

## REVISION TRANSMITTAL

This sheet transmits Revision 2 to SB700-42-01, which:

- A. Changed the SB700-42-01-0 kit as follows:
  - Changed part number M39029-57-354 to M39029/57-354.
  - Changed part number S13478-1 to S3478-1.
- B. Changed the SB700-42-01-1 kit as follows:
  - Changed part number M39029-57-354 to M39029/57-354.
  - Changed part number S13478-1 to S3478-1.

**NOTE:** This revision replaces Revision 1 of SB700-42-01 in its entirety.

**NOTE:** This transmittal sheet provides a complete description of the changes made by this revision, except for editorial changes.

### REVISION COMPLIANCE

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

### LOG OF REVISIONS

Original Issue	February 1, 2021
Revision 1	February 3, 2021
Revision 2	April 2, 2021



**TITLE**

INTEGRATED MODULAR AVIONICS - GARMIN G5000 SOFTWARE UPDATE 5.1.7 VERSION 2257.58

**EFFECTIVITY****MODEL**

700 (Citation Longitude)

**SERIAL NUMBERS**

-0004, -0008 thru -0016, -00018 thru -0021  
 incorporating SB700-29-01, -0017, -0022 thru  
 -0032

The equivalent of this service document has been incorporated on production airplanes -0033 and On.

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

**REASON**

To update the Garmin G5000 system 5.1.7 software Version 2257.58.

**DESCRIPTION**

This service document provides parts and instructions to update Garmin G5000 software 5.1.7 version 2257.58.

**NOTE:** This service bulletin will require the following software and enablement cards as necessary:

- Part Number - 010-00330-FG - Search and Rescue Enablement Card (existing), if option was installed
- Part Number - 010-00474-50 - Database Card (existing).
- Part Number - 010-02010-14 - Garmin 5.1.7 Software Version 2257.58 Base Card
- Part Number - 010-00330-FB - Link 2000+ CPDLC Enablement Card (existing), if option was installed
- Part Number - 010-00330-5K - SurfaceWatch Enablement Card (existing), if option was installed
- Part Number - 010-00330-J5 - FANS 1/A Enablement Card (existing), if option was installed
- Part Number - 8203142-11 - Default Pilot Profile Card
- Part Number - 8204541-21 - CMC Viewer Card
- Part Number - 8204542-17 - CMC Configuration Card

**COMPLIANCE**

DISCRETIONARY. 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.

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- 4) The mechanic or airplane owner must apply the information in the service document only to aircraft serial numbers identified in the *Effectivity* section of the document.
- 5) The mechanic or airplane owner must use maintenance practices that are identified as acceptable standard practices in the aviation industry and governmental regulations.

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

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

### APPROVAL

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

### FLIGHT CREW OPERATIONS

Refer to the attached *Flight Crew Operations Summary*.

### CONSUMABLE MATERIAL

You must use the consumable materials that follow, or their equivalent, to complete this service document.

NAME	NUMBER	MANUFACTURER	USE
Adhesive	U074040 (Loctite 222MS)	Textron Aviation Parts Distribution 7121 Southwest Boulevard Wichita, KS 67215	Thread Sealant.

### TOOLING

No specialized tooling is required to complete this service document.

### WEIGHT AND BALANCE INFORMATION

Negligible

### REFERENCES

Cessna Model 700 Maintenance Manual

Cessna Model 700 Electrical Wiring Interconnect System Manual

### PUBLICATIONS AFFECTED

Cessna Model 700 Maintenance Manual

Cessna Model 700 Illustrated Parts Catalog

Cessna Model 700 Wiring Diagram Manual

Cessna Model 700 Airplane Flight Manual

### ACCOMPLISHMENT INSTRUCTIONS

1. Connect external electrical power to the aircraft. (Cessna Model 700 Maintenance Manual, Chapter 24, External Electrical Power - Maintenance Practices.)
2. Make sure the L MAIN and R MAIN switch are in the ON position (Recessed).
3. Push and release the EXT PWR switch to the ON position.
4. Make sure the L ELEC and R ELEC switches are in the NORM position.
5. Make sure the BUS TIE switch shows CLOSED.

6. Record the Settings and Options that are currently installed.

**NOTE:** Make sure that the G5000 system is powered up and in Normal mode.

- A. Record the empty weight value as follows:

- (1) On the pilot's right Garmin Touch Controller (GTC), do as follows:
  - (a) Select Home.
  - (b) Select PERF.
  - (c) Select Weight and Fuel.
  - (d) Record the airplane's Basic Empty Weight and Crew & Stores weight.

Weight Category	Weight (Indicated by the GTC)
Basic Empty Weight (Aircraft)	
Crew and Stores Weight	

- B. Find the Options that are currently installed as follows:

- (1) Put the G5000 system in configuration mode as follows:

- (a) Disengage MFD L GTC circuit breaker N3.

**NOTE:** Wait 20.0 seconds for the GTC to de-energize completely.

- (b) Push and hold the right inner knob on the MFD L GTC and engage the MFD L GTC circuit breaker N3.

- 1 Release the right inner knob on the MFD L GTC when you see INITIALIZING or Garmin Logo on the GTC screen.

- (c) On the MFD L GTC, do as follows:

- 1 Select Restart Options.
    - 2 Select System to Config Mode.

**NOTE:** This will reboot the system in configuration mode.

- (d) After the system has rebooted, do the steps that follow:

- 1 Make sure the SYSTEM UPLOAD screen shows on the L PFD
    - 2 Make sure the SYSTEM STATUS screen shows on the MFD and R PFD.
    - 3 Make sure all four GTC's show the Home (Config Mode) screen.

- (2) Select GDU Controls on the MFD L GTC Home (Config Mode) screen.

**NOTE:** The GDU Controls screen will show on the GTC. The steps that follow use this screen and the FMS knob on the GTC to control the pilot's PFD.

- (3) Make sure that PFD1 is selected on the MFD L GTC to control the L PFD.

- (4) Turn the right inner knob on the MFD L GTC to the right until the TRANSACTION LOG screen shows.

**NOTE:** A list of the current files loaded to the system will show. The most recent files are at the top of the list.

- (5) Record the Options shown on the Transaction Log screen.

**NOTE:** Also mark Yes for new Options to be loaded during this software upgrade.

**CAUTION:** If there were Options that were loaded incorrectly before, DO NOT record those Options in the Yes column or else the issue will be repeated. Any Options that are recorded in the Yes column will be reloaded to the aircraft.

Option Description	Yes	No
ACARS - ARINC Direct ( <b>NOTE 1</b> )		
ACARS - Honeywell GDC ( <b>NOTE 1</b> )		
ACARS- Satcom Direct ( <b>NOTE 1</b> )		
FK632D - Second HF (Full Up)		
FK632L - Sirius XM		
FK658A - ADF		
FK658E - ADF2		
FK676B - Iridium Data Radio		
FK676D - Laseref VI ( <b>NOTE 2</b> )		
FK738G - Crew Jumpseat ( <b>NOTE 2</b> )		
Enable CPDLC - Link 2000+		
Enable SurfaceWatch		
FANS - 1/A Enable		
Enable Enhanced Search and Rescue		

**NOTE 1:** Only one version of ACARS can be loaded. **NOTE 2:** These new options can be added if needed.

7. Remove the SD card from the top slot of the Multifunction Display (MFD).

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

8. Discard the SD cards that follow:
- 010-02010-11 - Garmin V5.1.0 Base Software Card (if applicable)
  - 8203142-5 - G5000 Default Pilot Profile Card (if applicable)
  - 8204541-12 - CMC Viewer Card (if applicable)
  - 8204541-18 - CMC Viewer Card (if applicable)
  - 8204542-12 - CMC Configuration Card (if applicable)
9. Make sure the cards that follow are available before the software is installed:
- 010-00474-50 - Database SD Card (existing).
  - 010-02010-14 - Garmin 5.1.7 Software Version 2257.58 Base Card (new)
  - 010-00330-FB - Link 2000+ CPDLC Enablement Card - if the option was installed (existing)
  - 010-00330-FG - Search and Rescue Enablement Card - If the option was installed (existing)
  - 010-00330-5K - SurfaceWatch Enablement Card - if option was installed (existing)
  - 010-00330-J5 - FANS-1/A Enablement Card - if option was installed (existing)
  - 8203142-11 - G5000 Default Pilot Profile Card (new)
  - 8204541-21 - CMC Viewer Card (new)
  - 8204542-17 - CMC Configuration Card (New)
  - Two blank SD cards 32GB or less (Not supplied with kit)
10. Using a computer, make a copy of only the 'force\_config' file from the 010-02010-11 Garmin 5.1.0 Software Version 2257.37 Base Card onto each blank SD card.

**NOTE:** The 'force\_config' file should be the only file on both SD cards.

11. 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 batteries.
    - (2) Disconnect external electrical power.
  - 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.
12. Do the electrical wiring modifications.
  - A. (Refer to Figure 1, Sheet 1 and 2.) Aircraft -0001 thru -0030 do the wiring modification per wiring diagrams.
    - (1) Make sure to mark the electrical wiring using the S4111-1B Labels and MS3367-2-9 tie wraps. (Refer to Cessna Model 700 Electrical Wiring Interconnect System Manual, Chapter 20, EWIS Modification - Maintenance Practices.)
  - B. (Refer to Figure 2, Sheets 1, 2 and 3.) Aircraft -0031 and -0032 do the wiring modification per wiring diagrams.
    - (1) Make sure to mark the electrical wiring using the S4111-1B Labels and MS3367-2-9 tie wraps. (Refer to Cessna Model 700 Electrical Wiring Interconnect System Manual, Chapter 20, EWIS Modification - Maintenance Practices.)
  - C. On the left Direct Current (DC) power junction box, remove the L HYD REMOTE INDICATOR (HZ141) circuit breaker from the junction box circuit breaker panel. (Refer to Cessna Model 700 Maintenance Manual, Chapter 24, DC Power Junction Box - Maintenance Practices.)
  - D. On the right DC power junction box, remove the R HYD REMOTE INDICATOR (HZ234) circuit breaker from the junction box circuit breaker panel. (Refer to Cessna Model 700 Maintenance Manual, Chapter 24, DC Power Junction Box - Maintenance Practices.)
  - E. Remove the ring terminals from the electrical wires that attached to circuit breakers HZ141 and HZ234. (Refer to Cessna Model 700 Electrical Wiring Interconnect System Manual, Chapter 20, Electrical Terminals - Maintenance Practices.)
  - F. Install four TC4001 End Caps on the end of the electrical wires that attached to L HYD REMOTE INDICATOR (HZ141) and RHYD REMOTE INDICATOR (HZ234) circuit breakers. (Refer to Cessna Model 700 Electrical Wiring Interconnect System Manual, Chapter 20, Sleeving, Heat Shrinkable Tubing, and Conduit - Maintenance Practices.)
  - G. Install one CM2692-15J1S Plug Button in the left DC power junction box circuit breaker panel for circuit breaker HZ141.
  - H. Install one S3478-1 CB Block Assembly in the right DC power junction box circuit breaker panel for circuit breaker HZ234.
  - I. Using a black indelible marker, mark through HZ141 L HYD REMOTE INDICATOR on the LH J-Box Circuit Breaker Placard.

