

International Aero Engines

SERVICE BULLETIN

<u>ENGINE - LP TURBINE - INCORPORATE REVISED (EGT) BRACKETS OF FLANGE P - CATEGORY CODE 4 - MOD.ENG-72-0007</u>

1. Planning Information

A. Effectivity

(1) Aircraft: Airbus A320

(2) Engine: V2500=A1 Engine Serial No.s before V0122.

B. Reason

(1) Condition

A new rerouted No.4 Oil Weep Line caused interference with the EGT Bracket Asssemblies. Also interference exists with the Hold Open Rod Brackets.

(2) Background

The interference was found when the EGT Bracket Assemblies were installed.

(3) Objective

Provide new recontoured EGT Bracket Assemblies mounted on the front face of Flange P at holes 52 and 53 and 62 and 63. These Bracket Assemblies will prevent interference with the new rerouted No.4 Oil Weep Line and Hold Open Brackets.

(4) Substantiation

Not necessary.

(5) Effect of Bulletin on the following 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. <u>Description</u>

(1) The recontoured EGT Bracket Assemblies eliminate the interference with the new contoured No.4 Oil Weep Line and Hold Open Rod Brackets.

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 4

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

<u>Manpower</u>

Estimated Manhours to incorporate the full intent of this Bulletin:

Venue **Estimated Manhours** (1) In Service Total 1 hour 41 minutes (a) To gain access (i) Job preparation 10 minutes (ii) Install warning 3 minutes notices (iii) Open thrust reverser 'C' ducts 18 minutes TOTAL: 31 minutes (b) To embody

(i) Remove the brackets .. 4 minutes

(ii) Install the new brackets 5 minutes

TOTAL: 9 minutes

(C) To return engine to flyable status



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(i) Close the thrust reverser 'C' duct

.. 21 minutes

(ii) Remove warning

notices 3 minutes

TOTAL: 24 minutes

(2) In shop Not applicable

(3) At overhaul Not applicable

Remarks: No additional time is required to maintain the new

configuration.

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

I. Weight and Balance

(1) Weight change None

(2) Moment arm No effect

(3) Datum Engine front mount centreline

(Powerplant Station (PPS) 100)

J. Electrical Load Data

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

K. <u>References</u>

(1) Internal Reference No.

EC89VA169

EC91VK008

(2) Other reference



V2500 Service Bulletin Number

(a) V2500-ENG-72-0050 (Engine - LP Turbine Module and Exhaust Gas Temperature (EGT) Indicating System - Replacement og EGT Loop Clamp Brackets and Attaching Bolts).

A320 Aircraft Maintenenace Manual

V2500 Standard Practices Manual

L. Other Publications Affected

V2500 Engine Illustrated Parts Catalog, Chapter.Section 72-50-00, Figure 1 and Chapter/Section 77-21-43, Figure 1, to add the new parts.

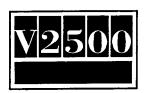
V2500 Engine Manual Chapter/Section 72-50-00, Cleaning, to add the new parts.

V2500 Engine Manual Chapter/Section 72-50-00, Inspection/Check, to add the new parts.



