EFFECTIVITY:
MODEL: 707/720
SSI DOCUMENT (D6-44860)
SSD REFERENCE:
57-A00-13
57-A10-13
57-A20-13
57-A30-13
57-A40-13

PART 6 - EDDY CURRENT

WINGS - ATTACH FITTINGS

1. Purpose

   A. To detect surface cracks in the engine nacelle inboard support fittings at fastener holes common to the front spar lower chord.

   B. This inspection requires wing tank entry. Fuel tank must be drained and purged to a "health safe" condition (as defined by Chapter 28 of the Maintenance Manual) before entering tank with an eddy current instrument. The eddy current instrument must be battery powered.

      NOTE: Approval for operating eddy current equipment in a fuel tank with the conditions stated above must be obtained from local Airline/Airport fire department.

2. Equipment

   A. Instrument - Any eddy current instrument that satifies the requirements of this procedure is acceptable. Refer to Part 6, 51-00-00, Figure 4 for instrument.

   B. Probes - Shielded pencil probes per Part 6, 51-00-00, Figure 4.

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

3. Preparation for Inspection

   A. Drain and purge wing fuel cells to allow fuel tank entry with eddy current instrument.

   B. Gain access to nacelle inboard support fittings through underwing fuel cell access panels.

   C. Remove sealant as necessary to inspect.

4. Instrument Calibration

   A. Calibrate per Part 6, 51-00-00, Figure 4.

Nacelle Inboard Support Fittings
Figure 1 (Sheet 1)

