

TITLE

NAVIGATION - GH-3900 SECONDARY FLIGHT DISPLAY (SFD) DG HEADING MODE

EFFECTIVITY**MODEL**

680A (Citation Latitude)

SERIAL NUMBERS

-0001 and On

REASON

To change the GH-3900 Secondary Flight Display (SFD) heading mode software to allow for DG Mode navigation when the SFD Magnetometer becomes unreliable.

DESCRIPTION

This service document provides parts and instructions to update the GH-3900 Secondary Flight Display (SFD) heading mode software.

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.

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

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

June 22, 2021

SB680A-34-19
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Textron Aviation Customer Service, P.O. Box 7706, Wichita, KS 67277, U.S.A. 1-316-517-5800

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TOOLING

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

NAME	NUMBER	MANUFACTURER	USE
1. Laptop Computer (using Microsoft Windows operating system) with an RS-232 serial port (original equipment)	L-3 576-6158-01 Fieldloader Software (or most current version)	Textron Aviation Parts Distribution 7121 Southwest Boulevard Wichita, KS 67215	To do the L-3 Communications GH-3900 Detachable Configuration Module (DCM) Data Load.
2. USB to serial dongle)			
3. L-3 Communications GH-3900 Fieldloader Software			

WEIGHT AND BALANCE INFORMATION

Negligible

REFERENCES

Cessna Model 680A Maintenance Manual

L-3 Avionics Systems Service Bulletin SB9200-34500-7 Rev A, or later

PUBLICATIONS AFFECTED

None

ACCOMPLISHMENT INSTRUCTIONS

1. Connect external electrical power to the airplane.
 - A. If necessary, adjust the ground power unit (GPU) to 28.5 Vdc +0.5 and -0.5 Vdc.
2. Set the L BATT and R BATT switches to the ON position.
3. Set the L AVN and R AVN switches to the ON position.
4. Set the STBY PWR switch to the ON position.
5. Remove the center pedestal access panel 244CC to get access to the electrical connector (JI300). (Refer to Cessna 680A Maintenance Manual, Chapter 6, Access Plates and Panel Identification - Description and Operation.)
6. Use a serial cable and a USB to serial adapter to connect the laptop to the electrical connector (JI300).

NOTE: The electrical connector is on the diagnostic connections panel at the aft end of the pedestal.

7. Aircraft -0001 thru -0254, do the steps that follow:
 - A. If part number 9200-34500-0401 GH-3900 Standby Flight Display is installed.
 - (1) Do L-3 Avionics Systems Service Bulletin SB9200-34500-7 Rev A, or later.
 - (2) Go to Paragraph 8.A.
 - B. If part number 9200-34502-0401 GH-3900 Standby Flight Display is installed.
 - (1) Go to Paragraph 8.A.

8. Aircraft -0255 and On, do the steps that follow:
- A. Load Configuration File dcm_680A_092320.bin as follows:
- (1) If not already done, download Configuration File dcm_680A-092320 from the Textron Aviation website, txtav.com.
 - (2) If necessary, on the laptop, start the L-3 Fieldloader software.
 - (3) Select COM port from the pull down menu.
NOTE: The COM port selection can change on different computers. If the selected COM port does not operate correctly, select a different COM port.
 - (4) Push and hold the M button and the BARO knob found on the bezel of the secondary flight display (SFD).
 - (a) After the SETUP MENU page shows on the SFD, release the M button.
 - (5) Using the BARO Knob, scroll down and highlight DATA LOAD.
 - (6) Push and release the BARO knob to select 'Data Load'.
 - (7) Push and release the BARO knob to select 'Activate Data Load'.
 - (a) Make sure the SFD shows DATA LOAD READY.
 - (8) Select the CONNECT button on the laptop.
 - (9) Push the BROWSE button and locate dcm_680A_092320.bin file to load to the SFD.
 - (10) Select the UPDATE button on the laptop.
 - (11) Wait until the SFD shows TRANSFER COMPLETE and the laptop shows DATA LOAD COMPLETE.
 - (12) Select the DISCONNECT button on the laptop.
- B. Do the GH-3900 System Check as follows:
- (1) Set the STBY PWR switch to the OFF position.
 - (2) Push and hold the M KEY and the BARO knob on the Standby Display.
 - (3) Set the STBY PWR switch to the ON position.
 - (4) Release the M KEY and BARO knob when the SETUP MENU screen shows.
NOTE: Do Steps 8.B.(1) thru 8.B.(4) again if the SETUP MENU does not show.
 - (5) Turn the BARO knob and scroll to SYSTEM ID page.
 - (a) Make sure the software version shows R01.05.
 - (b) Make sure the DCM Value shows DCM:680A:092320.
 - (6) Set the STBY PWR switch to the OFF position.
 - (7) Set the STBY PWR switch to the ON position.
 - (8) After the SFD is fully operational. Make sure of the following:
 - (a) That no invalidity messages or flags are shown.
 - (b) The correct configuration options are shown.
 - (c) The attitude is level and stable.
 - (d) The altitude matches field elevation within ± 20 feet (± 6.09 m) with correct barometric pressure set.
 - (e) The heading indication matches the PFD selected heading.

