International Aero Engines

SERVICE BULLETIN

ENGINE - CORE TO FANCASE INTERFACE SEALING OF BIFURCATION PANEL - CATEGORY CODE 6, 3 - MOD.ENG-72-0193

1. Planning Information

A. Effectivity

(1) Aircraft: (a) Airbus A320
(b) Airbus A321

(2) Engine: (a) V2500-A1 Engines prior to Serial No.V0361
(b) V2527-A5 Engines prior to Serial No. V10065
(c) V2530-A5 Engines, Serial Nos. V10052 and V10053

B. Concurrent Requirements

None

C. Reason

(1) Condition

Leakage can occur through the radial gap between tube/harness connectors and bifurcation panel, which is a firewall seal.

(2) Background

This condition was encountered during drainage certification testing of the A5 engine on the Airbus A321.

(3) Objective

To improve the integrity of bifurcation firewall sealing.

(4) Substantiation

Sealant is currently applied on the A1 and A5 engines at two positions between tube adaptors and the bifurcation panel and has proved an effective sealant. Application of additional sealant has shown that it will improve the integrity of the bifurcation firewall seal.

(5) Effect of Bulletin on Workshop Procedures:

Removal/Installation	Affected (See Supplemental Information)
Disassembly/Assembly	Not affected
Cleaning	Not affected
Inspection/Check	Not affected
Repair	Not affected
Testing	Not affected

(6) Supplemental Information

The Removal/Installation will be revised to add the new configuration of this Service Bulletin.

D. Description

(1) This Service Bulletin introduces sealant (silcoset 152 or RTV 159) around the radial gap between the tube/harness connectors and the bifurcation panel.

The opportunity has also been taken to include sealant at the joint of the bifurcation panel and the No.6 strut.

E. Approval

The part number changes and/or part modifications described in Section 2 and 3 of this Service Bulletin have been shown to comply with the applicable Federal Aviation Regulations and are FAA-APPROVED for the Engine Model listed.

F. Compliance

Category Code 6 (V2500-A1 engines)

Accomplish when the subassembly (i.e. modules, accessories, components, build groups) is disassembled sufficiently to afford access to the affected part and to all affected spare parts.

Category Code 3 (V2527/V2530-A5 engines)

Accomplish at the next 'A' check after receipt of Bulletin.

G. Manpower

Estimated manhours to incorporate the full intent of this Bulletin:

Venue	Estimated Manhours
V2500-A1 Engines	
(1) In Service	Not applicable
(2) At Overhaul	

(a) To embody .. .. .. 57 minutes
TOTAL: 57 minutes

V2500-A5 Engines

(1) In Service

(a) To gain access .. .. 20 minutes

(b) To embody .. .. 57 minutes

(c) To return engine to flyable status .. .. 24 minutes
TOTAL: 1 hour 41 minutes

(2) At Overhaul

(a) To embody .. .. .. 57 minutes
TOTAL: 57 minutes

NOTE: The above times do not include drying and curing times.

H. Material - Price and Availability

(1) Modification Kit not required.

(2) See "Material Information" section for prices and availability of future spares.

I. Tooling - Price and Availability

Special tools are not required.

J. Weight and Balance

(1) Weight change .. .. .. None

(2) Moment arm .. .. .. No effect

(3) Datum .. .. .. Engine front mount centerline (Power Plant Station (PPS) 100)

K. Electrical Load Data

This Service Bulletin has no effect on the aircraft electrical load.

L. References

(1) Internal Reference No.

