



<b>sabena</b> <sup>®</sup> <b>B707</b>	Module: ENGINE 4	A/C Reg :	Check :	 <b>Q1F1000504</b>
	Oper. : RT-MP LC			
	Type : REI-INSP	Issuer : A59513	Cert.St.: 45379	<b>Page 1 of 7</b>
Spec. : REI INSP	Release Date: 11.09.2008			

**ENG #4 SENSING LOOP WIRING LWR LOOP CONN**

Execution / Start Date:	
End Date:	

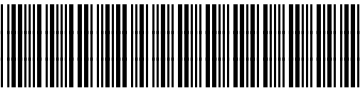
MAINT	RII/INSP

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**ENG #4 SENSING LOOP WIRING LWR LOOP CONN**

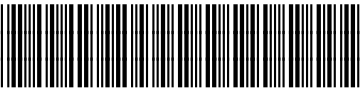
					MAINT	RII/INSP
Nr.	Hardtime	Task	Spec.	Related Documents		
1.		E3 I1 W1	INS	AMM 26-1-2 rev (ref. MS) DFW B707-26-001 rev 06.12.2007 MMS-328 261102 00204 rev 19/12/07		
<b>Check: C</b>						
<b>Zones: 454</b>						
<b>Access:</b>						
NRC YES <input type="radio"/> NO <input type="radio"/>		IF YES, NUMBER(S):				
<p><b>DETAILED VISUAL INSPECTION FOR THE ENGINE FIRE DETECTION LOOPS &amp; WIRING &amp; ATTACHING HARDWARE: (ANY FINDING HAS TO BE RECTIFIED BEFORE NEXT FLIGHT)</b></p> <p><b>CAUTION: OBEY ALL CAUTION NOTES &amp; WARNINGS AS OUTLINED IN AMM CHAPTER 26-1 &amp; REFERENCED DOCUMENTS IN THIS JOB CARD.</b></p>						
<p>Step 1. Perform a detailed visual inspection of Electrical wiring &amp; attaching hardware from plug to horizontal firewall for:</p> <ul style="list-style-type: none"> <li>a) wiring for any signs of chafing and/or other damage</li> <li>b) clamps for looseness and/or other damage</li> <li>c) clamp cushion for any damage</li> </ul> <p><b>NOTE: Obey all caution notes and warnings in referenced document as applicable. Reference Document: Boeing Standard Wiring Practices Manual ( SWPM ) Chapter 20-10-04 Cleaning of Wire Harnesses, 20-10-06 Inspection of Wiring, 20-10-11 Wiring Assembly &amp; Installation Configuration, 20-10-12 Wire Harness Supports 20-10-13 Repair of Electrical Wire and Cable.</b></p> <p style="text-align: center;"><b>LOWER ENGINE FIRE LOOP</b></p>						
<p>Step 2. Perform a detailed visual inspection of Engine Fire Loop electrical connector for:</p> <ul style="list-style-type: none"> <li>a) any signs of damaged sealing</li> <li>b) proper safety lock wire installation</li> <li>c) any signs of looseness of connector</li> </ul> <p><b>NOTE: If no discrepancies are found iaw step 2 requirements the connector need <u>NOT</u> to be disconnected for further inspection.</b></p> <ul style="list-style-type: none"> <li>d) In case of any damaged sealing, improper installation such as looseness the connector of the sensing element has to be disconnected &amp; inspected. Perform the following: <ul style="list-style-type: none"> <li>1) Cleaning of connector</li> <li>2) Inspection of connector for contamination and/or corrosion</li> <li>3) Inspection of connector parts for any obvious damage</li> </ul> </li> </ul> <p style="text-align: center;"><b>LOWER ENGINE FIRE LOOP</b></p>						

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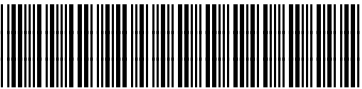
**ENG #4 SENSING LOOP WIRING LWR LOOP CONN**

