## SERVICE BULLETIN SUMMARY

AIRBUS INDUSTRIE
CUSTOMER SERVICES DIRECTORATE
1 Rond Point Maurice Bellonte
31707 BLAGNAC CEDEX FRANCE
Tel: (33) 5 61 93 33 33

Telex: AIRBU 530526 F
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 - PACK TEMPERATURE CONTROL - INSTALL A MODIFIED PACK

CONTROLLER PN 759D0000-02

MODIFICATION No.: 28488K6156

#### REASON/DESCRIPTION/OPERATIONAL CONSEQUENCES

Operators have reported spurious PACK REGUL FAULT messages on the Electronic Centralized Aircraft Monitoring (ECAM). There were no associated maintenance messages. The message occurred on aircraft with the pack controller PN 759D0000-01.

Investigations have shown that the message is caused by an internal communication failure between the primary and secondary channels of the pack controller, as a result of which the primary channel is considered to be inoperative. In all cases, the system could be reset.

Reports have also been made of repetitive pack maintenance status messages in the PFR. Investigations have shown that this was due to the loss of altitude signal from ADIRU 3, and flickering of the 'pack flow inop' bit. This has no adverse impact on the air conditioning pack operation.

This Service Bulletin introduces an improved common pack controller for A319, A320 and A321 aircraft and advises the operators of the issue of LIEBHERR AEROSPACE LINDENBERG Service Bulletin No. 759D-21-01.

The modification to the pack controller includes:

- Improvement of RS232 monitoring
- Improvement of aircraft altitude-reception failure-monitoring
- Increase of watchdog test temporization
- Minor software modifications concerning BPV (Bypass Valve), PIPS (Packet Inlet Pressure Sensor), PIFS (Pack Inlet Flow Sensor) and RAD (Ram Air Door)

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## SERVICE BULLETIN SUMMARY

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

#### **EFFECTIVITY**

This Service Bulletin is applicable to these operator(s):

AEF AES AFR AIB AMM AMU ANA AUA AWE AZA BMA C3J CES CIB CJG CNW CSC CSN CTN DLH EDW EIN EWG FIN G4I HDA IBE IWD LEI M4G MON NWA QAF QTR SAB SEU SLK SWR SYR TAI TAM TAP TAR TAS UAL USA VIR

### CONCURRENT REQUIREMENTS

None

#### REFERENCES/REPERCUSSIONS

TFU : 21.61.34.008

OEB : None

AOT : None

SIL : 21-115

LIFE LIMIT : None

LINE MAINTENANCE AFFECTED : None

OTHER : None

### NATURE OF THE WORK

AIRCRAFT : NO

**EQUIPMENT: YES** 

HARD : YES SOFT : YES

OBRM: NO

## MANPOWER

TOTAL MANHOURS 1.25

ELAPSED TIME (HOURS) 1.25

## MATERIAL INFORMATION

AIRCRAFT DATA

None

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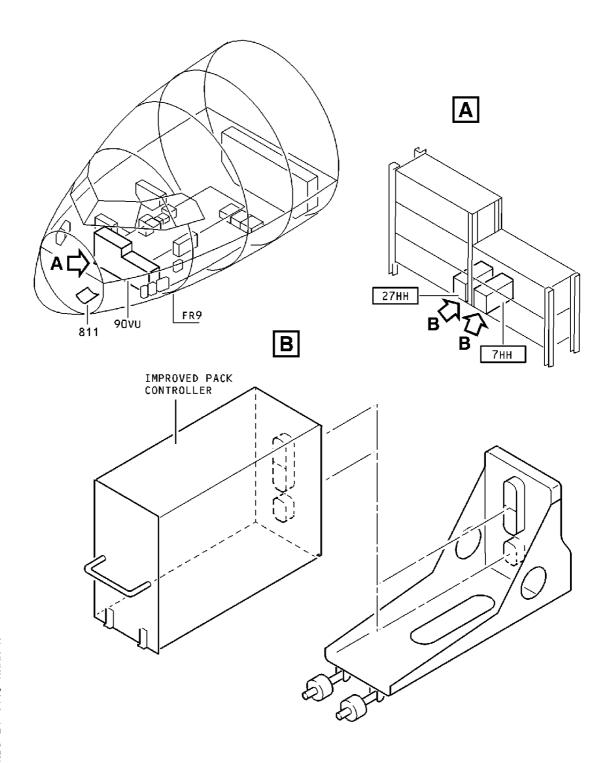
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APPENDICES