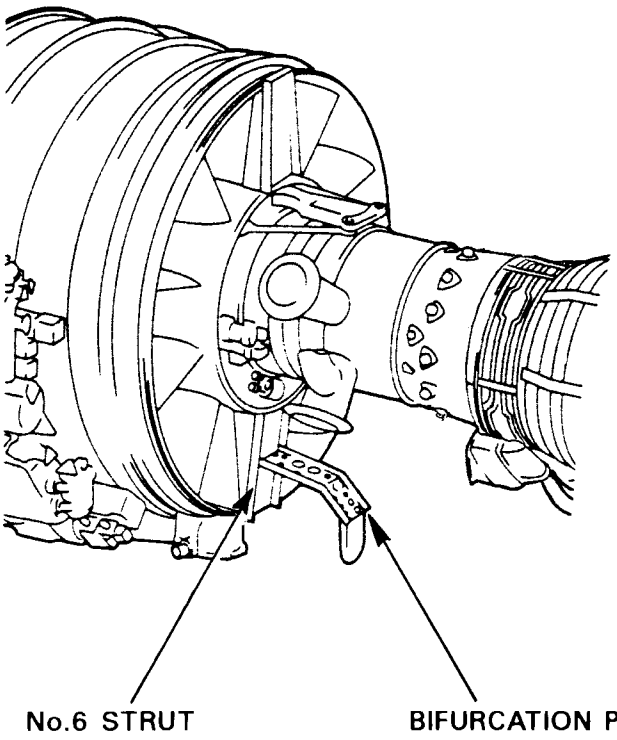
EC93VR096

(2) Other References

V2500 Overhaul Processes and Consumable Index (PCI-V2500-1IA).

M. Other Publications Affected

(1) V2500 Engine Manual (E-V2500-1IA), 72-00-32, Installation-03, Config-1 and Config-2.



