

TITLE

NAVIGATION - GARMIN SOFTWARE UPDATE TO VERSION 4.8.11

EFFECTIVITY**MODEL**

525B (CJ3+)

SERIAL NUMBERS

-0057, -0451 thru -0609

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

NOTE: (Airplanes -0451 thru -0470) SB525B-31-04 *Indicating/Recording Systems - AReS II Software Update* must be installed prior to or in conjunction with this service bulletin.

NOTE: Garmin SB 1994, GRS 77 Software Version 3.04 - Pitch/Roll Offset Calibration Procedure must be completed prior to or in conjunction with this service bulletin.

REASON

To update the Garmin G3000 software to version 4.8.11.

DESCRIPTION

This service bulletin provides parts and instructions to update the Garmin G3000 software to version 4.8.11.

COMPLIANCE

MANDATORY. This service document must be accomplished within 2 years from the date of receipt.

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.

APPROVAL

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

This service bulletin has not been EASA approved.

FLIGHT CREW OPERATIONS

Refer to the attached *Flight Crew Operations Summary*.

CONSUMABLE MATERIAL

No specialized consumable materials are required to complete this service document.

TOOLING

NAME	NUMBER	MANUFACTURER	USE
Laptop Computer	Commercially Available		For AReS II config file loading
ARes View software	9988301-17 or later	Download from www.txtavsupport.com	Used to load the new AReS II configuration file.

WEIGHT AND BALANCE INFORMATION

Negligible

REFERENCES

Cessna Model 525B Maintenance Manual

Cessna Model CJ3+ FAA Approved Airplane Flight Manual (525BFMA) and checklists (525BCLANP and 525BCLAEAP)

ICA-525B-34-00005A *DC Generator Digital Analog Table (DAT) Calibration Procedure (Airplanes -0685 and -0800 thru -1047 that incorporate SB525B-34-32)*

PUBLICATIONS AFFECTED

Cessna Model 525B Maintenance Manual

Cessna Model CJ3+ FAA Approved Airplane Flight Manual (525BFMA) and checklists (525BCLANP and 525BCLAEAP)

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. (Airplanes equipped with the Stormscope option) (Refer to Figure 1.) Modify the wiring.
 - A. Open the left nose baggage compartment door.
 - B. Remove nose baggage compartment panels 211IZ and 211HZ to get access to the left GIA 63W Integrated Avionics Unit. (Refer to the Model 525B Maintenance Manual, Chapter 6, Access Plates and Panels Identification - Description and Operation.)

- C. Remove the nose radome to get access to the Stormscope Processor. (Refer to the Model 525B Maintenance Manual, Chapter 53, Nose Radome - Maintenance Practices.
 - D. Disengage the STORMSCOPE circuit breaker located on the right circuit breaker panel.
 - E. Disengage the NAV IAU 1 and the COMM 1 circuit breakers located on the right circuit breaker panel in the cockpit.
 - F. Remove the PN836 electrical connector from the Stormscope processor and the P606 electrical connector from the left GIA63W Integrated Avionics Unit.
 - G. Install the 26PN836-77PN409 Electrical Wire with two MS39029/58-362 Connector Pins.
 - H. Install the 77J3-70P606 Electrical Wire using two M39029/58-362 Connector Pins.
 - I. Install the PN836 electrical connector in the Stormscope processor and the P606 electrical connector in the left GIA63W Integrated Avionics Unit.
 - J. Engage the STORMSCOPE circuit breaker located in the aft power J-box in the aft baggage compartment.
 - K. Engage the NAV IAU 1 and the COMM 1 circuit breakers located on the right circuit breaker panel in the cockpit.
3. Remove the SD cards.
- A. Remove all of the SD cards from the L PFD, MFD, and R PFD.
 - B. Discard the SD cards that follow:

NOTE: Textron Aviation provided the SD cards in a blue software pouch that was included as loose equipment at the time of delivery.

