STATION		BOEING CARD NO.
TAIL NO.	SAS BOEING 767 TASK CARD	28-AWL-01
DATE		AIRLINE CARD NO.

SKILL	WORK AREA	RELATED TASK	INTERVAL	PHASE	MPD REV	TASK CARD REVISION
AIRPL	CTR WING		NOTE	99XXX	002	AUG 22/09

TASK	TITLE	STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE	APPLICABILITY ENGINE
CHECK/INSP	EXTERNAL WIRES OVER CTR FUEL TANK		ALL	ALL

ZONES	ACCESS PANELS
131 132	

MECH	INSP	MPD ITEM NUMBER

INSPECT (DETAILED) THE WIRE BUNDLES OVER CENTER FUEL TANK. 28-11-00-6A

INTERVAL NOTE: THIS TASK SATISFIES THE REQUIREMENTS OF ALI 28-AWL-01 WITH AN INTERVAL OF 12 YRS.

1. External Wires Over the Auxiliary Tank Inspection

A. General

(1) ALI - Refer to the task: Airworthiness Limitation Precautions (AMM 28-00-00/201), for important information on airworthiness limitation instructions (ALIs).

B. References

(1) AMM 24-22-00/201, Control (Supply Power)

(2) AMM 25-25-01/201, Passenger Seats

(3) AMM 25-24-04/401, Partitions

(4) AMM 25-27-01/401, Floor Covering

(5) AMM 25-27-09/401, Passenger Seat Raceways

(6) AMM 53-01-01/401, Floor Panel

(7) SWPM 20-10-11, Wiring Assembly and Installation

C. Access

MECH | INSP

(1) Location Zones
131 Area above Wing Center Section (Left)
132 Area above Wing Center Section (Right)

D. Prepare for the Inspection

(1) To get access to the top the center auxiliary tank from Station 785.9 to Station 955.1, do these steps:

(a) Remove the seats (AMM 25-25-01/201).

(b) If applicable, remove the partitions (AMM 25-24-04/401).

(c) Remove the floor covering (AMM 25-27-01/401).

(d) If applicable, remove the passenger seat raceways (AMM 25-27-09/401).

(e) Remove the floor panels (AMM 53-01-01/401).

E. External Wires Over the Auxiliary Tank Inspection

(1) Do a detailed inspection of the wire bundles routed on the main deck over the auxiliary fuel tank and under the floor beams between Station 785.9 and Station 955.1.

(a) Look for these items:

1) Damaged clamps,

2) Wire chafing,

3) Wire bundles that are in contact with the surface of the auxiliary fuel tank.

(2) If you found a problem, do these steps:

(a) Remove electrical power from the airplane (AMM 24-22-00/201).

(b) Do the applicable repair (SWPM 20-10-11).

F. Put the Airplane Back to Its Usual Condition

(1) Install the floor panels (AMM 53-01-01/401).

MECH	INSP

(2) If applicable, install the passenger seat raceways (AMM 25-27-09/401).

(3) Install the floor covering (AMM 25-27-01/401).

(4) If applicable, install the partitions (AMM 25-24-04/401).

(5) Install the seats (AMM 25-25-01/201).

(6) Supply electrical power if it is necessary (AMM 24-22-00/201).

STATION		BOEING CARD NO.
TAIL NO.	SAS BOEING 767 TASK CARD	28-AWL-05-1
DATE		AIRLINE CARD NO.

SKILL	WORK AREA	RELATED TASK	INTERVAL	PHASE	MPD REV	TASK CARD REVISION
ELECT	LH MAIN TK		NOTE	24896		AUG 22/09

TASK	TITLE	STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE	APPLICABILITY ENGINE
FUNCTIONAL	HYDRAULIC LINE FUEL TANK PENETRATION		ALL	ALL

ZONES	ACCESS PANELS
532	5001 532BB

MECH	INSP	MPD ITEM NUMBER

FUNCTIONALLY CHECK THE BONDING RESISTANCE OF THE LH HEAT EXCHANGER HYDRAULIC LINES AT THE FUEL TANK PENETRATION (SFAR 88). 29-11-27-6A

INTERVAL NOTE: THIS ALI TASK COVERS 28-AWL-05 AND HAS AN INTERVAL OF 6 YRS OR 25000 FH, WHICHEVER COMES FIRST.

1. Bonding Resistance Check of the Heat Exchanger Lines (Fig. 601)

A. General

(1) ALI - Refer to the task: Airworthiness Limitations Precautions (AMM 29-00-00/201), for important information airworthiness limitation instructions (ALIs).

B. References

(1) AMM 06-44-00/201, Wings (Major Zones 500 and 600) Access Doors and Panels

(2) AMM 28-11-00/201, Fuel Tanks

(3) AMM 28-11-01/401, Main Tank Access Door

(4) AMM 28-26-00/201, Defueling

(5) SWPM 20-20-00, Electrical Bonds and Grounds

C. Equipment

(1) Bonding Meter - Use one of these:

(a) Bonding Meter - Model T477W
Avtron Manufacturing, Inc.
Cleveland, Ohio

(b) Bonding Meter - Model M1
(Serial Number A0000112 and subsequent)
BCD Electronics Ltd.
Vancouver, Canada

D. Access

(1) Location Zones
532 Main Tank (Inboard of Rib No. 10) (Left)
632 Main Tank (Inboard of Rib No. 10) (Right)
651 Rear Spar to MLG Support Beam (Right)

(2) Access Panels
532BB Main Tank Access Door (Left)
632BB Main Tank Access Door (Right)
532AZ Fuel Tank Baffle (Left)
632AZ Fuel Tank Baffle (Right)

E. Bonding Resistance Check in the Main Fuel Tanks

(1) Defuel the main fuel tanks (AMM 28-26-00/201).

(2) Remove the access door, 532BB (632BB), for the left (right) main fuel tank (AMM 28-11-01/401).

(3) AIRPLANES WITH FUEL TANK BAFFLE AT RIB 5;
Remove the fuel tank baffle panel, 532AZ (632AZ), at rib 5 in the left (right) main fuel tank.

WARNING: CAREFULLY DO ALL OF THE SAFETY PROCEDURES IN THE PURGING AND ENTRY PROCEDURE FOR THE FUEL TANK. INJURY TO PERSONS AND DAMAGE TO EQUIPMENT CAN OCCUR.

(4) Do this procedure: Purging and Fuel Tank Entry (AMM 28-11-00/201).

WARNING: MAKE SURE THE BONDING RESISTANCE IS LESS THAN THE LIMITS. THE RESISTANCE OF THE ELECTRICAL BOND IS VERY IMPORTANT IF LIGHTNING HITS THE AIRPLANE. AN EXPLOSION CAN OCCUR IF THE BONDING RESISTANCE IS NOT IN THE LIMITS DURING AN LIGHTNING STRIKE.

(5) Use a bonding meter to do the checks of the bonding resistance in the main tanks for each heat exchanger as follows (SWPM 20-20-00):

(a) Make sure the resistance between the bulkhead fitting and the rear spar for the inlet line is 0.005 ohms (5 milliohms) or less.

NOTE: CDCCL- Refer to the task: Airworthiness Limitation Precautions (AMM 29-00-00/201), for important information on Critical Design Configuration Control Limitations (CDCCLs).

NOTE: This is applicable to Airworthiness Limitation 28-AWL-05.

(b) Make sure the resistance between the bulkhead fitting and the rear spar for the outlet line is 0.005 ohms (5 milliohms) or less.

NOTE: CDCCL- Refer to the task: Airworthiness Limitation Precautions (AMM 29-00-00/201), for important information on Critical Design Configuration Control Limitations (CDCCLs).

NOTE: This is applicable to Airworthiness Limitation 28-AWL-05.

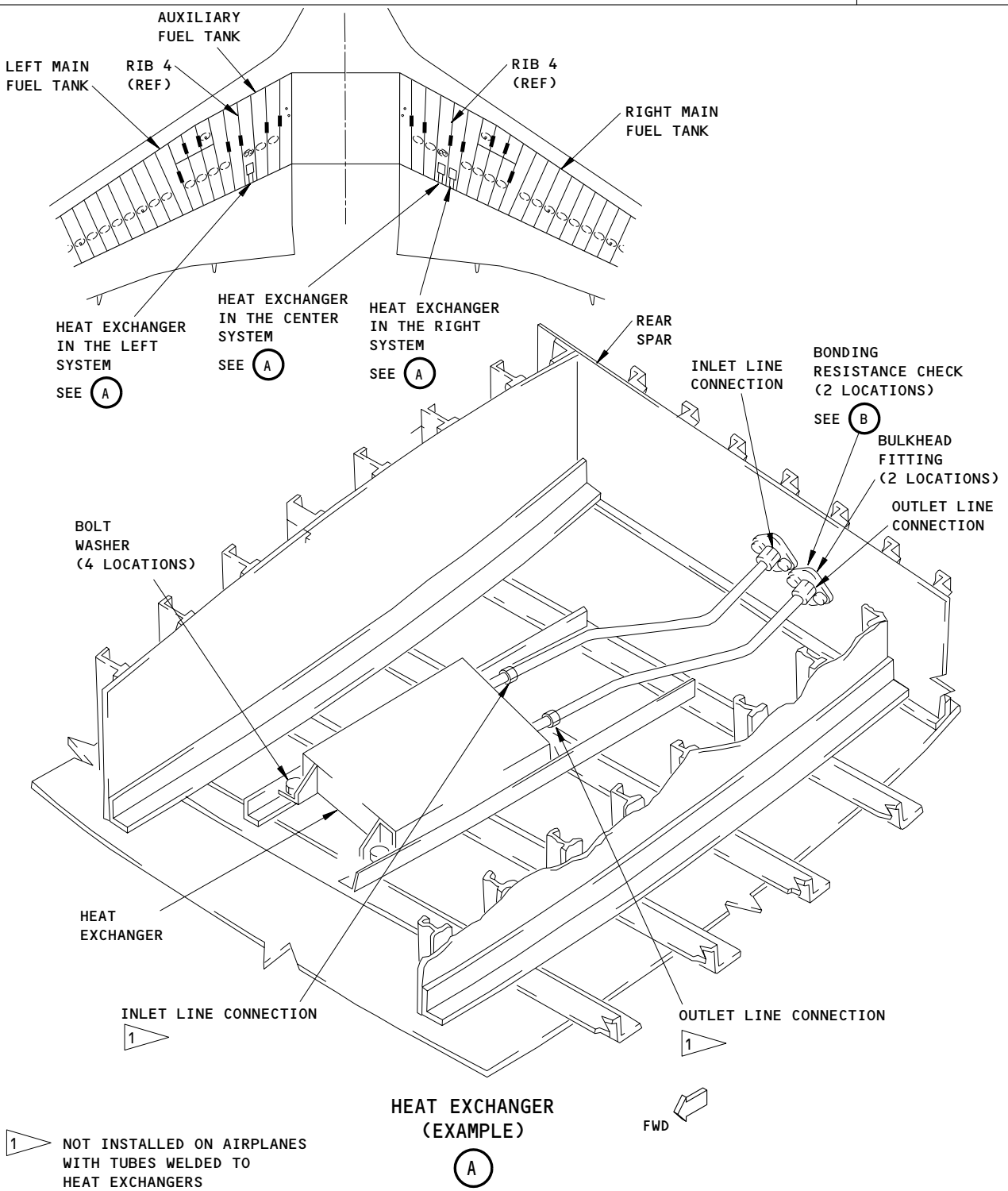
(6) If the bonding resistance is more than 0.005 ohms (5 milliohms), rework the bonding surface to a value of 0.001 ohm (1 milliohm) or less (SWPM 20-20-00).

NOTE: CDCCL- Refer to the task: Airworthiness Limitation Precautions (AMM 29-00-00/201), for important information on Critical Design Configuration Control Limitations (CDCCLs).

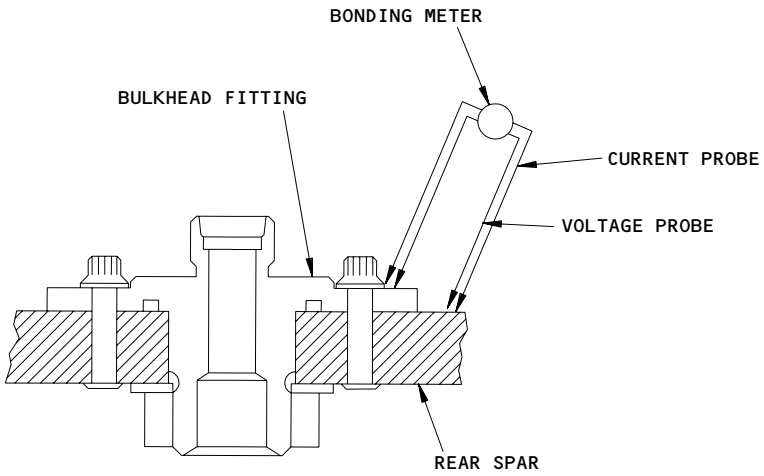
NOTE: This is applicable to Airworthiness Limitation 28-AWL-05.

(7) AIRPLANES WITH FUEL TANK BAFFLE AT RIB 5;
Install the fuel tank baffle panel, 532AZ (632AZ), at rib 5 in the left (right) main fuel tank.

(8) Install the access door, 532BB or 632BB, for the main fuel tank (AMM 28-11-01/401).



Heat Exchanger Bonding Resistance Check
Figure 601 (Sheet 1)



BONDING RESISTANCE CHECK
(EXAMPLE)

B

Heat Exchanger Bonding Resistance Check
Figure 601 (Sheet 2)

STATION		BOEING CARD NO.
TAIL NO.	SAS BOEING 767 TASK CARD	28-AWL-05-2
DATE		AIRLINE CARD NO.

SKILL	WORK AREA	RELATED TASK	INTERVAL	PHASE	MPD REV	TASK CARD REVISION
ELECT	RH MAIN TK		NOTE	24896		AUG 22/09

TASK	TITLE	STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE	APPLICABILITY ENGINE
FUNCTIONAL	HYDRAULIC LINE FUEL TANK PENETRATION		ALL	ALL

ZONES	ACCESS PANELS
632 651	6001 632BB 651TB

MECH	INSP	MPD ITEM NUMBER

FUNCTIONALLY CHECK THE BONDING RESISTANCE OF THE CENTER AND R/H SYSTEMS HEAT EXCHANGER HYDRAULIC LINES AT THE FUEL TANK PENETRATIONS (SFAR 88). 29-11-27-6A

INTERVAL NOTE: THIS ALI TASK COVERS 28-AWL-05 AND HAS AN INTERVAL OF 6 YRS OR 25000 FH, WHICHEVER COMES FIRST.

1. Bonding Resistance Check of the Heat Exchanger Lines (Fig. 601)

A. General

(1) ALI - Refer to the task: Airworthiness Limitations Precautions (AMM 29-00-00/201), for important information airworthiness limitation instructions (ALIs).

B. References

(1) AMM 06-44-00/201, Wings (Major Zones 500 and 600) Access Doors and Panels

(2) AMM 28-11-00/201, Fuel Tanks

(3) AMM 28-11-01/401, Main Tank Access Door

(4) AMM 28-26-00/201, Defueling

(5) SWPM 20-20-00, Electrical Bonds and Grounds

C. Equipment

(1) Bonding Meter - Use one of these:

(a) Bonding Meter - Model T477W
Avtron Manufacturing, Inc.
Cleveland, Ohio

(b) Bonding Meter - Model M1
(Serial Number A0000112 and subsequent)
BCD Electronics Ltd.
Vancouver, Canada

D. Access

(1) Location Zones
532 Main Tank (Inboard of Rib No. 10) (Left)
632 Main Tank (Inboard of Rib No. 10) (Right)
651 Rear Spar to MLG Support Beam (Right)

(2) Access Panels
532BB Main Tank Access Door (Left)
632BB Main Tank Access Door (Right)
532AZ Fuel Tank Baffle (Left)
632AZ Fuel Tank Baffle (Right)

E. Bonding Resistance Check in the Main Fuel Tanks

(1) Defuel the main fuel tanks (AMM 28-26-00/201).

(2) Remove the access door, 532BB (632BB), for the left (right) main fuel tank (AMM 28-11-01/401).

(3) AIRPLANES WITH FUEL TANK BAFFLE AT RIB 5;
Remove the fuel tank baffle panel, 532AZ (632AZ), at rib 5 in the left (right) main fuel tank.

WARNING: CAREFULLY DO ALL OF THE SAFETY PROCEDURES IN THE PURGING AND ENTRY PROCEDURE FOR THE FUEL TANK. INJURY TO PERSONS AND DAMAGE TO EQUIPMENT CAN OCCUR.

(4) Do this procedure: Purging and Fuel Tank Entry (AMM 28-11-00/201).

WARNING: MAKE SURE THE BONDING RESISTANCE IS LESS THAN THE LIMITS. THE RESISTANCE OF THE ELECTRICAL BOND IS VERY IMPORTANT IF LIGHTNING HITS THE AIRPLANE. AN EXPLOSION CAN OCCUR IF THE BONDING RESISTANCE IS NOT IN THE LIMITS DURING AN LIGHTNING STRIKE.

(5) Use a bonding meter to do the checks of the bonding resistance in the main tanks for each heat exchanger as follows (SWPM 20-20-00):

(a) Make sure the resistance between the bulkhead fitting and the rear spar for the inlet line is 0.005 ohms (5 milliohms) or less.

NOTE: CDCCL- Refer to the task: Airworthiness Limitation Precautions (AMM 29-00-00/201), for important information on Critical Design Configuration Control Limitations (CDCCLs).

NOTE: This is applicable to Airworthiness Limitation 28-AWL-05.

(b) Make sure the resistance between the bulkhead fitting and the rear spar for the outlet line is 0.005 ohms (5 milliohms) or less.

NOTE: CDCCL- Refer to the task: Airworthiness Limitation Precautions (AMM 29-00-00/201), for important information on Critical Design Configuration Control Limitations (CDCCLs).

NOTE: This is applicable to Airworthiness Limitation 28-AWL-05.

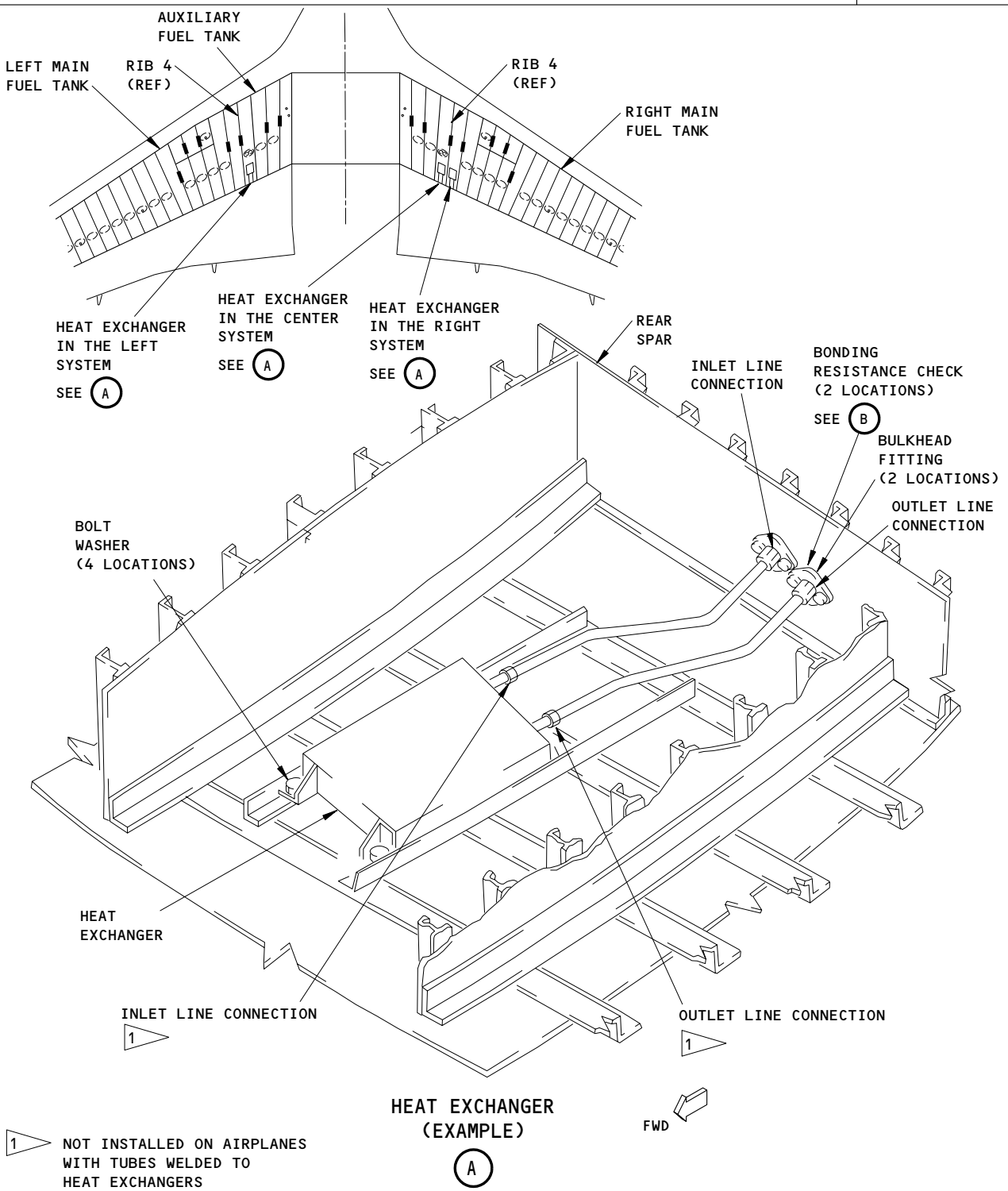
(6) If the bonding resistance is more than 0.005 ohms (5 milliohms), rework the bonding surface to a value of 0.001 ohm (1 milliohm) or less (SWPM 20-20-00).

NOTE: CDCCL- Refer to the task: Airworthiness Limitation Precautions (AMM 29-00-00/201), for important information on Critical Design Configuration Control Limitations (CDCCLs).

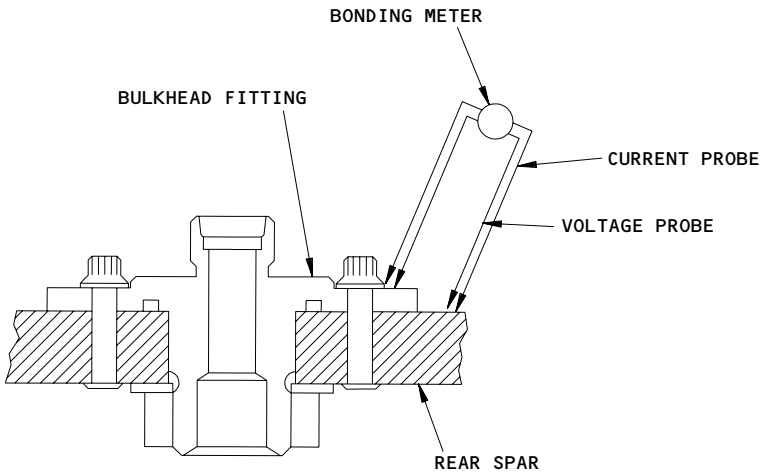
NOTE: This is applicable to Airworthiness Limitation 28-AWL-05.

(7) AIRPLANES WITH FUEL TANK BAFFLE AT RIB 5;
Install the fuel tank baffle panel, 532AZ (632AZ), at rib 5 in the left (right) main fuel tank.

(8) Install the access door, 532BB or 632BB, for the main fuel tank (AMM 28-11-01/401).



Heat Exchanger Bonding Resistance Check
Figure 601 (Sheet 1)



BONDING RESISTANCE CHECK
(EXAMPLE)

B

Heat Exchanger Bonding Resistance Check
Figure 601 (Sheet 2)

STATION		BOEING CARD NO.
TAIL NO.	SAS BOEING 767 TASK CARD	28-AWL-18-1
DATE		AIRLINE CARD NO.

SKILL	WORK AREA	RELATED TASK	INTERVAL	PHASE	MPD REV	TASK CARD REVISION
AIRPL	L/H WING		8C NOTE	248XX		AUG 22/09

TASK	TITLE	STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE	APPLICABILITY ENGINE
FUNCTIONAL	FQIS WIRING AND BONDING		ALL	ALL

ZONES	ACCESS PANELS
510	511DB 511FB

MECH	INSP	MPD ITEM NUMBER

FUNCTIONALLY CHECK (RESISTANCE MEASUREMENT) THE OUT OF TANK FQIS WIRING LIGHTNING SHIELD TO GROUND TERMINATION BOND (SFAR 88). 20-55-54-6A

NOTE: THIS TASK SATISFIES THE REQUIREMENTS OF 28-AWL-18.
ALI TASK 28-AWL-18 INTERVAL IS EVERY 12 YRS.

1. FQIS Wiring and Bonding - Inspection

A. General

(1) ALI - Refer to the task: Airworthiness Limitation Precautions (AMM 20-00-00/201), for important information on airworthiness limitation instructions (ALIs).

(2) Do this task to do the requirements of 28-AWL-18 and 28-AWL-26.

B. References

(1) AMM 20-56-02/201, Loop Resistance Measurement

(2) AMM 20-56-03/201, Joint Resistance Measurement

(3) AMM 06-44-00/201, Finding an Access Door or Panel on the Wings

(4) AMM 28-41-00/501, Fuel Quantity Indicating System (FQIS) Tank Units - Operational Check

(5) AMM 32-00-20/201, Landing Gear Downlocks - Maintenance Practices.

(6) SWPM Chapter 20, Standard Wiring Practices Manual.

C. Equipment

(1) 906-10246-2 or 906-10246-3 - Loop Resistance Tester (LRT)

MECH | INSP

D. Prepare for the Procedure

(1) To inspect the FQIS out-tank wire bundle shieldings at the fuel tank spar penetrations, a man-lift or ladder and safety equipment is necessary.

(2) Send copies of all data recorded while doing this procedure to the Boeing Company for engineering analysis. Send the data to this address:
Boeing Commercial Airplane Group
P.O. Box 3707
Seattle, WA 98124-2207, USA
Attention: Manager, ELECTROMAGNETICS EFFECTS, MC OL-67.
Or this email address:
"EME AMM Task Card Data Group
EMEAMMTaskCardData@boeing.com."

(3) Make copies of the applicable data sheet (Fig. 602).

(4) Do this task: Install the Downlocks on the Landing Gear.

(5) Open the applicable panels for the applicable FQIS wire bundle:
552HB, Left Inboard Wing Trailing Edge Panel
652HB, Right Inboard Wing Trailing Edge Panel

E. Fuel Tank FQIS Connector Bonding Check

(1) Measure the loop resistance of a wire bundle using the LRT.

NOTE: Typical LRT connections for the FQIS wire bundles are shown on Fig. 601.

(a) Do this task: Loop Resistance Measurement (AMM 20-56-02/201) on each FQIS wire bundle listed in the applicable FQIS WIRE BUNDLE LOOP RESISTANCE table below:

1) Record the measured loop resistance value on the data sheet.

2) If the measured loop resistance value is within the MIN-MAX limits listed in the data sheet, go to the next wire bundle in the table.

3) If the values are out of the MIN-MAX limits, do the FQIS Wiring and Bonding - Fault Isolation.

4) After you measure the resistance, do a check of the connector and backshell for the wire bundle at the point of measurement and make sure that they are hand-tight.

NOTE: A loose connector or backshell can cause an out-of-limits resistance reading.

5) If a loose connector or backshell is found and tightened, do the Loop Resistance Measurement (AMM 20-56-02/201) on this wire bundle again.

(2) After you measure all wire bundles resistances, do this inspection check:

(a) AIRPLANE WITH BF GOODRICH FQPU;
For the connector backshell, look for corrosion in the area where the lightning shield connects to the backshell.

(b) For the ground jumper, look for corrosion and worn or broken strands.

(c) If a problem is found, repair in accordance to (SWPM 20-20-00).

(d) After any repair, do the Loop Resistance Measurement (AMM 20-56-02/2 01) on that wire bundle again.

