



OIL - REPLACEMENT OF TWO OIL SCAVENGE TUBES ON THE EXTERNAL GEARBOX - CATEGORY CODE 4
- MOD.ENG-79-0026

1. Planning Information

A. Effectivity

- (1) Aircraft: Airbus A320
- (2) Engine: V2500-A1 Engines prior to Serial No.V0213

B. Reason

(1) Condition

Cracks may potentially occur in welded joints of the end fittings resulting in oil leakage.

(2) Background

Investigation of cracked tubes showed dimensional nonconformances resulting in additional tensional loads.

(3) Objective

To provide two oil scavenge tubes using a closely controlled manufacturing process to minimise tolerance buildup.

(4) Substantiation

None

(5) Effects of Bulletin on workshop procedures:

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

C. Description

Two scavenge tubes are replaced with two redesigned tubes.

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**D. Approval**

The Part Number Change and/or part modifications described in Sections 2 and 3 of this Service Bulletin have been shown to comply with the applicable Federal Aviation Regulations and are FAA-APPROVED for the Engine Model listed.

E. Compliance

Category Code 4

Accomplish at the first visit of an engine or module to a maintenance base capable of compliance with the accomplishment instructions regardless of the planned maintenance action or the reason for engine removal.

F. Manpower

Estimated manhours to incorporate the full intent of this Bulletin:

Venue	Estimated Manhours
(1) In service	TOTAL 1 hour
(a) To gain access 	15 minutes
(b) To embody 	15 minutes
(c) To return flyable status 	29 minutes
(d) To record 	1 minute
TOTAL	1 hour
(2) At overhaul	Not applicable

G. Material – Price and Availability

- (1) Modification Kit not required.
- (2) See "Material Information" section for prices and availability of future spares.

H. Tooling – Price and Availability

Special tools are not required.



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I. Weight and Balance

- | | |
|-------------------|---|
| (1) Weight change | None |
| (2) Moment arm | No effect |
| (3) Datum | Engine front mount centerline
(Powerplant Station (PPS) 100) |

J. Electrical Load Data

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

K. References

- (1) Internal Reference No.

EC89VF007

EC89VF007A
- (2) Other references

A320 Aircraft Maintenance Manual.

L. Other Publications Affected

- (1) The V2500 Illustrated Parts Catalog, Chapter/Section 79-22-48 will be revised to add the new tubes.
- (2) The V2500 Power Plant Illustrated Parts Catalog, Chapter/Section 79-22-48 will be revised to add the new tubes.

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2. Accomplishment Instructions

A. Rework Instructions

- (1) There are no rework instructions necessary for this Service Bulletin.

B. Pre-requisite instructions

- (1) Open the Fan Cowls by the approved procedure in Reference (1), Chapter/Section 71-13-00, Maintenance Procedures.
- (2) Drain the Scavenge Oil Filter by the approved procedure in Reference (1), Chapter/Section 12-13-79.
- (3) Disconnect the Electrical Connector (15) from the Oil Temperature Sensor. Refer to Figure 1.
- (4) Disconnect the tubes (16) and (17) from the Scavenge Oil filter Housing Assembly (12).

C. Disassembly/Assembly Instructions

- (1) Remove the 4B7128 or 4B7252 Oil Tube. Refer to Figure 1.
 - (a) Remove the three bolts (10) and the three washers (11).
 - (b) Remove the three bolts (1) the one washer (2) and the bracket (3) which attach the Oil Tube (21) to the Oil Tank.
 - (c) Loosen, but do not remove, the three bolts (20) which attach the Oil Tube (21) to the Scavenge Oil Filter Housing Assembly.
 - (d) Hold the Scavenge Oil Filter Housing Assembly and remove the three bolts (14) and the three washers (13).
 - (e) Remove the Scavenge Oil Filter Housing Assembly with the Oil Tube (21) from the Oil Tank.
 - (f) Remove the three bolts (20) and the three washers (19) and remove the Oil Tube (21) from the Oil Filter Housing Assembly.
 - (g) Remove and discard the packing (4) and (18).
- (2) Remove 4B7162 Oil Tube. Refer to Figure 1.

NOTE: Due to build tolerances it may be difficult to remove 4B7162 Oil Tube. If this occurs remove the Oil Tank by the approved procedure in Reference 1 Chapter/Section 79-11-41. It is not necessary to perform Subtask 79-31-15-020-400 and Subtask 79-11-51-020-400 Step (4) and (5).

