

<u>ENGINE - FUEL AND CONTROL - REPLACE THE FUEL DIVERTER AND RETURN VALVE PACKINGS WITH PACKINGS MADE FROM IMPROVED MATERIAL - CATEGORY CODE 6 - MOD.ENG-73-0062</u>

1. Planning Information

A. Effectivity

- (1) Aircraft: (a) Airbus A320
 - (b) Airbus A321
 - (c) McDonnell Douglas MD-90
- (2) Engine: (a) V2500-A1 Engines prior to Serial No. V0362.
 - (b) V2527-A5 Engines prior to Serial No. V10105.
 - (c) V2530-A5 Engines prior to Serial No. V10105.
 - (d) V2525-D5 Engines prior to Serial No. V20012.
 - (e) V2528-D5 Engines prior to Serial No. V20012.

B. Reason

(1) Condition

Inspection on several returned units from operators revealed deterioration (Compression Set) on fluorosilicone packings of the Fuel Diverter and Return Valve (FDRV).

(2) Background

It was detrmined that the fluorosilicone packing was deteriorated under high temperature conditions.

(3) Objective

The material of packings is to be changed from fluorosilicone to fluorocarbon for all packing of FDRV, in order to improve unit reliability and durability.

(4) Substantiation

Substantiation testing has been successfully completed.

(5) Effect of Bulletin on Workshop Procedures

International Aero Engines

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. <u>Description</u>

(1) The following service bulletin must be incorporated in conjunction with this service bulletin:

Ishikawajima-Harima Heavy Industries (IHI) Service Bulletin No. 13298-73-005 (For V2500-A1) and 17300-73-005 (For V2500-A5 and V2500-D5) (Refer to 1.I (2)).

(2) The material of packings has been changed from fluorosilicone to fluorocarbon with accomplishment instruction given in the IHI Service Bulletin No. 13298-73-005 (For V2500-A1) and 17300-73-005 (For V2500-A5 and V2500-D5).

D. Approval

The part number changes described in this bulletin have been shown to comply with the applicable Federal Aviation Regulation and are FAA-APPROVED for Engine Model listed.

E. Compliance

Category Code 6

Accomplish when 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:

Venue Estimated Manhours

(1) In Service Not applicable

(2) At Overhaul Not applicable

V2500-ENG-73-0062



International Aero Engines

SERVICE BULLETIN

G. Weight and Balance

(1) Weight change None

(2) Moment arm No effect

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

H. Electrical Load Data

Not affected

I. References

(1) Internal Reference No.

EC94VJ030

(2) Other references

IAE Engine Illustrated Parts Catalog.

Ishikawajima- Harima Heavy Industries Co.,Ltd. (IHI) service bulletin No. 13298-73-005 (for V2500-A1) and No. 17300-73-005 (for V2500-A5 and V2500-D5), "Engine Fuel Control - New Fuel Diverter and Return Valve Assembly with changing material of packings.

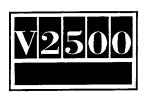
A320 Engine Manual.

A321 Engine Manual.

MD-90 Engine Manual.

J. Other Publication Affected

- (1) IAE Engine Illustrated Parts Catalog, 73-13-41.
- (2) IAE Power Plant Illustrated Parts Catalog, 73-13-42.
- (3) IHI Component Maintenance Manual, Chapter/Section 73-13-42 (V2500-A1) and 73-18-52 (V2500-A5 and V2500-D5).



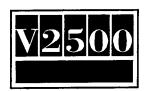
2. Accomplishment Instruction

A. Rework Instructions

None.

- B. Assembly Instructions
 - (1) V2500-A1 Engines
 - (a) Install the new 5L0064 Fuel Diverter and Return Valve (FDRV) by use of approved procedure, Engine Manual Chapter/Section 72-00-32, Installation-20.
 - (2) V2500-A5 and V2500-D5 Engines
 - (a) Install the new 5L0065 Fuel Diverter and Return Valve (FDRV) by use of approved procedure, Engine Manual Chapter/Section 72-00-32, Installation-20.
- C. Record Instructions

A record of accomplishment is necessary.



3. <u>Material Information</u>

Applicability: For all V2500 Engine to incorporate this Bulletin.

