



## AIRCRAFT MAINTENANCE MANUAL

### ENGINE DRAIN LINES - CLEANING/PAINTING

EFFECTIVITY: ALL

#### 1. General

- A. This section gives the procedures to clean the engine drain lines.
- 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
71-71-01-100-801-A	ENGINE DRAIN LINES - CLEANING	ALL



AIRCRAFT  
MAINTENANCE MANUAL

TASK 71-71-01-100-801-A

EFFECTIVITY: ALL

2. ENGINE DRAIN LINES - CLEANING

A. General

- (1) Obey the instructions below to clean the engine drain lines.

B. References

REFERENCE	DESIGNATION
AMM TASK 71-12-01-000-801-A/400	ENGINE LOWER COWLING - OPENING
AMM TASK 71-12-01-400-801-A/400	ENGINE LOWER COWLING - CLOSING

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
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	Ladder	To get access to the engine	1
Commercially available	Rubber Gloves, Phosphate-Ester-Base, Fluid-Resistant	As a protection for your hands	1

F. Consumable Materials

Not Applicable

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	Engine



EMB145 – EMB135

AIRCRAFT  
MAINTENANCE MANUAL

I. Preparation

SUBTASK 841-002-A

- WARNING:** • THE PHOSPHATE-ESTER-BASE OIL CAUSES INJURY TO THE SKIN AND EYES ITS VAPORS ARE HIGHLY CORROSIVE. BE CAREFUL NOT TO TOUCH THIS OIL. YOU MUST USE GLOVES AND GOGGLES.
- KEEP THE ELECTRICAL POWER OFF WHEN YOU DISCONNECT OR CONNECT THE FUEL, HYDRAULIC, AND ELECTRICAL LINES. IF NOT, INJURIES TO PERSONS CAN OCCUR IF YOU ACCIDENTALLY APPLY PRESSURIZED FLUIDS, ENERGIZE ELECTRICAL CIRCUITS, OR THERE IS A FIRE.
- USE APPLICABLE CONTAINERS TO COLLECT THE REMAINING FLUIDS FROM THE OPEN LINES, TO KEEP THE WORK AREA CLEAN AND SAFE.

**CAUTION:** ALWAYS REMOVE THE HYDRAULIC FLUID THAT FALLS FROM THE ENGINE. DAMAGE COULD COME FROM ITS CORROSIVE ACTION.

- (1) On the circuit breaker panel, open the circuit breakers below and attach a DO-NOT-CLOSE tag to them.
  - START 1/2.
  - THRUST REVERSER 1/2.
- (2) Put the ladder in the work area.
- (3) Open the lower cowling ([AMM TASK 71-12-01-000-801-A/400](#)) to get access to the engine.

J. Clean the Engine Drains Lines ([Figure 701](#)) ([Figure 702](#))

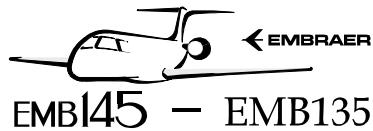
SUBTASK 160-002-A

- (1) Disconnect the drain lines at the LRU's below:
  - CGV actuator drain.
  - Electrical generators (2).
  - Hydraulic pump drain.
  - Air turbine starter (ATS) drain.
  - Fuel pump drain.
  - Oil scupper drain.

**WARNING:** THE PHOSPHATE ESTER-BASE OIL CAUSES INJURY TO THE SKIN AND EYES ITS VAPORS ARE HIGHLY CORROSIVE. BE CAREFUL NOT TO TOUCH THIS OIL. YOU MUST USE GLOVES AND GOGGLES.

**CAUTION:** ALWAYS REMOVE THE HYDRAULIC FLUID THAT FALLS FROM THE ENGINE. DAMAGE COULD COME FROM ITS CORROSIVE ACTION.

- (2) Disconnect the thrust reverser drain line from the engine compartment.



