

MANDATORY SERVICE BULLETIN

NUMBER: SB11-03

REVISION: 00

DATE: 03/16/2011

SUBJECT: ENGINE INLET SHROUD MODIFICATION

EFFECTIVITY:

KODIAK 100 Series Aircraft Serial Numbers: 100-001 through 100-047.

SUMMARY:

Quest has been notified that the right receiver shroud has been rubbing on the engine mount. Although no significant damage or problem has occurred, the following Service Bulletin is being mandated by Quest.

ACTION:

Quest is mandating a one time modification to the right receiver shroud and repair to the engine mount, if required.

LOG OF CHANGES:

Revision:	Date:	Description of Change:
00	03/16/2011	Initial Release

ATTACHED DOCUMENTS:

Document #:	Date:	Document Title:
N/A	N/A	N/A

PARTS, TOOLS, AND EQUIPMENT:

The parts, tools and equipment listed below are needed in order to complete the instructions contained within.

Parts and Tools included in this Service Bulletin:

Item	Quantity	Part Number	Description
N/A	N/A	N/A	N/A

 Parts and Tools **Not** included in this Service Bulletin:

Item	Quantity	Part Number	Description
1	As Needed	-	Emory Cloth or Equivalent
2	As Needed	See Description	Steel Primer: DuPont Corlar® 525-333 or PRC-DeSoto 513X384
3	As Needed	See Description	Aluminum Primer: PRC-DeSoto 513X384 or DeSoto IFT HS or PRC-DeSoto CA 7700
4	As Needed	See Description	Light gray colored commercial grade epoxy paint. For Ref: Preferred color is obtained using Torginol light grey #9460 BSWR.
5	As Needed	See Description	Grinder, File or Equivalent

FAA APPROVED:

The inspection and modification described in this Mandatory Service Bulletin has shown compliance with the applicable Federal Aviation Regulations and is FAA Approved.

COMPLIANCE:

This Mandatory Service Bulletin must be complied with on or before the next 100 hr, Annual Inspection, or scheduled maintenance, whichever comes first.

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INDUSTRY SUPPORT INFORMATION:

N/A

WEIGHT AND BALANCE:

Negligible

CREDIT AND WARRANTY INFORMATION:

Owners of Aircraft under warranty may contact Quest for reimbursement up to \$225.

*Quest Customer Service
Service Bulletin SB11-03*

Phone: (208)263-1111 Toll Free: 1(866)263-1112

Email: Customercare@questaircraft.com

COMPLETION:

Record the work performed in the **KODIAK 100 Maintenance Records**.

ACCOMPLISHMENT INSTRUCTIONS:

Accomplishment Instructions are listed in the next section of this Service Bulletin.

MANPOWER:

The instructions contained in this Mandatory Service Bulletin will take approximately:

- 3 hours
- Additional time may be required to allow primer and paint to fully cure.

ATTACHED DOCUMENTS:

N/A

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1. RIGHT SHROUD RECEIVER REMOVAL

1. Remove the safety wire attached to each L-bolt (P/N 100-171-3161). Refer to **Figure 1-1, Detail B**.
2. Follow the plenum shroud removal instructions in the **KODIAK 100 Maintenance Manual Chapter 71, Power Plant** to detach the plenum shroud from the right shroud receiver (P/N 100-171-3118). Refer to **Figure 3-1**.
3. Remove the cotter pin (P/N MS24665-134) and washer (P/N NAS1149F0432P) from the forward L-bolt (P/N 100-171-3161). Refer to **Figure 1-1, Detail A**.

 **NOTE:** The aft L-bolt assembly may stay connected to the right shroud receiver during modification.

4. Remove the two (2) screws (P/N MS24693-S272) attaching the right shroud receiver (P/N 100-171-3118) to the aft plenum and remove the right shroud receiver (P/N 100-171-3118) from the aircraft.


2. RIGHT SHROUD RECEIVER MODIFICATION

1. Mark the bottom of the right shroud receiver (P/N 100-171-3118) as shown in **Figure 2-1, Details A & B**.
2. Using a grinder or similar tool, remove the area indicated in **Figure 2-1, Detail B**. Round and radius the new corners.
3. Prime and paint the exposed aluminum. Refer to the bill of materials for recommended products.

3. ENGINE MOUNT REPAIR

1. Inspect the inboard side of the engine mount in the area indicated in **Figure 3-1, Detail A**. If rubbing has occurred between the shroud receiver and the engine mount, the area should be inspected for damage to the engine mount structure.
2. If damage is found, the affected area should be blended out using an emory cloth, or equivalent tool within the following specifications:
 - Maximum of .005 depth from the engine mount tube outside wall.
 - No longer than 3.000 inches.
 - Less than 1/4 of the circumference of the engine mount tube.
 - Greater than .750 inches from the weld joint.

