



AIRCRAFT
MAINTENANCE MANUAL

ELEVATOR SERVO AND SPRING-TAB FABRIC COVER - REMOVAL/INSTALLATION

EFFECTIVITY: ALL

1. General

- A. This section gives the procedures to remove/install the elevator spring and servo-tab fabric cover.
- 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
55-22-02-000-801-A	ELEVATOR SPRING AND SERVO-TAB FABRIC COVER - REMOVAL	ALL
55-22-02-400-801-A	ELEVATOR SPRING AND SERVO-TAB FABRIC COVER - INSTALLATION	ALL



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TASK 55-22-02-000-801-A

EFFECTIVITY: ALL

2. ELEVATOR SPRING AND SERVO-TAB FABRIC COVER - REMOVAL

A. General

- (1) This procedure gives the instructions to remove the elevator spring and servo-tab fabric cover.

B. References

REFERENCE	DESIGNATION
AMM TASK 20-40-02-910-801-A/200	STATIC GROUNDING - STANDARD PRACTICES

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
335		Left Elevator
336		Right Elevator

D. Tools and Equipment

ITEM	DESCRIPTION	PURPOSE	QTY
GSE 036	Hydraulic Platform	To get access to the elevator spring and servo tabs	

E. Auxiliary Items

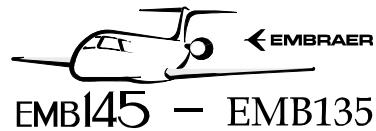
ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Lint-Free Wiper Cloth	For the surface cleaning	AR
Commercially available	Acrylic Spatula	For the epoxy adhesive removal	1
Commercially available	180-200 Grit Sandpaper	For the surface preparation	AR
Commercially available	Protective gloves	For the technician's skin protection	AR
Commercially available	Safety goggles	For the technician protection	AR

F. Consumable Materials

SPECIFICATION (BRAND)	DESCRIPTION	QTY
F.S. TT-M-261	Methyl-Ethyl-Ketone (MEK)	AR

G. Expandable Parts

Not Applicable



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H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	Elevator Spring and Servo Tabs

I. Preparation

SUBTASK 841-002-A

WARNING: MAKE SURE THAT THE AIRCRAFT IS IN A SAFE CONDITION BEFORE YOU DO THE MAINTENANCE PROCEDURES. THIS IS TO PREVENT INJURY TO PERSONS AND/OR DAMAGE TO THE EQUIPMENT.

- (1) Make sure that the aircraft is safe for maintenance.
- (2) Statically ground the aircraft ([AMM TASK 20-40-02-910-801-A/200](#)).

WARNING: DO NOT CLOSE THE CIRCUIT BREAKER UNTIL YOU COMPLETE THE MAINTENANCE. IF YOU DO NOT OBEY THIS PRECAUTION, INJURY TO PERSONS AND/OR DAMAGE TO EQUIPMENT CAN OCCUR.

- (3) On the circuit breaker panel, open the PITCH TRIM 1 circuit breaker and attach a DO-NOT-CLOSE tag to it.
- (4) On the left electrical power control/distribution box, open the PITCH TRIM 1 circuit breaker and attach a DO-NOT-CLOSE tag to it.
- (5) On the right electrical power control/distribution box, open the PITCH TRIM 2 circuit breaker and attach a DO-NOT-CLOSE tag to it.
- (6) Put a DO-NOT-OPERATE-THE-HORIZONTAL-STABILIZER sign on the pitch trim panel, in the cockpit.
- (7) Put a hydraulic platform GSE 036 to get access to the left and right servo and spring tabs.
- (8) Put warning signs in the area where you will do the task.

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

SUBTASK 020-002-A

- WARNING:** • MAKE SURE THAT THERE IS A GOOD AIRFLOW THROUGH THE WORK AREA AND OBEY THESE MANUFACTURER'S INSTRUCTIONS:
- DO NOT LET THE MATERIAL GET IN YOUR MOUTH;
 - DO NOT SMOKE NEAR THE WORK AREA;
 - DO NOT BREATHE THE GAS; AND
 - IF YOUR SKIN OR EYES SHOW SIGNS OF IRRITATION, GET MEDICAL AID IMMEDIATELY.
- DO NOT PERMIT THE CLEANING PRODUCT TO TOUCH PAINT-FINISHED SURFACES NOT TO CAUSE DAMAGE TO THEM. USE CLEAN, SOFT (COTTON), NON-SYNTHETIC, AND LINT-FREE CLOTHS ONLY.
- DO NOT PUT THE REMAINING CLEANING MATERIAL BACK INTO THE ORIGINAL CONTAINER TO PREVENT CONTAMINATION.