NOTE: Optional SD cards will be required as cores to receive the new optional SD cards at no cost.

 - 010-01293-10 G3000 Base Loader card
 - 010-03722-00 TOLD Database Card

NOTE: With 4.8 Software, the TOLD Database is loaded from the Base Loader Card

 - 9102016-11 Cessna G3000 Default Pilot Profile card
 - 9145505-1 Cessna CJ3+ Maintenance card (installed in the top slot of the MFD)

NOTE: The 9145505-1 Cessna CJ3+ Maintenance card must be discarded before the new software is opened. There is a difference between the 9145505-1 Cessna CJ3+ Maintenance card that is currently with the airplane and the 9145505-1 Cessna CJ3+ Maintenance card that is required to complete this service bulletin.

 - 010-00330-D2 Garmin Doppler Turbulence card (if installed)
 - 010-00330-55 SVS unlock data card (if installed)
 - 010-00330-F0 CPDLC unlock card (if installed)
 - Three 010-00474-44 SD Database Cards
 - 010-00330-E6 ACARS Enablement Card (if installed)
 - 010-00330-5E Surfacewatch Enablement Card (if installed)
 - 010-00330-56 TAWS-A Enablement Card (if installed)
 - 010-00330-DA GCS Enablement Card (if installed)
 - C. The cards that follow must be available before the software is installed:
 - 010-01293-21 Garmin V4.8 Base Software Card
 - 010-00330-DE Garmin Doppler Turbulence card (if installed)
 - 010-00330-5M SVS unlock data card (if installed)
 - 010-00330-FA CPDLC unlock card (if installed)
 - 9145505-1 Cessna 525B Maintenance Card
 - 9102016-19 Default Pilot Profile
 - Three 010-00474-52 SD Database Cards

- 010-00330-ED ACARS Enablement Card (if installed)

NOTE: Airplanes with Universal WX ACARS service provider will need to switch to ARINC Direct, SATCOM Direct, or Honeywell CDC.

- 010-00330-5K Surfacewatch Enablement Card (if installed)
- 010-00330-5N TAWS-A Enablement Card (if installed)
- 010-00330-DH GCS Enablement Card (if installed)

- D. The 190-01742-02 Pilot's Guide is required and can be accessed free of charge at www.txtavsupport.com. Crews should download a copy prior to departure with the airplane.

NOTE: Customers that prefer a hard copy of the pilot's guide can purchase it separately. However, the hard copy of the pilot's guide will not be free of charge.

- (1) Download the pilot's guide as follows:

- (a) Go to www.txtavsupport.com.
- (b) Log into the website.
- (c) Under the Model section, select Citation 525B.
- (d) Under the Avionics section, select the CJ3+ G3000 Pilot's Guide Version 4.8 Software.
- (e) Save the document to the computer and/or print the Pilot's Guide for a paper copy.
- (f) Move the document to an appropriate electronic device for viewing as required.

4. Remove the maintenance warning tags and connect the airplane batteries.

NOTE: The G3000 avionics system may lock up if external electrical power is removed during software loading. Connecting the battery is suggested to reduce the risk of locking up the G3000 avionics system if external power is interrupted.

5. Do the Complete Software Loading procedures. (Refer to the Model 525B Maintenance Manual, Chapter 34, Garmin G3000 Integrated Avionics System - Adjustment/Test Airplanes with Software Version 4.8 or later.)

NOTE: Make sure to record the current options installed on the airplane before performing the software loading procedures.

- A. From the GTC Home page, do the steps that follow:

- (1) Select Utilities>Setup>Avionics Status.
- (2) Scroll down until the GTS status is shown.
- (3) Make sure the GTS Software is version 3.14.1.

6. (Airplanes equipped with the Clarity system) Update the Clarity system.

- A. Install the Clarity App on a Wi-Fi capable device.

