

RAM AIRCRAFT, L.P.  
SERVICE BULLETIN

**SB2013-02**

**SUBJECT:** One-Time Visual Inspection of Bolts – Front Engine Mount Support (aft bolts)

**PURPOSE:** To verify proper thread engagement through engine beam nutplate

**COMPLIANCE:** At next annual or 100-hour inspection, whichever comes first.

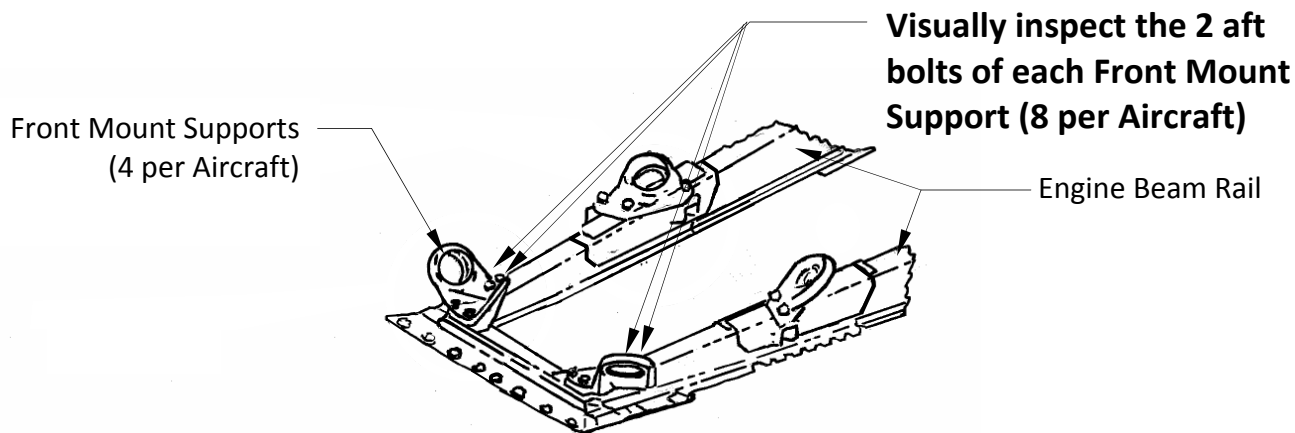
**MODELS AFFECTED:** Cessna 414A modified by STC # SA09105SC-D (a.k.a. RAM Series VII)

**DOCUMENTS SUPERSEDED:** RAM Drawing 1772 Revision R and earlier revisions


**PARTS SUPERSEDED:** Part no. AN4H13A

A. INTRODUCTION

The following one-time visual inspection is recommended by RAM Aircraft LP (RAM). Performing this Service Bulletin will assure STC conformity of the installation of engine mount support bolts in certain locations. Installations of RAM Series VII engines on Cessna 414A airplanes prior to the date of this service bulletin may be affected.

