



Date: Dec.12/00

Subject: Transmittal of Revision 1 To Service Bulletin Number
V25000-ENG-72-0342.

Service Bulletin Revision History:

<u>Event</u>	<u>Date</u>
Basic Issue	Dec.20/98
Revision 1	Dec.12/00

Reason For Issuance Of Revision:

- (1) To Update accomplishment instructions.
- (2) Reformatted to latest specifications.

Effect on Prior Compliance:

None.

List of Effective Pages:

<u>Bulletin Page No.</u>	<u>Rev. No.</u>	<u>Effective Date</u>
1	1	Dec.12/00
2 to 4	Basic	Dec.20/98
5 and 6	1	Dec.12/00

V2500-ENG-72-0342

Transmittal

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International Aero Engines SERVICE BULLETIN

ENGINE - PROVIDE THE REQUIREMENTS FOR MODIFICATION TO THE PHOENIX STANDARD
CONFIGURATION

MODEL APPLICATION

V2500-A1

BULLETIN INDEX LOCATOR

72-40-00

Compliance Category Code

| 8

Internal Reference No.

98VC104, 98VC104A

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ENGINE - PROVIDE THE REQUIREMENTS FOR MODIFICATION TO THE PHOENIX STANDARD
CONFIGURATION

1. Planning Information

A. Effectivity

- (1) Aircraft: Airbus A320
- (2) Engine: V2500-A1 Engines As Applicable

B. Reason

(1) Condition:

V2500-A1 HP turbine distress that can limit engine installation time through early engine removals. Additionally, HP Turbine distress at engine disassembly can result in expensive repair costs due to part replacement.

(2) Background:

Service experience has demonstrated that several parts of the V2500-A1 hot section are prone to severe distress resulting in engine removals and high maintenance costs. These parts have been modified and redesigned to significantly improve the service characteristics of the V2500-A1 engine.

(3) Objective:

Group a series of V2500-A1 hot section improvements referred to as the Phoenix Standard, that installed as a group, promises to significantly improve the operational characteristics of the hot section. The package as a whole will reduce engine removals due to hot section distress, increasing on-wing time while also reducing maintenance costs through significantly reduced parts scrap rates. LPC bleed system improvements are included in the Phoenix Standard due to its demonstrated ability to improve engine performance and performance retention.

(4) Substantiation

Not applicable. Substantiation was provided on the listed Service Bulletins, which constitute the Phoenix Standard.

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(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

- (1) Install the components specified in the referenced Service Bulletins.

D. Approval

The Part Number Changes and/or part modifications described in Section 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.

The 'compliance' statement and the procedures described in paragraph F 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 8

Accomplish based upon experience with the prior configuration.

F. Manpower

Estimated Manhours to incorporate the full intent of this Bulletin:

<u>Venue</u>	<u>Estimated Manhours</u>
(1) In service	Not applicable
(2) At overhaul	Not applicable

G. Material - Price and Availability

- (1) Modification kit is not required. Parts are supplied as single line items.
- (2) See "Material Information" section for prices and availability of future spares.

H. Tooling - Price and Availability

Special tools are not required to accomplish this Service Bulletin.

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I. Weight and Balance

- | | |
|-------------------|--|
| (1) Weight change | Plus 0.17 lb (0,08 Kg) |
| (2) Moment arm | No effect |
| (3) Datum | Engine Front mount Centerline
(Power Plant station (PPS) 100) |

J. Electrical Load Data

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

K. References

(1) IAE V2500 Service Bulletins:

V2500-ENG-72-0133 (Engine - LP Compressor - LPC Bleed Valve Linkage System With Improved Durability)

V2500-ENG-72-0222 (Engine - HP Turbine Rotor And Stator Assembly - Introduce A New Stage 2 Turbine Blade Lock Retainer)

V2500-ENG-72-0233 (Engine - LP Compressor - Rod Adjustment Feature Relocation Of LPC Bleed Rigging)

V2500-ENG-72-0315 (Engine - Diffuser And Combustion Group And Stage 1 Turbine Nozzle Assembly - Provide New Inner And Outer Combustion Chamber Liners With Addition Of PWA 281 Coating)

V2500-ENG-72-0339 (Engine - HP Turbine Rotor And Stator Assembly - Provide New Stage 1 HPT Duct Segments, Band Segments, Supports, Seals And Bolts)

V2500-ENG-72-0340 (Engine - HP Turbine Rotor And Stator Assembly - Provide A New Single Fully Ceramic Coated Vane And A New Stage 1 High Pressure Turbine Cooling Duct Assembly)

V2500-ENG-72-0341 (Engine - HP Turbine Rotor And Stator Assembly - Provide A New Stage 1 High Pressure Turbine Support Assembly Which Contains A New Seal)

(2) The V2500 Engine Manual (E-V2500-1IA).

(3) The V2500 Engine Manual (E-V2500-3IA).

L. Other Publications Affected

(1) The V2500 Engine Manual(E-V2500-1IA or E-V2500-3IA).

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2. Material Information

A. Kit associated with this bulletin.

None

B. Parts affected by this bulletin.

See the material information sections of the Service Bulletins specified for the material necessary to incorporate the Phoenix Standard.

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3. Accomplishment Instructions

A. Incorporate the intent of the following (Reference 1) Service Bulletins:

V2500-ENG-72-0133
V2500-ENG-72-0222
V2500-ENG-72-0233
V2500-ENG-72-0315
V2500-ENG-72-0339
V2500-ENG-72-0340
V2500-ENG-72-0341

NOTE: Phoenix Standard compliance with Reference (1), V2500-ENG-72-0315 (New Inner And Outer Combustion Chamber Liners With the Addition of PWA 281 Coating) requires only the bulkhead segment, fuel nozzle guide and combustion chamber segments in rows one through four be incorporated. Combustion chamber segments in row five for both inner and outer chambers are not required as part of the Phoenix Standard.

NOTE: The new 2A5591 Stage 1 HP Turbine Vane must be installed when incorporating Reference (1), Service Bulletin V2500-ENG-72-0340 as part of the Phoenix Standard.

NOTE: When incorporating Service Bulletin V2500-ENG-72-0340, then Service Bulletin V2500-ENG-72-0341 must be accomplished at the same time or prior.

NOTE: When incorporating Service Bulletin V2500-ENG-72-0339, then Service Bulletin V2500-ENG-72-0341 must be accomplished at the same time or prior.

NOTE: Service Bulletin V2500-ENG-72-0339 has the option of being incorporated without the installation of the new Phoenix Standard Stage 1 Vane (SB 72-0340).

B. Recording Instructions

(1) A record of accomplishment is necessary.

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