**NOTE:** The circuit breaker placard is located above the left DC power junction box.
  - J. Using a black indelible marker, mark through HZ234 R HYD REMOTE INDICATOR on the RH J-Box Circuit Breaker Placard.

**NOTE:** The circuit breaker placard is located above the right DC power junction box.

13. Install the 10S1048 Control Wheel Steering (CWS) switch in the pilot's and copilot's control wheel assembly as follows:
  - A. Remove the pitch trim switch (SXM301) from the pilot and copilot's control wheel assembly. (Refer to Cessna Model 700 Maintenance Manual, Chapter 27, Pitch Trim Switch - Removal/Installation.)
  - B. Remove the master disconnect switch (SXM302) from pilot and copilot's control wheel assembly. (Refer to Cessna Model 700 Maintenance Manual, Chapter 22, Master Disconnect Switch - Removal/Installation.)
  - C. Discard the 7496024-2 and 7496024-3 Pilot and Copilot's Outboard Wheel Caps and retain the attach hardware.
  - D. Install the pitch trim switch (SXM301) in the 7461152-1 Pilot Outboard Wheel Cap and the 7461152-2 Copilot Outboard Wheel Cap. (Refer to Cessna Model 700 Maintenance Manual, Chapter 27, Pitch Trim Switch - Removal/Installation.)
  - E. Install the master disconnect switch (SXM302) in the 7461152-1 Pilot Outboard Wheel Cap and the 7461152-2 Copilot Outboard Wheel Cap. (Refer to Cessna Model 700 Maintenance Manual, Chapter 22, Master Disconnect Switch - Removal/Installation.)
  - F. Install one 10S1048 CWS switch (SXM303) in the 7461152-1 Pilot Outboard Wheel Cap and the 7461152-2 Copilot Outboard Wheel Cap as follows:
    - (1) Install the 10S1048X CWS switch (SXM303) in outboard wheel cap.
    - (2) Remove caps and unstow electrical wires EJXM028 - ASXM303 and DJXM030 - CSXM303 located in the control wheel assembly.
    - (3) Install electrical wire EJXM028 - ASXM303 to terminal A of the CWS switch. (Refer to Citation Standard Practices Manual, Chapter 20. Soldering - Maintenance Practices and Cessna Model 700 Electrical Wiring Interconnect System Manual, Chapter 20, Electrical Terminals - Maintenance Practices.)
    - (4) Install electrical wire DJXM030 - CSXM303 to terminal C of the CWS switch. (Refer to Citation Standard Practices Manual, Chapter 20. Soldering - Maintenance Practices and Cessna Model 700 Electrical Wiring Interconnect System Manual, Chapter 20, Electrical Terminals - Maintenance Practices.)
    - (5) Install the set screw that attaches the CWS switch to the outboard wheel cap with U074040 anaerobic adhesive.
    - (6) Install the outboard wheel caps using retained hardware.
    - (7) Remove the maintenance warning tags and connect the airplane batteries.
    - (8) Do the Garmin Automatic Flight Control System (AFCS) - Adjustment/Test. (Refer to the Cessna Model 700 Maintenance Manual, Chapter 22, Garmin Automatic Flight Control System (AFCS) - Adjustment/Test.)
14. Load the Garmin G5000 Integrated Avionics System Base Software (Version 5.1.7) with the 010-02010-14 Version 2257.58 Base Software Card as follows:
  - A. Put the G5000 system in configuration mode as follows:
    - (1) Put one of the copied SD cards with the 'force\_config' file into the upper slot of the R PFD.
    - (2) Put one of the copied SD cards with the 'force\_config' file into the upper slot of the MFD.
    - (3) Put the 010-02010-14 Garmin 5.1.7 Software Base Version 2257.58 Card into the upper slot of the L PFD.
    - (4) Connect external electrical power to the aircraft.
    - (5) If necessary, adjust the power unit to 28 VDC ( $\pm .05$ ) VDC.



- (6) Makes sure the L MAIN and the R MAIN switches on the left switch panel to the ON position (recessed).
- (7) Push and hold the right inner knob on the MFD L GTC.
- (8) Push and release the EXT PWR switch to the ON position.
- (9) Release the right inner knob on the MFD L GTC when you see INITIALIZING or Garmin Logo on the GTC screen.
- (10) Make sure that the BUS TIE switch on the left switch panel shows CLOSED.
- (11) Make sure that the L ELEC and the R ELEC switches on the left switch panel show NORM.
- (12) After the initialization of the L PFD, make sure the INITIALIZING SYSTEM message shows in the top left corner of the L PFD.

**NOTE:** The L PFD will automatically start to load the display software.

- (13) When the display software load is complete, the SYSTEM UPLOAD page will show at the top of L PFD.
  - (14) On the MFD L GTC, do as follows:
    - (a) Select Restart Options.
    - (b) Select System to Config Mode.
- NOTE:** This will reboot the system in configuration mode.
- (15) After the system has rebooted, do the steps that follow:
    - (a) Make sure the SYSTEM UPLOAD screen shows on the L PFD.
    - (b) Make sure the SYSTEM STATUS shows on the MFD and R PFD
    - (c) Make sure all four GTC's show the Home (Config Mode) screen.

B. Do Software and Configuration Loading as follows:

**CAUTION:** The three GDU displays and four GTC touch controllers must be in configuration mode when Garmin G5000 software are being loaded. Otherwise, the incorrect loading of data will result.

- (1) Push and release the right inner knob on the MFD L GTC to activate the cursor.
- (2) Turn the right inner knob on the MFD L GTC to highlight the SD CARD in the CARD window of the system upload page.
- (3) Select the Enter button on the MFD L GTC to select the CARD item.
- (4) Turn the right inner knob on the MFD L GTC, to highlight 'Model 700 Base Configuration' in the GROUP field.
- (5) Select the Enter button on the MFD L GTC.
  - (a) Make sure 'Model 700 Base' shows in the ITEM field.
- (6) Turn the right inner knob on the MFD L GTC, to highlight 'Model 700 Base' in the ITEM field.
- (7) Select the Enter button on the MFD L GTC.
  - (a) Make sure the proper model shows in the ITEM field and software and LRU's show in the PRODUCT field.
- (8) Select the Misc Keys button on the MFD L GTC.
- (9) Select the SKEY1 button on the MFD L GTC.

**NOTE:** All boxes should now be checked.

(10) Select the SKEY6 button on the MFD L GTC.

**NOTE:** Each of the GTC's, the L PFD, the MFD and the R PFD will reboot and verification messages will show as each GTC and display are loaded.

(11) Select the Back button on the MFD L GTC.

(12) Select the GDU Controls button on the MFD L GTC.

(13) Select the Enter button when the 'Upload and Crossfill Complete' message is shown.

C. Do the Transaction Log Verification as follows:

(1) Push and release the right inner knob on the MFD L GTC to de-activate the cursor.

(2) Turn the right inner knob on the MFD L GTC, to the right until the TRANSACTION LOG screen shows.

(3) Make sure the transaction log shows the following:

(a) LOADER IMAGE shows '006-B2257-58'.

(b) GROUP shows 'Model 700 Base Configuration'.

(c) ITEM shows 'Model 700 Base'.

(d) STATUS shows PASS (in green).

(4) Turn the right inner knob on the MFD L GTC, to the left until the SYSTEM UPLOAD screen shows.

D. Load the Necessary Options as follows:

**NOTE:** This section will give the steps required to load the options that were previously installed, and others that are being added per the table in Step 6. B.(5).

(1) If applicable, load the ACARS - ARINC Direct Option as follows:

**NOTE:** If this is the first option to be loaded, start at Step 15.D.(1) (a). Otherwise, start at Step 15.D.(1) (b).

(a) If this is the first option to be loaded, do as follows:

1 Push and release the right inner knob on the MFD L GTC to activate the cursor.

2 Turn the right inner knob on the MFD L GTC to the right and highlight the software part number in the CARD window.

3 Select the Enter button on the MFD L GTC to select the CARD item.

4 Turn the right inner knob on the MFD L GTC to the right to highlight 'Options' in the GROUP field.

5 Select the Enter button on the MFD L GTC. Go to Step 15.D.(1)(c).

(b) Turn the right outer knob on the MFD L GTC to the left until the cursor is in the ITEM field.

(c) Turn the right inner knob on the MFD L GTC to highlight "ACARS - ARINC DIRECT" in the ITEM field.

(d) Select the Enter button on the MFD L GTC.

(e) Using the Left and Right arrows on the MFD L GTC, highlight LOAD at the bottom of the display.

(f) Select the Select button on the MFD L GTC.

(g) Monitor the software load.

