



SERVICE BULLETIN SB-00031

Date Released:	November 24, 2020
Date Effective:	November 24, 2020
Subject:	RV-8/8A Quick Build Firewall Fastener Inspection and Replacement
Affected Models:	RV-8 QB and RV-8A QB Fuselages
Required Action:	Inspect the four fasteners that attach each WD-803-1 Lower Engine Mount Bracket to the F-834-1 Longerons on each side of the airplane. If the utilized fasteners are AN3 bolts: No further action is required. If the utilized fasteners are rivets: Replace with AN3 bolts.
Time of Compliance:	Before further aerobatic flight (>3g and/or <1g)
Level of Certification:	Owner (certification not required) <i>Check the rules of the local controlling authority/agency and the operating limitations for your aircraft.</i>

Synopsis:

Van's has discovered that in a limited number of Quick Build fuselage kit, four rivets were used to attach each Lower Engine Mount Bracket to the lower longerons instead of the specified AN-3 bolts. Each WD-803-1 Lower Engine Mount Bracket should be fastened to the corresponding F-834-1 Lower Longeron using four AN3 bolts, as shown in Drawing 67/67A (refer to Figure 1, below). To ensure all QB fuselages in the field are assembled with the correct fasteners, inspection is required. Use of these rivets results in reduced strength/capacity of the structural joint, and therefore the rivets - if they are installed - must be replaced with AN3 bolts.

The area to be inspected is visible from the cockpit/front baggage area.

Materials Required:

The following materials are required to complete the steps necessary to achieve compliance with this Service Bulletin:

On airplanes that have four AN3 bolts attaching each WD-803-1 Lower Engine Mount Bracket to the F-834-1 Longeron: No materials required.

On airplanes that have four rivets attaching each WD-803-1 Lower Engine Mount Bracket to the F-834-1 Longeron:

- Eight (8X) AN3-5A bolts
- Eight (8X) AN960-10 washers
- Eight (8X) AN365-1032 nuts
- Two (2X) FF 1" FIREWALL PLUG

Method of Compliance:

Step 1: Inspect the forward end of each L-843 Longeron (left and right) and determine whether the four fasteners attaching it to the WD-803-1 Lower Engine Mount Bracket are AN3 bolts. If they are, then skip to Step 8.

