SERVICE BULLETIN SUMMARY

AIRBUS

CUSTOMER SERVICES DIRECTORATE 1 Rond Point Maurice Bellonte 31707 BLAGNAC CEDEX FRANCE

Tel : (33) 5 61 93 33 33 Telex : AIRBU 530526F

Fax : (33) 5 61 93 42 51

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

ATA SYSTEM: 21

TITLE: AIR CONDITIONING - AVIONICS EQUIPMENT GROUND COOLING - DEACTIVATE THE

GROUND REFRIGERATION UNIT (GRU).

MODIFICATION No.: 33129P8139

REASON/DESCRIPTION/OPERATIONAL CONSEQUENCES

Due to restrictions imposed by the scope of Montreal protocol, the refrigerant used in the Ground Refrigeration Unit (GRU) PN 786B010000 is no longer allowed to be used for the production or maintenance of refrigeration units.

Operators are therefore required to either upgrade their GRU to the standard PN 799A010000 (RFC/RMO applies) or de-activate it.

For the operators who do not wish to upgrade the GRU to the standard PN 799A010000, this Service Bulletin consists in de-activating the GRU while leaving it in-situ.

Accomplishment of this Service Bulletin will allow the operators to comply with the content of the Montreal protocol.

Accomplishment of this Service bulletin will reduce the maintenance tasks.

Maintenance Planning Document (MPD) No. 212700-01-1, 212700-02-1, 212700-03-1, 212700-04-1, 212700-05-1 and 212742-01-1 must be deleted after accomplishment of this Service Bulletin.

EVALUATION TABLE						
COMPLIANCE	Desirable	CANCELS INSPECTION SB	No			
POTENTIAL AD	No	A/C OPERATION AFFECTED	Yes			
RELIABILITY AFFECTED	No	PAX COMFORT AFFECTED	No			
COST SAVING	No	ETOPS AFFECTED	No			
STRUCTURAL LIFE EXTN	No	VENDOR SB INVOLVED	No			
KIT PRICE (USD)	See SB					

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EFFECTIVITY

This Service Bulletin is applicable to these operators :

A1L ALK CTN CYP D2F IAC KAC MSR MXA RJA TAR TNA

CONCURRENT REQUIREMENTS

None

REFERENCES/REPERCUSSIONS

TFU : None

OEB : None

AOT : None

SIL : None

LIFE LIMIT : None

LINE MAINTENANCE AFFECTED : No

OTHERS : None

NATURE OF THE WORK

AIRCRAFT : YES
EQUIPMENT : NO
HARD : NO
SOFT : NO
OBRM : NO

MANPOWER

TOTAL MANHOURS 22.5
ELAPSED TIME (HOURS) 15.0

MATERIAL INFORMATION

AIRCRAFT DATA

Kit 211148A01R01

Plug assy

Kit 211148A02R00

thru

Kit 211148A11R00

Integrally lighted plate

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<u>APPENDICES</u>

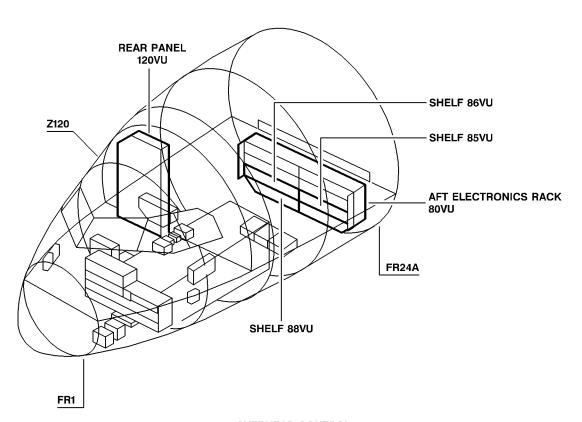
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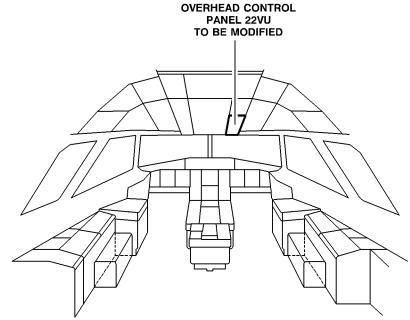
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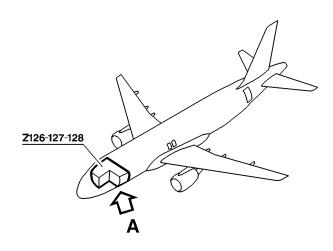




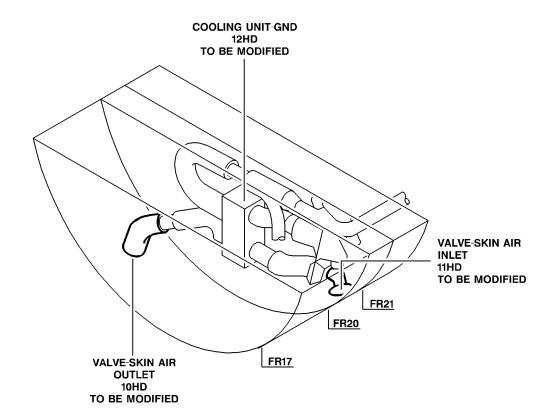
NSB5 211148 SU 00 d

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AIRBUS

CUSTOMER SERVICES DIRECTORATE 1 Rond Point Maurice Bellonte 31707 BLAGNAC CEDEX FRANCE

Tel : (33) 5 61 93 33 33 Telex : AIRBU 530526F

Fax : (33) 5 61 93 42 51

ATA SYSTEM: 21

TITLE: AIR CONDITIONING - AVIONICS EQUIPMENT GROUND COOLING - DEACTIVATE THE

GROUND REFRIGERATION UNIT (GRU).

MODIFICATION No.: 33129P8139

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1. PLANNING INFORMATION

A. **EFFECTIVITY**

(1) Models

320-211 320-212 320-231 320-232 321-131 321-231

- (2) Aircraft
 - (a) Effectivity by MSN

This Service Bulletin is applicable to aircraft MSN:

0028 0035 0037 0038 0045-0051 0056-0058 0074 0075 0080 0087-0090 0095-0097 0123 0165 0166 0178 0180-0182 0194 0195 0198 0256 0258 0295 0316 0322 0326 0332 0344 0351 0366 0369 0396 0398 0406 0416 0423 0431 0432 0451 0469 0486 0490 0492 0499 0538 0555 0569 0606 0680 0687 0715 0725 0731 0746 0791 0822

- NOTE (01) This Service Bulletin is only applicable to aircraft on which Mod. No. 20056P0073 (AIR CONDITIONING AVIONICS EQUIPMENT GROUND COOLING INSTALL COOLING SYSTEM) is embodied or Service Bulletin No. A320-21-1067) is accomplished.
- NOTE (02) This modification is applicable by Service Bulletin only.

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(b) Effectivity by Operator

The Operator/MSN relationship is provided for information only and is correct at the time of issue in accordance with the information available to AIRBUS. Any future changes resulting from transfer of an aircraft from one operator to another will not be reflected in this list unless the Service Bulletin is revised for another reason.

OPERATOR	MSN								
A1L	0322								
ALK	0406								
CTN	0258								
CYP	0028 00	35 0037	0038	0180	0256	0295	0316		
D2F	0326 03	44							
IAC	0045 00 0074 00 0416 04	75 0080	0089	0090	0095	0096	0097	0396	0398
KAC	0181 01	82 0195							
MSR	0165 01 0725	66 0178	0194	0198	0351	0366	0680	0687	0715
MXA	0332 03	69							
RJA	0087 00	88 0569							
TAR	0123								
TNA	0538 05	55 0606	0731	0746	0791	0822			

(c) Effectivity by MSN and Kit/Configuration

The kits and configurations applicable to these MSNs are given at the end of this list: 0028 0035 0037-0038

KIT No.	QTY	PER A/C	CONFIGURATION	
211148A01R01		1	01	(01)
211148A05R00		1	None	(06)

- NOTE (01) Config. 01 concerns the aircraft on which modification No. 21420P1641 (LIGHTS WIRING PROVISIONS FOR OPTIONAL LIGHT ON TRANSFORMER 37LP-FU SE 6 IN 22VU) is not embodied.
- NOTE (06) 211148A05R00 concerns the modification of the integrally lighted plate (9LF) for aircraft on which old PN D33110086A00 is installed.

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The kits and configurations applicable to these MSNs are given at the end of this list: 0045-0051 0056-0058 0074-0075 0080

KIT No.	QTY	PER	A/C	CONFIGURATION	
211148A01R01			1	01	(01)
211148A06R00			1	None	(07)
211148A08R00			1	None	(80)

- NOTE (01) Config. 01 concerns the aircraft on which modification No. 21420P1641 (LIGHTS WIRING PROVISIONS FOR OPTIONAL LIGHT ON TRANSFORMER 37LP-FU SE 6 IN 22VU) is not embodied.
- NOTE (07) 211148A06R00 concerns the modification of the integrally lighted plate (9LF) for aircraft on which old PN D33110137A00 is installed.
- NOTE (08) 211148A08R00 concerns the modification of the integrally lighted plate (9LF) for aircraft on which old PN D33110087A00 is installed.
- NOTE: Selection of Kit 211148A06R00 or Kit 211148A08R00 depends on the existing integrally lighted plate (9LF) on the overhead control panel (22VU).

The kits and configurations applicable to these MSNs are given at the end of this list: 0332 0369 0538 0555 0606 0731 0746 0791 0822

KIT No.	QTY	PER A/C	CONFIGURATION	
211148A01R01		1	02	(02)
211148A02R00		1	None	(03)

- NOTE (02) Config. 02 concerns the aircraft on which modification No. 21420P1641 (LIGHTS WIRING PROVISIONS FOR OPTIONAL LIGHT ON TRANSFORMER 37LP-FU SE 6 IN 22VU) is embodied.
- NOTE (03) 211148A02R00 concerns the modification of the integrally lighted plate (9LF) for aircraft on which old PN D33110123B00 is installed.

The kits and configurations applicable to these MSNs are given at the end of this list: 0087-0088 0123 0181-0182 0195 0258 0569

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KIT No. QTY PER A/C CONFIGURATION

211148A01R01 1 02 (02) 211148A03R00 1 None (04)

NOTE (02) Config. 02 concerns the aircraft on which modification No. 21420P1641 (LIGHTS - WIRING PROVISIONS FOR OPTIONAL LIGHT ON TRANSFORMER 37LP-FU SE 6 IN 22VU) is embodied.

NOTE (04) 211148A03R00 concerns the modification of the integrally lighted plate (9LF) for aircraft on which old PN D33110104A00 is installed.

The kits and configurations applicable to these MSNs are given at the end of this list: 0165-0166 0178 0194 0198 0351 0366

KIT No.	QTY	PER	A/C	CONFIGURATION	
211148A01R01			1	02	(02)
211148A04R00			1	None	(05)

- NOTE (02) Config. 02 concerns the aircraft on which modification No. 21420P1641 (LIGHTS WIRING PROVISIONS FOR OPTIONAL LIGHT ON TRANSFORMER 37LP-FU SE 6 IN 22VU) is embodied.
- NOTE (05) 211148A04R00 concerns the modification of the integrally lighted plate (9LF) for aircraft on which old PN D33110110A00 is installed.

The kits and configurations applicable to these MSNs are given at the end of this list: $0180\ 0256\ 0295\ 0316\ 0406$

KIT No.	QTY	PER	A/C	CONFIGURATION	
211148A01R01			1	02	(02)
211148A05R00			1	None	(06)

- NOTE (02) Config. 02 concerns the aircraft on which modification No. 21420P1641 (LIGHTS WIRING PROVISIONS FOR OPTIONAL LIGHT ON TRANSFORMER 37LP-FU SE 6 IN 22VU) is embodied.
- NOTE (06) 211148A05R00 concerns the modification of the integrally lighted plate (9LF) for aircraft on which old PN D33110086A00 is installed.

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The kits and configurations applicable to these MSNs are given at the end of this list: 0486 0490 0492 0499

KIT No.	QTY	PER	A/C	CONFIGURATION	
211148A01R01			1	02	(02)
211148A06R00			1	None	(07)

- NOTE (02) Config. 02 concerns the aircraft on which modification No. 21420P1641 (LIGHTS WIRING PROVISIONS FOR OPTIONAL LIGHT ON TRANSFORMER 37LP-FU SE 6 IN 22VU) is embodied.
- NOTE (07) 211148A06R00 concerns the modification of the integrally lighted plate (9LF) for aircraft on which old PN D33110137A00 is installed.

The kits and configurations applicable to these MSNs are given at the end of this list: 0089-0090 0095-0097 0396 0398 0416 0423 0431-0432 0451 0469

KIT No.	QTY	PER A/C	CONFIGURATION	
211148A01R01		1	02	(02)
211148A06R00		1	None	(07)
211148A08R00		1	None	(08)

- NOTE (02) Config. 02 concerns the aircraft on which modification No. 21420P1641 (LIGHTS WIRING PROVISIONS FOR OPTIONAL LIGHT ON TRANSFORMER 37LP-FU SE 6 IN 22VU) is embodied.
- NOTE (07) 211148A06R00 concerns the modification of the integrally lighted plate (9LF) for aircraft on which old PN D33110137A00 is installed.
- NOTE (08) 211148A08R00 concerns the modification of the integrally lighted plate (9LF) for aircraft on which old PN D33110087A00 is installed.
- NOTE: Selection of Kit 211148A06R00 or Kit 211148A08R00 or Kit 211148A11R00 depends on the existing integrally lighted plate (9LF) on the overhead control panel (22VU).

