

REVISION TRANSMITTAL

This sheet transmits Revision 1 to SB525-34-97, which:

- A. Adds a new Step 1 which adds instructions to record current options installed on the airplane.
- B. Adds a new Step 2 to make sure the Clarity system operates correctly.
- C. Adds a NOTE to Step 8 which makes sure to reinstall all options installed on the airplane after performing the main software loading procedures.
- D. Adds Step 9 to enter the empty weight.
- E. Adds Step 10 to reinstall the electronic checklist option.
- F. Adds Step 11 to enter the left and right engine serial numbers.
- G. Adds Step 12 to enter the GWX pitch/roll offset.
- H. Adds Step 13 to make sure the CDMS Diagnostics operates correctly.
- I. Adds Step 16 which makes sure the AReS wireless settings are correct.
- J. Adds a new Step 25 which adds the GRS 77/79 Calibration and Test.
- K. Adds a new Step 26 which adds the GMU 44 Magnetometer Calibration.
- L. Deletes the NOTE that 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.
- M. Adds the NOTE that this service bulletin not applicable to airplanes that have incorporated SB525-34-107. *Navigation - Garmin Hardware and Software Update To Version 4.8.9.*
- N. Adds the NOTE that airplanes that have incorporated this service bulletin are eligible to upgrade the hardware in SB525-34-107, *Naviagation - Garmin Hardware and Software Update To Version 4.8.9.*
- O. Adds Step 29.G which requires that airplanes certified for Steep Approach to make sure to use AFM Supplement 2, Airplanes Certified for Steep Approaches (525FMA-S2) Revision 2 or later.

NOTE: This revision replaces the original issue of SB525-34-97 in its entirety.

REVISION COMPLIANCE

MANDATORY. Airplanes previously modified by this service bulletin must do Steps 25 and 26.

LOG OF REVISIONS

Original Issue	March 26, 2021
Revision 1	August 25, 2021

TITLE

NAVIGATION - GARMIN SOFTWARE UPDATE TO VERSION 4.8.11

EFFECTIVITY**MODEL**

525 (Citation M2)

SERIAL NUMBERS

-0685, -0800 thru -1047

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

NOTE: (Airplanes -0685 and -0800 thru -0878) SB525-31-03 *Indicating/Recording Systems - AReS II Software Update* must be completed prior to or in conjunction with this service bulletin.

NOTE: SB525-34-97 is not applicable to airplanes that have incorporated SB525-34-107, *Naviagation - Garmin Hardware and Software Update To Version 4.8.9*

NOTE: Airplanes that have incorporated this service bulletin are eligible to upgrade the hardware in SB525-34-107, *Naviagation - Garmin Hardware and Software Update To Version 4.8.9*.

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.

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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 525 (0685 and 0800 and On) Maintenance Manual

Cessna Model M2 FAA Approved Airplane Flight Manual (525FMC) and checklist (525CLCEAP)

ICA-525-3400008 *DC Generator Digital Analog Table (DAT) Calibration Procedure (Airplanes -0685 and -0800 thru -1047 that incorporate SB525-34-97)*

PUBLICATIONS AFFECTED

Cessna Model 525 (0685 and 0800 and On) Maintenance Manual

Cessna Model M2 FAA Approved Airplane Flight Manual (525FMC) and checklist (525CLCEAP)

ACCOMPLISHMENT INSTRUCTIONS

1. Record the current options installed on the airplane before removing any hardware.
 - A. Apply electrical power to the airplane.
 - B. Record the airplane basic empty weight.
 - (1) From the Home Screen on the GTC, select PERF>Weight and Fuel.
 - (2) Record the airplane Basic Empty Weight.
 - C. Windshear Option.
 - (1) Disengage the AOA circuit breaker on the left hand circuit breaker panel.
 - (a) If the WINDSHEAR FAIL CAS message is displayed, mark YES ____
 - (b) If the WINDSHEAR FAIL CAS message is not displayed, mark NO ____
 - D. Synthetic Vision option.
 - (1) On the PFD select PFD Settings, then select Attitude Overlays.
 - (a) If the Synthetic Terrain button is displayed, mark YES ____
 - (b) If the Synthetic Terrain button is not displayed mark NO ____

- E. Checklist option.
- (1) From the Home screen of either GTC, look for the Checklist button to be displayed. It may be grayed out,
 - (a) If the Checklist button is present mark YES ____

NOTE: When reinstalling the checklist option, you will need to convert the current .ACE checklist file to a .GCL checklist file using the Garmin Checklist Editor (Checkset) from the Garmin support website.

