TITLE
EQUIPMENT/FURNISHINGS - AMSAFE EMA INSTALLATION MODIFICATION

EFFECTIVITY
The airplanes that follow that are equipped with the AMSAFE inflatable restraint system:

<table>
<thead>
<tr>
<th>MODEL</th>
<th>SERIAL NUMBERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>172R</td>
<td>17280001 thru 17281272</td>
</tr>
<tr>
<td>172S</td>
<td>172S8001 thru 172S10102</td>
</tr>
<tr>
<td>182S</td>
<td>18280001 thru 18280944</td>
</tr>
<tr>
<td>182T</td>
<td>18280945 thru 18281741</td>
</tr>
<tr>
<td>T182T</td>
<td>T18208001 thru T18208480</td>
</tr>
<tr>
<td>206H</td>
<td>20608001 thru 20608257</td>
</tr>
<tr>
<td>T206H</td>
<td>T20608001 thru T20608585</td>
</tr>
</tbody>
</table>

For Model 172 airplanes that are equipped with the Amsafe inflatable restraint system through accomplishment of MK172-25-09A, issued February 13, 2013, accomplishment of SEB-25-02 is not required. Model 172 airplanes that installed MK172-25-09, issued April 25, 2005, must accomplish SEB-25-02.

For Model 182 airplanes that are equipped with the Amsafe inflatable restraint system through accomplishment of MK182-25-08A, issued March 1, 2006, accomplishment of SEB-25-02 is not required. Model 182 airplanes that installed MK182-25-08, issued April 25, 2005, must accomplish SEB-25-02.

For Model 206 airplanes that are equipped with the Amsafe inflatable restraint system through accomplishment of MK206-25-09A, issued December 26, 2006, or MK206-25-09B, issued February 13, 2013, accomplishment of SEB-25-02 is not required. Model 206 airplanes that installed MK206-25-09, issued June 20, 2005, must accomplish SEB-25-02.

REASON
Because Amsafe has changed the electronic module assembly (EMA) for the inflatable restraint system from a 508358-409 EMA to a 508358-421 EMA, the installation configuration of the EMA(s) must be changed slightly to allow the new EMA to be installed correctly.

DESCRIPTION
This service bulletin provides parts and instructions to do a replacement of the 508358-409 EMA with the new, 508358-421 EMA.

COMPLIANCE
Optional: This service bulletin should be accomplished when you initially replace the 508358-409 EMA(s) with the 508358-421 EMA(s).

NOTE: Refer to Chapter 5 of the applicable maintenance manual for replacement time limits for the EMA.

APPROVAL
Cessna received FAA approval for the technical data in this publication that changes the airplane type design.
Cessna received EASA approval for the technical data in this publication that changes the airplane type design.

WEIGHT AND BALANCE INFORMATION

Negligible

REFERENCES

- E508804 AMSAFE Supplemental Maintenance Manual

*NOTE:* Make sure all publications used are complete and current. Refer to www.cessnasupport.com.

*NOTE:* This information must be considered an amendment to the Cessna Manufacturer's Service/Maintenance Manual.

PUBLICATIONS AFFECTED

- Model 172R & 172S Illustrated Parts Catalog
- Model 182S/182T/T182T Illustrated Parts Catalog
- Model 206H/T206H Illustrated Parts Catalog

ACCOMPLISHMENT INSTRUCTIONS

1. Prepare the airplane for maintenance.
   A. Make sure that the airplane is electrically grounded.
   B. Make sure that all switches are in the OFF/NORM position.
   C. Disconnect electrical power from the airplane.
      (1) Disconnect external electrical power.
      (2) Disconnect the airplane battery.
   D. 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 crew seats as necessary. Keep the attachment hardware but discard the nuts. (Refer to the applicable maintenance manual, Chapter 25, Flight Compartment - Maintenance Practices.)

3. Remove the carpet that is installed on the floor under the pilot's and the copilot's seats.

4. Remove the floorboard access plates as necessary to get access to the EMA(s) under the crew seat(s). (Refer to the applicable maintenance manual, Chapter 6, Dimensions and Areas.)

5. (Refer to Figure 1, View B-B.) Disconnect the cable interface assembly from the 508358-409 EMA(s) that you will replace. (Refer to the applicable maintenance manual, Chapter 25, Inflatable Restraint System - Maintenance Practices.)

