

SERVICE BULLETIN

NON-MODIFICATION SERVICE BULLETIN — NACELLE — HYDRAULIC SYSTEM — REPLACEMENT OF SUSPECT PACKING ON THE ENGINE DRIVEN HYDRAULIC PUMP PRESSURE SWITCH

<u>MODEL APPLICATION</u> V2522-A5, V2524-A5, V2527-A5, V2527E-A5, V2527M-A5, V2530-A5, V2533-A5

BULLETIN ISSUE SEQUENCE

V2500 Series 29-0267

ATA NUMBER

29-11-17

29-13-17

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Compliance Category

3

P&W Distribution Code

V2500

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Summary

The purpose of this Non-Modification Service Bulletin (NMSB) is to provide instruction for the replacement of a suspect packing installed on the engine driven hydraulic pump pressure switch that may allow hydraulic fluid leakage.

NOTE:

Operators that have done Reference 6, "Recommended Operator Action" in the All Operator Letter PUB0002842 (issued August 10, 2018 by UTC Aerospace Systems) have carried out the intent of this Service Bulletin. Do Part 4 'Recording Instructions' in the Accomplishment Instructions section of this Service Bulletin only.

Planning Information

Effectivity Data

Engine Models Applicable

V2522-A5, V2524-A5, V2527M-A5, V2527-A5, V2527E-A5, V2530-A5, V2533-A5 Any engine that has a serial number listed in Table 1.

Table 1: Aircraft and Engine Serial Numbers

MSN	Engine Serial No.	MSN	Engine Serial No.	MSN	Engine Serial No.	MSN	Engine Serial No.
8111	V18711	8163	V18754	8271	V18771	8336	V18793
8111	V18750	8163	V18729	8271	V18773	8336	V18795
8114	V18732	8169	V18753	8241	V18772	8328	V18796
8114	V18738	8169	V18755	8241	V18774	8328	V18797
8115	V18721	8223	V18747	8296	V18775	8347	V18801
8115	V18722	8223	V18748	8296	V18779	8347	V18804
8130	V18744	8236	V18752	8295	V18780	8355	V18803
8130	V18723	8236	V18756	8295	V18778	8355	V18802
8141	V18730	8183	V18737	8305	V18786	8362	V18805
8141	V18731	8183	V18739	8305	V18787	8362	V18806
8143	V18735	8238	V18759	8311	V18788	8401	V18813
8143	V18736	8238	V18765	8311	V18789	8401	V18815
8151	V18726	8216	V18768	8327	V18791		
8151	V18727	8216	V18767	8327	V18790		
8160	V18749	8244	V18769	8325	V18792		
8160	V18751	8244	V18770	8325	V18794		

Concurrent Requirements

There are no concurrent requirements.

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Reason

- 1. Condition: Hydraulic fluid leaks have been attributed to a suspect packing installed on the engine driven hydraulic pump pressure switch.
- Background: There have been two reports of in-flight hydraulic system leaks from the
 engine driven hydraulic pump pressure switch. This has been attributed to a suspect
 packing installed on the engine driven hydraulic pump pressure switch that did not
 meet the packing material specifications.
- 3. Objective: This NMSB provides instructions for replacement of a suspect packing installed on the engine driven hydraulic pump pressure switch for the engine serial numbers shown in the Table 1 in the Effectivity section.
- 4. Substantiation: The instructions contained in this NMSB returns the engine driven hydraulic pump pressure switch to the current engineering design.
- 5. Effects of Bulletin on:

Removal/Installation: Not Affected.

Disassembly/Assembly: Not Affected.

Cleaning: Not Affected.

Inspection/Check: Not Affected.

Repair: Not Affected.

Testing: Not Affected.

6. Supplemental Information

None.

Description

Replace the suspect packing with a new non-suspect packing.

Compliance

Category 3

Accomplish within 750 flight hours, 750 flight cycles, or 4 months of receipt of this Non-Modification Service Bulletin, whichever comes first.

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Approval Data

The technical content of this document under JAR 25 is approved under the authority of DOA ref. EASA.21J.031.

