



EMB145 - EMB135

AIRCRAFT  
MAINTENANCE MANUAL

COWLING - INTERNAL - INSPECTION/CHECK

EFFECTIVITY: ALL

1. General

- A. This section gives the procedures to do the visual inspection of the cowling for general condition.
- B. Related Zones: 411/412/413/415/421/422/423/425.
- C. (Applicable to EMB-145 ( ) models) Zone Boundaries: STA X = 20971.8 thru STA X = 24534.5.  
(Applicable to EMB-135 ( ) models) Zone Boundaries: STA X = 17426.8 thru STA X = 20989.5.
- D. The procedures in this section are given in the sequence below. The tasks identified with (♦) are part of the Scheduled Maintenance Requirements Document (SMRD).

TASK NUMBER	DESCRIPTION	EFFECTIVITY
05-20-71-200-801-A ♦	COWLING - INTERNAL GENERAL VISUAL ALL INSPECTION	ALL



# AIRCRAFT MAINTENANCE MANUAL

TASK 05-20-71-200-801-A

EFFECTIVITY: ALL

## 2. COWLING - INTERNAL GENERAL VISUAL INSPECTION

### A. General

- (1) This procedure obeys the EWIS ICA requirement.
- (2) This task gives instructions to do SMRD Zonal Task 71-Z411-214-001-A00.
- (3) You must do the internal general visual inspection (GVI) of the cowling, in zones 411/412/413/415/421/422/423/425, at a distance from which you can touch the items that you will examine.
- (4) The function of the internal visual inspection (GVI) is to find damage, failure, or irregular conditions that can be easily seen.
- (5) After you complete the procedures given in the Zonal Inspection task, you must do a General Visual Inspection (GVI) in all of the specified zones. The inspection must include all installations, components, and structures. Refer to the INTRODUCTION for zonal inspection criteria..

### B. References

REFERENCE	DESIGNATION
AMM TASK 71-11-01-000-801-A/400	ENGINE UPPER COWLING - REMOVAL
AMM TASK 71-11-01-400-801-A/400	ENGINE UPPER COWLING - INSTALLATION
AMM TASK 71-51-01-200-801-A/600	ENGINE HARNESS - VISUAL INSPECTION
WM 20-22-00	-

### C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
411		Power plant and nacelle
412		Power plant and nacelle
413		Power plant and nacelle

### D. Tools and Equipment

ITEM	DESCRIPTION	PURPOSE	QTY
Standard	Ladder	To get access to the area	
Standard	Flashlight	To help in the inspection of the area	

### E. Auxiliary Items

Not Applicable

### F. Consumable Materials

Not Applicable

**G. Expandable Parts**

Not Applicable

**H. Persons Recommended**

<i>QTY</i>	<i>FUNCTION</i>	<i>PLACE</i>
1	Does the task	Cowling

**I. Preparation**
**SUBTASK 841-002-A**

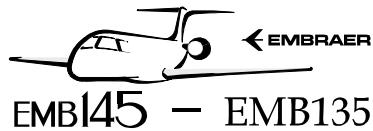
- (1) On the circuit breaker panel, open the circuit breakers that follow and attach a DO-NOT-CLOSE tag to them:
  - START 1/2.
  - THRUST REVERSER 1/2, if applicable.
  - FADEC 1A/2A.
  - FADEC 1B/2B.
- (2) Put the ladder in position.
- (3) Remove the engine upper cowling ([AMM TASK 71-11-01-000-801-A/400](#)).

**J. Internal General Visual Inspection ([Figure 601](#))**
**SUBTASK 212-002-A**

**WARNING:** • **DO NOT TOUCH THE EXHAUST DUCT AND ENGINE COMPONENTS UNTIL THEY ARE COOL. THE TEMPERATURE CAN STAY HOT FOR A LONG TIME AFTER THE ENGINE STOPS.**

• **THE ENGINE IGNITION SYSTEM CAUSES HIGH ENERGY. THIS ENERGY MAKES THE SYSTEM DANGEROUS SOURCE OF ELECTRICAL SHOCK. DEATH CAN OCCUR UNLESS THE PRECAUTIONS ARE OBEYED. DO NOT DO MAINTENANCE TASKS ON THE ENGINE IGNITION SYSTEM WHEN ITS ON.**

- (1) Examine the cowling zone for nicks, cracks, dents, erosion, corrosion, deteriorated protective treatment, and foreign objects.
- (2) Examine the outer bypass duct, aft and forward mounts, and exhaust section for condition.
- (3) Examine the accessory drive gear box for condition.
- (4) Examine the fuel-cooled oil cooler for condition.
- (5) Examine the starter pneumatic ducts for condition.
- (6) Examine the drain system for condition.
- (7) Examine the fire extinguishing system for condition.



