



EMB145 - EMB135

AIRCRAFT
MAINTENANCE MANUAL

INBOARD FLAP TRAILING EDGE - REPLACEMENT - MAINTENANCE PRACTICES

EFFECTIVITY: ALL

1. General

- A. This section gives the procedure to replace the trailing edge and install a new one, when the damage extension is out of repairable limits.
- B. These procedures are applicable to the inboard flap trailing edge of the LH and RH wings.
- 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
57-52-03-960-801-A	INBOARD FLAP TRAILING EDGE - RE- PLACEMENT	ALL



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MAINTENANCE MANUAL

TASK 57-52-03-960-801-A

EFFECTIVITY: ALL

2. INBOARD FLAP TRAILING EDGE - REPLACEMENT

A. General

- (1) This task gives the procedure to replace the trailing edge and install a new one, when the damage extension is out of repairable limits.

B. References

REFERENCE	DESIGNATION
AMM TASK 27-50-00-000-801-A/400	INBOARD FLAP - REMOVAL
AMM TASK 27-50-00-400-801-A/400	INBOARD FLAP - INSTALLATION
CPM 51-21-04	-
SRM 51-40-02 PR	-

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
532	-	LH wing
632	-	RH wing

D. Tools and Equipment

Not Applicable

E. Auxiliary Items

Not Applicable

F. Consumable Materials

SPECIFICATION (BRAND)	DESCRIPTION	QTY
ASTM D-740	Methyl Ethyl Ketone (MEK)	AR
Commercially available	Aluminum-oxide abrasive sandpaper No. 200	AR
Commercially available	Aluminum-oxide abrasive sandpaper No. 400, 500 and 600	AR
MEP 09-066	Adhesive, Epoxy, Type II	AR

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	FUNCTION	PLACE
2	Do the task	Inboard Flap Trailing Edge

I. Replacement of the Inboard Flap Trailing Edge ([Figure 201](#)) ([Figure 202](#)) ([Figure 203](#))

SUBTASK 960-002-A

- (1) Remove the inboard flap ([AMM TASK 27-50-00-000-801-A/400](#)).
- (2) Remove and discard the damaged trailing edge, by removing the required attachment fasteners.
- (3) Bonding strip installation.
 - (a) Position the bonding strip in the trailing edge P/N 145-68041-005 at root area where there is a room to install it, and make it flush with the trailing edge. Refer to [Figure 202](#), Sheet 3.
 - (b) Install bonding strip with MS14218AD4-4 fasteners and shave the formed head.
 - (c) Apply alodine 1200 (CPM 51-21-04).
- (4) Positioning of the trailing edge to torque box.
 - (a) Align edges of torque-box and trailing edge at flap-root.
 - (b) In the manufacturing jig (or alternative, equivalent tooling) position the flap and the trailing assuring system line.
 - (c) Mark in the trailing edge the position of the existing holes in the torque box, root fitting, tip fitting and central fitting.
 - (d) Make sure that all edge distances are kept to 2.5D at least.
 - (e) Install the trailing edge using fastener mapping and SRM 51-40-02 PR practices keeping a typical gap of 5 mm max and a typical step of 0.8mm max between the trailing edge and the torque box in the upper side and between the trailing edge and the leading edge in the lower side. Refer to [Figure 202](#), Sheets 1 to 3 and to [Figure 203](#), Sheets 1 to 3.
- (5) Final assembly:

