



Original Issue: 04 April 2025 Reference: MFSBA-2501 Rev 00

TITLE

Alert Service Bulletin - Kit for STC SA011869WI

PURPOSE

This Alert Service Bulletin informs operators of a potential safety issue and provides instructions to minimize probability of an unsafe failure condition.

EFFECTIVITY

- Textron Aviation Inc. 172 and 175 model aircraft that have been modified in accordance with STC SA01869WI, Middle Fork Mods LLC Tail Tie Down Assembly 16-020-534530, Middle Fork Mods LLC Serial Numbers 1 through 140
- The complete applicable aircraft model list is detailed in FAA Supplemental Type Certificate SA01869WI.

REASON

There is a potential safety issue regarding the installation of the Tail Tie-Down Assembly interference with the rudder control cable. Two incidents have been reported in which the installation of this modification results in the rudder control cable contacting a fairing screw installed by this Kit. This condition could result in severance or fraying of the cables with loss of rudder control. Figure 1 identifies the area in question.

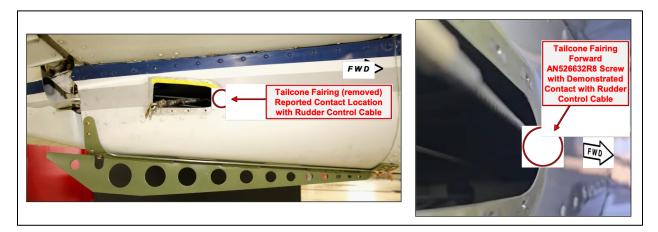


Figure 1: Affected Area





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COMPLIANCE

Compliance with this Alert Service Bulletin must be accomplished until a Mandatory Service Bulletin is issued to correct the potential safety issue. Document Alert Service Bulletin compliance as a written entry in the applicable aircraft logbook.

A service document published by Middle Fork Mods may be recorded as completed in an aircraft logbook only when the following requirements are satisfied:

- 1. The mechanic must complete all the instructions in the service document, including the intent therein.
- 2. The mechanic or airplane owner must use the technical data in the service document only as approved and published.
- 3. The mechanic or airplane owner must apply the information in the service document only to aircraft identified in the Effectivity section of the document.
- 4. The mechanic or airplane owner must use maintenance practices that are identified as acceptable standard practices in the aviation industry and governmental regulations.
- 5. Complete and mail or email a copy of the attached **COMPLIANCE FORM** to Middle Fork Mods LLC (contact information is on the **COMPLIANCE FORM**).

This should be accomplished at the next scheduled inspection after receipt of this Alert Service Bulletin, but no later than the next 16 flight hours.

Refer to the Modification Instructions (16-020-AE3302) as required.

REFERENCES

- 1. Federal Aviation Administration. Department of Transportation. Supplemental Type Certificate Number SA01869WI.
- 2. Applicable Textron/Cessna Aircraft Maintenance Manual (AMM)
- 3. Middle Fork Mods. Modification Instructions. 16-020-AE3302 Rev 0. "Tail Tie-Down Replacement."
- 4. Federal Aviation Administration. Advisory Circular. AC 43.13-2B. "Acceptable Methods, Techniques, and Practices Aircraft Alterations."

DESCRIPTION

Tail cone fairing fasteners are to be inspected for damage and wear and replaced if such is found. Rudder control cable assemblies shall be inspected for separation, broken wires, fraying of cables and wear. Inspect the rudder flight control cable installation to see if any damage or changes exist outside the modifications introduced by this Kit that would change the location of the rudder control cable.





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Worn or damaged rudder control cables shall be replaced. There shall be positive clearance between any item on the aircraft and the rudder control cable.

SAFETY INTENT

For aircraft with the Middle Fork Mods LLC Tail Tie Down Assembly 16-020-534530 installed, the intent is to avoid inadvertent rudder control cable contact.

TOOLS AND TECHNICAL DATA

- Middle Fork Mods LLC Modification Instructions Document No:16-020-AE3302
- Phillips # 2 screwdriver
- Mirror and flashlight

PERSONNEL REQUIREMENTS

- One individual that holds an Airframe and Powerplant Mechanic license
- One helper

REPORTING

Middle Fork Mods is requesting in the interest of Aviation Safety that the results of the inspection be shared with us regardless of the findings to assist us in rapidly correcting this situation and to better understand what models are affected. Please fill out the form attached at the end of this bulletin and return it to Middle Fork Mods (contact information is contained within the form).

