

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

Subject:Stick Shaker Harness Routing ImprovementATA-Code:31-20

Labor: 4 hours	Effectivity: K003 – K031
Affected Model(s): E1000, E1000GX	Due: Next annual inspection.
Compliance: Mandatory	Recurrence: No

1 BACKGROUND AND PURPOSE:

It has been found on affected aircraft that the stick shaker harness electrical connector (P241) may loosen or become damaged due to the forward and aft motion of the yoke.

This Service Bulletin gives routing improvements for the stick shaker harness to prevent this condition.

2 **REFERENCES**:

Epic E1000 Airframe 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 at an Authorized E1000 Service Center.

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 <u>REVISION:</u>

A – If the original revision of this service bulletin was accomplished, no further action is required.

- Corrected procedure for solder type connector.
- Added additional panel removal for access.

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6 <u>TOOLS:</u>

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

7 PARTS/MATERIALS:

<u>No.</u>	Part Number	Description	<u>Qty</u>	Epic Aircraft Supplied	<u>Customer</u> Supplied
1.	AS21919WCJ06	Clamp, Loop Type, Cushioned, Cres, Ø .375	2		
or	AS21919WDG06	Clamp, Loop Type, Cushioned, Ø .375			
2.	AN3-7A	BOLT 10-32 x 29/32" Undrilled	1	\boxtimes	
3.	AN743-C12	Bracket, Support Clamp, Corrosion Resistant Steel	1		
4.	AN3-3A	Bolt, 10-32 x 15/32" Undrilled	1	\boxtimes	
5.	NAS1149F0332P	Washer, Flat #10 x .032	4	\boxtimes	
6.	MS21042L3	Nut, Self-Locking, 450°, Reduced #10-32	2		
7.	PT08E8-2S	Circular Connector 2p SZ 8 Socket Plug Right Angle	1		

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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 pilot seat (refer to Epic E1000 Aircraft Maintenance Manual, PN SK05000000, chapter 25-10).
- **4.** Remove the pedestal finish panel (refer to Epic E1000 Aircraft Maintenance Manual, PN SK05000000, chapter 25-10).
- 5. Remove the pilot's side yoke support access panel (refer to Figure 1, Sheet 1).

NOTE: Removal of the copilot's side yoke support access panel can provide additional access if needed.

- **6.** Inspect the stick shaker wire harness for damage. Repair any damage to the harness as needed.
- 7. Replace the P241 electrical connector as follows:
 - **a.** Disconnect the electrical connector from the stick shaker.
 - **b.** Cut the two wires from the P241 connector.
 - **c.** Install the electrical connector backshell so the strain relief is oriented forward and slightly inboard. (Refer to Figure 2)
 - **d.** Solder the wires in the new 90° connector:
 - i. K3150329C-22 to pin A
 - ii. K3150310A-22N to pin B.
- **8.** Remove the lower nut, washers, and bolt that attach the stick shaker to the elevator torque tube. Retain the hardware (refer to Figure 1, Sheet 1).
- **9.** Install the clamp on the stick shaker with the retained bolt, washers, and nut. Torque the nut to 20-25 in-lbs.
- **10.** Put the second clamp in position on the harness.
- **11.** Attach the bracket to the clamp with the bolt, washers, and nut, (refer to Figure 1, Sheet 2 for the correct orientation of the bracket and clamp).
- **12.** Attach the clamp/bracket assembly to the instrument panel support with the bolt, washers, and nut. Torque the bolt to 20-25 in-lbs.
- **13.** Connect the P241 electrical connector to the stick shaker.
- **14.** Connect external electrical power to the airplane (refer to Epic E1000 Aircraft Maintenance Manual, PN SK05000000, chapter 24-40).

