



Service Bulletin

PRIORITY 2 - RECOMMENDED

Service Bulletin No. / Date: SB TMG 601-1010 P2, Revision 1 / March 18, 2019

Subject: Update GARMIN G1000 configuration software

Type affected: Cessna C172 R/S with TAE 125-02-114 as well as optional GARMIN G1000 NAV III Avionics and Wide Area Augmentation System (WAAS)



Models affected: All C172 R/S with G1000 integrated engine data

Classification: Category P2 – Recommended

Time of Compliance: At next maintenance action

Reason: To keep the G1000 software up to date and in relation to the latest revision of the POH supplement

Approval: The technical information contained in this document has been approved under the authority of EASA Design Organisation Approval No. EASA.21J.010.

Checked B. Metzdorf, CVE 	Approved M. Heinrich, Office of Airworthiness 
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Correction:

1. Software check:

- Compare the currently installed G1000 configuration software version (engine enable card) with the latest version listed in tables below. For current version see A/C logbook resp. POH (enable card is stored there).
- If both versions differ install the latest approved software version according to section 2.

GARMIN G1000 (Legacy)		
Approved Version	Details	Remarks
006-XX172-34	Initial software version	Superseded by version 006-D2357-11
006-D2357-11	Prod. release software	<i>Engine enable card P/N 010-00905-11</i>
006-B2790-21	Prod. release software, latest version	<i>Engine enable card P/N 010-00905-21</i>

GARMIN G1000 NXi		
Approved Version	Details	Remarks
006-D2357-12	Prod. release software, latest version	<i>P/N 010-00905-12</i>

- ◆ **Note:** It is highly recommended always to use the latest approved software version.
- ◆ **Note:** Please contact Technify Motors GmbH for supply of latest software version or further information.

2. Software update

a) Installation of GARMIN software

- Install the latest approved G1000 configuration software via loader card (engine enable card). Refer to G1000 NAV III Line Maintenance Manual, chapter 2.7.4.

- ◆ **Note:** Changing the GARMIN software requires an ammeter recalibration.

b) Ammeter recalibration:

- Recalibrate Main Bus Amp and Standby Battery Amp in accordance with the G1000 NAV III Line Maintenance Manual, chapter 2.7.
- Recalibrate Alternator Amp as follows:
 - 1) Ensure all aircraft switches are in the OFF-position and all circuit breakers are IN.
 - 2) Remove cowlings and covers as necessary to access the J-Box.



- 3) Disconnect the J2 connector at the J-Box.
- 4) Remove the alternator line (TD-04-A-04) from the alternator.
- 5) Apply 28.5 VDC to aircraft via the alternator line.
- 6) Pull the PFD circuit breakers.
- 7) While pressing and holding the enter (ENT) button on the PFD, apply power to the essential bus by turning STBY BATT switch to ARM. Release the ENT button after the words INITIALIZING SYSTEM appear on the PFD. This places the PFD in configuration mode.
- 8) Keep all other switches OFF.
- 9) On the PFD navigate to the CAL page group using the large FMS knob. Navigate to the HSCM CALIBRATION page using the small FMS knob.
- 10) Press softkeys 2 (second from the left), 3, 4, 5 in sequence on the PFD.
- 11) Turn the small FMS knob to select 3A and press the ENT button.
- 12) If the VALUE under CURRENT DATA is greater than +10 Amps or less than -10 Amps, it is recommended replacing the GEA71. This is referring to VALUE only, not CURRENT CORRECTED VALUE.
- 13) Press the STORE softkey on the PFD.
- 14) Select YES and press the ENT button when the Calibrate HSCM offset? message appears.
- 15) Wait for the GEA to configure. When the GEA configuration is COMPLETE press the ENT button. The CURRENT CORRECTED VALUE should go to approximately zero. The CURRENT CORRECTED VALUE corresponds to what the user sees on the G1000 ammeter when powered up in normal mode.
- 16) Turn STBY BATT switch to OFF and return aircraft to normal configuration.
- 17) Charge the standby battery.

c) Fuel quantity indicator check:

- Check the indicated fuel quantity for both tanks for plausibility. Calibrate the fuel quantity sensors if necessary. Refer to G1000 NAV III Line Maintenance Manual.

d) Manual update:

- Replace the supplement of the pilot operating handbook (POH supplement) for the C172 R/S with TAE 125-02-114 by the latest revision. See TMG manual download.

e) Engine Test Run:

- Perform an engine test run in accordance with OM-02-02. Pay special attention to the engine indicators.