EMB145 - EMB135

AIRCRAFT  
MAINTENANCE MANUAL

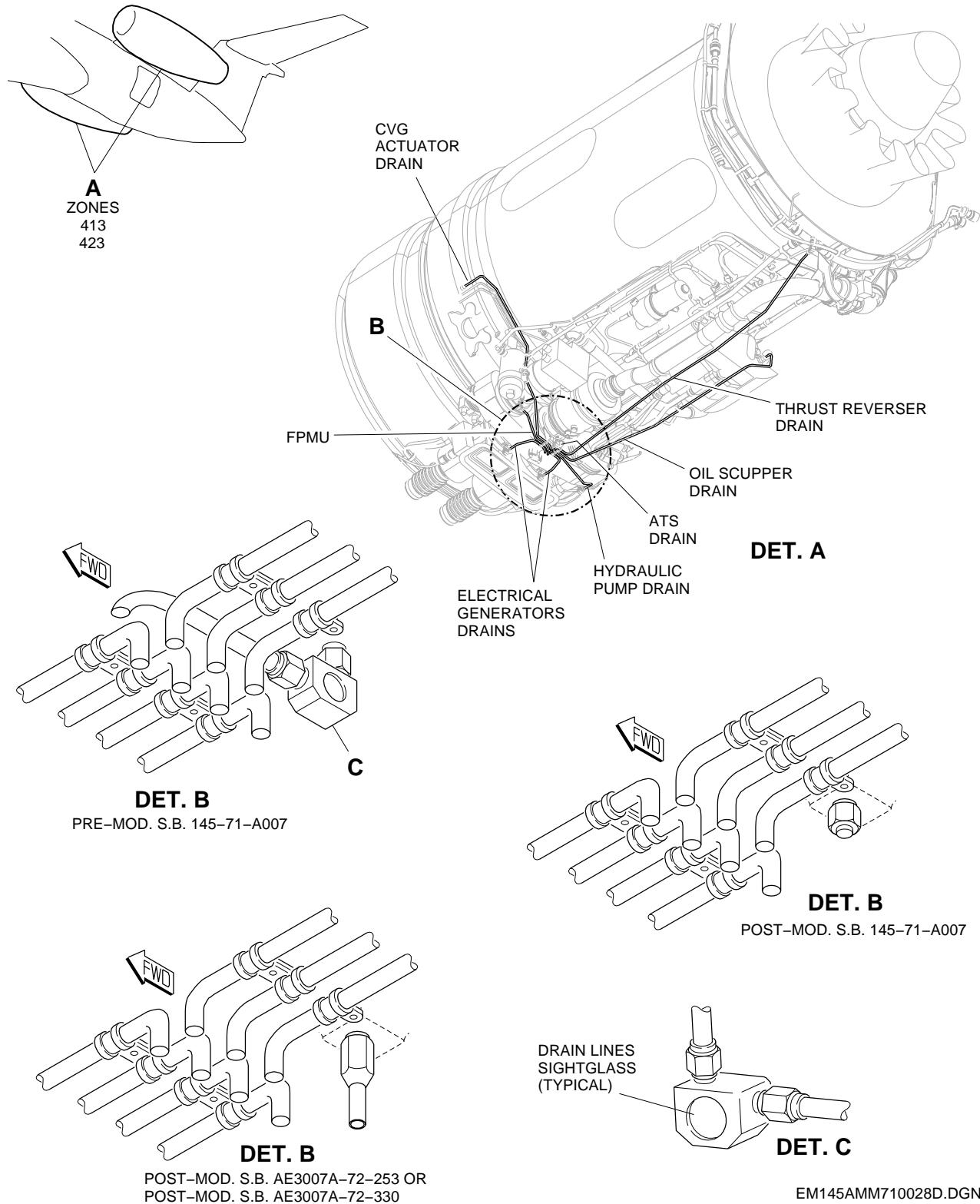
- (3) Use a source of dry clean compressed air to clean the lines and remove possible blockage.
- (4) Make sure that all line drains are cleaned and connect all line drains disconnected above.

K. Follow-on

SUBTASK 842-002-A

- (1) Close the lower cowling ([AMM TASK 71-12-01-400-801-A/400](#)).
- (2) Remove the ladder.
- (3) On the circuit breaker panel, close the circuit breakers below and remove the DO-NOT-CLOSE tag from them:
  - START 1/2.
  - THRUST REVERSER 1/2.