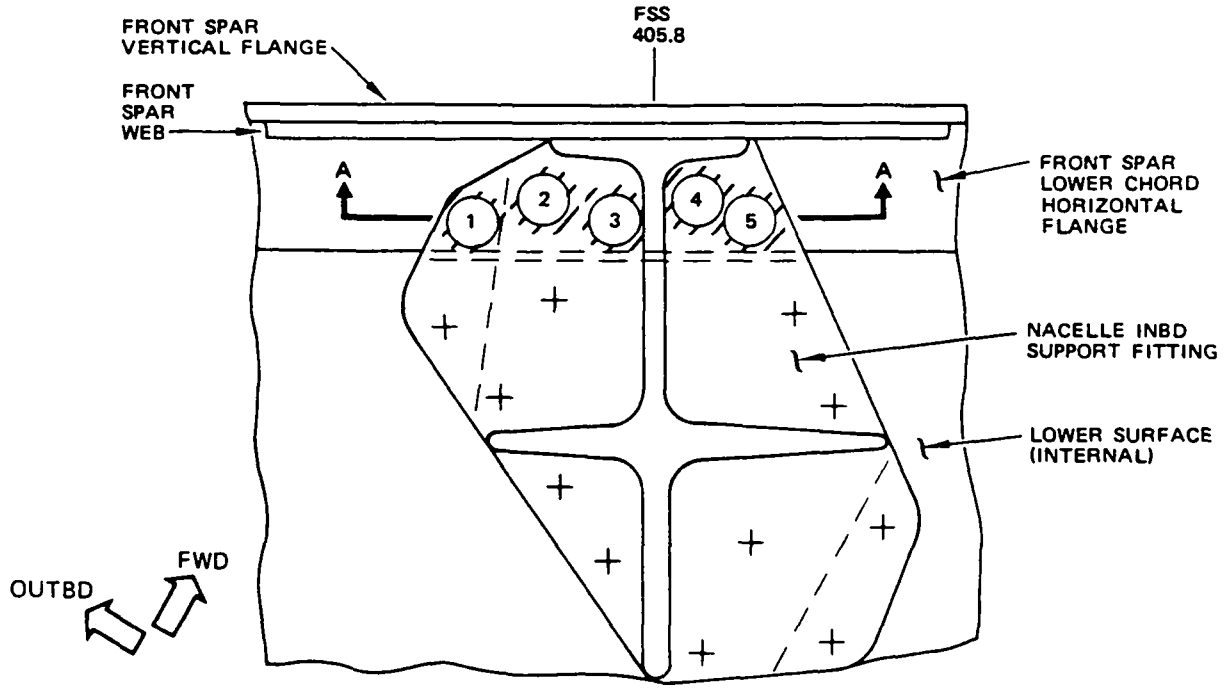
5. Inspection Procedure

A. Refer to Details I and II for inspection locations.

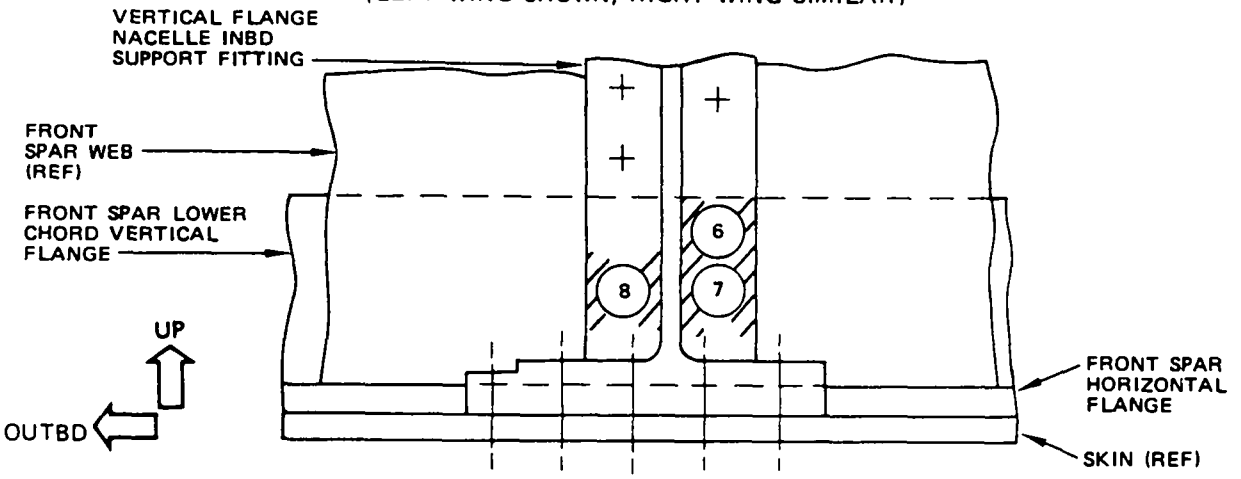
WARNING: PRECAUTIONS AND SAFETY PROCEDURES CONTAINED IN CHAPTER 28 OF THE MAINTENANCE MANUAL MUST BE FOLLOWED BY PERSONNEL ENTERING ANY TANK THAT HAS CONTAINED FUEL. POSSIBILITY OF EXPLOSION AND TOXIC DANGER EXISTS IN VICINITY OF FUEL TANKS WHICH HAVE CONTAINED FUEL.

B. Inspect support fittings at fastener holes common to front spar chord vertical and horizontal flanges per Part 6, 51-00-00, Figure 4.

Nacelle Inboard Support Fittings
Figure 1 (Sheet 2)



PLAN VIEW
(LEFT WING SHOWN, RIGHT WING SIMILAR)



SECTION A–A (REAR VIEW)

NOTES

- PLACE PENCIL PROBE ON FITTING SCAN AROUND FASTENERS COMMON TO FRONT SPAR AND SUPPORT FITTINGS.