A. Parts affected by this Bulletin:

| New Part No. (ATA No.) | Qty | Est'd Unit Price (\$) | Keyword | Old Part No. (IPC No.) | Instructions/ Disposition | | | | | |
|------------------------------|-----|-----------------------------|------------------------------------|------------------------------|------------------------------|--|--|--|--|--|
| For V2500-A1 Engines: | | | | | | | | | | |
| 5L0064 (73-13-42) | 1 | | .Valve, Fuel Divert & Return | 5L0060 (01-100) | (A)(B)(C) (S1)(1D)(3D) | | | | | |
| 19668-905 (73-13-42) | 1 | | Packing, Performed | M25988- 1-905 (01-153) | (A)(B)(S1) (5D)(6D) | | | | | |
| 19668-907 (73-13-42) | 1 | | Packing, Performed | M25988- 1-907 (01-163) | (A)(B)(S1) (5D)(6D) | | | | | |
| 19668-905 (73-13-42) | 1 | | Packing, Performed | M25988- 1-905 (01-173) | (A)(B)(S1) (5D)(6D) | | | | | |
| For V2527-A For V2525-D | | | | | | | | | | |
| 5L0065 (73-13-42) | 1 | | .Valve, Fuel Divert & Return | 5L0061 (01-100) | (A)(B)(D) (S1(2D)(4D) | | | | | |
| 19668-905 (73-13-42) | 1 | | Packing, Performed | M25988- 1-905 (01-153) | (A)(B)(S1) (5D)(6D) | | | | | |
| 19668-907 (73-13-42) | 1 | | Packing, Performed | M25988- 1-907 (01-163) | (A)(B)(S1) (5D)(6D) | | | | | |
| 19668-905 (73-13-42) | 1 | | Packing, Performed | M25988- 1-905 (01-173) | (A)(B)(S1) (5D)(6D) | | | | | |

V2500-ENG-73-0062



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

- (A) New part is currently available.
- (B) Old part will no longer be available.
- (C) New vendor P/N 13298G14 (Old vendor P/N 13298G13).
- (D) New vendor P/N 17300G07 (Old vendor P/N 17300G06).
- (S1) Old and new parts are freely and fully interchangeable both physically and functionally.
- (1D) New part configuration must be accomplished in accordance with IHI Vendor Service Bulletin No.13298-73-005.
- (2D) New part configuration must be accomplished in accordance with IHI Vendor Service Bulletin No.17300-73-005.
- (3D) For all items necessary to this modification, refer to IHI Vendor Service Bulletin No.13298-73-005.
- (4D) For all items necessary to this modification, refer to IHI Vendor Service Bulletin No.17300-73-005.
- (5D) Old and new part are replaceable item at the on-wing and shop maintenance.
- (6D) Old and new part are reflected both Power Plant Illustrated Part Catalog (PIPC) and Engine Illustrated Part Catalog (EIPC).

NOTE: Contact the "Ishikawajima - Harima Heavy Industry Co.,Ltd. (IHI) Product Support Department, Customer Support Manager V2500" for information concerning firm prices.



ISHIKAWAJIMA-HARIMA HEAVY INDUSTRIES CO., LTD.

SERVICE BULLETIN

No. 13298-73-005

ENGINE - FUEL AND CONTROL - NEW FUEL DIVERTER AND RETURN VALVE ASSEMBLY WITH CHANGING MATERIAL OF PACKING

1. Planning Information

A. Effectivity

This Service Bulletin is applicable to the Ishikawajima-Harima Heavy Industries Co., Ltd. (IHI) Fuel Diverter and Return Valve (FDRV) Part Number 13298G13 (IAE Part Number 5L0060) installed on the IAE V2500-A1 engines and the spare FDRV Part Number 13298G13 (IAE Part number 5L0060).

B. Reason

(1) Condition

Inspection on several returned unit from operators revealed compression set on fluorosilicone packings in the Fuel Diverter and Return Valve (FDRV).

(2) Background

This compression set may cause a fuel leakage in the future.

(3) Objective

The material of packing is to be changed from fluorosilicone to fluorocarbon for all packings of FDRV, in order to improve unit reliability and durability.

C. Description

- (1) The changes introduced by this service bulletin are as follows:
 - (a) The packing material has been changed from fluorosilicone to fluorocarbon.

13298-73-005

Page 1 of 10

ISHIKAWAJIMA-HARIMA HEAVY INDUSTRIES CO., LTD.

SERVICE BULLETIN

- (2) This service bulletin provides accomplishment instructions for replacing the all existing packings and also provides instruction for the reidentification for the FDRV.
- (3) This service bulletin describes in two options to accomplish the modification of the FDRV.
 - (a) Option 1: Operators who wish to have the modification accomplished by IHI.
 - (b) Option 2: Operators who wish to accomplish the modification in their shop by replacing packing.
- D. Compliance

Category Code 6

Accomplish when the FDRV is removed from the engine or the module.

