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DATE: Apr. 7/08

## V2500-A5 SERIES PROPULSION SYSTEM SERVICE BULLETIN

This document transmits Revision 1 to Service Bulletin V2500-ENG-71-0311

**Document History** 

Service Bulletin Revision Status

Initial Issue Mar. 4/08

Service Bulletin Revision 1

Remove Incorporate Reason for change

All pages of the Pages 1 to 12 of the Service Bulletin

Service Bulletin Service Bulletin and the Appendix and the Appendix

V2500-ENG-71-0311

To extend the Effectivity

CHECK THAT ALL PREVIOUS TRANSMITTALS HAVE BEEN INCORPORATED If any have not been received please advise Customer Data Services, Rolls-Royce plc, Derby, England © Rolls-Royce plc (date as above) Printed in Great Britain





# ENGINE - INSTALLATION OF CABLE WRAP ON THE ENGINE SYSTEM DRAIN PIPES (FOR CONTROLLED SERVICE USE)(BANGKOK AIRWAYS ONLY)

#### 1. Planning Information

#### A. Effectivity

Printed in Great Britain

R

- (1) Airbus A319 operated by BANGKOK AIRWAYS only.
  - (a) V2524-A5 Engine Serial Numbers V12612, V12614, V12858, V12860, V12862, V12865, 12882 and 12890.
- (2) Airbus A320 operated by BANGKOK AIRWAYS only.
  - (a) V2527-A5 Engine Serial Numbers V11720, V11772, V11774, V11986, V12013 and V12193.

NOTE: This hardware is installed for controlled service use.

#### B. Concurrent Requirements

None.

## C. Reason

#### (1) Problem

Some operators have experienced a hard foul between the #3 Latch on the Fan Cowl Door and the Hydraulic Pump Drains Line when the Door is being fully closed.

# (2) Background

Airlines have experienced excessive wear of the Hydraulic Pump Drains Line in way of the #3 Latch on the Fan Cowl Door.

#### (3) Objective

This Controlled Service Use (CSU) Service Bulletin will evaluate wear characteristics of the cable wrap and determine if the application of the wrap can extend the life of the hydraulic pipe.

#### (4) Substantiation

Not applicable.

Mar. 4/08

Apr. 7/08 Revision 1

V2500-ENG-71-0311

Page 1 of 12



- (5) Effect of Bulletin on:
  - (a) Operation

Not affected.

(b) Maintenance

Not affected.

(c) Overhaul

Not affected.

(d) Repair Schemes

Not affected.

(e) Interchangeability

Not affected.

(f) Fits and Clearances

Not affected.

(6) Supplementary Information

None.

# D. <u>Description</u>

Part A:

The hydraulic pipe is inspected and the findings recorded. The spirap is fitted to the hydraulic pipe and secured with tie wraps.

Part B:

The hydraulic pipe and the spirap are inspected before  $600 \, \text{FH} / 100 \, \text{days} / 750 \, \text{FC}$ , whichever comes first. The findings are recorded. The spirap is removed from the pipe before  $1800 \, \text{FH} / 300 \, \text{days} / 2250 \, \text{FC}$ , whichever comes first.

## E. Compliance

Category Code 8

This Service Bulletin is released for purposes of controlled service installation with BANGKOK AIRWAYS.

Mar. 4/08

Apr. 7/08 Revision 1



#### F. Approval

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

The authorising IAE document is EC 08VN811.

#### G. <u>Manpower</u>

Estimated man-hours to incorporate the intent of this Service Bulletin on each engine:

Part A: Inspection of pipe and installation of the spirap.

- (1) In Service
  - 1.5 hours.
- (2) At Overhaul

Not applicable.

Part B: Inspection of pipe and the spirap before 600 FH / 100 days / 750 FC whichever comes first, from installation of the spirap.

- (1) In Service
  - 0.5 hours.
- (2) At Overhaul

Not applicable.

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

H. Material Price and Availability

None.

I. Tooling Price and Availability

None.

J. <u>Industry Support Information</u>

Not applicable.

K. Weight and Balance

Not affected.

Mar. 4/08

Apr. 7/08 Revision 1



L. Electrical Load Data

Not affected.

M. Software Accomplishment Summary

Not applicable.

