

TITLE

WINGS - WING STATION 48.00 RIB INSPECTION

EFFECTIVITY**MODEL**

525B (CJ3+)

SERIAL NUMBERS

-0451 thru -0455, -0457, -0460

NOTE: Facilities performing inspections to this service letter must conform to the requirements of Nondestructive Testing Manual Part 1, Personnel and Facilities.

REASON

The clips that attach WS 48.00 Rib to the skin and spars may not have the proper heat treatment.

DESCRIPTION

This service letter contains instructions to do an conductivity test on the clips on the WS 48.00 rib to verify heat treatment. All parts to be inspected should be ALCLAD 2024-T42, 0.063 inch thick. Any deviation would require contacting Citation Customer Service.

COMPLIANCE

MANDATORY. This service letter must be accomplished within 500 flight hours or one-year from the date of receipt, whichever occurs first.

LABOR HOURS

WORK PHASE	LABOR-HOURS
Inspection	2.0
Clip Replacement (includes paint)	5.0 per clip
Restoration	2.0

May 21, 2015

 SL525B-57-04
 Page 1 of 9

Cessna Aircraft Company, Cessna Customer Service, P.O. Box 7706, Wichita, KS 67277, U.S.A. 1-316-517-5800

This document contains technical data and is subject to U.S. export regulations. This information has been exported from the United States in accordance with export administration regulations. Diversion contrary to U.S. law is prohibited. ECCN: 9E991

MATERIAL AVAILABILITY

NEW P/N	QUANTITY	KEY WORD	OLD P/N	INSTRUCTIONS/ DISPOSITION
HL10VBJ5-3	As Required	Pin	Same	Discard
HL10VBJ5-4	As Required	Pin	Same	Discard
HL11VBJ5-9	As Required	Pin	Same	Discard
HL19PB5-6	As Required	Pin	Same	Discard
HL19PB5-9	As Required	Pin	Same	Discard
HL19PB5-12	As Required	Pin	Same	Discard
HL70-5	As Required	Collar	Same	Discard
CM3873AD5-6	As Required	Rivet	Same	Discard
6321385-2	As Required	Clip (Forward Upper)	Same	Discard
6321385-4	As Required	Clip (Forward Lower)	Same	Discard
6321385-6	As Required	Clip (Mid Lower)	Same	Discard
6321385-10	As Required	Clip (Aft Lower)	Same	Discard
6321385-14	As Required	Clip (Aft of Main Spar Lower)	Same	Discard
6321385-20	As Required	Clip (Aft Upper)	Same	Discard

* Please contact Textron Aviation Parts & Distribution for current cost and availability of parts listed in this service letter. Phone at 1-800-835-4000 (Domestic) or 1-316-517-7542 (International). Send Email to: dirup@txtav.com or telefax at 1-316-517-7711.

Based on availability and lead times, parts may require advanced scheduling.

CONSUMABLE MATERIAL

You must use the consumable materials that follow, or their equivalent, to complete this service letter.

NAME	NUMBER	MANUFACTURER	USE
Sealant (Type IB)	U470641	Textron Aviation Parts & Distribution 7121 Southwest Boulevard Wichita, KS 67215	To seal the fasteners.
Color Chemical Film	U074093	Textron Aviation Parts & Distribution 7121 Southwest Boulevard Wichita, KS 67215	To prepare aluminum surface for intermediate primer.
Corrosion Resistant Primer	K000574	Textron Aviation Parts & Distribution 7121 Southwest Boulevard Wichita, KS 67215	Final finish for aluminum.
Corrosion Resistant Primer	K000926	Textron Aviation Parts & Distribution 7121 Southwest Boulevard Wichita, KS 67215	Final finish for aluminum in a fuel environment.

TOOLING

NAME	NUMBER	MANUFACTURER	USE
Eddy Current Device	Direct reading 60 kHz	Commercially Available	To measure conductivity of the aluminum clips.
Eddy Current Probe	With flat contact surface and not larger than 0.50 inch diameter	Commercially Available	
Calibration Reference Standard	25% to 32% IACS	Commercially Available	
Calibration Reference Standard	38% to 60% IACS	Commercially Available	

NOTE: The eddy current instrument must be a direct reading unit and used at 60 kHz. The instrument must be capable of the following:

- Accuracy within + or - 0.5% IACS
- Display changes within 0.5% IACS or less
- Instrument must be able to demonstrate less than a 0.5% IACS change when measuring through non conductive coatings of at least 0.003 (0.08 mm) inch and up to the limit established by the manufacturer.

