

SERVICE BULLETIN SB-120722-B

ID NUMBER & REVISION: SB-120722-B SUBJECT: Auto Pilot Runaway Trim Condition (Garmin G3X Software Update) **RELEASE DATE:** 29 December 2022 29 December 2022 **EFFECTIVE DATE:** SUPERSEDES NOTICE: SB-120722-A AIRCRAFT AFFECTED: MAKE & MODEL: ICON A5 SERIAL NUMBERS: ASN: 00139, 00141, 00142, 00144, 00145, 00148, 00149, 00150, 00152, 00153, 00155, 00156, 00158, 00159, 00161, 00166 Disable the autopilot until Garmin software 9.13 and ICON configuration **REQUIRED ACTION:** file are installed. The autopilot can be re-enabled and operated once the software is installed. TIME OF COMPLIANCE: Before next flight **REVISION HISTORY:** Initial Release Α Pilot/Owner 🖂 A&P \times LEVEL OF CERTIFICATION REQUIRED (any level checked LSA Repairman – Inspection ☑ Certified Repair Station can perform task): \boxtimes LSA Repairman – Maintenance ⊠ Manufacturer

PURPOSE:

Garmin recently released a Service Bulletin (SB) number 22112 Rev B indicating that there is a potential for a runaway trim condition when the autopilot is engaged. The runaway trim condition is an automatic and un-commanded movement of the trim. This condition is typically recognized upon the first engagement of the autopilot. An un-commanded pitch moment will occur as well as trim indicator movement.

ASSEMBLIES AND PARTS:

PART	DESCRIPTION	OLIANTITY	ALTERNATE	
NUMBER		QUANTIT	PART NUMBER	DESCRIPTION
N/A	Garmin G3X Software 9.13	1		
N/A	ICON 1.0 Configuration File	1		

IF APPLICABLE, SERVICE KITS:

KIT NUMBER	CONTENT PARTS	DESCRIPTION	QUANTITY
None			

INSTRUCTIONS:

NOTE: Disable the autopilot until the Garmin software version 9.13 is uploaded, and the ICON 1.0 configuration file is installed.



SERVICE BULLETIN SB-120722-B

1. Remove the autopilot fuse (see Figure 1) from the overhead fuse panel



Figure 1 Overhead Fuse Panel

2. Affix an "INOP" label onto the face of the autopilot controller, as shown in Figure 2.



SERVICE BULLETIN SB-120722-B



Figure 2 INOP Label

NOTE: At this point the aircraft is safe to fly without the autopilot.

3. To fly the aircraft with an operable autopilot, proceed to "Software 9.13 Plus ICON 1.0 configuration file" instructions below

Software 9.13 Plus ICON 1.0 configuration file

- 1. Download the Garmin software version 9.13 onto a SD card
 - a. The software can be downloaded here.
 - b. Select: GDU 4xx Cockpit Display for your desired operating system
 - c. Select your inserted Software SD card as the download location for the software
 - d. Once downloaded, open folder titled "Garmin"
 - e. Inside "Garmin" folder, create new folder titled "config"
 - f. Download ICON 1.0 configuration file and transfer into "config" file on the software SD card.

NOTE: The ICON 1.0 configuration file shall be obtained from an authorized ISP or ICON headquarters in Vacaville California.

- 2. Ensure that aircraft master power is off
- 3. Insert the SD card into the SD slot at the bottom of the Garmin G3X Touch display
 - a. See Figure 2





Figure 3 SD Card Slot and Menu Button

- 4. When "Update Software" windows populates, select "Yes"
 - a. See Figure 3





Figure 4 Update Software Screen

- 5. The Garmin G3X will automatically update the software, DO NOT turn off the aircraft power until the software is fully updated. This can be confirmed when message "Software update in progress-Do not remove power" is no longer shown. This can be found by selecting "Messages" at bottom of screen
 - a. See Figures 4 and 5











