

RECOMMENDED SERVICE BULLETIN**NUMBER:** SB13-05**REVISION:** 00**DATE:** November 1, 2013

SUBJECT: AFT FUSELAGE DRAIN HOLES

EFFECTIVITY:

KODIAK® 100 Series Aircraft Serial Numbers: 100-0001 through 100-0095

SUMMARY:

The accompanying Field Service Instruction provides guidance for adding seven drain holes to the aft fuselage of the KODIAK® 100 aircraft.

COMPLIANCE:

Quest recommends this Service Bulletin be complied with on or before the next 100 Hour Inspection or Annual Inspection whichever comes first.

ATTACHED DOCUMENTS:

| Document #: | Document Title: |
|-------------|--------------------------|
| FSI-070 | AFT FUSELAGE DRAIN HOLES |

FAA APPROVAL STATUS:

The instructions attached to this Service Bulletin have demonstrated compliance with all applicable Federal Aviation Regulations and are approved by the Federal Aviation Administration.

CREDIT AND WARRANTY INFORMATION:

Quest Aircraft Company is not offering reimbursement for labor associated with this service bulletin.

Quest Customer Service**Service Bulletin: SB13-05****Phone: (208)263-1111 Toll Free: 1(866)263-1112****Email: Customerservice@questaircraft.com****SPECIAL INSTRUCTIONS:**

N/A



FIELD SERVICE INSTRUCTION

TITLE:

Aft Fuselage Drain Holes

SERIAL RANGE:

100-0001 thru 100-0095

JASC CODE: 5300

PAGE:

1 of 8

REPORT NO.:

FSI-070

REVISION:

00

SUBJECT

This Field Service Instruction provides guidance for adding seven drain holes to the aft fuselage of the KODIAK® 100 aircraft.

AFFECTED MANUALS AND PUBLICATIONS

None

INDUSTRY REFERENCES

None

WEIGHT AND BALANCE

Negligible

MANPOWER

The estimated man-hours and minimum number of persons required to perform this Field Service Instruction are listed below. The "Minimum Persons" refers only to maintenance personnel or installers, and unless otherwise specified within this instruction does not include additional personnel that may be needed solely to comply with safety requirements (for example, safety observers that are not performing tasks within this instruction). It is the responsibility of maintenance personnel to comply with safety requirements, including having a safety observer available as needed.

Estimated Man-hours: 1 hour

Minimum Persons: 1 person

If more than the minimum personnel perform this instruction, the actual man-hours required may be reduced due to increased efficiencies. As appropriate, Quest encourages the use of additional personnel; man-hour estimates are based on the minimum personnel required.

RECORD OF COMPLETION

Update the appropriate KODIAK® 100 maintenance records.

Quest Aircraft Company, LLC
1200 Turbine Drive
Sandpoint, ID 83864

▲ DISCLAIMER ▲

The instructions / procedures presented herein are based upon the systems and components of the aircraft when it was delivered from the factory, or as modified by Quest Service Bulletins. Third-party modifications that have affected any component, system, or operating characteristic discussed by this document may invalidate the instructions / procedures provided. Before performing the instructions / procedures herein, examine all Supplemental Type Certificate (STC), Supplemental Type Authority (STA), or equivalently authorized modifications to verify that the instructions/procedures presented in this document can be properly completed. If an aircraft has an STC, STA, or equivalently authorized modification that affects any component, system, or operating characteristic also affected by this document, the operator is responsible for obtaining appropriate regulatory approval before performing the instructions / procedures herein. Quest Aircraft Company cannot be responsible for the quality of work performed in accomplishing the requirements of this document.

If you have any questions as to the applicability of this document to your specific aircraft, contact Quest Customer Service by telephone at (208) 263-1111, toll-free at (866) 263-1112, or via email at CustomerCare@QuestAircraft.com



FIELD SERVICE INSTRUCTION

TITLE:

Aft Fuselage Drain Holes

SERIAL RANGE:

100-0001 thru 100-0095

JASC CODE: 5300

PAGE:

2 of 8

REPORT NO.:

FSI-070

REVISION:

00

REVISION RECORD

| REV | PAGE | CHANGE DESCRIPTION |
|-----|------|--------------------|
| 00 | All | Initial Release |



TITLE:

FIELD SERVICE INSTRUCTION

Aft Fuselage Drain Holes

SERIAL RANGE:

100-0001 thru 100-0095

JASC CODE:

5300

PAGE:

3 of 8

REPORT NO.:

FSI-070

REVISION:

00

TABLE OF CONTENTS

REVISION RECORD..... 2

TABLE OF CONTENTS..... 3

1. Special Safety Instructions..... 4

 1.1 Warnings 4

 1.2 Cautions..... 4

 1.3 Notes..... 4

2. Parts, Tools, and Equipment 4

 Table 2-1: Parts and Tools Included in the Service Kit..... 4

 Table 2-2: Consumables Included in the Service Kit..... 4

 Table 2-3: Serial-Number-Specific Parts Included in the Service Kit 4

 Table 2-4: Parts and Tools NOT Included in the Service Kit 4

3. General..... 5

 Figure 3-1: Overview 5

4. Preparation 5

5. Instructions..... 6

 5.1 Drill the Holes 6

 5.1.1 Hole Positions and Size 6

 Figure 5-1: Drain Hole Positions – Inside Aircraft..... 7

 Figure 5-2: Typical Cross-Section 8

 5.2 Finish the Holes..... 8

6. Completion..... 8



FIELD SERVICE INSTRUCTION

TITLE:

Aft Fuselage Drain Holes

SERIAL RANGE:

100-0001 thru 100-0095

JASC CODE:

5300

PAGE:

4 of 8

REPORT NO.:

FSI-070

REVISION:

00

1. Special Safety Instructions

1.1 Warnings

Failure to comply with “Warnings” contained in this instruction may result in financial loss, significant delay in the completion time, and/or serious injury to personnel.

1.2 Cautions

Failure to comply with “Cautions” contained in this instruction may result in the destruction of components, unnecessary complications, the need to reverse completed work, and/or delays in the completion time.

1.3 Notes

“Notes” are provided when additional information may lead to an increase in efficiency.

2. Parts, Tools, and Equipment

The following tables describe the parts, tools, and equipment necessary to successfully complete this instruction. Where applicable, reference to drawings provided with this instruction is provided.

Table 2-1: Parts and Tools Included in the Service Kit

| Item # | Part No. | Qty | Description | Drawing No. | Dwg Item # |
|--------|----------|-----|-------------|-------------|------------|
| 2-1-1 | N/A | — | N/A | N/A | N/A |

Table 2-2: Consumables Included in the Service Kit

| Item # | Part No. | Qty | Description | Drawing No. | Dwg Item # |
|--------|----------|-----|-------------|-------------|------------|
| 2-2-1 | N/A | — | N/A | N/A | N/A |

Table 2-3: Serial-Number-Specific Parts Included in the Service Kit

| Item # | Part No. | Qty | Description | Drawing No. | Dwg Item # |
|--------|----------|-----|-------------|-------------|------------|
| 2-3-1 | N/A | — | N/A | N/A | N/A |

Table 2-4: Parts and Tools NOT Included in the Service Kit

| Item # | Part No. | Qty | Description | Drawing No. | Dwg Item # |
|--------|------------------------|-----|-------------------------------|-------------|------------|
| 2-4-1 | Commercially Available | AR | .189 diameter (#12) drill bit | N/A | N/A |

3. General

This Field Service Instruction provides guidance for ensuring proper drainage of the KODIAK® 100 aircraft by adding seven drain holes to the aft fuselage floor of the aircraft.