NOTE: Calibration Reference Standards must be NIST traceable and certified accurate within + or - 0.85% IACS.

WARRANTY

Eligibility: Citations identified within the serial number effectivity of this service letter which are within the five-year/5,000 hour warranty period on the original issue date of this service letter.

Parts Coverage: Cessna-owned and Cessna-authorized Service Facilities, operators, or other maintenance facilities may submit a Citation Claim Form for the parts required to accomplish this service letter.

Labor Coverage: Cessna-owned and Cessna-authorized Service Facilities may submit a Citation Claim Form for the labor necessary to accomplish this service letter. Please note Labor Hours Requirements for coverage guidelines.

Credit Application: All work must be completed and the Citation Claim Form submitted before the date shown below. Send the Citation Claim Form, along with any required parts (see Material Availability), to the point of purchase.

Parts to be returned to Textron Aviation Parts & Distribution should be forwarded to:

Textron Aviation Parts & Distribution
Warranty Administration
7121 Southwest Boulevard
Wichita, KS
USA 67215

Expiration: September 30, 2016

REFERENCES

Cessna Model 525B Maintenance Manual

Cessna Model 525A/525B Structural Repair Manual

Cessna Model 525A/525B Non-Destructive Testing Manual

CIL-20-01 *Standard Practices - Cessna Certification Of Nondestructive Testing Facilities/Personnel*

PUBLICATIONS AFFECTED

None

ACCOMPLISHMENT INSTRUCTIONS

1. Prepare the airplane for maintenance.
 - A. Make sure that the airplane is electrically grounded.
 - B. Make sure that all switches are in the OFF/NORM position.
 - C. Disconnect electrical power from the airplane.
 - (1) Disconnect the airplane batteries.
 - (2) Disconnect external electrical power.
 - D. Attach maintenance warning tags to the battery and external power receptacle that have "**DO NOT CONNECT ELECTRICAL POWER - MAINTENANCE IN PROGRESS**" written on them.
2. Prepare the airplane for inspection.
 - A. Defuel the airplane. (Refer to the Model 525B Maintenance Manual, Chapter 12, Fuel - Servicing.)
 - B. Remove access panels 611CB, 612CB, 621AB, and 621BB. (Refer to the Model 525B Maintenance Manual, Chapter 57, Wings Skin/Access plate - Maintenance Practices and Chapter 6, Access Plates and panels Identification - Description and Operation.)
3. (Refer to Figure 2.) Measure the conductivity of the identified clips with an Eddy Current instrument.

NOTE: Additional inspection information:

- Parts or material shall not be tested until the temperature of the probe, the standards, and the part or material has been allowed to equalize. The respective temperatures must stay equalized and constant throughout the test within 5°F (3°C) of each other.
- Parts to be inspected will have primer applied. There is no need to remove the primer to conduct this inspection.
- The areas to be tested shall be free of anything that would prevent the probe from being placed flat on the part and from making complete contact with the part surface.
- The surface of the part to which the conductivity measuring probe is applied shall be at least as large as the outside diameter of the probe.
- If the probe cannot be placed so that it does not hang over the edge of the part a smaller diameter probe must be used.
- The parts to be inspected are ALCLAD coated. Cladding has an effect on conductivity readings as compared to the bare metal values. Conductivity readings taken on clad material will not give "true" conductivity readings due to the influence of the cladding. However, readings can be correlated to true conductivity. These readings are called "apparent" conductivity because they include the results through the cladding and the true conductivity values.

- A. Calibrate the Eddy Current instrument.

NOTE: The instrument used must be certified and have a valid cal-cert label affixed to the instrument.

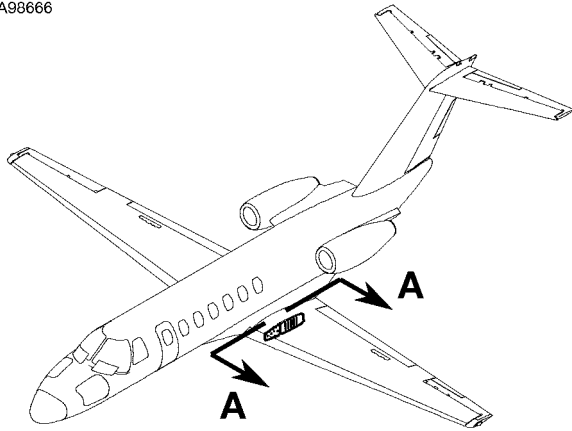
- (1) Calibrate the Eddy Current instrument in accordance with the manufacturer's instructions given in the Operator's Instruction Manual.
- (2) The instrument shall read the value of each reference standard used to calibrate within $\pm 0.5\%$ IACS.




