

## REVISION TRANSMITTAL

This sheet transmits Revision 3 to CAL-34-03 which:

- A. Is updated with Revision F of Garmin Service Advisory No. 1612

**NOTE:** This revision replaces the original issue and all previous revisions of CAL-34-03 in their entirety.

### REVISION COMPLIANCE

INFORMATIONAL. This service letter is for informational purposes only.

### LOG OF REVISIONS

Original Issue	August 4, 2016
Revision 1	September 26, 2016
Revision 2	January 25, 2021
Revision 3	May 24, 2021



**TITLE**

NAVIGATION - TRANSMITTAL OF GARMIN SERVICE ADVISORY NO.: 1612 REVISION F, 2020 IGRF (INTERNATIONAL GEOMAGNETIC REFERENCE FIELD) MAGNETIC FIELD MODEL

**EFFECTIVITY**

The airplanes that follow that are equipped with a Garmin Integrated Flight Deck (ex. G1000).

MODEL	SERIAL NUMBERS
208	20800416, 20800500 and On
208B	208B1190, 208B1216, 208B02000 and On

**REASON**

The 2020 IGRF Magnetic Field Model requires an update by December 31, 2021.

**DESCRIPTION**

This service letter transmits Garmin Service Advisory NO. 1612 Revision F, 2020 IGRF (International Geomagnetic Reference Field) Magnetic Field Model.

**COMPLIANCE**

INFORMATIONAL. This service document is for informational purposes only.

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.

**REFERENCES**

Garmin Service Advisory NO. 1612 Revision F 2020 IGRF (International Geomagnetic Reference Field) Magnetic Field Model.

**PUBLICATIONS AFFECTED**

None.

Original Issue - August 4, 2016  
Revision 3 - May 24, 2021

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**ACCOMPLISHMENT INSTRUCTIONS**

1. Review and complete the Garmin Service Advisory NO. 1612 Revision F, 2020 IGRF (International Geomagnetic Reference Field) Magnetic Field Model.
2. Make an entry in the airplane logbook that states compliance and method of compliance with this service letter.

## **SERVICE ADVISORY**

**NO.: 1612 Rev F**

**TO:** Owners and Operators of Garmin Integrated Flight Decks  
**DATE:** November 12, 2020  
**SUBJECT:** 2020 IGRF (International Geomagnetic Reference Field) Magnetic Field Model  
**REVISION F:** Added step to stop power to GIA #2 and operating system specific instructions

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### **AFFECTED PRODUCTS**

All Garmin G1000 Integrated Flight Decks (G900X, G950, G1000(H), G1000 NXi, Cirrus Perspective™, Embraer Prodigy™) with a Garmin AHRS and GDU software versions 6.00 and greater are affected.

All Garmin G2000, G3000, G5000(H), and Embraer Prodigy® Touch systems with a Garmin AHRS are also affected.

### **NOTE**

G1000, G900X, G950, Cirrus Perspective, and Embraer Prodigy systems with GDU software versions 5.02 and previous are covered by a separate service bulletin. Contact your local dealer.

### **DESCRIPTION**

The 2020 IGRF Magnetic Field Model is now available. Refer to the RESOLUTION section for instructions on how to update the IGRF Magnetic Field Model. Completion must be accomplished before December 31, 2021.

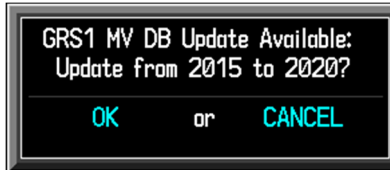
## SERVICE ADVISORY

### RESOLUTION

#### **Garmin Integrated Flight Decks with GIA software versions less than 7.00 and greater than 7.71**

The 2020 IGRF Magnetic Field Model is available to update as part of the Navigation Database cycle 2012 (and subsequent database cycles).

1. Update the Navigation Database as described in the applicable pilot's guide.
2. At the following prompt, select "OK" to update the IGRF Magnetic Field Model.