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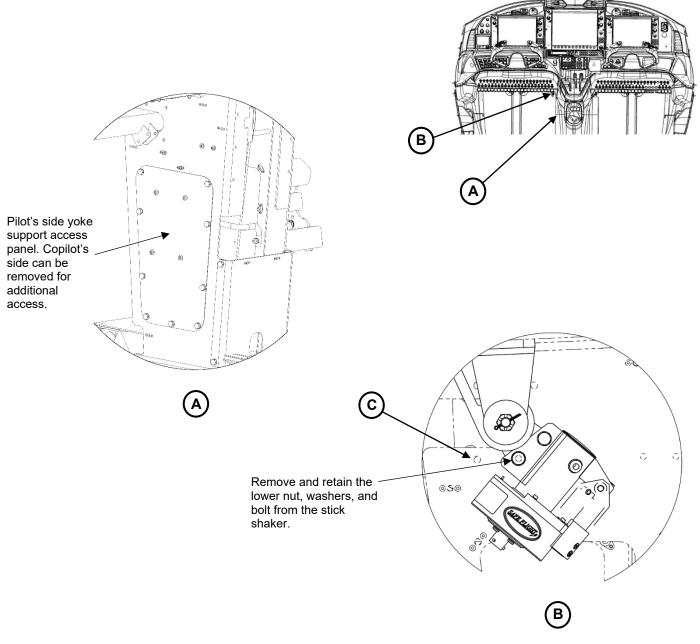
- **15.** Set the BATT 1 and BATT 2 switches to ON.
- **16.** Press and hold the STALL TEST switch.
- **17.** Make sure the stick shaker comes on.
- **18.** Release the STALL TEST switch.
- **19.** Set the BATT 1 and BATT 2 switches to OFF.
- **20.** Disconnect external electrical power from the airplane (refer to Epic E1000 Aircraft Maintenance Manual, PN SK05000000, chapter 24-40).
- **21.** Install the pilot's side (and co-pilot's side if removed) yoke support access panel(s).
- **22.** Install the pedestal finish panel (refer to Epic E1000 Aircraft Maintenance Manual, PN SK05000000, chapter 25-10).
- **23.** Install the pilot seat (refer to Epic E1000 Aircraft Maintenance Manual, PN SK05000000, chapter 25-10).

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Figure 1: Stick Shaker Harness Routing Improvement (Sheet 1 of 2)

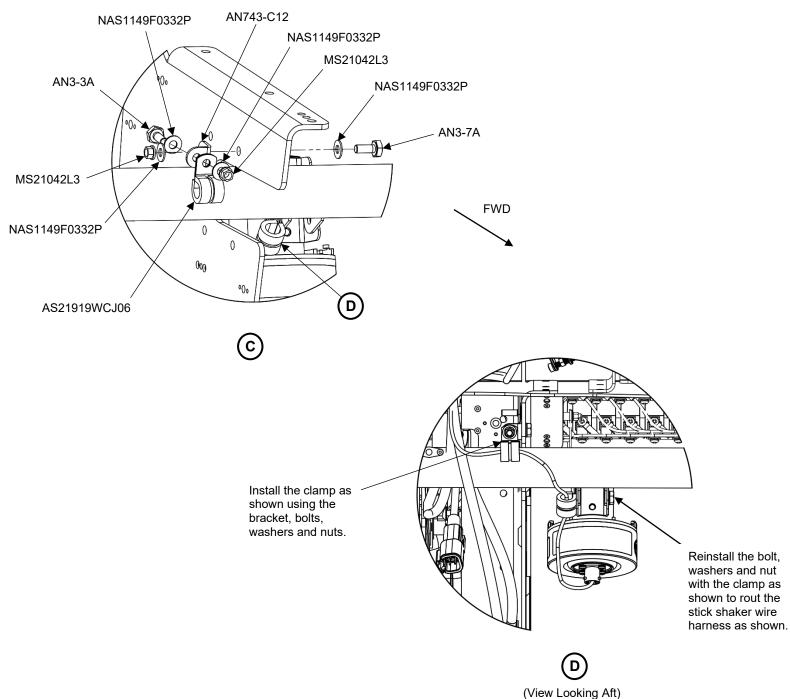


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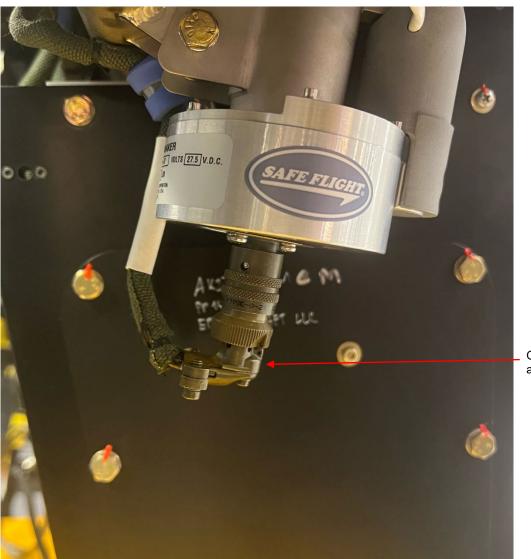
Figure 1: Stick Shaker Harness Routing Improvement (Sheet 2 of 2)



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Figure 2: Stick Shaker Harness Routing Improvement – Final Installation



Orient the backshell as shown.

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9 WEIGHT AND BALANCE:

Negligible

10 PUBLICATIONS AFFECTED:

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 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:				

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