



AIRCRAFT MAINTENANCE MANUAL

HIGH STAGE VALVE - CLEANING/PAINTING

EFFECTIVITY: ALL

1. General

- A. This section gives the procedures to clean the high-stage valve filter.
- 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 |
|----------------------|---|-------------|
| 36-11-02-100-801-A ♦ | HIGH-STAGE VALVE FILTER - CLEANING ALL BY ULTRASONIC METHOD | |
| 36-11-02-100-802-A | HIGH-STAGE VALVE FILTER - CLEANING ALL BY AIR BLAST METHOD | |



EMB145 - EMB135

AIRCRAFT
MAINTENANCE MANUAL

TASK 36-11-02-100-801-A

EFFECTIVITY: ALL

2. HIGH-STAGE VALVE FILTER - CLEANING BY ULTRASONIC METHOD

A. General

- (1) The high stage valves are installed in the LH/RH nacelles, on the top of the engines.
- (2) This task gives the procedure to clean the high-stage valve filter.

B. References

| REFERENCE | DESIGNATION |
|---------------------------------|--|
| AMM MPP 06-43-00/100 | - COMPONENT LOCATION |
| AMM TASK 20-40-02-910-801-A/200 | STATIC GROUNDING - STANDARD PRACTICES |
| AMM TASK 36-11-02-000-802-A/400 | HIGH-STAGE VALVE FILTER - REMOVAL |
| AMM TASK 36-11-02-400-802-A/400 | HIGH-STAGE VALVE FILTER - INSTALLATION |

C. Zones and Accesses

| ZONE | PANEL/DOOR | LOCATION |
|------|------------|--|
| 412 | 412BT | LH engine - Upper cowling access panel |
| 422 | 422BT | RH engine - Upper cowling access panel |

D. Tools and Equipment

| ITEM | DESCRIPTION | PURPOSE | QTY |
|------------------------|-----------------|----------------|-----|
| Commercially available | Ultrasonic Bath | To clean parts | |

E. Auxiliary Items

| ITEM | DESCRIPTION | PURPOSE | QTY |
|------------------------|---|------------------------------------|-----|
| Commercially available | Goggles | For eye protection | 1 |
| Commercially available | Gloves | For hand protection | 1 |
| Locally available | Source of dry and filtered compressed air or nitrogen | To blow dry air into the component | 1 |
| Commercially available | Ladder | To get access to the work area | 1 |

F. Consumable Materials

| SPECIFICATION (BRAND) | DESCRIPTION | QTY |
|-----------------------|-------------------|-----|
| AMS3160 | Petroleum solvent | AR |

G. Expandable Parts

Not Applicable

H. Persons Recommended

| <i>QTY</i> | <i>FUNCTION</i> | <i>PLACE</i> |
|------------|-----------------|---------------|
| 1 | Does the task | LH/RH Engines |

I. Preparation
SUBTASK 841-002-A

- (1) Keep the aircraft grounded ([AMM TASK 20-40-02-910-801-A/200](#)).
- (2) Put the ladder on the work area.
- (3) Remove the upper-cowling access panel 412BT or 422BT ([AMM MPP 06-43-00/100](#)).

WARNING: DO NOT TOUCH THE BLEED-AIR SYSTEM DUCTS OR COMPONENTS IMMEDIATELY AFTER THE ENGINE OR APU STOPS, BECAUSE OF THE HIGH BLEED-AIR TEMPERATURE.

- (4) Remove the high-stage valve filter ([AMM TASK 36-11-02-000-802-A/400](#)).

J. Clean High-Stage Valve Filter by Ultrasonic Method ([Figure 701](#))
SUBTASK 130-002-A

- (1) Clean the high-stage valve filter as follows:

NOTE: Refer to the last revision of CMM 21-32-20 of Hamilton Standard, as necessary.

WARNING: THE USE OF COMPRESSED AIR CAN CREATE AN ENVIRONMENT OF PROPELLED FOREIGN OBJECTS THAT CAN ENTER THE EYES AND CAUSE INJURY. PUT ON EYE PROTECTION AND DO NOT USE MORE THAN 207 KPa (30 psi). IF YOU DO NOT OBEY THIS PRECAUTION, INJURY TO THE EYES CAN OCCUR.

- (a) Blow 25 psig maximum compressed air through the high-stage valve filter to remove contamination.

WARNING: DO NOT GET THE CLEANING MATERIAL ON YOUR SKIN OR IN YOUR EYES OR MOUTH. PUT ON APPROVED PROTECTIVE CLOTHING, GOGGLES AND GLOVES. ALWAYS OBEY THE MANUFACTURER'S HEALTH AND SAFETY PRECAUTIONS WHEN YOU USE THE CLEANING MATERIAL. THE CLEANING MATERIAL IS DANGEROUS AND CAN CAUSE AN INJURY.