   *NOTE:* Model 172 airplanes go to Step 6 to do the modification.

   *NOTE:* Model 182 airplanes go to Step 7 to do the modification.

   *NOTE:* Model 206 airplanes go to Step 8 to do the modification.

6. Model 172 airplanes, do the modification as follows:
   A. Remove and discard the four nuts, washers, and bolts that attach the 508358-409 EMA to the EMA Stiffener.
**CAUTION:** To prevent the EMA case from being damaged, tighten the AN3-22A Bolts lightly only until the washer under the head of nut will not turn.

B. With the four AN3-22A Bolts, NAS1149F0363P Washers, and MS21044N3 Nuts, install the 508358-421 EMA to the EMA stiffener. Make sure that the directional arrows on the EMA point forward and the connector faces aft.

C. (Refer to Figure 1, View B-B.) Connect the cable interface assembly to the 508358-421 EMA.

D. If installed, get access to the 508358-409 EMAs installed under the bench seat.

E. Remove and discard the hardware that attaches the 508358-409 EMA to the floorboard structure.

**CAUTION:** To prevent the EMA case from being damaged, tighten the AN3-22A Bolts lightly only until the washer under the head of bolt will not turn.

F. With the four AN3-22A Bolts and NAS1149F0363P Washers, install the 508358-421 EMA to the EMA stiffener for the bench seat, if installed. Make sure that the directional arrows on the EMA point forward and the connector faces aft.

G. (Refer to Figure 1, View B-B.) Connect the cable interface assembly to the 508358-421 EMA.

H. Go to Step 9.

7. Model 182 airplanes, do the modification for the crew seats and bench seat as follows:

A. Remove and discard the four nuts, washers, and bolts that attach the 508358-409 EMA to the EMA Stiffener.

**CAUTION:** Make sure that you do not cut into the web of the stiffener when you elongate the hole.

B. (Airplane serials 18281504 thru 18281741, airplane serials T18208358 thru T18208480, and airplanes that have accomplished MK182-25-08 Original Issue) (Refer to Figure 1, Detail A, View C-C and View D-D.) Do the modification that follows:

1. As shown, elongate the four existing holes in the floorboard and the stiffener as necessary to permit installation of the 0719095-1 Spacer.

2. Deburr and apply Alodine to bare metal.

**CAUTION:** To prevent the EMA case from being damaged, tighten the AN3-22A Bolts lightly only until the washer under the head of nut will not turn.

(3) Install the 0719095-1 Spacer and the 508358-421 EMA with the four AN3-25A Bolts, NAS1149F0363P Washers, and MS21044N3 Nuts. Make sure that you install the 0719095-1 Spacer with the rounded corners facing up and the slots facing outboard.

C. (Refer to Figure 1, View E-E.) (Airplane serials 18280001 thru 18281503 that have accomplished MK182-25-08A and airplane serials T18208001 thru T18208357 that have accomplished MK182-25-08A) Install the 508358-421 EMA with the four AN3-22A Bolts, NAS1149F0363P Washers, and MS21044N3 Nuts.

D. (Refer to Figure 1, View B-B.) Connect the cable interface assemblies to the 508358-421 EMAs.

E. If installed, get access to the 508358-409 EMAs installed under the bench seat.

F. Remove the hardware that attaches the 508358-409 EMA to the floorboard structure.

**CAUTION:** To prevent the EMA case from being damaged, tighten the AN3-22A Bolts lightly only until the washer under the head of bolt will not turn.

(3) With the four AN3-22A Bolts and NAS1149F0363P Washers, install the 508358-421 EMA to the EMA stiffener for the bench seat, if installed. Make sure that the directional arrows on the EMA point forward and the connector faces aft.

