fabric patches (Razorback).

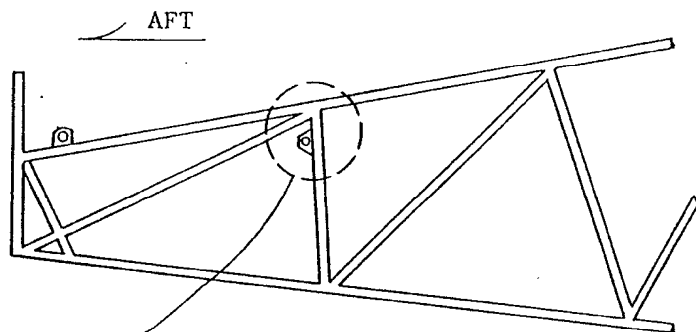
Effectivity Date:

This service bulletin is effective upon receipt.



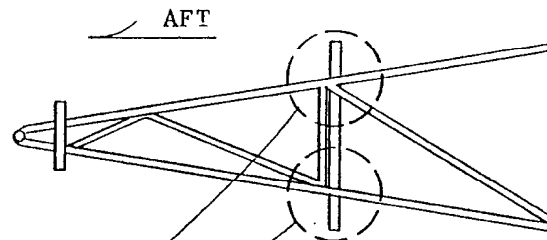
DETAIL A

(INSPECT LEFT AND RIGHT SIDES OF THE FUSELAGE)



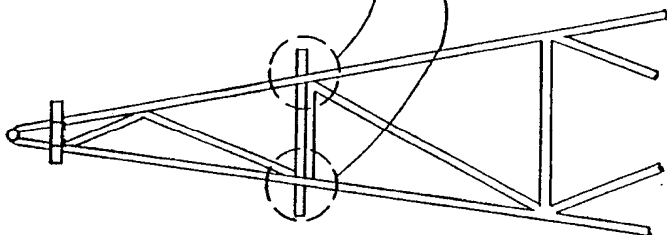
SIDE VIEW
M-4 SERIES

INSPECT THIS AREA
FOR CRACKS (SEE
DETAIL A)



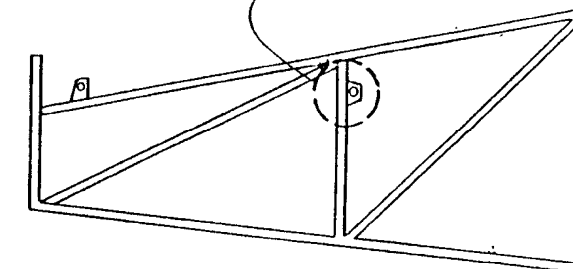
TOP VIEW
M-5 SERIES

INSPECT THIS AREA FOR
CRACKS (SEE DETAIL A)