 - (b) If the Checklist button is not present mark NO ____
- F. LINK 2000+ option.
- (1) If the CPDLC button is available on the home screen of either GTC, mark YES ____
 - (2) If CPDLC button is not available on the home screen of either GTC mark NO ____
- G. Windshear Option
- (1) Disengage the AOA circuit breaker.
 - (a) If the WINDSHEAR FAIL CAS message is displayed mark YES ____
 - (b) If the WINDSHEAR FAIL CAS message is not displayed mark NO ____
- H. Single GSR56 (Iridium Phone) option.
- (1) On either GTC select the SERVICES / TELEPHONE button, then select Telephone.
 - (a) If a single Iridium transceiver is displayed on the left side, mark YES ____
 - (b) If a single Iridium transceiver is not displayed on the left side, mark NO ____
- I. Dual GSR56 (Iridium Phone) option.
- (1) On either GTC select the SERVICES / TELEPHONE button, then select Telephone.
 - (a) If a dual Iridium transceiver is displayed on the left & right side, mark YES ____
 - (b) If a dual Iridium transceiver is not displayed on the left & right side mark NO ____
- J. ACARS option.
- (1) From the Home screen of either GTC look for a Services button. If it is located, select it and look for a button marked ACARS.
 - (a) If the ACARS button is present mark YES ____
 - (b) If the ACARS button is not present mark NO ____
- K. GDL69 (XM Receiver) option.
- (1) From the Home screen of either GTC touch the Weather button. Then touch Weather Selection.
 - (a) If Sirius XM Settings is displayed, mark YES ____
 - (b) If Sirius XM Settings is not displayed, mark NO ____
- L. GSR56 Weather option.
- (1) From the Home screen of either GTC touch the Weather button. Then touch Weather Selection.
 - (a) If CONNEXT WEATHER is displayed, mark YES ____
 - (b) If CONNEXT WEATHER is not displayed, mark NO ____
- M. Stormscope (Lightning Detect) option.
- (1) From the Home screen of either GTC touch the Weather button. Then touch Weather Selection.
 - (a) If Stormscope is displayed, mark YES ____

- (b) If Stormscope is not displayed mark NO ____
- N. Doppler & Turbulence (Includes Ground Clutter Suppression) option.
- (1) From the Home screen of either GTC select the Weather button.
 - (2) Select the Weather Selection button.
 - (3) Select the WEATHER RADAR SETTINGS button.
 - (a) If the Turbulence Detection & GND Clutter Suppression buttons are visible, mark YES ____
 - (b) If the Turbulence Detection & GND Clutter Suppression buttons are not visible mark NO ____
- O. Ground Clutter Suppression (Stand Alone Option Without Doppler & Turbulence) option.
- (1) From the Home screen of either GTC select the Weather button.
 - (2) Select the Weather Selection button.
 - (3) Select the WEATHER RADAR SETTINGS button,
 - (a) If the GND Clutter Suppression buttons are visible, mark YES ____
 - (b) If the GND Clutter Suppression buttons are not visible mark NO ____
 - (4) The GND Clutter Suppression button will be visible without the Turbulence Detection button.
 - (5) Do not select YES if Doppler & Turbulence is selected YES in Step 1.N.
- P. Cabin Briefing option.
- (1) From the Home screen of either GTC select AIRCRAFT SYSTEMS.
 - (a) If the Cabin Briefing button is displayed mark YES ____
 - (b) If the Cabin Briefing button is not displayed mark NO ____
- Q. SurfaceWatch option.
- (1) From the Home screen of either GTC select Utilities.
 - (2) Select Setup and then Avionics Settings.
 - (3) Select the Alerts tab.
 - (a) If the SurfaceWatch Inhibit button is visible mark YES ____
 - (b) If the SurfaceWatch Inhibit button is not visible mark NO ____
- NOTE:** The Inhibit box will not be illuminated (resets at power up).
- R. Becker ADF option.
- (1) If ADF is seen on the AUDIO & RADIO screen of either GTC mark YES ____
 - (2) If ADF is not seen on the AUDIO & RADIO screen mark NO ____
- S. GDR66 (VHF Datalink (Datalink/COMM 3)) option.
- (1) If COM 3 or Datalink are seen on the AUDIO & RADIO screen of either GTC mark YES ____
 - (2) If COM 3 or Datalink are not seen on the AUDIO & RADIO screen of either GTC mark NO ____
- T. HF9000 option.
- (1) If HF9000 is seen on the AUDIO & RADIO screen of either GTC mark YES ____
 - (2) If HF9000 is not seen on the AUDIO & RADIO screen of either GTC mark NO ____
- U. DME 2 option.
- (1) If DME2 is seen on the AUDIO & RADIO screen of either GTC mark YES ____

- (2) If DME2 is not seen on the AUDIO & RADIO screen of either GTC mark NO ____
- V. TAWS Class A option.
- (1) From the Home screen of either GTC select the TAWS button then select the TAWS Selection button.
- (a) If there are 6 buttons displayed on the page, then TAWS A is loaded, and mark YES ____
- (b) If there are not 6 buttons displayed TAWS B is loaded as default mark NO ____
- W. EROS Oxygen Mask option.
- (1) Look at the crew mask and determine if it is EROS brand.
- (a) If the crew mask is an EROS mark YES ____
- (b) If the Auto XPDR/TCAS Mode is not available then TCAS I is loaded as default mark NO ____
- X. TCAS II Option.
- (1) From the Home screen of either GTC select the Traffic button then select the Traffic Settings button.
- (a) If the Auto XPDR/TCAS Mode is available then TCAS II is loaded and mark YES ____
- (b) If FDR FAIL CAS message is not displayed mark NO ____
- Y. Record the current options installed that can only be seen in configuration mode.
- (1) Put the system into configuration mode.
- NOTE:** Anytime that software or configurations are being loaded, all three displays, and both touch controllers must be in configuration mode.
- (a) Disengage the L PFD, MFD, R PFD, L Touch Control, R Touch Control circuit breakers.
- (b) Insert the base loader software card into the upper slot of PFD 1.
- 1 If 2.3 software is installed insert the 010-01121-10 base loader software card into the upper slot of PFD 1.
- 2 If 3.2 software is installed insert the 010-01121-20 base loader software card into the upper slot of PFD 1
- (c) Turn on the airplane power.
- (d) Press and hold the right knob on the left GTC and push the L Touch Control circuit breaker in.
- 1 Let go when you see initializing.
- (e) Press and hold the right knob on the right GTC and push the R Touch Control circuit breaker in.
- 1 Let go when you see initializing.
- (f) Press and hold the #12 softkey on the #2 PFD and push the R PFD circuit breaker in.
- 1 Let go when you see initializing.
- 2 PFD 2 should come up in configuration mode.
- a SYSTEM STATUS should show at the top of the screen.