The compliance statement and the procedures described in this Service Bulletin have been shown to comply with the applicable Federal Aviation Regulations and are FAA-APPROVED for the engine model listed.

The Aircraft Type Certificate (TC) holder has been informed of this change.

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Manpower

1.

For Engines Installed On Aircraft						
A.	To Gain/Close Access					
B.	To Remove the Engine Driven Hydraulic Pump Pressure Switch 0.5 hours.					
C.	To Install the Engine Driven Hydraulic Pump Pressure Switch . 1.5 hours.					
D.	Total Necessary Man-Hours					

2. At Overhaul

......Not Applicable.

Weight and Balance

1. Weight Change

None.

Moment Arm

No Effect.

3. Datum

Engine Front Mount Centerline (Power Plant Station (PPS) 100)

Electrical Load Data

This Service Bulletin has no effect on the aircraft electrical load.

Software Accomplishment Summary

Not Applicable.

References

NOTE:

In 2014 IAE converted the V2500 Technical Publications to a new system. As a result of the conversion, some manuals were consolidated. All manuals received new P&W part numbers. To facilitate the use of this Service Bulletin, a Technical Publications conversion table is provided in the Appendix.

- 1. ATA Locator 29-11-17 and 29-13-17.
- Internal Reference No. 18VN812.
- V2500 Standard Practices and Processes, P&W Ref. PN 2A4414, Chapter/Section 70-00-00.
- 4. V2500-A5 Series Illustrated Parts Catalog, P&W Ref. PN 2A4428, Chapter/Section 29-11-17 and 29-13-17.
- 5. A320/A321 Airbus Aircraft Maintenance Manual (AMM), Chapter/Section 29-11-17, 29-13-17.
- 6. UTAS All Operators Letter (AOL) PUB0002842.

Other Publications Affected

Not Applicable.

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Interchangeability of Parts

Not Applicable.

Information in the Appendix

Alternate Accomplishment Instructions (No)

Progression Charts (No)

Added Data (Yes)

Revision to Table of Limits (No)

Inspection Procedures (No)



Material Information

Material — Price and Availability

- 1. There is no kit provided to do this Service Bulletin.
- 2. Part availability information is provided in material data Instructions Disposition.

Industry Support Program

To provide support to the affected operators, UTAS will provide free-of-charge packings. Operators should submit a "no charge" purchase order that includes one packing per engine and an additional spare packing per every two engines (three total per affected MSN). The purchase order must specify this Service Bulletin number and only the parts listed herein

The material data that follows is for each engine.

For V2522-A5, V2524-A5, V2527-A5, V2527E-A5, V2527M-A5, V2530-A5, V2533-A5 Engines:

New PN	Qty	Estimate of Unit Price (\$)	Keyword	Old PN	Instructions — Disposition
	1	*	PACKING	100-910-2397 (29-11-17-80A-020) (29-13-17-80A-020)	(4)(A)(S)

Instructions/Disposition Code Statements:

Parts Modification Conditions

Estimated part prices are provided when they are available at time of publication. The Estimate of Unit Price is only for planning purposes and does not constitute a firm quotation. An asterisk (*) is shown where part pricing information was unavailable. In either case, contact UTAS Spares for firm quotations.

(4) Do an replacement as specified in the Accomplishment Instructions.

Spare Parts Availability

- (A) The part is available.
- (S) Procure the part directly from the Supplier referenced in Vendor Services or Special Components.