- CAUTION:** • DO NOT APPLY THE CLEANING PRODUCT DIRECTLY ON THE SURFACE THAT YOU WILL CLEAN. IF YOU DO, DAMAGE TO THE SURFACE CAN OCCUR.
- DO NOT LET THE CLEANING PRODUCT DRY BEFORE YOU USE THE LINT-FREE CLOTH. IF YOU DO, DAMAGE TO THE SURFACE CAN OCCUR.

- (1) **NOTE:** The procedure for removal of the elevator spring and servo-tab fabric cover must be done with the servo and spring tabs fully extended.

If applicable, pull the old cover to remove it.

NOTE: Use an acrylic spatula to release the edge of the old cover.

NOTE: Be careful when you remove the old cover to prevent damage to the surface.

- (2) Clean the surface where the new elevator spring and/or servo-tab fabric cover will be installed, with a clean, lint-free cloth moist with methyl ethyl ketone (MEK). Refer to sheet 1 and/or sheet 2, as applicable.

WARNING: USE SKIN PROTECTION AND BREATHE CAREFULLY WHEN YOU SAND. SANDING RELEASES A FINE POWDER THAT CAN CAUSE SKIN IRRITATION. DO NOT BREATHE TOO MUCH OF THIS POWDER TO PREVENT HEALTH PROBLEMS.

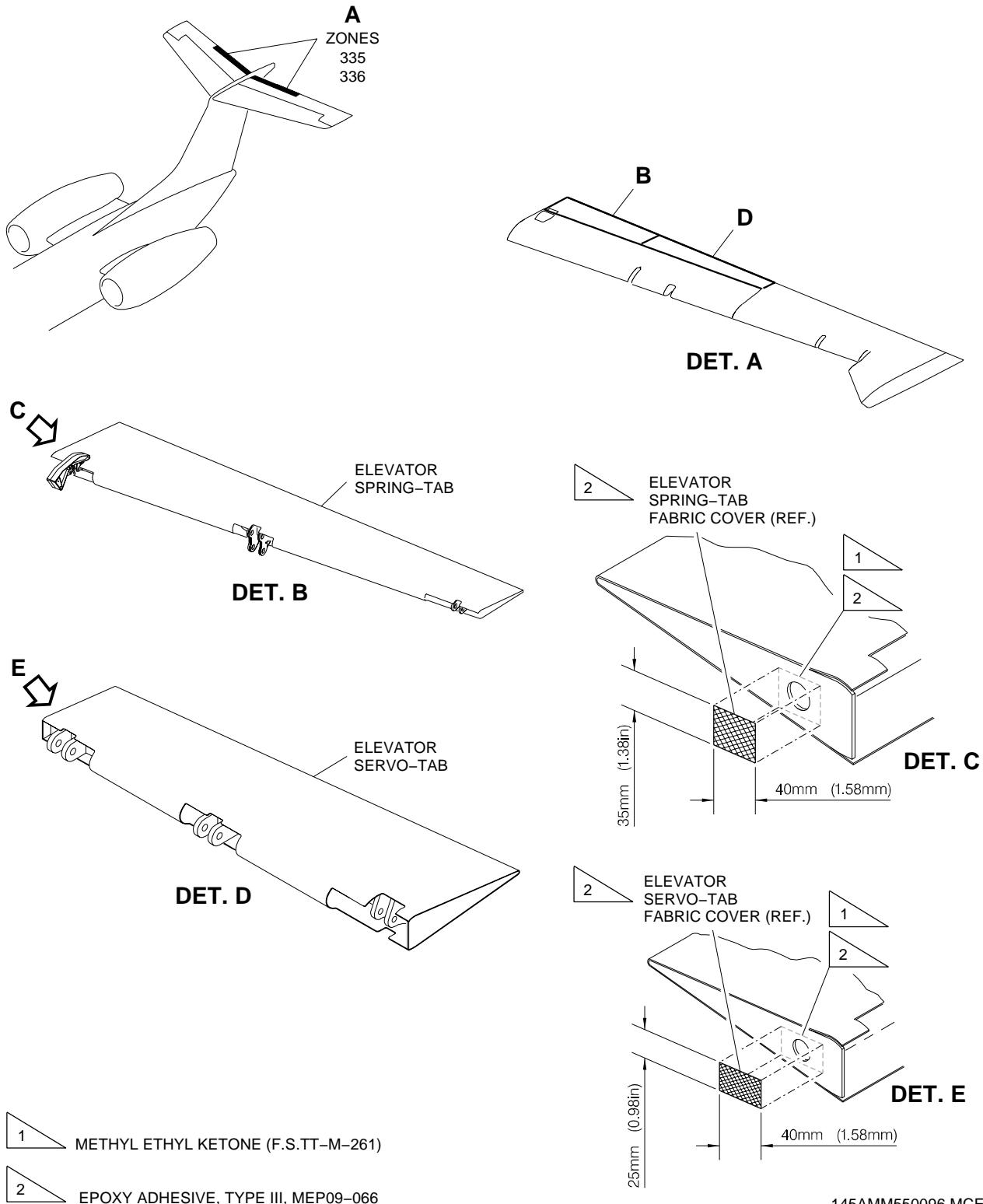
CAUTION: WHEN YOU SAND COMPOSITE PARTS, BE CAREFUL NOT TO CAUSE DAMAGE TO THEIR PLIES. IF YOU DO NOT OBEY THIS PRECAUTION, DAMAGE TO COMPONENTS CAN OCCUR.