- (1) Search for Clarity in the App Store[®] or Google Play[®].
- (2) In devices browser, go to web page: www.clarity-wireless.com.
- (3) While device is connected to the aircraft Wi-Fi, in device browser type 192.168.1.70 in the address bar.

- B. Download latest Clarity software version.

- (1) Obtain a blank 2GB USB thumb drive.
- (2) Go to www.txtavsupport.com / Model Citation 525B/ Maintenance Software / Heads Up Technologies Clarity[™] Wireless Server.
- (3) Download the update.zip (Version 8.18 or later) file to the desktop of the computer.
- (4) Extract the file to the desktop.

- (5) Transfer the extracted Update file to the USB thumb drive.
- C. Insert the USB thumb drive into the USB port located behind cabin seat #6.
- D. Wait 2 to 3 minutes for the Clarity system to initialize.
- E. Connect a Wi-Fi capable device to the aircraft Wi-Fi.
- F. Open the Clarity App.
- G. Select the PREFERENCES button.
- H. Select the ADMIN tab at the top of the screen.
- I. Select Password and type "H3ad5up56" and push the Login button.
- J. Push the START UPDATE button.
- K. If prompted, select COMMIT to continue loading.
- L. When prompted, cycle the power switch, wait 1 minute then re-engage switch
- M. Remove the USB thumb drive that was inserted in the USB port behind cabin seat #6.
- N. Wait 2 to 3 minutes for the Clarity system to initialize.
- O. Connect Wi-Fi capable device to the aircraft Wi-Fi.
- P. Open the Clarity App.
- Q. Make sure the software version is correct.
 - (1) Select the PREFERENCES button.
 - (2) Select the ADMIN tab at the top of the screen.
 - (3) The current software version will be displayed below the ENTER PASSWORD.
 - (4) Software version should match the version listed that was downloaded from www.txtavsupport.com.
- R. Set the DHCP/DNS to the correct setting.
 - (1) Open and connect the Clarity App to the aircraft.
 - (2) Select Preferences
 - (3) Select the Admin tab in the upper right corner.
 - (4) Enter the password "headsup123&".
 - (5) Select Login.
 - (6) Select Configuration tab.
 - (7) Select applicable DHCP/DNS setting.
 - (a) Select DHCP/DNS to Disable if the airplane has Aircell or Iridium internet.
 - (b) Select DHCP/DNS to Active if the airplane has no internet
 - (8) Select the home icon at the top of the page.
 - (9) Select Preferences.
 - (10) Select the Admin tab in the upper right corner.
 - (11) Enter the password "headsup123&".
 - (12) Select Login.
 - (13) Select Configuration tab.
 - (14) Confirm the applicable DHCP/DNS setting is still selected.

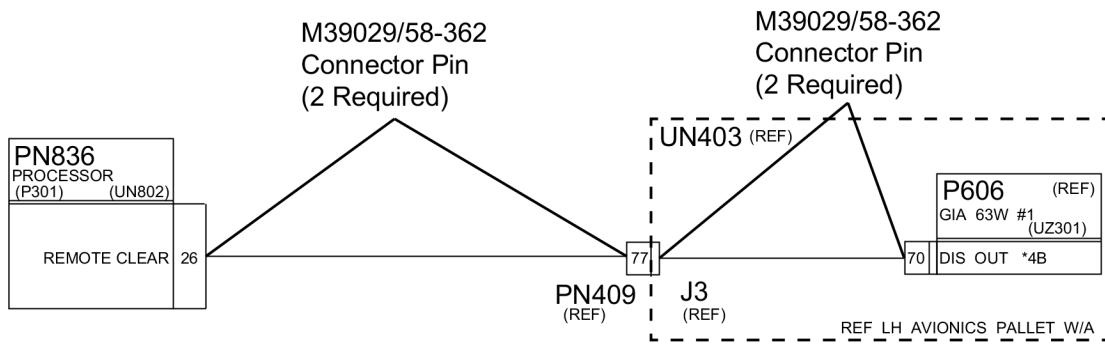
(15) Close Clairity APP.

