

Number: SB 2X-71-17

Issued: July 21, 2011

SNS SUBJECT: 71-60 AIR INTAKES - Disbonding Of Induction System Air Box Seal(s)

1. COMPLIANCE

Mandatory: Cirrus Design considers this Service Bulletin to be MANDATORY. Accomplish this Service Bulletin within the next 10 Flight Hours. Compliance time begins upon receipt of this Service Bulletin.

2. EFFECTIVITY

SR22T Serials 0001-0169, except 0004, 0019, 0027, 0047, 0097, 0126, 0127, 0135, 0138, 0139, 0144, 0154, 0155, 0157-0161, 0163.

3. APPROVAL

FAA approval has been obtained on all technical data in this Service Bulletin that affects type design.

4. PURPOSE

A condition can occur in which the induction system air box seal(s) could become disbonded and ingested into the turbocharger compressor.

5. DESCRIPTION

This Service Bulletin provides instructions for the replacement of the air box seals.

6. WARRANTY INFORMATION

For aircraft under warranty at the issue date of this Service Bulletin, Cirrus Design will cover all parts and labor costs for this Service Bulletin if the work is accomplished within the Compliance time period and the work is performed at an authorized Cirrus Design Service Center.

7. MANPOWER REQUIREMENTS

2.25 manhours.

8. OTHER PUBLICATIONS AFFECTED

SR22/22T Airplane Maintenance Manual (p/n 13773-001)

SR22/22T Illustrated Parts Catalog (p/n 13744-001)

9. WEIGHT AND BALANCE

N/A

EFFECTIVITY:

SR22T Serials 0001-0169, except 0019, 0027, 0047, 0097, 0126, 0127, 0135, 0138, 0139, 0144, 0154, 0155, 0157-0161, 0163.

10. MATERIAL INFORMATION

The following parts are required to comply with this Service Bulletin. Parts can be obtained from an Authorized Cirrus Design Service Center or Parts Distributor.

Order kit 70257-001 to obtain the following parts.

Item No.	Description	P/N or Spec.	Supplier	Quantity
1	Reinforced Silicone Fiberglass Seal	29486-001	Cirrus Design	2

11. ACCOMPLISHMENT INSTRUCTIONS

A. Acquire necessary tools, equipment, and supplies.

Description	P/N or Spec.	Supplier	Purpose
Grinding Wheel	NA	Any Source	Abrading
Cut-Off Tool	NA	Any Source	Cutting
Alodine Pen	N/A	Any Source	Corrosion Prevention
Emery Cloth	120 Grit	Any Source	Abrading
Isopropyl Alcohol	NA	Any Source	Solvent Cleaning
RTV Prime Coat	PR1204	Dow Corning	Adhesive Primer
RTV Sealant	736	Dow Corning	Adhesive

- B. Remove engine cowling. (Refer to AMM 71-10)
- C. Remove clamp securing air box to turbocharger.
- D. Disconnect air box from turbocharger.
- E. Remove and discard black rubber seal from air box.
- F. Remove residual adhesive from air box.
- G. Using Grinding Wheel, grind weld on outside diameter of airbox fitting flush to surrounding surface.
(See Figure 1)

CAUTION: Do not extend slots into any weld.

H. Affected Serials in Range 0001 thru 0151, LH Air Box Only;

Using Cut-Off Tool, extend three of the four air box flange slots to 0.90 inch (2.29 cm) with full radius on the end. Do not extend the top slot nearest to the weld.

I. Affected Serials in Range 0001 thru 0151, LH Air Box Only;

Using Cut-Off Tool, increase width of all four air box flange slots to 0.13 inch (3.30 mm).

J. Affected Serials in Range 0152 thru 0169, LH Air Box Only;

Using Cut-Off Tool, extend all four air box flange slots to 0.90 inch (2.29 cm) with full radius on the end.

K. All Affected Serials, RH Air Box Only;

Using Cut-Off Tool, increase width of all four air box flange slots to 0.13 inch (3.30 mm).

EFFECTIVITY:

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L. All Affected Serials, RH Air Box Only:

Using Cut-Off Tool, extend three of the four air box flange slots to 0.90 inch (2.29 cm) with full radius on the end. Do not extend the top slot nearest to the weld.

