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**ATA SYSTEM : 54**

**TITLE : NACELLES/PYLONS - LOWER FAIRING - MODIFY STRUCTURE AT LOWER AFT PYLON FAIRING LEVEL FOR PW ENGINES**

**MODIFICATION No. :** 53623S18198

This page transmits Revision No. 01 of Service Bulletin No. A330-54-3022

ADDITIONAL WORK

No additional work is required by this revision for aircraft modified by any previous issue.

REASON

Revision No. 01 issued to add aircraft MSN 0663 for Operator NWA and aircraft MSN 0665 for Operator EEZ.

CHANGES

SUMMARY :

- REASON/DESCRIPTION/OPERATIONAL CONSEQUENCES

  . Modification classification table added.

- EFFECTIVITY

  . Operators updated.

- MANPOWER

  . Notion of configuration added.

PLANNING INFORMATION :

- DESCRIPTION

  . 1.D. Notion of configuration added.

- MANPOWER

  . 1.G. Notion of configuration added.

- SPECIAL TOOLS



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. 2.G. Mention to tools listed in the Vendor Service Bulletin added.

ACCOMPLISHMENT INSTRUCTIONS :

- Preparation

. 3.A.(1) Notion of configuration added.

- MODIFICATION

. 3.B. Notion of configuration added.

- TESTS

. 3.C. Notion of configuration added.

- CLOSE-UP

. 3.D. Notion of configuration added.

FILING INSTRUCTIONS

This Service Bulletin has been generated electronically and is reissued as a complete document. Replace the complete document.

Put this Revision Transmittal Sheet in front of the Service Bulletin.

HISTORY OF PREVIOUS REVISIONS

No previous revisions.

REVISION SEQUENCE

ORIGINAL : May 25/05
REVISION No. : 01 - Jan 09/08



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

**ATA SYSTEM : 54**

**TITLE : NACELLES/PYLONS - LOWER FAIRING - MODIFY STRUCTURE AT LOWER AFT PYLON FAIRING LEVEL FOR PW ENGINES**

**MODIFICATION No. :** 53623S18198

REASON/DESCRIPTION/OPERATIONAL CONSEQUENCES

This Service Bulletin is issued to advise all operators of A330 aircraft powered by PW4164 / PW4168 / PW4168A engines, of the issue of PRATT and WHITNEY Service Bulletin No. PW4G-100-54-7.

Some A330/PW operators are experiencing Lower Aft Pylon Fairing (LAPF) seals damage with cracking of LAPF firewall, supports, frames, clips, spars, side skins, blade seals, nozzle seals and lower skin assembly. Investigation identified seals failure due to fatigue and thermal distress. Damage of LAPF structure (cracks) were also reported as a consequence of High Cycle Fatigue (HCF) and thermal stresses.

This Service Bulletin recommends to introduce a structural improvement at LAPF level by :

- Blade and nozzle seals re-design ;

- Structural modification on supports, firewall, heatshield, frames, spars and skins.

Accomplishment of this Service Bulletin will avoid any deterioration of the fairing and will protect surrounding areas.

Accomplishment of this Service Bulletin cancels the inspection requirements of the mandatory Service Bulletin No. A330-54-3021.

| EVALUATION TABLE | | | |
|---|---|---|---|
| COMPLIANCE | Recommended | CANCELS INSPECTION SB | YES |
| POTENTIAL AD | No | A/C OPERATION AFFECTED | No |
| RELIABILITY AFFECTED | No | PAX COMFORT AFFECTED | No |



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| EVALUATION TABLE | | | |
|---|---|---|---|
| COST SAVING | No | ETOPS AFFECTED | No |
| STRUCTURAL LIFE EXTN | YES | VENDOR SB INVOLVED | YES |
| KIT PRICE (USD) | No Kit | | |

| MODIFICATION CLASSIFICATION | |
|---|---|
| MAJOR | 53623S18198 |
| MINOR | None |

As per EASA IR 21, a minor change is one that has no appreciable effect on the mass, balance, structural strength, reliability, operational characteristics affecting the airworthiness of the product. All other changes are major changes.

**EFFECTIVITY**

This Service Bulletin is applicable to these operators :

AAR DAT EEZ FWI GRL HFY HVN IWD KAL LTU MAS NVR NWA SWR TAM TAP THA USA

This modification is embodied before delivery on aircraft 0674 and subsequent.