E. Approval

This service bulletin has been technically agreed by IAE.

F. Manpower

No additional man-hours are required during overhaul.

- G. Material cost and availability
 - (1) Option 1: Operators who wish to have the modification accomplished by IHI.

Accomplishment of this service bulletin by IHI will be completed based on IHI standard terms, and prices of sale pertaining to commercial contract IHI's Customer Support Manager for information concerning firm quotation.

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

New parts required to accomplish this service bulletin are listed in Section 3 (Material Information), and available at prices and lead times indicated.

An order for spare parts should be addressed to:

13298-73-005

Jan. 25/95

ISHIKAWAJIMA-HARIMA HEAVY INDUSTRIES CO., LTD.

SERVICE BULLETIN

Ishikawajima-Harima Heavy Industries Co,. Ltd. 229, Tonogaya, Mizuho-Machi, Nishitama-Gun Tokyo, 190-12 Japan. (For the attention of the Product Department, Customer Support Manager V2500).

Fax:

(0425)68-7104

Telephone:

(0425) 68-7107

H. Tooling - price and availability

Special tools are not required.

I. Weight and Balance

Not affected

J. Electrical Load Data

Not affected

- K. References
 - (1) IAE Service Bulletin No. V2500-ENG-73-0062.
 - (2) IHI Component Maintenance Manual, 73-13-42, Fuel Diverter and Return Valve, Part Number 13298 series.
 - (3) IAE Engineering Change No. 94VJ030.
- I. Other Publications Affected

IHI Component Maintenance Manual, 73-13-42, Fuel Diverter and Return Valve, Part Number 13298 series.

ISHIKAWAJIMA-HARIMA HEAVY INDUSTRIES CO., LTD.

SERVICE BULLETIN

- 2. Accomplishment Instruction
 - A. Assembly Instructions
 - (1) Option 1: Operators who wish to have the modification accomplished by IHI.
 - (a) Return the part number 13298G13 (IAE part number 5L0060).
 FDRV for modification and reidentification to:

Ishikawajima-Harima Heavy Industries Co,. Ltd. 229, Tonogaya, Mizuho-Machi, Nishitama-Gun Tokyo, 190-12 Japan. (For the attention of the Product Support Department, Customer Support Manager V2500).

Fax: (0425) 68-7104 Telephone: (0425) 68-7107

NOTE: All part number 13298G13 FDRV's that accomplished the modification by IHI will be reidentified with the following on the new name plates (Refer to Figure 1):

IAE P/N 5L0064 IHI P/N 13298G14

NOTE: All Part number 2411700-25 FDV's subassembly of FDRV's that accomplished the modification by IHI will be reidentified with the following on the 2411793, new name plates (Refer to Figure 1):

(Teijin Seiki P/N) 2411700-29

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

NOTE: Expendable parts (i.e. sealing ring, back-up ring, Cap seal) must be replaced with new one by the approved procedures in Reference (2).

- (a) Disassemble the 13298G13, FDRV and removal of the 13713P1, name plate by the approved procedures in Reference (2), Disassembly.
- (b) Replace all the existing packings with new packings from the Fuel Diverter and Return Valve (FDRV) by the approved procedures in Reference (2), Disassembly and Assembly.

ISHIKAWAJIMA-HARIMA HEAVY INDUSTRIES CO., LTD.

SERVICE BULLETIN

(c) Make a mark the new part number on the new 13713P1, name plate and identify as follows; Use the metal stamps by hand press (Refer to Figure 1).

(IAE P/N) 5L0064 (IHI P/N) 13298G14

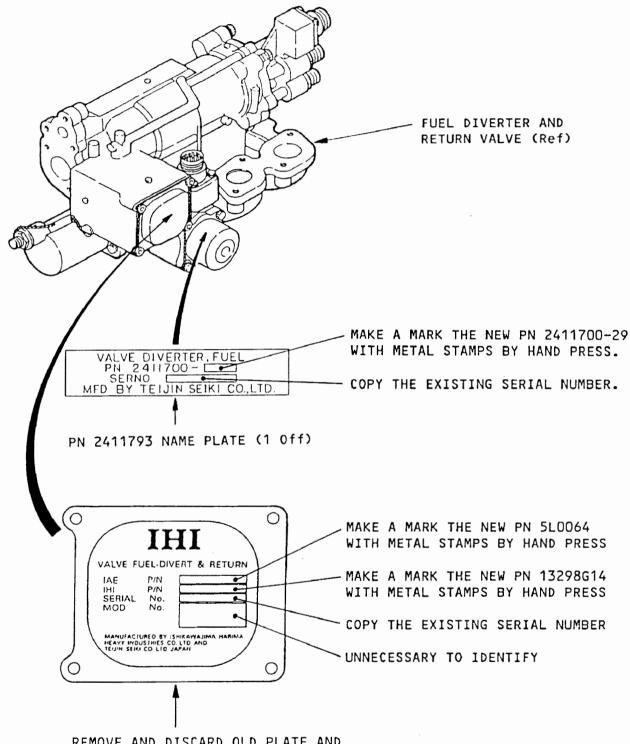
- (d) Assemble the FDRV and install the name plate by the approved procedures in Reference (2), Assembly.
- (e) Make a mark the new part number adjacent to old part number on the 2411793, existing name plate and identify as follows (Refer to Figure 1):

