Cessna
A Textron Company

Service Bulletin

June 18, 2007

SEB07-2
Revision 2

TITLE

ENGINE MOUNT BRACKET INSPECTION

EFFECTIVITY

Model	Year	Serial Numbers
172B	1961	17247747 thru 17248734
172B		630
172C	1962	17248735 thru 17249544
172D	1963	17249545 thru 17250572
172E	1964	17250573 thru 17251822
172E		639
172F	1965	17251823 thru 17253392
172G	1966	17253393 thru 17254892
172H	1967	17254893 thru 17256492
172H	1967	17256494 thru 17256512
172H		638
172I	1968	17256513 thru 17257161
172J		660
172K	1969	17257162 thru 17258486
172K	1970	17258487 thru 17259223
172L	1971	17259224 thru 17259903
172L	1972	17259904 thru 17260758
172M	1973	17260759 thru 17261444
172M	1973	17261446 thru 17261577
172M	1973	17261579 thru 17261898
172M		17256493
172M	1974	17261899 thru 17263458
172M	1975	17263459 thru 17265684
172M	1976	17265685 thru 17267584
172N	1977	17267585 thru 17269309

Original Issue: April 16, 2007
Revision 1: May 14, 2007

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172N		17261445
172N	1978	17269310 thru 17270049
172N	1978	17270051 thru 17271034
172N		17261578
172N	1979	17271035 thru 17272884
175	1958 thru 1959	55001 thru 56238
175		28700A, 626, 640
175A	1960	56239 thru 56777
175A		619
175B	1961	17556778 thru 17557002
175C	1962	17557003 thru 17557119
P172D	1963	P17257120 thru P17257188
R172K	1977	R1722000 thru R1722724
R172K	1978	R1722725 thru R1722929
R172K	1979	R1722930 thru R1723199
FP172	1963	FP172-0001 thru FP172-0003
F172D	1963	F172-0001 thru F172-0018
F172E	1964	F172-0019 thru F172-0085
F172F	1965	F172-0086 thru F172-0179
F172G	1966	F172-0180 thru F172-0319
F172H	1967	F172-0320 thru F172-0431
F172H	1967	F172-0436 thru F172-0442
F172H	1967	F172-0444 thru F172-0446
F172H	1968	F172-0432 thru F172-0435
F172H	1968	F172-0443
F172H	1968	F172-0447 thru F172-0559
F172H	1969	F172-0560 thru F172-0654
F172H	1970	F17200655 thru F17200754
F172K	1971	F17200755 thru F17200804
F172L	1972	F17200805 thru F17200904
F172M	1973	F17200905 thru F17201034
F172M	1974	F17201035 thru F17201234
F172M	1975	F17201235 thru F17201384
F172M	1976	F17201385 thru F17201514
F172N	1977	F17201515 thru F17201639
F172N	1978	F17201640 thru F17201749
F172N	1979	F17201750 thru F17201909
FR172E	1968	FR17200001 thru FR17200060
FR172F	1969	FR17200061 thru FR17200145
FR172G	1970	FR17200146 thru FR17200225
FR172H	1971	FR17200226 thru FR17200275

FR172H	1972	FR17200276 thru FR17200350
FR172J	1973	FR17200351 thru FR17200440
FR172J	1974	FR17200441 thru FR17200530
FR172J	1975	FR17200531 thru FR17200559
FR172J	1976	FR17200560 thru FR17200590
FR172K	1977	FR17200591 thru FR17200620
FR172K	1978	FR17200621 thru FR17200630
FR172K	1979	FR17200631 thru FR17200655

PURPOSE

Reports have been received of cracks being found in some upper and lower engine truss mounting brackets that are installed behind the firewall. This Service Bulletin provides instructions to do an inspection of the brackets, and if necessary, to replace the brackets. Non compliance with this Service Bulletin could result in having less than the desired structural integrity of the upper and lower engine truss mounting brackets.

COMPLIANCE

NOTE: Compliance with this revision is required if in compliance with the Original Issue or with Revision 1 of this Service Bulletin. The repetitive inspection requirements remain the same.

For 175 Models:

Mandatory:

If any of the four (4) original brackets have not been replaced, accomplish this inspection on the affected bracket(s) at the next scheduled inspection not to exceed 25 hours of operation or 12 months/annual inspection, whichever occurs first. Repeat this inspection every 2,500 hours of operation thereafter.

