

ATA AIRLINES, INC.

LEFT ENGINE DMS CHECKS

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CHECK BEING PERFORMED: Custom

ZONES: 411
A/C NUMBER:
REV. DATE: 05/13/05
FREQUENCY: 4A

W/C NUMBER: 341I7902 DATE:

Table with 3 columns: MFR P/N, DESCRIPTION, QTY. Rows include J221P028 (Packing), PD680 (Solvent), BMS15-5 (Cloth), 034116 (Swab), and Bag (Polyethylene).

Table with 3 columns: TOOLS, DESCRIPTION, QTY. Rows include Lens (Magnifying), 856A1364G02 (Set - Print), Air Source (Regulated), Gloves (Rubber), and Goggles (Splash Protective).

PANELS

413
414

REFERENCES

Figures 1-2; AMM 71-11-02, 79-00-00, 79-21-05; GMM Chapter 3

MECH INSP

MPD Items: 79-030-01, 79-050-01

XXXXX 1. Do a check of the DMS STATUS on the Flight Management Computer/ Control Display Unit (FMCS CDU):

A. Push the INIT REF key two times:

NOTE: This causes the PERF INIT INDEX to show

B. Push the INDEX Line Select Key (LSK).

C. Push the MAINT (LSK).

D. Push the ENGINE LSK.

E. Push the LSK for ENGINE 1.

NOTE: This causes the ENGINE 1 BITE TEST MAIN MENU to show.

F. Push the DMS STATUS LSK.

NOTE: This causes the ENGINE 1 BITE TEST DMS STATUS to show.

A/C NUMBER:

CHECK BEING PERFORMED: Cust

W/C NUMBER: 341I7902 (continued)

MECH: INSP:

(1) DEBRIS DETECTED: NO should show.

(2) If DEBRIS DETECTED: YES shows, this indicates debris detection is active.

(a) Do the fault isolation first from this task, FIM 79-21 TASK 808, then continue.

2. Prepare for additional Engine 1 DMS Functional Checks and Inspections (Figs. 1 and 2).

XXXXX A. Open Engine 1 Fan Cowl Panels, AMM TASK 71-11-02-010-801.

CAUTION: REMOVE AND TAG ONE CHIP DETECTOR AT A TIME. THIS CAN PREVENT AN ERROR IN IDENTIFICATION OF THE SOURCE OF THE MATERIAL ON THE CHIP DETECTORS.

XXXXX B. Remove each of the DMS Detectors, AMM TASK 79-21-05-000-807.

NOTE: If the DMS Detector is removed for this W/C only, it is not necessary to disconnect the DMS detector connector from the DMS box.

(1) When you remove a chip detector, attach a tag to identify it.

NOTE: The tag identifies the plug location for each scavenge circuit.

(2) Place without dripping, the chip detector or scavenge screen with particles in a new polyethylene bag.

CAUTION: REMOVE THE SCREEN FROM THE CHIP DETECTORS TO EXAMINE THE CHIP DETECTOR MAGNET FOR THE PRESENCE OF PARTICLES. IF YOU DO NOT REMOVE THE SCREEN FROM THE CHIP DETECTOR, IT IS POSSIBLE THAT YOU WILL NOT BE ABLE TO SEE THE PARTICLES THAT ARE CAUGHT BY THE CHIP DETECTOR MAGNET.

XXXXX C. If not already done, do these steps on each of the DMS Detectors to remove the Scavenge Screen from the Chip Detector and clean the Scavenge Screen (Fig. 2):

A/C NUMBER:

CHECK BEING PERFORMED: Cust

W/C NUMBER: 341I7902 (continued)

MECH: INSP:

NOTE: Make sure you do not remove the particles from the chip detector magnet. Make sure you collect all the particles in the scavenge screen while you remove the scavenge screen from the chip detector.

(1) Place the chip detector on a clean surface, keep the plastic bag and identification tag.

(2) Push the spring-loaded pin that attaches the scavenge screen to the chip detector with a swab.

(3) Carefully remove the scavenge screen from the chip detector.

(4) Carefully remove and keep the particles from the scavenge screen.

WARNING: DO NOT GET THE SOLVENT IN YOUR MOUTH OR EYES, OR ON YOUR SKIN. DO NOT BREATHE THE FUMES FROM THE SOLVENT. PUT ON PROTECTIVE SPLASH GOGGLES AND GLOVES WHEN YOU USE THE SOLVENT. KEEP THE SOLVENT AWAY FROM SPARKS, FLAME AND HEAT. THE SOLVENT IS POISONOUS AND FLAMMABLE WHICH CAN CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

(5) After you remove all the particles, clean the scavenge screen with solvent, PD680 Type I or II.

(a) Dry the scavenge screen with a 0-30 psig dry filtered air source.

(b) Make sure that the scavenge screen is free of all particles.

