**Summary** V2500-NAC-36-0004 Number:

Date: April 25, 2002

Internal Reference No.

ATA System: 36-00

JG 01VN805

"MODIFICATION SERVICE BULLETIN" - "NACELLE - POWERPLANT - ECS SENSE SUBJECT:

LINE SUPPORT BRACKET - MODIFICATION OF"

### BACKGROUND

### GENERAL:

The shape of the ECS sense line support bracket can cause the sense line to interfere with the underside of the ECS crossover duct.

This service bulletin provides instructions to modify one ECS sense line support bracket on each engine to eliminate possible interference with the ECS crossover duct.

### ACTION:

Modify one ECS sense line support bracket on each engine.

### COMPLIANCE:

### Category 4

Accomplish at the first visit of the nacelle or nacelle component to a maintenance base capable of compliance with the accomplishment instructions regardless of the planned maintenance action for the nacelle or nacelle component.

### EFFECTIVITY:

All V2500-D5 engine buildup units (EBU) and quick engine change (QEC) kits.

### MANPOWER:

Refer to Paragraph 1.G.

### MATERIAL INFORMATION:

No parts are required to accomplish this service bulletin.

"MODIFICATION SERVICE BULLETIN" - "NACELLE - POWERPLANT - ECS SENSE LINE SUPPORT BRACKET - MODIFICATION OF"

### PLANNING INFORMATION

- A. Effectivity
  - (1) Airplane: MD-90
  - (2) Powerplant: All V2500-D5 EBUs and QECs.
- B. Concurrent Requirements

None.

- C. Reason
  - (1) Problem
    - (a) The ECS sense line can interfere with the underside of the ECS cross-over duct.
  - (2) Cause
    - (a) The contour of one ECS sense line support bracket on each engine may put the ECS sense line too close to the ECS crossover duct.
  - (3) Background
    - (a) Interference between the ECS sense line and the underside of the ECS cross-over duct has been found in service.
  - (4) Objective
    - (a) The changes in configuration recommended in this Service Bulletin are intended to maintain reliability of the thrust reverser by preventing the ECS sense line from contacting the ECS cross-over duct.
  - (5) Substantiation
    - (a) By analysis.

## D. <u>Description</u>

This service bulletin provides instructions to modify one ECS sense line support bracket on each engine.

## E. Compliance

Category 4

Accomplish at the first visit of the nacelle or nacelle component to a maintenance base capable of compliance with the accomplishment instructions regardless of the planned maintenance action for the nacelle or nacelle component.

### F. Approval

Incorporation of this Service Bulletin must be accomplished only in conjunction with Boeing Service Bulletin MD90-36-016 which has received exclusive FAA approval for MD-90 Series Aircraft.

### G. Manpower

Estimated man-hours to incorporate the full intent of this Service Bulletin.

VENUE EST'D MAN-HOURS

(1) In Service

(a) To accomplish 1.0 hours

> Total 1.0 hours per nacelle (2.0

> > hours per aircraft)

NOTE: Man-hour estimate is provided for planning purposes only. No labor reimbursement is provided under the terms of this service bulletin offering.

# International Aero Engines V2500 Propulsion System - Nacelle SERVICE BULLETIN

No parts are required to accomplish this service bulletin.

## I. Tooling

None.

## J. Weight and Balance

1)	Weight change	None
2)	Moment Arm	No effect
3)	Datum	Engine front mount centreline (Powerplant Station PS 100)

## K. References

Publication	Chapter/Section	
MD-90 Aircraft Maintenance Manual	78-32-00	
IAE V2500 Standard Practices/Processes Manual (PCI-V2500-1IA)	70-09-00	

## L. Other Publications Affected

Publication	Chapter/Section			
MD-90 Engine log	Illustrated	Parts	Cata-	36-21-49

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### Material Information

Material - Price and Availability

None.

- B. Material Requirements
  - (1) The following is applicable to one EBU or QEC.
- C. Kits necessary for this Service Bulletin:

None.

D. Parts affected by this Service Bulletin:

NEW PNUMBER		ESTD UNIT		OLD PNNUMBER	INSTR/
(ATA NUMBER)	<u>OTY</u>	PRICE	<u>KEYWORD</u>	(IPC NUMBER)	<u>DISPOS</u>
290-5126-505			Bracket, Aft	290-5126-503	(A)(S1)
(36-21-49)			Tube	(11-241))	
				(12-241)	
				(locations	
				are EIPC)	

- E. Instructions/Disposition Codes:
  - (A) New part is available.
  - (S1) New part can replace old part but not vice versa.
- F. Tooling Price and Availability:

None.

