

AIRCRAFT MAINTENANCE MANUAL

RADOME POLYURETHANE FILM - REMOVAL/INSTALLATION

EFFECTIVITY: ALL

1. General

- A. This section gives the procedures to remove and apply the original (larger) and additional (smaller) polyurethane films from/to the radome.
- 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
53-11-05-000-801-A	POLYURETHANE FILM - REMOVAL	ALL
53-11-05-400-801-A	POLYURETHANE FILM - APPLICATION	ALL
53-11-05-000-802-A	ADDITIONAL POLYURETHANE FILM - REMOVAL	ADDITIONAL POLYURETHANE FILM
53-11-05-400-802-A	ADDITIONAL POLYURETHANE FILM - APPLICATION	ADDITIONAL POLYURETHANE FILM



EMB145 - EMB135

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TASK 53-11-05-000-801-A

EFFECTIVITY: ALL

2. POLYURETHANE FILM - REMOVAL

A. General

- (1) This task gives the procedure to remove the polyurethane film from the radome.

B. Zones and Accesses

Not Applicable

C. Tools and Equipment

Not Applicable

D. Auxiliary Items

Not Applicable

E. Consumable Materials

Not Applicable

F. Expandable Parts

Not Applicable

G. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	Radome

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

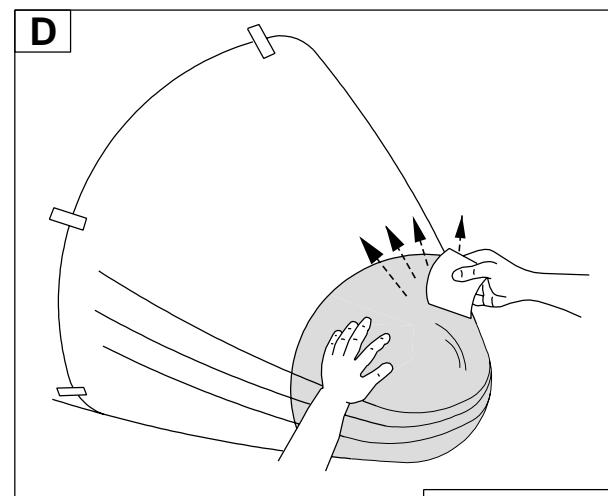
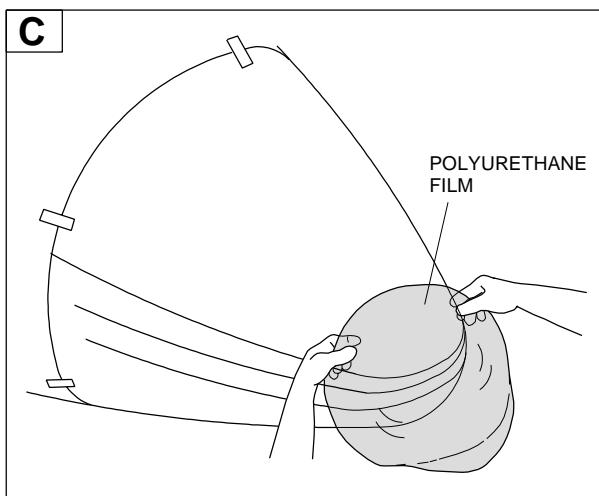
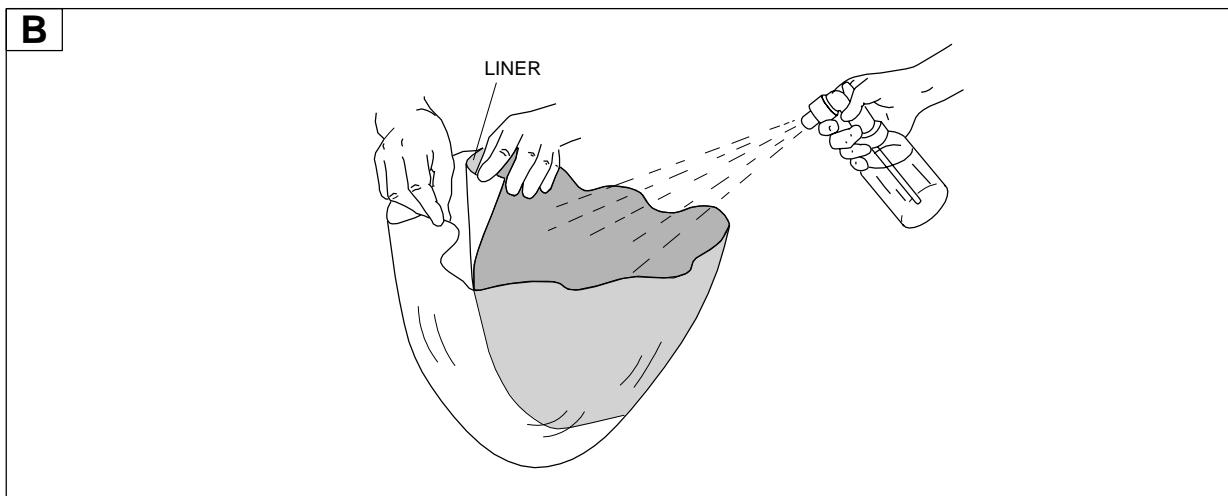
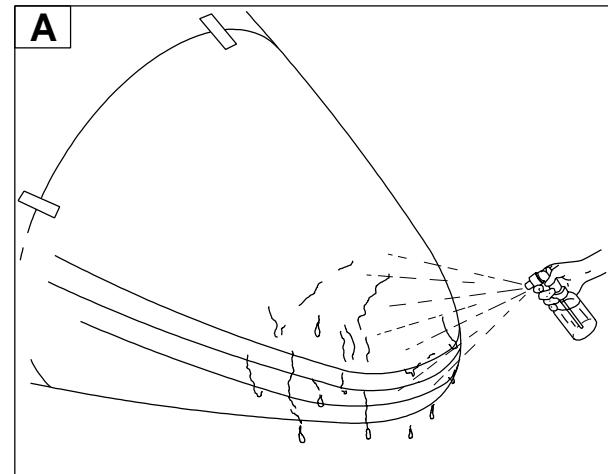
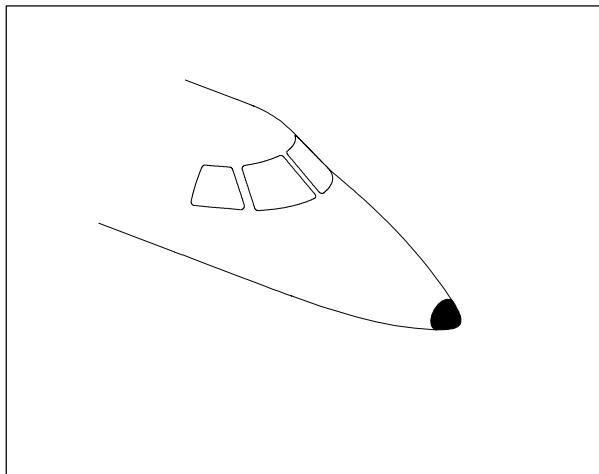
SUBTASK 020-002-A

- (1) Put the new polyurethane film on the radome surface.
- (2) With the old polyurethane film used as a reference, mark the contour and the upper surface of the new film.
- (3) Remove the new polyurethane film.
- (4) Cut the excess material from the new polyurethane film with a pair of scissors.
- (5) Remove the original polyurethane film with an acrylic spatula.

EFFECTIVITY: ALL

Polyurethane Film - Removal/Application

Figure 401



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TASK 53-11-05-400-801-A
EFFECTIVITY: ALL
3. POLYURETHANE FILM - APPLICATION
A. General

- (1) This task gives the procedure to apply the polyurethane film.