1 Select the Enter button when the loading is complete to acknowledge the 'Upload and Crossfill Complete' window.

- (2) If applicable, load the ACARS - Honeywell GDC Option as follows:

**NOTE:** If this is the first option to be loaded, start at Step 15.D.(2)(a). Otherwise, start at Step 15.D.(2)(b).

- (a) If this is the first option to be loaded, do as follows:

- 1 Push and release the right inner knob on the MFD L GTC to activate the cursor.
- 2 Turn the right inner knob on the MFD L GTC to the right and highlight the software part number in the CARD window.
- 3 Select the Enter button on the MFD L GTC to select the CARD item.
- 4 Turn the right inner knob on the MFD L GTC to the right to highlight 'Options' in the GROUP field.
- 5 Select the Enter button on the MFD L GTC. Go to Step 15.D.(2)(c).

- (b) Turn the right outer knob on the MFD L GTC to the left until the cursor is in the ITEM field.

- (c) Turn the right inner knob on the MFD L GTC to highlight 'ACARS - Honeywell GDC' in the ITEM field.

- (d) Select the Enter button on the MFD L GTC.

- (e) Using the Left and Right arrows on the MFD L GTC, highlight LOAD at the bottom of the display.

- (f) Select the Select button on the MFD L GTC.

- (g) Monitor the Software load.

- 1 Select the Enter button when the loading is complete to acknowledge the 'Upload and Crossfill Complete' window.

- (3) If applicable, load the ACARS - Satcom Direct Option as follows:

**NOTE:** If this is the first option to be loaded, start at Step 15.D.(3)(a). Otherwise, start at Step 15.D.(3)(b).

- (a) If this is the first option to be loaded, do as follows:

- 1 Push and release the right inner knob on the MFD L GTC to activate the cursor.
- 2 Turn the right inner knob on the MFD L GTC to the right and highlight the software part number in the CARD window.
- 3 Select the Enter button on the MFD L GTC to select the CARD item.
- 4 Turn the right inner knob on the MFD L GTC to highlight 'Options' in the GROUP field.
- 5 Select the Enter button on the MFD L GTC. Go to Step 15.D.(3)(c).

- (b) Turn the right outer knob on the MFD L GTC to the left until the cursor is in the ITEM field.

- (c) Turn the right inner knob on the MFD L GTC to highlight 'ACARS - Satcom Direct' in the ITEM field.

- (d) Select the Enter button on the MFD L GTC.

- (e) Using the Left and Right arrows on the MFD L GTC, highlight LOAD at the bottom of the display.

- (f) Select the Select button on the MFD L GTC.

- (g) Monitor the Software load.
- 1 Select the Enter button when the loading is complete to acknowledge the 'Upload and Crossfill Complete' window.
- (4) If applicable, load the Dual HF Option (FK632D- Second HF (Full Up)) option as follows:
- NOTE:** If this is the first option to be loaded, start at Step 15.D.(4)(a). Otherwise, start at Step 15.D.(4)(b).
- (a) If this is the first option to be loaded, do as follows:
- 1 Push and release the right inner knob on the MFD L GTC to activate the cursor.
  - 2 Turn the right inner knob on the MFD L GTC to the right and highlight the software part number in the CARD window.
  - 3 Select Enter on the MFD L GTC to select the CARD item.
  - 4 Turn the right inner knob on the MFD L GTC to the right to highlight 'Options' in the GROUP field.
  - 5 Select Enter on the MFD L GTC. Go to Step 15.D.(4)(c).
- (b) Turn the right outer knob on the MFD L GTC to the left until the cursor is in the ITEM field.
- (c) Turn the right inner knob on the MFD L GTC to highlight 'FK632D- Second HF (Full Up)' in the ITEM field.
- (d) Select Enter on the MFD L GTC.
- (e) Using the Left and Right arrows on the MFD L GTC, highlight LOAD at the bottom of the display.
- (f) Select the Select button on the MFD L GTC.
- (g) Monitor the configuration load.
- 1 Push and release ENTER when the loading is complete to acknowledge the 'Upload and Crossfill Complete' window.
- (5) If applicable, load Sirius XM (FK632L- SiriusXM (Weather/Music)) option as follows:
- NOTE:** If this is the first option to be loaded, start at Step 15.D.(5)(a). Otherwise, start at Step 15.D.(5)(b).
- (a) If this is the first option to be loaded, do as follows:
- 1 Push and release the right inner knob on the MFD L GTC to activate the cursor.
  - 2 Turn the right inner knob on the MFD L GTC to the right and highlight the software part number in the CARD window.
  - 3 Select the Enter button on the MFD L GTC to select the CARD item.
  - 4 Turn the right inner knob on the MFD L GTC to the right to highlight 'Options' in the GROUP field.
  - 5 Select the Enter button on the MFD L GTC. Go to Step 15.D.(5)(c).
- (b) Turn the right outer knob on the MFD L GTC to the left until the cursor is in the ITEM field.
- (c) Turn the right inner knob on the MFD L GTC to highlight 'FK632L - SiriusXM (Weather/Music)' in the ITEM field.
- (d) Select the Enter button on the MFD L GTC.
- (e) Using the Left and Right arrows on the MFD L GTC, highlight LOAD at the bottom of the display.

- (f) Select the Select button on the MFD L GTC.
- (g) Monitor the Software load.
  - 1 Select the Enter button when the loading is complete to acknowledge the 'Upload and Crossfill Complete' window.
- (6) If applicable, load the ADF Option (FK658A- ADF) option as follows:

**NOTE:** If this is the first option to be loaded, start at Step 15.D.(6)(a). Otherwise, start at Step 15.D.(6)(b).

  - (a) If this is the first option to be loaded, do as follows:
    - 1 Push and release the right inner knob on the MFD L GTC to activate the cursor.
    - 2 Turn the right inner knob on the MFD L GTC to the right and highlight the software part number in the CARD window.
    - 3 Select the Enter button on the MFD L GTC to select the CARD item.
    - 4 Turn the right inner knob on the MFD L GTC to the right to highlight 'Options' in the GROUP field.
    - 5 Select the Enter button on the MFD L GTC. Go to Step 15.D.(6)(c).
  - (b) Turn the right outer knob on the MFD L GTC to the left until the cursor is in the ITEM field.
  - (c) Turn the right inner knob on the MFD L GTC to highlight 'FK658A - ADF' in the ITEM field.
  - (d) Select the Enter button on the MFD L GTC.
  - (e) Using the Left and Right arrows on the MFD L GTC, highlight LOAD at the bottom of the display.
  - (f) Select the Select button on the MFD L GTC.
  - (g) Monitor the Software load.
    - 1 Select the Enter button when the loading is complete to acknowledge the 'Upload and Crossfill Complete' window.
- (7) If applicable, load the Second ADF Option (FK658E- ADF2) option as follows:

**NOTE:** If this is the first option to be loaded, start at Step 15.D.(7)(a). Otherwise, start at Step 15.D.(7)(b).

  - (a) If this is the first option to be loaded, do as follows:
    - 1 Push and release the right inner knob on the MFD L GTC to activate the cursor.
    - 2 Turn the right inner knob on the MFD L GTC to the right and highlight the software part number in the CARD window.
    - 3 Select the Enter button on the MFD L GTC to select the CARD item.
    - 4 Turn the right inner knob on the MFD L GTC to the right to highlight 'Options' in the GROUP field.
    - 5 Select the Enter button on the MFD L GTC. Go to Step 15.D.(7)(c).
  - (b) Turn the right outer knob on the MFD L GTC to the left until the cursor is in the ITEM field.
  - (c) Turn the right inner knob on the MFD L GTC to highlight 'FK658E - ADF2' in the ITEM field.
  - (d) Select the Enter button on the MFD L GTC.
  - (e) Using the Left and Right arrows on the MFD L GTC, highlight LOAD at the bottom of the display.
  - (f) Select the Select button on the MFD L GTC.

- (g) Monitor the software load.
- 1 Select the Enter button when the loading is complete to acknowledge the 'Upload and Crossfill Complete' window.
- (8) If applicable, load the Iridium Data Radio (FK676B- Iridium Data Radio) option as follows:
- NOTE:** If this is the first option to be loaded, start at Step 15.D.(8)(a). Otherwise, start at Step 15.D.(8)(b).
- (a) If this is the first option to be loaded, do as follows:
- 1 Push and release the right inner knob on the MFD L GTC to activate the cursor.
  - 2 Turn the right inner knob on the MFD L GTC to the right and highlight the software part number in the CARD window.
  - 3 Select the Enter button on the MFD L GTC to select the CARD item.
  - 4 Turn the right inner knob on the MFD L GTC to the right to highlight 'Options' in the GROUP field.
  - 5 Select the Enter button on the MFD L GTC. Go to Step 15.D.(8)(c).
- (b) Turn the right outer knob on the MFD L GTC to the left until the cursor is in the ITEM field.
- (c) Turn the right inner knob on the MFD L GTC to highlight 'FK676B - Iridium Data Radio' in the ITEM field.
- (d) Select the Enter button on the MFD L GTC.
- (e) Using the Left and Right arrows on the MFD L GTC, highlight LOAD at the bottom of the display.
- (f) Select the Select button on the MFD L GTC.
- (g) Monitor the Software load.
- 1 Select the Enter button when the loading is complete to acknowledge the 'Upload and Crossfill Complete' window.
- (9) If applicable, load the Laseref VI Option (FK676D - Laseref VI) option as follows:
- NOTE:** If this is the first option to be loaded, start at Step 15.D.(9)(a). Otherwise, start at Step 15.D.(9)(b).
- (a) If this is the first option to be loaded, do as follows:
- 1 Push and release the right inner knob on the MFD L GTC to activate the cursor.
  - 2 Turn the right inner knob on the MFD L GTC to the right and highlight the software part number in the CARD window.
  - 3 Select the Enter button on the MFD L GTC to select the CARD item.
  - 4 Turn the right inner knob on the MFD L GTC to the right highlight 'Options' in the GROUP field.
  - 5 Select the Enter button on the MFD L GTC. Go to Step 15.D.(9)(c).
- (b) Turn the right outer knob on the MFD L GTC to the left until the cursor is in the ITEM field.
- (c) Turn the right inner knob on the MFD L GTC to highlight 'FK676D - Laseref VI' in the ITEM field.
- (d) Select the Enter button on the MFD L GTC.
- (e) Using the Left and Right arrows on the MFD L GTC, highlight LOAD at the bottom of the display.

