Diamond AIRCRAFT

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DAI SI 40-067
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SERVICE INFORMATION NO. SI 40-067

> **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:

All DA 40   aircraft equipped with GARMIN G1000 System.
All DA 40F   aircraft equipped with GARMIN G1000 System.

1.2 Subject:

GARMIN: Service Bulletin No. 0739B
ATA-Code: 34-00

1.3 Reason:

GARMIN has issued a Service Bulletin which contains information about the G1000 System Software update to Version 0369.13.
This Service Information supersedes SI 40-064.

1.4 Information:

For detailed technical information see GARMIN Service Bulletin No. 0739B.

II. OTHERS

The GARMIN Service Bulletin No. 0739B is attached to this SI.

In case of doubt contact GARMIN.

GARMIN.

SERVICE BULLETIN

NO.: 0739 Revision B

TO: Diamond Aircraft Industries, Inc.

DATE: 22 October 2007

SUBJECT: G1000 Phase 6 Update for Diamond DA40 & DA40 F Aircraft

REVISION B: Deleted reference to price of datacard

PURPOSE

This Service Bulletin announces the availability of G1000 System Software Version 0369.13 and WAAS for DA40 & DA40 F aircraft (KAP 140 equipped aircraft are not eligible for this update).

DESCRIPTION

This Service Bulletin provides information required to update G1000-equipped Diamond DA40 & DA40 F aircraft with new system software and optional WAAS hardware.

The Phase 6 update provides the following:
- WAAS (optional)*
- Airways, VNAV & Charts Capability
- New Full-Page Engine Gauges Display

*Requires a hardware modification.

APPROVAL

G1000 System Software Version 0369.13 is FAA-approved for installation in accordance with STC #SA01444WI-D. There are four available STC Configurations documented in the Master Drawing List, 005-00400-01 Rev. 2 or later FAA approved revision. They are summarized as follows:

- -1 Configuration: G1000 with GFC 700 AFCS, WAAS
- -2 Configuration: G1000 with GFC 700 AFCS, no WAAS
- -3 Configuration: G1000, No Autopilot, WAAS
- -4 Configuration: G1000, No Autopilot, no WAAS

AFMS AND PILOT'S GUIDE CONSIDERATIONS

As a result of changes related to the system software version update, the documents listed in the following table are required to be issued to the aircraft operator/owner before the aircraft is returned to service.

Document Title	Part Number	Revision
Airplane Flight Manual Supplement: G1000 Integrated Avionics System In a Diamond Model DA40 & DA40 F Or	190-00492-10	Revision 2 or later FAA-approved revision
Airplane Flight Manual Supplement: G1000 Integrated Avionics System – Diamond Model DA40 & DA40F (No GFC 700)	190-00492-11	Revision 2 or later FAA-approved revision
G1000 Cockpit Reference Guide for Diamond DA40	190-00324-07	Revision A or later

PRODUCT AFFECTED

All G1000-equipped Diamond DA40 & DA40 F aircraft equipped with a Garmin G1000 system with system software version prior to 0369.13.

The following G1000-equipped Diamond DA40 & DA40 F aircraft are **not** eligible for this modification:

- G1000-equipped Diamond DA40 & DA40 F aircraft equipped with a KAP 140 autopilot
- G1000-equipped Diamond DA40 & DA40 F aircraft equipped with a 011-00868-**00** GRS 77 AHRS

COMPLIANCE

This service bulletin is optional.

REFERENCES

The required STC documents are available from:
- www.garmin.com, within the Dealer Resource section of the web site
- Diamond Aircraft Industries-supplied CD-ROM

The following document is required to accomplish the update:

Document Title	Part Number	Revision
G1000 / GFC 700 Field Update Instructions, Diamond DA40 & DA40F	190-00544-03	Revision 1 or later FAA-approved revision

Maintenance Documentation

The following document is required to maintain the airworthiness of G1000-equipped DA 40 aircraft with System Software 0369.13:

Document Title	Part Number	Revision
G1000 System Maintenance Manual – Diamond DA40 & DA 40 F (Contains Instructions for Continued Airworthiness)	190-00545-01	Revision A or later revision

WARRANTY INFORMATION

This modification is not warranty reimbursable.