Refer to **Figure 3-1, Detail B & C**. If the blended area does not fit within the above stated specifications, contact Quest for further instructions.

 **NOTE:** The paint applied to the engine mount is often very thick. Additional paint may need to be removed in the local area to achieve an accurate reading of the blend depth.

3. After blending, inspect the local area for cracks using Penetrant inspection method in accordance with **AC43.13 (Ch. 5, Section 5)**.
4. Touch up paint on engine mount in accordance with the **KODIAK 100 Maintenance Manual Chapter 71, Power Plant**.

4. RIGHT SHROUD RECEIVER INSTALLATION



NOTE: Standard Torque values should be used during the installation of right shroud receiver.

1. Position and secure the right receiver (P/N **100-171-3118**) using the two (2) screws (P/N **MS24693-S272**). Refer to **Figure 1-1, Detail A**.
2. Reconnect the fwd L-bolt (P/N **100-171-3161**) to the right shroud receiver (P/N **100-171-3118**) using the washer (P/N **NAS1149F0432P**) and a new cotter pin (P/N **MS24665-134**). Attach the L-bolt (P/N **100-171-3118**) assembly to the aft plenum. Refer to **Figure 1-1, Detail A**.
3. Position and reinstall the plenum shroud in accordance with the **KODIAK 100 Maintenance Manual Chapter 71, Power Plant**.
4. Install safety wire around both L-bolts similar to installation shown in **Figure 1-1, Detail B**.

5. RECORD WORK PERFORMED IN KODIAK LOG BOOKS

Upon completion, record all work performed in the appropriate KODIAK maintenance records.

-----END OF INSTRUCTIONS-----

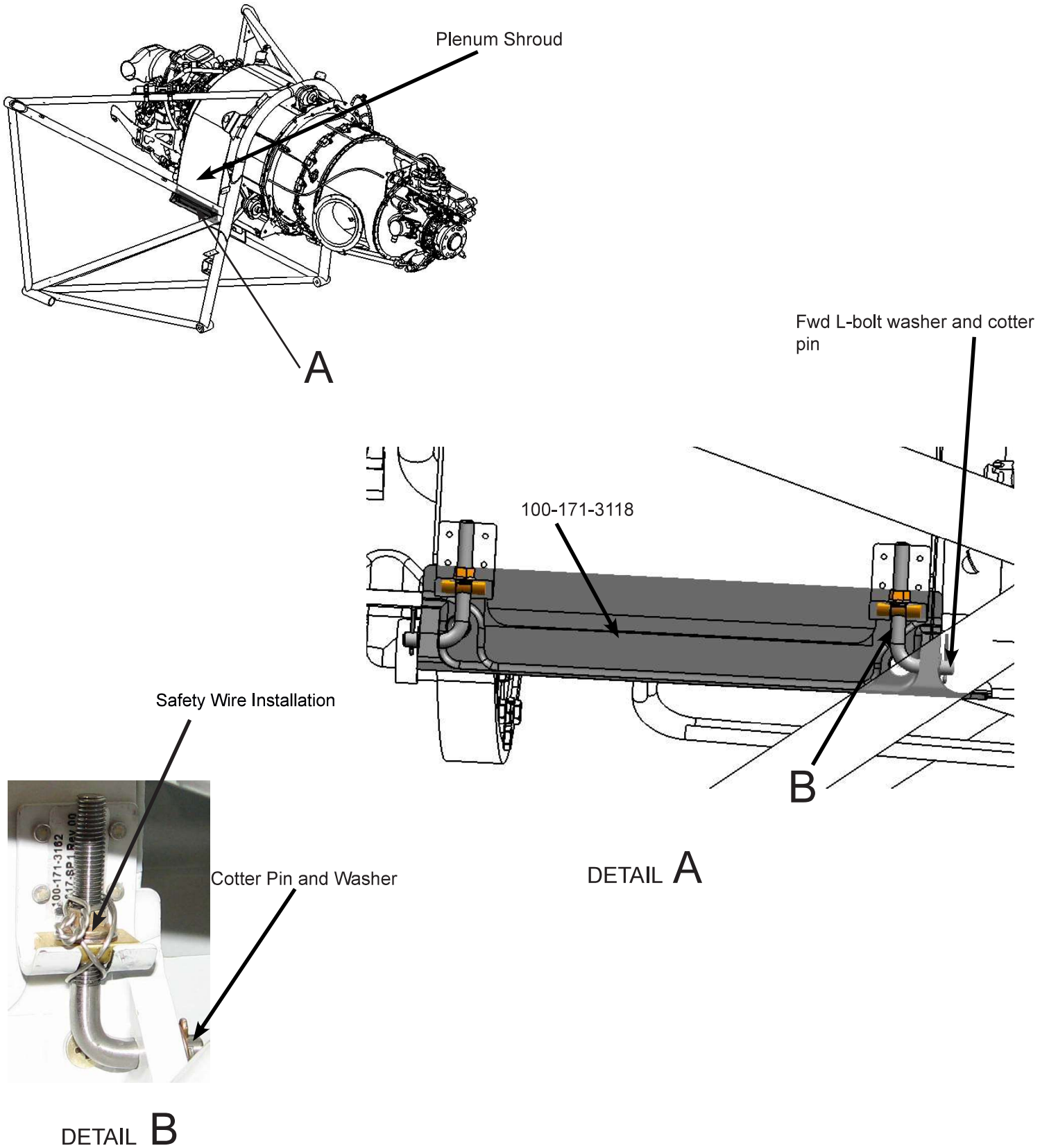
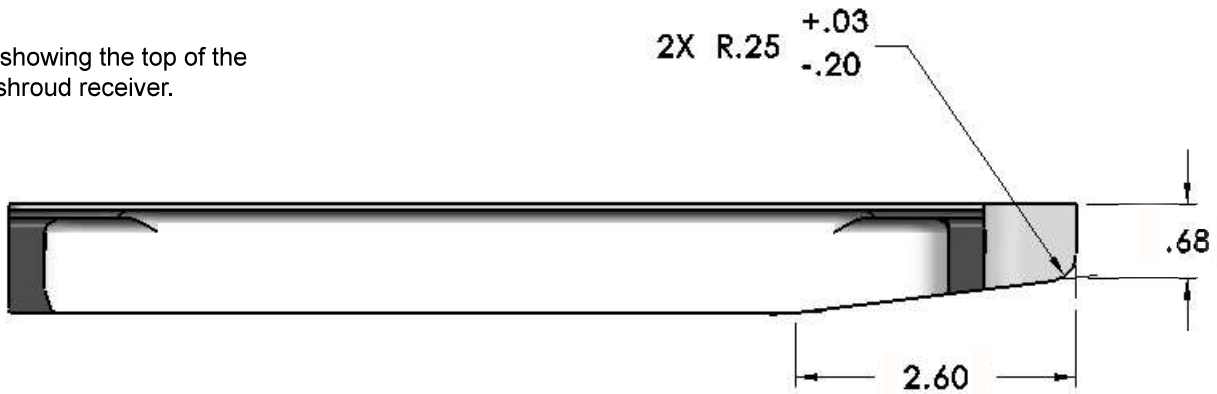


