SERVICE BULLETIN SUMMARY

AIRBUS INDUSTRIE
CUSTOMER SERVICES DIRECTORATE
1 Rond Point Maurice BELLONTE
31707 BLAGNAC CEDEX FRANCE
Tel: (33) 61933333
Telex: AIRBU 530526F

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

TITLE: AIR CONDITIONING - PRESSURE CONTROL AND MONITORING - INSPECT THE SERIAL NUMBER OF THE GEARBOX OF THE OUTFLOW VALVE 10HL AND IF

NECESSARY DO A MODIFICATION TO THE GEARBOX

MODIFICATION No. : INSPECTION

ATA SYSTEM: 21

REASON/DESCRIPTION/OPERATIONAL CONSEQUENCES

This Service Bulletin is issued to advise the operators of the issue of the NORD-MICRO Service Bulletin 16917-21-004.

The gearbox (Part Number 4052-16638-1, serial number 9201 thru 9843) of the outflow valve 10HL has an internal gear-ring/ball bearing which is installed with an interference fit.

There have been reports of outflow valve failures followed by the ECAM Message CAB PRESS SYST 1+2 FAULT, with the manual mode still available. First inspection showed that the outflow valve flap had become disconnected from the outflow valve gearbox.

Internal inspection showed that the gear-ring was not aligned with the planetary gear. The misalignment was caused by a separation of the gear-ring from the ball bearing.

The manual mode is not affected by the separation of the gear-ring from the ball bearing, and still operates correctly.

Gearboxes with the serial number 9844 and higher have a retaining ring to prevent this separation. The NORD-MICRO Service Bulletin 16917-21-004 details the procedure to install a supplementary retaining ring in the gearbox.

The retaining ring will prevent separation of the gear-ring/ball bearing.

EFFECTIVITY

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

AAA, ACA, ADR, AEF, AFR, AIB, ALK, AMC, ANA, AUA, AZA, BAW, BV,
CDN, CSC, CYP, DLH, FHA, GFA, HP, IAC, IBE, ITF, KAC, MON, MSR,
MXA, NWA, GHY, OYC, RGA, RJA, SAA, SHK, SWR, TAI, TAR, UAL, XF,
XP, XR, XW, XZ.

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SERVICE BULLETIN(S) TO BE ACCOMPLISHED PREVIOUSLY OR SIMULTANEOUSLY

None

REFERENCES/REPERCUSSIONS

TFU : None

OEB : None

AOT : None

SIL : None

LIFE LIMIT : None

LINE MAINTENANCE AFFECTED : No

OTHER : None

NATURE OF THE WORK

AIRCRAFT : NO

EQUIPMENT: YES

HARD: YES

SOFT: NO

OBRM : NO

COMPLIANCE

Recommended

The inspection should be carried out at the next suitable planned maintenance period within the next 500 Flight Hours. If the modification is necessary, it should be carried out before or during the next 2500 Flight Hours.

MANPOWER

Inspection Only

TOTAL MANHOURS 1.25

ELAPSED TIME (HOURS) 1.25

Modification only

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SERVICE BULLETIN SUMMARY

TOTAL MANHOURS

7.75

ELAPSED TIME (HOURS)

7.25

MATERIAL INFORMATION

AIRCRAFT DATA

None

EQUIPMENT DATA

Designation: Gearbox

Supplier : NORD-MICRO

Service Bulletin No.: 16917-21-004

Old Part Number: 4052-16638-1

New Part Number: 4052-16638-1 (Amendment D or AD)

Interchangeability code: 01

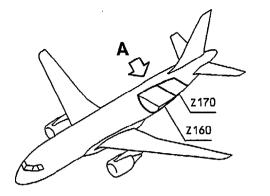
Mixability: Not applicable

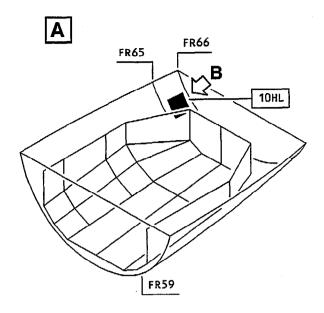
APPENDICES

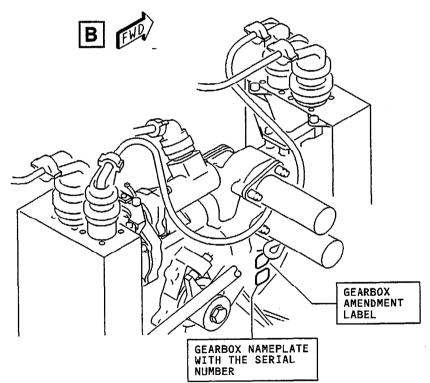
None

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AIRBUS INDUSTRIE
CUSTOMER SERVICES DIRECTORATE
1 Rond Point Maurice BELLONTE
31707 BLAGNAC CEDEX FRANCE
Tel: (33) 61933333