None

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SERVICE BULLETIN SUMMARY



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ATA SYSTEM: 21

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#### 1. PLANNING INFORMATION

#### A. EFFECTIVITY

(1) Models

319-111 319-112 319-114 319-115 319-131 319-132 319-133 320-211 320-212 320-214 320-232 320-233 321-111 321-112 321-131 321-211 321-231

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

This Service Bulletin is applicable to aircraft MSN

0844 0861 0863 0868-0869 0872 0876 0878 0880-1043 1045 1047 1049 1050 1054 1056 1057 1059 1063

(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 Industrie. 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

AEF 0954 0990 1004

AES 0892

AFR 0938 0956 0985 0998 1000 1020 1025 1036

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OPERATOR	MSN									
AIB	0913									
AMM	1006									
AMU	0908									
ANA	0963	1008	1042							
AUA	0920	0935								
AWE	0889	0924	0931	0953	1003	1043	1049	1050	1056	
AZA	0940	0951	0959	0999						
BMA	0934	0968	0974	1014	1045					
C3J	0883	0914								
CES	0925	1005	1028	1030						
CIB	0884	0894	0905	0957	0971					
CJG	0876									
CNW	0897	0909	0939	0967	0984	0986	1041			
CSC	0878	0915	0919	1013						
CSN	0881	0895	0900	0950	0966	1035	1039	1057		
CTN	1009	1029								
DLH	0887	0901								
EDW	0942	0947	1026							
EIN	0926	0991	1023							
EWG	1016									
FIN	0941	0961								
G4I	1002									
HDA	0930	0993	1024							
IBE	0992	0994	1021	1027	1047	1059	1063			
IWD	8880									
LEI	1017									
M4G	0910									
MON	0983									
NWA	0903	0907	0911	0923	0962	0964	0981	0988	0996	1011
	1037									
QAF	0927									
QTR		0932								
SAB		0995	1012	1054						
SEU	0973									
SLK	0872	0899	0969							
SWR		0987								
SYR		0918								
TAI		0912	0916	1007						
TAM		1010								
TAP				0945	0960	0979	0982	1034		
TAR		0880	0958	0975						
TAS	0937									
UAL				0944	0948	0952	0955	0965	0980	0989
		1022		0015	0005	0000	0001	0001	0005	0000
USA				0868						0929
VID		0946	0949	0972	0997	1019	1033	1038	1040	
VIR	0978									

(c) Effectivity by MSN and Kit/Configuration

None

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(3) Spares

Pack temperature controller PN 759D0000-01.

#### B. CONCURRENT REQUIREMENTS

None

#### C. REASON

#### (1) History

Operators have reported spurious PACK REGUL FAULT messages on the Electronic Centralized Aircraft Monitoring (ECAM). There were no associated maintenance messages. The message occurred on aircraft with the pack controller PN 759D0000-01.

Investigations have shown that the message is caused by an internal communication failure between the primary and secondary channels of the pack controller, as a result of which the primary channel is considered to be inoperative. In all cases, the system could be reset.

Reports have also been made of repetitive pack maintenance status messages in the PFR. Investigations have shown that this was due to the loss of altitude signal from ADIRU 3, and flickering of the 'pack flow inop' bit. This has no adverse impact on the air conditioning pack operation.

