AIRBUS INDUSTRIE
PRODUCT SUPPORT DIRECTORATE
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31707 BLAGNAC CEDEX FRANCE

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SERVICE BULLETIN SUMMARY

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

This summary is for information only and is not D.G.A.C. approved for modification of the aircraft

MODIFICATION NO: 21873K2005 ATA SYSTEM: 21

T I T L E : AIR CONDITIONING - MODIFY IN SITU AIR CONDITIONING PACKS 10HM AND 11HM AND AIR CYCLE MACHINES 10HM1 AND 11HM1

#### REASON/DESCRIPTION/OPERATIONAL CONSEQUENCES

Operational experience has shown on in-service A/C that the air conditioning packs froze at the turbine outlet reducing the reliability of the air-cycle machines.

To improve the de-icing device at the turbine outlet, the LIEBHERR ABG-SEMCA Service Bulletin No. 744A-21-04 and No. 757A-21-04 rev 1 can be accomplished in situ.

The modified air conditioning packs combine a modified air-cycle machine and a modified pipe assy for an improved reliability.

NOTE: The Vendor Service Bulletins will be accomplished at the operators facilities by LIEBHERR ABG-SEMCA representatives or approved repair stations personnel.

#### **EFFECTIVITY**

This Service Bulletin is applicable to the following operators: AAA, ACA, ADR, AFR, BAW, BNF, CYP, DLH, IAC, ITF, NWA, RJA and XP.

SERVICE BULLETIN/MODIFICATION TO BE ACCOMPLISHED PREVIOUSLY OR SIMULTANEOUSLY

None

## REFERENCES/REPERCUSSIONS

The OEB 63/1 is cancelled by this Service Bulletin.

## NATURE OF THE MODIFICATION

AIRCRAFT NO

EQUIPMENT YES (Refer to LIEBHERR ABG-SEMCA Service Bulletin No. 744-21-04

and No. 757A-21-04 rev 1).

HARD YES (Refer to LIEBHERR ABG-SEMCA Service Bulletin No. 744-21-04

and No. 757A-21-04 rev 1).

SOFT NO OBRM NO

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# SERVICE BULLETIN SUMMARY

COMPLIANCE

Desirable

MANPOWER

Total manhours

11.00

Elapsed time (hours) 5.50

MATERIAL INFORMATION

Aircraft Data

None

**Equipment Data** 

Designation

Air Conditioning Pack

Supplier

LIEBHERR ABG-SEMCA

Service Bulletin No.

744A-21-04

Part Number Before

744A0000-07

Part Number After

744A0000-07 Amdt A

Interchangeability

Code 01

Intermixability

It is possible to use the air conditioning system even if only one of the two air conditioning packs is modified.

Designation

Air Cycle Machine

Supplier

LIEBHERR ABG-SEMCA

Service Bulletin No.

**757A-21-04** rev 1

Part Number Before

757A0000-07

Part Number After

757A0000-07 Amdt A

Interchangeability

Code 01

Intermixability

It is possible to use the air conditioning system even if

only one of the two air cycle machines is modified.

**APPENDICES** 

None

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SERVICE BULLETIN

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

MODIFICATION NO: 21873K2005

ATA SYSTEM: 21

T I T L E: AIR CONDITIONING - MODIFY IN SITU AIR CONDITIONING PACKS 10HM AND

11HM AND AIR CYCLE MACHINES 10HM1 AND 11HM1

#### 1. PLANNING INFORMATION

## A. EFFECTIVITY

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

(2) Aircraft

Customer and Fleet No.	MSN	Qty of Kits None
AAA 001-008	022, 023, 024, 025, 026, 027, 029, 030	
ACA 201-204 ADR 001	059, 068, 073, 084 043	
AFR 001,002 004-007	005, 007, 014, 019, 020, 021	
AFR 031-036	061, 062, 063, 100, 101, 102	
BAW 001-008	006, 008, 011, 017, 018, 039, 042, 103	
BNF 901-916	052, 053, 054, 055, 064, 065, 066, 067, 076, 077, 081, 082, 091, 092, 098, 099	
CYP 001-004	028, 035, 037, 038	
DLH 001-011	069, 070, 071, 072, 078, 083, 086, 093, 094, 104, 105	
IAC 001-012	045, 046, 047. 048, 049, 050,	
014-019	051, 056, 057, 058, 074, 075,	
	080, 089, 090, 095, 096, 097	
ITF 001-010	010, 012, 013, 015, 016, 033, 036, 044, 004, 003	
NWA 301-307	031, 032, 034, 040, 041, 060, 106	
RJA 001, 002 XP 001	087, 088 085	

NOTE: On A/C MSN 106 the Mod. No. 21668K1811 is partly embodied. The P/N of the air conditioning pack and air cycle machine will be changed from 744A0000-07 to 744A0000-07Amdt A and 757A0000-07 to 757A0000-07 Amdt A respectively. Completion of Mod No. 21668K1811 has to be done with this Service Bulletin.