FQIS WIRE BUNDLE LOOP RESISTANCE 767-200 BF GOODRICH FQPU					
Location	Part # Boeing S283T025-CN1156-	Rear Spar Connector	Loop Resistance Min-Max (mOhms)	Rear Spar Ground	W/D
Left Main Tank	-126 or -926	M1947	18-44	GD4148-S	28-41-21
Left Main Dens. Tank	-122 or -922	M1945	11-40	GD5980-S	28-41-21
Left Aux Tank	-127 or -927	M1948	9-40	GD4132-S	28-41-23
Right Main Tank	-136 or -936	M1957	18-43	GD4156-S	28-41-22
Right Main Dens. Tank	-132 or -932	M1950	10-40	GD5978-S	28-41-22
Right Aux Tank	-137 or -937	M1958	11-47	GD5974-S	28-41-23
Right Aux Dens. Tank	-135 or -935	M1952	11-40	GD5976-S	28-41-23

FQIS WIRE BUNDLE LOOP RESISTANCE 767-300 BF GOODRICH FQPU					
Location	Part # Boeing S283T025-CN1156-	Rear Spar Connector	Loop Resistance Min-Max (mOhms)	Rear Spar Ground	W/D
Left Main Tank	-121 or -921	M1944	18-44	GD4148-S	28-41-21
Left Main Dens. Tank	-122 or -922	M1945	11-40	GD5980-S	28-41-21
Left Aux Tank	-123 or -923	M1946	9-40	GD4132-S	28-41-23
Right Main Tank	-131 or -931	M1949	18-43	GD4156-S	28-41-22
Right Main Dens. Tank	-132 or -932	M1950	10-40	GD5978-S	28-41-22
Right Aux Tank	-134 or -934	M1951	11-47	GD5974-S	28-41-23
Right Aux Dens. Tank	-135 or -935	M1952	11-40	GD5976-S	28-41-23

FQIS WIRE BUNDLE LOOP RESISTANCE 767-200,300 BOEING BUNDLE-HONEYWELL FQPU					
Location	Boeing Part #	Rear Spar Connector	Loop Resistance Min-Max (mOhms)	Rear Spar Ground	W/D
Left Main Tank Lo-Z	286T0446	DO1582	51-121	GD4148-S	28-41-21
Left Main Tank Hi-Z	286T0446	DO1552	172-284	GD4148-S	28-41-21
Left Aux Tank Lo-Z	286T0454	DO2816	45-150	GD4132-S	28-41-23
Left Aux Tank Hi-Z	286T0454	DO2812	105-175	GD4132-S	28-41-23
Right Main Tank Lo-Z	286T0448	DO1584	51-122	GD4156-S	28-41-22
Right Main Tank Hi-Z	286T0448	DO1560	172-284	GD4156-S	28-41-22
Right Aux Tank Lo-Z	286T0448	DO2818	51-152	GD4142-S	28-41-23
Right Aux Tank Hi-Z	286T0448	DO2814	111-184	GD4142-S	28-41-23

F. Put the Airplane Back to its Usual Condition

(1) If any FQIS wire bundles were disturbed during the accomplishment of this procedure, do this task: Operational Check - Fuel Quantity Indicating System (FQIS) (AMM 28-41-00/501).

(2) Close these access panels:

(3) Do this task: Remove the Downlocks on the Landing Gear.

2. FQIS Wiring and Bonding - Fault Isolation

MECH | INSP

A. References

(1) AMM 20-56-01/201, LRT Lid Standard Measurement

(2) AMM 20-56-02/201, Loop Resistance Measurement

(3) AMM 20-56-03/201, Joint Resistance Measurement

(4) AMM 32-00-40/201, Landing Gear Ground Door Release System Operation (Open the Doors)

(5) SWPM Chapter 20, Standard Wiring Practices Manual

B. Access

(1) Location Zones

732	Main Landing Gear Door - Left
742	Main Landing Gear Door - Right
552	Inboard Wing Trailing Edge - Left Wing
652	Inboard Wing Trailing Edge - Right Wing

C. Procedure

(1) If the wire bundle loop resistance is less than the MIN value shown in data sheet (Fig. 602), then check the operation of the LRT. To check the LRT operation, do this task: LRT Lid Standard Measurement (AMM 20-56-01/201).

(a) If no problem is found with the LRT, check the test setup: check the LRT coupler connections to the wire bundle and attempt another loop measurement. The couplers should only be clamped around the wire bundle being measured and mustbe closed properly.

(b) If no problem is found with the LRT and the test setup, do a inspection on the wire bundle around the connector being measured. Look for any physical damage, corrrosion for the connector, corrrosion, worn or broken strand for the ground jumper, and any sign of damage or degrade for the wire bundle. Repair or replace in accordance to (SWPM Chapter 20).

NOTE: An example might be an area where bundle insulation has degraded and a portion of the shield is exposed and making contact with structure at an intermediate point in the bundle length. Another might be some metallic object penetrating the insulation and making contact between the shield and structure.

1) If a problem was found and repaired, do the Loop Resistance Measurement (AMM 20-56-02/201) on this bundle.

2) If no defects are found with the wire bundle, then record the below-minimum resistance reading. Contact Boeing for support.

(2) If the wire bundle loop resistance is greater than the MAX value resistance, do these steps:

(a) AIRPLANE WITH BF GOODRICH FQPU;
Measure the joint resistance (AMM 20-56-03/201) from the FQIS backshell to primary structure at the spar penetration for connectors in applicable tables below:

1) If the joint value measured is more than the maximum value in the applicable table, do the joint resistance test on that connector breakdown according to Table. 601 (AMM 20-56-03/201).

a) If a joint value measured is more than the maximum value, repair in accordance to (SWPM Chapter 20).

(b) AIRPLANE WITH BOEING - HONEYWELL FQPU;

Measure the joint resistance (AMM 20-56-03/201) from the ground terminal to primary structure at the spar penetration for connectors in applicable tables below:

1) If the joint value measured is more than the maximum value in the applicable table, do these tasks:

MECH	INSP

a) Measure the joint resistance from the ground terminal to bracket. Make sure the joint value is not greater than 1.0 milliohms.

b) Measure the joint resistance from the bracket to structure. Make sure the joint value is not greater than 0.5 milliohms.

c) If a joint value measured is greater than the maximum value, repair in accordance to (SWPM Chapter 20).

FQIS WIRE BUNDLE JOINT RESISTANCE 767-200 BF GOODRICH FQPU					
Location	Part # Boeing S283T025-CN1156-	Rear Spar Connector	Joint Resistance Min-Max (mOhms)	Rear Spar Ground	W/D
Left Main Tank	-126 or -926	M1947	0-5.5	GD4148-S	28-41-21
Left Main Dens. Tank	-122 or -922	M1945	0-5.5	GD5980-S	28-41-21
Left Aux Tank	-127 or -927	M1948	0-5.5	GD4132-S	28-41-23
Right Main Tank	-136 or -936	M1957	0-5.5	GD4156-S	28-41-22
Right Main Dens. Tank	-132 or -932	M1950	0-5.5	GD5978-S	28-41-22
Right Aux Tank	-137 or -937	M1958	0-5.5	GD5974-S	28-41-23
Right Aux Dens. Tank	-135 or -935	M1952	0-5.5	GD5976-S	28-41-23

FQIS WIRE BUNDLE JOINT RESISTANCE 767-300 BF GOODRICH FQPU					
Location	Part # Boeing S283T025-CN1156-	Rear Spar Connector	Joint Resistance Min-Max (mOhms)	Rear Spar Ground	W/D
Left Main Tank	-121 or -921	M1944	0-5.5	GD4148-S	28-41-21
Left Main Dens. Tank	-122 or -922	M1945	0-5.5	GD5980-S	28-41-21
Left Aux Tank	-123 or -923	M1946	0-5.5	GD4132-S	28-41-23
Right Main Tank	-131 or -931	M1949	0-5.5	GD4156-S	28-41-22
Right Main Dens. Tank	-132 or -932	M1950	0-5.5	GD5978-S	28-41-22
Right Aux Tank	-134 or -934	M1951	0-5.5	GD5974-S	28-41-23
Right Aux Dens. Tank	-135 or -935	M1952	0-5.5	GD5976-S	28-41-23

FQIS WIRE BUNDLE JOINT RESISTANCE 767-200,300 BOEING BUNDLE-HONEYWELL FQPU					
Location	Boeing Part #	Rear Spar Connector	Joint Resistance Min-Max (mOhms)	Rear Spar Ground	W/D
Left Main Tank Lo-Z	286T0446	DO1582	0-1.5	GD4148-S	28-41-21
Left Main Tank Hi-Z	286T0446	DO1552	0-1.5	GD4148-S	28-41-21
Left Aux Tank Lo-Z	286T0454	DO2816	0-1.5	GD4132-S	28-41-23
Left Aux Tank Hi-Z	286T0454	DO2812	0-1.5	GD4132-S	28-41-23
Right Main Tank Lo-Z	286T0448	DO1584	0-1.5	GD4156-S	28-41-22
Right Main Tank Hi-Z	286T0448	DO1560	0-1.5	GD4156-S	28-41-22
Right Aux Tank Lo-Z	286T0448	DO2818	0-1.5	GD4142-S	28-41-23
Right Aux Tank Hi-Z	286T0448	DO2814	0-1.5	GD4142-S	28-41-23

(3) If the joint resistance at the spar penetration was within limits, and the loop resistance value is still greater than the maximum, move to the inboard end of the wire bundle at the wheel well.

(a) Do this task: Joint Resistance Measurement (AMM 20-56-03/201) from the FQIS ground terminal to primary structure according to tables below:

1) If the joint value measured is more than the maximum value in the tables, repair in accordance to (SWPM Chapter 20).

MECH	INSP

(4) If repair is required and completed, return to the FQIS Wiring and Bonding - Check.

(a) If you found and corrected the problem, record that on the data sheet in the Comments column.

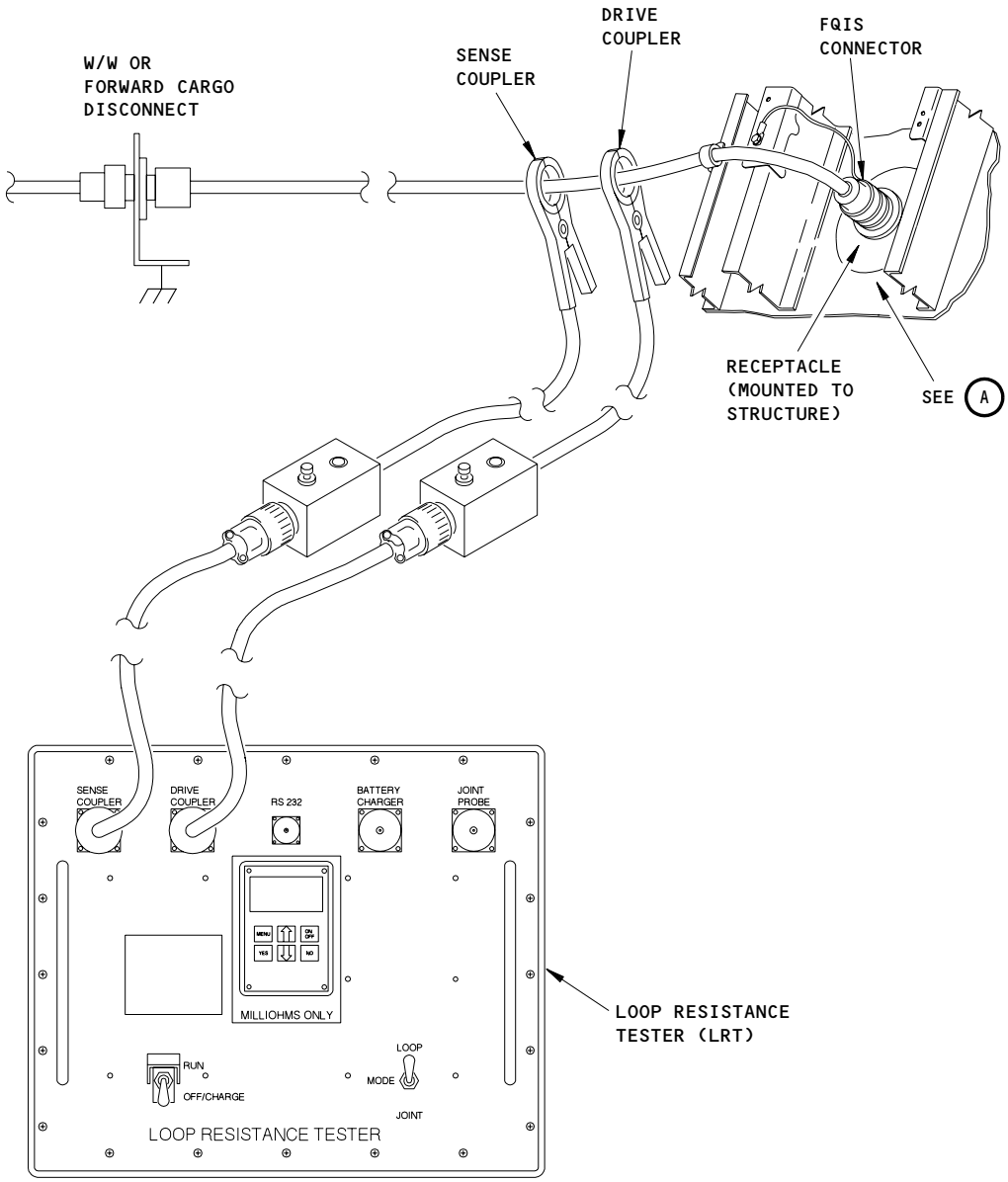
(5) If the joint resistance values at both ends of the wire bundle are OK, and the loop resistance stays greater than the maximum permitted resistance, then the problem is in the wire bundle.

(a) Repair or replace the wire bundle in accordance to (SWPM Chapter 20).

1) If repair is required and completed, do the FQIS Wiring and Bonding - Check to re-test this wire bundle.

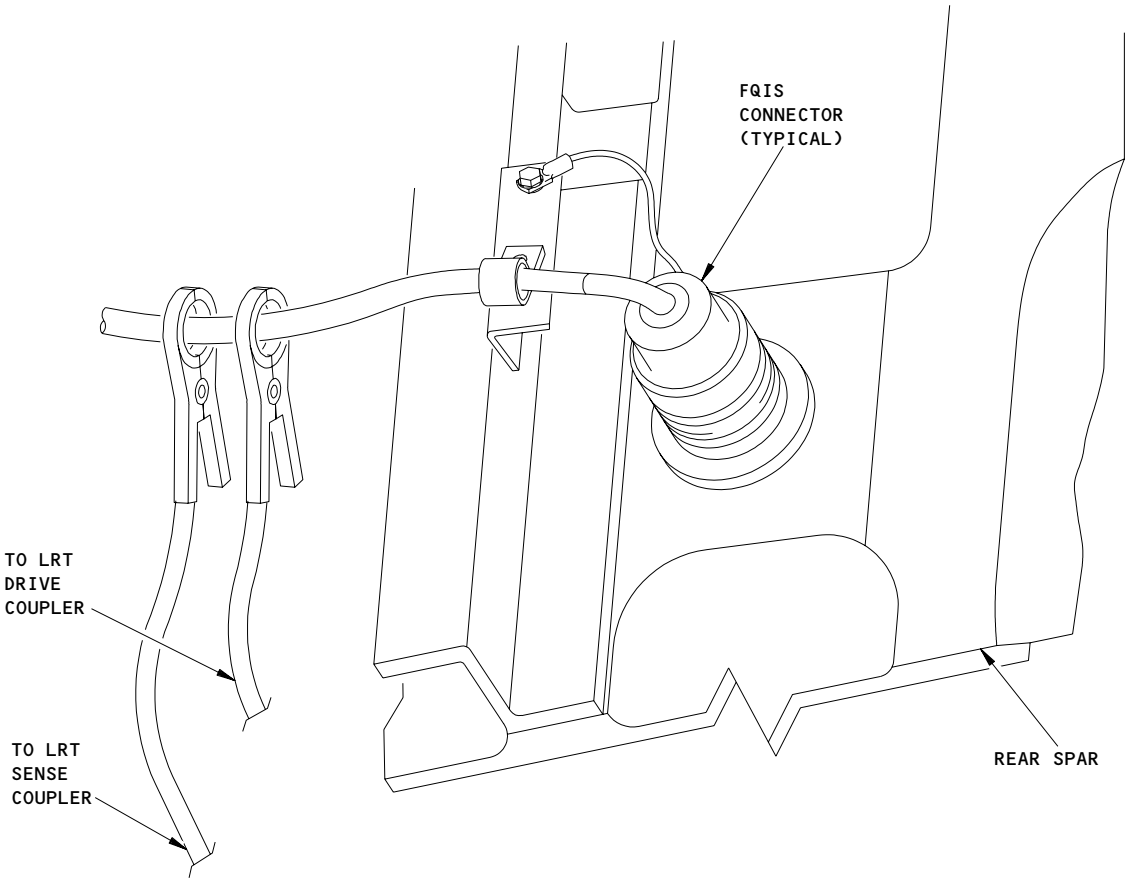
FQIS WIRE BUNDLE JOINT RESISTANCE AT INBOARD END						
Location	Model	Boeing Part Number S283T025- (Cinch CN1156)	Wheel Well Ground	Max Joint Resistance Terminal to Bracket (milliohms)	Max Joint Resistance Bracket to Structure (milliohms)	Wiring Diagrams
Left Main Tank	200 300 300F	-126 (-926) -121 (-921) -321 (-971)	GD5926-S, GD5928-S	1.0	0.5	28-41-21
Left Main Dens Tank	200 300 300F	-122 (-922)	GD4034-S, GD4134-S	1.0	0.5	28-41-21
Left Aux Tank	200 300 300F	-127 (-927) -123 (-923) -323 (-973)	GD5926-S, GD5928-S	1.0	0.5	28-41-23
Right Main Tank	200 300 300F	-136 (-936) -131 (-931) -331 (-981)	GD5922-S, GD5924-S	1.0	0.5	28-41-22
Right Main Dens Tank	200 300 300F	-132 (-932)	GD3946-S, GD4140-S	1.0	0.5	28-41-22
Right Aux Tank	200 300 300F	-137 (-937) -134 (-934) -334 (-984)	GD5922-S, GD5924-S	1.0	0.5	28-41-23
Right Aux Dens Tank	200 300 300F	-135 (-935)	GD3946-S, GD4098-S	1.0	0.5	28-41-23

FQIS WIRE BUNDLE JOINT RESISTANCE AT INBOARD END					
Location	Boeing Part Number	Rear Spar Ground	Max Joint Resistance Terminal to Bracket (milliohms)	Max Joint Resistance Bracket to Structure (milliohms)	Wiring Diagrams
Left Main Tank Lo-Z	286T0446-101	GD4148-S	1.0	0.5	28-41-21
Left Main Tank Hi-Z	286T0446-101	GD4148-S	1.0	0.5	28-41-21
Left Aux Tank Lo-Z	286T0454-005	GD4132-S	1.0	0.5	28-41-23
Left Aux Tank Hi-Z	286T0454-005	GD4132-S	1.0	0.5	28-41-23
Right Main Tank Lo-Z	286T0448-101	GD4156-S	1.0	0.5	28-41-22
Right Main Tank Hi-Z	286T0448-101	GD4156-S	1.0	0.5	28-41-22
Right Aux Tank Lo-Z	286T0448-101	GD4142-S	1.0	0.5	28-41-23
Right Aux Tank Hi-Z	286T0448-101	GD4142-S	1.0	0.5	28-41-23



FQIS TEST CONNECTIONS

High Intensity Radiated Fields (HIRF) Inspection
(Fuel Quantity Indicating System Bundles)
Figure 601 (Sheet 1)



LOOP TEST CONNECTIONS
A

High Intensity Radiated Fields (HIRF) Inspection
(Test Connections)
Figure 601 (Sheet 2)

PLANE:	
DATE:	
TECHNICIAN:	

REAR SPAR CONNECTOR	MEASURED LOOP RESISTANCE	LOOP RESISTANCE MIN-MAX (milliohms)	REAR SPAR GROUND	COMMENTS
M1944		18-44	GD4148-S	
M1945		11-40	GD5980-S	
M1946		9-40	GD4132-S	
M1949		18-43	GD4156-S	
M1950		10-40	GD5978-S	
M1951		11-47	GD5974-S	
M1952		11-40	GD5976-S	

767-300/300F FQIS CONNECTORS (BF GOODRICH FQPU)

High Intensity Radiated Fields (HIRF) Inspection
(Data Sheet)
Figure 602 (Sheet 1)

PLANE:	
DATE:	
TECHNICIAN:	

REAR SPAR CONNECTOR	MEASURED LOOP RESISTANCE	LOOP RESISTANCE MIN-MAX (milliohms)	REAR SPAR GROUND	COMMENTS
DO1582		51-121	GD4148-S	
DO1552		172-284	GD4148-S	
DO2816		45-150	GD4132-S	
DO2812		105-175	GD4132-S	
DO1584		51-122	GD4156-S	
DO1560		172-284	GD4156-S	
DO2818		51-152	GD4142-S	
DO2814		111-184	GD4142-S	

767-200, -300 FQIS CONNECTORS (BOEING BUNDLE - HONEYWELL FQPU)

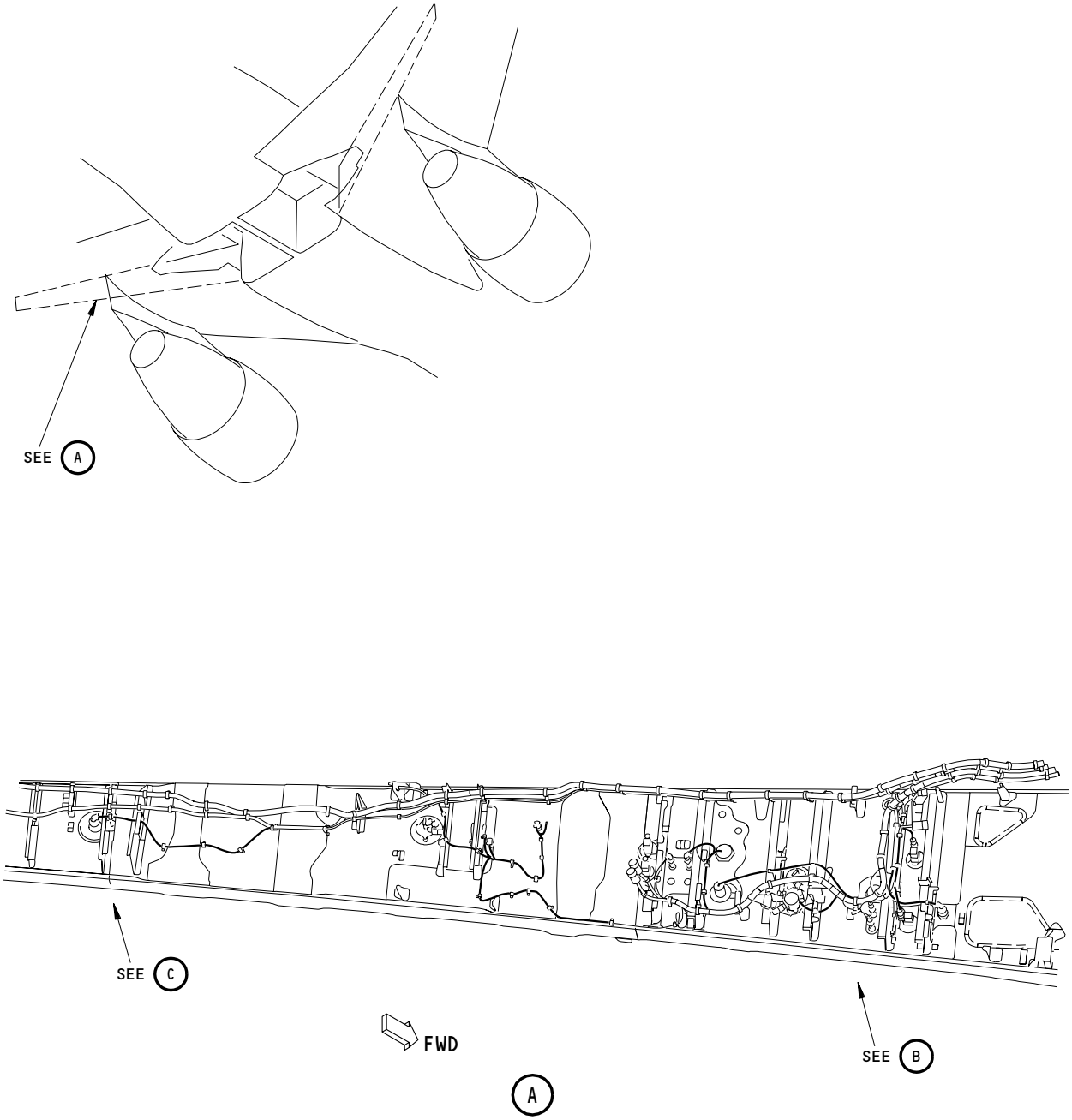
High Intensity Radiated Fields (HIRF) Inspection
(Data Sheet)
Figure 602 (Sheet 2)

PLANE:	
DATE:	
TECHNICIAN:	

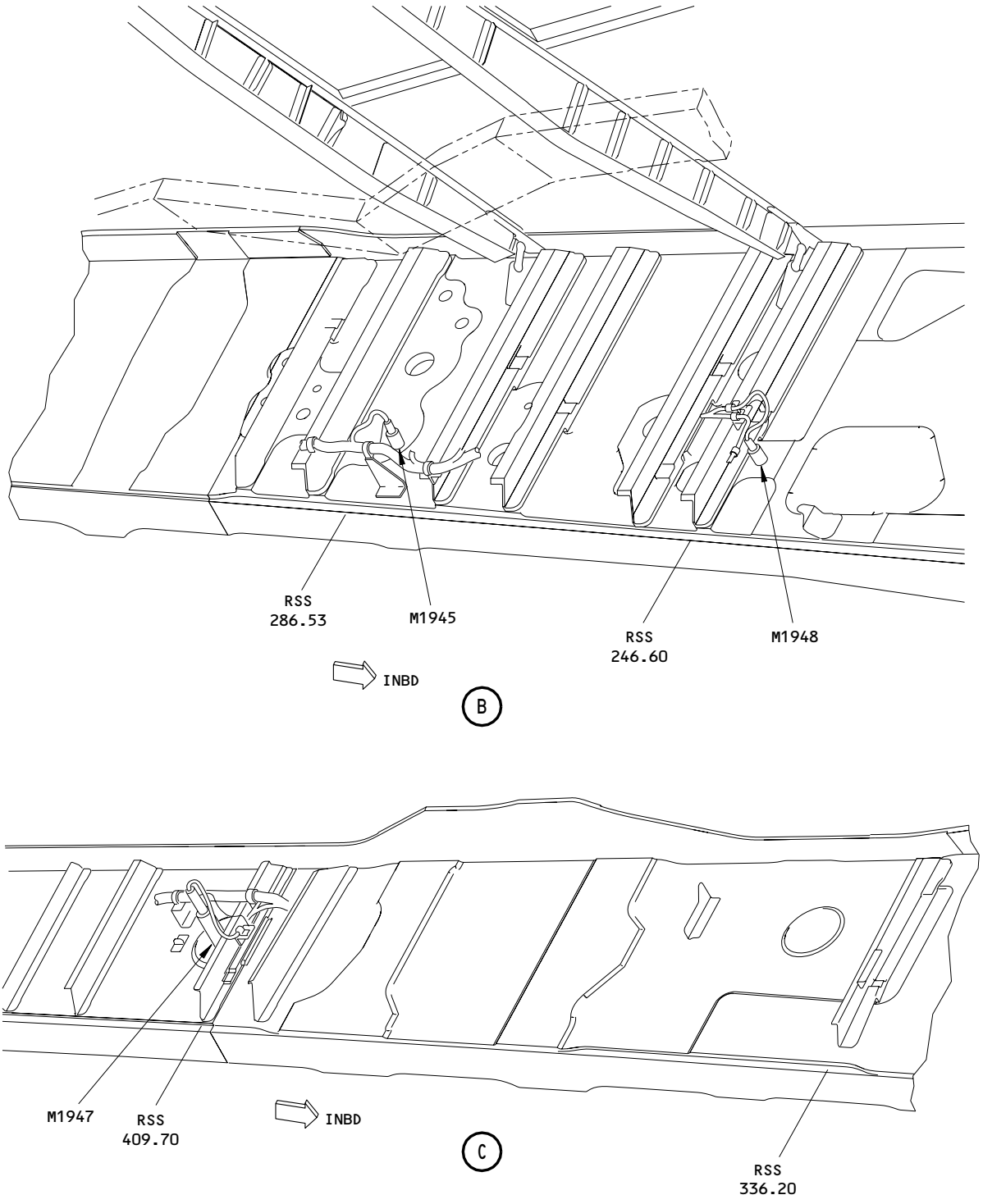
REAR SPAR CONNECTOR	MEASURED LOOP RESISTANCE	LOOP RESISTANCE MIN-MAX (milliohms)	REAR SPAR GROUND	COMMENTS
M1947		18-44	GD4148-S	
M1945		11-40	GD5980-S	
M1948		9-40	GD4132-S	
M1957		18-43	GD4156-S	
M1950		10-40	GD5978-S	
M1958		11-47	GD5974-S	
M1952		11-40	GD5976-S	