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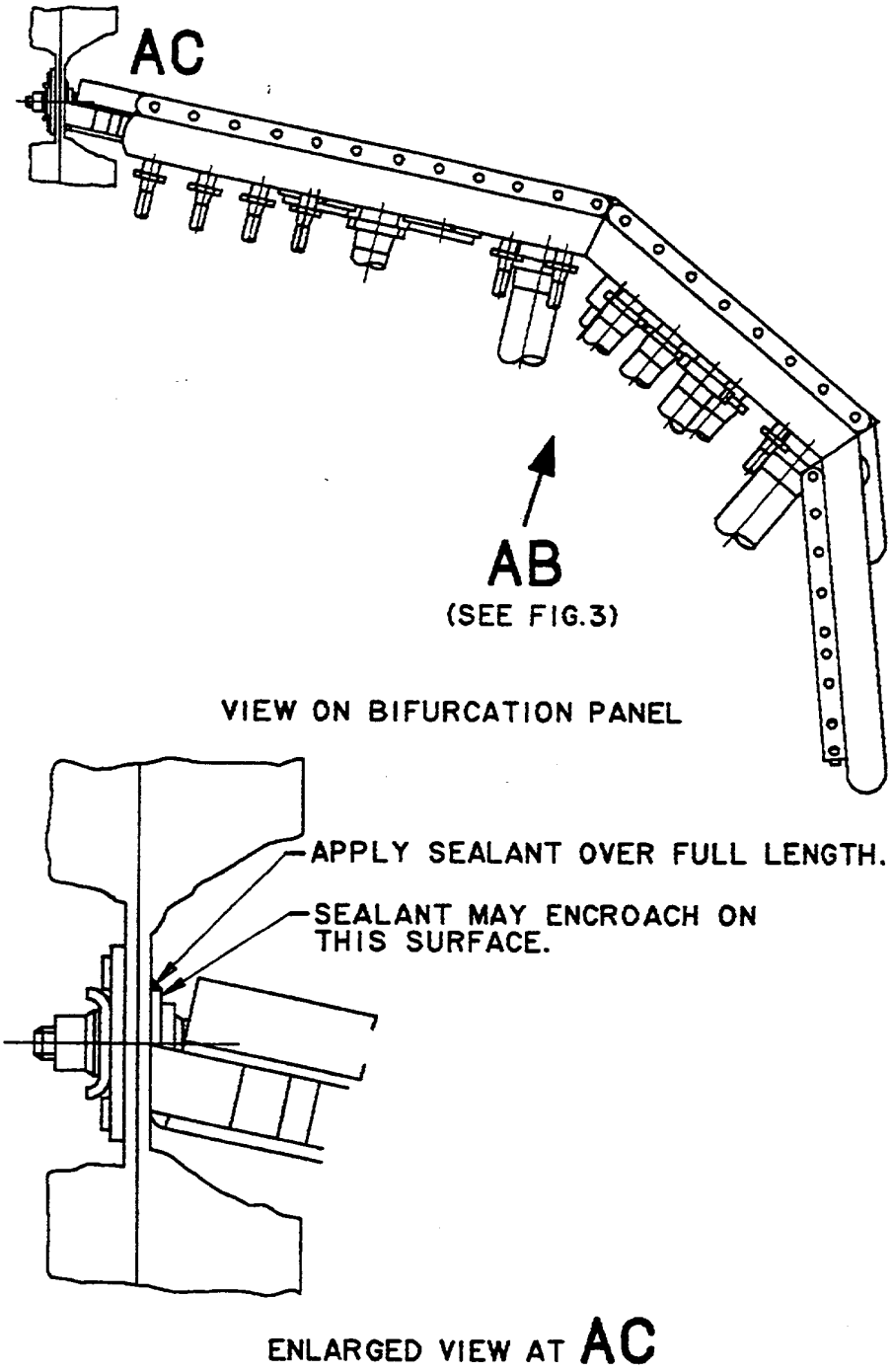
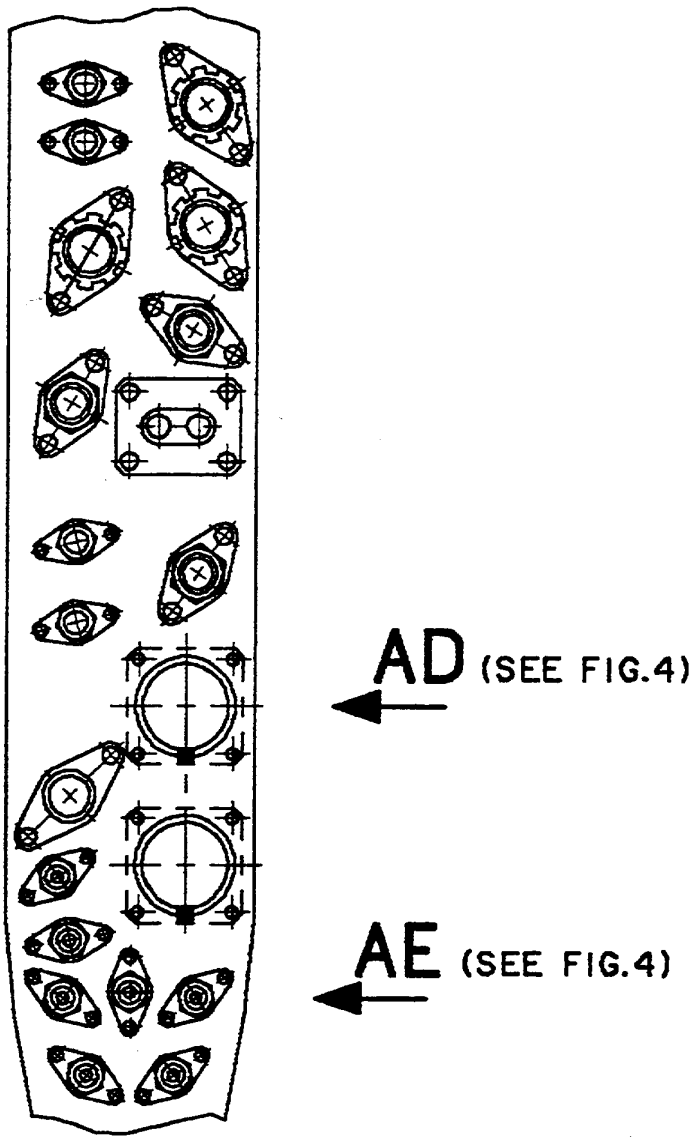
Location of bifurcation panel and No.6 strut
Fig.1



