REVISION TRANSMITTAL

This sheet transmits Revision 1 to SB525-34-107, which:

A. Adds the NOTE that for 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 to the NOTE in the EFFECTIVITY section.

B. Adds Step 1.B to record the airplane basic empty weight.

C. Adds Step 1.C to record the Windshear option.

D. Adds Step 1.Z to record the left and right engine serial numbers

E. Revises the tasks in Step 2 to make sure that the Clairity System operates correctly.

F. Adds NOTES to Step 18 to record and reinstall the options on the airplane.

G. Adds Step 19 to enter the airplane basic empty weight.

H. Adds Step 20 to reinstall the Checklist option.

I. Adds Step 21 to enter the left and right engine serial numbers.

J. Adds Step 22 to enter the GWX pitch/roll offset.

K. Adds Step 23 to make sure the CDMS Diagnostics operates correctly.

L. Adds a NOTE to Step 25 that 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.

NOTE: This revision replaces the original issue of SB525-34-107 in its entirety.

REVISION COMPLIANCE

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

LOG OF REVISIONS

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

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

TITLE

NAVIGATION - GARMIN HARDWARE AND SOFTWARE UPDATE TO VERSION 4.8.9

EFFECTIVITY

MODEL	SERIAL NUMBERS
525 (Citation M2)	-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: The MANDATORY issues in SB525-34-97, *Garmin Software Update To Version 4.8.11* are covered by SB525-34-107, *Garmin Hardware and Software Update To Version 4.8.9*.

NOTE: Airplanes that have incorporated SB525-34-107 should not accomplish SB525-34-97.

REASON

To install upgraded GDU 1450W Flight Displays, GEA 71C Engine Interface Units, GRS 79 AHRS Units, GDL 59 Data Links, GCU 275 PFD Controllers, GIA 64E Integrated Avionics Units, GTC 575 Touchscreen Controllers, GMA 36B Remote Audio Panels, GDL 69A SXM Data Link, a GWX Weather Radar Processor and update the Garmin G3000 software to version 4.8.9.

DESCRIPTION

This service document provides parts and instructions to install upgraded GDU 1450W Flight Displays GEA 71C Engine Interface Units, GRS 79 AHRS Units, GDL 59 Data Links, GCU 275 PFD Controllers, GIA 64E Integrated Avionics Units, GTC 575 Touchscreen Controllers, GMA 36B Remote Audio Panels, GDL 69A SXM Data Link, a GWX Weather Radar Processor and update the Garmin G3000 software to version 4.8.9.

COMPLIANCE

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

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.

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

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.

Textron Aviation received EASA 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*.

CONSUMABLE MATERIAL

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

TOOLING

None

WEIGHT AND BALANCE INFORMATION

Weigh the airplane before and after modification

REFERENCES

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

Citation Standard Practices Manual

PUBLICATIONS AFFECTED

Cessna Model 525 (0685 and 0800 and On) Wiring Diagram 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.

   NOTE: If 4.8 software is already installed before incorporating this service bulletin, review the Transaction log and record the installed options. (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 and Later))

   NOTE: If 3.2 software is installed, do the following steps to record the installed options.

   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 aircraft 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. 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 ___

H. 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 ___

I. 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 ___

J. 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 ___

K. 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 ___

L. 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 ___

M. 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 ___

N. 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.M.

O. 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 ___

P. 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).

Q. 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 ___

R. 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 ___

S. 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 ___

T. 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 ___

U. 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 ___

V. 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 crew mask is not an EROS mark NO ___

NOTE: The option changes the gains for the microphone if an EROS crew mask is installed.

W. 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 the Auto XPDR/TCAS Mode is not available then TCAS I is loaded as default mark NO ___

X. 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 010-01293-10 base software loader 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.

Y. 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

Z. Record the 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 _____.

AA. 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 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.

4. Remove nose baggage compartment panels 212DZ, 211LZ, 212HZ and 212KZ. (Refer to the Model 525 (0685 and 0800 and On) Maintenance Manual, Chapter 6, Access Plates and Panels Identification - Description and Operation.)

5. Install two 011-03711-41 (Mod Level 1 or later) GIA 64E Integrated Avionics Units.

A. Remove the current 011-01105-40 GIA 63W Integrated Avionics Units and return them to Textron Aviation for exchange. (Refer to the Model 525 (0685 and 0800 and On) Maintenance Manual, Chapter 34, Garmin GIA 63W/64E Integrated Avionics Unit - Removal/Installation,)

B. (Airplanes equipped with the Stormscope option) (Refer to Figure 1, Sheet 1.) Modify the wiring.

(1) Open the left nose baggage compartment door.

(2) Remove the nose radome to get access to the Stormscope Processor. (Refer to the Model 525 (0685 and 0800 and On) Maintenance Manual, Chapter 53, Nose Radome - Maintenance Practices.)

(3) Disengage the STORMSCOPE circuit breaker located on the right circuit breaker panel.

(4) Disengage the NAV IAU 1 circuit breaker located on the right circuit breaker panel in the cockpit.

(5) Remove the PN836 electrical connector from the Stormscope processor.

(6) Remove the PN409 electrical connector from the left avionics pallet.

(7) Install the 26PN836-77PN409 Electrical Wire with two M39029/58-362 Connector Pins.

(8) Install the 77J3-70P606 Electrical Wire using two M39029/58-362 Connector Pins.

(9) Install the PN836 Electrical Connector in the Stormscope processor.

(10) Install the PN409 electrical connector in the left avionics pallet.

(11) Engage the STORMSCOPE circuit breaker located in the aft power J-box in the aft baggage compartment.

(12) Engage the NAV IAU 1 circuit breaker located on the right circuit breaker panel in the cockpit.

C. (Refer to Figure 1, Sheet 6.) Do the GIA 64E Wiring Modification. (Refer to the Citation Standard Practices Manual, Chapter 20, Splices, Terminals and Heat Shrinkable Tubing - Maintenance Practices.)

(1) Install the 1P603-69J4 (ORN), 21P603-70J4 (WHT/ORN), 40P603-71J4 (BLU), 60P603-72J4 (WHT/BLU)] Ethernet Cable with four M39029/56-351 Contacts and four M39029/58-363 Contact Pins and two S2974-8 Shield Terminations.

(2) Install the 21P603-70J4 (WHT/ORN), 1P603-69J4 (ORN), 60P603-72J4 (WHT/BLU), 40P603-71J4 (BLU) Ethernet Cable with four M39029/56-351 Contacts and four M39029/58-363 Contact Pins and two S2974-8 Shield Terminations.

(3) Install the 69PN411-71PN412 (ORN), 70PN411-72PN412 (WHT/ ORN), 71PN411-69PN412 (BLU), 72PN411-70PN412 (WHT/BLU) Ethernet Cable with four M39029/56-351 Contacts and four M39029/58-363 Contact Pins and two S2974-8 Shield Terminations.

D. Install the new 011-03711-41 GIA 64E Integrated Avionics Units. (Refer to the Model 525 (0685 and 0800 and On) Maintenance Manual, Chapter 34, Garmin GIA 63W/64E Integrated Avionics Unit - Removal/Installation.)

6. Install two 011-03682-04 GEA 71C Engine Interface Units.

   A. Remove the current 011-00831-05 GEA 71C Engine Interface Units and return them to Textron Aviation for exchange. (Refer to the Model 525 (0685 and 0800 and On) Maintenance Manual, Chapter 77, Garmin GEA 71H/71C Engine/Airframe Interface Unit - Removal/Installation.)

   B. (Refer to Figure 1, Sheet 2.) Do the Oxygen Pressure wiring modification. (Refer to the Citation Standard Practices Manual, Chapter 20, Splices, Terminals and Heat Shrinkable Tubing - Maintenance Practices.)

      (1) Remove the electrical wires from pins 56PT409 and 57PT409 and repin in 8PT409 and 9PT409.

