

AIRBUS INDUSTRIE  
PRODUCT SUPPORT DIRECTORATE  
1 Rond Point Maurice BELLONTE  
31707 BLAGNAC CEDEX FRANCE  
Tel : (33) 61-93-33-33  
Telex : AIRBU 530526 F



SERVICE BULLETIN CHANGE NOTICE

S.B. No. A320-21-1015  
Mod. No. 21224/P01532

REV.

DATED : Mar 16/89

TITLE : AIR CONDITIONING - AVIONICS EQUIPMENT VENTILATION - REDUCE  
LEVEL OF VIBRATION AT WALL HEAT EXCHANGER.

MODEL : All models listed on S.B.

DESCRIPTION :

This notice is issued to inform the affected operators that subject Service Bulletin is changed as stated below.

SERVICE BULLETIN

Page 1 of 11 : Paragraph 1.A.(2) EFFECTIVITY, A/C MSN 036 deleted.

Read :

"This modification is embodied prior to delivery on  
A/C MSN 003, 004, 020-027, 029, 030, 036, 043".

Instead of :

"This modification is embodied prior to delivery on  
A/C MSN 003, 004, 020-027, 029, 030, 043".

This change will be incorporated in the next revision of this Service Bulletin; however no revision is planned at the present time.

FILING INSTRUCTION

File this Change Notice in front of the Service Bulletin.

SERVICE BULLETIN No. : A320-21-1015

5 DATE : Apr 19/89

CHANGE NOTICE No. : 0.A.

AIRBUS INDUSTRIE  
PRODUCT SUPPORT DIRECTORATE  
1 Rond Point Maurice BELLONTE  
31707 BLAGNAC CEDEX FRANCE  
Tel : (33) 61-93-33-33  
Telex : AIRBU 530526 F



SERVICE BULLETIN CHANGE NOTICE

S.B. No. A320-21-1015  
Mod. No. 21224/P01532

REV. 1

DATED : Mar 16/89

TITLE : AIR CONDITIONING - AVIONICS EQUIPMENT VENTILATION - REDUCE LEVEL  
OF VIBRATION AT WALL HEAT EXCHANGER

MODEL : All models listed on S.B.

SERVICE BULLETIN

Page 1 of 11 Paragraph 1.A.(2) BAW A/C MSN 042 added.

This change will be incorporated in the next revision of this Service Bulletin, however no revision is planned at the present time.

FILING INSTRUCTION

File this Change Notice in front of the Service Bulletin.

SERVICE BULLETIN No. : A320-21-1015

5 DATE : Oct 17/89

CHANGE NOTICE No. : 1.A.

AIRBUS INDUSTRIE  
PRODUCT SUPPORT DIRECTORATE  
1 Rond Point Maurice BELLONTE  
31707 BLAGNAC CEDEX FRANCE  
Tel : (33) 61-93-33-33  
Telex : AIRBU 530526 F



SERVICE BULLETIN

REVISION TRANSMITTAL SHEET

MODIFICATION No. 21224/P01532

ATA SYSTEM : 21

TITLE : AIR CONDITIONING - AVIONICS EQUIPMENT VENTILATION -  
REDUCE LEVEL OF VIBRATION AT WALL HEAT EXCHANGER.

This page transmits Revision No. 1 of Service Bulletin A320-21-1015.  
No additional work is required by this Revision.

REASON

This Revision is issued to inform the operators of the modification of  
EFFECTIVITY paragraph.

SERVICE BULLETIN SUMMARY

Page 2 - Para EFFECTIVITY :

Version NWA : deleted.

This modification is embodied prior to delivery on A/C MSN 003,  
004, 020-027, 029-032, 034, 036, 039, 040, 041-043 and  
subsequent added.

SERVICE BULLETIN

Page 1 of 11 - Para 1.A.(1) : On aircraft model 320-231 asterisk deleted.

Para 1.A.(2) : On Version CYP asterisk deleted.

Note : Aircraft certified at time of Service Bulletin  
printing. Deleted.