- B. Do an inspection of the clips identified in Figure 1 to determine if they are of the proper heat treat condition.
- (1) Measure the conductivity of the identified clips with the Eddy Current instrument.
NOTE: The surface area of the part where the probe is placed must be at least as big as the surface area of the probe. The probe must be placed on a flat surface of the part and make complete contact.
 - (2) Acceptable apparent (value through the cladding) conductivity values for 2024-T42 0.063 inch thick is in the range of 29.2% to 33.8% IACS.
NOTE: If Cladding is removed, the conductivity values of bare 2024-T42 0.063 inch thick range between 27.5% to 34% IACS.
 - (3) Record the conductivity values in Figure 2.
 - (4) If the apparent value is outside of the acceptable range contact Team CJ at 1-855-832-9831, 1-316-517-7785, or TeamCJ@txtav.com.
4. (Refer to Figure 1.) Replace clips identified by TeamCJ.
- A. Place tact cloths in the fuel bay to catch metal shavings and other FOD.
CAUTION: Remove all metal shavings and FOD from the wing fuel tank. Failure to remove metal shavings and FOD from the wing fuel tank can damage the fuel pumps, clog the engine fuel filters, and cause false fuel level indications.
- B. Remove and replace the 6321385-2 Clip.
- (1) Remove and discard the 6321385-2 Clip.
 - (2) Put the 6321385-2 Clip into position and ream five holes to a diameter between 0.1625 and 0.1645 inch-diameter that align with the holes in the WS 48.00 Rib.
 - (3) Ream two holes to a diameter between 0.1625 and 0.1645 inch-diameter that align with the holes in the wing skin.
 - (4) Remove the clip and deburr the holes.
 - (5) Apply a fay seal where the 6321385-2 Clip contacts the wing skin and WS 48.00 Rib.
 - (6) Install one 6321385-2 Clip with five HL10VBJ5-3 Pins, two HL19PB5-6 Pins, and seven HL70-5 Collars.
- C. Remove and replace the 6321385-4 Clip.
- (1) Remove and discard the 6321385-4 Clip.
 - (2) Put the 6321385-4 Clip into position and match drill two Number 21 (0.159 inch-diameter) holes in the clip that align with the existing holes in the rib.
 - (3) Remove the clip and deburr the holes.
 - (4) Put the 6321385-4 Clip into position and ream five holes to a diameter between 0.1625 and 0.1645 inch-diameter to match the holes in the WS 48.00 Rib.
 - (5) Ream two holes to a diameter between 0.1625 and 0.1645 inch-diameter to match the holes in the wing skin.
 - (6) Remove the clip and deburr the holes.
 - (7) Apply a fay seal where the 6321385-4 Clip contacts the wing skin and WS 48.00 Rib.
 - (8) Install one 6321385-4 Clip with two CM3873D5-6 Rivets, five HL10VBJ5-3 Pins, two HL19PB5-6 Pins, and seven HL70-5 Collars.