(Teijin Seiki P/N 2411700-29)

- NOTE: (1) Clean the name plate attaching area on the 241176-9, solenoid valve assembly with Methyl Ethyl Ketone (MEK).
 - (2) Apply the bonding adhesive (Hysol EA929, The Dexter Corp, or equivalent) to the name plate.
 - (3) Wind the name plate around the 2411760-9, solenold valve assembly then bend both end of the name plate with winding.
 - (f) Do a functional testing (Refer to Reference (2), Test and Fault Isolation).
- B. Recording Instructions
 - (1) A record of accomplishment is necessary.

ISHIKAWAJIMA-HARIMA HEAVY INDUSTRIES CO., LTD.

SERVICE BULLETIN



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

Reidentification of Fuel Diverter and Return Valve Figure 1

13298-73-005

Jan. 25/95

Page 6 of 10

3. <u>Material Information</u>

Applicability: For each IHI 13298G13, (IAE PN 5L0060), FDRV. It is

installed on the V2500-A1 engine and the spare FDRV to

incorporate this bulletin.

A. Kits associated with this bulletin:

None

B. Parts affected by this bulletin:

| New Part No. (IPL No.) | Qty | Unit Price(\$ |) Lead Time | Keyword | Old Part No. | Instruction/ Disposition |
|---------------------------------------|-----|------------------|-------------|-----------------------------|----------------------|-----------------------------|
| 13298G14 (5L0064) (1-1) | 1 | | | Valve, Fuel Dvt & Return | 13298G13 (5L0060) | (A) (B) (S1) (1D) |
| 2411700-29 (3-1) | 1 | | | Valve, Fuel Diverter | 2411700-25 | (S1) (1D) |
| 19668-010 (1-145, 1-260, 2-115) | 4 | 9 | 30 days | . Packing | M25988/1- 010 | (A) (B) (S1) |
| 19668-011 (2-110) | 1 | 5 | 30 days | . Packing | M25988/1- 011 | (A) (B) (S1) |
| 19668-014 (2-60) | 1 | 6 | 30 days | . Packing | M25988/1- 014 | (A) (B) (S1) |
| 19668-015 (2-55) | 1 | 6 | 30 days | . Packing | M25988/1- 015 | (A) (B) (S1) |
| 19668-017 (2-65) | 1 | 6 | 30 days | . Packing | M25988/1- 017 | (A) (B) (S1) |
| 19668-021 (1-185) | 1 | 6 | 30 days | . Packing | M25988/1- 021 | (A) (B) (S1) |
| 19668-027 (1-170, 1-275) | 2 | 6 | 30 days | . Packing | M25988/1- 027 | (A) (B) (S1) |
| 19668-135 (1-270) | 4 | 7 | 30 days | . Packing | M25988/1- 135 | (A) (B) (S1) |
| 19668-137 (1-150) | 1 | 8 | 30 days | . Packing | M25988/1- 137 | (A) (B) (S1) |

13298-73-005

Jan. 25/95

Page 7 of 10

ISHIKAWAJIMA-HARIMA HEAVY INDUSTRIES CO., LTD.