EMB145 – EMB135

AIRCRAFT  
MAINTENANCE MANUAL

- (8) Examine the fuel hose and fuel plumbing for condition.
- (9) Examine the oil plumbing for condition.
- (10) Examine the engine-driven pump hydraulic lines for condition.
- (11) Examine the ignition leads for condition.
- (12) Examine the fire/overheat detector for condition.
- (13) Examine the engine bonding straps, A and B FADEC harness ([AMM TASK 71-51-01-200-801-A/600](#)), generator cables and harness, anti-icing electrical harness, and fire/overheat detection electrical harness for condition.
- (14) Examine the cowling aerodynamic surfaces and cowling pressure relief door for condition.
- (15) Examine the EWIS components for signs of damage, adequate installation, chafing and general condition. Refer to WM 20-22-00.

K. Follow-on

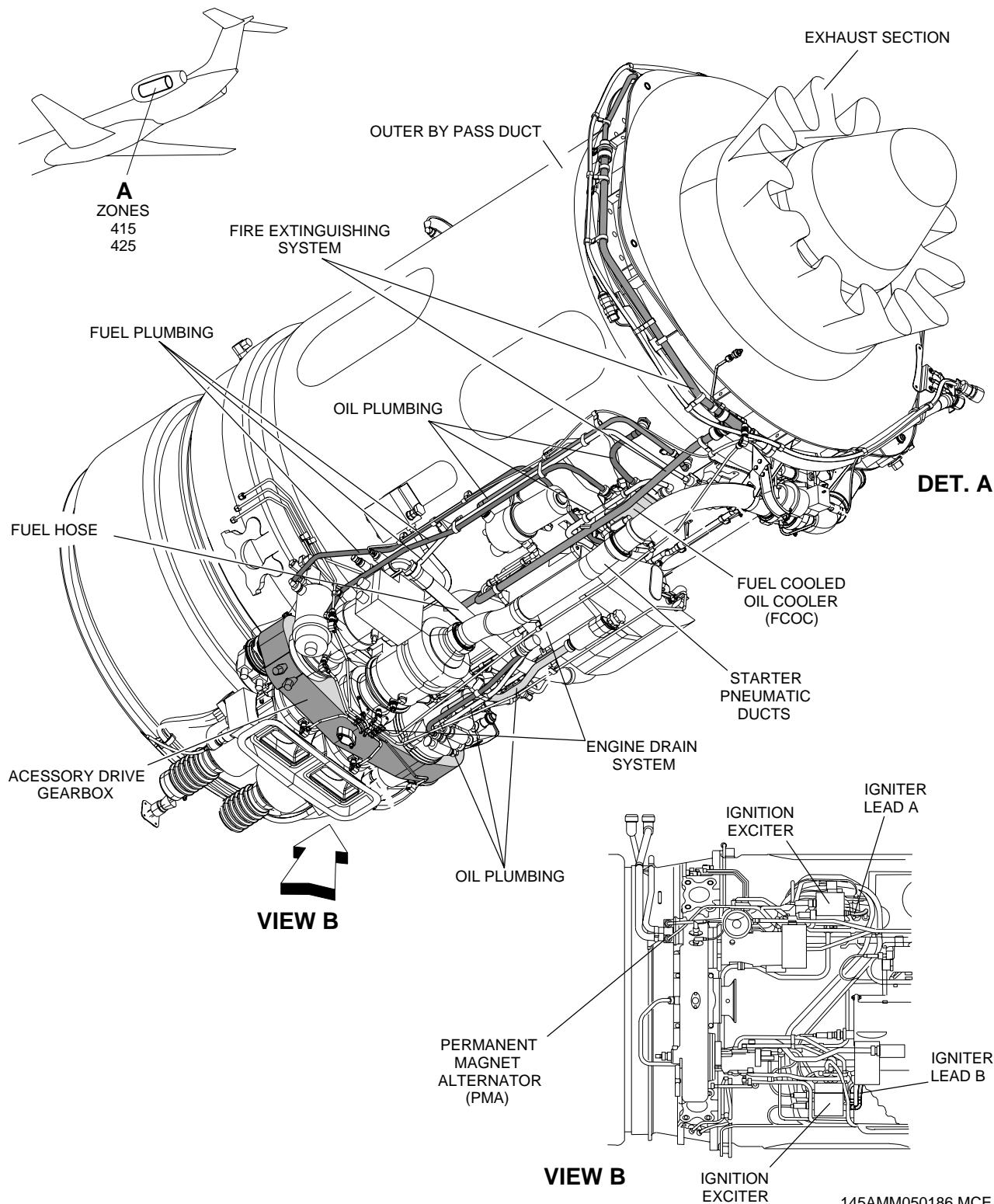
SUBTASK 842-002-A

- (1) Install the engine upper cowling ([AMM TASK 71-11-01-400-801-A/400](#)).
- (2) Remove the ladder.
- (3) On the circuit breaker panel, close the circuit breakers that follow and remove the DO-NOT-CLOSE tag from them:
  - START 1/2.
  - THRUST REVERSER 1/2.
  - FADEC 1A/2A.
  - FADEC 1B/2B.

**EFFECTIVITY: ALL**

Cowling - Internal General Visual Inspection

Figure 601 - Sheet 1

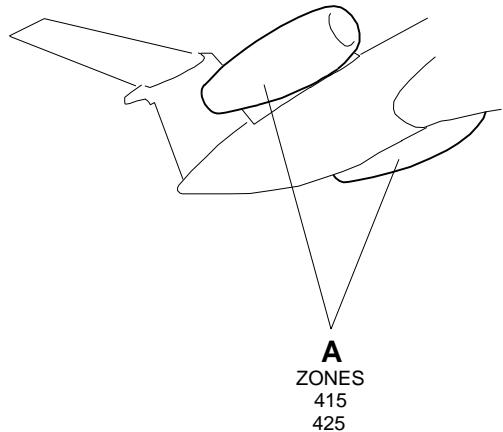


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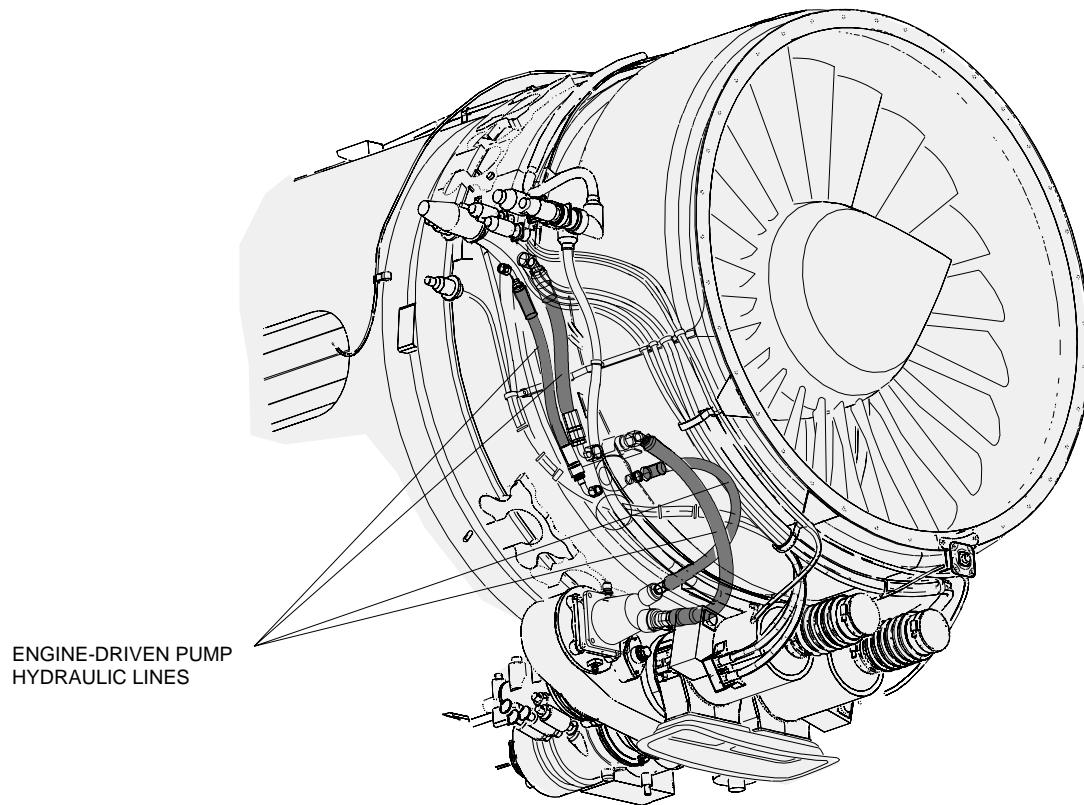
**EFFECTIVITY: ALL**