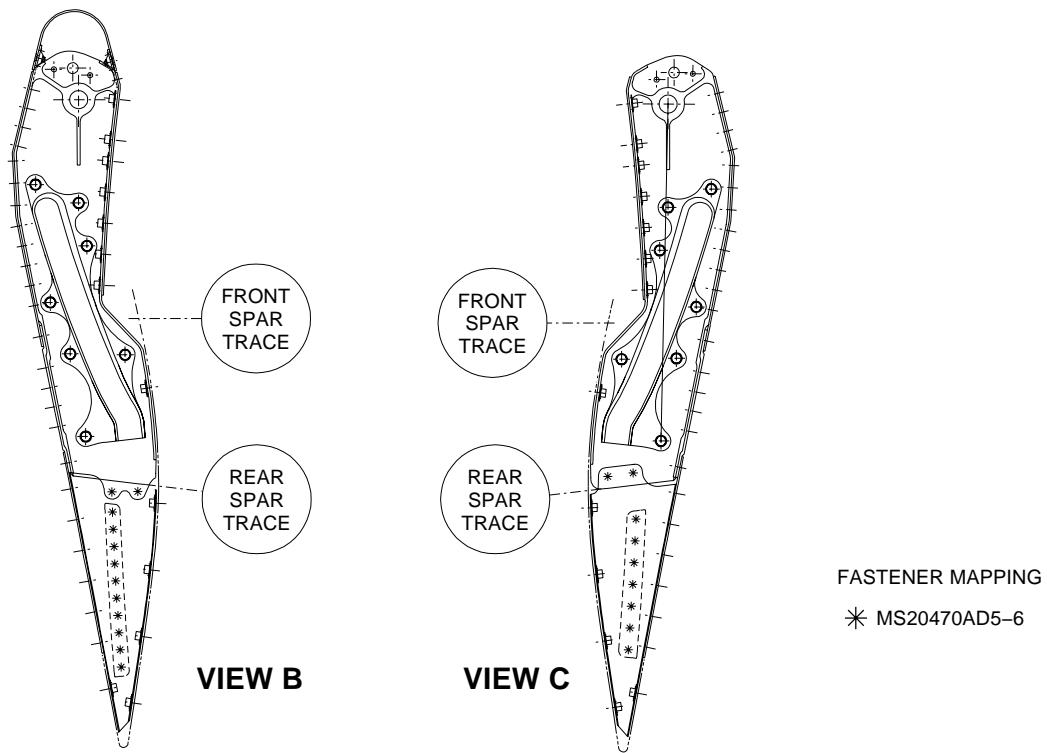
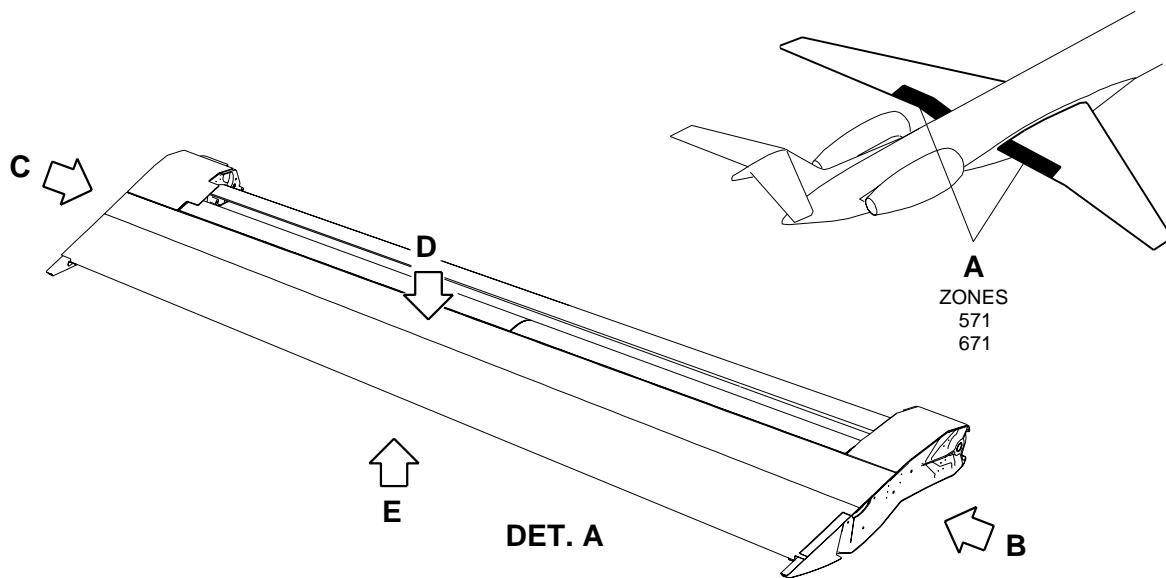
CAUTION: THIS ASSEMBLY AFFECTS INTERCHANGEABILITY OF ROOT AND TIP FAIRINGS.