SERVICE BULLETIN

| New Part No. (IPL No.) | Qty | Unit Price(\$) | Lead Time | Keyword | Old Part No. | Instruction/ Disposition |
|-------------------------------------|-----|-------------------|-----------|-----------|---|-----------------------------|
| 19668-013 (1-50) | 3 | 5 | 30 days | . Packing | M25988/1- 013 | (A) (B) (S1) |
| 19668-905 (1-130, 3-13) | 2 | 5 | 30 days | . Packing | M25988/1- 905 | (A) (B) (S1) |
| 19668-907 (1-135) | 1 | 6 | 30 days | . Packing | M25988/1- 907 | (A) (B) (S1) |
| 19668-029 (1-225) | 1 | 6 | 30 days | . Packing | M25988/1- 029 | (A) (B) (S1) |
| 19668-025 (1-215) | 1 | 6 | 30 days | . Packing | M25988/1- 025 | (A) (B) (S1) |
| 19668-008 (1-10) | 1 | 9 | 30 days | . Packing | M25988/1- 008 | (A) (B) (S1) |
| 2411771- 904 (3-10) | 1 | 4 | 30 days | . Packing | M25988/1- 904 or M25988/2- 904 | (A) (B) (S1) |
| 2411771- 029 (3-40) | 1 | 6 | 30 days | . Packing | M25988/1- 029 or M25988/2- 029 | (A) (B) (S1) |
| 2411771- 129 (3-45) | 1 | 14 | 30 days | . Packing | M25988/1- 129 or M25988/2- 129 | (A) (B) (S1) |
| 2411771- 010 (3-85, 3-190) | 3 | 9 | 30 days | . Packing | M25988/1- 010 or M25988/2- 010 | (A) (B) (S1) |
| 2411771- 121 (3-95) | 1 | 13 | 30 days | . Packing | M25988/1- 121 or M25988/2- 121 | (A) (B) (S1) |

13298-73-005

Page 8 of 10

Jan. 25/95

| New Part No. (IPL No.) | Qty | Unit Price(\$) | Lead Time | Keyword | Old Part No. | Instruction/ Disposition |
|------------------------------|-----|-------------------|-----------|---------------|---|-----------------------------|
| 2411771- 128 (3-130) | 1 | 14 | 30 days | . Packing | M25988/1- 128 or M25988/2- 128 | (A) (B) (S1) |
| 2411771- 127 (3-135) | 1 | 14 | 30 days | . Packing | M25988/1- 127 or M25988/2- 127 | (A) (B) (S1) |
| 2411771- 016 (3-180) | 1 | 6 | 30 days | . Packing | M25988/1- 016 | (A) (B) (S1) |
| 2411771- 120 (3-205) | 2 | 13 | 30 days | . Packing | M25988/1- 120 | (A) (B) (S1) |
| 2411771- 013 (3-240) | 1 | 5 | 30 days | . Packing | M25988/1- 013 or M25988/2- 013 | (A) (B) (S1) |
| 2411771- 014 (3-245) | 1 | 6 | 30 days | . Packing | M25988/1- 014 or M25988/2- 014 | (A) (B) (S1) |
| 2411771- 119 (3-250) | 1 | 13 | 30 days | . Packing | M25988/1- 119 or M25988/2- 119 | (A) (B) (S1) |
| 2411793 (3-3) | 1 | 10 | 30 days | . Plate, name | 2411793 | (A) |
| 13713P1 (1-20) | 1 | 34 | 30 days | .Plate, name | 13713P1 | (A) |

13298-73-005

Jan. 25/95

Page 9 of 10

ISHIKAWAJIMA-HARIMA HEAVY INDUSTRIES CO., LTD.

SERVICE BULLETIN

- C. Instruction/Disposition Code Statements:
 - (A) New part will be available for sale.
 - (B) Old part will no longer be available for sale.
 - (S1) Old and new part are freely and fully interchangeable, both physically and functionally.
- (1D) Old part can be reworked and reidentified to a new part number.

NOTE: Contact the "Ishikawajima - Harima Heavy Industry Co., Ltd. (IHI)
Product Support Dept., Customer Support Manager V2500."
for information concerning firm prices.

13298-73-005

Jan. 25/95

ISHIKAWAJIMA-HARIMA HEAVY INDUSTRIES CO., LTD.

SERVICE BULLETIN

No. 17300-73-005

ENGINE - FUEL AND CONTROL - NEW FUEL DIVERTER AND RETURN VALVE ASSEMBLY WITH CHANGING MATERIAL OF PACKING

1. Planning Information

A. Effectivity

This Service Bulletin is applicable to the Ishikawajima-Harima Heavy Industries Co., Ltd. (IHI) Fuel Diverter and Return Valve (FDRV) Part Number 17300G06 (IAE Part Number 5L0061) installed on the IAE V2500-A5 and V2500-D5 engines and the spare FDRV Part Number 17300G06 (IAE Part number 5L0061).

B. Reason

(1) Condition

Inspection on several returned unit from operators revealed compression set on fluorosilicone packings in the Fuel Diverter and Return Valve (FDRV).

(2) Background

This compression set may cause a fuel leakage in the future.