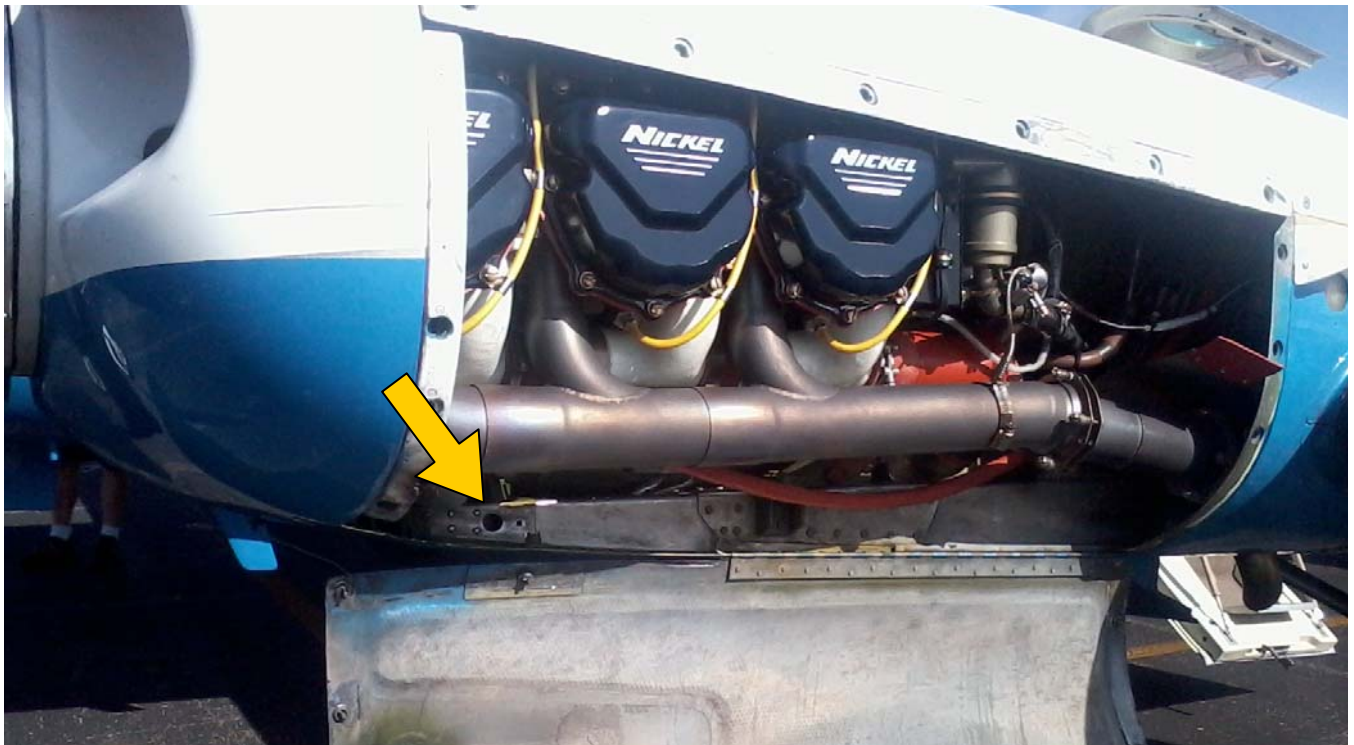


**FIGURE 1**  
Engine Nacelle Structure  
LH same as RH

ISSUED			REVISED			 <b>RAM Aircraft, L.P.</b> Waco Regional Airport 7505 Karl May Dr. Waco, Texas 76708 Phone: (254) 752-8381 Fax: (254) 752-3307 Website: <a href="http://www.ramaircraft.com">http://www.ramaircraft.com</a>	PAGE	REVISION
MO	DAY	YEAR	MO	DAY	YEAR		1 of 4	
06	27	2013					SB2013-02	

**B. INSPECTION INSTRUCTIONS:**

1. Gain access to the Front Mount Supports on each engine nacelle (4 places per Aircraft) as shown in Figures 1, 2A, and 2B by opening the inboard and outboard side cowling doors at each engine nacelle. It is not necessary to remove the top engine cowl.
2. Locate the two aft bolts on each of the Front Mount Supports (8 bolts per Aircraft) as shown in Figure 1.
3. Visually inspect each bolt for security and for proper thread engagement through corresponding nutplates, which are visible through lightening holes on each engine beam rail. See Figure 2A and 2B for location of lightening hole.
4. Use a borescope or a light source and inspection mirror to inspect bolt thread engagement as viewed inside the engine beam rails through the nearby lightening hole. See Figure 3. Both nutplates are visible through this hole at each beam rail.
5. Bolts found loose or not meeting the thread engagement acceptance criteria in Section C require corrective action per Section D.