CAUTION: REMOVE THE SCREEN FROM THE CHIP DETECTORS TO EXAMINE THE CHIP DETECTOR MAGNET FOR THE PRESENCE OF PARTICLES. IF YOU DO NOT REMOVE THE SCREEN FROM THE CHIP DETECTOR, IT IS POSSIBLE THAT YOU WILL NOT BE ABLE TO SEE THE PARTICLES THAT ARE CAUGHT BY THE CHIP DETECTOR MAGNET.

CAUTION: DO NOT USE A MAGNET TO REMOVE THE PARTICLES FROM THE CHIP DETECTOR MAGNET. IF YOU USE A MAGNET, IT CAN

A/C NUMBER:

CHECK BEING PERFORMED: Cust

W/C NUMBER: 341I7902 (continued)

MECH: INSP:

DECREASE THE MAGNETIC PERFORMANCE OF THE CHIP DETECTOR.

XXXXX D. Do these steps on each of the DMS Detectors to remove the particles from the chip detector magnet and clean the chip detector:

- (1) Carefully remove and keep the particles from the chip detector magnet with a cloth, BMS15-5 or a thin sheet of paper.

NOTE: Do not collect the particles on a strip of adhesive tape, since it will affect the laboratory material analysis.

WARNING: DO NOT GET THE SOLVENT IN YOUR MOUTH OR EYES, OR ON YOUR SKIN. DO NOT BREATHE THE FUMES FROM THE SOLVENT. PUT ON PROTECTIVE SPLASH GOGGLES AND GLOVES WHEN YOU USE THE SOLVENT. KEEP THE SOLVENT AWAY FROM SPARKS, FLAME AND HEAT. THE SOLVENT IS POISONOUS AND FLAMMABLE WHICH CAN CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

- (2) After you remove all the particles, clean the chip detector magnet with solvent, PD680 Type I or II.

(a) Dry the chip detector magnet with a 0-30 psig dry filtered air source.

(b) Make sure that the chip detector is free of all particles.

NOTE: If all the particles are not removed from the DMS detector, the DMS DETECTOR REQUIRES INSPECTION maintenance message can show again after the subsequent flight.

XXXXX 3. Test each Engine 1 DMS Line as follows:

A. Put a clean metallic wire jumper or any metallic piece onto the DMS Detector magnet to bridge the gap.

B. Do a check of the DMS STATUS on the FMCS CDU.

A/C NUMBER:

CHECK BEING PERFORMED: Cust

W/C NUMBER: 341I7902 (continued)

MECH: INSP:

(1) If DEBRIS DETECTED: YES shows, the line has passed the test.

(2) If DEBRIS DETECTED: NO shows, the DMS has failed the test.

NOTE: This is caused by an open circuit within the DMS Detector, the DMS Box or the J9 Harness.

(a) Do the fault isolation for this task, FIM 79-21 TASK 808 to determine the cause and correct it.

CAUTION: DO NOT INSTALL THE CHIP DETECTOR WITHOUT A PACKING. INSTALLATION OF THE CHIP DETECTOR WITHOUT A PACKING CAN CAUSE OIL LEAKAGE DURING ENGINE OPERATION AND A POSSIBLE ENGINE FAILURE.

C. Reinstall the DMS Detector, AMM TASK 79-21-05-400-805.

XXXXX 4. Examine the particles of each Engine 1 DMS Detector Magnet and Scavenge Screen, AMM TASK 79-00-00-200-804 (Selection), Subtask 160-002-F00 through Subtask 210-010-F00.

