

TITLE

LANDING GEAR - LANDING GEAR WARNING HORN REPLACEMENT

EFFECTIVITY

MODEL

425

441

SERIAL NUMBERS

425-0001 thru 425-0236

441-0001 thru 441-0362

REASON

The original landing gear warning horn is no longer available. If the landing gear warning horn needs to be replaced, a new landing gear warning horn is available and will require an additional bracket for installation.

DESCRIPTION

This service document provides parts and instructions to remove the original landing gear warning horn and install a new landing gear warning horn.

NOTE: At the customer's discretion, they may choose to replace only the landing gear warning horn, or the landing gear warning horn and the stall warning horn together.

- **CONFIGURATION 1:** Aircraft replacing the 9910080-1 Landing Gear Warning Horn and the 9910080-2 Stall Warning Horn.
- **CONFIGURATION 2:** Aircraft replacing only the 9910080-1 Landing Gear Warning Horn.
- **CONFIGURATION 3:** Aircraft that have installed **CONFIGURATION 2**, from CQB-34-01: Stall Warning Horn Replacement, that have a 9910080-6 Stall Warning Horn, and the 9910080-1 Landing Gear Warning Horn needs to be replaced.

NOTE: If the customer would like to replace the stall warning horn in conjunction with the landing gear warning horn, refer to CQB-34-01: Stall Warning Horn Replacement.

COMPLIANCE

OPTIONAL. This service document can be accomplished at the discretion of the owner.

A service document published by Textron Aviation may be recorded as *completed* in an aircraft log only when the following requirements are satisfied:

- 1) The mechanic must complete all of the instructions in the service document, including the intent therein.
- 2) The mechanic must correctly use and install all applicable parts supplied with the service document kit. Only with written authorization from Textron Aviation can substitute parts or rebuilt parts be used to replace new parts.
- 3) The mechanic or airplane owner must use the technical data in the service document only as approved and published.
- 4) The mechanic or airplane owner must apply the information in the service document only to aircraft serial numbers identified in the *Effectivity* section of the document.
- 5) The mechanic or airplane owner must use maintenance practices that are identified as acceptable standard practices in the aviation industry and governmental regulations.

October 11, 2022

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Textron Aviation Customer Service, P.O. Box 7706, Wichita, KS 67277, U.S.A. 1-316-517-5800

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Textron Aviation is not responsible for the quality of maintenance performed to comply with this document, unless the maintenance is accomplished at a Textron Aviation-owned Service Center.

APPROVAL

Textron Aviation received FAA approval for the technical data in this publication that changes the airplane type design.

FLIGHT CREW OPERATIONS

No Changes

CONSUMABLE MATERIAL

You must use the consumable materials that follow, or their equivalent, to complete this service document.

NAME	NUMBER	MANUFACTURER	USE
Color Chemical Film Treatment	U074093 (Alodine 1132 Touch n Prep)	Textron Aviation Parts Distribution 7121 Southwest Boulevard Wichita, KS 67215	To protect bare aluminum surface.

TOOLING

No specialized tooling is required to complete this service document.

WEIGHT AND BALANCE INFORMATION

Negligible

REFERENCES

Cessna Model 425 Maintenance Manual

Cessna Model 441 Maintenance Manual

CQB-34-01: Stall Warning Horn Replacement

PUBLICATIONS AFFECTED

Cessna Model 425 Parts Catalog

Cessna Model 441 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.
 - E. Gain access as necessary to do the landing gear warning horn replacement. (Refer to the applicable Maintenance Manual, Chapter 25, Flight Compartment Trim and Panels - Maintenance Practices.)

CONFIGURATION 1

NOTE: To install the 9910080-6 Stall Warning Horn, reference **CONFIGURATION 1** procedures and parts from CQB-34-01: Stall Warning Horn Replacement.

2. (Refer to Figure 1, Sheet 1.) Remove the 9910080-1 Landing Gear Warning Horn as follows:
 - A. Disconnect and label the electrical wiring from the 9910080-1 Landing Gear Warning Horn and the 9910080-2 Stall Warning Horn.
 - B. Remove the four rivets from the 5718117-5 Tee. (Refer to the applicable Maintenance Manual, Chapter 51, Fastener Installation and Removal.)
 - C. Remove and discard the screw, nut, and lock washer from the 9910080-1 Landing Gear Warning Horn.
 - D. Remove and discard the screw, nut, and lock washer from the 9910080-2 Stall Warning Horn.
 - E. Remove and keep the two mounting screws from the 5118331-6 Channel Support.

NOTE: The kept mounting screws will be used for installation.
 - F. Discard the lock washers and the 5118331-6 Channel Support.
 - G. Keep the 5618033-1 Insulator.

NOTE: The kept 5618033-1 Insulator will be used for installation.
3. (Refer to Figure 2, Sheet 1, 2, and 3.) Install the 9910080-5 Landing Gear Warning Horn as follows:
 - A. Install the 9910080-6 Stall Warning Horn. (Refer to the CQB-34-01: Stall Warning Horn Replacement, **CONFIGURATION 1**.)
 - B. Align the existing holes of the 5618033-1 Insulator onto the 5718117-5 Tee.
 - C. Put the 5990604-2 Bracket onto the existing holes of the 5618033-1 Insulator.
 - D. Install the two mounting screws and two NAS1149FN616P Washers into the 5990604-2 Bracket.
 - E. Install the 9910080-5 Landing Gear Warning Horn into the 5990604-2 Bracket.
 - F. Install the knurled nut onto the 9910080-5 Landing Gear Warning Horn.

NOTE: The plastic knurled nut must be installed with the three indents toward the bracket and horn assembly. On the internal circumference, the smooth side without threads is installed first, towards the bracket and horn. This technique of installation will make sure the nut fully seats against the bracket and not bottom-out on the threads. If not installed correctly the knurled nut will bottom-out on the threads and the horn assembly will not be fully tightened to the bracket.
 - G. Install the 5718117-5 Tee with four CR3214-4-2 Pull Fasteners onto the frame.
 - H. Install the labeled electrical wiring and screws into the 9910080-5 Landing Gear Warning Horn.

NOTE: The screws are supplied with the 9910080-5 Landing Gear Warning Horn.
4. Do the operational check for the landing gear warning horn as follows:

NOTE: For additional information on the landing gear warning horn operation refer to the applicable Maintenance Manual, Chapter 32, Position and Warning - Description and Operation.

 - A. Connect the aircraft battery.
 - B. Do the Landing Gear Functional Test, Operational Check, to retract the landing gear into the up and locked position. (Refer to the applicable Maintenance Manual, Chapter 32, Landing Gear General - Maintenance Practices.)

NOTE: Keep the landing gear in the up and locked position during the landing gear warning horn operational test.

- C. Extend the flaps below the 15-degree position.

NOTE: For aircraft model 441 extend the flaps to the APPROACH position.

- D. Make sure that the landing gear warning horn operates once the flaps are below the 15-degree position.

NOTE: For the aircraft model 441, the landing gear warning horn operates once the flaps are below the APPROACH position.

- E. Retract the flaps to the 0-degree position.

- F. Extend the gear to the down and locked position.

- G. Make sure that the gear is extended and locked.

NOTE: The three green down and lock lights must be illuminated.

- H. Remove the hydraulic cart. (Refer to the applicable Maintenance Manual, Chapter 29, General - Maintenance Practices.)

- I. Remove airplane from jacks. (Refer to the applicable Maintenance Manual, chapter 7, Jacking Instructions.)

5. Go to Step, 14.

CONFIGURATION 2

6. (Refer to Figure 1, Sheet 1.) Remove the 9910080-1 Landing Gear Warning Horn as follows:

- A. Disconnect and label the electrical wiring from the 9910080-1 Landing Gear Warning Horn and the 9910080-2 Stall Warning Horn.

