



# AIRCRAFT MAINTENANCE MANUAL

## ENGINE HARNESS - INSPECTION/CHECK

EFFECTIVITY: ALL

### 1. General

- A. This section gives the procedure to do the inspection of the engine harness.
- B. 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
71-51-01-200-801-A	ENGINE HARNESS - VISUAL INSPEC- TION	ALL



EMB145 - EMB135

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TASK 71-51-01-200-801-A

EFFECTIVITY: ALL

2. ENGINE HARNESS - VISUAL INSPECTION

A. General

- (1) This task is applicable to the LH and RH engines.
- (2) This task gives the procedure to do the general visual inspection of the engine harnesses.

B. References

REFERENCE	DESIGNATION
AMM MPP 71-00-00/200	- MAINTENANCE PRACTICES
AMM MPP 71-51-01/400	- REMOVAL/INSTALLATION
AMM SDS 74-10-00/1	
AMM SDS 77-20-00/1	
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
Unison CMM 71-50-04	-
WM 20-21-00	-

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
412		LH engine upper cowling
422		RH engine upper cowling
413		LH engine lower cowling
423		RH engine lower cowling

D. Tools and Equipment

Not Applicable

E. Auxiliary Items

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Workstand	To get access to the engine	1

F. Consumable Materials

Not Applicable

G. Expandable Parts

Not Applicable

**H. Persons Recommended**

QTY	FUNCTION	PLACE
1	Does the task	Engine

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

**WARNING: BEFORE YOU DO THE TASK, OBEY THE SAFETY PRECAUTIONS GIVEN IN AMM MPP 71-00-00/200 TO PREVENT INJURY TO PERSONS AND DAMAGE TO MATERIAL.**

- (1) On the circuit breaker panel, open the circuit breakers below and attach a DO-NOT-CLOSE tag to them.
  - AIR COND EBV 1/2.
  - ENG AIR INLET 1/2.
  - FUEL PUMP 1B/2A.
  - FUEL PUMP 1A/2B.
  - AIR COND HSV 1/2.
  - POWERPLANT FIRE DET 1/2.
  - START 1/2.
- (2) Put the workstand in the work area.
- (3) Remove the upper cowling ([AMM TASK 71-11-01-000-801-A/400](#)) to get access to the engine.

**J. Engine Harness - Visual Inspection ([Figure 601](#)) ([Figure 602](#)) ([Figure 603](#))**
**SUBTASK 212-002-A**

**CAUTION:** • MAKE SURE THAT THE ENGINE HARNESSSES ARE CORRECTLY ATTACHED AND THERE IS NO CHAFING AGAINST THE ENGINE COMPONENTS, COWLING AND PYLON STRUCTURE. THIS CAN CAUSE SERIOUS PROBLEMS TO THE CORRECT ENGINE OPERATION. REFER TO FIGURE 601, 602 AND 603 FOR CORRECT ROUTING OF THE ENGINE HARNESSSES.

- TO MAKE SURE THAT THE ENGINE HARNESSSES ARE CORRECTLY INSTALLED, OBEY THE INSTRUCTIONS GIVEN IN THE HARNESS GENERAL REQUIREMENTS SECTION, ON WM 20-21-00.
- IF CLAMP (1) IS NOT INSTALLED, THE HARNESS THAT IT HOLDS CAN CHAFE AGAINST THE COWLING. AS A RESULT OF TOO MUCH CHAFING, WIRES CAN BECOME BARE AND A SHORT-CIRCUIT WILL OCCUR.

- (1) Do a general visual inspection of the FADEC control harnesses (LH and RH engines) as follows:

- Examine for kinks at the attachment of the connector to the wiring.
- Examine for correct routing and attachment.
- Examine for integrity of the insulation.
- Examine all clamps for general condition.
- Make sure that the harnesses do not chafe against the oil tubes.
- Make sure that the harnesses do not chafe against components and flanges.
- Make sure that the clamp (1) is correctly installed and the harness does not chafe against the cowling structure.
- Make sure that the cushion of all clamps is in good condition and the metallic part of the clamps does not chafe against the harness.
- Make sure that the oil tank mounting lever assembly (2) does not chafe against the harness.
- Make sure that the tube support (3) does not chafe against the harness.
- Make sure that the hydraulic hose set (4) does not chafe against the harness.
- Make sure that the parts shown in DET. B of [Figure 603](#) do not chafe against the harnesses.
- Make sure that the exciter boxes and its adjacent components do not chafe against the harness (Ref. [AMM SDS 77-20-00/1](#)).
- Make sure that the ITT trim plug does not chafe against the harness (Ref. [AMM SDS 74-10-00/1](#)).