- 6. The software is fully updated when the message "Software update in progress- Do not remove power" disappears
- 7. The update will take several minutes
- 8. Once the software is fully updated, reboot the G3X by
 - a. Simultaneously holding the NRST, MENU, and BACK buttons
 - b. Once the boot screen appears, hold only the MENU button until the configuration load screen appears
 - i. See Figure 3
- 9. Once in configuration mode, click "Config Files"
 - a. See Figure 6



Figure 7 Configuration Mode Screen

- 10. The configuration file on the SD card will be shown
 - a. See Figure 7



SERVICE BULLETIN

SB-120722-B

Configuration Files	
Move Selector	Move Selector

Figure 8 ICON Configuration File

- 11. Select "ICON A5LE CONFIGURATION"
 - a. A prompt will appear; Select "Yes"
 - b. See Figure 8

	💽 Configur	ation Files		
ICON A5LE CONFIG	URATION		/	
	Load Icon A Edition Con Version	A5 Limited figuration n 1.0?		
	No	Yes		
Mayo Soloctor			Movo	Soloctor

Move Selector

Figure 9 Load Configuration File Prompt



- 12. A green check mark will appear showing that the file has been loaded
 - a. See Figure 9

Configuration Files		
ICON A5LE CONFIGURATION		
Move Selector	Move Selector	

Figure 10 ICON Configuration Loaded

- 13. Press the BACK button on the G3X touch display
- 14. Select "System Information" to verify that the ICON 1.0 configuration file has been loaded
 - a. See Figure 10



SERVICE BULLETIN SB-120722-B



- n the Primary Elight Display Config Module indicates "Valid" with a gree
- 15. Confirm the Primary Flight Display Config Module indicates "Valid" with a green check mark and Config Version indicates "ICON 1.0"
 - a. See Figure 11



Figure 12 Confirmation of the ICON 1.0 File

16. Press the BACK button to return to the Configuration Mode page



- 17. Select "Transponder" to go to Transponder Configuration page
 - a. See Figure 12



Figure 13 Transponder Configuration

- 18. On the right-side menu "Configuration", scroll using swipe gestures to move the menu down. Continue until the option "Position Integrity" is shown
 - a. See Figures 13 and 14



SERVICE BULLETIN

SB-120722-B

Transponder Configuration		
Remote Transponder	Configuration	
Transponder Type GTX 45R	Mode S Address Type	
	Aircraft Registration N915BA	
Status		
✓ GTX 45R 2.54	Aircraft Type Fixed Wing	
 Select Tab Select Tab 		

Figure 14 Set Position Integrity



Figure 15 Set Position Integrity 2

- 19. Select the drop-down menu for Position Integrity and select "IFR GPS 1e-7"
 - a. See Figure 15





- 20. Press the BACK button on the G3X Touch display to return to the Configuration Mode page
- 21. Select "Save & Reboot"
- 22. A prompt will appear; Select "Yes"



- 23. The system will reboot
 - a. Wait for the G3X system to return to the home page
 - b. While rebooting, regard the bottom of the screen and ensure "Software Version 9.13" is displayed
 - i. This will occur quickly and only display for a few seconds
- 24. Turn off aircraft master power and remove the SD card from the G3X Touch display
- 25. Insert the autopilot fuse into the autopilot slot on the fuse panel
- 26. If installed, remove the "INOP" label from the face of the autopilot controller

SERVICE BULLETIN SB-120722-B

Make the following logbook entry:

"I hereby certify that the Garmin G3X has been updated to software version 9.13 and the ICON 1.0 configuration file has been installed in accordance with this Service Bulletin. Potentially unclear instructions have been clarified with the Aircraft OEM. No issues were observed that might hinder return to service.

The corrective action of Service Bulletin (SB-120722-A) has been complied with (ref. FAA Exemption 10829B)".

If you have questions, comments, or concerns about this Service Bulletin and/or if you are no longer owner/operator of this aircraft, please forward this information to the present owner/operator and notify ICON Aircraft at: ICON Aircraft 2141 ICON Way, Suite 100 Vacaville, CA 95688 (855) FLY-ICON or (707) 564-4000 <u>support@iconaircraft.com</u> Please include the aircraft registration number, serial number, your name, and if known the contact information of the new owner/operator.