#### (2) Objective/Action

This Service Bulletin is published to advise the operators of the issue of LIEBHERR AEROSPACE LINDENBERG Service Bulletin No. 759D-21-01 which introduces the installation of an improved common pack controller for A319, A320 and A321 aircraft.

#### (3) Advantages

The improvements of the pack controller consist in the following software modifications:

- Improvement of RS232 monitoring
- Improvement of aircraft altitude-reception failure-monitoring
- Increase of watchdog test temporization
- Minor software modifications concerning BPV (Bypass Valve), PIPS (Packet Inlet Pressure Sensor), PIFS (Pack Inlet Flow Sensor) and RAD (Ram Air Door)
- (4) Operational/Maintenance Consequences

None

#### D. DESCRIPTION

To accomplish this Service Bulletin it is necessary to :

- (1) Remove the pack controllers 7HH and 27HH.
- (2) Modify the pack controllers in accordance with LIEBHERR AEROSPACE LINDENBERG Service Bulletin No. 759D-21-01.

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(3) Install the modified pack controllers 7HH and 27HH.

#### E. COMPLIANCE

(1) Classification

Desirable

(2) Accomplishment Timescale

In accordance with operator's 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.

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

This Service Bulletin is written for an aircraft in a maintenance status. The manhours/elapsed time estimates do not include the time to prepare for the modification, non-productive elapsed times or administration.

Get Access	0.25
Removal/Installation	0.25
Test	0.50
Close-up	0.25
TOTAL MANHOURS	1.25
ELAPSED TIME (HOURS)	1.25

#### H. WEIGHT AND BALANCE

Not changed

### I. ELECTRICAL LOAD DATA

None

#### J. REFERENCES

Aircraft Maintenance Manual (AMM) : 12-34-24 21-61-00 21-61-34

LIEBHERR AEROSPACE LINDENBERG SB : 759D-21-01

### K. PUBLICATIONS AFFECTED

Illustrated Parts Catalog (IPC) : 21-61-08 21-61-34

#### L. INTERCHANGEABILITY/MIXABILITY

DESCRIPTION	OLD PART No.	NEW PART No.	INT	MIXABILITY
Pack controller	759D0000-01	759D0000-02	02	YES

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NOTE: For the definitions of interchangeability codes in the column INT. refer to ATA 200 Chapter 1A-2.

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#### 2. MATERIAL INFORMATION

- A. MATERIAL PRICE AND AVAILABILITY
  - (1) Material

Modification of removed equipment should be negotiated directly with LIEBHERR AEROSPACE LINDENBERG as per instructions given in Service Bulletin No. 759D-21-01.

(2) Price and Availability

Refer to the vendor Service Bulletin No. 759D-21-01 for the equipment modification sales terms.

B. INDUSTRY SUPPORT INFORMATION

None

C. LIST OF COMPONENTS

None

D. LIST OF MATERIALS - OPERATOR SUPPLIED

None

E. PARTS TO BE RE IDENTIFIED BY THE OPERATOR

For re-identification refer to LIEBHERR AEROSPACE LINDENBERG Service Bulletin No. 759D-21-01.

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 CAUTIONS INCLUDED IN THE REFERENCED PROCEDURES.

- (1) Preparation
  - (a) Make sure that the aircraft is electrically grounded, (Refer to AMM 12-34-24 Page block 201).
  - (b) Do the preparation (Refer to AMM 21-61-34 Page block 401).
- (2) Standard Practices

None

#### B. MODIFICATION

(1) Removal and installation of pack temperature controller

Refer to Figure 1

- (a) Remove the pack controllers 7HH and 27HH, (Refer to AMM 21-61-34 Page block 401).
  - 2 controllers
- 75900000-01

Item (1)

- (b) Modify the pack controllers 7HH and 27HH, PN 759D0000-01 (Refer to LIEBHERR AEROSPACE LINDENBERG Service Bulletin No.759D-21-01).
- (c) Install the modified pack controllers 7HH and 27HH, (Refer to AMM 21-61-34 Page block 401).
  - 2 controllers
- 759D0000-02

Item 1

### C. TEST

(1) Do the operational test, (Refer to AMM 21-61-00 Page block 501).

