

ENGINE - FUEL SYSTEM AIR TUBES - REVISED PB SENSE LINE - INSPECTION CHECK & RECALL OF ANY UN-INSTALLED SB 73-0130, P/N M1550-1 SENSE LINE TUBES. ( NON-MODIFICATION )

#### **MODEL APPLICATION**

V2522-D5 V2525-D5 V2528-D5

#### **BULLETIN INDEX LOCATOR**

73-22-00

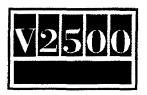
Compliance Category Code

Internal Reference No.

3

99VR734

V2500-ENG-73-0155



ENGINE - FUEL SYSTEM AIR TUBES - REVISED PB SENSE LINE - INSPECTION CHECK & RECALL OF ANY UN-INSTALLED SB 73-0130, P/N M1550-1 SENSE LINE TUBES. ( NON-MODIFICATION )

#### 1 Planning Information

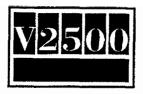
- A. Effectivity
  - (1) Aircraft
    - (a) Boeing DPD MD90
  - (2) Engines
    - (a) V20012, V20027, V20043, V20071, V20082, V20101, V20142 and any additional V2500-D5 engine which has had SB 73-0130 installed.

#### B. Reason

(1) Problem

The purpose of this Non-Modification Service Bulletin is to advise all D5 operators of a potential foul problem on engines with SB 73-0130 installed and the corrective action to be taken.

- (2) Background
  - (a) Following a successful Controlled Service Introduction(CSI) on five engines IAE released SB 73-0130 for full incorporation on the D5 fleet. However, a manufacturing error has been identified on one tube included in the kit of parts for this Service Bulletin. Affected part is the Pb air to EEC tube assembly, with flexible steel braided section. (Part Number M1550-1.)
  - (b) In addition, on the SB 73-0130 accomplishment instructions issued on March 5, 1999 the spacers installed at two clipping points (CP2198 / CP2694) have been reversed from the original design intent and this, combined with the above pipe manufacturing error can result in insufficient clearance, between the Pb air to EEC tube assembly and the Loom A harness when SB73-0130 is incorporated.(Part Number M1550-1.)
  - (c) Examination of the first two engines that have had SB73-0130 installed during a shop visit has confirmed that both exhibited a foul between the Loom A harness bundle and Pb air to EEC tube assembly. (Part Number M1550-1.)
    Following reversal of the spacers / associated attaching bolts, at clipping points CP2198 / CP2694 and manipulation of the Loom A harness bundle, in a slight bow away from the EEC towards the bracket that carries the remainder of the EEC connection flexible tubes, it was confirmed that sufficient clearance was achieved between Loom A and all adjacent tubes or features.



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(d) SB 73-0130 is being revised and re-issued to reflect the above. All tubes to P/N M1550-1 are being recalled from Modkits that have not yet been installed on engines for inspection and/or rework as required to ensure that they are of the correct length.

#### C. Compliance

#### Category 3

#### Installed or Spare Engines

Accomplish the action at F.1. below at, or before, the next scheduled A check on any V2500-D5 engine which has had the revised Pb sense line (SB 73-0130) installed.

#### SB 73-0130 Modkits

On any SB 73-0130 Modkit that have been received from IAE, including those received by Repair Bases/Maintenance Centres via their customers, accomplish the action at F.2. below within 30 calendar days from receipt of the Modkit.

#### D. Approval

The compliance statement and the procedures given in paragraph F. of this Non-Modification Service Bulletin, obey the Federal Aviation Regulations and are FAA approved for the engine models listed.

#### E. References

Service Bulletin V2500-ENG-73-0130

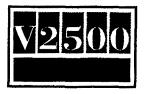
Aircraft Maintenance Manual(AMM) and Illustrated Parts Catalogue(IPC) references contained within Service Bulletin V2500-ENG-73-0130.