MODIFICATION INSTRUCTIONS

Before starting these instructions do all of the following:

- Verify the installation of the 011-00868-**10** GRS 77 AHRS. If a 011-00868-**10** GRS 77 AHRS is not installed do not proceed with this modification.

- Remove the obstacle/terrain data SD cards from the bottom slot of both PFD and MFD units. Do not insert the new obstacle/terrain data SD cards into the bottom slot of both the PFD and MFD until all software and configuration files have been loaded and all displays have been powered up in normal mode at least one time subsequent to loading software. Failure to do so may result in obstacles not displaying correctly.

- Record the System ID # from the MFD AUX-System Status page. Once this modification is complete ensure the System ID # has not changed. If it has changed please contact Garmin Product Support.

Perform the software upgrade referencing the entire <u>G1000 Field Update Instructions, Diamond DA40 & DA40 F</u> document, Garmin P/N 190-00544-03 Revision 1 or later FAA approved revision.

Additional Items:

Depending on the previous configuration of the G1000 installation prior to this upgrade, the following activities may need to be performed to bring the installation up to the latest type design requirements. Refer to Garmin document 190-00544-**01**, <u>G1000 Field Upgrade Instructions, Diamond DA40 & DA40F</u>, in the specified sections below.

> **NOTE**
>
> Garmin document 190-00544-01 is FAA-approved under STC #SA01254WI-D. Refer to STC Master Drawing List, 005-C0004-00, Revision Z or later FAA-approved revision.

- **XM Crew Audio Upgrade (optional)**

Refer to Section 5.2 in 190-00544-01. This procedure provides for the connection of factory stowed XM Music input wiring to allow pilot and co-pilot headsets to receive XM audio. This only applies to DA 40 aircraft which are equipped with the GDL 69A but do not have the pilot and co-pilot headset jacks wired to receive XM audio.

- **VNAV Placard Removal**

Refer to Section 4.10 in 190-00544-01. This section allows the removal of a limitation placard labeled 'Use of VNAV is Prohibited' from the DA 40 instrument panel, if installed.

TESTING PROCEDURE

Perform the return to service and testing procedure according to the <u>G1000 Field Update Instructions, Diamond DA40 & DA40 F</u> document, Garmin P/N 190-00544-03 Revision 1 or later FAA approved revision.

MATERIAL INFORMATION

<u>G1000/DA40 Software Loader Card</u>
To accomplish this update, the technician must have the new G1000/DA40 Loader Card, Garmin P/N 010-00369-13. A Diamond supplied CD-ROM containing G1000 System Software version 0369.13 may also be used to load software files to an SD Card, as an equivalent means of obtaining the required Loader Card.

QTY	Part Number	Description
1	010-00369-13	G1000 Software Loader Card (Diamond DA40)

> **NOTE**
>
> Additional materials and equipment may be required. Refer to the Required Materials & Equipment Section in the <u>G1000 Field Update Instructions, Diamond DA40 & DA40 F</u> document (Garmin P/N 190-00544-03 Revision 1 or later FAA approved revision) for a complete list.

COMPLETION

To ensure warranty coverage on the newly installed G1000 LRU's (if applicable), complete the form below and return it to Garmin.

Person completing this Service Bulletin:_____

Owner of aircraft:_____

Aircraft Serial Number:_____

Aircraft N#:_____

Replaced GIA 63 Serial Numbers:_____

:_____

Installed GIS 63W Serial Numbers:_____

:_____

Replaced GDU 1042 Serial Number:_____

Installed GDU 1044 Serial Number:_____

Date this Service Bulletin was completed on:_____