- (g) Press and hold the #12 softkey on the MFD and push the MFD circuit breaker in.
 - 1 Let go when you see initializing.
 - 2 MFD should come up in configuration mode.
 - a SYSTEM STATUS should show at the top of the screen.
 - (h) Press and hold the #12 softkey on the #1 PFD and turn on power.
 - 1 Let go when you see initializing.
 - (i) Press the NO softkey at “DO YOU WANT TO UPDATE SYSTEM FILES?” prompt.
 - (j) Press the NO softkey at “DO YOU WANT TO UPDATE THE CUSTOM GRAPHICS FILES (EG, SPLASH SCREEN)?” if it appears.
 - (k) PFD 1 should come up in configuration mode.
 - 1 SYSTEM UPLOAD should show at the top of the screen.
- Z. Record the options installed that can only be seen in configuration mode.

NOTE: This is with the G3000 still powered up in configuration mode.

- (1) ACARS Service Provider (Only if ACARS was determined to be an option).
 - (a) Rotate small GTC knob until on AIRCRAFT CONFIGURATION page.
 - (b) On the IATA Airline Designator line, look for a 2 letter code and check appropriate box in the table below.
 - 1 XA designates ARINC Direct
 - 2 GS designates Honeywell GDC
 - 3 UV designates Universal Weather

ARINC Direct	Honeywell GDC	Universal Weather

- (2) TAWS A Voice Callouts (100-400 FT) (In Addition to Standard 500 FT Callout) (Only if TAWS A option is installed).

NOTE: In 4.8 software, TAWS A voice callouts are pilot selectable on the GTC when the TAWS A option is installed.

- (a) The system should still be in configuration mode from before.
- (b) Rotate the large GTC knob until on the GDU tab (near the left side of the choices).
- (c) Rotate the small GTC knob to the right until on TAWS Configuration.
- (d) Select VCO (voice call out) at the bottom of the display.
- (e) VCO 500 (500 FT) is highlighted, and will always show TRUE, as this is standard. Do not mark YES for this part.
- (f) Rotate the small GTC knob to the right one turn to change to VCO 400 (400 FT).
- (g) If it is FALSE the VCO 400 under the Enabled line, then the TAWS A Callout feature is not turned on. Mark NO ____
- (h) If it is TRUE, the VCO 400 under the Enabled line, then the TAWS A Callout feature is turned on. Mark YES ____
- (i) Only 400 FT shown, but would indicate that 100-400 are turned on.

- (3) SurfaceWatch Voice Callouts (Only if SurfaceWatch option is installed).
 - (a) The system should still be in configuration mode.
 - (b) Push the GTC knob to deactivate the cursor.
 - (c) Rotate the small GTC knob to the right until on SurfaceWatch Configuration.
 - (d) If the following are shown, then the SurfaceWatch Voice Callouts are turned on: Mark YES ____

If the following are not shown, then the SurfaceWatch Voice Callouts are not turned on: Mark NO ____

- 1 Five Thousand= RTO
- 2 Four Thousand= RTO
- 3 Three Thousand= RTO/LRO
- 4 Two Thousand= RTO/LRO
- 5 One Thousand= RTO/LRO
- 6 Five Hundred= RTO/LRO

AA. Record left and right engine serial numbers.

- (1) The system should still be in configuration mode from before.
- (2) Rotate the outer knob on the GTC until on the GDU tab (near the left side of the choices).
- (3) Rotate the inner knob on the GTC until on AIRFRAME CONFIGURATION.
- (4) Record the left engine serial number _____.
- (5) Record the right engine serial number _____.

AB. Record GWX pitch/roll offset.

- (1) The system should still be in configuration mode from before.
- (2) Rotate the outer knob on the GTC until on the GWX tab (near the right side of the choices).
- (3) Record the PITCH TRIM set value _____.
- (4) Record the ROLL TRIM set value _____.

2. (Airplanes equipped with the Clairity System) Make sure the Clairity System operates correctly.

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

- (1) Search for Clairity in the App Store© or Google Play©.
- (2) Select and install the Clairity App the on the Wi-Fi capable device.