## N. References

- (1) Airbus A320/V2500-A1 A319/A320/A321/V2500-A5 Aircraft Maintenance Manual.
- (2) Airbus A320/V2500-A1 A319/A320/A321/V2500-A5 Component Maintenance Manual.
- (3) IAE V2500 Overhaul Processes and Consumables Index PCI-V2500-1IA, Section II.
- (4) Engineering Change 08VN811.
- (5) ATA Locator 71-00-00.
- O. Other Publications Affected

None.

P. Interchangeability of Parts

Not applicable.

Mar. 4/08

Apr. 7/08 Revision 1



## 2. Material Information

A. Kits associated with this Bulletin:

None.

B. Parts affected by this Bulletin:

None.

C. <u>Instruction/Disposition Codes</u>

None.

D. <u>Materials required to incorporate this Bulletin:</u>

CoMat N/A	1 Box	Spirap Part Number 500024-1 (Material Code 062512)	M+M Aerospace Hardware Inc 10000 NW 15th Terrace 025263 Miami, FL, US 33172-5263 Tele 305 925 2600 Fax 305 507 7193
CoMat N/A	2	Tie Wrap Part Number MS3367-1-9	M+M Aerospace Hardware Inc 10000 NW 15th Terrace 025263 Miami, FL, US 33172-5263 Tele 305 925 2600 Fax 305 507 7193
CoMat 01-076	A/R	Methylethylketone (MEK)	N/A
CoMat 01-124	A/R	Isopropyl Alcohol	N/A
CoMat 02-099	A/R	Lint free cloth	N/A

NOTE: Refer to the Overhaul Processes and Consumables Index PCI-V2500-1IA to identify the consumable materials.

Mar. 4/08

Apr. 7/08 Revision 1

#### 3. Accomplishment Instructions

PART A: Inspection of pipe and installation of spirap.

A. Pre-requisite Instructions

None.

B. Rework 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.

- (1) Open the Fan Cowl Doors as instructed in the A320/V2500-A1 A319/A320/A321/V2500-A5 Aircraft Maintenance Manual, Task 71-13-00-010-010.
- (2) Inspect the drain pipe, P/N 740-5698-509 as instructed in the A320/V2500-A1 A319/A320/A321/V2500-A5 Component Maintenance Manual (CMM-THD-V2500-1IA), Chapter 71-73-48. Refer to Figure 1.
- (3) Make a note on the Data Recording Sheet of existing allowable damage or wear on the drain pipes prior to the installation of the spirap. Clearly state in the comments where the damage or wear has occurred (take the pipe union as your datum) and the amount of damage and wear.

WARNING: SOLVENT (COMAT 01-076 OR COMAT 01-124) 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.

- (4) Use a clean lint free cloth (CoMat O2-099) made moist with solvent (CoMat O1-076 or CoMat O1-124) and remove dirt and grease from the surfaces of the drain pipes identified in Figure 1. Wipe the area dry before the solvent becomes dry.
- (5) Apply two layers of spirap, P/N 500024-1 around the pipe between the pipe union and the first clipping point.
- (6) Secure the spirap to the pipe with two tie wraps, P/N MS3367-1-9 fitted approximately 0.75in. (19,0 mm) from the Pipe Union and approximately 0.75in. (19,0 mm) from the first clipping point.
- (7) Close the Fan Cowl Doors as instructed in the A320/V2500-A1 A319/A320/A321/V2500-A5 Aircraft Maintenance Manual, Task 71-13-00-410-010.

Mar. 4/08

Apr. 7/08 Revision 1



C. Post-requisite Instructions

None.

D. Recording Instructions

A record of accomplishment is necessary.

Write in the Aircraft Log Book that Service Bulletin V2500-ENG-71-0311 PART A has been done.

Mar. 4/08

Apr. 7/08 Revision 1

PART B: Inspection of pipe and spirap before 600 FH / 100 days / 750 FC whichever comes first, from installation of the spirap.

E. Pre-requisite Instructions

None.

