Figure 1 - Deleted

EFFECTIVITY
MODEL: 707/720
SSI DOCUMENT (D6-44860)
REFERENCE:
SSD 54-A00-01
54-A10-01
54-A20-01
54-A30-01
54-A40-01
SERVICE BULLETIN
REFERENCE: A3364

PART 6 - EDDY CURRENT

NACELLES - ATTACH FITTINGS

1. Purpose

. To detect cracks in the diagonal brace end fitting lugs, the aft drag support fitting lugs, and the attachment flange of the lower spar fittings on inboard and outboard nacelles.

2. Equipment

A. Instrument - Refer to Part 6, 51-00-00, Fig. 4.

B. Probes - Straight and right angle shielded pencil probes per Part 6, 51-00-00, Fig. 4.

(1) P/N P-50 Straight, P/N P-907-50 Right angle, NDT Product Engineering

(2) P/N VM 100PS Straight, P/N VM 100AS right angle, VM Products

C. Reference Standard - Refer to Part 6, 51-00-00, Fig. 4.

NOTE: Refer to part 1, 51-06-00, par. 7 for information on equipment manufacturers.

3. Preparation for Inspection

A. Remove strut access panels, trailing edge fairing and aft sailboat fairing.

B. Remove diagonal brace coupling pins for access to lugs.

C. Remove sealant from the lower spar fitting attachment flange as necessary for inspection.

D. Clean inspection surfaces.

Nacelle Diagonal Brace
Lower Spar Support and Fitting Lugs
Figure 2 (Sheet 1)

4. Instrument Calibration

Refer to Part 6, 51-00-00, Fig. 4.

