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## V2500-A1/A5 SERIES PROPULSION SYSTEMS SERVICE BULLETIN

Printed in Great Britain

This document transmits Revision 1 to Service Bulletin V2500-NAC-71-0306

### Document History

Service Bulletin Revision Status

Initial Issue Jan.17/08

### Service Bulletin Revision 1

Remove	Incorporate	Reason for change
All pages of the Service Bulletin.	Pages 1 to 12 of the Service Bulletin.	To revise the Material Information, the Rework Instructions and a Figure.

# V2500-NAC-71-0306

Transmittal - Page 1 of 1

CHECK THAT ALL PREVIOUS TRANSMITTALS HAVE BEEN INCORPORATED  
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NACELLE – POWER PLANT – REPLACEMENT OF THE FAN COWL DOOR CORNER PIECES**1. Planning Information****A. Effectivity****(1) Airplane:**

Airbus A319, A320, A321

**(2) Engine:**

(a) V2500-A1

(b) V2500-A5

**(3) Fan Cowl Doors**

(a) ALL V2500-A1 Fan Cowl Doors.

(b) V2500-A5 Fan Cowl Doors prior to Serial Number 5458001.

**B. Concurrent Requirements**

None.

**NOTE:** This Service Bulletin supersedes the intent of Service Bulletin V2500-NAC-71-0269.

**C. Reason****(1) Problem**

The Fan Cowl Door Corner Pieces are attached to the Fan Cowl Door by way of titanium rivets. The titanium rivet heads may make contact with the aluminium Capping Straps on the Inlet Cowl and cause excessive wear.

**(2) Evidence**

Airlines have experienced excessive wear of the Inlet Cowl Capping Straps in way of the upper and lower Fan Cowl Door Corner Pieces.

**(3) Substantiation**

All hardware changes have been substantiated by satisfactory engineering analysis.

(4) Objectives

The new Corner Pieces have been designed to remove contact between the titanium rivet head and the aluminium Capping Strap. The new design will restrict wear to the nylatron Corner Pieces only. The new stepped arrangement on the Corner Piece will provide a visual and measurable indication of the amount of wear that has occurred to the Corner Pieces.

(5) Effect of Bulletin on:

(a) Operation

Not affected.

(b) Maintenance

Not affected.

(c) Overhaul

Not affected.

(d) Repair Schemes

Affected (Refer to Paragraph 1.0. Other Publication Affected).

(e) Interchangeability

Not affected.

(f) Fits and Clearances

Not affected.

D. Description

The Fan Cowl Doors are opened and the Capping Straps on the Intake Cowl are inspected and, if necessary, repaired or replaced. The four Corner Pieces on each Door are replaced.

E. Compliance

Category Code 8

Accomplish based upon experience with prior configuration.

F. Approval

R The technical content of this Service Bulletin has been approved under the  
R authority of the EASA Design Organization Approval No. EASA.21J.031.

R The authorising IAE documents are EC's 05VN308, 05VN308A and 07VN306.

G. Manpower

Estimated Man-hours to incorporate the full intent of this Service Bulletin on each Nacelle:

(1) In Service

Not applicable.

(2) At Overhaul

4.0 hours.

NOTE: Manpower estimate is provided for planning purposes only. No labor allowance is provided under the terms of this Service Bulletin offering.

H. Material Cost and Availability

The parts to accomplish this Service Bulletin are available from the manufacturer as Kit No V2571306-551.

Operators with units listed in Paragraph 1.A should submit a purchase order for the applicable quantity of kits. The purchase order must specify this Service Bulletin number and the parts listed herein. Operators will have one year from the issue date of this Service Bulletin to place an order. After one year, kits will no longer be available and operators will have to order parts individually at catalog prices.

Direct request to:

Goodrich Aerospace

850 Lagoon Drive

Chula Vista, CA 91910-2098 USA

Attn: Regional Business Manager - MZ107A

(Service Bulletin No. V2500-NAC-71-0306)

I. Tooling

None.

J. Industry Support Information

Not applicable.