- (2) If repair is necessary, refer to Unison CMM 71-50-04.
- (3) If replacement is necessary, refer to [AMM MPP 71-51-01/400](#).

K. Follow-on

SUBTASK 842-002-A

- (1) Install the upper cowling ([AMM TASK 71-11-01-400-801-A/400](#)).
- (2) Remove the workstand from the work area.
- (3) On the circuit breaker panel, close the circuit breakers below and remove the DO-NOT-CLOSE tag from them.
  - AIR COND EBV 1/2.
  - ENG AIR INLET 1/2.
  - FUEL PUMP 1B/2A.
  - FUEL PUMP 1A/2B.
  - AIR COND HSV 1/2.
  - POWERPLANT FIRE DET 1/2.



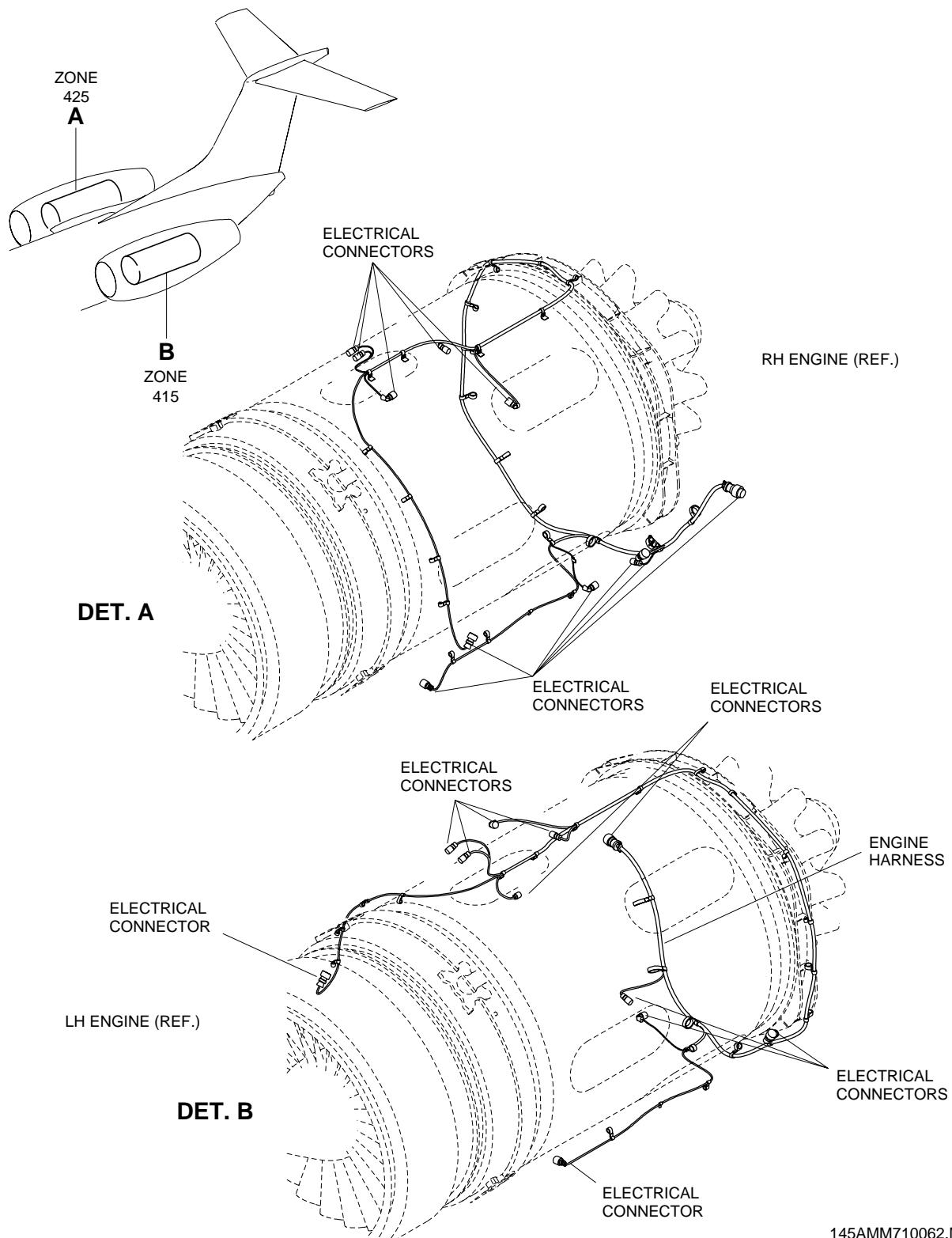
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- START 1/2.

