



AIR - LP COMPRESSOR BLEED, MASTER ACTUATOR - INTRODUCTION OF REVISED TORQUEMOTOR STRAINERS - CATEGORY CODE 6 - MOD.ENG-75-0076

1. Planning Information

A. Effectivity

- (1) Aircraft
 - (a) Airbus A319.
 - (b) Airbus A320.
 - (c) Airbus A321.
 - (d) Boeing - Douglas Product Division MD-90.
- (2) Engines
 - (a) V2500-A1 Engines prior to Serial No. V0362
 - (b) V2522-A5 Engines prior to Serial No. V10450
 - (c) V2524-A5 Engines prior to Serial No. V10450
 - (d) V2527-A5 Engines prior to Serial No. V10450
 - (e) V2527E-A5 Engines prior to Serial No. V10450
 - (f) V2530-A5 Engines prior to Serial No. V10450
 - (g) V2533-A5 Engines prior to Serial No. V10450
 - (h) V2525-D5 Engines prior to Serial No. V20250
 - (i) V2528-D5 Engines prior to Serial No. V20250

B. Concurrent Requirements

None.

C. Reason

(1) Problem

Dual-channel track check faults can occur on the LPC Bleed master actuator (LPCBMA).

The problem is caused by fuel lacquer that blocks the supply port strainer of the affected LPCBMA torque motor.

(2) Evidence

This problem has been found on several occasions on in-service units.

(3) Substantiation

A satisfactory engineering analysis and successful vendor rig tests have been done on the changes contained in this Service Bulletin.

(4) Objective

The purpose of this Service Bulletin is to improve unit reliability.

V2500-ENG-75-0076



(5) Effect of Bulletin on:

(a) Operation

Not affected.

(b) Maintenance

Not affected.

(c) Overhaul

Not affected

(d) Repair Schemes

Not affected.

(e) Interchangeability

Not affected

(f) Fits and Clearances

Not affected.

D. Description

(1) This Service Bulletin includes the installation of a LPCBMA which has the Lucas Aerospace Modification DTV-060 (A1/A5 Models) or DTV-061 (D5 Models). (Refer to 1.L.).

(2) The LPCBMA has changed as follows:

(a) The 40/50 microm strainer of the torquemotor have been replaced with 70/80 microm strainers in the supply, return and control ports.

(3) The existing LPCBMA can be reworked. (Refer to the vendor Service Bulletin at 1.L.).

(4) DTV-060 (A1/A5 Models) or DTV-061 (D5 Models) will be put on the modification plate of affected units when this Service Bulletin has been done. (Refer to 1.L.).

E. Compliance

CATEGORY 6

V2500-ENG-75-0076



SERVICE BULLETIN

This Service Bulletin can be done when the subassembly, (That is modules, accessories, components, build groups), is disassembled sufficiently to get access to the affected parts.

F. Approval

The part number changes and/or modification are given in Section 2 and Section 3 of this Service Bulletin. They obey the applicable Federal Aviation Regulations and are FAA-APPROVED for the engine models listed.

G. Manpower

(1) Estimate of man-hours necessary to do this Service Bulletin in full:

Venue	Estimated Man-hours
In Service	Not applicable
At overhaul	No more time is necessary to do this Service Bulletin

NOTE: It is possible to get access to the parts affected by this Service Bulletin at overhaul.

H. Material Price and Availability

- (1) A modification kit is not necessary.
- (2) Refer to 3. Material Information section for prices and availability of spares.

I. Tooling Price and Availability

Special tools are not necessary.

J. Weight and Balance

(1) Weight Change

None.

(2) Moment Arm

Not affected.

(3) Datum

Engine front mount centreline (Power Plant Station (PPS)100).

V2500-ENG-75-0076



K. Electrical Load Data

The aircraft electrical load is not affected by this Service Bulletin.

L. References

(1) Internal Reference No.

EC97VI010A

(2) Other References

Refer to the Lucas vendor Service Bulletins that follow:

(a) For DTV 060, refer to: 1666-75-007 or 1777-75-004 (A1/A5).

(b) For DTV 061, refer to: 1797-75-003 (D5).

Refer to the manuals that follow:

(a) The A1 Engine Manual (EM), Chapter/Section 72-00-40.

(b) The A5 Engine Manual (EM), Chapter/Section 72-00-40.

(c) The D5 Engine Manual (EM), Chapter/Section 72-00-40.

(d) The Airbus A319 Aircraft Maintenance Manual (AMM), Chapter/Section 75-31-42.

(e) The Airbus A320/A321 Aircraft Maintenance Manual (AMM), Chapter/Section 75-31-42.

(f) The Boeing-Douglas MD-90 Aircraft Maintenance Manual (AMM), Chapter/Section 75-32-42.

Airbus Aircraft modification No.21820.

M. Other Publications Affected

Illustrated Parts Catalog (IPC), Chapter/Section 75-31-42.



2. Accomplishment Instructions

A. Rework Instructions

- (1) Refer to the vendor Service Bulletin (1.L.).

B. Assembly Instructions

- (1) For the correct Removal/Installation procedures refer to the manuals that follow:
 - (a) The A1 Engine Manual (EM), Chapter/Section 72-00-40, Removal-02, CONFIG-01 and Installation-09, CONFIG-01.
 - (b) The A5 Engine Manual (EM), Chapter/Section 72-00-40, Removal-02, CONFIG-02 and Installation-09, CONFIG-02.
 - (c) The D5 Engine Manual (EM), Chapter/Section 72-00-40, Removal-02/Installation-09.
 - (d) The Airbus A319 Aircraft Maintenance Manual (AMM), Chapter/Section 75-31-42, Removal/Installation CONFIG-01.
 - (e) The Airbus A320/A321 Aircraft Maintenance Manual (AMM), Chapter/Section 75-31-42, Removal/Installation CONFIG-02.
 - (f) The Boeing-Douglas MD-90 Aircraft Maintenance Manual (AMM), Chapter/Section 75-32-42, Removal/Installation.