- (3) With a grit No. 180-200 sandpaper, remove the residues of epoxy adhesive from the surface where the new elevator spring and/or servo-tab fabric cover will be installed. Refer to sheet 1 and/or sheet 2, as applicable.

EFFECTIVITY: ALL

Elevator Spring and Servo-Tab Fabric Cover - Removal/Installation

Figure 401 - Sheet 1

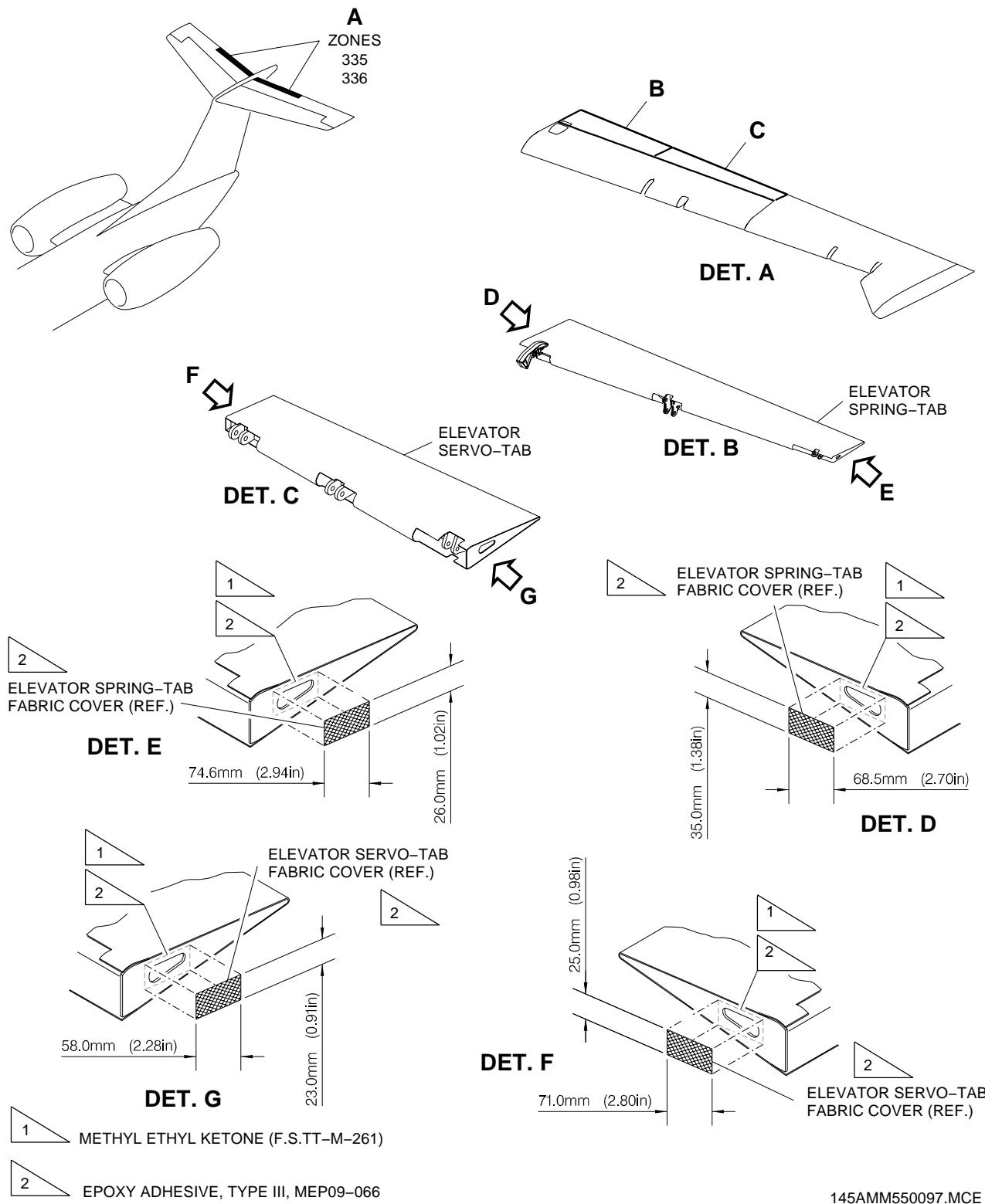


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EFFECTIVITY: ALL

Elevator Spring and Servo-Tab Fabric Cover - Removal/Installation

Figure 401 - Sheet 2



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TASK 55-22-02-400-801-A
EFFECTIVITY: ALL
3. ELEVATOR SPRING AND SERVO-TAB FABRIC COVER - INSTALLATION
A. General

(1) This task gives the procedures to install the elevator spring and servo-tab fabric cover.

B. References

<i>REFERENCE</i>	<i>DESIGNATION</i>
AMM TASK 20-40-02-910-801-A/200	STATIC GROUNDING - STANDARD PRACTICES
AMM TASK 51-21-02-100-801-A/700	COMPOSITE MATERIAL PARTS - PAINTING REPAIR PROCESS
AMM TASK 55-22-02-000-801-A/400	ELEVATOR SPRING AND SERVO-TAB FABRIC COVER - REMOVAL

C. Zones and Accesses

<i>ZONE</i>	<i>PANEL/DOOR</i>	<i>LOCATION</i>
335		Left Elevator
336		Right Elevator

D. Tools and Equipment

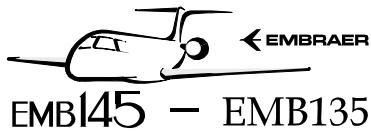
<i>ITEM</i>	<i>DESCRIPTION</i>	<i>PURPOSE</i>	<i>QTY</i>
GSE 036	Hydraulic Platform	To get access to the spring and servo-tab	