NOTE: This inspection shall be accomplished on any replaced bracket at 2,500 hours of operation after replacement and every 2,500 hours of operation thereafter.

If either the Original Issue of SEB07-2 or SEB07-2 Revision 1 has been accomplished, removal and replacement of the engine truss to firewall mount bracket bolts and nuts shall be accomplished at the next scheduled inspection not to exceed 100 hours of operation or 12 months/annual inspection, whichever occurs first.

For 172 Models:

Mandatory:

If any of the four (4) original brackets have not been replaced, accomplish this inspection on the affected bracket(s) at the next scheduled inspection not to exceed 100 hours of operation or 12 months/annual inspection, whichever occurs first. Repeat this inspection every 2,500 hours of operation thereafter.

NOTE: This inspection shall be accomplished on any replaced bracket at 2,500 hours of operation after replacement and every 2,500 hours of operation thereafter.

If either the Original Issue of SEB07-2 or SEB07-2 Revision 1 has been accomplished, removal and replacement of the engine truss to firewall mount bracket bolts and nuts shall be accomplished at the next scheduled inspection not to exceed 100 hours of operation or 12 months/annual inspection, whichever occurs first.

APPROVAL

FAA approval has been obtained on technical data in this publication that affects airplane type design.

MAN-HOURS

Approximately 7.4 man-hours for inspection

If necessary, approximately 3.0 man-hours to replace each bracket

If in compliance with the Original Issue of SEB07-2 or SEB07-2 Revision 1, approximately 7.0 man-hours to remove and replace the engine truss to firewall mount bracket bolts and nuts

MATERIAL

The parts below are available from Cessna Parts Distribution through an appropriate Cessna Service Station for the suggested list price shown.

Part Number	Description	Qty/Airplane	Price
AN6 (See the Applicable Illustrated Parts catalog for the specific part numbers)	Bolt	4	
MS21045L6	Nut	4	$ 1.30 (PS) ea MQ 10
NAS1149F0663P	Washer	8	$ 0.07 (PS) ea MQ 100
S1450-23N22-100	Washer	4	$ 5.20 (PS) ea
CR3523-5-03	Rivet	8 (if required)	$ 4.23 (PS) ea MQ 25
MS20470AD5-6A	Rivet	8 (if required)	$ 27.63 (PS) lb
MS20470AD5-8A	Rivet	8 (if required)	$ 27.19 (PS) lb
0513132-9	Lower Left Mounting Bracket	1 (if required)	$ 138.00 (S) ea
0513132-10	Lower Right Mounting Bracket	1 (if required)	$ 131.00 (S) ea
0513132-11	Upper Mounting Bracket (Right and Left)	2 (if required)	$ 218.00 (S) ea
U074093	Alodine 1132 Marker	(as required)	$ 152.00 (VR) ea
K000912	Corrosion Resistant Primer (1.5 gal kit)	(as required)	$ 339.00 (VS) ea

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE

ACCOMPLISHMENT INSTRUCTIONS

Change In Weight And Balance

Negligible

The equipment below, or equivalent, will be necessary to do the inspection.

Name	Number	Manufacturer	Use
Borescope • 0.125-inch (2.00 mm) diameter • 7.87-inch (200 mm) length probe • 70 to 80-degree field of view at a 30-degree fore-oblique angle. (70 to 80-degree direct field of view at a 0-degree angle is acceptable.)		Commercially available Olympus, Storz, or equivalent	To do the visual inspection for cracks

NOTE: For airplanes not in compliance with SEB07-2 Revision 1, go to Step 1.

NOTE: For airplanes in compliance with SEB07-2 or SEB07-2 Revision 1, you must remove and replace the AN6 Bolt and the MS21045L6 Nut in all positions, and torque the nut to 160 to 190 inch-pounds. Go to Step 1.

1. Prepare the airplane for maintenance.

   A. Make sure that all switches are in the OFF/NORM position.

   B. Disconnect electrical power from the airplane.

      (1) Disconnect the airplane battery.

      (2) Disconnect external electrical power.

