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DATE: Apr.27/11

V2500-A1/A5 SERIES PROPULSION SYSTEMS SERVICE BULLETIN

This document transmits the Initial Issue of Service Bulletin V2500-ENG-79-0098.

Service Bulletin Initial Issue

Remove	Incorporate	Reason for change
	Pages 1 to 12 of the Service Bulletin.	Initial Issue.
	Page 1 of the Supplement.	Initial Issue.

V2500-ENG-79-0098
Transmittal - Page 1 of 1

CHECK THAT ALL PREVIOUS TRANSMITTALS HAVE BEEN INCORPORATED
If any have not been received please advise IAE International Aero Engines AG

ENGINE – EXHAUST GAS TEMPERATURE (EGT) HARNESS CLIPPING MODIFICATION TO PREVENT
CHAFING ON FUEL MANIFOLD TUBE

1. Planning Information

A. Effectivity

(1) Airbus A319

- (a) V2522-A5, V2524-A5, V2527M-A5 Engines prior to Serial No. V13191 (A5 Standard and A5 SelectOne™ Retrofit Standard).

V2522-A5, V2524-A5, V2527M-A5 Engines prior to Serial No. V15725 (A5 SelectOne™ Production Standard).

(2) Airbus A320

- (a) V2500-A1 Engines prior to Serial No. V0362.

- (b) V2527-A5, V2527E-A5 Engines prior to Serial No. V13191 (A5 Standard and A5 SelectOne™ Retrofit Standard).

V2527-A5, V2527E-A5 Engines prior to Serial No. V15725 (A5 SelectOne™ Production Standard).

(3) Airbus A321

- (a) V2530-A5, V2533-A5 Engines prior to Serial No. V13191 (A5 Standard and A5 SelectOne™ Retrofit Standard)

V2530-A5, V2533-A5 Engines prior to Serial No. V15725 (A5 SelectOne™ Production Standard).

B. Concurrent Requirements

The Service Bulletin that follows must be done before this one:

For V2500-A1 Engines:

V2500-ENG-79-0087 – OIL – SCAVENGE OIL TUBES – RE-ROUTE OF NUMBER 4 BEARING SCAVENGE TUBE

V2500-ENG-75-0049 – AIR – BEARING COMPARTMENT COOLING HPC AIR BLEED TUBES – ADDITIONAL CLIPPING FOR CORE TUBES – SERVO AIR TO HANDLING BLEED VALVES

For V2500-A5 Engines:

V2500-ENG-79-0088 – OIL – SCAVENGE OIL TUBES – RE-ROUTE OF NUMBER 4 BEARING SCAVENGE TUBE

Apr.27/11

Apr.27/11 Initial Issue

V2500-ENG-79-0098

Page 1 of 12

IAE PROPRIETARY INFORMATION

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V2500-ENG-75-0049 - AIR - BEARING COMPARTMENT COOLING HPC AIR BLEED TUBES -
ADDITIONAL CLIPPING FOR CORE TUBES - SERVO AIR TO
HANDLING BLEED VALVES

C. Reason

(1) Condition

Local damage to the fuel manifold tube can occur, by chafing of the Exhaust Gas Temperature (EGT) harness against the fuel manifold tube. This can be caused by not enough clearance between the parts.

(2) Background

Chafing on the fuel manifold tube has been found on engines in service.

(3) Objective

Incorporation of this Service Bulletin is designed to improve the routing of the EGT harness and provide enough clearance between the EGT harness and the fuel manifold tube.

(4) Substantiation

The changes introduced by this Service Bulletin were the subject of satisfactory engineering analysis. This Service Bulletin complies with the applicable engine certification basis.

(5) Effect of Bulletin on:

(a) Operation

Not affected.

(b) Maintenance

Affected (Refer to paragraph 1.0. Other Publications Affected).

(c) Overhaul

Affected (Refer to paragraph 1.0. Other Publications Affected).

(d) Repair Schemes

Not affected.

(e) Interchangeability

Affected (Refer to paragraph 1.B. Concurrent Requirements).

(f) Fits and Clearances

Not affected.

D. Description

This Service Bulletin modifies the clip positions CP5211 and CP5529 to improve the route of the Exhaust Gas Temperature (EGT) harness.