Cowling - Internal General Visual Inspection

Figure 601 - Sheet 2



**A**  
ZONES  
415  
425



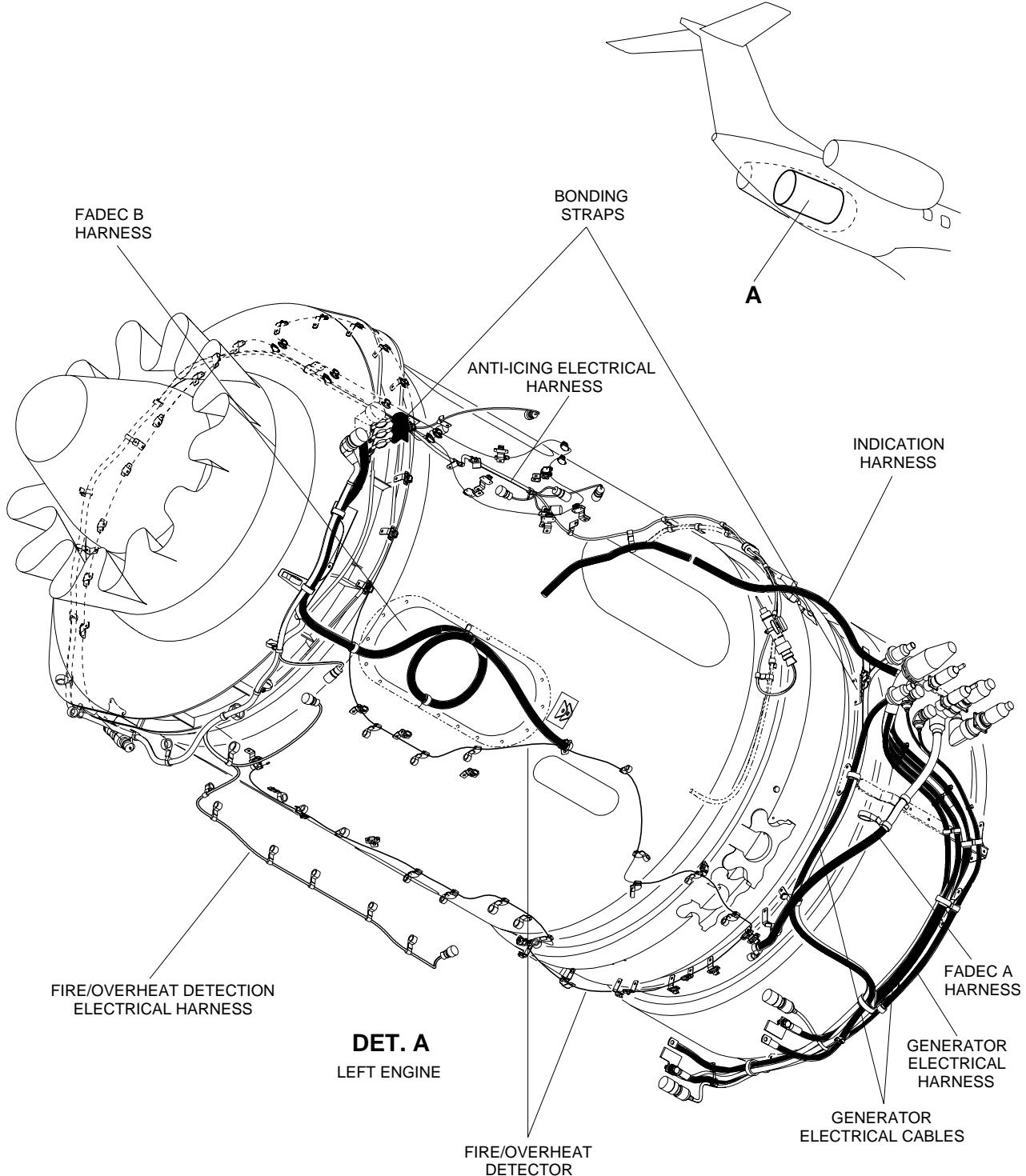
**DET. A**

145AMM050019.MCE C