9. Make sure that all switches are in the OFF/NORM position.
10. Disconnect electrical power from the airplane.
11. Disconnect the laptop from the aircraft.
12. Install the center pedestal access panel 244CC. (Refer to Cessna 680A Maintenance Manual, Chapter 6, Access Plates and Panel Identification - Description and Operation.)
13. Update Cessna Model 680A (Latitude) Airplane Flight Manual (0001 and On) (68AFM).
 - A. Make sure that Supplement 15 Original Issue or later is inserted into the 680A Citation Latitude (00001 and On) FAA Approved Airplane Flight Manual (68AFM).
14. 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.
15. Remove the maintenance warning tags and connect the airplane battery.
16. 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.

MATERIAL INFORMATION

Download the file below to complete this service document.

NEW P/N	QTY	KEY WORD	INSTRUCTIONS/ DISPOSITION
dcm_680A_092320.bin	1	Configuration File	Download from txtav.com
GH-3900.2 System Software Release 1.5 (SW Version R01.05)	1	SFD Software	Download from http://www.as.l-3com.com/customer-support/technical-publications/

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

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

FLIGHT CREW OPERATIONS SUMMARY

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

- This service bulletin provides an update to the GH-3900 that will allow it to go into Directional Gyro (DG) mode when operating in latitudes where the magnetometer cannot provide accurate data.
- While in DG mode the GH-3900 will continue to provide information to the Garmin avionics for comparison to the primary heading systems.
- When departing from a latitude where the GH-3900 is in DG mode the crew will need to set the initial heading.
- The GH-3900 will automatically revert to magnetometer data when the aircraft reaches a latitude where the magnetometer data is valid.

TITLE

NAVIGATION - GH-3900 SECONDARY FLIGHT DISPLAY (SFD) DG HEADING MODE

TO:

Cessna Model 680A Aircraft Owner

REASON

To change the GH-3900 Secondary Flight Display (SFD) heading mode software to allow for DG Mode navigation when the SFD Magnetometer becomes unreliable.

COMPLIANCE

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

LABOR HOURS

WORK PHASE	LABOR-HOURS
Modification	As Necessary
Test and Inspection	As Necessary

MATERIAL AVAILABILITY

Download the file below to complete this service document.

PART NUMBER	AVAILABILITY	COST
dcm_680A_092320.bin (See Note *)	*	*
GH-3900.2 System Software Release 1.5 (SW Version R01.05) (See Note **)	*	*

NOTE: * The dcm_680A-092320 Configuration File can be downloaded at txtav.com.

NOTE: ** The GH-3900.2 System Software Release 1.5 (SW Version R01.05) can be downloaded at <http://www.as.l-3com.com/customer-support/technical-publications/>.

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.



