



Service Instruction SI-0002

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: Door Pin Rigging Inspection

ATA-Code: 52-10

Labor: 4-5 hours

Affected Model(s): E1000

Effectivity: K004

Compliance: Recommended ☐ Mandatory ☒

Due: As soon as practical

1. Background and Purpose:

The purpose of this service instruction is to provide a requirement for an inspection and potential re-rigging of the door pin engagement length per the latest released design data. This inspection ensures the door pin engagement lengths are correct after clarifications were made to how the lengths of the door pins are measured.

2. References:

SK05000000, Epic E1000 Aircraft Maintenance Manual
SK05000004 E1000 Illustrated Parts Catalog
SK52000001 Rev C
AK52300000 Rev E6
AC 43.13-1B Change 1

3. WARRANTY:

Required for warranty.

4. Parts/Materials/Tools:

No.	Item Number	Description	Qty	Epic Aircraft Supplied	Customer Supplied
1.		Calipers or scale	1	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2.		Loctite™ LB 8042	A/R	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3.		.032 Safety Wire	A/R	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4.		Feeler Gauge	1	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5.				<input type="checkbox"/>	<input type="checkbox"/>
6.				<input type="checkbox"/>	<input type="checkbox"/>
7.				<input type="checkbox"/>	<input type="checkbox"/>
8.				<input type="checkbox"/>	<input type="checkbox"/>
9.				<input type="checkbox"/>	<input type="checkbox"/>

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5. Instructions:

The main cabin door utilizes eight adjustable door pins which extend through the door frame through adjustable plates. Push pull rods adjust the extension lengths of the pins and the rods are locked in place using jam nuts.

(1) Make sure the receiver plates are adjusted so the pins move easily without binding and there isn't excessive movement of the door when the latch pins engage the receiver plates.

(2) With the door open, position the door locking tee handle to the locked position, fully extending the door latch pins.

CAUTION: Closing the door with the door handle in the latched position will result in damage to the door frame.

(3) Measure the extension of the pins from the tip of the pin to the face of the latch pin assembly. Write this as "Pin Extension from Door" in Table 1.

(4) Retract the latch pins then close and latch the door.

(5) Measure the gap between the face of the receiver plate and the face of the latch pin Assembly with feeler gauge. Write this as "Door to Receiver Plate Gap" Table 1.

(6) Add the "Minimum Engagement" value to the "Door to Receiver Plate Gap" value to determine the "Required Minimum Pin Extension from Door" dimension.

Note: If pin engagement is found to be satisfactory, no further action is required.

(7) Remove the door interior panels.

(8) Open the door and adjust the pushrods as necessary to achieve the Required Minimum Pin Extension dimension. To adjust the door latch pin throw, do as follows:

CAUTION: Make sure the pushrods do not contact any door structure or adjacent hardware throughout their travel. Note: Always begin adjustment with the middle side pins. Adjusting the push-rods connected to the door handle will affect all of the pins.

(8.1) For straight pushrods: Remove the safety wire from the jam nuts. Loosen the jam nuts on each end of the pushrod then rotate the rod to retract or extend the pins as required.

(8.2) For curved pushrods: Disconnect the rod ends from the latch assemblies. Remove the safety wire from the jam nuts. Loosen the jam nuts and rotate the rod ends as

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needed. Reconnect the rod ends to the latch assemblies and install cotter pins as necessary.

CAUTION: Prior to closing the door, ensure door pin switches are adjusted so that pins do not max out switch depth which could damage switches. Refer to AMM Chapter 52-10 Section (F)(2).

(8.3) Close and latch the door.

(9) Verify the "Minimum Engagement" dimension is achieved, refer to Table 1.

Note: Minimum engagement is measured from the tip of the pin to the face of the receiver plate when the handle is in the locked position, refer to Figure 2, Figure 3 and Figure 4.

(10) After adjustments are made, ensure that all latch pins still meet the required amount of engagement and threads are visible in the witness holes of the pushrods.

(11) Adjust the microswitches as needed. Refer to AMM Chapter 52-10 Section(F)(2).

(12) Ensure the inside bore of the latch assemblies and the latch pins are thoroughly coated with Loctite™ LB 8042 grease.

(13) Test operation of the door to ensure that it closes properly without binding. Re-adjust plates and pins as required. If required, ensure proper minimum engagement.

(14) Tighten the jam nuts and install safety wire.

(15) Install the door interior panels.