B. References

<i>REFERENCE</i>	<i>DESIGNATION</i>
IPC 11-21-05	EXTERIOR DECAL, CORROSION PROTECTION

C. Zones and Accesses

Not Applicable

D. Tools and Equipment

<i>ITEM</i>	<i>DESCRIPTION</i>	<i>PURPOSE</i>	<i>QTY</i>
Commercially available	Acrylic spatula	To install polyurethane film	

E. Auxiliary Items

<i>ITEM</i>	<i>DESCRIPTION</i>	<i>PURPOSE</i>	<i>QTY</i>
Commercially available	Protective Gloves	For protection of technicians hands	1
Commercially available	Safety Goggles	For protection of technicians eyes	1

F. Consumable Materials

<i>SPECIFICATION (BRAND)</i>	<i>DESCRIPTION</i>	<i>QTY</i>
ASTM-D-740	Methyl Ethyl Ketone - MEK	AR
Commercially available	Neutral liquid detergent	AR
TT-I-735	Isopropyl alcohol	AR

G. Expendable Parts

<i>ITEM</i>	<i>IPC REFERENCE (VENDOR REFERENCE)</i>	<i>QTY</i>
Polyurethane film	IPC 11-21-05	1

H. Persons Recommended

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

I. Preparation (Figure 401)

SUBTASK 841-002-A

WARNING: WEAR RUBBER GLOVES AS A PROTECTION AGAINST CHEMICAL PRODUCT.

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

J. Application (Figure 401)

SUBTASK 420-002-A

WARNING: BE CAREFUL WHEN YOU USE SOLVENTS BECAUSE THEY ARE A HEALTH AND FIRE HAZARD. USE SAFETY GOGGLES AND PROTECTIVE CLOTHING WHEN YOU HANDLE THEM. DO NOT BREATHE THEIR GASES AND WORK IN A WELL VENTILATED AREA.

CAUTION: THE RADOME SURFACE MUST BE FREE OF OIL, GREASE, AND RESIN.

- (1) With a cloth soaked in MEK, clean the radome surface.
- (2) Remove the burrs from the painted strip, as applicable.

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

- (3) Pull the liner slowly and circumferentially, and spray the adhesive side of the polyurethane film with wetting solution at the same time. Refer to (Figure 401); Step B).
- (4) Spray the radome surface with wetting solution. Refer to (Figure 401); Step A).
- (5) Correctly put the new polyurethane film in position on the radome. Refer to (Figure 401); Step C).

CAUTION: START THE STEP BELOW AT THE CENTER OF THE RADOME NOSE AND WORK TOWARD THE REAR OF THE POLYURETHANE FILM.

- (6) Squeeze the water out of the boot with the acrylic spatula. Refer to (Figure 401); Step D).
- (7) If you see an air bubble, pull the polyurethane film backup off the part at the location of the air bubble, spray again with the wetting solution, and apply the film back.
- (8) **NOTE:** The wind pressure against the polyurethane films does not tend to lift the edges.

One hour after the application of the polyurethane film, the radome is ready for service.

TASK 53-11-05-000-802-A
EFFECTIVITY: ADDITIONAL POLYURETHANE FILM
4. ADDITIONAL POLYURETHANE FILM - REMOVAL
A. General

- (1) This task gives the procedure to remove the additional polyurethane film from the radome.

B. References

<i>REFERENCE</i>	<i>DESIGNATION</i>
AMM TASK 53-11-05-200-801-A/600	RADOME POLYURETHANE FILM - INSPECTION/ CHECK
CMM 53-10-00	-