- B. Remove the four rivets from the 5718117-5 Tee. (Refer to the applicable Maintenance Manual, Chapter 51, Fastener Installation and Removal.)

- C. Remove and discard the screw and lock washer from the 9910080-1 Landing Gear Warning Horn.

- D. Discard the 9910080-1 Landing Gear Warning Horn.

- E. Remove and keep the screw and lock washer from the 9910080-2 Stall Warning Horn.

NOTE: The kept screw and lock washer will be used for installation.

- F. Keep the 9910080-2 Stall Warning Horn.

NOTE: The kept 9910080-2 Stall Warning Horn will be used for installation.

- G. Remove and keep the mounting screws, lock washers, and the 5118331-6 Channel Support.

NOTE: The kept mounting screws, lock washers, and the 5118331-6 Channel Support will be used for installation.

7. (Refer to Figure 3, Sheet 1, 2, and 3.) Install the 9910080-5 Landing Gear Warning Horn as follows:

- A. Align the existing holes of the 5618033-1 Insulator onto the 5718117-5 Tee.

- B. Put the 5990604-2 Bracket onto the 5618033-1 Insulator.

- C. Match drill the two 0.147 inch diameter holes of the 5990604-2 Bracket into the 5618033-1 Insulator and the 5718117-5 Tee.

(1) Debur the drilled holes from the 5618033-1 Insulator and the 5718117-5 Tee.

(2) Apply Color Chemical Film Treatment to all bare metal.

- D. Install two MS21069L06 Nutplates with four MS20426AD3-6A Rivets onto the 5718117-5 Tee. (Refer to the applicable Maintenance Manual, Chapter 51, Fastener Installation and Removal.)

- E. Put the drilled holes of the 5618033-1 Insulator onto the drilled holes of the 5718117-5 Tee.

- F. Install the 5990604-2 Bracket with two MS35206-228 Screws and two NAS1149FN616P Washers.
- G. Install the 9910080-5 Landing Gear Warning Horn into the 5990604-2 Bracket.
- H. Install the knurled nut onto the 9910080-5 Landing Gear Warning Horn.

NOTE: The plastic knurled nut must be installed with the three indents toward the bracket and horn assembly. On the internal circumference, the smooth side without threads is installed first, towards the bracket and horn. This technique of installation will make sure the nut fully seats against the bracket and not bottom-out on the threads. If not installed correctly the knurled nut will bottom-out on the threads and the horn assembly will not be fully tightened to the bracket.

- I. Install the 5118331-6 Channel Support with the mounting screws and lock washers in the existing holes of the 5618033-1 Insulator.
- J. Install the 9910080-2 Stall Warning Horn onto the forward side of the 5118331-6 Channel Support with the screw and lock washer.
- K. Install the 5718117-5 Tee with four CR3214-4-2 Pull Fasteners onto the frame.
- L. Install the labeled electrical wiring into the 9910080-2 Stall Warning Horn.
- M. Install the labeled electrical wiring and screws into the 9910080-5 Landing Gear Warning Horn.

NOTE: The screws are supplied with the 9910080-5 Landing Gear Warning Horn.

- 8. Do the operational check for the landing gear warning horn as follows:

NOTE: For additional information on the landing gear warning horn operation refer to the applicable Maintenance Manual, Chapter 32, Position and Warning - Description and Operation.

- A. Do the Landing Gear Functional Test, Operational Check, to retract the landing gear into the up and locked position. (Refer to the applicable Maintenance Manual, Chapter 32, Landing Gear General - Maintenance Practices.)

NOTE: Keep the landing gear in the up and locked position during the landing gear warning horn operational test.

- B. Extend the flaps below the 15-degree position.

NOTE: For aircraft model 441 extend the flaps to the APPROACH position.

- C. Make sure the landing gear warning horn operates once the flaps are below the 15-degree position.

NOTE: For the aircraft model 441, the landing gear warning horn operates once the flaps are below the APPROACH position.

- D. Retract the flaps to the 0-degree position.
- E. Extend the gear to the down and locked position.
- F. Make sure that the gear is extended and locked.

NOTE: The three green down and lock lights must be illuminated.

- G. Remove the hydraulic cart. (Refer to the applicable Maintenance Manual, Chapter 29, General - Maintenance Practices.)
- H. Remove airplane from jacks. (Refer to the applicable Maintenance Manual, chapter 7, Jacking Instructions.)

- 9. Do the Operational, Ground Check, of the Stall Warning System. (Refer to the applicable Maintenance Manual, Chapter 27, Stall Warning - Maintenance Practices.)

- 10. Go to Step, 14.

CONFIGURATION 3

NOTE: Make sure that **CONFIGURATION 2** from CQB-34-01: Stall Warning Horn Replacement has been installed.

11. (Refer to Figure 4, Sheet 1.) Remove the 9910080-1 Landing Gear Warning Horn as follows:
- A. Disconnect the electrical wiring from the 9910080-1 Landing Gear Warning Horn.
 - B. Remove and discard the screw and lock washer from the 9910080-1 Landing Gear Warning Horn.
 - C. Discard the 9910080-1 Landing Gear Warning Horn.
 - D. Remove and keep the mounting screws from the 5118331-6 Channel Support.

NOTE: The kept mounting screws will be used for installation.

- E. Discard the lock washers and the 5118331-6 Channel Support.
12. (Refer to Figure 5, Sheet 1 and 2.) Install the 9910080-5 Landing Gear Warning Horn as follows:

- A. Put the 5990604-2 Bracket onto the existing holes of the 5718117-5 Tee.
- B. Install the two mounting screws with two NAS1149FN616P Washers into the 5990604-2 Bracket.
- C. Install the 9910080-5 Landing Gear Warning Horn into the 5990604-2 Bracket.
- D. Install the knurled nut onto the 9910080-5 Landing Gear Warning Horn.

NOTE: The plastic knurled nut must be installed with the three indents toward the bracket and horn assembly. On the internal circumference, the smooth side without threads is installed first, towards the bracket and horn. This technique of installation will make sure the nut fully seats against the bracket and not bottom-out on the threads. If not installed correctly the knurled nut will bottom-out on the threads and the horn assembly will not be fully tightened to the bracket.

- E. Install the wiring and screws into the 9910080-5 Landing Gear Warning Horn.

NOTE: The screws are supplied with the 9910080-5 Landing Gear Warning Horn.

13. Do the operational check for the landing gear warning horn as follows:

NOTE: For additional information on the landing gear warning horn operation refer to the applicable Maintenance Manual, Chapter 32, Position and Warning - Description and Operation.

- A. Do the Landing Gear Functional Test, Operational Check, to retract the landing gear into the up and locked position. (Refer to the applicable Maintenance Manual, Chapter 32, Landing Gear General - Maintenance Practices.)

NOTE: Keep the landing gear in the up and locked position during the landing gear warning horn operational test.

- B. Extend the flaps below the 15-degree position.

NOTE: For aircraft model 441 extend the flaps to the APPROACH position.

- C. Make sure the landing gear warning horn operates once the flaps are below the 15-degree position.

NOTE: For the aircraft model 441, the landing gear warning horn operates once the flaps are below the APPROACH position.

- D. Retract the flaps to the 0-degree position.

- E. Extend the gear to the down and locked position.

- F. Make sure that the gear is extended and locked.

NOTE: The three green down and lock lights must be illuminated.