(3) Objective

The material of packing is to be changed from fluorosilicone to fluorocarbon for all packings FDRV, in order to improve unit reliability and durability.

C. Description

- (1) The changes introduced by this service bulletin are as follows:
 - (a) The packing material has been changed from fluorosilicone to fluorocarbon.

17300-73-005

Page 1 of 10

ISHIKAWAJIMA-HARIMA HEAVY INDUSTRIES CO., LTD.

SERVICE BULLETIN

- (2) This service bulletin provides accomplishment instructions for replacing the all existing packings and also provides instruction for the reidentification of the FDRV.
- (3) This service bulletin describes in two options to accomplish the modification of the FDRV.
 - (a) Option 1: Operators who wish to have the modification accomplished by IHI.
 - (b) Option 2 : Operators who wish to accomplish the modification in their shop by replacing packing.

D. Compliance

Category Code 6

Accomplish when the FDRV is removed from the engine or the module.

E. Approval

This service bulletin has been technically agreed by IAE.

F. Manpower

No additional man-hours are required during overhaul.

- G. Material cost and availability
 - (1) Option 1: Operators who wish to have the modification accomplished by IHI.

Accomplishment of this service bulletin by IHI will be completed based on IHI standard terms, and prices of sale pertaining to commercial contract IHI's Customer Support Manager for information concerning firm quotation.

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

New parts required to accomplish this service bulletin are listed in Section 3 (Material Information), and available at prices and lead times indicated.

An order for spare parts should be addressed to:

17300-73-005

Jan. 25/95

Page 2 of 10

ISHIKAWAJIMA-HARIMA HEAVY INDUSTRIES CO., LTD.

SERVICE BULLETIN

Ishikawajima-Harima Heavy Industries Co,. Ltd. 229, Tonogaya, Mizuho-Machi, Nishitama-Gun Tokyo, 190-12 Japan. (For the attention of the Product Department, Customer Support Manager V2500).

Fax:

(0425)68-7104

Telephone:

(0425)68-7107

H. Tooling - price and availability

Special tools are not required.

I. Weight and Balance

Not affected

J. Electrical Load Data

Not affected

- K. References
 - (1) IAE Service Bulletin No. V2500-ENG-73-0062.
 - (2) IHI Component Maintenance Manual, 73-18-52, Fuel Diverter and Return Valve, Part Number 17300 series.
 - (3) IAE Engineering Change No. 94VJ030.
- I. Other Publications Affected

IHI Component Maintenance Manual, 73-18-52, Fuel Diverter and Return Valve, Part Number 17300 series.

17300-73-005

Jan. 25/95

Page 3 of 10

SERVICE BULLETIN

2. Accomplishment Instruction

- A. Assembly Instructions
 - (1) Option 1: Operators who wish to have the modification accomplished by IHI.
 - (a) Return the part number 17300G06 (IAE part number 5L0061). FDRV for modification and reidentification to:

Ishikawajima-Harima Heavy Industries Co,. Ltd. 229, Tonogaya, Mizuho-Machi, Nishitama-Gun Tokyo, 190-12 Japan. (For the attention of the Product Support Department, Customer Support Manager V2500).

Fax: (0425) 68-7104 Telephone: (0425) 68-7107

NOTE: All part number 17300G06 FDRV's that accomplished the modification by IHI will be reidentified with the following on the new name plates (Refer to Figure 1):

(IAE P/N) 5L0065 (IHI P/N) 17300G07

NOTE: All Part number 2411700-27 FDV's subassembly of FDRV's that accomplished the modification by IHI will be reidentified with the following on the 2411793, new name plates (Refer to Figure 1):

(Teijin Seiki P/N) 2411700-31

- (2) Option 2: Operators who wish to accomplish the modification in their shop by replacing packing.
- NOTE: Expendable parts (i.e. sealing ring, back-up ring, Cap seal) must be replaced with new one by the approved procedures in Reference (2).
 - (a) Disassemble the 17300G06, FDRV and removal of the 13713P1, name plate by the approved procedures in Reference (2), Disassembly.
 - (b) Replace all the existing packings with new packings from the Fuel Diverter and Return Valve (FDRV) by the approved procedures in Reference (2), Disassembly and Assembly.

17300-73-005

Jan. 25/95

ISHIKAWAJIMA-HARIMA HEAVY INDUSTRIES CO., LTD.

SERVICE BULLETIN

(c) Make a mark the new part number on the new 13713P1, name plate and identify as follows;
Use the metal stamps by hand press (Refer to Figure 1).