C. Recording Instructions

- (1) A record of accomplishment is necessary. (Refer to the vendor Service Bulletin 1.L.).



SERVICE BULLETIN

3. Material Information

Applicability: For each V2500 engine for which this Service Bulletin is necessary.

A. Kits necessary for this Service Bulletin:

None.

B. Units affected by this Service Bulletin:

NEW PART No. (ATA No.)	QTY	EST'D UNIT PRICE (\$)	PART TITLE	OLD PART (IPC No.)	INSTR DISP
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A1 Models

1666MK5 (75-31-42)	1	Note	Actuator - Master LPC Bleed (VU4271)	1666MK5 (01-100)	(A)(S1)
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A5 Models

1777MK2 (75-31-42)	1	Note	Actuator - Master LPC Bleed (VU4271)	1777MK2 (01-100)	(A)(S1)
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D5 Models

1797MK2 (75-31-42)	1	Note	Actuator - Master LPC Bleed (VU4271)	1797MK2 (01-100)	(A)(S1)
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NOTE: The unit prices, if shown, are an estimate and they are given for the purpose of planning only. For information about actual prices, refer to the IAE Price Catalog or contact IAE's spare parts sale department.

C. Instruction/disposition codes:

- (A) New standard of unit will be available from August 1998.
(S1) Old and new parts are freely and fully interchangeable.

V2500-ENG-75-0076

Lucas Aerospace
SERVICE BULLETIN
PUBLICATION TRANSMITTAL

LUCAS AEROSPACE
SHAFTMOOR LANE, BIRMINGHAM, B28 8SW
ENGLAND.

TELEPHONE: 0121-707-7111
FACSIMILE: 0121-707-8826

Date: 8th May1998

LPC BLEED MASTER ACTUATOR
TYPE 1666

THIS DOCUMENT TRANSMITS SERVICE BULLETIN 1666-75-007.

Remove

Insert

Reason

Service Bulletin 1666-75-007
Pages 1 thru 5 and Supplement
1 of 1, dated May 8/98

Introduction of torque motor with
revised filtration to prevent blockage
with fuel degradation products

Lucas Aerospace

SERVICE BULLETIN

ENGINE COMPRESSOR CONTROL - LPC BLEED MASTER ACTUATOR INTRODUCTION OF TORQUE MOTOR WITH REVISED FILTRATION TO PREVENT BLOCKAGE WITH FUEL DEGRADATION PRODUCTS

(LUCAS AEROSPACE MOD. D.TV.060)

1. Planning Information

A. Effectivity

- (1) Aircraft
 - (a) Airbus - A320.
- (2) Engine
 - (a) V2500 - A1.
- (3) Equipment
 - (a) Actuator, Master LPC Bleed Unit - Type 1666 Mk 5.

B. Reason

(1) Condition

The current standard of Torque Motor (in the Master L.P.C. Bleed Unit Actuator) is prone to blockage of the filters by fuel degradation products.

(2) Background

The condition was identified during the investigation of units returned from service.

(3) Objective

Incorporation of the changes introduced by this Service Bulletin (Modification) are designed to improve the reliability of the torque motor by revised filtration of the filter screen. This Service Bulletin (Modification) only affects filtration and not the number of filters in a Torque Motor.

(4) Substantiation

The changes introduced by this Service Bulletin (Modification) will enhance the reliability of the Torque Motor.

C. Description

This Service Bulletin (Modification) introduces a Torque Motor with revised filtration to prevent blockage by fuel degradation products.