**EFFECTIVITY: ALL**

Cowling - Internal General Visual Inspection

Figure 601 - Sheet 3

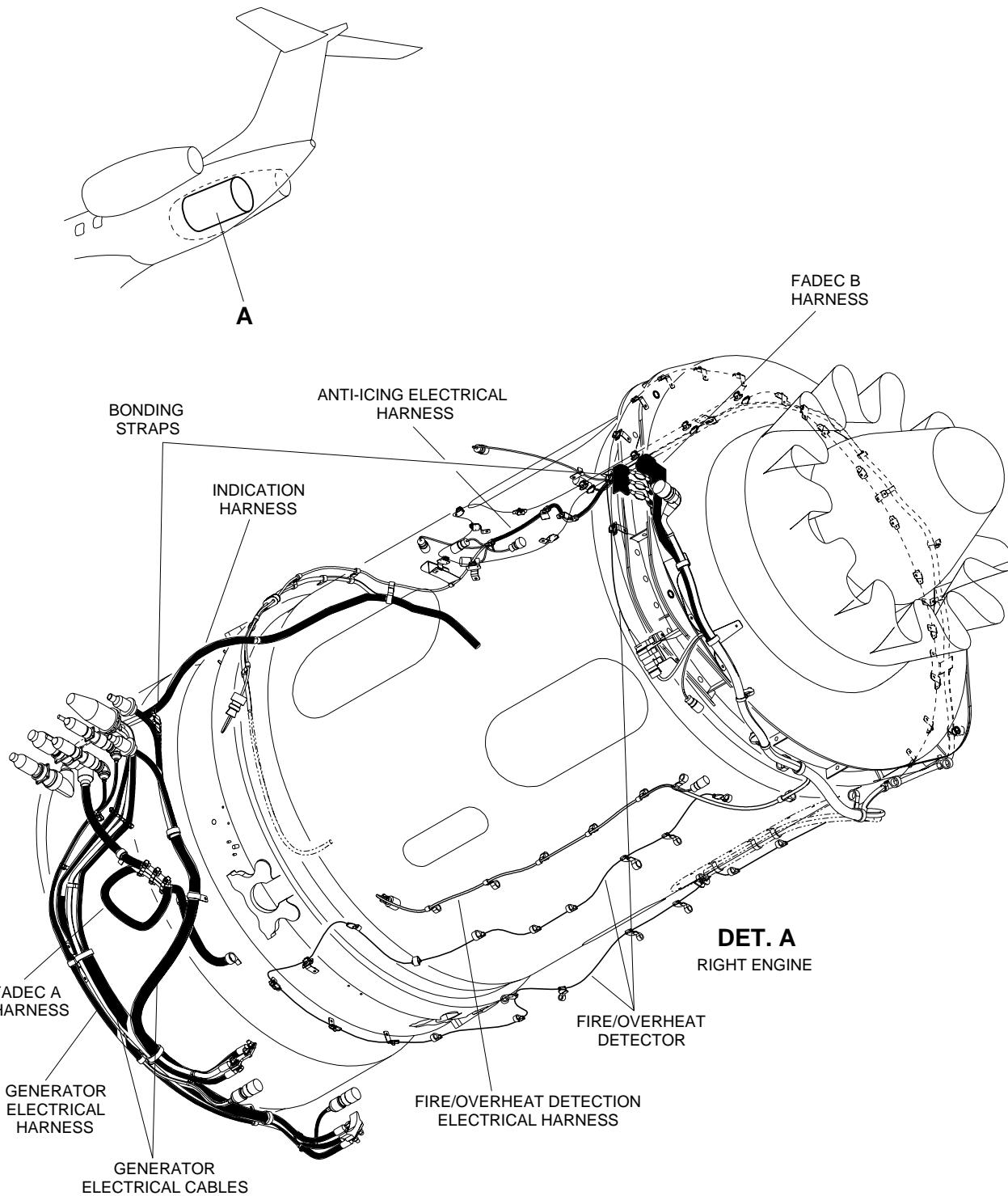


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**EFFECTIVITY: ALL**