Table 1: Minimum Door Pin Engagement Lengths

Location	Minimum Engagement	Pin Extension from Door	Door to Receiver Plate Gap	Required Minimum Pin Extension from Door
Pin 1 (Aft Lower)	.776			
Pin 2 (Aft Mid)	.776			
Pin 3 (Aft Upper)	.776			
Pin 4 (Top Aft)	.770			
Pin 5 (Top Fwd)	.776			
Pin 6 (Fwd Upper)	.945			
Pin 7 (Fwd Mid)	.752			
Pin 8 (Fwd Lower)	.776			

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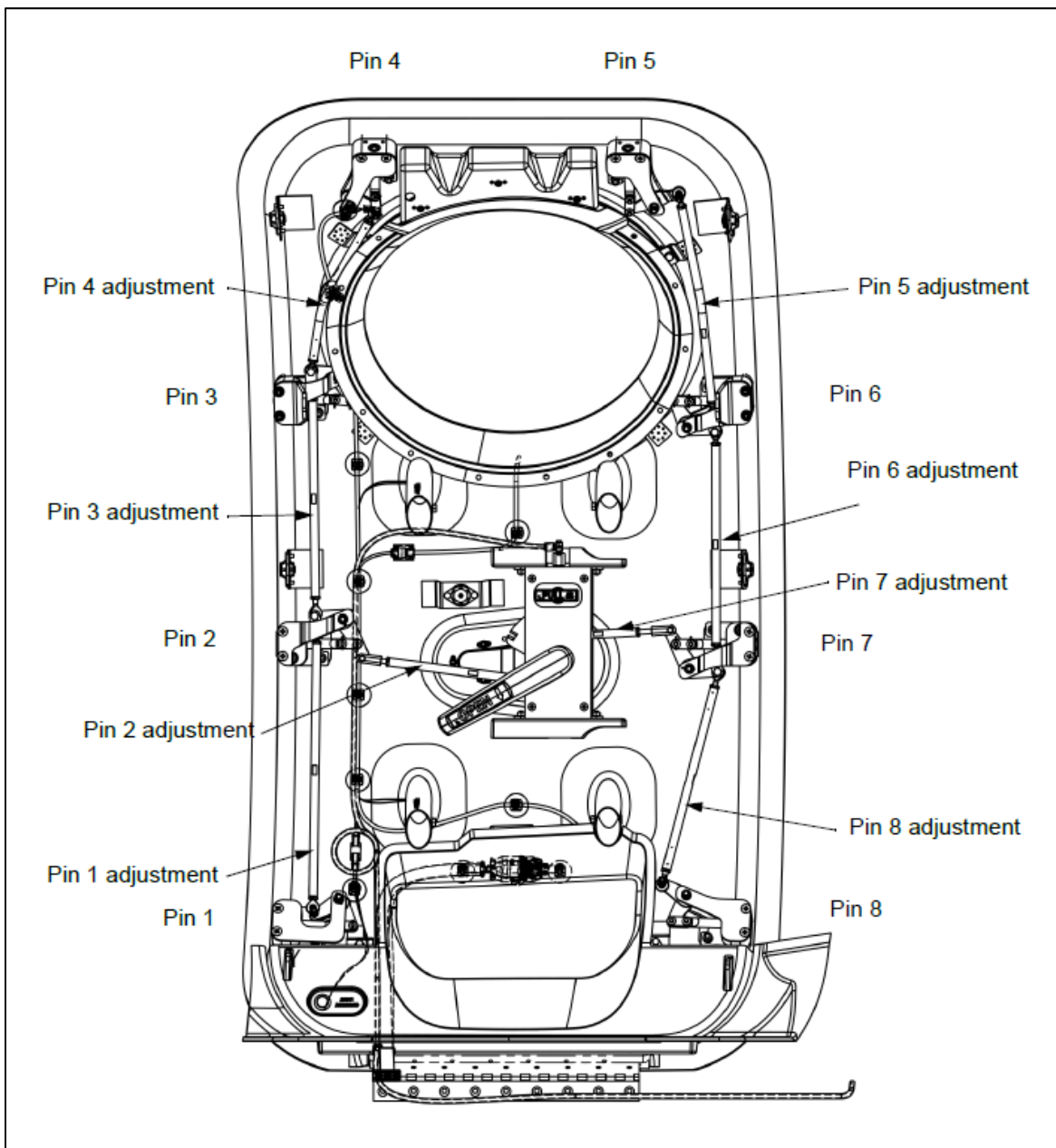


