



EMB145 – EMB135

AIRCRAFT  
MAINTENANCE MANUAL

**NACA-AIR-INTAKE POLYURETHANE FILM AT FORWARD FUSELAGE I - REMOVAL/INSTALLATION**

*EFFECTIVITY: ACFT MODEL(S) EMB-145*

1. General

- A. This section gives the procedures to remove and install the Naca-Air-Intake polyurethane film at Forward Fuselage I.
- 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              |
|--------------------|--|--------------------------|
| 53-11-06-000-801-A | NACA-AIR-INTAKE POLYURETHANE FILM AT FORWARD FUSELAGE I - REMOVAL      | ACFT MODEL(S)<br>EMB-145 |
| 53-11-06-400-801-A | NACA-AIR-INTAKE POLYURETHANE FILM AT FORWARD FUSELAGE I - INSTALLATION | ACFT MODEL(S)<br>EMB-145 |



EMB145 – EMB135

AIRCRAFT  
MAINTENANCE MANUAL

TASK 53-11-06-000-801-A

EFFECTIVITY: ACFT MODEL(S) EMB-145

2. NACA-AIR-INTAKE POLYURETHANE FILM AT FORWARD FUSELAGE I - REMOVAL

A. General

- (1) This task gives the instructions to remove the Naca-Air-Intake polyurethane film at Forward Fuselage I.

B. Zones and Accesses

| ZONE | PANEL/DOOR | LOCATION                |
|------|------------|-------------------------|
| 113  |            | Forward fuselage I - LH |
| 114  |            | Forward fuselage I - RH |

C. Tools and Equipment

Not Applicable

D. Auxiliary Items

| ITEM                   | DESCRIPTION | PURPOSE            | QTY |
|------------------------|-------------|--------------------|-----|
| Commercially available | Spatula     | To remove the film | 1   |

E. Consumable Materials

Not Applicable

F. Expandable Parts

Not Applicable

G. Persons Recommended

| QTY | FUNCTION      | PLACE              |
|-----|---------------|--------------------|
| 1   | Does the task | Forward fuselage I |

H. Removal ([Figure 401](#))

SUBTASK 020-003-A

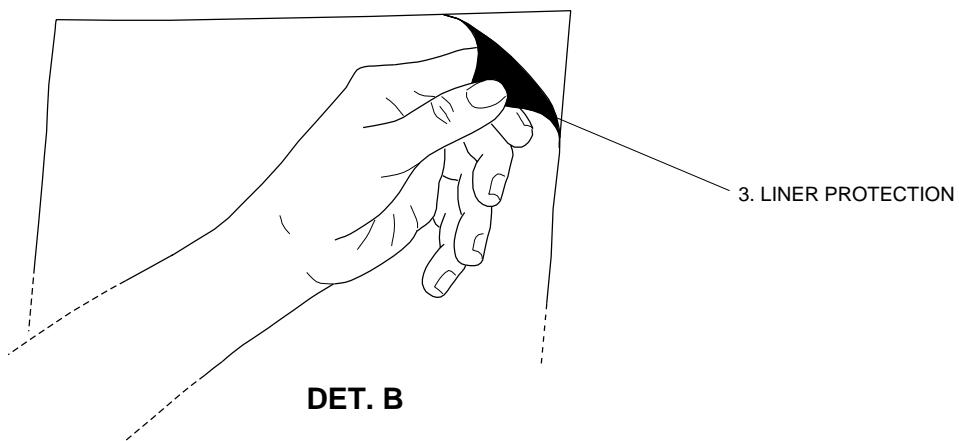
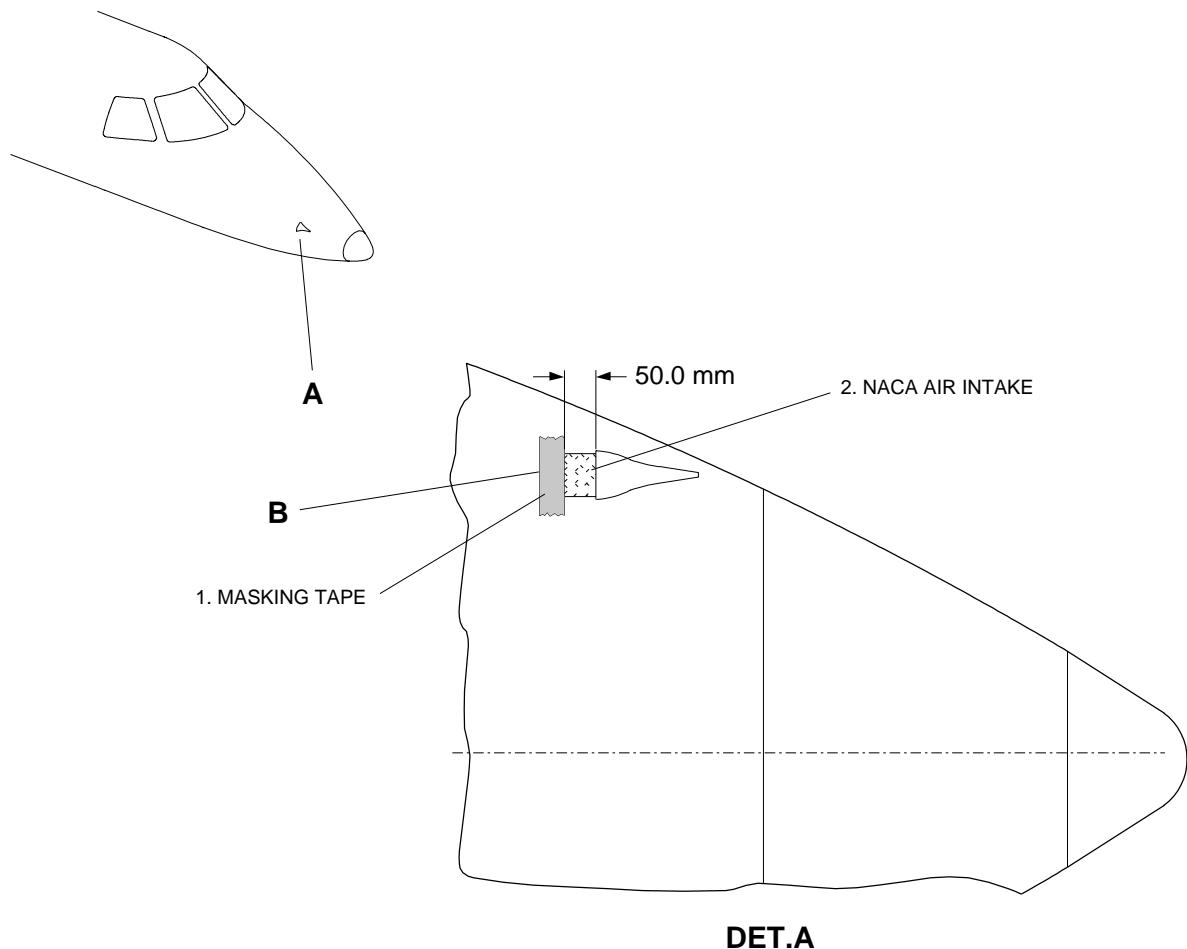
- (1) **NOTE:** Be careful when you remove the old polyurethane film to prevent damage to the Naca Air-Intake surface.

