

REVISION TRANSMITTAL

This sheet transmits Revision 3 to SB525C-34-09, which:

- A. Updates the TSSA-4100 software and corresponding compatible TSSE-100 software that are available from Rockwell Collins.
- B. Changes the NOTE in Step 3A to read that the TSS-4100 needs 810-0052-110 TSSA-4100 software.
- C. Changes Step 7M to make sure the TSS CPN is 810-0052-110.
- D. Changes Step 7N to make sure that the (TSS) ECU-3000 DATA shows TSSE-4100 DISP PN: 810-0250-012.
- E. Changes the part number of the ECU-3000 from 822-1200-803 (Software Level 810-0250-011) to 822-1200-803 (Software Level 810-0250-012) in the MATERIAL INFORMATION section.
- F. Changes the part number of the TSS-4100 822-2132-001 (Software Level 810-0052-102) to 822-1200-803 (Software Level 810-0052-110) in the MATERIAL INFORMATION section.
- G. Changes the part number of the ECU-3000 Software from 810-0250-011 to 810-0250-012 in the MATERIAL INFORMATION section.
- H. Changes the part number of the of the TSS-4100 Software from 810-0052-102 to 810-0052-110 in the MATERIAL INFORMATION section.

NOTE: This revision replaces the original issue and all previous revisions of SB525C-34-09 in their entirety.

REVISION COMPLIANCE

OPTIONAL. Airplanes that are not equipped with TSSA-4100 software version 810-0052-102 and TSSE-4110 SW 810-00250-011 should do Revision 3 of this bulletin.

NOTE: Airplanes that are equipped with TSSA-4100 software version 810-0052-102 and TSSE-4110 SW 810-00250-011 are not effected by this revision.

LOG OF REVISIONS

Original Issue	July 2, 2015
Revision 1	July 22, 2015
Revision 2	November 4, 2016
Revision 3	January 3, 2022

REVISION TRANSMITTAL

This sheet transmits Revision 2 to SB525C-34-09, which:

- A. Adds a *Note* that states the ECU-3000 and TSS-4100 may be upgraded on-wing or removed and returned to the Textron Aviation for update, either method is acceptable.
- B. Lists SB525C-34-10 *Navigation - Collins TSS-4100 And ECU-3000 Software Dataloading Connector Installation* as a prerequisite if software is loaded on-wing.
- C. Adds a *Note* for airplanes -0001 thru -0072 and -0074 thru -0077 that have not incorporated SB525C-34-05.
- D. Adds instructions to load the TSS-4100 and ECU-3000 on-wing.
- E. Adds ARINC 615 Dataloader and software to the *Tooling* section.
- F. Adds ECU-3000 and TSS-4100 software to the *Material Information* section.
- G. Changes the TSS-4100 software from 810-0052-100 to 810-0052-102.
- H. Removes ICA-525C-34-00002 *CJ4 Rockwell Collins ADS-B Out ICA Supplement* from the service bulletin. The ICA supplement has been incorporated into the 525C Maintenance Manual.
- I. Removes the AFM Temporary Changes. (Revision 5 was distributed in June 2015)

NOTE: This revision replaces the original issue and all previous revisions of SB525C-34-09 in their entirety.

REVISION COMPLIANCE

NO EFFECT. Airplanes previously modified by this service bulletin are not effected by this revision.

LOG OF REVISIONS

Original Issue	July 2, 2015
Revision 1	July 22, 2015
Revision 2	November 4, 2016

TITLE

NAVIGATION - AUTOMATIC DEPENDENT BROADCAST SURVEILLANCE (ADS-B) OUT TRANSPONDER INSTALLATION

EFFECTIVITY**MODEL**

525C (CJ4)

SERIAL NUMBERS

-0001 thru -0176, -0178 thru -0186

The equivalent of this service bulletin has been incorporated on production airplanes -0177 and -0187 and On.

NOTE: Textron Aviation-owned Service Centers are the only facilities that can complete this service bulletin.

NOTE: Airplanes -0001 thru -0072 and -0074 thru -0077 must incorporate SB525C-34-05, *Navigation - Traffic Surveillance System (TSS-4100) TCAS II Software 7.1 Upgrade*, prior to or in conjunction with this service bulletin.

- Also SB525C-34-07 *Navigation - TAWS And TCAS Aural Alerts Wiring Modification* must be accomplished prior to or in conjunction with SB525C-34-05 *Navigation - Traffic Surveillance System (TSS-4100) TCAS II Software 7.1 Upgrade*.
- The 811-1052-903 software must be loaded to the TSS-4100 on airplanes -0001 thru -0072 and -0074 thru -0077 that have not incorporated SB525C-34-05, *Navigation - Traffic Surveillance System (TSS-4100) TCAS II Software 7.1 Upgrade* prior to incorporating this service bulletin if the TSS-4100 software is loaded on-wing.