   C. Attach maintenance warning tags to the battery and external power receptacle that have **"DO NOT CONNECT ELECTRICAL POWER - MAINTENANCE IN PROGRESS"** written on them.

2. Remove the upper and the lower engine cowlings. (Refer to the applicable sections of the service manual.)

3. Remove the pilot and the copilot seats. (Refer to the applicable sections of the service manual.)

WARNING: **WHILE YOU DO THIS INSPECTION, MAKE SURE THAT THE ENGINE IS SAFELY HELD IN PLACE. ONE AFTER THE OTHER, THE BOLTS THAT HOLD THE ENGINE TRUSSES TO THEIR MOUNTING BRACKET WILL BE REMOVED. IF YOU DO NOT SECURE THE ENGINE DURING THE INSPECTION, IT CAN MOVE AND CAUSE INJURY TO PERSONNEL AND DAMAGE TO THE AIRPLANE.**

4. Use an engine hoist to remove all of the engine weight from the engine truss.

NOTE: For airplanes in compliance with SEB07-2 or SEB07-2 Revision 1, go to Step 8.

NOTE: For airplanes not in compliance with SEB07-2 or SEB07-2 Revision 1, go to Step 5.

5. Do an inspection of the left 0513132-11 Upper Mounting Bracket:

   A. (Refer to Figure 1, View A-A and Detail A.) From a position under the instrument panel, move the wires and the insulation away from the bolt that attaches the upper left engine truss to the left 0513132-11 Upper Mounting Bracket.

B. Remove and discard the bolt, washers, and nut that attach the truss to the left 0513132-11 Upper Mounting Bracket.

C. (Refer to Figure 1, View B-B.) Put a borescope through the slot in the 0513132-7 Upper Left Stringer.

D. (Refer to Figure 1, View D-D.) Look carefully for a deformed or cracked left 0513132-11 Upper Mounting Bracket.

(1) If you do find deformities or cracks, go to Step 5E.

(2) If you do not find deformities or cracks, go to Step 6.

E. (Refer to Figure 1, View B-B.) Remove the left 0513132-11 Upper Mounting Bracket from the 0513132-7 Upper Left Stringer and the airplane skin.

(1) Remove the two rivets that attach the left 0513132-11 Upper Mounting Bracket to the hat section of the 0513132-7 Upper Left Stringer.

(2) Remove the four rivets that attach the left 0513132-11 Upper Mounting Bracket to the flange of the 0513132-7 Upper Left Stringer and the airplane skin.

(3) As necessary, remove rivets that are adjacent to the left 0513132-11 Upper Mounting Bracket until you can remove the left 0513132-11 Upper Mounting Bracket from the 0513132-7 Upper Left Stringer and the airplane.

(4) Discard the left 0513132-11 Upper Mounting Bracket.

F. Install the new left 0513132-11 Upper Mounting Bracket to the upper left engine truss.

(1) Put the left 0513132-11 Upper Mounting Bracket in position at the 0513132-7 Upper Left Stringer.

(2) Install the two MS20470AD5-6A Rivets and two MS20470AD5-8A Rivets that attach the left 513132-11 Upper Mounting Bracket to the 0513132-7 Upper Left Stringer and the airplane skin.

(3) Drill the four existing Number 30 (0.128-inch diameter) holes in the new left 0513132-11 Upper Mounting Bracket, 0513132-7 Upper Left Stringer, and airplane skin with a Number 21 (0.159-inch diameter) drill.

(4) Drill two Number 21 (0.159-inch diameter) holes through the left 0513132-11 Upper Mounting Bracket and the hat of the 0513132-7 Upper Left Stringer.

(5) Drill one 0.375-inch diameter hole through the left 0513132-11 Upper Mounting Bracket for the AN6 Bolt.

(6) Deburr the holes and apply Alodine to bare metal.

(7) Install the two CR3523-5-03 Rivets that attach the left 0513132-11 Upper Mounting Bracket to the 0513132-7 Upper Left Stringer.

(8) Install rivets to replace the ones that you removed to get access to the 0513132-11 Mounting Bracket.

(9) Apply Alodine to bare metal.

(10) Do a touch-up of the paint as necessary.

(11) (Refer to Figure 1, Detail A.) With the AN6 Bolt, S1450-23N22-100 Washer, two NAS1149F0663P Washers, and MS21045L6 Nut, attach the upper left engine truss to the left 0513132-11 Upper Mounting Bracket.