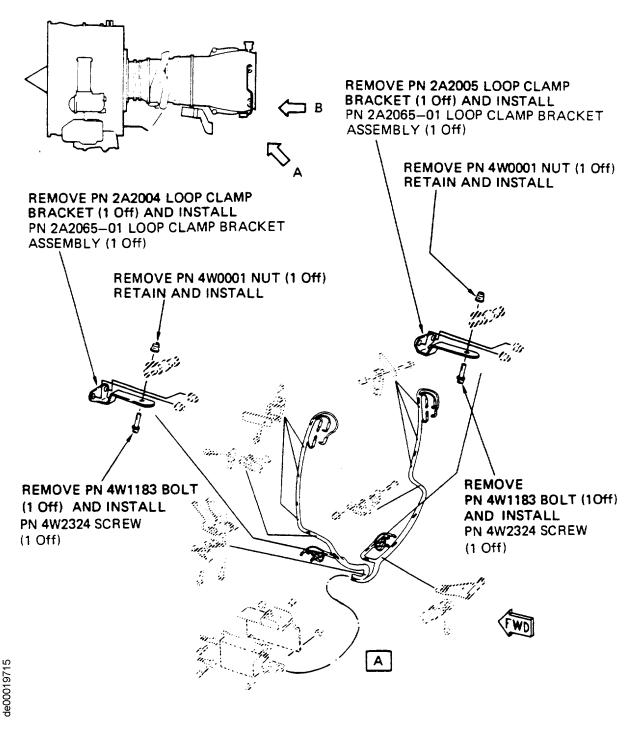
2. Accomplishment Instructions

- A. Perequisite Instructions
 - (1) On the aircraft panel 115VU, put a warning notice to tell the persons not to start the engines.
 - (2) On the aircraft panel 50VU, make sure that the ON legend on the ENG FADEC GND PWR push button switch is OFF and install a warning notice.
 - (3) Open the thrust reverser halves by the procedure in Reference (2), TASK 78-32-00-010-010.
- B. Rework Instructions
 - (1) There are no rework instructions necessary for this Service Bulletin.
- C. Removal Instructions for Engines Not Incorporating Reference (1)
 - (1) Remove the Nuts and Bolts which hold the two Loop Clamp Brackets 2A2004 and 2A2005 to the Loop Clamps
 - (2) Remove the Nuts and Bolts which hold the 2A2004 and 2A2005 Loop Clamp Brackets to the Turbine Exhaust Case (Hole Locations 52, 53, 62 and 63). Refer to Figure 1.
 - (3) Remove the Loop Clamp Brackets.
- D. Removal Instructions for Engines Incorporating Reference (1)
 - (1) Remove the Nuts and Bolts which hold the two Loop Clamp Brackets 2A2O5O to the Loop Clamps.
 - (2) Remove the Nuts and Bolts which hold the 2A2050 Loop Clamp Brackets to the Turbine Exhaust Case (Hole Locations 52, 53, 62 and 63). Refer to Figure 1.
 - (3) Remove the Clamp Brackets.
- E. Assembly Instructions
 - (1) Lubricate the threads of 4W0001 Nuts (4 off) and the Bolts (which will hold the Brackets to the flange) with CoMat 10-039 Engine Oil.
 - (2) Put the 2A2O65-O1 Loop Clamp Bracket Assembly (1 off) at the location of holes 62 and 63. Refer to Figure 1.
 - (a) Make sure that the bracket mount flange is forward of Flange P.
 - (3) Install the Nuts and Bolts and tighten them with your hand.



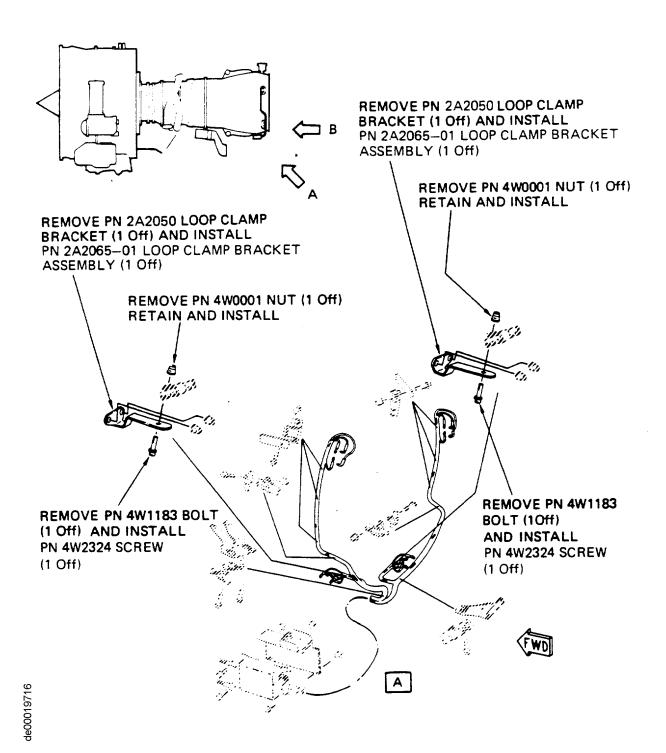
- (4) Put the 2A2O65-O1 Loop Clamp Bracket Assembly (1 off) at the location of holes 52 and 53. Refer to Figure 1.
 - (a) Make sure that the bracket mount flange is forward of Flange P.
- (5) Install the Nuts and Bolts and tighten them with your hand.
- (6) Torque the Bolts to between 85 to 105 lbfin (9,60 to 11,86 Nm). See in Reference (3), Chapter/Section 70-41-00, Torque Tightening Technique.
- (7) Move the Loop Clamps so that the bolt holes in the Clamps align with the bolt holes in the Loop Clamp Brackets.
- (8) Lubricate the threads of the two 4W2324 Screws (2 off) and the Nuts, removed in step (2) of Paragraph c. or D. with CoMat 10-039 Engine Oil.
- (9) Install the Screws and Nuts and tighten rthem with your hand.
- (10) Torque the Screws to between 36 to 45 lbfin (4,07 to 5,08 Nm). See Reference (3), Chapter/Section 70-41-00, Torque Tightening Technique.
- F. Postrequisite Instructions
 - (1) Close the thrust reverser halves by the procedure in Reference (2), TASK 78-32-00-410-010.
 - (2) Remove the warning notices.
- G. Recording Instructions
 - (1) A record of accomplishment is necessary.