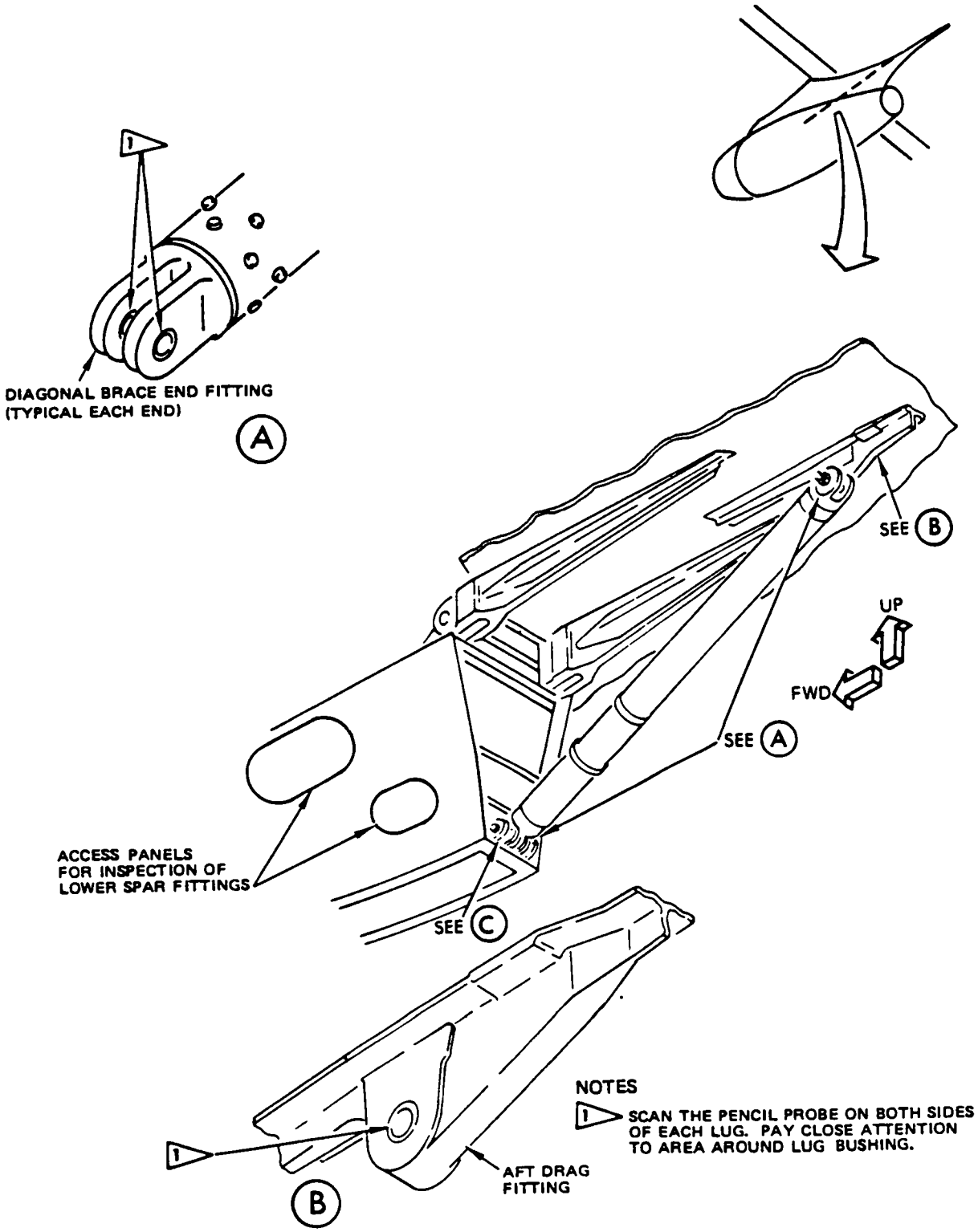
5. Inspection Procedure

Scan inspection locations specified in Detail I per Part 6, 51-00-00, Fig. 4.

6. Inspection Results

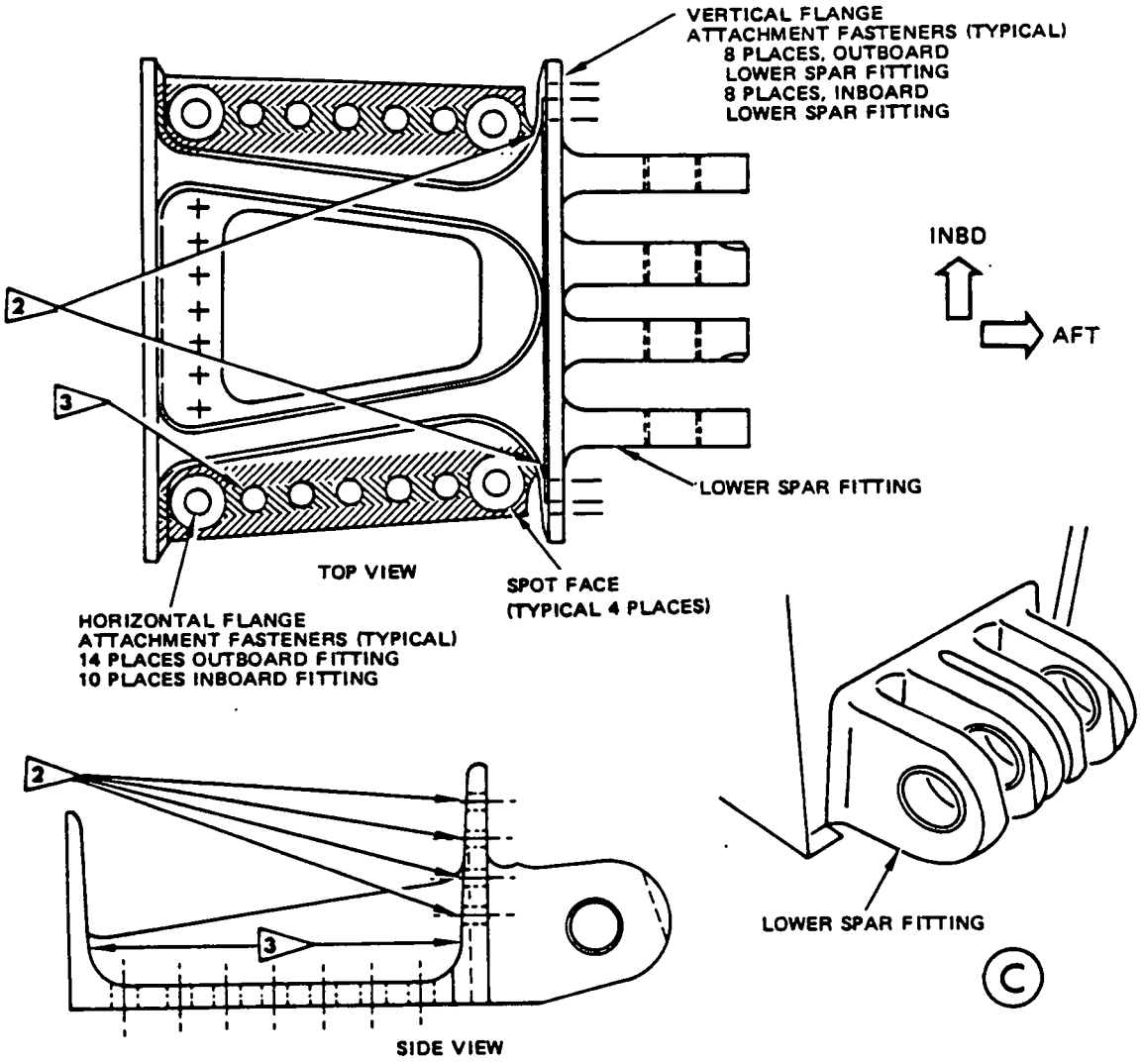
A. A rapid meter movement occurring as probe is moved over a short distance is a potential crack indication and further investigation is required.