- G. Remove the hydraulic cart. (Refer to the applicable Maintenance Manual, Chapter 29, General - Maintenance Practices.)
 - H. Remove airplane from jacks. (Refer to the applicable Maintenance Manual, chapter 7, Jacking Instructions.)
- 14. Put the battery switch to the OFF position.
 - 15. Install all access panels and upholstery items that were removed during this bulletin. (Refer to the applicable Maintenance Manual, Chapter 25, Flight Compartment Trim and Panels - Maintenance Practices.)
 - 16. Remove the maintenance warning tags and connect the airplane battery.
 - 17. Make an entry in the airplane logbook that states compliance and method of compliance with this service document.

NOTE: Textron Aviation recommends that compliance with all service documents is reported to a maintenance tracking system provider.

- Complete a record of compliance. (Maintenance Transaction Report, Log Book Entry, or other record of compliance.)
- Put a copy of the completed record of compliance in the airplane logbook.
- Send a copy of the completed record of compliance to the maintenance tracking system provider used.

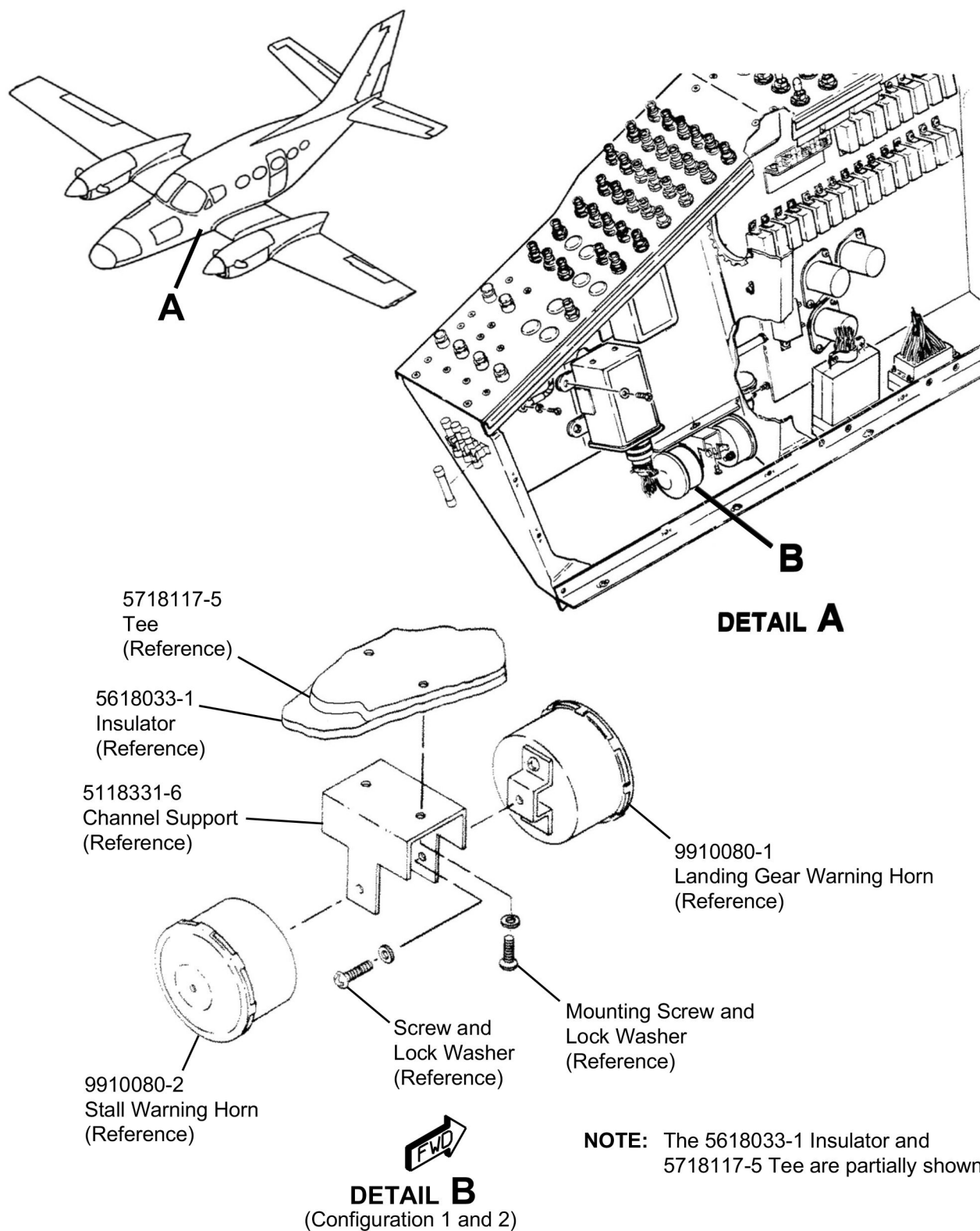


Figure 1. Before Modification (Sheet 1)

A112287

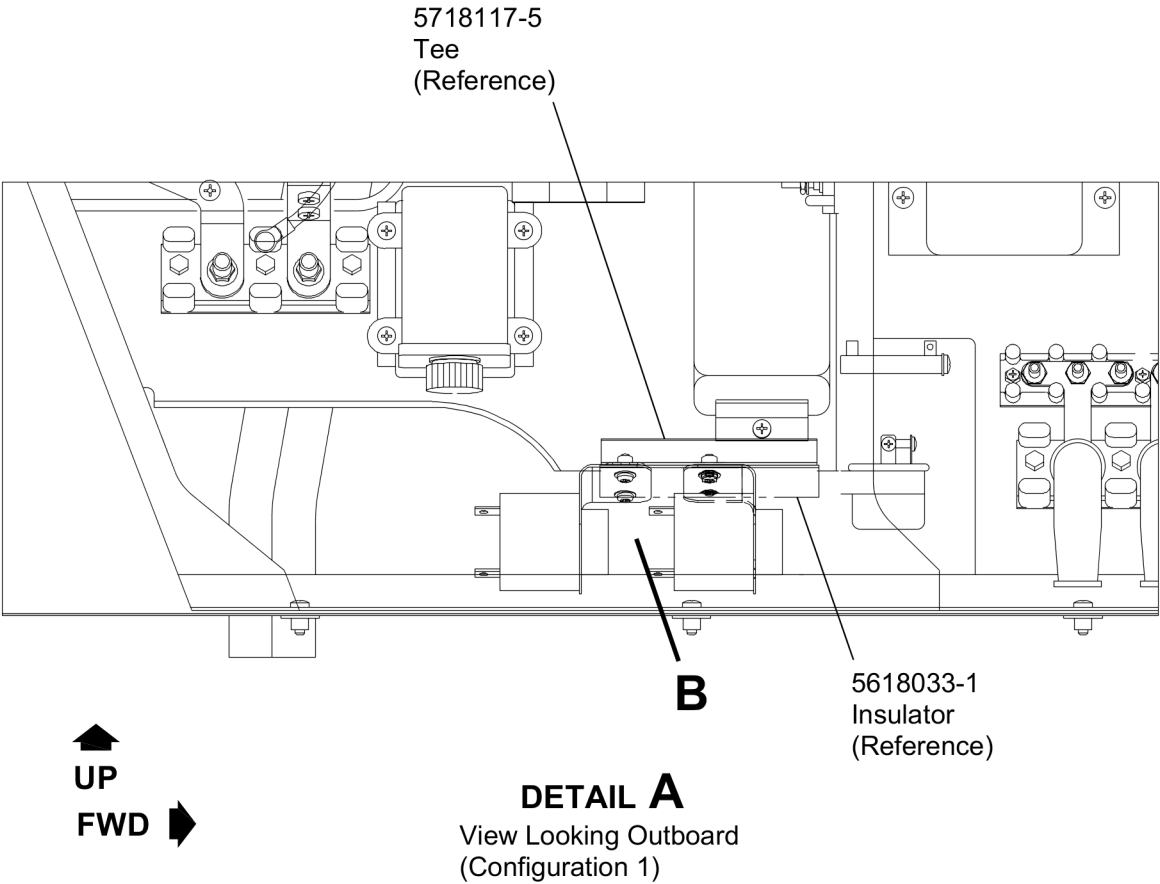
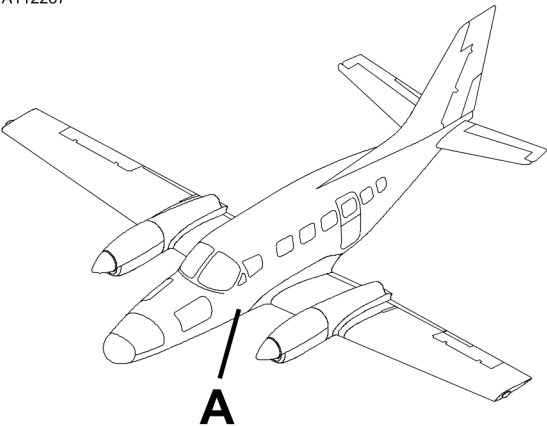