The changes are as follows:

- (1) On clip position CP5211, the length of the spacer and the length of the bolt is reduced.
- (2) On clip position CP5529, the clip attached to the EGT harness is rotated through 180 degrees around the axis of the bolt. There are no hardware changes to this clip position.

NOTE: The Accomplishment Instruction of this Service Bulletin is divided into two INSTRUCTIONS as follows:

INSTRUCTION I – Applicable for engines "In Service".

INSTRUCTION II – Applicable for engines "At Overhaul/Shop Visit".

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 part and to all affected spare parts.

F. 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 models listed.

G. Manpower

- (1) In Service

2 hours.

- (2) At Overhaul

Applicable (hours not affected).

H. Material Price and Availability

Modification kit is not required; parts supplied as single line items.

For prices and availability of spares, refer to the supplement to this Service Bulletin.

I. Tooling Price and Availability

Special tools are not required.

J. Industry Support Information

Not applicable.

K. Weight and Balance**(1) Weight Change**

None.

(2) Moment Arm

No effect.

(3) Datum

Engine Front Mount Centerline (Power Plant Station (PPS) 100).

L. Electrical Load Data

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

M. Software Accomplishment Summary

Not applicable.

N. References

(1) IAE V2500 Engine Manual (E-V2500-11A), Chapter 72-00-40.

(2) Internal Reference No.

Engineering Change No. 10VR004 and 10VR004-01.

(3) ATA Locator - 79-21-49.

O. Other Publications Affected

- (1) IAE V2500 Engine Illustrated Parts Catalogues (S-V2500-1IA, S-V2500-2IA, S-V2500-2IB, S-V2500-2SA, S-V2500-2SB, S-V2500-5IA, S-V2500-5IB, S-V2500-5SA, S-V2500-5SB, S-V2500-6IA, S-V2500-6IB, S-V2500-6SA, S-V2500-6SB, S-V2500-7IA, S-V2500-7IB, S-V2500-7SA and S-V2500-7SB), Chapter 79-21-49 will be amended to incorporate the new part numbers (Refer to paragraph 2. Material Information).
- (2) IAE V2500 Engine Manual (E-V2500-1IA), Chapter 72-00-40.
- (3) Aircraft Maintenance Manual, Chapter 71-52-45.

P. Interchangeability of Parts

Affected (Refer to paragraph 2.E. Instruction disposition codes).

2. Material Information

A. The kit required consists of the following parts:

None.

B. Parts to be reworked:

None.

C. New production parts:

FIG ITEM NO.	NEW PART NO.	QTY	PART TITLE	MAT	OLD PART NO.	INSTR DISP
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79-21-49

For V2500-A1/A5 Engines:

15-525	4W0116	1	.Bolt (CP5211)	-	4W0119	(S1)(A)
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For V2500-A1 Engines:

15-530	UP10481	1	.Spacer (CP5211)	-	5W1033	(S1)(A)
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For V2500-A5 Engines:

15-530	UP10481	1	.Spacer (CP5211)	-	UP10482 or 5W1033	(S1)(A)
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D. Redundant parts:

None.

E. Instruction disposition codes:

(S1) The old and new parts are not interchangeable.

(A) The new part is currently available for sale.

3. Accomplishment Instructions

INSTRUCTION I – APPLICABLE FOR ENGINES "IN SERVICE"

A. Rework Instructions

- (1) None.

B. Assembly Instructions

(1) General

- (a) Obey all the WARNINGS and CAUTIONS in the procedures that are referred to.

(b) Consumable Materials

- (i) Refer to the related Manual tasks given in this instruction.

(c) Tools and Equipment

- (i) Refer to the related Manual tasks given in this instruction.

- (2) Get access to the EGT harness that is installed on the right side of the core engine

- (a) Open the applicable cowl doors (Refer to the Aircraft Maintenance Manual (AMM), Chapter 71-13-00).

WARNING: YOU MUST BE CAREFUL WHEN YOU WORK ON THE ENGINE PARTS AFTER THE ENGINE IS STOPPED. THE ENGINE PARTS CAN STAY HOT FOR ALMOST ONE HOUR.