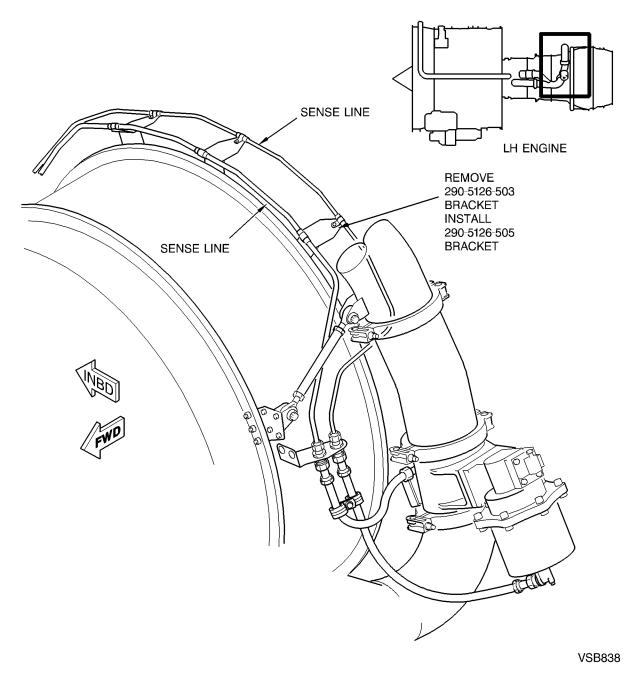
G. Materials Required to do this Service Bulletin:

None.

## 3. Accomplishment Instructions

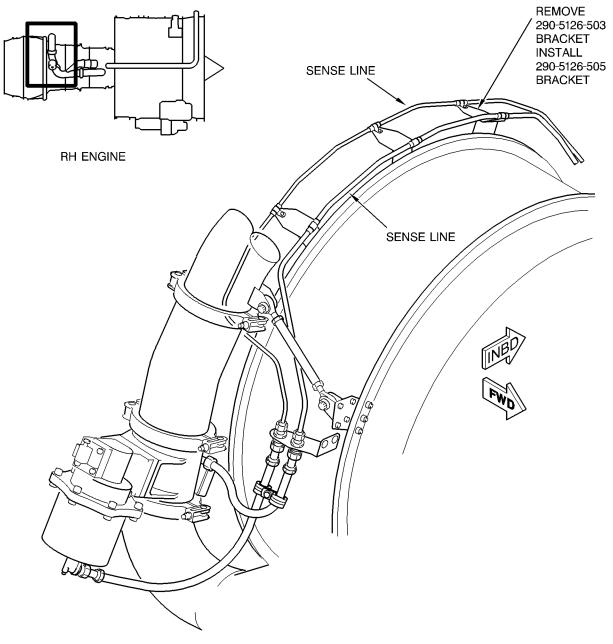
- Open the thrust reverser halves. Refer to the MD-90 Aircraft Maintenance Manual, Chapter 78-32-00, Page Block 201.
- B. Remove the ECS sense line from the indicated bracket. For the LH engine, refer to Figure 1 (sheet 1). For the RH engine, refer to Figure 1 (sheet 2).
- C. Remove the indicated bracket from the engine brackets. For the LH engine, refer to Figure 1 (sheet 1). For the RH engine, refer to Figure 1 (sheet 2).
- D. Modify the bracket.
  - (1) Bend the bracket as shown in Figure 1 (sheet 3).
  - (2) Do a 10X visual inspection of the bracket for cracks. Replace the bracket if you find cracks.
  - (3) Re-identify the 290-5126-503 bracket as the 290-5126-505. Use a rubber stamp and ink. Refer to the IAE V2500 Standard Practices/ Processes Manual, Chapter 70-09-00.
- E. Install the 290-5126-505 bracket on the engine bracket. For the LH engine, refer to Figure 1 (sheet 1). For the RH engine, refer to Figure 1 (sheet 2).
- F. Install the ECS sense line on the 290-5126-505 bracket. For the LH engine, refer to Figure 1 (sheet 1). For the RH engine, refer to Figure 1 (sheet 2).
- G. Close the thrust reverser halves. Refer to the MD-90 Aircraft Maintenance Manual, Chapter 78-32-00, Page Block 201.
- H. Recording Instructions
  - (1) A record of accomplishment is required. Write in the applicable records that Service Bulletin V2500-NAC-36-0004 has been done.





ECS Sense Line Bracket Modification Figure 1 (sheet 1)

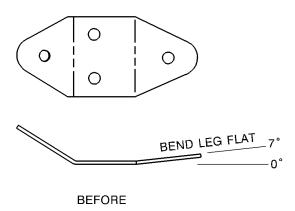


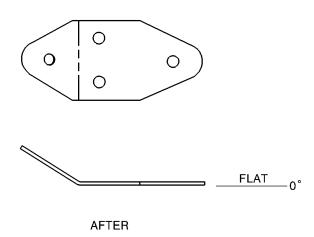


VSB839

ECS Sense Line Bracket Modification Figure 1 (sheet 2)

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VSB840

ECS Sense Line Bracket Modification Figure 1 (sheet 3)

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