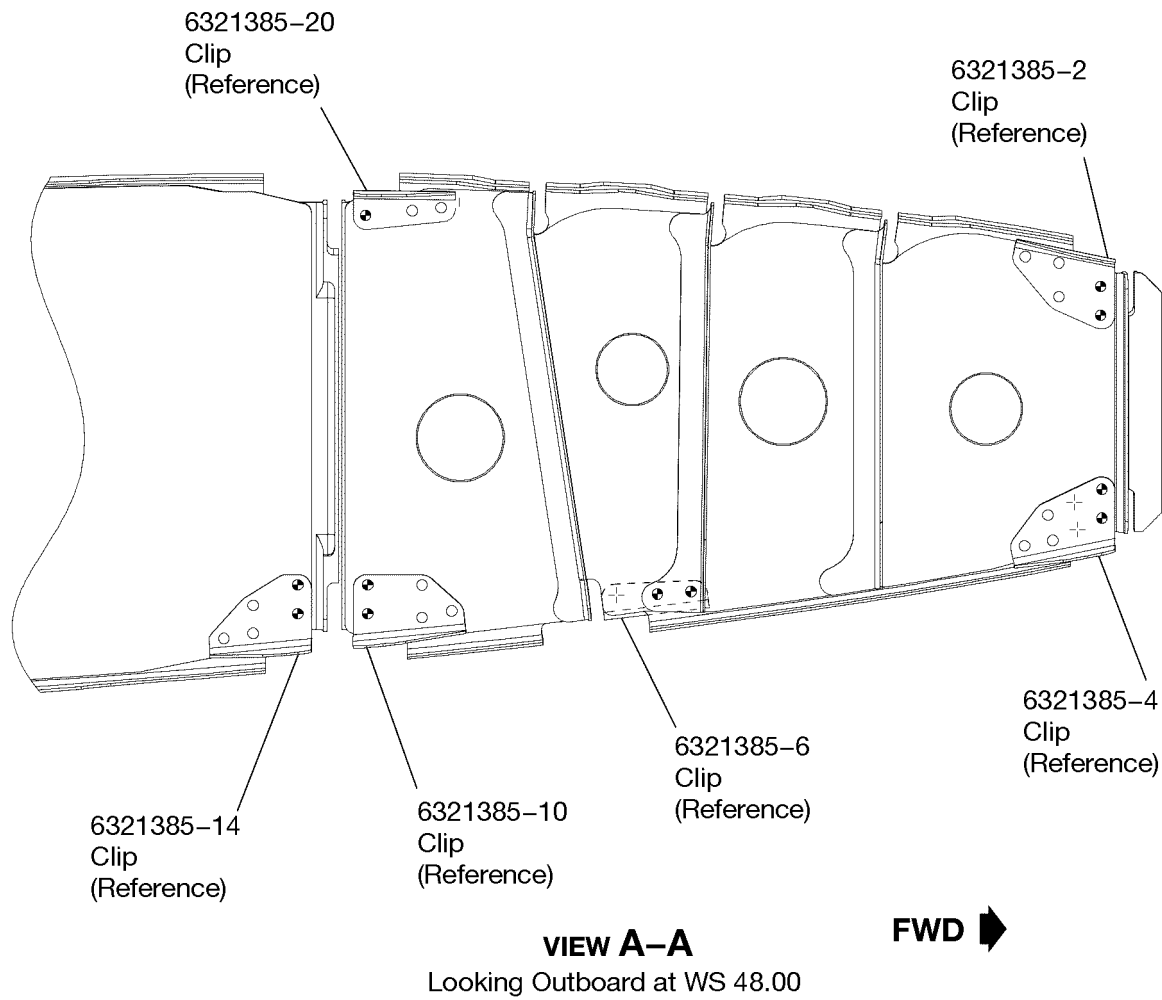
- D. Remove and replace the 6321385-6 Clip.
- (1) Remove and discard the 6321385-6 Clip.
 - (2) Put the 6321385-6 Clip into position and match drill one Number 21 (0.159 inch-diameter) hole in the clip that align with the existing holes in the rib.
 - (3) Remove the clip and deburr the hole.
 - (4) Put the 6321385-6 Clip into position and ream two holes to a diameter between 0.1625 and 0.1645 inch-diameter to match the holes in the WS 48.00 Rib.
 - (5) Ream two holes to a diameter between 0.1625 and 0.1645 inch-diameter to match the holes in the wing skin.
 - (6) Remove the clip and deburr the holes.
 - (7) Apply a fay seal where the 6321385-6 Clip contacts the wing skin and WS 48.00 Rib.
 - (8) Install one 6321385-6 Clip with one CM3873D5-6 Rivet, two HL10VBJ5-3 Pins, two HL11VBJ5-9 Pins, and four HL70-5 Collars.
- E. Remove and replace the 6321385-10 Clip.
- (1) Remove and discard the 6321385-10 Clip.
 - (2) Put the 6321385-10 Clip into position and ream five holes to a diameter between 0.1625 and 0.1645 inch-diameter that align with the holes in the WS 48.00 Rib.
 - (3) Ream two holes to a diameter between 0.1625 and 0.1645 inch-diameter that align with the holes in the wing skin.
 - (4) Remove the clip and deburr the holes.
 - (5) Apply a fay seal where the 6321385-10 Clip contacts the wing skin and WS 48.00 Rib.
 - (6) Install one 6321385-10 Clip with three HL10VBJ5-3 Pins, two HL10VBJ5-4 Pins, two HL19PB5-6 Pins, and seven HL70-5 Collars.
- F. Remove and replace the 6321385-14 Clip.
- (1) Remove and discard the 6321385-14 Clip.
 - (2) Put the 6321385-14 Clip into position and ream five holes to a diameter between 0.1625 and 0.1645 inch-diameter that align with the holes in the WS 48.00 Rib.
 - (3) Ream two holes to a diameter between 0.1625 and 0.1645 inch-diameter that align with the holes in the wing skin.
 - (4) Remove the clip and deburr the holes.
 - (5) Apply a fay seal where the 6321385-14 Clip contacts the wing skin and WS 48.00 Rib.
 - (6) Install one 6321385-14 Clip with three HL10VBJ5-3 Pins, two HL10VBJ5-4 Pins, two HL19PB5-6 Pins, and seven HL70-5 Collars.
- G. Remove and replace the 6321385-20 Clip.
- (1) Remove and discard the 6321385-20 Clip.
 - (2) Put the 6321385-20 Clip into position and ream three holes to a diameter between 0.1625 and 0.1645 inch-diameter that align with the holes in the WS 48.00 Rib.
 - (3) Ream two holes to a diameter between 0.1625 and 0.1645 inch-diameter that align with the holes in the wing skin.
 - (4) Remove the clip and deburr the holes.
 - (5) Apply a fay seal where the 6321385-20 Clip contacts the wing skin and WS 48.00 Rib.