WARNING: DO NOT TOUCH HOT PART WITHOUT APPLICABLE GLOVES. HOT PARTS CAN CAUSE AN INJURY.

- (3) At the clip position CP5211:

- (a) Remove the old bolt (79-21-49, 15-525), P/N 4W0119, the washer (79-21-49, 15-526) and the old spacer (79-21-49, 15-530), P/N UP10482 or 5W1033 that attach the clip (71-52-45, 01-041) and the clip (79-21-49, 15-528) to the bracket (72-42-20, 03-170).
- (b) Install the new bolt (79-21-49, 15-525), P/N 4W0116, the washer (79-21-49, 15-526) and the new spacer (79-21-49, 15-530), P/N UP10481 that attach the clip (71-52-45, 01-041) and the clip (79-21-49, 15-528) to the bracket (72-42-20, 03-170).

- (4) At the clip position CP5529:
 - (a) Remove the nut (71-52-45, 01-085), the bolt (71-52-45, 01-078), and the spacer (71-52-45, 01-083) that attach the clip (71-52-45, 01-081) and the clip (73-22-49, 01-552) to the tube (79-21-49, 15-500).
 - (b) Remove the clip (71-52-45, 01-081) from the EGT harness (71-52-45, 01-005).
 - (c) Turn the clip (71-52-45, 01-081) through 180 degrees in the same plane and install it on the EGT harness (71-52-45, 01-005).
 - (d) Install the bolt (71-52-45, 01-078), the spacer (71-52-45, 01-083) and the nut (71-52-45, 01-085) that attach the clip (71-52-45, 01-081) and the clip (73-22-49, 01-552) to the tube (79-21-49, 15-500).
- (5) Make a check that the EGT harness (71-52-45, 01-005) has the minimum clearance of 0.2 in. (5 mm) between the EGT harness and the fuel manifold tube and the other parts.
- (6) Torque the bolt (79-21-49, 15-525) (CP5211) and the nut (71-52-45, 01-085) (CP5529) to 36-45 lbf in. (4-5 Nm).
- (7) Make sure that the work area is clean and clear of tools, equipment and other unwanted materials.
- (8) Close the access to the EGT harness
 - (a) Close the applicable cowl doors (Refer to the Aircraft Maintenance Manual (AMM), Chapter 71-13-00).

C. Recording Instructions

- (1) A record of accomplishment is required.

INSTRUCTION II – APPLICABLE FOR ENGINES "AT OVERHAUL/SHOP VISIT"

D. Rework Instructions

- (1) None.

E. Assembly Instructions

- (1) General

- (a) Obey all the WARNINGS and CAUTIONS in the procedures that are referred to.

- (b) Consumable Materials

- (i) Refer to the related Manual tasks given in this instruction.

- (c) Tools and Equipment

- (i) Refer to the related Manual tasks given in this instruction.

- (2) Get access to the EGT harness that installed on the right side of the engine

- (3) At the clip position CP5211:

- (a) Remove the old bolt (79-21-49, 15-525), P/N 4W0119, the washer (79-21-49, 15-526) and the old spacer (79-21-49, 15-530), P/N UP10482 or 5W1033 that attach the clip (71-52-45, 01-041) and the clip (79-21-49, 15-528) to the bracket (72-42-20, 03-170).
 - (b) Install the new bolt (79-21-49, 15-525), P/N 4W0116, the washer (79-21-49, 15-526) and the new spacer (79-21-49, 15-530), P/N UP10481 that attach the clip (71-52-45, 01-041) and the clip (79-21-49, 15-528) to the bracket (72-42-20, 03-170).

- (4) At the clip position CP5529:

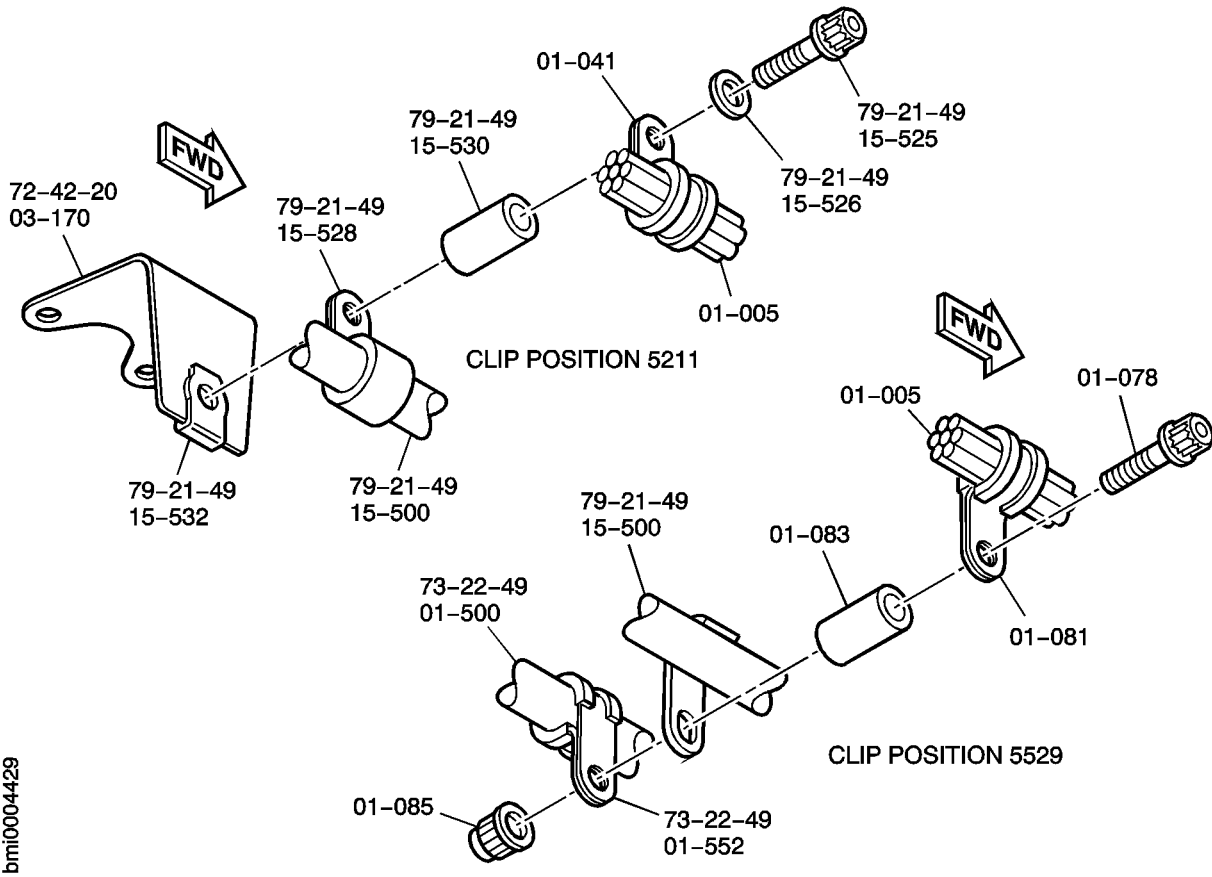
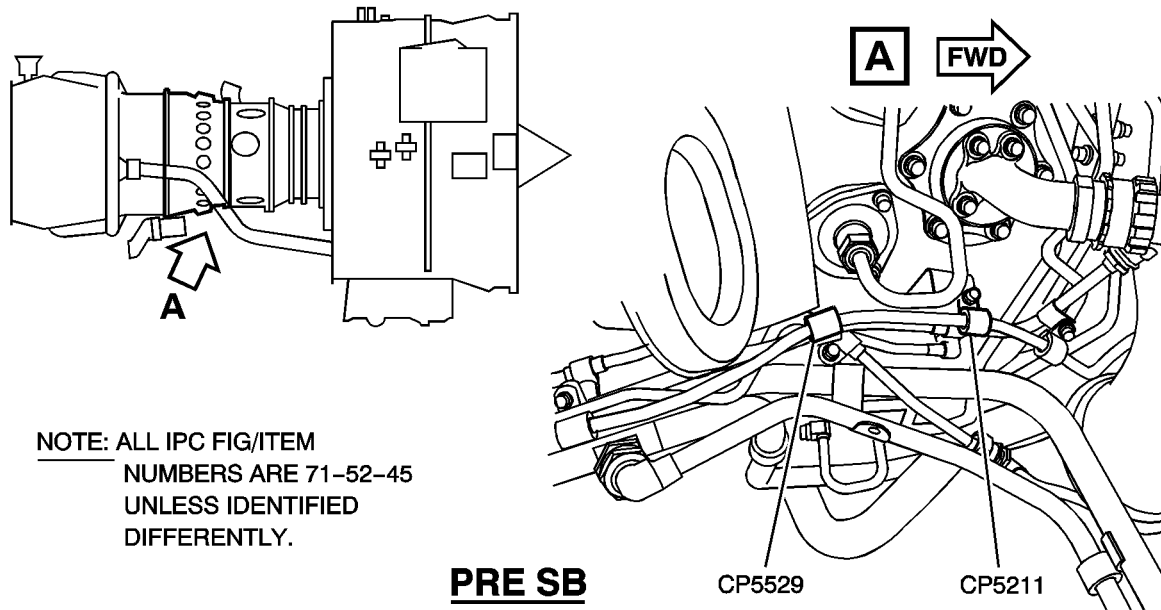
- (a) Remove the nut (71-52-45, 01-085), the bolt (71-52-45, 01-078), and the spacer (71-52-45, 01-083) that attach the clip (71-52-45, 01-081) and the clip (73-22-49, 01-552) to the tube (79-21-49, 15-500).
 - (b) Remove the clip (71-52-45, 01-081) from the EGT harness (71-52-45, 01-005).
 - (c) Turn the clip (71-52-45, 01-081) through 180 degrees in the same plane and install it on the EGT harness (71-52-45, 01-005).
 - (d) Install the bolt (71-52-45, 01-078), the spacer (71-52-45, 01-083) and the nut (71-52-45, 01-085) that attach the clip (71-52-45, 01-081) and the clip (73-22-49, 01-552) to the tube (79-21-49, 15-500).