B. Connect the Wi-Fi capable device to the airplane Wi-Fi.

C. Open the Clairity App.

- (1) Select PREFS
- (2) Select ADMIN
- (3) Record the System Version located at the bottom of the page.

D. Clairity Operation

- (1) If the airplane Wi-Fi and Clairity App operate normally, go to Step 3.
- (2) If the airplane Wi-Fi and Clairity App does not operate correctly, add a squawk and address as required prior to updating the ARES configuration file and Clairity system.

3. 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 batteries.
 - D. Attach maintenance warning tags to the batteries and external power receptacle that have **"DO NOT CONNECT ELECTRICAL POWER - MAINTENANCE IN PROGRESS"** written on them.
4. (Airplanes equipped with the Stormscope option) Modify the wiring.
 - A. Open the left nose baggage compartment door.
 - B. Remove nose baggage compartment panels 211DZ and 211LZ to get access to the left GIA63W Integrated Avionics Unit. (Refer to the Model 525 (0685 and 0800 and On) Maintenance Manual, Chapter 6, Access Plates and Panels Identification - Description and Operation.)
 - C. Disengage the STORMSCOPE circuit breaker located in the aft power J-box in the aft baggage compartment.
 - D. Disengage the NAV IAU 1 and the COMM 1 circuit breakers on the right circuit breaker panel in the cockpit.
 - E. Remove the nose radome. (Refer to Model 525 (0685 and 0800 and On) Maintenance Manual, Chapter 53, Nose Radome - Maintenance Practices.)
 - F. Remove the PN836 electrical connector from the Stormscope processor and the P606 electrical connector from the left GIA63W Integrated Avionics Unit.
 - G. Remove the PN409 electrical connector from the left avionics pallet.
 - H. (Refer to Figure 1, Sheet 1.) Install the 26PN836-77PN409 Electrical Wire using two M39029/58-362 Connector Pins.
 - I. (Refer to Figure 1, Sheet 1.) Install the 77J3-70P606 Electrical Wire using two M39029/58-362 Connector Pins.
 - J. Install the PN836 electrical connector in the Stormscope processor.
 - K. Install the PN409 electrical connector in the left avionics pallet.
 - L. Engage the STORMSCOPE circuit breaker located in the aft power J-box in the aft baggage compartment.
 - M. Engage the NAV IAU 1 and the COMM 1 circuit breakers on the right circuit breaker panel in the cockpit.
5. (Airplanes equipped with the Windshear option) (Refer to Figure 1, Sheet 2.) Install two S3105-8 Resistors.

NOTE: Install the resistor modification within six inches of the PT407 connector.

 - A. Disengage the ENGINE INTER 1 (left GEA 71H/71C) circuit breaker on the left circuit breaker panel in the cockpit.
 - B. Remove aft baggage compartment panel 321CB to get access to the engine airframe interface unit.
 - C. Remove the PT407 Electrical Connector from the airframe interface unit.
 - D. Install two S3105-8 Resistors in the PT407 Electrical Connector using six inches of M81044/12-22-9 Electrical Wire, one M39029/22-191 Contact, one M81714/65-22-1 and one M81824/1-1 Splice.

NOTE: It is permissible to trim excess wire from the S3105-8 Resistors.

- E. Install the PT407 Electrical Connector in the engine airframe interface unit.
 - F. Engage the ENGINE INTER 1 (left GEA 71H/71C) circuit breaker on the left circuit breaker panel in the cockpit.
6. 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 for cores to receive the new optional SD cards at no cost.

- 010-01121-10 G3000 Base Loader card if 2.3 software is installed
- 010-01121-20 G3000 Base Loader card if 3.2 software is installed
- 010-03720-02 Told Database Card if 3.2 software is installed

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

- 9102016-1 Cessna G3000 Default Pilot Profile card if 2.3 software is installed
- 9102016-11 Cessna G3000 Default Pilot Profile card if 3.2 software is installed
- 010-00330-C1 TCAS II unlock card if 2.3 software is installed
- 010-00330-CA TCAS II unlock card if 3.2 software is installed
- 010-03720-02 TOLD Database if 3.2 software is installed

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

- 9145503-1 Cessna M2 Maintenance card (installed in the top slot of the MFD).

NOTE: The 9145503-1 Cessna M2 Maintenance card must be discarded before the new software is opened. There is a difference between the 9145503-1 Cessna M2 Maintenance card that is currently with the airplane and the 9145503-1 Cessna M2 Maintenance card that is required to complete this service bulletin.

- 010-00330-D2 Garmin Doppler Turbulence card (if installed)
- 010-00330-C7 Windshear unlock 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:

- 010-01121-31 Garmin V4.8 Base Software Card
- 010-00330-DE Garmin Doppler Turbulence card (if installed)
- 010-00330-CC Windshear unlock card (if installed)
- 010-00330-5M SVS unlock data card (if installed)
- 010-00330-5N TAWS Class A unlock card (if installed)
- 010-00330-FA CPDLC unlock card (if installed)
- 9145503-1 Cessna 525 M2 Maintenance card
- 9102016-19 Pilot Profile Card
- 010-00330-CB TCAS II Unlock Card (if installed)
- 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 GDC.