(12) Torque the MS21045L6 Nut to 160 to 190 inch-pounds.

(13) Go to Step 6.

6. Repeat Step 5 for the right 0513132-11 Upper Mounting Bracket.

   A. (Refer to Figure 1, Detail A.) For the installation of the upper right engine truss to the right 0513132-11 Upper Mounting Bracket, use the same hardware that is specified in Step 5F(11).

7. Do an inspection of the lower left and lower right engine truss mounting brackets as follows:

   A. Remove floorboard access panels and rudder pedal access panels as necessary to get access to the 0513132-10 Lower Right Mounting Bracket and the 0514132-9 Lower Left Mounting Bracket.

      CAUTION: When you remove the lower mounting bracket bolts, you must remove the two lower bolts at the same time. When you install the lower mounting bracket bolts, you must install the two lower bolts at the same time. Failure to do this can cause damage to the engine truss, the 0513132-5 Lower Left Stringer, and the 0513132-6 Lower Right Stringer.

   B. (Refer to all applicable details and views in Figure 1.) Do Steps 5B thru 5F again for the 0513132-10 Lower Right Mounting Bracket and the 0514132-9 Lower Left Mounting Bracket as necessary. Go to Step 9.

8. (For airplanes in compliance with the original issue of SEB07-2 or SEB07-2 Revision 1) Remove and replace the AN6 Bolts and the MS21045L6 Nuts as follows:

   A. (Refer to Figure 1, Detail A and Detail B.) From a position under the instrument panel, move the wires and the insulation away from the bolts that attach the upper left and the upper right engine truss to the upper mounting brackets.

   B. Remove floorboard access panels and rudder pedal access panels as necessary to get access to the bolts that attach the lower left and the lower right engine trusses to the lower mounting brackets.

   C. Remove and discard the upper left AN6 Bolt and MS21045L6 Nut that attach the engine truss to the mounting bracket, and install a new AN6 Bolt and MS21045L6 Nut. Torque the MS21045L6 Nut to 160 to 190 inch-pounds.

   D. Repeat Step 8C for the upper right AN6 Bolt and MS21045L6 Nut.

      CAUTION: When you remove the lower mounting bracket bolts, you must remove the two lower bolts at the same time. When you install the lower mounting bracket bolts, you must install the two lower bolts at the same time. Failure to do this can cause damage to the engine truss, the 0513132-5 Lower Left Stringer, and the 0513132-6 Lower Right Stringer.

   E. Remove and discard the lower left and lower right AN6 Bolts and MS21045L6 Nuts that attach the engine truss to the mounting brackets, and install new AN6 Bolts and MS21045L6 Nuts. Torque the MS21045L6 Nuts to 160 to 190 inch-pounds.