   C. (Airplanes equipped with the Windshear option that have incorporated SB525-34-97) (Refer to Figure 1, Sheet 7) Modify the wiring.

      (1) Remove aft baggage compartment panel 321CB to get access to the engine airframe interface unit.

      (2) Remove the PT407 Electrical Connector from the airframe interface unit.

      (3) Remove the two S3105-8 Resistors, one M81714/65-22-1 and one M81824/1-1 Splice

      (4) Install M81044/12-22-9 Electrical Wire cut to fit to replace the S3105-8 Resistor with one M81714/65-22-1 and one M81824/1-1 Splice. (Refer to the Citation Standard Practices Manual, Chapter 20, Wiring and Resistors - Maintenance Practices.)

      (5) Install the PT407 Electrical Connector in the engine airframe interface unit.

   D. (Refer to Figure 1, Sheet 4.) Install the 011-00979-03 Configuration Modules in the PT407 and PT408 Connector. (Refer to the Citation Standard Practices Manual, Chapter 20, Splices, Terminals and Heat Shrinkable Tubing - Maintenance Practices.)

      NOTE: The 011-00979-03 Configuration Module gets installed inside of the existing PT407 and PT408 Connector.

      NOTE: The pins for the wires are existing in the PT407 and PT408 Connector.

      (1) Install the 011-00979-03 Configuration Module in the PT407 Connector.

      (2) Install the 011-00979-03 Configuration Module in the PT408 Connector.

   E. Install the new 011-03682-04 GEA 71C Engine Interface Units. (Refer to the Model 525 (0685 and 0800 and On) Maintenance Manual, Chapter 77, Garmin GEA 71H/71C Engine/Airframe Interface Unit - Removal/Installation.)

7. Install one 011-03997-00 GWX Weather Radar Processor.

   A. Remove the current 011-01768-00 GWX 70 Weather Radar Processor and return it to Textron Aviation for exchange. (Refer to the Model 525 (0685 and 0800 and On) Maintenance Manual, Chapter 34, Garmin GWX 70/80 Weather Radar - Maintenance Practices.)

   B. Install the new 011-03997-00 GWX Weather Radar Processor. (Refer to the Model 525 (0685 and 0800 and On) Maintenance Manual, Chapter 34, Garmin GWX 70/80 Weather Radar - Maintenance Practices.)

8. Install three 011-04187-00 GDU1450W Flight Displays.

   A. Remove the current 011-01910-00 GDU1400W Flight Displays and return them to Textron Aviation for exchange. (Refer to the Model 525 (0685 and 0800 and On) Maintenance Manual, Chapter 34, Garmin GDU 1400/1450W Flight Display - Removal/Installation.)

   B. Install the new 011-04187-00 GDU1450W Flight Displays. (Refer to the Model 525 (0685 and 0800 and On) Maintenance Manual, Chapter 34, Garmin GDU 1400/1450W Flight Display - Removal/Installation.)

9. Install two 011-03732-00 GRS 79 AHRS Units.

   A. Remove the current 011-00868-10 GRS 77 AHRS Units. Return the current 011-00868-10 GRS 77 AHRS Units to Textron Aviation for exchange. (Refer to the Model 525 (0685 and 0800 and On) Maintenance Manual, Chapter 34, Garmin GRS 77/79 AHRS Unit -Removal/Installation.)

   B. (Refer to Figure 1, Sheet 5.) Do the GRS79 Jumper Wiring Modification. (Refer to the Citation Standard Practices Manual, Chapter 20, Splices, Terminals and Heat Shrinkable Tubing - Maintenance Practices.)

      NOTE: It will be necessary to assemble two GRS79 Jumper Wiring Modifications. One for each GRS 79 AHRS Units

      (1) Install the wires.

         NOTE: The P3 Configuration Module is part of the 011-03733-00 GRS 79 Connector Kits.

         (a) Install the 14P1-18J2 Electrical Wire in the DD44S00GV30 Hi Density 44S Connector using one M39029/57-354 Socket Contact.

         (b) Install the 16P1-20J2 Electrical Wire in the DD44S00GV30 Hi Density 44S Connector using one M39029/57-354 Socket Contact.

         (c) Install the 34P1-22J2 Electrical Wire in the DD44S00GV30 Hi Density 44S Connector using one M39029/57-354 Socket Contact.

         (d) Install the 36P1-24J2 Electrical Wire in the DD44S00GV30 Hi Density 44S Connector using one M39029/57-354 Socket Contact.

         (e) Install the 51P1-26J2 (WHT), 52P1-11J2 (BLU), 32P1-41J2 (ORN) Electrical Wire in the DD44S00GV30 Hi Density 44S Connector using three M39029/57-354 Socket Contacts and one S2974-8 Shield Termination.

         (f) Install the 71P1-21J2 (WHT), 72P1-6J2 (BLU), 73P1-35J2 (ORN)] Electrical Wires in the DD44S00GV30 Hi Density 44S Connector using three M39029/57-354 Socket Contacts and one S2974-8 Shield Termination.

         (g) Install the 10P1-25J2 (WHT), 11P1-39J2 (BLU) Electrical Wire in the DD44S00GV30 Hi Density 44S Connector using two M39029/57-354 Socket Contact and one S2974N4 Shield Termination.

         (h) Install the 12P1-10J2 (WHT), 13P1-9J2 (BLU), 33P1-40J2 (ORN) Electrical Wire in the DD44S00GV30 Hi Density 44S Connector using three M39029/57-354 Socket Contacts and one S2974-8 Shield Termination.

         (i) Install the 27P1-14J2 (WHT), 7P1-29J2 (BLU) Electrical Wire in the DD44S00GV30 Hi Density 44S Connector using two M39029/57-354 Socket Contacts and one S2974N4 Shield Termination.

         (j) Install the 49P1-13J2 (WHT), 50P1-28J2 (BLU) Electrical Wire in the DD44S00GV30 Hi Density 44S Connector using two M39029/57-354 Socket Contacts and one S2974N4 Shield Termination.

         (k) Install the 8P1-12J2 (WHT), 9P1-27J2 (BLU) Electrical Wire in the DD44S00GV30 Hi Density 44S Connector using two M39029/57-354 Socket Contacts and one S2974N4 Shield Termination.

         (l) Install the 28P1-33J2 (WHT)-29P1-19J2 (BLU) Electrical Wire in the DD44S00GV30 Hi Density 44S Connector using two M39029/57-354 Socket Contacts and one S2974N4 Shield Termination.

         (m) Install the 45P1-15J2 (WHT), 46P1-30J2 (BLU) Electrical Wire in the DD44S00GV30 Hi Density 44S Connector using two M39029/57-354 Sockets Contact and one S2974N4 Shield Termination.

(n) Install the 75P1-2J2 (WHT), 57P1-3J2 (BLU) Electrical Wire in the DD44S00GV30 Hi Density 44S Connector using two M39029/57-354 Socket Contacts and one S2974N4 Shield Termination.

(2) Install the J2 connector of one adapter in the number 1 GRS 77 connector and the J2 connector of the adapter in the number 2 GRS 77 Connector.

(3) Install the opposite end to the electrical wires in the 011-03733-00 GRS 79 Connector Kits.

NOTE: The contacts for the electrical wires are included in the 011-03733-00 GRS 79 Connector Kits.

C. (Refer to Figure 2, Detail A and View A-A.) Install two new 117-00608-00 GRS 79 Remote Racks.

(1) Remove and keep the MS27039-0808 Screws from the two 115-00459-00 GRS 77 Mounting Racks.

(2) Remove and discard the two 115-00459-00 GRS 77 Mounting Racks.

(3) Install two 6397107-2 Channel Assemblies for each 117-00608-00 GRS 79 Remote Rack installation with the kept MS27039-0808 Screws.

(4) Install each 6397107-3 Shelf Assembly with four MS35206-245 Screws.