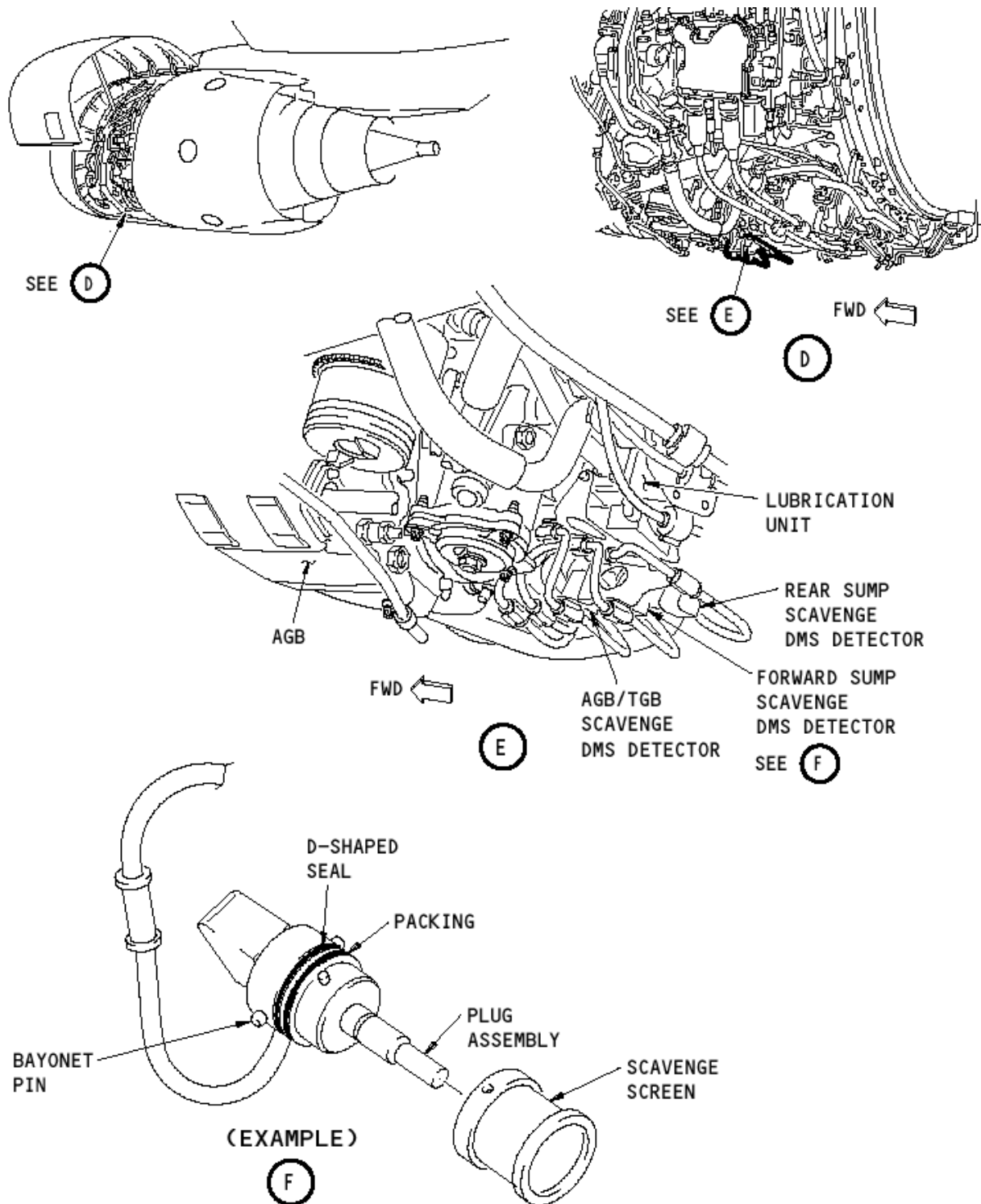
A. Comply with Engine Oil System Monitoring, GMM Chapter 3.

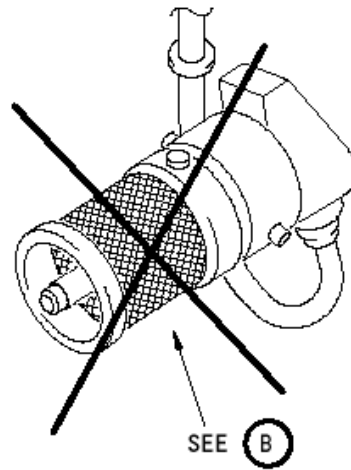
(1) Forward all findings to Powerplant Engineering for immediate lab analysis.

XXXXX 5. Return the aircraft to its usual condition.

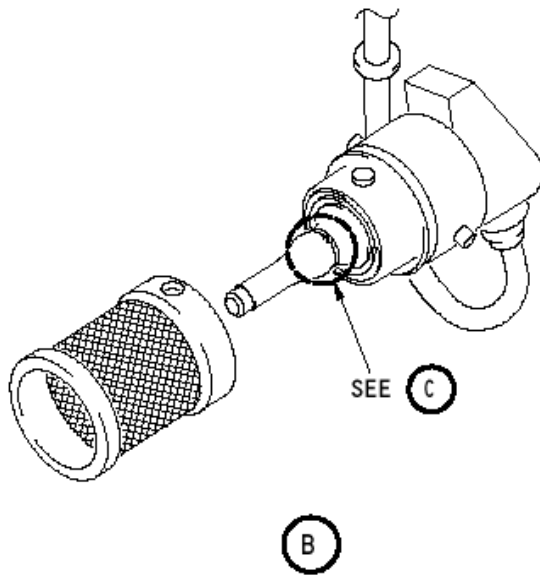
A. Close Engine 1 Fan Cowl Panels, AMM TASK 71-11-02-410-801.

*****END OF WORKCARD*****





NOTE: DO NOT INSPECT WITH SCREEN INSTALLED.



NOTE: REMOVE SCREEN TO CLOSELY INSPECT DETECTOR.



NOTE: CLEANING REQUIRED AFTER INSPECTION.