767-200 FQIS CONNECTORS (BF GOODRICH FQPU)

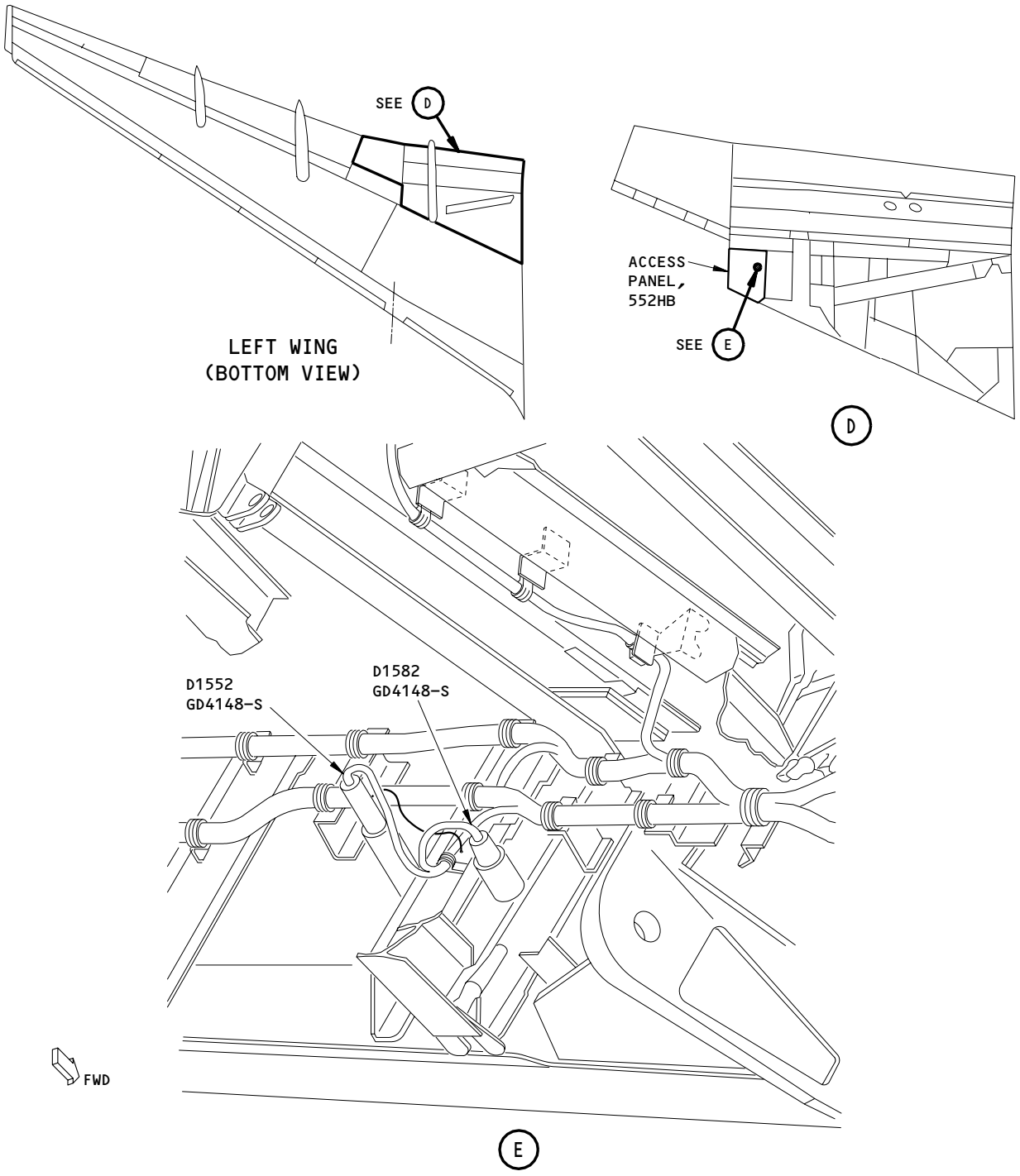
High Intensity Radiated Fields (HIRF) Inspection
(Data Sheet)
Figure 602 (Sheet 3)



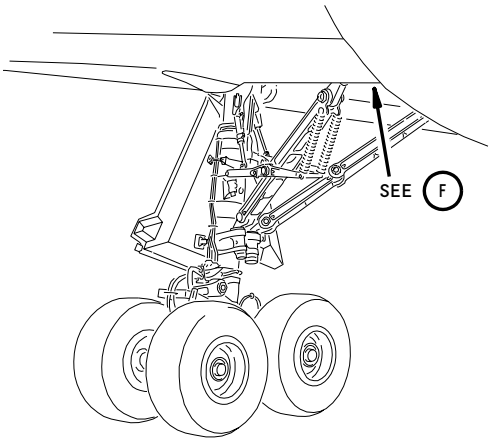
Fuel Quantity Indicating System (FQIS) Lightning Shield Inspection
(767-200 BF Goodrich FQPU)
Figure 603 (Sheet 1)

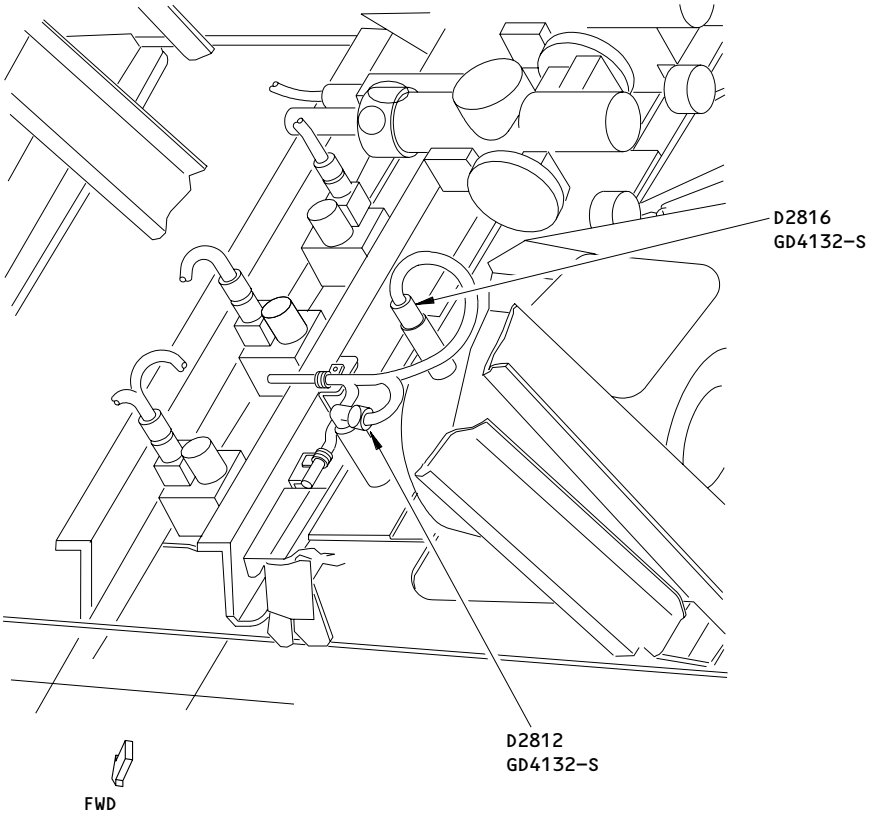


Fuel Quantity Indicating System (FQIS) Lightning Shield Inspection
(767-200 BF Goodrich FQPU)
Figure 603 (Sheet 2)

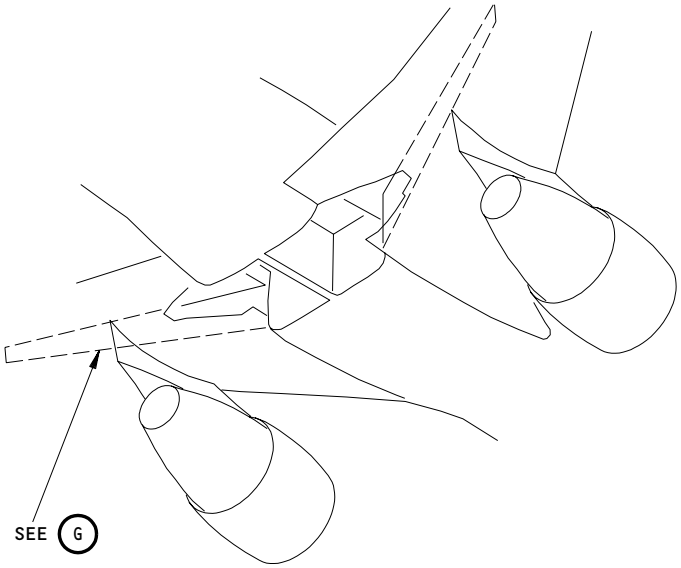


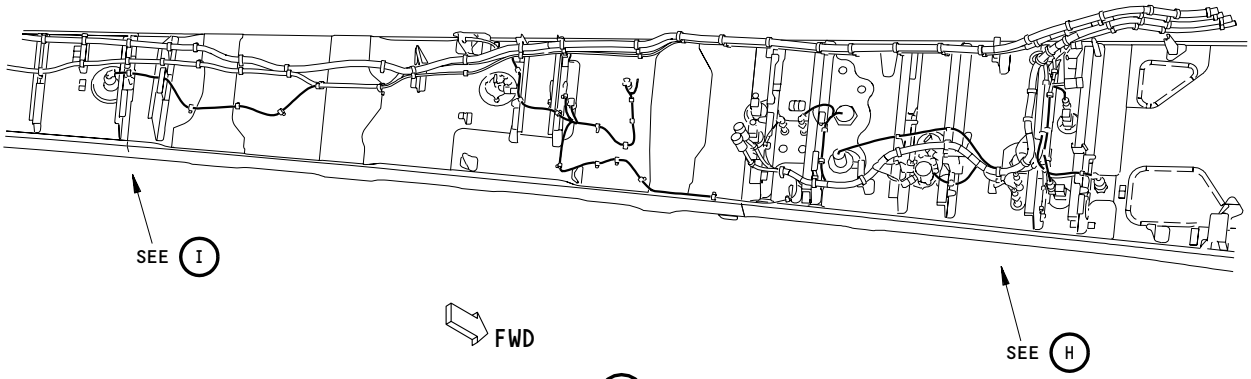
Fuel Quantity Indicating System (FQIS) Lightning Shield Inspection
(767-200/300 Honeywell FQPU)
Figure 603 (Sheet 3)



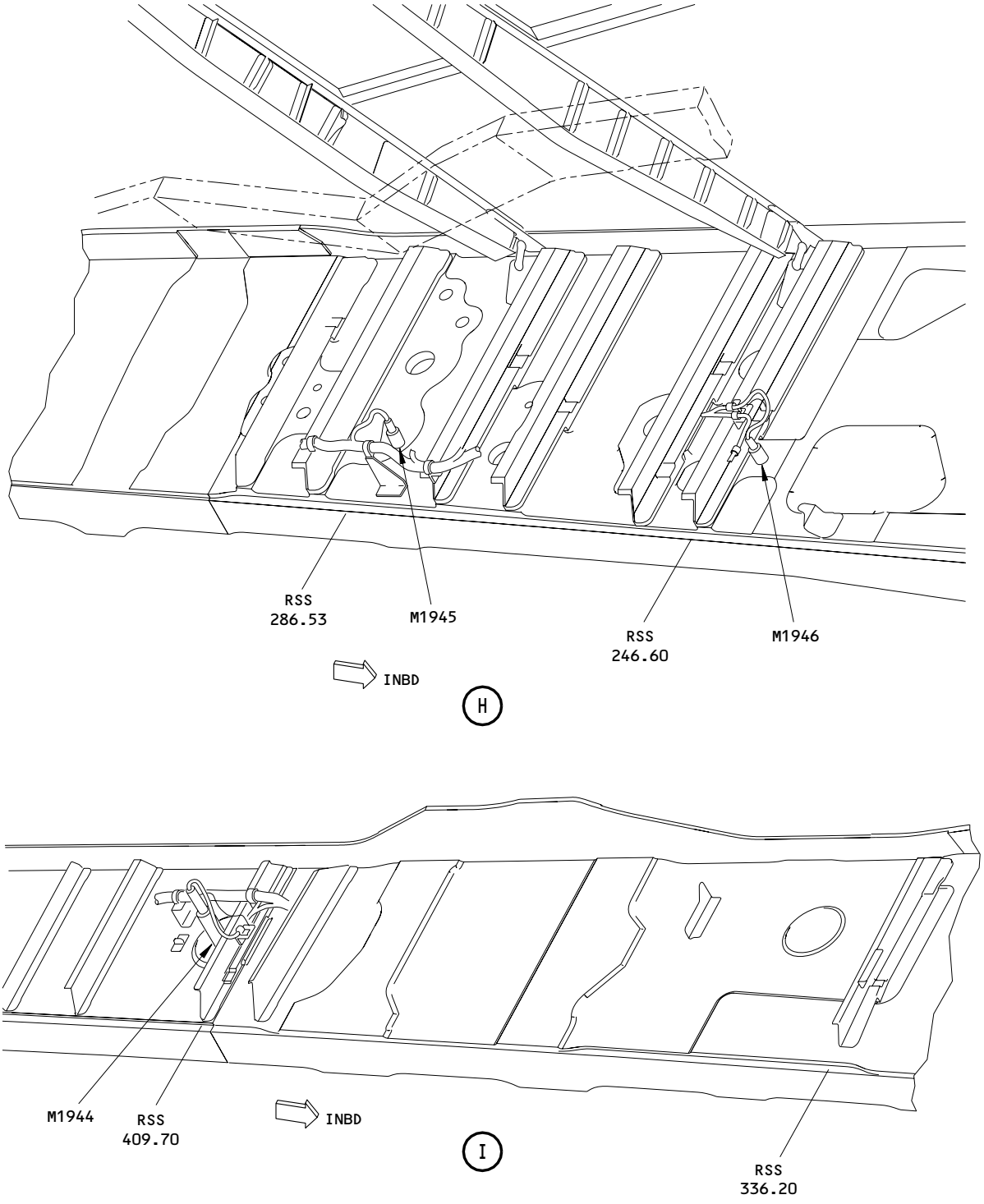


Fuel Quantity Indicating System (FQIS) Lightning Shield Inspection
(767-200/300 Honeywell FQPU)
Figure 603 (Sheet 4)

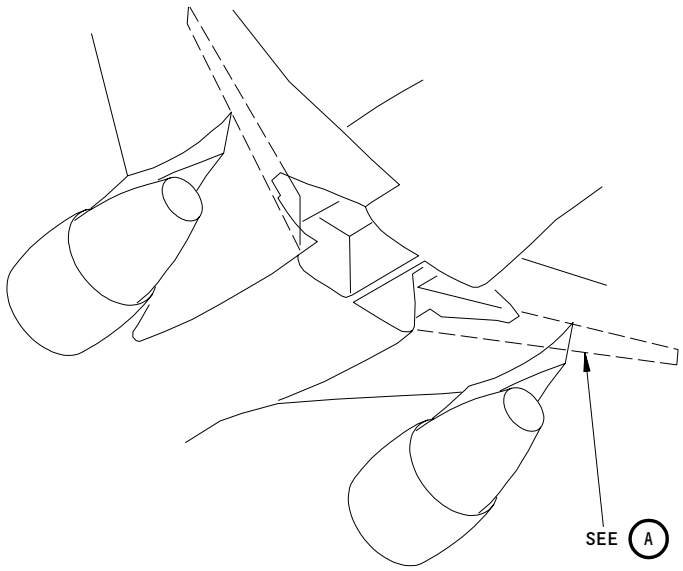


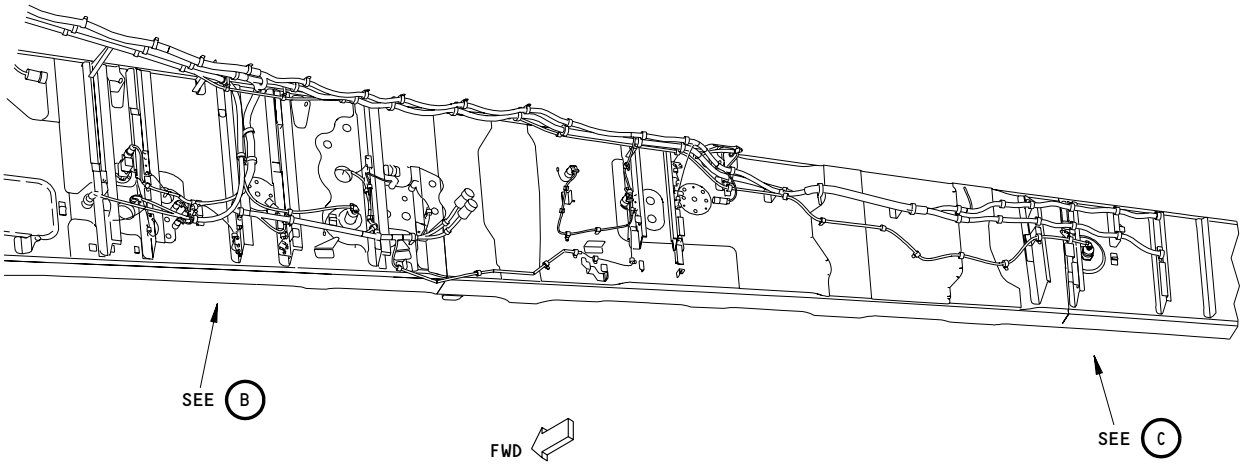


Fuel Quantity Indicating System (FQIS) Lightning Shield Inspection
(767-300/300F/400 BF Goodrich FQPU)
Figure 603 (Sheet 5)



Fuel Quantity Indicating System (FQIS) Lightning Shield Inspection
(767-300/300F/400 BF Goodrich FQPU)
Figure 603 (Sheet 6)





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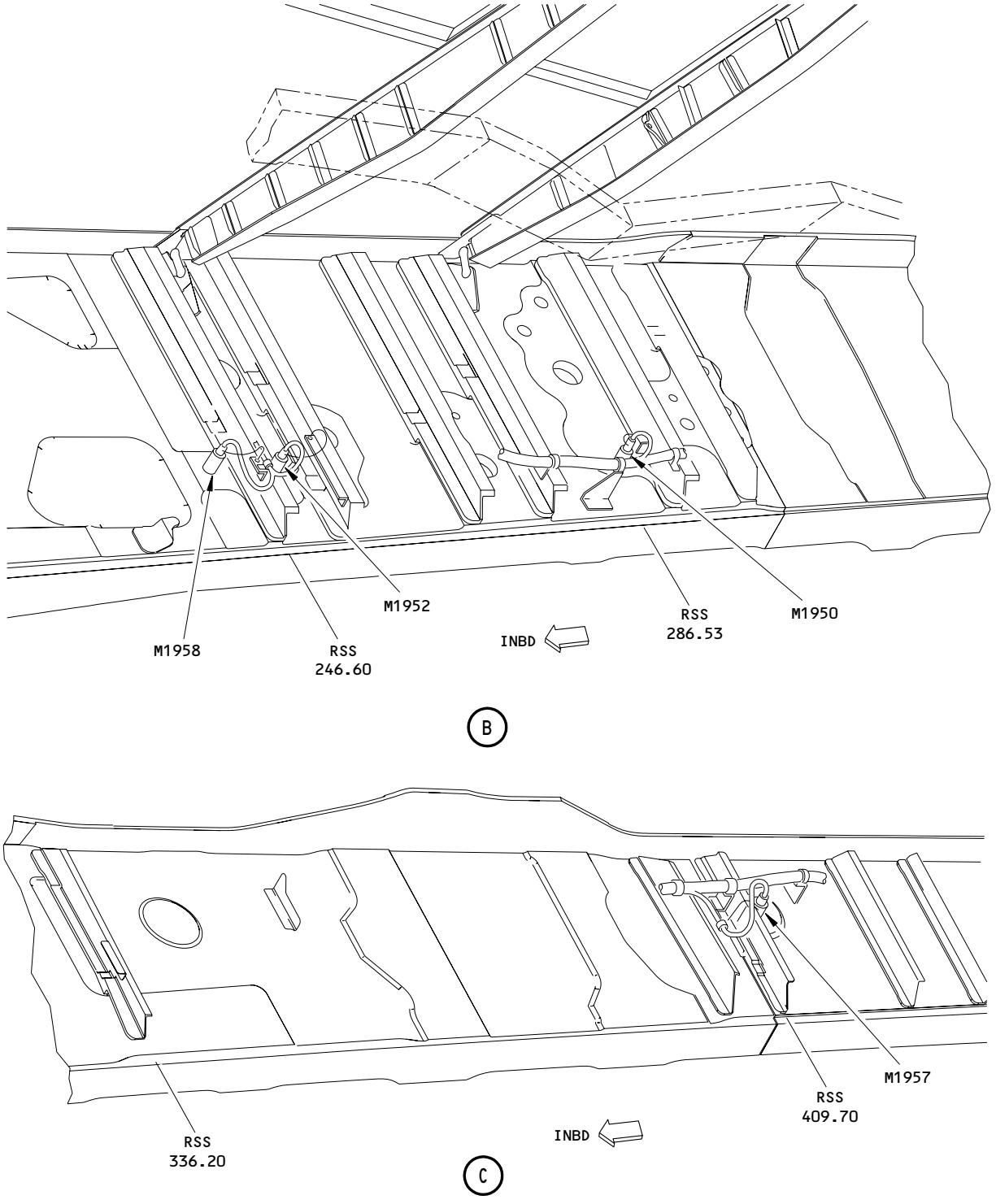
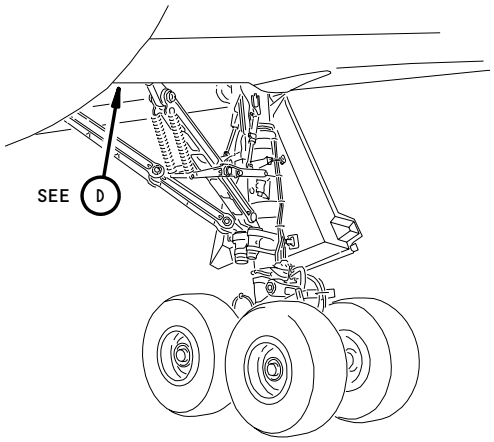
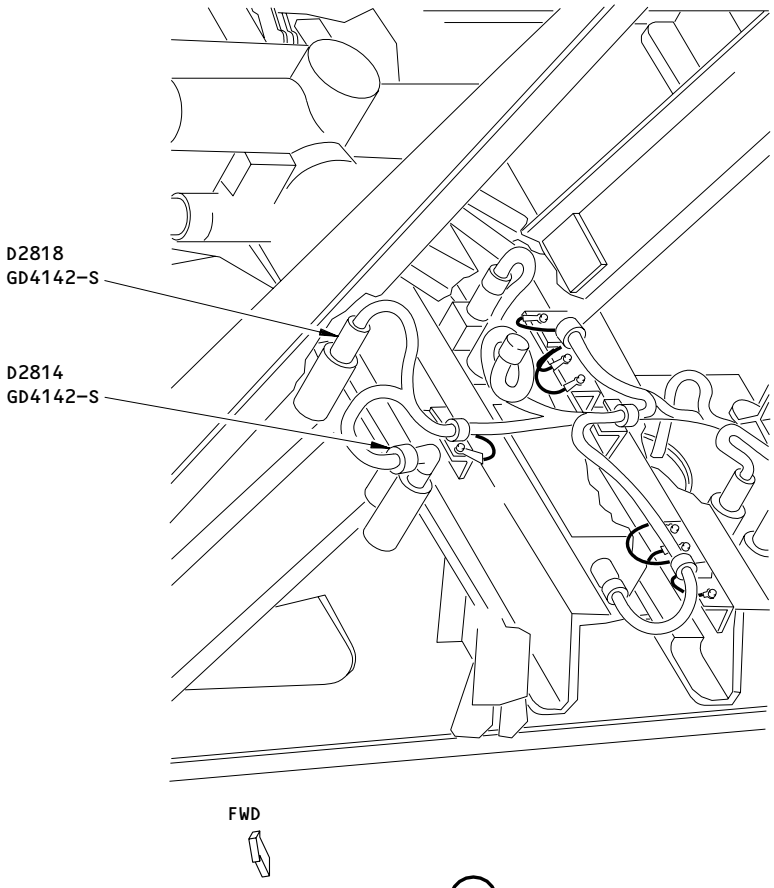
Fuel Quantity Indicating System (FQIS) Lightning Shield Inspection
(767-200 BF Goodrich FQPU)
Figure 604 (Sheet 1)

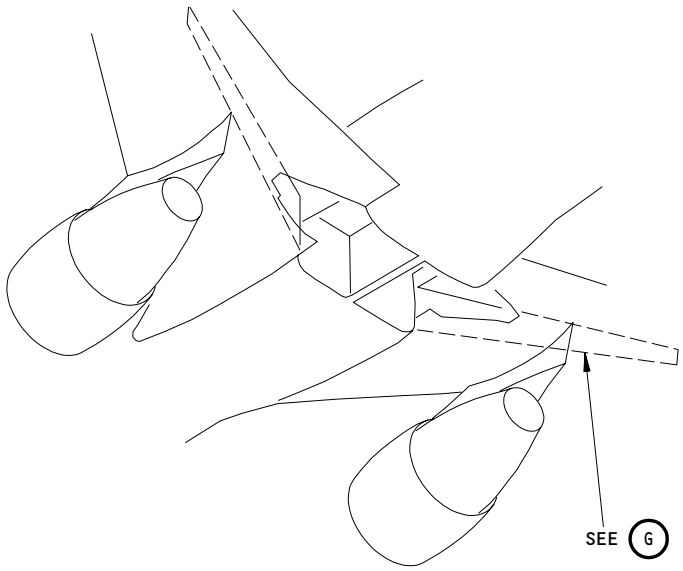


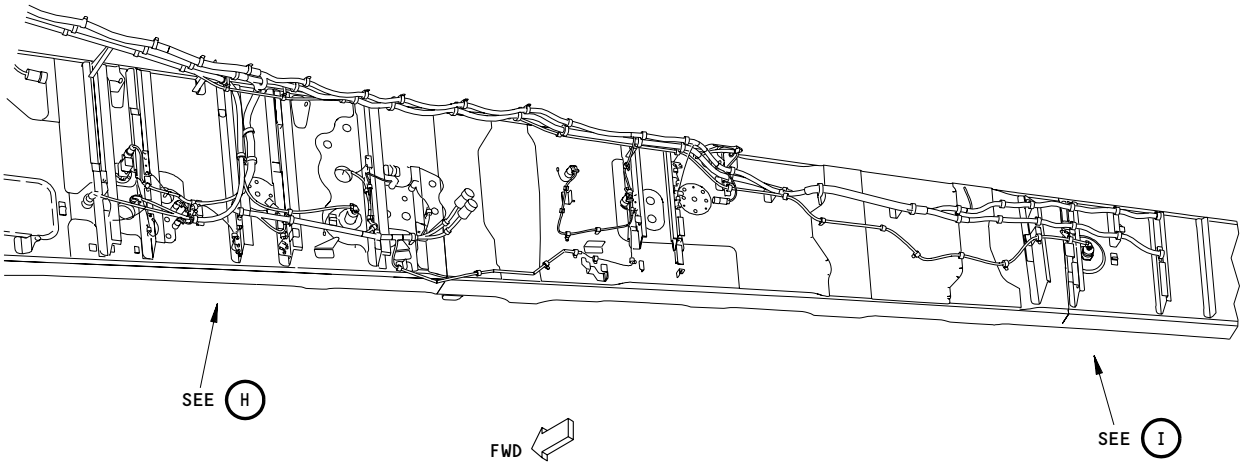
Fuel Quantity Indicating System (FQIS) Lightning Shield Inspection
(767-200 BF Goodrich FQPU)
Figure 604 (Sheet 2)





Fuel Quantity Indicating System (FQIS) Lightning Shield Inspection
(767-200/300 Honeywell FQPU)
Figure 604 (Sheet 3)