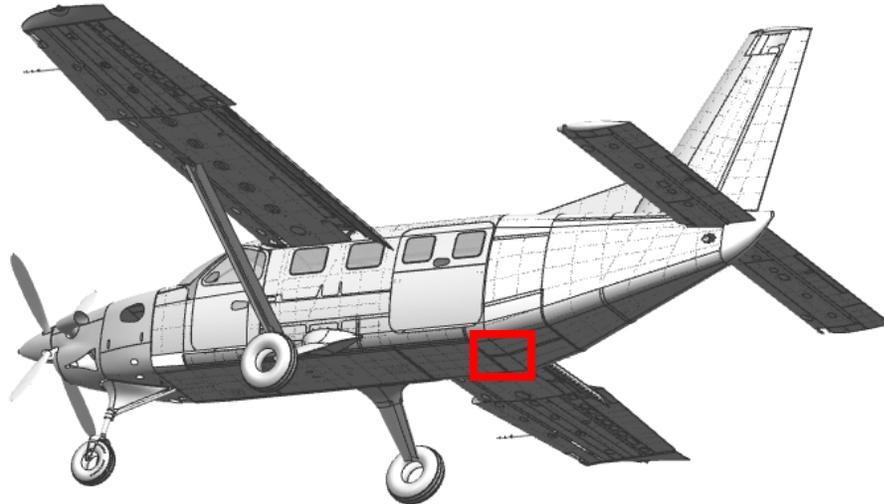


Figure 3-1: Overview

4. Preparation

1. Support the aircraft with the tail stand in accordance with the *KODIAK® 100 Airplane Maintenance Manual*, Chapter 25.
2. Access the aft fuselage section by removing any cargo in the area, and the passenger seats, the three aft cockpit floorboards, and the aft cargo floor panel in accordance with the *KODIAK® 100 Airplane Maintenance Manual*.



FIELD SERVICE INSTRUCTION

TITLE:

Aft Fuselage Drain Holes

SERIAL RANGE:

100-0001 thru 100-0095

JASC CODE:

5300

PAGE:

6 of 8

REPORT NO.:

FSI-070

REVISION:

00

5. Instructions

5.1 Drill the Holes

Drill and finish seven (7) holes in the bottom aircraft skin in accordance with the instructions below.

▲ NOTE ▲

One drain hole (shown as position “D” in **Figure 5-1**) already exists on the aircraft. The final number of drain holes will be eight.

5.1.1 Hole Positions and Size

- Drill each hole to a diameter of 0.189 inch \pm 0.010 (#12 bit)
- Position three (3) of the holes at Fuselage Station 179, and four (4) of the holes at Fuselage Station 181.
- Position each hole in relation to the edge of the frame flange. Refer to **Figure 5-1** for measurements.

▲ NOTE ▲

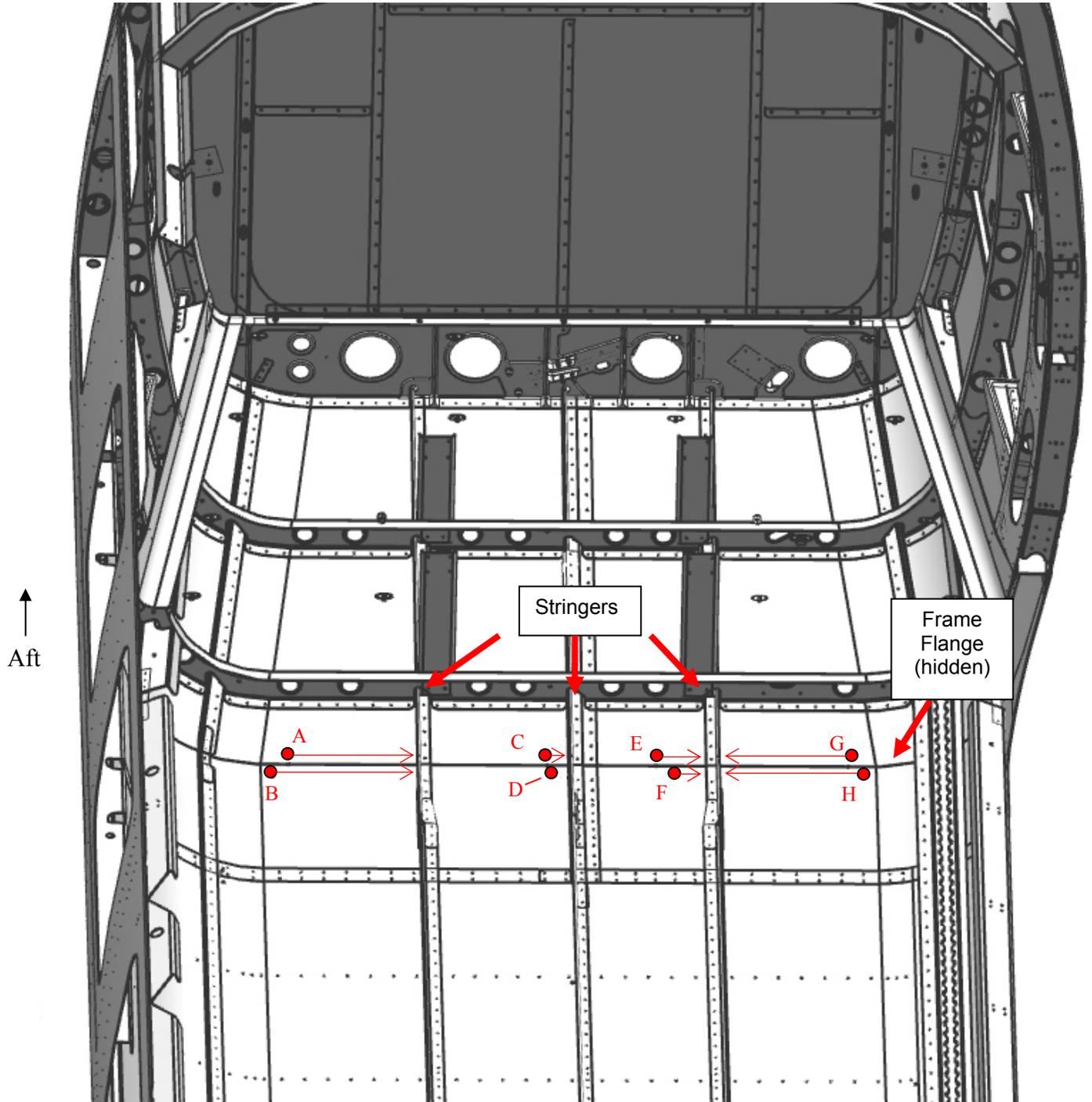
Distances shown on **Figure 5-1** are approximate.