H. (Refer to Figure 1, View B-B.) Connect the cable interface assembly to the 508358-421 EMA.
I. Go to Step 9.

8. Model 206 airplanes, do the modification for the crew seats, passenger 3 and 4 seats, and bench seat as follows:
   A. For each 508358-409 EMA installed, remove and discard the four nuts, washers, and bolts that attach the 508358-409 EMA to the EMA Stiffener.
      CAUTION: To prevent the EMA case from being damaged, tighten the AN3-22A Bolts lightly only until the washer under the head of nut will not turn.
   B. For each 508358-409 EMA installed, with the four AN3-22A Bolts, NAS1149F0363P Washers, and MS21044N3 Nuts, install the 508358-421 EMA to the EMA stiffener. Make sure that the directional arrows on the EMA point forward and the connector faces aft.
   C. Connect the cable interface assembly to the 508358-421 EMA.
   D. If installed, get access to the 508358-409 EMAs installed under the bench seat.
   E. Remove the hardware that attaches the 508358-409 EMA to the floorboard structure.
      CAUTION: To prevent the EMA case from being damaged, tighten the AN3-22A Bolts lightly only until the washer under the head of bolt will not turn.
   F. With the four AN3-22A Bolts and NAS1149F0363P Washers, install the 508358-421 EMA to the floorboard structure for the bench seat. Make sure that the directional arrows on the EMA point forward and the connector faces aft.
   G. (Refer to Figure 1, View B-B.) Connect the cable interface assembly to the 508358-421 EMA.

9. Install the seats as necessary. Use the kept attachment hardware and the new MS21042L3 Nuts. (Refer to the applicable maintenance manual, Chapter 25, Flight Compartment - Maintenance Practices.)


11. Install the floorboard access plates as necessary. (Refer to the applicable maintenance manual, Chapter 6, Dimensions and Areas.)

12. Install the carpet on the floor under the pilot's and the copilot's seats.

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

14. Do a seat operation test on the pilot's and copilot's seat. (Refer to the applicable maintenance manual, Chapter 25, Inflatable Restraint System - Maintenance Practices.)

15. Make an entry in the airplane logbook that states compliance and method of compliance with this service bulletin.

NOTE: This information must be considered an amendment to the Cessna Manufacturer's Service/Maintenance Manual.
NOTE 1: All dimensions are shown in inches.

Figure 1. Amsafe EMA Replacement (Sheet 1)
NOTE 2: (Airplane serials
18281504 thru
18281741, airplane
serials T18208358
thru T18208480, and
airplanes that have
accomplished
MK182–25–08 Original
Issue) Use AN3–25A
Bolts and not AN3–22A
Bolts.

Figure 1. Amsafe EMA Replacement (Sheet 2)
Figure 1. Amsafe EMA Replacement (Sheet 3)
Figure 1. Amsafe EMA Replacement (Sheet 4)

NOTE 3: Spacer is installed with rounded corners adjacent to stiffener.

NOTE 4: Spacer is installed with slotted screw holes outboard.

DETAIL A
Model 182T Serials 18281504 Thru 18281741 and Model T182T Serials T18208358 Thru T18208480 and Airplanes that have accomplished MK182–25–08 Original Issue
MATERIAL INFORMATION
Model 182T Serials 18281504 thru 18281741, T182T Serial T18208358 thru T18208480, and Model 182 airplanes modified in accordance with MK182-25-08 (But not MK182-25-08A) order the kit below to install this modification (1 per aircraft), for the forward EMA:

<table>
<thead>
<tr>
<th>NEW P/N</th>
<th>QUANTITY</th>
<th>KEY WORD</th>
<th>OLD P/N</th>
<th>INSTRUCTIONS/ DISPOSITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEB-25-02-1</td>
<td></td>
<td>Kit, consisting of the following parts:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AN3-25A</td>
<td>4</td>
<td>Bolt</td>
<td>AN3-23A</td>
<td>Discard</td>
</tr>
<tr>
<td>MS21042L3</td>
<td>8</td>
<td>Nut</td>
<td>Same</td>
<td>Discard</td>
</tr>
<tr>
<td>MS21044N3</td>
<td>4</td>
<td>Nut</td>
<td>Same</td>
<td>Discard</td>
</tr>
<tr>
<td>NAS1149F0363P</td>
<td>4</td>
<td>Washer</td>
<td>Same</td>
<td>Discard</td>
</tr>
<tr>
<td>0719095-1</td>
<td>1</td>
<td>EMA Spacer</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

Model 182T Serials 18281504 thru 18281741, T182T Serial T18208358 thru T18208480, and Model 182 airplanes modified in accordance with MK182-25-08 (But not MK182-25-08A) equipped with an AFT EMA or Model 172, 206, and all other Model 182 airplanes order the kit below to install this modification (1 per EMA):