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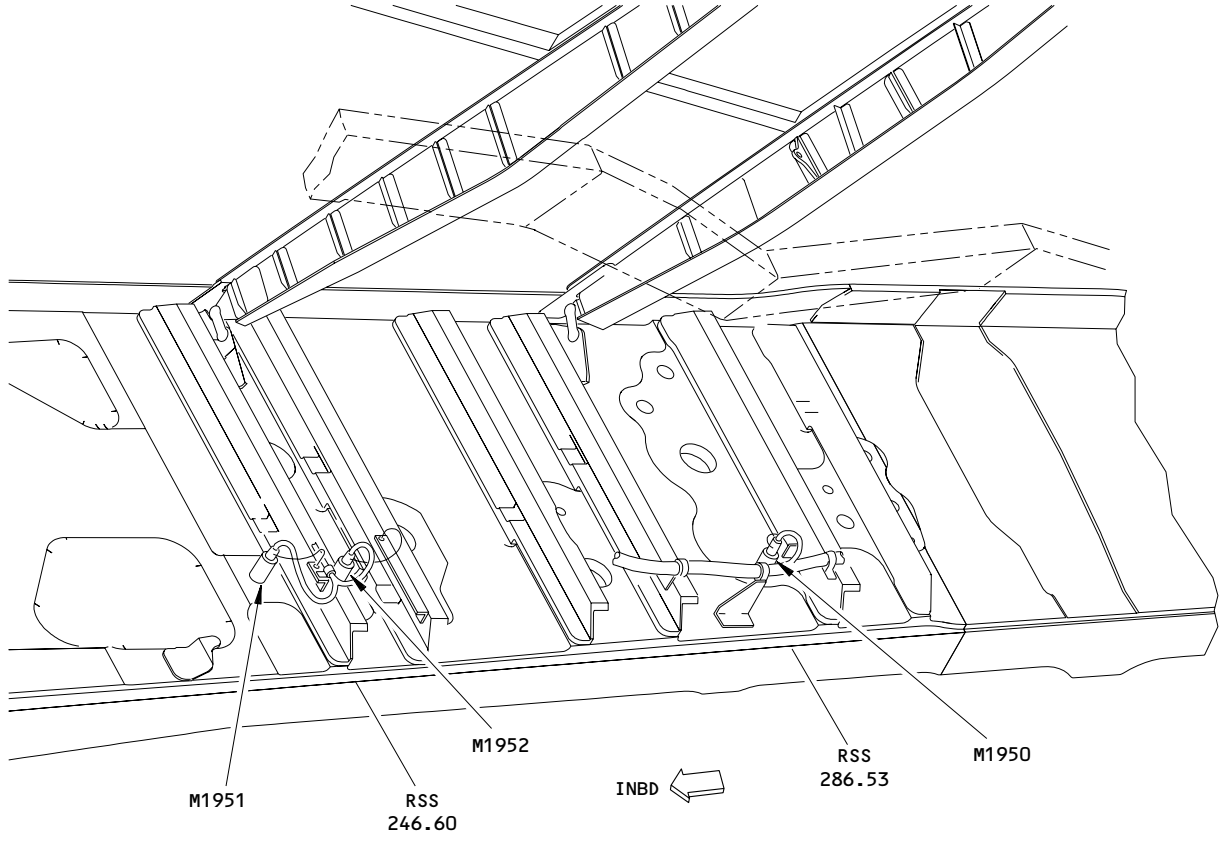
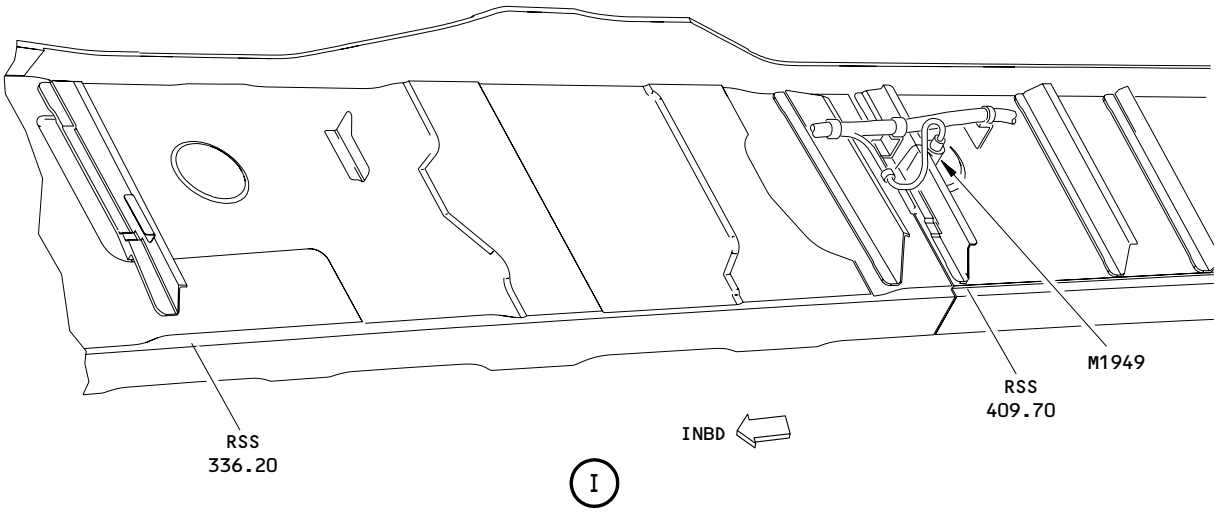
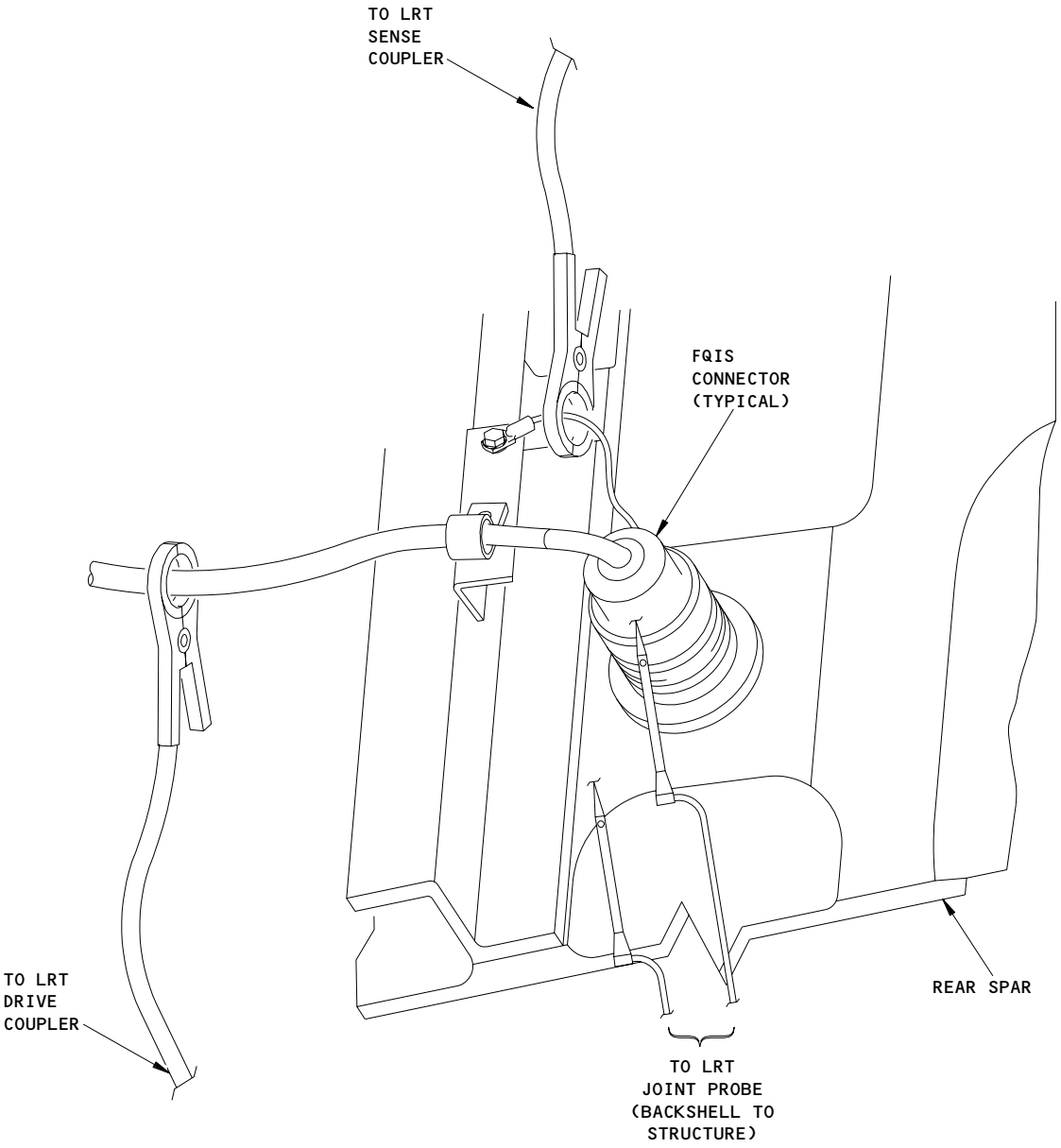
Fuel Quantity Indicating System (FQIS) Lightning Shield Inspection
(767-300/300F/400 BF Goodrich FQPU)
Figure 604 (Sheet 5)



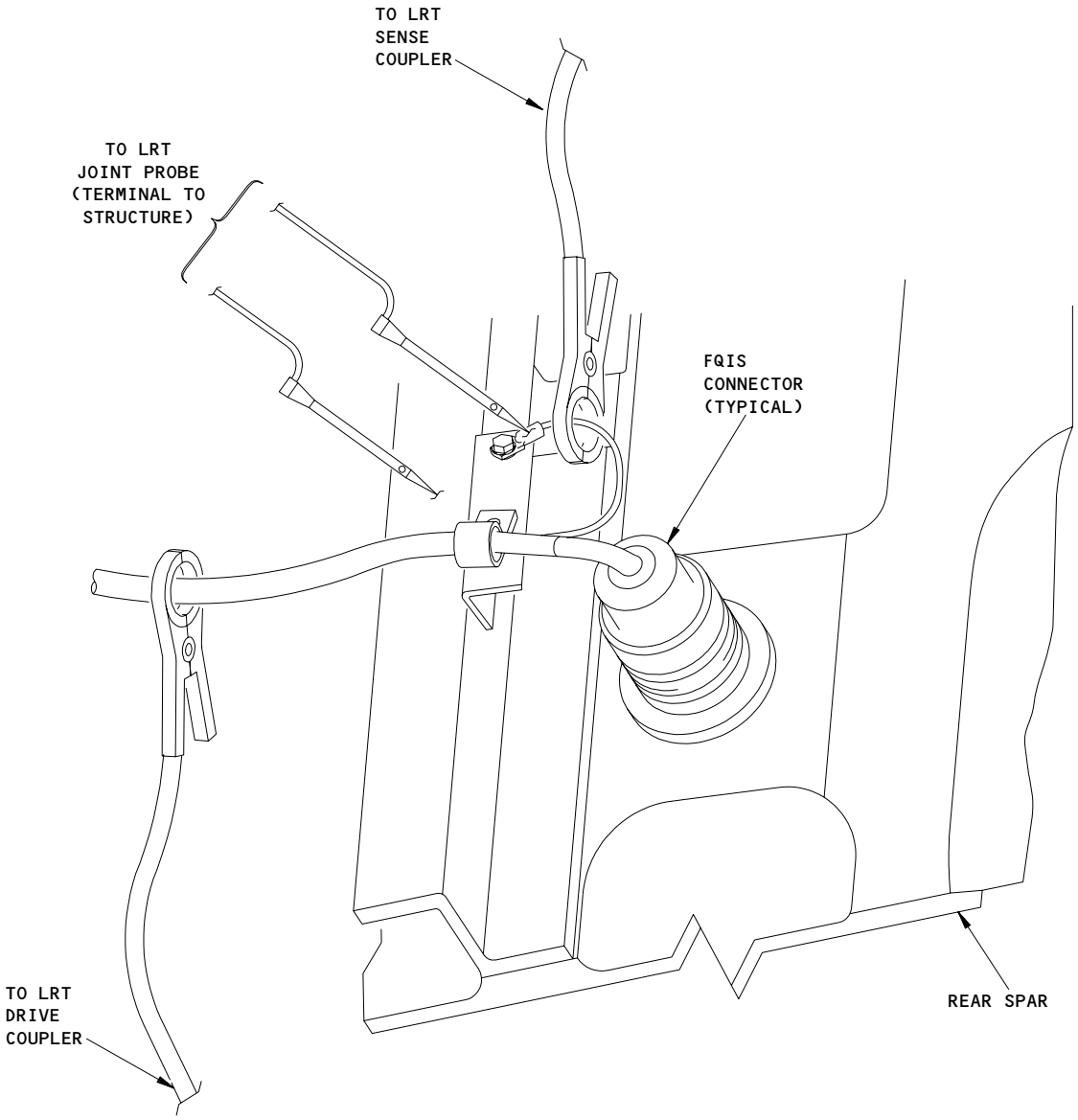


Fuel Quantity Indicating System (FQIS) Lightning Shield Inspection
(767-300/300F/400 BF Goodrich FQPU)
Figure 604 (Sheet 6)



JOINT TEST CONNECTIONS

High Intensity Radiated Fields (HIRF) Fault Isolation
(BF Goodrich FQPU Test Connections)
Figure 605



JOINT TEST CONNECTIONS

High Intensity Radiated Fields (HIRF) Fault Isolation
(Honeywell FQPU Test Connections)
Figure 606

PLANE:	
DATE:	
TECHNICIAN:	

REAR SPAR CONNECTOR	REAR SPAR GROUND	MEASURED JOINT RESISTANCE (milliohms)	MAX JOINT RESISTANCE (milliohms)	COMMENTS
M1944	GD4148-S		5.5	
M1945	GD5980-S			
M1946	GD4132-S			
M1959	GD4156-S			
M1950	GD5978-S			
M1951	GD5974-S			
M1952	GD5976-S			

767-300/300F FQIS CONNECTORS (BF GOODRICH FQPU)

High Intensity Radiated Fields (HIRF) Fault Isolation
(Data Sheet)
Figure 607 (Sheet 1)

PLANE:	
DATE:	
TECHNICIAN:	

REAR SPAR CONNECTOR	REAR SPAR GROUND	MEASURED JOINT RESISTANCE (milliohms)	MAX JOINT RESISTANCE (milliohms)	COMMENTS
DO1582	GD4148-S		1.5	
DO1552	GD4148-S			
DO2816	GD4132-S			
DO2812	GD4132-S			
DO1584	GD4156-S			
DO1560	GD4156-S			
DO2818	GD4142-S			
DO2814	GD4142-S			

767-200, -300 FQIS CONNECTORS (BOEING BUNDLE - HONEYWELL FQPU)

High Intensity Radiated Fields (HIRF) Fault Isolation
(Data Sheet)
Figure 607 (Sheet 2)

PLANE:	
DATE:	
TECHNICIAN:	

REAR SPAR CONNECTOR	REAR SPAR GROUND	MEASURED JOINT RESISTANCE (milliohms)	MAX JOINT RESISTANCE (milliohms)	COMMENTS
M1947	GD4148-S		5.5	
M1945	GD5980-S			
M1948	GD4132-S			
M1957	GD4156-S			
M1950	GD5978-S			
M1958	GD5974-S			
M1952	GD5976-S			

767-200 FQIS CONNECTORS (BF GOODRICH FQPU)

High Intensity Radiated Fields (HIRF) Fault Isolation
(Data Sheet)
Figure 607 (Sheet 3)

LOCATION	MODEL	PART # BOEING S283T025- (CINCH CN1156-)	WHEEL WELL GROUND	MAX JOINT RESISTANCE TERMINAL TO BRACKET (milliohms)	MAX JOINT RESISTANCE BRACKET TO STRUCTURE (milliohms)	W/D
LEFT MAIN TANK	767-200	-126 (-926)	GD5926-S, GD5928-S	1	0.5	28-41-21
	767-300	-121 (-921)				
	767-300F	-321 (-971)				
LEFT MAIN DENS TANK	767-200	-122 (-922)	GD4034-S, GD4134-S	1		
	767-300					
	767-300F					
LEFT AUX TANK	767-200	-127 (-927)	GD5926-S, GD5928-S	1		28-41-23
	767-300	-123 (-923)				
	767-300F	-323 (-973)				
RIGHT MAIN TANK	767-200	-136 (-936)	GD5922-S, GD5924-S	1		28-41-22
	767-300	-131 (-931)				
	767-300F	-331 (-981)				
RIGHT MAIN DENS TANK	767-200	-132 (-932)	GD3946-S, GD4140-S	1		
	767-300					
	767-300F					
RIGHT AUX TANK	767-200	-137 (-937)	GD5922-S, GD5924-S	1		28-41-23
	767-300	-134 (-934)				
	767-300F	-334 (-984)				
RIGHT AUX DENS TANK	767-200	-135 (-935)	GD3946-S, GD4098-S	1		
	767-300					
	767-300F					

767-200, -300, -300F, CINCH (BF GOODRICH FQPU ONLY)

High Intensity Radiated Fields (HIRF) Joint Resistance Values
Figure 608 (Sheet 1)

LOCATION	BOEING PART NUMBER	REAR SPAR GROUND	MAX JOINT RESISTANCE TERMINAL TO BRACKET (MILLIOHMS)	MAX JOINT RESISTANCE BRACKET TO STRUCTURE (MILLIOHMS)	WIRING DIAGRAM
LEFT MAIN TANK LO-Z	286T0446-101	GD4148-S	1	0.5	28-41-21
LEFT MAIN TANK HI-Z		GD4148-S			
LEFT AUX TANK LO-Z	286T0454-005	GD4132-S			28-41-23
LEFT AUX TANK HI-Z		GD4132-S			
RIGHT MAIN TANK LO-Z	286T0448-101	GD4156-S			28-41-22
RIGHT MAIN TANK HI-Z		GD4156-S			
RIGHT AUX TANK LO-Z		GD4142-S			28-41-23
RIGHT AUX TANK HI-Z		GD4142-S			

767-200, 300 BOEING BUNDLE

High Intensity Radiated Fields (HIRF)
Joint Resistance Values
Figure 608 (Sheet 2)

STATION		BOEING CARD NO.
TAIL NO.	SAS BOEING 767 TASK CARD	28-AWL-18-2
DATE		AIRLINE CARD NO.

SKILL	WORK AREA	RELATED TASK	INTERVAL	PHASE	MPD REV	TASK CARD REVISION
AIRPL	R/H WING		8C NOTE	248XX		AUG 22/09

TASK	TITLE	STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE	APPLICABILITY ENGINE
FUNCTIONAL	FQIS WIRING AND BONDING		ALL	ALL

ZONES	ACCESS PANELS
610	611DB 611FB

MECH	INSP	MPD ITEM NUMBER

FUNCTIONALLY CHECK (RESISTANCE MEASUREMENT) THE OUT OF TANK FQIS WIRING LIGHTNING SHIELD TO GROUND TERMINATION BOND (SFAR 88). 20-55-54-6A

NOTE: THIS TASK SATISFIES THE REQUIREMENTS OF 28-AWL-18.
ALI TASK 28-AWL-18 INTERVAL IS EVERY 12 YEARS.

1. FQIS Wiring and Bonding - Inspection

A. General

(1) ALI - Refer to the task: Airworthiness Limitation Precautions (AMM 20-00-00/201), for important information on airworthiness limitation instructions (ALIs).

(2) Do this task to do the requirements of 28-AWL-18 and 28-AWL-26.

B. References

(1) AMM 20-56-02/201, Loop Resistance Measurement

(2) AMM 20-56-03/201, Joint Resistance Measurement

(3) AMM 06-44-00/201, Finding an Access Door or Panel on the Wings

(4) AMM 28-41-00/501, Fuel Quantity Indicating System (FQIS) Tank Units - Operational Check

(5) AMM 32-00-20/201, Landing Gear Downlocks - Maintenance Practices.

(6) SWPM Chapter 20, Standard Wiring Practices Manual.

C. Equipment

(1) 906-10246-2 or 906-10246-3 - Loop Resistance Tester (LRT)

MECH | INSP

D. Prepare for the Procedure

(1) To inspect the FQIS out-tank wire bundle shieldings at the fuel tank spar penetrations, a man-lift or ladder and safety equipment is necessary.

(2) Send copies of all data recorded while doing this procedure to the Boeing Company for engineering analysis. Send the data to this address:
Boeing Commercial Airplane Group
P.O. Box 3707
Seattle, WA 98124-2207, USA
Attention: Manager, ELECTROMAGNETICS EFFECTS, MC OL-67.
Or this email address:
"EME AMM Task Card Data Group
EMEAMMTaskCardData@boeing.com."

(3) Make copies of the applicable data sheet (Fig. 602).

(4) Do this task: Install the Downlocks on the Landing Gear.

(5) Open the applicable panels for the applicable FQIS wire bundle:
552HB, Left Inboard Wing Trailing Edge Panel
652HB, Right Inboard Wing Trailing Edge Panel

E. Fuel Tank FQIS Connector Bonding Check

(1) Measure the loop resistance of a wire bundle using the LRT.

NOTE: Typical LRT connections for the FQIS wire bundles are shown on Fig. 601.

(a) Do this task: Loop Resistance Measurement (AMM 20-56-02/201) on each FQIS wire bundle listed in the applicable FQIS WIRE BUNDLE LOOP RESISTANCE table below:

1) Record the measured loop resistance value on the data sheet.

2) If the measured loop resistance value is within the MIN-MAX limits listed in the data sheet, go to the next wire bundle in the table.

3) If the values are out of the MIN-MAX limits, do the FQIS Wiring and Bonding - Fault Isolation.

4) After you measure the resistance, do a check of the connector and backshell for the wire bundle at the point of measurement and make sure that they are hand-tight.

NOTE: A loose connector or backshell can cause an out-of-limits resistance reading.

5) If a loose connector or backshell is found and tightened, do the Loop Resistance Measurement (AMM 20-56-02/201) on this wire bundle again.

(2) After you measure all wire bundles resistances, do this inspection check:

(a) AIRPLANE WITH BF GOODRICH FQPU;
For the connector backshell, look for corrosion in the area where the lightning shield connects to the backshell.

(b) For the ground jumper, look for corrosion and worn or broken strands.

(c) If a problem is found, repair in accordance to (SWPM 20-20-00).

(d) After any repair, do the Loop Resistance Measurement (AMM 20-56-02/2 01) on that wire bundle again.

FQIS WIRE BUNDLE LOOP RESISTANCE 767-200 BF GOODRICH FQPU					
Location	Part # Boeing S283T025-CN1156-	Rear Spar Connector	Loop Resistance Min-Max (mOhms)	Rear Spar Ground	W/D
Left Main Tank	-126 or -926	M1947	18-44	GD4148-S	28-41-21
Left Main Dens. Tank	-122 or -922	M1945	11-40	GD5980-S	28-41-21
Left Aux Tank	-127 or -927	M1948	9-40	GD4132-S	28-41-23
Right Main Tank	-136 or -936	M1957	18-43	GD4156-S	28-41-22
Right Main Dens. Tank	-132 or -932	M1950	10-40	GD5978-S	28-41-22
Right Aux Tank	-137 or -937	M1958	11-47	GD5974-S	28-41-23
Right Aux Dens. Tank	-135 or -935	M1952	11-40	GD5976-S	28-41-23

MECH | INSP

FQIS WIRE BUNDLE LOOP RESISTANCE
767-300 BF GOODRICH FQPU

Location	Part # Boeing S283T025-CN1156-	Rear Spar Connector	Loop Resistance Min-Max (mOhms)	Rear Spar Ground	W/D
Left Main Tank	-121 or -921	M1944	18-44	GD4148-S	28-41-21
Left Main Dens. Tank	-122 or -922	M1945	11-40	GD5980-S	28-41-21
Left Aux Tank	-123 or -923	M1946	9-40	GD4132-S	28-41-23
Right Main Tank	-131 or -931	M1949	18-43	GD4156-S	28-41-22
Right Main Dens. Tank	-132 or -932	M1950	10-40	GD5978-S	28-41-22
Right Aux Tank	-134 or -934	M1951	11-47	GD5974-S	28-41-23
Right Aux Dens. Tank	-135 or -935	M1952	11-40	GD5976-S	28-41-23

FQIS WIRE BUNDLE LOOP RESISTANCE 767-200,300 BOEING BUNDLE-HONEYWELL FQPU					
Location	Boeing Part #	Rear Spar Connector	Loop Resistance Min-Max (mOhms)	Rear Spar Ground	W/D
Left Main Tank Lo-Z	286T0446	DO1582	51-121	GD4148-S	28-41-21
Left Main Tank Hi-Z	286T0446	DO1552	172-284	GD4148-S	28-41-21
Left Aux Tank Lo-Z	286T0454	DO2816	45-150	GD4132-S	28-41-23
Left Aux Tank Hi-Z	286T0454	DO2812	105-175	GD4132-S	28-41-23
Right Main Tank Lo-Z	286T0448	DO1584	51-122	GD4156-S	28-41-22
Right Main Tank Hi-Z	286T0448	DO1560	172-284	GD4156-S	28-41-22
Right Aux Tank Lo-Z	286T0448	DO2818	51-152	GD4142-S	28-41-23
Right Aux Tank Hi-Z	286T0448	DO2814	111-184	GD4142-S	28-41-23

F. Put the Airplane Back to its Usual Condition

(1) If any FQIS wire bundles were disturbed during the accomplishment of this procedure, do this task: Operational Check - Fuel Quantity Indicating System (FQIS) (AMM 28-41-00/501).

(2) Close these access panels:

(3) Do this task: Remove the Downlocks on the Landing Gear.

2. FQIS Wiring and Bonding - Fault Isolation

MECH | INSP

A. References

(1) AMM 20-56-01/201, LRT Lid Standard Measurement

(2) AMM 20-56-02/201, Loop Resistance Measurement

(3) AMM 20-56-03/201, Joint Resistance Measurement

(4) AMM 32-00-40/201, Landing Gear Ground Door Release System Operation (Open the Doors)

(5) SWPM Chapter 20, Standard Wiring Practices Manual

B. Access

(1) Location Zones

732	Main Landing Gear Door - Left
742	Main Landing Gear Door - Right
552	Inboard Wing Trailing Edge - Left Wing
652	Inboard Wing Trailing Edge - Right Wing

C. Procedure

(1) If the wire bundle loop resistance is less than the MIN value shown in data sheet (Fig. 602), then check the operation of the LRT. To check the LRT operation, do this task: LRT Lid Standard Measurement (AMM 20-56-01/201).

(a) If no problem is found with the LRT, check the test setup: check the LRT coupler connections to the wire bundle and attempt another loop measurement. The couplers should only be clamped around the wire bundle being measured and mustbe closed properly.

(b) If no problem is found with the LRT and the test setup, do a inspection on the wire bundle around the connector being measured. Look for any physical damage, corrrosion for the connector, corrrosion, worn or broken strand for the ground jumper, and any sign of damage or degrade for the wire bundle. Repair or replace in accordance to (SWPM Chapter 20).

NOTE: An example might be an area where bundle insulation has degraded and a portion of the shield is exposed and making contact with structure at an intermediate point in the bundle length. Another might be some metallic object penetrating the insulation and making contact between the shield and structure.

1) If a problem was found and repaired, do the Loop Resistance Measurement (AMM 20-56-02/201) on this bundle.

2) If no defects are found with the wire bundle, then record the below-minimum resistance reading. Contact Boeing for support.

(2) If the wire bundle loop resistance is greater than the MAX value resistance, do these steps:

(a) AIRPLANE WITH BF GOODRICH FQPU;
Measure the joint resistance (AMM 20-56-03/201) from the FQIS backshell to primary structure at the spar penetration for connectors in applicable tables below:

1) If the joint value measured is more than the maximum value in the applicable table, do the joint resistance test on that connector breakdown according to Table. 601 (AMM 20-56-03/201).

a) If a joint value measured is more than the maximum value, repair in accordance to (SWPM Chapter 20).

(b) AIRPLANE WITH BOEING - HONEYWELL FQPU;

Measure the joint resistance (AMM 20-56-03/201) from the ground terminal to primary structure at the spar penetration for connectors in applicable tables below:

1) If the joint value measured is more than the maximum value in the applicable table, do these tasks:

MECH	INSP

a) Measure the joint resistance from the ground terminal to bracket. Make sure the joint value is not greater than 1.0 milliohms.

b) Measure the joint resistance from the bracket to structure. Make sure the joint value is not greater than 0.5 milliohms.

c) If a joint value measured is greater than the maximum value, repair in accordance to (SWPM Chapter 20).