Figure 2. After Modification (Sheet 1)

5710T1004
A5990T604-1

A112288

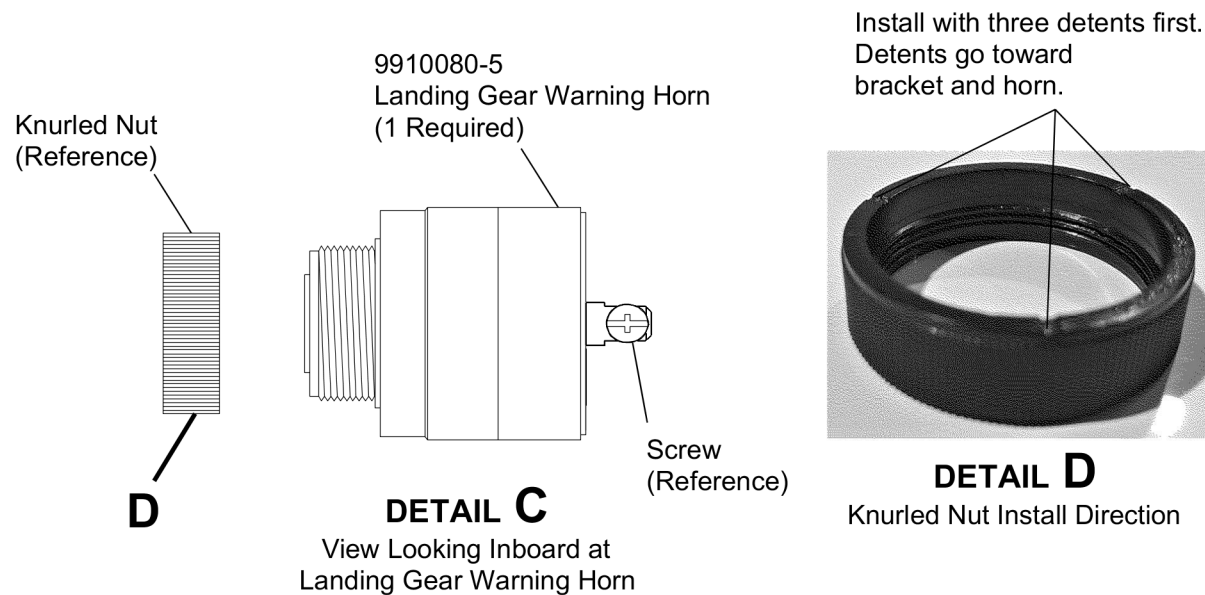
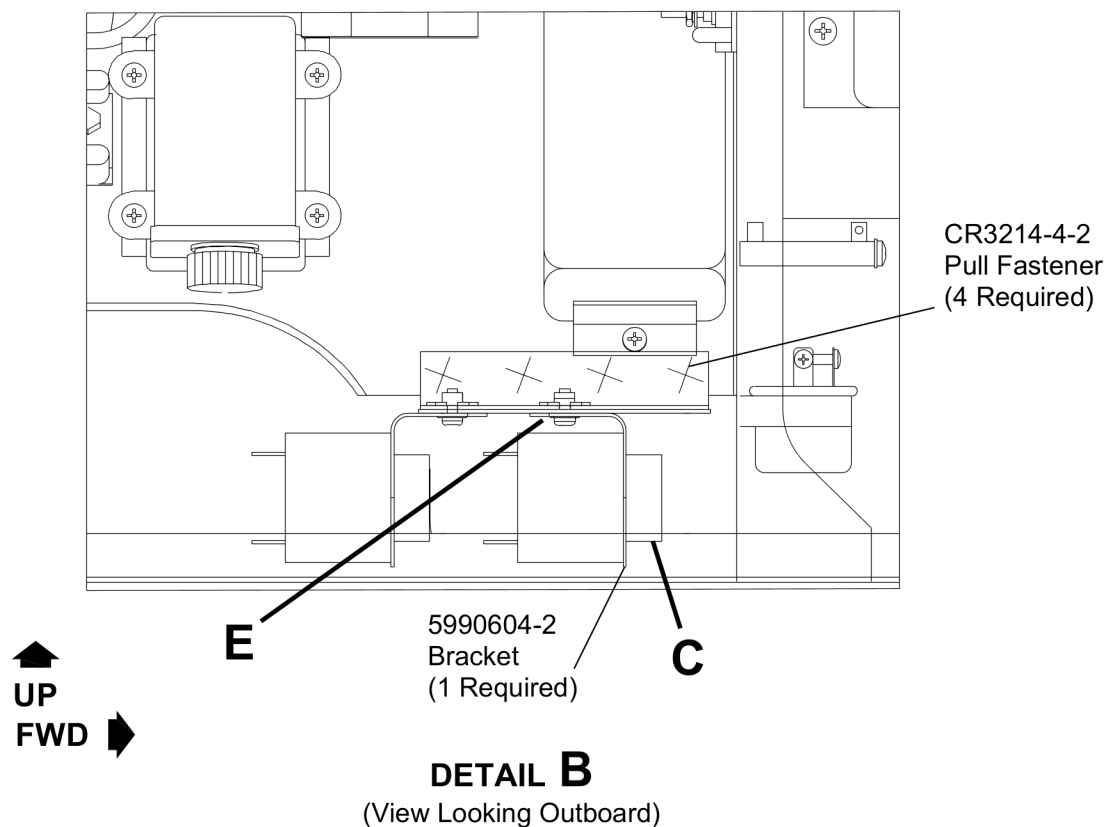
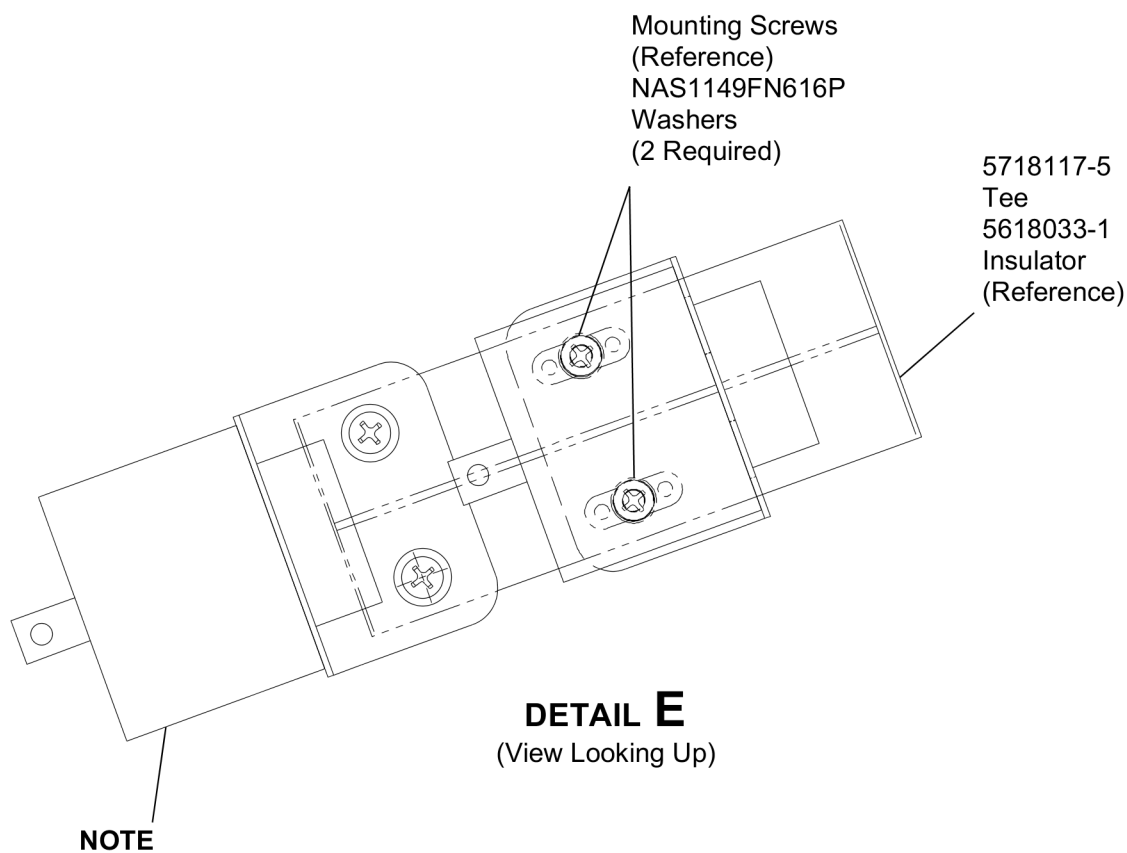