Telex: AIRBU 530526F

TITLE : AIR CONDITIONING - PRESSURE CONTROL AND MONITORING - INSPECT THE SERIAL NUMBER OF THE GEARBOX OF THE OUTFLOW VALVE 10HL AND IF

NECESSARY DO A MODIFICATION TO THE GEARBOX

MODIFICATION No.: INSPECTION ATA SYSTEM: 21

1. PLANNING INFORMATION

A. EFFECTIVITY

(1) Aircraft models: 319-112, 319-113, 320-111, 320-211, 320-212, 320-231, 320-232, 320-233, 321-111, 321-112, 321-131, 321-211, 321-231

(2) Aircraft

	omer and t No.	MSN	Kit No.	Qty of Kits	Config. No.
AAA	001-013	022,023,024,025,026,027, 029,030,140,142,157,229, 547	NONE		
ACA	201-234	059,068,073,084,122,126, 127,141,149,150,154,159, 183,233,242,248,253,254, 255,265,277,290,310,311, 324,330,333,341,342,350, 359,378,384,426	NONE		
ADR	001-003	043,113,114	NONE		
AEF	001	575	NONE		
	051,052	565,580	NONE		
AFR	001,002	005,007	NONE		
	004-008	014,019,020,021,002	NONE		
	031-048	061,062,063,100,101,102, 128,129,133,186,187,188, 226,227,228,285,286,287	NONE		
	106,107	131,132	NONE		
AIB	001	258	NONE		
	401,402	376,386	NONE		
ALK	001,002	374,406	NONE		
AMC	001,002	112,293	NONE		

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	omer and t No.	MSN	Kit No.	Qty of Kits	Config. No.
ANA	001-022	138,139,148,151,167,170, 196,212,219,245,300,328, 365,383,413,482,501,507, 531,534,549,554	NONE		
AUA	476-478	552,570,581	NONE		
AZA	001-017	477,488,494,495,434,524, 526,532,515,516,513,514, 576,583,586,593,599	NONE		
BAW	001-010	006,008,011,017,018,039, 042,103,109,120	NONE		
BV	051,052	185,191	NONE		
CDN	401-405	174,175,210,231,232	NONE		
	407-411	283,284,302,305,309	NONE		
	415,416	403,404	NONE		
CSC	051-053	540,551,556	NONE		
CYP	001-008	028,035,037,038,180,256, 295,316	NONE		
DLH	001-010	069,070,071,072,078,083, 086,093,094,104	NONE		
	012-034	110,111,116,117,135,137, 147,161,162,172,200,201, 202,209,216,217,218,267, 268,269,346,382,401	NONE		
	101-115	458,468,473,474,484,493, 412,502,505,518,560,563, 564,567,595	NONE		
	201,202	609,610	NONE		
FHA	001,002	332,369	NONE		
	101-104	538,555,602,606	NONE		
GFA	801-816	313,325,345,375,419,421, 438,445,459,466,481,497, 536,537,542,543	NONE		
HP	620-622	052,053,054	NONE		
	624-629	050,064,065,066,067,076	NONE		
	631-637	077,081,082,091,092,098, 099	NONE		
IAC	001-012	045,046,047,048,049,050, 051,056,057,058,074,075	NONE		
	014-031	080,089,090,095,096,097, 396,398,416,423,431,432, 451,469,486,490,492,499	NONE		