**K. Weight and Balance**

Not affected.

**L. Electrical Load Data**

Not affected.

**M. Software Accomplishment Summary**

Not applicable.

**N. References**

- R (1) Airbus A319/A320/A321 Aircraft Maintenance Manual (M-V2500-1IA), Chapter/Sections 71-13-00.
- (2) IAE V2500 Standard Practices/Process Manual (SPP-V2500-1IA), Chapter/Sections 70-11-26, 70-36-02, 70-38-07 and 70-39-03.
- (3) IAE V2500 Overhaul Processes and Consumable Index (IAE PCI-V2500-1IA) Section II.
- (4) IAE V2500-A1/A5 Air Intake Cowl Component Maintenance Manual V2500 A1/A5 (CMM-AIC-V2500-1IA), Chapter/Sections 71-11-00, Repair 020 (VRS2788).
- (5) Service Bulletin V2500-NAC-71-0269.
- (6) Internal Reference No:
- R Engineering Changes No: 05VN308, 05VN308A and 07VN306.
- (7) ATA Locator - 71-13-00.

**O. Other Publications Affected**

- R (1) IAE V2500-A1/A5 Component Maintenance Manual V2500 A1/A5  
R (CMM-FC-V2500-1IA), Chapter/Sections 71-13-00, Repair 024 (VRS2790).
- (2) IAE V2500-A1/A5 Structural Repair Manual for the V2500 A1/A5 (PSR-V2500-1IA/2IA), Chapter/Sections 54-20-00, Repair 039 (VRS2790).

**P. Interchangeability of Parts**

Old and new Fan Cowl Doors are fully interchangeable, both physically and functionally.

## 2. Material Information

### A. Kits required consist of the following parts:

NEW PART NO.	QTY	PART TITLE
V2571306-551	1	Kit, Replacement of the Fan Cowl Door Corner Pieces
Kit consist of:		
740-4019-517	4	Corner Piece
740-4019-515	4	Corner Piece
CSR904B5-5	20	Rivet

### B. Parts to be Reworked:

None.

### C. New Production Parts:

NOTE: Applicability: V2500-A1/A5 Fan Cowl Doors.

FIG ITEM NO.	NEW PART NO.	QTY	PART TITLE	MAT	OLD PART NO.	INSTR DISP
71-13-00 (CMM)						
04-070B 24-070B	740-4019-515	2	Corner Piece		740-4019-511	(B)(S1)
04-080B 24-080B	740-4019-517	1	Corner Piece		740-4019-513	(B)(S1)
04-090B 24-090B	740-4019-517	1	Corner Piece		740-4019-514	(B)(S1)
04-070B 24-070B	740-4019-515	2	Corner Piece		740-4019-511	(B)(S1)

D. Redundant parts:

None.

E. Instructions/Dispositions Code Statements:

- (1) Kit is currently available.
- (2) New parts are currently available.
- (S1) Old and new parts are not interchangeable.

F. Materials Required to do this Service Bulletin:

- (1) Refer to the table that follows:

COMAT NO.	DESIGNATION
01-076	Methylethylketone (MEK)
01-124	Isopropyl Alcohol
02-099	Lint free cloth
02-178	Masking Tape
04-005	PL32M Jointing Compound Vendor Code-K6835
05-075	800 grit Silicon Carbide Abrasive Paper
07-166	Clear Varnish
08-162	Scotch-Weld 2216 B/A adhesive Vendor Code 04963

The details of the consumable material with the consumable material number 07-166 given in the table above are as follows:

COMAT NO.	RR REFERENCE (OMAT NO.)	MATERIAL	MANUFACTURER'S REFERENCE AND/OR SPECIFICATION	SUPPLIER CODE
07-166	07/790	9110C8000/ 2000-2-0538	Varnish	*
		EC75/C9071	Varnish	IAE77 IAE391 K6835 **
		IP9064	Clear Varnish	00BB6 K3504 **
		IP2	Clear Varnish	00BB6 K3504 **