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(3) Spares

None

#### **B. REASON**

#### History

Operational experience has shown on in-service A/C that the air conditioning packs froze at the turbine outlet reducing the reliability of the air-cycle machines.

#### Objective/Action

To improve the de-icing device at the turbine outlet, the LIEBHERR ABG-SEMCA Service Bulletins No. 744A-21-04 and No. 757-21-04 rev 1 must be accomplished.

## **Advantages**

The modified air conditioning packs are equipped with a modified air-cycle machine and a modified pipe assy to improve the reliability of the air-cycle machines.

#### Accomplishment Timescale

In accordance with operator maintenance planning.

#### C. DESCRIPTION

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

- NOTE: The Vendor Service Bulletins will be accomplished at the operators facilities by LIEBHERR ABG-SEMCA representatives or approved repair stations personnel.
- (1) Modifying the air conditioning packs 10HM and 11HM in-situ from 744A0000-07 to 744A0000-07 Amdt A (Refer to LIEBHERR ABG-SEMCA Service Bulletin No. 744A-21-04).
- (2) Modifying the air cycle machines 10HM1 and 11HM1 in-situ from 757A0000-07 to 757A0000-07 Amdt A (Refer to LIEBHERR ABG-SEMCA Service Bulletin No. 757A-21-04 rev 1).

#### D. APPROVAL

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

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#### E. MANPOWER

This Service Bulletin may be accomplished in the following approximate manhours and elapsed time:

Gain access 2.00

Modification 5.00 Refer to LIEBHERR ABG-SEMCA Service Bulletins

744A-21-04 and 757A-21-04 rev 1.

Test 2.00

Close-Up 2.00 Total manhours 11.00

Elapsed time (hours) 5.50

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.

#### F. MATERIAL - COST AND AVAILABILITY

Refer to LIEBHERR ABG-SEMCA Service Bulletins No. 744A-21-04 and 757A-21-04 rev 1.

#### G. TOOLING - PRICE AND AVAILABILTIY

None

#### H. WEIGHT AND BALANCE

MEW = + 1.2 kg (+ 2.65 lb.) MOMENT = + 20.04 kgm (+ 144.95 lbf.ft.)

## I. REFERENCE

LIEBHERR ABG-SEMCA Service Bulletin No. 744A-21-04, 757A-21-04 rev l

Aircraft Maintenance Manual 12-34-24, 21-52-23, 21-52-41, 21-63-00, 53-35-13

#### J. PUBLICATIONS AFFECTED

Illustrated Parts Catalog 21-52-03, 21-52-21

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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 the access platform in position at the passenger/crew door.
- (3) Open the passenger/crew door.
- (4) Open, safety and tag the circuit breakers as given in AMM 21-52-41, P. Block 401.
- (5) Put the access platform in position at the access panels 191KB and 192KB (Refer to AMM 53-35-13, P. Block 401).
- (6) Remove and retain the access panels 191KB and 192KB (Refer to AMM 53-35-13, P. Block 401).

#### **B. MODIFICATION**

- NOTE: The Vendor Service Bulletin will be accomplished at the operators' facilities by LIEBHERR ABG-SEMCA representatives or approved repair stations personnel.
- (1) Do the modification to the air conditioning packs 10HM and 11HM 744A0000-07 as given in the LIEBHERR ABG-SEMCA Service Bulletin No. 744A-21-04.
- (2) Do the modification to the air cycle machines 10HM1 and 11HM1 757A0000-07 as given in the LIEBHERR ABG-SEMCA Service Bulletin No. 757A-21-04 rev 1.

#### C. TEST

- (1) Remove the safety clips and tags and close the circuit breakers opened in para. 2.A.(4).
- (2) Do a Leak check of the pipe assy connections (Refer to AMM 21-52-23, P. Block 401).
- (3) Do an operational test of the cockpit and cabin temperature system (Refer to AMM 21-63-00, P. Block 501).

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## D. CLOSE-UP

- (1) Make sure that the work area is clean and clear of tools and other items.
- (2) Install the retained access panels 191KB and 192KB (Refer to AMM 53-35-13, P. Block 401).
- (3) Close the passenger/crew door.
- (4) 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 Bulletins No. 744A-21-04 and  $757A-21-04~{\rm rev}~1$ .

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