C. Zones and Accesses

Not Applicable

D. Tools and Equipment

Not Applicable

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	Radome

I. Removal (Figure 402)
SUBTASK 020-003-A

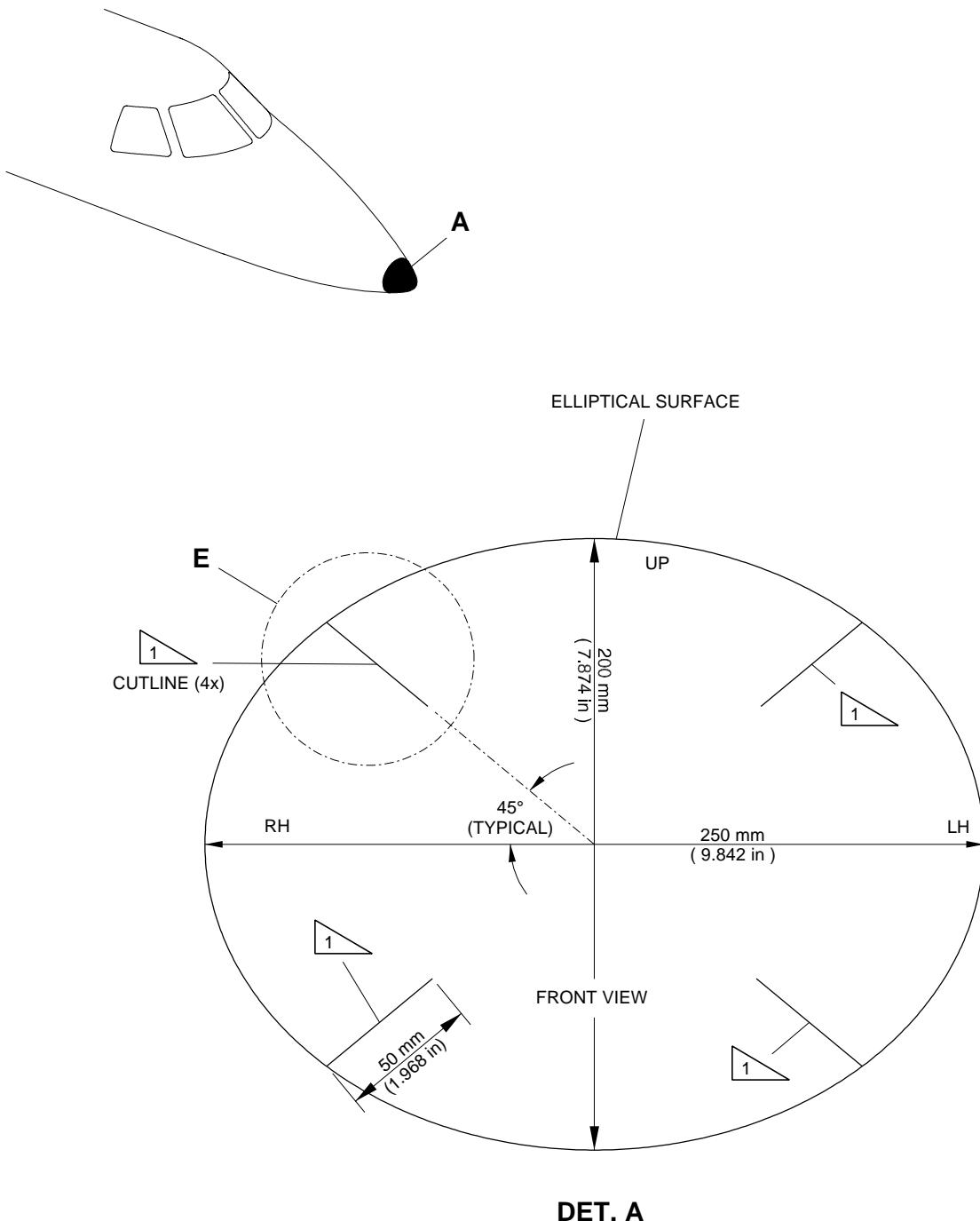
- (1) Remove the additional polyurethane film from the radome.

NOTE: It is easier to use only the hands to disbond the additional film from the original film.

- (2) Examine the original (larger) polyurethane film ([AMM TASK 53-11-05-200-801-A/600](#)). If damage is found, replace the film.