SB9200-34500-7 (Rev. A)

November 3, 2016

GH-3900.2 System Software Release 1.5 (SW Version R01.05)

Planning Information

- Effectivity:** Electronic Standby Indicator
P/N 9200-34500-0101, -0201, -0401, -0601
- ECN:** 90174, 90326
- Approval:** Implementation of this service bulletin may affect the approval of the unit installation. It is the responsibility of the installer to obtain government or other regulatory agency approval.
- Export Compliance:** This technical data is controlled under the Export Administration Regulations (EAR) and may not be exported without proper authorization by the U.S. Department of Commerce.
- Concurrent Requirements:** System Software Release 1.5 (version R01.05) requires ACM Tool (576-6157-06) revision 1.01 to generate an aircraft configuration file version 02.13.
Units with System Software Release 1.1 (version R01.01) or Release 1.2 (version R01.02) or Release 1.3 (version R01.03) or Release 1.4 (version R01.04) do not need to be updated unless the functionality of System Software Release 1.5 (version R01.05) is required.
The new configuration options selectable with the ACM Tool for System Software Release 1.5 do not change the way attitude and air data (e.g. altitude and airspeed) are computed within the system.
System Software Release 1.5 is not compatible with aircraft configuration file version 02.03 (used for System Software release 1.0) and will generate a “compatibility error” message on the splash screen. Units with the aircraft configuration file version 02.03 are required to generate a new configuration file when updating their indicator to Release 1.5.
- Reason:** To inform customers of System Software Release 1.5 (version R01.05) for the GH-3900.2 Indicator.
- Description:** Incorporation of System Software Release 1.5 (version R01.05) provides the following functionality:
- Option to select SDI (00 or 01) for the Discrete/Diagnostic Output labels 272, 350, 351.
 - Configuration option to Enable GH-3000 Release 5.0 Emulation
 - Configuration option to enable internal DG mode with a magnetometer as the heading input" (includes “set heading” menu item)
 - New Crosscheck Attitude message for overrate conditions. Includes Align or Clear operation.
 - On the display the gap between Baro and Alt Tape, and Mach and Airspeed tape is removed.
 - Automatic Reboot alignment function if RAM BIT failures occur in air.

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Compliance:	<u>Customer Units:</u> Incorporation of System Software Release 1.5 (version R01.05) is recommended and is incorporated only at the request or approval of the customer or repair station. Note: If sending the unit to the FAA Certificated Repair Station co-located at the OEM facility, the customer must request this software upgrade be incorporated. Normal service costs shall be charged for this upgrade, which includes a full functional check.
Manpower:	The incorporation of this software release requires less than 1 hour.
Weight and Balance:	N/A
Electrical Load Data:	N/A
Software Accomplishment Summary:	0030-34477-01
References:	Installation Manual, (0040-34401-01, Rev K or later)
Other Publications Affected:	ACM Tool, Instruction Manual, (0040-34402-06) Pilot's Guide, (0040-34400-01, Rev F or later)
Interchangeability of Parts:	N/A

Material Information

Material:	N/A
Industry Support Information:	N/A
Material Necessary for Each Aircraft Component:	N/A
Material Necessary for Each Spare:	N/A
Re-Identified Parts:	N/A
Tooling:	N/A

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Accomplishment Instructions:

This software upgrade is accomplished either at the FAA Certificated Repair Station co-located at the OEM facility, an approved original equipment manufacturer (OEM), or an approved L-3 AS dealer using the instructions provided in this service bulletin.

Refer to the shipping instructions below for specific shipping information when sending the unit to the FAA Certificated Repair Station co-located at the OEM facility.

How to obtain System Software and Aircraft Configuration Tool

The System Software, aircraft configuration tool, and field loader tool can be obtained by either compact disc or downloading from the L-3 Technical Publications website.

NOTES

1. A unit being updated from System Software Release 1.1, 1.2, 1.3, and 1.4 to System Software Release 1.5 will benefit for the corrections, but do not need to update the current aircraft configuration file.
2. A unit being updated from System Software Release 1.1, 1.2, 1.3, and 1.4 to System Software Release 1.5 and want the new options are required to update the aircraft configuration file. Refer to Instruction Manual (0040-34402-06).

If using the compact disc, order the following from L-3 AS (Phone: 616-285-6457, Email avionics.sales@L-3com.com):

- System Software CD for Release 1.5, Package, (9230-34429-0105)
- ACM Tool (576-6157-06) CD for Release 1.5, Package, (9230-34433-0006)
- Field Loader Tool (576-6158-03) CD, (9230-10005-0003)

First time users of the website are required to sign up for site access.

1. Go to <http://www.as.l-3com.com/customer-support/technical-publications/>.
2. On the Technical Publications page first time users must fill out the Secure Site Access Request and return the form and supporting documentation to avionics.techpubs@l-3com.com.
3. Refer to the referenced GH-3900.2 installation manual for details.

