

# ALERT SERVICE BULLETIN

FROM GOVERNMENT AIRCRAFT FACTORIES

NOMAD ALERT SERVICE BULLETIN AN22-74-1 AND AN22-74-1 REV. 1.

THIS ASB IS A COPY OF THE ORIGINAL TELEXED ALERT SERVICE BULLETINS DISPATCHED TO ALL OPERATORS IN JUNE 1978.

1. SUBJECT - HOT AIR CHECK VALVE 1/N-74-334 INSPECTION AND TEMPORARY ADDITION OF CLAMP AROUND FLANGE JOINT.
2. APPLICABILITY - ALL NOMAD N22, N22B N24 AND N24A A/C DELIVERED OR IN OPERATION PRIOR TO OR ON 22 JUNE 1978.
3. COMPLIANCE - PART 1 WITHIN 10 HOURS FLYING AFTER RECEIPT OF THESE INSTRUCTIONS. PART 2 - IF NECESSARY IMMEDIATELY FOLLOWING INSPECTION. PART 3 - WITHIN 50 HOURS FLYING AFTER 22 JUNE 1978.
4. REASON - INSTANCES HAVE OCCURRED WHEREBY THE INTERFLANGE GASKET SEAL OF HOT AIR VALVE 1/N-74-334 HAD PROTRUDED ALLOWING ESCAPE OF HOT AIR GASES DOING DAMAGE TO SURROUNDING COMPONENTS.

THIS INSTRUCTION PROVIDES A TEMPORARY FIX TO PREVENT DAMAGE AND ALLEVIATE A HAZARDOUS SITUATION PENDING THE INTRODUCTION OF VALVE MODIFICATION.

5. ACCOMPLISHMENT INSTRUCTIONS - (REFER IPC 21-40-00 DETAIL B FIG 1 SHEET 1 ITEM 23).

PART 1 INSPECTION.

- A. CAREFULLY REMOVE LAGGING TO EXPOSE VALVE 1/N-74-334 PORT AND STARBOARD.
- B. ENSURE BY VISUAL INSPECTION, WITHOUT DISMANTLING, THAT FLANGE SEAL GASKET IS INTACT, THAT 8 OFF FLANGE BOLTS ARE FITTED AND NOT LOOSE AND THAT THERE IS NO EVIDENCE OF HOT AIR LEAKAGE. IF SERVICEABLE REFIT LAGGING.

PART 2 VALVE RECTIFICATION. IF INSPECTION IAW PART 1 DETECTED GASKET DAMAGE, LOOSE BOLTS, OR EVIDENCE OF GAS LEAKAGE.

- A. REMOVE DEFECTIVE VALVE.
- B. DISCONNECT FLANGE BOLTS 8 OFF AND SEPARATE VALVE HALVES .
- C. REVIEW FLANGE/SEAL GASKET - MANUFACTURE FROM PRESSED ASBESTOS TYPE MATERIAL SIZE DECIMAL ZERO SIX ZERO THICK TRADE NAME - KLINGERIT OR SIMILAR.
- D. RE- ASSEMBLE VALVE, ENSURING THAT SPRING IS NOT TRAPPED BETWEEN FLANGES.

PART 3 TEMPORARY CORRECTIVE ACTION TO PREVENT SEAL/GASKET EXTRUSION IS ACHIEVED BY THE FOLLOWING INSTRUCTIONS WHICH DETAIL THE PHYSICAL CLAMPING OF THE EXTERNAL CIRCUMFERENCE OF THE VALVE FLANGE BY THE USE OF A REWORKED TANGENTIAL TYPE WORM DRIVE HOSE CLAMP PT NO AEROSEAL QS200-M40S OR QS100-M40S OR AN 737-TW82 OR COMMERCIAL STAINLESS STEEL CLAMP OF EQUIVALENT SIZE. THE SIDE EDGES OF THESE CLAMPS IS NOTCHED TO PREVENT LATERAL MOVEMENT OF THE CLAMP.