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<p><b>NOTE: Obey all caution notes and warnings in referenced SWPM as applicable. Reference Documents: SWPM Chapter 20-62-14 Assembly of Fenwal Connectors, SWPM Chapter 20-60-03 Section 4, SAB 26-209 for Material Information.</b></p> <p><b>NOTE: Ensure that connector is sealed internally with Dow Corning electrical insulation compound DC4 during reassembly as outlined in SWPM 20-60-03 Section 4.</b></p> <p><b>NOTE: Ensure that Connector threads are sealed with Sauereisen Cement during reassembly as outlined in SWPM Chapter 20-64-14.</b></p> <p><b>CAUTION: CURE THE CEMENT A MINIMUM OF 18 HOURS AT 70 DEGREES F ( 21 deg C ) BEFORE THE CONNECTOR IS PUT IN SERVICE.</b></p> <p><b>CAUTION: THE CONNECTOR IS NOT SERVICEABLE UNTIL THE CEMENT FULLY CURES. IN FLIGHT TEMPERATURES HIGHER THAN 180 DEGREES F ( 82 deg C ) AND HIGH VIBRATIONS CAN CAUSE UNSATISFACTORY PERFORMANCE OF THE CONNECTOR.</b></p> <p>Step 3. Perform a detailed visual inspection of engine Fire Loop sensing element for:</p> <ul style="list-style-type: none"> <li>a) Breaks or fractures in the walls of the sensor element outer tube.</li> <li>b) Kinks, twists, dents or crushed sensor sections.</li> <li>c) Cuts or abrasion that may penetrate the wall of the sensor element tube.</li> <li>d) Check the security of the sensor element mounting points.</li> <li>e) Check grommets for proper position &amp; any deterioration.</li> <li>f) Check sensor element for excessive slack &amp; looseness.</li> <li>g) Check sensor element for signs of chafing or lying against any structure.</li> <li>h) Check sensor element &amp; supporting hardware for corrosion.</li> </ul> <p><b>NOTE: Any visual damage to the sensing element as a result of inspections under step 3 will require the sensing element to be replaced.</b></p> <p><b>Reference Document: AMM 26-1-2 for inspection &amp; AMM 26-1-3 for replacement.</b></p>		
<b>LOWER ENGINE FIRE LOOP</b>		

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**ENG #4 SENSING LOOP WIRING LWR LOOP CONN**

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<p>Step 4. Test engine &amp; Nacelle fire detection system iaw AMM 26-1-0 page block 200.</p> <p>a) Supply power to 115-volt a-c bus No. 2 &amp; essential 28 volt d-c bus.</p> <p>b) Close engine fire 4 warning &amp; the test &amp; alarm bell circuit breakers an a-c bus No. 2 and essential 28-volt d-c .(P2 &amp; P6)</p> <p>c) Hold the test switch on pilots' overhead panel to "FIRE".</p> <p>1) Warning lights in the handle of engine 4 fire switch handle should illuminate.</p> <p>2) Alarm bell should ring.</p> <p><b>NOTE: Alarm bell may be silenced by pressing bell cutout switch on pilots' light shield.</b></p>		
<p>5. <u>If a sensing element has been changed due to findings</u>, perform functional check/test of engine fire detection sensing elements iaw AMM 26-1-2.</p>		