Users with site access are to go to <https://www.avionictechpubs.com/>.

1. On the left side of the home page and select Search Documents. Enter “GH-3900.2” in the basic search field.
2. The search results provide a list of available publications and software for the GH-3900.2.
3. The system software is located in the Software Release Document (GH-3900.2-34400-R01.05).
4. Click on the “details” for the document you want to subscribe too.
5. Click on the “Subscribe to this document”. A zip file will download to your computer.
6. If you do not see the “Subscribe to this document” option, then access to this document is restricted beyond what is required for the publication. Contact the Manuals Administrator at avionics.techpubs@l-3com.com for subscription access.

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A. Generate Aircraft Configuration File

1. Generate a new aircraft configuration file using ACM Tool (576-6157-06, Rev 1.01, aircraft config version: 02.13), if any of the new options of System Software Release 1.5 are required.
 - Instructions for using the ACM Tool are provided in reference Instruction Manual, (0040-34402-06).
 - Release 1.5 is not compatible with aircraft configuration file version 02.03 (used for System Software release 1.0) and will generate a “compatibility error” message on the splash screen. Units with the aircraft configuration file version 02.03 are required to generate a new configuration file if updating their indicator to release 1.5.
 - Aircraft Config File Version 02.06 (revision 2.03 and 02.03.1) used for System Software release 1.1 can be loaded into the new ACM Tool (576-6157-06) to generate a new configuration file (aircraft configuration file version 1.01, revision 2.13).
 - Aircraft Config File Version 02.08 (revision 2.04 and 02.05) used for System Software release 1.2 can be loaded into the new ACM Tool (576-6157-06) to generate a new configuration file (aircraft configuration file version 1.01, revision 2.13).
 - Aircraft Config File Version 02.07 (revision 02.09) used for System Software release 1.3 can be loaded into the new ACM Tool (576-6157-06) to generate a new configuration file (aircraft configuration file version 1.01, revision 2.13).
 - Aircraft Config File Version 02.11 (revision 02.11) used for System Software release 1.4 can be loaded into the new ACM Tool (576-6157-06) to generate a new configuration file (aircraft configuration file version 1.01, revision 2.13).

B. Setup Procedure

NOTE

Aircraft or rotorcraft that do not have an onboard maintenance computer or an external RS-232 interface (typically a 9-pin connector) installed as part of the aircraft wiring harness must temporarily install an Aircraft Cable (9020-34000-01) or if performing this procedure on a bench use Bench Cable (9020-34000-02 refer to the referenced GH-3900.2 installation manual for details) to load configuration data. Refer to the RS-232 data loading instructions below.

1. Connect aircraft to external power source to conserve aircraft battery power.
2. Verify circuit breakers for the GH-3900.2 are open.
3. Verify the circuit breaker for the air data computer and magnetometer (if applicable) are closed.
4. Apply power to the GH-3900.2 system using applicable essential or emergency electrical buses.
5. Press and hold the **M** button and the adjustment knob located on the indicator bezel.
6. Close the circuit breaker for the indicator.
7. Continue to hold the **M** button and the adjustment knob until the SETUP MENU is shown on the indicator display.
8. In the SETUP MENU use the adjustment knob to scroll the menu items with the selected menu item being highlighted in blue. An unselected menu item has a dark gray background. Push the adjustment knob to open the highlighted menu item.
9. From the SETUP MENU select DATA LOAD Menu. See Figure 1A. The DATA LOAD Menu shows the Activate Dataload selected.
 - The Dataload Menu is used to activate the Dataload Mode and start the data load (DL) software.

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10. Press the adjustment knob to activate the Data Load Mode. The DL software does the following:
 - The message Data Load – READY is shown on the screen. See Figure 1B.
 - The ARINC 429 Input Bus 4 and ARINC 429 Output Bus 1 are set to high speed (100 kbps).
 - The RS-232 bi-directional interface is set to 115,200 baud with no parity, 1 start bit, 8 data bits, and 1 stop bit.
 - The ARINC 429 Input Bus 4 is set to receive Label 361.
11. The unit is now ready to communicate with the computer and receive data.