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- (a) Remove the three bolts (8) and washers (7) that attach the Oil Tube (21) to the Oil Scavenge Pump.
- (b) Remove the Oil Tube (21).
- (c) Remove and discard the packings (9) and (5).
- (3) Discard 4B7128 or 4B7252 and 4B7162 Oil Tubes.
- (4) Install new 4B7248 Oil Tube. Refer to Figure 1.
 - (a) Install a new packings (9) and (5) on the flange of the tube seats, by the approved procedure in Reference (1), Chapter/Section 70-23-13, Maintenance Practices.
 - (b) Lubricate with V10-077 engine oil the tube seat on the Oil Scavenge Pump Flange. Refer to Aircraft Maintenance Manual, Chapter/Section 70-30-00, Consumable Materials Index.
 - (c) Put the flange of the new 4B7248 Oil Tube in to the seat on the Oil Scavenge Pump Flange.
 - (d) Secure the Tube with the three washers (7) and bolts (8).
 - (e) Tighten the bolts by hand.
 - (f) If required, Install oil tank by the approved procedure, Reference (1), Chapter/Section 79-11-41.
- (5) Install new 4B2262 Oil Tube. Refer to Figure 1.
 - (a) Install new packings (4) and (18) on the Oil tube (1) by the approved procedure in Reference (1) Chapter/Section 70-23-13, Maintenance Practices.
 - (b) Lubricate the Oil Tube mating faces on the Scavenge Oil Filter Housing Assembly and the Oil Tank Assembly using V10-077 lubricant (engine oil). Refer to Aircraft Maintenance Manual, Chapter/Section 70-30-00, Consumable Materials Index.
 - (c) Install the Oil Tube (21) on the Scavenge Oil filter Housing Assembly using three bolts (20) and the three washers (19). Tighten the bolts (20) by hand.
 - (d) Put the Scavenge Oil Filter Housing Assembly with the Oil Tube (1) in position on the Oil Tank.
 - (e) Align the Oil Tube Flange with the Flange on the Oil Tank.



- (f) Install the three bolts (14) and the three washers (13). Tighten the bolts (14) by hand.
- (g) Install the three bolts (1) the one washer (2) and the bracket (3) to attach the Oil Tube (21) to the Oil Tank.
- (h) Torque the bolts (14) to between 85 and 95 lbfin (9,6 to 10,7 Nm) (Refer to Aircraft Maintenance Manual Chapter/Section 70-23-11, Torque Tightening Technique).
- (i) Torque the bolts (1) and (20) to between 85 and 95 lbfin (9,6 to 10,7 Nm). (Refer to Aircraft Maintenance Manual Chapter/Section 70-23-11, Torque Tightening Technique).
- (j) Attach the Oil Tube (6) to the Scavenge Oil Filter Housing assembly using the three bolts (10) and the three washers (11).
- (k) Torque the bolts (10) and (8) to between 85 and 95 lbfin (9,6 to 10,7 Nm). (Refer to Aircraft Maintenance Manual Chapter/Section 70-23-11, Torque Tightening Technique).

