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## SERVICE BULLETIN (Non-Certified Aircraft) NO.: 23034 Rev A

**TO:** Non-Certified Aircraft Owners  
**DATE:** March 28, 2023  
**SUBJECT:** GTX™ 45R/GTX 345 Series ADS-B Software Version 3.41  
**CERTIFICATION**  
**AUTHORIZATION:** TSO Authorized Software for Non-Certified Aircraft (see Approval section for details)

**Note:** This Service Bulletin is provided solely for the purpose of installing the Subject software in non-certified aircraft. This Service Bulletin is not intended for software installation on certified aircraft whose maintenance must be performed by persons authorized in accordance with 14 CFR 43.3. This software update is NOT an owner/operator eligible activity as “preventative maintenance” under 14 CFR 43 for FAA certified aircraft. Non-certified aircraft owners who, upon reviewing these instructions, do not feel qualified to perform this upgrade without any assistance should contact a Garmin dealer to perform this important upgrade.

### PRODUCTS AFFECTED

The following GTX 45R/GTX 345 Series series units are affected:

**Table 1. Products Affected**

Model	Appliance P/N
GTX 345	011-03302-0( )
GTX 345 GPS	011-03302-4( )
GTX 345R	011-03303-0( )
GTX 345R GPS	011-03303-4( )
GTX 345 NV	011-03302-2( )
GTX 345 NV, GPS	011-03302-6( )
GTX 345D	011-04333-00
GTX 345DR	011-04334-00
GTX 45R	011-04287-0()

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## **PURPOSE**

GTX 45R/GTX 345 Series ADS-B Software Version 3.41 contains the following changes:

- Corrected an issue described in Garmin Service Advisory 23009 that prevents the appearance of some traffic targets while the Basic Surface Situation Awareness (SURF) application is active.
- Corrected an issue where some 1090ES ADS-B and ADS-R surface targets may erroneously appear as directional.



### **NOTE**

This also provides improved “look-ahead” hover-taxi alerting in rotorcraft.

- Removed transmittal of Non-Performing Emitter (NPE) traffic data from HSDB to other connected Garmin devices.



### **NOTE**

This addresses a traffic display compatibility issue in some G3X™ installations. NPE data is still transmitted using ConnexT® over wired serial interfaces and Bluetooth.

## **DESCRIPTION**

This service bulletin describes the process for upgrading GTX 45R/GTX 345 Series units to ADS-B Software Version 3.41.

## **MATERIAL INFORMATION**

**NOTE:** All files are available to download on [www.garmin.com](http://www.garmin.com).

- GTX 35R/GTX 45R/GTX 3x5 Field Release (006-B2466-0N)
- GTX 3X5 Software Loading Tool (006-A0271-T5) (or later version)

GTX 35R/GTX 45R/GTX 3x5 Field Release (006-B2466-0N) contains the following:



### **NOTE**

The software loading tool only shows loadable regions that are applicable to the connected unit type.

Item	Part Number	Version
Public Keys	006-D7109-K0	2.00
Region List (Non-Diversity)	006-D7109-01	2.01
Region List (Diversity)	006-D7402-00	2.00
System	006-B1607-0N	2.80
Audio	006-D4910-07	2.52
FPGA (Non-Diversity)	006-C0153-22	2.20
	006-C0153-28*	2.80*
FPGA (Diversity)	006-C0184-22	2.20
ADS-B Public Keys	006-D7336-K0	2.00
ADS-B System	006-B1797-1E	3.41
ADS-B FPGA	006-C0157-21	2.10
	006-C0157-26**	2.60**
GPS	006-B1827-22	8.2
GPS Loader	006-B2349-00	2.0

\* Only when installed on GTX units with part numbers 011-03300-41, 011-03301-01, 011-03302-02, or 011-03303-02

\*\* Only when installed on GTX units with part numbers 011-03302-02 or 011-03303-02

## **COMPLIANCE**

Recommended: Compliance with this service bulletin is recommend at the next scheduled maintenance interval.

## **APPROVAL**

GTX 35R/GTX 45R/GTX 3X5 Series ADS-B Software Version 3.41 is TSO authorized. Refer to the applicable installation manual for additional approvals. The change from ADS-B Software Version 3.40 is minor per 14 CFR 21.619.

## **DOCUMENTATION CONSIDERATIONS**

The current revision of the GTX 335/345 Series Pilot's Guide (Garmin P/N 190-01499-00) Rev G is applicable. Pilot's Guides are available at [www.garmin.com/manuals](http://www.garmin.com/manuals).