9. Install all of the equipment that you moved and removed.

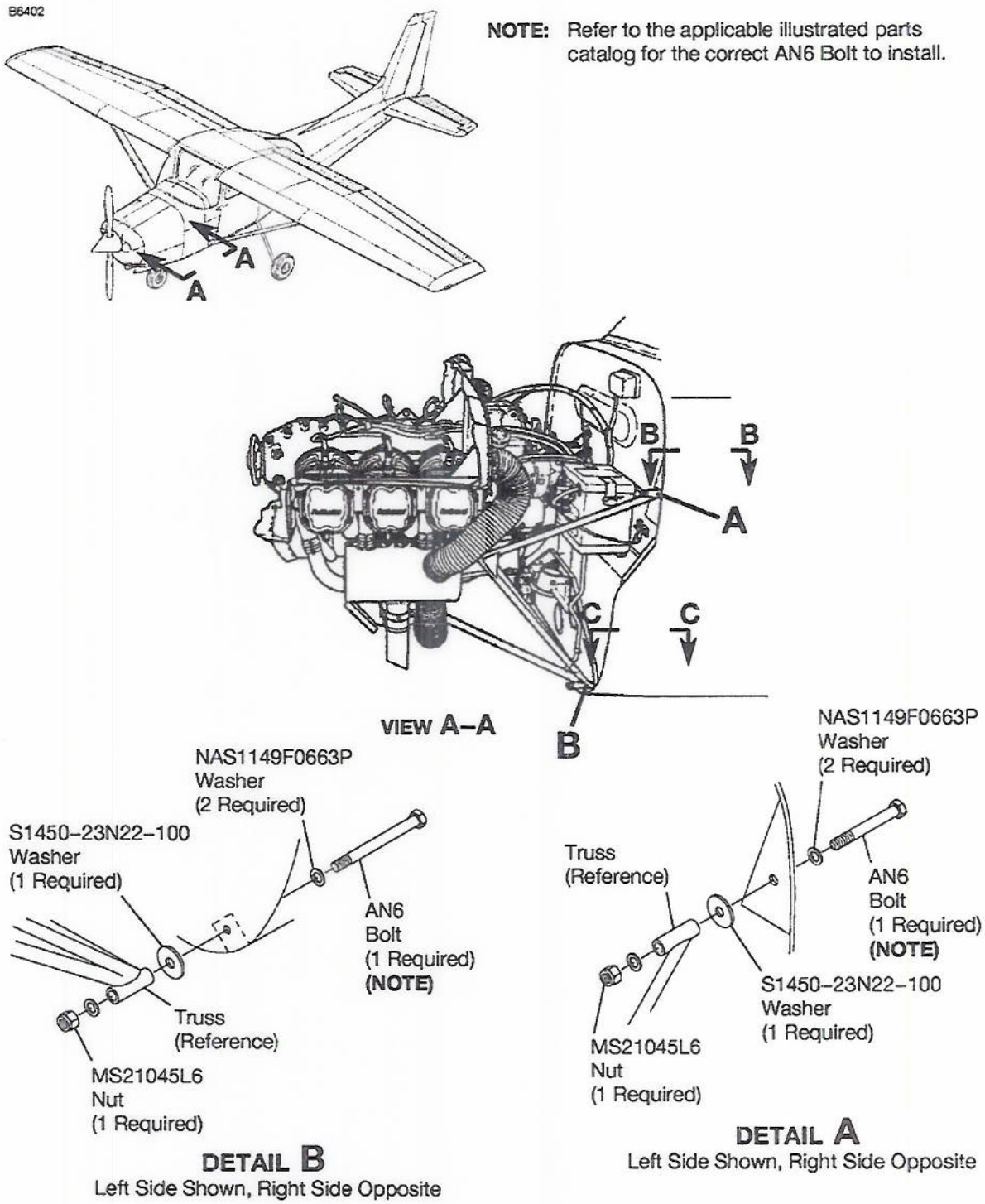
10. Install the pilot's and the copilot's seats.

11. Install the upper and the lower engine cowlings.

12. Remove the maintenance warning tags and connect the airplane battery.

13. Make an entry in the airplane logbook that states compliance and method of compliance with this Service Bulletin, and also state when the next inspection is due.

    NOTE: This information shall be considered an amendment to the Cessna Manufacturer's Service/Maintenance Manual or Instructions for continued airworthiness and must be accomplished for ongoing airworthiness compliance as required per 14 CFR Part 43.13.



For Model 172 thru 172N, R172K, FP172, F172D thru F172N, and FR172E thru FR172K Airplanes

Figure 1. Engine Mount Bracket Inspection (Sheet 1)

