GARMIN
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# SERVICE ALERT

**NO.: 20137 Rev A**

**TO:** Owners/Operators of G3X Touch for Certificated Aircraft and certain GI 275 installations with EIS

**DATE:** December 22, 2020

**SUBJECT:** Fuel Quantity Indication Error

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## PRODUCTS AFFECTED

G3X Touch and GI 275 systems installed in certified aircraft with a GEA 24 engine adapter that is interfaced to resistive fuel senders with a range of less than or equal to 100 ohms are affected.

## ISSUE

When operating at low fuel, the G3X Touch and GI 275 fuel quantity gauges may erroneously indicate up to four (4) gallons, more or less, than the actual quantity in each tank. The fuel quantity error increases when the fuel senders have small resistance ranges and when the GEA 24 is subject to significant temperature changes.

**NOTE**

The error only occurs if a GEA 24 is installed and connected to resistive fuel senders with a range of less than or equal to 100 ohms.

## PILOT ACTION

1. Immediately, until the actions below are accomplished to determine applicability, all pilots must plan for a fuel indication error of up to four (4) gallons per tank for all operations. Fuel tank displays may indicate up to four (4) gallons when the tank is empty (no usable fuel).

**WARNING**

Always use thorough fuel planning for each leg of the flight. Visually inspect the fuel on board prior to take-off for fuel management and flight planning to ensure adequate reserves. Refer to the aircraft POH or AFM for performance information.

2. Obtain the resistance range of the aircraft fuel sender(s) to determine if the system is affected.

The resistance range can be determined by one of the following actions:

- Contact the Garmin dealer or installation shop that performed the G3X Touch or GI 275 installation and request the resistance range of the fuel quantity probe(s) connected to the GEA 24 engine adapter.

  The resistance range is the difference between the resistance at full and empty positions on the sender. For example, a sender that measures 30 ohms at full and 250 ohms at empty has a resistance range of 250 - 30 = 220 ohms.

- Obtain the aircraft configuration summary file. At the time of installation an SD card or thumb drive is typically saved in the maintenance logbook. If not available in the aircraft records, contact the shop that performed the installation to obtain the configuration file.

For a G3X Touch installation the config file will be named xxxxx.gcb. Alternatively, there may be a xxxxx.cal (preferred) file for each tank. For a GI 275 installation the file will be named xxxx.gca.

Email this configuration file to Garmin Aviation Customer Support at avionics@garmin.com. Put "NXXX Fuel Senders" (where NXXX is the aircraft registration number) in the Subject line and provide the make, model, and serial number of the aircraft. Customer support will reply and notify you if the system is affected or not.

If the resistance range is greater than 100 ohms, no further action is necessary.

If the resistance range is less than or equal to 100 ohms, or if the resistance range cannot be determined, take the aircraft to a Garmin dealer for further evaluation and/or placard installation.

## RESOLUTION

Garmin will provide additional information for an improvement to fuel quantity indication accuracy when available.