



ENGINE - FUEL AND CONTROL - INTRODUCTION OF A NEW FUEL DIVERTER AND RETURN VALVE WITH
NEW MICROSWITCH ASSEMBLIES - CATEGORY CODE 6 - MOD.ENG-73-0081

1. Planning Information

A. Effectivity

- (1) Aircraft: (a) Airbus A320, A321
(b) McDonnell Douglas MD-90
- (2) Engine: (a) V2500-A1 Engines prior to Serial No. V0362
(b) V2527-A5 Engines prior to Serial No. V10161*
(c) V2530-A5 Engines prior to Serial No. V10161*
(d) V2525-D5 Engines prior to Serial No. V20043
(e) V2528-D5 Engines prior to Serial No. V20043

* The Serial Number data shown is of a preliminary nature and is provided for advanced planning only. A future revision to this Service Bulletin will confirm final serial number effectivity.

B. Reason

(1) Condition

High resistance material was formed on the electrical contact of the Microswitch of the Fuel Diverter and Return Valve (FD&RV).

It is considered that this was caused due to high temperature and high vibration during service.

(2) Background

Several warnings "FDV X-CHECK LATCHED FAILED" were observed on ECAM.

(3) Objective

To provide a new FD&RV with the new Microswitches which can maintain the reliability for high temperature and high vibration.

(4) Substantiation

The substantiation testing for the new Microswitch has been successfully completed by Controlled Service Use (CSU) instructed by IAE Service Bulletin V2500-ENG-73-0072.

(5) Effects of Bulletin on Workshop Procedures:

V2500-ENG-73-0081



SERVICE BULLETIN

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) This Service Bulletin introduces new FD&RV modified by the following IHI Service Bulletin:

Ishikawajima-Harima Heavy Industries Co., Ltd. (IHI) Service Bulletin No. 13298-73-006 (for V2500-A1) and 17300-73-006 (for V2527-A5, V2530-A5, V2525-D5 and V2528-D5).

- (2) For relationship with other Service Bulletins, see 1.K. "References" and 1.M. "Family Tree".

- (3) This Service Bulletin is comprised of the following two parts:

PART 1: Engines not incorporating IAE Service Bulletin No. V2500-ENG-73-0062

PART 2: Engines incorporating IAE Service Bulletin No. V2500-ENG-73-0062

D. Approval

The part number changes 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.

E. Compliance

Category Code 6

Accomplish when the subassembly (i.e., modules, accessories, components, build groups) is disassembled sufficiently to afford access to the affected part and to all affected spare subassemblies.

F. Manpower

Estimated manhours to incorporate the full intent of this Bulletin:

V2500-ENG-73-0081



SERVICE BULLETIN

Venue	Estimated Manhours
(1) In Service	Not applicable
(2) At Overhaul	Not affected
(Note: The part affected by this Service Bulletin is accessible at overhaul)	

G. Material - Price and Availability

- (1) Modification Kit is not required
- (2) See "Material Information" section for prices and availability of future spares.

H. Tooling - Price and Availability

Not affected.

I. Weight and Balance

- | | | | | |
|-------------------|----|----|----|---|
| (1) Weight change | .. | .. | .. | None |
| (2) Moment arm | .. | .. | .. | No effect |
| (3) Datum | .. | .. | .. | Engine front mount centerline
(Powerplant Station P.P.S.100) |

J. Electrical Load Data

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

K. References

- (1) Internal Reference No.

95VJ014

- (2) Other References

IAE Service Bulletin No. V2500-ENG-73-0072 Engine - Fuel and Control - Introduction of a new Fuel Diverter and Return Valve with new type of Microswitch for Controlled Service Use.

IAE Service Bulletin No. V2500-ENG-73-0062 Engine - Fuel and Control - Replace the Fuel Diverter and Return Valve Packings made from Improved Material

V2500-ENG-73-0081



V2500 Engine Illustrated Parts Catalogs (S-V2500-1IA,
S-V2500-2IA and S-V2500-3IA)

V2500 Engine Manuals (E-V2500-1IA and E-V2500-3IA)

Ishikawajima-Harima Heavy Industries Co., Ltd. (IHI) Service
Bulletins No. 13298-73-006 (for V2500-A1) and 17300-73-006
(for V2527-A5, V2530-A5, V2525-D5 and V2528-D5), Engine -
Fuel and Control - New Fuel Diverter and Return Valve with
new type of Microswitch

L. Other Publications Affected

- (1) V2500 Engine Illustrated Parts Catalogs (S-V2500-1IA, S-V2500-2IA and S-V2500-3IA), Chapter/Section 73-13-42

M. Family Tree

See Figure 1.



2. Accomplishment Instructions

A. Rework Instructions

None

B. Assembly Instructions

Install the new FD&RV by the approved procedures in Reference (4), Chapter/Section 72-00-32, Installation-20.

C. Recording Instructions

A record of accomplishment is necessary.



SERVICE BULLETIN

3. Material Information

Applicability: For each V2500 engine to incorporate this Bulletin.

A. Kits associated with this Bulletin:

None

B. Parts affected with this bulletin:

New Part No. (ATA No.)	Qty	Est'd Unit Price (\$)	Keyword	Old Part No. (IPC No)	Instructions Disposition
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(1) For V2500-A1 Engines not incorporating IAE Service Bulletin
No. V2500-ENG-73-0062:

13298G15 (73-13-42) IAE P/N:5L0073	1		.Valve, Fuel Diverter & Return	13298G13 (01-100) IAE P/N:5L0060	(A)(B) (S1)(1D)
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(2) For V2500-A1 Engines incorporating IAE Service Bulletin
No. V2500-ENG-73-0062:

13298G16 (73-13-42) IAE P/N:5L0075	1		.Valve, Fuel Diverter & Return	13298G14 (01-100) IAE P/N:5L0064	(A)(B) (S1)(1D)
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(3) For V2527-A5, V2530-A5, V2525-D5 and V2528-D5 Engines
not incorporating IAE Service Bulletin No. V2500-ENG-73-0062:

17300G08 (73-13-42) IAE P/N:5L0074	1		.Valve, Fuel Diverter & Return	17300G06 (01-100) IAE P/N:5L0061	(A)(B) (S1)(2D)
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(4) For V2527-A5, V2530-A5, V2525-D5 and V2528-D5 Engines
incorporating IAE Service Bulletin No. V2500-ENG-73-0062:

17300G09 (73-13-42) IAE P/N:5L0076	1		.Valve, Fuel Diverter & Return	17300G07 (01-100) IAE P/N:5L0065	(A)(B) (S1)(2D)
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V2500-ENG-73-0081