- (5) Make a check that the EGT harness (71-52-45, 01-005) has the minimum clearance of 0.2 in. (5 mm) between the EGT harness and the fuel manifold tube and the other parts.
- (6) Torque the bolt (79-21-49, 15-525) (CP5211) and the nut (71-52-45, 01-085) (CP5529) to 36-45 lbf in. (4-5 Nm).
- (7) Make sure that the work area is clean and clear of tools, equipment and other unwanted materials.

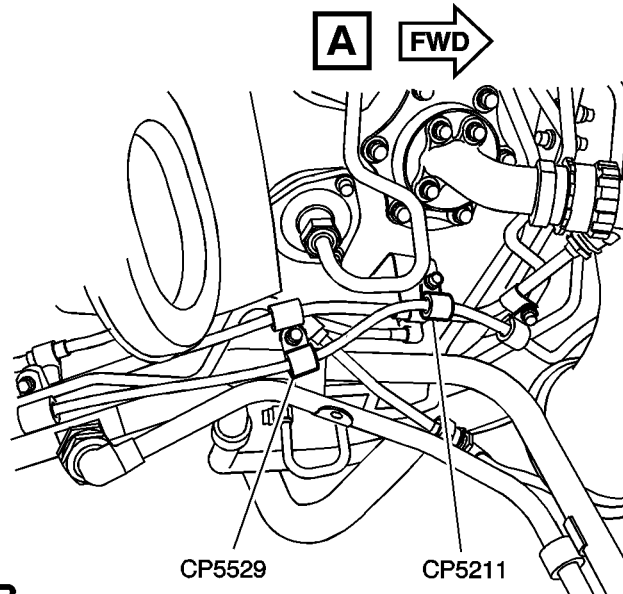
F. Recording Instructions

- (1) A record of accomplishment is required.