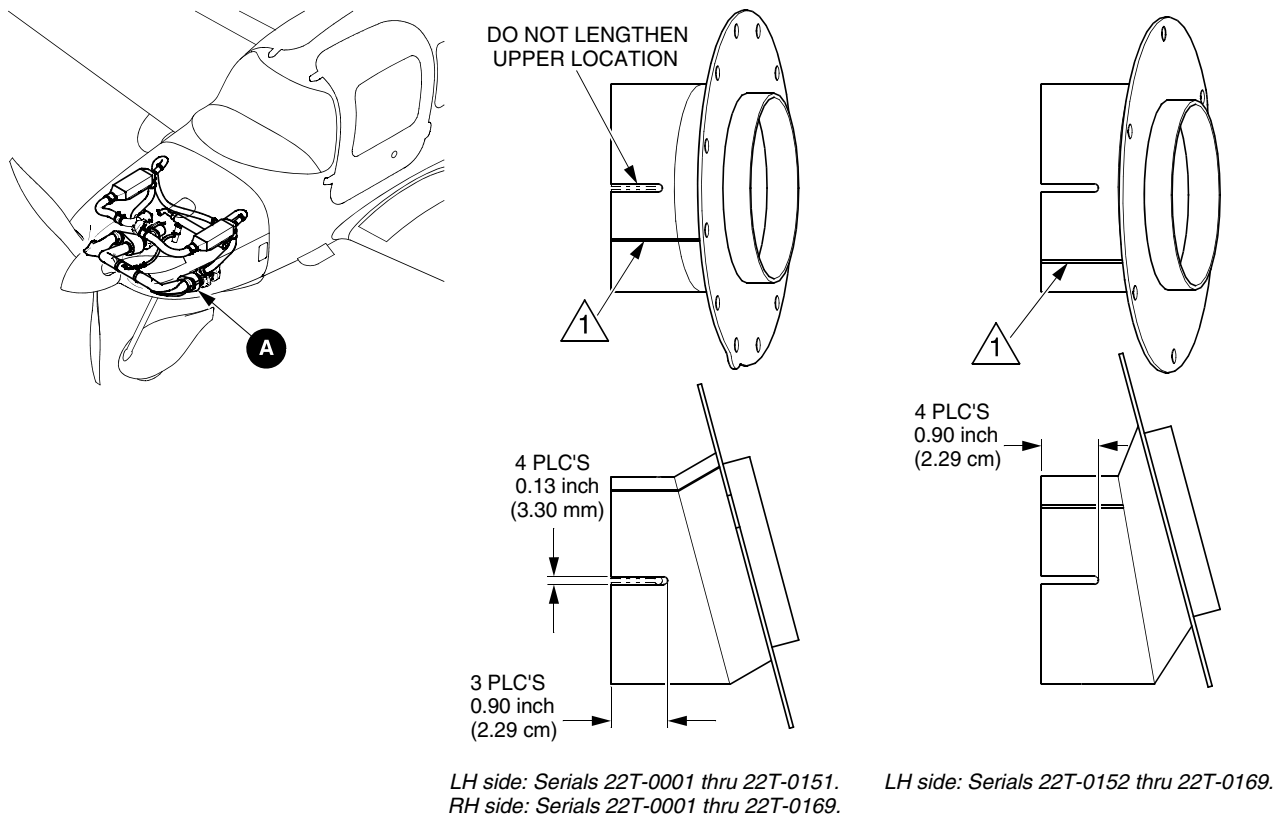
- M. Touch-up reworked areas with alodine pen.
- N. Abrade inside of Reinforced Silicone Fiberglass Seal with emery cloth and solvent clean with isopropyl alcohol.
- O. Abrade induction mounting flange on turbocharger with emery cloth and solvent clean with isopropyl alcohol.
- P. Clean air box of any residual machining debris.
- Q. Apply PR1204 RTV prime coat to turbocharger induction mounting flange. Cure for 2 hours.
- R. Apply a thin coating of 736 RTV sealant turbocharger induction mounting flange.
- S. Install Reinforced Silicone Fiberglass Seal to mounting flange pushing seal as far aft as possible. Remove excess RTV. Cure for 24 hours.

CAUTION: Upon installation, If airbox fit is loose, remove from turbocharger, and use clamp to slightly reduce flange diameter. Use care not to over-compress and cause fit-up problems.

- T. Install air box over turbocharger induction mounting flange. Torque clamp to 90-100 in-lb (10-11 Nm).
- U. Ensure FOD cannot enter induction system by inspecting air box flange and verifying fiberglass seal completely blocks air box slots. (See Figure 1)
- V. Install clamp securing air box to turbocharger.
- W. Repeat procedure on opposite turbocharger.
- X. Install engine cowling. (Refer to AMM 71-10)
- Y. Complete airplane records by noting compliance with SB 2X-71-17 in Aircraft Logbook.