C. Instructions and Disposition Code Statements:

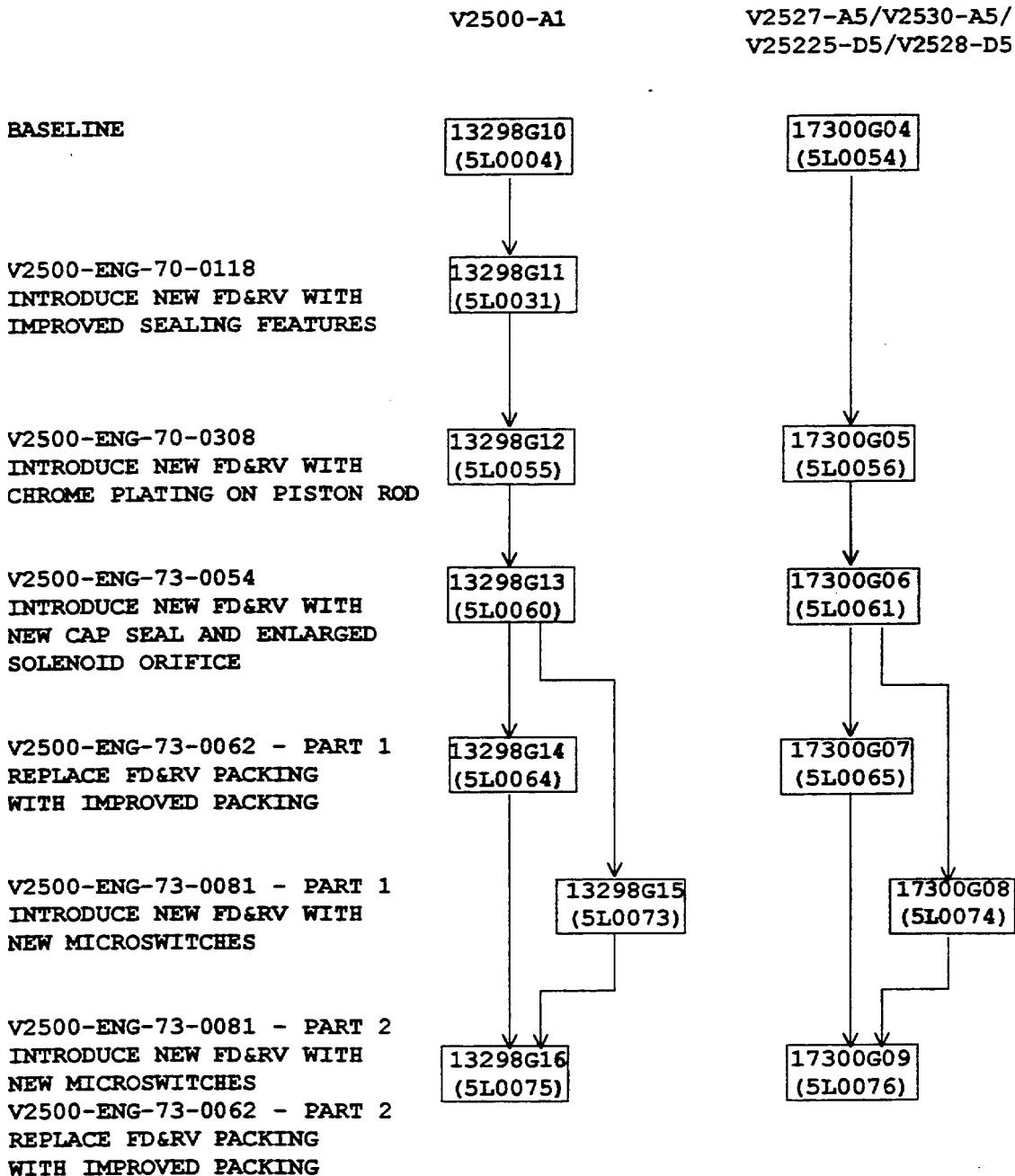
- (A) New part is currently available.
- (B) Old part is no longer available for sale.
- (1D) Old part can be reworked and reidentified to New part by
IHI Service Bulletin No. 13298-73-006
- (2D) Old part can be reworked and reidentified to New part by
IHI Service Bulletin No. 17300-73-006
- (S1) Old and New parts are freely and fully interchangeable, both
physically and functionally.

NOTE: The estimated 1996 unit prices shown are provided for planning purposes only and do not constitute a firm quotation. For information concerning firm prices, consult the IAE Price Catalog or contact the IAE's Spare Parts Sales Department or the following vendor;

Ishikawajima-Harima Heavy Industries Co., Ltd. (IHI)
Civil Aero Engine Overhaul and Repair
Business Dept.
Tel: 0425-68-7107
Fax: 0425-68-7104



SERVICE BULLETIN

MODIFICATIONSPART NUMBER CHANGE

Printed in Great Britain

Family Tree - Fuel Diverter and Return Valve Ref. Catalog Sequence No. 73-13-42
Fig.1

V2500-ENG-73-0081



International Aero Engines

SERVICE BULLETIN

Printed in Great Britain

V2500-ENG-73-0081

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SERVICE BULLETIN

No: 13298-73-006

**ENGINE - FUEL AND CONTROL - NEW FUEL DIVERTER AND RETURN VALVE
WITH NEW MICROSWITCH ASSEMBLIES****1. Planning Information****A. Effectivity****(a) Engine**

(a) V2500-A1 Engines

(b) Unit

(a) All 13298G series FD&RV prior to Serial No. 486

B. Concurrent Requirements

This Service Bulletin must be incorporated subsequent to the following Service Bulletins:

<u>Bulletin No.</u>	<u>Title</u>
13298-73-001	Introduction of a New Fuel Diverter and Return Valve
13298-73-002	Introduction of a New Fuel Diverter and Return Valve
13298-73-003	New Fuel Diverter and Return Valve Assembly with New Cap Seal and Enlarged Solenoid Orifice
13298-73-004	To Increase Thickness of CPV Plate on the Fuel Diverter and Return Valve Assembly

C. Reason**(1) Condition**

High resistance material was formed on the electrical contact of the Fuel Diverter Return Valve (FD&RV) Microswitch. It is considered that this was caused due to high temperature and high vibration.

SERVICE BULLETIN

(2) Background

Several warnings "FDV X-CHECK LATCHED FAILED" were observed on ECAM during service.

(3) Objective

To change the materials of contact and insulator in the FD&RV Microswitch to prevent forming of high resistance material.

D. Description

- (1) The changes introduced by this Service Bulletin are as follows: (Refer to Figure 2)

- a) The Movable Contact in the Microswitch is changed from the single spot contact to the bifurcated flat spring contact.
- b) The contact material in Microswitch is changed from silver based alloy to gold based alloy.
- c) The insulator material in Microswitch is changed from mica to ceramic.

- (2) Existing FD&RV can be reworked by replacing the existing Microswitches with the new ones.
- (3) New Microswitches will be available for replacement purposes.
- (4) This Service Bulletin is comprised of the following two parts:

PART 1: FD&RV not incorporating IHI Service Bulletin
No.13298-73-005

PART 2: FD&RV incorporating IHI Service Bulletin
No.13298-73-005

- (5) For relationship with other Service Bulletins, see "1.L. References" and "1.N. Family Tree Chart".

E. Approval

This Service Bulletin has been technically agreed by IAE.

SERVICE BULLETIN

F. Compliance

Category Code 6

Accomplish when the subassembly is disassembled sufficiently to afford access to the affected part and to all affected spare subassemblies.

G. 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 (<u>Note</u> : The parts (Microswitches) affected by this Service Bulletin are accessible)	
a) Increase in time required for assembly of New Microswitches (2 off)	Not affected

H. Material - Price and Availability

(1) Modification kit not required.

(2) See "3. Material Information" section for prices and availability of the parts required for this bulletin.

(3) Modification Price

(a) Option 1: Operators who wish to have the modification accomplished by IHI.

This Service Bulletin modification will be accomplished by IHI based on IHI's standard terms and commercial prices to be quoted upon request.

(b) Option 2: Operators who wish to accomplish the modification in their shop.

New parts required for this Service Bulletin modification are listed in "3. Material Information" section, and available at prices and lead times indicated.

For an order to each of the above two options, contact the address shown in "3. Material Information".

SERVICE BULLETIN

I. Tooling - Price and Availability

Not affected.

J. Weight

Not affected

K. Electrical Load Data

Not affected

L. References

- (1) IAE Service Bulletin No. V2500-ENG-73-0081
Engine-Fuel and Control-Introduction of a New Fuel Diverter
and Return Valve with New Microswitch Assemblies
- (2) IHI Service Bulletin No. 13298-73-005 New Fuel Diverter and
Return Valve Assembly with Changing Material of Packing
- (3) IHI Component Maintenance Manual, 73-13-42, Fuel Diverter
and Return Valve, Part No. 13298 series.
- (4) V2500 Standard Practices/Processes Manual, 70-09-00, Markings
of Part