Figure 2. After Modification (Sheet 2)

A5990T604-1
B0710700

A112289



NOTE: For Stall Warning Horn Parts
Refer to CQB-34-01: Stall Warning
Horn Replacement, Configuration 1.

5710T1004
E5990T604-1

Figure 2. After Modification (Sheet 3)

A112290

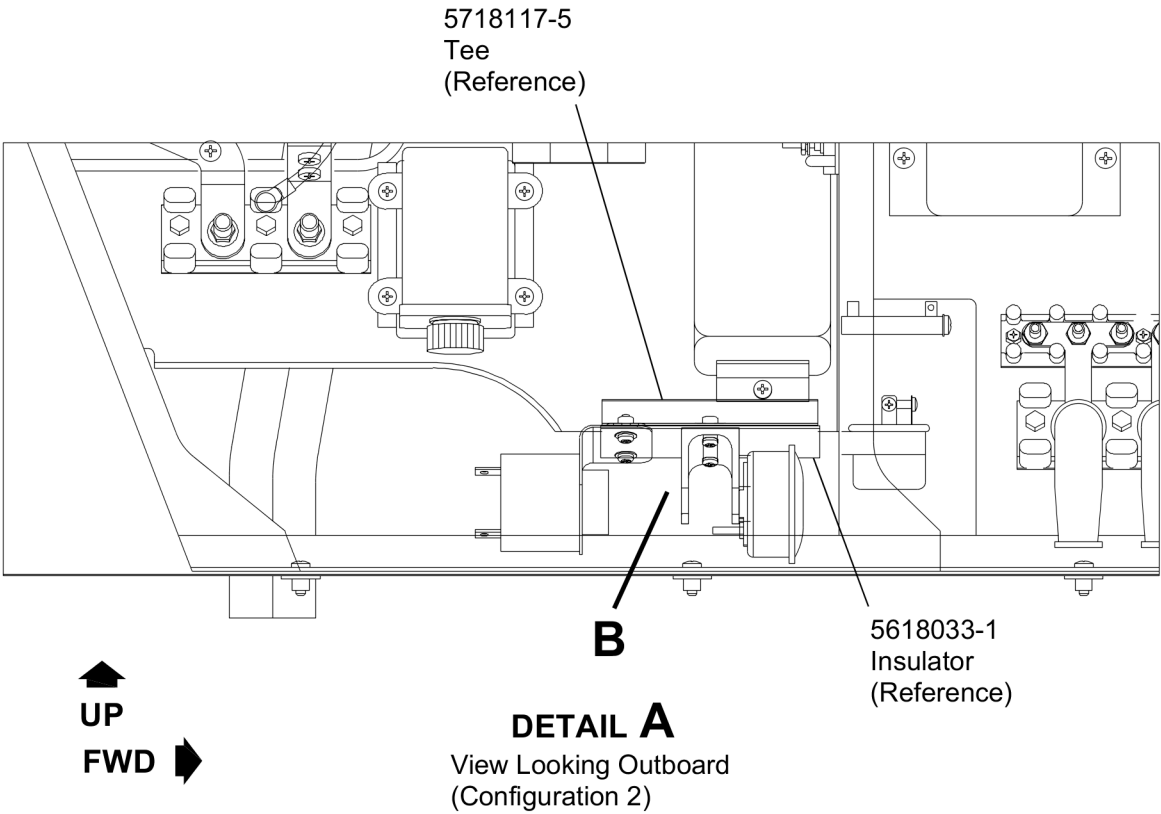
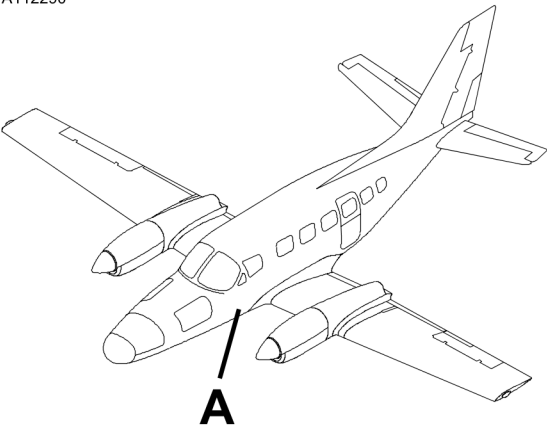
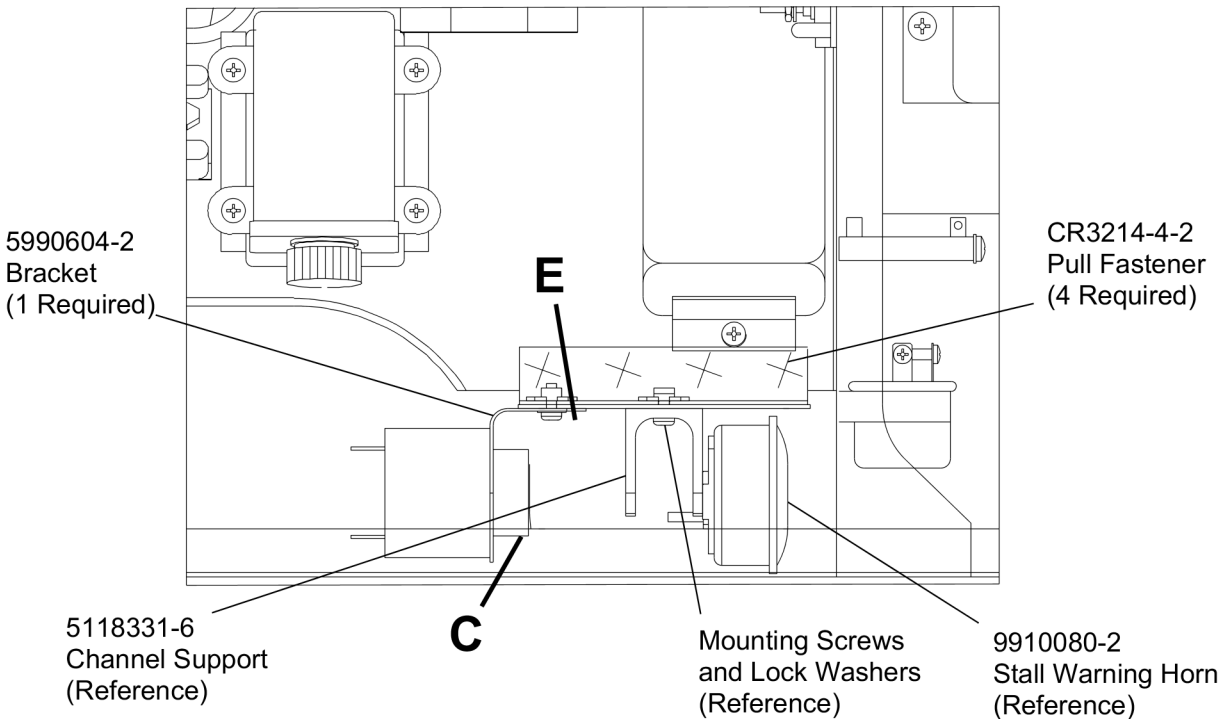