- (f) Select the Select button on the MFD L GTC.
  - (g) Monitor the software load.
    - 1 Select the Enter button when the loading is complete to acknowledge the 'Upload and Crossfill Complete' window.
- (10) If applicable, load the Crew Jumpseat Option (FK738G - Crew Jumpseat) option as follows:
- NOTE:** If this is the first option to be loaded, start at Step 15.D.(10)(a). Otherwise, start at Step 15.D.(10)(b).
- (a) If this is the first option to be loaded, do as follows:
    - 1 Push and release the right inner knob on the MFD L GTC to activate the cursor.
    - 2 Turn the right inner knob on the MFD L GTC to the right and highlight the software part number in the CARD window.
    - 3 Select the Enter button on the MFD L GTC to select the CARD item.
    - 4 Turn the right inner knob on the MFD L GTC to the right to highlight 'Options' in the GROUP field.
    - 5 Select the Enter button on the MFD L GTC. Go to Step 15.D.(10)(c).
  - (b) Turn the right outer knob on the MFD L GTC to the left until the cursor is in the ITEM field.
  - (c) Turn the right inner knob on the MFD L GTC to highlight 'FK738G - Crew Jumpseat' in the ITEM field.
  - (d) Select the Enter button on the MFD L GTC.
  - (e) Using the Left and Right arrows on the MFD L GTC, highlight LOAD at the bottom of the display.
  - (f) Select the Select button on the MFD L GTC.
  - (g) Monitor the Software load.
    - 1 Select the Enter button when the loading is complete to acknowledge the 'Upload and Crossfill Complete' window.
- (11) If applicable, load the CPDLC/Link 2000+ option as follows:
- (a) Turn the outer knob of the L PFD-GTC DIM knob to the OFF position.
  - (b) If installed, remove the Software Base Loader card (part number: 010-02010-14) from the upper slot of the L PFD.
  - (c) Put the CPDLC/Link 2000+ loader card (part number: 010-00330-FB) into the upper slot of the L PFD.
  - (d) Turn the outer knob of the L PFD-GTC DIM knob to the ON position.

**NOTE:** The L PFD will start in configuration mode.

**NOTE:** SYSTEM UPLOAD will show at the top of the screen.
  - (e) Make sure that PFD1 is selected on the MFD L GTC to control the L PFD.
  - (f) Push and release the right inner knob on the MFD L GTC to activate the cursor.
  - (g) Turn the right inner knob on the MFD L GTC to the right and highlight the SD CARD line item in the CARD window.
  - (h) Select the Enter button on the MFD L GTC.
  - (i) Turn the right inner knob on the MFD L GTC to highlight 'Enable\_Link2000CPDLC' in the GROUP field.



- (j) Select the Enter button on the MFD L GTC.
  - (k) Turn the right inner knob on the MFD L GTC to highlight 'Enable Link 2000+ CPCDLC' in the ITEM field.
  - (l) Select the Enter button on the MFD L GTC.
  - (m) Using the Left and Right arrows on the MFD L GTC, highlight LOAD at the bottom of the display.
  - (n) Select the Select button on the MFD L GTC.
  - (o) Monitor the Software load.
    - 1 Select the Enter button when the loading is complete to acknowledge the 'Upload and Crossfill Complete' window.
  - (p) Turn the outer knob of the L PFD-GTC DIM knob to the OFF position.
  - (q) Remove the CPDLC loader card (part number: 010-00330-FB) from the upper slot of the L PFD.
- (12) If applicable, load the SurfaceWatch option as follows:
- (a) Turn the outer knob of the L PFD-GTC DIM knob to the OFF position.
  - (b) If installed, remove the Software Base Loader card (part number: 010-02010-14) from the upper slot of the L PFD.
  - (c) Put the SurfaceWatch loader card (part number: 010-00330-5K) into the upper slot of the L PFD.
  - (d) Turn the outer knob of the L PFD-GTC DIM knob to the ON position.
    - NOTE:** The L PFD will start in configuration mode.
    - NOTE:** SYSTEM UPLOAD will show at the top of the screen.
  - (e) Make sure that PFD1 is selected on the MFD L GTC to control the L PFD.
  - (f) Push and release the right inner knob on the MFD L GTC to activate the cursor.
  - (g) Turn the right inner knob on the MFD L GTC to the right and highlight the SD CARD line item in the CARD window.
  - (h) Select the Enter button on the MFD L GTC.
  - (i) Turn the right inner knob on the MFD L GTC to highlight 'Enable\_SurfaceWatch' in the GROUP field.
  - (j) Select the Enter button on the MFD L GTC.
  - (k) Turn the right inner knob on the MFD L GTC to highlight 'Enable SurfaceWatch' in the ITEM field.
  - (l) Select the Enter button on the MFD L GTC.
  - (m) Using the Left and Right arrows on the MFD L GTC, highlight LOAD at the bottom of the display.
  - (n) Select the Select button on the MFD L GTC.
  - (o) Monitor the Software load.
    - 1 Select the Enter button when the loading is complete to acknowledge the 'Upload and Crossfill Complete' window.
  - (p) Turn the outer knob of the L PFD-GTC DIM knob to the OFF position.



- (q) Remove the SurfaceWatch loader card (part number: 010-00330-5K) from the upper slot of the L PFD.
- (13) If applicable, load the Enhanced Search and Rescue option as follows:
- (a) Turn the outer knob of the L PFD-GTC DIM knob to the OFF position.
  - (b) If installed, remove the Software Base Loader card (part number: 010-02010-14) from the upper slot of the L PFD.
  - (c) Put the Enhanced Search and Rescue loader card (part number: 010-00330-FG) into the upper slot of the L PFD.
  - (d) Turn the outer knob of the L PFD-GTC DIM knob to the ON position.  
**NOTE:** The L PFD will start in configuration mode.  
**NOTE:** SYSTEM UPLOAD will show at the top of the screen.
  - (e) Make sure that PFD1 is selected on the MFD L GTC to control the L PFD.
  - (f) Select the right inner knob on the MFD L GTC to activate the cursor.
  - (g) Turn the right inner knob on the MFD L GTC to the right and highlight the SD CARD line item in the CARD window.
  - (h) Select the Enter button on the MFD L GTC.
  - (i) Turn the right inner knob on the MFD L GTC to highlight 'Enable\_SAR' in the GROUP field.
  - (j) Select the Enter button on the MFD L GTC.
  - (k) Turn the right inner knob on the MFD L GTC to highlight 'Enable Enhanced Search and Rescue' in the ITEM field.
  - (l) Select the Enter button on the MFD L GTC.
  - (m) Using the Left and Right arrows on the MFD L GTC, highlight LOAD at the bottom of the display.
  - (n) Select the Select button on the MFD L GTC.
  - (o) Monitor the Software load.
    - 1 Select the Enter button when the loading is complete to acknowledge the 'Upload and Crossfill Complete' window.
  - (p) Turn the outer knob of the L PFD-GTC DIM knob to the OFF position.
  - (q) Remove the Enhanced Search and Rescue loader card (part number: 010-00330-FG) from the upper slot of the L PFD.
- (14) If applicable, load the FANS 1/A option as follows:
- (a) Turn the outer knob of the L PFD-GTC DIM knob to the OFF position.
  - (b) If installed, remove the Software Base Loader card (part number: 010-02010-14) from the upper slot of the L PFD.
  - (c) Put the FANS 1/A loader card (part number: 010-00330-J5) into the upper slot of the L PFD.
  - (d) Turn the outer knob of the L PFD-GTC DIM knob to the ON position.  
**NOTE:** The L PFD will start in configuration mode.  
**NOTE:** SYSTEM UPLOAD will show at the top of the screen.
  - (e) Make sure that PFD1 is selected on the MFD L GTC to control the L PFD.

- (f) Push and release the right inner knob on the MFD L GTC to activate the cursor.
  - (g) Turn the right inner knob on the MFD L GTC to the right and highlight the SD CARD line item in the CARD window.
  - (h) Select the Enter button on the MFD L GTC.
  - (i) Turn the right inner knob on the MFD L GTC to highlight 'Enable\_FANS' in the GROUP field.
  - (j) Select the Enter button on the MFD L GTC.
  - (k) Turn the right inner knob on the MFD L GTC to highlight 'FANS 1/A Enable' in the ITEM field.
  - (l) Select the Enter button on the MFD L GTC.
  - (m) Using the Left and Right arrows on the MFD L GTC, highlight LOAD at the bottom of the display.
  - (n) Select the Select button on the MFD L GTC.
  - (o) Monitor the Software load.
    - 1 Select the Enter button when the loading is complete to acknowledge the 'Upload and Crossfill Complete' window.
  - (p) Turn the outer knob of the L PFD-GTC DIM knob to the OFF position.
  - (q) Remove the FANS 1/A loader card (part number: 010-00330-J5) from the upper slot of the L PFD.
- E. Do the CMC Diagnostic Configuration Upload as follows:
- (1) If the L PFD is still powered on after doing the option loading, do as follows:
    - (a) Turn the outer knob of the L PFD-GTC DIM knob to the OFF position.
    - (b) If installed, remove the SD card from the upper slot of the L PFD.
  - (2) Put the CMC Configuration SD card (part number: 8204542-17) into the upper slot of the L PFD.
  - (3) Turn the outer knob of the L PFD-GTC DIM knob to the ON position.

**NOTE:** The L PFD will start in configuration mode.

**NOTE:** SYSTEM UPLOAD will show at the top of the screen.
  - (4) Make sure that PFD1 is selected on the MFD L GTC to control the L PFD
  - (5) Push and release right inner knob on the MFD L GTC to activate the cursor.
  - (6) Turn the right inner knob on the MFD L GTC, to highlight 'Model 700 CMC Config' in the GROUP field.
  - (7) Select the Enter button on the MFD L GTC.
  - (8) Turn the right inner knob on the MFD L GTC, to highlight '8204542-17 V2.60' in the ITEM field.
  - (9) Select the Enter button on the MFD L GTC.
  - (10) Using the Left and Right arrows on the pilots right GTC, highlight LOAD at the bottom of the display.
  - (11) Select the Select button on the MFD L GTC.