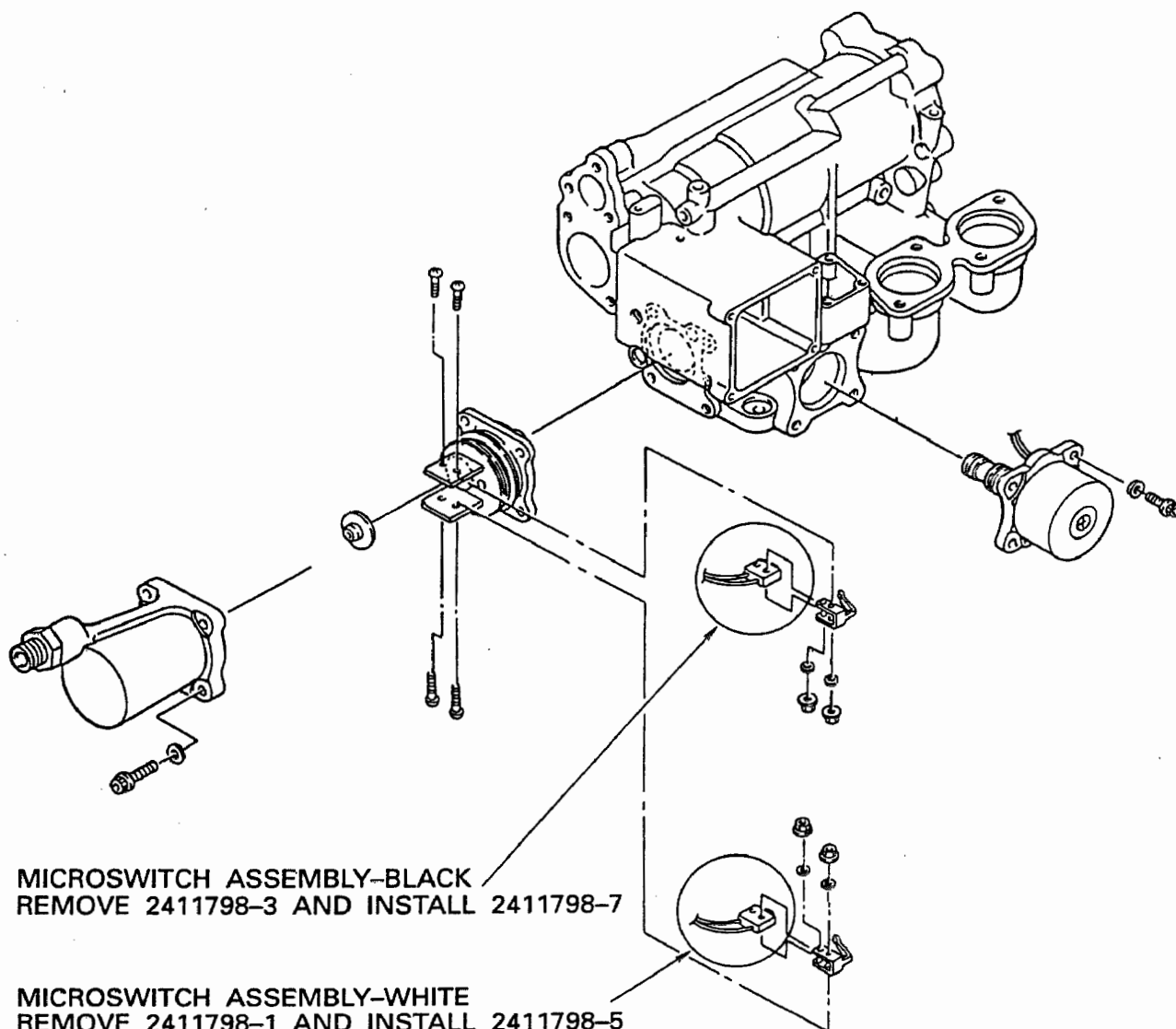
M. Other Publications Affected

- (1) IHI Component Maintenance Manual, 73-13-42, Fuel Diverter
and Return Valve, Part No. 13298 series
- (2) IHI Service Bulletin No. 13298-73-005 New Fuel Diverter and
Return Valve

N. Family Tree Chart

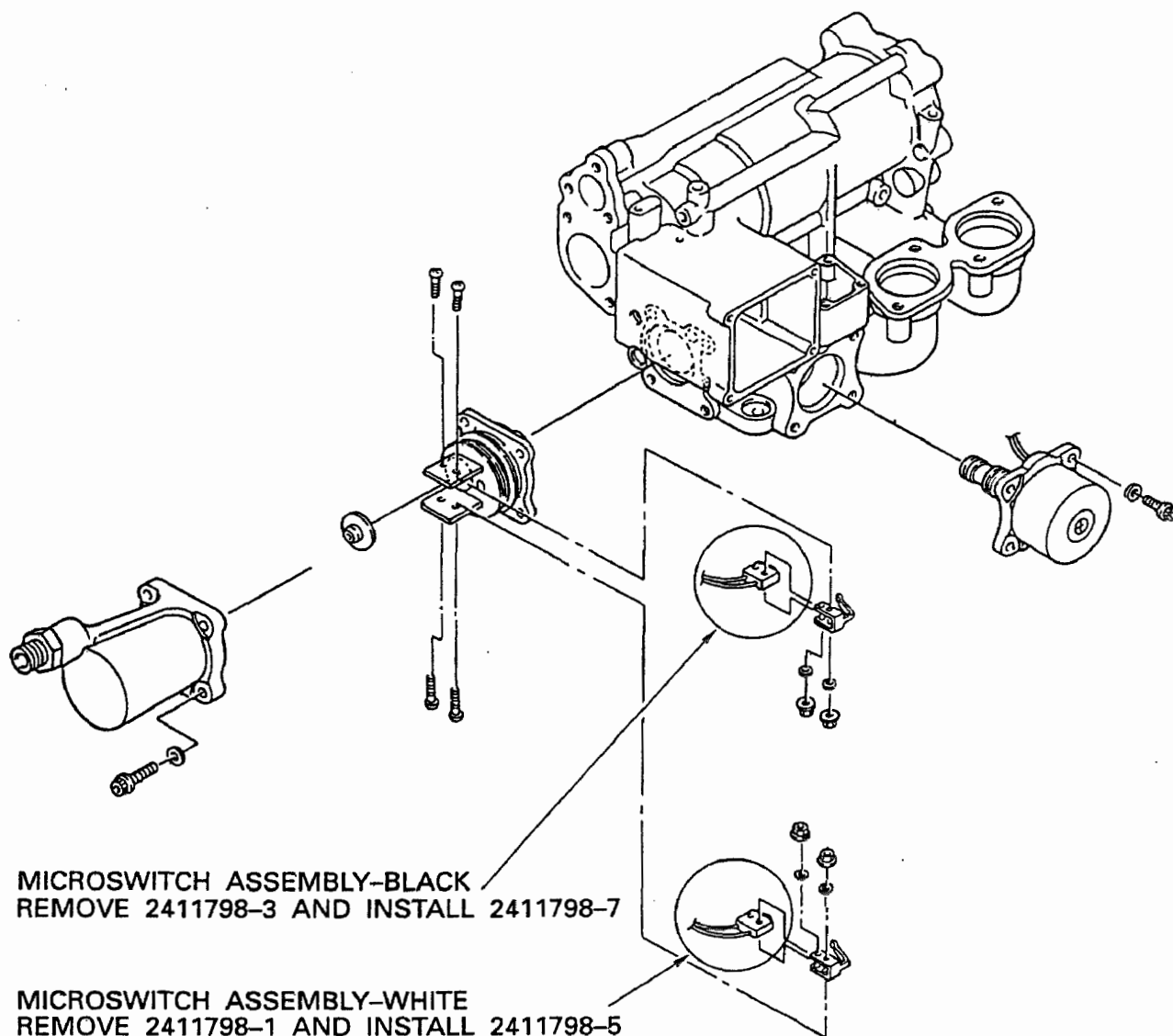
Refer to Figure 4.