IAE P/N 5L0065 IHI P/N 17300G07

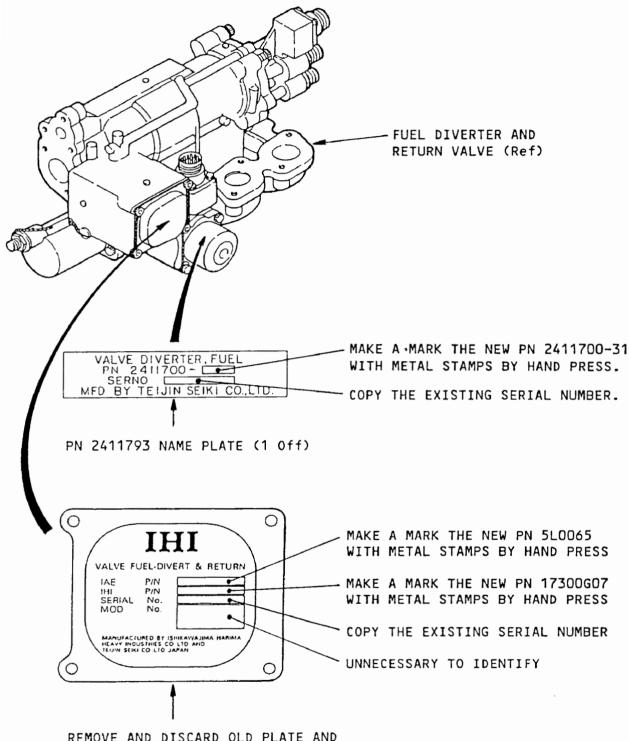
- (d) Assemble the FDRV and installation of the name plate by the approved procedures in Reference (2), Assembly.
- (e) Make a mark the new part number adjacent to old part number on the new 2411793, existing name plate and identify as follows (Refer to Figure 1):

(Teijin Seiki P/N 2411700-31)

- NOTE: (1) Clean the name plate attaching area on the 241176-9, solenoid valve assembly with Methyl Ethyl Ketone (MEK).
 - (2) Apply the bonding adhesive (Hysol EA929, The Dexter Corp, or equivalent) to the name plate.
 - (3) Wind the name plate around the 2411760-9, solenold valve assembly then bend both end of the name plate with winding.
 - (f) Do a functional testing (Refer to Reference (2), Test and Fault Isolation).
- B. Recording Instructions
 - (1) A record of accomplishment is necessary.

ISHIKAWAJIMA-HARIMA HEAVY INDUSTRIES CO., LTD.

SERVICE BULLETIN



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

Reidentification of Fuel Diverter and Return Valve Figure 1

17300-73-005

Jan. 25/95

Page 6 of 10

3. Material Information

Applicability: For each IHI 17300G06, (IAE PN 5L0061), FDRV. It are

installed on the V2500-A5 and V2500-D5 engines and the spare FDRV to incorporate this bulletin.

A. Kits associated with this bulletin:

None

B. Parts affected by this bulletin:

| New Part No. (IPL No.) | Qty | Unit Price(\$ |) Lead Time | Keyword | Old Part No. | Instruction/ Disposition |
|---------------------------------------|-----|------------------|-------------|-----------------------------|----------------------|-----------------------------|
| 17300G07 (5L0065) (1-1) | 1 | ~ | | Valve, Fuel Dvt & Return | 17300G06 (5L0061) | (A) (B) (S1) (1D) |
| 2411700-31 (3-1) | 1 | | | Valve, Fuel Diverter | 2411700-27 | (S1) (1D) |
| 19668-010 (1-145, 1-260, 2-115) | 4 | 9 | 30 days | . Packing | M25988/1- 010 | (A) (B) (S1) |
| 19668-011 (2-110) | 1 | 5 | 30 days | . Packing | M25988/1- 011 | (A) (B) (S1) |
| 19668-01 4 (2-60) | 1 | 6 | 30 days | . Packing | M25988/1- 014 | (A) (B) (S1) |
| 19668-015 (2-55) | 1 | 6 | 30 days | . Packing | M25988/1- 015 | (A) (B) (S1) |
| 19668-017 (2-65) | 1 | 6 | 30 days | . Packing | M25988/1- 017 | (A) (B) (S1) |
| 19668-021 (1-185) | 1 | 6 | 30 days | . Packing | M25988/1- 021 | (A) (B) (S1) |
| 19668-027 (1-170, 1-275) | 2 | 6 | 30 days | . Packing | M25988/1- 027 | (A) (B) (S1) |
| 19668-135 (1-270) | 4 | 7 | 30 days | . Packing | M25988/1- 135 | (A) (B) (S1) |
| 19668-137 (1-150) | 1 | 8 | 30 days | . Packing | M25988/1- 137 | (A) (B) (S1) |

17300-73-005

Jan. 25/95

Page 7 of 10

ISHIKAWAJIMA-HARIMA HEAVY INDUSTRIES CO., LTD.