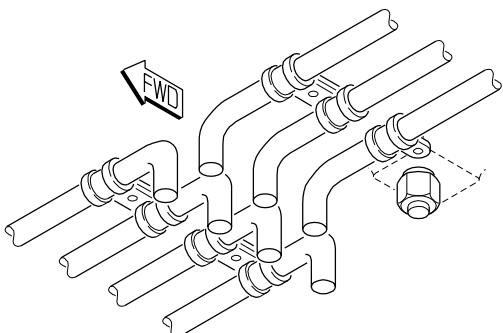
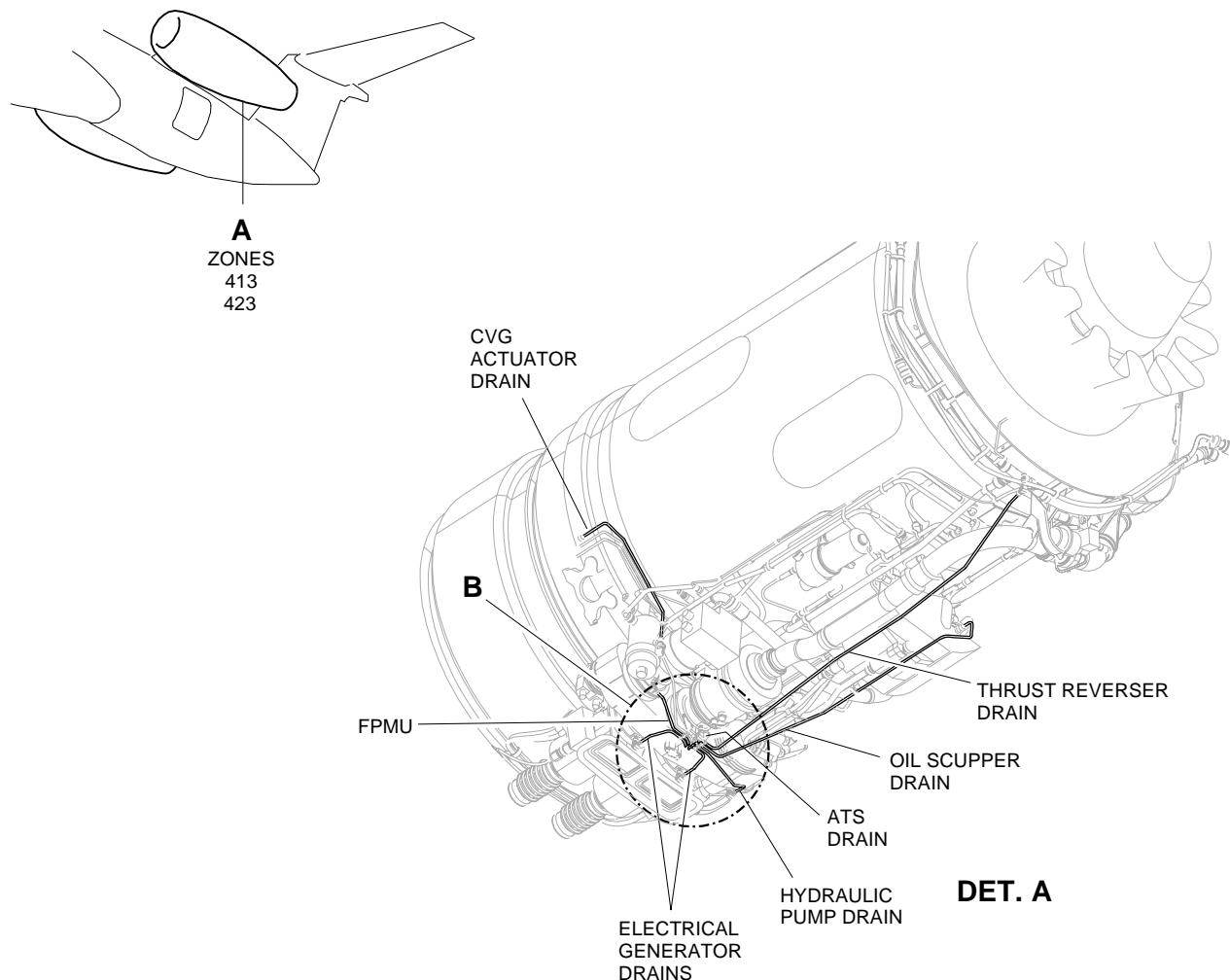
**EFFECTIVITY: ENGINE WITH SIGHTGLASSES**  
**Engine Drain Lines - Component Locations**  
**Figure 701**



**EFFECTIVITY: ENGINE WITHOUT SIGHTGLASSES**

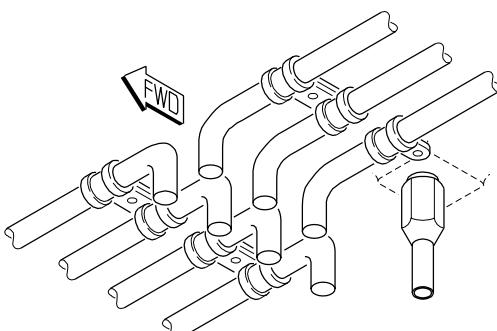
Engine Drain Lines - Component Locations

Figure 702



**DET. B**

PRE-MOD. S.B. AE3007A-72-253  
PRE-MOD. S.B. AE3007A-72-274



**DET. B**

POST-MOD. S.B. AE3007A-72-253 OR  
POST-MOD. S.B. AE3007A-72-330

EM145AMM710227C.DGN