(5) Install each 117-00608-00 GRS 79 Remote Rack with four NAS1801-3-8 Screws.

D. Install the new 011-03732-00 GRS 79 AHRS Unit. (Refer to the Model 525 (0685 and 0800 and On) Maintenance Manual, Chapter 34, Garmin GRS 77/79 AHRS Unit - Removal/Installation.)

10. (Airplanes equipped with a Garmin Iridium Phone) Install one 011-01746-03 GDL 59 Data Link Unit.

A. Remove the current 011-01746-00 GDL 59 Data Link Unit and return it to Textron Aviation for exchange. (Refer to the Model 525 (0685 and 0800 and On) Maintenance Manual, Chapter 23, Garmin GDL 59 WI-FI Data Link System - Maintenance Practices.)

B. Install the new 011-01746-03 GDL 59 Data Link Unit. (Refer to the Model 525 (0685 and 0800 and On) Maintenance Manual, Chapter 23, Garmin GDL 59 WI-FI Data Link System - Maintenance Practices.)

11. Install two 011-01983-20 GCU 275 PFD Controllers.

A. Remove the current 011-01983-01 GCU 275 PFD Controllers and return them to Textron Aviation for exchange. (Refer to the Model 525 (0685 and 0800 and On) Maintenance Manual, Chapter 34, Garmin GCU 275 PFD Controller - Removal/Installation.)

B. Install the new 011-01983-20 GCU 275 PFD Controllers. (Refer to the Model 525 (0685 and 0800 and On) Maintenance Manual, Chapter 34, Garmin GCU 275 PFD Controller - Removal/Installation.)

12. Install two 011-03759-01 (Mod Level 1 or later) GTC 575 Touchscreen Controllers.

A. Remove the current 011-01924-10 GTC 570 Touchscreen Controllers and return them to Textron Aviation for exchange. (Refer to the Model 525 (0685 and 0800 and On) Maintenance Manual, Chapter 34, Garmin GTC 570/575 Touchscreen Controller (GTC) - Removal/Installation.)

B. Install the new 011-03759-01 GTC 575 Touchscreen Controllers. (Refer to the Model 525 (0685 and 0800 and On) Maintenance Manual, Chapter 34, Garmin GTC 570/575 Touchscreen Controller (GTC) - Removal/Installation.)

13. Install two 011-04093-00 GMA 36B Remote Audio Panels.

A. Remove the current 011-01793-00 GMA 36B Remote Audio Panels and return them to Textron Aviation for exchange. (Refer to the Model 525 (0685 and 0800 and On) Maintenance Manual, Chapter 23, Garmin GMA 36/36B Remote Audio Panel - Removal/Installation.)

B. (Refer to Figure 1, Sheet 3.) Do the DME Option Wiring Modification. (Refer to the Citation Standard Practices Manual, Chapter 20, Splices, Terminals and Heat Shrinkable Tubing - Maintenance Practices.)

(1) Remove the electrical wire from pins 74PI548 and 75PI548 and install in pins 31PI548 and 52PI548.

(2) Remove the electrical wire from pins 15PI523 and 16PI523 and install in pins 54PI523 and 55PI523.

C. Install the new 011-04093-00 GMA 36B Remote Audio Panels. (Refer to the Model 525 (0685 and 0800 and On) Maintenance Manual, Chapter 23, Garmin GMA 36/36B Remote Audio Panel - Removal/Installation.)

14. (Airplanes equipped with GDL 69 SXM Data Link) Install one 011-03177-10 GDL 69A SXM Data Link.

A. Remove the current 011-00987-00 GDL 69A SXM Data Link and return it to Textron Aviation for exchange. (Refer to the Model 525 (0685 and 0800 and On) Maintenance Manual, Chapter 34, Garmin GDL 69A/69A SXM Data Link System - Maintenance Practices.)

B. Install the new 011-03177-10 GDL 69A SXM Data Link. (Refer to the Model 525 (0685 and 0800 and On) Maintenance Manual, Chapter 34, Garmin GDL 69A/69A SXM Data Link System - Maintenance Practices.)

15. 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.

- 010-01907-00 G3000 Base Loader card if 2.3 software is installed
- 010-01121-20 G3000 Base Loader card if 3.2 software is installed
- 010-01121-31 G3000 Base Loader card if 4.8 software was installed by incorporating SB525-34-97
- 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
- 9102016-19 Cessna G3000 Default Pilot Profile card if 4.8 software was installed by incorporating SB525-34-97
- 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

  NOTE: If SB525-34-97 has been incorporated keep one 010-00474-52 Database Card with the airplane.
- 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)

  NOTE: The return of the 010-00330-DA Ground Clutter Suppression Card won't be accepted. A purchase of a new 010-00330-DE Garmin Doppler Turbulence Card is required to keep the GCS functionality.

C. The cards that follow must be available before the software is installed:
- 010-01121-00 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
- 9102016-15 Pilot Profile Card
- 010-00330-CB TCAS II Unlock Card (if installed)
- One 010-00474-52 SD Database Card
- 010-00330-EB 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)

16. 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.

17. Connect a 28 volt external power supply to the airplane.

18. 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 in shown.

       (3) Make sure the GTS Software is version 3.14.

19. Enter the airplane basic 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.

20. (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.

21. Enter the left and right engine serial numbers.

    A. Put the system in configuration mode per Step 1.X.

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.

22. 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.

23. 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.

24. (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 device is connect to 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. Wait 5 minutes for the Clairity system to initialize.

N. Connect Wi-Fi capable device to the aircraft Wi-Fi.

O. Open the Clairity App.

P. Verify the software version.

(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.

25. Do the AReS II Recording System Configuration with the (6308907-2 / file name 525m-1003.cfg or later) 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.

26. 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 22.
        (2) If eitherWireless 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.

27. (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.)

28. Do the 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.)

29. Do the COM 1 and COM 2 Communication System Tuning Test. (Refer to the Model 525 (0685 and 0800 and On) Maintenance Manual, Chapter 34, Garmin GIA 63W/64E Integrated Avionics Unit - Adjustment/Test.)

30. Do the COM 1 Emergency Tune Operational Test. (Refer to the Model 525 (0685 and 0800 and On) Maintenance Manual, Chapter 34, Garmin GIA 63W/64E Integrated Avionics Unit - Adjustment/Test.)

31. Do the COM 1 and COM 2 Communication System Operational Check. (Refer to the Model 525 (0685 and 0800 and On) Maintenance Manual, Chapter 34, Garmin GIA 63W/64E Integrated Avionics Unit - Adjustment/Test.)

32. Do the VOR/Localizer 1 and VOR/Localizer 2 Operational Test. (Refer to the Model 525 (0685 and 0800 and On) Maintenance Manual, Chapter 34, Garmin GIA 63W/64E Integrated Avionics Unit - Adjustment/Test.)

33. Do the Glideslope 1 and Glideslope 2 Operational Test. (Refer to the Model 525 (0685 and 0800 and On) Maintenance Manual, Chapter 34, Garmin GIA 63W/64E Integrated Avionics Unit - Adjustment/Test.)

34. Do the GPS 1 and GPS 2 Operational Test. (Refer to the Model 525 (0685 and 0800 and On) Maintenance Manual, Chapter 34, Garmin GIA 63W/64E Integrated Avionics Unit - Adjustment/Test.)