Aircraft MSN 036, 039, 042 deleted.

Version NWA deleted.

Read : This modification is embodied prior to delivery on  
A/C MSN 003, 004, 020-027, 029-032, 034, 036, 039,  
040, 041-043 and subsequent.

Instead of : This modification is embodied prior to delivery  
on A/C MSN 003, 004, 020-027, 029, 030, 043 and  
subsequent.

FILING INSTRUCTIONS

Replace pages SUMMARY 1 of 2, 2.

SERVICE BULLETIN 1 of 11.

File this Revision Transmittal Sheet in front of the Service Bulletin.

REVISION SEQUENCES

ORIGINAL : Mar 16/89

REVISION : No. 1 - Aug 03/89

5 DATE : Mar 16/89

SERVICE BULLETIN No. : A320-21-1015

REVISION No. : 1 - Aug 03/89

PAGE : 1 of 1

This summary is for information only and is not DGAC approved for modification of the aircraft.

MODIFICATION No. 21224/P01532

ATA SYSTEM : 21

TITLE : AIR CONDITIONING - AVIONICS EQUIPMENT VENTILATION - REDUCE  
LEVEL OF VIBRATION AT WALL HEAT EXCHANGER.

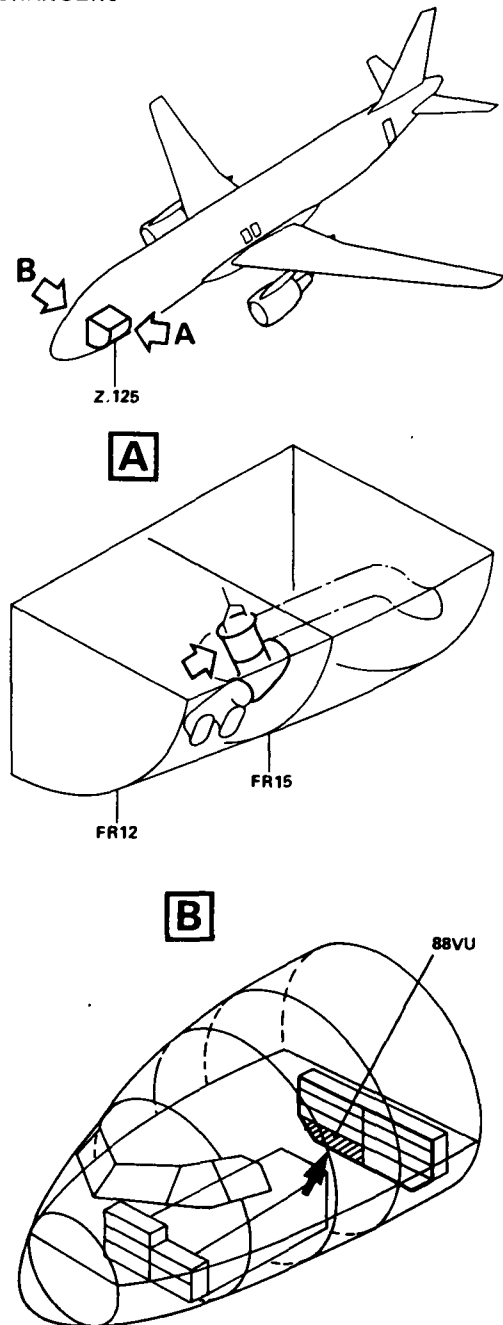
REASON

Modification of the A.E.V.C. logic,  
to enable the SKIN EXCHANGER OUTLET  
BY PASS valve to be open in flight  
and deletion of a diaphragm in the  
ventilation circuit.

Although cabin and cockpit noise levels  
are within specification, Airbus has  
decided to reduce noise generated by  
air circulation within the avionics  
skin heat exchanger.

A new definition of the avionics  
ventilation system enables the air  
flow to be reduced, at the level of  
the heat exchanger, while still  
maintaining a satisfactory airflow  
at the level of the equipment. This  
new definition reduces the cockpit and  
cabin noise levels in flight.

