



ENGINE - FUEL AND CONTROL - DEDICATED ALTERNATOR - DELETION OF COPPER LAMINATION -
CATEGORY CODE 6 - MOD.ENG-73-0026

1. Planning Information

A. Effectivity

- (1) Aircraft: Airbus A320
- (2) Engine: (a) V2500 - A1 Engines V0122 through V0179
(b) Any engine incorporating Service Bulletin V2500-ENG-75-0010

B. Reason

(1) Condition

In the dedicated alternator stator, differential expansion between the copper and iron laminations in the stator stack may cause the bond between the laminations to break.

(2) Background

The condition was identified during unit reliability testing at the manufacturer.

(3) Objective

Incorporation of the changes introduced by this Service Bulletin are designed to maintain unit reliability.

(4) Substantiation

The changes introduced by this Service Bulletin have been by extensive unit rig and bench testing to alleviate the condition.

(5) Effect of Bulletin on Workshop Procedure

Removal/Installation	Not affected
Disassembly/Assembly	Not affected
Cleaning	Not affected
Inspection/Check	Not affected
Repair	Not affected
Testing	Not affected

(6) Supplemental Information

See Dowty Fuel System Service Bulletin 1664-73-003 (DFS Mod.DTV030)

V2500-ENG-73-0026



SERVICE BULLETIN

C. Description

- (1) This Service Bulletin covers the fitment to engines of a dedicated alternator stator, with the copper laminations with equivalent iron laminates and other material changes to provide increased heat dissipation.

D. Approval

The Part Number Changes 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 6

Accomplish when the sub-assembly (ie. modules, accessories, components, build groups) is disassembled sufficiently to afford access to the affected parts and to all affected spare parts.

F. Manpower

Estimated manhours to incorporate the full intent of this Bulletin.

Venue	Estimated Manhours
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(1) In Service Not applicable
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(2) In shop Not applicable
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G. Material – Price and Availability

(1) Modification Kit not required.

(2) Refer to D.F.S. Service Bulletin 1664-73-003.

H. Tooling – Price and Availability

Special tools are not required.

I. Weight and Balance

(1) Weight Change None
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(2) Moment Arm No effect
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(3) Datum Engine front mount centreline (Power Plant Station (PPS) 100)
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V2500-ENG-73-0026



J. Electrical Load Data

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

K. References

(1) Internal Reference No.

90VR025

89VR060

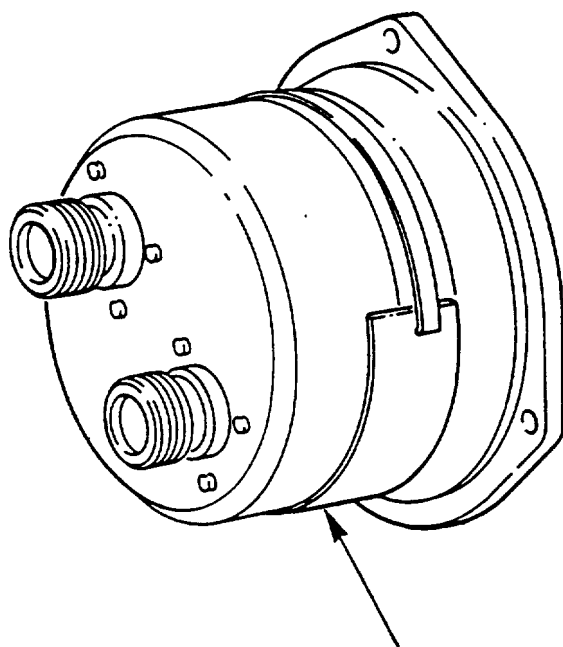
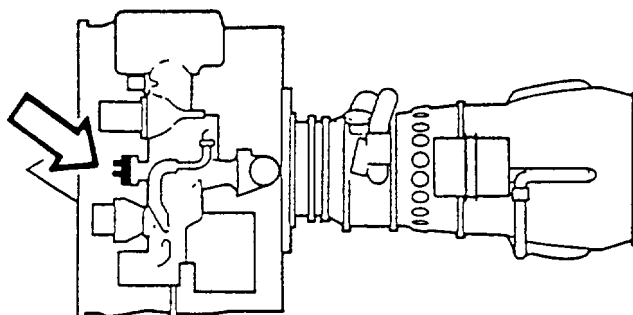
(2) Other References

D.F.S. Service Bulletin 1664-73-003

IAE Service Bulletin 75-0010

L. Other Publications Affected

(1) Dowty Fuel systems Component Maintenance Manual 73-22-38



REMOVE 1664 MK3 DEDICATED ALTERNATOR
AND INSTALL 1664 MK4 DEDICATED ALTERNATOR

B3047

Location of Dedicated Alternator
Fig.1

V2500-ENG-73-0026



2. Accomplishment Instructions

A. Accomplishment of this Service Bulletin is by unit replacement.

B. The part number identification 1664 Mk4 will show that this Service Bulletin has been included in the unit.

NOTE: It is essential that Service Bulletin 75-0010 is incorporated on stator units type 1664 Mk4 prior to the incorporation of this Service Bulletin.

C. Recording Instructions

A record of accomplishment is necessary.

3. Material Information

Applicability: For each V2500 Engine to incorporate this Bulletin.