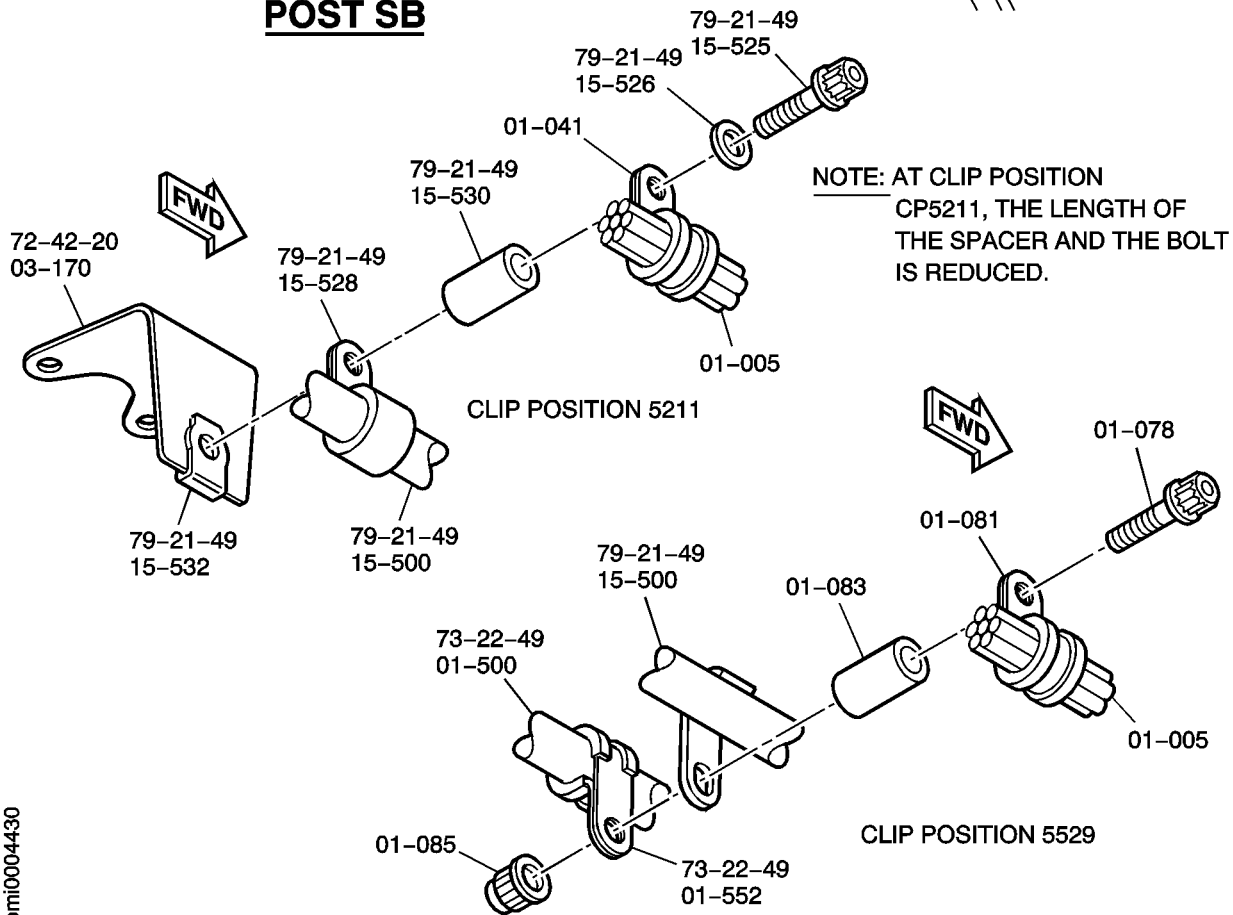


Locations of Clip Positions CP5211 and CP5529
Figure 1 Sheet 1

NOTE: ALL IPC FIG/ITEM
NUMBERS ARE 71-52-45
UNLESS IDENTIFIED
DIFFERENTLY.



POST SB



Locations of Clip Positions CP5211 and CP5529
Figure 1 Sheet 2

ENGINE – EXHAUST GAS TEMPERATURE (EGT) HARNESS CLIPPING MODIFICATION TO PREVENT
CHAFING ON FUEL MANIFOLD TUBE

SUPPLEMENT – PRICES AND AVAILABILITY

The prices (if shown) are for estimating purposes only and as such are given in good faith, without commercial liability for advanced planning purposes only. Refer to IAE Spares and/or current price catalogue for current prices.

1. Modification Kit:

Not applicable.

2. New Production Parts:

Part No.	Description	Unit Price US Dollars
4W0116	.Bolt	25.20
UP10481	.Spacer	27.30

Parts are currently available.

3. Tools

None.