35. Do the GMC 710 Mode Controller Check. (Refer to the Model 525 (0685 and 0800 and On) Maintenance Manual, Chapter 34, Garmin GIA 63W/64E Integrated Avionics Unit - Adjustment/Test.)
36. Do the Passenger Address System Operational Test. (Refer to the Model 525 (0685 and 0800 and On) Maintenance Manual, Chapter 34, Garmin GIA 63W/64E Integrated Avionics Unit - Adjustment/Test.)
37. Do the Collins ALT-4000 Radio Altimeter System Test. (Refer to the Model 525 (0685 and 0800 and On) Maintenance Manual, Chapter 34, Garmin GIA 63W/64E Integrated Avionics Unit - Adjustment/Test.)
38. Do the DME Operational Test (GTC Control Function). (Refer to the Model 525 (0685 and 0800 and On) Maintenance Manual, Chapter 34, Collins DME-4000 Distance Measuring Equipment (DME) - Adjustment/Test (Airplanes -0057 and -0451 and On).)
39. Do an operational check of the Engine Indication System. (Refer to the Model 525 (0685 and 0800 and On) Maintenance Manual, Chapter 77, Engine Indication System - Adjustment/Test.)
40. Do the Garmin Weather Radar Operational Test. (Refer to the Model 525 (0685 and 0800 and On) Maintenance Manual, Chapter 34, Garmin GWX 70/80 Weather Radar - Adjustment/Test.)
41. Do the GDU Operational Status Test. (Refer to the Model 525 (0685 and 0800 and On) Maintenance Manual, Chapter 34, Garmin 1400W/1450W Flight Display - Adjustment/Test.)
42. Do the PFD TAWS self test. (Refer to the Model 525 (0685 and 0800 and On) Maintenance Manual, Chapter 34, Garmin 1400W/1450W Flight Display - Adjustment/Test.)
43. Do the Reversionary Display operation test. (Refer to the Model 525 (0685 and 0800 and On) Maintenance Manual, Chapter 34, Garmin 1400W/1450W Flight Display - Adjustment/Test.)
44. (Airplanes equipped with Garmin GDL 59 Wi-Fi Data Link) Do an operational check of the Garmin GDL 59 Wi-Fi Data Link System. (Refer to the Model 525 (0685 and 0800 and On) Maintenance Manual, Chapter 23, Garmin GDL 59 Wi-Fi Data Link System - Adjustment/Test.)
45. Do an operational test of the GCU 275 GCU PFD Controller. (Refer to the Model 525 (0685 and 0800 and On) Maintenance Manual, Chapter 34, Garmin GCU 275 PFD Controller - Adjustment/Test.)
46. Do an operational test of the GTC 575 Controller. (Refer to the Model 525 (0685 and 0800 and On) Maintenance Manual, Chapter 34, Garmin GTC 570/575 Touchscreen Controller (GTC) - Adjustment/Test.)
47. Do a functional test of the ESI-1000. (Refer to the Model 525 (0685 and 0800 and On) Maintenance Manual, Chapter 34, L-3 Communications Electronic Standby Indicator - Adjustment/Test.)
48. Do the Power and Circuit Breaker Test. (Refer to the Model 525 (0685 and 0800 and On) Maintenance Manual, Chapter 23, Garmin GMA 36/36B Integrated Audio System - Adjustment/Test.)
49. Do the Headset Microphone and Isolation Operational Test. (Refer to the Model 525 (0685 and 0800 and On) Maintenance Manual, Chapter 23, Garmin GMA 36/36B Integrated Audio System - Adjustment/Test.)
50. Do the Marker Beacon Operational Test. (Refer to the Model 525 (0685 and 0800 and On) Maintenance Manual, Chapter 23, Garmin GMA 36/36B Integrated Audio System - Adjustment/Test.)
51. Do the Microphone/Interphone Switch Operational Check. (Refer to the Model 525 (0685 and 0800 and On) Maintenance Manual, Chapter 23, Garmin GMA 36/36B Integrated Audio System - Adjustment/Test.)
52. (Airplanes equipped with Garmin 69A/69A SXM Data Link) Do an operational test of the Garmin 69A/69A SXM Data Link system. (Refer to the Model 525 (0685 and 0800 and On) Maintenance Manual, Chapter 34, Garmin GDL 69A/69A SXM Data Link System - Adjustment/Test.)
53. Remove the external electrical power supply from the airplane.
54. Install the nose radome. (Refer to the Model 525 (0685 and 0800 and On) Maintenance Manual, Chapter 53, Nose Radome - Maintenance Practices.)
55. Install nose baggage compartment panels 211BZ, 211DZ, 211LZ, 212HZ and 211KZ. (Refer to the Model 525 (0685 and 0800 and On) Maintenance Manual, Chapter 6, Access Plates and Panels Identification - Description and Operation.)
56. Close the left nose baggage door.

57. 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.)

58. (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.)

59. 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-R03-32 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. Make sure that the M2 Emergency and Abnormal Procedures Checklist 525CLCEAP TC-R03-11 Revision 3 or later is used.

    D. 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.

    E. Make sure the new 190-02618-00 Pilots Guide is used.

    F. Remove and discard the current Cockpit Reference Guide.

        (1) Remove and discard the 190-1577-00 Cockpit Reference Guide if 2.3 Software is installed.

        (2) Remove and discard the 190-1578-01 Cockpit Reference Guide if 3.2 Software is installed.

        (3) Remove and discard the 190-1577-02 Cockpit Reference Guide if 4.8.11 Software is installed.

    G. Remove and discard the 190-02619-00 Cockpit Reference Guide if 2.3 Software is installed.190-01577-01 Cockpit Reference Guide from the airplane.

    H. Make sure the new 190-02619-00 Cockpit Reference Guide is used.

    I. If required, make sure that AFM Supplement 2, Airplanes Certified for Steep Approaches (525FMC-52-02) Revision 2 or later is used.

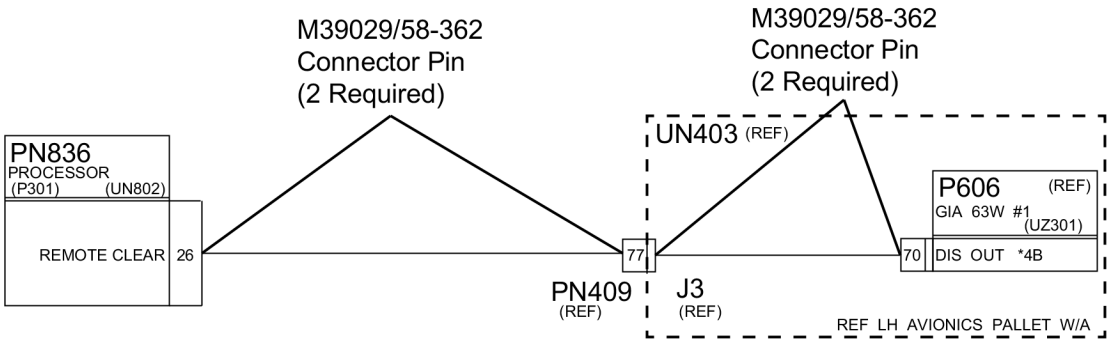
60. Make sure the flight crew receives the *Flight Crew Operations Summary*, which shows the operational changes that are a result of the accomplishment of this service bulletin.

61. Remove the maintenance warning tags and connect the airplane battery.

62. 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.

