WING LEADING EDGE III - REMOVAL/INSTALLATION

EFFECTIVITY: ALL

1. General

   A. This section gives the procedures to remove and install wing leading edges III.

   B. These procedures are applicable to LH and RH wing leading edges III.

   C. 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*
57-43-00-000-801-A	LEADING EDGE III - REMOVAL	ALL
57-43-00-400-801-A	LEADING EDGE III - INSTALLATION	ALL

TASK 57-43-00-000-801-A
EFFECTIVITY: ALL

2. LEADING EDGE III - REMOVAL

A. General

(1) This procedure gives the instructions to remove wing leading edge III.

B. References

REFERENCE	*DESIGNATION*
AMM TASK 57-30-00-000-801-A/400	WING TIP - REMOVAL
SRM 51-20-01	-

C. Zones and Accesses

ZONE	*PANEL/DOOR*	*LOCATION*
513		LH wing
613		RH wing
561	Wing tip	LH wing
661	Wing tip	RH wing

D. Tools and Equipment

Not Applicable

E. Auxiliary Items

Not Applicable

F. Consumable Materials

Not Applicable

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	*FUNCTION*	*PLACE*
1	Does the task	LH or RH wing
1	Helps the other technician	LH or RH wing

I. Preparation

SUBTASK 841-002-A

(1) On the Circuit Breaker Panel, open the WING circuit breaker and attach a DO-NOT-CLOSE tag to it.

(2) Remove the wing tip fairing (AMM TASK 57-30-00-000-801-A/400).

J. Removal (Figure 401)

SUBTASK 020-002-A

(1) Remove the splice (5) and gasket seal (10). For this, remove the screws (4) (52 positions).

(2) Loosen the clamp (8) (refer to DET. E) and disconnect the hose (7) from the tube (9) at the end of leading edge III (3).

(3) Disconnect the end of the piccolo tube of leading edge III (3) from the end of the piccolo tube of leading edge II (6) as follows:

CAUTION: BE CAREFUL WHEN YOU SLIDE THE COUPLING (1) ON THE PICCOLO TUBE TO PREVENT DAMAGE TO THE SEAL DEVICE IN THE COUPLING AND TO THE PICCOLO TUBE ENDS.

(a) Loosen the clamp of the coupling (1) (refer to DET. D) and push to slide it on the piccolo tube of leading edge II (6).

NOTE: The coupling should be completely moved off the piccolo tube to prevent damage to the end tube.

CAUTION: REMOVE THE SCREWS FROM LOWER AND UPPER POSITIONS. IF YOU DO NOT OBEY THIS PRECAUTION, DAMAGE TO THE SPAR AND LEADING EDGE CAN OCCUR.

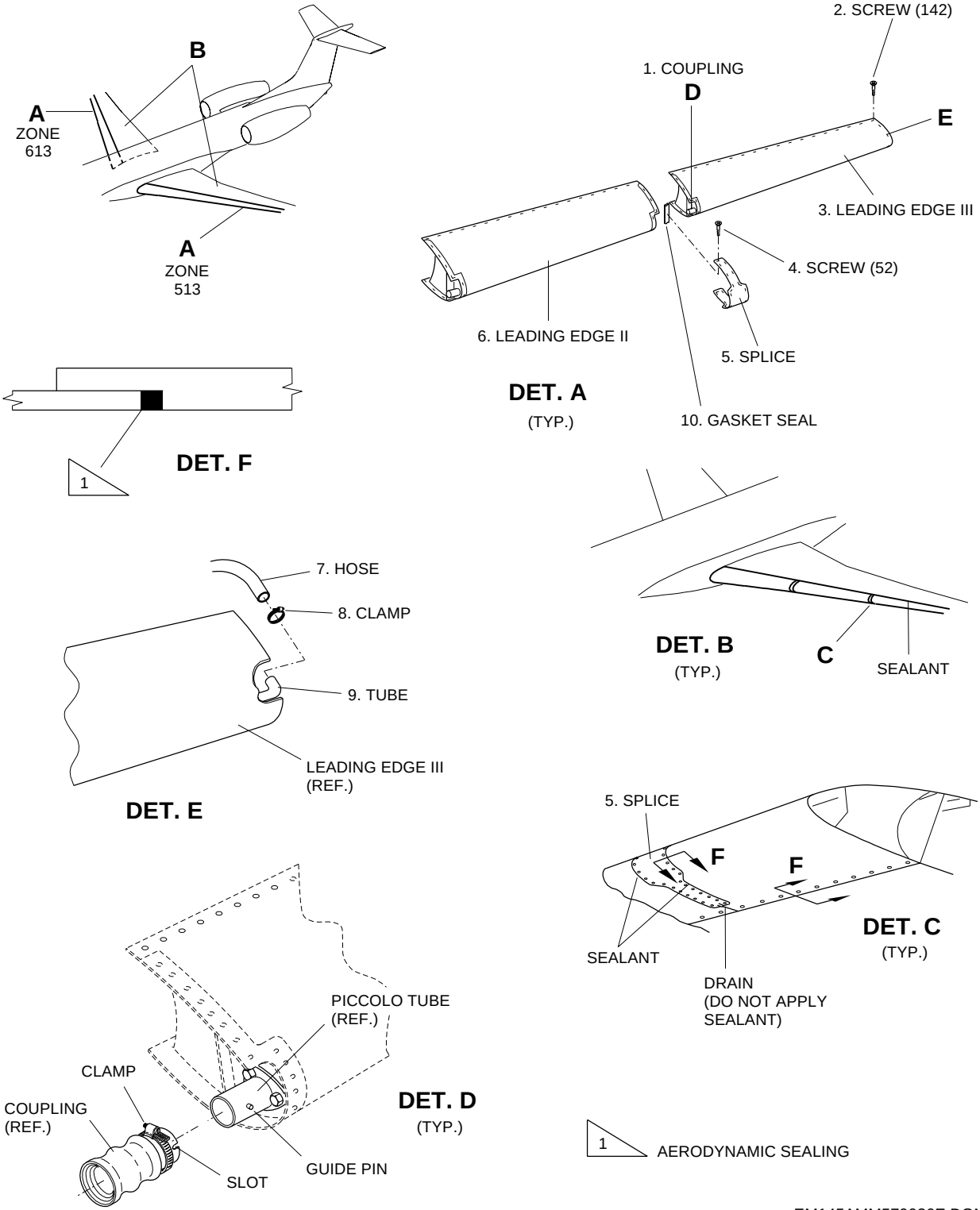
(4) Remove the screws (2) (142 positions).