CONCURRENT REQUIREMENTS

None

REFERENCES/REPERCUSSIONS

TFU : 54.56.00.003

OEB : None

AOT : None

SIL : None

LIFE LIMIT : None

LINE MAINTENANCE AFFECTED : No



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OTHERS : None

NATURE OF THE WORK

AIRCRAFT : YES

EQUIPMENT : NO

HARD : NO

SOFT : NO

OBRM : NO

MANPOWER

Config. 01, on aircraft for one pylon

| | |
|---|---|
| **TOTAL MANHOURS** | **5.0** |
| **ELAPSED TIME (HOURS)** | **4.5** |

Config. 01, on bench

| | |
|---|---|
| **TOTAL MANHOURS** | **Refer to PRATT and WHITNEY Service Bulletin No. PW4G-100-A54-7** |
| **ELAPSED TIME (HOURS)** | **Refer to PRATT and WHITNEY Service Bulletin No. PW4G-100-A54-7** |

MATERIAL INFORMATION

AIRCRAFT DATA

None

APPENDICES

None



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**ATA SYSTEM : 54**

**TITLE : NACELLES/PYLONS - LOWER FAIRING - MODIFY STRUCTURE AT LOWER AFT PYLON FAIRING LEVEL FOR PW ENGINES**

**MODIFICATION No. :** 53623S18198

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## 1. PLANNING INFORMATION

### A. EFFECTIVITY

(1) Models

330-223 330-321 330-322 330-323

(2) Aircraft

(a) Effectivity by MSN

This Service Bulletin is applicable to aircraft MSN :

0050 0060 0062 0064-0067 0069 0072 0073 0077 0082 0087 0095 0096 0100 0107 0110 0112 0116 0119 0120 0122 0127 0143 0162 0171 0172 0181 0195 0206 0209 0219 0222-0224 0226 0229-0232 0238 0240 0241 0247 0249 0253 0255 0256 0258 0259 0262 0267 0275 0288 0290 0291 0294 0296 0299 0300 0305 0308 0312 0315 0317 0322-0324 0333 0337 0338 0342 0343 0346 0350 0351 0353 0358 0361 0362 0364 0366 0368 0370 0375 0380 0388 0403 0425 0428 0432 0444 0454 0469 0476 0484 0490 0493 0524 0533 0542 0549 0550 0552 0578 0588 0591 0609 0614 0618 0620 0621 0631 0633 0640 0663 0665

(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.



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| OPERATOR | MSN |
|---|---|
| AAR | 0640 |
| DAT | 0082 |
| EEZ | 0358 0364 0665 |
| FWI | 0240 0253 |
| GRL | 0230 |
| HFY | 0096 |
| HVN | 0087 0255 0262 |
| IWD | 0072 |
| KAL | 0162 0172 0206 0219 0222 0226 0241 0256 0258 0267 0338 0350 0351 0368 0425 0428 0484 0490 0550 |
| LTU | 0120 0127 0171 0403 0432 0444 0454 0469 0476 0493 |
| MAS | 0067 0069 0073 0077 0095 0100 0107 0110 0116 0119 0143 0290 0296 0300 |
| NVR | 0353 0362 |
| NWA | 0524 0533 0542 0549 0552 0578 0588 0591 0609 0614 0618 0620 0621 0631 0633 0663 |
| SWR | 0229 0249 0275 0288 0291 0294 0299 0322 0324 0343 0366 |
| TAM | 0232 0238 0247 0259 0361 |
| TAP | 0181 0195 0223 0305 0308 0312 0317 |
| THA | 0050 0060 0062 0064 0065 0066 0112 0122 0209 0224 0231 0346 |
| USA | 0315 0323 0333 0337 0342 0370 0375 0380 0388 |

(c) Effectivity by MSN and Kit/Configuration

The Kits and configurations applicable to these MSNs are given at the end of this list

0050 0060 0062 0064-0067 0069 0072-0073 0077 0082 0087 0095-0096 0100 0107 0110 0112 0116 0119-0120 0122 0127 0143 0162 0171-0172 0181 0195 0206 0209 0219 0222-0224 0226 0229-0232 0238 0240-0241 0247 0249 0253 0255-0256 0258-0259 0262 0267 0275 0288 0290-0291 0294 0296 0299-0300 0305 0308 0312 0315 0317 0322-0324 0333 0337-0338 0342-0343 0346 0350-0351 0353 0358 0361-0362 0364 0366 0368 0370 0375 0380 0388 0403 0425 0428 0432 0444 0454 0469 0476 0484 0490 0493 0524 0533 0542 0549-0550 0552 0578 0588 0591 0609 0614 0618 0620-0621 0631 0633 0640 0663 0665



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| KIT No. | QTY PER A/C | CONFIGURATION |
|---|---|---|
| None | | 01 |

NOTE : Config. 01 is valid for all the aircraft given in the effectivity of this Service Bulletin as a standard configuration.

