Diamond AIRCRAFT

Diamond Aircraft Industries G.m.b.H.
N.A. Otto-Straße 5
A-2700 Wiener Neustadt

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SERVICE INFORMATION NO. SI 40-021
SERVICE INFORMATION NO. SI D4-030

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 40   all airplanes equipped with Garmin 400 Series Units as listed in Garmin Software Service Bulletin

DA 40 D   all airplanes equipped with Garmin 400 Series Units as listed in Garmin Software Service Bulletin

1.2 Subject:

Software Upgrade for Garmin 400 Series Units

ATA-Code: 34-50

1.3 Reason:

Garmin has issued the Mandatory Software Service Bulletin No. 0515 with the purpose of upgrading the 400 Series Unit Software to Version 4.04.

1.4 Approval:

The technical information contained in this document has been approved under the authority of EASA Design Organization Approval No. EASA.21J.052.

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1.5 Information:

For detailed information see attached Garmin Software Service Bulletin No. 0515.

This SSB is applicable with no restrictions beyond those stated in the Garmin Software Service Bulletin.

II. OTHERS

** MANDATORY **
SOFTWARE SERVICE BULLETIN
NO.: 0515

TO: All Garmin Aviation Service Centers

DATE: 15 March 2005

SUBJECT: New Software Version 4.04 (Main) for the GPS 400, GNC 420, GNC 420A, GNS 430, and GNS 430A

PURPOSE

This Software Service Bulletin incorporates unit Main Software Version 4.04 for 400 Series units.

Main Software Version 4.04 includes the following:

1. Corrects now rescinded/cancelled Main Software Version 4.03 to properly provide DME/ARC navigation procedures.
2. Provides GDL 69 Data Link interface.

The following models are affected:

GPS 400, Unit P/N 011-00504-00, 011-00504-10
GNC 420, Unit P/N 011-00506-00, 011-00506-10, 011-00506-30
GNC 420A, Unit P/N 011-00837-00, 011-00837-10
GNS 430, Unit P/N 011-00280-00, 011-00280-10, 011-00280-30
GNS 430A, Unit P/N 011-00836-00, 011-00836-10

DESCRIPTION

This modification consists of uploading 400 Series Main Software Version 4.04.

APPROVAL

TSO-C129a
TSO-C37d, JTSO-2C37e (ETSO-2C37e for the GNS 430A)
TSO-C38d, JTSO-2C38e (ETSO-2C38e for the GNS 430A)
TSO-C40c, JTSO-2C40c (ETSO-2C40c for the GNS 430A)
TSO-C36e, JTSO-C36e (ETSO-C36e for the GNS 430A)
TSO-C34e, JTSO-C34e (ETSO-C34e for the GNS 430A)

The Engineering data contained in Main Software Version 4.04 of the GPS 400, GNC 420/A, and GNS 430/A are FAA approved. This change is a minor software change.

AFMS AND PILOT'S GUIDE CONSIDERATIONS

There are no AFMS changes.

PRODUCT AFFECTED

All GPS 400, GNC 420/A, and GNS 430/A units with main software version 4.03 or previous are affected. The unit's current software version for the Main Processor may be viewed on the Software Version Page under the AUX Menu.

COMPLIANCE

MANDATORY for units with Main Software Version 4.03 only.

NOTE: Units without Main Software Version 4.03 may be upgraded to enable GDL 69 interface as a non-reimbursable option.

REFERENCES

400 Series Installation Manual, P/N 190-00140-02, Rev. N or later

MANPOWER

One-hour (1.0) labor including testing

WARRANTY INFORMATION

This modification is warranty reimbursable for parts and labor in units with Main Software Version 4.03 only. Clearly indicate the previous software version on the warranty claim.

NOTE: Units without Main Software Version 4.03 may be upgraded to enable GDL 69 interface as a non-reimbursable option.

MODIFICATION INSTRUCTIONS

The procedures described below are for the software field upgrade only.

1. Check the unit's current software version for the Main Processor. This information can be viewed on the Software Version Page under the AUX Menu.
2. Write down the display contrast level value on the Display Page, located on AUX page 4, before clearing the memory. This number will be required later in the process.
3. Apply power and turn the unit on. Allow the Self Test to complete and press the ENT key to acknowledge as required.
4. Insert the software upgrade data card into the left datacard slot on the front of the unit. (Note: It may take several seconds before recognizing the data card).
5. Confirm the software upload by pressing the <ENT> key on the User Card Upload Confirmation Window.
6. The software upload status is displayed during the upload (upload time is approximately 30 seconds).
7. When complete, the unit will reset and a color display test will appear.
8. Turn the unit off and wait for the unit to power off.
9. Remove the software upgrade data card and replace the Jeppesen datacard.
10. Turn the unit on and verify the new software version on the Startup / Self-Test Page or Software Version Page.
11. Turn the unit off and wait for the unit to power off.
12. Press and hold the <CLR> key down while turning the unit on. (This will clear all memory including waypoints, user setup and satellite almanac information.)
13. Turn the unit off.
14. Turn the unit on and enter the display contrast level value (written down in Step 2) on the Display Page located on AUX page 4.
15. Connect an outside antenna to the unit and allow it to collect almanac data. This process should take 15-20 minutes.

TESTING PROCEDURE

The unit's built-in Self-Test and successful completion of the Post Installation Check Out Procedure in the aircraft, as outlined in the unit's Installation Manual, is adequate to ensure proper functioning.

MATERIAL INFORMATION

All parts required to modify one (1) GPS 400, GNC 420/A, or GNS 430/A per this Service Bulletin:

QTY	Part Number	Description
1	010-00194-10	Software Upload Datacard, Main ver. 4.04 ***NOTE *** *This datacard carries a charge of $50.00, which will be refunded upon return of the datacard to Garmin.*

A connector kit is available to construct the test harness if required:

QTY	Part Number	Description
1	011-00351-04	Upload connector kit *Consists of:* 78 Pin connector and pins