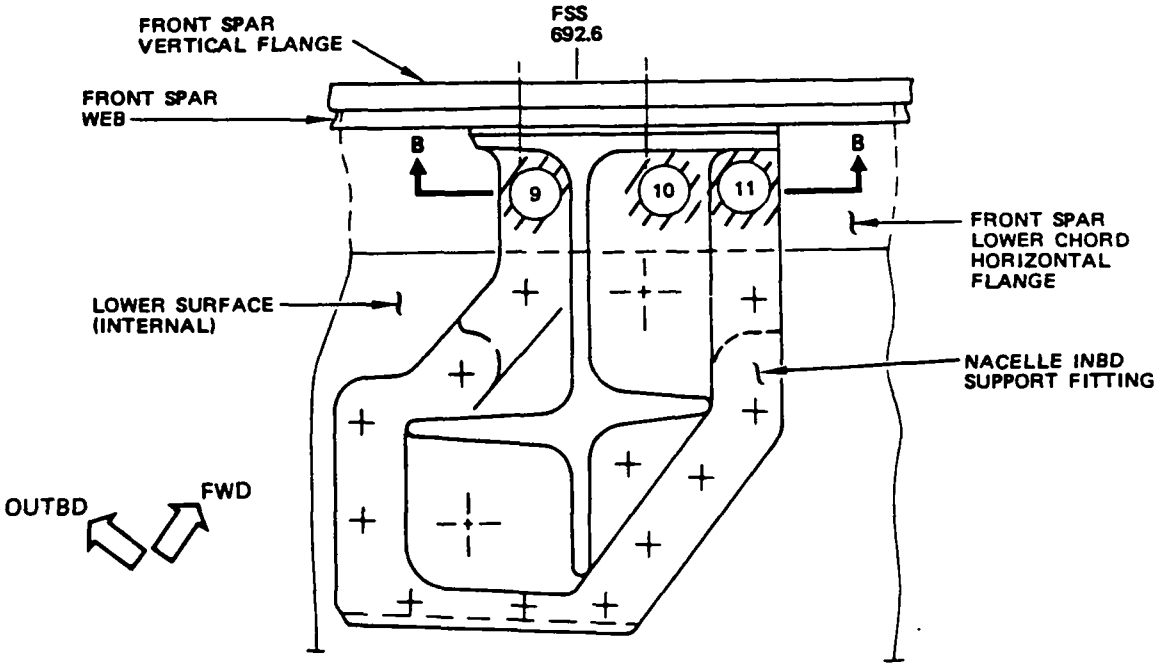
/// INSPECTION AREA

(6) INSPECTION FASTENER

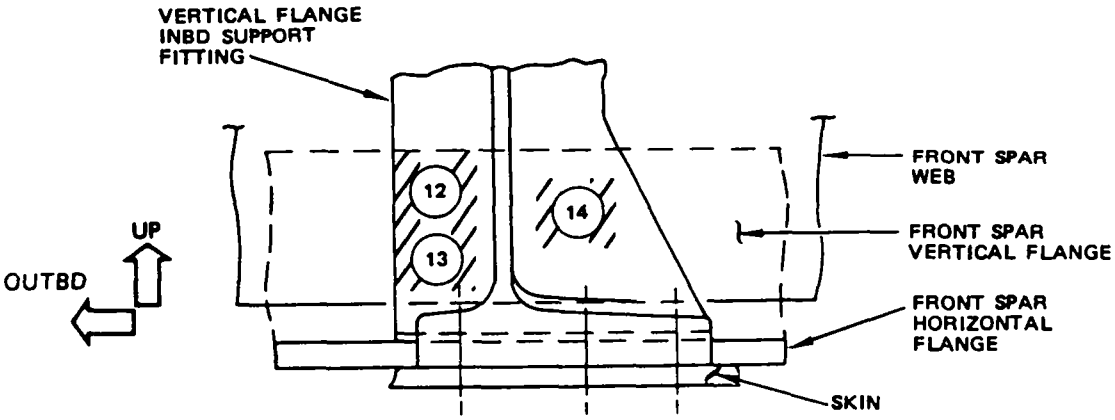
NACELLE INBOARD SUPPORT FITTING – INBOARD NACELLES
DETAIL I

Nacelle Inboard Support Fittings
Figure 1 (Sheet 2A)

NONDESTRUCTIVE TEST



PLAN VIEW



SECTION B–B (REAR VIEW)

NOTES

- LEFT WING SHOWN, RIGHT WING SIMILAR
- PLACE PENCIL PROBE ON INBOARD SUPPORT FITTING SCAN AROUND FASTENERS COMMON TO SPAR AND FITTING

/// INSPECTION AREA

(12) INSPECTION FASTENER

NACELLE INBOARD SUPPORT FITTINGS – OUTBOARD NACELLES
DETAIL II

Nacelle Inboard Support Fittings
Figure 1 (Sheet 3)

EFFECTIVITY
MODEL: 707/720 SERVICE BULLETIN REFERENCE: SB 3366 SSI DOCUMENT (D6-44860) REFERENCE: SSD 57-A05-16 57-A15-16 57-A25-16 57-A35-16 57-A45-16

PART 6 - EDDY CURRENT

WING - ATTACH FITTINGS

1. Purpose

   A. To inspect the inboard and outboard nacelle outboard support fittings for surface cracks using high frequency eddy current.

2. Equipment

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

3. Preparation For Inspection

   A. Gain access to nacelle support fittings at each inboard and outboard engine strut by removing panels from outboard upper corner of struts.