**NOTE:** A Delete or Retain prompt will show on the display.
  - (12) Turn the outer knob on the MFD L GTC and highlight Delete.
  - (13) Using the Left and Right arrows, highlight Delete at the bottom of the display.

**WARNING:** The steps above are the only way to delete the existing CMC files properly. Failure to follow the steps will result in an (amber) INCOMPLETE message, and will require you to do a full configuration load with all options.

- (14) Select the Enter button on the MFD L GTC.
- (15) Monitor the software load.
- (16) Select the Enter button when the loading is complete to acknowledge the 'Upload and Crossfill Complete' window.
- (17) Make sure that the CMC Diagnostic Configuration upload was successful as follows:
- (a) Push and release right knob on the MFD L GTC to deactivate the cursor.
  - (b) Turn the right inner knob on the MFD L GTC until the TRANSACTION LOG screen shows.
    - 1 Make sure that the top of the LOADER IMAGE column shows 'Card-XXXX'.
    - 2 Make sure that the top of the GROUP column shows 'Model 700 CMC Config'.
    - 3 Make sure that the top of the ITEM column shows '8204542-17 V2.60'.
    - 4 Make sure that the top of the STATUS column shows 'NO TRANS ID' in white.
    - 5 Make sure that there are no amber or red items in the STATUS column.
      - a If there are any (amber) or (red) items in the STATUS column, please speak Team 700 at 316-517-9335, 1-888-508-2379 or team700@txtav.com.
  - (c) Using the Left and Right arrows on the MFD L GTC, highlight DETAIL at the bottom of the display.
  - (d) Select the Select button on the GTC.
  - (e) Push and release right inner knob on the MFD L GTC to activate the cursor.
  - (f) Turn the right inner knob on the MFD L GTC to highlight '8204542-17 V2.60'.
  - (g) Select the Enter button on the GTC to expand the entry for '8204542-17 V2.60'.
  - (h) Record the value shown in the TRANSACTION ID column next to each line in table below.
    - Logging
    - Phase of Flight Blobs
    - OEM Alerts
    - OEM Blobs

**NOTE:** CLEAR CMC LOG and CLEAR CMC CONFIGURATION do not require verification.

- 1 Make sure that the four TRANSACTION ID values match the expected values.

TRANSACTION ID	Logging	Phase of Flight Blobs	OEM Alerts	OEM Blobs
TRANSACTION ID (Right Column)				
TRANSACTION ID (Expected Value)	0x8C706755	0x17AFDC6B	0xB2D1DEBE	0x053AC8F7B

- (i) If the TRANSACTION ID values recorded in table above are not correct, speak to Team 700 at 316-517-9335, 1-888-508-2379 or team700@txtav.com.

**CAUTION:** If the TRANSACTION ID values are not correct, do not continue. The CMC Diagnostic Configuration Upload is not correct.

- F. Do the Aircraft Configuration Loading as follows:
- (1) Make sure that the fuel and aircraft weight are set to the necessary units as follows:
    - (a) Push and release the right inner knob on the MFD L GTC to de-activate the cursor.
    - (b) Turn the right inner knob on the MFD L GTC to the right until the SYSTEM SETUP screen shows.
    - (c) If the fuel and aircraft weight units are not pounds, do as follows:
      - 1 Push and release right inner knob on the MFD L GTC to activate the cursor.
      - 2 Turn the right large knob on the MFD L GTC until the cursor is at the FUEL line in the DISPLAY UNITS box.
      - 3 Turn the right inner knob on the MFD L GTC, to highlight POUNDS.
      - 4 Select the Enter button on the MFD L GTC.
      - 5 Push and release right inner knob on the MFD L GTC to deactivate the cursor.
  - (2) Load the Transponder and TCAS Configuration as follows:
    - (a) Turn the right inner knob on the MFD L GTC to the right until the AIRCRAFT CONFIGURATION screen shows.
    - (b) Make sure that the registration and VFR code are correct. If not, do as follows:
      - 1 Push and release right inner knob on the MFD L GTC to activate the cursor.  
**NOTE:** The cursor should be on the Aircraft Registration line.
      - 2 Select the Keyboard button on the MFD L GTC GDU Controls screen.
      - 3 Enter the aircraft tail number.  
**NOTE:** A Hexadecimal code must be entered for non-US registered aircraft.
      - 4 The VFR code must be set to the correct value for the country of registry.
    - (c) Make sure that the Domain Identifier is correct. If the value is not correct, enter the three letter Identifier into the Domain Identifier line with Keyboard on the MDF L GTC GDU Controls screen.
      - 1 Find the correct ISO 3166-1 ALPHA-3 code for the country of registry as follows:
        - a Access the website [txtavsupport.com](http://txtavsupport.com) and log on with your User Name and Password.
        - b Under MY MODELS, select 'Citation 700'.
        - c Under AVIONICS, select 'Domain Identifier'.
        - d Find the necessary country and the associated three letter Identifier.  
**NOTE:** An example of a three letter Identifier is "USA" for the United States.
  - (3) Complete the Transponder and TCAS Configuration as follows:

**NOTE:** These steps are necessary whether changes were made to the Transponder and TCAS settings or not.

    - (a) Using the Left and Right arrows on the MFD L GTC, highlight SET GTX at the bottom of the display.
    - (b) Select, the Select button on the GTC.

- (c) Select the Enter button to select OK.
  - (d) Select the Enter button to acknowledge.
  - (e) Using the Left and Right arrows on MFD L GTC, highlight SET GTS at the bottom of the display.
  - (f) Select, the Select button on the GTC.
  - (g) Select the Enter button to select OK.
  - (h) Select the Enter button to acknowledge.
  - (i) Push and release right knob on MFD L GTC to deactivate the cursor.
- (4) Program the Configuration Modules as follows:
- (a) On the MFD L GTC do as follows:
    - 1 Turn the right inner on the MFD L GTC to the left to select the SYSTEM UPLOAD screen on the L PFD.
    - 2 Using the Left and Right arrows, highlight UPDT CFG at the bottom of the L PFD.
    - 3 Select the Select button on the MFD L GTC.
    - 4 Turn the right outer knob on the MFD L GTC to highlight Yes.
    - 5 Select the Enter button.
    - 6 Monitor the update status.
    - 7 When update is complete, select the Enter button.
- NOTE:** The AIRCRAFT ID number is kept in the system for later use as a comparison tool, so it is very important to make sure that the system is configured correctly before you confirm the software in the steps that follow.
- (5) Confirm the AIRCRAFT ID as follows:
- (a) Turn the right inner knob on the MFD L GTC to the right until the CONFIGURATION MANAGER screen shows.
  - (b) At the top of the screen, make sure that the two AIRCRAFT ID numbers match.
    - 1 If they do not match, do as follows:
      - a Using the Left and Right arrows on the MFD L GTC, highlight CNFM AC at the bottom of the display.
      - b Select the Select button on the MFD L GTC.

**NOTE:** A window will show that states 'Confirm aircraft ID as expected configuration?'.
      - c Using the Left and Right arrows on the MFD L GTC, highlight OK.
      - d Select the Select button on the MFD L GTC.
      - e At the top of the screen, make sure that the two AIRCRAFT ID numbers in the EXPECTED CONFIGURATION ID column and the ACTUAL CONFIGURATION ID column match.
- (6) Make sure that the Configuration Load is correct as follows:

**NOTE:** This is completed while you are still on the CONFIGURATION MANAGER screen.

  - (a) Push and release right inner knob on the MFD L GTC to activate the cursor.

- (b) Turn the right outer knob on the MFD GTC to scroll through the list of LRU's in the CONFIGURATION ITEMS box.
  - 1 Make sure that each LRU shows Valid (in green) except for GSR1 and GSR2 which if installed, will show 'Status Not Supported' (in gray).
- (7) Do the Transaction ID Verification as follows:
  - (a) Push and release right inner knob on the MFD L GTC to deactivate the cursor.
  - (b) Turn the right inner knob to the left on the MFD L GTC to the left until the 'TRANSACTION LOG' page shows.
  - (c) Make sure that the bottom entry in the list is labeled as follows:
    - 1 LOADER IMAGE shows '006-B2257-58'.
    - 2 GROUP shows 'Model 700 Base Configuration'.
    - 3 ITEM shows 'Model 700 Base'.
    - 4 STATUS shows 'PASS' (in green).
  - (d) Verify the Transaction Logs for Installed Options:
    - 1 Make sure that there is a line entry for every loaded option as determined previously in the "Record the Installed Options" section. (Refer to Step 6.B.(5).
    - 2 Make sure that for each of the line entries, there is a PASS (in green) in the STATUS column.
    - 3 Make sure there is not a line entry marked CNFM CFG with 'FLEET ID UPDATED' (in amber) in the STATUS column.
      - a If an amber 'FLEET ID UPDATED' is present, the software must be reloaded.  
**NOTE:** A line entry of CNFM CFG with 'AIRCRAFT ID UPDATED' (in white) in the STATUS column or no line entry with CNFM CFG is acceptable.
    - 4 Make sure the loaded options only show one-time in the Transaction Log.
    - 5 Make sure that here are no entries with an amber or red indication in the STATUS column.  
**NOTE:** Green and white are the only acceptable colors for status.
- (8) Do the Crew Profile Loading as follows:
  - (a) Turn aircraft electrical power off. (Refer to Cessna Model 700 Maintenance Manual, Chapter 24, External Electrical Power - Maintenance Practices.)
  - (b) Remove the 8204542-17 - CMC Configuration Card from the upper slot of the L PFD.
  - (c) Remove one of the copied SD cards with the 'force\_config' file from the upper slot of the MFD.
  - (d) Remove one of the copied SD cards with the 'force\_config' file from the upper slot of the R PFD.
  - (e) Put the 8203142-11 - Default Pilot Profile Card into the upper slot of the MFD.
  - (f) Turn aircraft electrical power on. (Refer to Cessna Model 700 Maintenance Manual, Chapter 24, External Electrical Power - Maintenance Practices.)