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SLOT MODIFICATION

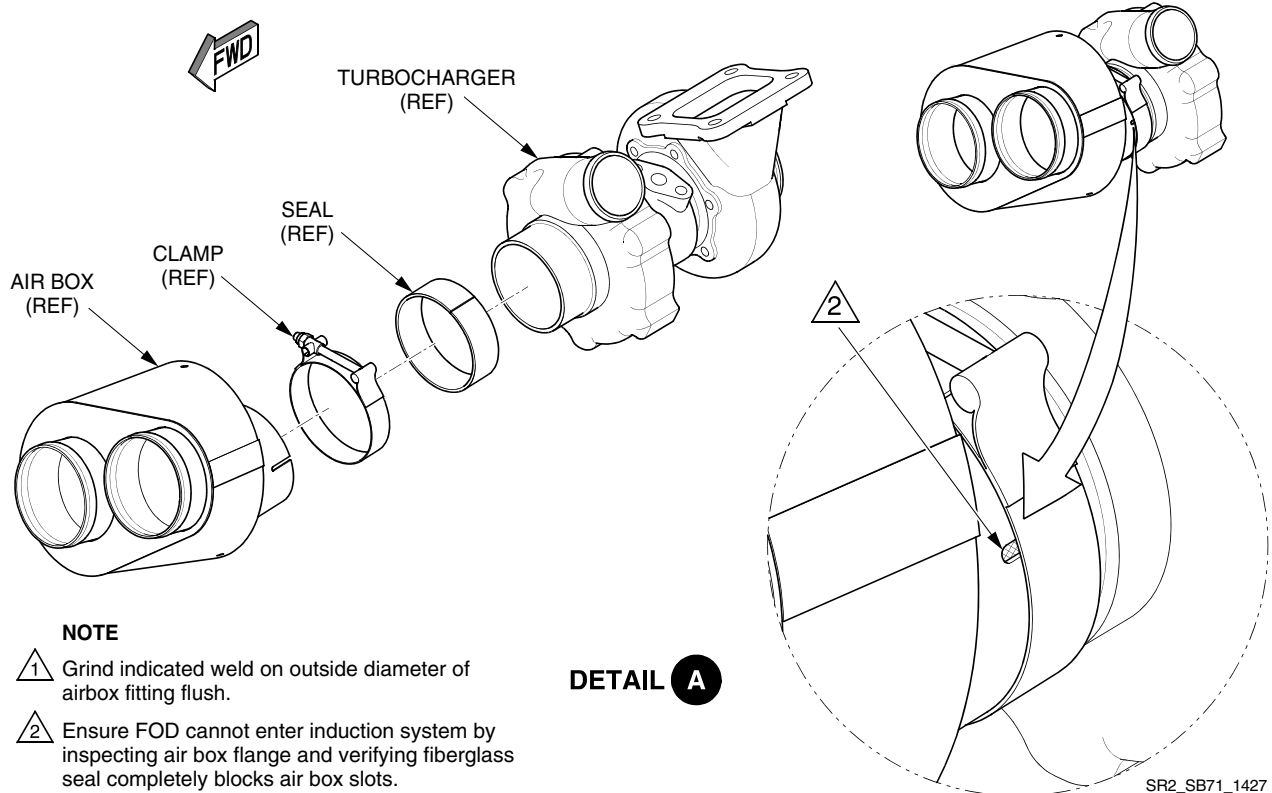


Figure 1
Air Box Seal Installation

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Service Loop Evaluation Form

SNS SUBJECT: 71-60 AIR INTAKES - Disbonding Of Induction System Air Box Seal(s)

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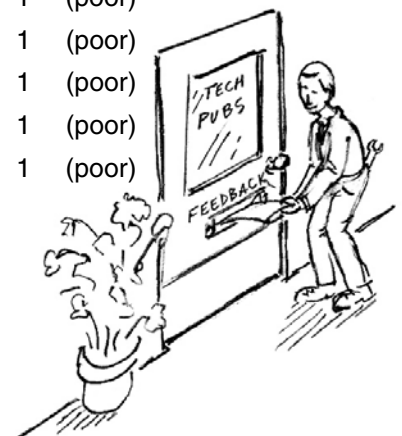
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