For the supplier names and addresses of the supplier codes K3504 and \* to \*\* of the consumable material given in the table above refer to the table that follow:

FEDERAL CODE	SUPPLIER CODE	SUPPLIER ADDRESS
	*	International Paints, Aviation Division Ladyswood Works, Ratton Park Street, Birmingham B16 0AD, England.
	**	PGG Aerospace Tel: ++44 1388 770242 Fax: ++44 1388 776870 Email: Cunningham@PPG.com
	K3504	Indestructible Paint Ltd Tel: ++ 44 121 70 2485 Fax: ++ 44 121 78 4338 www.indestructible.co.uk

**NOTE:** To identify the consumable materials, refer to the Overhaul Processes and Consumable Index PCI-V2500-1IA.

### 3. Accomplishment Instructions

#### A. Pre-requisite Instructions

**WARNING:** DO NOT TOUCH THE ENGINE COMPONENTS FOR A SHORT TIME AFTER THE ENGINE IS SHUT DOWN. THE COMPONENTS STAY HOT AND CAN CAUSE INJURY.

**WARNING:** MAKE SURE THAT THE AIRCRAFT IS SAFE FOR MAINTENANCE. THIS WILL PREVENT INJURIES TO PERSONNEL AND/OR DAMAGE TO THE EQUIPMENT.

- (1) Open the Fan Cowl Doors. Refer to the Aircraft Maintenance Manual, Task 71-13-00-010-010.
- (2) Visually inspect the Air Intake Cowl Capping Strap for wear or damage and, if required, replace. Refer to the Component Maintenance Manual, Chapter 71-11-00, Repair 020 (VRS2788).

#### B. Rework Instructions

- (1) At four locations, carefully drill out the five rivets, P/N CSR904B4-5 to release the Corner Piece, P/N 740-4019 from the left hand Fan Cowl Door. Refer to Figure 1.
- (2) Remove the four Corner Pieces, P/N 740-4019 from the Fan Cowl Door.
- (3) At four locations, carefully drill out the five rivets, P/N CSR904B4-5 to release the Corner Piece, P/N 740-4019 from the right hand Fan Cowl Door.
- (4) Remove the four Corner Pieces, P/N 740-4019 from the Fan Cowl Door.
- (5) On the left hand Fan Cowl Door do the steps that follow.

**WARNING:** YOU MUST USE PROTECTIVE CLOTHING, GLOVES, DUST MASK AND SAFETY GOGGLES TO PROTECT YOU AGAINST DUST AND LOOSE PARTICLES WHICH CAN BE DANGEROUS TO YOUR HEALTH.

- (a) At four locations, increase the size of the two fastener holes on the Fan Cowl Door to suit the rivet, P/N CSR904B5-5. Refer to the Standard Practices/Processes Manual, Task 70-39-03-390-501.
- (b) Remove any burrs from the Fan Cowl Door.
- (c) At four locations, apply masking tape (CoMat 02-178) on the outer surface of the Fan Cowl Door over the three redundant holes.

R

**WARNING:** ADHESIVE (08-162) IS CLASSIFIED AS A HAZARDOUS MATERIAL THAT MAY CAUSE INJURY OR ILLNESS IF NOT PROPERLY USED. THIS PRODUCT SHOULD BE USED ONLY IN ACCORDANCE WITH THE MANUFACTURERS SPECIFIC SAFETY AND HEALTH RECOMMENDATIONS. PRIOR TO USE OF THIS PRODUCT, CAREFULLY READ THE APPLICABLE MATERIAL SAFETY DATA SHEET AND FOLLOW ALL LISTED SAFETY AND HEALTH PRECAUTIONS.

(d) Mix a quantity of adhesive (CoMat 08-162) in accordance with the manufacturers instructions.

(e) Fill the redundant holes in the Fan Cowl Door with the adhesive until the adhesive overflows on the inner surface of the Fan Cowl Door.

(f) Use a plastic spatula to scrape the overflow adhesive level with the inner surface of the Door.

(g) Cure the adhesive in accordance with the manufacturers instructions.