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The kits and configurations applicable to these MSNs are given at the end of this list: 0680 0687 0715 0725

KIT No.	QTY	PER	A/C	CONFIGURATION	
211148A01R01			1	02	(02)
211148A07R00			1	None	(09)

- NOTE (02) Config. 02 concerns the aircraft on which modification No. 21420P1641 (LIGHTS WIRING PROVISIONS FOR OPTIONAL LIGHT ON TRANSFORMER 37LP-FU SE 6 IN 22VU) is embodied.
- NOTE (09) 211148A07R00 concerns the modification of the integrally lighted plate (9LF) for aircraft on which old PN D33110197A00 is installed.

The kits and configurations applicable to these MSNs are given at the end of this list: 0322 0326 0344

KIT No.	QTY	PER	A/C	CONFIGURATION	
211148A01R01			1	02	(02)
211148A09R00			1	None	(10)
211148A10R00			1	None	(11)
211148A11R00			1	None	(12)

- NOTE (02) Config. 02 concerns the aircraft on which modification No. 21420P1641 (LIGHTS WIRING PROVISIONS FOR OPTIONAL LIGHT ON TRANSFORMER 37LP-FU SE 6 IN 22VU) is embodied.
- NOTE (10) 211148A09R00 concerns the modification of the integrally lighted plate (9LF) for aircraft on which old PN D33110141B00 is installed.
- NOTE (11) 211148A10R00 concerns the modification of the integrally lighted plate (9LF) for aircraft on which old PN D33110271A00 is installed.
- NOTE (12) 211148A11R00 concerns the modification of the integrally lighted plate (9LF) for aircraft on which old PN D00410458A00 is installed.
- NOTE: Selection of Kit 211148A09R00 or Kit 211148A10R00 or Kit 211148A11R00 depends on the existing integrally lighted plate (9LF) on the overhead control panel (22VU).

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(3) Spares

Kit 211148A01R01

Skin Air Valve VFT210

or

Skin Air Valve VFT210A

or

Skin Air Valve VFT210-1

Kit 211148A02R00

Integrally Lighted Plate D33110123B00

Kit 211148A03R00

Integrally Lighted Plate D33110104A00

Kit 211148A04R00

Integrally Lighted Plate D33110110A00

Kit 211148A05R00

Integrally Lighted Plate D33110086B00

Kit 211148A06R00

Integrally Lighted Plate D33110137A00

Kit 211148A07R00

Integrally Lighted Plate D33110197A00

Kit 211148A08R00

Integrally Lighted Plate D33110087A00

Kit 211148A09R00

Integrally Lighted Plate D33110141B00

Kit 211148A10R00

Integrally Lighted Plate D33110271A00

Kit 211148A11R00

Integrally Lighted Plate D00410458A00

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B. CONCURRENT REQUIREMENTS

None

C. REASON

(1) History

Due to restrictions imposed by the scope of Montreal protocol, the refrigerant used in the Ground Refrigeration Unit (GRU) PN 786B010000 is no longer allowed to be used for the production or maintenance of refrigeration units.

Operators are therefore required to either upgrade their GRU to the standard PN 799A010000 (RFC/RMO applies) or de-activate it.

(2) Objective/Action

For the operators who do not wish to upgrade the GRU to the standard PN 799A010000, this Service Bulletin consists in de-activating the GRU while leaving it in-situ.

(3) Advantages

Accomplishment of this Service Bulletin will allow the operators to comply with the content of the Montreal protocol.

(4) Operational/Maintenance Consequences

Accomplishment of this Service bulletin will reduce the maintenance tasks.

Maintenance Planning Document (MPD) No. 212700-01-1, 212700-02-1, 212700-03-1, 212700-04-1, 212700-05-1 and 212742-01-1 must be deleted after accomplishment of this Service Bulletin.

D. <u>DESCRIPTION</u>

To accomplish this Service Bulletin it is necessary to :

- (1) For Kit 211148A01R01
 - (a) In the avionics compartment, LH side, modify the inlet skin air valve (11HD).
 - (b) In the avionics compartment, RH side, Modify the outlet skin air valve (10HD).
 - (c) Modify the connectors of the fan-GND cool (8HD), the cooling unit-GND (12HD) and press SW-GND cool fan (13HD), in the avionics compartment.
 - (d) Modify the wiring on shelf 88VU, in the avionics compartment.

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- (e) Modify the pin programming and the parity of the SDAC on the shelf 85VU and the shelf 86VU, in the avionics compartment.
- (f) Modify the equipment in the rear circuit breaker panel 122VU, in the cockpit.
- (g) Modify the equipment in the power center-AC 123VU, in the cockpit.
- (2) Kit 211148A02R00, modify the equipment and the wiring in the overhead control panel 22VU, in the cockpit.
- (3) Kit 211148A03R00, modify the equipment and the wiring in the overhead control panel 22VU, in the cockpit.
- (4) Kit 211148A04R00, modify the equipment and the wiring in the overhead control panel 22VU, in the cockpit.
- (5) Kit 211148A05R00, modify the equipment and the wiring in the overhead control panel 22VU, in the cockpit.
- (6) Kit 211148A06R00, modify the equipment and the wiring in the overhead control panel 22VU, in the cockpit.
- (7) Kit 211148A07R00 , modify the equipment and the wiring in the overhead control panel 22VU, in the cockpit.
- (8) Kit 211148A08R00, modify the equipment and the wiring in the overhead control panel 22VU, in the cockpit.
- (9) Kit 211148A09R00, modify the equipment and the wiring in the overhead control panel 22VU, in the cockpit.
- (10) Kit 211148A10R00 , modify the equipment and the wiring in the overhead control panel 22VU, in the cockpit.
- (11) Kit 211148A11R00 , modify the equipment and the wiring in the overhead control panel 22VU, in the cockpit.

E. <u>COMPLIANCE</u>

(1) Classification

Desirable

(2) Accomplishment Timescale

In accordance with operators' maintenance schedule.

F. APPROVAL

The technical content of this Service Bulletin has been approved under the authority of the DGAC Design Organisation Approval No. F.JA.02.

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If an aircraft listed in the effectivity has a modification or repair embodied that is not of AIRBUS origin, and which affects the content of this Service Bulletin, the operator is responsible for obtaining approval by its airworthiness authority for any adaptation necessary before incorporation of the Service Bulletin.

G. MANPOWER

The manpower estimates given in this Service Bulletin are based on the direct labor cost to do the work. These estimates assume that the work will be done by experienced personnel, and may need to be revised upwards to suit operator's circumstances. The estimates do not include the time to prepare, plan or inspect the work. Manufacture and procurement of parts and tools, drying times for paints, sealants, etc, and general administration work are also not included.

Kit 211148A01R01 thru Kit 211148A11R00

Get access	2.0
Modif. of the skin air valve (11HD)	1.5
Modif. of the skin air valve (10HD)	1.5
Modif. of the connectors in the AV/COMP	2.0
Modif. of the pin programming	1.0
Modification of the parity	0.5
Modif. of the C/B panel 122VU	1.0
Modif. of the center-AC 123VU	1.0
Modif. of the wiring in the panel 22VU	2.0
Modif. of the equipment on the 22VU	2.0
Modification of the integrally plate 9LF	1.0
Test	5.0
Close-up	2.0
TOTAL MANHOURS	22.5
ELAPSED TIME (HOURS)	15.0

H. WEIGHT AND BALANCE

Kit 211148A01R01 thru Kit 211148A11R00

Manufacturers Empty Weight: -0.120 kg (-0.2645 lb)

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Effect on Balance : -0.570 kgm (-4.122 lb.ft)

I. ELECTRICAL LOAD DATA

(1) Direct Current (DC) Load Changes

Kit 211148A01R01 thru Kit 211148A11R00

Designation: AIR COND/VENT/GND/COOL/CTL

Circuit breaker : 3HD (Existing)

Busbar: 103PP

Electrical Load Data: -90 W

(2) Alternating Current (AC) Load Changes

Kit 211148A01R01 thru Kit 211148A11R00

Designation: VENT/GND COOL/UNIT

Circuit breaker: 1HD (Existing)

Bus-Bar :1XP/A/B/C

Electrical Load Data: -1827 VA

Designation: VENT/GND COOL/UNIT

Circuit breaker: 2HD (Existing)

Electrical Load Data: -1827 VA

Bus-Bar :2XP/A/B/C

J. REFERENCES

Aircraft Maintenance Manual (AMM) : 12-34-24 20-21-11 21-21-00

21-26-00 21-27-00 21-27-52 21-27-53 21-43-00 22-96-00 22-97-00 23-26-00 24-38-51 26-16-00 26-23-00 30-45-00 31-50-00 31-55-34 31-60-00 33-13-00 33-14-00 52-41-00

73-22-34

Consumable Material List (CML)

Elec. Std. Practices Manual (ESPM) : 20-33-00 20-51-10 20-55-00

Maintenance Planning Document (MPD) : 212700-01-1 212700-02-1

212700-03-1 212700-04-1 212700-05-1 212742-01-1

Standards Manual (SM)

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Structural Repair Manual (SRM) : 51-40-00 51-43-12 51-44-11

51-46-11

Service Bulletin No. A320-21-1067

K. PUBLICATIONS AFFECTED

Aircraft Maintenance Manual (AMM) : 05-53-00 21-27-00 21-27-34

21-27-42 21-27-51 21-27-52

21-27-53

Aircraft Schematic Manual (ASM) : 21-27-01 31-54-02

Aircraft Wiring List (AWL)

Aircraft Wiring Manual (AWM) : 21-27-01 21-27-02 21-27-03

21-27-04 21-27-05 31-54-05 31-54-06 31-54-29 33-14-02 93-00-22 93-00-88 93-01-22 93-01-23 94-20-20 94-23-05

94-23-08 94-30-00

Illustrated Parts Catalog (IPC) : 21-27-01 21-27-08 33-13-08

Trouble Shooting Manual (TSM) : 21-27-00

Master Minimum Equipment List (MMEL)

Flight Crew Operating Manual (FCOM) : VOL 1 VOL 3

This Service Bulletin has an operational impact. You are therefore requested to inform AIRBUS, at least four weeks in advance, of your intention to accomplish this Service Bulletin, in order to receive required amendments to your operational documentation. For this purpose, please send a fax, telex or mail to:

AI/SE-D, AIRBUS - Customer Services Directorate Fax No. (33) 5 61 93 28 06 Sita No. TLSBP7X E-mail sb.reporting@airbus.fr

These amendments will be confirmed by the next normal revision of operational documentation, once your Service Bulletin accomplishment report has been sent, as usual, to our Customer Services Directorate (SE-D).

L. <u>INTERCHANGEABILITY/MIXABILITY</u>

DESCRIPTION	OLD PART No.	NEW PART No.	INT	MIXABILITY
Integrally Lighted Plate	D33110104A00	D33110046A00	03	Not applicable
Integrally Lighted Plate	D33110141B00	D33110084A00	03	Not applicable
Integrally Lighted Plate	D33110271A00	D33110120A00	03	Not applicable

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DESCRIPTION	OLD PART No.	NEW PART No.	INT	MIXABILITY
Integrally Lighted Plate	D00410458A00	D33110121A00	03	Not applicable
Integrally Lighted Plate	D33110123B00	D33110183A00	03	Not applicable
Integrally Lighted Plate	D33110110A00	D33110229A00	03	Not applicable
Integrally Lighted Plate	D33110087A00	D33110255A00	03	Not applicable
Integrally Lighted Plate	D33110086B00	D33110284A00	03	Not applicable
Integrally Lighted Plate	D33110137A00	D33110285A00	03	Not applicable
Integrally Lighted Plate	D33110197A00	D33110286A00	03	Not applicable

NOTE: For definitions of interchangeability codes shown in column INT. refer to ATA. Common Support Data Dictionary (CSDD), Chapter 2.

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2. MATERIAL INFORMATION

A. MATERIAL - PRICE AND AVAILABILITY

(1) Material

Customers with aircraft shown in the effectivity of this Service Bulletin should send a purchase order to AIRBUS. Quote the number of this Service Bulletin. The address is:

AIRBUS SPARES SUPPORT AND SERVICES P.O. Box 630262 22312 HAMBURG GERMANY

(2) Price and Availability

Kit 211148A01R01

Cost : 1260 US Dollars

Availability: 99 calendar days from receipt of order

The Kit availability given above is the standard lead time from the date of your purchase order. If you require the Kit(s) before this time, please include a retrofit planning schedule with your order so that we can try to comply with your requirements.

The sales terms (costs and availability) are estimated in relation to economic conditions at the issue date of the Service Bulletin.

Kit 211148A02R00

Cost : 810 US Dollars

Availability: 99 calendar days from receipt of order

The Kit availability given above is the standard lead time from the date of your purchase order. If you require the Kit(s) before this time, please include a retrofit planning schedule with your order so that we can try to comply with your requirements.

