SERVICE BULLETIN REVISION NOTICE

NACELLE – HYDRAULIC SYSTEM – REPLACEMENT OF UNION ON THE ENGINE DRIVEN PUMP (EDP) SUCTION LINE OUTLET

Turbojet Engine Service Bulletin No. V2500-NAC-29-0266 Revision No. 1 dated March 23, 2020

Revision History

Original Issue February 17, 2017

Revision 1 dated March 23, 2020

Reason for the Revision

To change the Effectivity Data to all V2500-A5 Engine Serial Numbers prior to V18356.

To change the Estimated Manpower Hours for in-service engine access and closure procedures added to the Accomplishment Instructions.

To restore the Union (5) torque specified in the Accomplishment Instructions to the Hydraulic System production drawing specification of 900 - 1000 lbf-in. (101.7 - 113.0 N.m).

To add engine access and closure procedures to the Accomplishment Instructions for in-service accomplishment of this service bulletin.

Effect of Revision on Prior Compliance

None.

This is a Complete Revision (Not Applicable to the SGML version)

The format of this Service Bulletin has been changed from previous versions. This revision shows flow bars and the revision date on the bottom of every page. Technical changes incorporated in this revision are marked with revision bars. The contents are in accordance with the list of effective pages.

Supplier Service Bulletin

V2500-NAC-29-0266

MODEL APPLICATION

V2522-A5, V2524-A5, V2527-A5, V2527E-A5, V2527M-A5, V2530-A5, V2533-A5

BULLETIN ISSUE SEQUENCE

V2500 Series 29-0266

Page	Revision No.	Date
1 thru 10	1	March 23/20

A copy of this Revision Notice and any future revision notices must be filed as a permanent record with your copy of the subject bulletin.

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ATA NUMBER

29-11-49

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Compliance Category

8

IAE Distribution Code

V2500

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Summary

The purpose of this Service Bulletin is to inform operators that when the current union on the EDP suction line outlet is removed that it should be replaced with the new union. Installation of the new union will improve hydraulic installation.

Planning Information

Effectivity Data

Engine Models Applicable

V2522-A5, V2524-A5, V2527M-A5, V2527-A5, V2527E-A5, V2530-A5, V2533-A5. Engine Serial No. All Engine Serial Numbers prior to V18356.

Concurrent Requirements

There are no concurrent requirements.

Reason

1. Condition: Clearance between the union on the EDP suction line outlet and adjacent hydraulic parts may be close to the minimum if the dampener is installed to Eaton EDPs (as per VSB V2500-NAC-29-0265 or MOD 159213).

   Additionally, for operators without Eaton EDPs fitted or with Eaton EDPs fitted that have not embodied VSB V2500-NAC-29-0265 or MOD 159213 (installation of dampener). It is acceptable to install the new union in lieu of the old union.

2. Background: A close to minimum clearance condition was observed between the Eaton EDP suction line union and adjacent hydraulic parts when the dampener is installed (as per VSB V2500-NAC-29-0265 or MOD 159213).

3. Objective: This Service Bulletin is to inform operators that when the current union on the EDP suction line outlet is removed that it should be replaced with the new union.

4. Substantiation: All hardware changes have been substantiated by satisfactory engineering analysis.

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

This Service Bulletin is to inform operators that have Eaton EDPs fitted and with VSB V2500-NAC-29-0265 or MOD 159213 (installation of dampener) embodied that the current union on the EDP suction line outlet should be replaced with the new union to improve clearances.

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Additionally, this Service Bulletin is to inform operators without Eaton EDPs fitted or with Eaton EDPs fitted that have not embodied VSB V2500-NAC-29-0265 or MOD 159213 (installation of dampener) that it is acceptable to replace the old union with the new union.

Compliance

Category 8 - Optional

Accomplish based upon experience with the prior configuration.

Approval Data

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

The part number changes and/or part modifications specified in the Accomplishment Instructions and Material Information sections of this Service Bulletin have been shown to comply with the applicable Federal Aviation Regulations and are FAA-APPROVED for the engine model(s) given.

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.

Manpower

1. In Service

   To gain access ..... 0.5 hours.

   To replace components ..... 0.25 hours.
   Total Man Hours ..... 0.75 hours.

2. At Overhaul

   To replace union ..... 0.25 hours.
   Total Man Hours ..... 0.25 hours.

NOTE: Estimated labor hours are for planning purposes only. Labor reimbursement is not provided under the terms of this service bulletin.

Weight and Balance

1. Weight Change

   None.

2. Moment Arm

   No Effect.

3. Datum

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

Electrical Load Data

Not Affected.

Software Accomplishment Summary

Not Applicable.