Vendor Services or Special Components/Materials



Vendor Services or Special Components/Materials

P&W Designation	Vendor Designation	Name	Vendor Name & Address		
100-910-2397	100-910-2397	Packing	UTC Aerospace Systems (UTAS) - Aerostructures Group 850 Lagoon Drive Chula Vista, CA 91910–2098 USA		
Vendor Manu	Vendor Manufacturer's Code: 73030				

See Illustrated Parts Catalog Vendor Manufacturer's Code List

NOTE: Direct the purchase order to UTAS. Please do not submit purchase orders for

packings via iSpec 2000 Ordering System or Internet Portal. Purchase Orders for packings should be submitted via email attachment to sparesales@utas.utc.com

NOTE: EXCEPT FOR WORK OR SUPPLIES TO BE PERFORMED OR FURNISHED

BY IAE, IT IS UNDERSTOOD THAT IAE DOES NOT ENDORSE THE WORK PERFORMED BY THE COMPANY OR COMPANIES NAMED HEREIN OR ANY OTHER COMPANY AND DOES NOT ACCEPT RESPONSIBILITY TO ANY DEGREE FOR THE SELECTION OF SUCH COMPANY OR COMPANIES FOR THE PERFORMANCE OF ANY WORK OR PROCUREMENT OF SUPPLIES.

Tooling — Price and Availability

Special tools are not required to accomplish this Service Bulletin.

Reidentified Parts

Not Applicable.

Other Material Information Data

Not Applicable.



Accomplishment Instructions

For Engines Installed On Aircraft

NOTE: Operators that have done Reference 6, "Recommended Operator Action" in the All Operator Letter PUB0002842 (issued August 10, 2018 by UTC Aerospace Systems) have carried out the intent of this Service Bulletin. Do Part 4 'Recording Instructions'

in the Accomplishment Instructions section of this Service Bulletin only.

WARNING: MAKE SURE THAT THE ENGINE IS SAFE FOR MAINTENANCE. THIS

WILL PREVENT INJURIES TO PERSONNEL AND/OR DAMAGE TO THE

EQUIPMENT.

OBEY THE HYDRAULIC SAFETY PROCEDURES.

DO NOT GET HYDRAULIC FLUID ON YOUR SKIN, IN YOUR EYES OR IN YOUR MOUTH. HYDRAULIC FLUID IS POISONOUS AND CAN GO THROUGH YOUR SKIN AND INTO YOUR BODY. FLUSH HYDRAULIC FLUID FROM YOUR EYES, MOUTH OR SKIN WITH WATER. GET MEDICAL AID IF YOU GET

HYDRAULIC FLUID IN YOUR EYES OR MOUTH.

CAUTION: DO NOT LET HYDRAULIC FLUID FALL ON THE ENGINE. UNWANTED

HYDRAULIC FLUID MUST BE REMOVED IMMEDIATELY WITH A CLEAN LINT FREE CLOTH. THE FLUID CAN CAUSE DAMAGE TO THE SURFACE

PROTECTION AND TO SOME PARTS.

Gain access to the engine as follows:

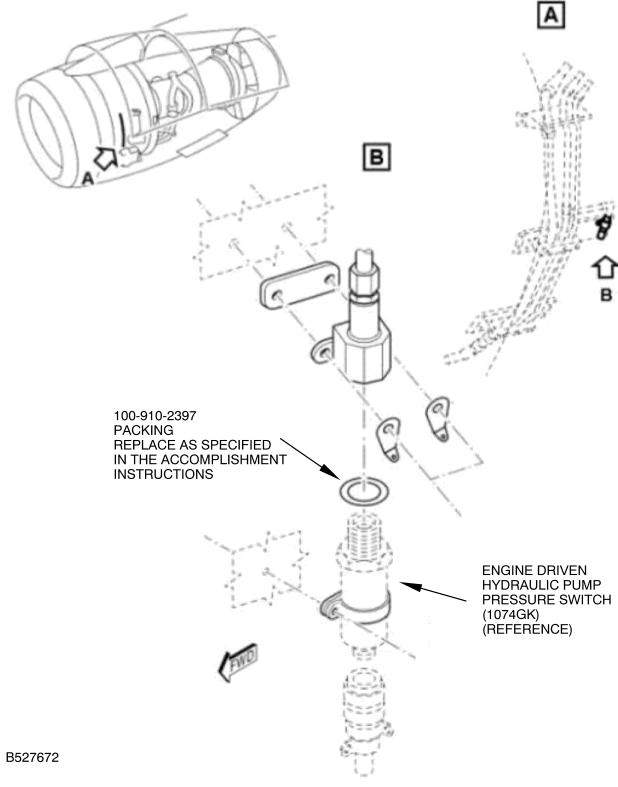
A. Open the fan cowl doors as specified in Reference 5, AMM Task 71-13-00-010-010.

