

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

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# SERVICE INFORMATION NO. SI D4-046

NOTE: Sl´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

# <u>1.1 Airplanes affected:</u>

All non G1000 equipped DA 40 D aircraft with GTX 327 or GTX 32 units installed.

## 1.2 Subject:

GTX 327 or GTX 32 Software upgrade ATA-Code: 34-00

## <u> 1.3 Reason:</u>

Garmin has issued Service Bulletin No. 545 for upgrading the GTX 327 and GTX 32 Software.

## 1.4 Information:

For detailed technical information see Garmin Service Bulletin No. 545 which is applicable without any further additions or restrictions.

# II. OTHERS

The Service Bulletin No.: 0545 of Garmin is attached to this SI.

In case of doubt contact Diamond Aircraft Industries.



# SOFTWARE SERVICE BULLETIN NO.: 0545

**TO:** All Garmin Aviation Service Centers

**DATE:** 25 January 2006

**SUBJECT:** GTX 327, GTX 32 Software Upgrade to Version 2.09 for non-G1000 applications only

#### **PURPOSE**

This Software Service Bulletin incorporates new unit Software Version 2.09 for the GTX 327 and GTX 32.

Software version 2.09 provides the following enhancement:

• When entering a transponder code the unedited portions are dashed out. If the transponder code is not completely entered within a timely matter, the code will revert to display the previously set value.

## DESCRIPTION

This modification consists of uploading new software to the unit using a Garmin supplied diskette, P/N A00-10062-08. (Note: requires Windows.)

## **APPROVAL**

TSO C74c Class 1A

The Engineering data contained in GTX 327/32 Software Version 2.09 are FAA approved. This change is a minor software change.

## AFMS AND PILOT'S GUIDE CONSIDERATIONS

There are no recommended AFMS changes.

GTX 327 Pilot's Guide, P/N 190-00187-00, Rev. B.

# PRODUCT AFFECTED

All GTX 327/32 units with Software Version 2.08 or previous software versions. The current software version is displayed at power up, either on the GTX 327 front panel or the GNS 480 (CNX80) screen for the GTX 327/32.

# COMPLIANCE

**Optional**: This service bulletin may be incorporated in GTX 327/32 units that do not have Software Version 2.09, at the customer's request.

# **REFERENCES**

GTX 327 Installation Manual, P/N 190-00187-02, Rev. K or later, GTX 32 Installation Manual, P/N 190-00303-60, Rev. B or later.

## MANPOWER

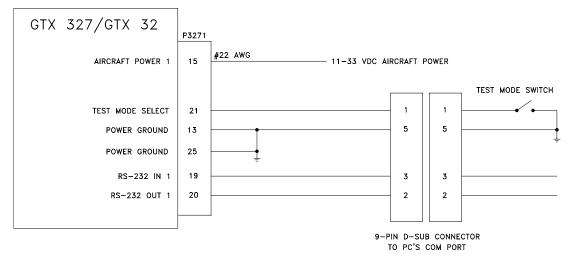
One-hour (1.0) labor including testing.

# WARRANTY INFORMATION

This modification is a customer option and is not warranty reimbursable.

# **MODIFICATION INSTRUCTIONS FOR UPGRADING TO SOFTWARE VER. 2.09**

1. Assemble a test harness for the GTX 327/32 as shown in the following figure:



- 2. Ensure that the unit is turned off. Connect the GTX 327/32 to the test harness and apply power to the harness.
- 3. With the unit off, enable test mode via the Test Mode Switch. (Applies a ground to P3271 pin 21).
- At the Computer's DOS prompt, extract the files from the diskette, P/N A00-10062-08 into a directory on the Computer's Hard Disk Drive using the following command lines:

C:

MD C:\GARMIN

CD C:\GARMIN

A:327UPD08 (note this is a zero)

- 5. Connect the 9-pin D-Sub connector of the test harness to a free serial port (COM 1 or 2) on the PC and apply power.
- 6. Turn the GTX 327 unit on. (The GTX 32 will turn on by the application of power.) The GTX 327 unit will be in test mode and show a dynamic test screen.
- 7. From the DOS prompt, in the directory in which you extracted the files (e.g., C:\GARMIN), run the update program using the following command line:

AVXRGN32 /R4 /Fhex 006B0125.00N (note: these are zeros, observe exact character string including spacing).

- 8. During the software upload, the GTX 327 unit display test pattern either becomes static or the display will blank, depending on the software version originally installed in the unit. The upload process could take up to 5 minutes to complete; the unit will reset itself, turn on, and show a dynamic display test screen.
- 9. Turn the unit off and disable test mode via the test mode switch.
- 10. Turn the unit on and verify the new Software Version 2.09 on the GTX 327 Startup/Self-Test Page. Verify the new Software Version 2.09 for the GTX 32 on the GNS 480 (CNX80) display.

# **MODIFICATION INSTRUCTIONS FOR BACKLOADING TO SOFTWARE VER. 2.08**

This special use diskette provides a means to return a version 2.09 unit to Software Version 2.08, should the need arise.

- 1. Assemble the test harness for the GTX 327/32 as shown in the previous figure.
- 2. Ensure that the unit is turned off. Connect the GTX 327/32 to the test harness and apply power to the harness.
- 3. With the unit off, enable test mode via the test mode switch. (Applies a ground to P3271 pin 21).
- 4. At the Computer's DOS prompt, extract the files from diskette, P/N A00-10062-07, into a directory on the Computer's Hard Disk Drive using the following command lines:

C:

MD C:\GARMIN

CD C:\GARMIN

A:327UPD07 (note this is a zero)

- 5. Connect the 9-pin D-Sub connector of the test harness to a free serial port (COM 1 or 2) on the PC and apply power.
- 6. Turn the GTX 327 unit on. (The GTX 32 will turn on by the application of power.) The GTX 327 unit will be in test mode and show a dynamic test screen.
- 7. From the DOS prompt, in the directory in which you extracted the files (e.g., C:\GARMIN), run the update program using the following command line:

AVXRGN32 /R4 /Fhex 006B0125.00M (note: these are zeros, observe exact character string including spacing).

- 8. During the software upload, the GTX 327 unit display test pattern either becomes static or the display will blank, depending on the software version originally installed in the unit. The upload process could take up to 5 minutes to complete; the unit will reset itself, turn on, and show a dynamic display test screen.
- 9. Turn the unit off and disable test mode via the test mode switch.
- 10. Turn the unit on and verify the Software Version 2.08 on the GTX 327 Startup/Self-Test Page. Verify the Software Version 2.08 for the GTX 32 on the GNS 480 (CNX80) display.

# 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, shall be adequate to identify any errors in this modification.

## **IDENTIFICATION PROCEDURE**

The unit's current software version is viewed at power up as indicated in the last step of the MODIFICATION INSTRUCTIONS.

## MATERIAL INFORMATION

All parts required to modify multiple GTX 327 and GTX 32 units per this Service Bulletin are listed below:

QTY	Part Number	Description
1	A00-10062-08	Diskette, GTX 327/32 SW, 2.09
1	A00-10062-07	Diskette, GTX 327/32 SW, 2.08
		(Optional Diskette for backloading to SW, 2.07)

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

QTY	Part Number	Description
1	011-00651-01	GTX 327/32 Connector kit

# **ADDITIONAL INFORMATION**

None.