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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. This Service Bulletin is subject to aircraft modification N° 159675 P20085 (classified minor) and is covered by aircraft Service Bulletin N° A320-29-1170. Under no circumstances shall the modified equipment, by the result from the application of this SB, be installed on the aircraft type unless its aircraft SB is approved.
2. Internal Reference No. — EC 16VN306.
3. V2500 Standard Practices and Processes, (SPP-V2500-3IA), Chapter/Section 70-41-01, 70-41-02. and 70-64-02.
4. V2500-A5 Series Illustrated Parts Catalog, P&W Ref. PN 2A4428, Chapter/Section 29-11-49.
5. A319/A320/A321 Aircraft Maintenance Manual, Chapter/Section 71-13-00.
6. Bombardier Aerospace Modification D1349.
7. V2500 Service Bulletin V2500-NAC-29-0265.

Other Publications Affected

1. V2500-A1/A5 Component Maintenance Manual, Chapter/Section 29-11-49.
2. A318/A319/A320/A321 Aircraft Maintenance Manual. Refer to aircraft Service Bulletin N° A320-29-1170.

Interchangeability of Parts

Refer to aircraft Service Bulletin N° A320-29-1170.

Information in the Appendix

Alternate Accomplishment Instructions (No)

Progression Charts (No)

Added Data (Yes)

Revision to Table of Limits (No)

Inspection Procedures (No)

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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

Not Applicable.

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
MS21902J20	1	*	UNION	MS21924-20S or MS21924-20R (29-11-49-05-101)	(2)(A)(B)(C1)(S1)

Modification and Spares Information

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 AerostructureSupport@Collins.com for firm quotations.

(2) The new part is a replacement part only, and cannot be obtained by modification of the old part.

Spare Parts Availability

(A) The new part is available.

(B) Refer to aircraft Service Bulletin N° A320-29-1170 for procurement.

(C1) The old part will continue to be supplied. Either union part number can be used if no damper (refer to VSB NAC-29-0265) is installed.

(S1) Refer to aircraft Service Bulletin N° A320-29-1170 for interchangeability instructions.

Vendor Services or Special Components/Materials

Not Applicable.

Tooling — Price and Availability

Special tools are not required to accomplish this Service Bulletin.

Reidentified Parts

Not Applicable.

Other Material Information Data

Not Applicable.

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Accomplishment Instructions

1. Pre-requisite Instructions

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

WARNING: OBEY THE HYDRAULIC SAFETY PROCEDURES.

WARNING: 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.

A. Open the fan cowl doors. Refer Aircraft Maintenance Manual, TASK 71-13-00-010-010.

2. Rework Instructions

A. Removal of the union (3) from the EDP (ref). Refer to Figure 1.

(1) Put a suitable container below the coupling (2) / union (3) connection to the EDP.

(2) Hold the union (3) with an applicable wrench and disconnect the coupling (2) from the union.

(3) Let the hydraulic fluid flow into the container.

(4) With an applicable wrench, remove the union (3) and packing (4) from the EDP (ref).

(5) Discard the packing (4).

(6) Put a suitable protective cover on the end of the coupling (2) and the EDP (ref).

B. Installation of the new union (5) on the EDP (ref).

(1) Remove the covers from the new union (5), the coupling (2) and the EDP (ref).

(2) Lightly lubricate the threads and abutment faces of the union (5) and the coupling (2) with the hydraulic fluid used in the aircraft hydraulic system.

(3) Lubricate the new packing (4) with the hydraulic fluid used in the aircraft hydraulic system (ref SPM Task 70-44-01-400-501) and install the union (5) and packings (4) to the EDP.

(4) Torque the union (5) to 900 – 1000 lbf-in. (101.7 – 113.0 N.m).

(5) Connect the coupling (2) to the union (5).

(6) Hold the union (5) with an applicable wrench and with a second wrench, torque the connector nut of the coupling (2) to 800 – 900 lbf in. (90.4 – 101.7 Nm).

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3. Post-requisite Instructions

   A. Close the fan cowl doors. Refer Aircraft Maintenance Manual, TASK 71-13-00-410-010.

4. Recording Instructions

   A. A record of accomplishment is necessary. Write in the Engine Log Book that Service Bulletin V2500-NAC-29-0266 Revision 1 has been done.

