

Epic Aircraft, LLC ◆ 22590 Nelson Road ◆ Bend OR 97701

Phone: 541-318-8849 ◆ Fax: 541-382-5125 ◆ Web: www.epicaircraft.com

Subject: Flap Compensation Potentiometer Removal

ATA-Code: 27-50

<u>Labor:</u> 2.0 Hours <u>Effectivity:</u> K003, and K011 - K032

Affected Model(s): E1000 GX Due: Next annual inspection.

<u>Compliance:</u> Mandatory <u>Recurrence:</u> No

1 BACKGROUND AND PURPOSE:

On affected aircraft the flap potentiometer is not being utilized by the GFC 700 Autopilot and the installation is no longer required.

This Service Bulletin gives instructions to remove the flap compensation potentiometer.

2 REFERENCES:

Epic E1000 Aircraft Maintenance Manual P/N SK05000000

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 by a properly certificated Airframe and Power Plant mechanic or FAA approved repair station.

4 APPROVAL:

The engineering aspects of this service document have been shown to comply with the applicable Federal Aviation Regulations and are FAA approved.

5 REVISION:

This is the original issue of this service bulletin.

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6 <u>TOOLS:</u>

| No. | Description | <u>Qty</u> | Epic Aircraft Supplied | Customer Supplied |
|-----|--------------------|------------|------------------------|----------------------|
| 1. | Common hand tools. | A/R | | \boxtimes |

7 PARTS/MATERIALS:

| <u>No.</u> | Part Number | <u>Description</u> | <u>Qty</u> | Epic Aircraft | <u>Customer</u> |
|------------|--------------|--------------------|------------|---------------|-----------------|
| | | | | Supplied | Supplied |
| 1. | MS27488-20-2 | Sealing Plug | 5 | \boxtimes | |

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8 INSTRUCTIONS:

- 1. Set the BATT 1 and BATT 2 switches to OFF.
- 2. Disconnect external electrical power from the airplane (refer to Epic E1000 Aircraft Maintenance Manual, PN SK05000000, chapter 24-40).
- **3.** Remove the left belly panel and wheel well liner to access the flap actuator (refer to Epic E1000 Aircraft Maintenance Manual, PN SK05000000, chapter 57-10).
- **4.** Remove the Flap Compensation Potentiometer as follows:

NOTE: Potentiometer is only required specific aircraft. Verify aircraft SN before proceeding.

- **a.** Disconnect the flap potentiometer electrical connector (J532-P532).
- **b.** Remove the cotter pins, nuts, washers, and bolts that attach the potentiometer pushrod to the flap actuator body and the potentiometer actuating arm. Discard the pushrod and hardware.
- **c.** Loosen the set screw that attaches the actuating arm to the potentiometer. Remove and discard the actuating arm.
- **d.** Remove the nut and lockwasher that attach the potentiometer to the flap support bracket. Discard the potentiometer.
- **e.** Disconnect the following wires from connector P104, refer to Figure 1, sheet 2:
 - i. K2210303C-22 WHT
 - ii. K2210303C-22 BLU
 - iii. K2210303C-22 ORN
 - iv. K2210303C-22 (SHLD)
 - v. K2210304B-22N
- **f.** Install MS27488-20-2 sealing plugs in the open sockets in connector P104.
- g. Discard connector P532 and its harness.
- h. Change harness label for HK25100009 to "HK25100009 MOD FK25101000".
- **5.** Install the left belly panel and wheel well liner (refer to Epic E1000 Aircraft Maintenance Manual, PN SK05000000, chapter 57-10).
- **6.** Connect external electrical power to the airplane (refer to Epic E1000 Aircraft Maintenance Manual, PN SK05000000, chapter 24-40).
- 7. Set the BATT 1 and BATT 2 switches to ON.

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- **8.** Cycle the flaps fully through their travel. Make sure the FLAPS FAIL CAS message does not appear and the flaps move smoothly to the T/O and FULL positions then back to UP.
- 9. Set the BATT 1 and BATT 2 switches to OFF.
- **10.** Disconnect external electrical power from the airplane (refer to Epic E1000 Aircraft Maintenance Manual, PN SK05000000, chapter 24-40).

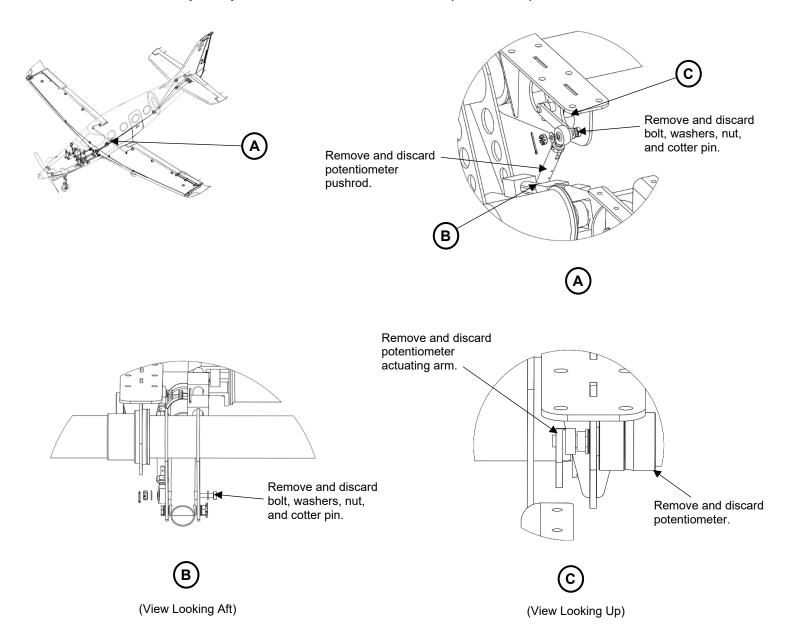
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FIGURE 1: Flap Compensation Potentiometer Removal (Sheet 1 of 2)



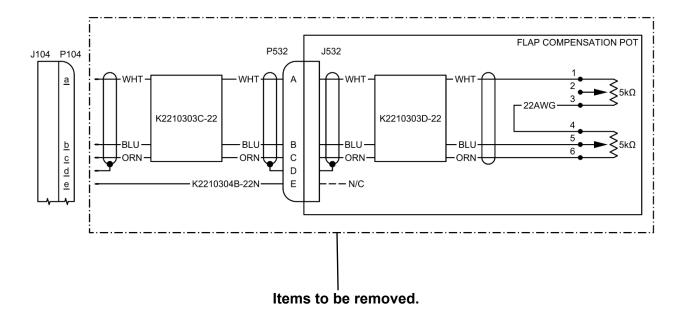
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FIGURE 1: Flap Compensation Potentiometer Removal (Sheet 2 of 2)



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9 WEIGHT AND BALANCE:

Negligible

10 PUBLICATIONS AFFECTED:

Epic E1000 Aircraft Maintenance Manual P/N SK05000000 Epic E1000 Illustrated Parts Catalog, P/N SK05000004

11 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 Bulletin.

| Aircraft Owner Information: | | | | |
|---|------------------------------|--|--|--|
| Date: Aircraft Serial No | umber: Aircraft Reg. Number: | | | |
| Owner's Name: | | | | |
| Maintenance Entity Information | | | | |
| Name of Shop Performing the work: | | | | |
| Name of Person(s) Performing inspection | n and/or work: | | | |
| Phone Number: | Email: | | | |

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