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	omer and t No.	MSN	Kit No.	Qty of Kits	Config. No.
IBE	001-022	134,136,143,146,158,173, 176,177,199,207,223,224, 240,241,246,264,266,274, 303,312,323,356	NONE ·		
ITF	001-003	010,012,013	NONE		
	005-018	016,033,036,044,004,003, 108,115,130,155,156,184, 214,239	NONE		
	020-027	278,337,352,236,237,377, 491,525	NONE		
	101-105	498,509,521,529,544	NONE		
	201,202	144,145	NONE		
	301,302	204,211	NONE		
	401-403	215,244,270	NONE		
	901-903	598,600,608	NONE		
KAC	001-003	181,182,195	NONE		
MON	001,002	379,389	NONE		
MSR	001-007	165,166,178,194,198,351, 366	NONE		
MXA	001-010	252,259,260,261,275,276, 296,320,321,353	NONE		
	012,016	368,433	NONE		
NWA	301-350	031,032,034,040,041,060, 106,107,118,121,125,152, 153,160,171,192,197,206, 208,213,262,263,272,273, 281,282,297,298,306,307, 318,319,329,339,340,355, 358,360,367,372,380,381, 387,388,399,400,408,410, 417,418	NONE		
OHY	001	385	NONE		
OYC	001-006	163,164,168,169,179,193	NONE		
RGA	001-005	590,594,601,605,607	NONE		
RJA	001-003	087,088,569	NONE		
SAA	001-007	243,249,250,251,334,335, 440	NONE		
SHK	001-003	322,326,344	NONE		
SWR	201,202	578,588	NONE		
	226-237	533,545,548,553,559,562, 566,574,577,585,596,603	NONE		
	276-281	517,519,520,522,535,541	NONE		
TAI	001,002	558,561	NONE		
	051-054	448,453,460,461	NONE		

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	comer and et No.	MSN	Kit No.	Qty of Kits	Config. No.
TAR	001-008	119,124,205,370,390,402, 123,511	NONE		
UAL	401-434	435,439,442,450,452,454, 456,457,462,463,464,465, 470,472,475,479,483,485, 487,489,500,503,504,506, 508,510,512,523,539,568, 571,587,589,592	NONE		
XF	001-009	393,394,414,430,443,447, 415,405,361	NONE		
	053-056	428,496,527,530	NONE		
	101-103	425,573,582	NONE		
	201-205	550,557,591,597,604	NONE		
	501,502	446,422	NONE		
	504-508	371,397,409,427,528	NONE		
	551,552	279,579	NONE		
ΧP	001	085	NONE		
	051-059	203,220,221,222,294,299, 301,348,349	NONE		
	062,063	391,392	NONE		
	502-506	362,363,455,471,584	NONE		
XR	501-525	225,230,238,247,257,271,	NONE		
		280,291,292,304,308,314, 315,317,327,336,338,429, 444,449,467,476,478,480, 437	NONE		
XW	501-506	347,354,357,373,411,424	NONE		
	509	441	NONE		
XZ	003,004	189,190	NONE		
	101-110	234,235,288,289,331,343, 395,407,420,436	NONE		
UNAS	SSIGNED AIRCR	AFT:			
		364	NONE		

(3) Spares

Gearbox Part Number 4052-16638-1 and 4052-16638-1 Amendment A

NONE

NONE

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B. REASON

(1) History

This Service Bulletin is to advise the operators of the issue of the NORD-MICRO Service Bulletin 16917-21-004.

The gearbox (Serial Number 9201 thru 9843) of the outflow valve 10HL has an internal gear-ring/ball bearing which is installed with an interference fit.

There have been reports of outflow valve failures followed by the ECAM Message CAB PRESS SYST 1+2 FAULT, with the manual mode still available. First inspection showed that the outflow valve flap had become disconnected from the outflow valve gearbox.

The manual mode is not affected by the separation of the gear-ring from the ball bearing, and still operates correctly.

Internal inspection showed that the gear-ring was not aligned with the planetary gear. The misalignment was caused by a separation of the gear-ring from the ball bearing.

(2) Objective/Action

Gearboxes with the serial number 9844 and higher have a retaining ring to prevent this separation. The NORD-MICRO Service Bulletin 16917-21-004 details the procedure to install a supplementary retaining ring on the gearbox.

(3) Advantages

The retaining ring will prevent separation of the gear-ring/ball bearing.

(4) Operational/Maintenance Consequences

None

(5) Accomplishment Timescale

The inspection is recommended to be carried out at the next suitable planned maintenance period within the next 500 Flight Hours. If the modification is necessary, it is recommended to be carried out before or during the next 2500 Flight Hours.

C. DESCRIPTION

To accomplish this Service Bulletin it is necessary to:

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- (1) Do an inspection of the gearbox serial number through the open outflow valve 10HL.
- (2) If the gearbox serial number is 9201 thru 9843 and the amendment standard D or AD has not been embodied, do the modification of the gearbox.

D_ APPROVAL

The design data contained in this Service Bulletin has been approved under the authority of DGAC Design Organisation Approval No C 01. The changes specified in this Service Bulletin have been approved by the DGAC when they are major, or under the authority of DGAC Design Organisation Approval No. C01, when they are minor.

E. MANPOWER

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

The 1.5 manhours necessary for the modification of the gearbox are given in the NORD-MICRO Service Bulletin 16917-21-004.