NOTE: SB525C-34-10 *Navigation - Collins TSS-4100 And ECU-3000 Software Dataloading Connector Installation* must be accomplished prior to or in conjunction with this service bulletin, if the ECU-3000 and TSS-4100 software is loaded on-wing.

NOTE: Please note the downtime required to complete this bulletin and schedule accordingly.

REASON

The airplanes must comply with regulatory requirements for ADS-B Out.

DESCRIPTION

This service bulletin provides parts and instructions to install ADS-B Out capable components that meet the regulatory requirements.

COMPLIANCE

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

A service bulletin published by Cessna Aircraft Company 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 bulletin, including the intent therein.
- 2) The mechanic must correctly use and install all applicable parts supplied with the service bulletin kit. Only with written authorization from Cessna Aircraft Company 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 bulletin only as approved and published.

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- 4) The mechanic or airplane owner must apply the information in the service bulletin only to aircraft serial numbers identified in the "Effectivity" section of the bulletin.
- 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 Cessna Aircraft Company is authorized to make or apply any changes to a Cessna-issued service bulletin, service letter, or flight manual supplement without prior written consent from Cessna Aircraft Company.

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

APPROVAL

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

FLIGHT CREW OPERATIONS

Refer to the attached *Flight Crew Operations Summary*.

TOOLING

NAME	NUMBER	MANUFACTURER	USE
IFR Test Set	IFR-6000 with software 2.08.00 or later or equivalent	Aeroflex 10200 West York Street Wichita, KS 67125	To verify transponder transmitted data.
Pitot-Static Test Set	6520-10 or Equivalent	Laversab Incorporated 10435 Greenbough Suite 300 Stafford, TX 77477	To do a test of the pitot-static systems.
Landing Gear Simulator Test Box	8788001-8	Textron Aviation Parts Distribution 7121 Southwest Boulevard Wichita, KS 67215	To simulate an airborne condition.
Avionics ARINC 615 Databus Analyzer	650-0330	Avionics Inc. 9941 West Jessamine Street Miami, FL 33157	To load ECU and TSS software on-wing.
Avionics LOAD615win Dataloader Software	700-0301	Avionics Inc. 9941 West Jessamine Street Miami, FL 33157	To load ECU and TSS software on-wing.

NOTE: A PDL-615 is an acceptable alternative to the Avionics ARINC 615 Databus Analyzer with LOAD615win Dataloader Software, but the PDL-615 is no longer produced.

WEIGHT AND BALANCE INFORMATION

Negligible

REFERENCES

Cessna Model 525C Maintenance Manual

NOTE: To install ADS-B Out on your airplane, you must get the engineering documents that follow. You must use the most recent revision and all of the applicable drawing change notices (DCN) for each engineering document.

DOCUMENT NUMBER	TITLE
8790039	ADS-B Out Mod W/A (525C)
8734403	TSS Dataloading Procedure & Adapters (if ECU and TSS software is loaded on-wing)

PUBLICATIONS AFFECTED

- Cessna Model 525C Maintenance Manual
- Cessna Model 525C Illustrated Parts Catalog
- Cessna Model 525C Wiring Diagram Manual
- Cessna Citation CJ4 FAA Approved Airplane Flight Manual (525CFM)
- Cessna Citation CJ4 Normal Procedures Checklist (525CCLNP)
- Cessna Citation CJ4 Emergency and Abnormal Procedures Checklist (525CCLEAP)

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 the airplane battery.
 - (2) Disconnect external electrical power.
 - 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. (Airplanes that will remove the ECU-3000 and TSS-4100 for upgrade) Remove the components that follow:
 - A. Remove the 822-1200-803 ECU-3000 (UN811) for the TSS-4100. (Refer to the Model 525C Maintenance Manual, Chapter 34, Collins ECU-3000 External Compensation Unit - Removal/Installation.)
 - (1) Send the removed unit to Textron Aviation.
 - B. Remove the 822-2132-001 TSS-4100. (Refer to the Model 525C Maintenance Manual, Chapter 34, Collins TSS-4100 Traffic Surveillance System (TSS) Unit - Removal/Installation.)
3. Remove the 622-9210-409 TDR-94D Transponder. (Refer to the Model 525C Maintenance Manual, Chapter 34, Collins TDR-94D Transponder - Removal/Installation.)
 - A. Send the removed TDR-94D and TSS-4100 (if applicable) to Textron Aviation for an upgrade.

NOTE: Make note that the TSS-4100 needs 810-0052-110 TSSA-4100 software.

NOTE: Contact the Textron Aviation Parts Distribution Repair Team to schedule your units at telefax 1-316-206-4068 or e-mail citationrepair@txtav.com available 8:00 - 4:30 CST weekdays. Advance notification and coordination is required for Textron Aviation Parts Distribution Repair Team to effectively schedule units, ship to supplier, and arrange return. The expected turn time for the supplier supporting this service document is 21 days.