B. Refer to Part 6, 51-00-00, Fig. 4.



INBOARD AND OUTBOARD NACELLE STRUT DIAGONAL BRACE
DETAIL I

Nacelle Diagonal Brace, Lower Spar Support and Fittings Lugs
Figure 2 (Sheet 3)



NOTES

- OUTBOARD LOWER SPAR FITTING SHOWN, INBOARD SIMILAR

INSPECTION AREA

2 SCAN PENCIL PROBE ON FWD SIDE OF VERTICAL FLANGE OF LOWER SPAR FITTING AROUND INDICATED FASTENERS.

3 SCAN PENCIL PROBE ON UPPER SIDE OF HORIZONTAL FLANGE OF LOWER SPAR FITTING AROUND ATTACHMENT FASTENERS.

INBOARD AND OUTBOARD NACELLE STRUT DIAGONAL BRACE
DETAIL I (CONT)

Nacelle Diagonal Brace, Lower Spar Support and Fitting Lugs
Figure 2 (Sheet 4)

EFFECTIVITY
MODEL: 707/720
SERVICE BULLETIN
REFERENCE: SB A3364
SSI DOCUMENT (D6-44860)
REFERENCE:
SSD 54-A05-01
54-A15-01
54-A25-01
54-A35-01
54-A45-01

PART 6 - EDDY CURRENT

NACELLES - ATTACH FITTINGS

1. Purpose

To detect cracks in the diagonal brace attachments, lower spar fittings and aft drag support fittings using high frequency eddy current.

2. Equipment

A. For surface eddy current inspection, refer to Part 6, 51-00-00, Fig. 4.

B. For bolt hole inspection, refer to Part 6, 51-00-00, Fig. 1.

3. Preparation for Inspection

A. Remove the inboard and outboard nacelle strut diagonal brace fairings per operator's standard procedure to obtain access to the brace end fittings and mating fittings.

B. Support the weight of the airplane on jacks at wing and body Jack Points I, II and VI per operator's standard procedure (Ref. 707/720 Structural Repair Manual Subject 51-6-1).

C. With airplane stabilized on jacks, support the weight of the engine and strut to remove all shear load from the brace coupling pins. If engine has been removed for any reason, support the weight of the nacelle strut.

D. Remove the brace coupling pins and the fasteners attaching the end fittings to the brace tube and remove the fittings from the tube.

E. Prepare inspection surfaces per Part 6, 51-00-00, Fig. 1 and 4, as applicable.

4. Instrument Calibration

A. For surface eddy current inspection, refer to Part 6, 51-00-00, Fig. 4.

B. For bolt hole inspection, refer to Part 6, 51-00-00, Fig. 1.

Nacelle Strut Diagonal Brace Attachments
Figure 3 (Sheet 1)

