



850 LAGOON DRIVE  
CHULA VISTA, CALIFORNIA 91910-2098

## V2500 Nacelle Systems Modification SERVICE BULLETIN

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September 30, 2009

Subject: Service Bulletin V2500-NAC-71-0266  
Revision 2 , Dated September 30, 2009

The subject Service Bulletin (Revision 2) is being transmitted.

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Mitch McKay  
V2500 Product Support

### Summary of Changes:

<u>Event</u>	<u>Date</u>
Original Issue	January 19, 2002
Revision 1	July 26, 2002
Revision 2	September 30, 2009

### Reasons for issuance of Revision:

- (1) 2.B 'Parts affected by the bulletin' revised to remove reference to part number 745-3170-503U and to include disposition code 'C' for part number 745-3170-503.
- (2) 3.B 'Rework Instructions' step (2) revised to read '745-3170-503 (undrilled)'.
- (3) 3.B 'Rework Instructions' steps (3), (8), (10), (13) and (17) revised to read '745-3170-503'.
- (4) 3.B 'Rework Instructions' Figure 1 revised to read '745-3170-503 (undrilled)'.

### Effect on Past Compliance:

No effect.

### List of Effective Pages:

<u>Page No.</u>	<u>Rev No.</u>	<u>Date</u>
1 thru 8	Revision 2	September 30, 2009

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### NACELLE – INLET COWL – T.A.I. EXHAUST ACCESS PANEL – REPLACEMENT OF

#### 1. Planning Information

##### A. Effectivity:

###### (1) Aircraft:

- a. Airbus A319
- b. Airbus A320
- c. Airbus A321

###### (2) Nacelle:

- a. V2500-A1 Nacelle - Air Intake Cowls Prior To Serial Number 1394001
- b. V2522-A5 Nacelle - Air Intake Cowls Prior To Serial Number 1394001
- c. V2524-A5 Nacelle - Air Intake Cowls Prior To Serial Number 1394001
- d. V2527-A5 Nacelle - Air Intake Cowls Prior To Serial Number 1394001
- e. V2527E-A5 Nacelle - Air Intake Cowls Prior To Serial Number 1394001
- f. V2527M-A5 Nacelle - Air Intake Cowls Prior To Serial Number 1394001
- g. V2530-A5 Nacelle - Air Intake Cowls Prior To Serial Number 1394001
- h. V2533-A5 Nacelle - Air Intake Cowls Prior To Serial Number 1394001

##### B. Concurrent Recommendation

Not Applicable

##### C. Reason:

- (1) Condition: Air exhausting from the T.A.I. Outlet Grille may cause a “whistling” noise that is audible in the Aircraft Cabin.
- (2) Problem: The T.A.I. Outlet Grille may cause a “whistling” noise audible in the Aircraft Cabin, and the Duct Vanes may crack at the welded joints where the Vanes meet the Plenum Duct Sides.
- (3) Cause: Investigation has identified this noise as emanating from the T.A.I. Outlet Grille.
- (4) Background: Several operators have reported “whistling” noises that are audible in the Aircraft Cabin and cracking of the welded joints at the Duct Vanes.
- (5) Objectives: To remove the “whistling” noise emanating from the T.A.I. Outlet Grill by the introduction of a new T.A.I. Exhaust Access Panel with revised welded vane edges.
- (6) Substantiation: The new T.A.I. Exhaust Access Panel has demonstrated acceptable noise levels during flight test trials.

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D. Description

(1) The change introduced by this Service Bulletin is as follows:

- (a) The T.A.I. Exhaust Access Panel is removed and a new T.A.I. Exhaust Access Panel with revised Outlet Grille is installed.

E. Approval

The technical content of this Service Bulletin has been approved under the authority of the EASA Design Organization Approval No. EASA.21J.031. In addition, the part number changes and/or part modifications that are given in sections 2 and 3 of this Service Bulletin comply with the applicable Federal Aviation Regulations and are FAA approved for the engine model(s) listed.

F. Compliance Category:

Category 7 - Accomplish when supply of superseded parts has been depleted.