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

- D. The 190-01578-02 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 M2.
 - (d) Under the Avionics section, select the M2 G3000 Pilot's Guide Version 4.8 Legacy Hardware.
 - (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.

7. 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.

8. Do the Complete Software Loading procedures. (Refer to the Model 525 (0685 and 0800 and On) 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.

NOTE: Make sure to reinstall all options installed on the airplane after performing the main 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.

9. Enter the airplane empty weight.

- A. From the Home screen on the GTC, select PERF>Weight and Fuel.
- B. Select Set Empty Weight to display the keypad.
- C. Use the keypad to enter the aircraft basic empty weight.
- D. Select Enter to accept the entry.

10. (Airplanes equipped with Checklist option.) Reinstall electronic checklist option.

NOTE: When reinstalling the checklist option, you will need to convert the current .ACE checklist file to a .GCL checklist file using the Garmin Checklist Editor (Checkset) from the Garmin support website.

11. Enter the left and right engine serial numbers.

- A. Put the system in configuration mode per Step 1.Y.
- B. Rotate the outer knob on the GTC until on the GDU tab (near the left side of the choices).
- C. Rotate the inner knob on the GTC until on AIRFRAME CONFIGURATION.
- D. Push the inner knob on the GTC.
- E. Rotate the outer knob on the GTC until the L ENGINE SN is highlighted.

- F. Rotate the inner knob on the GTC to select the first digit.
 - G. Enter the left engine serial number.
 - (1) Rotate the inner knob on the GTC to enter the correct digit.
 - (2) Rotate the outer knob on the GTC to select the digit to be edited.
 - H. Push the inner knob on the GTC.
 - I. Rotate the outer knob on the GTC until the R ENGINE SN is highlighted.
 - J. Rotate the inner knob on the GTC to select the first digit.
 - K. Enter the right engine serial number.
 - (1) Rotate the inner knob on the GTC to enter the correct digit.
 - (2) Rotate the outer knob on the GTC to select the digit to be edited.
 - L. Push the inner knob.
12. Enter the GWX pitch/roll offset.
- A. The system should still be in configuration mode.
 - B. Rotate the outer knob on the GTC until on the GWX tab (near the right side of the choices).
 - C. Push the inner knob on the GTC. The PITCH TRIM set value should be highlighted.
 - D. Use the inner knob on the GTC to adjust the PITCH TRIM set value to previously recorded value.
 - E. Use the outer knob on the GTC to highlight the ROLL TRIM set value.
 - F. Use the inner knob on the GTC to adjust the ROLL TRIM set value to previously recorded value.
 - G. Return to normal system configuration.
13. Make sure the CDMS Diagnostics operates correctly.
- A. Select Home on either GTC.
 - B. Select Aircraft Systems.
 - C. Select Maintenance.
 - D. Select CDMS Diagnostics.
 - E. OEM Diagnostics page should now be shown on the MFD.
 - F. Push the right knob on the GTC to highlight the Main Menu selection.
 - G. Rotate the small right knob on the GTC to highlight LIVE DATA VIEW.
 - H. Press Enter on the GTC screen.
 - I. Rotate the large right knob on the GTC to PCB Menu.
 - J. Rotate the little right knob on the GTC to highlight Fuel Control LH.
 - K. Press Enter on the GTC screen.
 - L. Make sure the Boost Pump Switch Position indicates OFF.
 - M. Select the L FUEL BOOST pump switch to the ON position.
 - N. Make sure the Boost Pump Switch Position indicates ON.
 - O. Select the L FUEL BOOST pump switch to the OFF position.
 - P. Make sure the Boost Pump Switch Position indicates OFF.
 - Q. If the CDMS page does not populate or respond accordingly, troubleshoot to correct the issue.

14. (Airplanes equipped with the Clairity System) Update the Clairity system.
- A. Install the Clairity App on a Wi-Fi capable device.
 - (1) Search for Clairity in the App Store© or Google Play©.
 - (2) In devices browser, go to web page: www.clairity-wireless.com.
 - (3) While the device is connected to the aircraft Wi-Fi, in device browser type 192.168.1.70 in the address bar.
 - B. Download latest Clairity software version.

NOTE: Depending on current Clairity software version installed, software may need to be step loaded to latest version. If required, follow step loading procedures on www.txtavsupport.com.

 - (1) Obtain a blank 4GB or larger USB thumb drive.
 - (2) Go to www.txtavsupport.com / Model Citation M2 / Maintenance Software / Heads Up Technologies Clairity™ 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 #4.
 - D. Wait 5 minutes for the Clairity system to initialize.
 - E. Connect a Wi-Fi capable device to the aircraft Wi-Fi.
 - F. Open the Clairity 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 located behind cabin seat #6.
 - N. Wait 5 minutes for the Clairity system to initialize.
 - O. Connect Wi-Fi capable device to the aircraft Wi-Fi.
 - P. Open the Clairity 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 Clairity App to the aircraft.
 - (2) Select Preferences
 - (3) Select the Admin tab in the upper right corner.