D. Compliance

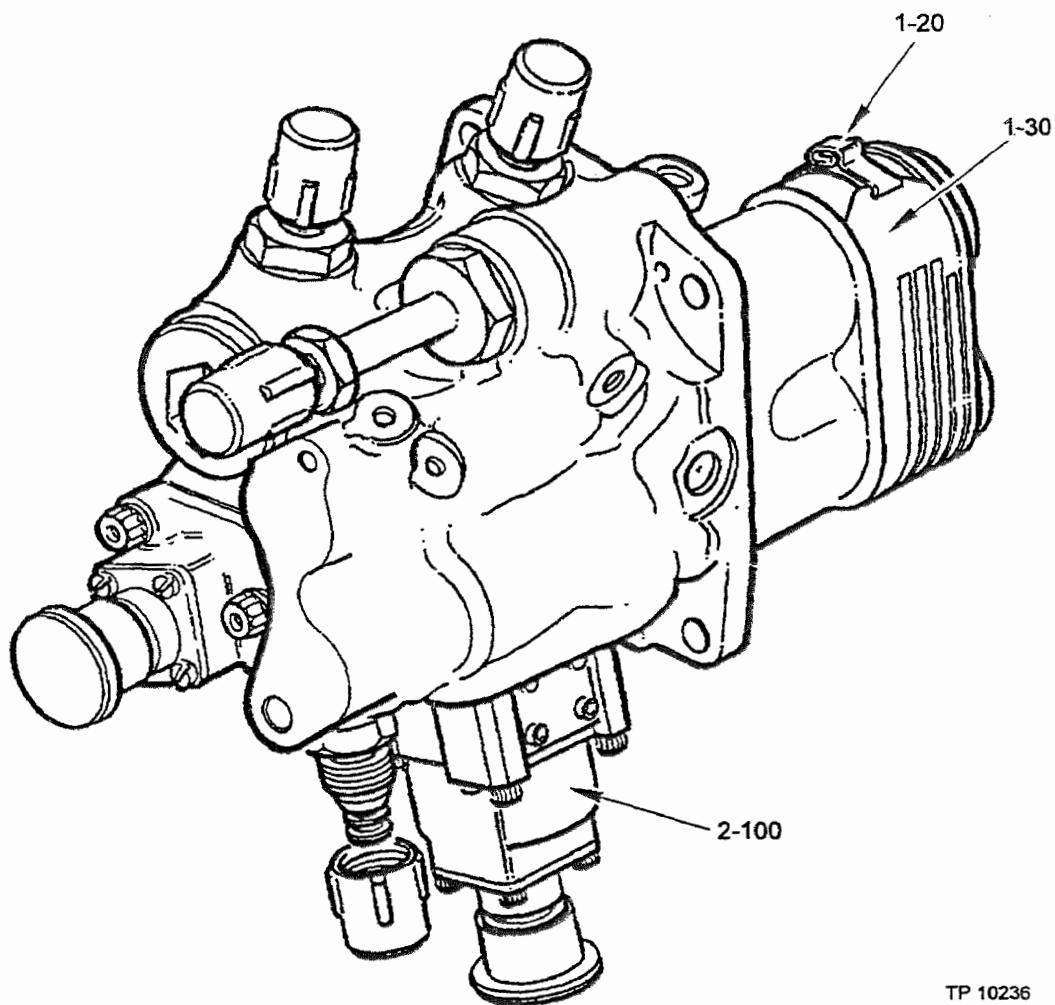
Category Code 6

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

1666-75-007

Page 1 of 5
May 8/98

Lucas Aerospace
SERVICE BULLETIN



TP 10236

LPC Bleed Master Actuator Identification
Figure 1

1666-75-007

Page 2 of 5
May 8/98

Lucas Aerospace

SERVICE BULLETIN

E. Approval

Service Bulletin No. 1666-75-007 (Mod. D.TV.060), was technically approved by IAE on Apr 15/98. The part number changes and/or part modifications described in this Service Bulletin have been shown to comply with the appropriate Federal Aviation Administration (FAA), Regulations and are FAA approved for those units listed in this Bulletin.

F. Manpower

Not Applicable.

G. Material - Price and Availability

See the Supplement to this Bulletin.

H. Tooling - Price and Availability

(1) Additional Tools

None.

(2) Tools made Redundant

None.

I. Weight and Balance

(1) Weight change Nil.

(2) Moment arm No effect.

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

J. References

(1) Lucas Aerospace Mod. D.TV.060.

(2) Lucas Aerospace, Component Maintenance Manual 75-31-42.

(3) IAE Service Bulletin V2500 ENG 75-0076.

K. Other Publications Affected

Nil.

2. Accomplishment Instructions (Fig 1)

Install the Torque Motor in accordance with the Component Maintenance Manual. Existing Torque Motors can be reworked by the manufacturer (Moog Controls Ltd).

A. Replace the Torque Motor Pre SB 1666-75-005

(1) If the Torque Motor (2-100) part no. 1656-1054 is to be modified, remove it from the disassembled kit of parts and either:

— Send the torque motor for rework and install the modified unit, part number 1777-9000

1666-75-007

Page 3 of 5
May 8/98

Lucas Aerospace

SERVICE BULLETIN

- Install a previously modified unit, part number 1777-9000 or 1777-9001.

B. Replace the Torque Motor Post SB 1666-75-005

- (1) If the torque motor (2-100A) part no. 1727-4008 is to be modified, remove it from the disassembled kit of parts and either:
 - Send the torque motor for rework and install the modified unit, part number 1777-9001
 - Install a previously modified unit, part number 1777-9001.

C. When Assembly is Complete:

- (1) Put the new identification plate (1-30) part number 215-4009 on a flat surface. Mark the identification plate with 1.60 mm (1/16in) letter/number stamps:

TYPE No. MARK: 1666 Mk 5

SERIAL No. Mark as on the original plate

MOD No.	Mark on the plate:	Installed Unit	Replacement Unit
	D.TV.060	1656-1054	1777-9000
	D.TV.049, D.TV.060	1656-1054	1777-9001
	D.TV.049, D.TV.060	1727-4008	1777-9001

INSP. Keep blank

TEST Keep blank

- (2) Fill the stamped letters and numbers with black paint and wipe away the surplus.
- (3) Install the new identification plate (1-30) part number 215-4009 on the unit with the new strap (1-20) part number 215-410.

D. A record of accomplishment is required.

E. Torque Motor Disposal Instructions

- (1) Inhibit and pack the torque motor in accordance with ASSEMBLY in the Component Maintenance Manual.
- (2) Return the torque motor to Moog Controls at the following address:

Moog Controls Ltd
Ashchurch
Tewkesbury
Gloucestershire, GL20 8NA
England
(For the attention of the Repair Co-ordinator)

3. Material Information

A. Modification Kit

See the Supplement to this Bulletin.