FQIS WIRE BUNDLE JOINT RESISTANCE 767-200 BF GOODRICH FQPU					
Location	Part # Boeing S283T025-CN1156-	Rear Spar Connector	Joint Resistance Min-Max (mOhms)	Rear Spar Ground	W/D
Left Main Tank	-126 or -926	M1947	0-5.5	GD4148-S	28-41-21
Left Main Dens. Tank	-122 or -922	M1945	0-5.5	GD5980-S	28-41-21
Left Aux Tank	-127 or -927	M1948	0-5.5	GD4132-S	28-41-23
Right Main Tank	-136 or -936	M1957	0-5.5	GD4156-S	28-41-22
Right Main Dens. Tank	-132 or -932	M1950	0-5.5	GD5978-S	28-41-22
Right Aux Tank	-137 or -937	M1958	0-5.5	GD5974-S	28-41-23
Right Aux Dens. Tank	-135 or -935	M1952	0-5.5	GD5976-S	28-41-23

FQIS WIRE BUNDLE JOINT RESISTANCE 767-300 BF GOODRICH FQPU					
Location	Part # Boeing S283T025-CN1156-	Rear Spar Connector	Joint Resistance Min-Max (mOhms)	Rear Spar Ground	W/D
Left Main Tank	-121 or -921	M1944	0-5.5	GD4148-S	28-41-21
Left Main Dens. Tank	-122 or -922	M1945	0-5.5	GD5980-S	28-41-21
Left Aux Tank	-123 or -923	M1946	0-5.5	GD4132-S	28-41-23
Right Main Tank	-131 or -931	M1949	0-5.5	GD4156-S	28-41-22
Right Main Dens. Tank	-132 or -932	M1950	0-5.5	GD5978-S	28-41-22
Right Aux Tank	-134 or -934	M1951	0-5.5	GD5974-S	28-41-23
Right Aux Dens. Tank	-135 or -935	M1952	0-5.5	GD5976-S	28-41-23

FQIS WIRE BUNDLE JOINT RESISTANCE 767-200,300 BOEING BUNDLE-HONEYWELL FQPU					
Location	Boeing Part #	Rear Spar Connector	Joint Resistance Min-Max (mOhms)	Rear Spar Ground	W/D
Left Main Tank Lo-Z	286T0446	DO1582	0-1.5	GD4148-S	28-41-21
Left Main Tank Hi-Z	286T0446	DO1552	0-1.5	GD4148-S	28-41-21
Left Aux Tank Lo-Z	286T0454	DO2816	0-1.5	GD4132-S	28-41-23
Left Aux Tank Hi-Z	286T0454	DO2812	0-1.5	GD4132-S	28-41-23
Right Main Tank Lo-Z	286T0448	DO1584	0-1.5	GD4156-S	28-41-22
Right Main Tank Hi-Z	286T0448	DO1560	0-1.5	GD4156-S	28-41-22
Right Aux Tank Lo-Z	286T0448	DO2818	0-1.5	GD4142-S	28-41-23
Right Aux Tank Hi-Z	286T0448	DO2814	0-1.5	GD4142-S	28-41-23

(3) If the joint resistance at the spar penetration was within limits, and the loop resistance value is still greater than the maximum, move to the inboard end of the wire bundle at the wheel well.

(a) Do this task: Joint Resistance Measurement (AMM 20-56-03/201) from the FQIS ground terminal to primary structure according to tables below:

1) If the joint value measured is more than the maximum value in the tables, repair in accordance to (SWPM Chapter 20).

MECH	INSP

(4) If repair is required and completed, return to the FQIS Wiring and Bonding - Check.

(a) If you found and corrected the problem, record that on the data sheet in the Comments column.

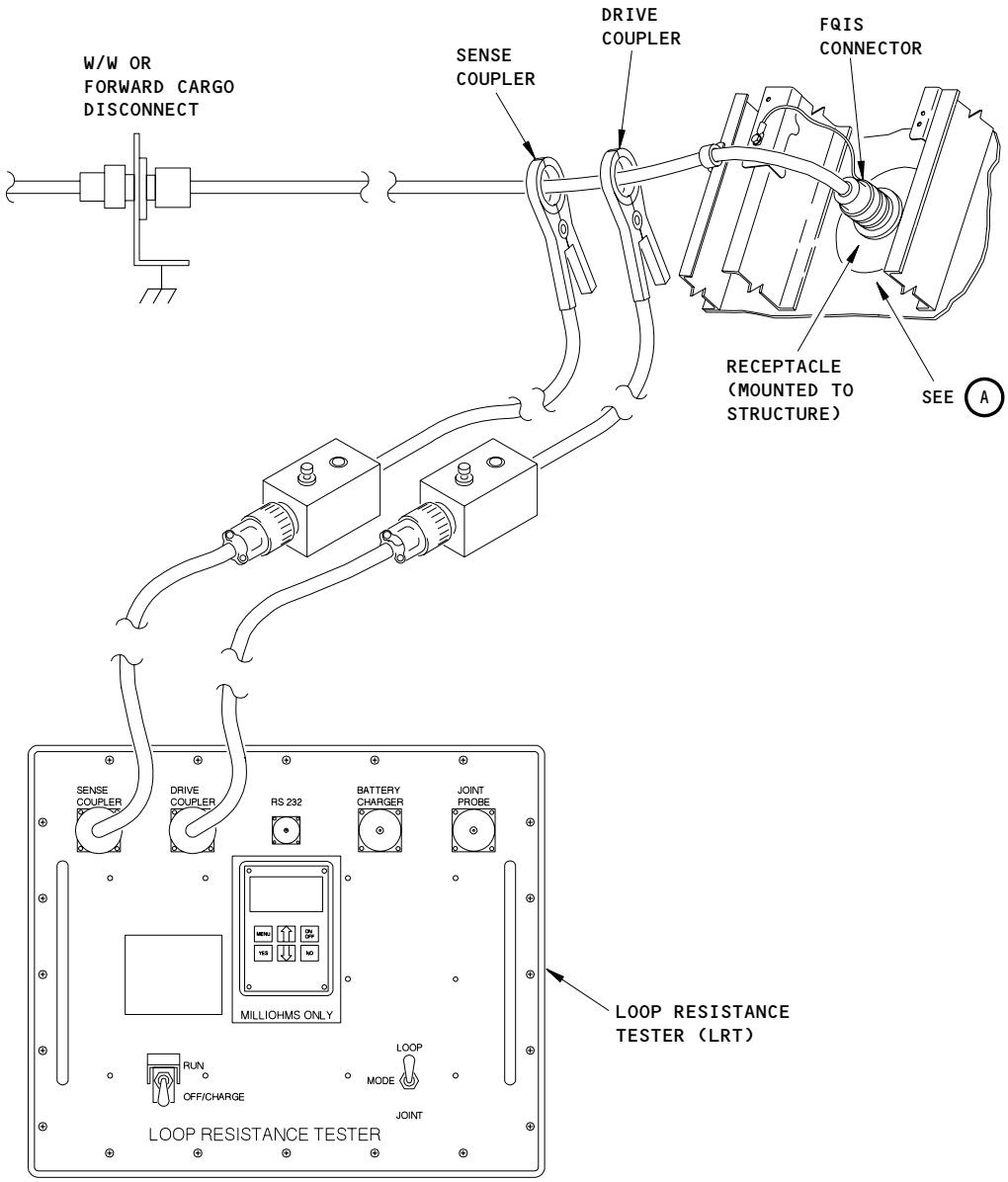
(5) If the joint resistance values at both ends of the wire bundle are OK, and the loop resistance stays greater than the maximum permitted resistance, then the problem is in the wire bundle.

(a) Repair or replace the wire bundle in accordance to (SWPM Chapter 20).

1) If repair is required and completed, do the FQIS Wiring and Bonding - Check to re-test this wire bundle.

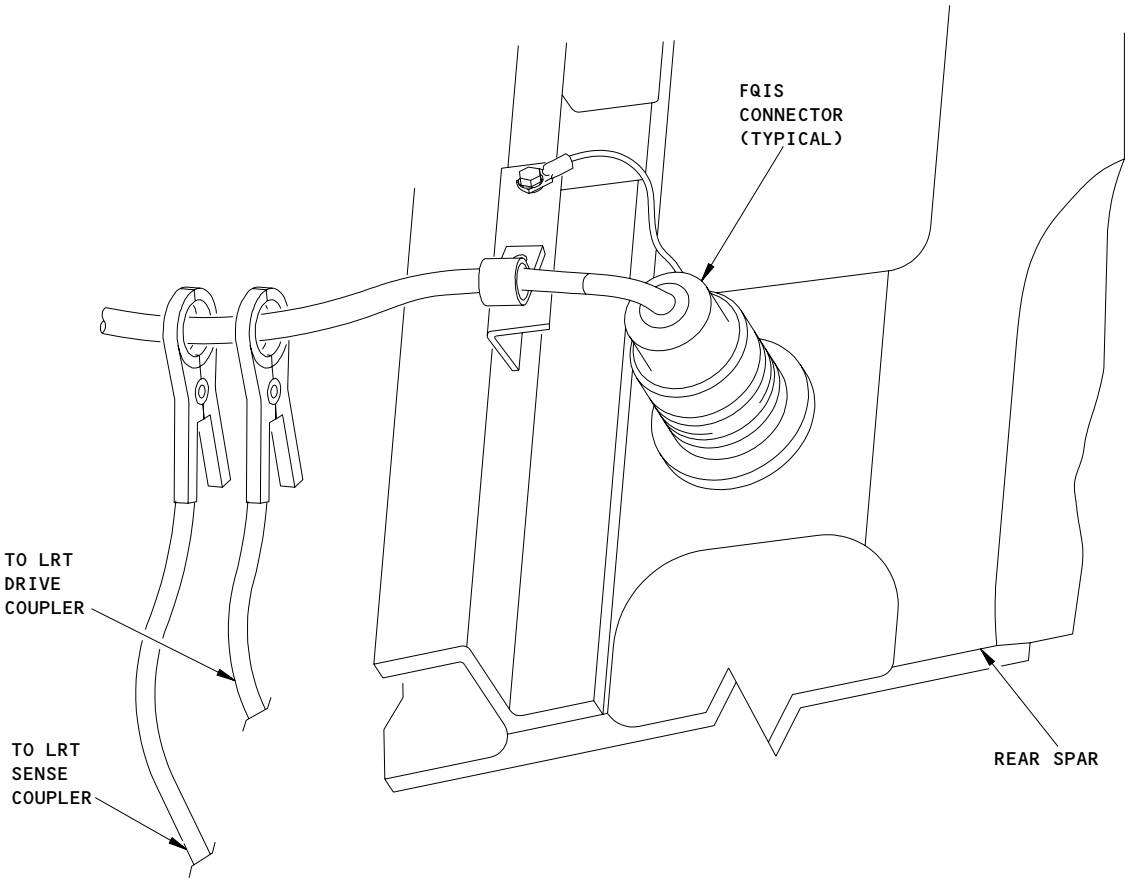
FQIS WIRE BUNDLE JOINT RESISTANCE AT INBOARD END						
Location	Model	Boeing Part Number S283T025- (Cinch CN1156)	Wheel Well Ground	Max Joint Resistance Terminal to Bracket (milliohms)	Max Joint Resistance Bracket to Structure (milliohms)	Wiring Diagrams
Left Main Tank	200 300 300F	-126 (-926) -121 (-921) -321 (-971)	GD5926-S, GD5928-S	1.0	0.5	28-41-21
Left Main Dens Tank	200 300 300F	-122 (-922)	GD4034-S, GD4134-S	1.0	0.5	28-41-21
Left Aux Tank	200 300 300F	-127 (-927) -123 (-923) -323 (-973)	GD5926-S, GD5928-S	1.0	0.5	28-41-23
Right Main Tank	200 300 300F	-136 (-936) -131 (-931) -331 (-981)	GD5922-S, GD5924-S	1.0	0.5	28-41-22
Right Main Dens Tank	200 300 300F	-132 (-932)	GD3946-S, GD4140-S	1.0	0.5	28-41-22
Right Aux Tank	200 300 300F	-137 (-937) -134 (-934) -334 (-984)	GD5922-S, GD5924-S	1.0	0.5	28-41-23
Right Aux Dens Tank	200 300 300F	-135 (-935)	GD3946-S, GD4098-S	1.0	0.5	28-41-23

FQIS WIRE BUNDLE JOINT RESISTANCE AT INBOARD END					
Location	Boeing Part Number	Rear Spar Ground	Max Joint Resistance Terminal to Bracket (milliohms)	Max Joint Resistance Bracket to Structure (milliohms)	Wiring Diagrams
Left Main Tank Lo-Z	286T0446-101	GD4148-S	1.0	0.5	28-41-21
Left Main Tank Hi-Z	286T0446-101	GD4148-S	1.0	0.5	28-41-21
Left Aux Tank Lo-Z	286T0454-005	GD4132-S	1.0	0.5	28-41-23
Left Aux Tank Hi-Z	286T0454-005	GD4132-S	1.0	0.5	28-41-23
Right Main Tank Lo-Z	286T0448-101	GD4156-S	1.0	0.5	28-41-22
Right Main Tank Hi-Z	286T0448-101	GD4156-S	1.0	0.5	28-41-22
Right Aux Tank Lo-Z	286T0448-101	GD4142-S	1.0	0.5	28-41-23
Right Aux Tank Hi-Z	286T0448-101	GD4142-S	1.0	0.5	28-41-23



FQIS TEST CONNECTIONS

High Intensity Radiated Fields (HIRF) Inspection
(Fuel Quantity Indicating System Bundles)
Figure 601 (Sheet 1)



LOOP TEST CONNECTIONS
A

High Intensity Radiated Fields (HIRF) Inspection
(Test Connections)
Figure 601 (Sheet 2)

PLANE:	
DATE:	
TECHNICIAN:	

REAR SPAR CONNECTOR	MEASURED LOOP RESISTANCE	LOOP RESISTANCE MIN-MAX (milliohms)	REAR SPAR GROUND	COMMENTS
M1944		18-44	GD4148-S	
M1945		11-40	GD5980-S	
M1946		9-40	GD4132-S	
M1949		18-43	GD4156-S	
M1950		10-40	GD5978-S	
M1951		11-47	GD5974-S	
M1952		11-40	GD5976-S	

767-300/300F FQIS CONNECTORS (BF GOODRICH FQPU)

High Intensity Radiated Fields (HIRF) Inspection
(Data Sheet)
Figure 602 (Sheet 1)

PLANE:	
DATE:	
TECHNICIAN:	

REAR SPAR CONNECTOR	MEASURED LOOP RESISTANCE	LOOP RESISTANCE MIN-MAX (milliohms)	REAR SPAR GROUND	COMMENTS
DO1582		51-121	GD4148-S	
DO1552		172-284	GD4148-S	
DO2816		45-150	GD4132-S	
DO2812		105-175	GD4132-S	
DO1584		51-122	GD4156-S	
DO1560		172-284	GD4156-S	
DO2818		51-152	GD4142-S	
DO2814		111-184	GD4142-S	

767-200, -300 FQIS CONNECTORS (BOEING BUNDLE - HONEYWELL FQPU)

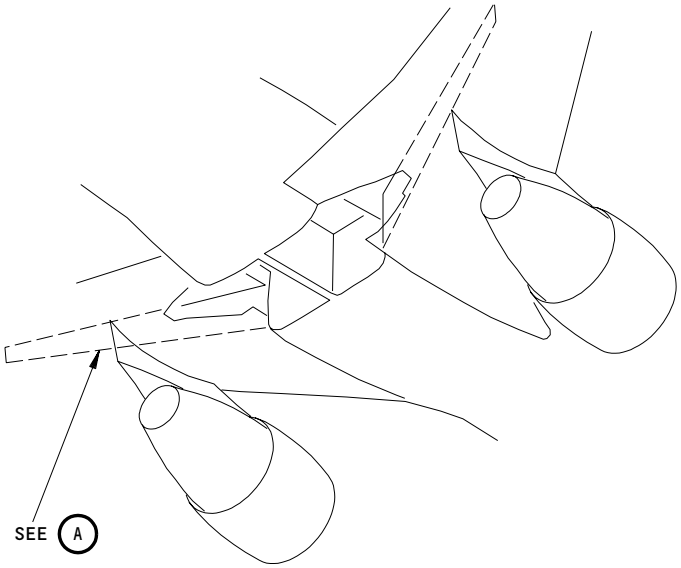
High Intensity Radiated Fields (HIRF) Inspection
(Data Sheet)
Figure 602 (Sheet 2)

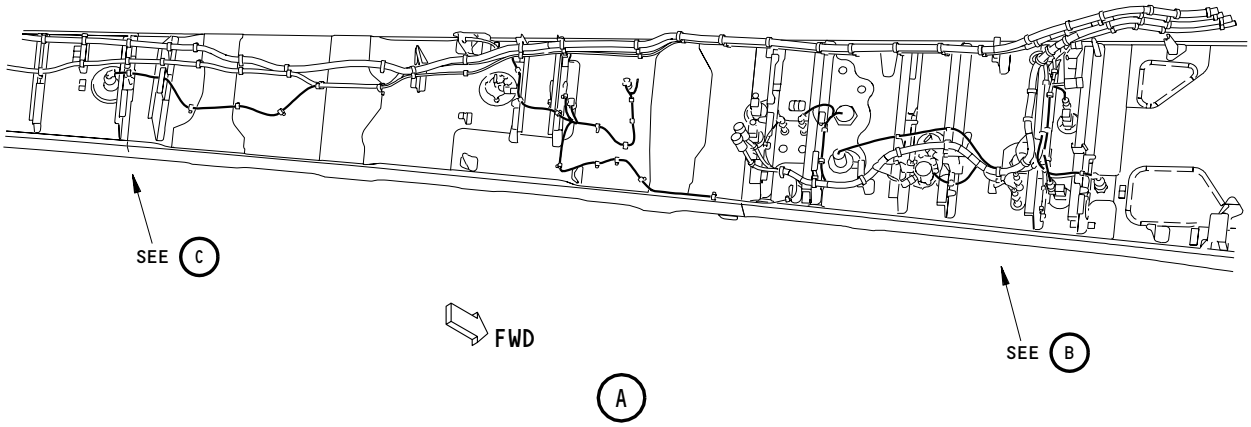
PLANE:	
DATE:	
TECHNICIAN:	

REAR SPAR CONNECTOR	MEASURED LOOP RESISTANCE	LOOP RESISTANCE MIN-MAX (milliohms)	REAR SPAR GROUND	COMMENTS
M1947		18-44	GD4148-S	
M1945		11-40	GD5980-S	
M1948		9-40	GD4132-S	
M1957		18-43	GD4156-S	
M1950		10-40	GD5978-S	
M1958		11-47	GD5974-S	
M1952		11-40	GD5976-S	

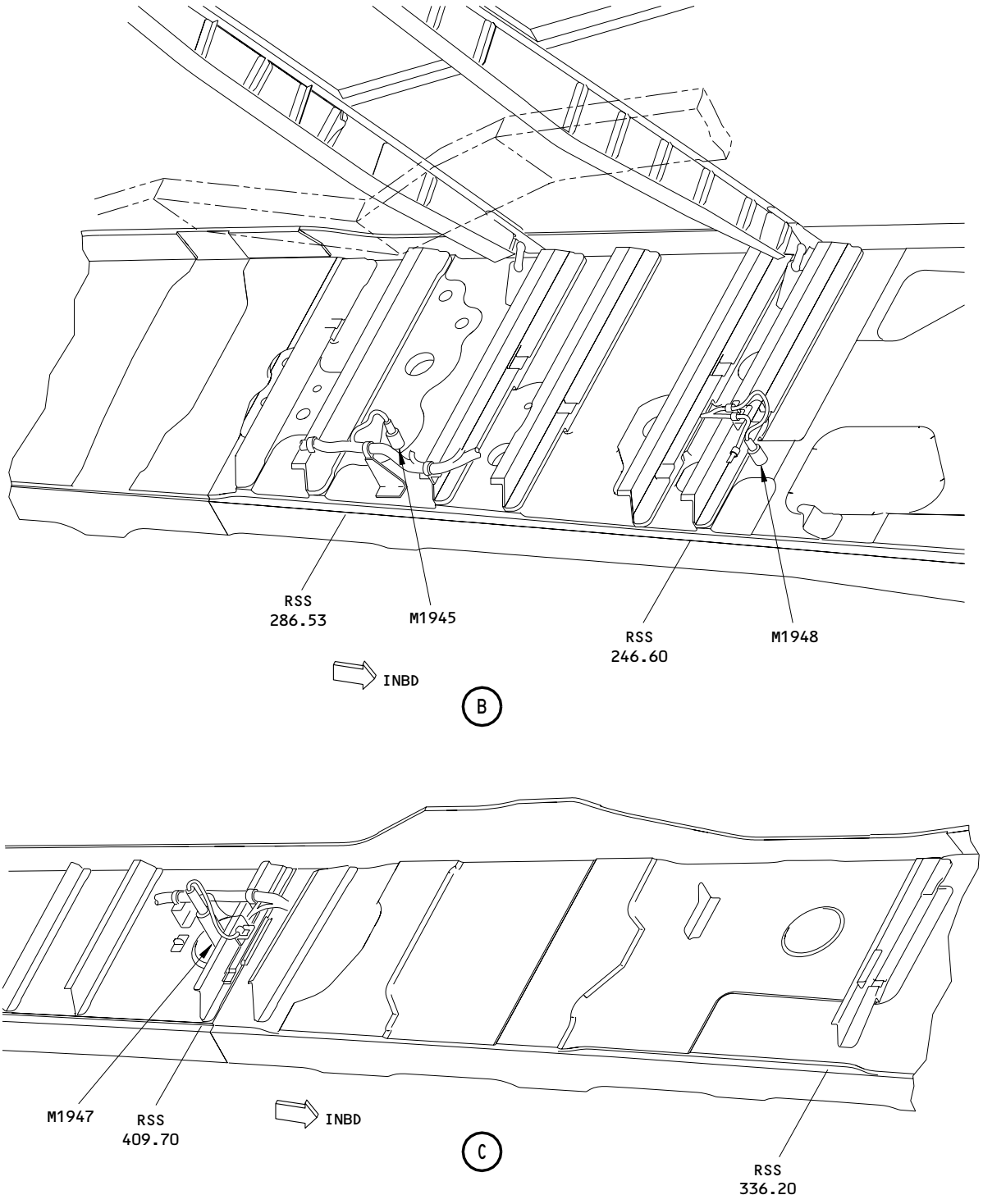
767-200 FQIS CONNECTORS (BF GOODRICH FQPU)

High Intensity Radiated Fields (HIRF) Inspection
(Data Sheet)
Figure 602 (Sheet 3)

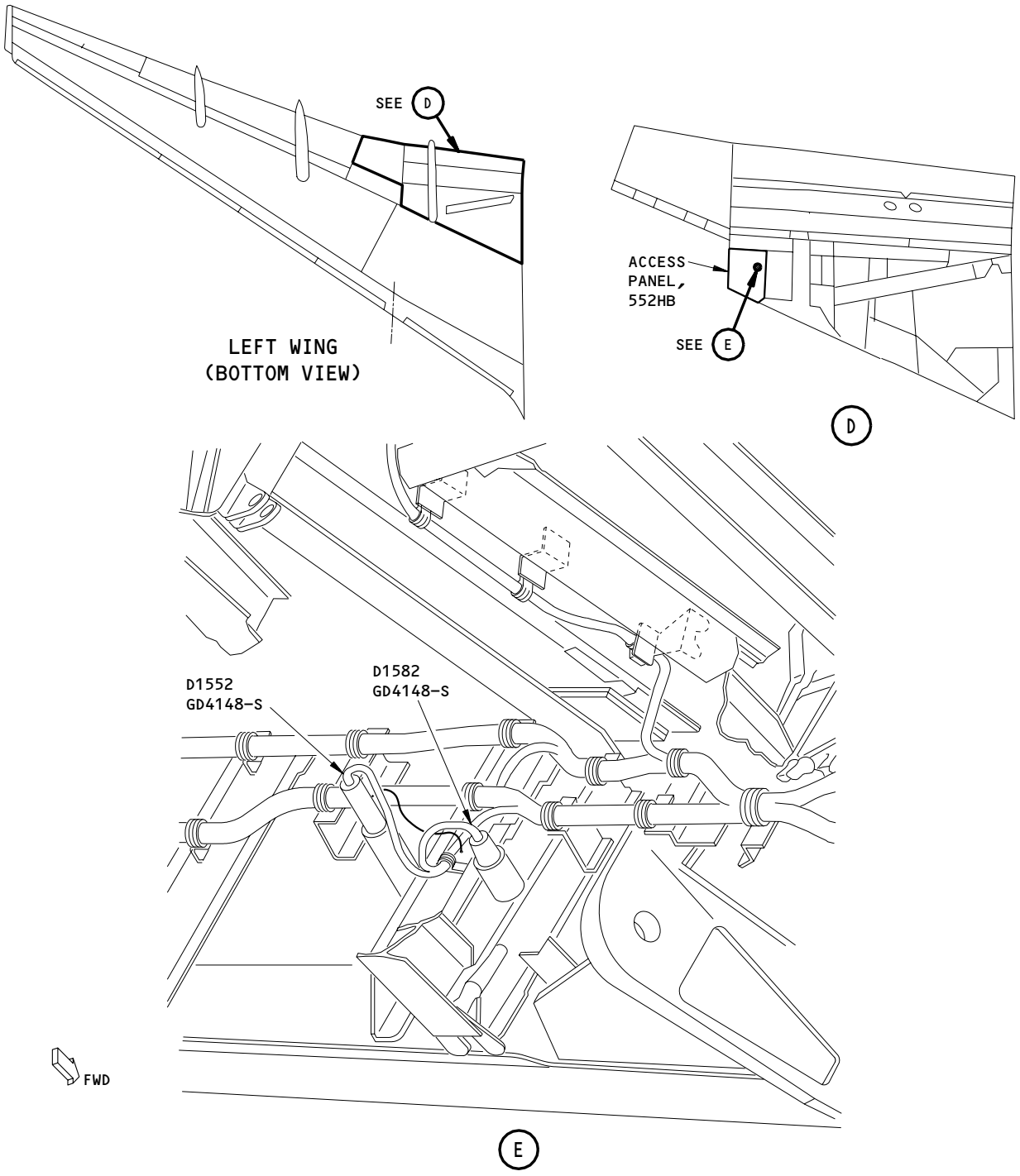




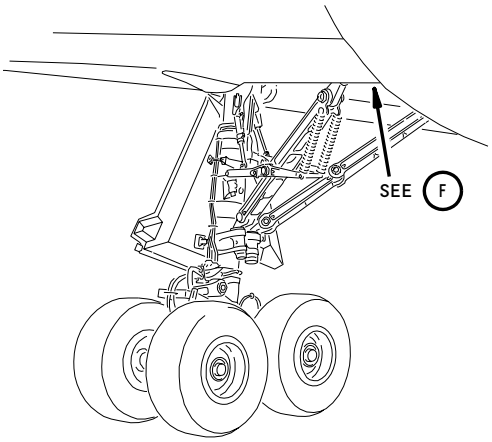
Fuel Quantity Indicating System (FQIS) Lightning Shield Inspection
(767-200 BF Goodrich FQPU)
Figure 603 (Sheet 1)

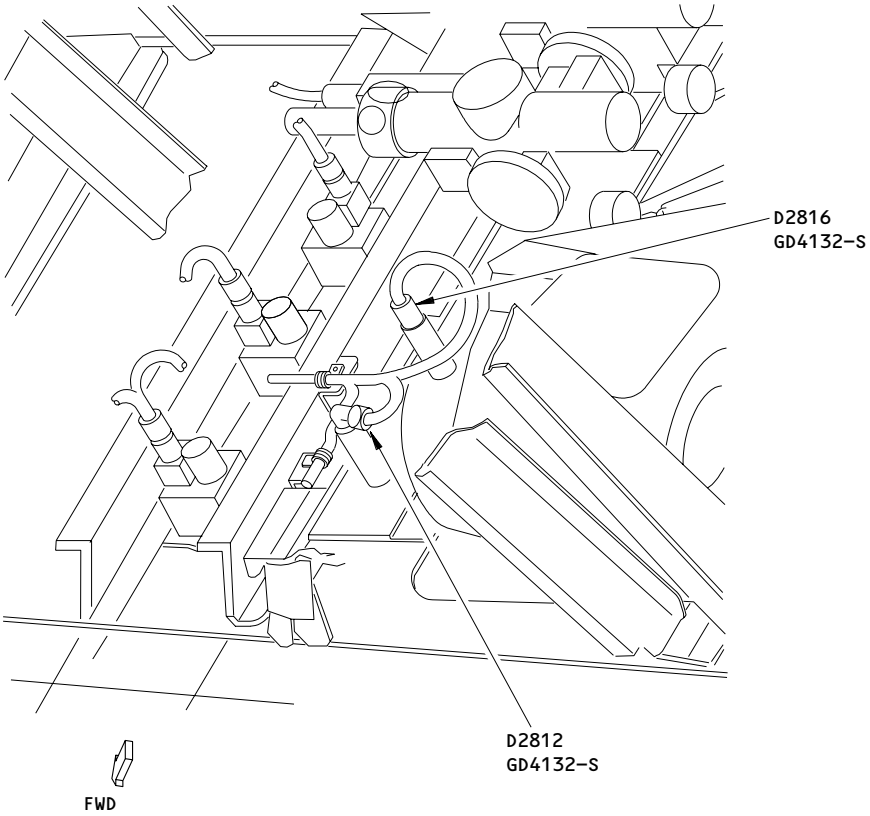


Fuel Quantity Indicating System (FQIS) Lightning Shield Inspection
(767-200 BF Goodrich FQPU)
Figure 603 (Sheet 2)