Figure 1-1 — Right Shroud Receiver Removal

View showing the top of the right shroud receiver.



DETAIL A

Remove Outlined Area



DETAIL B

Figure 2-1 — Right Shroud Receiver Modification

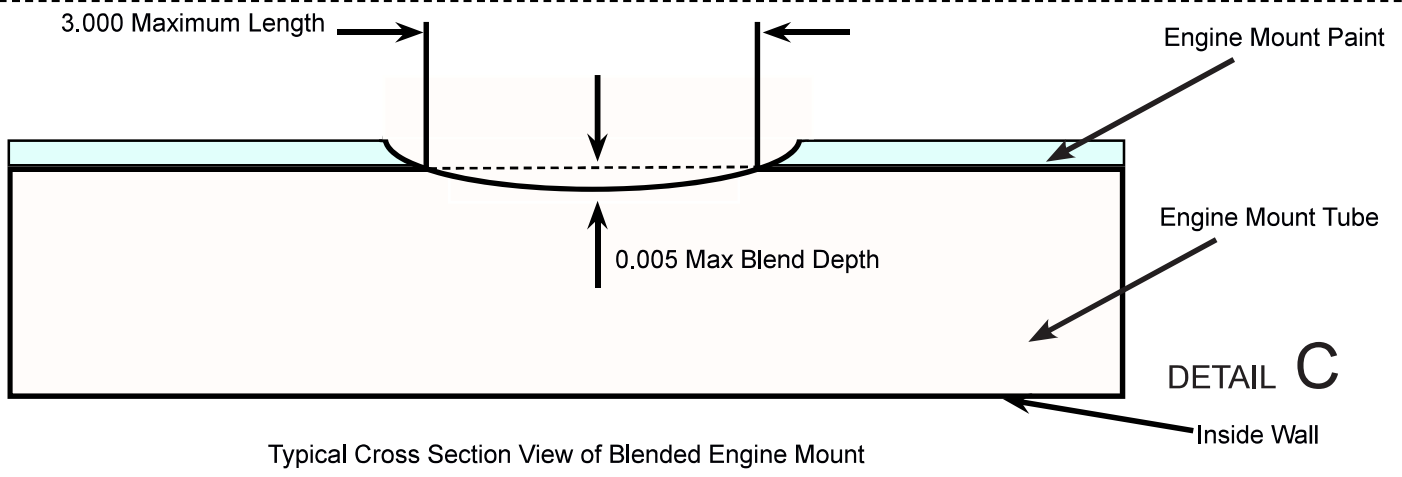
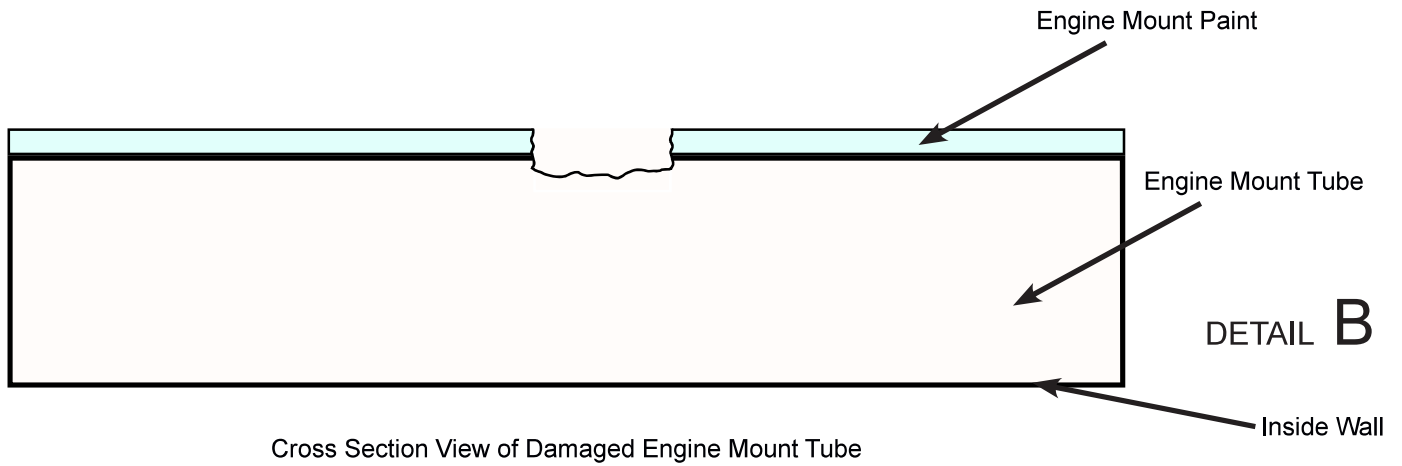
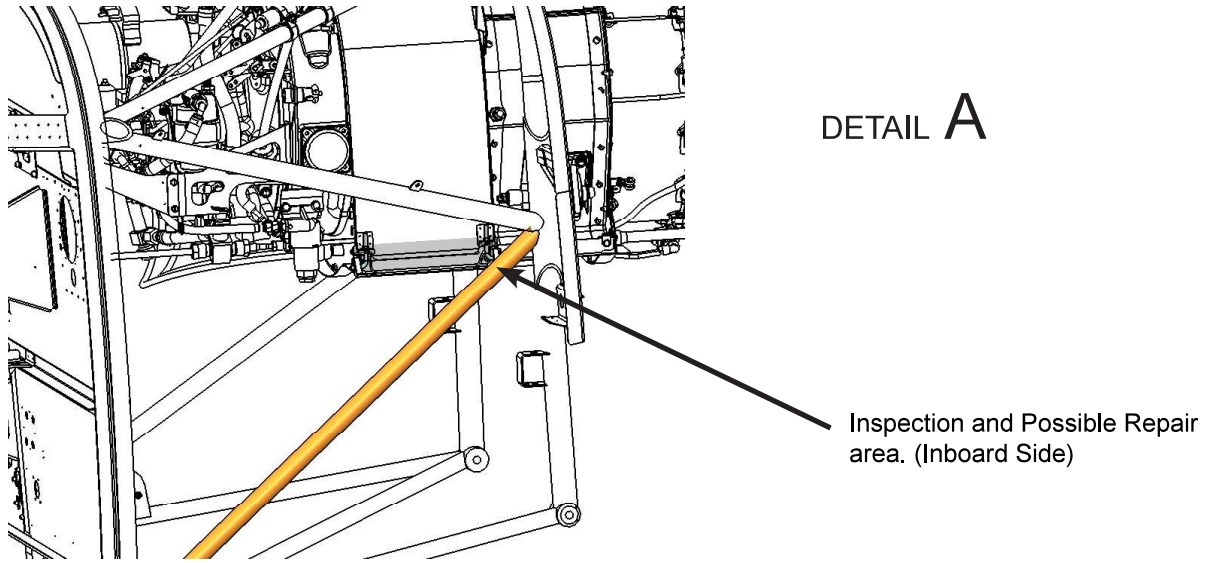


Figure 3-1 — Engine Mount Modification