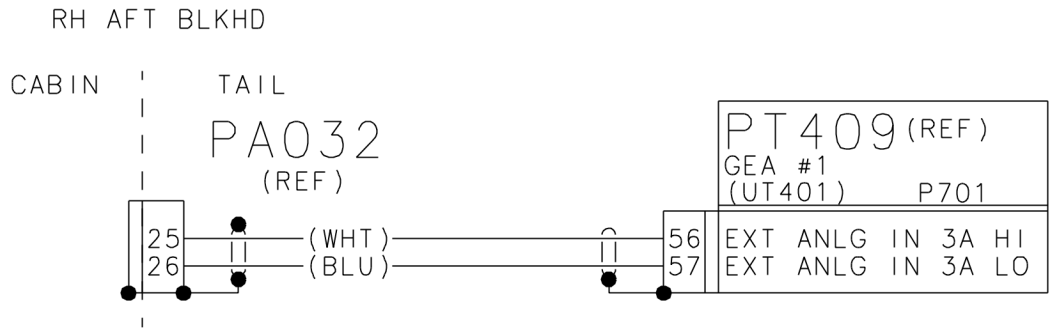
A111440



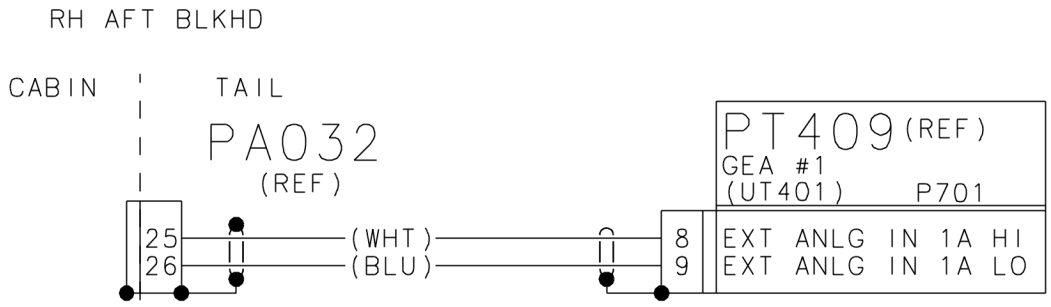
Airplanes Equipped with the Stormscope Option

Figure 1. Wiring Modification (Sheet 1)

A111442



GEA Wiring Re-Pin
Before Modification

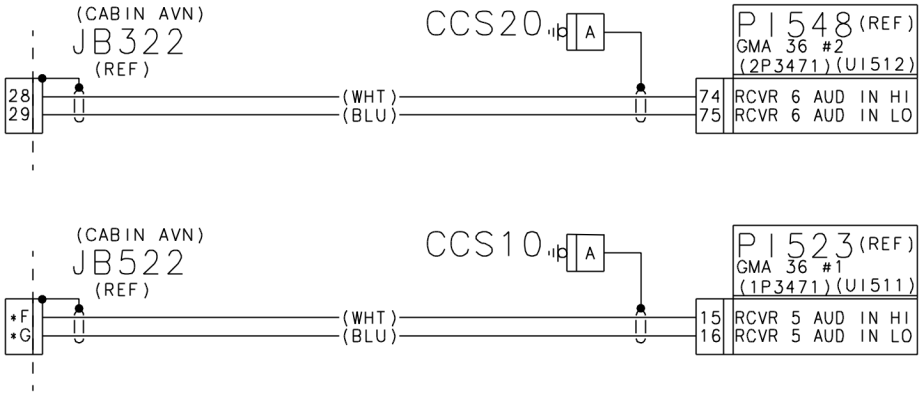


GEA Wiring Re-Pin
After Modification

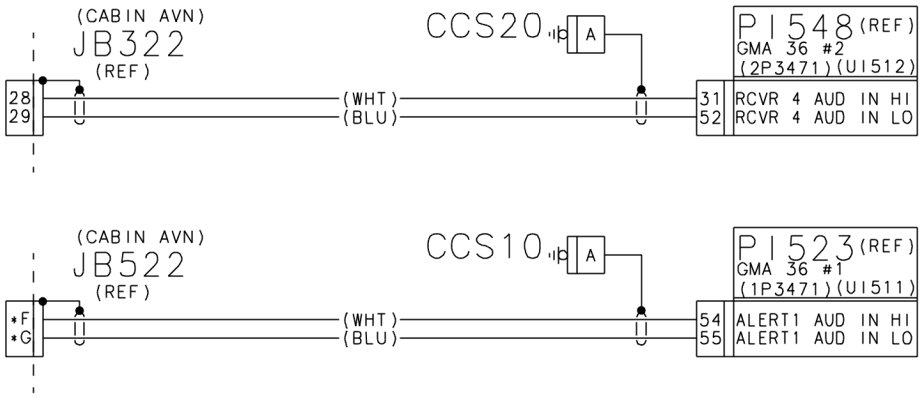
6390357

Figure 1. Wiring Modification (Sheet 2)

A111443



DME Audio Wiring Re-Pin
Before Modification

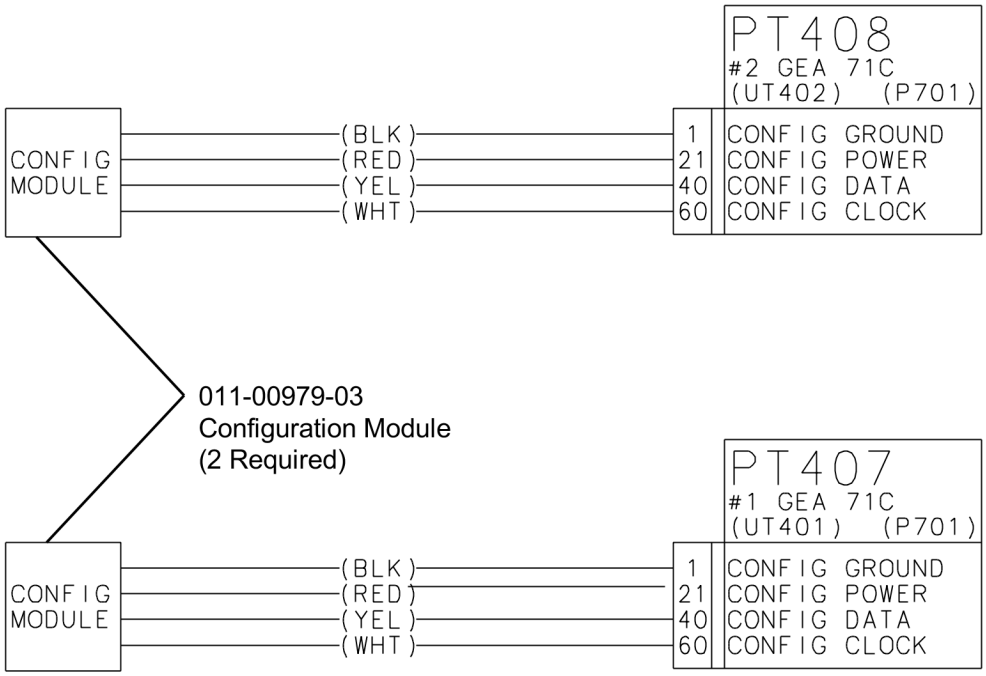


DME Audio Wiring Re-Pin
After Modification

6390357

Figure 1. Wiring Modification (Sheet 3)

A111444



6390357

Figure 1. Wiring Modification (Sheet 4)