SERVICE BULLETIN



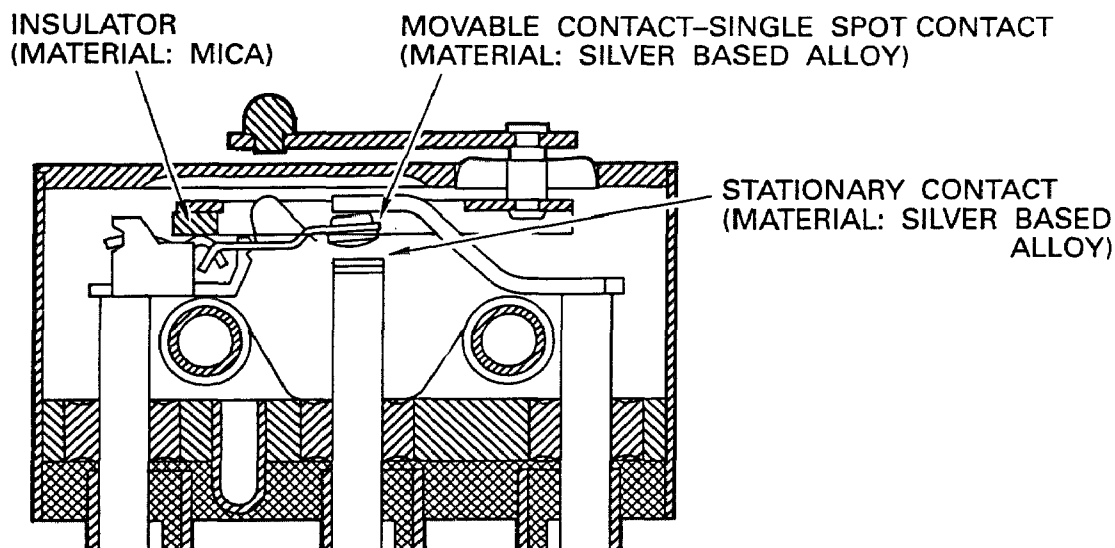
Location of Microswitch Assembly
Figure 1

SERVICE BULLETIN

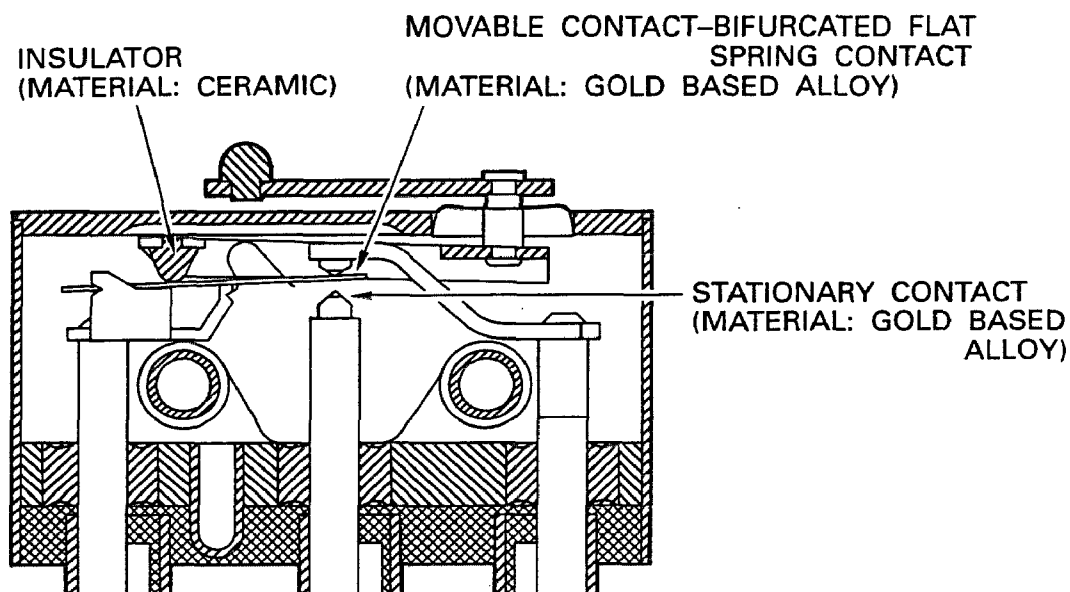


Location of Microswitch Assembly
Figure 1

SERVICE BULLETIN



Existing Microswitch (Part No. 2411798-1 or 2411798-3/Type: 6HM1-1)



New Microswitch (Part No. 2411798-5 or 2411798-7/Type: 20HM1-1)

Specification Difference between the existing and the new Microswitches
Figure 2

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SERVICE BULLETIN

2. Accomplishment Instructions

(1) Rework Instructions

None

(2) Assembly Instructions

PART 1: FD&RV not incorporating IHI Service Bulletin No.
13298-73-005

- (a) Assemble the new 2411798-5, Microswitch Assembly-White and the new 2411798-7, Microswitch Assembly-Black to the existing 2411700-25, Fuel Diverter Valve Assembly in accordance with the approved procedures in 1.L.Reference (3), Assembly.
- (b) Make marks of the new identification numbers on the new name plates with the metal stamps by hand press in accordance with the approved procedures in 1.L.Reference (4), 70-09-00 Markings of Part as follows: (Refer to Figure 3)

On the new 13713P1, Name Plate for Fuel Diverter and Return Valve Unit:

IAE P/N : 5L0073
IHI P/N : 13298G15
Serial No.: Mark the same Serial No.
as the existing one.

On the new 2411793, Name Plate for Fuel Diverter Valve Assembly:

P/N : 2411700-33
Serial No.: Mark the same Serial No.
as the existing one.

PART 2: FD&RV incorporating IHI Service Bulletin No.
13298-73-005

- (a) Assemble the new 2411798-5, Microswitch Assembly-White and the new 2411798-7, Microswitch Assembly-Black to the existing 2411700-29, Fuel Diverter Valve Assembly by the approved procedures in 1.L.Reference (3), Assembly.
- (b) Make marks of the new identification numbers on the new name plates with the metal stamps by hand press by the approved procedures in 1.L.Reference (4), 70-09-00 Markings of Part as follows: (Refer to Figure 3)



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SERVICE BULLETIN

On the new 13713P1, Name Plate for Fuel Diverter and Return Valve Unit:

IAE P/N : 5L0075
IHI P/N : 13298G16
Serial No.: Mark the same Serial No.
as the existing one.

On the new 2411793, Name Plate for Fuel Diverter Valve Assembly:

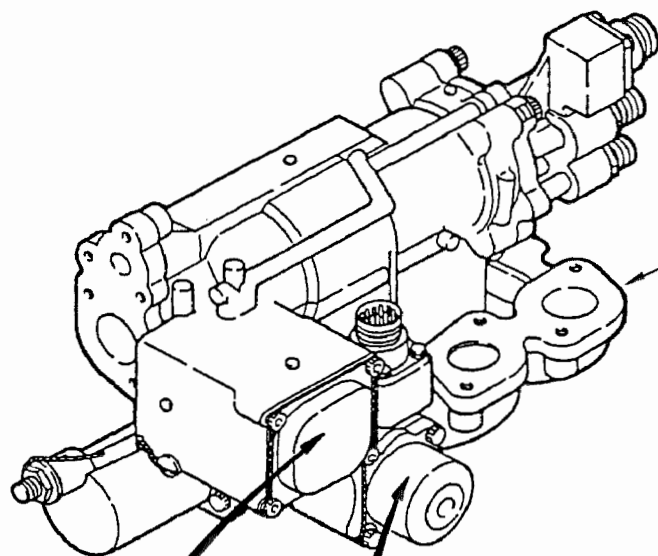
P/N : 2411700-37
Serial No.: Mark the same Serial No.
as the existing one.

NOTE: The above all modification can be done by IHI where Operator requests.
(Contact the address shown in "3. Material Information")

C. Recording Instructions

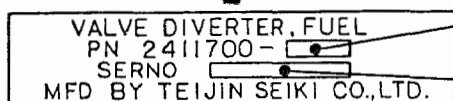
A record of accomplishment is necessary.

SERVICE BULLETIN

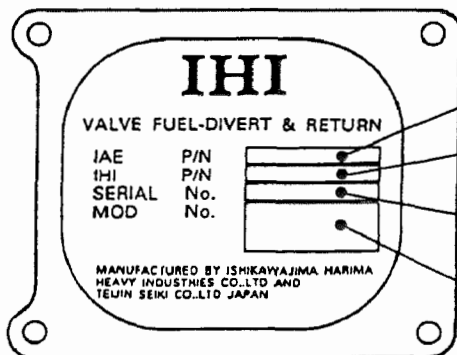


FUEL DIVERTER AND
RETURN VALVE (Ref)

MAKE A MARK THE NEW PN 2411700-33 OR 2411700-37
WITH METAL STAMPS BY HAND PRESS.



COPY THE EXISTING SERIAL NUMBER.



MAKE A MARK THE NEW PN 5L0073 OR 5L0075
WITH METAL STAMPS BY HAND PRESS.

MAKE A MARK THE NEW
PN 13298G15 OR 13298G16
WITH METAL STAMPS BY HAND PRESS.