The sales terms (costs and availability) are estimated in relation to economic conditions at the issue date of the Service Bulletin.

Kit 211148A03R00

Cost : 810 US Dollars

Availability: 99 calendar days from receipt of order

The Kit availability given above is the standard lead time from the date of your purchase order. If you require the Kit(s) before this

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time, please include a retrofit planning schedule with your order so that we can try to comply with your requirements.

The sales terms (costs and availability) are estimated in relation to economic conditions at the issue date of the Service Bulletin.

Kit 211148A04R00

Cost : 810 US Dollars

Availability: 99 calendar days from receipt of order

The Kit availability given above is the standard lead time from the date of your purchase order. If you require the Kit(s) before this time, please include a retrofit planning schedule with your order so that we can try to comply with your requirements.

The sales terms (costs and availability) are estimated in relation to economic conditions at the issue date of the Service Bulletin.

Kit 211148A05R00

Cost : 810 US Dollars

Availability: 99 calendar days from receipt of order

The Kit availability given above is the standard lead time from the date of your purchase order. If you require the Kit(s) before this time, please include a retrofit planning schedule with your order so that we can try to comply with your requirements.

The sales terms (costs and availability) are estimated in relation to economic conditions at the issue date of the Service Bulletin.

Kit 211148A06R00

Cost : 810 US Dollars

Availability: 99 calendar days from receipt of order

The Kit availability given above is the standard lead time from the date of your purchase order. If you require the Kit(s) before this time, please include a retrofit planning schedule with your order so that we can try to comply with your requirements.

The sales terms (costs and availability) are estimated in relation to economic conditions at the issue date of the Service Bulletin.

Kit 211148A07R00

Cost : 810 US Dollars

Availability: 99 calendar days from receipt of order

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The Kit availability given above is the standard lead time from the date of your purchase order. If you require the Kit(s) before this time, please include a retrofit planning schedule with your order so that we can try to comply with your requirements.

The sales terms (costs and availability) are estimated in relation to economic conditions at the issue date of the Service Bulletin.

Kit 211148A08R00

Cost : 810 US Dollars

Availability: 99 calendar days from receipt of order

The Kit availability given above is the standard lead time from the date of your purchase order. If you require the Kit(s) before this time, please include a retrofit planning schedule with your order so that we can try to comply with your requirements.

The sales terms (costs and availability) are estimated in relation to economic conditions at the issue date of the Service Bulletin.

Kit 211148A09R00

Cost : 810 US Dollars

Availability: 99 calendar days from receipt of order

The Kit availability given above is the standard lead time from the date of your purchase order. If you require the Kit(s) before this time, please include a retrofit planning schedule with your order so that we can try to comply with your requirements.

The sales terms (costs and availability) are estimated in relation to economic conditions at the issue date of the Service Bulletin.

Kit 211148A10R00

Cost : 810 US Dollars

Availability: 99 calendar days from receipt of order

The Kit availability given above is the standard lead time from the date of your purchase order. If you require the Kit(s) before this time, please include a retrofit planning schedule with your order so that we can try to comply with your requirements.

The sales terms (costs and availability) are estimated in relation to economic conditions at the issue date of the Service Bulletin.

Kit 211148A11R00

Cost : 810 US Dollars

Availability: 99 calendar days from receipt of order

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The Kit availability given above is the standard lead time from the date of your purchase order. If you require the Kit(s) before this time, please include a retrofit planning schedule with your order so that we can try to comply with your requirements.

The sales terms (costs and availability) are estimated in relation to economic conditions at the issue date of the Service Bulletin.

B. INDUSTRY SUPPORT INFORMATION

AIRBUS will not provide industrial support for accomplishment of this Service Bulletin.

C. LIST OF COMPONENTS

Kit 211148A01R01

ITEM	NEW PART No.	QTY UM	KEYWORD	ITEM	OLD PART No.	INT INST DISP
2	NSA8205-171	2	Packing			
3	NAS1153E8	20	Screw			
4	D5311044620096	2	Plug			
8	E0718-10	1 M	Tubing			
10	ABS0772A02A	3	Clip			
18	NSA938005-14	2	Cap			
19	NSA938005-12	1	Cap			
20	NSA938005-10	1	Cap			
	EN3155-016M2222	6	Contact			
	NSA935401-04	62	Tie			
	NSA935401-06	50	Tie			
	NSA936604CA0931	4	Cap			

NOTE: Refer to the AIRBUS Standards Manual (SM) if you find part numbers of hardware components in the related kit(s) which you cannot identify in the LIST OF COMPONENTS of this Service Bulletin. The SM will give you the correct part number to part number relationship.

Kit 211148A02R00

ITEM	NEW PART No.	QTY UM	KEYWORD	ITEM	OLD PART No.	INT INST DISP
12	D33110183A00	1	Plate	(12)	D33110123B00	03 *
	ASNA2083BG2-10	4	Screw			

NOTE: For definitions of interchangeability codes shown in column INT. refer to ATA Common Support Data Dictionary (CSDD), chapter 2.

NOTE (*) Discard

Kit 211148A03R00

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ITEM	NEW PART No.	QTY UM	KEYWORD	ITEM	OLD PART No.	INT INST DISP
12	D33110046A00	1	Plate	(12)	D33110104A00	03 *
	ASNA2083BG2-10	4	Screw			

NOTE: For definitions of interchangeability codes shown in column INT. refer to ATA Common Support Data Dictionary (CSDD), chapter 2.

NOTE (*) Discard

NOTE: Refer to the AIRBUS Standards Manual (SM) if you find part numbers of hardware components in the related kit(s) which you cannot identify in the LIST OF COMPONENTS of this Service Bulletin. The SM will give you the correct part number to part number relationship.

Kit 211148A04R00

ITEM	NEW PART No.	QTY UM	KEYWORD	ITEM	OLD PART No.	INT INST DISP
12	D33110229A00	1	Plate	(12)	D33110110A00	03 *
	ASNA2083BG2-10	4	Screw			

NOTE: For definitions of interchangeability codes shown in column INT. refer to ATA Common Support Data Dictionary (CSDD), chapter 2.

NOTE (*) Discard

NOTE: Refer to the AIRBUS Standards Manual (SM) if you find part numbers of hardware components in the related kit(s) which you cannot identify in the LIST OF COMPONENTS of this Service Bulletin. The SM will give you the correct part number to part number relationship.

Kit 211148A05R00

ITEM	NEW PART No.	QTY UM	KEYWORD	ITEM	OLD PART No.	INT INST DISP
12	D33110284A00	1	Plate	(12)	D33110086B00	03 *
	ASNA2083BG2-10	4	Screw			

NOTE: For definitions of interchangeability codes shown in column INT. refer to ATA Common Support Data Dictionary (CSDD), chapter 2.

NOTE (*) Discard

NOTE: Refer to the AIRBUS Standards Manual (SM) if you find part numbers of hardware components in the related kit(s) which you cannot identify in the LIST OF COMPONENTS of this Service Bulletin. The SM will give you the correct part number to part number relationship.

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Kit 211148A06R00

ITEM	NEW PART No.	QTY UM	KEYWORD	ITEM	OLD PART No.	INT INST DISP
12	D33110285A00	1	Plate	(12)	D33110137A00	03 *
	ASNA2083BG2-10	4	Screw			

NOTE: For definitions of interchangeability codes shown in column INT. refer to ATA Common Support Data Dictionary (CSDD), chapter 2.

NOTE (*) Discard

NOTE: Refer to the AIRBUS Standards Manual (SM) if you find part numbers of hardware components in the related kit(s) which you cannot identify in the LIST OF COMPONENTS of this Service Bulletin. The SM will give you the correct part number to part number relationship.

Kit 211148A07R00

ITEM	NEW PART No.	QTY UM	KEYWORD	ITEM	OLD PART No.	INT INST DISP
12	D33110286A00	1	Plate	(12)	D33110197A00	03 *
	ASNA2083BG2-10	4	Screw			

NOTE: For definitions of interchangeability codes shown in column INT. refer to ATA Common Support Data Dictionary (CSDD), chapter 2.

NOTE (*) Discard

NOTE: Refer to the AIRBUS Standards Manual (SM) if you find part numbers of hardware components in the related kit(s) which you cannot identify in the LIST OF COMPONENTS of this Service Bulletin. The SM will give you the correct part number to part number relationship.

Kit 211148A08R00

ITEM	NEW PART No.	QTY UM	KEYWORD	ITEM	OLD PART No.	INT INST DISP
12	D33110255A00	1	Plate	(12)	D33110087A00	03 *
	ASNA2083BG2-10	4	Screw			

NOTE: For definitions of interchangeability codes shown in column INT. refer to ATA Common Support Data Dictionary (CSDD), chapter 2.

NOTE (*) Discard

NOTE: Refer to the AIRBUS Standards Manual (SM) if you find part numbers of hardware components in the related kit(s) which you cannot identify in the LIST OF COMPONENTS of this Service Bulletin. The SM will give you the correct part number to part number relationship.

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Kit 211148A09R00

ITEM	NEW PART No.	QTY UM	KEYWORD	ITEM	OLD PART No.	INT INST DISP
12	D33110084A00	1	Plate	(12)	D33110141B00	03 *
	ASNA2083BG2-10	4	Screw			

NOTE: For definitions of interchangeability codes shown in column INT. refer to ATA Common Support Data Dictionary (CSDD), chapter 2.

NOTE (*) Discard

NOTE: Refer to the AIRBUS Standards Manual (SM) if you find part numbers of hardware components in the related kit(s) which you cannot identify in the LIST OF COMPONENTS of this Service Bulletin. The SM will give you the correct part number to part number relationship.

Kit 211148A10R00

ITEM	NEW PART No.	QTY UM	KEYWORD	ITEM	OLD PART No.	INT INST DISP
12	D33110120A00	1	Plate	(12)	D33110271A00	03 *
	ASNA2083BG2-10	4	Screw			

NOTE: For definitions of interchangeability codes shown in column INT. refer to ATA Common Support Data Dictionary (CSDD), chapter 2.

NOTE (*) Discard

NOTE: Refer to the AIRBUS Standards Manual (SM) if you find part numbers of hardware components in the related kit(s) which you cannot identify in the LIST OF COMPONENTS of this Service Bulletin. The SM will give you the correct part number to part number relationship.

Kit 211148A11R00

ITEM	NEW PART No.	QTY UM	KEYWORD	ITEM	OLD PART No.	INT INST DISP
12	D33110121A00	1	Plate	(12)	D00410458A00	03 *
	ASNA2083BG2-10	4	Screw			

NOTE: For definitions of interchangeability codes shown in column INT. refer to ATA Common Support Data Dictionary (CSDD), chapter 2.

NOTE (*) Discard

NOTE: Refer to the AIRBUS Standards Manual (SM) if you find part numbers of hardware components in the related kit(s) which you cannot identify in the LIST OF COMPONENTS of this Service Bulletin. The SM will give you the correct part number to part number relationship.

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D. <u>LIST OF MATERIALS - OPERATOR SUPPLIED</u>

(1) Consumable Materials

REFERENCE TO CML QTY PER A/C INST DISP **DESCRIPTION** MAT. No. Corrosion Inhibiting fillet 09-016 As required Consistency Chemical Conversion Coating 13-002 As required Yellow Aluminum 16-001C Polyurethane Primer As required As required Lockwire MS20995C20 None

(2) Components

None

E. PARTS TO BE RE-IDENTIFIED BY THE OPERATOR

None

F. TOOLING - PRICE AND AVAILABILITY

None

G. SPECIAL TOOLS

None

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3. ACCOMPLISHMENT INSTRUCTIONS

A. GENERAL

WARNING: MAKE SURE THAT YOU OBEY ALL THE WARNINGS AND ALL THE CAUTIONS

INCLUDED IN THE REFERENCED PROCEDURES.

CAUTION: ALWAYS OBEY THE PRECAUTIONS THAT FOLLOW TO KEEP ELECTRICAL WIRING IN A SATISFACTORY CONDITION (ELECTRICALLY AND MECHANICALLY SERVICEABLE). WHEN YOU DO MAINTENANCE WORK, REPAIRS OR MODIFICATIONS, ALWAYS KEEP ELECTRICAL WIRING, COMPONENTS AND THE WORK AREA AS CLEAN AS POSSIBLE, TO DO THIS:

PUT PROTECTION, SUCH AS PLASTIC SHEETING, CLOTHS, ETC;
 AS NECESSARY ON WIRING AND COMPONENTS.

 REGULARLY REMOVE ALL SHAVINGS, UNWANTED MATERIAL AND OTHER CONTAMINATION.

THESE PRECAUTIONS WILL DECREASE THE RISK OF CONTAMINATION AND DAMAGE TO THE ELECTRICAL WIRING INSTALLATION.

IF THERE IS CONTAMINATION REFER TO ESPM 20-55-00.