- (4) Enter the password "heads up123&".
 - (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 "heads up123&".
 - (12) Select Login.
 - (13) Select Configuration tab.
 - (14) Confirm the applicable DHCP/DNS setting is still selected.
 - (15) Close Clarity APP.
15. Do the AReS II Recording System Configuration with the 6308907-4 (525m-11.3.0.1.cfg) AReS II Configuration File. (Refer to the Model 525 (-0685 and -0800 and On) Maintenance Manual, Chapter 31, Aircraft Recording System - Adjustment/Test or SB525-31-03 *Indicating/Recording Systems - AReS II Software Update*.)
- NOTE:** Airplanes -0685 and -0800 thru -0878 must complete or have already completed SB525-31-03 *Indicating/Recording Systems - AReS II Software Update* prior to updating the configuration file.
16. Make sure the AReS wireless settings are correct after installing the new configuration file.
- A. Connect a PC with the AReS View 2 program installed to the wired Ethernet port.
 - B. Launch the AReS View 2 application.
 - C. Select AReS under the Source tab.
 - D. Locate the connected AReS unit in the list of available AReS units in the middle of the screen. "Type" will be "Local".
 - E. Select the Unit and click Connect in the lower right hand corner of the screen.
 - F. Select AReS Utilities under the Task tab.
 - G. Select Wireless under the Tools tab.
 - H. Make sure the Wireless Connect Mode and CabinConnect Enable mode are selected.
 - (1) If Wireless Connect Mode and CabinConnect Enable are selected, remove the PC and go to step 16.
 - (2) If either Wireless Connect Mode and CabinConnect Enable is not selected do the steps that follow:
 - (a) Select the Wireless Connect Mode.
 - (b) Select the CabinConnect Enable mode.
 - (c) Select Apply in the lower right hand corner of the screen.
 - (d) Remove the PC.
17. Do the DC Generator Digital Analog Table (DAT) Calibration Procedure (Refer to ICA-525-3400008 *DC Generator Digital Analog Table (DAT) Calibration Procedure (Airplanes -0685 and -0800 thru -1047 that*

incorporate SB525-34-97) or the Model 525 (-0685 and -0800 and On) Maintenance Manual, Chapter 77, Engine Indicating System - Inspection/Check.)

18. (Airplanes equipped with the Stormscope option) Do a functional test of the Stormscope weather mapping system. (Refer to the Model 525 (-0685 and -0800 and On) Maintenance Manual, Chapter 34, WX-1000E Stormscope Weather Mapping System - Adjustment/Test.)
 - A. Make sure the strikes and clear button operates correctly.
19. (Airplanes equipped with the Windshear option) Do the Angle of Attack (AOA) Windshear Calibration. (Refer to the Model 525 (-0685 and -0800 and On) Maintenance Manual, Chapter 34, Safe Flight Angle-Of-Attack System - Adjustment/Test.)
20. Install access panels 211DZ and 211LZ. (Refer to the Model 525 (0685 and 0800 and On) Maintenance Manual, Chapter 6, Access Plates and Panels Identification - Description and Operation.)
21. Install aft baggage compartment panel 321CB. (Refer to the Model 525 (0685 and 0800 and On) Maintenance Manual, Chapter 6, Access Plates and Panels Identification - Description and Operation.)
22. Install the nose radome. (Refer to Model 525 (0685 and 0800 and On) Maintenance Manual, Chapter 53, Nose Radome - Maintenance Practices.)
23. Install nose baggage compartment panels 211DZ and 211LZ to get access to the left GIA63W Integrated Avionics Unit. (Refer to the Model 525 (0685 and 0800 and On) Maintenance Manual, Chapter 6, Access Plates and Panels Identification - Description and Operation.)
24. Close the left nose baggage compartment door.
25. Do the GRS 77/79 AHRS Calibration and Test. (Refer to the Model 525 (0685 and 0800 and On) Maintenance Manual, Chapter 34, Garmin Attitude Heading Reference System (AHRS) - Adjustment/Test.)
26. Do the GMU 44 Magnetometer Calibration. (Refer to the Model 525 (0685 and 0800 and On) Maintenance Manual, Chapter 34, Garmin Attitude Heading Reference System (AHRS) - Adjustment/Test.)
27. (Airplanes equipped with the Windshear option) Do the Angle of Attack (AOA) Windshear Calibration. (Refer to the Model 525 (-0685 and -0800 and On) Maintenance Manual, Chapter 34, Safe Flight Angle-Of-Attack System - Adjustment/Test.)
28. 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.
29. Update the M2 FAA Approved Airplane Flight Manual (525FMC) and checklist (525CLCEAP).

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.