Figure 1: Latch Pin Adjustment Locations

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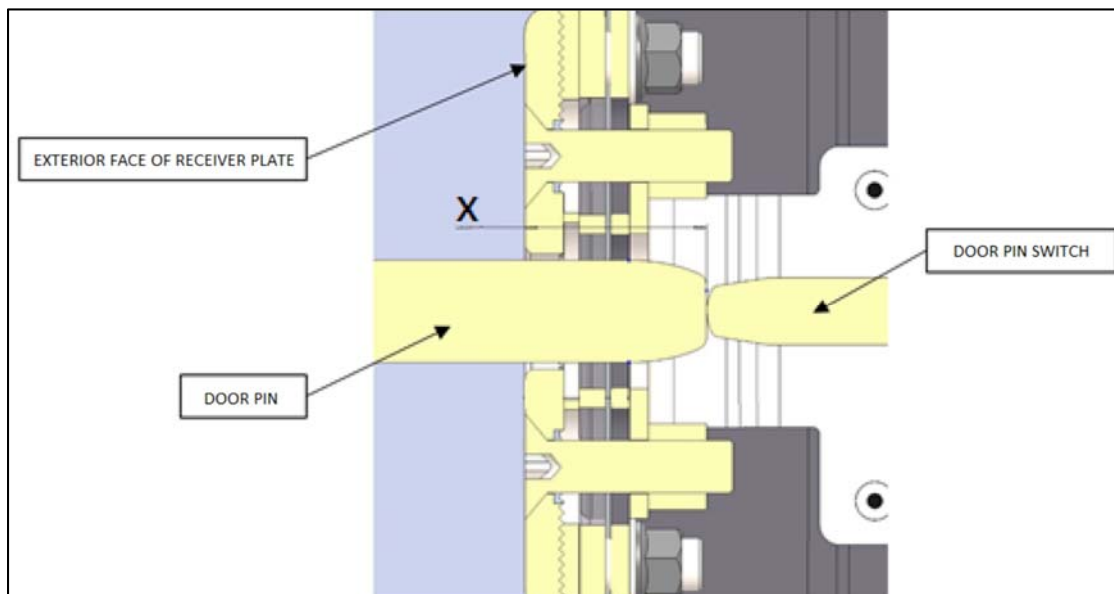


