International Aero Engines

SERVICE BULLETIN

OIL - ENGINE - OIL SYSTEM - APPLY JOINTING COMPOUND TO THE ACOC INLET DUCT AND FAN CASE ASSEMBLY - CATEGORY CODE 5 - MOD.ENG-79-0032



1. Planning Information

A. Effectivity

(1) Aircraft: Airbus A320

(2) Engine: V2500-A1 Engines Serial Numbers V0004, V0006, V0008, and all odd numbered Engines from V0009 thru V0261.

B. Reason

(1) Condition

The Air Cooled Oil Cooler (ACOC) Air Inlet Duct mating faces to the Fan Case may not have been applied with the jointing compound.

(2) Background

The engine assembling procedure shows that there is the possibility of the condition.

(3) Objective

Apply the jointing compound to the mating faces between the ACOC Air Inlet Duct and the Fan Case.

(4) Substantiation

Substantiation test is not required.

(5) Effects of Bulletin on Workshop Procedures:

| | |
|---|---|
| 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

The jointing compound should be applied between the ACOC Air Inlet Duct and the Fan Case.

D. Approval

The application of jointing compound described in Section 2 and 3 of this Service Bulletin has been shown to comply with the applicable Federal Aviation Regulations and is FAA-APPROVED for the Engine Model listed.

E. Compliance

Category Code 5

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

Manpower

Estimated Manhours to incorporate the full intent of this Bulletin:

| Venue | Estimated Manhours |
|---|---|
| (1) In Service | Not applicable |
| (2) In shop | Total: 2 hours 5 minutes |
| (a) To remove the ACOC Air Inlet Duct Assembly | 48 minutes |
| (b) To apply the jointing compound | 7 |
| (c) To install the ACOC AiR Inlet Duct Assembly | 1 hour 10 minutes |

G. Material Information

See 3. Material Information.

H. Tooling - Price and Availability

Special tools are not required to accomplish this Service Bulletin.

I. Weight and Balance

| | | |
|---|---|---|
| (1) | Weight change | None |
| (2) | Moment arm | No effect |
| (3) | Datum | Engine front mount centerline (Power Plant 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.

92VJ749

(2) Other References

V2500 Illustrated Parts Catalog, Chapter/Section 79-21-42.

V2500 Engine Manual, 72-00-32 Removal/Installation.

V2500 Engine Manual, 72-32-85 Inspection/Check.

V2500 Component, Maintenance Manual, 79-21-42 Inspection/Check.

V2500 Overhaul Processes and Consumable Index.

L. Other Publications Affected

None

2. Accomplishment Instructions

A. Removal Instructions

(1) Remove the related LP Compressor/Intermediate Case Electrical Harnesses by the approved procedure in the Reference 1.K.(2) TASK 72-00-32-020-002.

(2) Remove the related LP Compressor/Intermediate Case Tubes and Electrical Harness Raceways by the approved procedure in the Reference 1.K.(2). TASK 72-00-32-020-003.

(3) Remove the Air Modulating Valve by the approved procedure in the Reference 1.K.(2) SUBTASK 72-00-32-020-074 in TASK 72-00-32-020-004.

(4) Remove the ACOC Air Inlet Duct Assembly by the approved procedure in the Reference 1.K.(2) SUBTASK 72-00-32-020-075 in TASK 72-00-32-020-004.

B. Examination Instruction

Examine the mating faces of the ACOC Air Inlet Duct and LP Compressor/ Intermediate Case by the approved procedure in the Reference 1.K.(3) TASK 72-32-85-200-001 and 1.K.(4) TASK 79-21-42-200-101.

C. If damage, corrosion is found during a inspection of the duct or Fan Case.

(1) Remove the corrosion with CoMat 05-020 waterpr. silic. carb. abras. paper or CoMat 05-021 waterpr. silic. carb. abras. paper.

(2) Apply a layer of chromate conversion coating on the repaired area of the duct (Ref. SPM TASK 70-38-02-300-503).

D. Application Instructions

(1) Apply the jointing compound (See Figure. 1).

WARNING: DO NOT GET THE CLEANING FLUID ON YOUR SKIN OR IN YOUR EYES. PUT ON PROTECTIVE CLOTHING, GOGGLES AND A FACE MASK. USE THE FLUID IN A WELL VENTILATED AREA. DO NOT BREATHE THE GAS. IF YOU GET THE CLEANING FLUID ON YOUR SKIN OR IN YOUR EYES FLUSH IT AWAY WITH WATER. GET MEDICAL AID IF YOUR SKIN OR EYES BECOME IRRITATED.

(a) Clean the mating faces of the Air Inlet Duct and the LP Compressor/Intermediate Case with CoMat 01-076 methylethylketone.