- (6) Install one 6321385-20 Clip with two HL10VBJ5-3 Pins, one HL10VBJ5-4 Pin, two HL19PB5-6 Pins, and five HL70-5 Collars.
- H. Remove the tact cloths all FOD from the work area.
 - CAUTION:** Remove all metal shavings and FOD from the wing fuel tank. Failure to remove metal shavings and FOD from the wing fuel tank can damage the fuel pumps, clog the engine fuel filters, and cause false fuel level indications.
- I. Remove all metal shavings from the work area.
- J. Protect the bare aluminum inside the wing with U074093 Color Chemical Film and K000926 Corrosion Resistant Primer. (Refer to the Structural Repair Manual, Chapter 51, Protective Treatment of Metal.)
- K. Protect the bare aluminum on the outside of the wing with U074093 Color Chemical Film and K000574 Corrosion Resistant Primer. (Refer to the Structural Repair Manual, Chapter 51, Protective Treatment of Metal.)
5. Install the access panels that were removed. (Refer to the Model 525B Maintenance Manual, Chapter 57, Wings Skin/Access plate - Maintenance Practices and Chapter 6, Access Plates and panels Identification - Description and Operation.)
6. Refuel the airplane. (Refer to the Model 525B Maintenance Manual, Chapter 12, Fuel - Servicing.)
7. Make a through inspection around the fasteners that were replaced for fuel leaks.
8. Examine the removed fuel panels for leaks.
9. (If clips were replaced) Paint the areas affected by this modification.
10. Remove the maintenance warning tags and connect the airplane batteries.
11. Record that this service letter has been completed.
 - A. Complete a Maintenance Transaction Report.
 - B. Put a copy of the completed Maintenance Transaction Report in the airplane logbook.
 - C. Send a copy of the completed Maintenance Transaction Report to: CESCO C/O Camp Systems International Incorporated, 8201 East 34th Street North, Building 1100 Suite 1101 Wichita, KS 67226.

