

SERVICE INFORMATION NO. SI 42-014

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 send along with a new SI.

I. TECHNICAL DETAILS

1.1 Airplanes affected:

DA 42 - Type

1.2 Subject:

New 2005 IGRF Magnetic Field Model for G1000 Equipped Aircraft
ATA-Code: 34-00

1.3 Reason:

Garmin has issued a new Service Bulletin for the IGRF Magnetic Field Model for the G1000 which is installed in the DA42.

1.4 Information:

The new IGRF Magnetic Field Model is now approved for use in the DA 42 and is included in the DAI MSB 42-008, Rev. 1.

For detailed technical information (installation of new IGRF Magnetic Field Model) see Garmin Service Bulletin which is applicable together with MSB 42-008, Rev.1.

II. OTHERS

The Mandatory Service Bulletin No.: 0533 of Garmin is attached to this SI.

In case of doubt contact Diamond Aircraft Industries.



**** MANDATORY ****
SOFTWARE SERVICE BULLETIN
NO.: 0533

TO: All Garmin Aviation Service Centers
DATE: 12 October 2005
SUBJECT: New 2005 IGRF Magnetic Field Model for G1000 Equipped Aircraft

PURPOSE

This Service Bulletin contains instructions for updating the IGRF (International Geometric Reference Frame) Magnetic Field Model from base year 2000 to 2005. As the earth's magnetic field is continuously changing, similar updates will become available every five years.

DESCRIPTION

This Service Bulletin requires all G1000 equipped aircraft to update the IGRF Magnetic Field Model to 2005 before December 31, 2006. Failure to do so may compromise heading and attitude performance and result in a G1000 advisory message starting January 1, 2007.

AFMS AND PILOT'S GUIDE CONSIDERATIONS

There are no recommended AFMS changes.

PRODUCT AFFECTED

All G1000 equipped aircraft with a GRS 77 AHRS containing IGRF Magnetic Field Model 2000 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.

COMPLIANCE

MANDATORY: Compliance with this software service bulletin is suggested for the next regularly scheduled aircraft maintenance event. Completion must be accomplished prior to December 31, 2006.

REFERENCES

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

MANPOWER

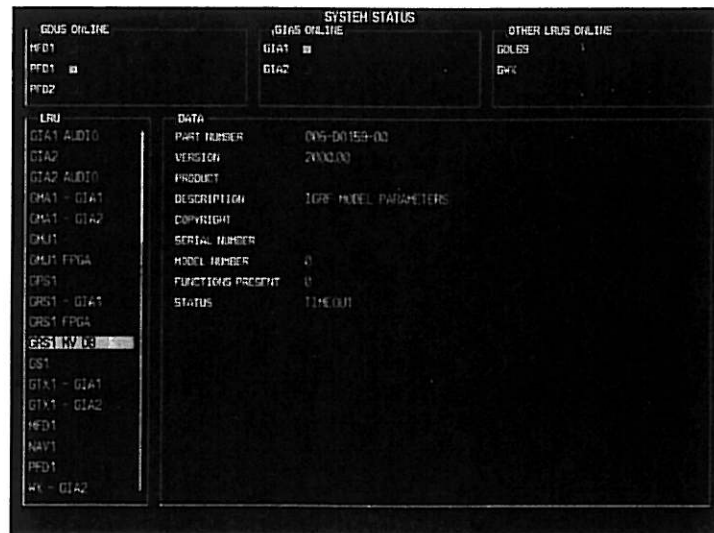
This Service Bulletin requires a maximum of one-hour (1.0) labor including testing and return-to-service.

WARRANTY INFORMATION

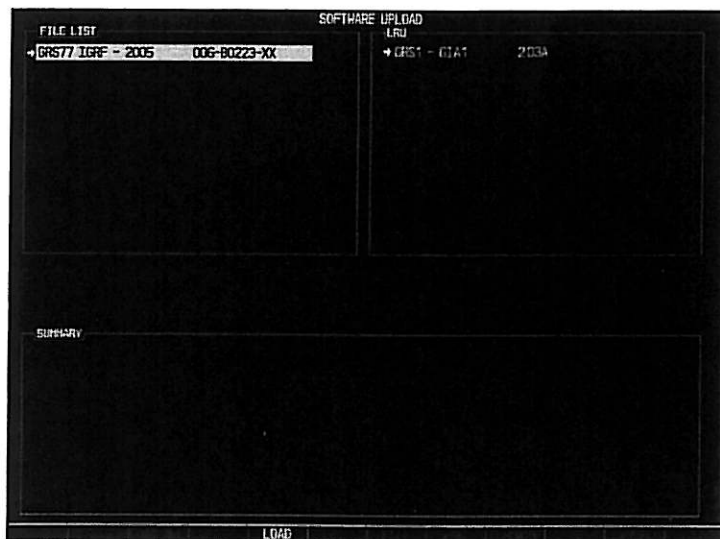
This modification is only warranty reimbursable within ninety days of G1000 warranty registration.

MODIFICATION INSTRUCTIONS

1. With the G1000 turned off, insert the 2005 IGRF Model Update Card into the top slot of the PFD.
2. Hold the ENT key down while powering on the MFD and PFD.
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-D0159-00 and Version is 2000.00 continue to step #6. If IGRF Part Number is 006-D0159-01 and Version is 2005.00, do not continue this procedure.



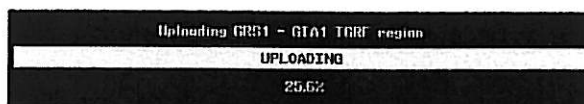
6. Press the FMS knob to deactivate the cursor.
7. Turn the small FMS knob to the Software Upload page in the System group.
8. Press the FMS knob to highlight **GRS77 IGRF – 2005 006-B0223-XX** in the File List.



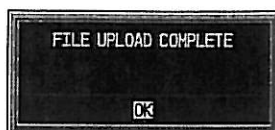
9. Press the LOAD softkey.
10. Select OK and press the ENT key to acknowledge the following prompt:



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-D0159-01 and Version is 2005.00.

TESTING PROCEDURE

None.

MATERIAL INFORMATION

QTY	Part Number	Description
1	010-00501-00	2005 IGRF Magnetic Field Model

The 2005 IGRF Magnetic Field Model can be downloaded from the Garmin web site, at the following address:

<https://www.garmin.com/dealerResource/mainmenu.jsp?>