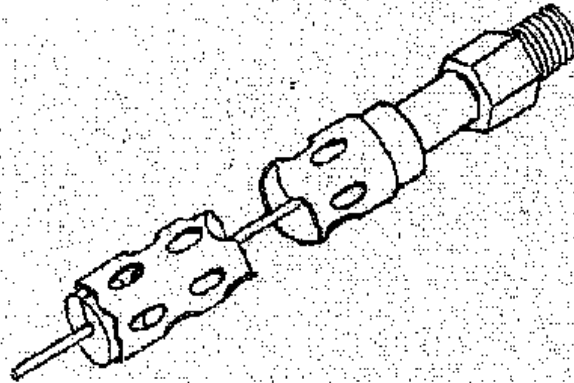
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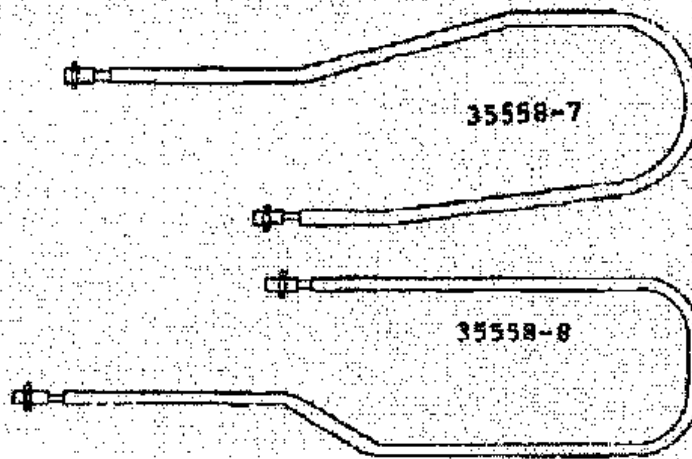
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**FIGURE 1 : Shrouded element section ( typical )**

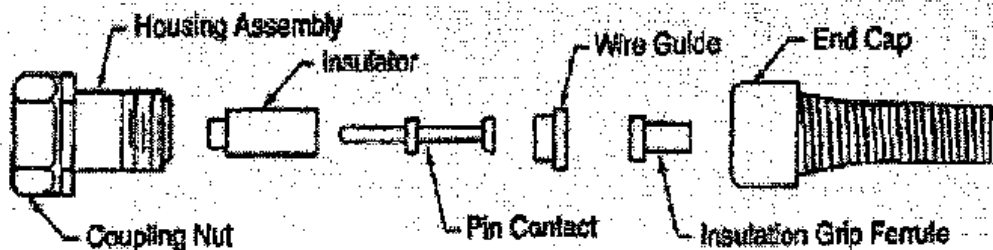
Fig. 1 to Fig. 3 are for reference only




**FIGURE 2: Shrouded lower und upper fire sensing elements**



**Figure 3: Fenwal PN: 35303-12 Connector**



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**Material Required**

Quantity:

Notes:

No material is required for inspection of the engine fire loop installation. In case of any replacement requirements due to findings refer to the appropriate IPC section 26-1-14 and 26-1-15 for part number details or refer to referenced documents in this Engineering Instruction.

Stock Number (if available for TCA)	Item	Part Number	Nomenclature	QTY per Kit	Tot. QTY
<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;"> <p><b>NOTE: Consumable Material is necessary when sealing of the connector is required.</b></p> </div>					
	1	DC4	Electrical Insulation Compound	as required	as required
<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;"> <p>Dow Corning Corporation ( V71984) 3901 Saginaw Road Midland, Michigan 48641-2721 Phone: 001-989-496-5409</p> </div>					
	2	Nr. 1 OR Nr. 31	Sauereisen Cement	as required	as required
<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;"> <p>Sauereisen 160 Gamma Drive Pittsburgh, PA 15238 USA Tel: 001-412-963-0303 Fax:001-412-963-7620</p> </div>					

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### Accomplishment Report

**Note:**

Please send this Accomplishment Report to ESEC and attach it to the CDRL30 (DLM Report) if applicable.

**Subject:** Engine - Fire Protection System Inspection

**Model:** B707 – Trainer Cargo Aircraft ( TCA )

**Accomplished at (Tailnumber):**

**Date of Accomplishment:**

**Description of Deviations:**

**Findings:**

**Carry Overs: Not applicable**

**ESEC Statement:** Please notify if connector had to be opened due to findings and specify findings.

Connector opened YES : \_\_\_\_\_ NO: \_\_\_\_\_

Specify Connector findings:

**SOR Statements:**

Executed/performed by:	SOR Engineering Representative:	SOR Quality Assurance:
Name:	Name:	Name:
Date:	Date:	Date:
SOR:		
Signature:	Signature:	Signature:

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