This Service Bulletin proposes the  
modification of the Avionics Equipment  
Ventilation Computer (A.E.V.C.), as per  
the instructions given in the CROUZET  
Service Bulletin No. 87292325-21-001,  
as well as the deletion of the diaphragm  
associated with the SKIN EXCHANGER OUTLET  
BY PASS valve.



5 DATE : Mar 16/89

SERVICE BULLETIN No. : A320-21-1015

REVISION No. : 1 - Aug 03/89

PAGE : 1 of 2

**SERVICE BULLETIN SUMMARY****ACTION**

In avionics compartment :

In electronics rack 80VU on shelf 88VU zone 128, replacement of the Avionics Equipment Ventilation Computer (A.E.V.C.) 10HQ modified as per instruction of CROUZET Service Bulletin No. 87292325-21-001.

Delete the diaphragm associated with the SKIN EXCHANGER OUTLET BY PASS valve.

**EFFECTIVITY**

This Service Bulletin is applicable to the following operators :  
AFR, BAW, CYP, ITF.

This modification is prior to delivery on A/C MSN 003, 004, 020-027, 029-032, 034, 036, 039-043 and subsequent.

**COMPLIANCE**

Optional.

**MANPOWER**

	<u>Aircraft</u>	<u>Bench</u>
Manhours	4.5	Refer to CROUZET Service Bulletin No. 87292325-21-001
Elapsed time (hours)	2.5	

**MATERIAL INFORMATION**

Quantity per A/C :

Refer to CROUZET Service Bulletin No. 87292325-21-001.

INTERCHANGEABILITY/INTERMIXABILITY pre/post SB A.E.V.C.

I.e. interchangeability - two way, but if A.E.V.C. P/N V02 fitted post SB noise reduction benefits are lost.

Intermixability - N/A.

DATE : Mar 16/89

SERVICE BULLETIN No. : A320-21-1015

REVISION No. : 1 - Aug 03/89

PAGE : 2

AIRBUS INDUSTRIE  
PRODUCT SUPPORT DIRECTORATE  
1 Rond Point Maurice BELLONTE  
31707 BLAGNAC CEDEX FRANCE  
Tel : (33) 61-93-33-33  
Telex : AIRBU 530526F



SERVICE BULLETIN

MODIFICATION No. 21224/P01532

ATA SYSTEM : 21

TITLE : AIR CONDITIONING - AVIONICS EQUIPMENT VENTILATION - REDUCE  
LEVEL OF VIBRATION AT WALL HEAT EXCHANGER.

1. PLANNING INFORMATION

A. EFFECTIVITY

(1) Aircraft Models : 320-111, 320-211, 320-231.

(2) Aircraft

Customer and Fleet No.	MSN	Qty of Kits None
AFR 001,002 004,005	005, 007 014, 019	
BAW 001-005	006, 008, 011, 017, 018	
CYP 001-004	028, 035, 037, 038	
ITF 001-006	010, 012, 013, 015, 016, 033	

This modification is embodied prior to delivery on A/C MSN 003,  
004, 020-027, 029-032, 034, 036, 039-043 and subsequent.

(3) Spares

1 Avionics Equipment Ventilation Computer (A.E.V.C.) 10HQ  
CROUZET 87292325V02.

5 DATE : Mar 16/89

SERVICE BULLETIN No. : A320-21-1015

REVISION No. : 1 - Aug 03/89

PAGE : 1 of 11

**SERVICE BULLETIN****B. REASON**

Modification of the A.E.V.C. logic, to enable the SKIN EXCHANGER OUTLET BY PASS valve to be open in flight and deletion of a diaphragm in the ventilation circuit.

Although cabin and cockpit noise levels are within specification, Airbus has decided to reduce noise generated by air circulation within the avionics skin heat exchanger.