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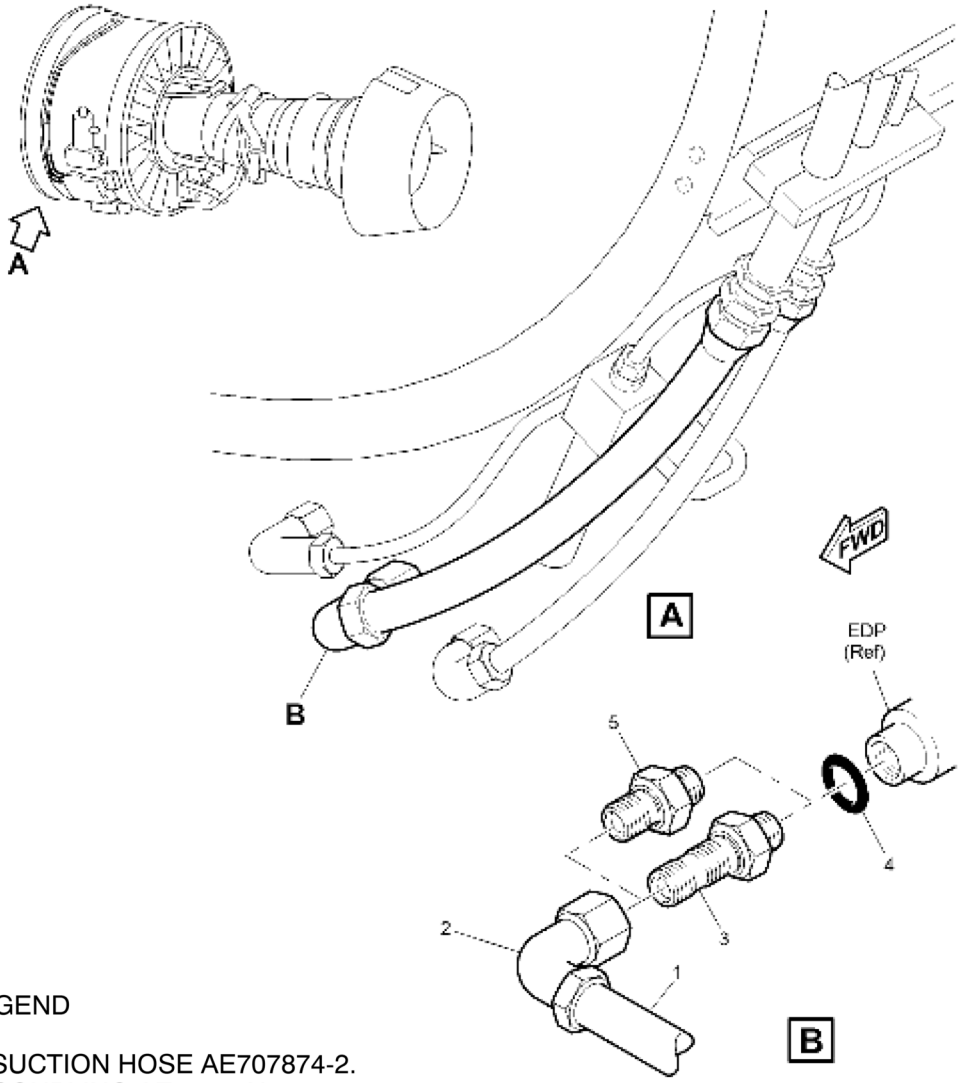

LEGEND

1. SUCTION HOSE AE707874-2.
2. COUPLING AE96787N.
3. UNION MS21924-20S OR MS21924-20R (PRE-MOD)
4. PACKING 100-920-2397.
5. UNION MS1902J20 (POST-MOD).

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REPLACEMENT OF EDP UNION
FIGURE 1

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Appendix

Added Data

Internal Reference Information

Revision No.	Reference Document	Origination
Original	EC16VN306	MM
1	EC16VN306	PJ/BAB

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

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
ENGINE MANUAL — D5	All	E-V2500-3IA	2A4416
CMM-EHC — D5	All	EHC-V2500-31A	2A4418
CMM-FN — D5	All	FN-V2500-3IA	2A4419
CMM-MMC — D5	All	MECH-V2500-3IA	2A4420
CMM-THD — D5	All	THD-V2500-3IA	2A4423
TLM — D5	All	T-V2500-3IA	2A4417
SPPM (SPM) — A1, A5, D5	All	SPP-V2500-1IA	2A4414
EIPC — A1	V2500-A1102Q00	S-V2500-1IA	2A4427

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Publication	Engine Model(s)	IAE IETM Pub Ref	P&W Part Number
EIPC — A5	V2522/V2524/V2527M-AQ02	S-V2500-6IA	2A4428
	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	
	V2530-AQ02	S-V2500-2IA	
	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	
EIPC — D5	V2525/V2528-AQ02	S-V2500-3IA	2A4426
	V2525/V2528-AQ03	S-V2500-3IB	
	V2525/V2528-AQ04	S-V2500-3IC	

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