(g) On the MFD L GTC, do as follows:

- 1 Select Home.
- 2 Select Aircraft Systems.
- 3 Select Maintenance.
- 4 Select Start Maintenance.
- 5 Enter the Maintenance Mode password (CACCDMS) when prompted.
- 6 Select Set Default Profile.
- 7 Select Cessna 700 Default profile or the customer defined default profile.
- 8 Select OK when prompted.
- 9 Select Home.
- 10 Select Utilities.
- 11 Select Crew Profile.
- 12 Select Restore Defaults.
- 13 Select OK when prompted.
- 14 In the Default Profile button, make sure that the Pilot Profile CRC number is listed as DFF4381F.

**NOTE:** This CRC number does not apply if using a customer defined default profile.

- a If the Pilot Profile CRC number is not listed as DFF4381F, do the Crew Profile Loading again.
- b Please contact Team 700 at 316-517-9335, 1-888-508-2379 or team700@txtav.com if you have any questions about the correct Pilot Profile CRC number.

- 15 Remove the 8203142-11 - Default Pilot Profile Card from the upper slot of the MFD.

(9) Do the Final Verification /Return to Service as follows:

(a) Check the LRU Status as follows:

- 1 Select Home on the MFD L GTC.
- 2 Select Utilities.
- 3 Select Setup.
- 4 Select Avionics Status.
- 5 Select the LRU Info tab on the left side.
  - a Make sure all the LRU's show a (green) check mark.

(b) Check the Message Status as follows:

- 1 Select the MSG on the MFD L GTC.
  - a Make sure no DB Mismatch message shows.
  - b Make sure no Manifest message shows.
  - c Make sure no Config message shows.

- (c) If the aircraft is equipped with CPDLC Link 2000+ and/or FANS-1A, do as follows:
    - 1 Select Home on the MFD L GTC.
    - 2 Make sure there is an ATC Datalink button in the lower left corner of the GTC screen.
    - 3 Select ATC Datalink.
      - a If equipped with CPDLC-Link 2000+, make sure there is a CPDLC tab on the left side of the GTC screen.
      - b If equipped with FANS-1/A, make sure there is an ADS-C tab on the left side of the GTC screen.
  - (d) Select the PERF screen, check the Weight and Fuel data as follows:
    - 1 Select Weight and Fuel.
    - 2 If the weight is not shown, do as follows:
      - a Select Set Empty Weight.
      - b Enter the recorded value in Step 6.B (5).
      - c Select the Enter button.
      - d Select Crew and Stores.
      - e Enter the recorded value in Step 6.B(5).
      - f Select the Enter button.
  - (e) Make sure that the AVIONICS CONFIG CAS message does not show.
  - (f) If the aircraft is equipped with GDL 69, GSR 56, ACARS, do as follows:
    - 1 Select Home on the MFD L GTC.
    - 2 Select Weather.
    - 3 Select Weather Selection.
      - a Make sure that "Connex Weather" shows.
      - b Make sure that "Sirius XM Weather" shows if the aircraft is equipped with GDL 69.
      - c Make sure that "ACARS Weather" shows if ACARS option is installed.
  - (g) Turn aircraft electrical power off. (Refer to Cessna Model 700 Maintenance Manual, Chapter 24, External Electrical Power - Maintenance Practices.)
- (10) Install the 8204541-21 CMC Viewer card in the upper slot of the MFD.
- 15. Update the 700 Longitude FAA Approved Flight Manuals 700FM-02 (Vol 1), 700NP-02 (Vol 2) and 700EAP-02 (Vol 3).
    - A. Make sure the 700 Longitude FAA Approved Flight Manual 700FM-02 (Vol 1) is at Revision 2, or later.
    - B. Make sure the 700 Longitude FAA Approved Flight Manual 700NP-02 (Vol 2) is at Revision 2, or later.
    - C. Make sure the 700 Longitude FAA Approved Flight Manual 700EAP-02 (Vol 3) is at Revision 2, or later.
  - 16. Update the Garmin G5000 Integrated Avionics System Pilot's Guide.
    - A. Remove and discard the 190-02432-00 Rev A. Pilot's Guide.
    - B. Put one 190-02432-01 Rev A. Pilot's Guide in the aircraft where it is accessible to the flight crew.
  - 17. 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.

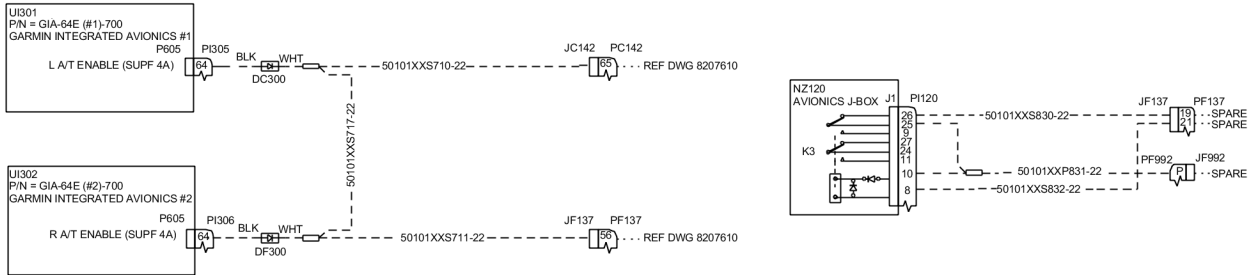


18. Make an entry in the airplane logbook that states compliance and method of compliance with this service document.

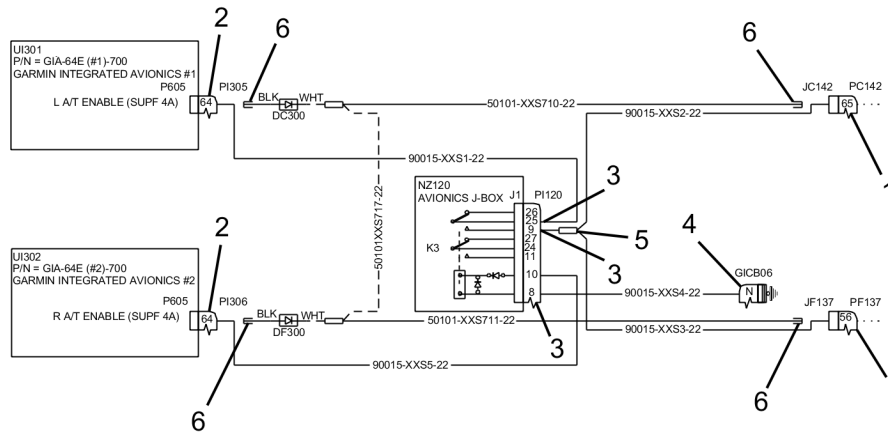
**NOTE:** Textron Aviation recommends that compliance with all service documents is reported to a maintenance tracking system provider.

- 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.

A109944



Before Modification  
 Aircraft -0001 thru -0030



After Modification  
 Aircraft -0001 thru -0030

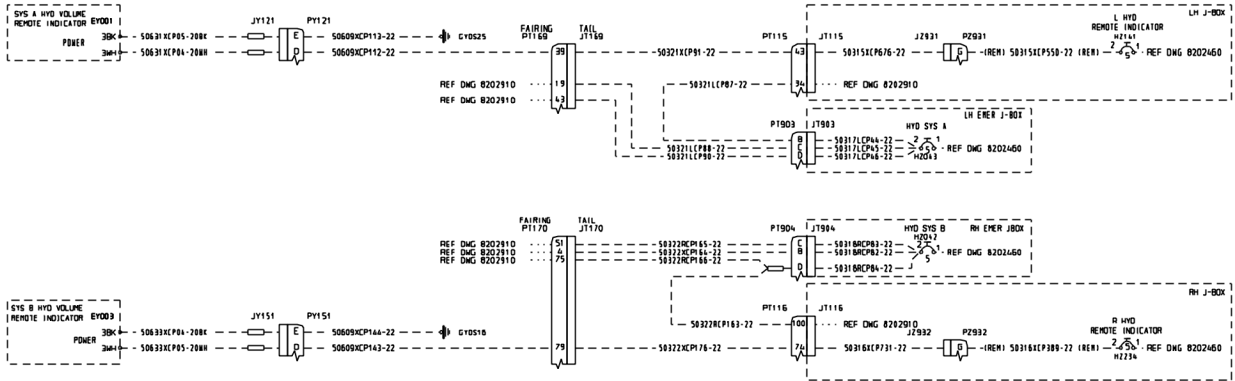
Legend	
-----	Existing Wire
—————	New Wire

Legend	
1	M39029/57-354
2	M39029/58-360
3	M39029/63-368
4	FC120N2
5	M81824/1-1
6	TC4001

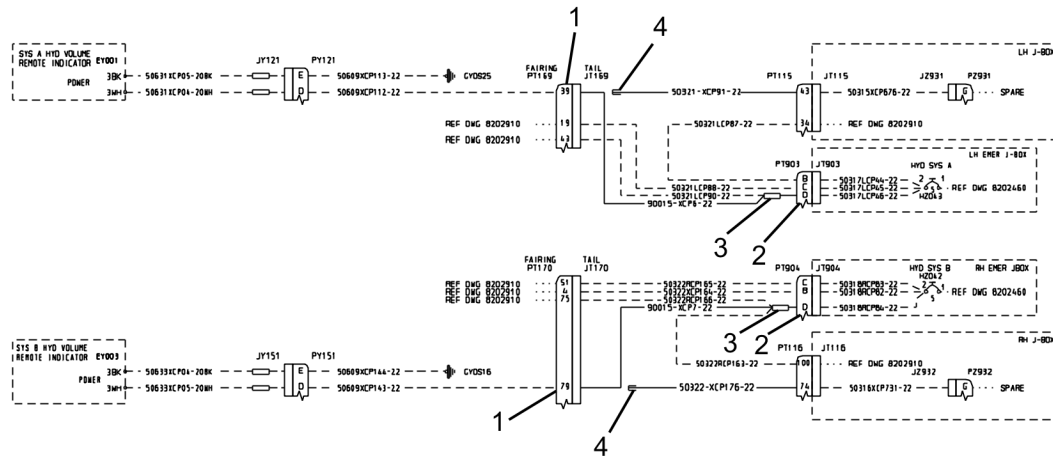
8290015-1

Figure 1. Garmin 5.1.7 Wiring Modification for Aircraft -0001 thru -0030 (Sheet 1)