F. Rework Instructions

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

- (1) Open the Fan Cowl Doors as instructed in the A320/V2500-A1 A319/A320/A321/V2500-A5 Aircraft Maintenance Manual, Task 71-13-00-010-010.
- (2) Visually inspect the Spirap on the drain pipe, P/N 740-5698-509 for signs of wear.
- (3) Make a record of any wear on Data Recording Sheet. Clearly state in the comments where the wear has occurred (take the pipe union as your datum) and the amount of wear and/or if the spirap has worn through to the pipe surface.
- (4) If the spirap is worn or damaged remove the spirap from the drain pipe and replace it as instructed in PART A (step 3.B.(4) thru step 3.B.(6)). Clearly state the findings in the Data Recording Sheet.
- (5) Close the Fan Cowl Doors as instructed in the A320/V2500-A1 A319/A320/A321/V2500-A5 Aircraft Maintenance Manual, Task 71-13-00-410-010.
- (6) Do a second inspection of the spirap as described in PART B (step 3.F.(1) thru step 3.F.(5)) before 600 FH / 100 days / 750 FC whichever comes first, from the first inspection.
- (7) Do a third inspection of the spirap as described in PART B (step 3.F.(1) thru step 3.F.(5)) before 600 FH / 100 days / 750 FC whichever comes first, from the second inspection.

Remove the spirap from the drain pipe, P/N 740-5698-509.

Use a clean lint free cloth (CoMat 02-099) made moist with solvent (CoMat 01-076 or CoMat 01-124) and remove dirt and grease from the surfaces of the drain pipes identified in Figure 1. Wipe the area dry before the solvent becomes dry.

Finally close the Fan Cowl Doors as described in PART B step 3.F.(5).

Mar. 4/08

Apr. 7/08 Revision 1



(8) Report the results to:

Customer Support

**Bombardier Shorts** 

P0 Box 241

Belfast BT3 9DZ

Northern Ireland

Tel: +44 2890 462404

Fax: +44 2890 733253

Email: belfast.technical.support@aero.bombardier.com

G. Post-requisite Instructions

None.

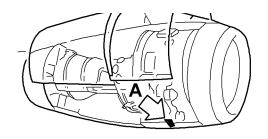
H. Recording Instructions

A record of accomplishment is necessary.

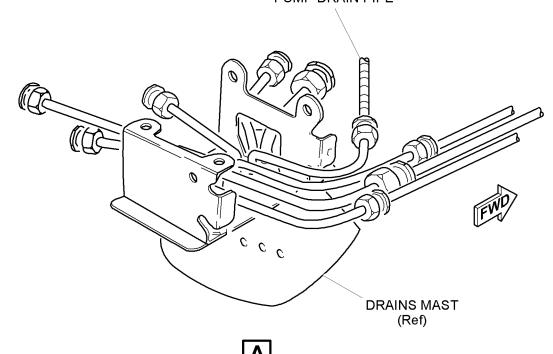
Write in the Aircraft Log Book that Service Bulletin V2500-ENG-71-0311 PART B has been done.

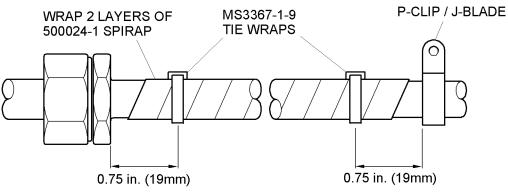
Mar. 4/08

Apr. 7/08 Revision 1



740-5698-509 HYDRAULIC PUMP DRAIN PIPE





TYPICAL SPIRAP INSTALLATION

Installation of the Spirap to the Drain Tube Figure 1

Mar. 4/08

Apr. 7/08 Revision 1

V2500-ENG-71-0311

Page 10



# Appendix to Service Bulletin V2500-ENG-71-0311

This Appendix supplies a Data Recording Sheet for the Hydraulic Pump Drain Pipe affected by the Fan Cowl Door #3 Latch foul. Complete and return to Bombardier Shorts as instructed.

Mar. 4/08

Apr. 7/08 Revision 1



# DATA RECORDING SHEET

# FOR SB V2500-ENG-71-0311 CONTROLLED SERVICE USE

740-5698-509 Drain Pipe

Part A					
REMARKS:					
Allowable damage to pipe					
prior to installation of					
spirap					
OPERATOR:					
ENG. S/N: A/C No					
Part B					
REMARKS:					
Condition of pipe and Spirap					
at 600FH/100days/	/				
750FC Check					
DATE:					
INSPECTOR:					

Mar. 4/08

Apr. 7/08 Revision 1