Cowling - Internal General Visual Inspection

Figure 601 - Sheet 4

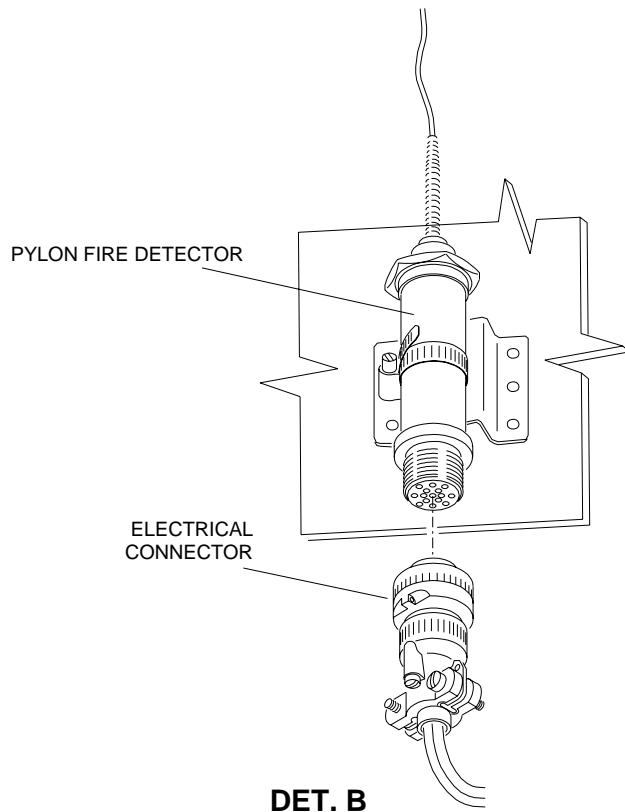
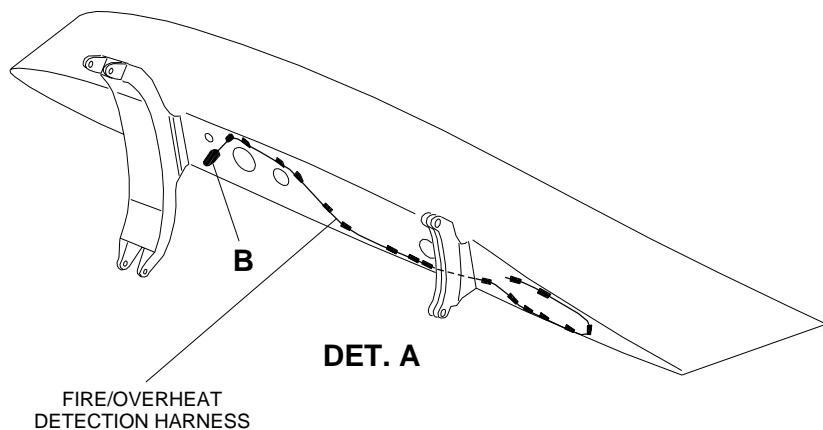