G. Manpower

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

- (1) In Service – 3.5 hrs per translating sleeve

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

Modification Kit not required. Parts supplied as single line items

Operators with units listed in paragraph 1.A should submit a purchase order for the applicable quantity of parts. The purchase order must specify this Service Bulletin number and the parts listed herein. The parts to accomplish this Service Bulletin are available from Goodrich at website <http://parts.goodrich.com> or email [sparesales@goodrich.com](mailto:sparesales@goodrich.com).

I. Tooling

None required.

### J. Weight and Balance

- (1) Weight change..... None
- (2) Moment arm..... None
- (3) Datum..... Engine Front Mount Centerline  
(Powerplant Station PPS 100.00)

### K. References

- |                                                                     |          |
|---------------------------------------------------------------------|----------|
| A320/V2500-A1A319/A320/A321/V2500-A5 Engine Manual<br>(E-V2500-1IA) | 71-11-11 |
| Airbus Aircraft Modification No. 31822                              |          |
| Overhaul Processes and Consumable Index PCI-V2500-1IA               |          |
| IAE V2500 Standard Practices/Processes Manual, Chapter              | 70-09-00 |

### L. Other Publications Affected

<u>Publication</u>	<u>Chapter/Section</u>
A320/V2500-A1A319/A320/A321/V2500-A5 Engine Manual (E-V2500-1IA)	71-11-11
A320/V2500-A1A320-A321/V2500-A5 Engine Maintenance Manual (M-V2500-1IA)	71-11-11
A320-V2500A1 Power Plant Build-Up Manual (PPB-V2500-1IA)	71-00-02
A320/A321/V2500A5 Power Plant Build-Up Manual (PPB-V2500-2IA)	71-11-11
A319/V2522/V2524-A5 Engine Illustrated Parts Catalog (S-V2500-6IA)	71-11-11
A320-V2500-A1 Engine Illustrated Parts Catalog (S-V2500-1IA)	71-11-11
A320/V2527/V2527E-A5 Engine Illustrated Parts Catalog (S-V2500-7IA)	71-11-11
A321/V2530-A5 Engine Illustrated Parts Catalog (S-V2500-2IA)	71-11-11
A321/V2533-A5 Engine Illustrated Parts Catalog (S-V2500-5IA)	71-11-11

# GOODRICH AEROSTRUCTURES

## V2500 Nacelle Systems Modification SERVICE BULLETIN

### 2. Material Information

Applicability: For each V2500-A1/A5 Nacelle to incorporate this Bulletin.

#### A. Kits Required Consist of the Following Parts:

Not applicable.

#### B. Parts affected by this Service Bulletin:

NEW PART No (ATA No)	QTY	EST'D UNIT PRICE (\$)	KEYWORD	OLD PART No (IPC No)	INSTR/DISPO
745-3170-503 (71-11-11)	1		.Panel, Access T.A.I. Exhaust	745-3170-501 (01-080A)	(A)(B)(C)(S1)

#### C. Instruction/Disposition Codes:

- (A) The new part is currently available.
- (B) New part for production is supplied drilled.
- (C) New part for in-service replacement is supplied undrilled.
- (S1) New part coded (S1) is fully interchangeable physically with old part coded (S1).

**NOTE:** The estimated 2009 unit price (if shown) is provided for planning purposes only and does not constitute a firm quotation. Consult the Goodrich Price Catalog or contact the Goodrich Spare Parts Sales Department for information concerning firm prices in this Service Bulletin.

#### D. Materials Required to do this Service Bulletin:

CoMat	01-438	Solvent
CoMat	02-099	Lint free cloth
CoMat	08-024	Jointing compound
CoMat	10-038	Petroleum Jelly

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

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Not subject to the EAR per 15 C.F.R. Chapter 1, Part 734.3(b)(3).

### 3. Accomplishment Instructions

#### A. Pre-requisite Instructions

**WARNING:** BE CAREFUL WHEN YOU WORK ON THE ENGINE COMPONENTS IMMEDIATELY AFTER THE ENGINE IS SHUTDOWN. THE ENGINE COMPONENTS CAN STAY HOT FOR UP TO ONE HOUR.

- (1) Put a warning notice on the 115VU Panel to tell persons not to start the engine 1(2).
- (2) Make sure that the engine 1(2) has been shutdown for at least five minutes.
- (3) Make sure that the ON legend on the ENG FADEC GND PWR push button switch is off on the 50VU Panel.
- (4) Install a warning notice on the 50VU Panel.