COPY THE EXISTING SERIAL NUMBER.

UNNECESSARY TO IDENTIFY

REMOVE AND DISCARD OLD PLATE AND
INSTALL THE NEW PN 13713P1 NAME PLATE (1 off)

Reidentification of Fuel Diverter and Return Valve
Figure 3

SERVICE BULLETIN

3. Material Information

Applicability: For each of FD&RVs with IHI Part Nos. 13298G13 (PART 1: Pre 13298-73-005) and 13298G14 (PART 2: Post 13298-73-005) which are installed on the V2500-A1 engines and stored as spares.

A. Kits associated with this Bulletin:

None

B. Parts affected by this Bulletin:

New P/N (IPL No.)	Qty	Unit Price(\$)	Lead Time(days)	Keyword	Old P/N	Instructions Disposition
(1) <u>PART 1</u> : FD&RV not incorporating IHI Service Bulletin No. 13298-73-005						
13298G15 (1-1) IAE P/N:5L0073	1			.Valve, Fuel Diverter and Return	13298G13 IAE P/N:5L0060	(A) (B) (1D) (S1)
2411700-33 (3-1)	1			..Valve, Fuel- Diverter	2411700-25	(A) (B) (1D) (S1)
2411798-5 (3-75A)	1	660.65	60 days	...Switch Assy - White	2411798-1 (3-75)	(A) (B) (2D) (S1)
2411798-7 (3-76A)	1	660.65	60 days	...Switch Assy - Black	2411798-3 (3-76)	(A) (B) (2D) (S1)
13713P1 (1-20)	1	10.00	30 days	..Plate, Name	13713P1	(C) (2D)
2411793 (3-3)	1	34.00	30 days	...Plate, Name	2411793	(C) (2D)

(2) PART 2: FD&RV incorporating IHI Service Bulletin No. 13298-73-005

13298G16 (1-1) IAE P/N:5L0075	1			. Valve, Fuel Diverter and Return	13298G14 IAE P/N:5L0064	(A) (B) (1D) (S1)
2411700-37 (3-1)	1			.. Valve, Fuel- Diverter	2411700-29	(A) (B) (1D) (S1)

SERVICE BULLETIN

New P/N (IPL No.)	Qty	Unit Price(\$)	Lead Time(days)	Keyword	Old P/N	Instructions Disposition
2411798-5 (3-75A)	1	660.65	60 days	...Switch Assy - White	2411798-1 (3-75)	(A) (B) (2D) (S1)
2411798-7 (3-76A)	1	660.65	60 days	...Switch Assy - Black	2411798-3 (3-76)	(A) (B) (2D) (S1)
13713P1 (1-20)	1	10.00	30 days	..Plate, Name	13713P1	(C) (2D)
2411793 (3-3)	1	34.00	30 days	...Plate, Name	2411793	(C) (2D)

C. Instructions and Disposition Code Statements:

- (A) New part is currently available.
- (B) Old part is no longer available for sale.
- (C) New part is currently available.
- (1D) New part is obtained by rework and reidentification of Old part by this Service Bulletin incorporation.
- (2D) Old part must be discarded.
- (S1) Old and New part are freely and fully interchangeable, both physically and functionally.

NOTE: The estimated 1996 unit prices shown are provided for planning purposes only and do not constitute the firm prices. For information concerning the firm prices and availability, contact the following address;

Ishikawajima-Harima Heavy Industries Co., Ltd.
229, Tonogaya, Mizuho-machi, Nishitama-gun,
Tokyo, 190-12 JAPAN.

Attn: Customer Support Manager
Civil Aero Engines Overhaul and Repair
Business Dept.

Fax: 0425-68-7104

Tel: 0425-68-7107

The contact address for rework is same as the above.

SERVICE BULLETIN

MODIFICATION

PART NUMBER CHANGE

BASELINE

13298-73-001
VALVE & SLEEVE MATCHED SET
CHANGE

13298-73-002
ROD CHANGE

13298-73-003
SOLENOID ASSEMBLY REPLACEMENT
AND CAP SEAL INSTALLATION

13298-73-004
INTRODUCE NEW CPV PLATE COVER

13298G10
5L0004
(2411700-9)

13298G11
5L0031
(2411700-9)

13298G12
5L0055
(2311700-21)

13298G13
5L0060
(2411700-25)

13298G13
5L0060
(2411700-25)

CONTINUED TO
Figure 4 (Sheet 2)

Note:

13298Gxx	→ FD&RV IHI P/N
5Lxxxx	→ FD&RV IAE P/N
(2411700-xx)	→ FDV P/N

Family Tree - Fuel Diverter and Return Valve
Ref. Catalog Sequence No. 73-13-42
Figure 4 (Sheet 1)



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SERVICE BULLETIN

MODIFICATION

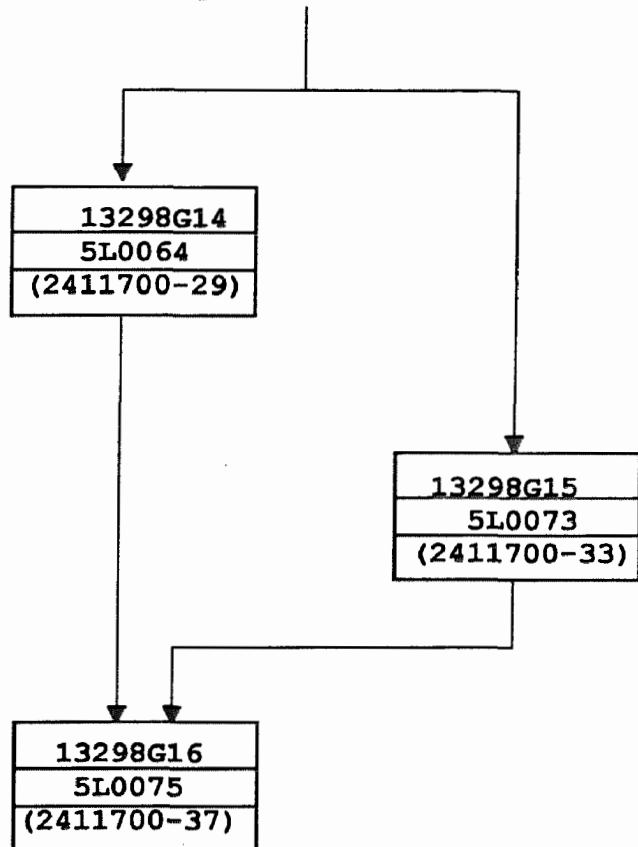
PART NUMBER CHANGE

CONTINUED FROM
Figure 4 (Sheet 1)

13298-73-005 - PART 1
SEAL MATERIAL CHANGE

13298-73-006 - PART 1
MICROSWITCH CHANGE

13298-73-006 - PART 2
MICROSWITCH CHANGE
13298-73-005 - PART 2
SEAL MATERIAL CHANGE



Family Tree - Fuel Diverter and Return Valve
Ref. Catalog Sequence No. 73-13-42
Figure 4 (Sheet 2)

SERVICE BULLETIN

No: 17300-73-006

ENGINE - FUEL AND CONTROL - NEW FUEL DIVERTER AND RETURN VALVE WITH NEW MICROSWITCH ASSEMBLIES

1. Planning Information

A. Effectivity

(a) Engine

- (a) V2527-A5 Engines
- (b) V2530-A5 Engines
- (c) V2525-D5 Engines
- (d) V2528-D5 Engines

(b) Unit

- (a) For A5 Engines: All 17300G series FD&RV's prior to
Serial No. 1189 *
- (b) For D5 Engines: All 17300G series FD&RV's prior to
Serial No. 2057 *

* The Serial Number data shown is of a preliminary nature and is provided for advanced planning only. A future revision to this Service Bulletin will confirm final Serial Number effectivity.

B. Concurrent Requirements

This Service Bulletin must be incorporated subsequent to the following Service Bulletins:

<u>Bulletin No.</u>	<u>Title</u>
17300-73-002	Introduction of a New Fuel Diverter and Return Valve
17300-73-003	New Fuel Diverter and Return Valve Assembly with New Cap Seal and Enlarged Solenoid Orifice
17300-73-004	To Increase Thickness of CPV Plate on the Fuel Diverter and Return Valve Assembly

C. Reason

(1) Condition

High resistance material was formed on the contact of the Fuel Diverter Return Valve (FD&RV) Microswitch. It is considered that this was caused due to high temperature and high vibration.

