RECOMMENDED

SERVICE BULLETIN

Premier

TITLE: ENGINE FUEL AND CONTROL - REPOSITIONING OF FUEL FLOW TRANSMITTERS

1. Planning Information

A. Effectivity

(1) Airplanes

Model 390 Premier I, Serials RB-1, RB-4 through RB-15, RB-17 through RB-58, RB-59 through RB-80, RB-82 and RB-84.

If you are no longer in possession of the airplane, please forward this information to the present owner.

(2) Spares

None.

B. Reason

This Service Bulletin is being issued because Raytheon Aircraft Company (RAC) has received reports from the field of intermittent fuel flow indications. The fuel flow transmitters P/N 1/2-1-81-302 were inspected and found to have fuel inside the electrical connector. During engine installation at production, air is purged from the fuel system by temporarily loosening the fuel line connections at the fuel flow transmitter. Any fuel that escapes during this procedure migrates down the body of the fuel flow transmitter and collects in the electrical connector.

C. Description

This Service Bulletin provides information to reposition the fuel flow transmitter to prevent fuel from collecting in the electrical connector. Instructions are also provided to install a heat shield on the fuel flow transmitter to prevent bleed air heat damage to the fuel flow transmitter.

D. Compliance

Raytheon Aircraft Company recommends that this Service Bulletin be accomplished within the next 200 flight hours or 12 months from receipt of this Service Bulletin, or at the next scheduled inspection, whichever occurs first.

The export of these commodities, technology or software are subject to the US Export Administration Regulations. Diversion contrary to U.S. law is prohibited. For guidance on export control requirements, contact the Commerce Department's Bureau of Export Administration at 202-482-4811 or at www.bxa.doc.gov.

Raytheon Aircraft Company (RAC) issues Service Information for the benefit of owners and fixed base operators in the form of two classes of Service Bulletins. The first class, Mandatory Service Bulletins (red border) includes changes, inspections and modifications that could affect safety or crashworthiness. RAC also issues Service Bulletins with no red border which are designated as either recommended or optional in the compliance section within the bulletin. In the case of recommended Service Bulletins, RAC feels the changes, modifications, improvements or inspections will benefit the owner/operator and although highly recommended, Recommended Service Bulletins are not considered mandatory at the time of issuance. In the case of Optional Service Bulletins, compliance with the changes, modifications, improvements or inspections is at the owner/operator's discretion.

Both classes are mailed to:

- (a) RAC Authorized Service Centers.
- (b) Owners of record on the FAA Aircraft Registration Branch List and the RAC International Owner Notification/Registration Service List.
- (c) Those having a publications subscription.

Information on Owner Notification Service or subscription can be obtained through any RAC Authorized Service Center. As Mandatory Service Bulletins and Service Bulletins are issued, temporary notification in the Service Bulletin Master Index should be made until the index is revised. Warranty will be allowed only when specifically defined in the Service Bulletin and in accordance with the RAC Warranty Policy.

Unless otherwise designated, RAC Mandatory Service Bulletins, Service Bulletins and RAC Kits are approved for installation on RAC airplanes in original or RAC modified configurations only, RAC Mandatory Service Bulletins, Service Bulletins and Kits may not be compatible with airplanes modified by STC installations or modifications other than RAC approved kits.



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E. Approval

The engineering data contained in this Service Bulletin is FAA approved.

F. Manpower

The following information is for planning purposes only:

Estimated man-hours: 3 hours.

Suggested number of men: 1 man.

The above is an estimate based on experienced, properly equipped personnel complying with this Service Bulletin. Occasionally, after work has started, conditions may be found which could result in additional man-hours.

G. Weight and Balance

None.

H. Electrical Load Data

Not changed.

I. Software Accomplishment Summary

Not applicable.

J. References

Raytheon Aircraft Premier I Model 390 Airplane Maintenance Manual (AMM), P/N 390-590001-0015A8 or subsequent revision, Chapter 73-30-01.

K. Publications Affected

It is recommended that a note "See Service Bulletin No. 73-3603" be made in the following:

Raytheon Aircraft Premier I Model 390 Airplane Maintenance Manual (AMM), P/N 390-590001-0015A8 or subsequent revision, Chapter 73-30-01;

Raytheon Aircraft Model 390 Premier I Illustrated Parts Catalog (IPC), P/N 390-590001-0011A3 or subsequent revision, Chapter 73-30-00.

L. Interchangeability of Parts

Not applicable.

M. Warranty Credit

Warranty credit for labor and parts to the extent noted under MANPOWER and MATERIAL will be allowed on all affected airplanes.

Warranty coverage offered in this Service Bulletin will expire 12 months from the last day of the month this Service Bulletin is issued. After that date, the owner/operator assumes the responsibility for compliance cost. Raytheon Aircraft Company reserves the right to void warranty coverage in the area affected by this

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Service Bulletin until the date the Service Bulletin is accomplished by a Raytheon Aircraft Company Authorized Service Center.