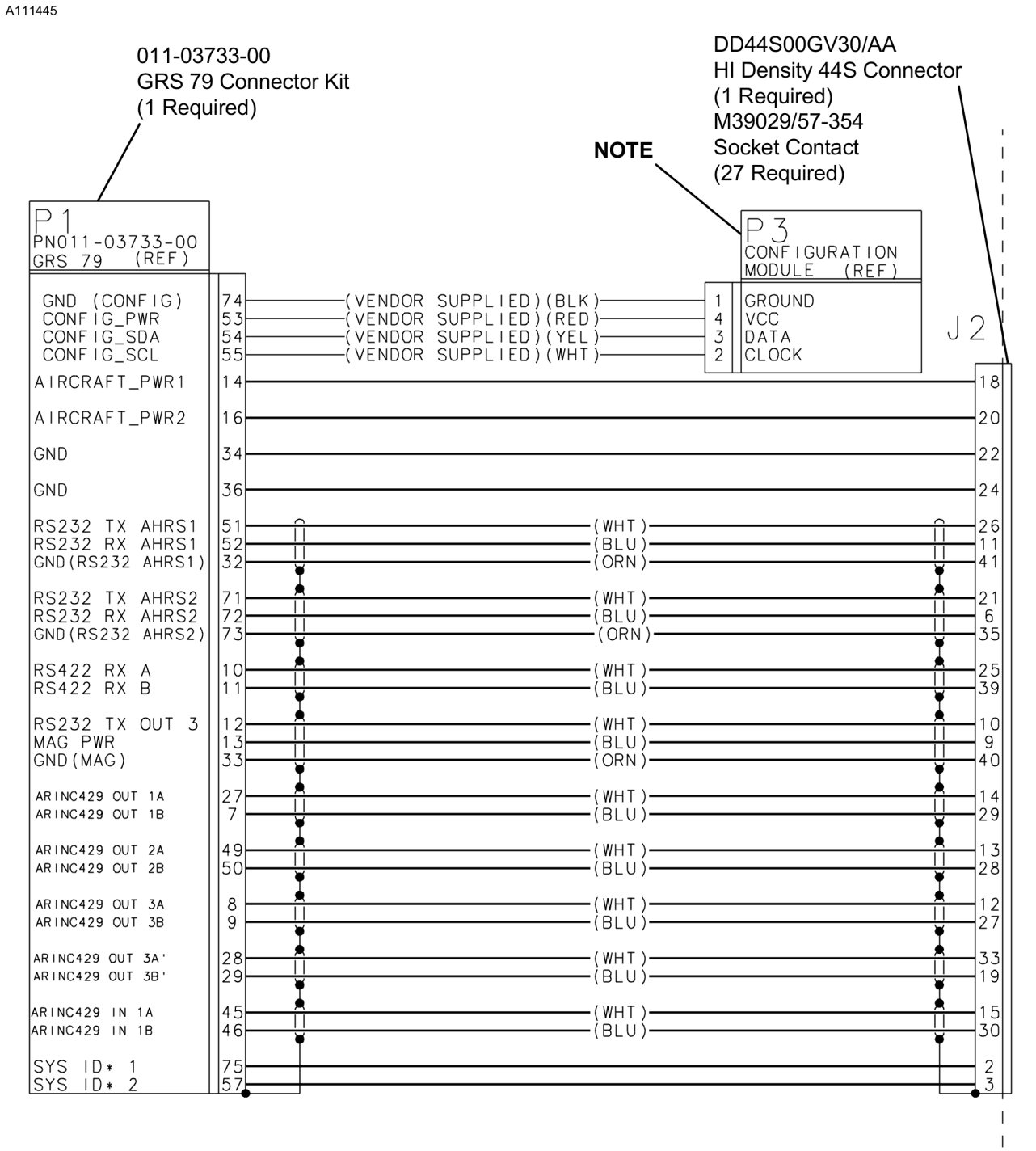
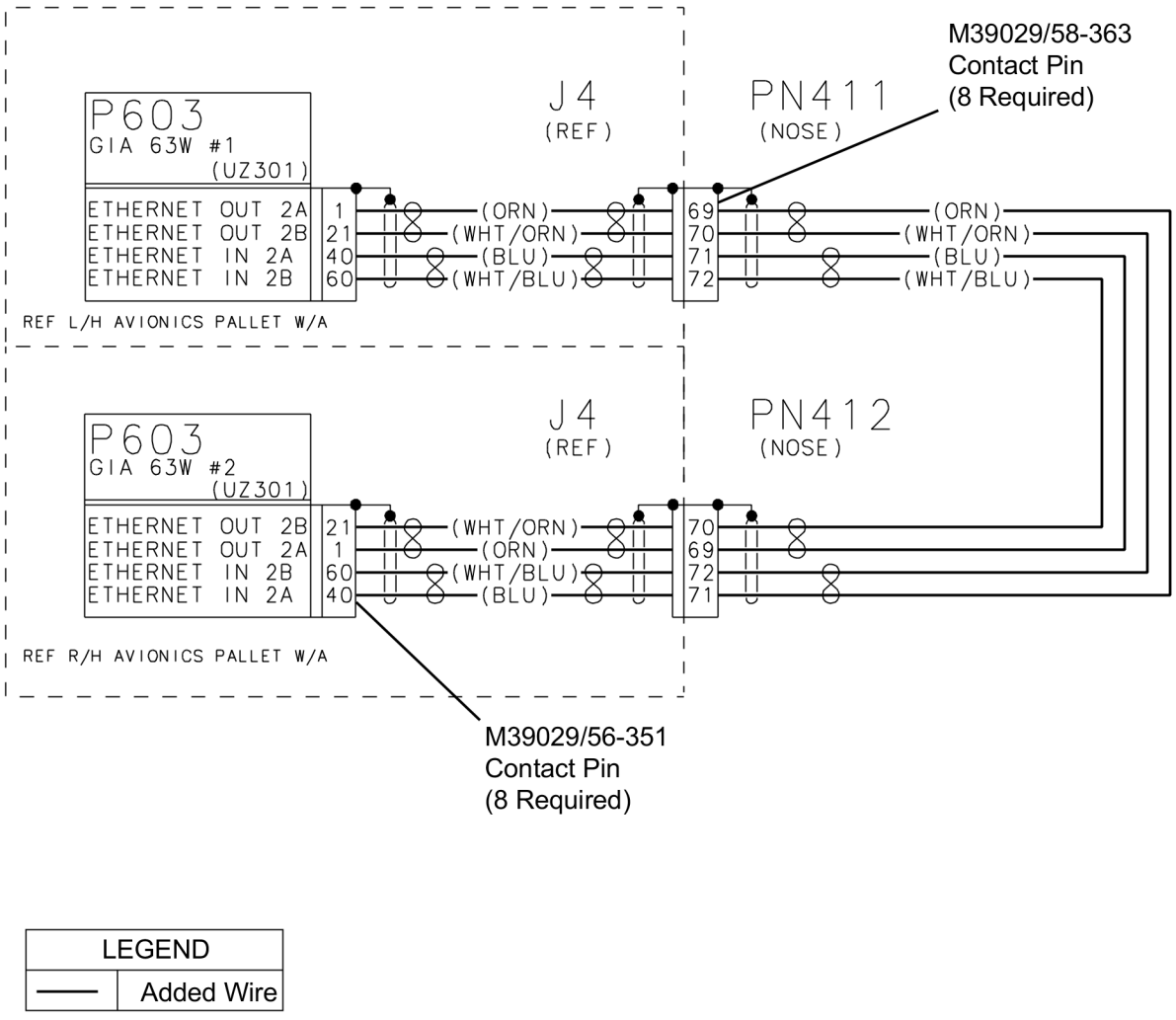


Figure 1. Wiring Modification (Sheet 5)