NOTE: A rotatable pool is not available for customers to support this modification.

4. Do the wiring modification. (Refer to Cessna Engineering Drawing 8790039.)
5. Install the upgraded avionics components.
 - A. (Airplanes that removed the ECU-3000 and TSS-4100 for upgrade) Install one 822-1200-803 ECU-3000 (UN811) for the TSS-4100. (Refer to the Model 525C Maintenance Manual, Chapter 34, Collins ECU-3000 External Compensation Unit - Removal/Installation.)
 - B. (Airplanes that removed the ECU-3000 and TSS-4100 for upgrade) Install one 822-2132-001 TSS-4100. (Refer to the Model 525C Maintenance Manual, Chapter 34, Collins TSS-4100 Traffic Surveillance System (TSS) Unit - Removal/Installation.)
 - C. Install one 622-9210-501 TDR-94D Transponder. (Refer to the Model 525C Maintenance Manual, Chapter 34, Collins TDR-94D Transponder - Removal/Installation.)
6. (Airplanes that will install software on-wing) Load the ECU-3000 and TSS-4100 software. (Refer to Cessna Engineering Drawing 8734403)
7. Make sure the TSS-4100 has the correct software.
 - A. Apply external electrical power to the airplane.
 - B. Move the BATTERY switch to the ON position.
 - C. Move the AVIONICS switch to the ON position.
 - D. Push the DATABASE button.
 - E. Push the UPR MENU button.
 - F. Turn the MENU ADV knob to go to the MAINTENANCE MAIN MENU.
 - G. Use the joystick to highlight LRU INDEX/OPERATIONS.
 - H. Push the PUSH SELECT knob.
 - I. Use the joystick until TSS is highlighted.
 - J. Push the PUSH SELECT knob.
 - K. Make sure that the DISPLAY SOFTWARE PART NUMBER field is highlighted.
 - L. Push the PUSH SELECT knob.
 - M. Make sure that the TSS CPN is 810-0052-110.
 - N. Make sure that the (TSS) ECU-3000 DATA shows TSSE-4100 DISP PN: 810-0250-012.

NOTE: Run this software check again if an INVALID CONFIGURATION DATA RECEIVED message is displayed under the TSS field.
8. Do the Transponder Functional Check. (Refer to the Model 525C Maintenance Manual, Chapter 34, Transponder - Adjustment/Test.)
9. Do the ADS-B Annunciation Checks. (Refer to the Model 525C Maintenance Manual, Chapter 34, Transponder - Adjustment/Test.)
10. Do the automatic dependent surveillance broadcast (ADS-B) transponder system functional check. (Refer to the Model 525C Maintenance Manual, Chapter 34, Transponder - Adjustment/Test.)
11. Make sure the flight crew receives the *Flight Crew Operations Summary*, which shows the operational changes that are a result of the accomplishment of this service bulletin.

12. Update the CJ4 FAA Approved Airplane Flight Manual (525CFM) and checklists (525CCLNP and 525CCLEAP).

NOTE: Look at the configuration codes listed in the applicable supplement and/or in Section 1 of the FAA Approved Airplane Flight Manual to make sure all changed crew procedures or limitations are complied with.

- A. Make sure that CJ4 FAA Approved Airplane Flight Manual (525CFM) Revision 5 or later is used.
 - B. Make sure that CJ4 Normal Procedures Checklist (525CCLNP) Revision 5 or later is used.
 - C. Make sure that CJ4 Emergency and Abnormal Procedures Checklist (525CCLEAP) Revision 5 or later is used.
13. Remove the maintenance warning tags and connect the airplane battery.
14. Record that this service bulletin has been completed.
- A. Complete a Maintenance Transaction Report.
 - B. Put a copy of the completed Maintenance Transaction Report in the airplane logbook.
 - C. Send a copy of the completed Maintenance Transaction Report to: CESCO M C/O Camp Systems International Incorporated, 8201 East 34th Street North, Building 1100 Suite 1101 Wichita, KS 67226.

MATERIAL INFORMATION

Order the hardware kit below to install this modification.

NEW P/N	QUAN-TITY	KEY WORD	OLD P/N	REF DES
SB525C-34-09-0	1	Kit , consisting of the following parts:		
M81824/1-2	10	Splice	None	
MS25036-102	5	Terminal	None	
S2974-7	8	Shield Termination	None	
030-2259-000	4	Contact	None	PN811B and PN811E
372-2514-110	14	Contact	None	PN806 and PN808
SB525C-34-09	1	Instructions		

Order the wire kit below to install this modification.