(b) Apply a layer, of equal thickness, of CoMat 04-004 jointing compound or CoMat 04-005 jointing compound or CoMat 04-006 jointing compound to the two faces. Let the faces become dry for ten minutes before installation or the Air Inlet Duct.

E. Installation Instructions

(1) Put the ACOC Air Inlet Duct Assembly in position. Then install the bolts that attach the ACOC Air Inlet Duct Assembly to the LP Compressor/Intermediate Case in the sequence that follows.

(a) Step 1 - Install four bolts (79-21-42, 01-415) in holes 1, 6, 7 and 12

(b) Step 2 - Install four bolts (79-21-42, 01-410) in holes 41, 45, 46 and 50.

(c) Step 3 - Install eight bolts (79-21-42, 01-415) in holes 2, 3, 4, 5, 8, 9, 10 and 11.

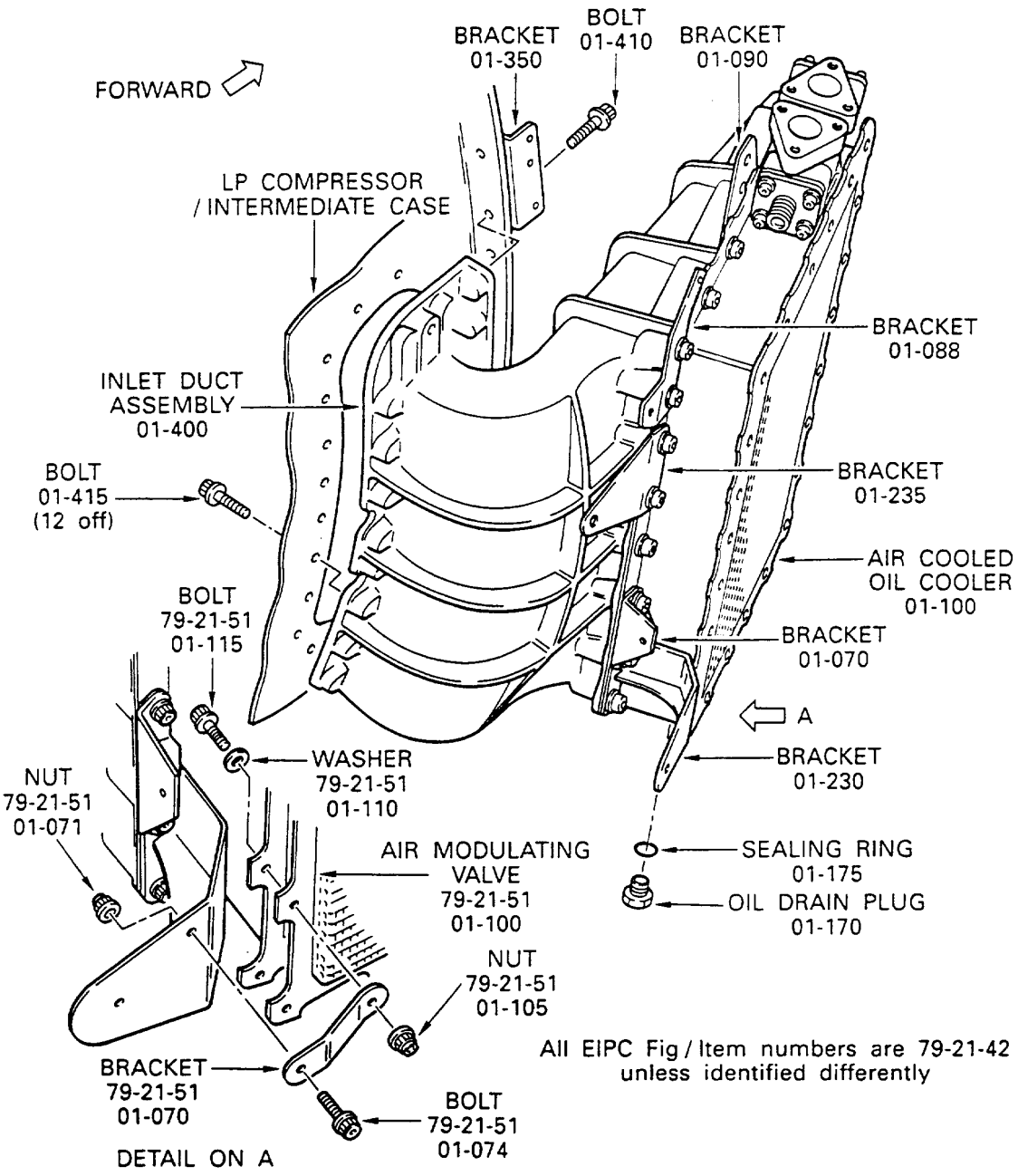
(d) Step 4 - Install six bolts (79-21-42, 01-410) in holes 42, 43, 44, 47, 48 and 49.