SERVICE BULLETIN

| New Part No. (IPL No.) | Qty | Unit Price(\$) | Lead Time | Keyword | Old Part No. | Instruction/ Disposition |
|-------------------------------------|-----|-------------------|-----------|-----------|---|-----------------------------|
| 19668-013 (1-50) | 3 | 5 | 30 days | . Packing | M25988/1- 013 | (A) (B) (S1) |
| 19668-905 (1-130, 3-13) | 2 | 5 | 30 days | . Packing | M25988/1- 905 | (A) (B) (S1) |
| 19668~907 (1-135) | 1 | 6 | 30 days | . Packing | M25988/1- 907 | (A) (B) (S1) |
| 19668-029 (1-225) | 1 | 6 | 30 days | . Packing | M25988/1- 029 | (A) (B) (S1) |
| 19668-025 (1-215) | 1 | 6 | 30 days | . Packing | M25988/1- 025 | (A) (B) (S1) |
| 19668-008 (1-10) | 1 | 9 | 30 days | . Packing | M25988/1- 008 | (A) (B) (S1) |
| 2411771- 904 (3-10) | 1 | 4 | 30 days | . Packing | M25988/1- 904 or M25988/2- 904 | (A) (B) (S1) |
| 2411771- 029 (3-40) | 1 | 6 | 30 days | . Packing | M25988/1- 029 or M25988/2- 029 | (A) (B) (S1) |
| 2411771- 129 (3-45) | 1 | 14 | 30 days | . Packing | M25988/1- 129 or M25988/2- 129 | (A) (B) (S1) |
| 2411771- 010 (3-85, 3-190) | 3 | 9 | 30 days | . Packing | M25988/1- 010 or M25988/2- 010 | (A) (B) (S1) |
| 2411771~ 121 (3-95) | 1 | 13 | 30 days | . Packing | M25988/1- 121 or M25988/2- 121 | (A) (B) (S1) |

ISHIKAWAJIMA-HARIMA HEAVY INDUSTRIES CO., LTD.

SERVICE BULLETIN

| New Part No. (IPL No.) | Qty | Unit Price(\$) | Lead Time | Keyword | Old Part No. | Instruction/ Disposition |
|------------------------------|-----|-------------------|-----------|---------------|---|-----------------------------|
| 2411771- 128 (3-130) | 1 | 14 | 30 days | . Packing | M25988/1- 128 or M25988/2- 128 | (A) (B) (S1) |
| 2411771- 127 (3-135) | 1 | 14 | 30 days | . Packing | M25988/1- 127 or M25988/2- 127 | (A) (B) (S1) |
| 2411771- 016 (3-180) | 1 | 6 | 30 days | . Packing | M25988/1- 016 | (A) (B) (S1) |
| 2411771- 120 (3-205) | 2 | 13 | 30 days | . Packing | M25988/1- 120 | (A) (B) (S1) |
| 2411771- 013 (3-240) | 1 | 5 | 30 days | . Packing | M25988/1- 013 or M25988/2- 013 | (A) (B) (S1) |
| 2411771- 014 (3-245) | 1 | 6 | 30 days | . Packing | M25988/1- 014 or M25988/2- 014 | (A) (B) (S1) |
| 2411771- 119 (3-250) | 1 | 13 | 30 days | . Packing | M25988/1- 119 or M25988/2- 119 | (A) (B) (S1) |
| 2411793 (3-3) | 1 | 10 | 30 days | . Plate, name | 2411793 | (A) |
| 13713P1 (1-20) | 1 | 34 | 30 days | . Plate, name | 13713P1 | (A) |

ISHIKAWAJIMA-HARIMA HEAVY INDUSTRIES CO., LTD.

SERVICE BULLETIN

- C. Instruction/Disposition Code Statements:
 - (A) New part will be available for sale.
 - (B) Old part will no longer be available for sale.
- (S1) Old and new part are freely and fully interchangeable, both physically and functionally.
- (1D) Old part can be reworked and reidentified to a new part number.

NOTE: Contact the "Ishikawajima - Harima Heavy Industry Co., Ltd. (IHI)
Product Support Dept., Customer Support Manager V2500."
for information concerning firm prices.

17300-73-005

Page 10 of 10