1666-75-007

Page 4 of 5
May 8/98

Lucas Aerospace

SERVICE BULLETIN

B. Parts to be Re-worked

<u>Keyword</u>	<u>Old Part No</u>
Motor, Torque	1656-1054
Motor, Torque	1727-4008

C. New Production Parts

The following new part(s) will be available as spares:

<u>New Part No</u>	<u>Qty</u>	<u>Keyword</u>	<u>Old Part No</u>
1777-9000	1	Motor, Torque	1656-1054
1777-9001	1	Motor, Torque	1727-4008
STD831-10	4	Ring, sealing, toroidal	STD831-10
215-4009	1	Plate, identification	215-4009
215-410	1	Strap, label, retaining	215-410

D. Redundant Parts

<u>IPL Fig/Item No</u>	<u>Keyword</u>	<u>Old Part No</u>
2-100	Motor, Torque	1656-1054
2-100A	Motor, Torque	1727-4008

E. Identification of Units

The type of equipment affected by this Service Bulletin (Modification) is:

<u>Unit</u>	<u>Type No.</u>
Actuator - Master L.P.C. Bleed Unit	1666 Mk 5

1666-75-007

Page 5 of 5
May 8/98

Lucas Aerospace

SERVICE BULLETIN

SB 1666-75-007 (SUPPLEMENT)

ENGINE COMPRESSOR CONTROL - LPC BLEED MASTER ACTUATOR
INTRODUCTION OF TORQUE MOTOR WITH REVISED FILTRATION
TO PREVENT BLOCKAGE WITH FUEL DEGRADATION PRODUCTS

(LUCAS AEROSPACE MOD. D.TV.060)

(IAE SB V2500-ENG-75-0076)

1. Modification Kit

Modification kit D.TV.060 comprises the parts given in Para. 2.

2. New Production Parts

<u>Part No.</u>	<u>Qty per Unit</u>	<u>Keyword</u>	<u>Gross World List Price</u> <u>(US Dollars)</u>	<u>Availability on</u> <u>Receipt of Order</u>
1777-9000	1	Motor, Torque	TBA	
1777-9001	1	Motor, Torque	TBA	
STD831-10	4	Ring sealing, toroidal	TBA	
215-4009	1	Plate, identification	TBA	
215-410	1	Strap, label, retaining	TBA	

3. New Tooling

None.

4. Spare Parts Supply

Spares distribution and Customer Service is available from the following Lucas Aerospace Customer Support Centres:

<u>REGION</u>	<u>ADDRESS</u>	<u>COMMUNICATION</u>
AMERICAS	LUCAS AEROSPACE CUSTOMER SUPPORT 30 VAN NOSTRAND AVENUE ENGLEWOOD NEW JERSEY 07631 USA.	PHONE (1) 201 567 6400 FAX (1) 201 894 1965 AOG (1) 201 567 6411 SITA/ARINC EWR LU7X
EUROPE/MIDDLE EAST/AFRICA	LUCAS AEROSPACE CUSTOMER SUPPORT STRATFORD ROAD SOLIHULL, B90 4LA ENGLAND.	PHONE (44) [0]121 451 5999 FAX (44) [0]121 451 5881 AOG (44) [0]121 451 5904 SITA/ARINC BHX LW7X
ASIA/PACIFIC	LUCAS AEROSPACE CUSTOMER SUPPORT 35 - 37 LOYANG WAY SINGAPORE 508733.	PHONE (65) 545 9975 FAX (65) 545 9965 AOG (65) 545 6253 SITA/ARINC SIN LU7X

1666-75-007

SUPPLEMENT
Page 1 of 1
May 8/98

Lucas Aerospace
SERVICE BULLETIN
PUBLICATION TRANSMITTAL

LUCAS AEROSPACE
SHAFTMOOR LANE, BIRMINGHAM, B28 8SW
ENGLAND.

TELEPHONE: 0121-707-7111
FACSIMILE: 0121-707-8826

Date: 8th May1998

LPC BLEED MASTER ACTUATOR
TYPE 1777

THIS DOCUMENT TRANSMITS SERVICE BULLETIN 1777-75-004.

Remove

Insert

Reason

Service Bulletin 1777-75-004
Pages 1 thru 5 and Supplement
1 of 1, dated May 8/98

Introduction of torque motor with
revised filtration to prevent blockage
with fuel degradation products

CHECK THAT ANY PREVIOUS REVISIONS HAVE BEEN INCORPORATED

If any have not been received please advise Technical Publications Department, Lucas Aerospace,
Birmingham B28 8SW, ENGLAND. Telephone: 0121-707-7111

Page 1

Lucas Aerospace

SERVICE BULLETIN

ENGINE COMPRESSOR CONTROL - LPC BLEED MASTER ACTUATOR INTRODUCTION OF TORQUE MOTOR WITH REVISED FILTRATION TO PREVENT BLOCKAGE WITH FUEL DEGRADATION PRODUCTS

(LUCAS ENGINE SYSTEMS MOD. D.TV.060)

1. Planning Information

A. Effectivity

(1) Aircraft

(a) Airbus - A319, A320 and A321.

(2) Engine

(a) V2500 - A5.

(3) Equipment

(a) Actuator - Master L.P.C Bleed Unit - Type 1777 MK 2.

B. Reason

(1) Condition

The current standard of Torque Motor (in the Master L.P.C Bleed Unit Actuator) is prone to blockage of the filters by fuel degradation products.

(2) Background

The condition was identified during the investigation of units returned from service.

(3) Objective

Incorporation of the changes introduced by this Service Bulletin (Modification) are designed to improve the reliability of the torque motor by revised filtration of the filter screen. This Service Bulletin (Modification) only affects filtration and not the number of filters in a Torque Motor.

(4) Substantiation

The changes introduced by this Service Bulletin (Modification) will enhance the reliability of the Torque Motor.

C. Description

This Service Bulletin (Modification) introduces a Torque Motor with revised filtration to prevent blockage by fuel degradation products.