<table>
<thead>
<tr>
<th>NEW P/N</th>
<th>QUANTITY</th>
<th>KEY WORD</th>
<th>OLD P/N</th>
<th>INSTRUCTIONS/ DISPOSITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEB-25-02-2</td>
<td></td>
<td>Kit, consisting of the following parts:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AN3-22A</td>
<td>4</td>
<td>Bolt</td>
<td>AN3-23A</td>
<td>Discard</td>
</tr>
<tr>
<td>MS21042L3</td>
<td>8</td>
<td>Nut</td>
<td>Same</td>
<td>Discard</td>
</tr>
<tr>
<td>MS21044N3</td>
<td>4</td>
<td>Nut</td>
<td>Same</td>
<td>Discard</td>
</tr>
<tr>
<td>NAS1149F0363P</td>
<td>4</td>
<td>Washer</td>
<td>Same</td>
<td>Discard</td>
</tr>
</tbody>
</table>

In addition to the SEB-25-02-1 Kit and the SEB-25-02-2 Kit, all airplanes must order the part below (1 per EMA):

<table>
<thead>
<tr>
<th>NEW P/N</th>
<th>QUANTITY</th>
<th>KEY WORD</th>
<th>OLD P/N</th>
<th>INSTRUCTIONS/ DISPOSITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>508358-421</td>
<td>1</td>
<td>EMA</td>
<td>508358-409</td>
<td>Discard</td>
</tr>
</tbody>
</table>
TITLE
EQUIPMENT/FURNISHINGS - AMSAFE EMA INSTALLATION MODIFICATION

TO:
Cessna Skyhawk, Skylane, and Stationair Owners

REASON
This owner advisory is to inform you that SEB-25-02 has been issued.

Because Amsafe has changed the electronic module assembly (EMA) for the inflatable restraint system from a 508358-409 EMA to a 508358-421 EMA, the installation configuration of the EMA(s) must be changed slightly to allow the new EMA to be installed correctly.

DESCRIPTION
SEB-25-02 provides parts and instructions to do a replacement of the 508358-409 EMA with the new, 508358-421 EMA.

COMPLIANCE
Optional: This service bulletin should be accomplished when you initially replace the 508358-409 EMA(s) with the 508358-421 EMA(s).

NOTE: Refer to Chapter 5 of the applicable maintenance manual for replacement time limits for the EMA.

LABOR HOURS

Model 172 Airplanes:
1.5 man-hours to replace the forward 508358-409 (Pilot/Copilot) EMA with the new 508358-421 EMA and to do the operational check.

No additional man-hours are required for the replacement of the forward 508358-409 EMA with the new 508358-421 EMA, because the floorboard does not require modification (slotting).

If necessary, 0.5 man-hour to remove and install the EMA under the aft bench seat and to do the operational check. (There is no modification to the floorboard required for the installation under the aft bench seat.)

Model 182 Airplanes:
2.5 man-hours to remove the forward 508358-409 EMA, modify (slot) the floorboard, install the new 508358-421 EMA, and do the operational check.

If necessary, 0.5 man-hour to remove and install the EMA under the aft bench seat and to do the operational check. (There is no modification to the floorboard required for the installation under the aft bench seat.)

Model 206 Airplanes:
1.5 man-hours to remove and install the pilot's EMA and to do the operational check.

If necessary, 1.5 man-hours to remove and install the copilot's EMA and to do the operational check.

No additional man-hours are required for the replacement of the forward 508358-409 EMAs with the new 508358-421 EMAs, because the floorboard does not require modification (slotting).
If necessary, 0.5 man-hour to remove and install the EMA under the aft bench seat and to do the operational check. (There is no modification to the floorboard required for the installation under the aft bench seat.)

Man-hours provided here are an estimate based on experienced, properly equipped technicians complying with this Service Bulletin. Occasionally, after work has started, conditions may be found that could result in additional man-hours.

Please contact a Cessna Authorized Service Facility for detailed information and arrange to have Cessna service bulletin SEB-25-02 accomplished on your airplane.

Access the QR code for the instructional video link that follows or use the URL address:

Select this link:


NOTE: As a convenience, service documents are now available online to all our customers through a simple, free-of-charge registration process. If you would like to sign up, please visit the "Customer Support Login" link at www.Cessna.com to register.