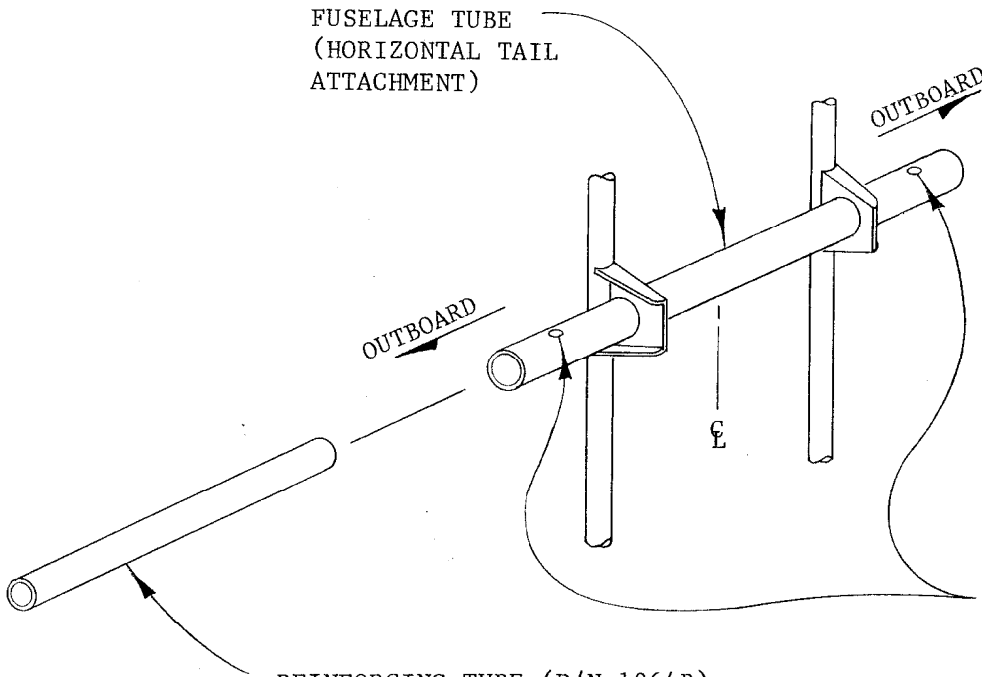
TOP VIEW
M-4 SERIES

AFT



SIDE VIEW
M-5 SERIES

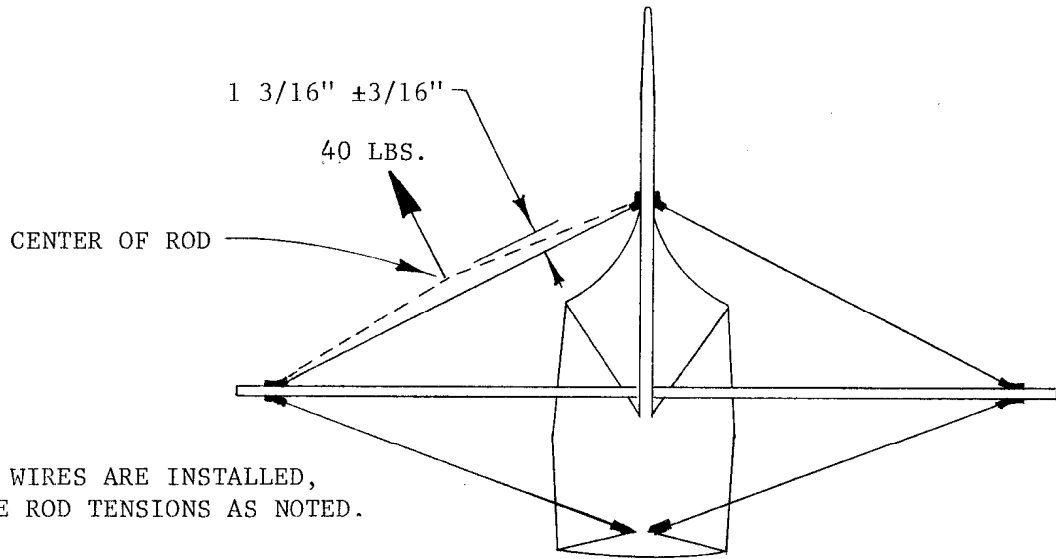
AFT



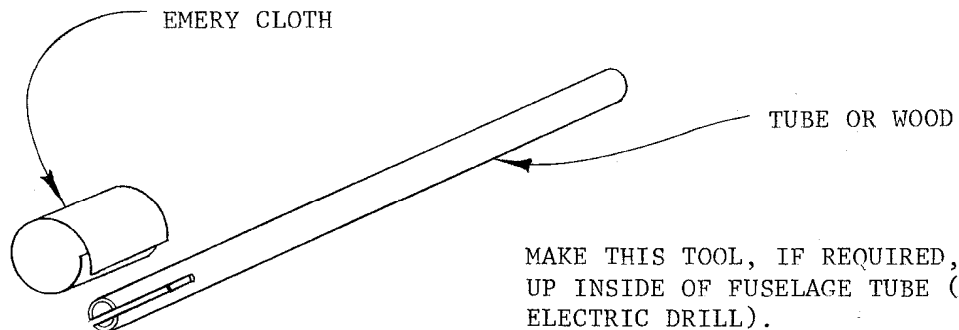
REINFORCING TUBE (P/N 1264B)
(INSTALL INSIDE OF FUSELAGE TUBE,
EQUAL DISTANCE FROM BOTH ENDS).

USE THESE HOLES AS A GUIDE
IN DRILLING HOLES IN REIN-
FORCING TUBE (SEE STEP #3
IN INSTRUCTIONS).

NOTE: COAT TUBE WITH WHEEL BEARING GREASE OR EQUIV.
PRIOR TO INSERTION INTO FUSELAGE TUBE.



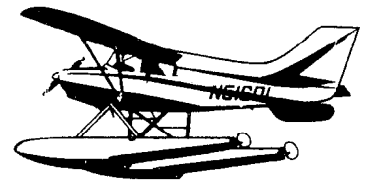
IF FLYING WIRES ARE INSTALLED,
ADJUST TIE ROD TENSIONS AS NOTED.



MAKE THIS TOOL, IF REQUIRED, TO CLEAN
UP INSIDE OF FUSELAGE TUBE (USE WITH
ELECTRIC DRILL).

Maule Aircraft Corporation

SPENCE AIR BASE :: MOULTRIE, GEORGIA 31768 :: PHONE 912/985-2045



COMPLIANCE RECORD SERVICE BULLETIN #1

DATE _____

Aircraft Model _____
Serial Number _____
Registration Number _____
Total Time on Airframe _____

The above Aircraft was inspected in accordance with Service Bulletin #1 and resulted in the following:

- NO cracks found at the horizontal fuselage tube that attaches to the front attachment of the horizontal tail.
- CRACKS found at horizontal fuselage tube that attaches to the front attachment of the horizontal tail. Describe on the back of this sheet. Also, describe any other cracks or damage found.

The following action has been taken in respect to this Service Bulletin #1:

- Reinforcing tube p/n 1264B has been inserted in place per Service Bulletin #1.
- I no longer own this aircraft. It was sold to:
Name _____
Address _____
City, State & Zip _____

Inspection performed by:

Name _____
Title _____
(Owner, A&P, IA, etc.)
Date performed _____

In an effort to keep our mailing list current for sending service bulletins, service letters, etc., please fill in the following:

Owner's name _____
Owners's address _____

Mail this compliance record to: Maule Aircraft Corporation
Engineering Records
Spence Field
Moultrie, GA 31768