(1) Preparation

- (a) Make sure that the aircraft is electrically grounded (Refer to AMM 12-34-24 Page block 201).
- (b) Put the access platforms in position.
- (c) Open the access doors 812, 822 and 824 (Refer to AMM 52-41-00 Page block 001).
- (d) Do the preparation procedure as specified in the removal/installation of the System Data Acquisition Concentractors (SDACs) (1WV1 and 1WV2) (Refer to AMM 31-55-34 Page block 401).
- (e) For the wiring parity of the SDACs, before any disconnection, note the figure number of the Hook-up Chart on which lines 1 and 3 corresponds to the existing aircraft wiring configuration (Refer to figure 20 or figure 21).
- (f) Make sure that the external connector(s) is (are) not connected to the aircraft receptacles EXT PW.
- (g) Make sure that there is (are) warning notice(s) on external power receptacle to tell persons not to connect an external power source.
- (h) Make sure that the EMER EXIT LT pushbutton switch on 25VU is on OFF position.

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- (i) In the cockpit, on the overhead panel 35VU release BAT pushbutton switches.
- (j) Put a warning notice on panel 35VU to tell persons no to operate the batteries.
- (k) Put a warning notice on refuel/defuel panel 800VU to tell persons no to operate the NORMAL BATTERY switch.
- (1) Put a warning notice in the cockpit to tell persons not to start the APU.
- (m) Put a warning notice in the cockpit to tell persons not to start the ENG 1, 2.
- (n) Disconnection of the battery:
 - For job set-up, refer to removal/installation of the batteries (2PB1, 2PB2) (Refer to AMM 24-38-51 Page block 401).
 - Turn the knurled nut by a quarter turn.
 - Disconnect the batteries connectors.
 - Put blanking caps on the disconnected electrical.

(2) Standard Practices

- (a) For the specification of the material numbers (Mat. No.), refer to the CML.
- (b) Remove and install the fasteners (Refer to SRM 51-40-00).
- (c) Drill and deburr the holes metallic structure (Refer to SRM 51-44-11).
- (d) Countersink the holes, (Refer to SRM 51-46-11).
- (e) Protect the part to be drilled with Chemical Conversion Coating Yellow Aluminum (Mat No. 13-002) and Polyure than Primer (Mat No. 16-001C) .
- (f) Torque the standard threaded fasteners (Refer to AMM 20-21-11 Page block 201).
- (g) Apply Corrosion Inhibiting fillet Consistency (Mat No. 09-016)
- (h) Renew the protection finish with Polyurethane Primer (Mat No. 16-001C).
- (i) For the alternate and substitute fasteners, (Refer to SRM 51-43-12).

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- (j) Obey the instructions for the general wiring installation, (Refer to ESPM 20-33-00).
- (k) Do a continuity test of the modified wires.

B. MODIFICATION

- (1) For Kit 211148A01R01
 - (a) In the avionics compartment, LH side, modify the inlet skin air valve (11HD).

Refer to figure 1 Sheet 2

Refer to figure 2 Sheets 1 and 2

Refer to figure 3

Refer to figure 4 Sheets 1 and 2

Refer to AMM 21-27-52 Page block 401

 $\underline{1}$ Remove:

Refer to AMM 21-27-52 Page block 401

Refer to figure 2 Sheet 1

FIN 11HD

10 Screw Item (3) Discard
1 Skin Air Valve Item (5)
1 Packing Item (2) Discard

NOTE: Temporarily retain the inlet skin air valve (11HD) item (5). This skin air valve is necessary to drill the holes of the new plug.

2 On bench:

Refer to figure 3

- \underline{a} Put in position on the inlet skin air valve (11HD) item (5):
- 1 Plug D5311044620096 Item 4
 - <u>b</u> Make a mark for the drilling of the ten holes on the plug item 4.
 - Remove the skin air inlet valve (11HD) item (5) and discard it.
 - <u>d</u> Drill the plug item 4 to match the ten holes, (Refer to figure 3).

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 \underline{e} Countersink the ten holes of the plug item 4, (Refer to SRM 51-46-11.)

3 Modify the routing.

Refer to figure 4 Sheets 1 and 2

- a Disconnect the wires from the connector 11HD-A.
- b Remove:

FIN 11HD-A

- 1 Connector Item (7) Retain
 - \underline{c} Pull the wires through the pressure seal 1303VP, out of the cover.
 - \underline{d} Connect the wires on the connector 11HD-A item (7) as per AWL.
 - \underline{e} Install on the connector as shown in view C.

Refer to figure 4 Sheet 2

1 M Tubing-Heat E0718-10 Item 8

attach with:

- 2 Tie-Cable NSA935401-04
 - <u>f</u> Install the wires with the connector 11HD-A in the stowed position on the route 1M.
 - q Attach with:

10 Tie-Cable NSA935401-04

or

10 Tie-Cable NSA935401-06

4 Install:

Refer to figure 2 Sheet 2

1 Packing NSA8205-171 Item 2 1 Plug D5311044620096 Item 4

attach with:

10 Screw NAS1153E8 Item 3

(b) In the avionics compartment, RH side, modify the outlet skin air valve (10HD).

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Refer to figure 1 Sheet 2 Refer to figure 3 Refer to figure 5 Sheets 1 and 2 Refer to figure 6 Sheets 1 and 2 Refer to AMM 21-27-53 Page block 401 1 Remove: Refer to AMM 21-27-53 Page block 401 Refer to figure 5 Sheet 1 FIN 10HD 10 Screw Item (3)Discard Skin Air Valve 1 Item (1)1 Packing Item (2) Discard NOTE: Temporarily retain the outlet skin air valve (10HD). This outlet skin air valve is necessary to drill the holes of the new plug. 2 On bench: Refer to figure 3 a Put in position on the outlet skin air valve (10HD) item (1): 1 Plug D5311044620096 Item 4 b Make a mark for the drilling of the ten holes on the plug item 4. c Remove the outlet skin air valve (10HD) item (1) and discard it. d Drill the plug item 4 to match the ten holes, (Refer to figure 3). e Countersink the ten holes of the plug item 4, (Refer to SRM 51-46-11.) 3 Modify the routing. Refer to figure 6 Sheets 1 and 2 a Disconnect the wires from the connector 10HD-A item (6).

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b Remove:

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FIN 10HD-A

1 Connector Item (6) Retain

- <u>c</u> Pull the wires through the pressure seal 1310VP, out of the cover.
- \underline{d} Connect the wires on the connector 10HD-A item (6) as per AWL.
- e Install on the connector as shown in view C.

Refer to figure 6 Sheet 2

Tubing-Heat E0718-10 Item 8

attach with:

2 Tie-Cable NSA935401-04

- \underline{f} Install the wires with the connector 10HD-A in the stowed position on the route 1M.
- g Attach with:

10 Tie-Cable NSA935401-04

or

10 Tie-Cable NSA935401-06

<u>4</u> Install:

Refer to figure 5 Sheet 2

1 Packing NSA8205-171 Item 2 1 Plug D5311044620096 Item 4

attach with:

10 Screw NAS1153E8 Item 3

(c) Modify the connectors of the fan-GND cool (8HD), the cooling unit-GND (12HD) and press SW-GND cool fan (13HD), in the avionics compartment.

Refer to figure 7 Sheets 1 and 2

- $\underline{1}$ Disconnect the connectors 8HD-A, 12HD-A, 12HD-B and 13HD-A.
- Install on the connectors 8HD-A, 12HD-A and 13HD-A as shown in view C.

Refer to figure 7 Sheet 2

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Tubing-Heat Item 8 E0718-10 Attach with: Tie-Cable NSA935401-04 8 Install the wires with the connectors 8HD-A, 12HD-A, 12HD-B and 13HD-A in the stowed position 4 Attach with: 30 Tie-Cable NSA935401-04 or 30 Tie-Cable NSA935401-06 5 On the connector 8HD-A and 12HD-A, install: Refer to figure 7 Sheet 2 2 NSA938005-14 Item 18 Cap 6 On the connector 12HD-B, install: Refer to figure 7 Sheet 2 1 NSA938005-12 Item 19 Cap 7 On the connector 13HD-A, install: Refer to figure 7 Sheet 2 1 Cap NSA938005-10 Item 20 Modify the wiring on shelf 88VU, in the avionics compartment. Refer to figure 1 Sheet 1 Refer to figure 12 Refer to figure 18 $\underline{1}$ Modify the connection of the wires shown on the lines 1thru 8 (Refer to figure 18). use:

4 Cap NSA936604CA0931

(e) Modify the pin programming and the parity of the SDAC on the shelf 85VU and the shelf 86VU, in the avionics compartment.

Refer to figure 1 Sheet 1

(d)

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Refer to figure 13

Refer to figure 14

Refer to figure 15

Refer to figure 19

Refer to figure 20

Refer to figure 21

Refer to AMM 31-55-34

- 1 Remove the SDACs (1WV1 and 1WV2) (Refer to AMM 31-55-34 Page block 401).
- 2 Modify the pin programming.

Refer to figure 1 Sheet 1

Refer to figure 13

Refer to figure 19

 \underline{a} Modify the connection of wires shown on the lines 1 thru 4 (Refer to figure 19)

NOTE: If necessary, use:

- 2 Contact
- EN3155-016M2222
- 3 Modify the wiring parity of the SDACs.

Refer to figure 1 Sheet 1

Refer to figure 14

Refer to figure 15

Refer to figure 20

Refer to figure 21

- \underline{a} If during accomplishment of para. 3. A.(1) (e) you noted that the existing aircraft wiring correspond to lines 1 and 3 of figure 20 :
 - Modify the connection of wires shown on the lines 1 thru 4 (Refer to figure 20).

NOTE: If necessary, use:

2 Contact EN3155-016M2222

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 \underline{b} If during accomplishment of para. 3. A.(1) (e) you noted that the existing aircraft wiring correspond to lines 1 and 3 of figure 21 :

 Modify the connection of wires shown on the lines 1 thru 4 (Refer to figure 21).

NOTE: If necessary, use:

2 Contact

EN3155-016M2222

- $\underline{4}$ Install the SDACs (1WV1 and 1WV2) (Refer to AMM 31-55-34 Page block 401).
- (f) Modify the equipment in the rear circuit breaker panel 122VU, in the cockpit.

Refer to figure 1 Sheet 1

Refer to figure 8

- $\underline{1}$ At the location W23, on the circuit breaker 3HD, install:
- 1 Clip-Locking ABS0772A02A Item 10

NOTE: Safety the clip on the circuit breaker with Lockwire MS20995C20.

(g) Modify the equipment in the power center-AC 123VU, in the cockpit.

Refer to figure 1 Sheet 1

Refer to figure 8

- 1 At the location AC11, on the circuit breaker 1HD, install:
- 1 Clip-Locking ABS0772A02A Item 10

NOTE: Safety the clamps on the circuit breaker with Lockwire MS20995C20.

- 2 At the location ACO3, on the circuit breaker 2HD, install:
- 1 Clip-Locking ABS0772A02A Item 10

NOTE: Safety the clamps on the circuit breaker with Lockwire MS20995C20.

(2) Kit 211148A02R00, modify the equipment and the wiring in the overhead control panel 22VU, in the cockpit.

Refer to figure 1

Refer to figure 9 Sheets 1 and 2

Refer to figure 10

Refer to figure 16

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(a) Remove the overhead control panel 22VU.

(b) Remove:

Refer to figure 9 Sheet 1

FIN 9LF

1 Integrally D33110123B00 Item (12) Discard Lighted Plate

4 Screw Discard

(c) Remove:

Refer to figure 9 Sheet 1 and 2

FIN 4HD-A

1 Connector Item (13) Discard

FIN 4HD-1

1 Sleeve Item (14) Discard

FIN 4HD

1 Switch-Pushbutton Item (16) Discard 2 Screw Item (15) Discard

(d) Install:

Refer to figure 1

Refer to figure 9 Sheet 2

FIN 9LF

1 Integrally D33110183A00 Item 12 Lighted Plate

Attach with:

4 Screw ASNA2083BG2-10

- (e) For Config. 01 , remove the wires shown on the lines 1 thru 17 (Refer to figure 16).
- (f) For Config. 02 , remove the wires shown on the lines 1 thru 17 (Refer to figure 17).
- (g) Install the overhead control panel 22VU.
- (3) Kit 211148A03R00 , modify the equipment and the wiring in the overhead control panel 22VU, in the cockpit. Refer to figure 1

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Refer to figure 9 Sheets 1 and 2 Refer to figure 10 Refer to figure 16

- (a) Remove the overhead control panel 22VU.
- (b) Remove:

Refer to figure 9 Sheet 1

FIN 9LF

1 Integrally D33110104A00 Item (12) Discard Lighted Plate

4 Screw Discard

(c) Remove:

FIN 4HD-A

1 Connector Item (13) Discard

FIN 4HD-1

1 Sleeve Item (14) Discard

FIN 4HD

1 Switch-Pushbutton Item (16) Discard 2 Screw Item (15) Discard

(d) Install:

Refer to figure 1

Refer to figure 9 Sheet 2

FIN 9LF

1 Integrally D33110046A00 Item 12 Lighted Plate

Attach with :

4 Screw ASNA2083BG2-10

- (e) For Config. 01 , remove the wires shown on the lines 1 thru 17 (Refer to figure 16).
- (f) For Config. 02 , remove the wires shown on the lines 1 thru 17 (Refer to figure 17).
- (g) Install the overhead control panel 22VU.

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(4) Kit 211148A04R00, modify the equipment and the wiring in the overhead control panel 22VU, in the cockpit.