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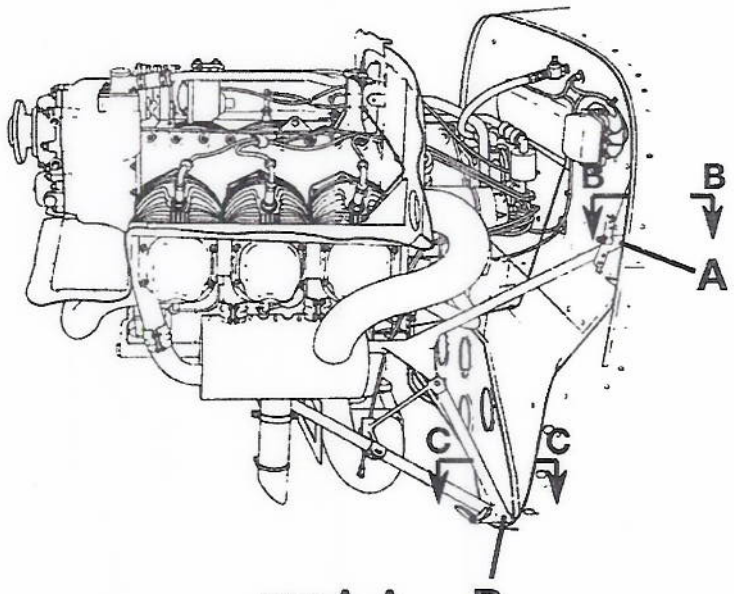
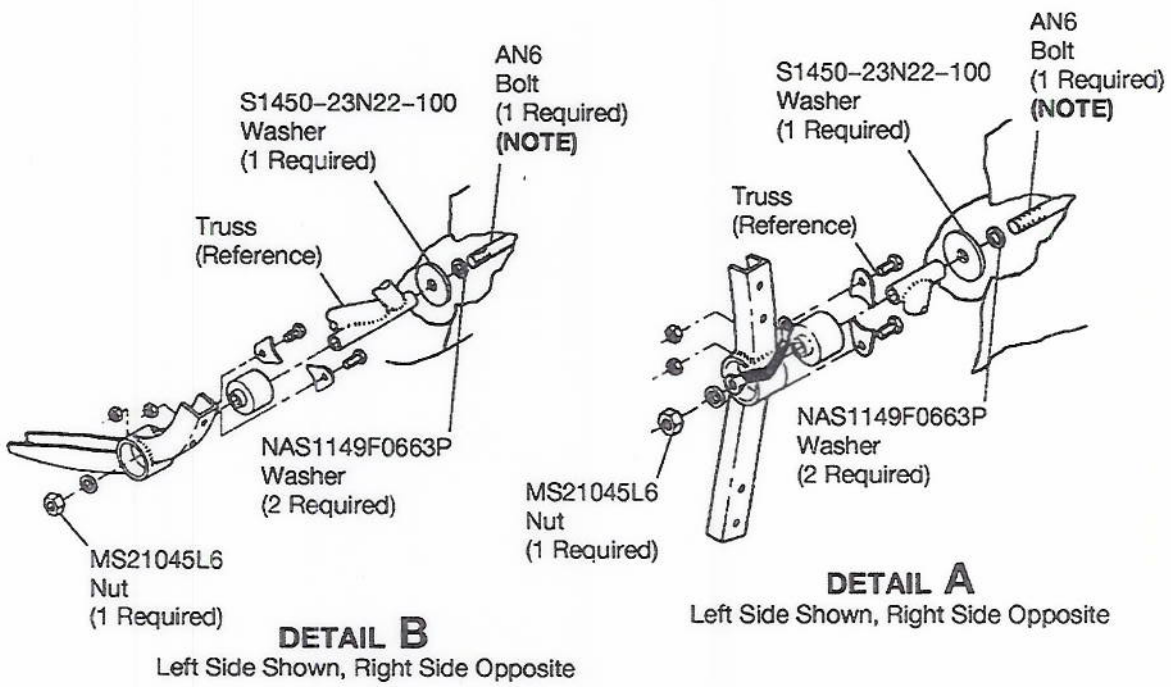


VIEW A–A



For Model 175 thru 175C and P172D Airplanes

Figure 1. Engine Mount Bracket Inspection (Sheet 2)