ACCOMPLISHMENT INSTRUCTIONS

- 1) Reference 16-020-AE3302 page 3-17, figure 3-19, "Tail cone Faring, Installed."
- 2) Remove 9x AN526632R8 screws and fairing with #2 Phillips screwdriver.





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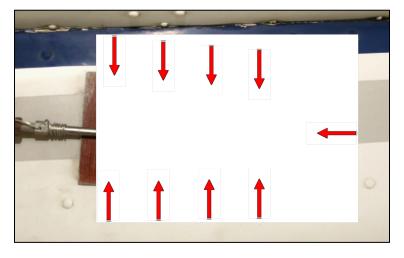


Figure 2: Screws to Remove

- 3) Inspect rudder cable in the vicinity of the Tail Tie Down Assembly 16-020-534530.
 - (a) If no wear or damage is observed on the rudder control cable at the location of the Kit screws and nutplates, no further action is required regarding the rudder control cable.
 - (b) If any wear or damage is observed on the rudder control cable at the location of the Kit screws and nutplates, replace the rudder control cable following approved guidance of the applicable Textron/Cessna AMM or FAA AC 43.13-1B.
- 4) Leaving fairing uninstalled thread AN526632R8 screws back into MS21069L06 nutplates to the same depth they would protrude through the inside of the fuselage with the fairing installed.

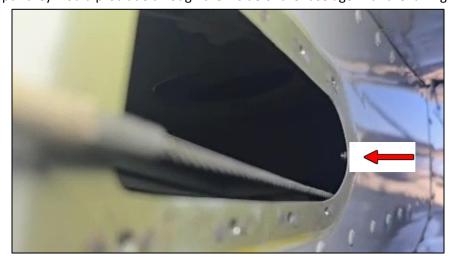


Figure 3: Removed Fairing with Reinstalled Screw for Clearance Inspection





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- 5) Ensure nose wheel is centered.
- 6) While Airframe Mechanic watches with mirror and flashlight have helper move the rudder control full travel left and right stop to stop.
- 7) While rudder cable is being moved due to rudder travel, ensure that at any point in its motion there **positive clearance** (i.e. no contact) between the rudder control cable and the fairing AN526632R8 screw or MS21069L06 nutplate.
 - (a) If, in the full rudder motion, **positive clearance is maintained** between rudder control cable and AN526632R8 screw or MS21069L06 nutplate, then no further action is required at this point.
 - Reinstall the fairing in accordance with Modification Instructions 16-020-AS3302.
 - ii. Make appropriate log entry in aircraft maintenance records indicating, "Adequate clearance per Middle Fork Mods LLC Alert Service Bulletin MFSBA-2501 Rev 00 was observed."
 - iii. Fill out the Alert Service Bulletin <u>COMPLIANCE FORM</u> and return it to Middle Fork Mods by email or mail (contact information contained within the form).
 - (b) If at any point in the full rudder motion, **positive clearance is not maintained** (i.e the contact) between rudder control cable and AN526632R8 screw or MS21069L06 nutplate, then the aircraft must be grounded until a Service Bulletin is issued to correct the potential safety issue.
 - Make appropriate log entry in aircraft maintenance records indicating either, "No contact observed per Middle Fork Mods LLC Alert Service Bulletin MFSBA-2501 Rev 00 was observed" or "Contact observed per Middle Fork Mods LLC Alert Service Bulletin MFSBA-2501 Rev 00."
 - ii. Fill out the Alert Service Bulletin <u>COMPLIANCE FORM</u> and return it to Middle Fork Mods by email or mail (contact information contained within the form).





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Middle P. Cha	e fill out and send to Fork Mods, LLC O. Box 346 allis ID, 83226 s37 ◆ mfm@custertel.ne	et	ALERT SERVICE BULLETIN COMPLIANCE FORM MFSBA-2501 Rev 00		
Customer Name and Address:			Telephone:		
			Fax:		
			Email:		
Aircraft Model Number	Aircraft Registration Number	Date Compliance Inspection Performed mm/dd/yy		Is there contact between the rudder control cable and the screw or nutplate? circle one answer	Measured clearance (in inches) if answer is "NO"
				YES / NO	
				YES / NO	
				YES / NO	
				YES / NO	
				YES / NO	
				YES / NO	
Remarks:		•			





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Information: We request your cooperation in filling out this form. The form should be filled out in its entirety and sent to the above address. We thank you in advance for your cooperation.