Refer to figure 1

Refer to figure 9 Sheets 1 and 2

Refer to figure 10 Refer to figure 16

- (a) Remove the overhead control panel 22VU.
- (b) Remove:

Refer to figure 9 Sheet 1

FIN 9LF

1 Integrally D33110110A00 Item (12) Discard Lighted Plate

4 Screw Discard

(c) Remove:

FIN 4HD-A

1 Connector Item (13) Discard

FIN 4HD-1

1 Sleeve Item (14) Discard

FIN 4HD

1 Switch-Pushbutton Item (16) Discard 2 Screw Item (15) Discard

(d) Install:

Refer to figure 9 Sheet 2

FIN 9LF

1 Integrally D33110229A00 Item 12 Lighted Plate

Attach with:

4 Screw ASNA2083BG2-10

- (e) For Config. 01 , remove the wires shown on the lines 1 thru 17 (Refer to figure 16).
- (f) For Config. 02 , remove the wires shown on the lines 1 thru 17 (Refer to figure 17).
- (g) Install the overhead control panel 22VU.

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(5) Kit 211148A05R00, modify the equipment and the wiring in the overhead control panel 22VU, in the cockpit.

Refer to figure 1

Refer to figure 9 Sheets 1 and 2

Refer to figure 10 Refer to figure 16

- (a) Remove the overhead control panel 22VU.
- (b) Remove:

Refer to figure 9 Sheet 1

FIN 9LF

1 Integrally D33110086B00 Item (12) Discard Lighted Plate

4 Screw Discard

(c) Remove:

FIN 4HD-A

1 Connector Item (13) Discard

FIN 4HD-1

1 Sleeve Item (14) Discard

FIN 4HD

1 Switch-Pushbutton Item (16) Discard 2 Screw Item (15) Discard

(d) Install:

Refer to figure 9 Sheet 2

FIN 9LF

1 Integrally D33110284A00 Item 12 Lighted Plate

Attach with:

4 Screw ASNA2083BG2-10

- (e) For Config. 01 , remove the wires shown on the lines 1 thru 17 (Refer to figure 16).
- (f) For Config. 02 , remove the wires shown on the lines 1 thru 17 (Refer to figure 17).
- (g) Install the overhead control panel 22VU.

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(6) Kit 211148A06R00, modify the equipment and the wiring in the overhead control panel 22VU, in the cockpit.

Refer to figure 1

Refer to figure 9 Sheets 1 and 2

Refer to figure 10 Refer to figure 16

- (a) Remove the overhead control panel 22VU.
- (b) Remove:

Refer to figure 9 Sheet 1

FIN 9LF

1 Integrally D33110137A00 Item (12) Discard Lighted Plate

4 Screw Discard

(c) Remove:

FIN 4HD-A

1 Connector Item (13) Discard

FIN 4HD-1

1 Sleeve Item (14) Discard

FIN 4HD

1 Switch-Pushbutton Item (16) Discard 2 Screw Item (15) Discard

(d) Install:

Refer to figure 9 Sheet 2

FIN 9LF

1 Integrally D33110285A00 Item 12 Lighted Plate

Attach with:

4 Screw ASNA2083BG2-10

- (e) For Config. 01 , remove the wires shown on the lines 1 thru 17 (Refer to figure 16).
- (f) For Config. 02 , remove the wires shown on the lines 1 thru 17 (Refer to figure 17).
- (g) Install the overhead control panel 22VU.

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(7) Kit 211148A07R00, modify the equipment and the wiring in the overhead control panel 22VU, in the cockpit.

Refer to figure 1

Refer to figure 9 Sheets 1 and 2

Refer to figure 10 Refer to figure 16

- (a) Remove the overhead control panel 22VU.
- (b) Remove:

Refer to figure 9 Sheet 1

FIN 9LF

1 Integrally D33110197A00 Item (12) Discard Lighted Plate

4 Screw Discard

(c) Remove:

FIN 4HD-A

1 Connector Item (13) Discard

FIN 4HD-1

1 Sleeve Item (14) Discard

FIN 4HD

1 Switch-Pushbutton Item (16) Discard 2 Screw Item (15) Discard

(d) Install:

Refer to figure 9 Sheet 2

FIN 9LF

1 Integrally D33110286A00 Item 12 Lighted Plate

Attach with:

4 Screw ASNA2083BG2-10

- (e) For Config. 01 , remove the wires shown on the lines 1 thru 17 (Refer to figure 16).
- (f) For Config. 02 , remove the wires shown on the lines 1 thru 17 (Refer to figure 17).
- (g) Install the overhead control panel 22VU.

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(8) Kit 211148A08R00, modify the equipment and the wiring in the overhead control panel 22VU, in the cockpit.

Refer to figure 1

Refer to figure 9 Sheets 1 and 2

Refer to figure 10 Refer to figure 16

- (a) Remove the overhead control panel 22VU.
- (b) Remove:

Refer to figure 9 Sheet 1

FIN 9LF

1 Integrally D33110087A00 Item (12) Discard Lighted Plate

4 Screw Discard

(c) Remove:

FIN 4HD-A

1 Connector Item (13) Discard

FIN 4HD-1

1 Sleeve Item (14) Discard

FIN 4HD

1 Switch-Pushbutton Item (16) Discard 2 Screw Item (15) Discard

(d) Install:

Refer to figure 9 Sheet 2

FIN 9LF

1 Integrally D33110255A00 Item 12 Lighted Plate

Attach with:

4 Screw ASNA2083BG2-10

- (e) For Config. 01 , remove the wires shown on the lines 1 thru 17 (Refer to figure 16).
- (f) For Config. 02 , remove the wires shown on the lines 1 thru 17 (Refer to figure 17).
- (g) Install the overhead control panel 22VU.

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(9) Kit 211148A09R00, modify the equipment and the wiring in the overhead control panel 22VU, in the cockpit.

Refer to figure 1

Refer to figure 9 Sheets 1 and 2

Refer to figure 10 Refer to figure 16

- (a) Remove the overhead control panel 22VU.
- (b) Remove:

Refer to figure 9 Sheet 1

FIN 9LF

1 Integrally D33110141B00 Item (12) Discard Lighted Plate

4 Screw Discard

(c) Remove:

FIN 4HD-A

1 Connector Item (13) Discard

FIN 4HD-1

1 Sleeve Item (14) Discard

FIN 4HD

1 Switch-Pushbutton Item (16) Discard 2 Screw Item (15) Discard

(d) Install:

Refer to figure 9 Sheet 2

FIN 9LF

1 Integrally D33110084A00 Item 12 Lighted Plate

Attach with:

4 Screw ASNA2083BG2-10

- (e) For Config. 01 , remove the wires shown on the lines 1 thru 17 (Refer to figure 16).
- (f) For Config. 02 , remove the wires shown on the lines 1 thru 17 (Refer to figure 17).
- (g) Install the overhead control panel 22VU.

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(10) Kit 211148A10R00 , modify the equipment and the wiring in the overhead control panel 22VU, in the cockpit.

Refer to figure 1

Refer to figure 9 Sheets 1 and 2

Refer to figure 10 Refer to figure 16

- (a) Remove the overhead control panel 22VU.
- (b) Remove:

Refer to figure 9 Sheet 1

FIN 9LF

1 Integrally D33110271A00 Item (12) Discard Lighted Plate

4 Screw Discard

(c) Remove:

FIN 4HD-A

1 Connector Item (13) Discard

FIN 4HD-1

1 Sleeve Item (14) Discard

FIN 4HD

1 Switch-Pushbutton Item (16) Discard 2 Screw Item (15) Discard

(d) Install:

Refer to figure 9 Sheet 2

FIN 9LF

1 Integrally D33110120A00 Item 12 Lighted Plate

Attach with:

4 Screw ASNA2083BG2-10

- (e) For Config. 01 , remove the wires shown on the lines 1 thru 17 (Refer to figure 16).
- (f) For Config. 02 , remove the wires shown on the lines 1 thru 17 (Refer to figure 17).
- (g) Install the overhead control panel 22VU.

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(11) Kit 211148A11R00 , modify the equipment and the wiring in the overhead control panel 22VU, in the cockpit.

Refer to figure 1

Refer to figure 9 Sheets 1 and 2

Refer to figure 10 Refer to figure 16

- (a) Remove the overhead control panel 22VU.
- (b) Remove:

Refer to figure 9 Sheet 1

FIN 9LF

1 Integrally D00410458A00 Item (12) Discard Lighted Plate

4 Screw Discard

(c) Remove:

FIN 4HD-A

1 Connector Item (13) Discard

FIN 4HD-1

1 Sleeve Item (14) Discard

FIN 4HD

1 Switch-Pushbutton Item (16) Discard 2 Screw Item (15) Discard

(d) Install:

Refer to figure 9 Sheet 2

FIN 9LF

1 Integrally D33110121A00 Item 12 Lighted Plate

Attach with:

4 Screw ASNA2083BG2-10

- (e) For Config. 01 , remove the wires shown on the lines 1 thru 17 (Refer to figure 16).
- (f) For Config. 02 , remove the wires shown on the lines 1 thru 17 (Refer to figure 17).
- (g) Install the overhead control panel 22VU.

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C. TEST

- (1) Job set-up:
 - (a) Re-connect the battery:
 - For the job set-up, refer to the removal/installation of the batteries (2PB1, 2PB2), (Refer to AMM 24-38-51 Page block 401),
 - Remove the blanking cap from the electrical connectors,
 - make sure that the electrical connectors are clean and in correct condition,
 - connect the connector of the batteries,
 - turn the knurled nut by a quarter turn,
 - (b) Remove all the warning notices.
 - (c) Restore the systems and the aircraft to the normal operating condition.
- (2) Tests.
 - (a) Initial conditions:
 - 1 On each connector which were disconnected, do a visual check, connector by connector as defined by ESPM 20-51-10, to make sure that:
 - the label of the plug is the same as the label on the receptacle,
 - the plug is correctly locked.
 - (b) Tests:

NOTE: If the aircraft is operated in CAT 3 conditions, you must also do this test: land CAT 3 capability test (Refer to AMM 22-97-00 Page block 501).

- 1 Do the operational test of the instrument and panel integral lighting (Refer to AMM 33-13-00 Page block 501).
- <u>2</u> Do the operational test of the annunciator light test system in the cockpit (Refer to AMM 33-14-00 Page block 501).
- Oo the operational test of the avionics equipment ventilation system (Refer to AMM 21-26-00 Page block 501).
- 4 Do the operational test of the Automatic Flight System (AFS) (Refer to AMM 22-96-00 Page block 501).

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- 5 Do the operational test of the Electronic Instrument System (EIS) (Refer to AMM 31-60-00 Page block 501).
- 6 Do the operational test of the Electronic Centralized Aircraft Monitoring (ECAM) (Refer to AMM 31-50-00 Page block 501).
- <u>7</u> Do the ground scanning of the central warning system (Refer to AMM 31-50-00 Page block 501).
- (3) Tests after disconnection/connection of the overhead control panel 22VU:
 - (a) Do the operational check of override function (BLOWER AND EXTRACT), (Refer to AMM 21-26-00 Page block 501).
 - (b) Do the operational test of the cabin recirculation fans 14HG and 15HG, (Refer to AMM 21-21-00 Page block 501).
 - (c) Do the operational test of the avionics equipment ground cooling fault warning, (Refer to AMM 21-27-00 Page block 501).
 - (d) Do the operational test of the FWD cargo compartment heating system, (Refer to AMM 21-43-00 Page block 501).
 - (e) Do the operational test of the landscape camera, (Refer to AMM 23-26-00 Page block 501).
 - (f) Do the operational test of the cargo compartment smoke detection system by Push to Test (PTT), (Refer to AMM 26-16-00 Page block 501).
 - (g) Do the operational test of the cargo compartment smoke detection with the Centralized Fault Display System (CFDS) to confirm isolation valvelatching circuit integrity, (Refer to AMM 26-16-00 Page block 501).
 - (h) Do the operational test of the ground cooling isolation valve to verify closing in case of smokewarning, (Refer to AMM 26-16-00 Page block 501).
 - (i) Do the operational test of the cargo compartment fire extinguishing system, (Refer to AMM 26-23-00 Page block 501).
 - (j) Do the check of the firing circuit continuity and do the operational test of priority switching, (Refer to AMM 26-23-00 Page block 501).
 - (k) Do the functional test of time delay for illumination of "DISCH AGENT 2" reminder light, (Refer to AMM 26-23-00 Page block 501).
 - (1) Do the continuity check of the cargo compartment firing circuit, (Refer to AMM 26-23-00 Page block 501).

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- (m) Do the inspection/check of theoperation of the windshield wipers, (Refer to AMM 30-45-00 Page block 601).
- (n) Do the functional test of the windshield rain protection, (Refer to AMM 30-45-00 Page block 501).
- (o) Do the operational test of the engine electronic control, (Refer to AMM 73-22-34 Page block 501).