Inspection only

Get access	0.50
Inspection	0.25
Test	-
Close-up	0.50
TOTAL MANHOURS	1.25
ELAPSED TIME (HOURS)	1.25

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Modification only

Get access	0.75
Remove	2.00
Repair	1.50
Install	1.50
Test	1 -00
Close-up	1.00
TOTAL MANHOURS	7.75
ELAPSED TIME (HOURS)	7.25

F. MATERIAL - COST AND AVAILABILITY

No AIRBUS INDUSTRIE kit is supplied. If parts are required for the modification, they will be supplied Free Of Charge (FOC) from :

NORD-MICRO ELEKTRONIK FEINMECHANIK AG MATERIAL SUPPORT DEPARTMENT P.O. BOX 630225 60352 FRANKFURT GERMANY

TEL: (49) 6109 303 435 FAX: (49) 6109 303 412

SITA: FRANOCR

as shown in the NORD-MICRO Service Bulletin 16917-21-004.

G. TOOLING - PRICE AND AVAILABILITY

None

H. WEIGHT AND BALANCE

None

I. REFERENCES

Aircraft Maintenance Manual (AMM) : 12-34-24, 21-31-00, 21-31-51

NORD-MICRO Service Bulletin (SB) : 16917-21-004

J. PUBLICATIONS AFFECTED

None

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2. ACCOMPLISHMENT INSTRUCTIONS

A. GENERAL

<u>WARNING</u>: MAKE SURE THAT YOU OBEY ALL THE WARNINGS AND ALL THE CAUTIONS INCLUDED IN THE REFERENCED PROCEDURES.

(1) Preparation

- (a) Electrically ground the aircraft (Refer to AMM 12-34-24, P. Block 201).
- (b) Put an access platform in position at the outflow valve 10HL and the access door 312AR.
- (c) Open the access door 3123AR.
- (d) Open, safety and tag these circuit breakers:

PANEL	SERVICE	IDENT.	LOCATION	
49VU	COND/CAB/PRESS/CTL1	1HL	D09	
122 V U	COND/LAV/GALLEY VENT CTL/EXTRACT FAN/SPLY	6ни	U19	
122VU	AIR COND/CAB PRESS/CTL/MAN	3HL	Y23	
122VU	AIR COND/CAB PRESS/CTL/2	2HL	Y22	

(2) Standard Practices

None

B. INSPECTION

(1) Do an inspection of the gearbox serial number through the open outflow valve 10HL.

C. MODIFICATION

- (1) If the gearbox serial number is 9201 thru 9843 and the amendment standard D or AD has not been embodied, do the modification of the gearbox.
 - (a) Remove the outflow valve 10HL (Refer to AMM 21-31-51, P. Block 401).
 - (b) Do the modification of the gearbox in accordance with the NORD-MICRO Service Bulletin 16917-21-004.
 - (c) Install the outflow valve 10HL (Refer to AMM 21-31-51, P. Block 401).

