

1200 E. 151<sup>st</sup> Street Olathe, KS 66062 913-397-8200

# \*\*MANDATORY\*\* SERVICE BULLETIN

NO.: 22112 Rev B

**TO:** Experimental and Light-Sport Aircraft GFC 500 Autopilot and GDU™ 4XX Owners

and Service Centers

DATE: December 09, 2022

SUBJECT: Automatic Trim/GDU™ 4XX Reset

Revision B: Updated Applicable SW Revisions

## **PRODUCTS AFFECTED**

G3X<sup>™</sup>, G3X Touch<sup>™</sup>, and G5 systems (with software versions listed below) installed in Experimental and Light-Sport Aircraft are affected:

- G3X with display software versions 12.30 and previous
- G3X Touch with display software versions 9.10 and previous
- G5 with display software versions 8.00 and previous

## **PURPOSE**

In G3X, G3X Touch, and G5 systems with GSA 28 autopilot servos connected to trim actuators, an un-commanded automatic trim runaway may occur when the autopilot is first engaged.



# **WARNING**

Engagement of the autopilot with this condition may result in an un-commanded deviation from the intended or desired flight path.

The G3X Touch display may intermittently reset during flight.

#### **DESCRIPTION**

This service bulletin contains instructions to load G5, G3X, and G3X Touch software. All installations must incorporate this update as soon as practical.

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## **COMPLIANCE**

Mandatory: This Service Bulletin must be accomplished before using the Autopilot with autotrim configured to on.

If unable to complete software update before the next flight, Disable the Autopilot by pulling the appropriate circuit breaker and placard the Autopilot "Inoperative" until the software is updated.

OR

Disable Trim Motor Control on the Pitch, Roll, and Yaw axes in Configuration Mode, until the software is updated.

- G3X Touch Page 35-108 of the G3X/G3X Touch Installation Manual (190-01115-01) Revision AQ
- G5 Page 8-45 of the G5 Electronic Flight Display Installation Manual for Non-Certified Aircraft (190-02072-01) Revision 10
- G3X- Page 34-64 of the G3X/G3X Touch Installation Manual (190-01115-01) Revision AQ

## **APPROVAL**

N/A

## **REFERENCES**

G5 Electronic Flight Display Installation Manual for Non-Certified Aircraft (190-02072-01) Revision 10 or later

G3X/G3X Touch Installation Manual (190-01115-01) Revision AQ or later

## **MANPOWER**

One (1) hour

## **WARRANTY INFORMATION**

This modification is not warranty reimbursable.

## SOFTWARE LOADING INSTRUCTIONS

## For the G3X:

- 1. Update the G3X unit software to 12.40 or later, per the instructions provided in section 34.3.1 (Page 34-2) of the G3X/G3X Touch Installation Manual (190-01115-01, Revision AQ).
- 2. Make sure G3X Software Version 12.40 is shown on the G3X screen after a power cycle.
- 3. Make sure the Autopilot passes pre-flight test (PFT).

# For the G3X Touch:

- 1. Update the G3X Touch unit software to 9.13 or later, per the instructions provided in Section 35.3.1 (Page 35-3) of the G3X/G3X Touch Installation Manual (190-01115-01, Revision AQ).
- 2. Make sure G3X Touch Software Version 9.13 is shown on the G3X Touch screen after a power cycle.
- Make sure the Autopilot passes pre-flight test (PFT).

## For the G5:

- 1. Update the G5 unit software to 8.17 or later, per the instructions provided in section 8.3 (Page 8-2) of the G5 Electronic Flight Instrument Installation Manual for Experimental/LSA (190-02072-01, Revision 10).
- 2. Make sure the G5 Software Version 8.17 is shown on the G5 screen after a power cycle.
- 3. Make sure the Autopilot passes pre-flight test (PFT).

## MATERIAL INFORMATION

Software can be found here:

G3X/G3X Touch

https://www8.garmin.com/support/collection.jsp?product=010-00G3X-00

G5

https://www8.garmin.com/support/collection.jsp?product=010-01485-00