D. CLOSE UP

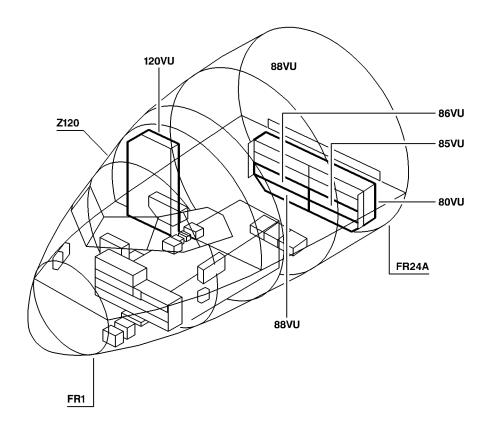
- (1) Do the close-up procedure as specified in the removal/installation of the SDACs (1WV1 and 1WV2) (Refer to AMM 31-55-34 Page block 401).
- (2) Close the access doors 812, 822 and 824 (Refer to AMM 52-41-00 Page block 001).
- (3) Remove the access platforms.

E. <u>DOCUMENTATION</u>

Write in the applicable aircraft records that you have done all the work given in the Service Bulletin.

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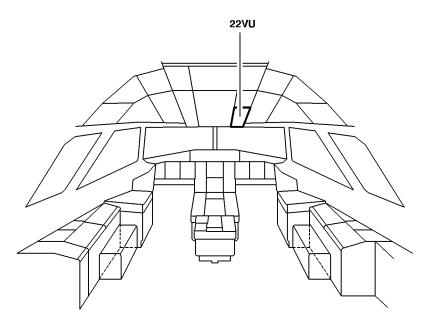
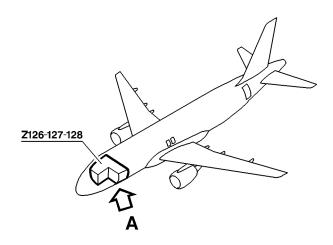


Figure 1 Sheet 1 Location of the Equipment

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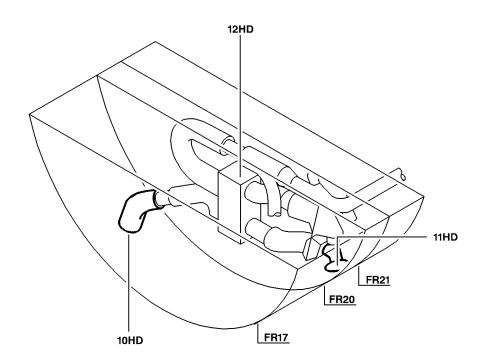


Figure 1 Sheet 2 Location of the Equipment

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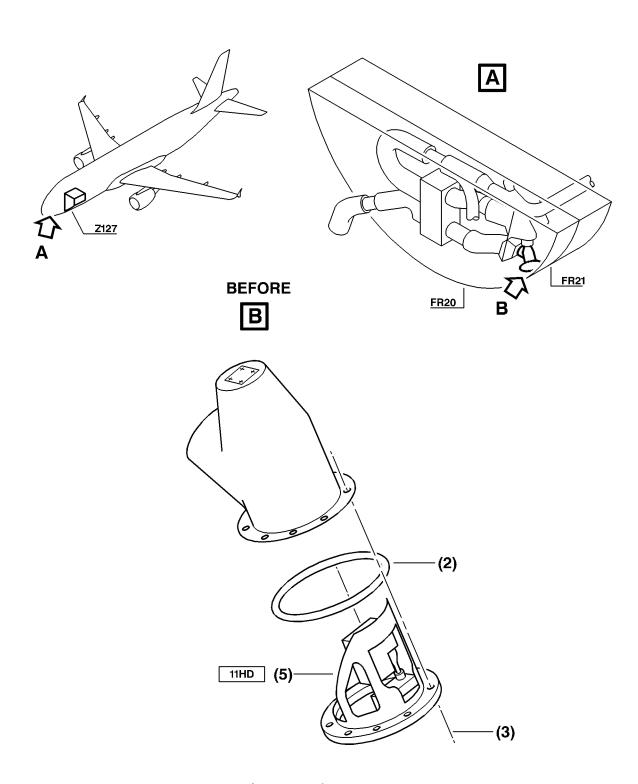


Figure 2 Sheet 1 Modification of the Inlet Skin Air valve (11HD)

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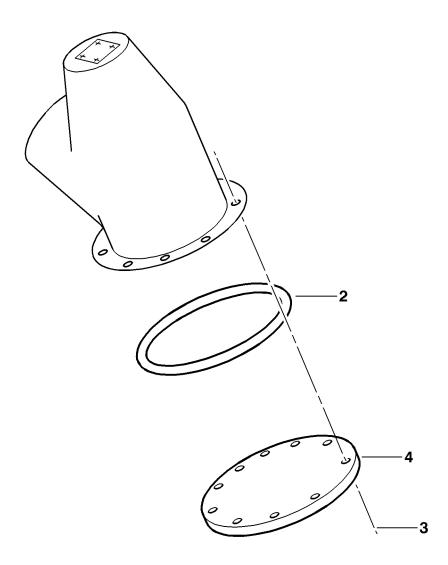


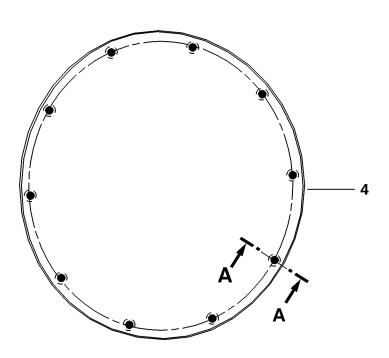
Figure 2 Sheet 2 Modification of the Inlet Skin Air valve (11HD)

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ON BENCH



SECTION A-A

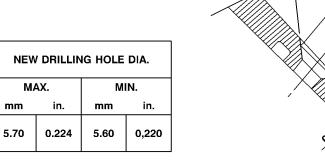


Figure 3 Sheet 1 Modification of the Plug on the Bench

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HOLE

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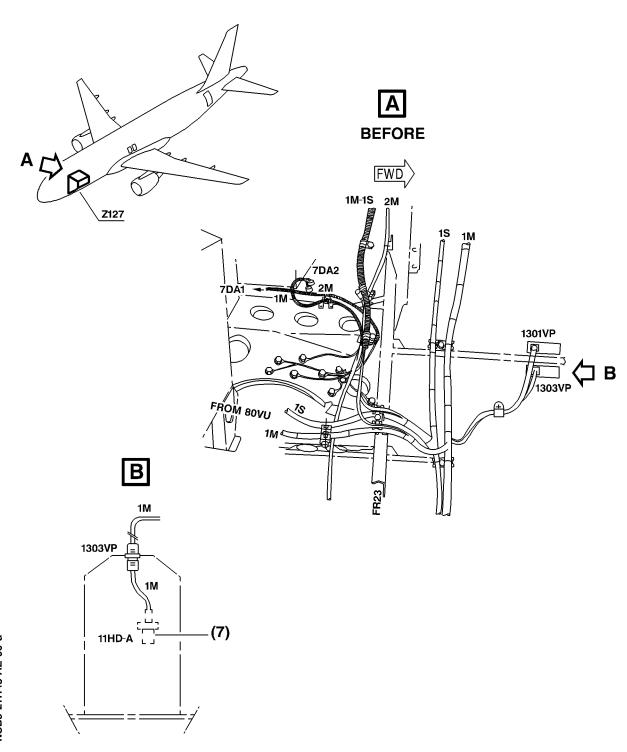


Figure 4 Sheet 1 Modification of the Routing in the LH FWD Avionics Compartment

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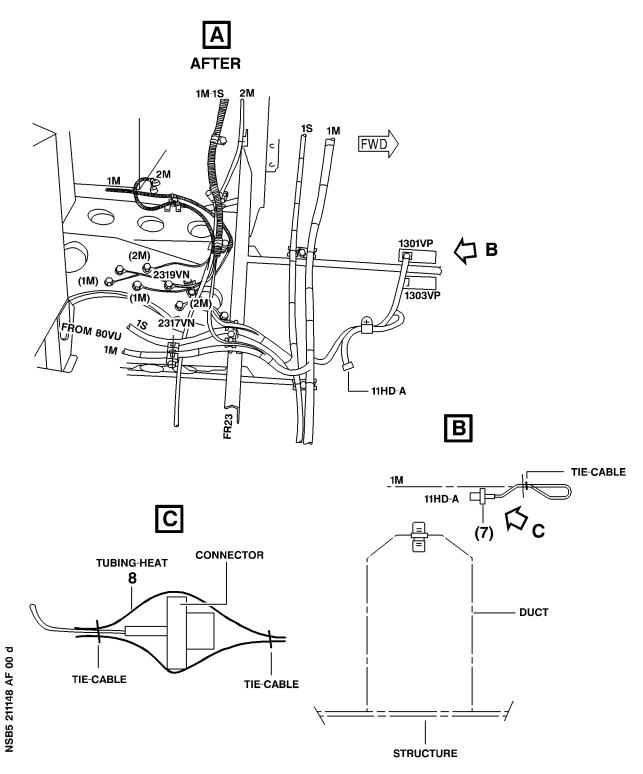
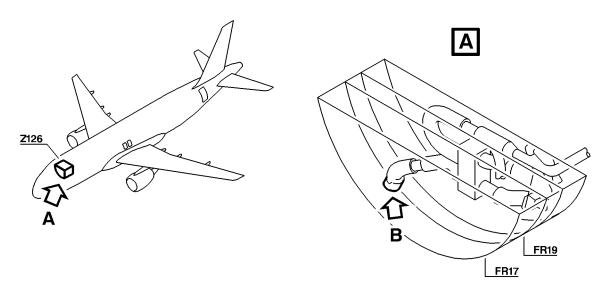


Figure 4 Sheet 2 Modification of the Routing in the LH FWD Avionics Compartment

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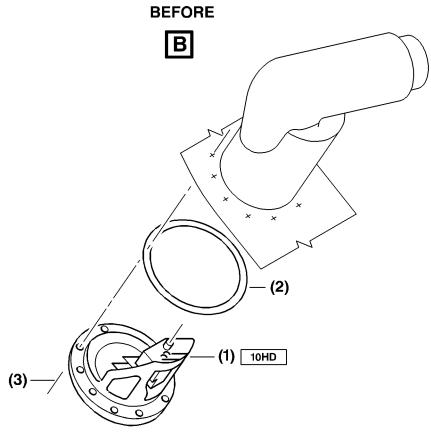


Figure 5 Sheet 1 Modification of the Outlet Skin Air Valve (10HD)

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AFTER



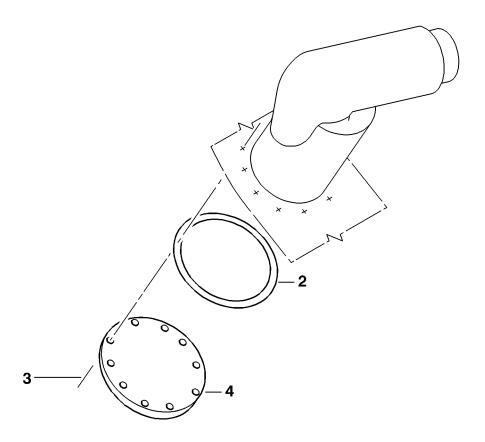


Figure 5 Sheet 2 Modification of the Outlet Skin Air Valve (10HD)

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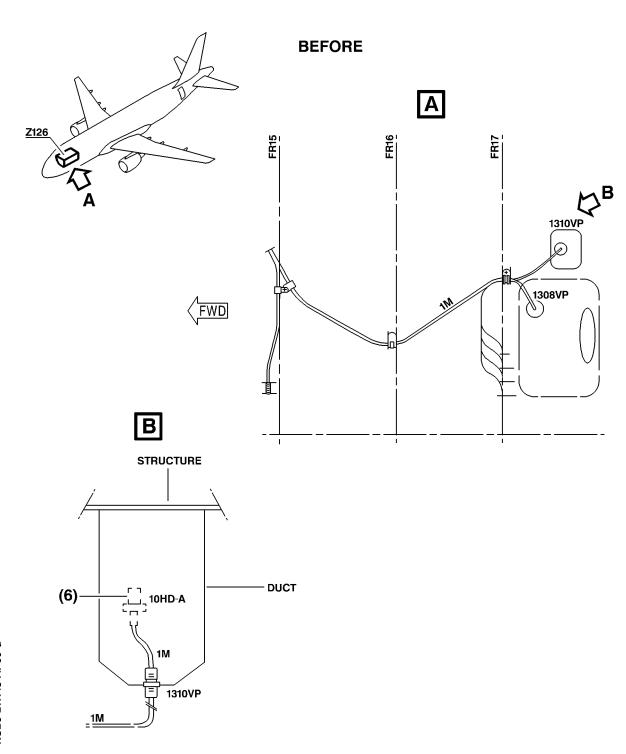