- A. REMOVE PORT AND STARBOARD VALVES.
- B. FIT CLAMP CENTRALLY TO CIRCUMFERENCE OF VALVE FLANGE WITH SCREW FITTING OF CLAMP OPPOSITE TO HINGE POSITION OF VALVE.
- C. AT THREE POINTS AROUND THE CLAMP BAND, APPROXIMATELY 120 DEGREES APART AND CONVIENTLY LOCATED BETWEEN FLANGE BOLTS - MARK A LINE ACROSS BAND EDGE TO EDGE.
- D. ON EITHER SIDE OF THESE LINES MARK 2 OTHER LINES DECIMAL TWO FIVE INCHES FROM ORIGINAL LINE - REMOVE CLAMP FROM VALVE.
- E. WHERE THESE SIX LINES MEET EACH EDGE OF BAND, FILE OUT 12 SEMICIRCULAR NOTCHES SIZE DECIMAL TWO FIVE INCHES DIA TO A DEPTH WHICH ALLOWS SIZE DECIMAL THREE INCHES OF BAND WIDTH BETWEEN NOTCHES ACROSS WIDTH OF BAND.
- F. FOLD SIX TABS, FORMED BY (E) ABOVE, DOWN 90 DEGREES TOWARDS CENTRE OF CLAMP (3 EACH SIDE). THESE TABS FORM CLAMP LATERAL LOCATION LUGS.
- G. RE-IDENTIFY CLAMP PT NO 1/N-72-99.
- H. REFIT REWORKED CLAMP TO VALVE FLANGE AND TIGHTEN FIRMLY USING STANDARD 8 INCH SCREWDRIVER.
- J. REPEAT (B) TO (H) FOR OTHER VALVE.

PART 4.

- A. ASSEMBLE REWORKED PORT AND STARBOARD VALVE/CLAMP ASSY TO HOT AIR DUCTS WITH HINGE UPPERMOST AND DIRECTIONAL FLOW ARROW POINTING AWAY FROM ENGINE.
  - B. REFIT VALVE AND PIPE LAGGING.
6. RECORD COMPLIANCE WITH THIS SERVICE BULLETIN IN AIRFRAME LOG BOOK.

AN22-74-1 REVISION 1.

1. SUBJECT - HOT AIR CHECK VALVE 1/N-74-334 INSPECTION AND REWORK, REVISION AS FOLLOWS.
2. APPLICABILITY - ALL NOMAD A/C DELIVERED OR IN OPERATION PRIOR TO OR ON 30 JUNE 1978 PRE OR POST COMPLIANCE WITH ORIGINAL ISSUE OF THIS DIRECTIVE.

3. COMPLIANCE - IN CONJUNCTION WITH PART 1 PART 2 OR PART 3 OF ORIGINAL INSTRUCTIONS OR WITHIN 50 HOURS OF RECEIPT OF THIS REVISION .
4. REASON - REPEATED LOSS OF TORQUE ON BOLT/NUT COMBINATIONS WHEN USING NYLOC INSERT NUTS.
5. ACCOMPLISHMENT INSTRUCTIONS - DURING INSPECTION AND/OR REWORK OF HOT AIR CHECK VALVE IAW PART 1, PART 2 OR PART 3 OF ORIGINAL ISSUE OF THIS DIRECTIVE.
  - A. REMOVE AND DISCARD 4 OFF NUTS WITH NYLOC INSERTS MS 21044 NO 6.
  - B. FIT 4 OFF STEEL LOCK NUTS SELECTED FROM MS 21043-06, MS21045-C06, MS21046-C06, NAS 1021-C06, NAS 1022-C06 OR EQUIVALENT SIZE AND SPEC SS OR CORROSION RESISTANT NUT.  
(NB: MACHINE SCREW PT NO IF REQD IS MS 35265-30).
  - C. REFIT REWORKED VALVE COMPLETE WITH CLAMP TO AIRCRAFT.
6. RECORD COMPLIANCE WITH THIS REVISION IN AIRFRAME LOG BOOK .

PRODUCT SUPPORT

APPROVED BY:

GOVERNMENT AIRCRAFT FACTORY

POST DESIGN SECTION

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