

SERVICE INFORMATION NO. SI 40-060

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 (non-WAAS) 500 Series Units.
All DA 40F aircraft equipped with GARMIN (non-WAAS) 500 Series Units.

1.2 Subject:

GARMIN: Software Service Bulletin No. 0705
ATA-Code: 34-00

1.3 Reason:

GARMIN has issued a Software Service Bulletin which contains the incorporation of unit Main Software Version 6.03 for 500 Series Units.

1.4 Information:

For detailed technical information see GARMIN Software Service Bulletin No: 0705 which is applicable without any further additions or restrictions.

II. OTHERS

The GARMIN Software Service Bulletin No. 0705 is attached to this SI.

In case of doubt contact Diamond Aircraft Industries.



SOFTWARE SERVICE BULLETIN

NO.: 0705

TO: All Garmin Aviation Service Centers
DATE: 28 August 2007
SUBJECT: New Software Version 6.03 (Main) for (non-WAAS) 500 Series Units only.

PURPOSE

This Software Service Bulletin incorporates unit Main Software Version 6.03 for 500 Series units.

Main Software Version 6.03 includes the following (for TAWS or TERRAIN equipped units only):

1. Provides TAWS and TERRAIN functionality updates.
2. Includes support for the 256 MB TERRAIN Data Card (P/N 010-10201-21).

NOTE

The 128 MB (P/N 010-10201-20) TERRAIN Data Card will still function with v6.03 Main Software, but does not provide enhanced TERRAIN resolution.

The following models are affected:

Model	Part Number
GPS 500	011-00562-00, 011-00562-10
GPS 500 w/TAWS	011-00863-00, 011-00863-01, 011-00863-10, 011-00863-11
GNS 530	011-00550-00, 011-00550-10, 011-00550-30
GNS 530 w/TAWS	011-00940-00, 011-00940-01, 011-00940-10011-00940-11, 011-00940-31
GNS 530A	011-00835-00, 011-00835-10
GNS 530A w/TAWS	011-00864-00, 011-00864-01, 011-00864-10, 011-00864-11

DESCRIPTION

This modification consists of uploading 500 Series Main Software Version 6.03.

APPROVAL

TSO-C129a
TSO-C37d, JTSO-2C37e
TSO-C38d, JTSO-2C38e
TSO-C40c, JTSO-2C40c
TSO-C36e, JTSO-C36e
TSO-C34e, JTSO-C34e
TSO-C151b (TAWS units only)

The Engineering data contained in Main Software Version 6.03 of the GPS 500, GPS 500 w/TAWS, GNS 530/A, and GNS 530/A w/TAWS are FAA approved per STC SA00864WI-D.

AFMS AND PILOT'S GUIDE CONSIDERATIONS

The AFMS (Airplane Flight Manual Supplement) documents have been updated per Main SW v6.03. There are no Pilot's Guide changes relative to this Software Service Bulletin (see References for recommended revision).

Document Name	Part Number
GNS 530 AFMS	P/N 190-00181-03, Rev. F or later
GPS 500, GNS 530/530A AFMS/SAFM	P/N 190-00181-16, Rev. C or later
GPS 500 AFMS	P/N 190-00181-63, Rev. E or later

PRODUCT AFFECTED

All GPS 500, GPS 500 w/TAWS, GNS 530(A), and GNS 530(A) w/TAWS units with main software version 6.01 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

Recommended

REFERENCES

Document Name	Part Number
GNS 530(A) Pilot's Guide and Reference	P/N 190-00181-00, Rev. D or later
500 Series Installation Manual	P/N 190-00181-02, Rev. S or later
GPS 500 Pilot's Guide and Reference	P/N 190-00181-60, Rev. C or later

MANPOWER

One-hour (1.0) labor including testing

WARRANTY INFORMATION

This modification is not warranty reimbursable for the following units:
GPS 500, GNS 530, GNS 530A
(see PURPOSE section for applicable part numbers)

This modification is warranty reimbursable for the manpower listed above for the following units:
GPS 500 w/TAWS, GNS 530 w/TAWS, GNS 530A w/TAWS
(see PURPOSE section for applicable part numbers)

When completing the Garmin warranty claim, be sure to include the aircraft serial number, the aircraft registration number, and clearly indicate that this service bulletin has been complied with, to ensure proper reimbursement.

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. Remove the Jeppesen NavData Card from the left slot.
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.) Verify the success of this procedure by confirming the message "Stored data was lost" is displayed when the MSG button is pressed.

13. Turn the unit off.
14. Turn the unit on.
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 500, GPS 500 w/TAWS, GNS 530(A), or GNS 530(A) w/TAWS per this Service Bulletin:

QTY	Part Number	Description
1	010-00224-10	Software Upload Datacard, Main ver. 6.03 <i>*NOTE* This datacard carries a charge of \$50.00, which will be refunded upon return of the datacard to Garmin.</i>
1	010-10201-21	TAWS/TERRAIN 256 MB Data Card (not required)

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

QTY	Part Number	Description
1	011-00351-04	Upload connector kit <i>Consists of:</i> 78 Pin connector and pins