WARNING: CLEANING PRODUCTS ARE TOXIC AND FLAMMABLE. A GOOD AIRFLOW MUST BE AVAILABLE WHEN YOU DO THE WORK IN CLOSED AREAS.

WARNING: SOLVENTS ARE HAZARDOUS MATERIALS. REFER TO PRODUCT/MATERIAL SAFETY DATA SHEETS AND LOCAL REQUIREMENTS FOR CORRECT HANDLING PROCEDURES.



EMB145 – EMB135

AIRCRAFT
MAINTENANCE MANUAL

- (b) Clean the air filter in an ultrasonic cleaner tank or equivalent with petroleum solvent (AMS3160), at ambient temperature for approximately 10 minutes.
- (c) Blow compressed air, with a pressure of 25 psig maximum, through the high-stage valve filter to remove any remaining contamination.

K. Follow-on

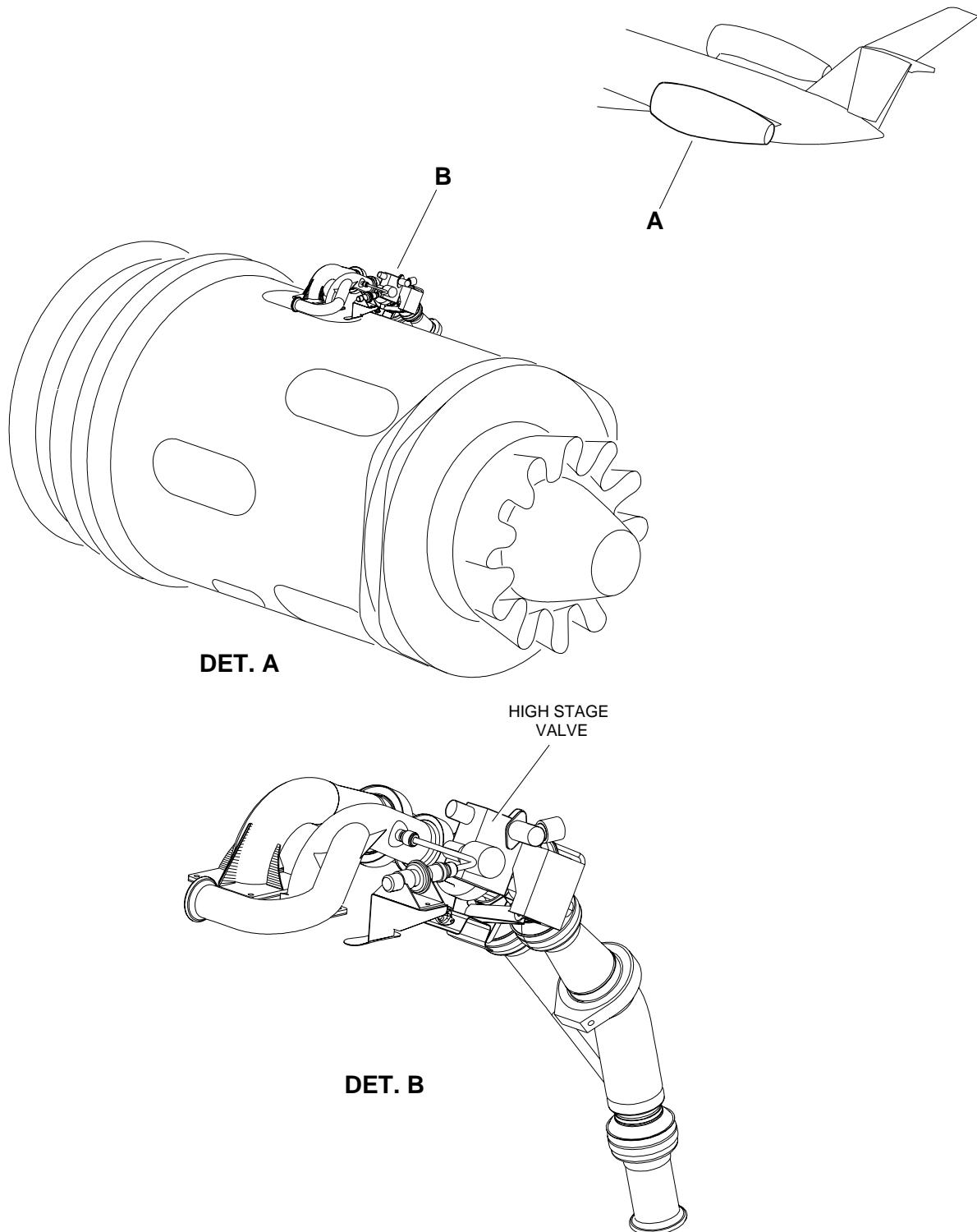
SUBTASK 842-002-A

- (1) Install the high-stage valve filter ([AMM TASK 36-11-02-400-802-A/400](#)).
- (2) Install the upper-cowling access panel 412BT or 422BT ([AMM MPP 06-43-00/100](#)).
- (3) Remove the ladder from the work area.

