

## Diamond Aircraft Industries GmbH N.A. Otto-Straße 5 2700 Wiener Neustadt Austria

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# SERVICE INFORMATION No. SI 42-212

**NOTE:** SI's are used only:

1) To distribute information from DAI to our customers.

2) To distribute applicable information/documents from our suppliers to our customers with additional information.

Typically there is no revision service for SI's. Each new information or change of that will be sent

along with a new SI.

# I. TECHNICAL DETAILS

#### 1.1 Airplanes affected:

DA 42 /M airplanes

# 1.2 Subject:

GARMIN Software Service Bulletin No. 0533 Rev. C

ATA-Code: 34-00

#### 1.3 Reason:

GARMIN has issued Software Service Bulletin No. 0533 Rev. C regarding the update of the IGRF (International Geomagnetic Reference Field) Magnetic Field Model from base year 2010 to 2015 for G1000 installations equipped with GDU Software versions 5.02 and previous.

#### 1.4 Information:

For detailed technical information refer to GARMIN Software Service Bulletin No. 0533 Rev. C which is applicable without any further additions or restrictions.

# **II. OTHERS**

GARMIN Software Service Bulletin No. 0533 Rev. C is attached to this Service Information.

In case of doubt contact GARMIN Ltd.



# SOFTWARE SERVICE BULLETIN

NO.: 0533 Rev C

**TO:** All Garmin Aviation Service Centers

DATE: November 16, 2016

**SUBJECT:** New 2015 IGRF Magnetic Field Model For G1000, G900X, G950, Cirrus

Perspective, Embraer Prodigy Equipped Aircraft With GDU Software

Versions 5.02 And Previous

**REVISION C:** Updated for 2015 IGRF Magnetic Field Model

#### PRODUCT AFFECTED

G1000, G900X, G950, Cirrus Perspective, and Embraer Prodigy systems (with GDU Software Versions 5.02 and previous) equipped with a GRS 77 AHRS containing IGRF Magnetic Field Model 2010 are affected. The IGRF Magnetic Field Model can be viewed on the System Status page in Configuration mode. For instructions on viewing the IGRF Magnetic Field Model refer to the MODIFICATION INSTRUCTIONS Section of this Service Bulletin.

NOTE

Refer to Garmin Service Advisory 1612 for instructions on systems with GDU software versions 6.00 and greater.

#### **PURPOSE**

This service bulletin contains instructions for verifying and updating the IGRF (International Geometric Reference Frame) Magnetic Field Model from base year 2010 to 2015. As the earth's magnetic field is continuously changing, similar updates will become available every five years.

#### **DESCRIPTION**

This modification consists of verifying and updating the IGRF Magnetic Field Model.

# **AFMS AND PILOT'S GUIDE CONSIDERATIONS**

There are no recommended AFMS changes.

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#### **COMPLIANCE**

Compliance with this software service bulletin is recommended for the next regularly scheduled aircraft maintenance event. Completion must be accomplished prior to December 31, 2016.

## **REFERENCES**

For general information regarding the G1000 Configuration mode see the G1000 Configuration and Line Maintenance Manual, P/N 190-00303-04, Rev. F or later.

## WARRANTY INFORMATION

This modification is not warranty reimbursable.

#### **MODIFICATION INSTRUCTIONS**

Refer to the MATERIAL INFORMATION section of this bulletin for instructions on how to create a 2015 IGRF Model Update Card.

## CAUTION

Make sure electrical power to the system is not interrupted during the update process. If electrical power is interrupted during the update process, the system may require maintenance.

With the G1000 turned off, insert the 2015 IGRF Model Update Card into the top slot of the PFD.

- 1. Hold the ENT key down while powering on the MFD and PFD.
- 2. Apply power to entire Garmin Integrated Flight Deck.
- 3. Press the FMS knob to activate the cursor.
- 4. Using the FMS knob highlight **GRS1 MV DB** in the LRU field.
- 5. If IGRF Part Number is 006-D0159-02 and Version is 2010.00 continue to step #6. If IGRF Part Number is 006-D0159-03 and Version is 2015.00, do not continue this procedure.



- 6. Press the FMS knob to deactivate the cursor.
- 7. Turn the small FMS knob to the Software Upload page in the System group.
- 8. Press the FMS knob to highlight IGRF VER 2015.00 006-D0159-03 in the File List.



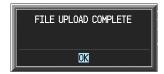
- 9. Press the LOAD softkey.
- 10. Select OK and press the ENT key to acknowledge the following prompt:



11. Monitor the upload status as it progresses:



12. After the files finish loading, press the ENT key to acknowledge the following prompt:



- 13. Press the FMS knob to deactivate the cursor.
- 14. Turn the small FMS knob to the System Status Page.
- 15. Press the FMS knob to activate the cursor.
- 16. Using the FMS knob highlight **GRS1 MV DB** in the LRU field.
- 17. Verify IGRF Part Number is 006-D0159-03 and Version is 2015.00.

# **TESTING PROCEDURE**

None.

#### MATERIAL INFORMATION

Do the following to create a 2015 IGRF Magnetic Field Model update card:

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

NOTE

SD card must be SanDisk brand 2GB or less and formatted to FAT 32.

- 2. Go to https://dealers.garmin.com.
- 3. Download the 006-B1330-03 2015 IGRF database file.
- 4. Save the database file to a PC.
- 5. Double-click on the .exe database file saved in Step 3.
- 6. Obey the onscreen prompts to save the database to the SD card.

NOTE

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

7. Eject the SD card.