- Maintain distance of 0.50 inch between each drain hole and any adjacent holes or fasteners.
- Refer to **Figure 5-2** for a typical cross-section view.

▲ CAUTION ▲

If the aircraft is equipped with an external cargo compartment, use caution when drilling to avoid damage to the external cargo compartment. Use a drill stop if necessary.

For questions, or for additional information, contact Quest Aircraft Customer Service.



Distances to stringers (inches)

A = 7.37 C = 1.33 E = 2.85 G = 7.37
 B = 8.31 D = Existing Hole F = 1.80 H = 8.31

Distance to frame flange (inches)

All holes = $0.21 \pm .03$
 (measured fore and aft of flange)

Figure 5-1: Drain Hole Positions – Inside Aircraft

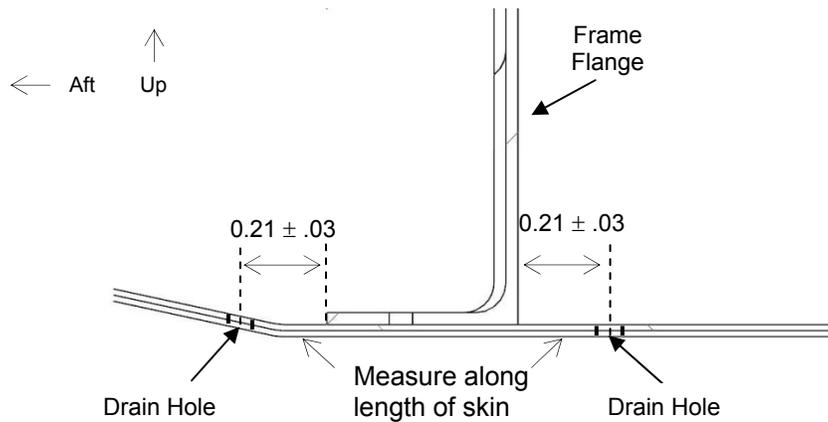


Figure 5-2: Typical Cross-Section

5.2 Finish the Holes

1. Deburr the holes.
2. Ensure adequate corrosion protection by performing either step a or step b:
 - a. Prime and paint aluminum surfaces where work was performed.

▲ NOTE ▲

Use a high quality zinc chromate or epoxy primer and high quality topcoat paint. Apply coatings in accordance with the manufacturer's instructions. Contact Quest Customer Service to order products.

- b. Spot Alodine using an Alodine pen on all surfaces where work was performed.

6. Completion

1. Remove burrs and any accumulated debris.
2. Reinstall the aft cargo floor panel, floorboards, and passenger seats in accordance with the *KODIAK® 100 Airplane Maintenance Manual*.
3. Record all work performed in the appropriate maintenance records.

---END---