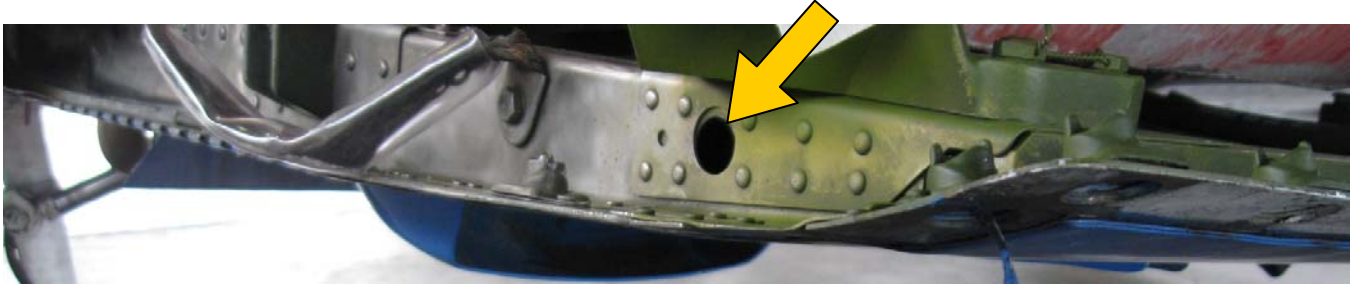


**FIGURE 2A**

**Lightening Hole**

LH Outboard Beam Rail Shown

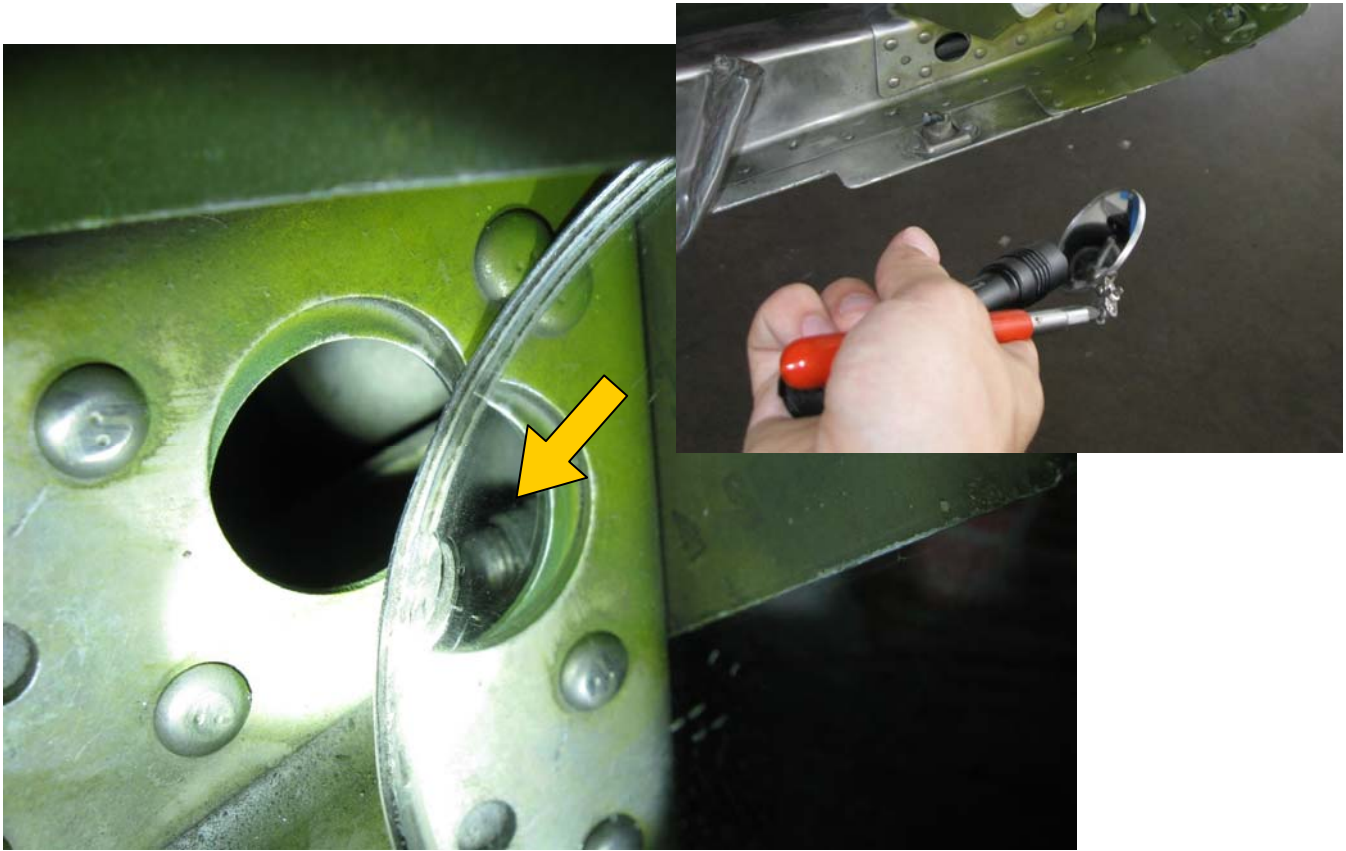
ISSUED			REVISED			 RAM Aircraft, L.P. Waco Regional Airport 7505 Karl May Dr. Waco, Texas 76708 Phone: (254) 752-8381 Fax: (254) 752-3307 Website: <a href="http://www.ramaircraft.com">http://www.ramaircraft.com</a>	PAGE	REVISION
MO	DAY	YEAR	MO	DAY	YEAR		2 of 4	
06	27	2013				SB2013-02		