E. Auxiliary Items

<i>ITEM</i>	<i>DESCRIPTION</i>	<i>PURPOSE</i>	<i>QTY</i>
Commercially available	Lint-Free Wiper Cloth	To clean the surface	AR
Commercially available	Brush	apply the epoxy adhesive	1
Commercially available	Protective gloves	For protection of the technician's skin	AR
Commercially available	Safety goggles	For protection of the technician	AR

F. Consumable Materials

<i>SPECIFICATION (BRAND)</i>	<i>DESCRIPTION</i>	<i>QTY</i>
F.S. TT-M-261	Methyl-Ethyl-Ketone (MEK)	AR
MEP 09-066	Type III - Epoxy Adhesive	AR
AMS-C-9084	Fabric Glass Fiber - Class 2, Type II, Style 116	AR



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G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	Spring and Servo Tabs

I. Preparation (Figure 401)

SUBTASK 000-002-A

WARNING: MAKE SURE THAT THE AIRCRAFT IS IN A SAFE CONDITION BEFORE YOU DO THE MAINTENANCE PROCEDURES. THIS IS TO PREVENT INJURY TO PERSONS AND/OR DAMAGE TO THE EQUIPMENT.

- (1) Make sure that the aircraft is in the same configuration as it was at the end of the removal task **AMM TASK 55-22-02-000-801-A/400**.

WARNING: • **MAKE SURE THAT THERE IS A GOOD AIRFLOW THROUGH THE WORK AREA AND OBEY THESE MANUFACTURER'S INSTRUCTIONS:**

- DO NOT LET THE MATERIAL GET IN YOUR MOUTH;
- DO NOT SMOKE NEAR THE WORK AREA;
- DO NOT BREATHE THE GAS; AND
- IF YOUR SKIN OR EYES SHOW SIGNS OF IRRITATION, GET MEDICAL AID IMMEDIATELY.