#### B. Rework Instructions

**NOTE:** THE NEW T.A.I ACCESS PANEL ASSEMBLY DOES NOT HAVE PRE-FABRICATED BOLT HOLES. THE ANCHOR NUTS ON THE INTERNAL V2500 INLET COWL STRUCTURE MAY BE POSITIONED DIFFERENTLY ON SOME AIRCRAFT. ATTACHMENT BOLT HOLES MUST BE FABRICATED ON THE NEW T.A.I ACCESS PANELS TO MATCH THE CORRESPONDING ANCHOR POINTS ON THE INLET COWL.

- (1) Remove 23 off NAS1581C3T7 Bolts to release the 745-3170-501 T.A.I. Exhaust Access Panel. Remove the T.A.I. Exhaust Access Panel from the Nose Cowl. Refer to Figure 1.
- (2) Make a mark of the hole pattern on the new 745-3170-503 (undrilled) T.A.I. Exhaust Access Panel identical to the hole pattern of the attaching locations on the Inlet Cowl (use the removed T.A.I. Exhaust Access Panel as a template).
- (3) Drill 23 off pilot holes 3/32" (2.4 mm) diameter through the 745-3170-503 T.A.I. Exhaust Access Panel.
- (4) Enlarge the pilot holes to 0.2047" +0.003" / -0.000" (5.20 mm +0.0762mm / -0.000mm) diameter on the T.A.I. Exhaust Access Panel.
- (5) Countersink the 23 off holes on the outer surface of the T.A.I. Exhaust Access Panel to suit NAS1581C3T7 Bolts. Remove all burrs from holes.

WARNING: 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.

- (6) Remove the old jointing compound from around the Nose Cowl at the T.A.I. Exhaust Access Panel interface with solvent (CoMat 01-438) and lint free cloth (CoMat 02-099). Wipe the area with a clean piece of lint free cloth before the solvent dries.

WARNING: OBEY THE PRECAUTIONS THAT FOLLOW WHEN YOU USE JOINTING COMPOUNDS:

- USE SAFETY GOGGLES
- PUT ON PROTECTIVE CLOTHING
- DO NOT LET JOINTING COMPOUND TOUCH YOUR SKIN, EYES AND MOUTH
- DO WORK IN AN AREA THAT HAS A GOOD FLOW OF AIR
- OBEY THE MANUFACTURER'S INSTRUCTIONS
- GET MEDICAL AID IF IRRITATION OCCURS

JOINTING COMPOUNDS CAN CAUSE INJURIES

- (7) Apply a thin layer of the jointing compound (CoMat 08-024) to the Nose Cowl interface aperture.
- (8) Apply a thin layer of Petroleum Jelly (CoMat 10-038) to the interface surface of the 745-3170-503 T.A.I Exhaust Access Panel.
- (9) Apply a thin layer of Petroleum Jelly (CoMat 10-038) to the 23 off NAS1581C3T7 Bolts.
- (10) Put the 745-3170-503 T.A.I. Exhaust Access Panel in the correct position and install with the NAS1581C3T7 Bolts.
- (11) Do a dimensional check of the T.A.I. Exhaust Access Panel aerodynamic clearances as instructed in the V2500 A5 Engine Manual, Chapter 71-11-11, subtask 71-11-11-220-052.
- (12) Let the T.A.I. Exhaust Access Panel remain in place for 30 minutes or until the Jointing Compound has set.
- (13) Remove the 745-3170-503 T.A.I Exhaust Access Panel.
- (14) Remove any traces of Petroleum Jelly from the Access Panel and Bolts with solvent (CoMat 01-438) and lint free cloth (CoMat 02-099).