5. Inspection Procedure

A. Inspect fittings per Detail 1.

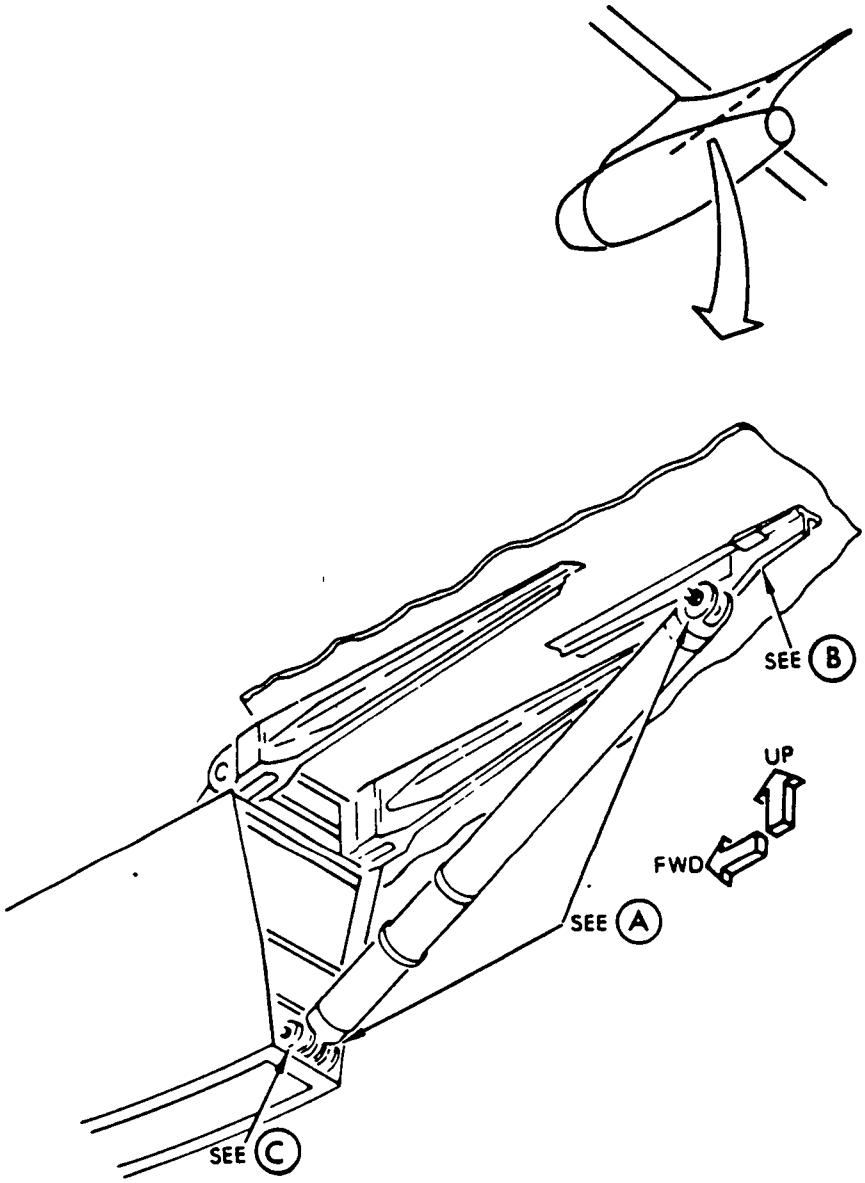
B. Perform inspection scans per Part 6, 51-00-00, Fig. 1 and 4, as applicable.

6. Inspection Results

A. A rapid meter movement occurring as probe is moved over a short distance is a potential crack indication and further investigation is required.