2. Replace the engine driven hydraulic pump pressure switch packing as follows:

A. Remove the engine driven hydraulic pump pressure switch as specified in Reference 5, AMM Task 29-13-17-000-010 or Task 29-13-17-000-010. See Figure 1.

- B. Remove and discard the suspect Packing, PN 100-910-2397.
- C. Install a non-suspect Packing, PN 100-910-2397 and engine driven hydraulic pump pressure switch as specified in Reference 5, AMM Task 29-13-17-400-010 or Task 29-13-17-400-010.
- Close access to the engine as follows:
 - A. Close the fan cowl doors as specified in Reference 5, AMM Task 71-13-00-410-010.
- 4. Recording Instructions
 - A. A record of accomplishment is required.





LOCATION OF THE PACKING 29-11-17 AND 29-13-17 FIGURE 1

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<u>Appendix</u>

Added Data

Internal Reference Information

Revision No.	Reference Document	Origination	
Original	EA 18VN812	PJ/PM	

Number values shown in parentheses adjacent to U.S. values are International System of units (SI) equivalents.

To calculate part life, include the hours and/or cycles since the part was made. Use the total hours or cycles to calculate life limits that are the result of part modification, a part used in an engine with different thrust, or for some other reason.

NOTE:

In 2014 IAE converted the V2500 Technical Publications to a new system. As a result of the conversion, some manuals were consolidated. All manuals received new P&W part numbers. To facilitate the use of this Service Bulletin, the following Technical Publications cross reference table is provided.

Technical Publications Cross Reference Table

Publication	Engine Model(s)	IAE IETM Pub Ref	P&W Part Number
ENGINE MANUAL — A1, A5	All	E-V2500-1IA	2A4407
CMM-EHC — A1, A5	All	EHC-V2500-1IA	2A4409
CMM-FN — A1, A5	All	FN-V2500-1IA	2A4410
CMM-MMC — A1, A5	All	MECH-V2500-1IA	2A4411
CMM-THD — A1, A5	All	THD-V2500-1IA	2A4412
TLM — A1, A5	All	T-V2500-1IA	2A4408
SPPM (SPM) — A1, A5, D5	All	SPP-V2500-1IA	2A4414



Publication	Engine Model(s)	IAE IETM Pub Ref	P&W Part Number
	V2522/V2524/V2527M-AQ02	S-V2500-6IA	
	V2522/V2524/V2527M-AQ03	S-V2500-6IB	
	V2522/V2524/V2527M-SQ02	S-V2500-6SA	
	V2522/V2524/V2527M-SQ03	S-V2500-6SB	
	V2522/V2524/V2527M-SQ04	S-V2500-6NA	
	V2522/V2524/V2527M-SQ05	S-V2500-6NB	
	V2527/V2527E-AQ02	S-V2500-7IA	
	V2527/V2527E-AQ03	S-V2500-7IB	
	V2527/V2527E-SQ02	S-V2500-7SA	
	V2527/V2527E-SQ03	S-V2500-7SB	
	V2527/V2527E-SQ04	S-V2500-7NA	
	V2527/V2527E-SQ05	S-V2500-7NB	0.4.400
EIPC — A5	V2530-AQ02	S-V2500-2IA	2A4428
	V2530-AQ03	S-V2500-2IB	
	V2530-SQ02	S-V2500-2SA	
	V2530-SQ03	S-V2500-2SB	
	V2530-SQ04	S-V2500-2NA	
	V2530-SQ05	S-V2500-2NB	
	V2533-AQ02	S-V2500-5IA	
	V2533-AQ03	S-V2500-5IB	
	V2533-SQ02	S-V2500-5SA	
	V2533-SQ03	S-V2500-5SB	
	V2533-SQ04	S-V2500-5NA	
	V2533-SQ05	S-V2500-5NB	