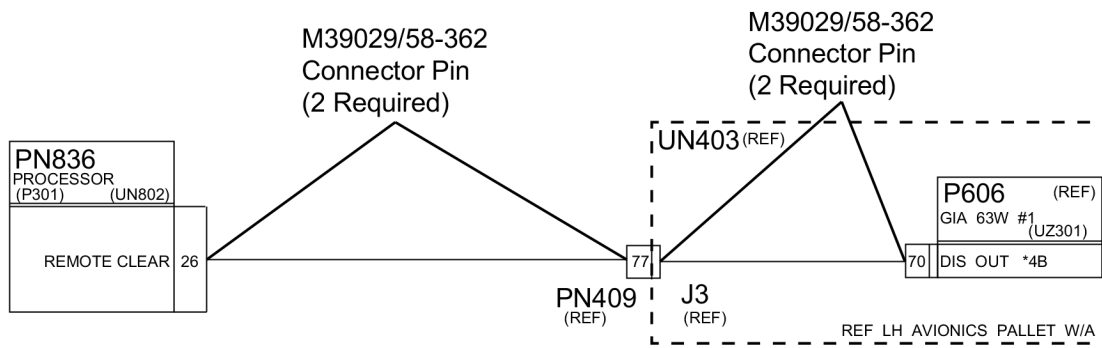
- A. Make sure that temporary changes 525FMC TC-R03-07 thru 525FMC-TC-R03-23 and 525FMC TC-R03-25 are inserted in the 525FMC FAA Approved Flight Manual.
- B. Make sure that temporary changes 525CLEAP TC-R03-01 thru 525CLCEAP TC-R03-09 are inserted in the M2 Emergency and Abnormal Procedures Checklist (525CLCEAP).
- C. Remove and discard the current 190-01578-00 if 2.3 SW or 190-01578-01 if 3.2 SW Pilots Guide from the airplane.
- D. Make sure the new 190-01578-02 Pilots Guide is used.
- E. Remove and discard the current 190-01577-01 Cockpit Reference Guide from the airplane.
- F. Make sure the new 190-01577-02 Cockpit Reference Guide is used.
- G. If required, make sure that AFM Supplement 2, Airplanes Certified for Steep Approaches (525FMC-52-02) Revision 2 or later is used.

30. 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.

A110309

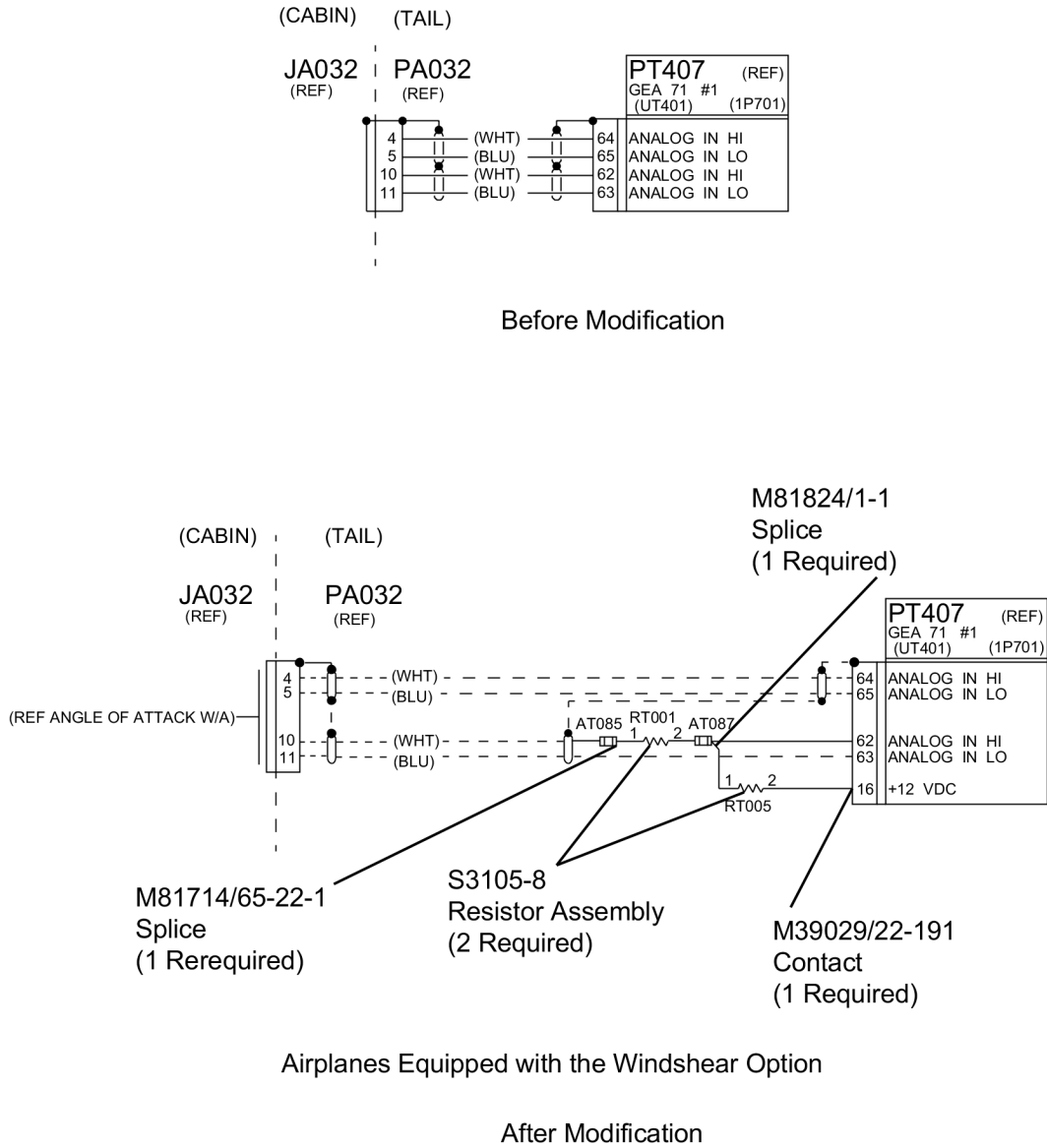


Airplanes Equipped with the Stormscope Option

6390357

Figure 1. Wiring Modification (Sheet 1)