(h) Remove the masking tape from the outside surface of the Fan Cowl Door.

**CAUTION:** DO NOT CAUSE DAMAGE TO THE OUTER SURFACE OF THE FAN COWL DOOR. BE CAREFUL AND ONLY REMOVE RESIN FROM THE REWORK AREA. DO NOT USE A LIQUID WITH THE ABRASIVE PAPER.

(i) At four locations, use 800 grit silicon carbide abrasive paper (CoMat 05-075) to make the rework area on the outside surface of the Fan Cowl Door smooth.

**WARNING:** COMAT 01-076 OR COMAT 01-124 SOLVENT IS FLAMMABLE AND THE VAPOUR IS HARMFUL. USE IN A WELL-VENTILATED AREA. AVOID PROLONGED BREATHING OF VAPOURS OR PROLONGED OR REPEATED CONTACT WITH SKIN. HIGH CONCENTRATIONS MAY CAUSE IMPAIRED JUDGEMENT. PROTECTIVE GLOVES SHOULD BE WORN DURING USE. MAY CAUSE DERMATITIS BY REMOVING SKIN OILS. PRIOR TO USE OF THIS PRODUCT, READ THE MATERIAL SAFETY DATA SHEET AND FOLLOW ALL LISTED SAFETY AND HEALTH PRECAUTIONS.

(j) Use a clean, lint free cloth dampened with solvent (CoMat 01-076 or CoMat 01-124) to remove all oil, grease, dirt or other contaminants from the rework area. Wipe the area dry with a clean, lint free cloth before the solvent evaporates. Refer to the Standard Practices/Process Manual, Task 70-11-26-300-503.

(k) Restore the paint finish. Refer to the Standard Practices/Processes Manual, Chapter 70-38-07.

**WARNING:** COMAT 07-166 VARNISH IS CLASSIFIED AS A HAZARDOUS MATERIAL THAT MAY CAUSE INJURY OR ILLNESS IF NOT PROPERLY USED. THIS PRODUCT SHOULD BE USED ONLY IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFIC SAFETY AND HEALTH RECOMMENDATIONS. PRIOR TO USE OF THIS PRODUCT, CAREFULLY READ THE APPLICABLE MATERIAL SAFETY DATA SHEET AND FOLLOW ALL LISTED SAFETY AND HEALTH PRECAUTIONS.

(l) At four locations, treat the cut edges on the Fan Cowl Door with varnish (CoMat 07-166).

R (m) Apply adhesive (CoMat 08-162) to the mating surface of the four Corner Pieces as instructed in the Standard Practices/Processes Manual, Chapter 70-36-02 and locate in the correct position on the Fan Cowl Door.

**NOTE:** Wet install the rivets with jointing compound (CoMat 04-005).

(n) At four locations, install the new Corner Piece, P/N 740-4019 to the Fan Cowl Door with the two rivets, P/N CSR904B5-5 as instructed in the Standard Practices and Processes Manual, Task 70-39-03-390-501 with jointing compound (CoMat 04-005).

R (o) Remove any excess adhesive and sealant.

(6) Repeat step (5) for the right hand Fan Cowl Door.

(7) Make sure that the work area is clean and clear of tools and other items.