A new definition of the avionics ventilation system enables the air flow to be reduced, at the level of the heat exchanger, while still maintaining a satisfactory airflow at the level of the equipment. This new definition reduces the cockpit and cabin noise levels in flight.

This Service Bulletin proposes the modification of the Avionics Equipment Ventilation Computer (A.E.V.C.), as per the instructions given in the CROUZET Service Bulletin No. 87292325-21-001, as well as the deletion of the diaphragm associated with the SKIN EXCHANGER OUTLET BY PASS valve.

**C. DESCRIPTION**

Accomplishment of this Service Bulletin consists in carrying out the following jobs :

In avionics compartment :

- (1) At shelf 88VU of electronics rack 80VU replacement of Avionics Equipment Ventilation Computer (A.E.V.C.) 10HQ modified as per instruction of CROUZET Service Bulletin No. 87292325-21-001.
- (2) In zone 125, suppression of the diaphragm associated to the SKIN EXCHANGER OUTLET BY PASS valve.

**D. APPROVAL**

This Service Bulletin is approved by Direction Générale de l'Aviation Civile - FRANCE (D.G.A.C.).

INTERCHANGEABILITY/INTERMIXABILITY pre/post SB A.E.V.C.

I.e. interchangeability - two way, but if A.E.V.C. P/N V02 fitted post SB noise reduction benefits are lost.

Intermixability - N/A.

# SERVICE BULLETIN

## E. MANPOWER

	<u>Manhours</u>	
	<u>Aircraft</u>	<u>Bench</u>
Removal/installation of A.E.V.C. (10HQ)	1	
Modification of A.E.V.C. (10HQ)		Refer to CROUZET Service Bulletin No. 87292325-21-001
Removal/installation of blowing duct	2	
Deletion of diaphragm	1	
Test	0.5	
<hr/>		
TOTAL MANHOURS	4.5	
ELAPSED TIME (HOURS)	2.5	

NOTE : This Service Bulletin assumes that the aircraft has been placed in a maintenance status. The manhours/elapsed time estimates do not include preparation for the modification, non-productive elapsed time, or administrative functions.

## F. MATERIAL - COST AND AVAILABILITY

Terms of procurement are to be negotiated directly with CROUZET as per CROUZET Service Bulletin No. 87292325-21-001.

## G. TOOLING - PRICE AND AVAILABILITY

None.

## H. WEIGHT AND BALANCE

None.

## I. REFERENCES

Aircraft Maintenance Manual : 12-34-24, 21-26-00, 21-26-34,  
24-41-00, 52-41-00.  
CROUZET Service Bulletin No. 87292325-21-001.

## J. PUBLICATIONS AFFECTED

Illustrated Parts Catalog : 21-26-08, 21-26-34.

DATE : Mar 16/89

SERVICE BULLETIN No. : A320-21-1015

REVISION No. :

PAGE : 3-4



SERVICE BULLETIN

2. ACCOMPLISHMENT INSTRUCTIONS

A. GENERAL

(1) Preparation

- (a) De-energize the aircraft electrical circuits (Ref. AMM 24-41-00, P. Block 201) and electrically ground the aircraft (Ref. AMM 12-34-24, P. Block 201).
- (b) Position access platform.
- (c) Open access doors 812, 824 (Ref. AMM 52-41-00).

B. MODIFICATION

- (1) At shelf 88VU of electronics rack 80VU replacement of Avionics Equipment Ventilation Computer (A.E.V.C.) 10HQ.  
Refer to AMM 21-26-34, P. Block 401

Refer to Figure 1 Sheet 2

(a) Remove :

1 A.E.V.C. (10HQ)	Item (1)
-------------------	----------

(b) Install :

1 A.E.V.C. (10HQ) 87292325V03 Item 1 modified as per instructions of CROUZET Service Bulletin No. 87292325-21-001.

- (2) In avionics compartment, zone 125, modification of blowing duct  
Refer to Figure 1 Sheet 1 of 2

(a) Remove :

1 Blowing Duct	Item (2) (retained)
----------------	---------------------

with :