   B. Clean inspection surfaces.

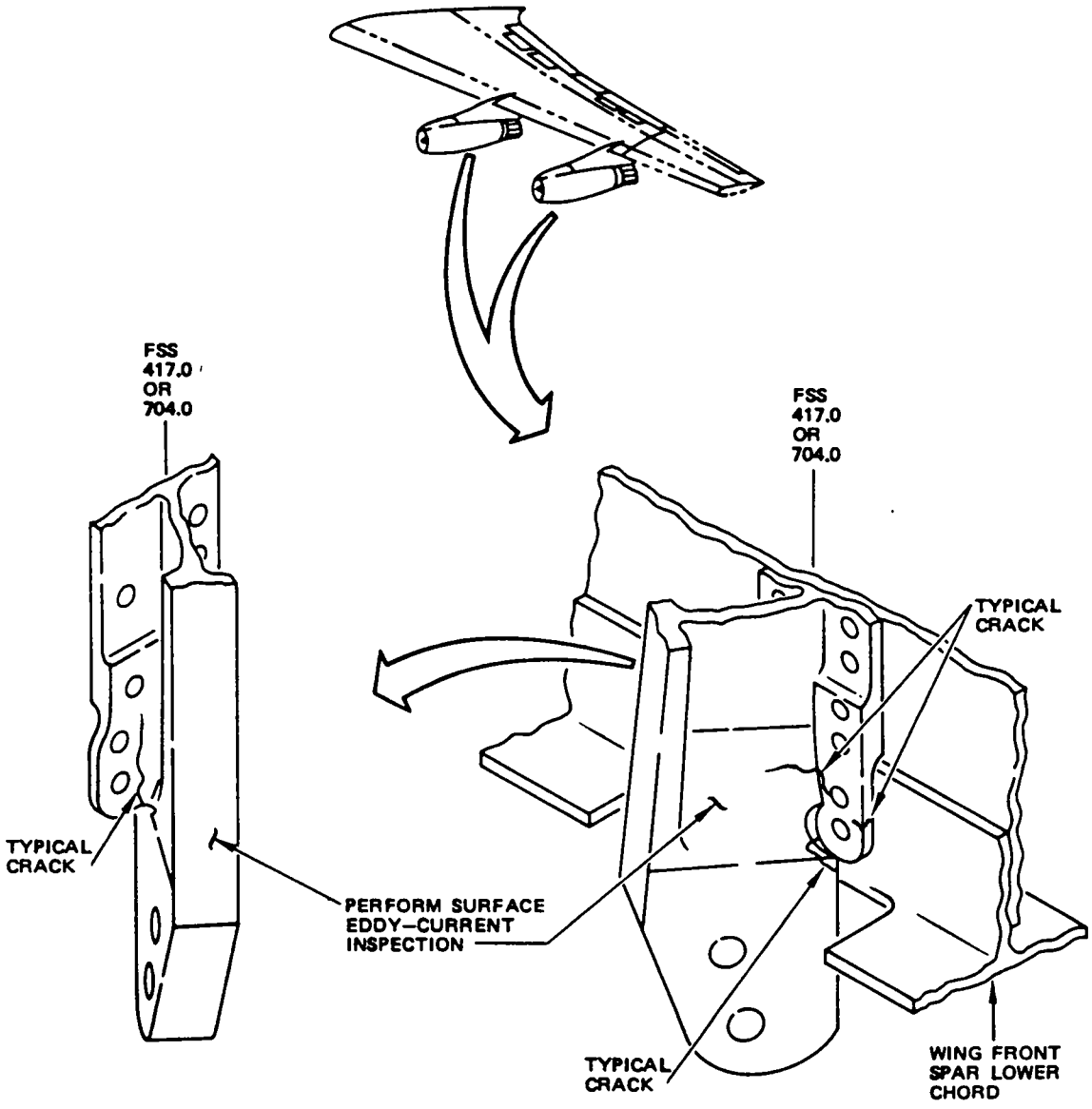
4. Instrument Calibration

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

5. Inspection Procedure

   A. Inspect nacelle support fittings for cracks per Detail I.

Nacelle Support Fitting
Figure 2 (Sheet 1)



NOTE

- LEFT WING SHOWN, RIGHT WING SIMILAR

SUPPORT FITTING INSPECTION
DETAIL I

Nacelle Inboard Support Fittings
Figure 2 (Sheet 2)

EFFECTIVITY
MODEL: 707/720
SERVICE BULLETIN REFERENCE: 1798, 2090, 3165, 3173
SSI DOCUMENT (D6-44860) REFERENCE:
SSD 57-A05-20
57-A15-20
57-A25-20
57-A35-20
57-A45-20

PART 6 - EDDY CURRENT

WING - ATTACH FITTINGS

1. Purpose

   To detect cracks initiating at the fairing clip and bracket attach holes of the overwing support fitting using high frequency eddy current. See Detail I for locations.