Figure 2: FWD MID/LOWER and AFT MID/LOWER Side Door Pin Locations

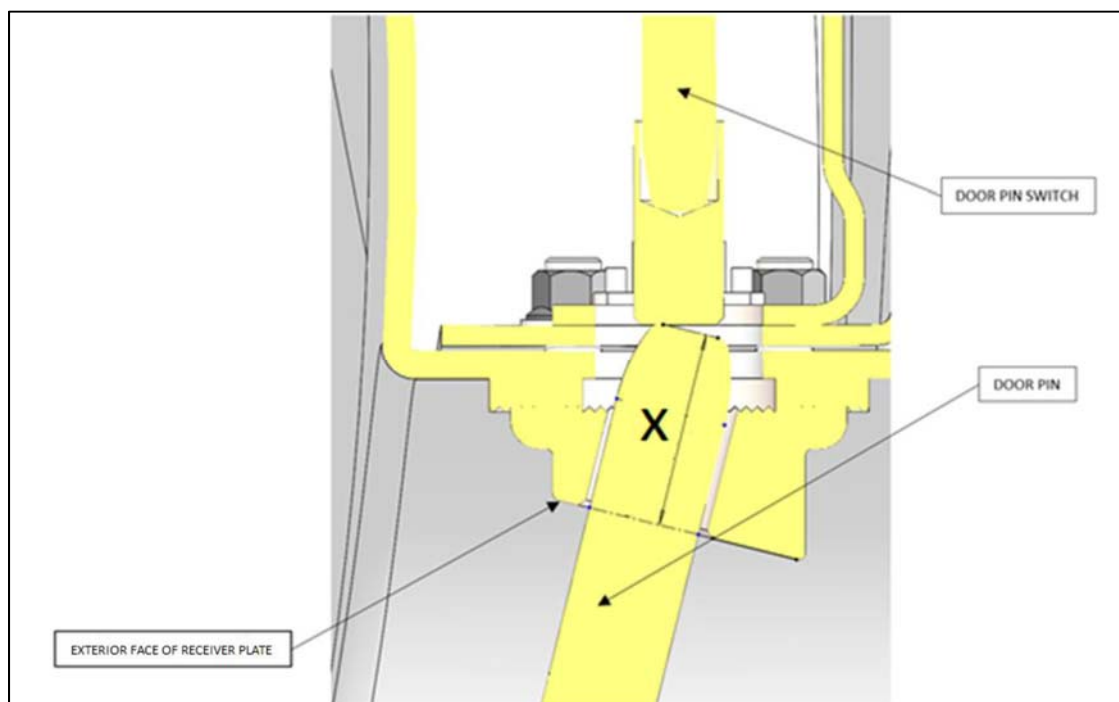


Figure 3: Top FWD/AFT Door Pin Locations

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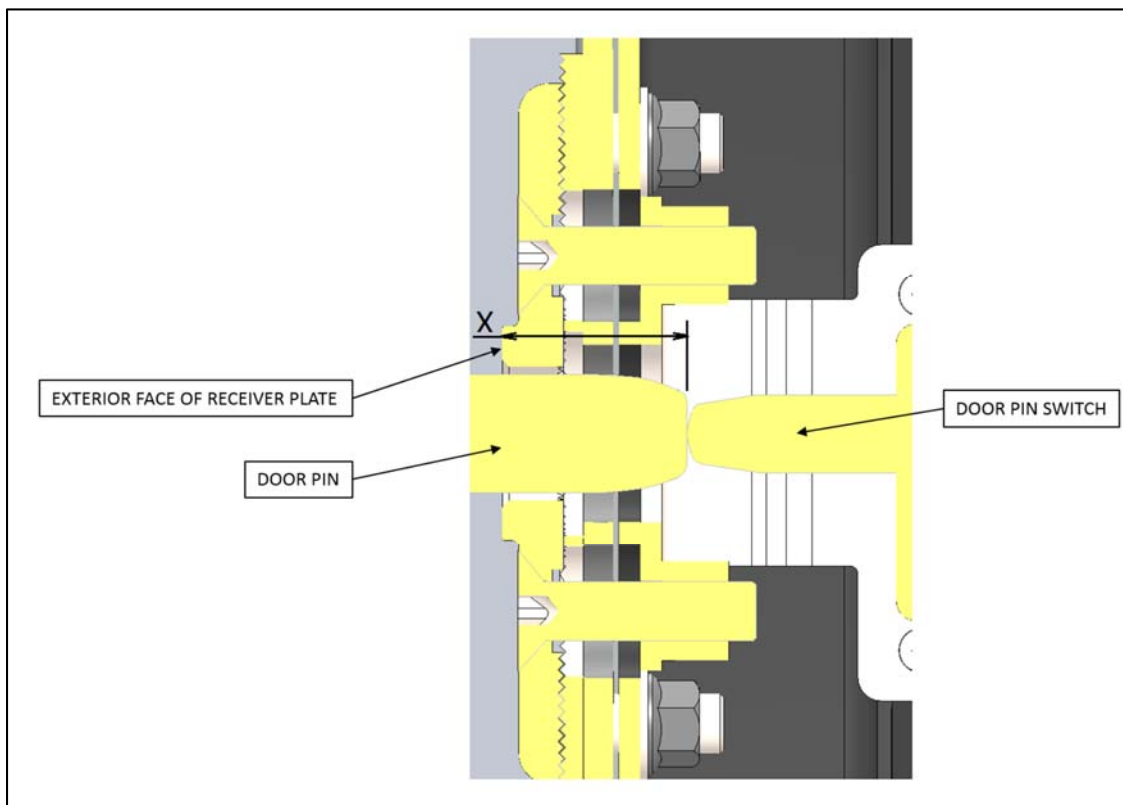


Figure 4: FWD UPPER and AFT UPPER Side Door Pin Locations

6. WEIGHT AND BALANCE:

There is no effect on weight and balance.

7. PUBLICATIONS AFFECTED:

There are no publications affected by this inspection.

8. RECORD COMPLIANCE:

Make appropriate entry in airplane maintenance records.

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9. Appendix A: Compliance Letter

Please complete and mail this form to Epic Aircraft, LLC

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

Date: _____

Aircraft Serial Number: _____ Aircraft Registration Number: _____

Owner's Name: _____

Address: _____

City: _____ State/Province: _____ County: _____

Phone Number: _____ Email: _____

Name of Person(s) Performing inspection and/or work: _____

Phone Number: _____ Email: _____

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