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**EFFECTIVITY: ALL**

Cowling - Internal General Visual Inspection

Figure 601 - Sheet 5

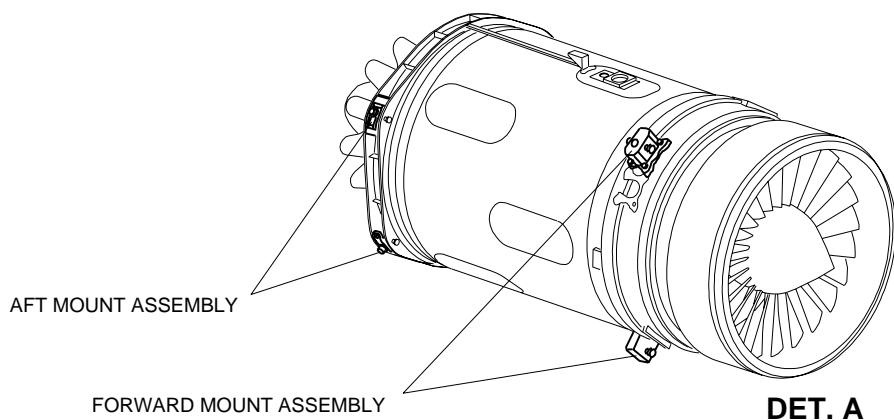
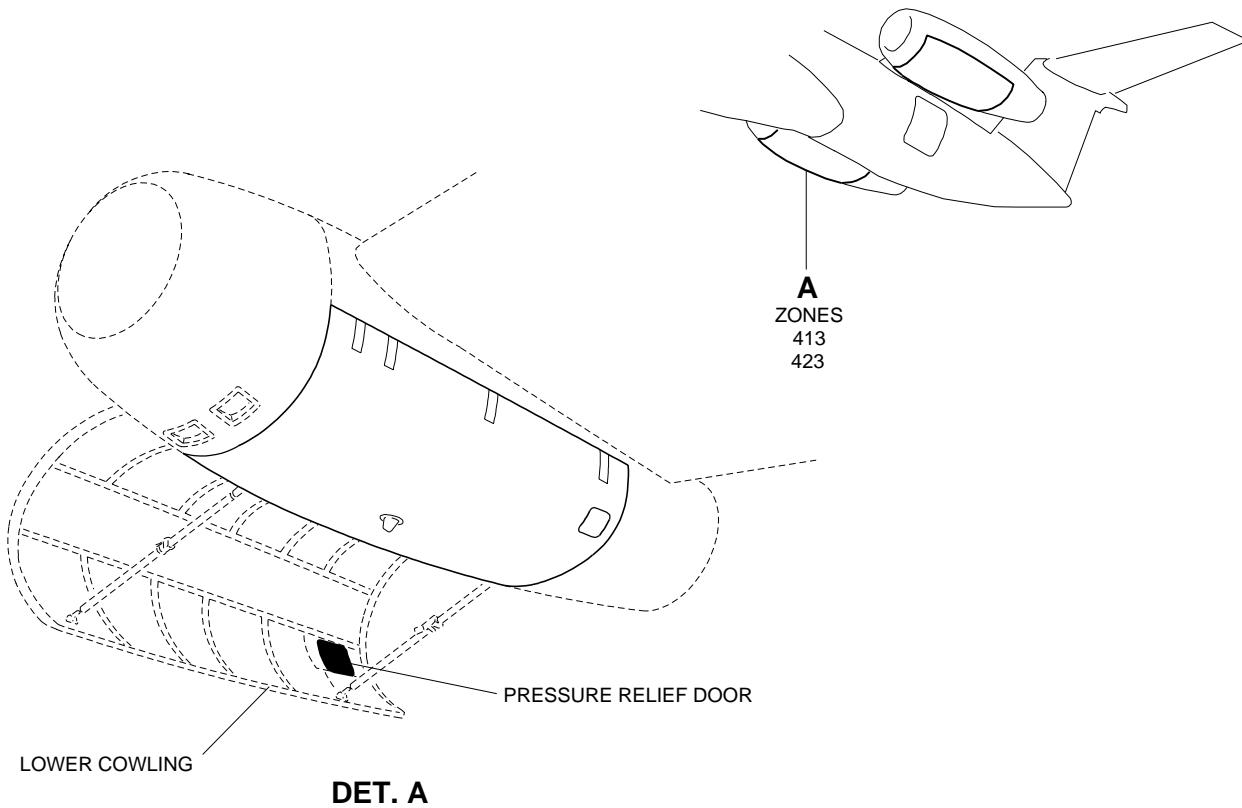


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**EFFECTIVITY: ALL**

Cowling - Internal General Visual Inspection

Figure 601 - Sheet 6



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