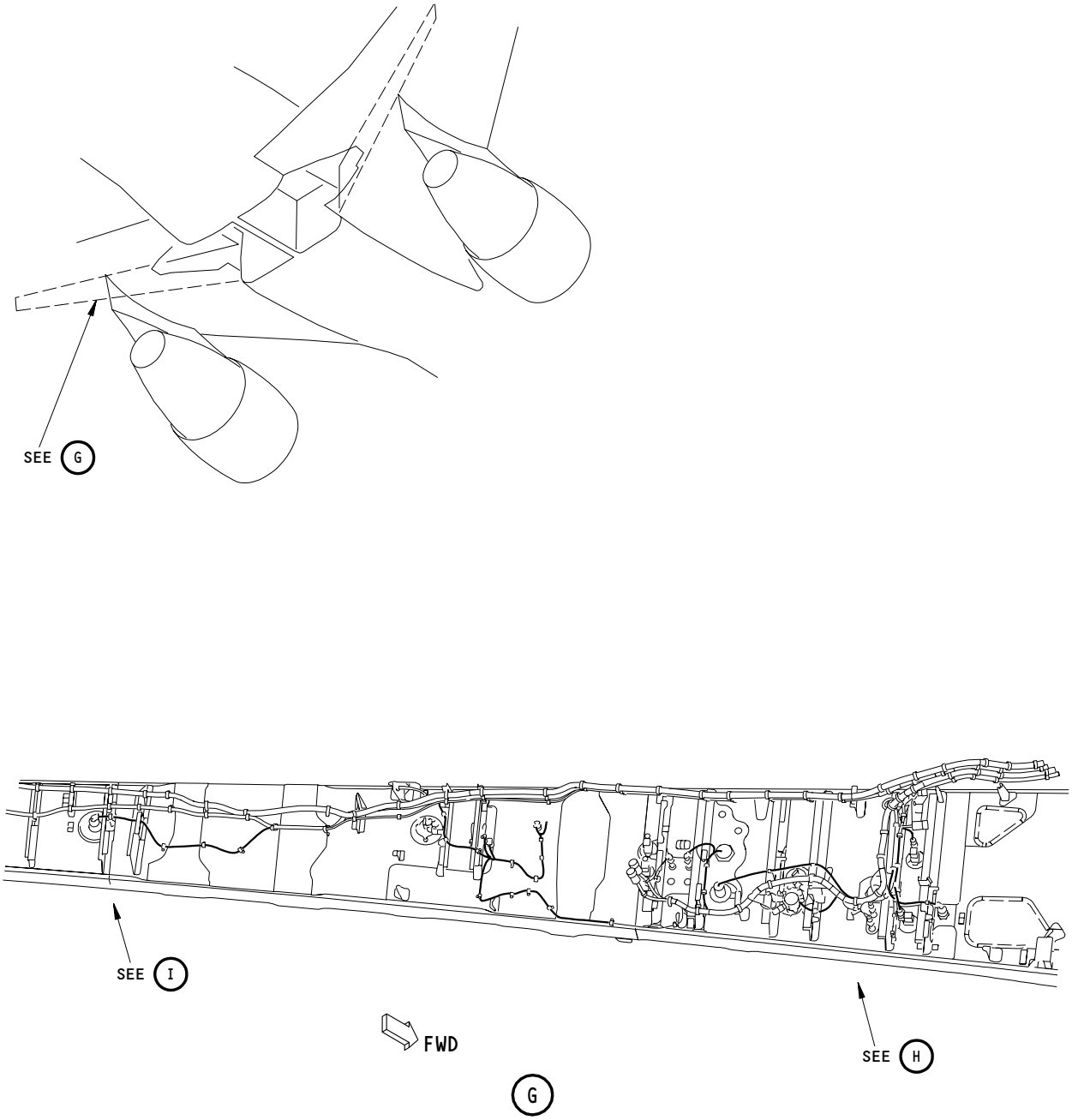


Fuel Quantity Indicating System (FQIS) Lightning Shield Inspection
(767-200/300 Honeywell FQPU)
Figure 603 (Sheet 3)

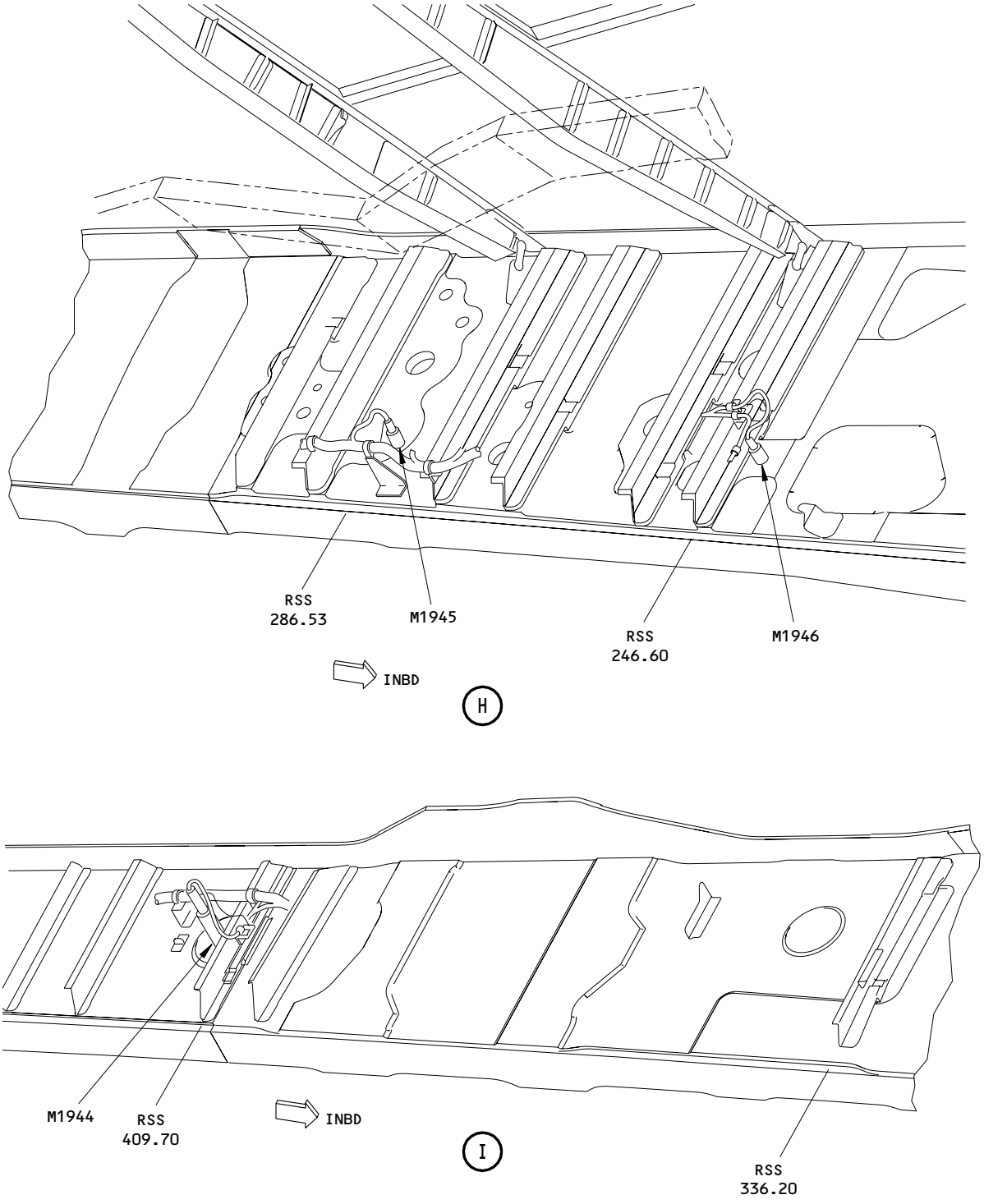




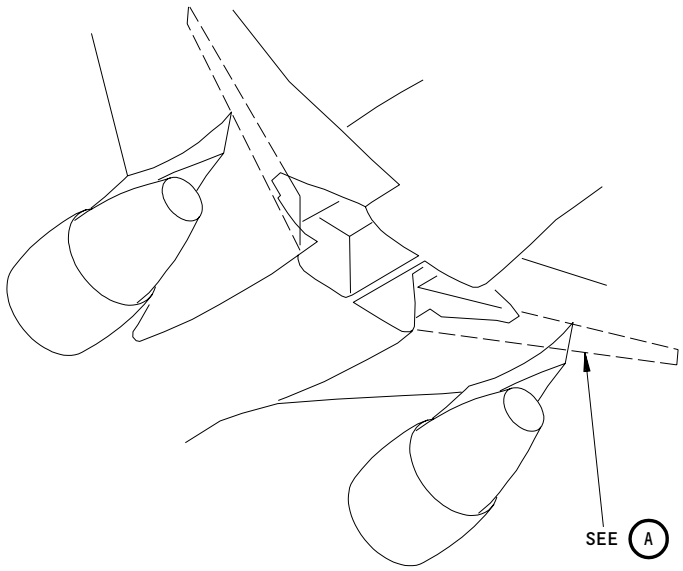
Fuel Quantity Indicating System (FQIS) Lightning Shield Inspection
(767-200/300 Honeywell FQPU)
Figure 603 (Sheet 4)

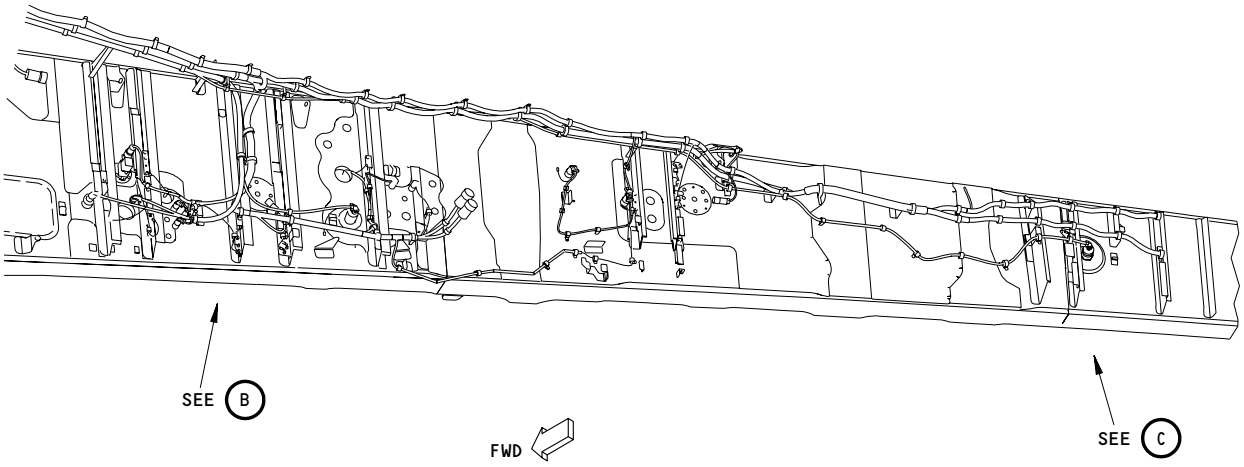


Fuel Quantity Indicating System (FQIS) Lightning Shield Inspection
(767-300/300F/400 BF Goodrich FQPU)
Figure 603 (Sheet 5)



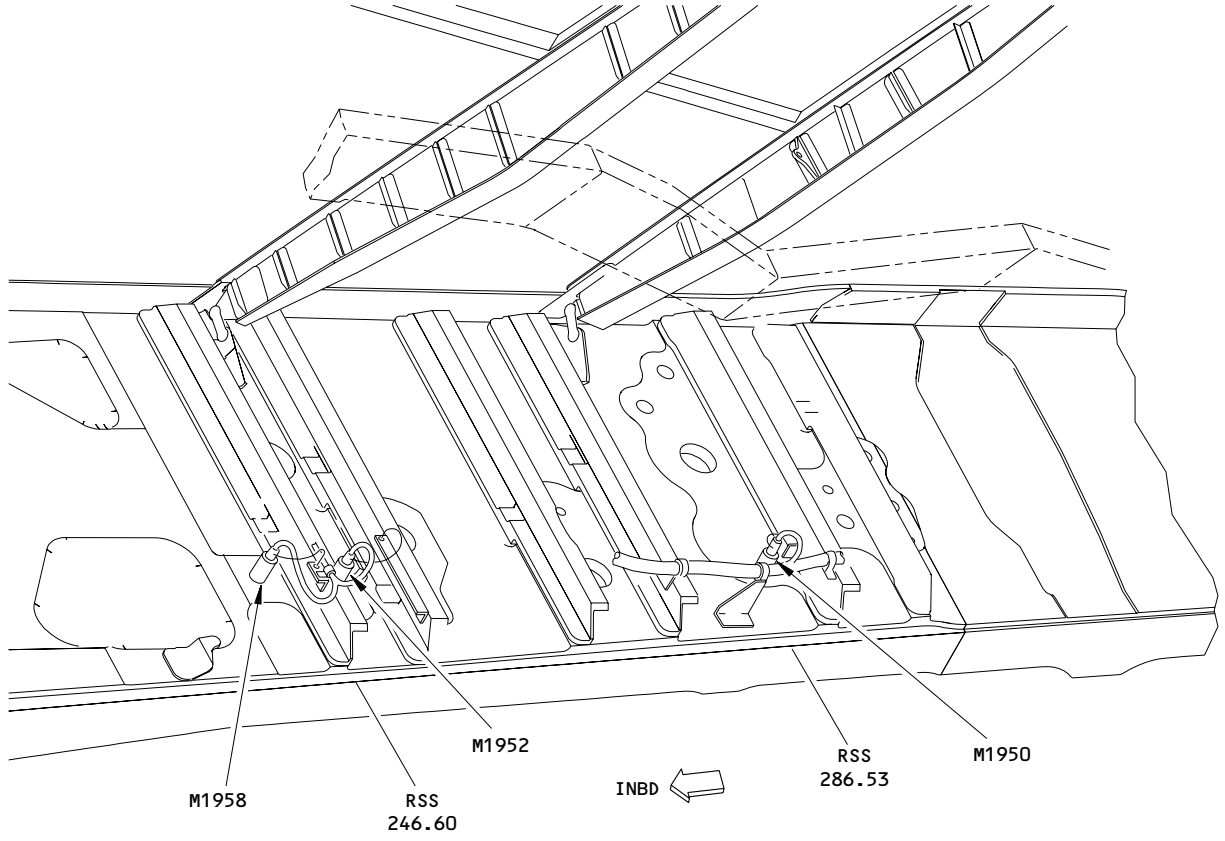
Fuel Quantity Indicating System (FQIS) Lightning Shield Inspection
(767-300/300F/400 BF Goodrich FQPU)
Figure 603 (Sheet 6)

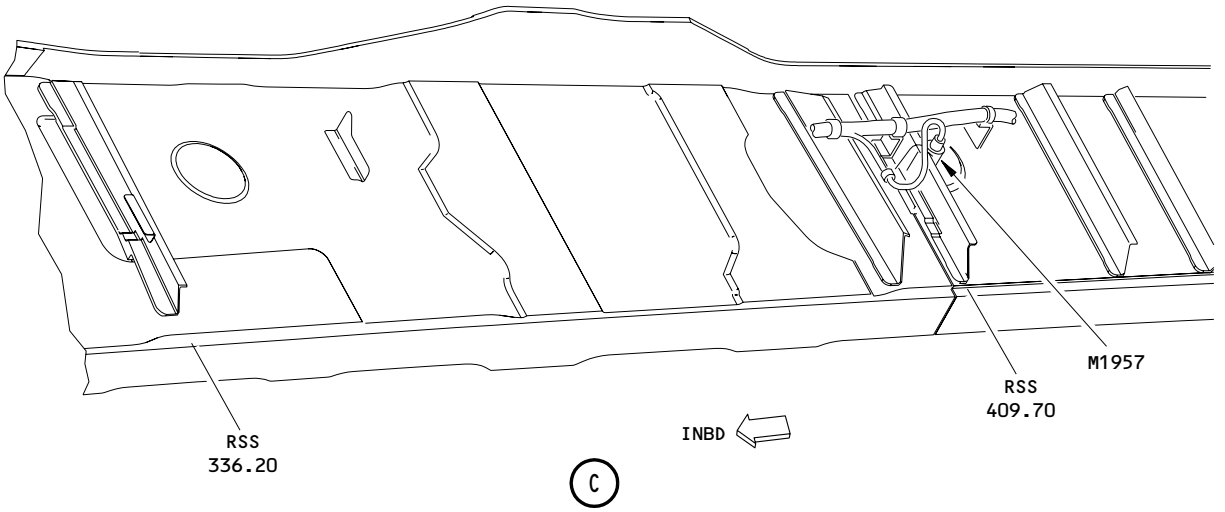




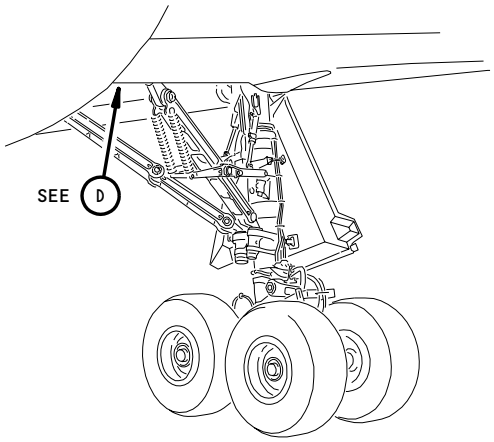
A

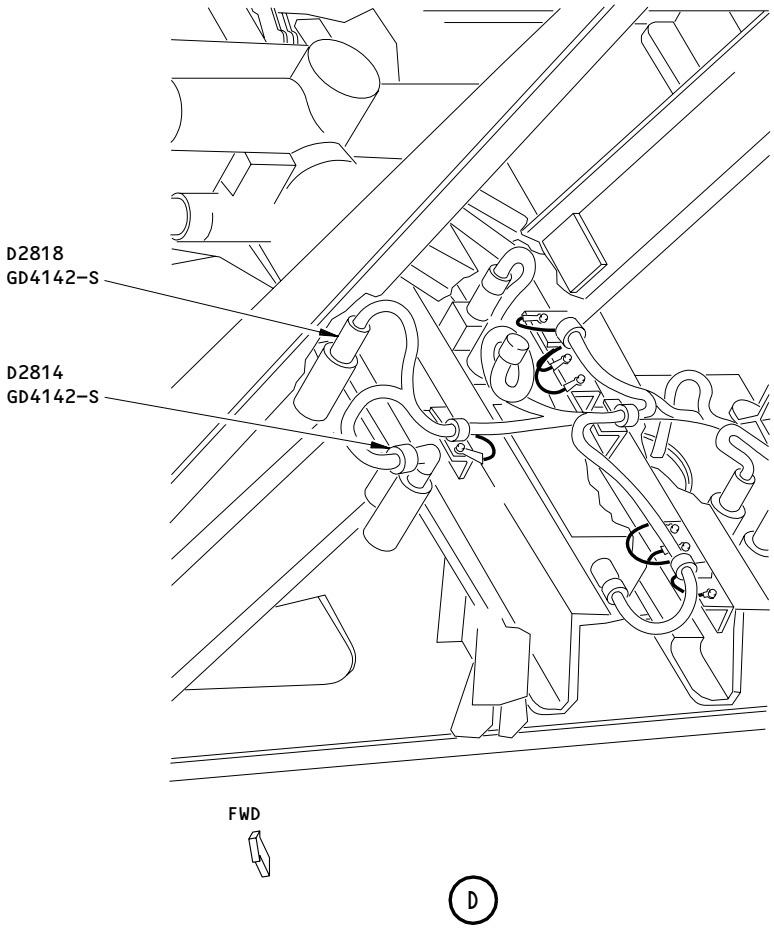
Fuel Quantity Indicating System (FQIS) Lightning Shield Inspection
(767-200 BF Goodrich FQPU)
Figure 604 (Sheet 1)



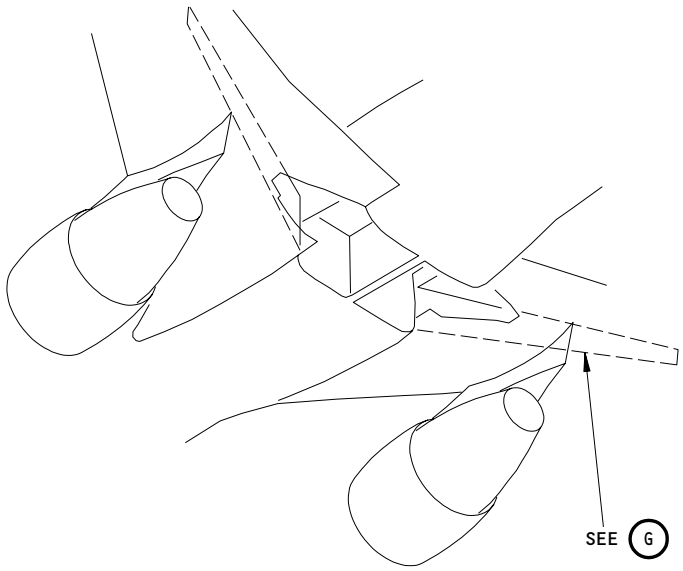


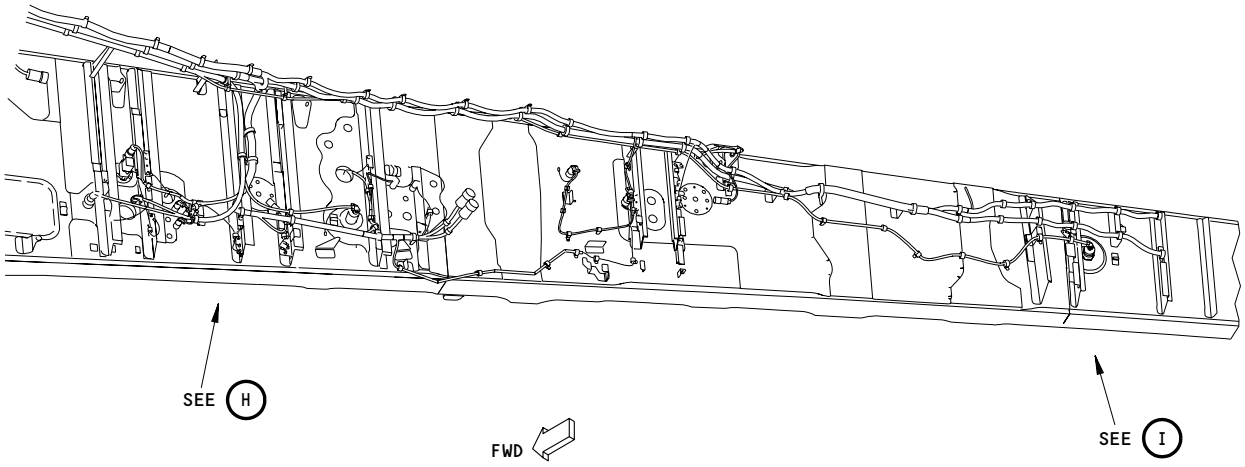
Fuel Quantity Indicating System (FQIS) Lightning Shield Inspection
(767-200 BF Goodrich FQPU)
Figure 604 (Sheet 2)





Fuel Quantity Indicating System (FQIS) Lightning Shield Inspection
(767-200/300 Honeywell FQPU)
Figure 604 (Sheet 3)