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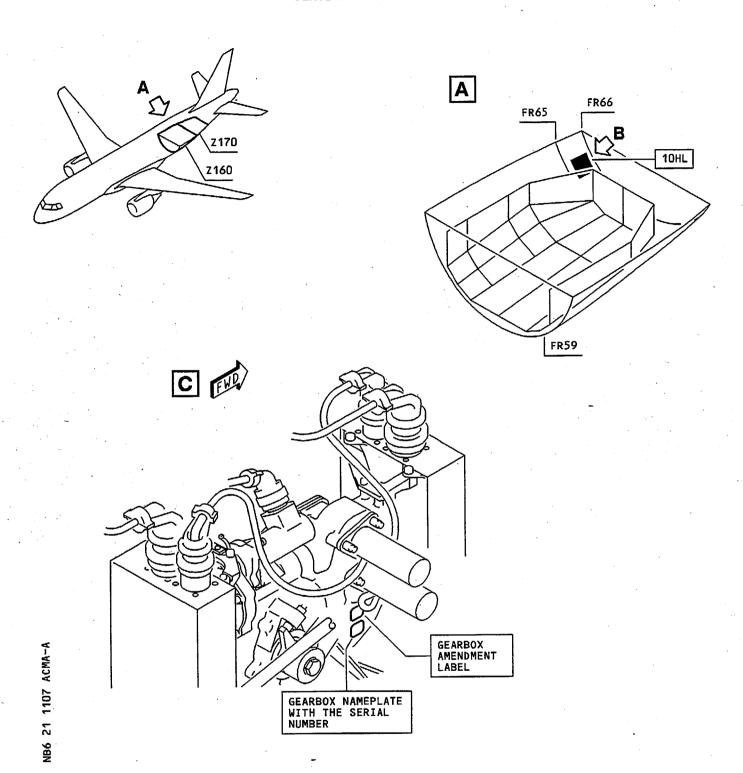
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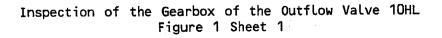
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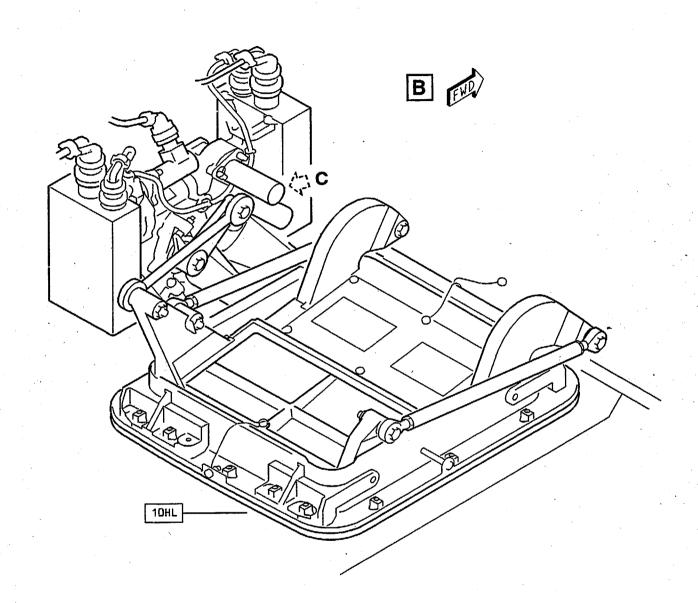
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D. TESTS

- (1) If the gearbox has been modified, do the operational test of the pressure control and monitoring system.
 - (a) Remove the safety clips and the tags and close these circuit breakers:

PANEL	SERVICE	IDENT.	LOCATION	
49VU	COND/CAB/PRESS/CTL1	1HL	D09	
122VU	COND/LAV/GALLEY VENT CTL/EXTRACT FAN/SPLY	6HU	U19	
122VU	AIR COND/CAB PRESS/CTL/MAN	3HL	Y23	
122VU	AIR COND/CAB PRESS/CTL/2	2HL	Y22	

(b) Do the operational test of the pressure control and monitoring system (Refer to AMM 21-31-00, P. Block 501).

E. CLOSE-UP

(1) Make sure that the safety clips and the tags are removed and that these circuit breakers are closed:

PANEL	SERVICE	IDENT.	LOCATION	
4 9 VU	COND/CAB/PRESS/CTL1	1HL	D09	
122VU	COND/LAV/GALLEY VENT CTL/EXTRACT FAN/SPLY	6HU	U19	
122VU	AIR COND/CAB PRESS/CTL/MAN	3HL	Y23	
122VU	AIR COND/CAB PRESS/CTL/2	2HL	Y22	

- (2) Make sure that the work area is clean and clear of tools and other items of equipment.
- (3) Remove the access platforms.

F. DOCUMENTATION

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

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3. MATERIAL INFORMATION

A. LIST OF COMPONENTS

NOTE :

No AIRBUS INDUSTRIE kit is supplied. If parts are required for the modification, they will be supplied Free Of Charge (FOC) from NORD-MICRO. Refer to Para. 1. F. Material Cost and Availability.

B. SPECIAL TOOLS

None

C. LIST OF MATERIAL - OPERATOR SUPPLIED

None

D. PARTS TO BE RE-IDENTIFIED BY OPERATOR

For the parts to be re-identified, refer to the NORD-MICRO NOTE: Service Bulletin 16917-21-004.

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\$\text{\$\Pi\$} A319/A320/A321

SERVICE BULLETIN

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

Tel: (33) 61933333 Telex: AIRBU 530526F

TITLE : AIR CONDITIONING - PRESSURE CONTROL AND MONITORING - INSPECT THE

SERIAL NUMBER OF THE GEARBOX OF THE OUTFLOW VALVE 10HL AND IF

NECESSARY DO A MODIFICATION TO THE GEARBOX

MODIFICATION No.: INSPECTION ATA SYSTEM: 21

IS BEING HEREWITH SUBMITTED TO YOU FOR REVIEW

Please fill:

... REJECTED

... WILL BE EMBODIED

... EFFECTIVITY

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

FROM:

AIRLINE:

NAME:

DATE:

Please return to :

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

TEL: (33) 61-91-33-33 Telex: AIRBU 530526 F

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