From the external side, lift an edge of the old polyurethane film and, with the spatula, start to remove the film.

**EFFECTIVITY: ACFT MODEL(S) EMB-145**

Naca-Air-Intake Polyurethane Film at Forward Fuselage I - Removal/Installation

Figure 401



145AMM530066.MCE



EMB145 - EMB135

AIRCRAFT  
MAINTENANCE MANUAL

TASK 53-11-06-400-801-A

EFFECTIVITY: ACFT MODEL(S) EMB-145

3. NACA-AIR-INTAKE POLYURETHANE FILM AT FORWARD FUSELAGE I - INSTALLATION

A. General

- (1) This task gives the instructions to install the Naca-Air-Intake polyurethane film at Forward Fuselage I.

B. References

| REFERENCE    | DESIGNATION                          |
|--------------|--------------------------------------|
| IPC 11-21-05 | EXTERIOR DECAL, CORROSION PROTECTION |

C. Zones and Accesses

| ZONE | PANEL/DOOR | LOCATION                |
|------|------------|-------------------------|
| 113  |            | Forward fuselage I - LH |
| 114  |            | Forward fuselage I - RH |

D. Tools and Equipment

Not Applicable

E. Auxiliary Items

| ITEM                   | DESCRIPTION   | PURPOSE             | QTY |
|------------------------|---------------|---------------------|-----|
| Commercially available | Spatula       | To install the film | 1   |
| Commercially available | Rubber gloves | To protect the hand | 1   |

F. Consumable Materials

| SPECIFICATION<br>(BRAND) | DESCRIPTION              | QTY |
|--------------------------|--------------------------|-----|
| FED. SPEC. TT-M-261      | Methyl-ethyl-ketone      | AR  |
|                          | Neutral liquid detergent | AR  |
| FED. SPEC. TT-I-735      | Isopropyl alcohol        | AR  |

G. Expendable Parts

| ITEM              | IPC REFERENCE<br>(VENDOR REFERENCE) | QTY |
|-------------------|-------------------------------------|-----|
| Polyurethane Film | IPC 11-21-05                        | 1   |



AIRCRAFT  
MAINTENANCE MANUAL

H. Persons Recommended

| QTY | FUNCTION      | PLACE              |
|-----|---------------|--------------------|
| 1   | Does the task | Forward fuselage I |

I. Preparation

SUBTASK 841-003-A

**WARNING: WEAR RUBBER GLOVES TO PROTECT YOURSELF AGAINST CHEMICAL PRODUCT.**

- (1) Prepare the wetting solution, whose composition is 2.5% neutral liquid detergent, 24.5% isopropyl alcohol, and 73% water.

J. Installation (Figure 401)

SUBTASK 420-003-A

**CAUTION: THE NACA AIR-INTAKE SURFACE MUST BE FREE OF OILS, GREASES, AND RESINS.**

- (1) Clean the Naca Air-Intake surface with methyl-ethyl-ketone.
- (2) Install the masking tape (Refer to Det. A).
- (3) Spray the Naca Air-Intake surface with wetting solution.

**CAUTION: THE ADHESIVE SURFACES OF THE POLYURETHANE FILM MUST NOT BE JOINED.**

- (4) Start the removal of the liner protection from the small section (Refer to Det. B).
- (5) With the masking tape used as a reference, put the film on the Naca Air-Intake surface. Make a pressure with the spatula to move the wetting liquid out. Do it from the center to the edges of the polyurethane film to prevent air bubbles.
- (6) **NOTE:** Thus, the wind pressure against the polyurethane film does not tend to cause edge lifting.

One hour after the application of the polyurethane film, the Naca Air Intake is ready for service.

