TITLE

FLIGHT CONTROLS - RELOCATION OF THE RUDDER TRIM TRANSDUCER CABLE CONNECTION TO THE RUDDER TRIM CABLE

EFFECTIVITY

MODEL	SERIAL NUMBERS
Super King Air B200GT	BY-207, BY-239, BY-250 thru BY-334, BY-336, BY-337
Super King Air B200CGT	BZ-1

NOTE: This modification is applicable only on Airplanes with factory installed Flight Data Recorder (FDR).

REASON

The spring load on the rudder trim transducer can pull on the rudder trim cable, causing movement over time. To reduce its effect, the rudder trim transducer cable and clamp block located on the outboard rudder trim cable, should be relocated to the inboard rudder trim cable.

DESCRIPTION

This service document provides parts and instructions to remove the rudder trim transducer cable and clamp block from the outboard rudder trim cable and relocate the clamp block with transducer cable to the inboard rudder trim cable.

COMPLIANCE

RECOMMENDED. This service document should be accomplished at a scheduled maintenance period or inspection.

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.

No individual or corporate organization other than Textron Aviation is authorized to make or apply any changes to a Textron Aviation-issued service document or flight manual supplement without prior written consent from Textron Aviation.

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.

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

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

In addition to the above kit(s), you must use the consumable materials that follow, or their equivalent, to complete this service bulletin.

NAME	NUMBER	MANUFACTURER	USE
Anaerobic Adhesive (Loctite 242)	U074062	Textron Aviation Parts Distribution 7121 Southwest Boulevard Wichita, KS 67215	Apply to screw.

TOOLING

No specialized tooling is required for accomplishment of this service document.

WEIGHT AND BALANCE INFORMATION

Negligible

REFERENCES

Super King Air B200GT/B200CGT Fusion Maintenance Manual.

PUBLICATIONS AFFECTED

Super King Air B200GT/B200CGT Fusion Maintenance Manual.

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 fuselage access panels 5 and 12. (Refer to the King Air Maintenance Manual, Chapter 6, Airplane Access Panels - Description and Operation).

   CAUTION: The transducer cable must have tension on it at all times and must not be allowed to snap back (freewind). If the cable is allowed to freewind into the transducer housing, it can cause damage to the transducer.
3. Measure and record the distance from the rudder trim position transducer to the clamp assembly on the outboard rudder trim cable.
4. (Refer to Figure 1). Disconnect the transducer cable from the RAS160520304-55 Clamp Assembly on the outboard rudder trim cable.
   A. Release the leader latch mechanism and disconnect the leader from the RAS160520304-55 Clamp Assembly.

5. Remove the two MS24693-S3 screws that attach the RAS160520304-55 Clamp Assembly on the outboard rudder trim cable.

   A. Keep the Screws and Clamp Assembly.

6. Clean all the residue sealants form the screws.

7. Apply Loctite 242 anaerobic adhesive to the threads of the screws.

8. (Refer to Figure 1). Install the kept RAS160520304-55 Clamp Assembly on the inboard rudder trim cable using the kept two MS24693-S3 screws.

   NOTE: Make sure that the distance between the rudder trim position transducer to the clamp assembly is same as recorded.

   CAUTION: The transducer cable must have tension on it at all times and must not be allowed to snap back (freewind). If the cable is allowed to freewind into the transducer housing, it can cause damage to the transducer.

9. (Refer to Figure 1). Connect the transducer cable to the clamp assembly on the inboard rudder trim cable as follows:

   A. Install the leader to the clamp assembly and latch the leader latching mechanism.

      NOTE: Remove the swivel from the leader before installation.

10. Connect the airplane battery. (Refer to the King Air Maintenance Manual, Chapter 24, Battery - Maintenance Practices.)

11. Perform the Laptop Computer/RAU Setup procedure to connect the laptop or RAU to the DFDR. (Refer to the King Air Maintenance Manual, Chapter 31, Rudder Position Transducer - Adjustment/Test).

