

# SERVICE BULLETIN

Date issued: 5-25-97

Number: 97-5-1

## **Subject:** RV-4 Rear Sear Bulkhead Reinforcement

Synopsis: The RV-4 rear seatback may, under adverse flight conditions, have enough load applied by the rear seat passenger to distort seatback sides and F-407 bulkhead, allowing the seatback to fall aft into the baggage area.

A gusset must be added to the longeron to support the seat back. Installation of the parts provided in this kit in accordance with the instructions contained in this service bulletin will provide additional support for the rear seatback and is considered mandatory to prevent rear seat failure as described above.

### Installation Instructions:

The two F-482 Bulkhead Gussets (one right and one left) are installed on the upper surface of the main longeron immediately aft of the F-407 fuselage bulkhead (see Figure 1). The bulkhead gussets attach to the longeron using four AN470AD4-5 rivets per side, and to the fuselage bulkhead using two AN426AD4-4 rivets per side (see Figures 1 & 2).

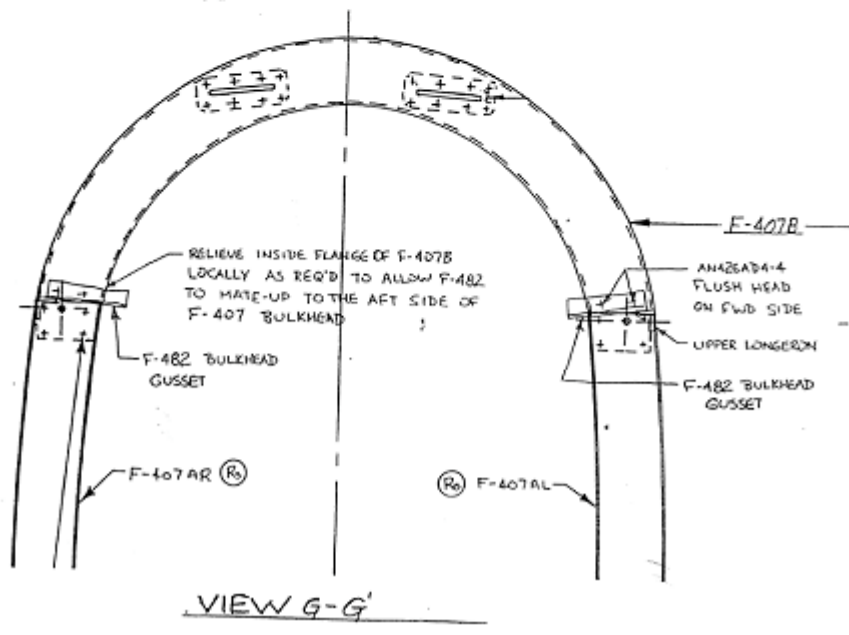
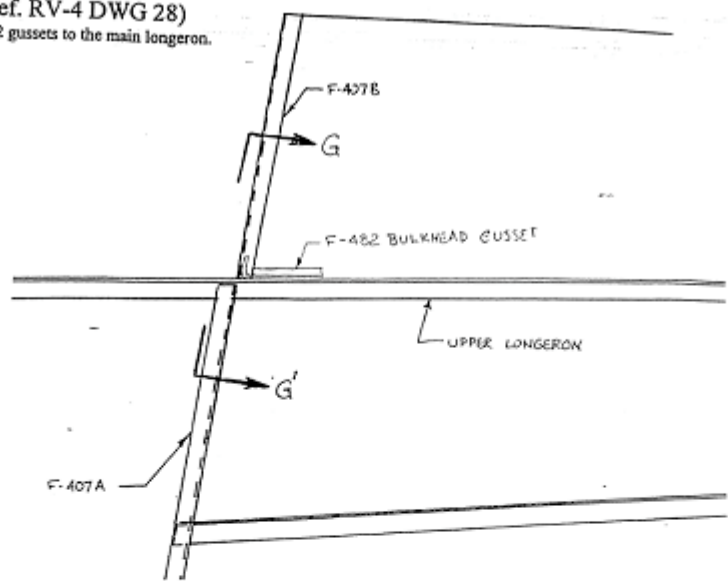
The F-482 Bulkhead Gussets are slightly too wide to clear the F-433 Rear Seatback Assembly if installed "as provided". The outboard edges of the gussets should be trimmed so the inboard edges of the gussets *just* clear the rear seatback assembly, allowing the seatback to rotate forward and give access the baggage compartment (see Figure 2). This minimum clearance will ensure maximum support for the rear seatback assembly.

The inboard flange of the fuselage bulkhead ring must be trimmed to allow the gusset to properly rest on the aft side of the fuselage bulkhead (see Figure 1).

The F-482 Bulkhead Gusset installation on the left side of the fuselage will require removal of the rear canopy latch block. The bottom surface of the canopy latch block may need to be trimmed prior to re-installation to allow for the additional thickness of the bulkhead gusset. AN426AD4-5 rivets may be used instead of AN470AD4-5 rivets if the additional clearance provided by having flush head fasteners is deemed necessary (see Figure 2).

After re-installation of all required aircraft equipment and compliance with this service bulletin has been recorded in the aircraft maintenance records, the aircraft may be returned to service.

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**FIG. 1 (ref. RV-4 DWG 28)**  
 Adding the F-482 gussets to the main longeron.



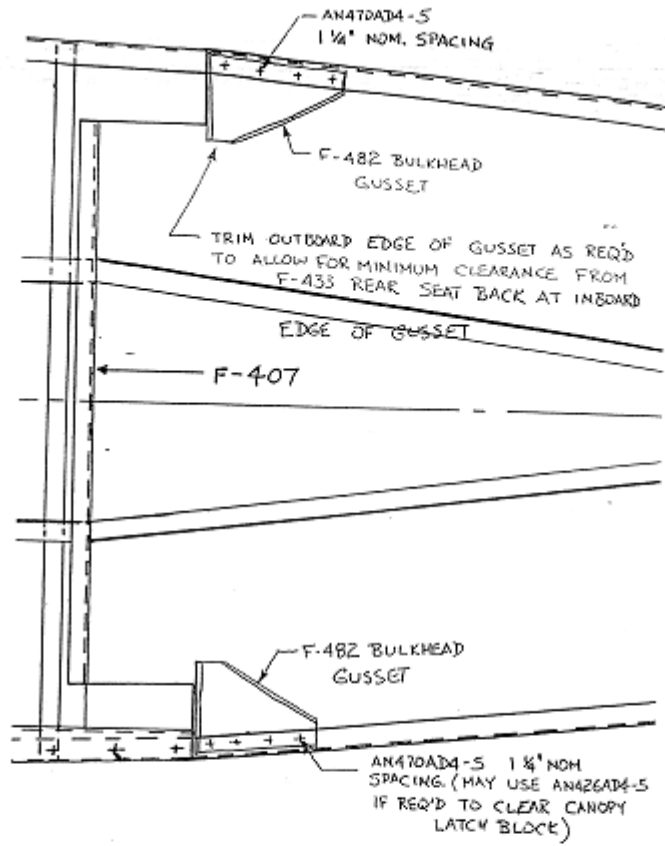


FIG. 2 (ref. RV-4 DWG 28)