Figure 6 Sheet 1 Modification of the Routing in the RH Avionics Compartment

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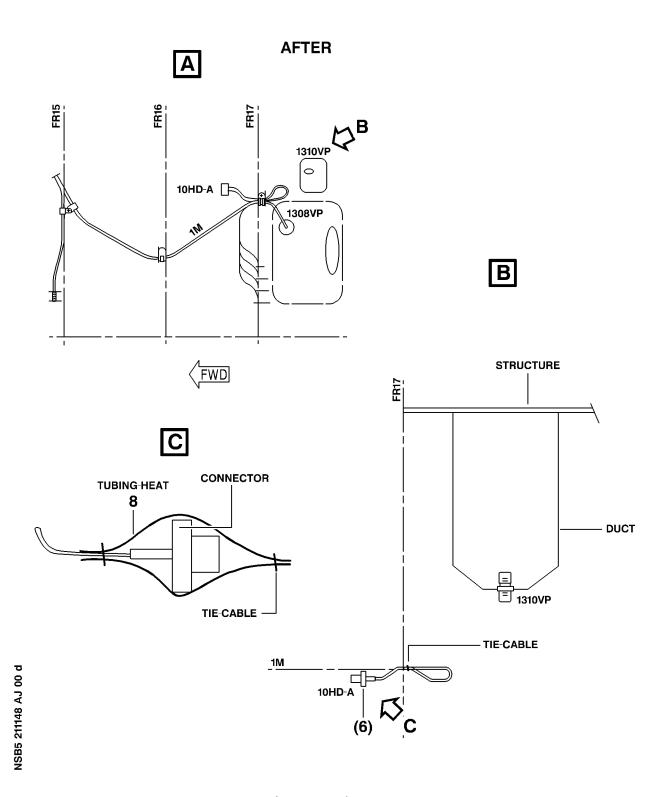
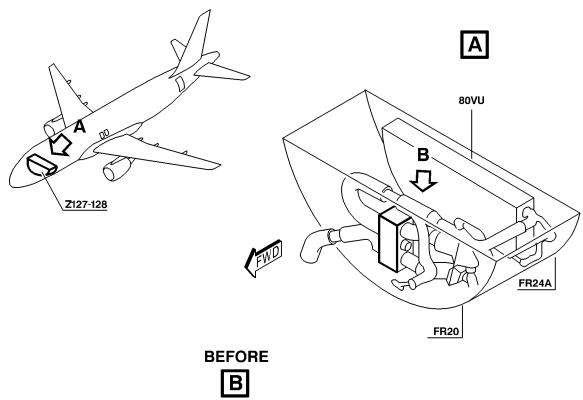


Figure 6 Sheet 2 Modification of the Routing in the RH Avionics Compartment

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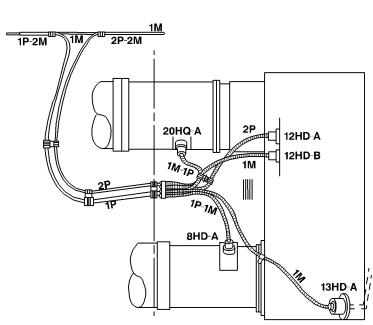


Figure 7 Sheet 1 Modification of the Connectors in the Avionics Compartment

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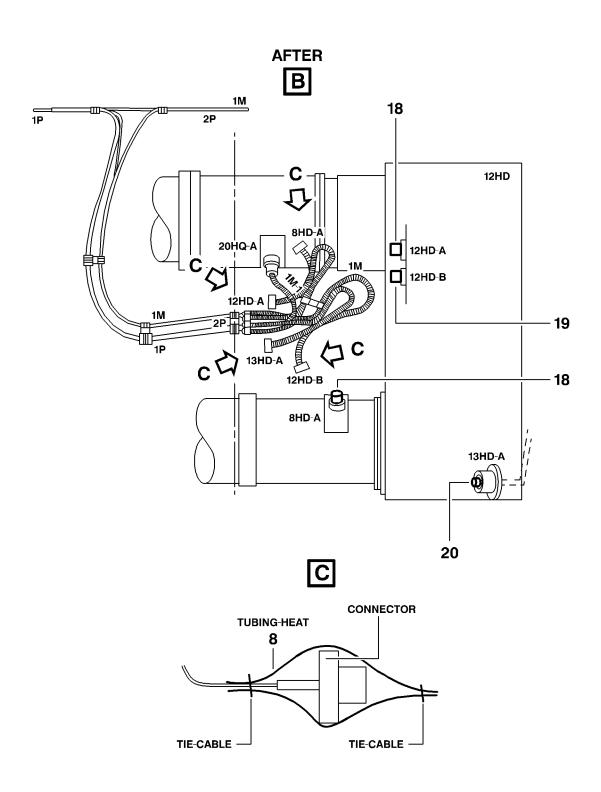


Figure 7 Sheet 2 Modification of the Connectors in the Avionics Compartment

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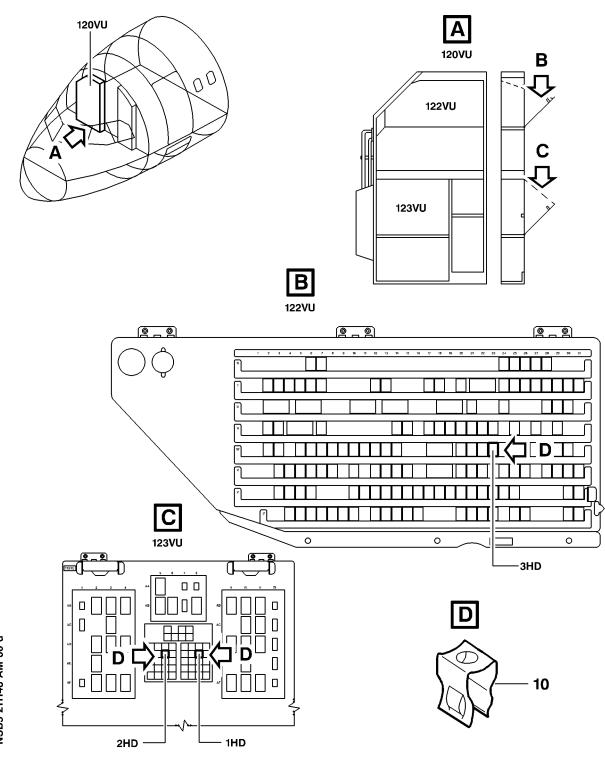


Figure 8 Sheet 1 Modification of the Equipment in the Cockpit

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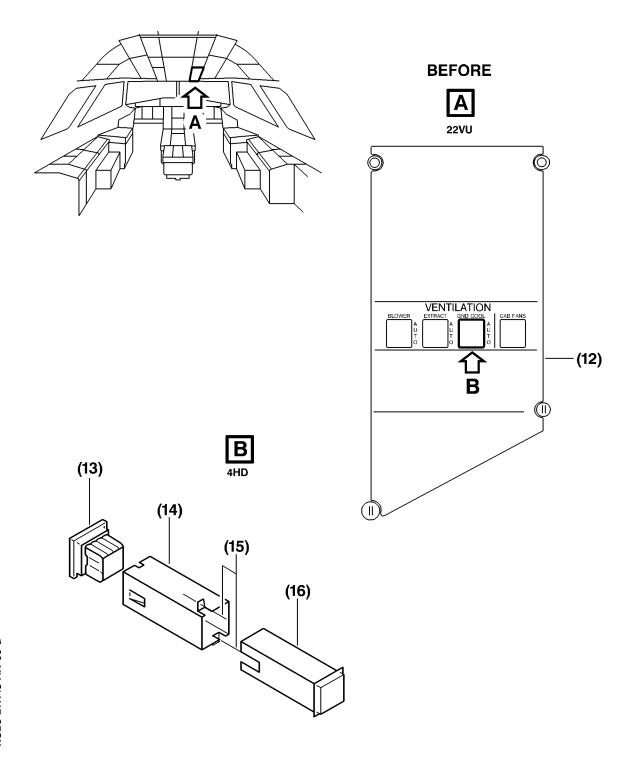


Figure 9 Sheet 1 Modification of the Integrally Lighted Plate (9LF), on the Overhead Control Panel 22VU

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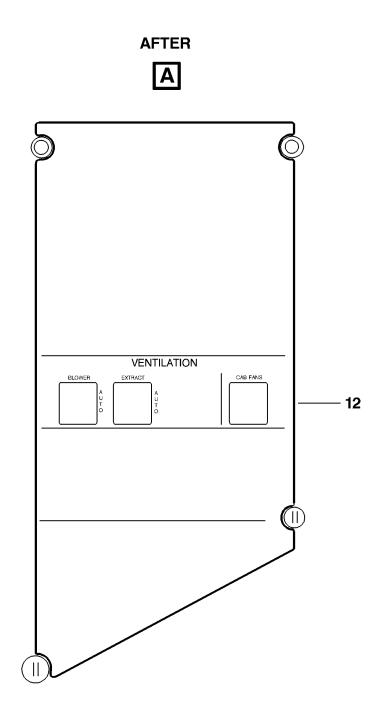


Figure 9 Sheet 2 Modification of the Integrally Lighted Plate (9LF), on the Overhead Control Panel 22VU

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8956 <B <C 2402VT <D <E <F D3 2402VT вз <G 4HD P/BSW VENTILATION/GND COOL F.R. 2402VT <H ~~~ 0027 ~~ <I 2402VC 2402VT <J ////// 0013 ///// BF22 /////// <K Α 2406VC 212 22VU

F.R. FOR REFERENCE

///// DELETED WIRE

NOTE : UNLESS OTHERWISE SPECIFIED PREFIX ALL WIRE IDENTIFICATION WITH ATA2127 UNLESS OTHERWISE SPECIFIED ALL WIRES ARE BF24 GAUGE UNLESS OTHERWISE SPECIFIED ALL ROUTES ARE 1M

Figure 10 Sheet 1
Modification of the Wiring in the Overhead Control Panel 22VU (Config. 01)

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8956 <B <C 2402VT <D <E <F D3 2402VT вз <G 4HD P/BSW VENTILATION/GND COOL F.R. 2402VT <H ~~~ 0027 ~~ <I 2402VC 2402VT <J /////// 0013 ///// BF22 /////// <K Α 2406VC 212 22VU

F.R. FOR REFERENCE

///// DELETED WIRE

NOTE : UNLESS OTHERWISE SPECIFIED PREFIX ALL WIRE IDENTIFICATION WITH ATA2127 UNLESS OTHERWISE SPECIFIED ALL WIRES ARE BF24 GAUGE UNLESS OTHERWISE SPECIFIED ALL ROUTES ARE 1M

Figure 11 Sheet 1
Modification of the Wiring in the Overhead Control Panel 22VU (Config. 02)

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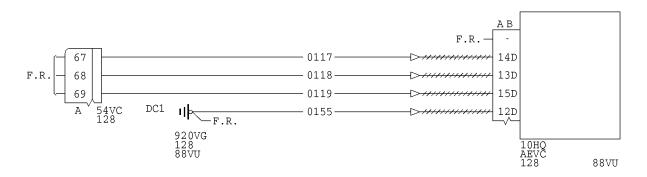
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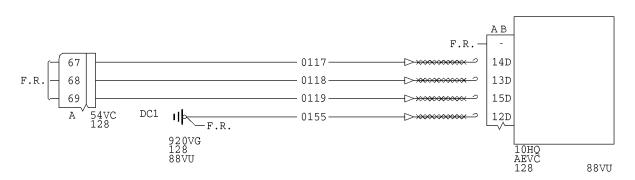
SERVICE BULLETIN

BEFORE

Г



AFTER



STOWED WIRE

D///// OLD HOOK-UP

>>>>> NEW HOOK-UP

F.R. FOR REFERENCE

NOTE : UNLESS OTHERWISE SPECIFIED PREFIX ALL WIRE IDENTIFICATION WITH ATA2127 UNLESS OTHERWISE SPECIFIED ALL WIRES ARE CF24 GAUGE UNLESS OTHERWISE SPECIFIED ALL ROUTES ARE 1M

Figure 12 Sheet 1 Modification of the Wiring in the Shelf 88VU

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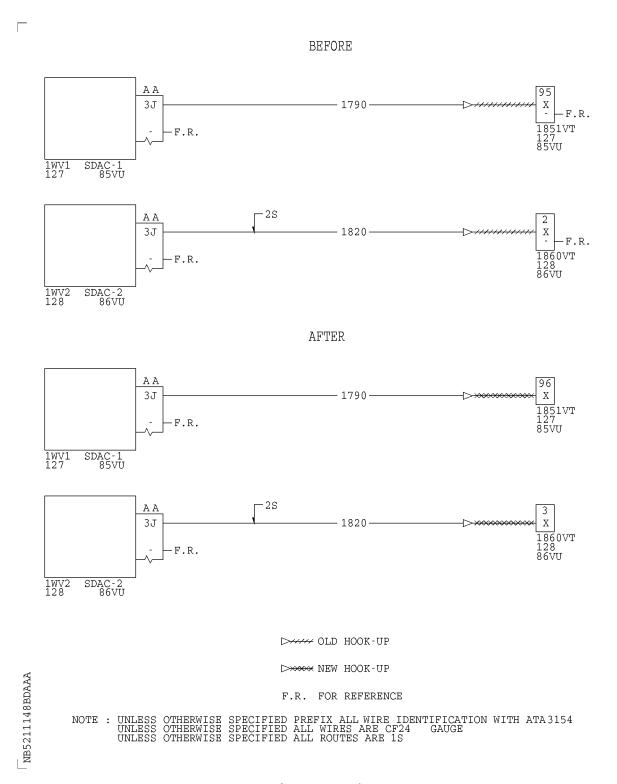