 - (a) Once the trailing edge is installed proceed with the root and tip ribs and the nut plates located at root and tip.
 - (b) Use the manufacturing jig (or alternative, equivalent tooling) to position both ribs and drill holes in the ribs and in the trailing edge where nut plates have to be installed.
 - (c) Make sure that all edge distances are kept to 2.5D at least. Install using fastener mapping and SRM 51-40-02 PR practices.
 - (d) Install the inboard flap ([AMM TASK 27-50-00-400-801-A/400](#)).

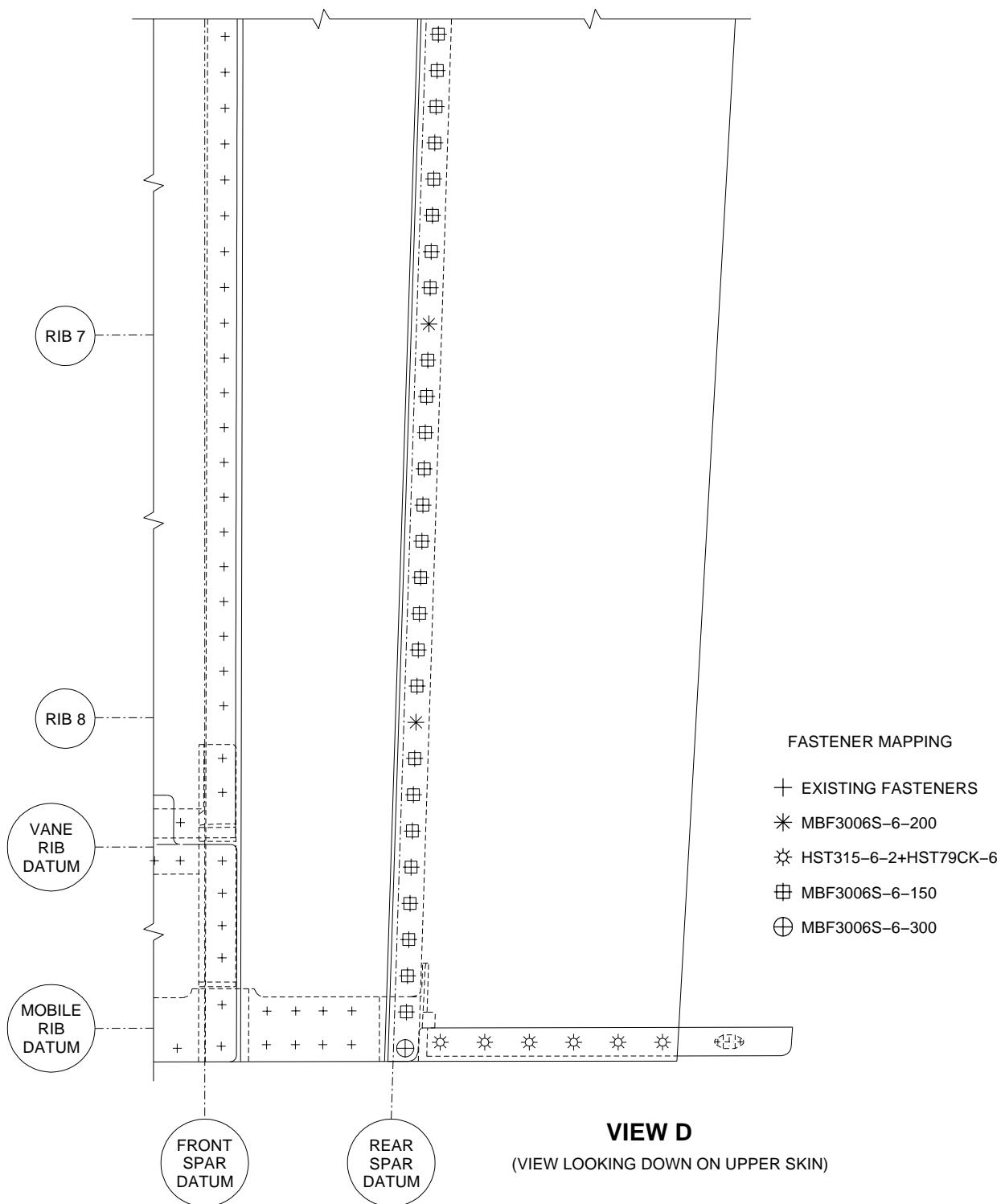
EFFECTIVITY: ALL

Inboard Flap Trailing Edge - Fastener Mapping

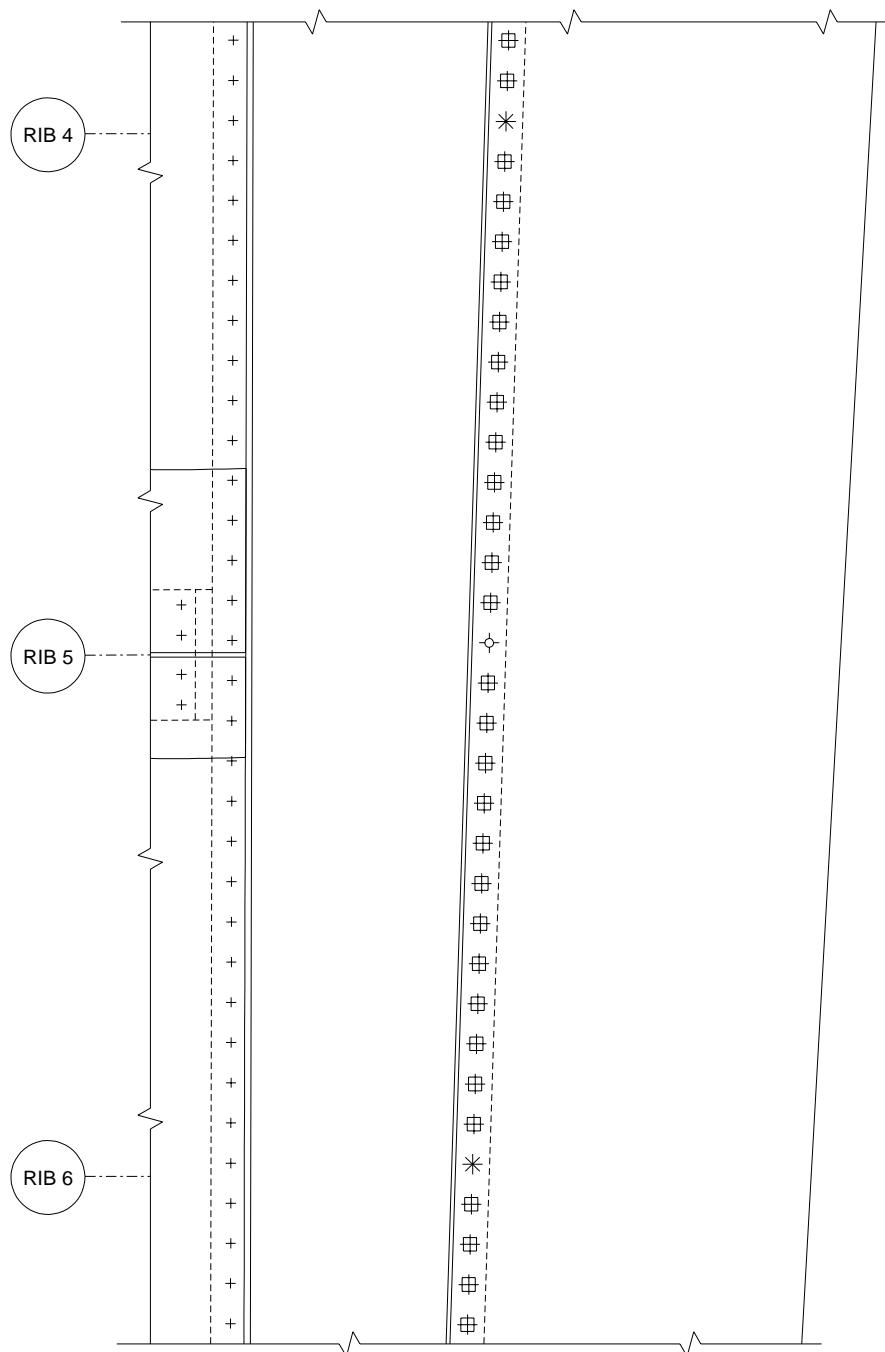
Figure 201



EM145AMM570180A.DGN

EFFECTIVITY: ALL
Inboard Flap Trailing Edge - Upper Skin - Fastener Mapping
Figure 202 - Sheet 1


EM145AMM570181A.DGN

EFFECTIVITY: ALL
Inboard Flap Trailing Edge - Upper Skin - Fastener Mapping
Figure 202 - Sheet 2