D. Compliance

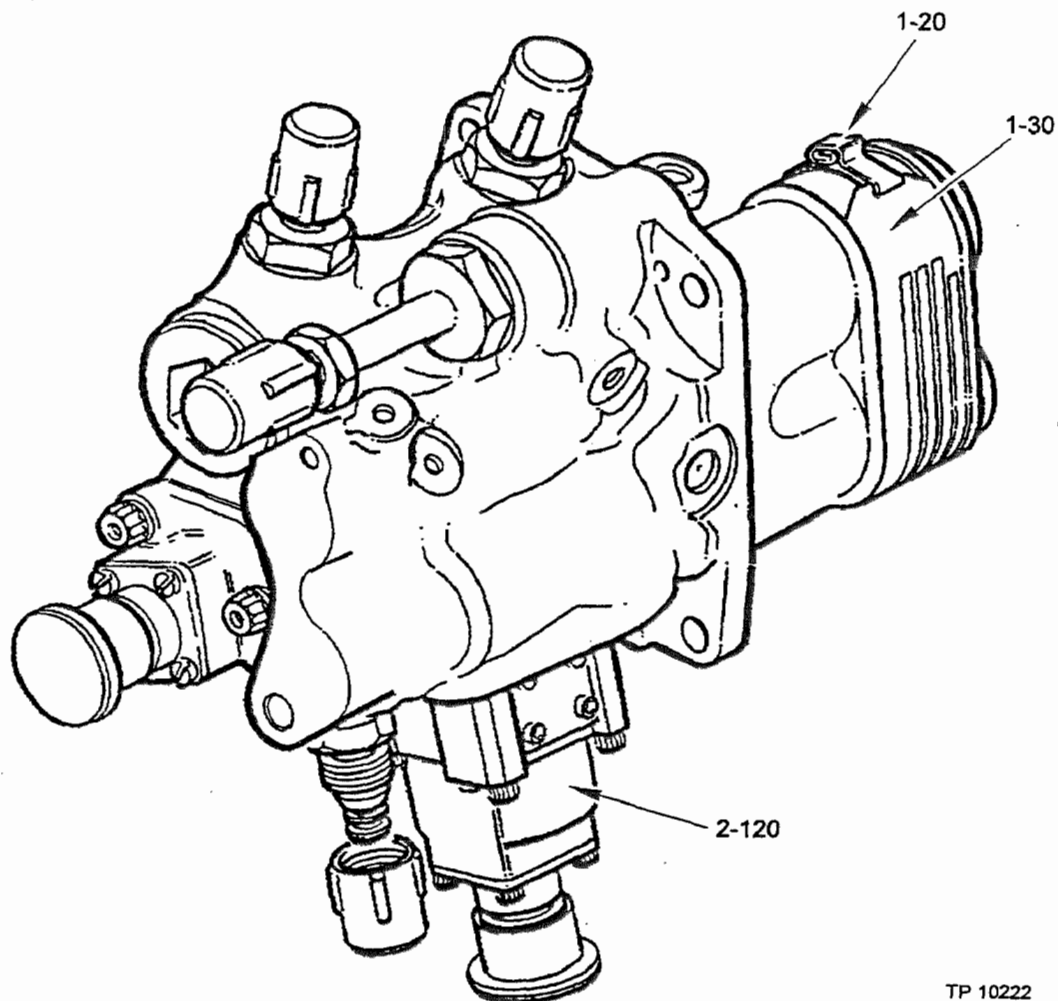
Category Code 6

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

1777-75-004

Page 1 of 5
May 8/98

Lucas Aerospace
SERVICE BULLETIN



TP 10222

LPC Bleed Master Actuator Identification

Figure 1

1777-75-004

Page 2 of 5
May 8/98

Lucas Aerospace

SERVICE BULLETIN

E. Approval

Service Bulletin No. 1777-75-004 (Mod. D.TV.060), was technically approved by IAE on Apr 15/98. The part number changes and/or part modifications described in this Service Bulletin have been shown to comply with the appropriate Federal Aviation Administration (FAA), Regulations and are FAA approved for those units listed in this Bulletin.

F. Manpower

Not Applicable.

G. Material - Price and Availability

See the Supplement to this Bulletin.

H. Tooling - Price and Availability

(1) Additional Tools

None.

(2) Tools made Redundant

None.

I. Weight and Balance

(1) Weight change Nil.

(2) Moment arm No effect.

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

J. References

(1) Lucas Aerospace, Component Maintenance Manual 75-38-02.

(2) Lucas Aerospace Mod. D.TV.060.

(3) IAE Service Bulletin V2500 ENG 75-0076.

K. Other Publications Affected

Nil.

2. Accomplishment Instructions (Fig 1)

Install the Torque Motor in accordance with the Component Maintenance Manual. Existing Torque Motors can be reworked by the manufacturer (Moog Controls Ltd).

A. Replace the Torque Motor Pre SB 1777-75-001

(1) If the torque motor (2-120) part no. 1656-1054 is to be modified, remove it from the disassembled kit of parts and either:

— Send the torque motor for rework and install the modified unit, part number 1777-9000

1777-75-004

Page 3 of 5
May 8/98

Lucas Aerospace

SERVICE BULLETIN

- Install a previously modified unit, part number 1777-9000 or 1777-9001.

B. Replace the Torque Motor Post SB 1777-75-001

- (1) If the torque motor (2-120A) part no. 1727-4008 is to be modified, remove it from the disassembled kit of parts and either:
 - Send the torque motor for rework and install the modified unit, part number 1777-9001
 - Install a previously modified unit, part number 1777-9001.