Figure 13 Sheet 1 Modification of the pin Programming of the SDACs

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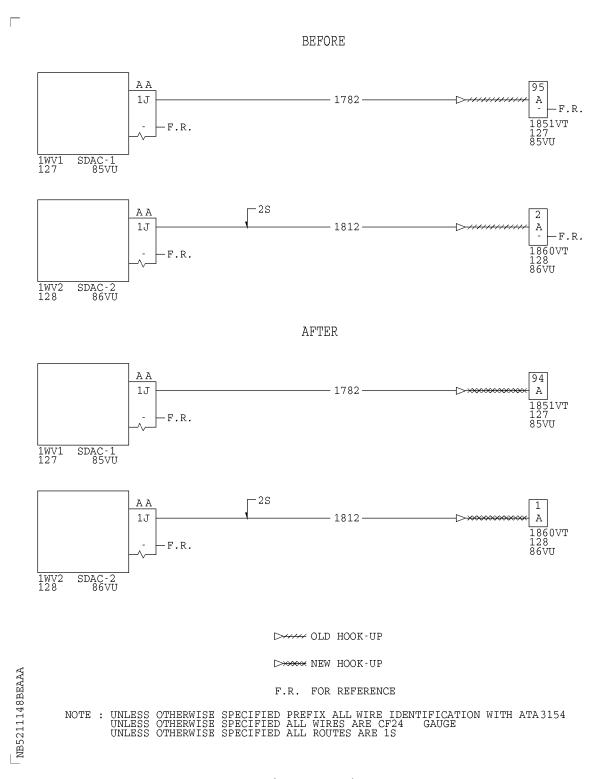


Figure 14 Sheet 1 Modification of the Parity of the SDACs

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 \Box **BEFORE** ΑΑ 1J Α 1782 1851VT 127 85VU F.R. -2s ΑА 1J 1812 Α 1860VT 128 86VU F.R. 1WV2 128 SDAC-2 86VU AFTER ΑА 95 1J -F.R. 1851VT 127 85VU 2 A 1J -F.R. 1860VT 128 86VU F.R. DAMA OLD HOOK-UP >>>>> NEW HOOK-UP F.R. FOR REFERENCE NOTE : UNLESS OTHERWISE SPECIFIED PREFIX ALL WIRE IDENTIFICATION WITH ATA3154 UNLESS OTHERWISE SPECIFIED ALL WIRES ARE CF24 GAUGE UNLESS OTHERWISE SPECIFIED ALL ROUTES ARE 1S

Figure 15 Sheet 1 Modification of the Parity of the SDACs

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Figure 16 Sheet 1 (Goto A3 section) Hook-up Chart

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Figure 17 Sheet 1 (Goto A3 section) Hook-up Chart

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Figure 18 Sheet 1 (Goto A3 section) Hook-up Chart

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Figure 19 Sheet 1 (Goto A3 section) Hook-up Chart

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Figure 20 Sheet 1 (Goto A3 section) Hook-up Chart

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Figure 21 Sheet 1 (Goto A3 section) Hook-up Chart

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SERVICE BULLETIN REPORTING SHEET

TITLE : AIR CONDITIONING - AVIONICS EQUIPMENT GROUND COOLING - DEACTIVATE THE

GROUND REFRIGERATION UNIT (GRU).

MODIFICATION No.: 33129P8139

Please complete the appropriate item (A or B
--

A - SB <u>WILL BE</u> embodied YES/NO (if NO please comment) If YES, aircraft concerned (as per SB effectivity by default) and planned dates
(month/year) of embodiment:
B - SB <u>HAS BEEN</u> embodied on aircraft:
Operator comments:
From Airline:
If operational documentation is affected (see Paragraph 1.K of this SB): If information is needed prior to next normal revision or prior to SB embodiment, please indicate required service(s): Either: Advance Data
<u>Important Information:</u> This SB will only be incorporated in your maintenance and operational documentation if this sheet is returned to Airbus and signed by a

<u>Important Information:</u> This SB will only be incorporated in your maintenance and operational documentation if this sheet is returned to Airbus and signed by a duly authorised representative. With the next feasible revision, this will result in

- updating of maintenance documentation to show pre and post SB data.

- updating of maintenance and operational documentation to show post SB data after embodiment.

If this SB requires previous or simultaneous accomplishment of other SBs, Airbus shall automatically include them in the manual revisions. Refer to SIL 00-037 for detailed information.

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Use this form to tell us what is your perception of the quality of this Service Bulletin. The reported data that you provide us will be used to analyse areas of difficulties and to take corrective action to further improve the quality of our Service Bulletins.

We thank you for the time you have taken in completing this form.

(Please rate on a scale of 1 to 4, with 4 being the highest score)

- Quality rating of this SB	4	3	2	1
- Quality rating of the Accomplishment Instructions	4	3	2	1
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- Is this SB easy to understand ?	Υ,	/ N		

If you have had difficulties in the accomplishment of this SB please quote below the area(s) and give a short description of the issue.

	Planning	1	Material		Instructions
X X X	Effectivity Reason Manpower References Publication	X I (X I	Kit content List of Materials Operator Supplied Re-identification Tooling	X X X	Preparation Mod/Inspection Test Close-Up Illustrations
_					

Comments:

Operator: Date:

Name/Title:

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FAX: (33) 5 61 93 42 51

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SERVICE BULLETIN

L					L E A	. D				E N D	2					
n e	Zone or Panel	Elec.Ident.	Term	Terminal P/N	Wire Ident.	Co	Rte	Gauge	Lend	gth Inch	Zone or Panel	Elec.Ident.	Term	Terminal P/N	Ins	structions
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	22VU 22VU 22VU 22VU 22VU 22VU 22VU 22VU	4HD-A 4HD-A 4HD-A 4HD-A 4HD-A 4HD-A 4HD-A 4HD-A 4HD-A 4HD-A 4HD-A 4HD-A 2406VC 2406VC 2406VC 2406VC	8 C3 D3 A3 9 7 4 C1 D2 D1 B1 B3 A2 <k <j 6G</j </k 		2127-0014 2127-0015 2127-0016 2127-0017 2127-0019 2127-0020 2127-0021 2127-0022 2127-0023 2127-0024 2127-0025 2127-0026 2127-0028 2127-0013 2127-0018 2127-0027 3154-2190			BF24 BF24 BF24 BF24 BF24 BF24 BF24 BF24			22VU 22VU 22VU 22VU 22VU 22VU 22VU 22VU	2402VT 2402VT 2402VT 2402VT 4HD-A 2406VC 2406VC 2406VC 2406VC 2406VC 2406VC 2406VC 2406VC 2402VT 2402VT 2402VT 2402VT 2402VT 2402VT	5L 6R 6S 3C 5 <b <c <d <e <f <g 6Y 6U 6T 6P</g </f </e </d </c </b 			(1) FIG 10
18 19 20 21 22 23 24 25																

D = DELETED WIRE
(1) = FOR CONFIG.01

Figure 16 Sheet 1 Hook-up Chart

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L		E N D	1				L E A	. D				E N D	2			
n e	Zone or Panel	Elec.Ident.	Term	Terminal P/N	Wire Ident.	Co	Rte	Gauge	Lend	gth Inch	Zone or Panel	Elec.Ident.	Term	Terminal P/N	Ins	tructions
1 2 3 4 5 6 7 8 9 10 11 12 13	22VU 22VU 22VU 22VU 22VU 22VU 22VU 22VU	4HD-A 4HD-A 4HD-A 4HD-A 4HD-A 4HD-A 4HD-A 4HD-A 4HD-A 4HD-A 4HD-A 4HD-A	8 C3 D3 A3 9 7 4 C1 D2 D1 B1 B3 A2		2127-0014 2127-0015 2127-0016 2127-0017 2127-0019 2127-0020 2127-0021 2127-0022 2127-0023 2127-0024 2127-0025 2127-0026 2127-0028			BF24 BF22 BF24 BF24 BF24 BF24 BF24 BF22 BF22			22VU 22VU 22VU 22VU 22VU 22VU 22VU 22VU	2402VT 2402VT 2402VT 2402VT 4HD-A 2406VC 2406VC 2406VC 2406VC 2406VC 2406VC 2406VC 2406VC 2406VC	6X 6R 6S 3C 5 <b <c <d <e <f <g <h< th=""><th></th><th>D D D D D D D D D D D D D D D D D D</th><th>(2) FIG 11 (2) FIG 11</th></h<></g </f </e </d </c </b 		D D D D D D D D D D D D D D D D D D	(2) FIG 11
14 15 16 17 18 19 20 21 22 23 24 25	22VU 22VU 22VU 22VU	2406VC 2406VC 2406VC 2402VT	<k <j <i 6G</i </j </k 		2127-0013 2127-0018 2127-0027 3154-2190			BF22 BF24 BF24 BF24			22VU 22VU 22VU 22VU	2402VT 2402VT 2402VT 2402VC	6U 6T 6P <g< th=""><th></th><th>D D D</th><th>(2) FIG 11 (2) FIG 11 (2) FIG 11 (2) FIG 11</th></g<>		D D D	(2) FIG 11 (2) FIG 11 (2) FIG 11 (2) FIG 11

D = DELETED WIRE
(2) = FOR CONFIG.02

Figure 17 Sheet 1 Hook-up Chart

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SERVICE BULLETIN

L					L E A	D				E N D	2					
n		Elec.Ident.	Term	Terminal P/N	Wire Ident.	Co	Rte	Gauge	Leno mm	gth Inch	Zone or Panel	Elec.Ident.	Term	Terminal P/N	Instru	ctions
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	88VU 88VU 88VU 88VU 88VU 88VU 88VU	10HQ-AB 10HQ-AB 10HQ-AB 10HQ-AB 10HQ-AB 10HQ-AB 10HQ-AB 10HQ-AB	12D ws 14D ws 13D ws 15D	NSA936604CA0931 NSA936604CA0931 NSA936604CA0931	2127-0155 2127-0155 2127-0117 2127-0117 2127-0118 2127-0118 2127-0119		1M 1M 1M 1M 1M 1M 1M	CF24 CF24 CF24 CF24 CF24 CF24 CF24			88VU 88VU 128 128 128 128 128	920VG 920VG 54VC 54VC 54VC 54VC 54VC 54VC	GND GND 67 68 68 69 69	Terminal P/N	M10 M1N M10 M1N M10 M1N	FIG 12
24 25																

M10 = OLD HOOK-UP ON END 1 M1N = NEW HOOK-UP ON END 1

= WIRE STOWED

GND = GROUND

Figure 18 Sheet 1 Hook-up Chart

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SERVICE BULLETIN

L		E N D	1				L E A	D				E N D	2			
n e	Zone or Panel	Elec.Ident.	Term	Terminal P/N	Wire Ident.	Co	Rte	Gauge	Leng	gth Inch	Zone or Panel	Elec.Ident.	Term	Terminal P/N	Instrı	actions
1 2 3 4 5	85VU 85VU 86VU 86VU	1851VT 1851VT 1860VT 1860VT	2X	EN3155-016M2222	3154-1820		1s 1s 2s 2s	CF24 CF24 CF24 CF24			85VU 85VU 86VU 86VU	1WV1 - AA 1WV1 - AA 1WV2 - AA 1WV2 - AA	3J 3J 3J		M10 M1N M10 M1N	FIG 13 FIG 13 FIG 13
6 7 8 9																
10 11 12 13																
14 15 16 17 18																
19 20 21 22																
23 24 25																

M10 = OLD HOOK-UP ON END 1 M1N = NEW HOOK-UP ON END 1

> Figure 19 Sheet 1 Hook-up Chart

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SERVICE BULLETIN

L		E N D				L E A	D				E N D	2				
n e	Zone or Panel	Elec.Ident.	Term	Terminal P/N	Wire Ident.	Со	Rte	Gauge	Lend	gth Inch	Zone or Panel	Elec.Ident.	Term	Terminal P/N	Inst	ructions
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	85VU 85VU 86VU 86VU	1851VT 1860VT 1860VT	2A	EN3155-016M2222	3154-1812		1s 1s 2s 2s	CF24 CF24 CF24			85VU 86VU 86VU	1WV1 - AA 1WV2 - AA 1WV2 - AA	1J 1J 1J		M1O M1N M1O M1N	(3) FIG 14 FIG 14 (3) FIG 14 FIG 14
		410 = OLD HOOK-UP ON END 1 (3) = REFER TO PARAGRAPH PREPARATION 41N = NEW HOOK-UP ON END 1 FOR THE PARITY														

Figure 20 Sheet 1 Hook-up Chart

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SERVICE BULLETIN

L		E N D				L E A	D				E N D	2				
n e	Zone or Panel	Elec.Ident.	Term	Terminal P/N	Wire Ident.	Со	Rte	Gauge	Leng	gth Inch	Zone or Panel	Elec.Ident.	Term	Terminal P/N	Inst	ructions
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	85VU 85VU 86VU 86VU	1851VT 1860VT 1860VT	1A 2A	EN3155-016M2222 EN3155-016M2222	3154-1812		1s 1s 2s 2s	CF24 CF24 CF24 CF24			85VU 85VU 86VU 86VU	1WV1-AA 1WV2-AA 1WV2-AA	1J 1J 1J		M10 M10 M1N	(3) FIG 15 FIG 15 (3) FIG 15 FIG 15
M1 M1		HOOK-UP ON END :		(3) = RI	EFER TO PARAGE FOR THE P.			ARATION								

Figure 21 Sheet 1 Hook-up Chart

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