GSAC

AIRWORTHINESS DIRECTIVE

released by DIRECTION GENERALE DE L'AVIATION CIVILE

Inspection and/or modifications described below are mandatory. No person may operate a product to which this Airworthiness Directive applies except in accordance with the requirements of this Airworthiness Directive.

Translation of 'Consigne de Navigabilité' ref. : 2001-187(B)
In case of any difficulty, reference should be made to the French original issue.

CFM INTERNATIONAL

CFM56-5C series turbofan engines

Fuel manifold CJ9L & CJ10L harness (ATA 72, 73)

1. APPLICABILITY:

This Airworthiness Directive applies to CFMI turbofan engines CFM56-5C all types installed on AIRBUS A340 or other aeroplanes.

2. REASON:

Interference between fuel manifold and CJ9L harness can lead to perforation of the fuel manifold with a possibility of engine fire. Two engines have been found with significant fuel leakage. Two other engines exhibited interference and wear at same location. Furthermore, during CJ9L harness inspection an operator noticed chafing between fuel manifold and CJ10L harness.

3. MANDATORY ACTIONS AND COMPLIANCE:

3.1. For all CFM56-5C engines: no later than ten days after the reception of the present Airworthiness Directive [Unless already accomplished according to Airworthiness Directive 2001-145(B)] :

Visually inspect if the routing of the CJ9L harness (HPTCC sensor) is on the correct side of the brackets (AMM ATA 73-21-50 figure 401).

Visually inspect if the harness is not chafing against the fuel manifold.

Visually inspect if there is a minimum clearance of 12 mm (half an inch) at all locations.

If the routing of the harness is not correct, or if there is chafing, or if there is not the minimum clearance, replace parts worn beyond manual limits and re-route CJ9L harness HPTCC sensor lead in accordance with Airbus Maintenance Manual ATA 73-21-50 figure 401. For this re-route the preferred hardware is bracket P/N 1645M28G05 (see SB CFM56-5C 72-266) with metallic cushion clamps P/N 649-412-351-0 and P/N 649-412-354-0 (see SB CFM56-5C 72-0327) ; however the original hardware bracket P/N 1645M28G03 only with metallic cushion clamps P/N 649-412-351-0 and P/N 649-412-354-0 may be used.

3.2. For engines serial numbers 74X-101 to 74X-466, pre SB 73-057 (deletion of 9:00 HPTCC sensor lead) which are engines equipped with one of the following electrical harnesses : 320-363-301-0, 320-398-501-0 or 320-398-502-0 : No later than ten days after the reception of the present Airworthiness Directive:

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Visually inspect if the routing of the CJ10L harness (HPTCC sensor) is on the correct side of the brackets (AMM ATA 73-21-50 figure 402 sheets 4 and 5).

Visually inspect if the harness is not chafing against the fuel manifold.

Visually inspect if there is a minimum clearance of 12 mm (half an inch) at all locations.

If the routing of the harness is not correct, or if there is chafing, or if there is not the minimum clearance, replace parts worn beyond manual limits and re-route CJ10L harness HPTCC sensor lead in accordance with Airbus Maintenance Manual ATA 73-21-50 figure 402 sheets 4 and 5, details S (3 locations), R and Q. For this re-route use only metallic cushion clamps P/N 649-412-351-0.

3.3. Serviceability of chafed parts after correcting any interference:

3.3.1. Serviceability of the fuel manifold:

Chafing less than 0.005 inch in depth : serviceable.

Chafing beyond 0.005 and less than 0.010 inch in depth: replace part at next C check or 3000 flight hours following the inspection whichever occurs first.

Chafing beyond 0.010 and less than 0.015 inch in depth: replace part before the fourth flight following the inspection.

Chafing beyond 0.015 inch in depth: replace part before the next flight following the inspection.

3.3.2. Serviceability of the CJ9L and CJ10L harness:

Any amount of wear allowed as long as braid is not pierced. Replace the harness at "C" check but not later than 3,000 hours since the last inspection if the wire braid is worn (pierced).

3.4. Report the date inspected, ESN and details of any mis-routing and/or wear found to CFMI.

3.5. For all CFM56-5C engines verify the minimum clearance at every 500 flight hours, if the three clamps maintaining CJ9L harness at detail S, detail R and detail Q (AMM ATA 73-21-50 figure 401) are not metallic cushion clamps (P/N 649-412-351-0 and P/N 649-412-354-0 introduced per SB CFM56-5C 72-0327)

3.6. For ESN 74X-101 to 74X-466, pre SB 73-057 verify the minimum clearance at every 500 flight hours, if the five clamps maintaining CJ10L harness at detail S, detail R and detail Q (AMM ATA 73-21-50 figure 402 sheets 4 and 5) are not metallic cushion clamps (P/N 649-412-351-0 introduced per SB CFM56-5C 72-0327) or if SB 73-057 is not applied.

REF.: Service Bulletin CFM56-5C 72-266 dated November 10, 1995
Service Bulletin CFM56-5C 72-0327 dated March 12, 1997
Service Bulletin CFM56-5C 73-057 dated September 05, 1997
Service Bulletin CFM56-5C 73-A0106 Revision 1 dated April 19, 2001
Service Bulletin CFM56-5C 73-A0107 (to be issued).

This Airworthiness Directive replaces AD 2001-145(B) which is cancelled by its Revision 1.

EFFECTIVE DATE :

Upon receipt from MAY 16, 2001