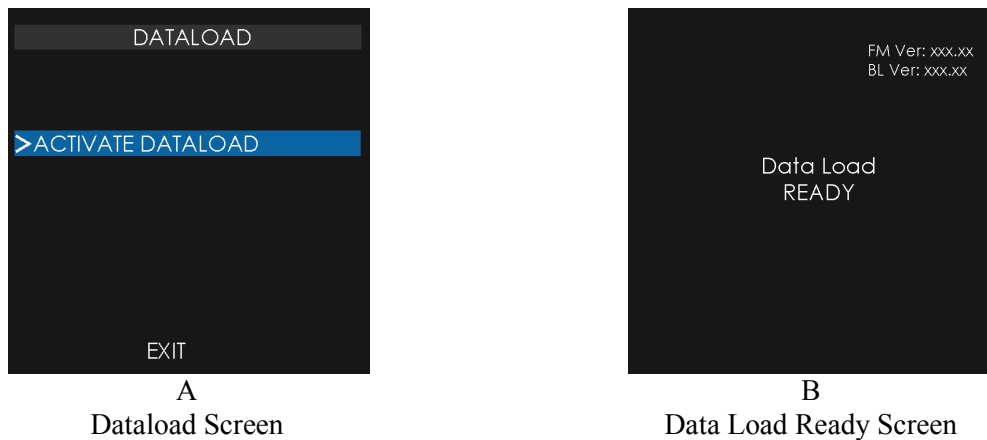


Figure 1: Dataload Screen

C. Load System Software and Aircraft Configuration Data

The GH-3900.2 indicator uses Data Loading (DL) Software to support the transfer of field-loadable System Software data from a portable maintenance computer or an onboard maintenance computer. The following procedures provide the information necessary to transfer updates to the indicators System Software and aircraft configuration file.

1. Transfer Data Using ARINC 429 (option)

Follow this procedure only when using ARINC 429 to transfer data. Otherwise go to paragraph 2 if transferring data using RS-232.

If using an onboard maintenance computer to transfer System Software and aircraft configuration data; follow the instructions provided in the aircraft maintenance manual (AMM).

While in the Data Load Mode the indicator DL software communicates with the computer using the ARINC 615-3 specification protocol for the transfer of ARINC 665-2 formatted data (system software and DCM configuration file) on ARINC 429 Input Bus 4 (via label 361) and ARINC 429 Output Bus 1 (via label 226). The data transfer process is automatic once initiated by the computer. The System Software and configuration data file data ends in a .bin extension.

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- a. During the transfer of data the indicator shows the message “Data Load: TRANSFER IN PROGRESS”.
 - If the transfer of data is not successful, the indicator may show one of the following messages:
 - Data Load: TRANSFER ABORTED... (File Type Error) or (SW Address Error) or (SW Size Error) or (GE Address Error) or (GE Size Error). These errors are shown if the selected flight software file is not recognized by the DL software. Check the file being selected and make sure it is correct. Restart the transfer procedure.
 - Data Load: TIMEOUT... This error is shown if data has not been detected by the DL software in the last 30 seconds. Restart the transfer procedure.
 - Data Load: TRANSFER ABORTED...and "HW Compatibility Error" A compatibility error with the target hardware has been detected during the transfer. Select the correct version of software for the target hardware.
 - Data Load: TRANSFER FAIL...and "SW CRC Error". An error within the flight software has been detected during the transfer. Restart the transfer procedure.
- b. When the transfer of data is successful the indicator shows the message “Data Load: TRANSFER COMPLETE, READY”.
- c. Cycle power to the GH-3900.2 system and observe that the indicator transitions to the Splash Screen. Verify that the Software Version is “R01.05” and that the unit transitions to normal operating mode.
 - If an error message is shown on the Splash Screen, check that the aircraft configuration file is the correct version. If problems continue refer to the Maintenance section of the referenced GH-3900.2 install manual to determine corrective action.
- d. Cycle power to the GH-3900.2 system and hold the **M** button and the adjustment knob until the SETUP MENU is shown on the indicator display.
- e. Go to the System Identification (ID) screen and verify the following:
 - Software Part Number (SW PART NO) : 8010-34400-0105
 - Software Version (SW VER): R01.05
 - Aircraft Config File Version: 02.06, 02.08, 02.09, 02.11 or 02.13 (as applicable)
- f. Cycle power to the GH-3900.2 system.
- g. Perform the operation checkout provided in paragraph D to verify operation.