7. Do the AReS II Recording System Configuration with the 6308913-4 (525b-13.3.0.1 cfg) AReS II Configuration File. (Refer to the Model 525B Maintenance Manual, Chapter 31, Aircraft Recording System - Adjustment/Test or SB525B-31-04 *Indicating/Recording Systems - AReS II Software Update*.)
8. Do the DC Generator Digital Analog Table (DAT) Calibration Procedure. (Refer to ICA-525B-34-00005ADC *Generator Digital Analog Table (DAT) Calibration Procedure (Airplanes -0685 and -0800 thru -1047 that incorporate SB525B-34-32)* or the Model 525B Maintenance Manual, Chapter 77, Engine Indicating System - Inspection/Check (Airplanes -0057 and -0451 and On).)
9. (Airplanes equipped with the Stormscope option) Do a functional test of the Stormscope weather mapping system. (Refer to the Model 525B Maintenance Manual, Chapter 34, WX-1000E Stormscope Weather Mapping System - Adjustment/Test.)
 - A. Make sure the strikes and clear button operates correctly.
10. Install the nose radome. (Refer to the Model 525B Maintenance Manual, Chapter 53, Nose Radome - Maintenance Practices.)
11. Install nose baggage compartment panels 211IZ and 211HZ. (Refer to the Model 525B Maintenance Manual, Chapter 6, Access Plates and Panels Identification - Description and Operation.)
12. Close the left nose baggage door.
13. 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.
14. Update the CJ3+ FAA Approved Airplane Flight Manual (525BFMA) and checklists (525BCLANP and 525BCLAEAP).

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 525BFMA FAA Approved Airplane Flight Manual Revision 3 or later is used.
 - B. Make sure that the CJ3+ Normal Procedures Checklist (525BCLANP) Revision 3 or later is used.
 - C. Make sure that the CJ3+ Emergency and Abnormal Procedures Checklist (525BCLAEAP) Revision 3 or later is used.
 - D. Remove and discard the current 190-01742-01 Pilots Guide from the airplane.
 - E. Make sure the new 1190-01742-02 Pilots Guide is used.
 - F. Remove and discard the current 190-01743-01 Cockpit Reference Guide from the airplane.
 - G. Make sure the new 190-01743-02 Cockpit Reference Guide is used.
15. 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 C/O Camp Systems International Incorporated, 8201 East 34th Street North, Building 1100 Suite 1101 Wichita, KS 67226.

A110310



Airplanes Equipped with the Stormscope Option

Figure 1. Wiring Modification (Sheet 1)

MANDATORY**SB525B-34-32****MATERIAL INFORMATION**

Airplanes equipped with the Stormscope option must order the following kit to install this modification.

NEW P/N	QUAN- TITY	KEY WORD	OLD P/N	INSTRUCTIONS/ DISPOSITION
SB525B-34-32	1	Kit , consisting of the following parts:		
MS3367-1-0	20	Tie Strap	None	
M81044/12-22-9	180 inches	Electrical Wire (Marked 26PN836-77PN409)	None	
M81044/12-22-9	100 inches	Electrical Wire (Marked 77J3-70P606)	None	
M39029/58-362	4	Connector Pin	None	
SB525B-34-32	1	Instructions		

It may be necessary to order the following parts to install this modification.