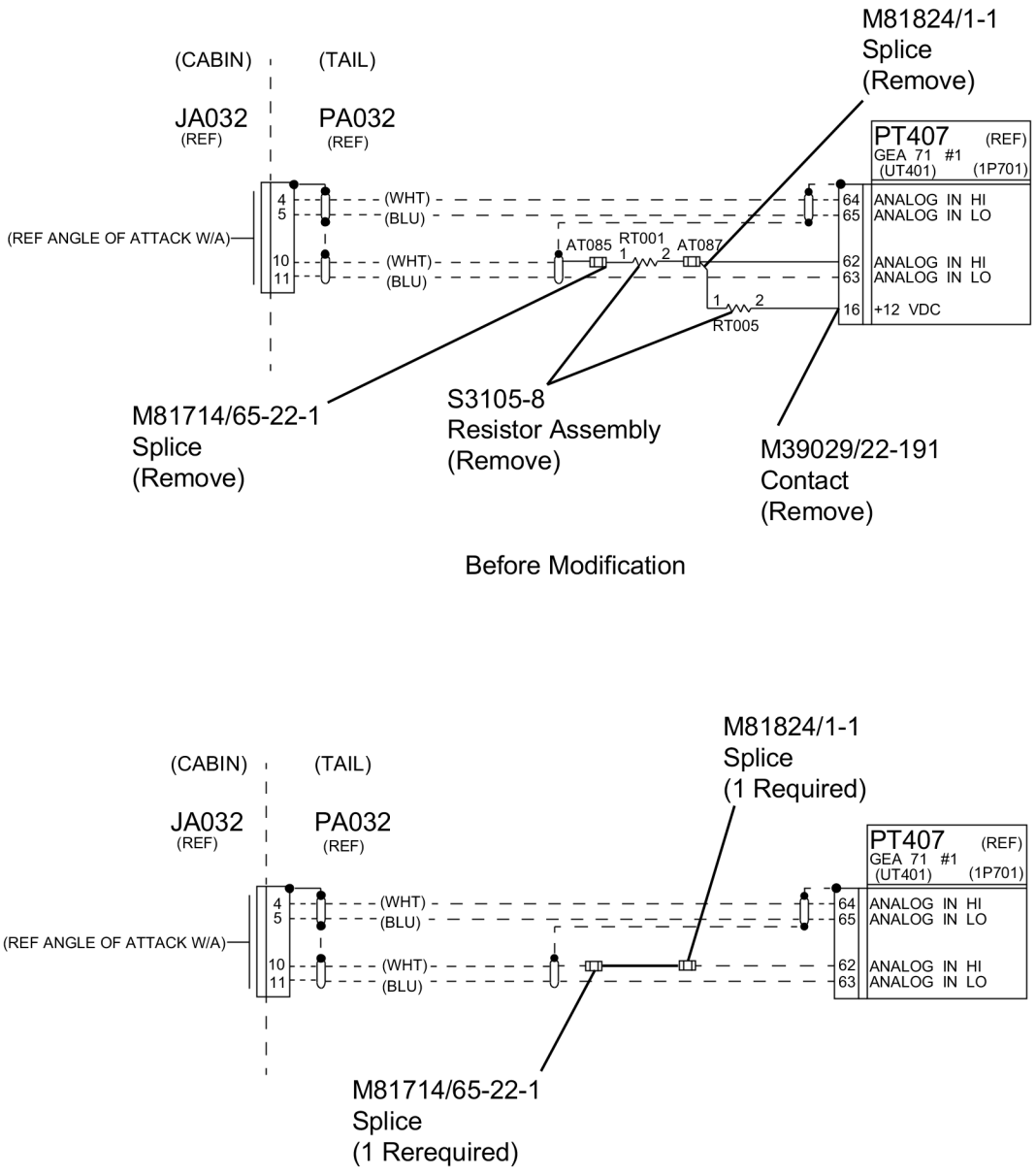
A111446



6390357

Figure 1. Wiring Modification (Sheet 6)

A111555



Before Modification

Airplanes Equipped with the Windshear
that have incorporated SB525-34-97

After Modification

Legend	
- - - - - - - -	Existing Wire
————	New Wire

6390357

Figure 1. Wiring Modification (Sheet 7)

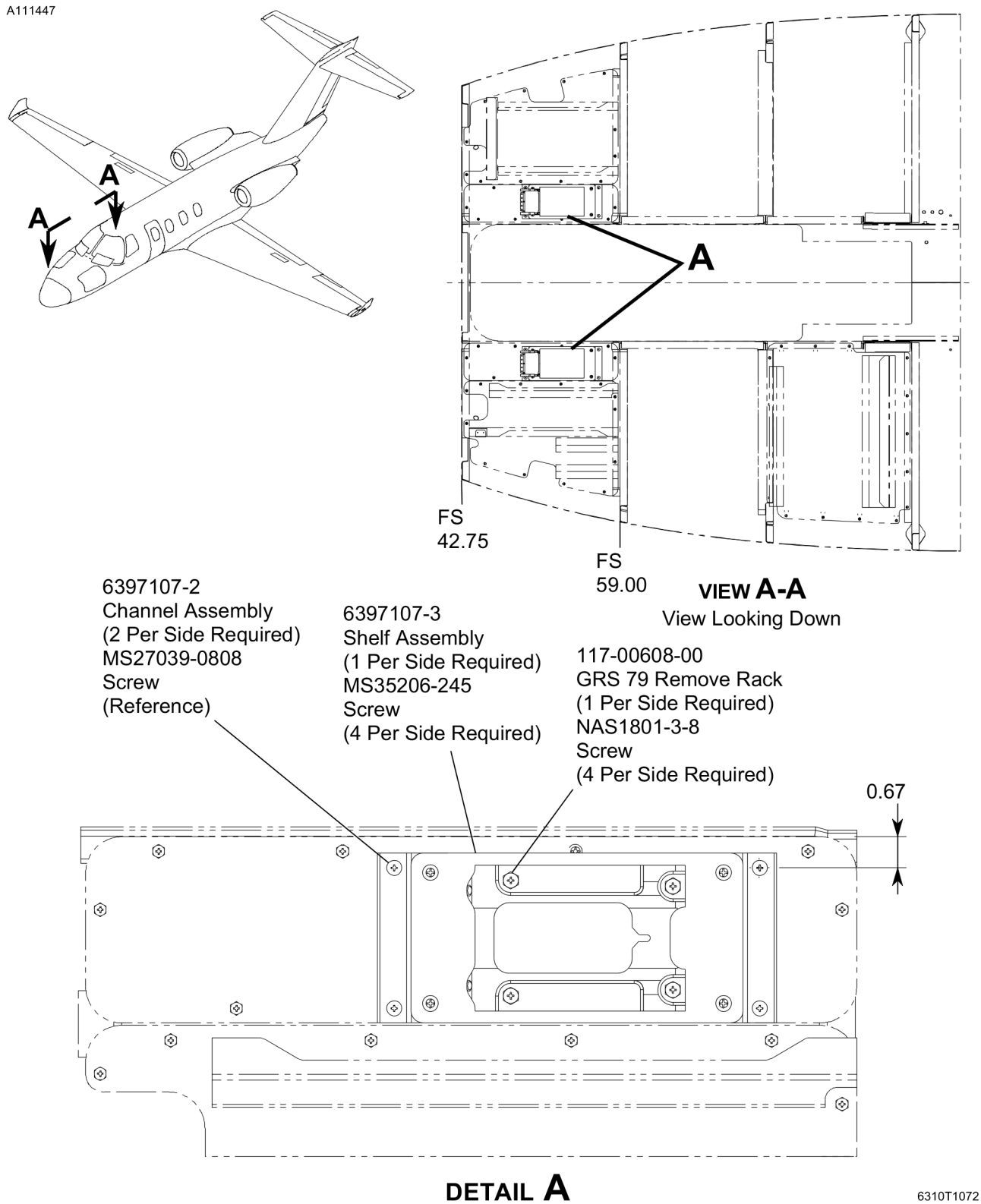


Figure 2. AHRS Remote Rack Installation (Sheet 1)

MATERIAL INFORMATION

Order the kit/parts below to install this modification.

NEW P/N	QUANTITY	KEY WORD	OLD P/N	INSTRUCTIONS/ DISPOSITION
SB525-34-107-0	1	**Kit,** consisting of the following parts:		
M39029/58-363	28	Contact Pin		
M81044/12-22-9	6 inches	Electrical Wire		
922204	60 inches	Ethernet Cable [(marked 1P603-69J4 (ORN), 21P603-70J4 (WHT/ORN, 40P603-71J4 (BLU), 60P603-72J4 (WHT/BLU)]		
922204	60 inches	Ethernet Cable [(marked 21P603-70J4 (WHT/ORN), 1P603-69J4 (ORN), 60P603-72J4 (WHT/BLU), 40P603-71J4 (BLU)]		
922204	164 inches	Ethernet Cable [(marked 69PN411-71PN412 (ORN), 70PN411-72PN412 (WHT/ ORN), 71PN411-69PN412 (BLU), 72PN411-70PN412 (WHT/BLU)]		
M39029/56-351	16	Contact		
S2974-8	9	Shield Termination		
S2974N4	7	Shield Termination		
SB525-34-107	1	Instructions		

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

NEW P/N	QUANTITY	KEY WORD	OLD P/N	INSTRUCTIONS/ DISPOSITION
SB525-34-107-1	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	

To do the GRS79 Jumper Wiring Modification, order two of the following kits to install this modification

