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SERVICE BULLETIN REVISION TRANSMITTAL SHEET

MODIFICATION NO: 21860K2003

ATA SYSTEM: 21

TITLE: AIR CONDITIONING - AIR GENERATION - MODIFY PACK CONTROLLER

Herewith Revision No. 3 of Service Bulletin A320-21-1032 NO ADDITIONAL WORK IS REQUIRED BY THIS REVISION.

REASON

This Revision is issued to revise the Para. MATERIAL.

CHANGES

SUMMARY

- Page 1 of 2

Approval statement revised.

SERVICE BULLETIN

- Page 1 of 7

Revision number added.

- Page 2

EFFECTIVITY revised.

- Page 3 - Page 4 Para. D. APPROVAL revised.

Para. F. MATERIAL revised.

FILING INSTRUCTIONS

- Replace Summary page 1 of 2.
- Replace Service Bulletin pages 1 of 7, 2, 3 and 4.
- File this Revision Transmittal Sheet in front of this Service Bulletin.

REVISION SEQUENCE

Original: Feb 19/90 Revision: 1 - Mar 23/90 Revision: 2 - Apr 30/91 Revision: 3 - MAY 17/93

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

MODIFICATION NO: 21860K2003

ATA SYSTEM: 21

T I T L E : AIR CONDITIONING - AIR GENERATION - MODIFY PACK CONTROLLER

REASON/DESCRIPTION/OPERATIONAL CONSEQUENCES

This Service Bulletin is published to advise operators of the issue of LIEBHERR ABG-SEMCA Service Bulletin No. 759-21-04. This publication deals with improving the air conditioning pack controller starting sequence, in cold weather conditions. In addition, LIEBHERR ABG-SEMCA introduces modifications in the software for system functioning improvement:

- failure analysis to prevent unjustified failure detections,
- de-icing cycling logic improvements for better protection,
- secondary pack control heating performance.

EFFECTIVITY

This Service Bulletin is applicable to the following operators:

AAA, ADR, AFR, AMC, BAW, CYP, DLH, HP, IAC, ITF, NWA, RJA, TAR, XP.

SERVICE BULLETIN/MODIFICATION TO BE ACCOMPLISHED PREVIOUSLY OR SIMULTANEOUSLY

None

REFERENCES/REPERCUSSIONS

None

NATURE OF THE MODIFICATION

Aircraft No

Equipment Yes (Refer to LIEBHERR SB 759-21-04)

HARD Yes (Refer to LIEBHERR SB 759-21-04)

SOFT Yes

OBRM No

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COMPLIANCE

Desirable

MANPOWER

	Aircraft	Bench
Total Manhours	3.00	3.50
Elapsed time (hours)	1.50	3.50

MATERIAL INFORMATION

Aircraft Data

None

Equipment Data

Pack Controller Designation

Supplier LIEBHERR ABG-SEMCA

759-21-04 Service Bulletin

Part Number Before 759A0000-07

Part Number After 759A0000-08

Code 02 Interchangeability

Intermixability

Yes

APPENDICES

None -

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MODIFICATION NO: 21860K2003 ATA SYSTEM: 21

T I T L E : AIR CONDITIONING - AIR GENERATION - MODIFY PACK CONTROLLER

1. PLANNING INFORMATION

A. EFFECTIVITY

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

Customer Fleet No.	MSN	Qty of Kits None
AAA 001-008	022, 023, 024, 025, 026, 027, 029, 030	
ADR 001-003	043, 113, 114	
AFR 001-002, 004-008	005, 007, 014, 019, 020, 021, 002	
AFR 031-038	061, 062, 063, 100, 101, 102, 128, 129	
AMC 001	112	
BAW 001-010	006, 008, 011, 017, 018, 039, 042, 103, 10	9,
CYP 001-004	028, 035, 037, 038	
DLH 001-015	069, 070, 071, 072, 078, 083, 086, 093, 094, 104, 105, 110, 111, 116, 117	4,
HP 620-622, 624-629, 631-637	052, 053, 054, 055, 064, 065, 066, 067, 076 077, 081, 082, 091, 092, 098, 099	5,
IAC 001-012 014-019	045, 046, 047, 048, 049, 050, 051, 056, 05 058, 074, 075, 080, 089, 090, 095, 096, 09	-

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Customer Fleet No.	MSN	Qty of Kits None
ITF 001-003 005-012	010, 012, 013, 016, 033, 036, 044, 004, 003, 108, 115	
NWA 301-311	031, 032, 034, 040, 041, 060, 106, 107, 11 121, 125	8,
RJA 001,002	087, 088,	
TAR 001,002, 007	119, 124, 123	
XP 001	085	

NOTE: This modification is embodied, prior to delivery, on A/C MSN 130 and subsequent.