2 sleeves	Item (3) (retained)
3 Clamps	Item (4) (retained)
1 Clamp	Item (5) (retained)
1 Clamp	Item (6) (retained)

DATE : Mar 16/89

SERVICE BULLETIN No. : A320-21-1015

REVISION No. :

PAGE : 5

### 3 Rivets

Item (8) (discard)

1 diaphragm

Item (7) (discard)

(e) Identify the modified items :

**02191017900000 becomes 02191017900200**

1 modified Blowing Duct 02191017900200 Item 2

with :

**2 Sleeves**

Item (3) (retained at removal)

## 8 Clamps

Item (4) (retained at removal)

1 CLamp

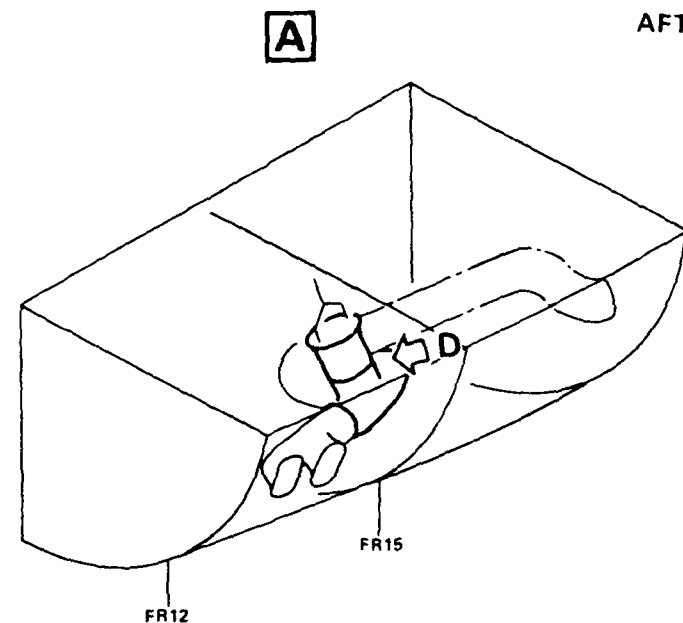
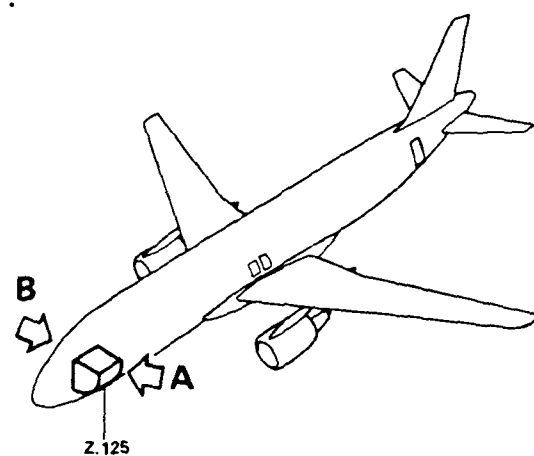
Item (5) (retained at removal)