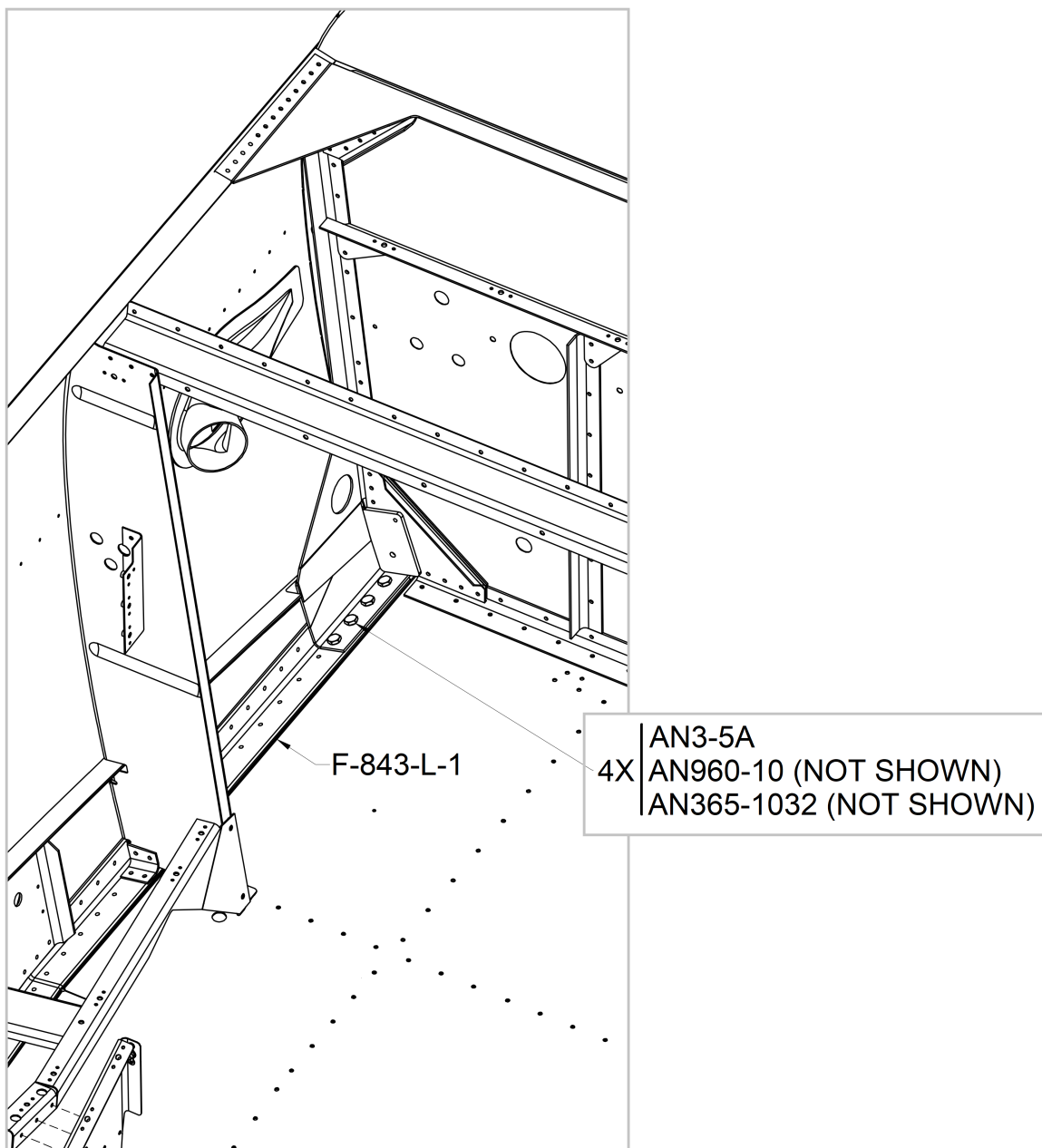


FIGURE 1: EXCERPT FROM RV-8 DRAWING 67/67A

Step 2: Drill a one-inch diameter hole in the lower outboard corners of the firewall, at the location specified in Figure 2, relative to the centers of the holes highlighted in green and red:

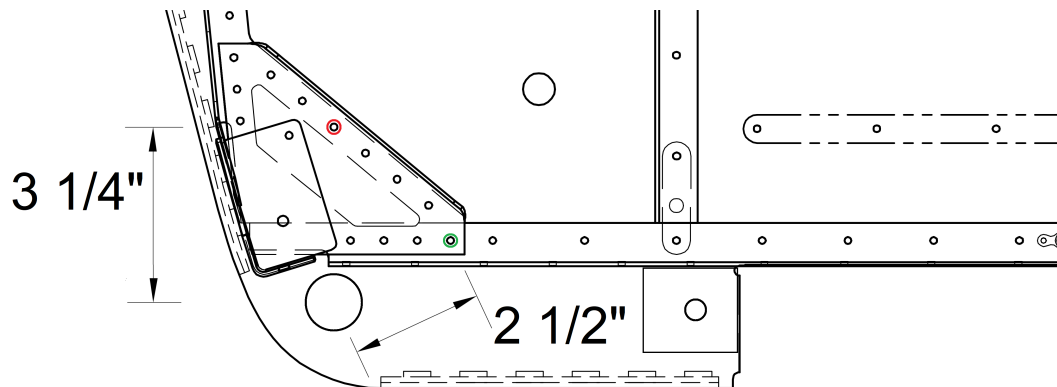


FIGURE 2: ONE-INCH DIAMETER HOLE LOCATION, FORWARD SIDE OF FIREWALL

Step 3: Drill a hole from inside the fuselage through the aft-most of the four rivets. Enlarge the hole for the AN3 bolt.

Step 4: Insert the AN3-5A bolt through the hole. Attach the AN960-10 washer and AN365-1032 nut.

Step 5: Tighten and torque the bolt from inside the fuselage, while holding the nut with a wrench through the one-inch hole in the firewall.

Step 6: Repeat steps 3, 4, and 5 for the second-to-aft-most rivet, then the third, and finally the fourth. Repeat these steps for the other side of the fuselage, i.e. 8 times in total.

Step 7: Insert an FF 1" FIREWALL PLUG, a snap-in stainless steel plug, into each of the one-inch holes. Seal with fire barrier sealant.

Step 8: Make a logbook entry indicating compliance with this service document per the requirements of the controlling authority/agency.

Place a copy of this notification in the back of the maintenance manual for your aircraft. Note the addition of this notification to the bottom of the Maintenance Manual table of contents.

If you are no longer in possession of this aircraft, please forward this information to the present owner/operator and immediately notify Van's Aircraft, Inc. via email at registrations@vansaircraft.com.

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