EFFECTIVITY:: ALL

High-Stage Valve Filter - Location

Figure 701



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EMB145 – EMB135

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MAINTENANCE MANUAL

TASK 36-11-02-100-802-A

EFFECTIVITY: ALL

3. HIGH-STAGE VALVE FILTER - CLEANING BY AIR BLAST METHOD

A. General

(1) The high stage valves are installed in the LH/RH nacelles, on the top of the engines.

B. References

| REFERENCE | DESIGNATION |
|---------------------------------|--|
| AMM MPP 06-43-00/100 | - COMPONENT LOCATION |
| AMM TASK 20-40-02-910-801-A/200 | STATIC GROUNDING - STANDARD PRACTICES |
| AMM TASK 36-11-02-000-802-A/400 | HIGH-STAGE VALVE FILTER - REMOVAL |
| AMM TASK 36-11-02-400-802-A/400 | HIGH-STAGE VALVE FILTER - INSTALLATION |

C. Zones and Accesses

| ZONE | PANEL/DOOR | LOCATION |
|------|------------|--|
| 412 | 412BT | LH engine - Upper cowling access panel |
| 422 | 422BT | RH engine - Upper cowling access panel |

D. Tools and Equipment

Not Applicable

E. Auxiliary Items

| ITEM | DESCRIPTION | PURPOSE | QTY |
|------------------------|---|--|-----|
| Commercially available | Ladder | To get access to the pylon | 1 |
| Commercially available | Goggles | For protection of your eyes | 1 |
| Commercially available | Gloves | For protection of your hands | 1 |
| Locally available | Source of dry and filtered compressed air | To blow contamination away and dry parts | 1 |

F. Consumable Materials

| SPECIFICATION (BRAND) | DESCRIPTION | QTY |
|-----------------------|----------------------|-----|
| Electro 140 | Contact Cleaner, LPS | AR |

G. Expandable Parts

Not Applicable

H. Persons Recommended

| QTY | FUNCTION | PLACE |
|-----|---------------|---------------|
| 1 | Does the task | LH/RH Engines |

I. Preparation
SUBTASK 841-003-A

- (1) Keep the aircraft grounded ([AMM TASK 20-40-02-910-801-A/200](#)).
- (2) Put a ladder in the work area.
- (3) Remove the upper cowling access panel 412BT or 422BT ([AMM MPP 06-43-00/100](#)).

WARNING: DO NOT TOUCH THE BLEED-AIR SYSTEM DUCTS OR COMPONENTS IMMEDIATELY AFTER THE ENGINE OR APU STOPS, BECAUSE OF THE HIGH BLEED-AIR TEMPERATURE.

- (4) Remove the high-stage valve filter ([AMM TASK 36-11-02-000-802-A/400](#)).

J. Clean High-Stage Valve Filter by Air Blast Method ([Figure 702](#))
SUBTASK 170-002-A

WARNING: USE EYE AND HAND PROTECTION WHEN YOU USE AN AIR SOURCE TO CLEAN. CONTAMINANTS CAN BECOME AIRBORNE AND CAUSE INJURY TO YOUR EYES AND HANDS.

- (1) Blow air at 25-psi maximum pressure from the regulated air source to remove heavy contaminants.
- (2) Spray the high stage valve filter with an electro-contact cleaning solution.
- (3) To remove the residual cleaning solution, let the filter air-dry or blow on it with a 25-psi maximum pressure from the air source.