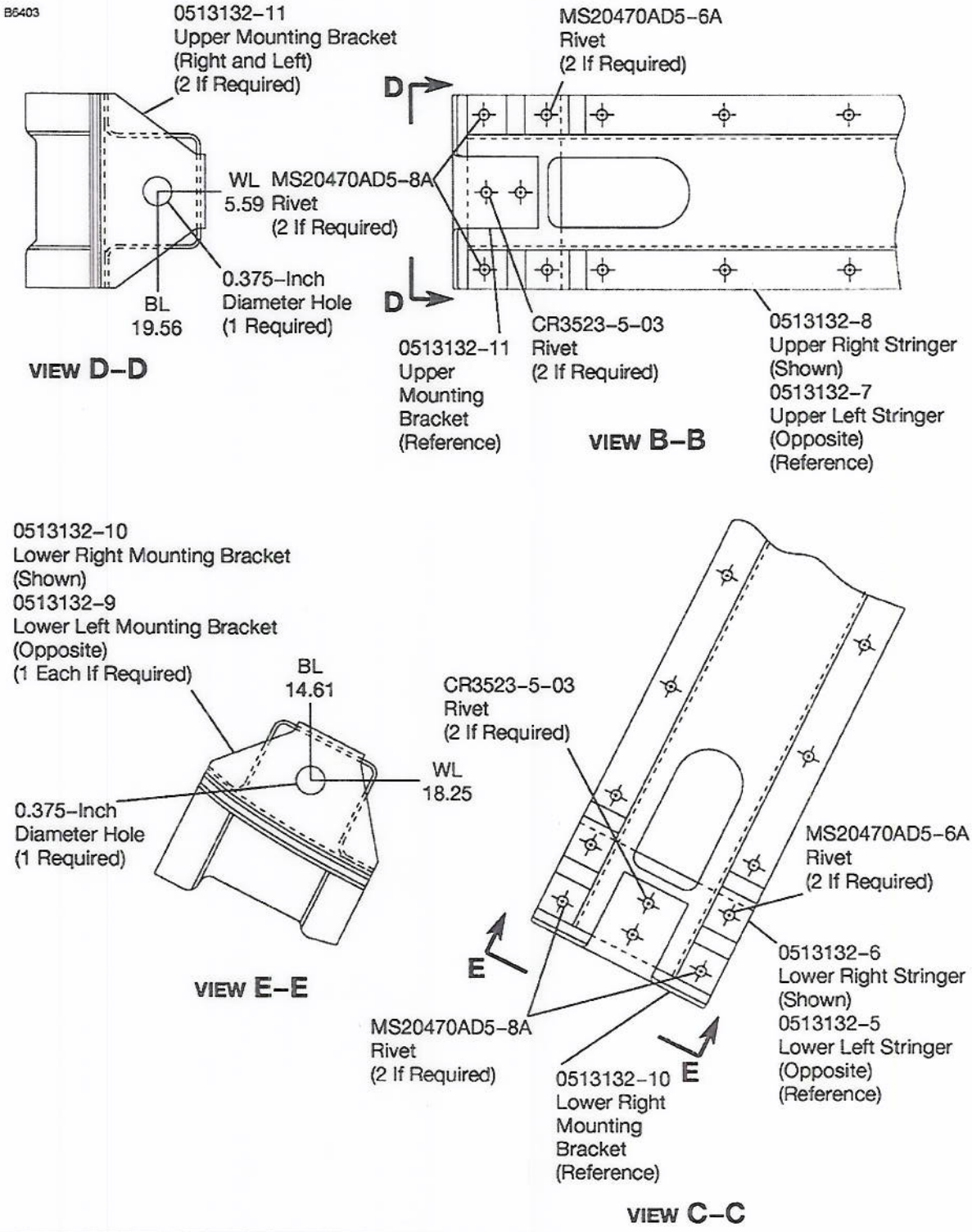


Figure 1. Engine Mount Bracket Inspection (Sheet 3)

CREDIT

Not applicable

OWNER NOTIFICATION

A. On April 16, 2007 the following Owner Advisory message was sent to applicable owners of record in SEB07-2A.

Dear Cessna Owner:

This Owner Advisory is to inform you that SEB07-2: Engine Mount Bracket Inspection has been released.

Reports have been received of cracks being found in some upper and lower engine truss mounting brackets that are installed behind the firewall. This Service Bulletin provides instructions to do an inspection of the brackets, and if necessary, to replace the brackets. Non compliance with this Service Bulletin could result in having less than the desired structural integrity of the upper and lower engine truss mounting brackets.

For 175 Models:

Mandatory:

If any of the four (4) original brackets have not been replaced, accomplish this inspection on the affected bracket(s) at the next scheduled inspection not to exceed 25 hours of operation or 12 months/annual inspection, whichever occurs first. Repeat this inspection every 2,500 hours of operation thereafter.

NOTE: This inspection shall be accomplished on any replaced bracket at 2,500 hours of operation after replacement and every 2,500 hours of operation thereafter.