C. When Assembly is Complete:

- (1) Put the new identification plate (1-30) part no. 215-4009 on a flat surface. Mark the identification plate with 1.60 mm (1/16in) letter/number stamps:

TYPE No. MARK: 1777 Mk 2

SERIAL No. Mark as on the original plate

MOD No.	Mark on the plate:	Installed Unit	Replacement Unit
	D.TV.060	1656-1054	1777-9000
	D.TV.049, D.TV.060	1656-1054	1777-9001
	D.TV.049, D.TV.060	1727-4008	1777-9001

INSP. Keep blank

TEST Keep blank

- (2) Fill the stamped letters and numbers with black paint and wipe away the surplus.

- (3) Install the new identification plate on the unit with the new strap (1-20) part no. 215-410.

D. A record of accomplishment is required.

E. Torque Motor Disposal Instructions

- (1) Inhibit and pack the torque motor in accordance with ASSEMBLY in the Component Maintenance Manual.
- (2) Return the torque motor to Moog Controls at the following address:

Moog Controls Ltd
Ashchurch
Tewkesbury
Gloucestershire, GL20 8NA
England
(For the attention of the Repair Co-ordinator)

3. Material Information

A. Modification Kit

See the Supplement to this Bulletin.

1777-75-004

Page 4 of 5
May 8/98

Lucas Aerospace

SERVICE BULLETIN

B. Parts to be Re-worked

<u>Keyword</u>	<u>Old Part No</u>
Motor, Torque	1656-1054
Motor, Torque	1727-4008

C. New Production Parts

The following new part(s) will be available as spares:

<u>New Part No</u>	<u>Qty</u>	<u>Keyword</u>	<u>Old Part No</u>
1777-9000	1	Motor, Torque	1656-1054
1777-9001	1	Motor, Torque	1727-4008
STD831-10	4	Ring, sealing, toroidal	STD831-10
215-4009	1	Plate, identification	215-4009
215-410	1	Strap, label, retaining	215-410

D. Redundant Parts

<u>IPL Fig/Item No</u>	<u>Keyword</u>	<u>Old Part No</u>
2-120	Motor, Torque	1656-1054
2-120A	Motor, Torque	1727-4008

E. Identification of Units

The type of equipment affected by this Service Bulletin (Modification) is:

<u>Unit</u>	<u>Type No.</u>
Actuator - Master L.P.C Bleed Unit	1777 MK 2

1777-75-004

Page 5 of 5
May 8/98

Lucas Aerospace SERVICE BULLETIN

SB 1777-75-004 (SUPPLEMENT)

ENGINE COMPRESSOR CONTROL - LPC BLEED MASTER ACTUATOR
INTRODUCTION OF TORQUE MOTOR WITH REVISED FILTRATION
TO PREVENT BLOCKAGE WITH FUEL DEGRADATION PRODUCTS

(LUCAS AEROSPACE MOD. D.TV.060)

(IAE SB V2500-ENG-75-0076)

1. Modification Kit

Modification kit D.TV.060 comprises the parts given in Para. 2.

2. New Production Parts

<u>Part No.</u>	<u>Qty per Unit</u>	<u>Keyword</u>	<u>Gross World List Price</u> <u>(US Dollars)</u>	<u>Availability on</u> <u>Receipt of Order</u>
1777-9000	1	Motor, Torque	TBA	
1777-9001	1	Motor, Torque	TBA	
STD831-10	4	Ring Sealing, Toroidal	TBA	
215-4009	1	Plate, identification	TBA	
215-410	1	Strap, label, retaining	TBA	

3. New Tooling

None.

4. Spare Parts Supply

Spares distribution and Customer Service is available from the following Lucas Aerospace Customer Support Centres:

<u>REGION</u>	<u>ADDRESS</u>	<u>COMMUNICATION</u>	
AMERICAS	LUCAS AEROSPACE CUSTOMER SUPPORT 30 VAN NOSTRAND AVENUE ENGLEWOOD NEW JERSEY 07631 USA.	PHONE	(1) 201 567 6400
		FAX	(1) 201 894 1965
		AOG	(1) 201 567 6411
		SITA/ARINC	EWB LU7X
EUROPE/MIDDLE EAST/AFRICA	LUCAS AEROSPACE CUSTOMER SUPPORT STRATFORD ROAD SOLIHULL, B90 4LA ENGLAND.	PHONE	(44) (0)121 451 5999
		FAX	(44) (0)121 451 5881
		AOG	(44) (0)121 451 5904
		SITA/ARINC	BHX LW7X
ASIA/PACIFIC	LUCAS AEROSPACE CUSTOMER SUPPORT 35 - 37 LOYANG WAY SINGAPORE 508733.	PHONE	(65) 545 9975
		FAX	(65) 545 9965
		AOG	(65) 545 6253
		SITA/ARINC	SIN LU7X

1777-75-004

SUPPLEMENT
Page 1 of 1
May 8/98

Lucas Aerospace
SERVICE BULLETIN
PUBLICATION TRANSMITTAL

LUCAS AEROSPACE
SHAFTMOOR LANE, BIRMINGHAM, B28 8SW
ENGLAND.

TELEPHONE: 0121-707-7111
FACSIMILE: 0121-707-8826

Date: 8th May 1998

LPC BLEED MASTER ACTUATOR
TYPE 1797

THIS DOCUMENT TRANSMITS SERVICE BULLETIN 1797-75-003.