SERVICE BULLETIN

(2) Background

Several warnings "FDV X-CHECK LATCHED FAILED" were observed on ECAM during service.

(3) Objective

To change the materials of contact and insulator in the FD&RV Microswitch to prevent forming of high resistance material.

D. Description

(1) The changes introduced by this Service Bulletin are as follows: (Refer to Figure 2)

- a) The Movable Contact in Microswitch is changed from the single spot contact to the bifurcated flat spring contact.
- b) The contact material in Microswitch is changed from silver based alloy to gold based alloy.
- c) The insulator material in Microswitch is changed from mica to ceramic.

(2) Existing FD&RV can be reworked by replacing the existing Microswitches with the new ones.

(3) New Microswitches will be available for replacement purposes.

(4) This Service Bulletin is comprised of the following two parts:

PART 1: FD&RV not incorporating IHI Service Bulletin
No.17300-73-005

PART 2: FD&RV incorporating IHI Service Bulletin
No.17300-73-005

(5) For relationship with other Service Bulletins, see "1.L. References" and "1.N. Family Tree Chart".

E. Approval

This Service Bulletin has been technically agreed by IAE.

SERVICE BULLETIN

F. Compliance

Category Code 6

Accomplish when the subassembly is disassembled sufficiently to afford access to the affected part and to all affected spare subassemblies.

G. 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 (<u>Note</u> : The parts (Microswitches) affected by this Service Bulletin are accessible)	
a) Increase in time required for assembly of New Microswitches (2 off)	Not affected

H. Material - Price and Availability

- (1) Modification kit not required.
- (2) See "3. Material Information" section for prices and availability of the parts required for this bulletin.
- (3) Modification Price

- (a) Option 1: Operators who wish to have the modification accomplished by IHI.

This Service Bulletin modification will be accomplished by IHI based on IHI's standard terms and commercial prices to be quoted upon request.

- (b) Option 2: Operators who wish to accomplish the modification in their shop.

New parts required for this Service Bulletin modification are listed in "3. Material Information" section, and available at prices and lead times indicated.

For an order for each of the above two options, contact the address shown in "3. Material Information".

SERVICE BULLETIN

I. Tooling - Price and Availability

Not affected.

J. Weight

Not affected

K. Electrical Load Data

Not affected

L. References

- (1) IAE Service Bulletin No. V2500-ENG-73-0081
Engine-Fuel and Control-Introduction of a New Fuel Diverter
and Return Valve with New Microswitch Assemblies
- (2) IHI Service Bulletin No. 17300-73-005 New Fuel Diverter and
Return Valve Assembly with Changing Material of Packing
- (3) IHI Component Maintenance Manual, 73-18-52, Fuel Diverter
and Return Valve, Part No. 17300 series.
- (4) V2500 Standard Practices/Processes Manual, 70-09-00, Markings
of Part

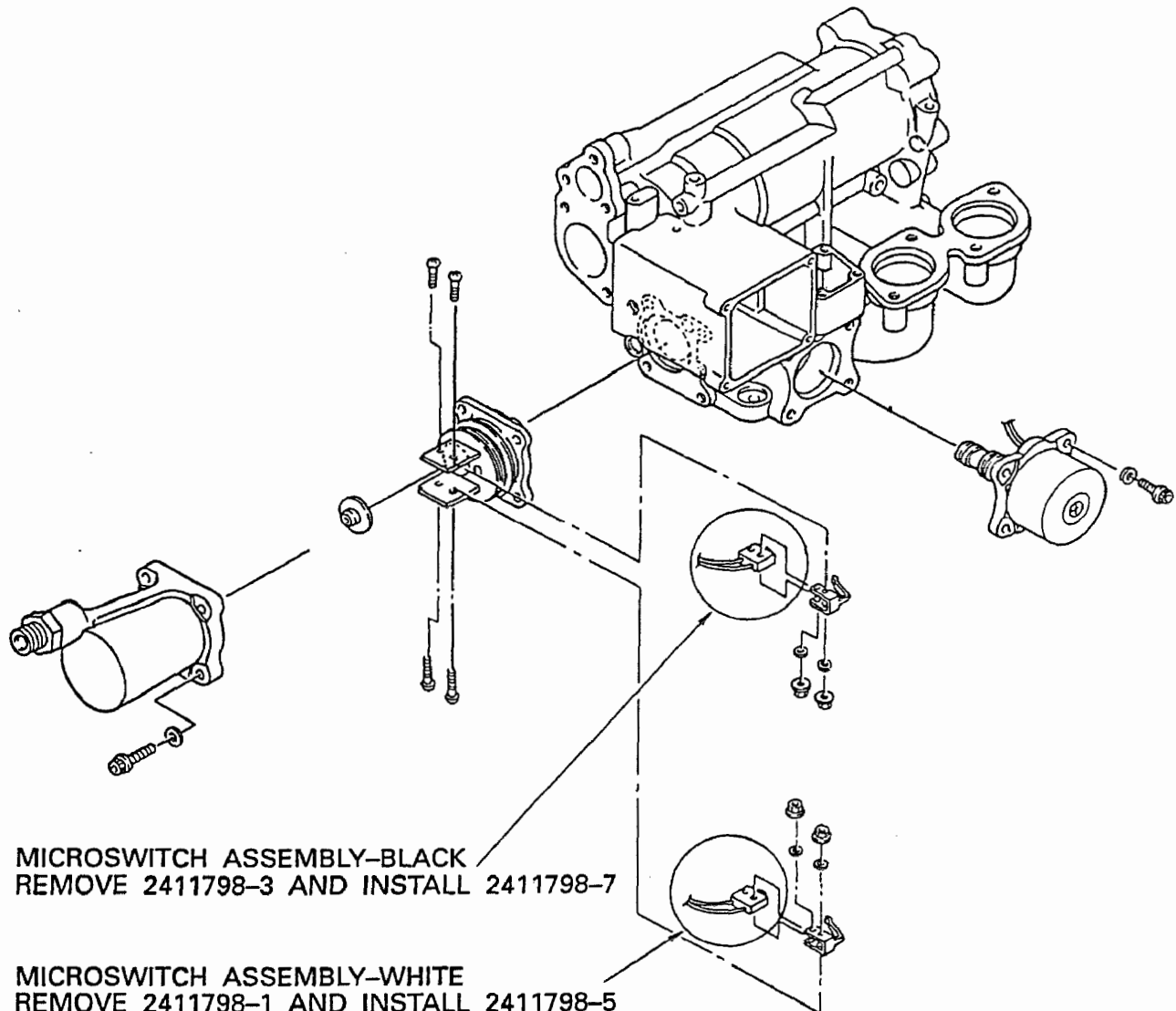
M. Other Publications Affected

- (1) IHI Component Maintenance Manual, 73-18-52, Fuel Diverter
and Return Valve, Part No. 17300 series
- (2) IHI Service Bulletin No. 17300-73-005 New Fuel Diverter and
Return Valve.