A110489



Before Modification  
 Aircraft -0001 thru -0030



After Modification  
 Aircraft -0001 thru -0030

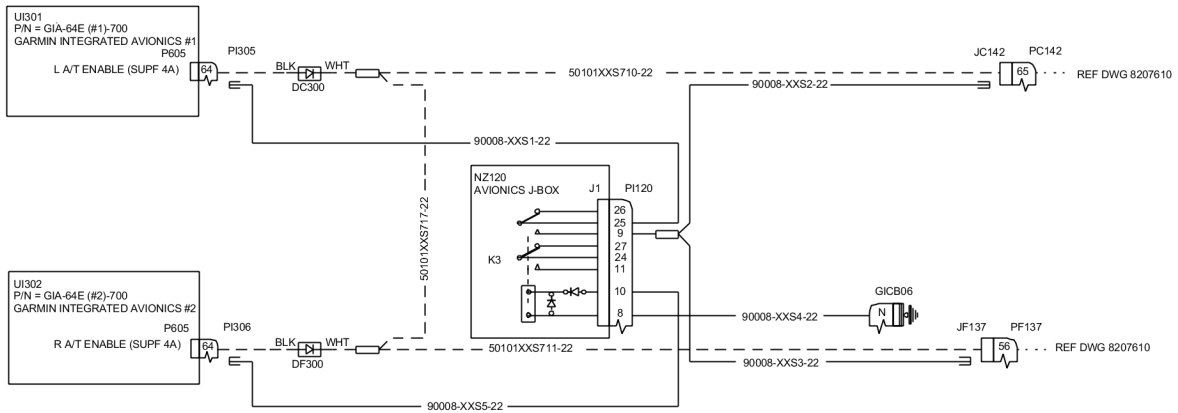
Legend	
-----	Existing Wire
—————	New Wire

Legend	
1	M39029/57-354
2	M39029/58-363
3	M81824/1-1
4	TC4001

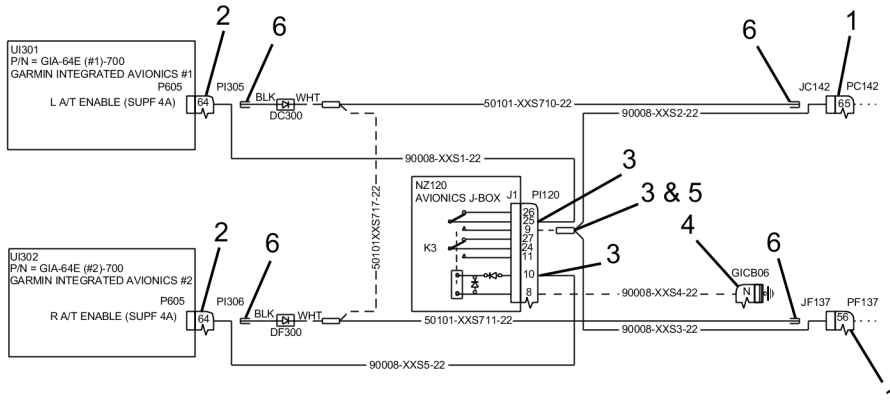
8290015-1

Figure 1. Garmin 5.1.7 Wiring Modification for Aircraft -0001 thru -0030 (Sheet 2)

A110490



Before Modification  
 Aircraft -0031 and -0032



After Modification  
 Aircraft -0031 and -0032

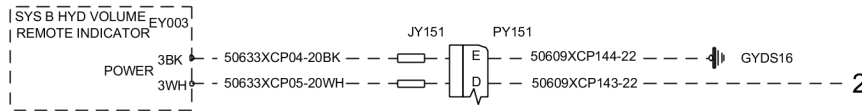
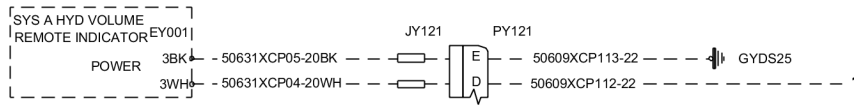
Legend	
-----	Existing Wire
—————	New Wire

Legend	
1	M39029/57-354
2	M39029/58-360
3	M39029/63-368
4	FC120N2
5	M81824/1-1
6	TC4001

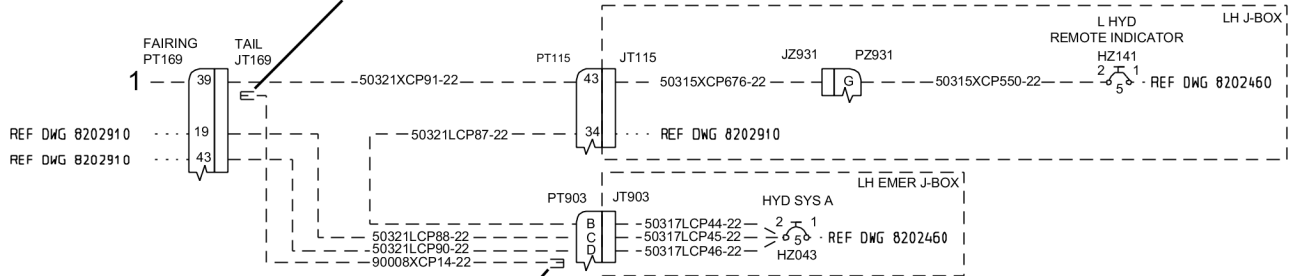
8290015-1

Figure 2. Wiring Modification for Aircraft -0031 and -0032 (Sheet 1)

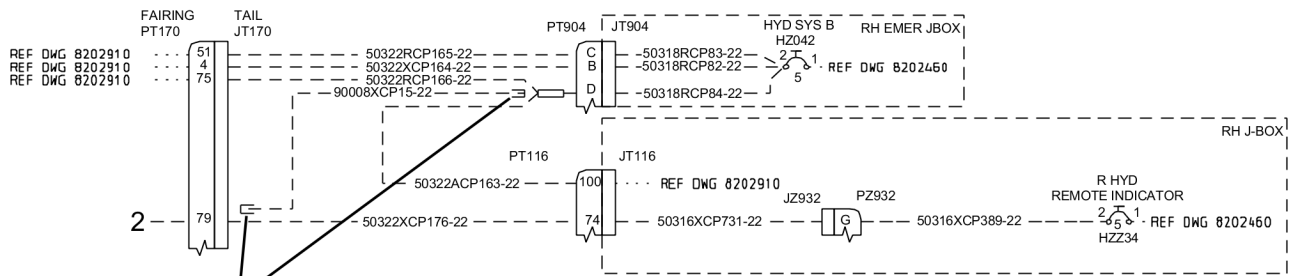
A110004



Capped and Stowed Electrical Wire



Capped and Stowed Electrical Wire



Capped and Stowed Electrical Wire

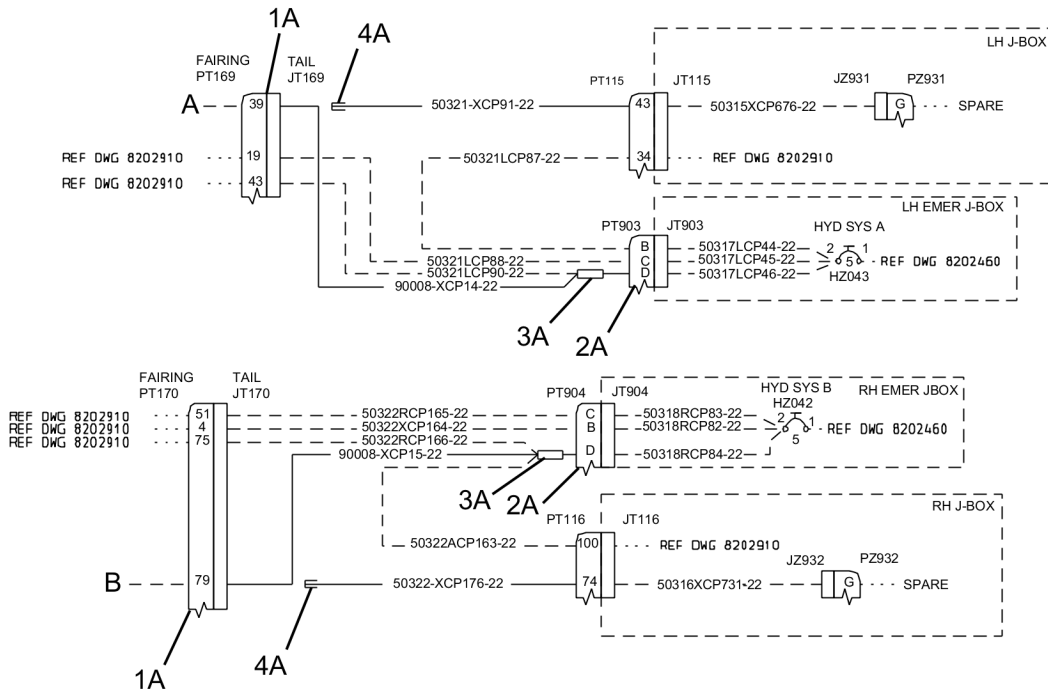
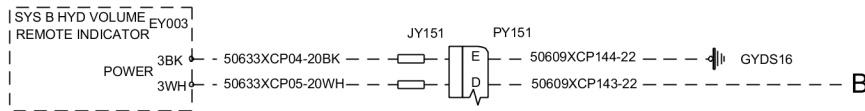
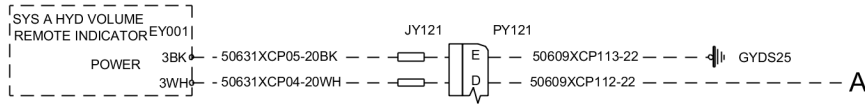
Before Modification  
 Aircraft -0031 Thru -0032

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

Figure 2. Wiring Modification for Aircraft -0031 and -0032 (Sheet 2)

8290009

A110005



After Modification  
 Aircraft -0031 and -0032

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

Legend	
1A	M39029/57-354
2A	M39029/58-363
3A	M81824/1-1
4A	TC4001

8290009

Figure 2. Wiring Modification for Aircraft -0031 and -0032 (Sheet 3)

**MATERIAL INFORMATION**

Aircraft -0001 thru -0030 order the kit below to complete this service document.