1 CLamp

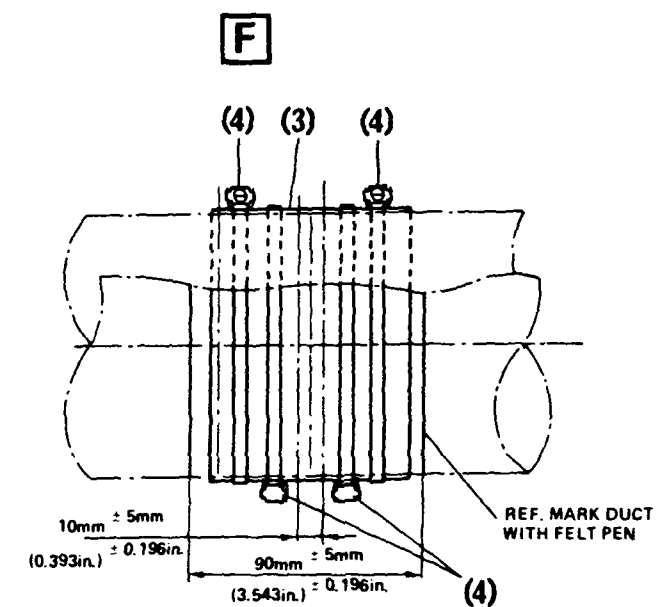
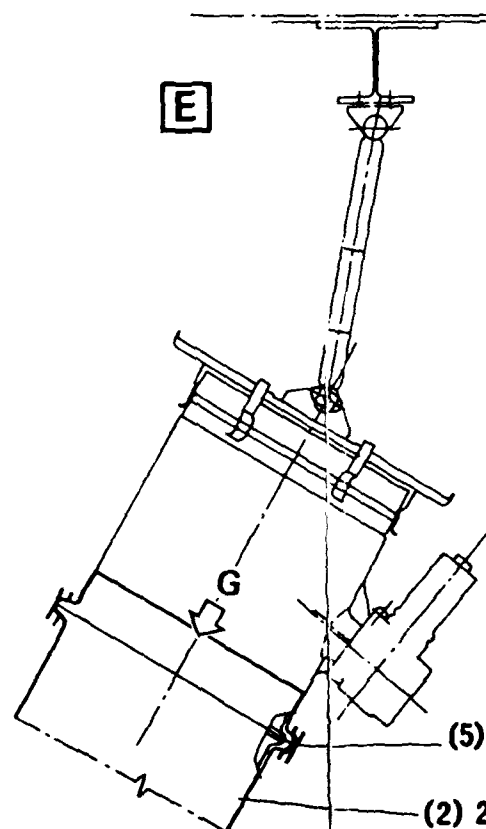
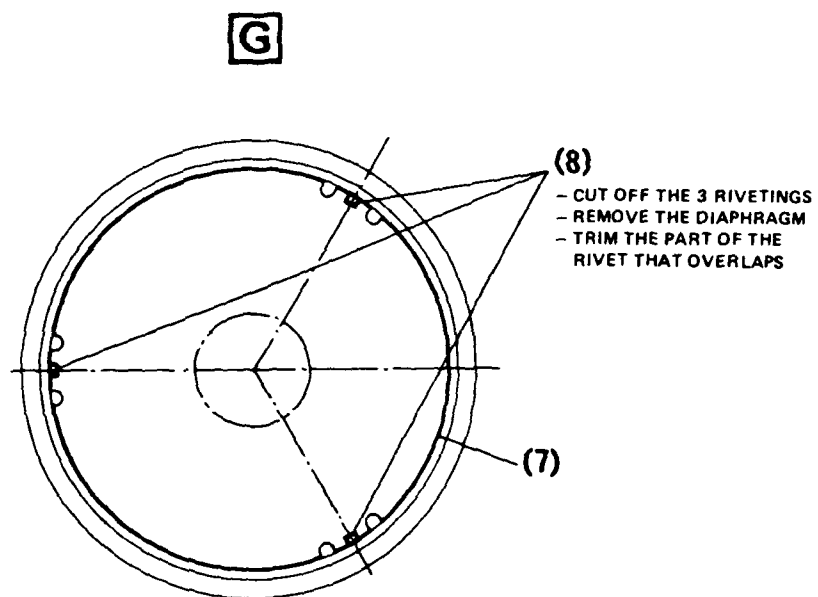
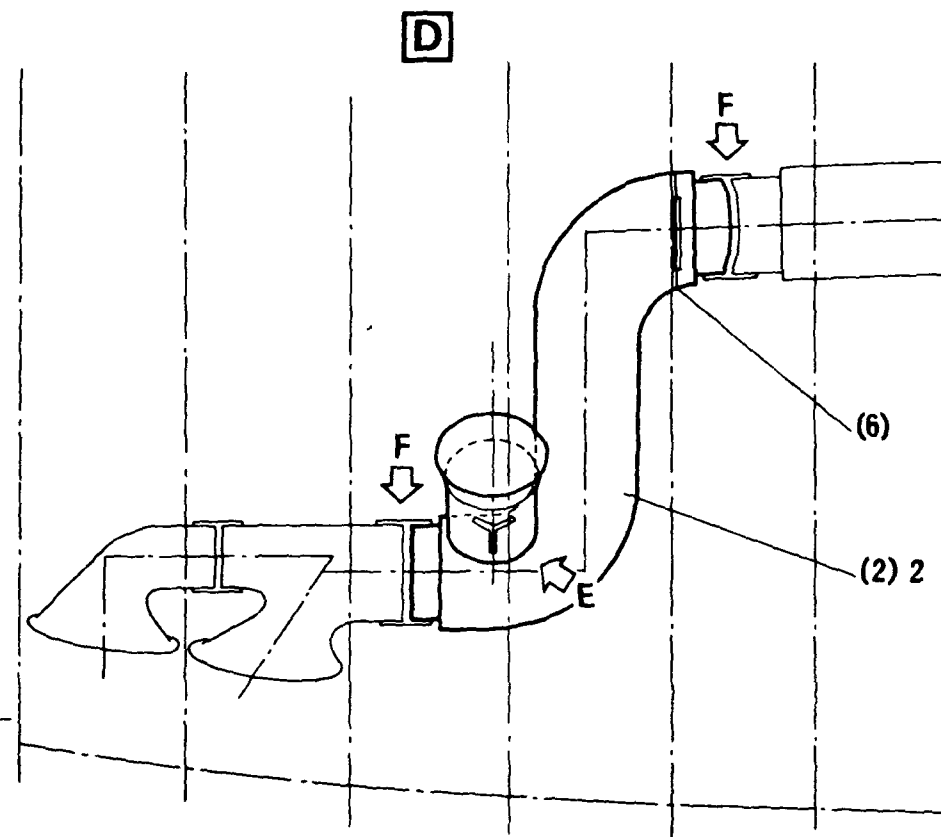
Item (6) (retained at removal)