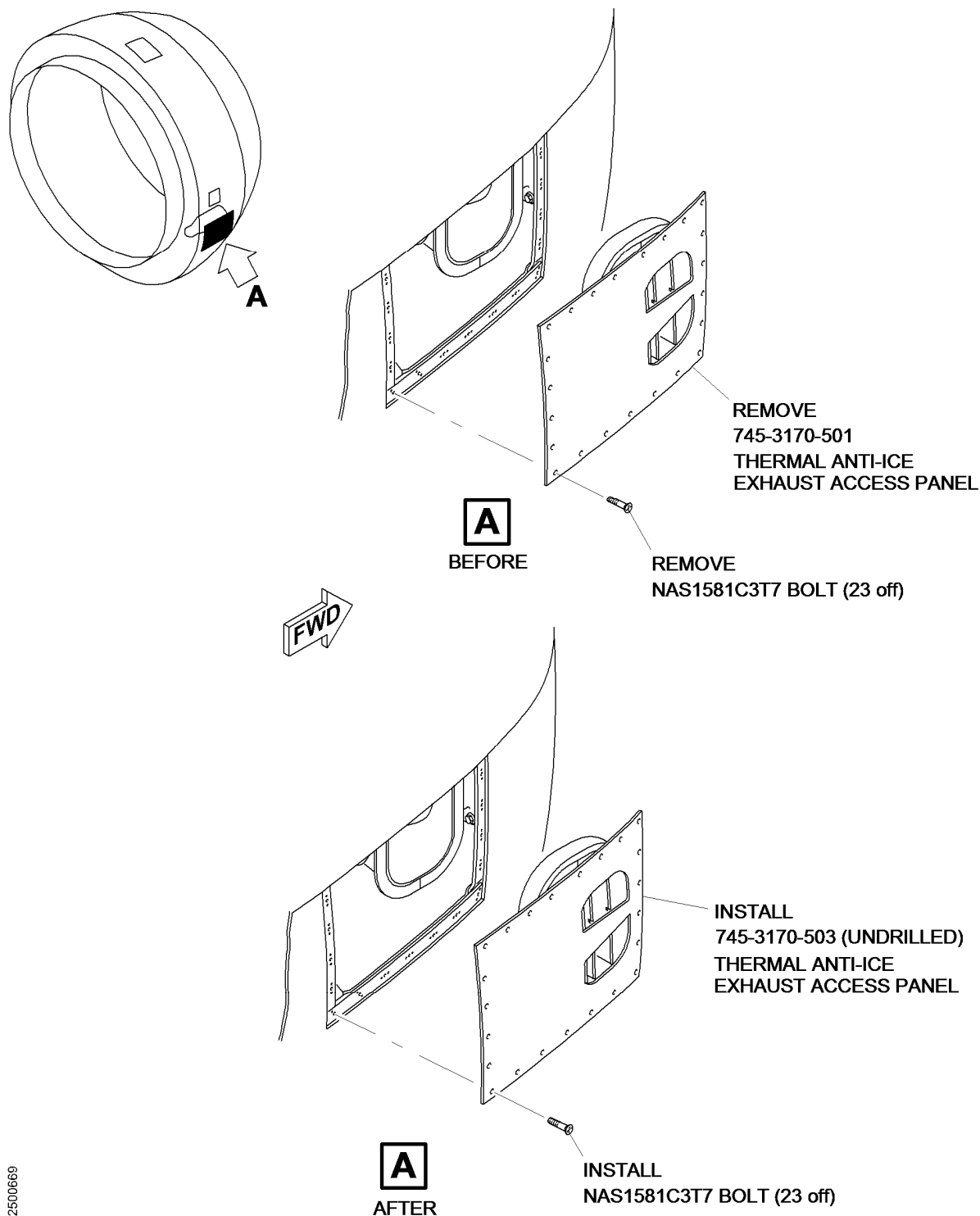
- (15) Wipe the area with a clean piece of lint free cloth before the solvent dries.
- (16) Remove any unwanted jointing compound.
- (17) Install the 745-3170-503 T.A.I. Exhaust Access Panel with 23-off NAS1581C3T7 Bolts. Torque the bolts to 26 lbin (3.0 Nm).

C. Post-requisite Instructions

- (1) Remove the warning notices.

D. Recording Instructions

Write in the Aircraft Log Book or other records and metal stamp, vibroetch or electroetch on the Inlet Cowl data plate that Service Bulletin V2500-NAC-71-0266 has been done. Refer to the IAE V2500 Standard Practices/Processes Manual, Chapter 70-09-00.



**Removal and Installation of the T.A.I Exhaust Access Panel.  
Figure 1 (Sheet 1 of 1)**

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