**EFFECTIVITY: ALL**

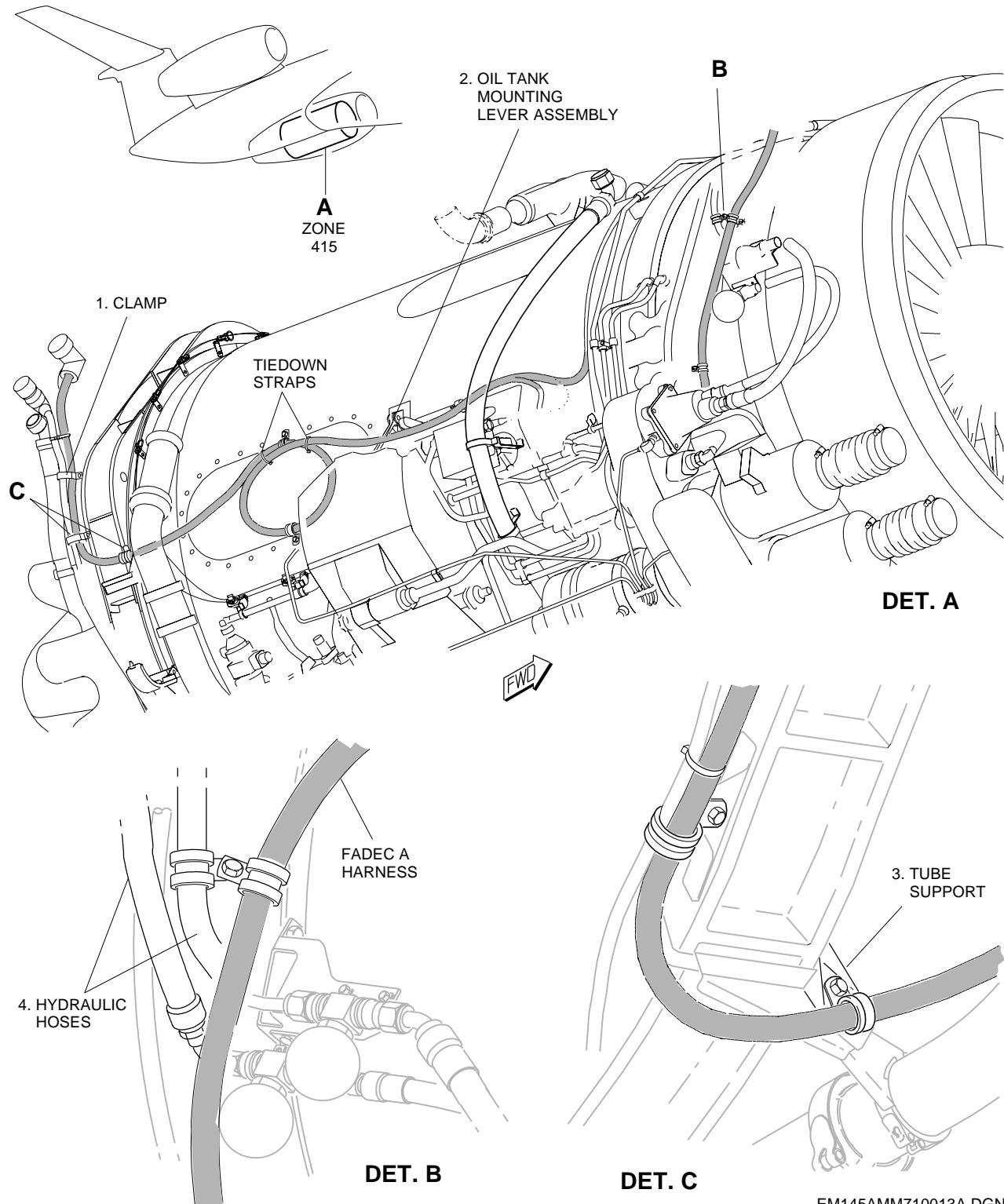
Engine Harness - Component Locations

Figure 601



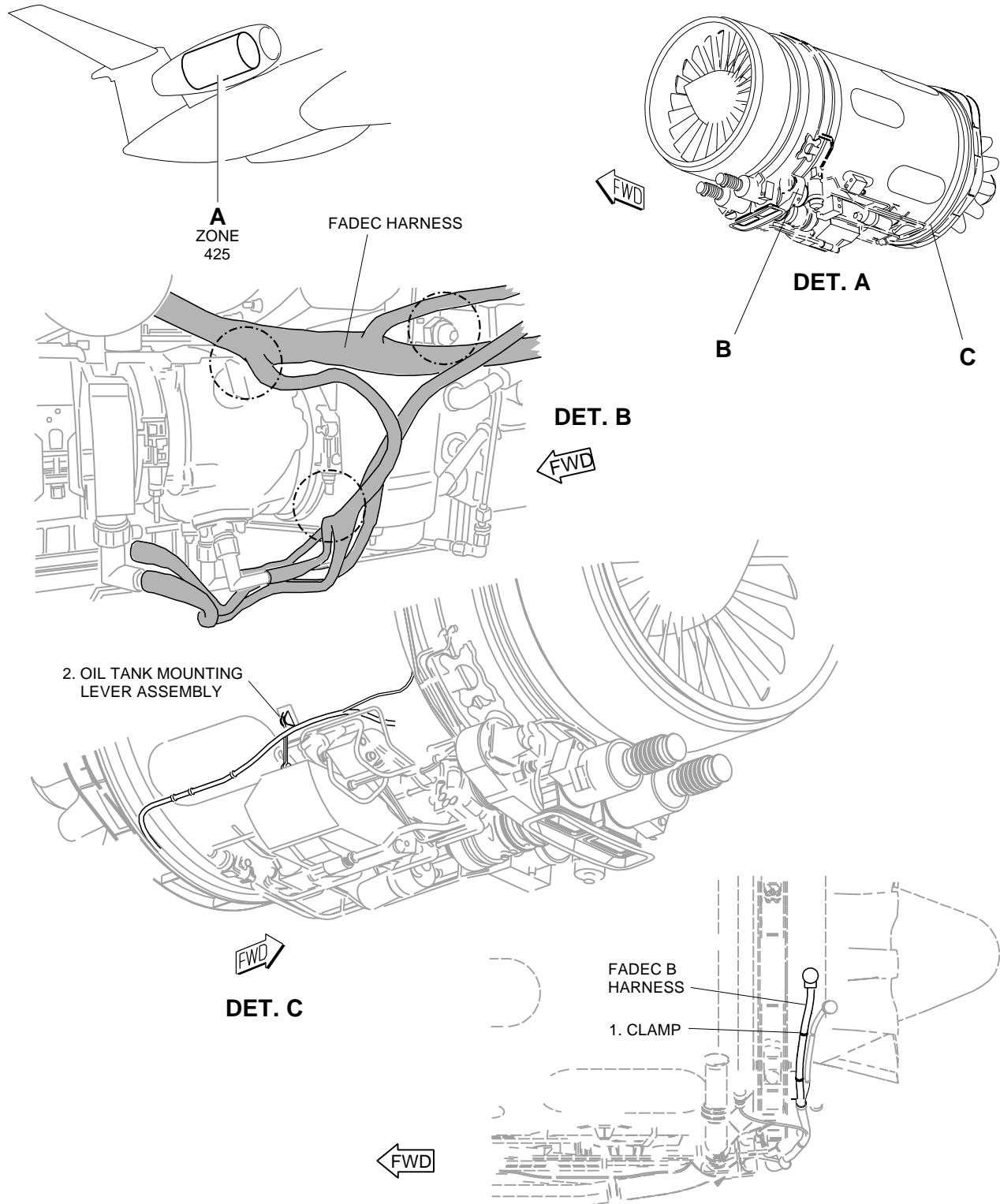
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**EFFECTIVITY: ALL**  
**Engine Harness - LH Engine**  
**Figure 602**



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**EFFECTIVITY: ALL**  
**Engine Harness - RH Engine**  
**Figure 603**



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