(3) Spares

Refer to PRATT and WHITNEY Service Bulletin No. PW4G-100-54-7.

## B. CONCURRENT REQUIREMENTS

None

## C. REASON

(1) History

Some A330/PW operators are experiencing Lower Aft Pylon Fairing (LAPF) seals damage with cracking of LAPF firewall, supports, frames, clips, spars, side skins, blade seals, nozzle seals and lower skin assembly. Investigation identified seals failure due to fatigue and thermal distress. Damage of LAPF structure (cracks) were also reported as a consequence of High Cycle Fatigue (HCF) and thermal stresses.

(2) Objective/Action

This Service Bulletin is issued to advise all operators of A330 aircraft powered by PW4164 / PW4168 / PW4168A engines, of the issue of PRATT and WHITNEY Service Bulletin No. PW4G-100-54-7.

This Service Bulletin recommends to introduce a structural improvement at LAPF level by :

- Blade and nozzle seals re-design ;

- Structural modification on supports, firewall, heatshield, frames, spars and skins.

(3) Advantages

Accomplishment of this Service Bulletin will avoid any deterioration of the fairing and will protect surrounding areas.

Accomplishment of this Service Bulletin cancels the inspection requirements of the mandatory Service Bulletin No. A330-54-3021.

(4) Operational/Maintenance Consequences

None

## D. DESCRIPTION

To accomplish this Service Bulletin it is necessary to :



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(1) Config. 01

(a) Replace the Lower Aft Pylon Fairing Assies

## E. COMPLIANCE

(1) Classification

Recommended

(2) Accomplishment Timescale

Accomplishment of this Service Bulletin is recommended at the earliest opportunity where manpower and facilities are available.

## F. APPROVAL

Approved under the EASA Design Organisation Approval No. EASA.21J.031.

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.

Config. 01 , on aircraft for one pylon

| | |
|---|---|
| Get access | 2.0 |
| Test | 0.5 |
| Close-up | 2.5 |
| **TOTAL MANHOURS** | **5.0** |
| **ELAPSED TIME (HOURS)** | **4.5** |

Config. 01 , on bench

| | |
|---|---|
| Modification of LAPF | Refer to PRATT and WHITNEY Service Bulletin No. PW4G-100-A54-7 |
| **TOTAL MANHOURS** | **Refer to PRATT and WHITNEY Service Bulletin No. PW4G-100-A54-7** |



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**ELAPSED TIME (HOURS)** **Refer to PRATT and WHITNEY Service Bulletin No. PW4G-100-A54-7**

## H. WEIGHT AND BALANCE

Manufacturers Empty Weight : 11.250 kg (+24.8017 lb)

Effect on Balance : + 371.475 kgm (+2686.878 lb.ft)

## I. ELECTRICAL LOAD DATA

Not changed

## J. REFERENCES

Aircraft Maintenance Manual (AMM) : 12-34-24 54-56-11

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

PRATT and WHITNEY Service Bulletin No. PW4G-100-A54-7

Service Bulletin No. A330-54-3021

## K. PUBLICATIONS AFFECTED

Illustrated Parts Catalog (IPC) : 54-56-11

## L. INTERCHANGEABILITY/MIXABILITY

| DESCRIPTION | OLD PART No. | NEW PART No. | INT | MIXABILITY |
|---|---|---|---|---|
| Lower Aft Pylon Fairing Assy | 72A100-501<br>72A100-503<br>72A100-505<br>72A100-507<br>72A100-509<br>72A100-511<br>72A100-513<br>72A100-701<br>72A100-703 | 72A100-705 | 01 | Not applicable |

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

NOTE : Only the mixability configuration(s) and condition(s) stated in this Service Bulletin are approved.



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## 2. MATERIAL INFORMATION

### A. MATERIAL - PRICE AND AVAILABILITY

(1) Material

Modification of removed equipment should be negotiated directly with PRATT and WHITNEY as per instructions given in Service Bulletin No. PW4G-100-A54-7.

(2) Price and Availability

Refer to the Vendor Service Bulletin No. PW4G-100-A54-7 for the equipment modification sales terms.

### B. INDUSTRY SUPPORT INFORMATION

Refer to the Vendor Service Bulletin No. PW4G-100-A54-7 for the industry support terms.