FASTENER MAPPING

- + EXISTING FASTENERS
- * MBF3006S-6-200
- diamond- MBF3006S-6-250
- # MBF3006S-6-150

VIEW D

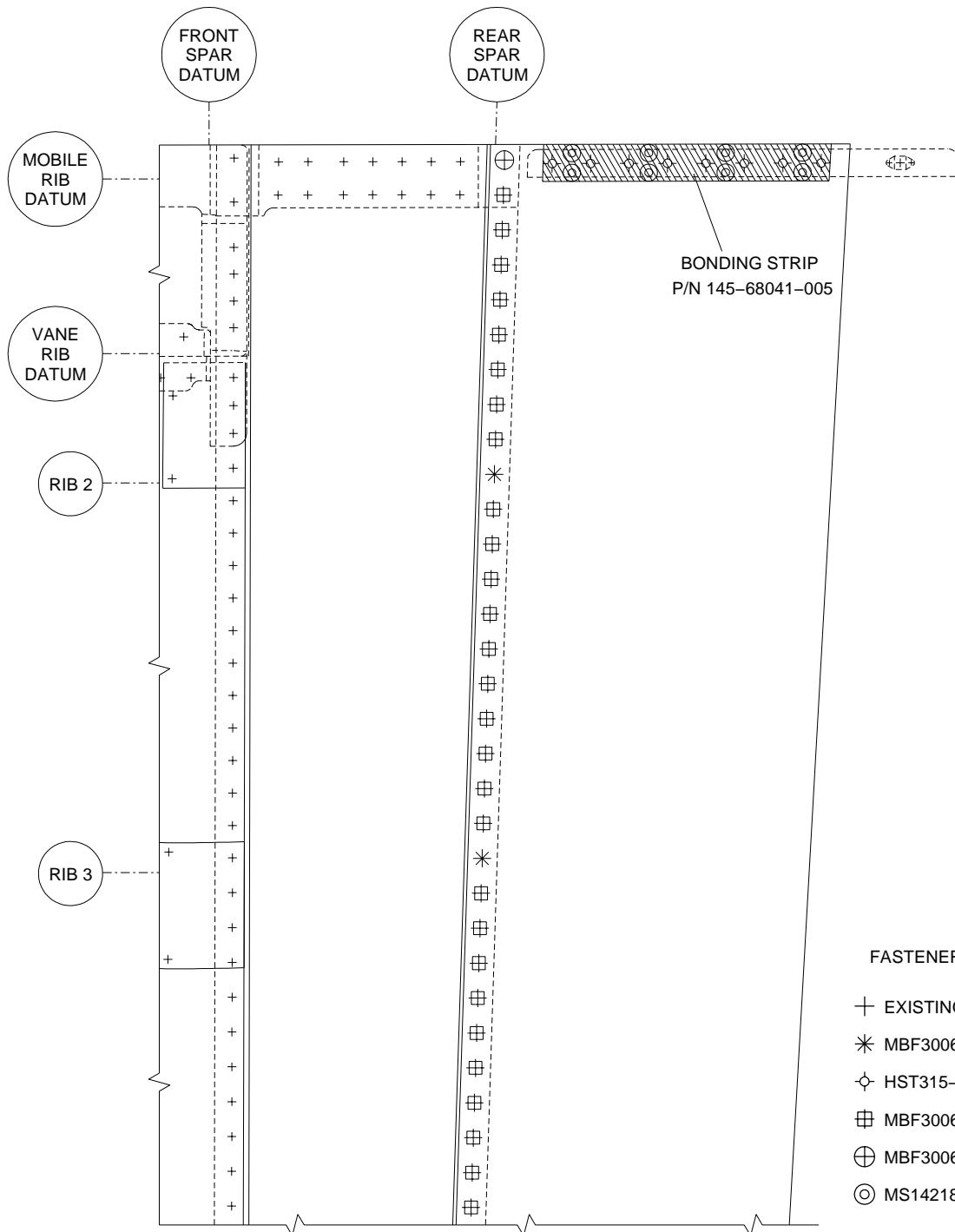
(VIEW LOOKING DOWN ON UPPER SKIN)