## **REFERENCES**

Referenced documents are available from [www.garmin.com](http://www.garmin.com).

**Table 2 References**

<b>Document Number</b>	<b>Revision (or later)</b>	<b>Description</b>
190-01499-00	G	GTX 3X5 Series Transponder Pilot's Guide
190-01499-01	A	GTX 3X5 Series Transponder G1000® Pilot's Guide
190-01499-99	B	GTX 345D Declaration of Conformity
190-01795-01	D	GTX 345 Important Safety and Product Information

## **MANPOWER**

One (1) hour labor per aircraft.

## **WARRANTY INFORMATION**

This modification is not warranty reimbursable.

## SOFTWARE INSTALLATION AND VERIFICATION INSTRUCTIONS

### Part One: Software Upgrade Procedure

1. Download the following onto a PC or laptop from [www.garmin.com](http://www.garmin.com):
  - GTX 35R/GTX 45R/GTX 3X5 Field Release (006-B2466-0N)
  - GTX 3X5 Software Loading Tool (006-A0271-T5) (or later version)
2. Install the GTX 3X5 Software Loading Tool.
3. Open the executable file (006-B2466-0N\_0A.exe)
4. Connect a USB cable from the PC or laptop to the USB connector attached to the GTX 35R/ GTX 45R/GTX 3X5 connector backplate.
5. Attach the aircraft to ground power.
6. Energize the unit.

**NOTE:** Take steps to prevent accidental power disruptions to the unit during the software loading process.

7. Open the Software Loading Tool
8. Select Connect under Connection Status
9. Make sure the unit is online.

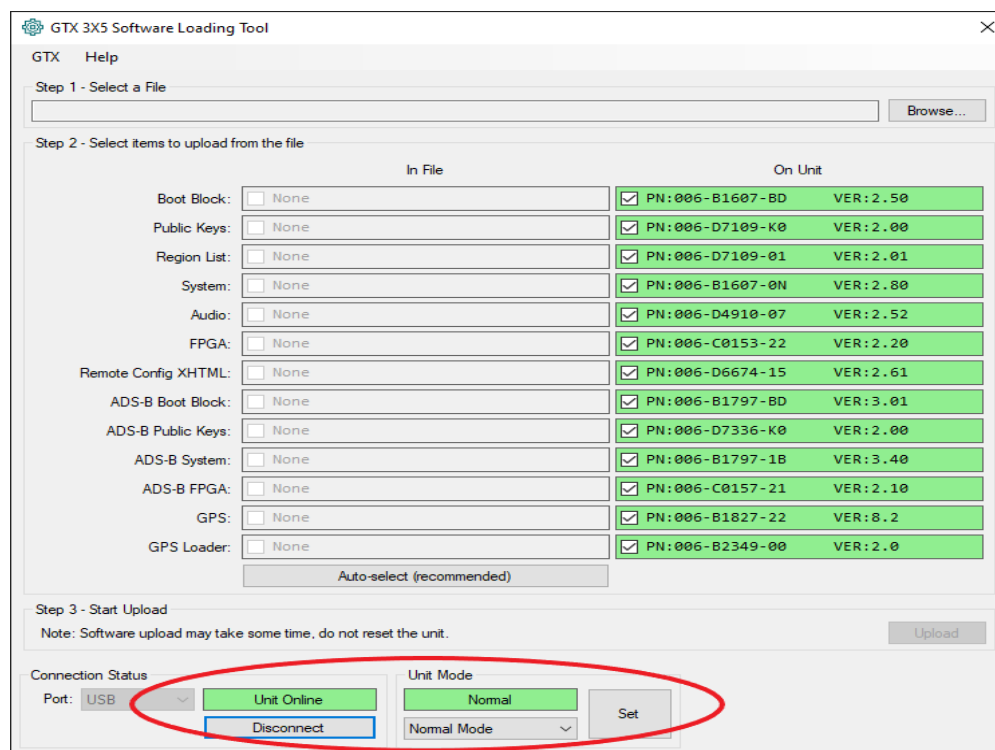


Figure 1 Connection Status

10. Select Browse

11. Locate the GTX 35R/GTX 45R/GTX 3X5 Field Release (006-B2466-0N\_0A.gca).

**GTX 3X5 Software Loading Tool**

GTX Help

Step 1 - Select a File  
C:\GTX 3x5 Update\006-B2466-0N\_0A.gca [Browse...]