NEW P/N	QUAN-TITY	KEY WORD	OLD P/N	INSTRUCTIONS/ DISPOSITION
SB525-34-107-2	1	**Kit,** consisting of the following parts:		
DD44S00GV30/AA	2	Hi Density 44S Connector		
M81044/12-22-9	24 inches	Electrical Wire (marked 14P1-18J2)	None	
M81044/12-22-9	24 inches	Electrical Wire (marked 16P1-20J2)	None	
M81044/12-22-9	24 inches	Electrical Wire (marked 34P1-22J2)		
M81044/12-22-9	24 inches	Electrical Wire (marked 36P1-24J2		
M27500-22ML3T08	24 inches	Electrical Wire [(marked 51P1-26J2--26J2 (WHT), 52P1-11J2 (BLU). 32P1-41J2(ORN)]		
M27500-22ML3T08	24 inches	Electrical Wire [(marked 71P1-21J2 (WHT),72P1-6J2 (BLU), 73P1-35J2 (ORN)]		
M27500-22ML2T08	24 inches	Electrical Wire [(marked 10P1-25J2 (WHT), 11P1-39J2 (BLU)]		
M27500-22ML3T08	24 inches	Electrical Wire [(marked 12P1-10J2 (WHT), 13P1-9J2 (BLU), 33P1-40J2 (ORN)]		
M27500-22ML2T08	24 inches	Electrical Wire [(marked 49P1-13J2 (WHT), 50P1-28J2 (BLU)]		
M27500-22ML2T08	24 inches	Electrical Wire [(marked 8P1-12J2 (WHT), 9P1-27J2 (BLU)]		
M27500-22ML2T08	24 inches	Electrical Wire [(marked 28P1-33J2 (WHT), 29P1-19J2 (BLU)]		
M27500-22ML2T08	24 inches	Electrical Wire [(marked 45P1-15J2 (WHT), 46P1-30J2 (BLU)]		
M27500-22ML2T08	24 inches	Electrical Wire [(marked 75P1-2J2 (WHT), 57P1-3J2 (BLU)]		
M39029/57-354	27	Socket Contact		
011-03733-00	2	Connector Kit, GRS 79		
011-00979-03	2	Configuration Module	None	

Order the kit below to install the GRS 79 AHRS Unit.

NEW P/N	QUANTITY	KEY WORD	OLD P/N	INSTRUCTIONS/ DISPOSITION
SB525-34-107-3	1	**Kit,** consisting of the following parts:		
MS35206-245	8	Screw		
NAS1801-3-8	8	Screw		
6397107-2	4	Channel Assembly	None	
6397107-3	2	Shelf Assembly	None	

Airplanes equipped with the Windshear option that have incorporated SB525-34-97 must order the following kit.

NEW P/N	QUANTITY	KEY WORD	OLD P/N	INSTRUCTIONS/ DISPOSITION
SB525-34-107-4	1	**Kit,** consisting of the following parts:		
M81824/1-1	1	Splice		
M81714/65-22-1	1	Splice		
M81044/12-22-9	12 inches	Electrical Wire		

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

NEW P/N	QUANTITY	KEY WORD	OLD P/N	INSTRUCTIONS/ DISPOSITION
011-03997-00	1	GWX Weather Radar Processor	011-01768-00	Return to Textron Aviation for core deposit
011-04187-00	3	GDU1450W Display	011-01910-00	
011-03682-04	2	GEA 71C Engine Interface Unit	011-00831-05	Return to Textron Aviation for core deposit
011-03732-00	2	GRS 79 AHRS Unit	011-00868-10	Return to Textron Aviation for core deposit
117-00608-00	2	GSU 75 Remote Rack	115-00459-00	Discard
011-01746-03	1	GDL59 Data Link Unit	011-01746-00	Return to Textron Aviation for core deposit
011-01983-20	2	GCU 275 PFD Controller	011-01983-01	Return to Textron Aviation for core deposit
011-03711-41 (Mod 1 or later)	2	GIA 64E Integrated Avionics Unit	011-01105-40	Return to Textron Aviation for core deposit
011-03759-01 (Mod 1 or later)	2	GTC 575 Touchscreen Controller	011-01924-10	Return to Textron Aviation for core deposit

NEW P/N	QUAN-TITY	KEY WORD	OLD P/N	INSTRUCTIONS/ DISPOSITION
011-04093-00	2	GMA 36B Remote Audio Panel	011-01793-00	Return to Textron Aviation for core deposit
011-03177-10	1	GDL 69A SXM Data Link	011-00987-00	Return to Textron Aviation for core deposit
010-01907-00	1	Garmin V4.8 Base Software Card	010-01121-10, 010-01124-20 or 010-01121-31	Discard
190-02618-00	1	Pilot's Guide	190-01578-00, 190-1578-01 or 190-01578-02	Discard
9145503-1	1	Cessna 525 Maintenance Card	9145505-1	Discard
9102016-15	1	Cessna G3000 Default Pilot Profile Card	9102016-11 or 9102016-19	Discard
010-00330-DE	1	Garmin Doppler Turbulence Card	010-00330-D2	(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-EB	1	ACARS Enablement Card	010-00330-E6	(As Required) Return to Textron Aviation for Exchange
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	1	Database SD Card	010-00474-44	Discard
190-02619-00	1	Cockpit Reference Guide	190-01577-00, 190-01577-01 or 190-01577-02	Discard

The existing hardware may 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. 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
- GEN 2 Alerting and Logging

Hardware Changes

- The GWX 75 Weather Radar Processor with Enhanced Color Palette replaces the GWX 70.
- The GDU 1450W EFIS Display replaces the GDU 1400W
- The GTC 575 EFIS Touch Controller replaces the GTC 570
- The GIA 64E Integrated Avionics (GPS, VHF COM, VOR/ILS, Flight Guidance Computer) replaces the GIA 63W
- The GMA 36B Audio Panel replaces the GMA 36
- The GDL 69A SXM Sirius/XM Data Link Satellite Receiver replaces the GDL 69A
- The GEA 71C Engine/Airframe Interface replaces the GEA 71H
- The GRS 79 AHRS replaces the GRS 77

TITLE

NAVIGATION - GARMIN HARDWARE AND SOFTWARE UPDATE TO VERSION 4.8.9

TO:

Citation M2 Owner

REASON

To install upgraded GDU 1450W Flight Displays, GEA 71C Engine Interface Units, GRS 79 AHRS Units, GDL 59 Data Links, GCU 275 PFD Controllers, GIA 64E Integrated Avionics Units, GTC 575 Touchscreen Controllers, GMA 36B Remote Audio Panels, GDL 69A SXM Data Link, a GWX Weather Radar Processor and update the Garmin G3000 software to version 4.8.9.

COMPLIANCE

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

LABOR HOURS

WORK PHASE	LABOR-HOURS
Modification	As Required

MATERIAL AVAILABILITY

PART NUMBER	AVAILABILITY	COST
SB525-34-107-0	*	*
SB525-34-107-1	*	*
SB525-34-107-2	*	*
SB525-34-107-3	*	*
SB525-34-107-4	*	*
011-03997-00	*	*
011-04187-00	*	*
011-03682-04	*	*
011-03732-00	*	*
117-00608-00	*	*
011-01746-03	*	*

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

PART NUMBER	AVAILABILITY	COST
011-01983-20	*	*
011-03711-41 (Mod 1 or later)	*	*
011-03759-01 (Mod 1 or later)	*	*
011-04093-00	*	*
011-03177-10	*	*
010-01907-00	*	*
190-02618-00	*	*
9145505-1	*	*
9102016-15	*	*
010-00330-DE	*	*
010-00330-5M	*	*
010-00330-FA	*	*
010-00330-EB	*	*
010-00330-5K	*	*
010-00330-5N	*	*
010-00474-52	*	*
190-02619-00	*	*

The existing hardware may 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. 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

None

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.