#### F. Action -

#### 1. <u>Installed or Spare Engines</u>

- (a) Inspect any affected engine for clearance between the electrical harness loom (Loom A) and the steel braided flexible pressure supply tubes that connect to the EEC.
- NOTE:-The new PB flexible tube(P/N M1550-1) and the new P2.5 flexible tube(P/N M1549-1) are routed under the harness loom in SB 73-0130, whilst the original P2, P5 & P12.5 flexible tubes retain their Pre.SB 73-0130 routing over the harness loom.
  - (i) If clearance of 0.160 inch (4 mm) is present accept the installation for continued service running pending supply of a replacement M1550-1 tube from IAE.

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- (ii) Record the spacer Part Number installed at CP2198 & CP2694 and the Manufacturing Serial Number of the M1550-1(PB) installed tube. (This is in the form of a six digit number commencing with 32\_\_\_\_ on an identification band attached to the tube.)
- (b) If clearance is less than (a) action as follows:-
  - (i) Record the spacer Part Number installed at CP2198 & CP2694 and the Manufacturing Serial Number of the M1550-1(PB) installed tube. [Refer 1.(a) (ii)]
  - (ii) If the spacers installed at (i) are UP10482 and UP10481 respectively disassemble the two clipping points and loosely re-assemble CP2198 using the original harness clamp and spacer UP10481/securing bolt 4W 0115, and CP2694 using the original harness clamp and spacer UP10482/securing bolt 4W 0118.
  - (iii) Loosen Loom A clipping points CP 2195 & CP 2196.
  - CAUTION: WHEN YOU LOOSEN OR DISMANTLE TUBE M1550-1 FROM THE PB UNION ( 5A 8226 ), MAKE SURE THAT THE UNION IS HELD WITH AN APPLICABLE SPANNER. IF YOU DO NOT DO THIS THE UNION CAN BE LOOSENED OR THE SCREW THREADS OF THE EEC PB PORT CAN BE DAMAGED.
  - (iv) Untorque the Pb sense line (P/N M1550-1) flexible connection at the EEC.
  - (v) Adjust the path of the Loom A harness through CP's 2195, 2196, 2198 & 2694 and tighten the clip securing bolts ensuring that a minimum of 0.160 inch (4 mm) clearance is attained between the harness and any of the flexible tubes which attach to the EEC input ports. It may be necessary to alter the routing of the flexible portion of the M1550-1 tube to obtain the minimum clearance.
  - CAUTION: WHEN YOU INSTALL TUBE M1550-1 TO THE PB UNION (5A 8226),
    MAKE SURE THAT THE UNION IS HELD WITH AN APPLICABLE
    SPANNER. IF YOU DO NOT DO THIS THE SCREW THREADS OF THE
    EEC Pb PORT CAN BE DAMAGED BY TOO MUCH TORQUE.
  - (vi) Torque tighten the M1550-1 securing nut, ensuring that the minimum harness /tube clearance set at (v) above is maintained. [ Refer (v) above.]
  - (vii) Check that none of the Loom A harness wires are protruding, re-secure any protruding wires within the loom bundle using the existing lacing wires.
  - (viii) Accept the installation for continued service running pending supply of a replacement M1550-1 tube from IAE.

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#### 2. Modkit (MKV 703001)

- (a) Remove the M1550-1 tube from any SB 73-0130 Modkit (MKV 703001) received and not yet installed.
- (b) Record the Manufacturing Serial Number of the removed tube. [ Refer 1.(a) (ii) above.]
- (c) Reject & return all M1550-1 tubes prior to Serial Number 33898 to the address below, { Quoting MRA 0191 as a reference.} along with a Manual FOC order for a replacement. to IAE Spares. { Also quoting MRA 0191 as a reference.}

Return address for rejected tubes:-

Rolls-Royce plc Receiving Stores, Sinfin Lane, Derby. DE24 8BJ

For the Attention of Mr. G. Brewer - Complaints Co-ordinator.

#### G. Record of Accomplishment

When the above action is completed write V2500 Non-Modification Service Bulletin ENG 73-0155 in the engine log book and supply a copy of all the M1550-1 tube assembly S/N's recorded at F.1. & 2. to the IAE representative advising that the action at F. has been completed.