All warranty work must be accomplished by a Raytheon Aircraft Authorized Service Center rated to perform maintenance on the specific model of airplane.

All warranty reimbursements are handled through Raytheon Aircraft Company Authorized Service Centers. The owner/operator should arrange for an Authorized Service Center to perform the work and the Authorized Service Center must submit the standard Raytheon Aircraft Company warranty claim.

2. Material Information

Contact a Raytheon Aircraft Authorized Service Center for information.

A. Industry Support

Not applicable.

B. Airplanes

The following parts required for this modification may be ordered through a Raytheon Aircraft Authorized Service Center or RAPID:

Part Number	Description	Quantity Per Airplane
390-910327-0003	Shield Assembly	2

Raytheon Aircraft Company expressly reserves the right to supersede, cancel and/or declare obsolete, without prior notice, any parts or publications that may be referenced in this Service Bulletin.

The following materials may be obtained locally:

Part Number	Description	Quantity Per Airplane
MS35275-242	Screw	8
NAS1149DN832J	Washer	8

C. Spares

Not applicable.

D. Reidentified Parts

None.

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E. Tooling - Price and Availability

Not applicable.

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3. Accomplishment Instructions

This Service Bulletin shall be accomplished as follows:

NOTE

Should any difficulty be encountered in accomplishing this Service Bulletin, contact Raytheon Aircraft Company 1-800-429-5372 or 316-676-3140.

A. Airplane

WARNING

Observe all Warnings and Cautions contained in the aircraft manuals referenced in this Service Bulletin.

Whenever any part of this system is dismantled, adjusted, repaired or renewed, detailed investigation must be made on completion to make sure that distortion, tools, rags or any other loose articles or foreign matter that could impede the free movement and safe operation of the system are not present, and that the systems and installations in the work area are clean.

- (1) Remove all power from the airplane and disconnect the battery. Display warning notices prohibiting reconnection of airplane electrical power.
- (2) Remove left and right fuel flow transmitters (refer to AMM, Chapter 73-30-01).

NOTE

For Serials RB-59 through RB-80, RB-82 and RB-84, remove shield assembly P/N 390-910327-0001 from left and right fuel flow transmitters by removing two screws. Discard shield assembly P/N 390-910327-0001 and screws.

- (3) Install shield P/N 390-910327-0003 to left and right fuel flow transmitter with four screws P/N MS35275-242 and four washers P/N NAS1149DN832J and secure with safety wire. Refer to Figure 1.
- (4) Install left and right fuel flow transmitters (refer to AMM, Chapter 73-30-01) with the exception that the fuel flow transmitter is rotated up 180° so that the electrical connector is above the bleed air tube. Make sure that there is a minimum gap of 0.35 inch between the fuel flow transmitter shield and the bleed air tube. Refer to Figure 1.
- (5) Reconnect the airplane battery, remove warning notices and restore power.
- (6) Ensure all work areas are clean and clear of tools and miscellaneous items of equipment.
- (7) Return airplane to service.

B. Spares

Not applicable.

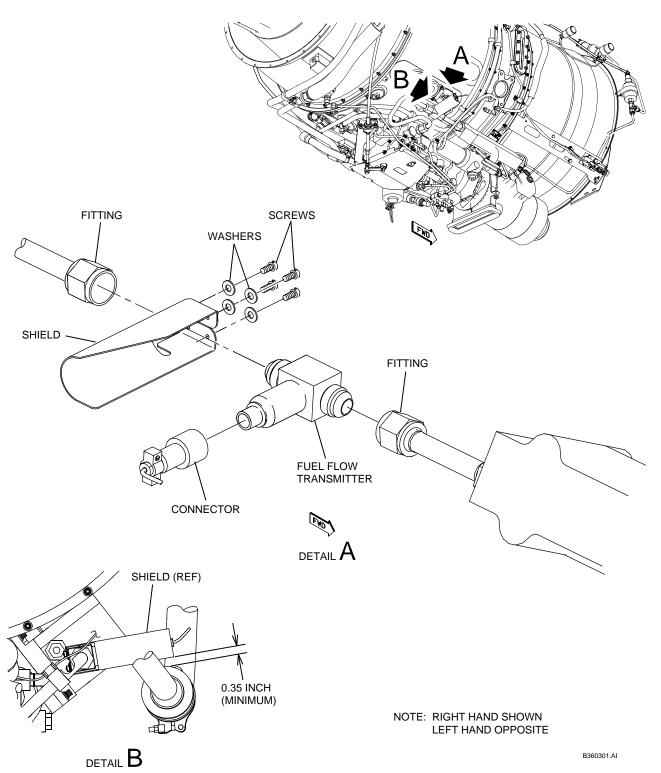
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C. Record of Compliance

Upon completion of this Service Bulletin, make an appropriate maintenance record entry.

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Repositioning of the Fuel Flow Transmitter and Shield Installation Figure 1