#### D. CLOSE UP

- (1) Make sure that the work areas are clean and clear of tools and other items of equipment.
- (2) Do the close-up (Refer to AMM 21-63-34 Page block 401).

## E. DOCUMENTATION

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

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SERVICE BULLETIN

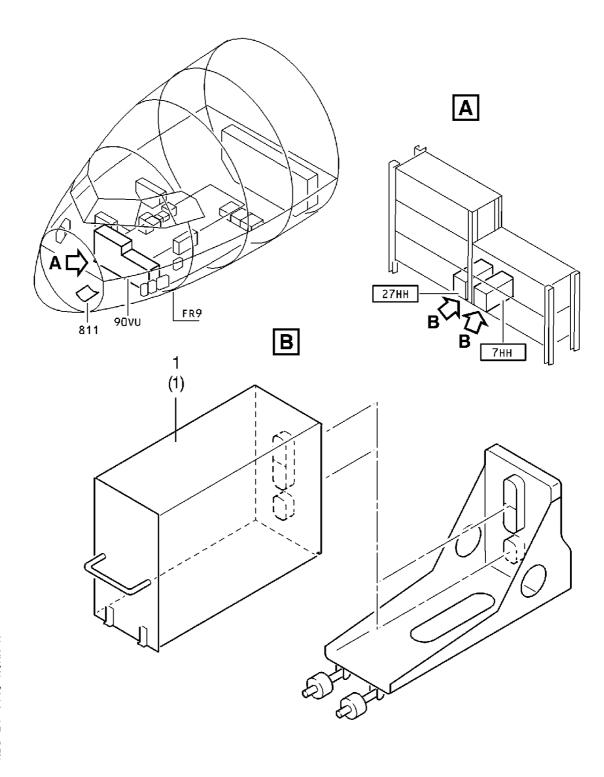


Figure 1 Sheet 1
Removal/Installation of Pack Controllers 7HH and 27HH

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## SERVICE BULLETIN REPORTING SHEET

TITLE: AIR CONDITIONING - PACK TEMPERATURE CONTROL - INSTALL A MODIFIED PACK

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MODIFICATION No.: 28488K6156

Please complete the	appropriate	item	:
---------------------	-------------	------	---

Accepted for embodiment	YES/NO
Embodied on MSN :	
Rejected	YES/NO
If	YES, please provide

short explanation

Signature : ...... Date : ......

## Important Information:

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

- updating of maintenance documentation to show <u>pre</u> and <u>post</u> 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 Industrie shall automatically include them in the manual revisions.

Refer to SIL 00-037 for detailed information

Please return this completed sheet to :

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

Attn : AI/SE-D32 Technical Data and Documentation Services

FAX: (+33) 5 61 93 28 06

or via your Resident Customer Support Office.

Alternatively, SB lists via letters or fax are also accepted.

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## SERVICE BULLETIN QUALITY PERCEPTION FORM

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
- Quality rating of the Illustrations	4	3	2	1
- Is this SB easy to understand ?	Y	/ 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		Material		Instructions
Χ	Effectivity	Χ	Kit Content	Χ	Preparation
Χ	Reason	Χ	List of Materials	Χ	Mod/Inspection
Χ	Manpower		Operator Supplied	X	Test
Χ	References	Χ	Re-identification	X	Close-up
X	Publication	X	Tooling	Χ	Illustrations

Comments :

Operator: Date:

Name/Title:

Please return this form to:

AIRBUS INDUSTRIE CUSTOMER SERVICES DIRECTORATE 1 Rond Point Maurice Bellonte 31707 BLAGNAC CEDEX

Attn: AI/SE-T1 Service Bulletins Management

FAX: (33) 5 61 93 42 51

or via your Resident Customer Support Office.

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