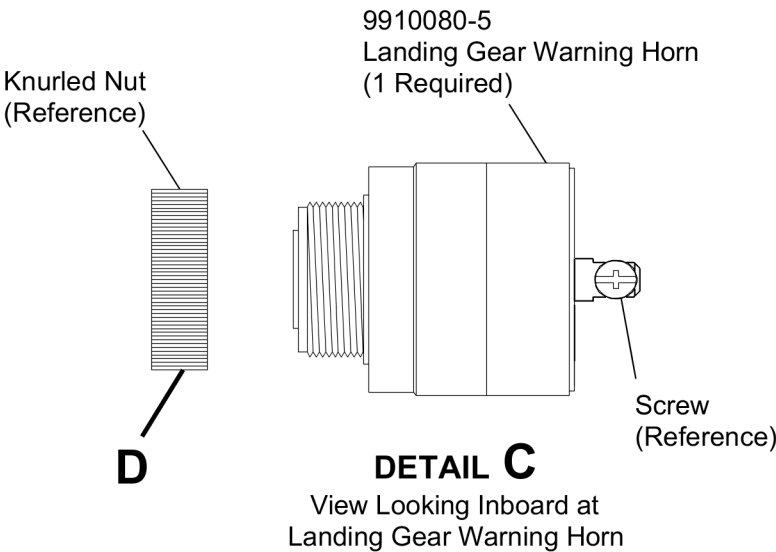
Figure 3. After Modification (Sheet 1)

5710T1004
A5990T604-1

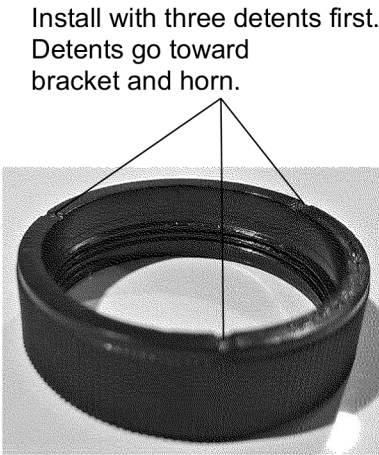
A112291



DETAIL B
(View Looking Outboard)



DETAIL C
View Looking Inboard at
Landing Gear Warning Horn

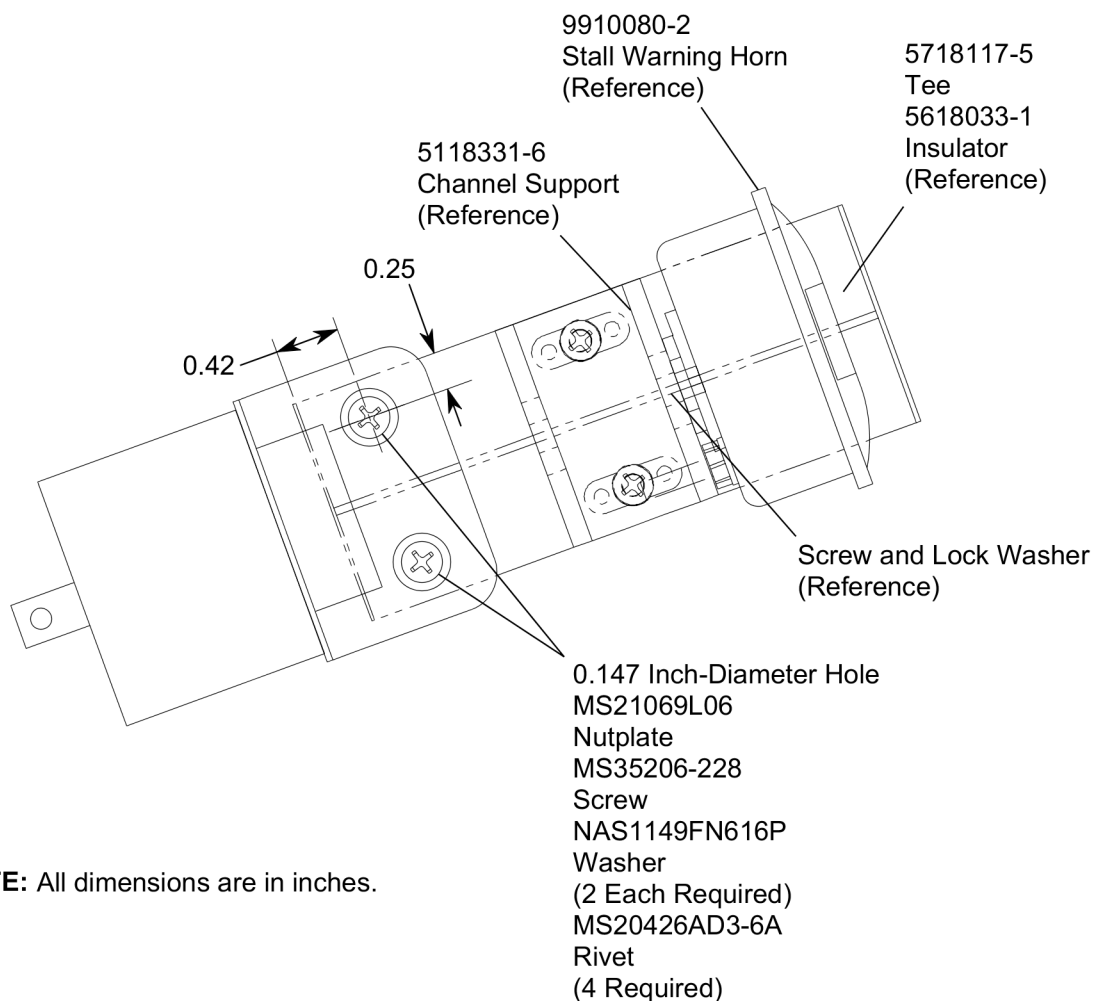


DETAIL D
Knurled Nut Install Direction

Figure 3. After Modification (Sheet 2)