View on bifurcation panel
Fig.2



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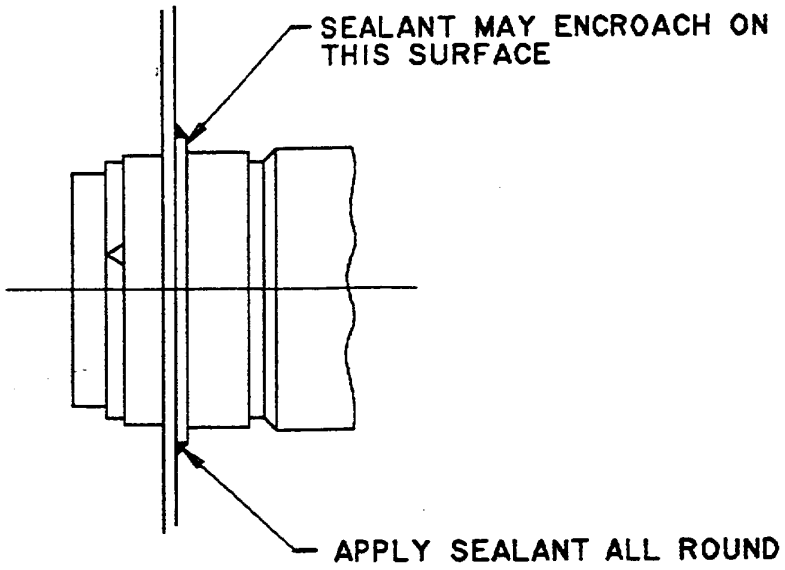
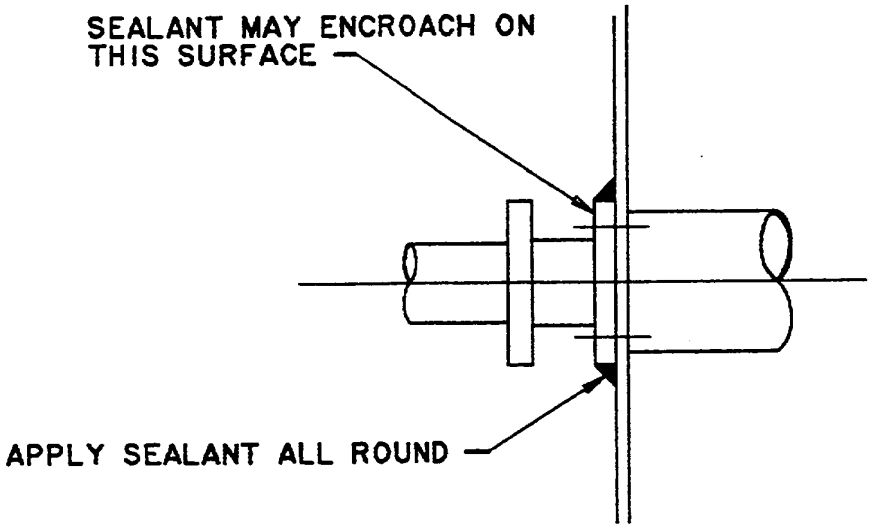
View on arrow AB (see Figure 2)
Fig.3



VIEW ON ARROW AD (SEE FIG.3)
TYPICAL 2 POSITIONS



VIEW ON ARROW AE (SEE FIG.3)
TYPICAL 19 POSITIONS

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View on arrows AD and AE (see Figure 3)
Fig.4

2. Accomplishment Instructions

A. Prerequisite Instructions

(1) On the aircraft panel 115 VU put a warning notice to tell persons not to start the engine.

(2) Make sure that the engine has been shutdown for at least 5 minutes.

(3) On the aircraft panel 50 VU make sure that the ON legend of the ENG FADEC GND PWR push button switch is OFF and install a warning notice.

(4) Open the left and right fan cowl doors with the instructions given in the A320 Aircraft Maintenance Manual or the A321 Aircraft Maintenance Manual, TASK 71-13-00-010-010.

(5) Open the left and right thrust reverser halves with the instructions given in the A320 Aircraft Maintenance Manual or the A321 Aircraft Maintenance Manual, TASK 78-32-00-010-010.

B. Rework Instructions

(1) There are no rework instructions necessary to accomplish this Service Bulletin.

C. Assembly Instructions

Consumable Materials

CoMat 01-076	Methylethylketone CH3COC2H5
CoMat 02-099	Lint free cloth
CoMat 05-016	Garnet paper
CoMat 05-017	Garnet paper
CoMat 08-013	Cold curing silicone compound (silcoset 152)
CoMat 08-014	Primer for silcoset 152
CoMat 08-032	Primer (for RTV159)
CoMat 08-074	Sealant (RTV159)

NOTE: To identify the consumable materials, refer to the Overhaul Processes and Consumable Index (P.C.I.).

(1) Find the tube/harness connectors and the intermediate case strut seal. Refer to Figures 1 and 2.

WARNING: WHEN YOU USE COMAT 01-076 METHYLETHYLKETONE CH3COC2H5 YOU MUST USE THE NECESSARY PROTECTIVE CLOTHING. DO NOT GET THE SOLVENT ON YOUR SKIN OR IN YOUR EYES. YOU MUST NOT SMOKE WHEN YOU USE THE SOLVENT AS THE VAPOR CHANGES AND BECOMES TOXIC.