NOTE: If during the film removal the paint of the radome peels off, restore the paint according to Nose Radome Assembly CMM 53-10-00.

EFFECTIVITY: ADDITIONAL POLYURETHANE FILM
Additional Polyurethane Film - Removal/Application
Figure 402 - Sheet 1



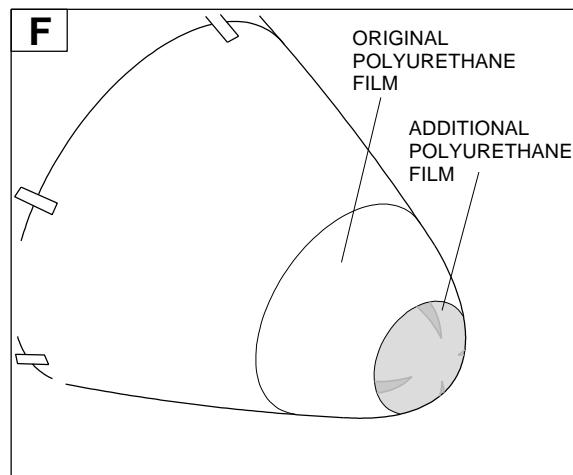
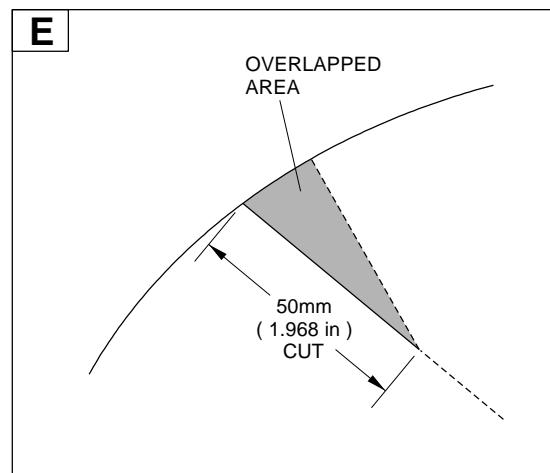
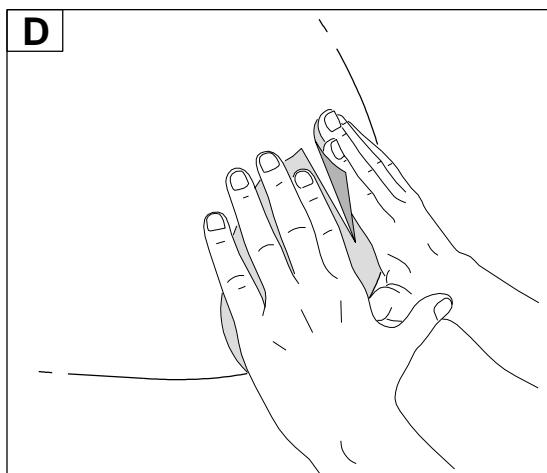
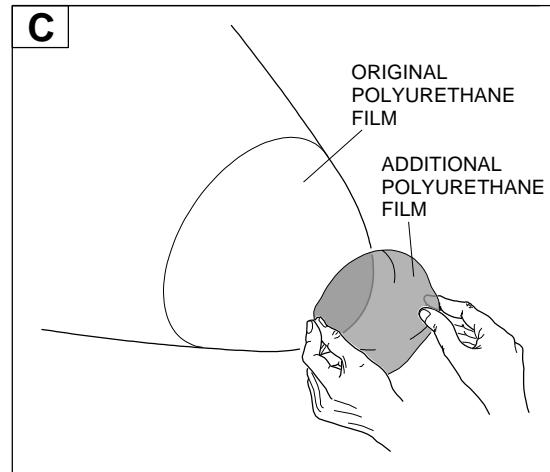
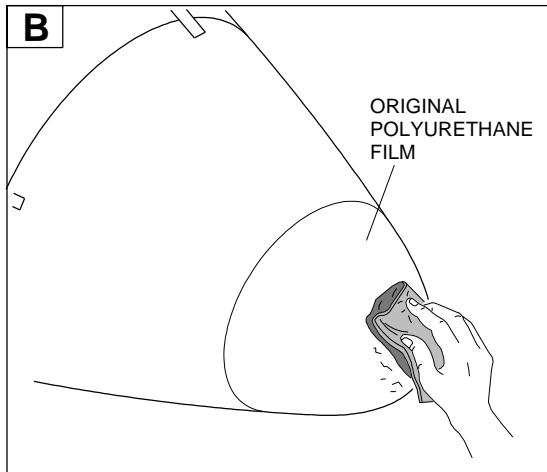
 CUTLINE LENGTH: 50 mm (1.968 in).