A5990T604-1
B0710700

A112292

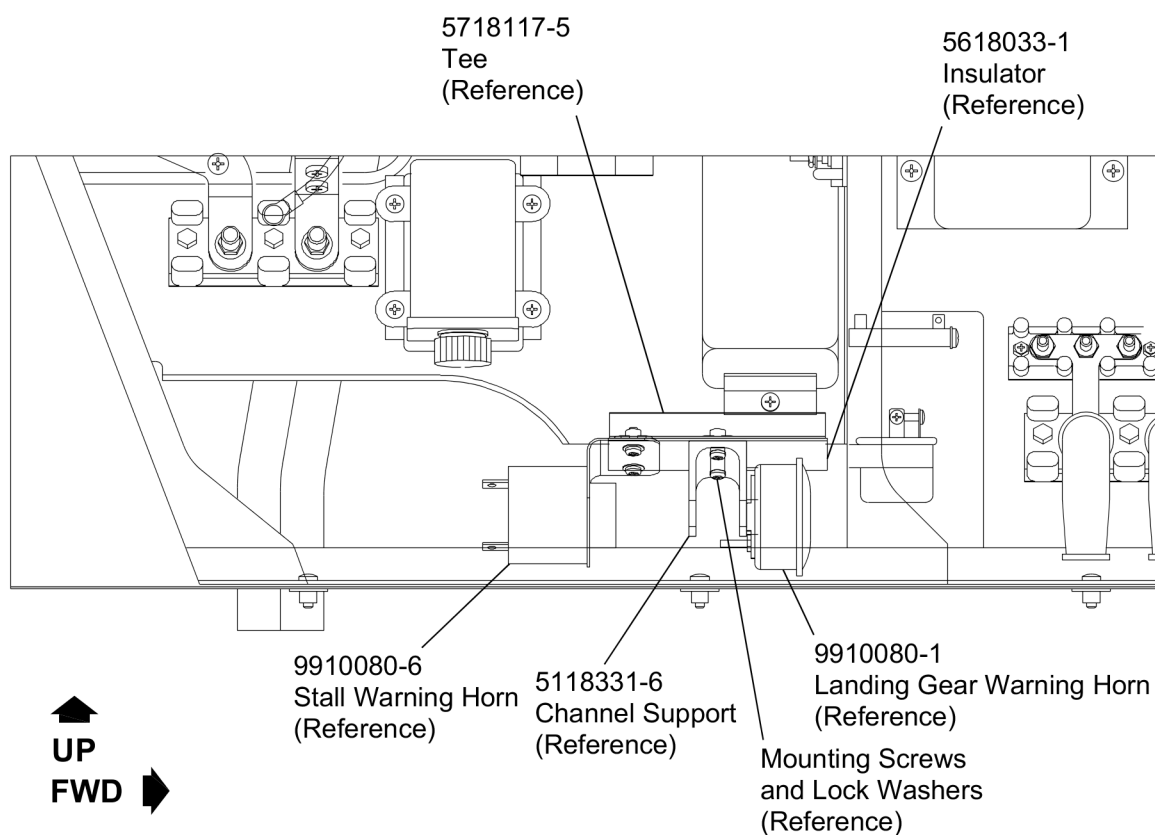
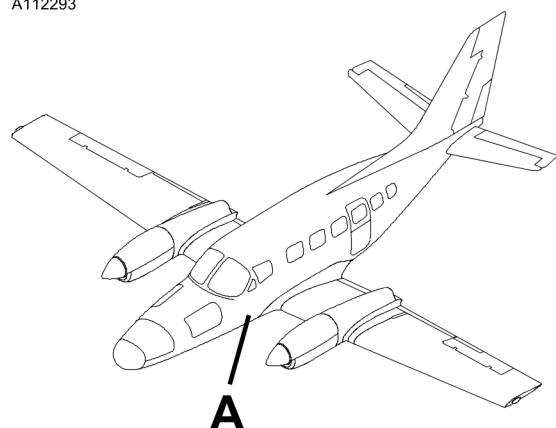


DETAIL E
(View Looking Up)

E5990T604-1

Figure 3. After Modification (Sheet 3)

A112293

**DETAIL A**View Looking Outboard
(Configuration 3)

NOTE: Make sure that CONFIGURATION 2 from CQB-34-01 Stall Warning Horn Replacement has been installed.

5710T1004
A5990T604-1

Figure 4. Before Modification (Sheet 1)

A112294

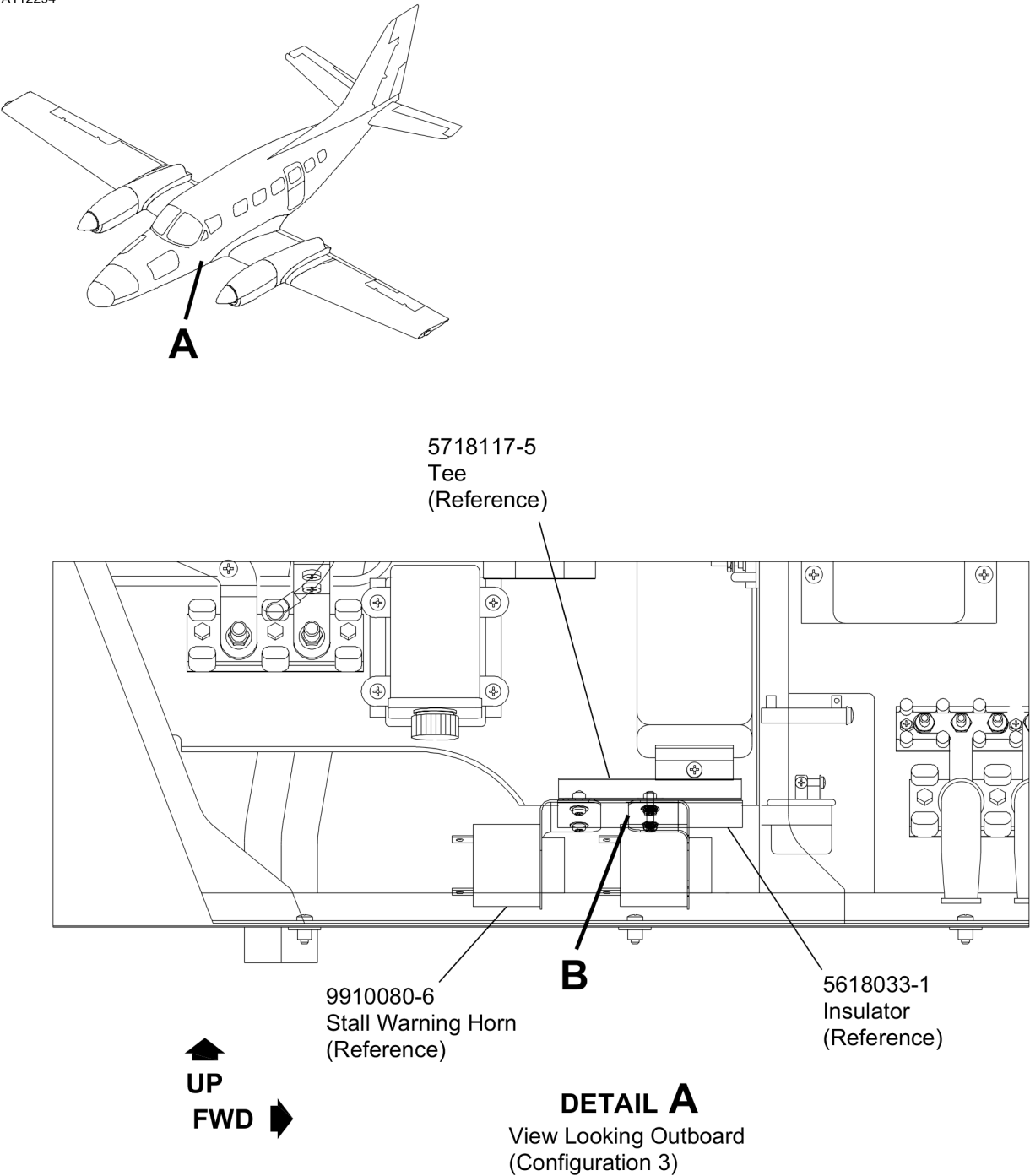
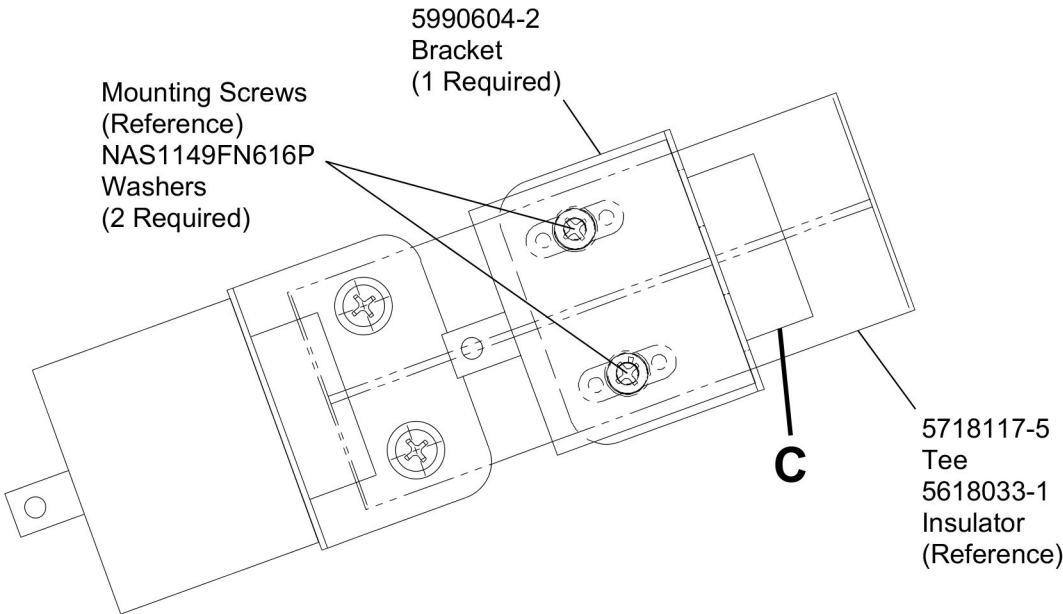