NEW P/N	QUAN-TITY	KEY WORD	OLD P/N	INSTRUCTIONS/ DISPOSITION
SB525C-34-09-1	1	Kit , consisting of the following parts:		
M27500-22ML2T08	88 Inches	Electrical Wire - 29PN808-RPB003 (WHT) 30PN808-SPB003 (BLU)	None	
M27500-22ML2T08	225 Inches	Electrical Wire - 49PN808- 11APN701B (WHT) 50PN808-11BPN701B (BLU)	None	

NEW P/N	QUAN-TITY	KEY WORD	OLD P/N	INSTRUCTIONS/ DISPOSITION
M27500-22ML2T08	106 Inches	Electrical Wire - 6HPN811B-11APN701B (WHT) 6GPN811B-11BPN701B (BLU)	None	
M27500-22ML2T08	87 Inches	Electrical Wire - 2HPN811E-RPB003 (WHT) 2GPN811E-SPB003 (BLU)	None	
M81044/12-22-9	72 Inches	Electrical Wire - not marked	None	
SB525C-34-09	1	Instructions		

All airplanes must upgrade the existing the component that follows.

NEW P/N	QUAN-TITY	KEY WORD	OLD P/N	INSTRUCTIONS/ DISPOSITION
622-9210-501	1	TDR-94D Transponder	622-9210-409	Return to Textron Aviation for upgrade

(Airplanes that will remove the ECU and TSS and send for the upgrade). You must upgrade the existing components that follow to complete this service bulletin.

NEW P/N	QUAN-TITY	KEY WORD	OLD P/N	INSTRUCTIONS/ DISPOSITION
822-1200-803 (Software Level 810-0250-012)	1	ECU-3000	822-1200-803	Return to Textron Aviation
822-2132-001 (Software Level 810-0052-110)	1	TSS-4100	822-2132-001	Return to Textron Aviation for upgrade

Contact the Textron Aviation Parts Distribution Repair Team to schedule your unit at telefax 1-316-206-4068 or e-mail citationrepair@txtav.com available 8:00 - 4:30 CST weekdays. Advance notification and coordination is required for Textron Aviation Parts Distribution Repair Team to effectively schedule units, ship to supplier, and arrange return. The expected turn time for the supplier supporting this service document is 21 days.

(Airplanes that will upload the ECU and TSS software on-wing). Order the parts that follow to upload the software on-wing.

NEW P/N	QUAN-TITY	KEY WORD	OLD P/N	INSTRUCTIONS/ DISPOSITION
810-0250-012	1	ECU-3000 Software	None	
810-0052-110	1	TSS-4100 Software	None	

FLIGHT CREW OPERATIONS SUMMARY

This summary provides additional information for the flight crew regarding operational changes as a result of accomplishment of this service bulletin. Please remove this summary from the service bulletin and give it to the flight crew. This summary is *informational only* and does not supersede any information in the FAA-approved airplane flight manual.

- Refer to CJ4 FAA Approved Airplane Flight Manual (525CFM) Revision 5 or later.

NOTE: Look at the configuration codes listed in the applicable supplement and/or in Section 1 of the FAA Approved Airplane Flight Manual to make sure all changed crew procedures or limitations are complied with.

- Refer to CJ4 Normal Procedures Checklist (525CCLNP) Revision 5 or later.
- Refer to CJ4 Emergency and Abnormal Procedures Checklist (525CCLEAP) Revision 5 or later.

TITLE

NAVIGATION - AUTOMATIC DEPENDENT BROADCAST SURVEILLANCE (ADS-B) OUT TRANSPONDER INSTALLATION

TO:

Cessna Aircraft Owner

REASON

The airplanes must comply with regulatory requirements for ADS-B out.

COMPLIANCE

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

LABOR HOURS**WORK PHASE**

Modification

LABOR-HOURS

As Necessary

MATERIAL AVAILABILITY

PART NUMBER	AVAILABILITY	COST
SB525C-34-09-0	*	*
SB525C-34-09-1	*	*
622-9210-501	*	*
822-1200-803 (Software Level 810-0250-012)	*	*
822-2132-001 (Software Level 810-0052-110)	*	*
810-0250-012	*	*
810-0052-110	*	*

Contact the Textron Aviation Parts Distribution Repair Team to schedule your unit at citationrepair@txtav.com available 8:00 - 4:30 CST weekdays. Advance notification and coordination is required for Textron Aviation Parts Distribution Repair Team to effectively schedule units, ship to supplier and arrange return. A Customer Repair Request Form is available online at ww2.txtav.com/Parts that is required to ship with every repair. The expected turn time for the supplier supporting this service document is 21 days.

* Please contact Textron Aviation Parts Distribution for current cost and availability of parts listed in this service document. Phone at 1-800-835-4000 (Domestic) or 1-316-517-5603 (International). Send email to: parts@txtav.com.

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

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