2. Equipment

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

   B. Probes - 90-degree-angle shielded pencil probe.

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

3. Preparation for Inspection

   A. Remove overwing support fitting fairings.

   B. Wipe inspection surface clean.

      NOTE: Not all overwing support fittings have clips or brackets attached.

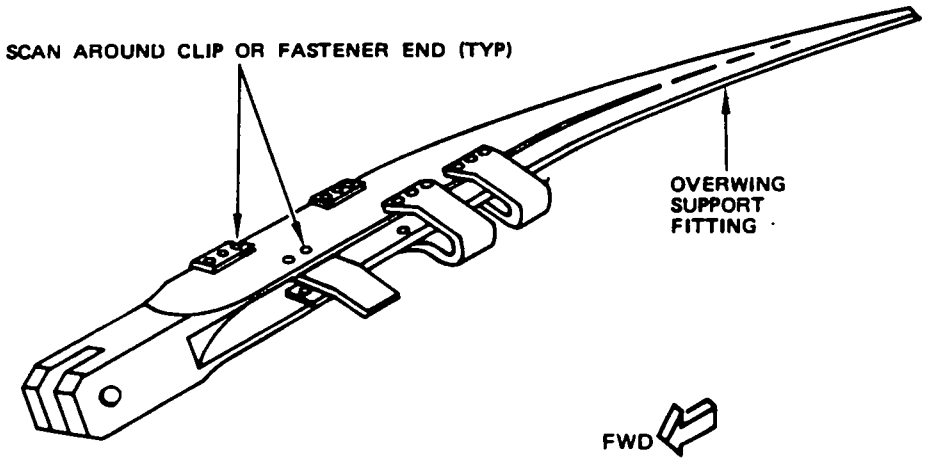
4. Instrument Calibration

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

5. Inspection Procedure

   A. Scan pencil probe on overwing support fitting flange around periphery of fairing clips and brackets. Scan support fitting flange around end of fasteners common to support fitting, clips and brackets.

Overwing Support Fitting at Clips and Brackets - Inboard and Outboard Nacelle Strut
Figure 3 (Sheet 1)



NOTE

- LEFT WING SHOWN
  RIGHT WING SIMILAR

TYPICAL CLIP AND BRACKET LOCATION
DETAIL I

Overwing Support Fitting at Clips and Brackets -
Inboard and Outboard Nacelle Strut
Figure 3 (Sheet 2)

EFFECTIVITY:
MODEL: 707/720 A/P'S THAT DO NOT HAVE OVERSIZED REPAIRED BOLT HOLES WITH BUSHING INSTALLED. SSI DOCUMENT (D6-44860) REFERENCE: 57-A05-17 57-A15-17 57-A25-17 57-A35-17 57-A45-17

PART 6 - EDDY CURRENT

WINGS - ATTACH FITTINGS

1. Purpose

To detect cracks in the overwing support fitting bolt hole forward of the front spar using low frequency eddy current.

2. Equipment

A. Surface inspection about fastener end.

(1) Instrument - Refer to Part 6, 51-00-00, Fig. 4.

(2) Probe - Shielded pencil probe per Part 6, 51-00-00, Fig. 4.

(3) Reference standard - Refer to Part 6, 51-00-00, Fig. 4.

B. Bolt hole inspection after fastener removal.

(1) Instrument - Part 6, 51-00-00, Fig. 1.

(2) Probe - Part 6, 51-00-00, Fig. 1.

(3) Reference standard - Part 6, 51-00-00, Fig. 1.

Overwing Support Fitting Attach Bolt Hole
Figure 4 (Sheet 1)

3. Preparation for Inspection

A. Surface inspection about fastener end.

(1) Remove overwing support fitting fairing (See Detail I).

(2) Clean surface around bolt head.

B. Bolt hole inspection.

(1) Remove overwing support fitting fairing (See Detail I).

(2) Remove bolt.

NOTE: If bushing is present eddy current inspect around bushing with surface probe.

(3) Clean inspection surface. If hole surface is rough a clean-up ream may be necessary.