For 172 Models:

Mandatory:

If any of the four (4) original brackets have not been replaced, accomplish this inspection on the affected bracket(s) at the next scheduled inspection not to exceed 100 hours of operation or 12 months/annual inspection, whichever occurs first. Repeat this inspection every 2,500 hours of operation thereafter.

NOTE: This inspection shall be accomplished on any replaced bracket at 2,500 hours of operation after replacement and every 2,500 hours of operation thereafter.

The information contained in the referenced Cessna Service Bulletin shall be considered an amendment to the Cessna Manufacturer's Service/Maintenance Manual or Instructions for continued airworthiness, and must be accomplished for ongoing airworthiness compliance as required per 14 CFR Part 43.13.

Please contact a Cessna Single Engine Service Station for detailed information and arrange to have Cessna Service Bulletin SEB07-2 accomplished on your airplane.

B. On May 14, 2007 the following message was sent to applicable owners of record in SEB07-2AR1 for the following model 172 airplane serial numbers: 28000 thru 29999, 36000 thru 36999, 46001 thru 46754, 610, 612, 615, 46755 thru 47746, 622, and 625.

Dear Cessna Owner:

This Owner Advisory is to inform you that SEB07-2 Revision 1 has been issued to remove your airplane serial number from the Effectivity section of the Service Bulletin. Research of our records revealed that your airplane is not affected by Service Bulletin SEB07-2.

C. On June 18, 2007 the following Owner Advisory will be sent to applicable owners of record in SEB07-2AR2.

Dear Cessna Owner:

This Owner Advisory is to inform you that Service Bulletin SEB07-2 Revision 2 has been issued to revise the torque value of the engine truss to firewall mounting bracket bolts and nuts and to require the replacement of these bolts and nuts if in compliance with the Original Issue of SEB07-2 or SEB07-2 Revision 1.

SEB07-2 Revision 2 provides instructions to do an inspection of the upper and lower engine truss mounting brackets that are installed behind the firewall, and if necessary, to replace the brackets. It also provides instructions to replace the engine truss to firewall mounting bracket bolts and nuts for airplanes in compliance with the Original Issue of SEB07-2 or SEB07-2 Revision 1. Non compliance with this Service Bulletin could result in having less than the desired structural integrity of the upper and lower engine truss bolts, nuts, and mounting brackets.

NOTE: Compliance with SB07-2 Revision 2 is required if in compliance with the Original Issue or Revision 1 of this Service Bulletin. The repetitive inspection requirements remain the same.

For 175 Models:

Mandatory:

If any of the four (4) original brackets have not been replaced, accomplish this inspection on the affected bracket(s) at the next scheduled inspection not to exceed 25 hours of operation or 12 months/annual inspection, whichever occurs first. Repeat this inspection every 2,500 hours of operation thereafter.

NOTE: This inspection shall be accomplished on any replaced bracket at 2,500 hours of operation after replacement and every 2,500 hours of operation thereafter.

If either the Original Issue of SEB07-2 or SEB07-2 Revision 1 has been accomplished, removal and replacement of the engine truss to firewall mount bracket bolts and nuts shall be accomplished at the next scheduled inspection not to exceed 100 hours of operation or 12 months/annual inspection, whichever occurs first.

For 172 Models:

Mandatory:

If any of the four (4) original brackets have not been replaced, accomplish this inspection on the affected bracket(s) at the next scheduled inspection not to exceed 100 hours of operation or 12 months/annual inspection, whichever occurs first. Repeat this inspection every 2,500 hours of operation thereafter.

NOTE: This inspection shall be accomplished on any replaced bracket at 2,500 hours of operation after replacement and every 2,500 hours of operation thereafter.

If either the Original Issue of SEB07-2 or SEB07-2 Revision 1 has been accomplished, removal and replacement of the engine truss to firewall mount bracket bolts and nuts shall be accomplished at the next scheduled inspection not to exceed 100 hours of operation or 12 months/annual inspection, whichever occurs first.

The information contained in the referenced Cessna Service Bulletin shall be considered an amendment to the Cessna Manufacturer's Service/Maintenance Manual or Instructions for continued airworthiness, and must be accomplished for ongoing airworthiness compliance as required per 14 CFR Part 43.13.

Please contact a Cessna Single Engine Service Station for detailed information and arrange to have Cessna Service Bulletin SEB07-2 Revision 2 accomplished on your airplane.

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