#### C. Post-requisite Instructions

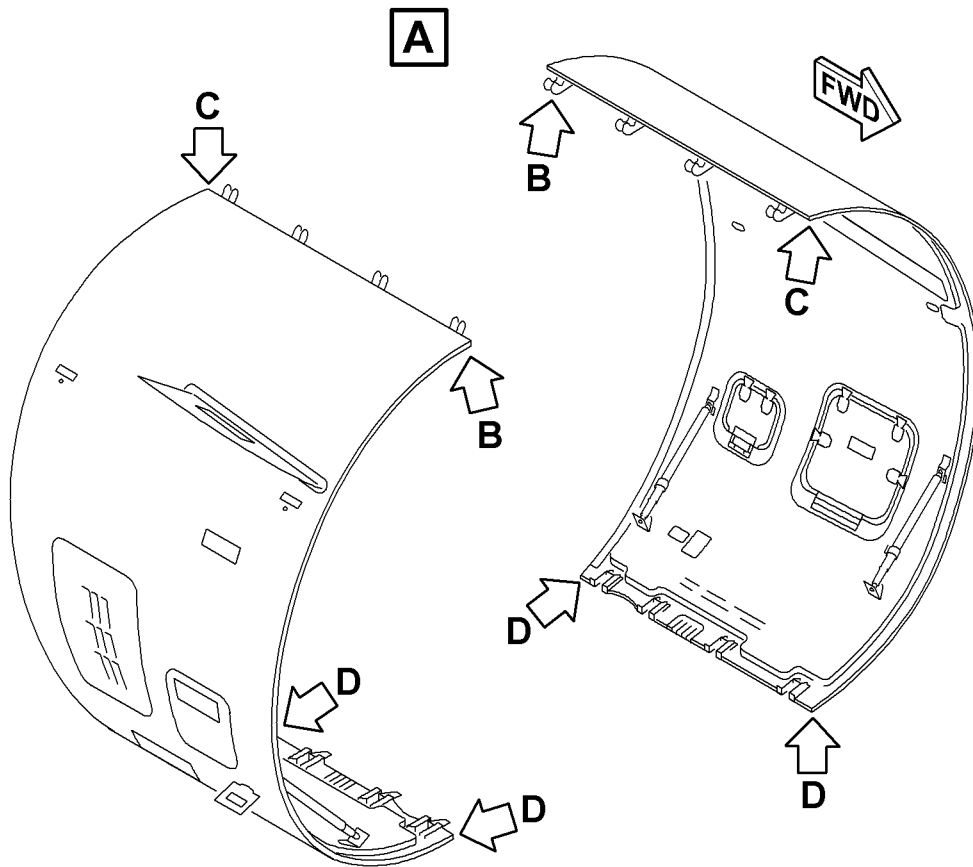
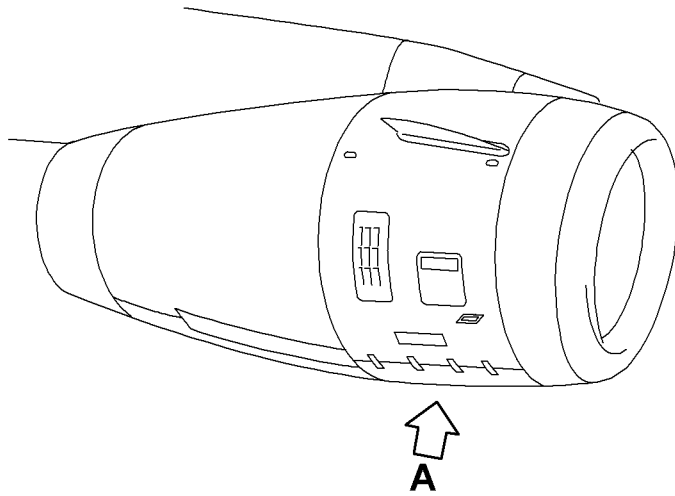
(1) Close the Fan Cowl Doors. Refer to the Aircraft Maintenance Manual, Task 71-13-00-410-010.

(2) Retract the translating sleeves. Refer to the Aircraft Maintenance Manual, Task 78-32-00-860-011.

#### D. Recording Instructions

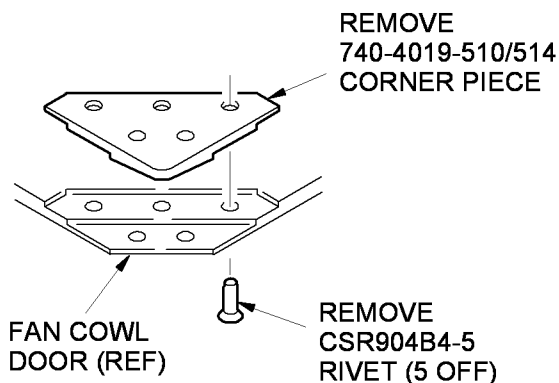
(1) A record of accomplishment is required.