4. Instrument Calibration

A. Surface - Refer to Part 6, 51-00-00, Fig. 1.

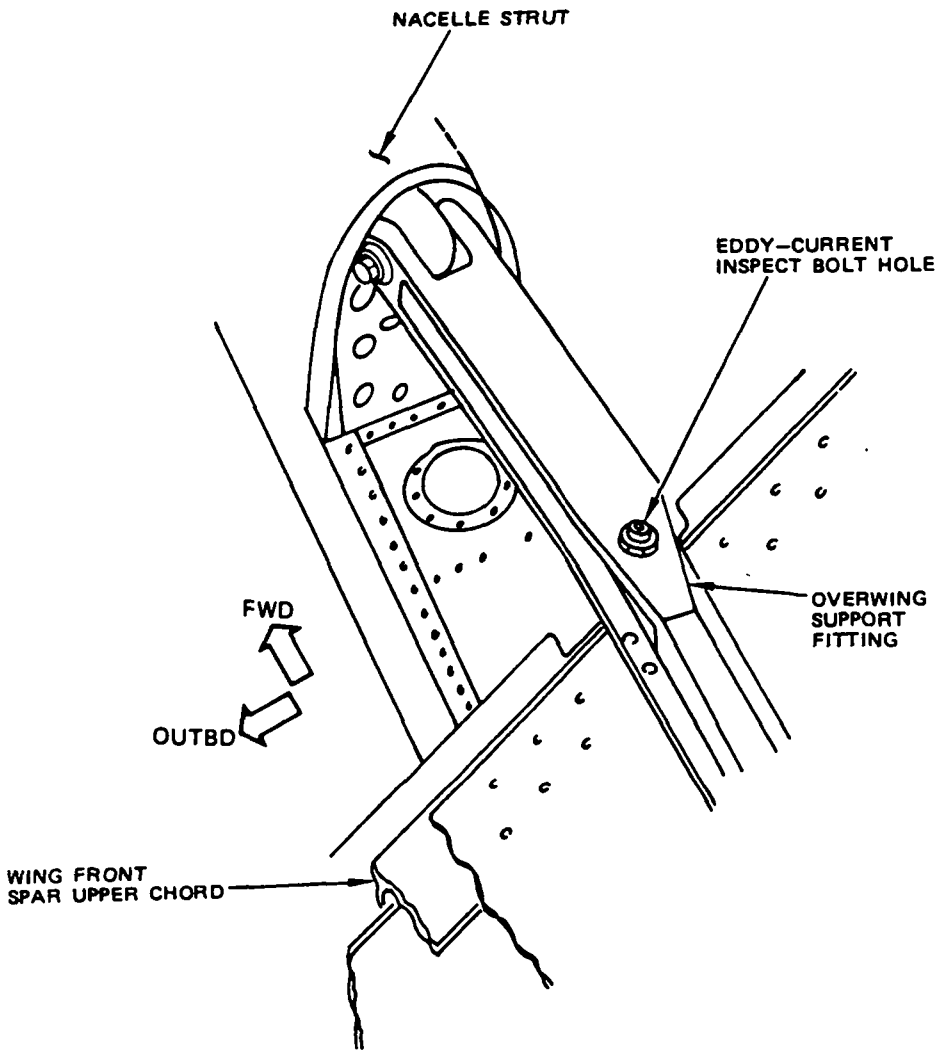
5. Inspection Procedure

A. Surface

(1) Scan around bolt head.

B. Bolt hole.

(1) Inspect bolt hole in overwing support fitting per Part 6, 51-00-00, Fig. 1.



OVERWING SUPPORT FITTING
ATTACH BOLT HOLE

DETAIL I

Overwing Support Fitting Attach Bolt Hole
Figure 4 (Sheet 3)

PART 6 - EDDY CURRENT

WINGS - ATTACH FITTINGS

1. Purpose

   A. To perform a surface high frequency eddy current inspection to detect cracks in the wing front and rear spar terminal fitting around the bottle pin boss.

2. Equipment

   A. Instrument - Any eddy current instrument that will satisfy the requirements of this procedure is acceptable. The following was used during the development of this procedure and found suitable.

      (1) ED 520
      Magnaflux Corp.
      6800 E. Washington Blvd.
      Los Angeles, CA 90049

   B. Probes - Any 1/8-inch diameter straight shielded pencil probe per Part 6, 51-00-00, Fig. 4 is acceptable. The following were used to develop this procedure.

NDT Products	VM Products
P.O. Box 423	7420 Park Ave. No. 20
Renton, Wa 98057	Tacoma, Wa 98408
P/N MP-50	P/N VM-100-PS

   C. Reference Standard

      (1) Refer to Part 6, 51-00-00, Fig. 4.