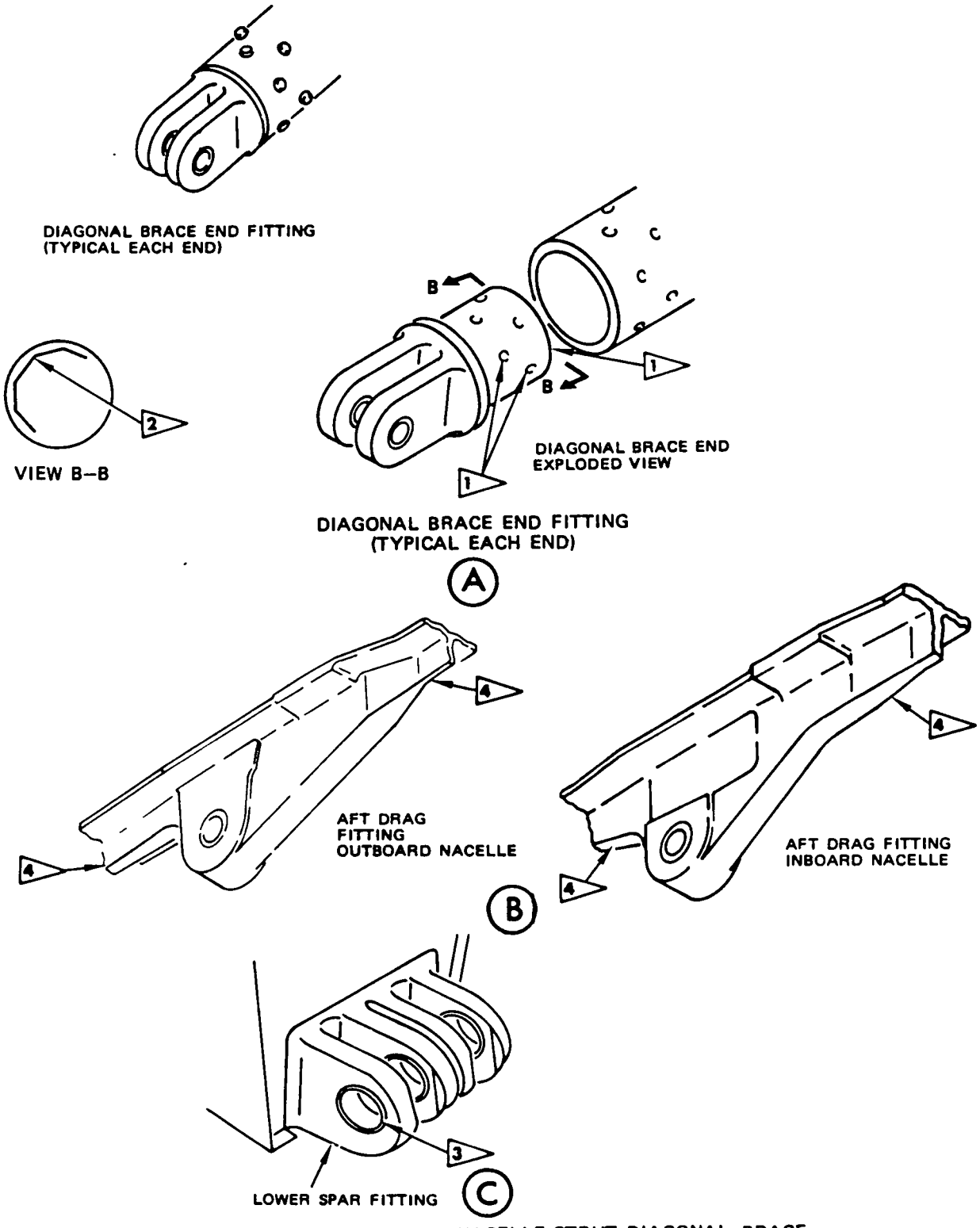
B. Refer to Part 6, 51-00-00, Fig. 1 and 4, as applicable.

Nacelle Strut Diagonal Brace Attachments
Figure 3 (Sheet 2)



INBOARD AND OUTBOARD NACELLE STRUT DIAGONAL BRACE
DETAIL I

Nacelle Strut Diagonal Brace Attachments
Figure 3 (Sheet 3)



INBOARD AND OUTBOARD NACELLE STRUT DIAGONAL BRACE
DETAIL I (CONT)
Nacelle Strut Diagonal Brace Attachments
Figure 3 (Sheet 4)

NONDESTRUCTIVE TEST

NOTES

1. ACCOMPLISH A HIGH FREQUENCY EDDY CURRENT INSPECTION OF THE FITTING ATTACH HOLES, USING A HOLE PROBE.

2. INSPECT CIRCULAR END OF THE FITTING, USING A SURFACE PROBE. PAY PARTICULAR ATTENTION TO THE THINNER PORTIONS OF THE TUBULAR END AT THE INTERSECTIONS OF THE FLAT AREAS OF THE FITTING INTERIOR.

3. AT THE FORWARD MATING FITTING IN THE NACELLE STRUT, ACCOMPLISH A HIGH FREQUENCY EDDY CURRENT INSPECTION FOR CRACKS IN THE EDGES OF THE LUG HOLES, USING A SURFACE PROBE.

4. AT THE AFT MATING FITTING ON THE LOWER SURFACE OF THE WING, EDDY CURRENT INSPECT THE VERTICAL WEBS FOR CRACKS AT THE FORWARD WEB RADIUS WHERE THE WEB MEETS THE FITTING LUG AND THE AFT WEB WHERE THE WEB ANGLE CHANGES OR THE WEB THICKNESS CHANGES.

Nacelle Strut Diagonal Brace Attachments
Figure 3 (Sheet 5)