Remove

Insert

Reason

Service Bulletin 1797-75-003
Pages 1 thru 5 and Supplement
1 of 1, dated May 8/98

Introduction of torque motor with
revised filtration to prevent blockage
with fuel degradation products

Lucas Aerospace
SERVICE BULLETIN

ENGINE COMPRESSOR CONTROL - LPC BLEED MASTER ACTUATOR
INTRODUCTION OF TORQUE MOTOR WITH REVISED FILTRATION
TO PREVENT BLOCKAGE WITH FUEL DEGRADATION PRODUCTS

(LUCAS ENGINE SYSTEMS MOD. D.TV.061)

1. Planning Information

A. Effectivity

(1) Aircraft

(a) McDonnell Douglas - MD90.

(2) Engine

(a) V2500 - D5.

(3) Equipment

(a) Actuator - Master L.P.C Bleed Unit - Type 1797 MK 2.

B. Reason

(1) Condition

The current standard of Torque Motor (in the Master L.P.C Bleed Unit Actuator) is prone to blockage of the filters by fuel degradation products.

(2) Background

The condition was identified during the investigation of units returned from service.

(3) Objective

Incorporation of the changes introduced by this Service Bulletin (Modification) are designed to improve the reliability of the torque motor by revised filtration of the filter screen. This Service Bulletin (Modification) only affects filtration and not the number of filters in a Torque Motor.

(4) Substantiation

The changes introduced by this Service Bulletin (Modification) will enhance the reliability of the Torque Motor.

C. Description

This Service Bulletin (Modification) introduces a Torque Motor with revised filtration to prevent blockage by fuel degradation products.

D. Compliance

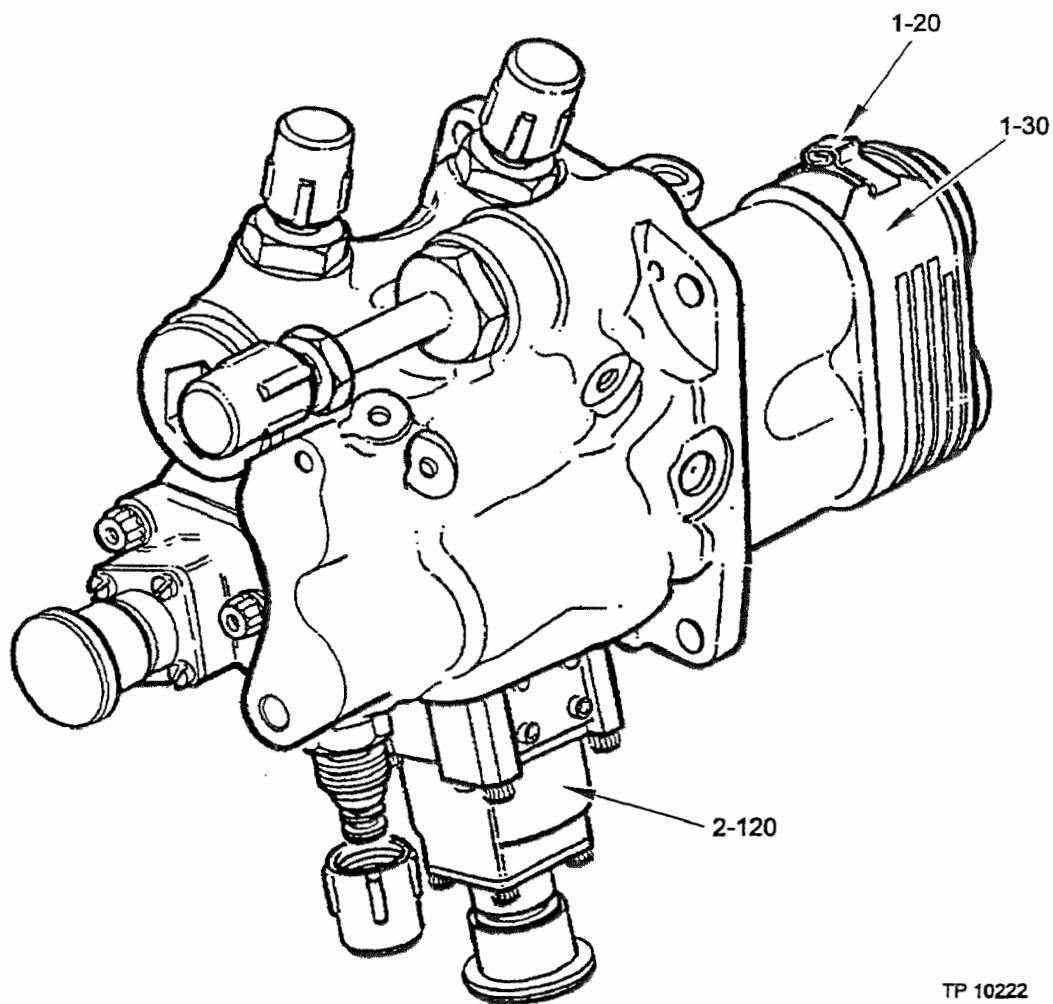
Category Code 6

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

1797-75-003

Page 1 of 5
May 8/98

Lucas Aerospace
SERVICE BULLETIN



TP 10222

LPC Bleed Master Actuator Identification
Figure 1

1797-75-003

Page 2 of 5
May 8/98

Lucas Aerospace

SERVICE BULLETIN

E. Approval

Service Bulletin No. 1797-75-003 (Mod. D.TV.061), was technically approved by IAE on Apr 15/98. The part number changes and/or part modifications described in this Service Bulletin have been shown to comply with the appropriate Federal Aviation Administration (FAA), Regulations and are FAA approved for those units listed in this Bulletin.

F. Manpower

Not Applicable.

G. Material - Price and Availability

See the Supplement to this Bulletin.

H. Tooling - Price and Availability

(1) Additional Tools

None.