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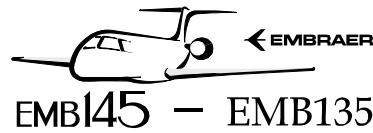
EFFECTIVITY: ADDITIONAL POLYURETHANE FILM

Additional Polyurethane Film - Removal/Application

Figure 402 - Sheet 2



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TASK 53-11-05-400-802-A

EFFECTIVITY: ADDITIONAL POLYURETHANE FILM

5. ADDITIONAL POLYURETHANE FILM - APPLICATION

A. General

(1) This task gives the procedure to apply the additional polyurethane film.

B. References

REFERENCE	DESIGNATION
AMM TASK 53-11-05-200-801-A/600	RADOME POLYURETHANE FILM - INSPECTION/ CHECK
IPC 11-21-05	EXTERIOR DECAL, CORROSION PROTECTION

C. Zones and Accesses

Not Applicable

D. Tools and Equipment

Not Applicable

E. Auxiliary Items

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Protective Gloves	For protection of technicians hands	1
Commercially available	Safety Goggles	For protection of technicians eyes	1

F. Consumable Materials

SPECIFICATION (BRAND)	DESCRIPTION	QTY
TT-I-735	Isopropyl alcohol	AR

G. Expendable Parts

ITEM	IPC REFERENCE (VENDOR REFERENCE)	QTY
Polyurethane film	IPC 11-21-05	1

H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	Radome

I. Preparation

SUBTASK 841-003-A

WARNING: WEAR RUBBER GLOVES AS A PROTECTION AGAINST CHEMICAL PRODUCT.



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- (1) Examine the original polyurethane film. Refer to ([AMM TASK 53-11-05-200-801-A/600](#)). If damage is found, replace the film.

J. Application (Figure 402)

SUBTASK 420-003-A

CAUTION: THE POLYURETHANE FILM MUST BE FREE OF OIL, GREASE, OR RESIN.

- (1) Clean the larger polyurethane film with a cloth wet with isopropyl alcohol before you apply the additional polyurethane film. Refer to (Figure 402); Step B).
- (2) Use the polyurethane film or polyurethane protective tape 8671 to make a new polyurethane film as follows in the steps below:

NOTE: Polyurethane protective tape 8671 is manufactured by 3M and is available in several sizes. Minimum roll width to make the doubler film is 200 mm (7.9 inch).

- (a) Make the additional polyurethane film. Cut polyurethane protective tape 8671 in the elliptical shape. Refer to (Figure 402); DET A).
- (b) Cut the surface along the cutlines (4X) to permit subsequent overlapping of the edges. Refer to (Figure 402); DET. A).

CAUTION: DO NOT MAKE HOLES IN THE FILM TO REMOVE AIR BUBBLES.

- (3) Align the film and, with your fingers, press it from the center to the edge. Refer to (Figure 402); Step C).
- (4) After application of the additional polyurethane film, overlap the cut area. Refer to (Figure 402); Step D).

NOTE: If you see air bubbles, pull the polyurethane film back at the location of the air bubbles and press them to the edge.