**FIGURE 2B**

**Lightening Hole**

RH Outboard Beam Rail Shown



**FIGURE 3**

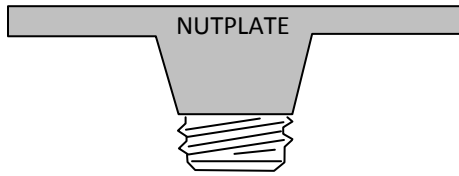
**Nutplate viewed through lightening hole with light and mirror**

Grasp mirror and light as shown in upper RH photo.  
 Main photo view is looking aftward through lightening hole at aft nutplate/bolt threads on Front Mount Support on RH outboard Engine Nacelle

ISSUED			REVISED			 RAM Aircraft, L.P. Waco Regional Airport 7505 Karl May Dr. Waco, Texas 76708 Phone: (254) 752-8381 Fax: (254) 752-3307 Website: <a href="http://www.ramaircraft.com">http://www.ramaircraft.com</a>	PAGE	REVISION
MO	DAY	YEAR	MO	DAY	YEAR		3 of 4	
06	27	2013				SB2013-02		

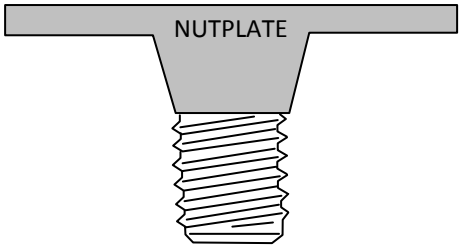
C. ACCEPTANCE CRITERIA:

1. As viewed in Figure 3, each of the bolts shall have a minimum of 2 threads and a maximum of 6 threads protruding past the end of the nutplate. See Figure 4.



ACCEPTABLE MINIMUM THREAD ENGAGEMENT

2 threads protruding past end of nutplate



ACCEPTABLE MAXIMUM THREAD ENGAGEMENT

6 threads protruding past end of nutplate

**FIGURE4**

**Thread Protrusion through Nutplate**


2. Ensure one p/n NAS1149FO463P (or p/n AN960-416) washer is installed under the head of each bolt.

D. CORRECTIVE ACTION:

1. If less than two (2) threads protrude past the end of the nutplate, remove the bolt and replace it with bolt p/n AN4H11A. Torque and safety wire bolts in accordance with Cessna 414A Service Manual instructions.
2. If a bolt is found loose or has more than six (6) threads protruding, contact RAM's Customer Service Department for parts and for further instructions.
3. Make appropriate logbook entry.

F. CONTACT INFORMATION:

RAM Aircraft, L.P. Customer Service Dept. at (254) 752-8381 between 8 AM and 5 PM C.S.T. Monday through Friday.

ISSUED			REVISED			 <b>RAM Aircraft, L.P.</b> Waco Regional Airport 7505 Karl May Dr. Waco, Texas 76708 Phone: (254) 752-8381 Fax: (254) 752-3307 Website: <a href="http://www.ramaircraft.com">http://www.ramaircraft.com</a>	PAGE	REVISION
MO	DAY	YEAR	MO	DAY	YEAR		4 of 4	
06	27	2013					SB2013-02	