(2) Tools made Redundant

None.

I. Weight and Balance

(1) Weight change Nil.

(2) Moment arm No effect.

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

J. References

(1) Lucas Aerospace, Component Maintenance Manual 75-38-22.

(2) Lucas Aerospace Mod. D.TV.061.

(3) IAE Service Bulletin V2500 ENG 75-0076.

K. Other Publications Affected

Nil.

2. Accomplishment Instructions (Fig 1)

Install the Torque Motor in accordance with the Component Maintenance Manual. Existing Torque Motors can be reworked by the manufacturer (Moog Controls Ltd).

A. Replace the Torque Motor Pre SB 1797-75-002

(1) If the torque motor (2-120) part no. 1767-4001 is to be modified, remove it from the disassembled kit of parts and either:

— Send the torque motor for rework and install the modified unit, part number 1797-9000

1797-75-003

Page 3 of 5
May 8/98

Lucas Aerospace

SERVICE BULLETIN

— Install a previously modified unit, part number 1797-9000.

B. When Assembly is Complete:

- (1) Put the new identification plate (1-30) part no. 215-4009 on a flat surface. Mark the identification plate with 1.60 mm (1/16in) letter/number stamps:

TYPE No. MARK: 1797 Mk 2

SERIAL No. Mark as on the original plate

MOD No.	Mark on the plate:	Installed Unit	Replacement Unit
	D.TV.061	1767-4001	1797-9000

INSP. Keep blank

TEST Keep blank

- (2) Fill the stamped letters and numbers with black paint and wipe away the surplus.
- (3) Install the new identification plate (1-30) on the unit with the new strap (1-20) part no. 215-410.

C. A record of accomplishment is required.

D. Torque Motor Disposal Instructions

- (1) Inhibit and pack the torque motor in accordance with ASSEMBLY in the Component Maintenance Manual.
- (2) Return the torque motor to Moog Controls at the following address:

Moog Controls Ltd
Ashchurch
Tewkesbury
Gloucestershire, GL20 8NA
England
(For the attention of the Repair Co-ordinator)

3. Material Information

A. Modification Kit

See the Supplement to this Bulletin.

B. Parts to be Re-worked

<u>Keyword</u>	<u>Old Part No</u>
Motor, Torque	1767-4001

1797-75-003

Page 4 of 5
May 8/98

Lucas Aerospace

SERVICE BULLETIN

C. New Production Parts

The following new part(s) will be available as spares:

<u>New Part No</u>	<u>Qty</u>	<u>Keyword</u>	<u>Old Part No</u>
1797-9000	1	Motor, Torque	1767-4001
STD1031-4013	4	Ring, sealing, toroidal	STD1031-4013
215-4009	1	Plate, identification	215-4009
215-410	1	Strap, label, retaining	215-410

D. Redundant Parts

<u>IPL Fig/Item No</u>	<u>Keyword</u>	<u>Old Part No</u>
2-120	Motor, Torque	1767-4001

E. Identification of Units

The type of equipment affected by this Service Bulletin (Modification) is:

<u>Unit</u>	<u>Type No.</u>
Actuator - Master L.P.C Bleed Unit	1797 MK 2.

1797-75-003

Page 5 of 5
May 8/98

Lucas Aerospace

SERVICE BULLETIN

SB 1797-75-003 (SUPPLEMENT)

ENGINE COMPRESSOR CONTROL - LPC BLEED MASTER ACTUATOR
INTRODUCTION OF TORQUE MOTOR WITH REVISED FILTRATION
TO PREVENT BLOCKAGE WITH FUEL DEGRADATION PRODUCTS

(LUCAS AEROSPACE MOD. D.TV.061)

(IAE SB V2500-ENG-75-0076)

1. Modification Kit

Modification kit D.TV.060 comprises the parts given in Para. 2.

2. New Production Parts

<u>Part No.</u>	<u>Qty per Unit</u>	<u>Keyword</u>	<u>Gross World List Price</u> <u>(US Dollars)</u>	<u>Availability on</u> <u>Receipt of Order</u>
1797-9000	1	Motor, Torque	TBA	
STD831-10	4	Ring Sealing, Toroidal	TBA	
215-4009	1	Plate, identification	TBA	
215-410	1	Strap, label, retaining	TBA	

3. New Tooling

None.

4. Spare Parts Supply

Spares distribution and Customer Service is available from the following Lucas Aerospace Customer Support Centres:

<u>REGION</u>	<u>ADDRESS</u>	<u>COMMUNICATION</u>	
AMERICAS	LUCAS AEROSPACE CUSTOMER SUPPORT 30 VAN NOSTRAND AVENUE ENGLEWOOD NEW JERSEY 07631 USA.	PHONE	(1) 201 567 6400
		FAX	(1) 201 894 1965
		AOG	(1) 201 567 6411
		SITA/ARINC	EWR LU7X
EUROPE/MIDDLE EAST/AFRICA	LUCAS AEROSPACE CUSTOMER SUPPORT STRATFORD ROAD SOLIHULL, B90 4LA ENGLAND.	PHONE	(44) (0)121 451 5999
		FAX	(44) (0)121 451 5881
		AOG	(44) (0)121 451 5904
		SITA/ARINC	BHX LW7X
ASIA/PACIFIC	LUCAS AEROSPACE CUSTOMER SUPPORT 35 - 37 LOYANG WAY SINGAPORE 508733.	PHONE	(65) 545 9975
		FAX	(65) 545 9965
		AOG	(65) 545 6253
		SITA/ARINC	SIN LU7X

1797-75-003

SUPPLEMENT
Page 1 of 1
May 8/98