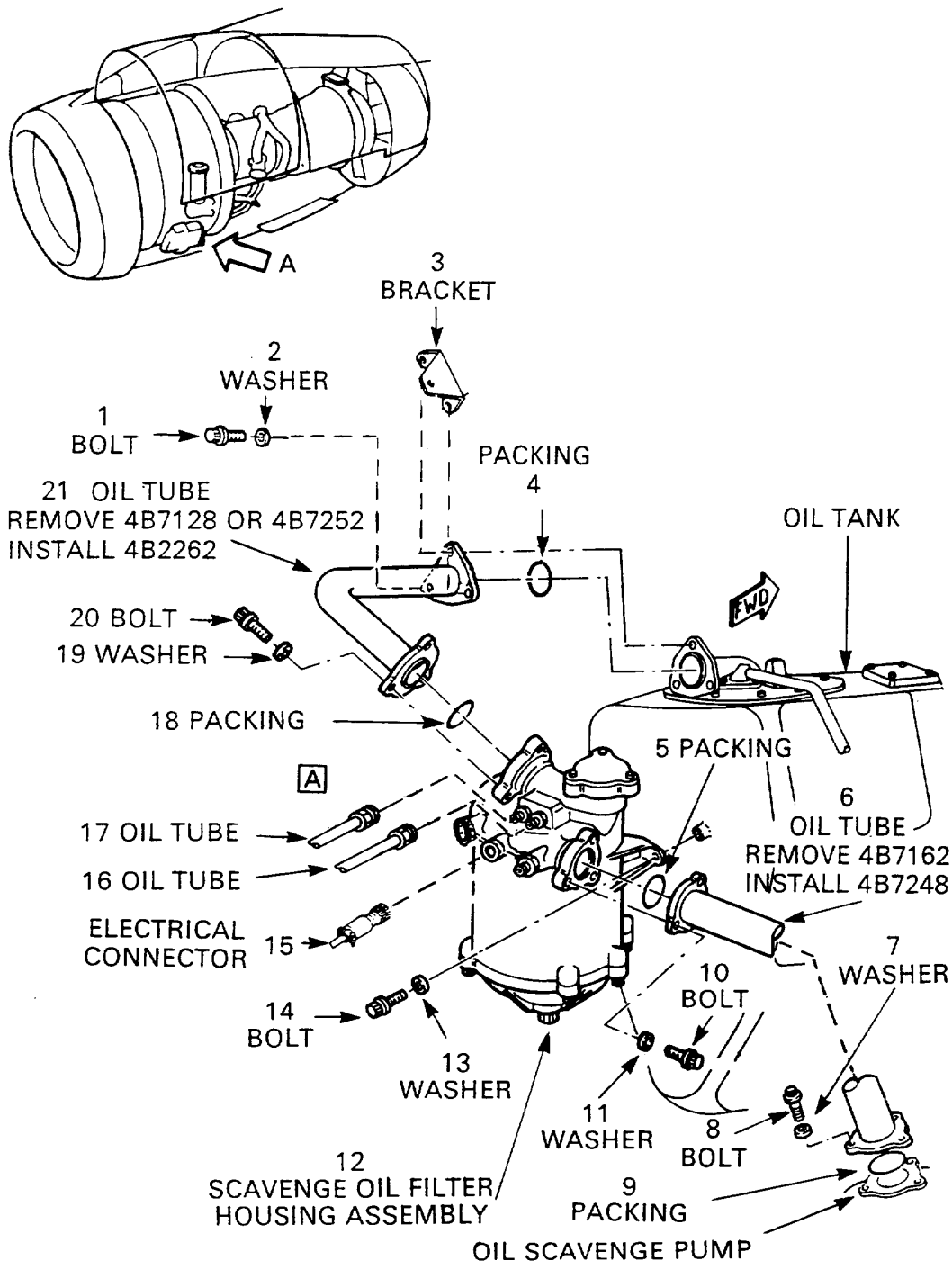
D. Post-requisite instructions

- (1) Connect the Oil Tubes (16) and (17). Refer to Figure 1.
 - (a) Torque the tube connectors to between 159 and 177 lbfin (18 and 20 Nm). (Refer to Aircraft Maintenance Manual Chapter/Section 70-23-11, Torque Tightening Technique).
 - (b) Safety the tube connectors with V02-126 wire. (Refer to Aircraft Maintenance Manual, Chapter/Section 70-30-00, Consumable Materials Index and Chapter/Section 70-40-11, Installation of Locking Devices).
- (2) Connect the Electrical Connector (15) to the Oil Temperature Sensor. (Refer to Aircraft Maintenance Manual, Chapter/Section 70-23-15, Connection of Electrical Connectors). Refer Figure to 1.
- (3) Fill the Scavenge Oil Filter by the approved procedure in Reference (1) Chapter/Section 12-13-79 Maintenance Procedure.
- (4) Close the Fan Cowls by the approved procedure in Reference (1), Chapter/Section 71-13-00, Maintenance Procedures.
- (5) Do a leak check for the Scavenge Oil Filter Housing Assembly and Oil Tubes by approved procedure in Reference (1) Chapter/Section 71-00-00, Maintenance Procedures.

E. Recording Instructions

- (1) A record of accomplishment is necessary.

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Oil scavenge tube replacement
Fig.1

ded0001436



SERVICE BULLETIN

3. Material Information

Applicability: For each V2500 Engine to incorporate this Bulletin.

A. Kits associated with this Bulletin:

None

B. Parts affected by this Bulletin:

New Part No. (ATA No.)	Qty	Est'd Unit Price (\$)	Keyword	Old Part No. (IPC No.)	Instructions Disposition
4B7248 (79-22-48)	1	984.00	.Tube, A/O Oil	4B7162 (03-100)	(A)(S1) (1D)
4B2262 (79-22-48)	1	821.00	.Tube, A/O Oil	4B7128 (05-500)	(A)(S1) (1D)
				or 4B7252 (05-500A)	

C. Expendables Required to Incorporate this Bulletin

Part No.	ATA/IPC No.	Qty	Keyword
AS3208-08	72-60-21-01-100	1	Packing
AS3208-08	79-22-43-01-150	1	Packing
AS3209-165	71-11-41-01-058	1	Packing
AS3209-217	79-22-48-03-130	1	Packing
AS3209-217	79-22-48-03-160	1	Packing
AS3209-217	79-22-48-05-530	1	Packing
AS3209-217	79-22-48-03-560	1	Packing
MS-28778-06	71-73-48-01-105	1	Packing

D. Consumables Required to Incorporate this Bulletin

CoMat 10-077 Lubricant (engine oil)
CoMat 02-141 Lockwire

E. Instructions/Disposition Code Statements:

- (A) New part coded (A) is currently available.
- (S1) Old and new parts coded (S1) are interchangeable in complete sets only.
- (1D) Old parts will be scrapped.

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International Aero Engines

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NOTE: The estimated 1992 Unit Price shown are provided for planning purpose only and do not constitute a firm quotation. Consult the IAE Price Catalog or contact IAE's Spare Parts Sales Department for information concerning firm prices.

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