Step 2 - Select items to upload from the file

	In File	On Unit
Boot Block:	<input type="checkbox"/> None	<input checked="" type="checkbox"/> PN:006-B1607-BD VER:2.50
Public Keys:	<input type="checkbox"/> PN:006-D7109-K0 VER:2.00	<input checked="" type="checkbox"/> PN:006-D7109-K0 VER:2.00
Region List:	<input type="checkbox"/> PN:006-D7109-01 VER:2.01	<input checked="" type="checkbox"/> PN:006-D7109-01 VER:2.01
System:	<input type="checkbox"/> PN:006-B1607-0N VER:2.80	<input checked="" type="checkbox"/> PN:006-B1607-0N VER:2.80
Audio:	<input type="checkbox"/> PN:006-D4910-07 VER:2.52	<input checked="" type="checkbox"/> PN:006-D4910-07 VER:2.52
FPGA:	<input type="checkbox"/> PN:006-C0153-22 VER:2.20	<input checked="" type="checkbox"/> PN:006-C0153-22 VER:2.20
Remote Config XHTML:	<input type="checkbox"/> None	<input checked="" type="checkbox"/> PN:006-D6674-15 VER:2.61
ADS-B Boot Block:	<input type="checkbox"/> None	<input checked="" type="checkbox"/> PN:006-B1797-BD VER:3.01
ADS-B Public Keys:	<input type="checkbox"/> PN:006-D7336-K0 VER:2.00	<input checked="" type="checkbox"/> PN:006-D7336-K0 VER:2.00
ADS-B System:	<input checked="" type="checkbox"/> PN:006-B1797-1E VER:3.41	<input checked="" type="checkbox"/> PN:006-B1797-1B VER:3.40
ADS-B FPGA:	<input type="checkbox"/> PN:006-C0157-21 VER:2.10	<input checked="" type="checkbox"/> PN:006-C0157-21 VER:2.10
GPS:	<input type="checkbox"/> PN:006-B1827-22 VER:8.2	<input checked="" type="checkbox"/> PN:006-B1827-22 VER:8.2
GPS Loader:	<input type="checkbox"/> PN:006-B2349-00 VER:2.0	<input checked="" type="checkbox"/> PN:006-B2349-00 VER:2.0

Auto-select (recommended)

Step 3 - Start Upload  
Note: Software upload may take some time, do not reset the unit. [Upload]

Connection Status  
Port: USB [Unit Online] [Disconnect]

Unit Mode  
Normal [Set]  
Normal Mode

Figure 2 Software Upload

12. Select Auto-select.

**GTX 3X5 Software Loading Tool**

GTX Help

Step 1 - Select a File  
C:\GTX 3x5 Update\006-B2466-0N\_0A.gca [Browse...]

Step 2 - Select items to upload from the file

	In File	On Unit
Boot Block:	<input type="checkbox"/> None	<input checked="" type="checkbox"/> PN:006-B1607-BD VER:2.50
Public Keys:	<input type="checkbox"/> PN:006-D7109-K0 VER:2.00	<input checked="" type="checkbox"/> PN:006-D7109-K0 VER:2.00
Region List:	<input type="checkbox"/> PN:006-D7109-01 VER:2.01	<input checked="" type="checkbox"/> PN:006-D7109-01 VER:2.01
System:	<input type="checkbox"/> PN:006-B1607-0N VER:2.80	<input checked="" type="checkbox"/> PN:006-B1607-0N VER:2.80
Audio:	<input type="checkbox"/> PN:006-D4910-07 VER:2.52	<input checked="" type="checkbox"/> PN:006-D4910-07 VER:2.52
FPGA:	<input type="checkbox"/> PN:006-C0153-22 VER:2.20	<input checked="" type="checkbox"/> PN:006-C0153-22 VER:2.20
Remote Config XHTML:	<input type="checkbox"/> None	<input checked="" type="checkbox"/> PN:006-D6674-15 VER:2.61
ADS-B Boot Block:	<input type="checkbox"/> None	<input checked="" type="checkbox"/> PN:006-B1797-BD VER:3.01
ADS-B Public Keys:	<input type="checkbox"/> PN:006-D7336-K0 VER:2.00	<input checked="" type="checkbox"/> PN:006-D7336-K0 VER:2.00
ADS-B System:	<input checked="" type="checkbox"/> PN:006-B1797-1E VER:3.41	<input type="checkbox"/> PN:006-B1797-1B VER:3.40
ADS-B FPGA:	<input type="checkbox"/> PN:006-C0157-21 VER:2.10	<input checked="" type="checkbox"/> PN:006-C0157-21 VER:2.10
GPS:	<input type="checkbox"/> PN:006-B1827-22 VER:8.2	<input checked="" type="checkbox"/> PN:006-B1827-22 VER:8.2
GPS Loader:	<input type="checkbox"/> PN:006-B2349-00 VER:2.0	<input checked="" type="checkbox"/> PN:006-B2349-00 VER:2.0