NEW P/N	QTY	KEY WORD	OLD P/N	INSTRUCTIONS/ DISPOSITION
<b>SB700-42-01-0</b>	<b>1</b>	<b>Kit, CONSISTING OF THE FOLLOWING PARTS:</b>		
CM2692-15J1S	1	Plug Button	Install	
FC120N2	1	Contact	Install	
M39029/57-354	4	Contact	Install	
M39029/63-368	4	Contact	Install	
M39029/58-360	2	Contact	Install	
M39029/58-363	4	Contact	Install	
M81044/12-22-9	6.0 feet	8250101-3: (90015-7610-XXS1-22) 64PI305 - 25PI120	Install	
M81044/12-22-9	6.0 feet	8250101-3: (90015-7610-XXS2-22) 65JC142 - (SP) 9PI120	Install	
M81044/12-22-9	6.0 feet	8250101-3: (90015-7610-XXS3-22) 56JF137 - (SP) 9PI120	Install	
M81044/12-22-9	4.0 feet	8250101-3: (90015-7610-XXS4-22) NGICB06 - 8PI120	Install	
M81044/12-22-9	3.5 feet	8250101-3: (90015-7610-XXS5-22) 64PI306 - 10PI120	Install	
M81044/12-22-9	4.5 feet	8250321-2: (90015-2910-XCP6-22) 39JT169 - (SP) DPT903	Install	
M81044/12-22-9	4.5 feet	8250322-2: (90015-2910-XCP7-22) 79JT170 - (SP) DPT904	Install	
M81824/1-1	5	Splice	Install	
MS3367-2-9	6	Tie Wraps	Install	
S3478-1	1	CB Block Assembly	Install	
S4111-1B	3	Label	Install	
TC4001	18	Endcap	Install	
10S1048X	2	Control Wheel Steering (CWS) Switch	Install	
7461152-1	1	Pilot Outboard Wheel Cap	Install	
7461152-2	1	Copilot Outboard Wheel Cap	Install	
SB700-42-01	1	Instructions		

Aircraft -0031 thru -0032 order the kit below to complete this service document.

NEW P/N	QTY	KEY WORD	OLD P/N	INSTRUCTIONS/ DISPOSITION
<b>SB700-42-01-1</b>	<b>1</b>	<b>Kit, CONSISTING OF THE FOLLOWING PARTS:</b>		
CM2692-15J1S	1	Plug Button	Install	
M39029/57-354	4	Contact	Install	
M39029/63-368	2	Contact	Install	
M39029/58-360	2	Contact	Install	
M39029/58-363	4	Contact	Install	
M81824/1-1	5	Splice	Install	
MS3367-2-9	6	Tie Wraps	Install	
S3478-1	1	CB Block Assembly	Install	
S4111-1B	3	Labels	Install	
TC4001	18	Endcap	Install	
10S1048X	2	Control Wheel Steering (CWS) Switch	Install	
7461152-1	1	Pilot Outboard Wheel Cap	Install	
7461152-2	1	Copilot Outboard Wheel Cap	Install	
SB700-42-01	1	Instructions		

Order the parts below to complete this service document.

NEW P/N	QTY	KEY WORD	OLD P/N	INSTRUCTIONS/ DISPOSITION
010-02010-14	1	Garmin 5.1.7 Software Version 2257.58 Base Card	Install	
8203142-11	1	Default Pilot Profile Card	Install	
8204541-21	1	CMC Viewer Card	Install	
8204542-17	1	CMC Configuration Card	Install	
190-02432-01 Rev A	1	Garmin G5000 Integrated Avionics System Pilot's Guide.	Install	

If necessary, order the parts below to install this service document.

NEW P/N	QTY	KEY WORD	OLD P/N	INSTRUCTIONS/ DISPOSITION
010-00330-FB (See Note)	1	Link 2000+ CPDLC Enablement Card	Install	
010-00330-FG (See Note)	1	Enhanced Search and Rescue Enablement Card	Install	



NEW P/N	QTY	KEY WORD	OLD P/N	INSTRUCTIONS/ DISPOSITION
010-00330-J5 (See Note)	1	FANS 1/A Enablement Card	Install	
010-00330-5K (See Note)	1	SurfaceWatch Enablement Card	Install	

**NOTE:** If this option has not been previously installed on aircraft and the operator would like to have these options, then the enablement cards will need to be purchased and not will be covered under warranty.

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

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

## FLIGHT CREW OPERATIONS SUMMARY

SB700-42-01 - Garmin G5000 Software Update 5.1.7 to Version 2257.58

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.

- New Functionality with Garmin 5.1.7 Version 2257.58 (Does not include button labeling or graphic changes if functions remain the same. Some functionality may require optional software.
  - PERF – The climb/cruise/descent full performance feature is enabled. Performance data can be entered by the crew during the power up initialization process.
  - TOLD – The Takeoff and Landing Data feature is enabled.
    - Takeoff distance, landing distance, and V-speeds can be automatically calculated based on crew entries. TOLD also accounts for brake energy via brake temperature input.
    - When landing data is entered in TOLD, the FMS speed will now change to Vref at a pilot configurable distance from the runway.
    - The pilot can also set an increment to Vref for the FMS speed.
  - SurfaceWatch added alerts
    - RUNWAY TOO SHORT: shown if the remaining runway distance is less than the required distance calculated by TOLD for takeoff or landing.
    - CHECK RUNWAY: shown if the airplane is on (before takeoff) or approaching (while landing) a runway that disagrees with the runway selected in the flight plan or TOLD. Note: to configure for circling approaches, set landing runway in TOLD and approach runway in the flight plan.
    - Vertical Situation Display (VSD) – The VSD feature is available as an inset on Nav map windows.
  - New and improved Autothrottle functionality
    - The autothrottle can be used for takeoff and landing.
      - For takeoff, the throttle must be advanced to the TO position manually.
      - For landing, the target speed may be set to any speed down to VREF. The autothrottle will increase the tracked speed automatically for turbulence and/or wind gusts.
      - The autothrottle will automatically engage to protect against overspeed or underspeed.
      - The autothrottle will automatically engage for Emergency Descent Mode.
  - Honeywell Laseref VI IRS – An IRS is available as an option to replace the Litef AHRS.
    - The IRS can be used as a backup navigation sensor to provide redundancy during overwater or remote operations.
    - The IRS is also required for approaches with RNP less than 0.3, which is not included in this software upgrade, nor is approval for any RNP AR approaches or RF legs.
  - SATCOM Direct has been added as a ACARS provider.
  - Observer Seat – An optional cockpit observer seat is available.
  - New autopilot functionality.
    - A Control Wheel Steering button is added to each pilot yoke.
    - The ALT mode is improved to track altitude better when flaps are extended or retracted.
  - Automatic cabin divider door functionality.
    - For airplanes equipped with a powered cabin divider door, the Avionics system now commands the door open when the flaps or landing gear are not UP.
    - An interface is added to the GTC to manually open the door if desired; the PAX SAFETY switch no longer opens the door.
  - Control of Cabin Internet System.
    - The crew now can turn the cabin internet system on or off. There is also an option to reset the cabin internet should it be necessary.
  - New CAS Messages.

- Amber A/I WING ZONE 2 – Shown if the wing anti-ice is on when RAT is greater than 15°C.
- Amber FUEL TANK COLD – Shown if the fuel tank temperature is too cold.
- Amber FUEL TEMP MISCOMPARE – Shown if the fuel tank temperature differs from left to right by more than 5°C when on the ground.
- Amber STUCK MIC – Shown if a Com radio push-to-talk button is stuck, and the radio has stopped transmitting.



**TITLE**

INTEGRATED MODULAR AVIONICS - GARMIN G5000 SOFTWARE UPDATE 5.1.7 VERSION 2257.58

**TO:**

Cessna Model 700 Aircraft Owner

**REASON**

To update the Garmin G5000 system 5.1.7 software to version 2257.58.

**COMPLIANCE**

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

**LABOR HOURS**

WORK PHASE	LABOR-HOURS
Modification	75.0

**MATERIAL AVAILABILITY**

Order the part/kits below to install this modification.

PART NUMBER	AVAILABILITY	COST
SB700-42-01-0	*	*
SB700-42-01-1	*	*
010-02010-14SP	*	*
8203142-11	*	*
8204541-21	*	*
8204542-17	*	*
190-02432-01 Rev A	*	*

If necessary, order the parts below to install this modification.

February 1, 2021

SB700-42-01  
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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PART NUMBER	AVAILABILITY	COST
010-00330-FB (See Note)	*	*
010-00330-FG (See Note)	*	*
010-00330-J5 (See Note)	*	*
010-00330-5K (See Note)	*	*

**NOTE:** If this option has not been previously installed on aircraft and the operator would like to have these options, then the enablement cards will need to be purchased and not will be covered under warranty.

\* Please contact a Textron Aviation Authorized Service Facility for current cost and availability of parts listed in this service document.

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

#### WARRANTY

Eligible airplanes exhibiting conditions described in this service document may demonstrate improved operation by incorporation of the work described herein. This service document is to be accomplished at the *discretion* of the owner. Eligible airplanes may qualify for parts and labor coverage to the extent noted in the *Labor Hours* and *Material Availability* sections of this document.

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

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

**Labor Coverage:** Textron Aviation-owned and Textron Aviation-authorized Service Facilities rated to perform maintenance on the specific model of 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](http://ww2.txtav.com/Parts) or email the completed Textron Aviation Claim Form to [warranty@txtav.com](mailto: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 1, 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](http://www.txtavsupport.com) to register.