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2. Transfer Data Using RS-232 (option)

Follow this procedure only when using RS-232 to transfer data. Otherwise go to paragraph 1 if transferring data using ARINC 429.

While in the Data Loading Mode the indicator DL software communicates with the portable maintenance computer using the RS-232 bi-directional serial channel. The maintenance computer uses a GH-3900 Loader Tool to interact with the indicator's data loader (DL) software to transfer data from the maintenance computer to the indicator. The data transfer process is controlled requiring send/receive control commands. Use the following procedure to save System Software to the indicator.

NOTE

The RS-232 serial port on the maintenance computer is automatically set to COM1 with Baud Rate set to 115200. A maintenance computer without a RS-232 serial connection requires a USB to serial adapter (9080-10018-01, refer to the referenced GH-3900.2 install manual details).

- a. Connect the maintenance computer to the RS-232 serial port using a serial cable or RS-232/USB converter (9080-10018-01). If the aircraft is not provisioned with an RS-232 maintenance port for the GH-3900.2, use an in-line maintenance harness (9020-34000-01).
- b. Start up the GH Field Loader software. See Figure 4-2.
- c. A portable maintenance computer with a serial port uses the COM1 port. If a USB to serial adapter is used, the appropriate COM port needs to be determined. Note – All available COM ports may be viewed by clicking on the drop down arrow.
- d. Press the Connect button to establish communication between the GH-3900.2 and the maintenance computer.

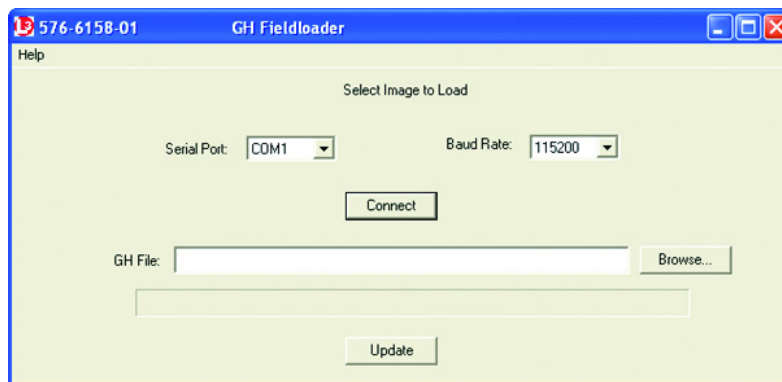


Figure 4-2: Example of GH Field Loader

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- e. Press the Browse button and locate the .bin System Software data file. Select the file and press the Update button.
- f. During the transfer of data the indicator shows the message “Data Load: TRANSFER IN PROGRESS”.
 - If the transfer of data is not successful, the indicator may show one of the following messages:
 - Data Load: TRANSFER ABORTED ... (File Type Error) or (SW Address Error) or (SW Size Error) or (GE Address Error) or (GE Size Error). These errors are shown if the selected System Software file is not recognized by the DL software. Check the file being selected and make sure it is correct. Restart the transfer procedure.
 - Data Load: TIMEOUT... This error is shown if data has not been detected by the DL software in the last 30 seconds. Restart the transfer procedure.
 - Data Load: TRANSFER ABORTED...and "HW Compatibility Error" A compatibility error with the target hardware has been detected during the transfer. Select the correct version of software for the target hardware.
 - Data Load: TRANSFER FAIL...and "SW CRC Error". An error within the System Software has been detected during the transfer. Restart the transfer procedure.
- g. When the transfer of data is successful the indicator shows the message “Data Load: TRANSFER COMPLETE, READY”.
- h. Press the Browse button and locate the .bin file for the configuration file (i.e., .bin). Select the file and press the Update button. Refer to step f & g for instructions during data transfer.
- i. When all file transfers are complete. Press the Disconnect button on the GH-3900.2 Field Loader software and remove RS-232 cable.
- j. Cycle power to the GH-3900.2 system and observe that the indicator transitions to the Splash Screen. Verify that the Software Version is “R01.05” and that the unit transitions to normal operating mode.
 - If an error message is shown on the Splash Screen, refer to paragraph 4.3.3 in the Maintenance section to determine corrective action.
- k. Cycle power to the GH-3900.2 system while holding the **M** button and the adjustment knob until the SETUP MENU is shown on the indicator display.
- l. Go to the System Identification (ID) screen and verify the following:
 - Software Part Number (SW PART NO) : 8010-34400-0105
 - Software Version (SW VER): R01.05
 - Aircraft Config File Version: 02.06, 02.08, 02.09, 02.11, or 02.13 (as applicable)
- m. Cycle power to the GH-3900.2 system.
- n. Perform the operation checkout provided in paragraph D to verify operation.