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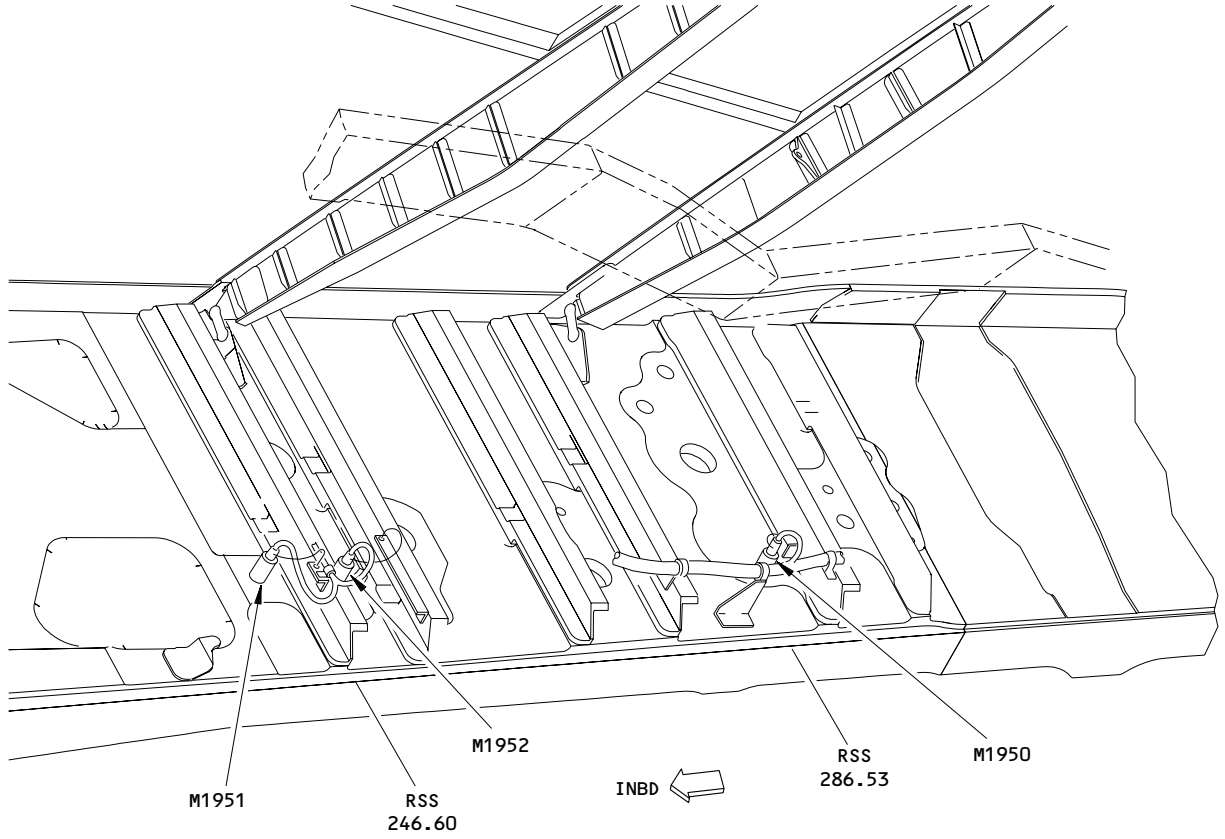
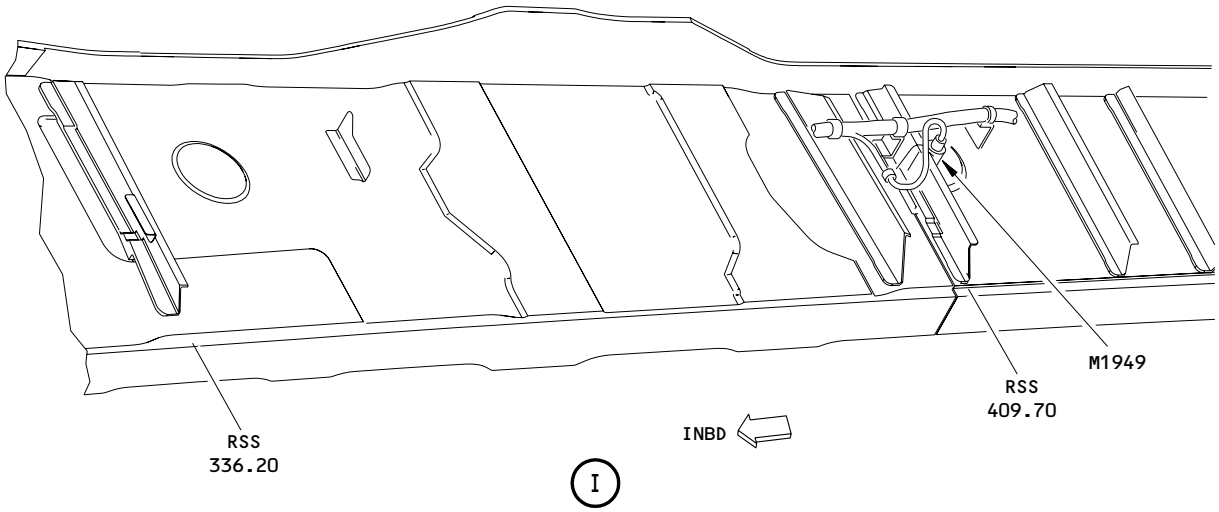
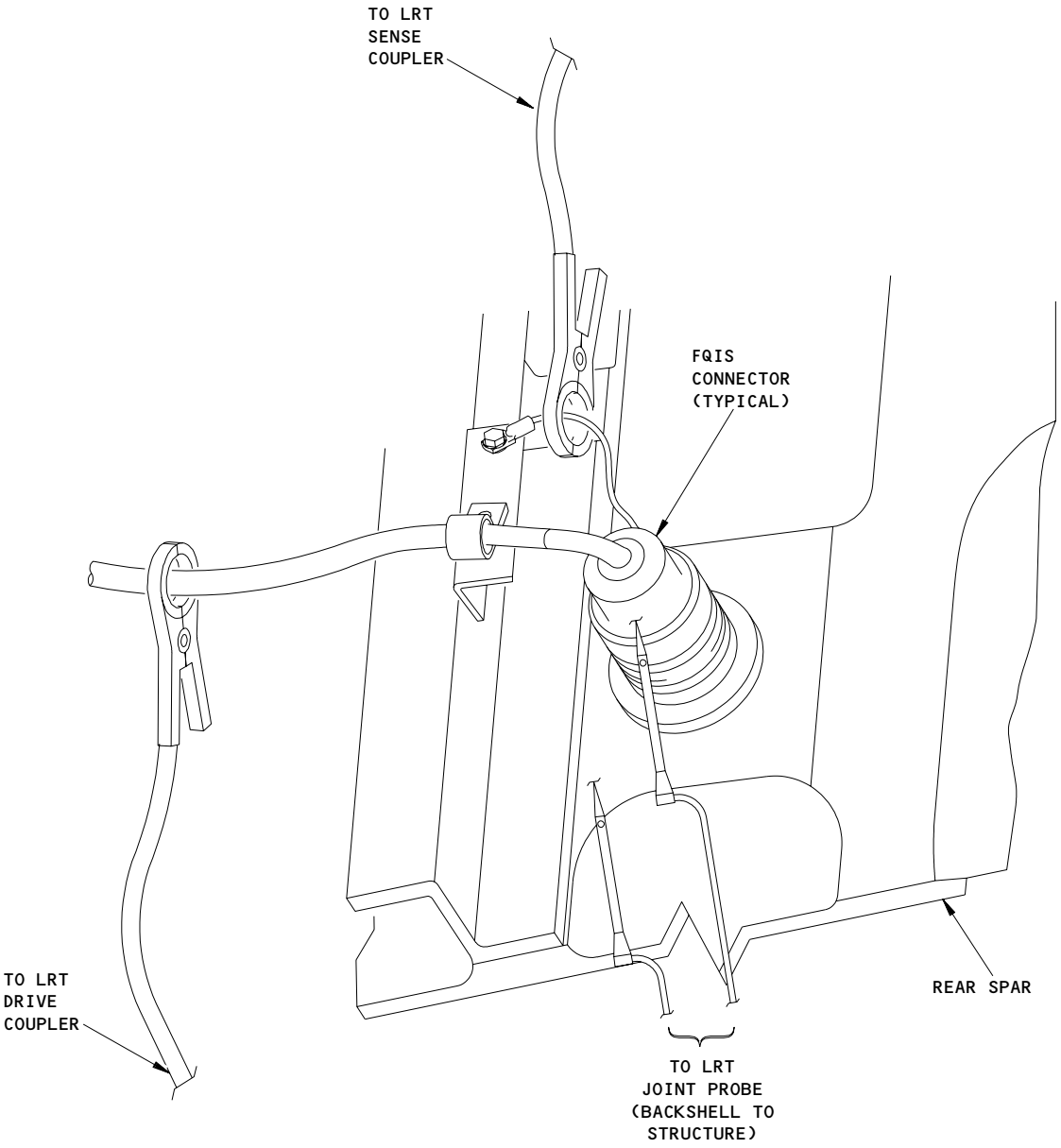
Fuel Quantity Indicating System (FQIS) Lightning Shield Inspection
(767-300/300F/400 BF Goodrich FQPU)
Figure 604 (Sheet 5)



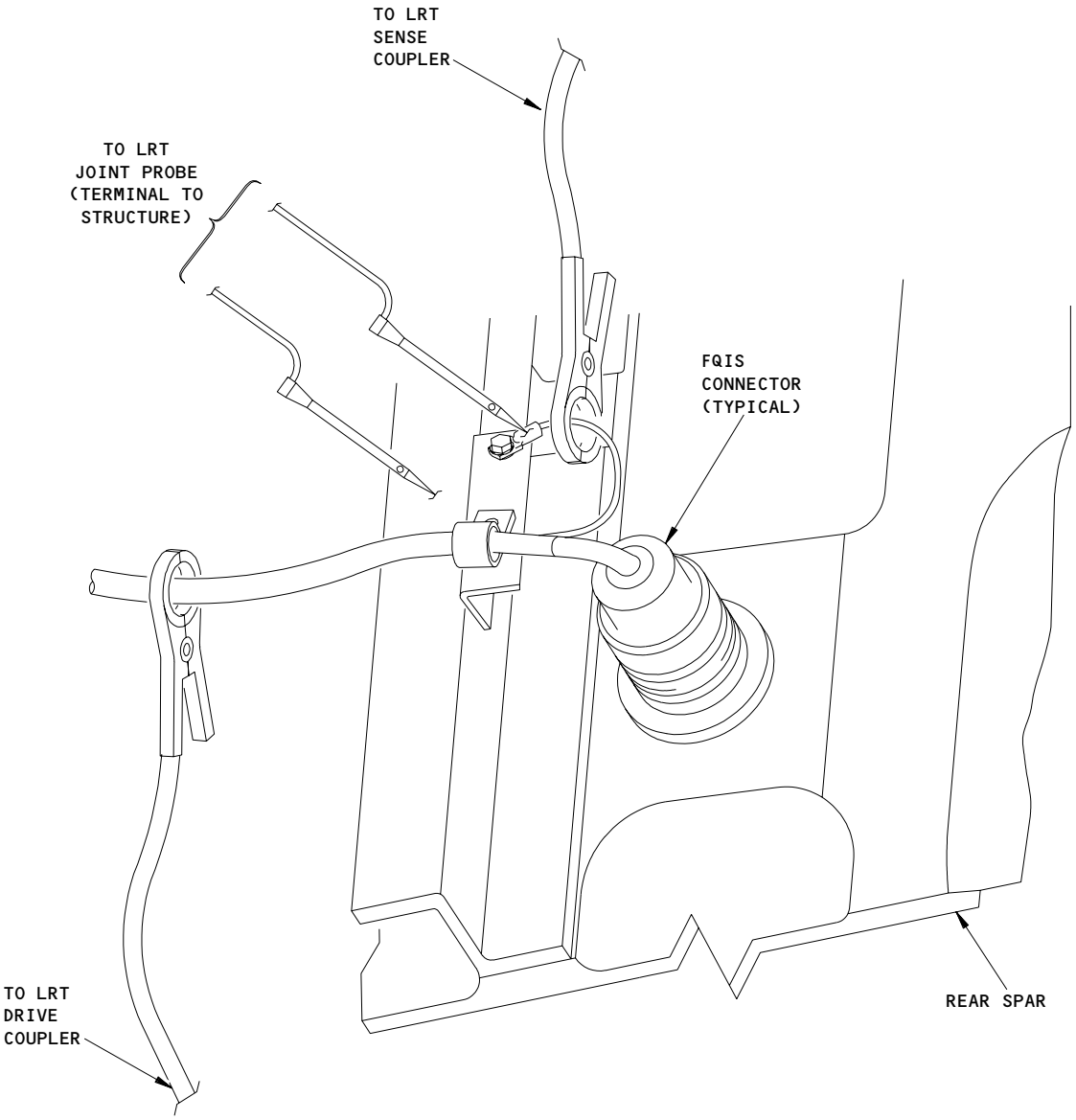


Fuel Quantity Indicating System (FQIS) Lightning Shield Inspection
(767-300/300F/400 BF Goodrich FQPU)
Figure 604 (Sheet 6)



JOINT TEST CONNECTIONS

High Intensity Radiated Fields (HIRF) Fault Isolation
(BF Goodrich FQPU Test Connections)
Figure 605



JOINT TEST CONNECTIONS

High Intensity Radiated Fields (HIRF) Fault Isolation
(Honeywell FQPU Test Connections)
Figure 606

PLANE:	
DATE:	
TECHNICIAN:	

REAR SPAR CONNECTOR	REAR SPAR GROUND	MEASURED JOINT RESISTANCE (milliohms)	MAX JOINT RESISTANCE (milliohms)	COMMENTS
M1944	GD4148-S		5.5	
M1945	GD5980-S			
M1946	GD4132-S			
M1959	GD4156-S			
M1950	GD5978-S			
M1951	GD5974-S			
M1952	GD5976-S			

767-300/300F FQIS CONNECTORS (BF GOODRICH FQPU)

High Intensity Radiated Fields (HIRF) Fault Isolation
(Data Sheet)
Figure 607 (Sheet 1)

PLANE:	
DATE:	
TECHNICIAN:	

REAR SPAR CONNECTOR	REAR SPAR GROUND	MEASURED JOINT RESISTANCE (milliohms)	MAX JOINT RESISTANCE (milliohms)	COMMENTS
DO1582	GD4148-S		1.5	
DO1552	GD4148-S			
DO2816	GD4132-S			
DO2812	GD4132-S			
DO1584	GD4156-S			
DO1560	GD4156-S			
DO2818	GD4142-S			
DO2814	GD4142-S			

767-200, -300 FQIS CONNECTORS (BOEING BUNDLE - HONEYWELL FQPU)

High Intensity Radiated Fields (HIRF) Fault Isolation
(Data Sheet)
Figure 607 (Sheet 2)

PLANE:	
DATE:	
TECHNICIAN:	

REAR SPAR CONNECTOR	REAR SPAR GROUND	MEASURED JOINT RESISTANCE (milliohms)	MAX JOINT RESISTANCE (milliohms)	COMMENTS
M1947	GD4148-S		5.5	
M1945	GD5980-S			
M1948	GD4132-S			
M1957	GD4156-S			
M1950	GD5978-S			
M1958	GD5974-S			
M1952	GD5976-S			

767-200 FQIS CONNECTORS (BF GOODRICH FQPU)

High Intensity Radiated Fields (HIRF) Fault Isolation
(Data Sheet)
Figure 607 (Sheet 3)

LOCATION	MODEL	PART # BOEING S283T025- (CINCH CN1156-)	WHEEL WELL GROUND	MAX JOINT RESISTANCE TERMINAL TO BRACKET (milliohms)	MAX JOINT RESISTANCE BRACKET TO STRUCTURE (milliohms)	W/D
LEFT MAIN TANK	767-200	-126 (-926)	GD5926-S, GD5928-S	1	0.5	28-41-21
	767-300	-121 (-921)				
	767-300F	-321 (-971)				
LEFT MAIN DENS TANK	767-200	-122 (-922)	GD4034-S, GD4134-S	1		
	767-300					
	767-300F					
LEFT AUX TANK	767-200	-127 (-927)	GD5926-S, GD5928-S	1		28-41-23
	767-300	-123 (-923)				
	767-300F	-323 (-973)				
RIGHT MAIN TANK	767-200	-136 (-936)	GD5922-S, GD5924-S	1		28-41-22
	767-300	-131 (-931)				
	767-300F	-331 (-981)				
RIGHT MAIN DENS TANK	767-200	-132 (-932)	GD3946-S, GD4140-S	1		
	767-300					
	767-300F					
RIGHT AUX TANK	767-200	-137 (-937)	GD5922-S, GD5924-S	1		28-41-23
	767-300	-134 (-934)				
	767-300F	-334 (-984)				
RIGHT AUX DENS TANK	767-200	-135 (-935)	GD3946-S, GD4098-S	1		
	767-300					
	767-300F					

767-200, -300, -300F, CINCH (BF GOODRICH FQPU ONLY)

High Intensity Radiated Fields (HIRF) Joint Resistance Values
Figure 608 (Sheet 1)

LOCATION	BOEING PART NUMBER	REAR SPAR GROUND	MAX JOINT RESISTANCE TERMINAL TO BRACKET (MILLIOHMS)	MAX JOINT RESISTANCE BRACKET TO STRUCTURE (MILLIOHMS)	WIRING DIAGRAM
LEFT MAIN TANK LO-Z	286T0446-101	GD4148-S	1	0.5	28-41-21
LEFT MAIN TANK HI-Z		GD4148-S			
LEFT AUX TANK LO-Z	286T0454-005	GD4132-S			28-41-23
LEFT AUX TANK HI-Z		GD4132-S			
RIGHT MAIN TANK LO-Z	286T0448-101	GD4156-S			28-41-22
RIGHT MAIN TANK HI-Z		GD4156-S			
RIGHT AUX TANK LO-Z		GD4142-S			28-41-23
RIGHT AUX TANK HI-Z		GD4142-S			

767-200, 300 BOEING BUNDLE

High Intensity Radiated Fields (HIRF)
Joint Resistance Values
Figure 608 (Sheet 2)

STATION		BOEING CARD NO.
TAIL NO.	SAS BOEING 767 TASK CARD	28-AWL-20-1
DATE		AIRLINE CARD NO.

SKILL	WORK AREA	RELATED TASK	INTERVAL	PHASE	MPD REV	TASK CARD REVISION
ELECT	MAIN EE CTR		00001 YRS	10808	004	AUG 22/09

TASK	TITLE	STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE	APPLICABILITY ENGINE
FUNCTIONAL	CTR AUX TANK FUEL PUMP AUTO SHUTOFF		NOTE	ALL

ZONES	ACCESS PANELS
119 211 212 521 531 621 631	119AL 521QB 531AB 621QB 631AB NOTE

MECH | INSP

MPD ITEM NUMBER

FUNCTIONALLY CHECK THE AUTO SHUTOFF SYSTEM FOR THE CENTER AUXILIARY TANK OVERRIDE / JETTISON FUEL PUMPS. 28-22-00-5F

AIRPLANE NOTE: APPLICABLE TO AIRPLANE LINE NUMBERS 922 AND ON WITH INSTALLED AND ACTIVATED AUTO SHUTOFF SYSTEM. APPLICABLE TO AIRPLANES THAT HAVE INCORPORATED SERVICE BULLETIN 767-28A0083 OR 767-28A0084.
THIS TASK SATISFIES THE REQUIREMENTS OF ALI 28-AWL-20.

ACCESS NOTE: ACCESS 621QB AND ZONE 621 ARE APPLICABLE ONLY TO AIRPLANES WITH THE OPTIONAL RIGHT WING FUELING STATION.

1. AIRPLANES WITH OVERRIDE PUMP AUTOMATIC SHUTOFF;
Override Pump Auto Shutoff Functional Test

A. General

(1) ALI - Refer to the task: Airworthiness Limitation Precautions (AMM 28-00-00/201), for important information on airworthiness limitation instructions (ALIs).

NOTE: This is applicable to Airworthiness Limitation 28-AWL-20.

B. References

(1) AMM 06-44-00/201, Wing Access Doors and Panels

(2) AMM 12-11-01/301, Fuel Tank Pressure Fueling

(3) AMM 24-22-00/201, Electrical Power - Control

(4) AMM 28-26-00/201, Defueling

(5) AMM 32-00-15/201, Landing Gear Door Locks

MECH | INSP

(6) AMM 32-00-20/201, Landing Gear Downlocks

C. Equipment

(1) Stopwatch - commercially available

D. Access

(1) Location Zones

119	Main Equipment Center (Left and Right)
211	Control Cabin - Section 41 (Left)
212	Control Cabin - Section 41 (Right)
521	Leading Edge to Front Spar (Left)
531	Center Auxiliary Tank (Left)
631	Center Auxiliary Tank (Right)

(2) Access Panel

119AL	Electronics Access Door
521QB	Fueling Station Door (Left)
531AB	Access Cover (Left)
631AB	Access Cover (Right)

E. Prepare to Do the Functional Test

(1) Make sure the down locks are installed on the nose and main landing gear (AMM 32-00-20/201).

WARNING: USE THE PROCEDURE IN AMM 32-00-15/201 TO INSTALL THE DOOR LOCKS. THE DOORS OPEN AND CLOSE QUICKLY AND CAN CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.

(2) Open the doors for the landing gear and install the door locks (AMM 32-00-15/201).

(3) Supply electrical power (AMM 24-22-00/201).

(4) Refuel or transfer fuel into the auxiliary fuel tank to make sure there is this minimum quantity of fuel in the auxiliary fuel tank (AMM 12-11-01/301, AMM 28-26-00/201):

(a) 21,700 pounds (9900 kilograms)

(5) Make sure these circuit breakers are closed:

MECH	INSP

(a) On the main power distribution panel, P6:

1) 6F15, L FUEL OVRD PUMP

2) 6F21, R FUEL OVRD PUMP

(b) On the overhead circuit breaker panel, P11:

1) 11D23, ENG SPEED SENS L1

2) 11D24, ENG SPEED SENS R1

3) 11M15, L CTR FUEL PUMPS

4) 11M24, R CTR FUEL PUMPS

5) 11M13, L FUEL JTSN CONT (if installed)

6) 11M22, R FUEL JTSN CONT (if installed)

(c) On the APU external power panel, P34:

1) 34L3, FUELING POWER

2) 34L5, FUELING VALVE

(d) AIRPLANES WITH FUEL JETTISON SYSTEM;
On the left miscellaneous electrical equipment panel, P36:

1) 36F4 or 36G7, L FUEL JETT PUMP

(e) AIRPLANES WITH FUEL JETTISON SYSTEM;
On the right miscellaneous electrical equipment panel, P37:

1) 37F4 or 37G4, R FUEL JETT PUMP

(6) Make sure the APU master control switch on the overhead panel, P5, is in the OFF position.

(7) Make sure these switch-lights of the fuel management panel on the P5 panel are in the position shown.

SWITCH-LIGHT	POSITION
AFT L PUMP	OFF
AFT R PUMP	OFF
FWD L PUMP	OFF
FWD R PUMP	OFF
LEFT C PUMP	OFF
RIGHT C PUMP	OFF

F. Functional Test - Left Override Pump Auto Shutoff Circuit

(1) Open the fueling station door, 521QB (AMM 06-44-00/201).

WARNING: DO NOT OPERATE A FUEL PUMP IF THE LOW PRESSURE LIGHT COMES ON AND STAYS ON. FUEL VAPORS IN THE TANK MAY IGNITE AND CAUSE A FIRE OR EXPLOSION.

(2) To operate any of the fuel pumps, you must be in the flight compartment to continuously monitor the fuel quantity and the low pressure indication in the fuel tank.

(a) Immediately push the applicable fuel pump switch to the off position if the low PRESS light comes on and stays on.

(3) Push the LEFT C PUMP switch-light of the fuel management panel on the P5 panel to the ON position.

NOTE: The PRESS light will come on and then go off which shows the left override pump has pressure.

MECH	INSP

(4) Listen for a minimum of 20 seconds at the left override pump to make sure it operates.

NOTE: The left override pump is behind access cover 531AB on the left wing (AMM 06-44-00/201).

(5) Push the LEFT C PUMP switch-light to the off position.

(6) Close the fueling station door, 521QB (AMM 06-44-00/201).

(7) Move the CH-1 toggle switch of the L N2 Engine Speed Card, M1093, on the P50 panel to the TEST position.

(8) Get access to the left override pump pressure switch on the rear spar.

(9) Disconnect the electrical connector from the pressure switch.

(10) Install a jumper on the left override pump pressure switch connector, D2806, between pins 2 and 3 (WDM 28-42-12).

(11) Push the LEFT C PUMP switch-light on the P5 panel to the ON position.

(12) Make sure the LEFT C PUMP PRESS light comes on and stays on.

NOTE: This shows the left override pump has low pressure.

(13) Listen for 15 seconds at the left override pump to make sure it operates then stops.

(14) Push the LEFT C PUMP switch-light to the off position.

(15) Remove the jumper from the left override pump pressure switch connector, D2806 (WDM 28-42-12).

(16) Connect the electrical connector to the pressure switch.

(17) Move the CH-1 toggle switch of the L N2 Engine Speed Card, M1093, on the P50 panel to the NORMAL position.

(18) For the left override pump, do this procedure: Test of the Override Pumps and Pressure Switches in the Auxiliary Fuel Tank (AMM 28-22-00/501).

MECH | INSP

G. Functional Test - Right Override Pump Auto Shutoff Circuit

(1) Open the fueling station door, 521QB (AMM 06-44-00/201).

WARNING: DO NOT OPERATE A FUEL PUMP IF THE LOW PRESSURE LIGHT COMES ON AND STAYS ON. FUEL VAPORS IN THE TANK MAY IGNITE AND CAUSE A FIRE OR EXPLOSION.

(2) To operate any of the fuel pumps, you must be in the flight compartment to continuously monitor the fuel quantity and the low pressure indication in the fuel tank.

(a) Immediately push the applicable fuel pump switch to the off position if the low PRESS light comes on and stays on.

(3) Push the RIGHT C PUMP switch-light of the fuel management panel on the P5 panel to the ON position.

NOTE: The PRESS light will come on and then go off which shows the right override pump has pressure.

(4) Listen for a minimum of 20 seconds at the right override pump to make sure it operates.

NOTE: The right override pump is behind access cover 631AB on the right wing (AMM 06-44-00/201).

(5) Push the RIGHT C PUMP switch-light to the off position.

(6) Close the fueling station door, 521QB (AMM 06-44-00/201).

(7) Move the CH-1 toggle switch of the R N2 Engine Speed Card, M1092, on the P50 panel to the TEST position.

(8) Get access to the right override pump pressure switch on the rear spar.

(9) Disconnect the electrical connector from the pressure switch.

(10) Install a jumper on the right override pump pressure switch connector, D2808, between pins 2 and 3 (WDM 28-42-12).

MECH | INSP

(11) Push the RIGHT C PUMP switch-light on the P5 panel to the ON position.

(12) Make sure the RIGHT C PUMP PRESS light comes on and stays on.

NOTE: This shows the right override pump has low pressure.

(13) Listen for 15 seconds at the right override pump to make sure it operates then stops.

(14) Push the RIGHT C PUMP switch-light to the off position.

(15) Remove the jumper from the right override pump pressure switch connector, D2808 (WDM 28-42-12).

(16) Connect the electrical connector to the pressure switch.

(17) Move the CH-1 toggle switch of the R N2 Engine Speed Card, M1092, on the P50 panel to the NORMAL position.

(18) For the right override pump, do this procedure: Test of the Override Pumps and Pressure Switches in the Auxiliary Fuel Tank (AMM 28-22-00/501).

H. Put the Airplane Back to Its Usual Condition

WARNING: USE THE PROCEDURE IN AMM 32-00-15/201 TO REMOVE THE DOOR LOCKS. THE DOORS OPEN AND CLOSE QUICKLY AND CAN CAUSE INJURY TO PERSONS AND DAMAGE TO EQUIPMENT.

(1) Remove the door locks from the landing gear doors and close the doors (AMM 32-00-15/201).

(2) Remove electrical power if it is not necessary for other tasks (AMM 24-22-00/201).

STATION		BOEING CARD NO.
TAIL NO.	SAS BOEING 767 TASK CARD	28-AWL-27-1
DATE		AIRLINE CARD NO.

SKILL	WORK AREA	RELATED TASK	INTERVAL	PHASE	MPD REV	TASK CARD REVISION
AIRPL	FUEL TANK		00012 MOS	10808		AUG 22/09

TASK	TITLE	STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE	APPLICABILITY ENGINE
OPERATIONAL	BOOST/OVERRIDE-JETTISON PUMP GFI		NOTE	ALL

ZONES	ACCESS PANELS
119 211 212 531 532 631 632	119AL

MECH	INSP	MPD ITEM NUMBER

OPERATIONALLY CHECK THE FUEL BOOST/OVERRIDE-JETTISON PUMP GFI CONTROL RELAYS BY USING THE BITE TEST. 28-22-00-5H

AIRPLANE NOTE: APPLICABLE TO AIRPLANES WITH GFI INSTALLED. THIS TASK SATISFIES THE REQUIREMENTS OF AWL 28-AWL-27.

1. AIRPLANES WITH GROUND FAULT INTERRUPTER (GFI);
Ground Fault Interrupter (GFI) - Operational Test and Auxiliary Tank Override/Jettison Pump Uncommanded-On - Functional Test

A. General

(1) ALI - Refer to the task: Airworthiness Limitation Precautions (AMM 28-00-00/201), for important information on airworthiness limitation instructions (ALIs).

NOTE: This is applicable to Airworthiness Limitations 28-AWL-27 and 28-AWL-28.

B. References

(1) AMM 06-44-00/201, Wings (Major Zones 500 and 600) Access Doors and Panels

(2) AMM 24-22-00/201, Electrical Power Control

(3) AMM 28-31-00/501, Fuel Jettison System

C. Access

MECH | INSP

(1) Location Zone
119 Main Equipment Center (Left and Right)
211 Control Cabin (Left)
212 Control Cabin (Right)
531 Center Auxiliary Tank (Left)
532 Main Tank - Inboard of Rib No. 10 (Left)
631 Center Auxiliary Tank (Right)
632 Main Tank - Inboard of Rib No. 10 (Right)

(2) Access Panel
119AL Electronic Access Door

D. Prepare for Test

(1) Do this procedure: Phase Check of the Fuel Pump Wiring for the applicable fuel boost or override pump (AMM 28-22-00/501) or Phase Check of the Jettison Pump Wiring for the applicable jettison pump (AMM 28-31-00/501).

(2) Do this procedure: Operational Test - Engine Fuel-Feed System for the applicable fuel boost pump (AMM 28-22-00/501).

(3) Make sure these circuit breakers are closed:

(a) Main Power Distribution Panel, P6:

1) 6F15, L FUEL OVRD PUMP

2) 6F21, R FUEL OVRD PUMP

3) 6G15, L AFT FUEL BOOST PUMP

4) 6G18, R FWD FUEL BOOST PUMP

5) 6G21, R AFT FUEL BOOST PUMP

6) 6G24, L FWD FUEL BOOST PUMP

(b) Overhead Circuit Breaker Panel, P11:

1) 11M13, L FUEL JTSN CONT (if installed)

2) 11M15, L CTR FUEL PUMPS

3) 11M16, FUEL PUMPS R FWD/L AFT

4) 11M22, R FUEL JTSN CONT (if installed)

5) 11M24, R CTR FUEL PUMPS

6) 11M25, FUEL PUMPS L FWD/R AFT

(c) AIRPLANES WITH FUEL JETTISON SYSTEM;
On the left miscellaneous electrical equipment panel, P36:

1) 36F4 or 36G7, L FUEL JETT PUMP

(d) AIRPLANES WITH FUEL JETTISON SYSTEM;
On the right miscellaneous electrical equipment panel, P37:

1) 37F4 or 37G4, R FUEL JETT PUMP

(4) Supply electrical power (AMM 24-22-00/201).

(5) Make sure these switch-lights of the fuel management panel on the P5 panel are in the position shown.

SWITCH-LIGHT	POSITION
AFT L PUMP	OFF
AFT R PUMP	OFF
FWD L PUMP	OFF
FWD R PUMP	OFF
LEFT C PUMP	OFF
RIGHT C PUMP	OFF

(6) Open the fueling station door, 521QB (AMM 06-44-00/201).

E. Ground Fault Interrupter (GFI) Relay Operational Test

WARNING: DO NOT OPERATE A FUEL PUMP IF THE LOW PRESSURE LIGHT COMES ON AND STAYS ON. FUEL VAPORS IN THE TANK MAY IGNITE AND CAUSE A FIRE OR EXPLOSION.