12. Make sure that the ROSE main menu at the bottom left area of the laptop/RAU screen shows the selected configuration name as 101-590169-0007.

    NOTE: IF the configuration file is not installed on the laptop, the configuration file can be downloaded from www.txtavsupport.com. Go to King Air 200 Series, Maintenance Software, King Air Fusion L-3 MADRAS Configuration Databases, under For King Air Fusion Phase 3 Aircarft: select B200GT FDR Configuration Database 101-590169-0007.

13. Perform the ROSE Program Operation procedure to configure the laptop/RAU to do the functional test. (Refer to the King Air Maintenance Manual, Chapter 31, Rudder Position Transducer - Adjustment/Test).

14. Perform the rudder trim position transducer rigging and functional test procedures. (Refer to the King Air Maintenance Manual, Chapter 31, Rudder Position Transducer - Adjustment/Test).

15. Install the fuselage access panels (5 and 12). (Refer to the King Air Maintenance Manual, Chapter 6, Airplane Access Panels - Description and Operation).

16. Remove the maintenance warning tags.

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.

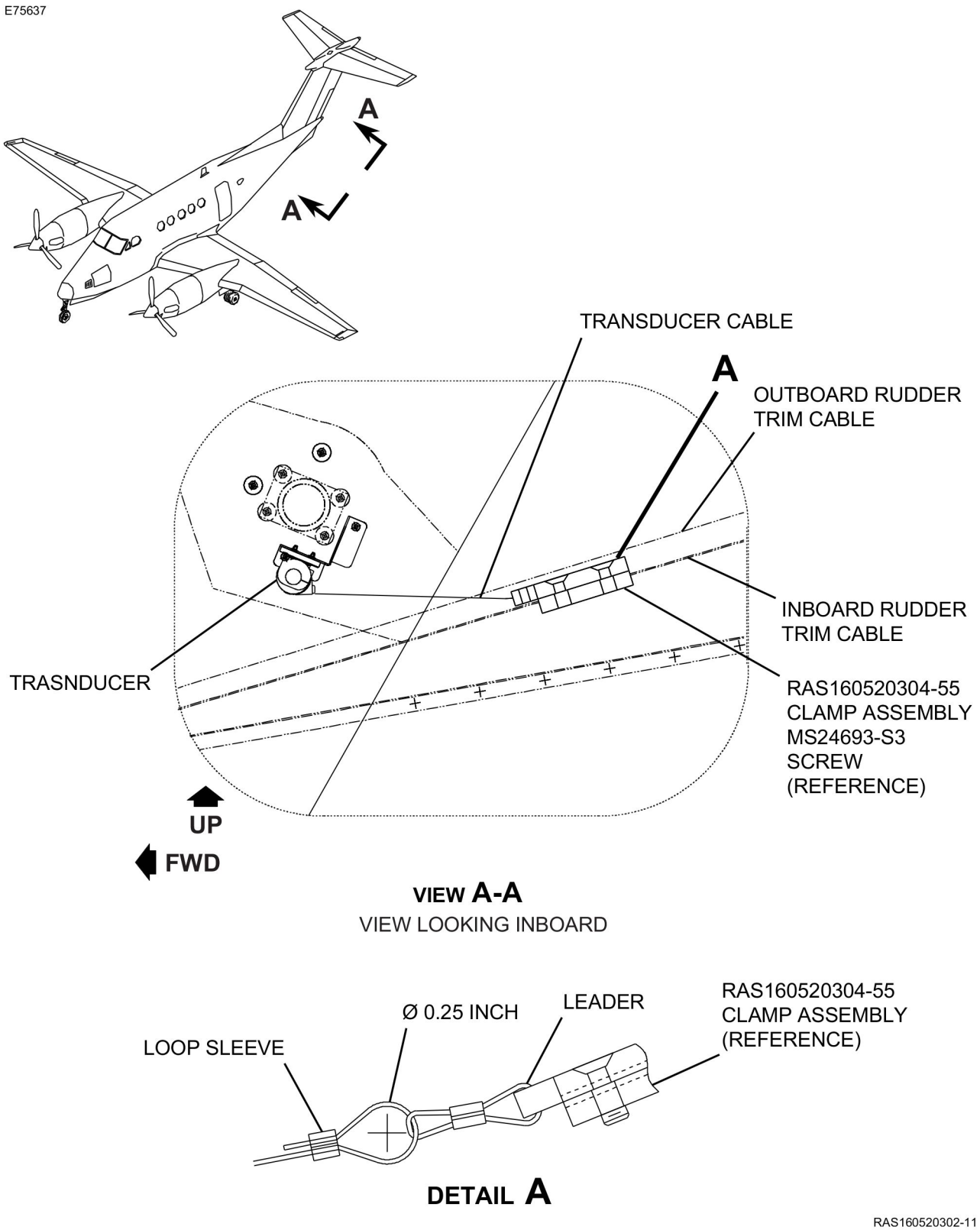

Figure 1. Rudder Trim Transducer Cable Connection (Sheet 1)

MATERIAL INFORMATION

No parts are required to complete this modification.

TITLE

FLIGHT CONTROLS - RELOCATION OF THE RUDDER TRIM TRANSDUCER CABLE CONNECTION TO THE RUDDER TRIM CABLE

TO:

Beecraft Models B200GT and B200CGT Aircraft Owner

REASON

The spring load on the rudder trim transducer can pull on the rudder trim cable, causing movement over time. To reduce its effect, the rudder trim transducer cable and clamp block located on the outboard rudder trim cable, should be relocated to the inboard rudder trim cable.

NOTE: This modification is applicable only on Airplanes with factory installed Flight Data Recorder (FDR).

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LABOR HOURS

WORK PHASE	LABOR-HOURS
Modification	4

MATERIAL AVAILABILITY

No parts are necessary to install this modification.

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WARRANTY