Write in the Aircraft Log Book that Service Bulletin V2500-NAC-71-0306 has been done.

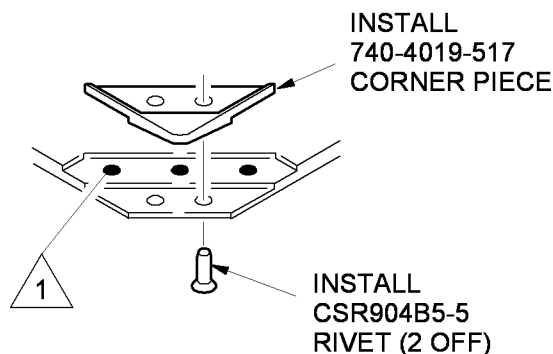


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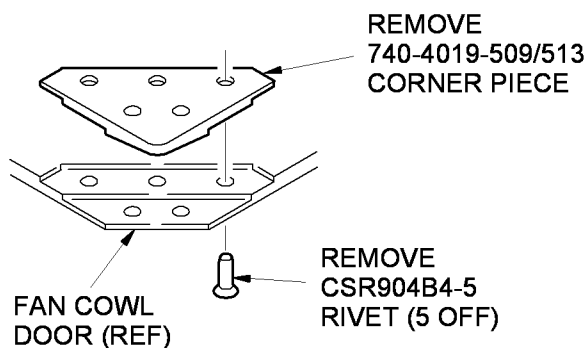
Replacement of the Fan Cowl Door Corner Pieces  
Figure 1 sheet 1



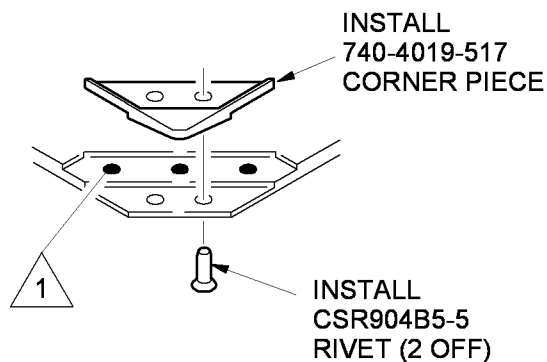
**B**  
BEFORE



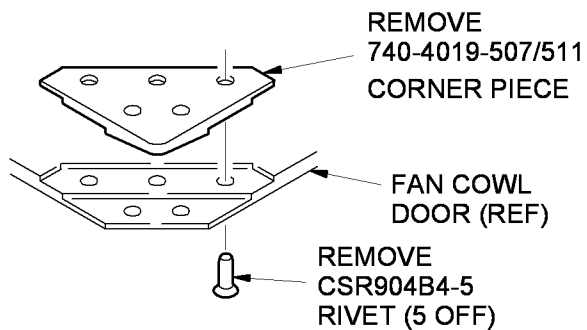
**B**  
AFTER



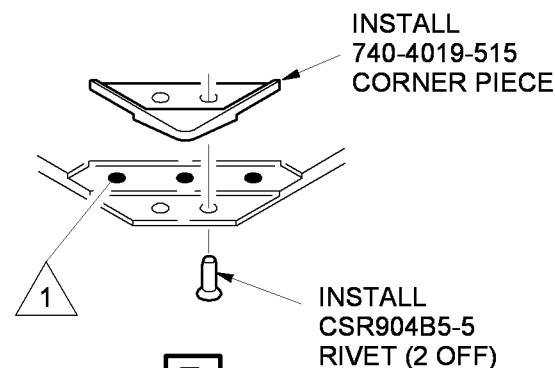
**C**  
BEFORE



**C**  
AFTER



**D**  
BEFORE



**D**  
AFTER

**NOTE:**  
FILL VACANT FASTENER HOLES  
WITH SCOTCH-WELD 2216 B/A ADHESIVE.

Replacement of the Fan Cowl Door Corner Pieces  
Figure 1 sheet 2