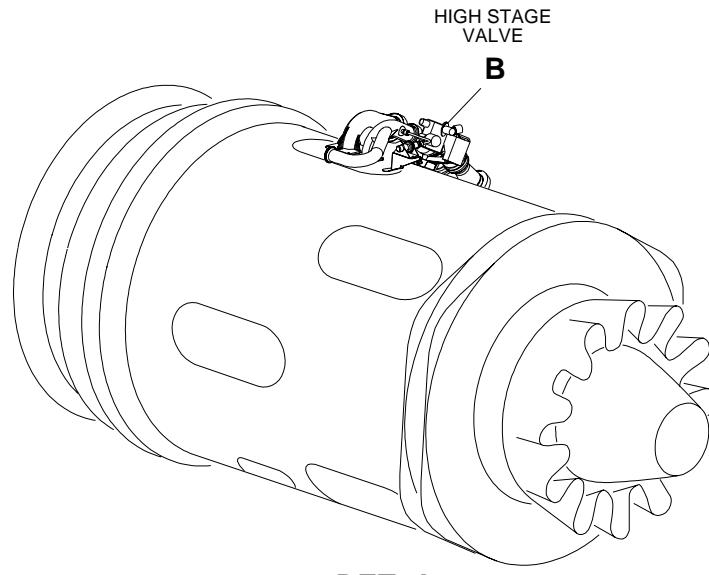
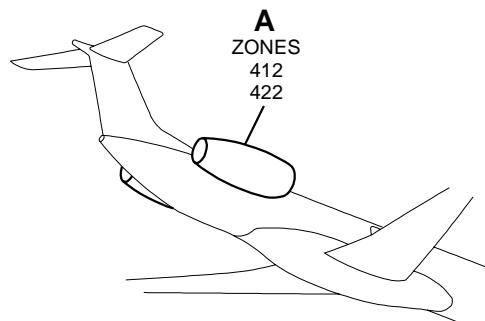
K. Follow-on
SUBTASK 842-003-A

- (1) Install the high-stage valve filter ([AMM TASK 36-11-02-400-802-A/400](#)).
- (2) Install the upper cowling access panel 412BT or 422BT ([AMM MPP 06-43-00/100](#)).
- (3) Remove the ladder from the work area.

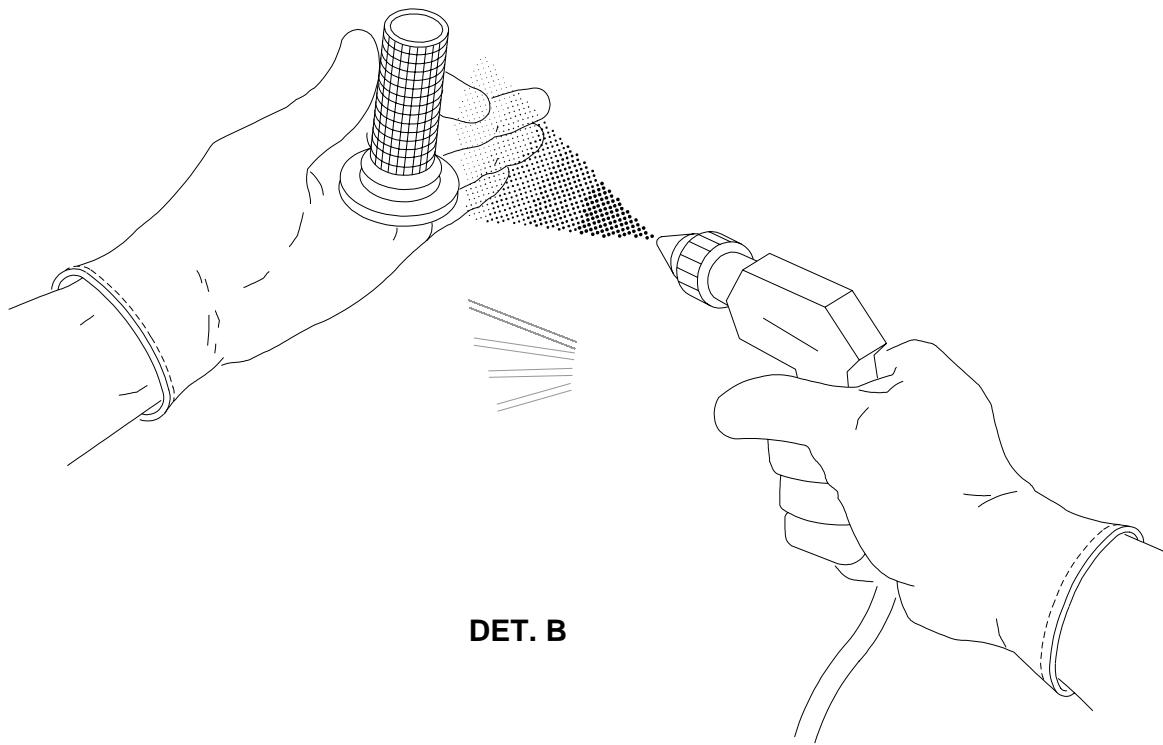
EFFECTIVITY:: ALL

High-Stage Valve Filter - Cleaning

Figure 702



DET. A



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