N. Family Tree Chart

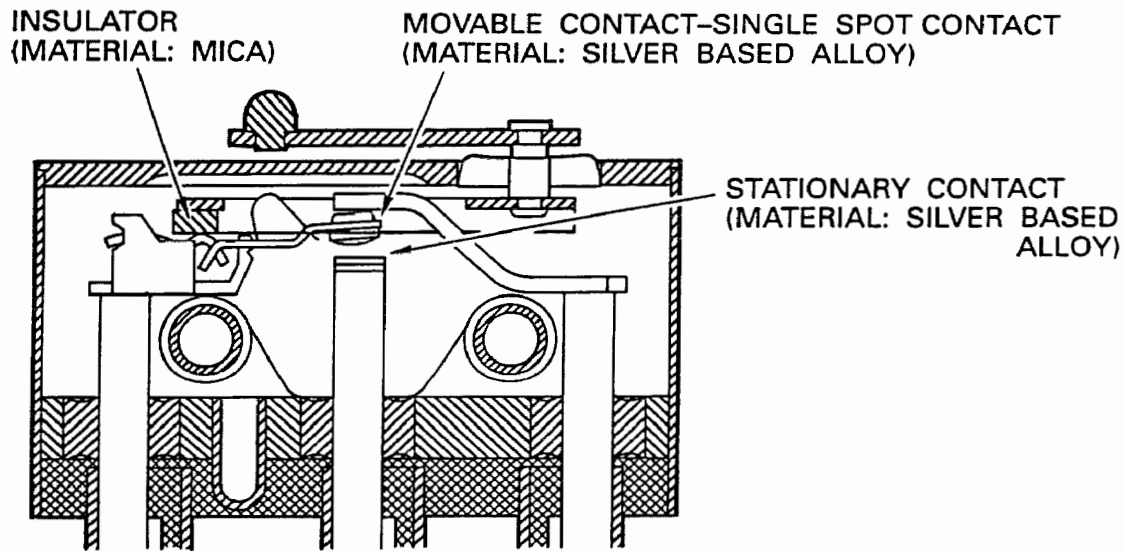
Refer to Figure 4.

SERVICE BULLETIN

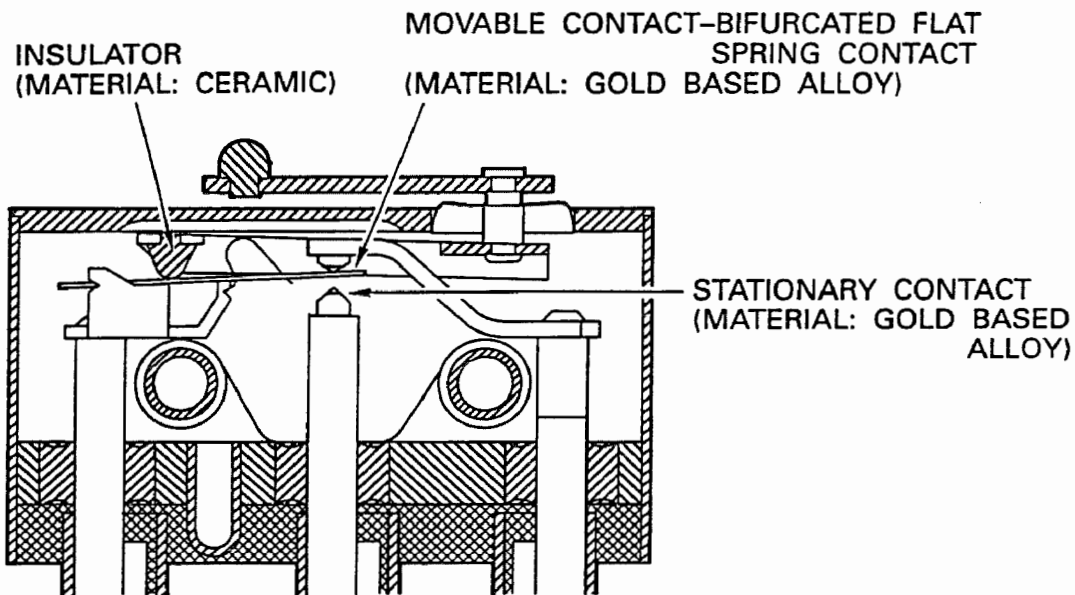


Location of Microswitch Assembly
Figure 1

SERVICE BULLETIN



Existing Microswitch (Part No. 2411798-1 or 2411798-3/Type: 6HM1-1)



New Microswitch (Part No. 2411798-5 or 2411798-7/Type: 20HM1-1)

Specification Difference between the existing and the new Microswitches
Figure 2

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SERVICE BULLETIN

2. Accomplishment Instructions

(1) Rework Instructions

None

(2) Assembly Instructions

PART 1: FD&RV not incorporating IHI Service Bulletin No.
17300-73-005

- (a) Assemble the new 2411798-5, Microswitch Assembly-White and the new 2411798-7, Microswitch Assembly-Black to the existing 2411700-27, Fuel Diverter Valve Assembly in accordance with the approved procedures in 1.L.Reference (3), Assembly.
- (b) Make marks of the new identification numbers on the new name plates with the metal stamps by hand press in accordance with the approved procedures in 1.L.Reference (4), 70-09-00 Markings of Part as follows: (Refer to Figure 3)

On the new 13713P1, Name Plate for Fuel Diverter and Return Valve Unit:

IAE P/N : 5L0074
IHI P/N : 17300G08
Serial No.: Mark the same Serial No.
as the existing one.

On the new 2411793, Name Plate for Fuel Diverter Valve Assembly:

P/N : 2411700-35
Serial No.: Mark the same Serial No.
as the existing one.

PART 2: FD&RV incorporating IHI Service Bulletin No.
17300-73-005

- (a) Assemble the new 2411798-5, Microswitch Assembly-White and the new 2411798-7, Microswitch Assembly-Black to the existing 2411700-31, Fuel Diverter Valve Assembly by the approved procedures in 1.L.Reference (3), Assembly.
- (b) Make marks of the new identification numbers on the new name plates with the metal stamps by hand press by the approved procedures in 1.L.Reference (4), 70-09-00 Markings of Part as follows: (Refer to Figure 3)



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On the new 13713P1, Name Plate for Fuel Diverter and Return Valve Unit:

IAE P/N : 5L0076

IHI P/N : 17300G09

Serial No.: Mark the same Serial No.
as the existing one.

On the new 2411793, Name Plate for Fuel Diverter Valve Assembly:

P/N : 2411700-39

Serial No.: Mark the same Serial No.
as the existing one.

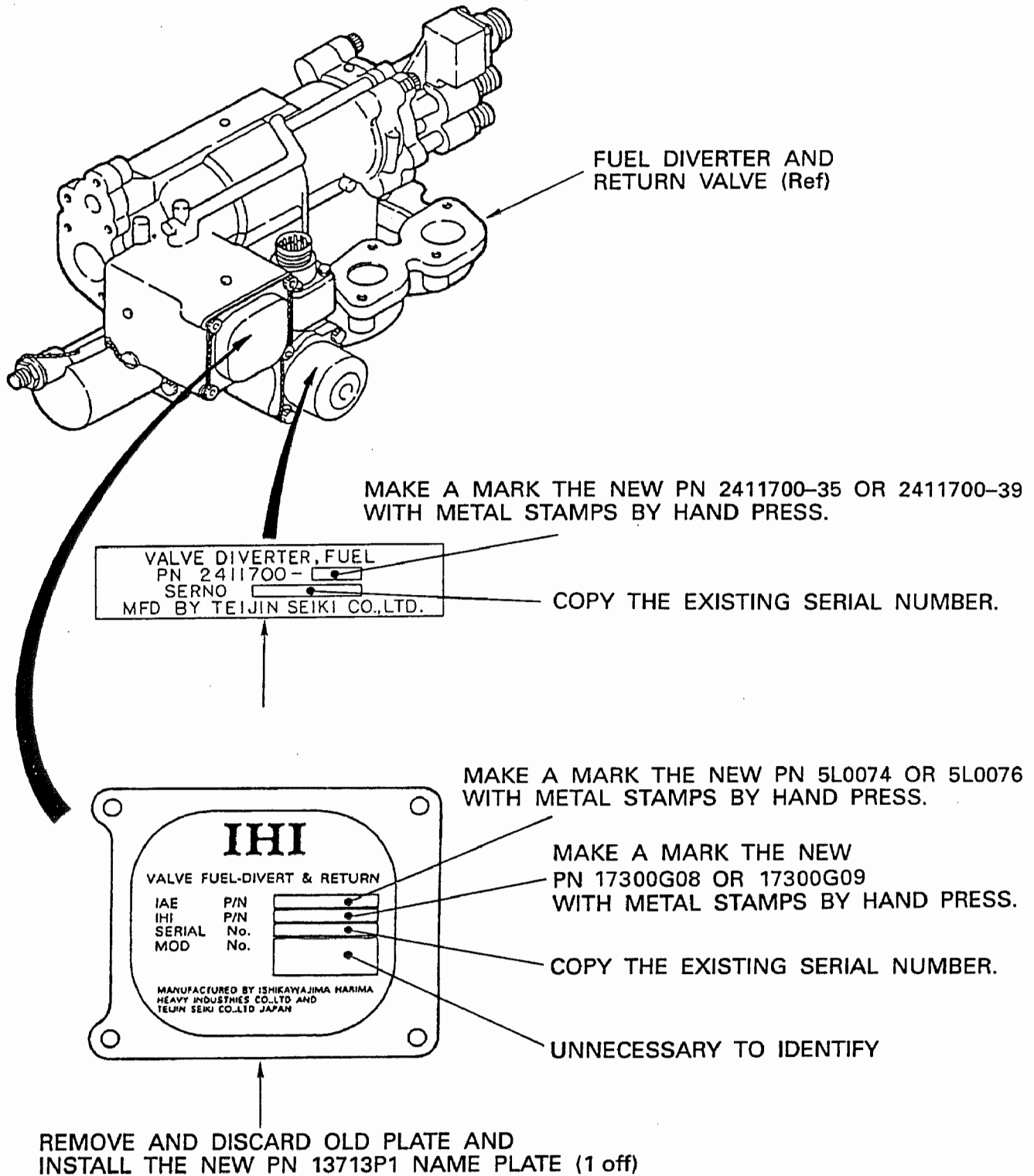
NOTE: The above all modification can be done by IHI where Operator requests.