A110320



6390357

Figure 1. Wiring Modification (Sheet 2)

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
SB525-34-97-0	1	Kit , consisting of the following parts:		
M81044/12-22-9	180 inches	Electrical Wire (Marked 26PN836-77PN409)	None	
M81044/12-22-9	100 inches	Electrical Wire (Marked 77J3-70P606)	None	
MS3367-1-0	20	Tie Strap	None	
M39029/58-362	4	Connector Pin	None	
SB525-34-97	1	Instructions		

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

NEW P/N	QUAN-TITY	KEY WORD	OLD P/N	INSTRUCTIONS/ DISPOSITION
SB525-34-97-1	1	Kit , consisting of the following parts:		
M81044/12-22-9	6 inches	Electrical Wire	None	
M39029/22-191	1	Contact Pin	None	
M81714/65-22-1	1	Splice	None	
M81824/1-1	1	Splice	None	
S3105-8	2	Resistor Assembly	None	
SB525-34-97	1	Instructions		

Order the kit/parts below to install this modification.

NEW P/N	QUAN-TITY	KEY WORD	OLD P/N	INSTRUCTIONS/ DISPOSITION
010-01121-31	1	Garmin V4.8 Base Software Card	010-01121-20 if 3.2 SW and 010- 01121-10 if 2.3 SW, 010-03720-02 if 3.2 SW is installed	Discard
9102016-19	1	Cessna G3000 Default Pilot Profile Card	9102016-1 if 2.3 SW and 9102016-11 if 3.2	(As Required) (Return to Textron Aviation for Exchange

MANDATORY**SB525-34-97**

NEW P/N	QUAN-TITY	KEY WORD	OLD P/N	INSTRUCTIONS/ DISPOSITION
010-00330-DE	1	Garmin Doppler Turbulence Card	010-00330-D2	(As Required) (Return to Textron Aviation for Exchange)
010-00330-CC	1	Windshear Unlock Card	010-00330-C7	(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)
010-00330-5N	1	TAWS Class A Unlock Card	010-00330-56	(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-CB	1	TCAS II Unlock Card	010-00330-C1 if 2.3 SW 010-00330-CA TCAS II if 3.2 SW	(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)
010-00330-DH	1	GCS Enablement Card	010-00330-DA	(As Required) Return to Textron Aviation for Exchange
010-00330-5K	1	Surfawatch Enablement Card	010-00330-5E	(As Required) (Return to Textron Aviation for Exchange)
010-00474-52	3	Database SD Card	010-00474-44	Return to Textron Aviation for Exchange
9145503-1	1	Cessna 525 M2 Maintenance	9145503-1	
190-01577-02	1	Cockpit Reference Guide	190-01577-01	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.

MANDATORY**SB525-34-97**

NEW P/N	QUAN- TITY	KEY WORD	OLD P/N	INSTRUCTIONS/ DISPOSITION
190-01578-02	1	Pilot's Guide	190-01578-00 if 2.3 SW and 190-01578-01 if 3.2 SW	

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 your Regional Textron Aviation Parts Distribution Customer Support Team 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).

For more information, please visit the TAPD Support & Aftermarket Account Management website at <https://ww2.txtav.com/Parts/Promos/TAPD>.

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

In cases where the required part(s) are approved as exchange, order the exchange part and, upon completion, expedite the return of the removed part to avoid return penalties. Contact the Textron Aviation Parts Distribution Sales Desk for availability of exchange parts.

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
- Windshear Improvements

TITLE

NAVIGATION - GARMIN SOFTWARE UPDATE TO VERSION 4.8.11

TO:

Citation M2 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	26.0
Airplanes installing the Windshear option	2.0
Airplanes installing the Stormscope option	4.0
Airplanes installing the Clarity Option	1.0

March 26, 2021

SB525-34-97
Page 1 of 3

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
SB525-34-97-0	*	*
SB525-34-97-1	*	*
010-01121-31	*	*
190-01577-02	*	*
190-01578-02	*	*
9102016-19	*	*
9145503-1	*	*
010-00330-DECIT	*	*
010-00330-CCCIT	*	*
010-00330-5MCIT	*	*
010-00330-5NCIT	*	*
010-00330-FACIT	*	*
010-00330-CBCIT	*	*
010-00330-EDCIT	*	*
010-00330-5KCIT	*	*
010-00330-DHCIT	*	*
010-00474-52CIT	*	*

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.

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For more information, please visit the TAPD Support & Aftermarket Account Management website at <https://ww2.txtav.com/Parts/Promos/TAPD>.

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

In cases where the required part(s) are approved as exchange, order the exchange part and, upon completion, expedite the return of the removed part to avoid return penalties. Contact the Textron Aviation Parts Distribution Sales Desk for availability of exchange parts.

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 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.