Perform operational test of the avionics equipment ventilation from the Multipurpose Control and Display Unit (M.C.D.U.).  
(Ref. AMM 21-26-00, P. Block 501).

- (1) Make certain that the work area is clear of tools and miscellaneous items of equipments.
- (2) Close access doors 812 and 824 (Ref. AMM 52-41-00).
- (3) Disconnect the aircraft electrical ground connection (Ref. AMM 12-34-24, P. Block 201).
- (4) Remove access platform.



AFTER



Modification of Duct-Blowing in Avionics Compartment  
Figure 1, Sheet 1 of 2

DATE : Mar 16/89

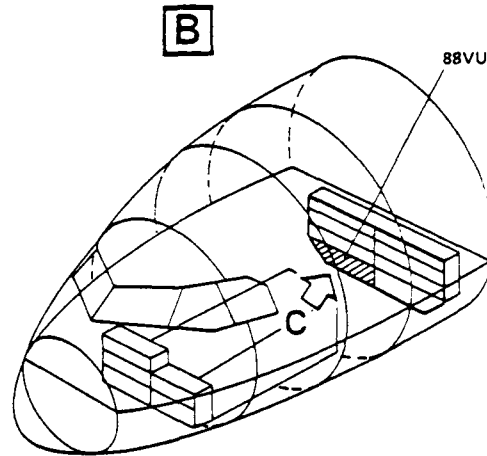
SERVICE BULLETIN No. : A320-21-1015

REVISION No.