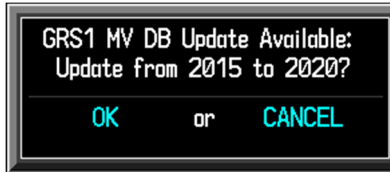
### **NOTE**

For systems with multiple GRS units installed, a similar message will appear for each GRS.

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### Garmin Integrated Flight Decks with GIA software versions 7.00 to 7.71

After updating to Navigation Database cycle 2012 (or subsequent database cycles), the following prompt will show on the display. Selecting “OK” to update the IGRF will result in a timeout error. The IGRF will not be updated.



To update the IGRF do the following:

1. Put a blank SD card in your PC's SD card reader/writer.

#### NOTE

For G900X, G950, G1000(H), Cirrus Perspective, and Embraer Prodigy systems using 006-B1330-04, the SD card must be SanDisk brand 2GB or less and formatted to FAT 32.

2. Go to [fly.garmin.com/fly-garmin/redirect/magvar-update](http://fly.garmin.com/fly-garmin/redirect/magvar-update).
3. Download one of the following 2020 IGRF update files.
  - 006-B1330-04 - G900X, G950, G1000(H), Cirrus Perspective, and Embraer Prodigy
  - 006-B1330-05 - G2000, G3000, G5000, and Embraer Prodigy Touch systems
4. Save the file to a PC.
5. For Microsoft Windows systems:
  - a. Double-click the .exe file saved in Step 4.
  - b. Obey the onscreen prompts to save the database to the SD card.

#### NOTE

Do not copy the .exe file to the SD card.

- c. Continue to Step 7.
6. For other operating systems:
    - a. Open the zip archive and extract it to a folder.

#### NOTE

The content is comprised of several folders that are named by software version (i.e., 4.00 or 13.00) and several additional files such as igrf\_10.rgn, igrf\_13.rgn, etc.

#### NOTE

Do not copy the zip archive to the SD card.

- b. Continue to Step 7.

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7. Eject the SD card.
8. Connect the aircraft to a ground power unit.
9. Put the SD card in the top slot of **PFD1**.

**NOTE**

Not using PFD1 may result in a failed IGRF database.



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10. Pull the circuit breaker for GIA #2 to prevent power on.
11. Energize the system.
12. This prompt will show on the display.

### NOTE

The screenshot below is for reference only. Actual GDU software version shown may differ depending on the version of the current GDU software.

```
INITIALIZING SYSTEM  
CHECKING SOFTWARE VERSION.  
GDU SOFTWARE VERSION 15.00 DETECTED. PLEASE WAIT FOR THE SYSTEM TO INITIALIZE.  
0% COMPLETE
```

13. The system will reboot and start uploading the 2020 IGRF Magnetic Field Model.

### NOTE

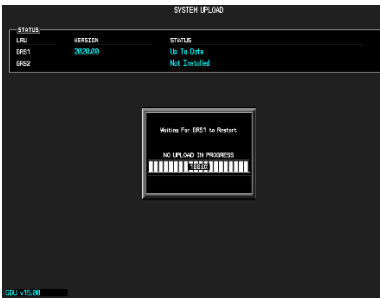
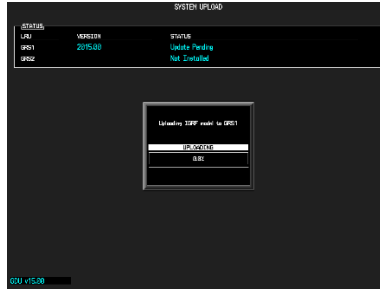
Do not interact with the MFD during this process. Interacting with the MFD may result in a failed IGRF database.

### CAUTION

This process may take longer than 20 minutes to complete. Do not perform a system power cycle during this step.

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14. Do the following if progress does not begin:
  - a. Stop power to the appropriate GRS.
  - b. Energize the appropriate GRS.



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15. When the update is complete this prompt will show on the display.



16. Remove the SD card.
17. Restore GIA #2 circuit breaker.
18. Stop power to the system.