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D. Operation Checkout

1. Verify that no invalidity messages or flags are displayed.
2. Check that correct configuration options (e.g. tape backgrounds, heading tape, slip/skid indicator, aircraft symbol, and digit colors) are showing on the screen.
3. Attitude is level and stable.
4. Altitude matches field elevation within 75 feet with correct baro setting.
5. Heading indication is correct on known heading.

Testing Procedures:

An approved original equipment operator (OEM) shall use the operational checkout provided by this service bulletin to verify correct operation of the unit.

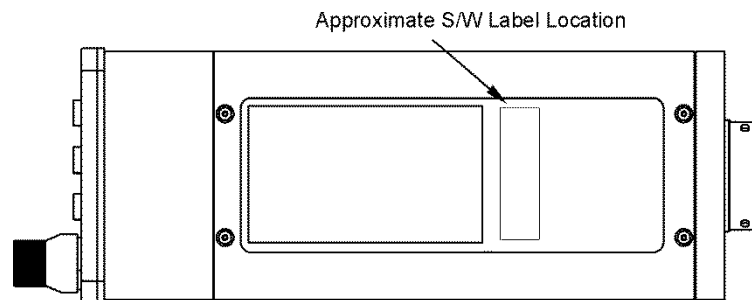
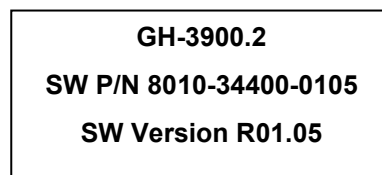
If the unit is removed from the aircraft and sent to the FAA Certificated Repair Station co-located at the OEM facility, then a performance test shall be performed on the unit.

Identification Procedures:

The following version information shall be displayed on the identification screen (ID):

- SW VER: R01.05
- AIRCRAFT CONFIG FILE: VERSION
02.06 for Release 1.1 or
02.08 for Release 1.2 or
02.09 for Release 1.3 or
02.11 for Release 1.4 or
02.13 for Release 1.5

Affix a software label to the recessed area of the GH-3900.2 as shown below. If applicable, remove and replace older label. A label template (Avery® 22828) has been included at the end of this service bulletin.



Top View

Shipping Instructions:

CAUTION

Units must be shipped in proper shipping containers to avoid damage. If a container is not available contact Avionics Systems to have one sent to you.

U.S. Returns:

It is recommended that you call L-3 Avionics Systems to obtain the most current turnaround time (TAT) prior to sending multiple units in for repair. Please send your unit to:

L-3 Avionics Systems
Attn: Customer Service
5353 52nd Street, S.E.
Grand Rapids, MI USA 49512-9704
Telephone: (800) 453-0288 or (616) 949-6600
Fax: (616) 977-6898

Include return shipping instructions, a telephone number and contact information for the person handling the return.

For additional assistance, call L-3 Avionics Systems Customer Service (800-453-0288 or 616-949-6600).

International Returns:

International customers must call L-3 Avionics Systems Customer Service prior to shipping unit to L-3 Avionics Systems for repair, modification, upgrade or enhancement.

The Service Administrator determines the unit's classification (Military or Civil) and provides the international customer with shipping instructions based on the unit's classification.

All units must be shipped prepaid to L-3 Avionics Systems. **U.S. Formal Entry is Required for All Imports.** Import fees are billed back to the international customer. Failure to follow import process could severely delay clearing customer unit through U.S. Customs and result in additional fees.

NOTE

Refer to Service Letter SL-261 for more details on international shipping.