### C. LIST OF COMPONENTS

None

### D. LIST OF MATERIALS - OPERATOR SUPPLIED

(1) Consumable Materials

None

(2) Components

| ITEM | NEW PART No. | QTY | UM | KEYWORD | ITEM | OLD PART No. | INT | INST DISP |
|---|---|---|---|---|---|---|---|---|
| | 72A100-705 | 1 | | LAPF | | 72A100-501<br>72A100-503<br>72A100-505<br>72A100-507<br>72A100-509<br>72A100-511<br>72A100-513<br>72A100-701<br>72A100-703 | 01 | (01) |

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

NOTE(01) Modification of removed equipment should be negotiated directly with PRATT and WHITNEY as per instructions given in Service Bulletin No. PW4G-100-A54-7

### E. PARTS TO BE RE-IDENTIFIED BY THE OPERATOR

None



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## F. TOOLING - PRICE AND AVAILABILITY

None

## G. SPECIAL TOOLS

To accomplish this Service Bulletin it is necessary to use the tools listed in PRATT and WHITNEY Service Bulletin No. PW4G-100-A54-7.



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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.
  IN CASE OF CONTAMINATION REFER TO ESPM 20-55-00.

(1) Preparation

(a) Config. 01

1 Make sure that the aircraft is electrically grounded (Refer to AMM 12-34-24, Page block 201).

2 Put the access platforms in position.

3 Do the preparation procedure as specified in the removal/installation of the lower fairing (Refer to AMM 54-56-11, Page block 401).

(2) Standard Practices

None

### B. MODIFICATION

(1) Config. 01

NOTE : For LAPF modification, Refer to PRATT and WHITNEY, Service Bulletin No. PW4G-100-A54-7

NOTE : This paragraph describes the replacement of one LAPF. The job is identical for both LAPF.

(a) Replace the Lower Aft Pylon Fairing Assies
(Refer to AMM 54-56-11, Page block 401)

1 Remove :

| | | |
|---|---|---|
| 1 | Lower Aft Pylon Fairing Assy | 72A100-501 |



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or

1 Lower Aft Pylon Fairing Assy 72A100-503

or

1 Lower Aft Pylon Fairing Assy 72A100-505

or

1 Lower Aft Pylon Fairing Assy 72A100-507

or

1 Lower Aft Pylon Fairing Assy 72A100-509

or

1 Lower Aft Pylon Fairing Assy 72A100-511

or

1 Lower Aft Pylon Fairing Assy 72A100-513

or

1 Lower Aft Pylon Fairing Assy 72A100-701

or

1 Lower Aft Pylon Fairing Assy 72A100-703

NOTE : The part number of the removed LAPF depends on the aircraft configuration.

2 Install :

1 Lower Aft Pylon Fairing Assy 72A100-705

**C. TEST**

(1) Config. 01

(a) Do the test procedure as specified in the removal/installation of the lower fairing (Refer to AMM 54-56-11, Page block 401).



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**D. CLOSE UP**

(1) Config. 01

(a) Do the close-up procedure as specified in the removal/installation of the lower fairing (Refer to AMM 54-56-11, Page block 401).

(b) Make sure that the work areas are clean and clear of tools and other items of equipment.

(c) Restore the systems and the aircraft to normal operating conditions.

(d) Remove the access platforms.

(e) Disconnect the aircraft electrical ground-connection (Refer to AMM 12-34-24, Page block 201).

**E. DOCUMENTATION**

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



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A330

SERVICE BULLETIN
REPORTING SHEET

**TITLE : NACELLES/PYLONS - LOWER FAIRING - MODIFY STRUCTURE AT LOWER AFT PYLON FAIRING LEVEL FOR PW ENGINES**

**MODIFICATION No. :** 53623S18198

Please complete the appropriate item (A or B):

A - SB WILL BE embodied ..... YES/NO (if NO please comment)
If YES, aircraft concerned (as per SB effectivity by default) and planned dates (month/year) of embodiement:
.....
.....

B - SB HAS BEEN embodied on aircraft: .....
.....
.....

Operator comments: .....
.....
.....

From Airline: .....
Name/Title: .....
Signature:..... Date: .....

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..... YES/NO
Or : Intermediate/Temporary revision ..... YES/NO

Important Information: 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.

Please return this completed sheet to:

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**TITLE : NACELLES/PYLONS - LOWER FAIRING - MODIFY STRUCTURE AT LOWER AFT PYLON FAIRING LEVEL FOR PW ENGINES**

**MODIFICATION No. :** 53623S18198

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 futher 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 |
|---|---|---|
| X Effectivity | X Kit Content | X Preparation |
| X Reason | X List of Materials | X Mod/Inspection |
| X Manpower | Operator Supplied | X Test |
| X References | X Re-identification | X Close-up |
| X Publication | X Tooling | X Illustrations |

Comments :

Operator : Date:

Name/Title :

Please return this form to:

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