EM145AMM570182A.DGN

EFFECTIVITY: ALL

Inboard Flap Trailing Edge - Upper Skin - Fastener Mapping

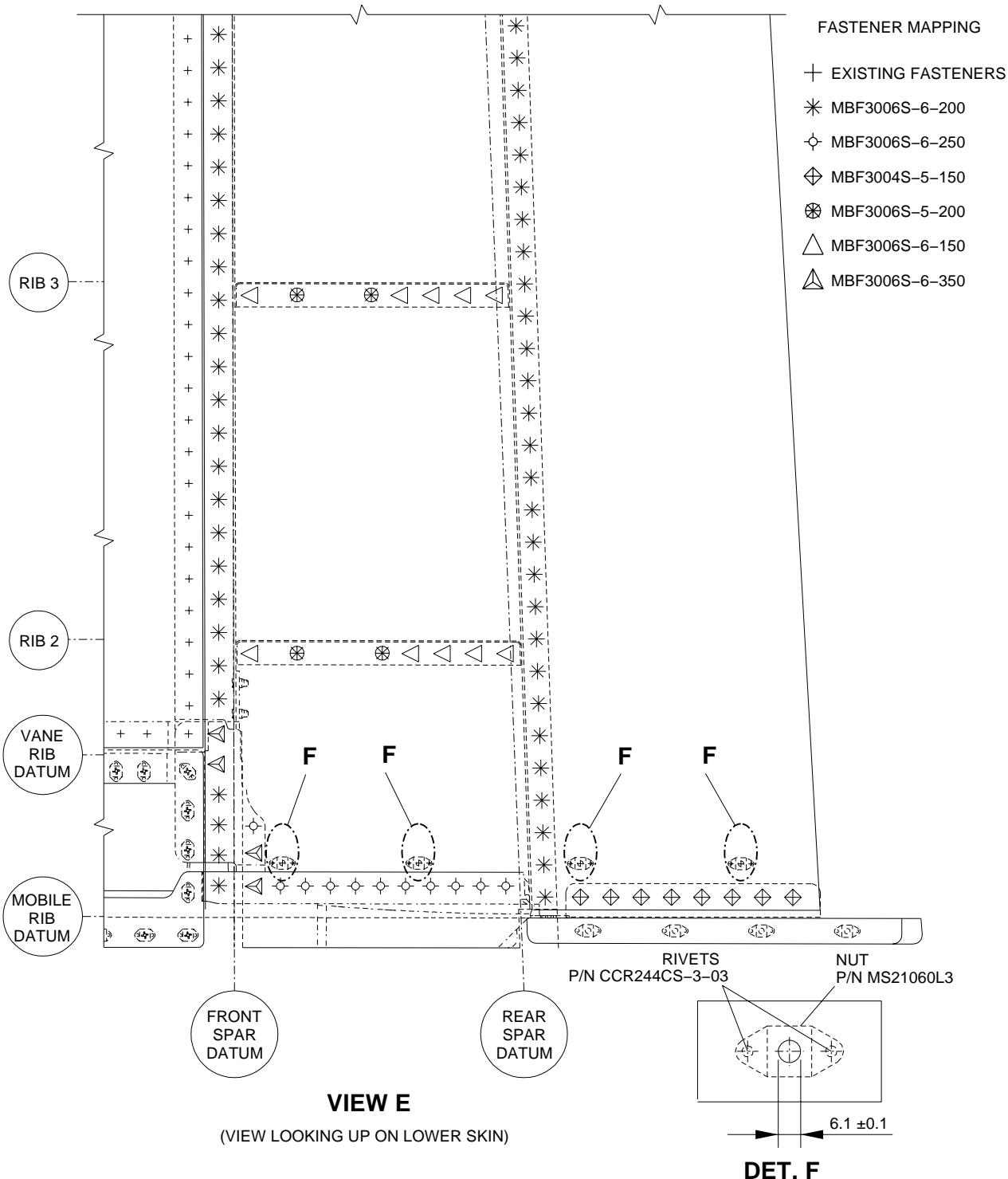
Figure 202 - Sheet 3



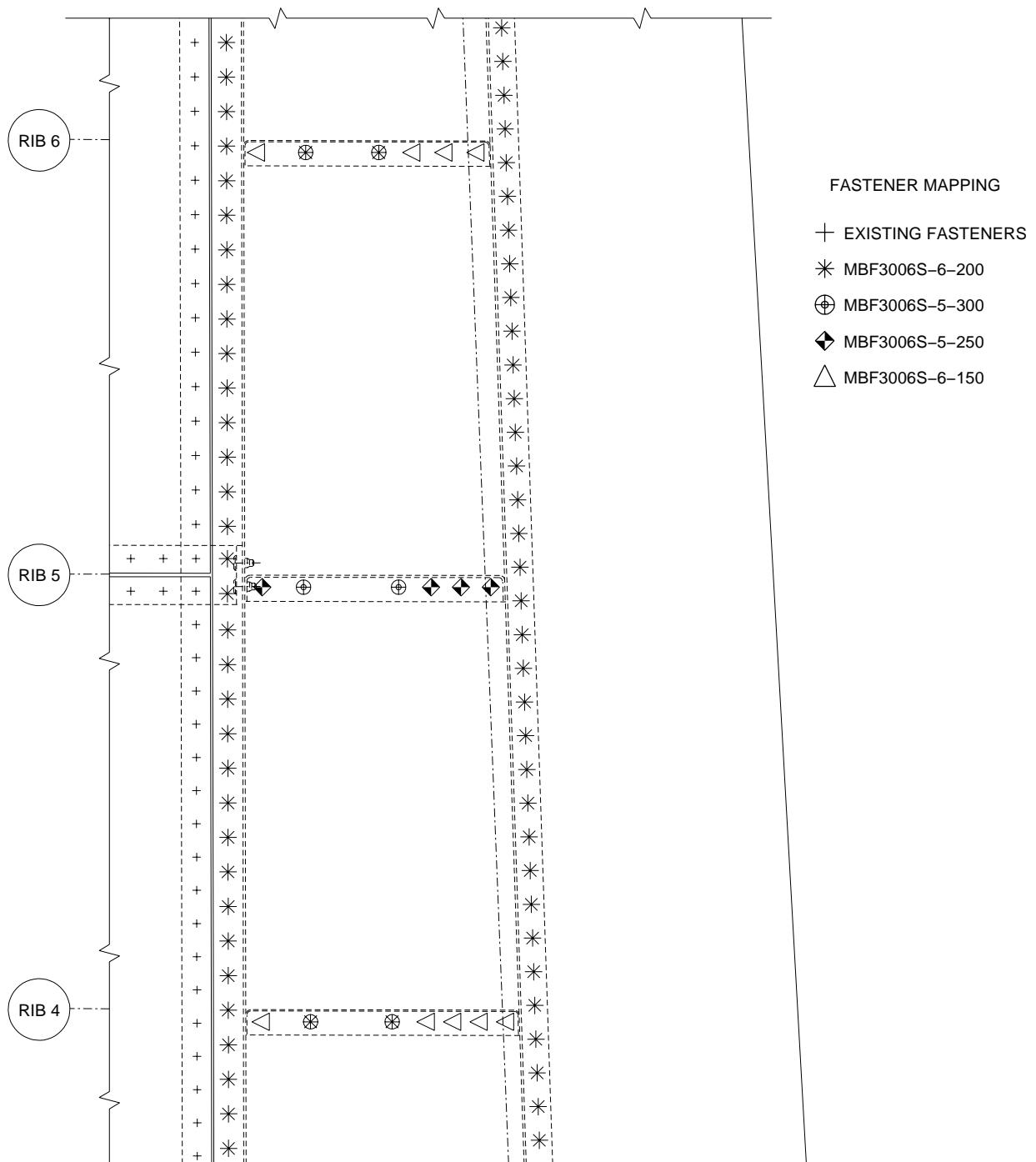
VIEW D

(VIEW LOOKING DOWN ON UPPER SKIN)

EM145AMM570183A.DGN

EFFECTIVITY: ALL
Inboard Flap Trailing Edge - Lower Skin - Fastener Mapping
Figure 203 - Sheet 1


EM145AMM570184A.DGN

EFFECTIVITY: ALL
Inboard Flap Trailing Edge - Lower Skin - Fastener Mapping
Figure 203 - Sheet 2

VIEW E

(VIEW LOOKING UP ON LOWER SKIN)

EM145AMM570185A.DGN

EFFECTIVITY: ALL

Inboard Flap Trailing Edge - Lower Skin - Fastener Mapping

Figure 203 - Sheet 3