A. Kits associated with this Bulletin:

None

B. Vendor units affected by this Bulletin:

New Part No. (ATA No.)	Qty	Est'd Unit Price (\$)	Keyword	Old Part No. (IPC No.)	Instructions Disposition
1664 Mk.4 (73-22-38)	1		Stator, dedicated alternator	1664 Mk.3 (01-100)	(S1)

C. Instruction/Disposition code statement:

(S1) Old and new parts coded (S1) are freely and fully interchangeable.

NOTE: Consult the IAE Price Catalog or contact IAE's Spare Parts Sales Department for information concerning firm prices.

Dowty Fuel Systems

SERVICE BULLETIN

1664-73-003

ENGINE FUEL AND CONTROL-DEDICATED ALTERNATOR,
STATOR UNIT. DELETION OF COPPER LAMINATIONS
FROM STATOR STACK (POWER).

(IAE SB V2500-ENG-73-0026)
(DFS MOD.D.TV.030)

1. Planning Information

A. Effectivity

(1) Airbus A320

V2500-A1 Engines.

(2) Stator Units.

All Stator Units that are identified with part number 1664 MK 3.

B. Reason

(1) Condition

In the dedicated alternator stator, differential expansion between the copper and iron laminations (in the stator stack), may cause the lamination bond to break. The unbonded copper laminations are susceptible to vibration, which could result in their detachment from the stack.

(2) Background

The condition was identified during unit reliability testing at the manufacturer.

(3) Objective

Incorporation of the changes introduced by this Service Bulletin, are designed to prevent the possibility of lamination detachment

(4) Substantiation

The changes introduced by this Service Bulletin have been shown by unit testing and engineering analysis to correct the condition.

Dowty Fuel Systems

SERVICE BULLETIN

C. Description

The Service Bulletin introduces a stator which has no copper laminations (in the power stator stack) and introduces other material changes.

D. Compliance

Category Code 6.

Accomplish when the sub-assembly (i.e. Modules, Accessories, Components, Build Group), is disassembled sufficiently to afford access to the affected part and to all affected spare parts.

E. Approval

Service Bulletin No. 1664-73-003 (Mod.D.TV.030), (IAE SB V2500-ENG-73-0026), was technically agreed by IAE on April 4/91. The part number changes and/or part modifications have been shown to comply with the appropriate Federal Aviation Regulations and are FAA approved for those units listed in this bulletin.

F. Manpower

Not applicable.

G. Material - Price and Availability

No modification kit is required; accomplishment is by exchange of stator unit. The exchange stator unit is available subject to the normal terms of the warranty agreement.

Removed stator units should be returned to:-

Smiths Industries (Product Support Centre)
Northolt Road
Heathrow Airport
LONDON TW6 2LU
England

(for areas other than North America)

For North America:

Dowty Fuel Systems Inc.
PO Box 5000
Sulley Road
Staverton West
Sterling V.A. 22170

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June 14/91

Dowty Fuel Systems

SERVICE BULLETIN

H. Tooling - Price and Availability

(1) Additional Tools.

None.

(2) Tools Made Redundant.

None.

I. Weight and Balance

(1) Weight change None.

(2) Moment Arm No effect.

(3) Datum Engine front mount
centerline. (Power Plant
Station (PPS) 100).

J. Electrical Load Data

None.

K. References

(1) Dowty and Smiths Industries Controls Ltd.,
Component Maintenance Manual 73-22-38.

(2) IAE Service Bulletin V2500-ENG-73-0026.

(3) IAE Service Bulletin V2500-ENG-75-0010.

(4) Dowty Fuel Systems Mod.D.TV.030.

L. Other Publications Affected

Nil.

M. Family Tree Charts

Not applicable.

2. Accomplishment Instructions

NOTE: It is essential that IAE Service Bulletin V2500-ENG-75-0010 is incorporated on Stator Units type 1664 MK2 prior to the incorporation of this Service Bulletin.

A. Accomplishment of this Service Bulletin is by unit replacement.

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Dowty Fuel Systems

SERVICE BULLETIN

- B. The part number identification 1664 Mk 4 will show that this Service Bulletin has been included in the unit.

3. Material Information

A. Modification Kit

No kit is required.

B. Parts to be Re-worked

None.

C. New Production Parts

The following new part will be available as a spare:

<u>New Part No.</u>	<u>Qty</u>	<u>Keyword</u>	<u>Old Part No.</u>
1664 Mk 4	1	Stator	1664 Mk 3

D. Redundant Parts

<u>IPL Fig./Item</u>	<u>New Part No.</u>	<u>Qty</u>	<u>Keyword</u>	<u>Old Part No.</u>
1-1	1664 Mk 4	1	Stator	1664 Mk 3

E. Identification of Units

The type of equipment affected by this Modification is:

<u>Unit</u>	<u>Type No.</u>
Stator Unit	1664 Mk 3

The exchange unit will be type No. 1664 Mk 4.

Dowty Fuel Systems

SERVICE BULLETIN

1664-73-003 (SUPPLEMENT)

ENGINE FUEL AND CONTROL-DEDICATED ALTERNATOR,
STATOR UNIT. DELETION OF COPPER LAMINATIONS
FROM STATOR STACK (POWER)

(IAE SB V2500-ENG-73-0026)
DFS MOD.D.TV.030

1. Modification Kit

No modification kit is required.

2. New Production Parts

<u>Part No.</u>	<u>Qty</u>	<u>Keyword</u>	<u>Gross World List Price (Dollars)</u>	<u>Availability on Receipt of Order</u>
1664 Mk4	1	Stator	\$ 9325.07	90 days

3. New Tooling

None.

SUPPLEMENT
1664-73-003