(2) Clean the surface of the joint faces at the bifurcation panel and No.6 strut, also areas AD and AE on the bifurcation panel positions as identified. Use a clean cloth or a soft brush made moist with CoMat 01-076 methylethylketone CH3COC2H5. Refer to Figures 2, 3 and 4.

(3) Hand clean the surfaces of the joint faces at the bifurcation panel and No.6 strut, also areas AD and AE. Use CoMat 05-016 garnet paper or CoMat 05-017 garnet paper.

WARNING: WHEN YOU USE COMAT 01-076 METHYLETHYLKETONE CH3COC2H5 YOU MUST USE THE NECESSARY PROTECTIVE CLOTHING. DO NOT GET SOLVENT ON YOUR SKIN OR IN YOUR EYES. YOU MUST NOT SMOKE WHEN YOU USE THE SOLVENT AS THE VAPOR CHANGES AND BECOMES TOXIC.

(4) Do step (2) again.

(5) Use dry compressed air or a CoMat 02-099 lint free cloth to dry the cleaned surfaces.

NOTE: (a) Make sure that there are no remaining cleaners in clearances between the bifurcation panel and the fuel tube connectors.

(b) The surfaces to be filled should be dry and free from grease, oil and dust.

(6) Use a soft brush to apply a thin layer of CoMat 08-014 primer for silcoset 152 or CoMat 08-032 primer (for RTV159) to the cleaned surfaces.

NOTE: The primer must be applied immediately after the surfaces are cleaned.

(7) Dry the primer as follows:

If CoMat 08-014 primer for silcoset 152 was used in step (6), dry in air for 30 minutes.

If CoMat 08-032 primer (for RTV159) was used in step (6), dry in air for 60 to 90 minutes.

(8) Apply the applicable sealant to the joint faces at the bifurcation panel and No.6 strut, also areas AD and AE on the bifurcation panel. refer to Figures 2, 3 and 4.

(a) Use CoMat 08-013 cold curing silicone compound (silcoset 152) if CoMat 08-014 primer for silcoset 152 has been used in step (6).

(b) Use CoMat 08-074 sealant (RTV159) if CoMat 08-032 primer (for RTV159) has been used in step 6.

NOTE: You must use the correct sealant with its applicable primer.

(9) Press the sealant into position using a spatula. Refer to Figures 2, 3 and 4.

(10) Cure the sealant as follows:

(a) If CoMat 08-013 cold curing silicone compound (silcoset 152) was used in step (8), cure the compound at 68 deg.F. (20 deg.C.) for 48 hours.

NOTE: The surface of the compound can be touched after 12 hours. Do not apply a load during this time.

(b) If CoMat 08-074 sealant (RTV159) was used in step (8), cure the sealant at 77 deg.F. (25 deg.C.) for 24 hours.

NOTE: The surface of the sealant can be touched after one or two hours. Do not apply a load during this time.

D. Post-requisite Instructions

(1) Close the left and right thrust reverser halves with the instructions given in the A320 Aircraft Maintenance Manual or the A321 Aircraft Maintenance Manual, TASK 78-32-00-410-010.

(2) Close the left and right fan cowl doors with the instructions given in the A320 Aircraft Maintenance Manual or the A321 Aircraft Maintenance Manual, TASK 71-13-00-410-010.

(3) Remove the warning notices from the aircraft panels 115 VU and 50 VU.

E. Recording Instructions

(1) A record of accomplishment is necessary.

3. Material Information

A. Kits associated with this Bulletin:

None

B. Parts affected by this Bulletin:

None

C. Instruction/Dispositon Code Statements:

Not applicable - no new parts introduced

D. Consumables Required To Incorporate This Bulletin

CoMat 01-076	Methylethylketone CH3COC2H5
CoMat 02-099	Lint free cloth
CoMat 05-016	Garnet paper
CoMat 05-017	Garnet paper
CoMat 08-013	Cold curing silicone compound (silcoset 152)
CoMat 08-014	Primer for silcoset 152
CoMat 08-032	Primer (for RTV159)
CoMat 08-074	Sealant (RTV159)