Auto-select (recommended)

Step 3 - Start Upload  
Note: Software upload may take some time, do not reset the unit. [Upload]

Connection Status  
Port: USB [Unit Online] [Disconnect]

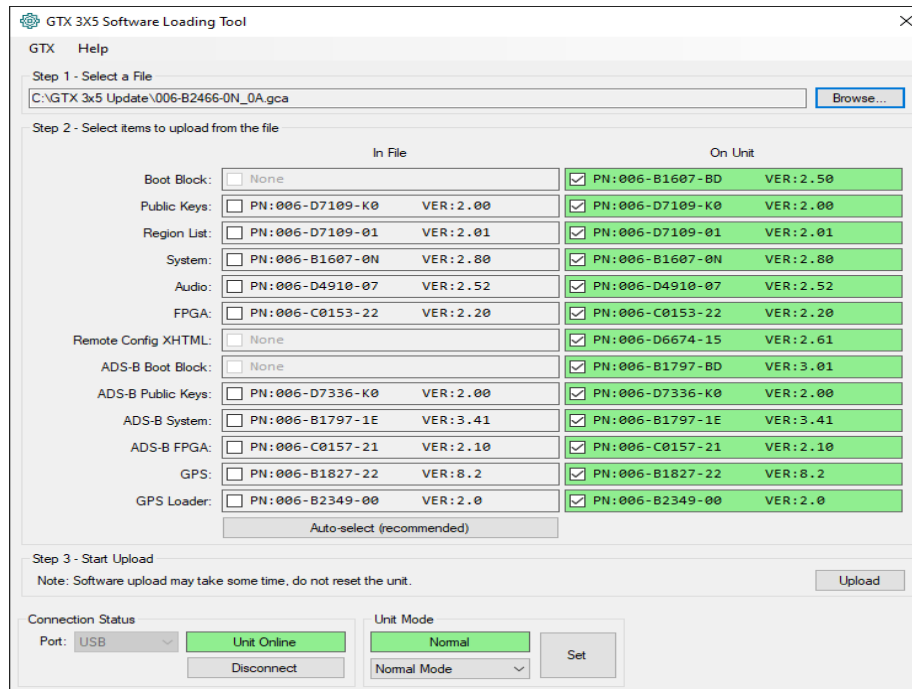
Unit Mode  
Normal [Set]  
Normal Mode

Figure 3 Auto-select

13. Select Upload.

**NOTE:** Individual items will be marked as complete as they are installed. If items fail, repeat the upload process. A message box will appear once the upload is complete.

14. After the upload is complete, make sure the software part numbers and versions on the unit match the ones in the GTX 3X5 field release file.



**Figure 4 Software Load Complete**

15. Select Exit.

## **Part Two: Software Upload Checkout**

### **Verify Updated GTX Software on Display (G3X™ installations only)**

1. Boot the GDU™ into configuration mode.
2. Energize the GTX.
3. Verify GTX 3X5 ADS-B software version appears as 3.41 on the System Information page.

### **Resolve Non-Volatile Memory Fault**

After loading software, further action is needed under the following conditions:

- System software was updated from version 2.02, 2.03, 2.05, or 2.10.
- System software was updated to version 2.11 or later.
- The unit is failed due to a non-volatile memory fault and configuration failure.

In this situation, RS232, A429, Discretes IO, and Altitude Source configuration will be defaulted due to an incompatibility in discrete configuration. To resolve this issue in G3X installations, energize both the G3X system and GTX to clear the fault. If the fault persists, review GTX configuration on the GDU and verify that settings are appropriate for the installation.

### **Part Three: Documentation Update Procedure (with the appliance installed)**

Make entries in aircraft records in accordance with local aviation authority requirements to indicate this bulletin has been completed.