• **DO NOT PERMIT THE CLEANING PRODUCT TO TOUCH PAINT-FINISHED SURFACES NOT TO CAUSE DAMAGE TO THEM. USE CLEAN, SOFT (COTTON), NON-SYNTHETIC, AND LINT-FREE CLOTHS ONLY.**

• **DO NOT PUT REMAINING CLEANING MATERIAL BACK INTO ORIGINAL CONTAINER TO PREVENT CONTAMINATION.**

CAUTION: • **DO NOT APPLY THE CLEANING PRODUCT DIRECTLY ON THE SURFACE THAT YOU WILL CLEAN. IF YOU DO, DAMAGE TO THE SURFACE CAN OCCUR.**

• **DO NOT LET THE CLEANING PRODUCT DRY BEFORE YOU USE THE LINT-FREE CLOTH. IF YOU DO, DAMAGE TO THE SURFACE CAN OCCUR.**

- (2) With a clean, lint-free cloth moist with methyl ethyl ketone (MEK), clean the surface where the new elevator spring and/or servo-tab fabric cover will be installed. Refer to sheet 1 and/or sheet 2, as applicable.

- (3) Dry the surface with a clean, lint-free cloth before the methyl ethyl ketone (MEK) evaporates.

J. Installation (Figure 401)

SUBTASK 420-003-A

- (1) Cut a piece of the new elevator spring and/or servo-tab fabric cover (fabric glass fiber, class 2, type II, style 116, Spec. AMS-C-9084), as shown on sheet 1 and/or sheet 2, as applicable, of Figure 401.

WARNING: • **APPLY THE ADHESIVE EPOXY IN OPEN AREAS AND DO NOT BREATHE ITS GASES. PUT ON THE APPLICABLE GLOVES AND SAFETY GOGGLES. DO NOT LET ADHESIVE EPOXY TOUCH YOUR SKIN FOR A LONG TIME. IF YOU DO THE WORK IN A CLOSED AREA, MAKE SURE THAT THERE IS SUFFICIENT AIRFLOW.**

• **OBEY THE MANUFACTURER'S INSTRUCTIONS WHEN YOU USE CHEMICAL PRODUCTS. THESE PRODUCTS ARE TOXIC AND CAN CAUSE INJURIES TO YOU.**

- (2) Apply adhesive epoxy in the area where the new elevator spring and/or servo-tab fabric cover will be installed. Refer to sheet 1 and/or sheet 2 as applicable.
- (3) With a brush, make the new elevator spring and/or servo-tab fabric cover wet with adhesive epoxy. Refer to sheet 1 and/or sheet 2, as applicable.
- (4) Put the new elevator spring and/or servo-tab fabric cover in position on the elevator spring and/or servo-tab rib, and apply pressure. Refer to sheet 1 and/or sheet 2, as applicable.
- (5) Wait for 60 minutes for the adhesive epoxy to cure.
- (6) Restore the surface finishing paint. Refer to Composite Materials Parts - Cleaning/Painting ([AMM TASK 51-21-02-100-801-A/700](#)).

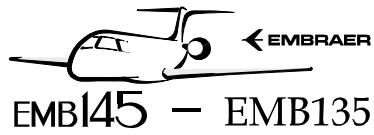
K. Follow-on

SUBTASK 020-003-A

- (1) On the circuit breaker panel, close PITCH TRIM 1 circuit breaker and remove the DO-NOT-CLOSE tag from it.
- (2) On the left power control/distribution box, close PITCH TRIM 1 circuit breaker and remove the DO-NOT-CLOSE tag from it.
- (3) On the right power control/distribution box, close PITCH TRIM 2 circuit breaker and remove the DO-NOT-CLOSE tag from it.
- (4) Remove the DO-NOT-OPERATE-THE-HORIZONTAL-STABILIZER sign from the pitch trim panel, in the cockpit.
- (5) Remove the grounding cable from the aircraft ([AMM TASK 20-40-02-910-801-A/200](#)).

CAUTION: EXAMINE ALL THE WORK AREAS TO MAKE SURE THAT YOU REMOVED ALL TOOLS AND EQUIPMENT AFTER YOU COMPLETED THE WORK. IF YOU DO NOT OBEY THIS PROCEDURE, DAMAGE TO THE AIRCRAFT CAN OCCUR.

- (6) Remove the hydraulic platform GSE 036 from the work area.
- (7) Remove the warning signs from the area where you did the task.



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- (8) Put the aircraft back to its initial condition.