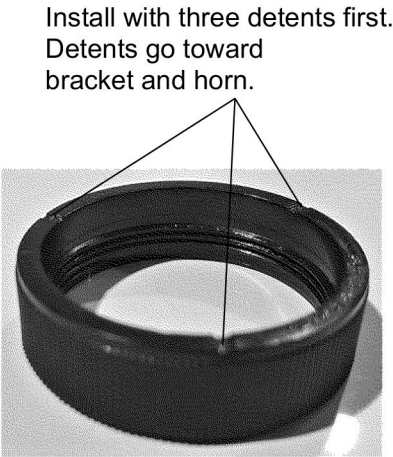
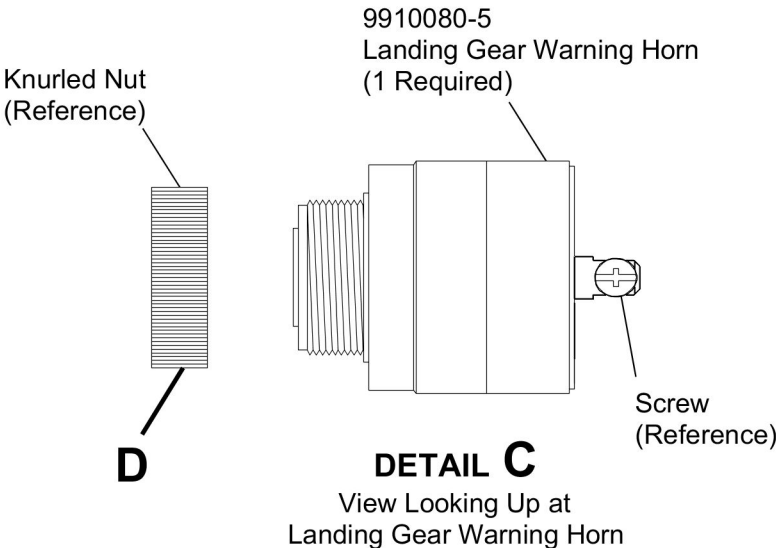
Figure 5. After Modification (Sheet 1)

5710T1004
A5990T604-1

A112295



DETAIL B
(View Looking Up)



DETAIL D
Knurled Nut Install Direction

Figure 5. After Modification (Sheet 2)

B5990T604-1
C0710700

MATERIAL INFORMATION

NOTE: CONFIGURATION 1: Order the kit below to install this modification.

NOTE: To install the 9910080-6 Stall Warning Horn in conjunction with the 9910080-5 Landing Gear Warning Horn, order the kit **CONFIGURATION 1** from CQB-34-01: Stall Warning Horn Replacement.

NEW P/N	QUAN- TITY	KEY WORD	OLD P/N	INSTRUCTIONS/ DISPOSITION
CQB-32-01-0	1	Kit , consisting of the following parts:		
CR3214-4-2	4	Pull Fastener	N/A	Install
NAS1149FN616P	2	Washer	N/A	Install
5990604-2	1	Bracket	5118331-6	Discard
9910080-5	1	Landing Gear Warning Horn	9910080-1	Discard
CQB-32-01	1	Instructions		

NOTE: CONFIGURATION 2: order the kit below to install this modification.

NEW P/N	QUAN- TITY	KEY WORD	OLD P/N	INSTRUCTIONS/ DISPOSITION
CQB-32-01-1	1	Kit , consisting of the following parts:		
CR3214-4-2	4	Pull Fastener	N/A	Install
MS20426AD3-6A	4	Rivet	N/A	Install
MS21069L06	2	Nut Plate	N/A	Install
MS35206-228	2	Screw	N/A	Install
NAS1149FN616P	2	Washer	N/A	Install
5990604-2	1	Bracket	N/A	Install
9910080-5	1	Landing Gear Warning Horn	9910080-1	Discard
CQB-32-01	1	Instructions		

NOTE: CONFIGURATION 3: Order the kit below to install this modification.

NOTE: Prior to order this kit make sure that **CONFIGURATION 2** from CQB-34-01: Stall Warning Horn Replacement has been installed.

NEW P/N	QUAN- TITY	KEY WORD	OLD P/N	INSTRUCTIONS/ DISPOSITION
CQB-32-01-2	1	Kit , consisting of the following parts:		
NAS1149FN616P	2	Washer	N/A	Discard
5990604-2	1	Bracket	5118331-6	Discard

NEW P/N	QUAN- TITY	KEY WORD	OLD P/N	INSTRUCTIONS/ DISPOSITION
9910080-5	1	Landing Gear Warning Horn	9910080-1	Discard
CQB-32-01	1	Instructions		

* Please contact a Textron Aviation Authorized Service Facility for current cost and availability of parts listed in this service document.

Based on availability and lead times, parts may require advanced scheduling.

TITLE

LANDING GEAR - LANDING GEAR WARNING HORN REPLACEMENT

TO:

Cessna Model 425 and 441 Aircraft Owner

REASON

The original landing gear warning horn is no longer available. If the landing gear warning horn needs to be replaced, a new landing gear warning horn is available and will require an additional bracket for installation.

COMPLIANCE

OPTIONAL. This service document can be accomplished at the discretion of the owner.

LABOR HOURS**WORK PHASE**

Modification

LABOR-HOURS

As Necessary

MATERIAL AVAILABILITY

PART NUMBER	AVAILABILITY	COST
CQB-32-01-0	*	*
CQB-32-01-1	*	*
CQB-32-01-2	*	*

* Please contact a Textron Aviation Authorized Service Facility for current cost and availability of parts listed in this service document.

Based on availability and lead times, parts may require advanced scheduling.

WARRANTY

None

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 Access link at www.txtavsupport.com to register.

October 11, 2022

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