This service document is *recommended*. Eligible airplanes may qualify for parts and labor coverage to the extent noted in the *Labor Hours* and *Material Availability* sections of this document.

Eligibility: Airplanes identified within the serial number effectivity of this service document must have active Airframe warranty coverage on the original issue date of this document and the coverage must be active on the day the work is accomplished.

Parts Coverage: Textron Aviation-owned and Textron Aviation-authorized Service Facilities, operators, or other maintenance facilities may submit a claim for the parts required to accomplish this service document as defined in the *Material Availability* section of this document.

Labor Coverage: Textron Aviation-owned and Textron Aviation-authorized Service Facilities rated to perform maintenance on the specific model of Beechcraft Aircraft may submit a claim for the labor necessary to accomplish this service document as defined in the *Labor Hours* section of this document.

Credit Application: After this service document has been accomplished, a claim must be submitted to Textron Aviation within 30 days of the service document completion. Claims for compliance of this service document are to be filed as a W4 type claim.
Please submit your claim form online at *ww2.txtav.com/Parts* or email the completed Textron Aviation Claim Form to *warranty@txtav.com*. If submitted on-line a Return Authorization will be provided. If a paper claim is submitted your claim will be entered into the system and a Return Authorization will be sent to you.

The Return Authorization must accompany any required return parts (see *Material Availability*), to the point of purchase.

Parts to be returned to Textron Aviation Parts Distribution should be forwarded to:

Textron Aviation Parts Distribution
Warranty Administration
285 South Greenwich Road
Bldg B89, Docks 1-4
Wichita, KS 67206
USA

Expiration: January 11, 2022 (after this date the owner/operator assumes the responsibility for compliance costs)

Textron Aviation reserves the right to void continued airplane warranty coverage for the parts affected by this service document until the service document is accomplished.

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.