3. Prepare for Inspection

   A. Remove lower wing-to-body fairing in the front spar area to gain access to the front spar bottle pin.

   B. Remove lower wing to body fairing in the rear spar area to gain access to the rear spar bottle pin.

Wing Terminal Fittings and Bottle Pins
Figure 5 (Sheet 1)

4. Instrument Calibration

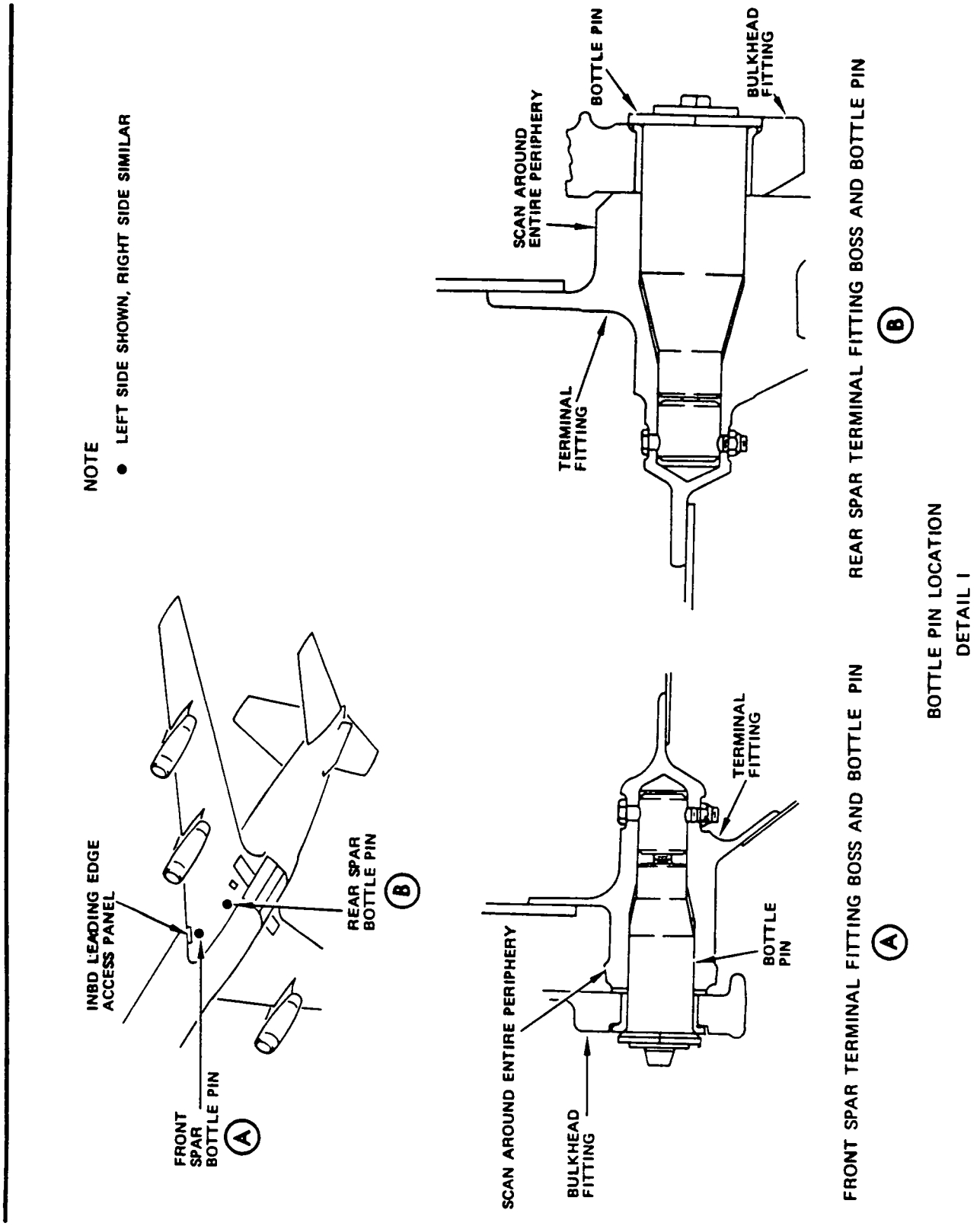
A. Refer to Part 6, 51-00-00, Fig. 4.