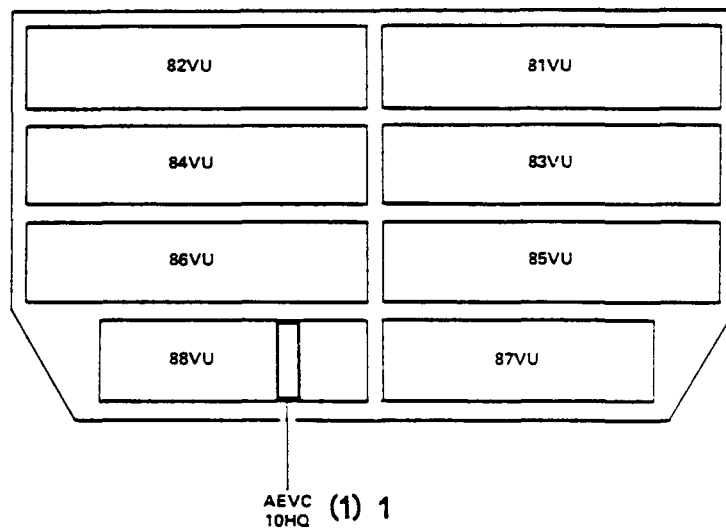
PAGE : 7-8

SERVICE BULLETIN

AFTER



**C**



At Shelf 88VU of Electronics Rack 80VU, Replacement of Avionics Equipment  
Ventilation Computer (A.E.V.C.) 10HQ  
Figure 1, Sheet 2

DATE : Mar 16/89

SERVICE BULLETIN No. : A320-21-1015

REVISION No.

PAGE : 9-10

3. MATERIAL INFORMATIONA. LIST OF COMPONENTS

I T E M	NEW PART No.	QTY	DESCRIPTION	I T E M	OLD PART No.	I N T	INSTRUCTIONS/ DISPOSITION
1	87292325V03	1	A.E.V.C.	(1)	87292325V02		**
		2	Sleeve	(3)	A2121212523300		*
		8	Clamp	(4)	NSA5528-145		*
		1	Clamp	(5)	NSA8603-687		*
		1	Clamp	(6)	NSA5528-180		*
		1	Diaphragm	(7)	D21210334208		***

\* Parts re-used

\*\* Modification of removed equipment will be negotiated directly with the vendor CROUZET as per instructions given in Service Bulletin No. 87292325-21-001.

\*\*\* Parts not re-used

B. SPECIAL TOOLS

None.

C. LIST OF MATERIALS - OPERATOR SUPPLIED

None.

D. PARTS TO BE RE-IDENTIFIED BY OPERATOR

I T E M	NEW PART No.	QTY	DESCRIPTION	I T E M	OLD PART No.	I N T	INSTRUCTIONS/ DISPOSITION
2	D2121017900200	1	Duct-Blowing	(2)	D2121017900000		

DATE : Mar 16/89  
REVISION No. :

SERVICE BULLETIN No. : A320-21-1015

PAGE : 11

AIRBUS INDUSTRIE  
PRODUCT SUPPORT DIRECTORATE  
1 Rond Point Maurice BELLONTE  
31707 BLAGNAC CEDEX FRANCE  
Tel : (33) 61-93-33-33  
Telex : AIRBU 530526F

 **A320**

SERVICE BULLETIN

MODIFICATION No. 21224/PO1532

ATA SYSTEM : 21

TITLE : AIR CONDITIONING - AVIONICS EQUIPMENT VENTILATION - REDUCE  
LEVEL OF VIBRATION AT WALL HEAT EXCHANGER.

IS BEING HERewith SUBMITTED TO YOU FOR REVIEW

Please fill :                      ... REJECTED  
   ... WILL BE EMBODIED  
   ... EFFECTIVITY

This SB can only be incorporated in your "customized" documentation within the agreed time schedule in so far as this sheet is returned to us on purchase date and signed by a duly authorized and empowered officer or representative.

FROM :

AIRLINE :

.....

NAME :

.....

DATE :

..... 19..

Please return to :

AIRBUS INDUSTRIE

BP No. 33  
31707 BLAGNAC CEDEX  
FRANCE

Att. : AI/S - Technical Publ. Dept.

5 DATE : Mar 16/89

SERVICE BULLETIN No. : A320-21-1015

REVISION No. :

PAGE : 1 of 1