NEW P/N	QUAN- TITY	KEY WORD	OLD P/N	INSTRUCTIONS/ DISPOSITION
010-01293-21	1	Garmin V4.8 Base Software Card	010-01293-10 and 010-03722-00	Discard
9145505-1	1	Cessna 525B Maintenance Card	9145505-1	Discard
9102016-19	1	Cessna G3000 Default Pilot Profile Card	9102016-11	(As Required) Return to Textron Aviation for Exchange
010-00330-DE	1	Garmin Doppler Turbulence Card	010-00330-D2	(As Required) Return to Textron Aviation for Exchange
010-00330-DH	1	GCS Enablement Card	010-00330-DA	(As Required) Return to Textron Aviation for Exchange
010-00330-5M	1	SVS Unlock Data Card	010-00330-55	(As Required) Return to Textron Aviation for Exchange
010-00330-FA	1	CPDLC Unlock Card	010-00330-F0	(As Required) Return to Textron Aviation for Exchange
010-00330-ED	1	ACARS Enablement Card	010-00330-E6	(As Required) Return to Textron Aviation for Exchange

MANDATORY**SB525B-34-32**

NEW P/N	QUAN-TITY	KEY WORD	OLD P/N	INSTRUCTIONS/ DISPOSITION
010-00330-5K	1	Surfacewatch Enablement Card	010-00330-5E	(As Required) Return to Textron Aviation for Exchange
010-00330-5N	1	TAWS-A Enablement Card	010-00330-56	(As Required) Return to Textron Aviation for Exchange
010-00474-52	3	Database SD Card	010-00474-44	Return to Textron Aviation for Exchange
190-01743-02	1	Cockpit Reference Guide	190-01743-01	Discard

The Pilot's Guide is required to carry on the airplane. The customer may elect to download a free copy of the Pilot's Guide from www.txtavsupport.com, or they may choose to purchase a printed copy from Textron Aviation. The printed copy will not be free of charge.

NEW P/N	QUAN-TITY	KEY WORD	OLD P/N	INSTRUCTIONS/ DISPOSITION
190-01742-02	1	Pilot's Guide	190-01742-01	

The existing unlock cards need to be returned to Textron Aviation Parts Distribution, Warranty Administration, 285 South Greenwich Road, Bldg B89, Docks 1-4, Wichita, KS 67206, USA, and exchanged for an upgraded unit. Due to limited availability, advance scheduling is required, please expedite the return of the removed part.

* 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.

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.

Software Changes

- Transition to Approach
- Visual Approach Support
- Automatic Dependent Surveillance-Broadcast (ADS-B) In
- HSI Map Overlays
- QFE Support
- European Visual Reporting Points
- Airspace Altitude Labeling
- Flight Path Angle Reference Cue
- Flight Plan Auto Nomination on Startup
- Database Update Improvements
- Performance (PERF)
- ADB2
- Plain Language Terminal Aerodrome Forecast (TAF)
- AOA Calibration
- SurfaceWatch Enhancements
- Enhanced Checklists
- True Airspeed and Wind Vector Update
- TCAS II False RA Nuisance Alerts Correction

TITLE

NAVIGATION - GARMIN SOFTWARE UPDATE TO VERSION 4.8.11

TO:

Citation CJ3+ Owner

REASON

To update the Garmin G3000 software to version 4.8.11.

COMPLIANCE

MANDATORY. This service document must be accomplished within 2 years from the date of receipt.

LABOR HOURS

WORK PHASE	LABOR-HOURS
Modification	14.0
Airplanes installing the Stormscope Option	4.0
Airplanes installing the Clarity Option	1.0

March 26, 2021

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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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MATERIAL AVAILABILITY

PART NUMBER	AVAILABILITY	COST
SB525B-34-32	*	*
010-01293-21	*	*
190-01742-02	*	*
190-01743-02	*	*
9145505-1	*	*
9102016-19	*	*
010-00330-DECIT	*	*
010-00330-CCCIT	*	*
010-00330-5MCIT	*	*
010-00330-FACIT	*	*
010-00330-CACIT	*	*
010-00330-EDCIT	*	*
010-00330-5KCIT	*	*
010-00330-DHCIT	*	*
010-00474-52CIT	*	*

* 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.

WARRANTY

This service document is *mandatory*. 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: All affected airplanes.

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 Cessna 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: March 26, 2023 (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.