(3) Spares

Pack Controller (LIEBHERR) 759A0000-07

B. REASON

(1) History

This Service Bulletin is published to advise operators of the issue of LIEBHERR ABG-SEMCA Service Bulletin No. 759A-21-04 which has been issued as a result of cold weather A/C tests. Some operators have requested an improvement in the pack starting sequence, in cold weather conditions.

(2) Objective/Action

The LIEBHERR ABG-SEMCA Service Bulletin deals with a modification to improve the pack starting sequence in cold weather conditions. In addition LIEBHERR ABG-SEMCA introduces modification in the software for system functioning improvement.

(3) Advantages

Improvement in the pack starting sequence will limit the cold air blowing in case of pull-up.

Modifications to the system functioning software will:

- improve failure analysis to prevent unjustified failure detections,
- improve de-icing cycling logic for better protection,
- improve secondary pack control heating performance.

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(4) Accomplishment Timescale

In accordance with operator's experience.

C. DESCRIPTION

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

- (1) Removing the pack controller.
- (2) Modifying the pack controller as per LIEBHERR ABG-SEMCA Service Bulletin 759-21-04.
- (3) Installing the modified pack controller.

D. APPROVAL

This Service Bulletin relates to the change(s) referenced on page 1 which has (have) been approved by the DGAC. The technical information contained in this Service Bulletin has been approved under the authority of DGAC Design Organisation Approval No. C 01.

E. MANPOWER

41---4 D - - - b

Manhours

	Aircraft	Bench
Gain Access	1.00	
Removal/Installation	0.50	
Modification		Refer to LIEBHERR ABC-SEMCA Service Bulletin 759-21-04
Test	0.50	
Close-Up	<u>1.00</u>	
Total manhours	3.00	3.50
Elapsed time (hours)	1.50	3.50

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

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F. MATERIAL - COST AND AVAILABILITY

This Service Bulletin is the subject of an Airbus retrofit campaign.

Modification of the part(s) / equipment is at no charge for the operator.

For the organisation of this retrofit operators are kindly requested to contact:

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Attn: AI/SE31

G. TOOLING - PRICE AND AVAILABILITY

Refer to LIEBHERR ABG-SEMCA Service Bulletin No. 759-21-04.

H. WEIGHT AND BALANCE

None

I. REFERENCES

LIEBHERR ABG-SEMCA Service Bulletin: 759-21-04

Aircraft Maintenance Manual: 12-34-24, 21-61-00, 21-61-34, 52-10-00

J. PUBLICATIONS AFFECTED

Illustrated Parts Catalog: 21-61-08, 21-61-34

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2. ACCOMPLISHMENT INSTRUCTIONS

A. GENERAL

- (1) Electrically ground the aircraft (Refer to AMM 12-34-24, P. Block 201).
- (2) Put an access platform in position at the passenger/crew door.
- (3) Open the passenger/crew door (Refer to AMM 52-10-00, P. Block 201).
- (4) Open, safety and tag the circuit breakers as given in AMM 21-61-34, P. Block 401.
- (5) Put an access platform in position at the access door 811.
- (6) Open the access door 811.

B. MODIFICATION

- (1) Remove the pack controller 7HH and 27HH (Refer to AMM 21-61-34, P. Block 401).
- (2) Do the modification to the pack controller as given in LIEBHERR ABG-SEMCA Service Bulletin 759-24-04.
- (3) Install the modified pack controller 7HH and 27HH (Refer to AMM 21-61-34, P. Block 401).

C. TEST

(1) Do an operational test of the pack controller (Refer to AMM 21-61-00, P. Block 501).

D. CLOSE-UP

- (1) Make sure that the work area is clean and clear of tools and other items.
- (2) Close the access door 811.
- (3) Remove the safety clips and the tags and close the circuit breakers given in AMM 21-61-34, P. Block 401.
- (4) Close the passenger/crew door (Refer to AMM 52-10-00, P. Block 201).
- (5) Remove the access platforms.

E. DOCUMENTATION

Write in the related A/C technical records that you did this Service Bulletin.

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. 3. MATERIAL INFORMATION

Refer to LIEBHERR ABG-SEMCA Service Bullletin 759-21-04.

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