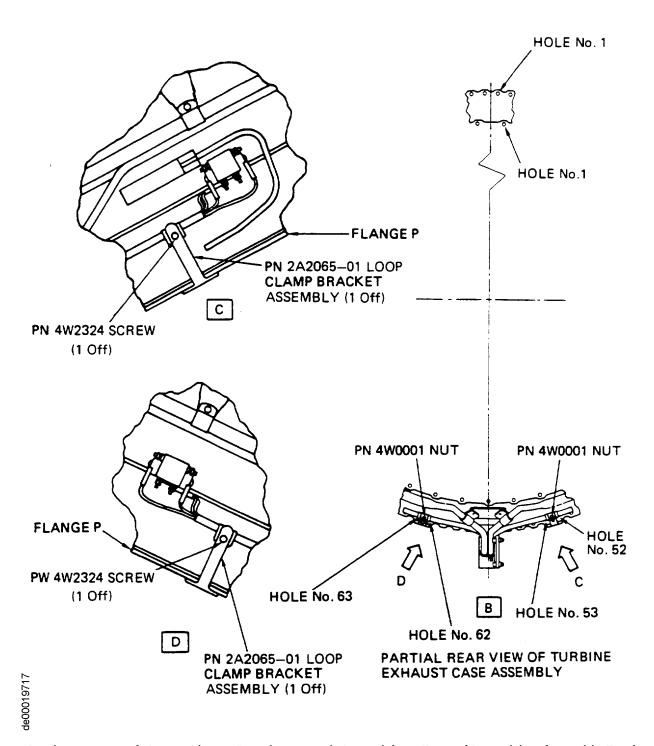
Replacement of Loop Clamp Brackets and Attaching Bolts (For Engines not Incorporating V2500-ENG-72-00-0050)) Fig.1





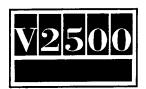
Replacement of Loop Clamp Brackets and Attaching Nuts (For Engines incorporating V2500-ENG-72-00-0050) FIG.1





Replacement of Loop Clamp Brackets and Attaching Nuts (Assembly for all Engines to incorporate this Modification)

Fig.1



3. Material Information

Applicability: For each V2500 Engine to Incorporate this Bulletin.

A. <u>Kits associated with this Bulletin:</u>

None.

B. Parts affected by this Bulletin:

New Part No. (ATA No.)	Qty	Est'd Unit Price (\$)	Keyword	Old Part No. (IPC No.)			
For Engines which do not incorporate Reference (1)							
2A2065-01 (72-50-00)	2		Bracket - Loop Clamp Assembly	- (01-400) (01-410)	(S1)(A)		
- (72-50-00)	1		Bracket - Loop Clamp	2A 2004 (001-410)	(S1)(B)		
- (72-50-00)	1		Bracket - Loop Clamp	2A2005 (01-400)	(S1)(B)		
4W2324 (77-21-43) AS50908 NAS1102E2R8	2		Screw Option Consisting of: Screw Screw	- (01-070) (01-290)	(S1)(A)		
(77-21-43)	2		Bolt Option Consisting of:	4W1183 (01-170) (01-290)	(S1)(B)		
			Bolt Bolt	MS9489-06 AS49808			
For Engines which incorporate Reference (1)							
2A2065-01 (72-50-00)	2		Bracket - Loop Clamp Assembly	2A2O5O (O1-4OO) (O1-41O)	(S1)(A)		
4W2324 (77-21-43) AS50908 NAS1102E3R8	2		Screw Option Consisting of: Screw Screw	- (01–170) (01–290)	(S1)(A)		
(77-21-43)	2		Bolt Option Consisting of:	4W1183 (01-170) (01-290)	(S1)(B)		
			Bolt Bolt	MS9489-06 AS49808			

C. <u>Instruction/Disposition Code Statements:</u>



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- (S1) Old and new parts are directly interchangeable.
- (A) New part is currently available.
- (B) Old part will no longer be available
- (C) Deleted

NOTE: The estimated 1991 unit prices shown are provided for planning purposes 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.

