Service Instruction SI-0012

Technical Portions FAA Approved

Epic Aircraft, LLC ◆ 22590 Nelson Road ◆ Bend OR 97701
Phone: 541-318-8849 ◆ Fax: 541-382-5125 ◆ Web: www.epicaircraft.com

Subject: Fuel Flow Calibration

ATA-Code: 28-20

Labor: 4.0

Effectivity: K014

Affected Model(s): E1000 GX

Due: At the owner's discretion

Compliance: Recommended ☒ Mandatory ☐

Recurrence: No

1 BACKGROUND AND PURPOSE:

This Service Instruction gives the procedure to adjust the Scale factor in the fuel flow indication of the Garmin G1000 NXi system.

2 REFERENCES:

Epic E1000 Airframe Maintenance Manual, PN SK05000000
Epic E1000 Pilot's Operating Handbook and FAA Approved Airplane Flight Manual P/N SK05000001

3 WARRANTY:

For aircraft under warranty, parts and labor will be covered by Epic Aircraft, LLC if the work is performed within the compliance period and at an Authorized E1000 Service Center.

4 TOOLS:

No.	Description	Qty	Epic Aircraft Supplied	Customer Supplied
1.	N/A		☐	☐

5 PARTS/MATERIALS:

No.	Part Number	Description	Qty	Epic Aircraft Supplied	Customer Supplied
1.	N/A			☐	☐

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6 INSTRUCTIONS:

A) With the aircraft on a level surface, top the aircraft with fuel.

B) Perform a maintenance flight with a normal climb and cruise profile for at least 1 hour (refer to Epic E1000 Pilot's Operating Handbook and FAA Approved Airplane Flight Manual, PN SK05000001). Note: Fuel FOB sync should be performed prior to flight.

C) After engine shutdown and BEFORE shutting off the EFIS system, record the Fuel Used from Sync in gallons from the Aux Fuel page.

D) With the aircraft on a level surface, top the aircraft with fuel again.

E) Record the number of gallons of fuel the airplane took to top off again, this number is the Actual Fuel Used number.

F) Calculate the Scale Factor by using the following formula:

Scale factor = Actual Fuel Used / Fuel Used From Sync

G) Connect a ground power unit to the airplane (refer to the Epic E1000 Airframe Maintenance Manual, PN SK05000000, Chapter 24-40).

H) Set the BATT 1 and BATT 2 switches to ON.

I) Pull the MFD and PFD1 and PFD2 circuit breakers**.**

J) While holding the ENT key on the MFD, reset the MFD circuit breaker.

K) When the words INITIALIZING SYSTEM appear in the upper left corner of the MFD, release the ENT key.

L) Repeat steps (6.D-E) for each PFD.

M) Using the PFD, go to the Fuel Tank Calibration page.

N) Press softkeys 12, 11, 10, and 9 to unlock this page.

O) Use the FMS knob to adjust ENG 1 SCALE (Scale Factor). The factory setting for the ENG 1 SCALE is 1.00000 and is the number used for calculating fuel flow. Replace this number with the number calculated from step F. Perform an "Update Config" and "Confirm Config" function on PFD 1. Cycle power on the EFIS system, confirm there is no "Config Error" message."

P) Repeat steps A-F to ensure that the fuel flow factor change is correct. The calculated number from step F should be 1.00 +/- 0.01. Repeat the process as necessary to obtain accurate fuel flow indication.

Q) Set the BATT 1 and BATT 2 switches to OFF.

R) Disconnect the ground power unit from the airplane (refer to the Epic E1000 Airframe Maintenance Manual, PN SK05000000, Chapter 24-40).

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7 WEIGHT AND BALANCE:

Negligible

8 PUBLICATIONS AFFECTED:

N/A

9 RECORD COMPLIANCE:

Make appropriate entry in airplane maintenance records.

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Appendix A: Compliance Letter

Please complete and mail this form to Customersupport@epicaircraft.com

This is to certify that I have completed the work in accordance with the Epic Aircraft, LLC Service Instruction.

Aircraft Owner Information:
Date: _____ Aircraft Serial Number: _____ Aircraft Reg. Number: _____ Owner's Name: _____
Maintenance Entity Information
Name of Shop Performing the work: _____ Name of Person(s) Performing inspection and/or work: _____ Phone Number: _____ Email: _____