(Contact the address shown in "3. Material Information")

C. Recording Instructions

A record of accomplishment is necessary.

SERVICE BULLETIN



Reidentification of Fuel Divertor and Return Valve
Figure 3

SERVICE BULLETIN

3. Material Information

Applicability: For each of FD&RVs with IHI Part Nos. 17300G06 (PART 1: Pre 17300-73-005) and 17300G07 (PART 2: Post 17300-73-005) which are installed on the V2527-A5 V2530-A5, V2525-D5 and V2528-D5 engines and stored as spares.

A. Kits associated with this Bulletin:

None

B. Parts affected by this Bulletin:

New P/N (IPL No.)	Qty	Unit Price (\$)	Lead Time (days)	Keyword	Old P/N	Instructions Disposition
(1) <u>PART 1</u> : FD&RV not incorporating IHI Service Bulletin No. 17300-73-005						
17300G08 (1-1) IAE P/N:5L0074	1			.Valve, Fuel Diverter and Return	17300G06 IAE P/N:5L0061	(A) (B) (1D) (S1)
2411700-35 (3-1)	1			..Valve, Fuel- Diverter	2411700-27	(A) (B) (1D) (S1)
2411798-5 (3-75A)	1	660.65	60 days	...Switch Assy - White	2411798-1 (3-75)	(A) (B) (2D) (S1)
2411798-7 (3-76A)	1	660.65	60 days	...Switch Assy - Black	2411798-3 (3-76)	(A) (B) (2D) (S1)
13713P1 (1-20)	1	10.00	30 days	..Plate, Name	13713P1	(C) (2D)
2411793 (3-3)	1	34.00	30 days	...Plate, Name	2411793	(C) (2D)

(2) PART 2: FD&RV incorporating IHI Service Bulletin No. 17300-73-005

17300G09 (1-1) IAE P/N:5L0076	1			. Valve, Fuel Diverter and Return	17300G07 IAE P/N:5L0065	(A) (B) (1D) (S1)
2411700-39 (3-1)	1			.. Valve, Fuel- Diverter	2411700-31	(A) (B) (1D) (S1)

SERVICE BULLETIN

New P/N (IPL No.)	Qty	Unit Price(\$)	Lead Time(days)	Keyword	Old P/N	Instructions Disposition
2411798-5 (3-75A)	1	660.65	60 days	...Switch Assy - White	2411798-1 (3-75)	(A) (B) (2D) (S1)
2411798-7 (3-76A)	1	660.65	60 days	...Switch Assy - Black	2411798-3 (3-76)	(A) (B) (2D) (S1)
13713P1 (1-20)	1	10.00	30 days	..Plate, Name	13713P1	(C) (2D)
2411793 (3-3)	1	34.00	30 days	...Plate, Name	2411793	(C) (2D)

C. Instructions and Disposition Code Statements:

- (A) New part is currently available.
- (B) Old part is no longer available for sale.
- (C) New part is currently available.
- (1D) New part is obtained by rework and reidentification of Old part by this Service Bulletin incorporation.
- (2D) Old part must be discarded.
- (S1) Old and New part are freely and fully interchangeable, both physically and functionally.

NOTE: The estimated 1995 unit prices shown are provided for planning purposes only and do not constitute the firm prices. For information concerning the firm prices and availability, contact the following address;

Ishikawajima-Harima Heavy Industries Co., Ltd.
229, Tonogaya, Mizuho-machi, Nishitama-gun,
Tokyo, 190-12 JAPAN.

Attn: Customer Support Manager
Civil Aero Engines Overhaul and Repair
Business Dept.

Fax: 0425-68-7104

Tel: 0425-68-7107

The contact address for rework is same as the above.

SERVICE BULLETIN

MODIFICATION

PART NUMBER CHANGE

BASELINE

17300-73-002
ROD CHANGE

17300-73-003
SOLENOID ASSEMBLY REPLACEMENT
AND CAP SEAL INSTALLATION

17300-73-004
INTRODUCE NEW CPV PLATE COVER

17300G04
5L0054
(2411700-19)

17300G05
5L0056
(2311700-23)

17300G06
5L0061
(2411700-27)

17300G06
5L0061
(2411700-27)

CONTINUED TO
Figure 4 (Sheet 2)

Note:

17300Gxx	➤ FD&RV IHI P/N
5Lxxxx	➤ FD&RV IAE P/N
(2411700-xx)	➤ FDV P/N

Family Tree - Fuel Diverter and Return Valve
Ref. Catalog Sequence No. 73-18-52
Figure 4 (Sheet 1)

SERVICE BULLETIN

MODIFICATION

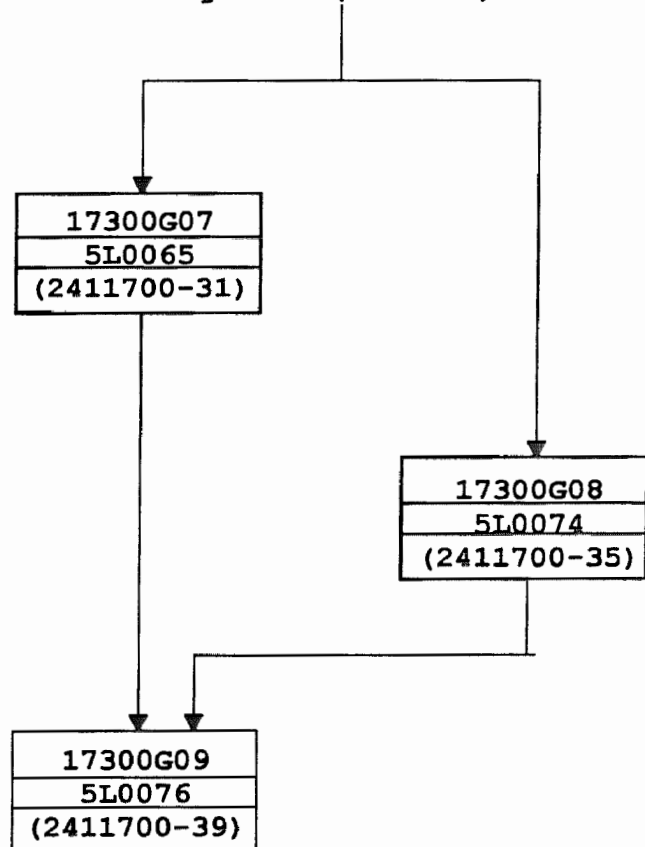
PART NUMBER CHANGE

CONTINUED FROM
Figure 4 (Sheet 1)

17300-73-005 - PART 1
SEAL MATERIAL CHANGE

17300-73-006 - PART 1
MICROSWITCH CHANGE

17300-73-006 - PART 2
MICROSWITCH CHANGE
17300-73-005 - PART 2
SEALING MATERIAL CHANGE



Family Tree - Fuel Diverter and Return Valve
Ref. Catalog Sequence No. 73-18-52
Figure 4 (Sheet 2)