A98666



Legend	
	CM3873AD5-6
	HL10VBJ5-4
	HL10VBJ5-3

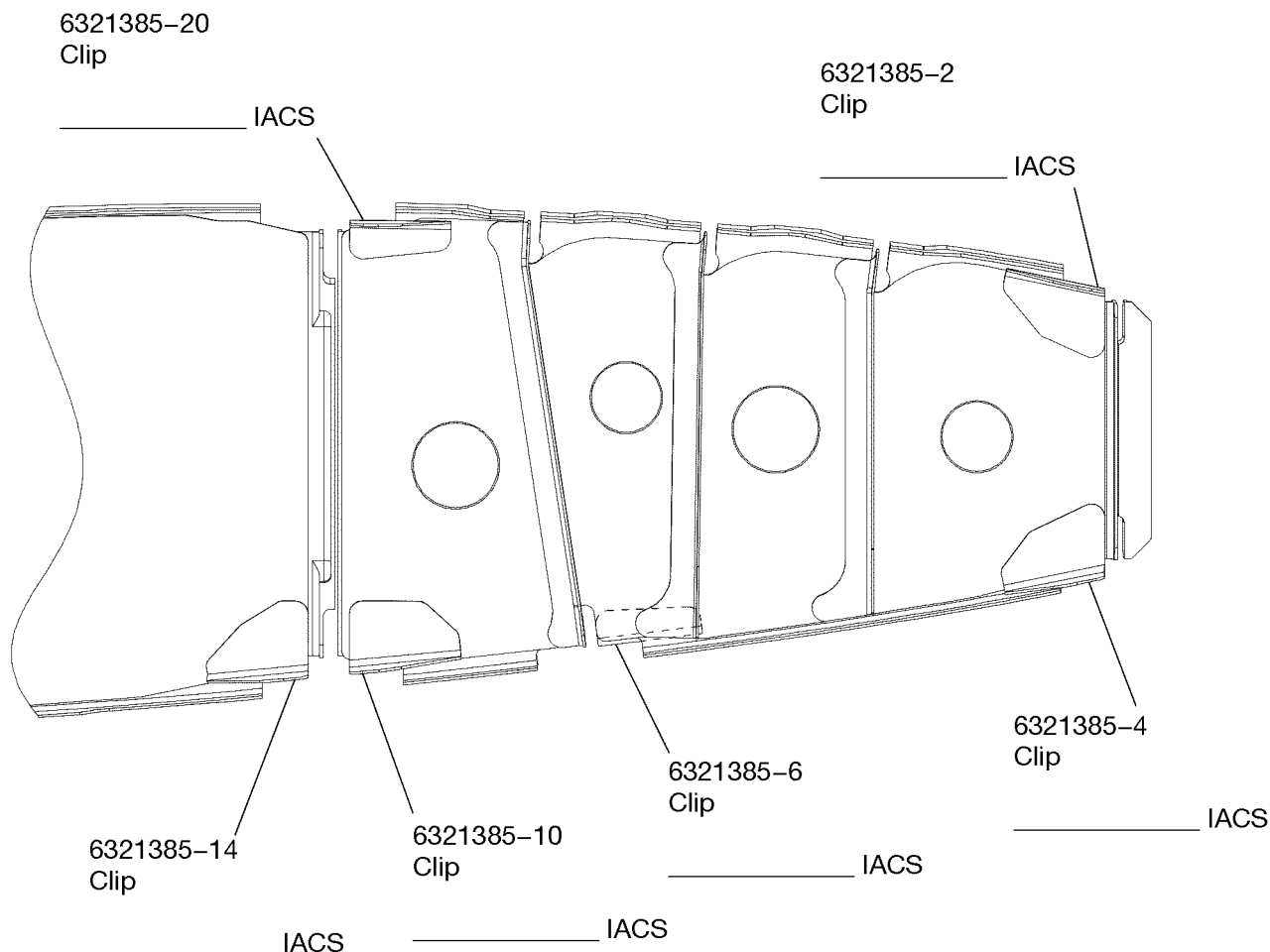
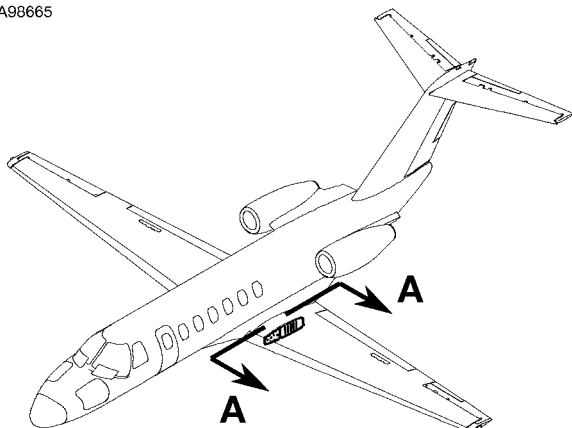


NOTE: Minimum edge distance is 0.35 inch.

6310T1072
AA6321380-11

Figure 1. WS 48.00 Clip Locations (Sheet 1)

A98665



VIEW A-A
Looking Outboard at WS 48.00



6310T1072
AA6321380-11

Figure 2. WS 48.00 Conductivity Results (Sheet 1)