(5) Carefully pull leading edge III (3) and remove it from the wing.

(6) Remove the old aerodynamic sealant and prepare the surface (SRM 51-20-01).

EFFECTIVITY: ALL

Leading Edge III - Removal/Installation
Figure 401



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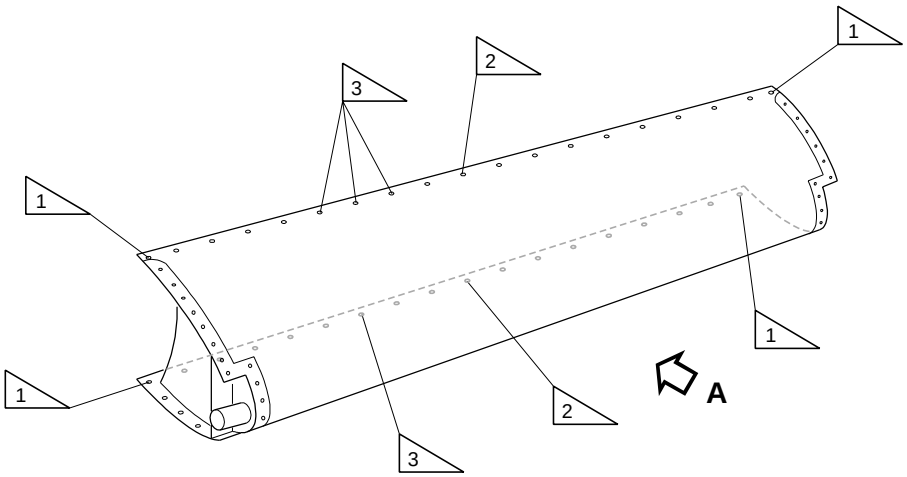
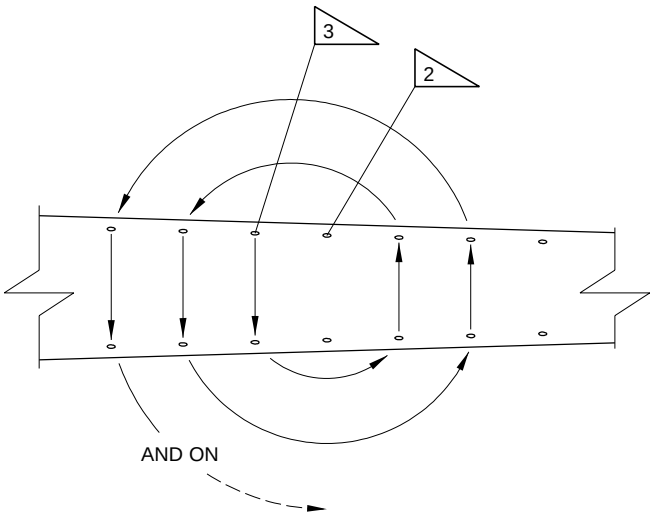
EFFECTIVITY: ALL
Screws Tightening Sequence
Figure 402





VIEW A

1 FIRST INSTALL THE SCREWS ON THESE CORNERS

2 SECONDLY INSTALL THE SCREWS ON THE CENTER POSITION

3 INSTALL THE REMAINING SCREWS FROM THE CENTER POSITION TO THE LEADING EDGE BORDERS, ALTERNATING BETWEEN THE UPPER RIVETING AND THE LOWER RIVETING ROW. REFER TO VIEW A FOR TIGHTENING SEQUENCE

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TASK 57-43-00-400-801-A
EFFECTIVITY: ALL

3. LEADING EDGE III - INSTALLATION

A. General

(1) This procedure gives the instructions to install wing leading edge III.