(2) Torque the 22 bolts to 85 to 105 lbfin (10 to 12 Nm) in the same sequence as referred to in step (1) (a) to (d).

(3) Install the Air Modulating Valve by the approved procedure in the Reference 1.K.(2) SUBTASK 72-00-32-020-062 in TASK 72-00-32-420-002.

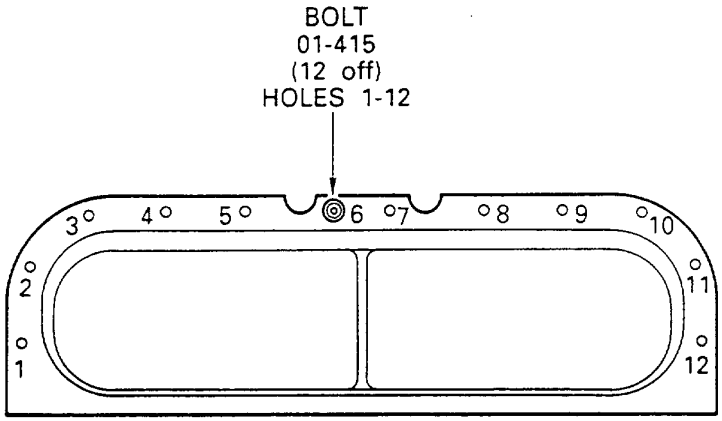
(4) Install the related LP Compressor/Intermediate Case Tubes and the Electrical Harness Raceway by the approved procedure in the Reference 1.K.(2) TASK 72-00-32-420-003.

(5) Install the related LP Compressor/Intermediate Case Electrical Harness by the approved procedure in the Reference 1.K.(2) TASK 72-00-32-420-004.

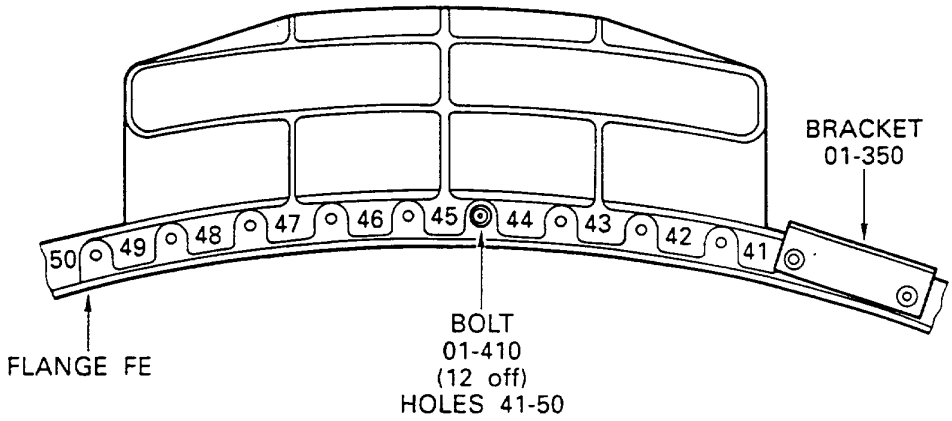



ded0001440

Air Cooled Oil Cooler (ACOC) and Air Inlet Duct
Fig.1




VIEW ON INLET DUCT
TO COMPRESSOR CASE FACE




VIEW ON FLANGE FE
WHEN YOU LOOK FROM THE FRONT

All EIPC Fig / Item numbers are 79-21-42

ded0001441

Bolts of ACOC Air Inlet Duct
Fig.2

3. Material Information

Applicability: For each V2500 Engine to incorporate this Bulletin.

A. Kits associated with this Bulletin:

None

B. Parts affected by this Bulletin:

Not applicable

C. Expendables

| Part Number | Nomenclature | Q'ty | Chapter/Fig.-Item |
|---|---|---|---|
| MS9387-003 | Sealing Ring | 1 | 79-21-42-01-175 |
| AS43013-118 | Sealing Ring | 1 | 79-21-49-01-498 |
| AS43013-118 | Sealing Ring | 1 | 79-21-49-02-096 |

D. Consumables

| | |
|---|---|
| CoMat 01-076 | Methylethylketone |
| CoMat 04-004 | Jointing Compound (HYLOMAR PL32 LIGHT) |
| CoMat 04-005 | Jointing Compound (HYLOMAR PL32 MEDIUM) |
| CoMat 04-006 | Jointing Compound (HYLOMAR PL32 HEAVY) |
| CoMat 05-020 | Waterpr. Silic. Carb. Abras. Paper (GRIT SIZE 320) |
| CoMat 05-021 | Waterpr. Silic. Carb. Abras. Paper (GRIT SIZE 240) |

NOTE: CoMat 04-004 or 04-005 Jointing Compound is preferable to CoMat 04-066 as to ease of application.