5. Inspection Procedure

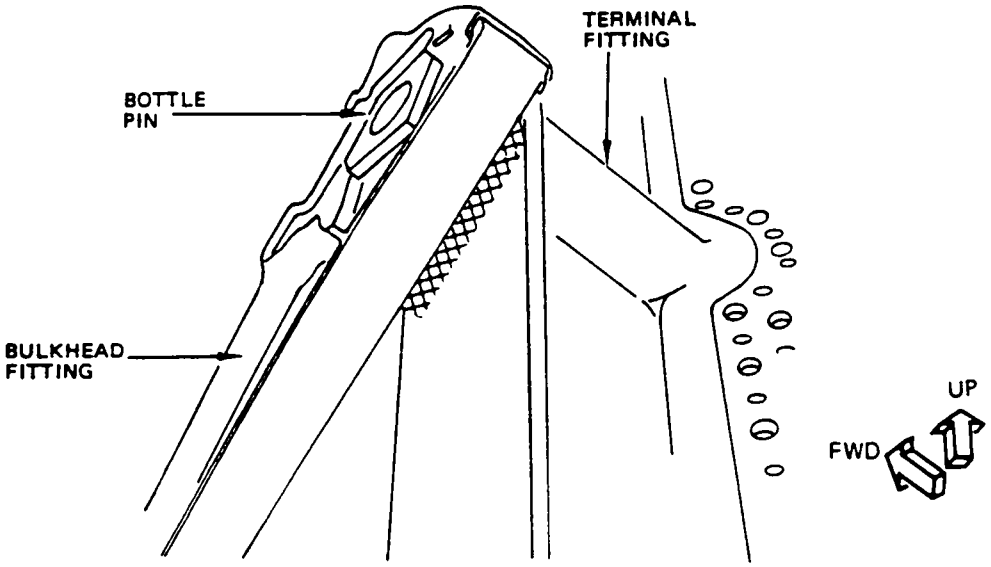
A. Scan the terminal fitting about the bottle pin boss. Scan completely around the terminal fitting. Visually inspect carefully while scanning the area. See Details I and II.

NOTE: When access around the bottle pin boss becomes difficult, scan around obstruction keeping the probe on the terminal fitting.

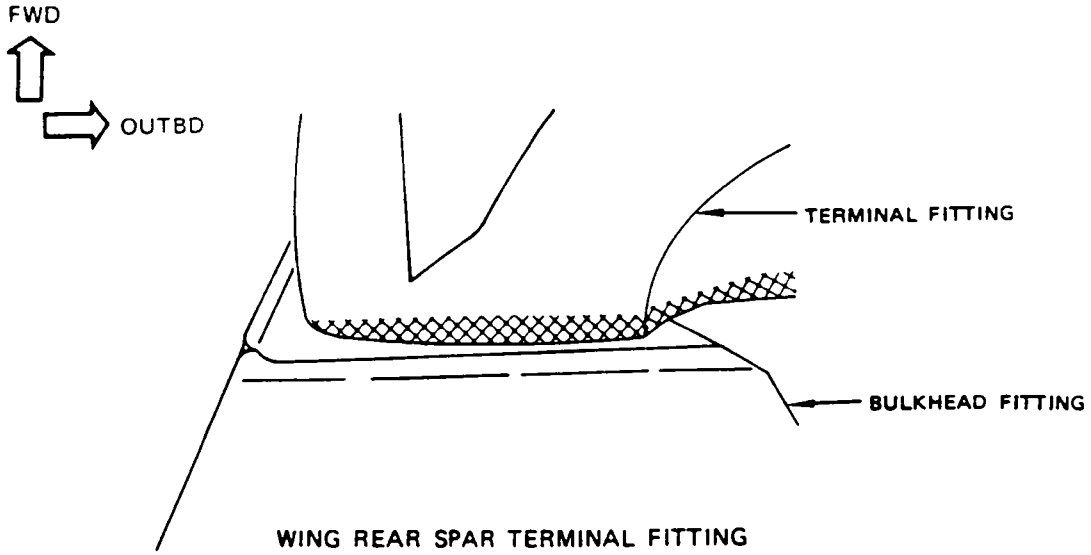
Wing Terminal Fittings and Bottle Pins
Figure 5 (Sheet 2)



Wing Terminal Fittings and Bottle Pins
Figure 5 (Sheet 3)



WING FRONT SPAR TERMINAL FITTING
(VIEW LOOKING INBOARD)



WING REAR SPAR TERMINAL FITTING
(VIEW LOOKING UP)

TERMINAL FITTINGS
INSPECTION AREA
DETAIL II

NOTE
XXXX INSPECTION AREA

Wing Terminal Fittings and Bottle Pins
Figure 5 (Sheet 4)