B. References

REFERENCE	*DESIGNATION*
AMM TASK 30-00-00-700-802-A/500	ANTI-ICING SYSTEM - OPERATIONAL TEST
AMM TASK 57-30-00-400-801-A/400	WING TIP - INSTALLATION
SRM 51-20-01	-

C. Zones and Accesses

ZONE	*PANEL/DOOR*	*LOCATION*
513		LH wing
613		RH wing
561	Wing tip	LH wing
661	Wing tip	RH wing

D. Tools and Equipment

Not Applicable

E. Auxiliary Items

Not Applicable

F. Consumable Materials

SPECIFICATION (BRAND)	*DESCRIPTION*	*QTY*
MEP 09-083	Sealant, PR 2050 B-1/2	AR
MEP 09-045	Sealant, RTV 157	AR
MEP 09-075	Corrosion-Inhibiting Compound (COR-BAN 27L)	AR
Commercially available	Adhesive Tape	AR
Commercially available	Aluminum Tape (AL Tape 425)	AR
Commercially available	Polyethylene Film	AR

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	*FUNCTION*	*PLACE*
1	Does the task	LH or RH wing

(Continued)

QTY	FUNCTION	PLACE
1	Helps the other technician	LH or RH wing

I. Installation (Figure 401)

SUBTASK 420-002-A

(1) Put leading edge III (3) on the spar of the wing.

(2) Install the screws (2) (142 positions) and tighten them in an each-second sequence to attach leading edge III (3). Refer to Figure 402.

(3) Connect the end of the piccolo tube of leading edge III (3) to the end of piccolo tube of leading edge II (6) as follows:

CAUTION: BE CAREFUL WHEN YOU SLIDE THE COUPLING (1) ON THE PICCOLO TUBE TO PREVENT DAMAGE TO THE SEAL DEVICE IN THE COUPLING AND TO THE PICCOLO TUBE ENDS.

(a) Push the coupling (1) and connect it to the piccolo tube of leading edge III (3).

NOTE: Make sure that the guide pin of the piccolo tube is correctly engaged on the slot of the coupling (1) (refer to DET. D).

(b) Tighten the clamp of the coupling (1).

(4) Connect the hose (7) to the tube (9) at the end of leading edge III (3) and tighten the clamp (8).

(5) Install the gasket seal (10) in the region of the splice (5).

WARNING: COR-BAN 27L CORROSION-INHIBITING COMPOUND IS TOXIC TO SKIN, EYES, AND RESPIRATORY TRACT. USE GOGGLES AND PROTECTIVE GLOVES. USE ONLY IN WELL VENTILATED AREAS. OBEY THE MANUFACTURES' HEALTH AND SAFETY INSTRUCTIONS.

(6) Apply COR-BAN 27L to the screws (4) (52 positions) of the splice.

(7) Install the splice (5) with the screws (4).

J. Follow-on

SUBTASK 842-002-A

(1) There are different methods to do the aerodynamic sealing along the gaps between the leading edge and the wing (refer to DET. B). Use the applicable procedure as necessary.

(a) Full sealant-curing time:

1 Apply sealant PR 2050 B-1/2.

NOTE: The sealant curing time will change with the environmental conditions (SRM 51-20-01).

(b) Acceleration of sealant curing time with heating:

1 Apply sealant PR 2050 B-1/2.

2 Wait for one hour after the sealant is applied.

CAUTION: THE TEMPERATURE MUST NOT BE HIGHER THAN 55°C (131°F).

3 Heat the area which received the sealant.

NOTE: Sealant curing time versus temperature rate changes as shown in the Sealant Specification Table (SRM 51-20-01).

(c) Application of aluminum tape after tack-free time.

NOTE: This procedure must only be done when a faster aircraft clearance is necessary.

1 Apply sealant PR 2050 B-1/2.

2 You can accelerate the sealant curing time as written in paragraph (b).

3 After the sealant is tack-free, apply aluminum tape.

NOTE: You can operate the aircraft immediately after the aluminum tape application.

4 Remove the aluminum tape after 150 hours.

(d) Application of polyethylene film and aluminum tape.

1 Apply sealant PR 2050 B-1/2.

2 Apply a polyethylene film over the sealant.

3 Apply the aluminum tape.

NOTE: You can operate the aircraft immediately after the aluminum tape application.

4 Remove the aluminum tape after 10 days.

CAUTION: BE CAREFUL WHEN YOU APPLY SEALANT ALONG THE CONTOUR OF THE FAIRING (6) TO PREVENT BLOCKAGE OF ITS DRAIN HOLE.

(2) Apply aerodynamic sealant RTV 157 (SRM 51-20-01) along the gaps between the fairing (5) and the leading edges (refer to DET. C).

(3) On the Circuit Breaker Panel, close the WING circuit breaker and remove the DO-NOT-CLOSE tag from it.

(4) Do an operational check of the Wing Thermal Anti-Icing System (AMM TASK 30-00-00-700-802-A/500).

(5) Install wing tip fairing (AMM TASK 57-30-00-400-801-A/400).