MECH	INSP

(1) To operate any of the fuel pumps, you must be in the flight compartment to continuously monitor the fuel quantity and the low pressure indication in the fuel tank.

(a) Immediately set the applicable fuel pump switch to the off position if the low PRESS light comes on and stays on.

(2) Push the applicable fuel boost pump or fuel override pump switch-light of the fuel management control panel on the P5 overhead panel to the ON position.

(3) Listen and make sure the applicable fuel pump operates.

(4) Make sure the applicable low PRESS light on the P5 overhead panel goes off.

(5) Push the applicable ground fault interrupter (GFI) relay TEST button on either the P140 or P141 panel.

(a) For the right center override fuel pump, the relay is K10696, found on the P141 panel.

(b) For the left center override fuel pump, the relay is K10697, found on the P140 panel.

(c) For the right override/jettison fuel pump, the relay is K10698, found on the P141 panel.

(d) For the left override/jettison fuel pump, the relay is K10699, found on the P140 panel.

(e) For the right aft fuel boost pump, the relay is K10702, found on the P141 panel.

(f) For the left forward fuel boost pump, the relay is K10703, found on the P140 panel.

(g) For the right forward fuel boost pump, the relay is K10704, found on the P141 panel.

(h) For the left aft fuel boost pump, the relay is K10705, found on the P140 panel.

MECH | INSP

(6) Make sure the RESET button on the applicable GFI relay has moved up, showing a white band.

NOTE: The RESET button located at the top edge of the GFI relay moves up, to expose a narrow white band when the GFI circuit turns off the relay due to a ground fault, or results when you push the TEST button located at the top surface of the relay.

(7) Listen and make sure the applicable fuel pump does not operate.

(8) Put the applicable fuel boost pump or fuel override pump switch-light of the fuel management control panel on the P5 overhead panel to the off position.

(9) To make sure the applicable fuel pump does not operate when the GFI circuit turns off the relay, do the subsequent steps:

(a) Put the applicable fuel pump switch on the fuel management control panel on the P5 overhead panel to the ON position.

(b) Listen and make sure the applicable fuel pump does not operate.

(c) Put the applicable fuel pump switch on the fuel management control panel on the P5 overhead panel, to the off position.

(10) Push the RESET button on the applicable GFI relay in.

(a) Make sure the RESET button does not pop back out and the white band is not visible.

(11) Push the applicable fuel boost pump or fuel override pump switch-light of the fuel management control panel on the P5 overhead panel to the ON position.

(12) Listen and make sure the applicable fuel pump operates.

(13) Put the applicable fuel boost pump or fuel override pump switch-light of the fuel management control panel on the P5 overhead panel to the off position.

(14) Close the fueling station door, 521QB (AMM 06-44-00/201).

(15) Remove electrical power if it is not necessary (AMM 24-22-00/201).

STATION		BOEING CARD NO.
TAIL NO.	SAS BOEING 767 TASK CARD	28-AWL-28-1
DATE		AIRLINE CARD NO.

SKILL	WORK AREA	RELATED TASK	INTERVAL	PHASE	MPD REV	TASK CARD REVISION
AIRPL	CTR AUX TK		00012 MOS	10808		AUG 22/09

TASK	TITLE	STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE	APPLICABILITY ENGINE
FUNCTIONAL	CENTER TANK FUEL PUMP UNCOMMANDED-ON		NOTE	ALL

ZONES	ACCESS PANELS
119 211 212 531 532 631 632	119AL

MECH | INSP

MPD ITEM NUMBER

FUNCTIONALLY CHECK THE CENTER AUXILIARY TANK FUEL BOOST PUMP UNCOMMANDED-ON SYSTEM. 28-22-00-5H

AIRPLANE NOTE: APPLICABLE TO AIRPLANES WITH BOOST PUMP UNCOMMANDED-ON SYSTEM INSTALLED.
THIS TASK SATISFIES THE REQUIREMENTS OF AWL 28-AWL-28.

1. AIRPLANES WITH GROUND FAULT INTERRUPTER (GFI);
Ground Fault Interrupter (GFI) - Operational Test and Auxiliary Tank Override/Jettison Pump Uncommanded-On - Functional Test

A. General

(1) ALI - Refer to the task: Airworthiness Limitation Precautions (AMM 28-00-00/201), for important information on airworthiness limitation instructions (ALIs).

NOTE: This is applicable to Airworthiness Limitations 28-AWL-27 and 28-AWL-28.

B. References

(1) AMM 06-44-00/201, Wings (Major Zones 500 and 600) Access Doors and Panels

(2) AMM 24-22-00/201, Electrical Power Control

(3) AMM 28-31-00/501, Fuel Jettison System

C. Access

(1) Location Zone

119	Main Equipment Center (Left and Right)
211	Control Cabin (Left)
212	Control Cabin (Right)
531	Center Auxiliary Tank (Left)
532	Main Tank - Inboard of Rib No. 10 (Left)
631	Center Auxiliary Tank (Right)
632	Main Tank - Inboard of Rib No. 10 (Right)

(2) Access Panel

119AL	Electronic Access Door

D. Prepare for Test

(1) Do this procedure: Phase Check of the Fuel Pump Wiring for the applicable fuel boost or override pump (AMM 28-22-00/501) or Phase Check of the Jettison Pump Wiring for the applicable jettison pump (AMM 28-31-00/501).

(2) Do this procedure: Operational Test - Engine Fuel-Feed System for the applicable fuel boost pump (AMM 28-22-00/501).

(3) Make sure these circuit breakers are closed:

(a) Main Power Distribution Panel, P6:

1) 6F15, L FUEL OVRD PUMP

2) 6F21, R FUEL OVRD PUMP

3) 6G15, L AFT FUEL BOOST PUMP

4) 6G18, R FWD FUEL BOOST PUMP

5) 6G21, R AFT FUEL BOOST PUMP

6) 6G24, L FWD FUEL BOOST PUMP

(b) Overhead Circuit Breaker Panel, P11:

1) 11M13, L FUEL JTSN CONT (if installed)

2) 11M15, L CTR FUEL PUMPS

3) 11M16, FUEL PUMPS R FWD/L AFT

4) 11M22, R FUEL JTSN CONT (if installed)

5) 11M24, R CTR FUEL PUMPS

6) 11M25, FUEL PUMPS L FWD/R AFT

(c) AIRPLANES WITH FUEL JETTISON SYSTEM;
On the left miscellaneous electrical equipment panel, P36:

1) 36F4 or 36G7, L FUEL JETT PUMP

(d) AIRPLANES WITH FUEL JETTISON SYSTEM;
On the right miscellaneous electrical equipment panel, P37:

1) 37F4 or 37G4, R FUEL JETT PUMP

(4) Supply electrical power (AMM 24-22-00/201).

(5) Make sure these switch-lights of the fuel management panel on the P5 panel are in the position shown.

SWITCH-LIGHT	POSITION
AFT L PUMP	OFF
AFT R PUMP	OFF
FWD L PUMP	OFF
FWD R PUMP	OFF
LEFT C PUMP	OFF
RIGHT C PUMP	OFF

(6) Open the fueling station door, 521QB (AMM 06-44-00/201).

E. Ground Fault Interrupter (GFI) Relay Operational Test

WARNING: DO NOT OPERATE A FUEL PUMP IF THE LOW PRESSURE LIGHT COMES ON AND STAYS ON. FUEL VAPORS IN THE TANK MAY IGNITE AND CAUSE A FIRE OR EXPLOSION.

MECH	INSP

(1) To operate any of the fuel pumps, you must be in the flight compartment to continuously monitor the fuel quantity and the low pressure indication in the fuel tank.

(a) Immediately set the applicable fuel pump switch to the off position if the low PRESS light comes on and stays on.

(2) Push the applicable fuel boost pump or fuel override pump switch-light of the fuel management control panel on the P5 overhead panel to the ON position.

(3) Listen and make sure the applicable fuel pump operates.

(4) Make sure the applicable low PRESS light on the P5 overhead panel goes off.

(5) Push the applicable ground fault interrupter (GFI) relay TEST button on either the P140 or P141 panel.

(a) For the right center override fuel pump, the relay is K10696, found on the P141 panel.

(b) For the left center override fuel pump, the relay is K10697, found on the P140 panel.

(c) For the right override/jettison fuel pump, the relay is K10698, found on the P141 panel.

(d) For the left override/jettison fuel pump, the relay is K10699, found on the P140 panel.

(e) For the right aft fuel boost pump, the relay is K10702, found on the P141 panel.

(f) For the left forward fuel boost pump, the relay is K10703, found on the P140 panel.

(g) For the right forward fuel boost pump, the relay is K10704, found on the P141 panel.

(h) For the left aft fuel boost pump, the relay is K10705, found on the P140 panel.

MECH	INSP

(6) Make sure the RESET button on the applicable GFI relay has moved up, showing a white band.

NOTE: The RESET button located at the top edge of the GFI relay moves up, to expose a narrow white band when the GFI circuit turns off the relay due to a ground fault, or results when you push the TEST button located at the top surface of the relay.

(7) Listen and make sure the applicable fuel pump does not operate.

(8) Put the applicable fuel boost pump or fuel override pump switch-light of the fuel management control panel on the P5 overhead panel to the off position.

(9) To make sure the applicable fuel pump does not operate when the GFI circuit turns off the relay, do the subsequent steps:

(a) Put the applicable fuel pump switch on the fuel management control panel on the P5 overhead panel to the ON position.

(b) Listen and make sure the applicable fuel pump does not operate.

(c) Put the applicable fuel pump switch on the fuel management control panel on the P5 overhead panel, to the off position.

(10) Push the RESET button on the applicable GFI relay in.

(a) Make sure the RESET button does not pop back out and the white band is not visible.

(11) Push the applicable fuel boost pump or fuel override pump switch-light of the fuel management control panel on the P5 overhead panel to the ON position.

(12) Listen and make sure the applicable fuel pump operates.

(13) Put the applicable fuel boost pump or fuel override pump switch-light of the fuel management control panel on the P5 overhead panel to the off position.

(14) Close the fueling station door, 521QB (AMM 06-44-00/201).

(15) Remove electrical power if it is not necessary (AMM 24-22-00/201).

STATION		BOEING CARD NO.
TAIL NO.	SAS BOEING 767 TASK CARD	28-R01
DATE		AIRLINE CARD NO.

SKILL	WORK AREA	RELATED TASK	INTERVAL	PHASE	MPD REV	TASK CARD REVISION
AIRPL	WINGS				018	AUG 22/08

TASK	TITLE	STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE	APPLICABILITY ENGINE
REPLACE	FUELING SHUTOFF VALVE CONTROL UNIT		ALL	ALL

ZONES	ACCESS PANELS
500 600	1004 551TB 561FB 651TB 661FB

MECH	INSP	MPD ITEM NUMBER

REPLACE THE FUELING SHUTOFF VALVE CONTROL UNIT. 28-21-12-4A

THIS CARD IS NOT A SCHEDULED MAINTENANCE TASK. IT IS A COMPONENT CHANGE CARD AND IT IS PROVIDED FOR OPERATOR CONVENIENCE DURING UNSCHEDULED MAINTENANCE ACTIVITIES. SEE APPENDIX A OF THE 767 MAINTENANCE PLANNING DATA (MPD) DOCUMENT,D622T001, FOR A DESCRIPTION OF THE COMPONENT CHANGE CARDS.

1. Remove the Control Unit of the Fueling Shutoff Valve (Fig. 401)

A. References

(1) AMM 06-44-00/201, Wing Access Doors and Panels

(2) AMM 27-51-00/201, Flight Controls

(3) AMM 32-00-15/201, Landing Gear Door Locks

(4) AMM 32-00-20/201, Landing Gear Downlocks

B. Procedure

WARNING: DO THE DEACTIVATION OF THE FLAP SYSTEM PROCEDURE. FAILURE TO DO THE DEACTIVATION OF THE FLAP SYSTEM PROCEDURE COULD CAUSE INJURY OR DAMAGE.

(1) Do the deactivation of the flap system procedure for the trailing edge flaps (AMM 27-51-00/201).

(2) Open this circuit breaker on the APU external power panel, P34, and attach DO-NOT-CLOSE tag:

(a) 34L5, FLNG VALVES

MECH | INSP

(3) Open this circuit breaker on the main power distribution panel, P6, and attach DO-NOT-CLOSE tag:

(a) 6E6, FUELING VALVES

(4) To get access to the control unit in the left or right auxiliary fuel tank, do the steps that follow:

(a) Make sure the downlocks for the nose and main landing gear are installed (AMM 32-00-20/201).

WARNING: REFER TO AMM 32-00-15/201 FOR DOOR LOCK INSTALLATION PROCEDURE. IF THE MAIN GEAR DOORS MOVE QUICKLY, INJURY OR DAMAGE CAN OCCUR.

(b) Open the applicable left or right main gear door and install the door lock (AMM 32-00-15/201).

(5) For the control unit in the left inboard main fuel tank, open the skin panel, 551TB (AMM 06-44-00/201).

(6) For the control unit in the right inboard main fuel tank, open the skin panel, 651TB (AMM 06-44-00/201).

(7) For the control unit in the left outboard main fuel tank, open the skin panel, 561FB (AMM 06-44-00/201).

(8) For the control unit in the right outboard main fuel tank, open the skin panel, 661FB (AMM 06-44-00/201).

(9) Disconnect the electrical connector (6) from the control unit (7).

(10) Remove the bolts (4) and the washers (5) that attach the control unit (7) to the valve body (1).

(11) Remove the control unit (7).

NOTE: If fuel leaks from the valve body (1) when the control unit (7) is removed, then the removal check valve has failed and the fueling shutoff valve must be replaced (AMM 28-21-02/401).

2. Install the Control Unit of the Fueling Shutoff Valve (Fig. 401)

MECH	INSP

A. References

(1) AMM 06-44-00/201, Wing Access Doors and Panels

(2) AMM 12-11-01/301, Fuel Tank Pressure Fueling

(3) AMM 32-00-15/201, Landing Gear Door Locks

B. Procedure

(1) Align the control unit (7) with the threaded inserts of the valve body (3).

(2) Make sure the three O-rings (8, 9) are installed as shown (View B, Fig. 401).

(3) Put washers (5) on the bolts (4).

(4) Install the bolts (4) through the control unit (7) into the threaded inserts of the valve body (3).

(5) Make sure the bonding resistance between the control unit (7) and the rear spar (2) is 0.008 ohm (8 milliohms) or less.

(6) Connect the electrical connector (6) to the control unit (7).

(7) Remove the DO-NOT-CLOSE tag and close this circuit breaker on the P34 panel:

(a) 34L5, FLNG VALVES

(8) Remove the DO-NOT-CLOSE tag and close this circuit breaker on the P6 panel:

(a) 6E6, FUELING VALVES

(9) Refuel the applicable fuel tank (AMM 12-11-01/301) and make sure the fueling shutoff valve operates correctly.

(10) Make sure there are no fuel leaks at the control unit of the fueling shutoff valve.

(11) For the control unit in the left inboard main fuel tank, close the skin panel, 551TB (AMM 06-44-00/201).

(12) For the control unit in the right inboard main fuel tank, close the skin panel 651TB (AMM 06-44-00/201).

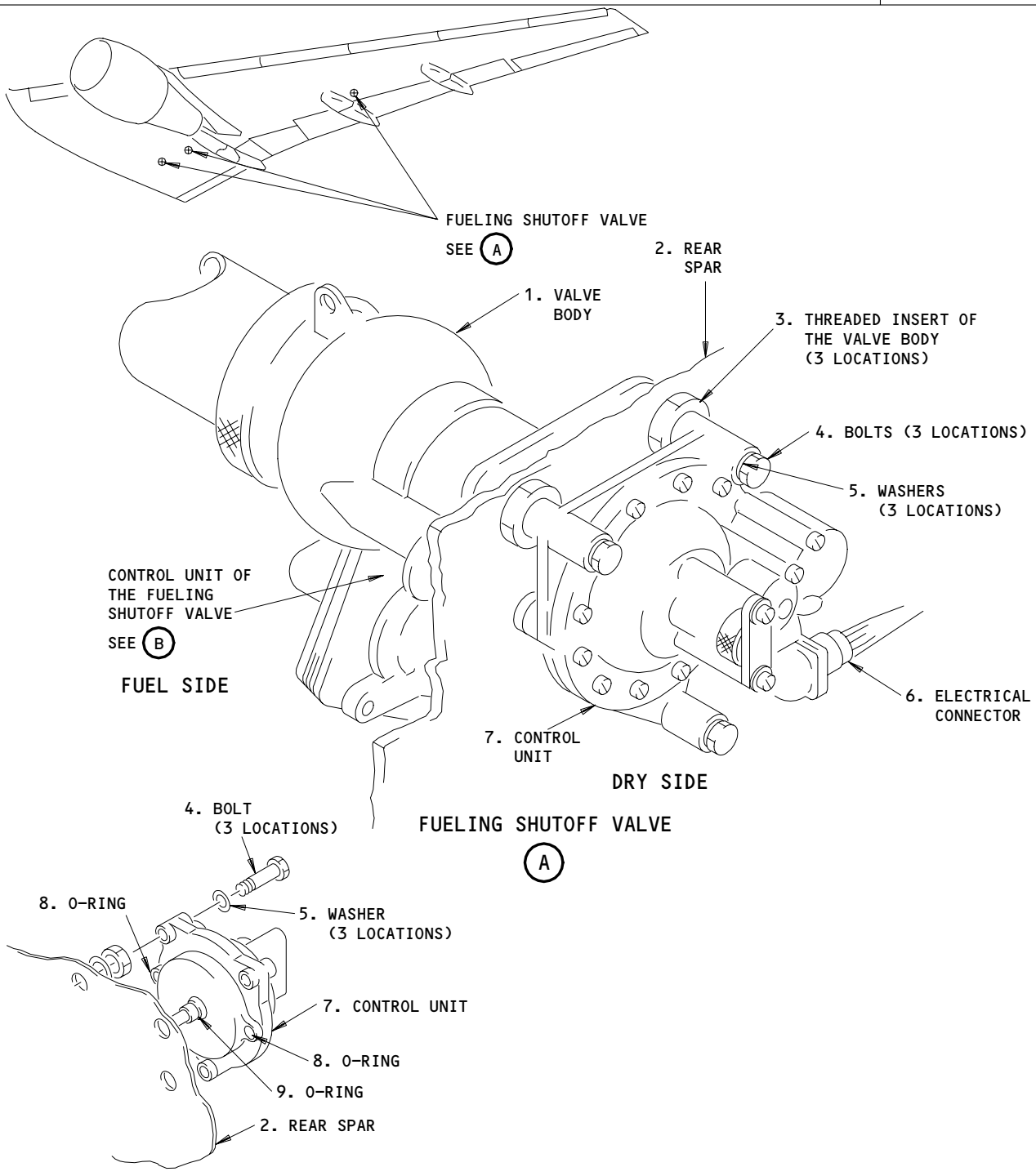
MECH	INSP

(13) For the control unit in the left outboard main fuel tank, close the skin panel, 561FB (AMM 06-44-00/201).

(14) For the control unit in the right outboard main fuel tank, close the skin panel, 661FB (AMM 06-44-00/201).

WARNING: USE THE PROCEDURE IN AMM 32-00-15/201 TO REMOVE THE DOOR LOCKS. THE DOORS OPEN AND CLOSE QUICKLY AND CAN CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.

(15) For the control unit in the left or right auxiliary fuel tank, remove the door locks from the main gear doors and close the doors (AMM 32-00-15/201).



Fueling Shutoff Valve Control Unit Installation
Figure 401

STATION		BOEING CARD NO.
TAIL NO.	SAS BOEING 767 TASK CARD	28-004-01-1
DATE		AIRLINE CARD NO.

SKILL	WORK AREA	RELATED TASK	INTERVAL		PHASE	MPD REV	TASK CARD REVISION
AIRPL	LEFT WING		2C	4C	12448	014	AUG 22/05

TASK	TITLE	STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE	APPLICABILITY ENGINE
OPERATIONAL	SURGE TANK PRESSURE RELIEF VALVE - L		ALL	ALL

ZONES	ACCESS PANELS
542	

MECH	INSP	MPD ITEM NUMBER
		28-13-04-2B

MANUALLY ACTUATE LEFT SURGE TANK PRESSURE RELIEF VALVE TO VERIFY OPERATION BY INSERTING TEST ROD IN PRESSURE SENSE HOLE.

1. Manually Operate the Pressure Relief Valve

   A. Manually Operate the Pressure Relief Valve

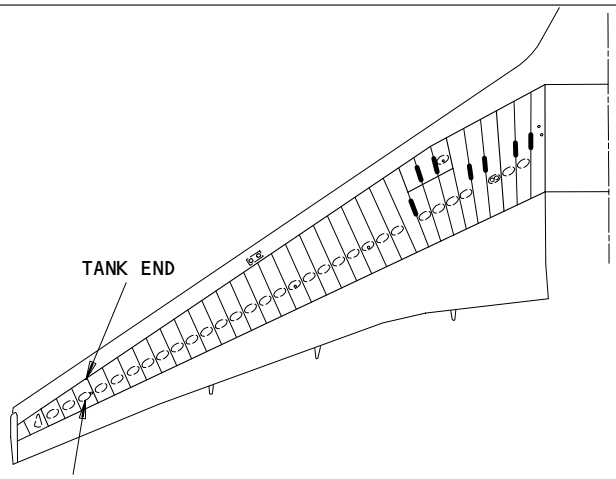
      (1) Put a screwdriver into the pressure sense hole on the left or right surge tank access door, 542AB or 642AB.

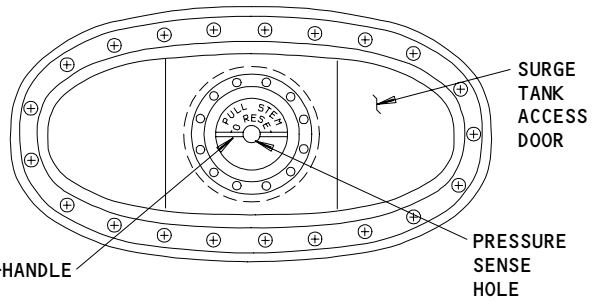
      (2) Push up on the screwdriver.

      (3) Make sure the pressure relief valve opens.

          NOTE: There is a loud noise and the pressure relief valve moves away from the screwdriver, when the pressure relief valve opens.

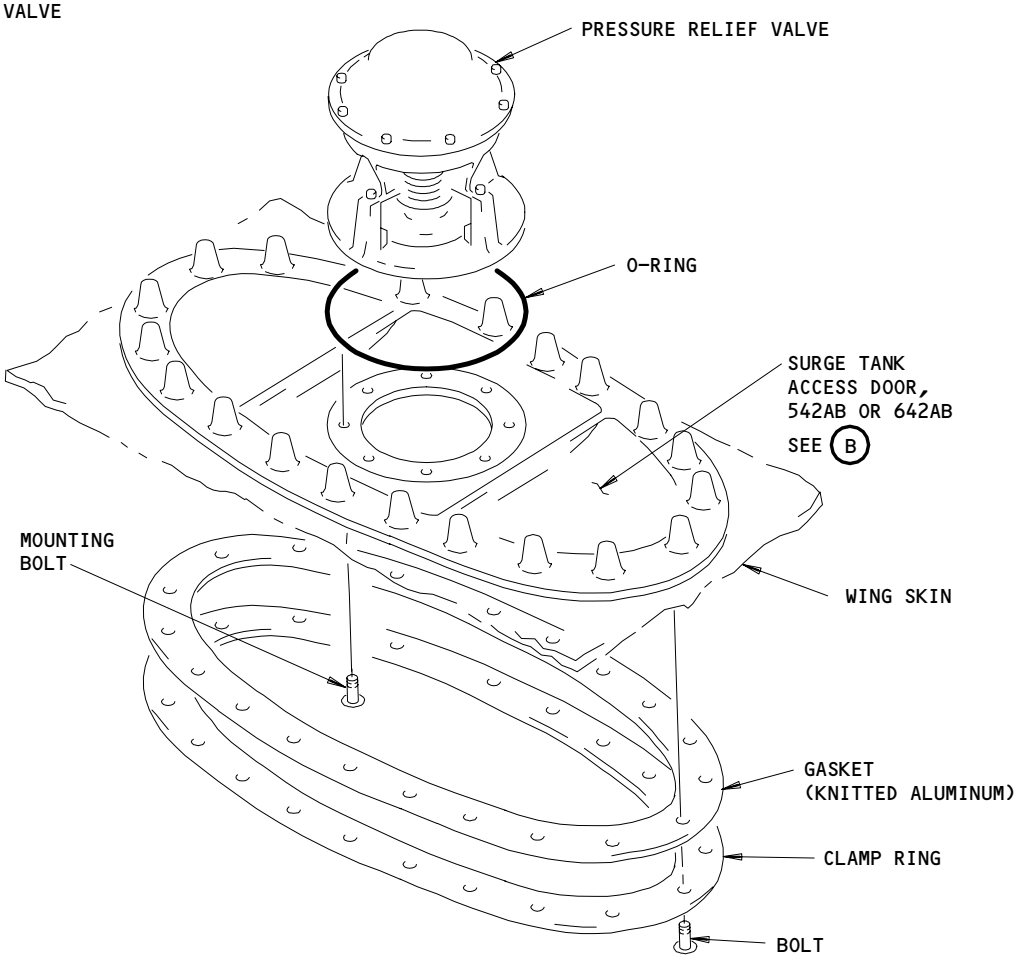
      (4) Pull the T-handle down until the pressure relief valve sets again.





SURGE TANK ACCESS DOOR, 542AB OR 642AB

B



PRESSURE RELIEF VALVE INSTALLATION

A

Surge Tank Pressure Relief Valve
Figure 201

STATION		BOEING CARD NO.
TAIL NO.	SAS BOEING 767 TASK CARD	28-004-01-2
DATE		AIRLINE CARD NO.

SKILL	WORK AREA	RELATED TASK	INTERVAL		PHASE	MPD REV	TASK CARD REVISION
AIRPL	RIGHT WING		2C	4C	12448	014	AUG 22/05

TASK	TITLE	STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE	APPLICABILITY ENGINE
OPERATIONAL	SURGE TANK PRESSURE RELIEF VALVE - R		ALL	ALL

ZONES	ACCESS PANELS
642	

MECH	INSP	MPD ITEM NUMBER
		28-13-04-2B

MANUALLY ACTUATE RIGHT SURGE TANK PRESSURE RELIEF VALVE TO VERIFY OPERATION BY INSERTING TEST ROD IN PRESSURE SENSE HOLE.

1. Manually Operate the Pressure Relief Valve

   A. Manually Operate the Pressure Relief Valve

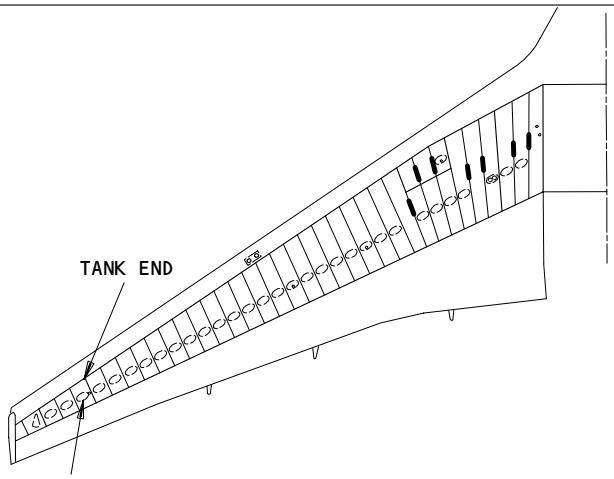
      (1) Put a screwdriver into the pressure sense hole on the left or right surge tank access door, 542AB or 642AB.

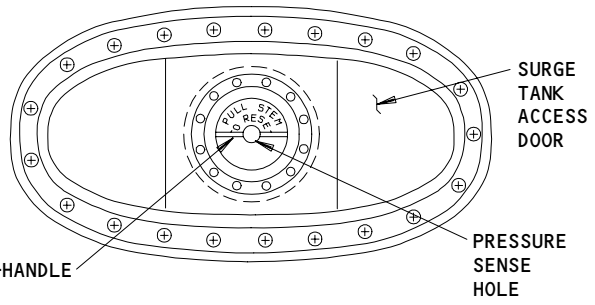
      (2) Push up on the screwdriver.

      (3) Make sure the pressure relief valve opens.

          NOTE: There is a loud noise and the pressure relief valve moves away from the screwdriver, when the pressure relief valve opens.

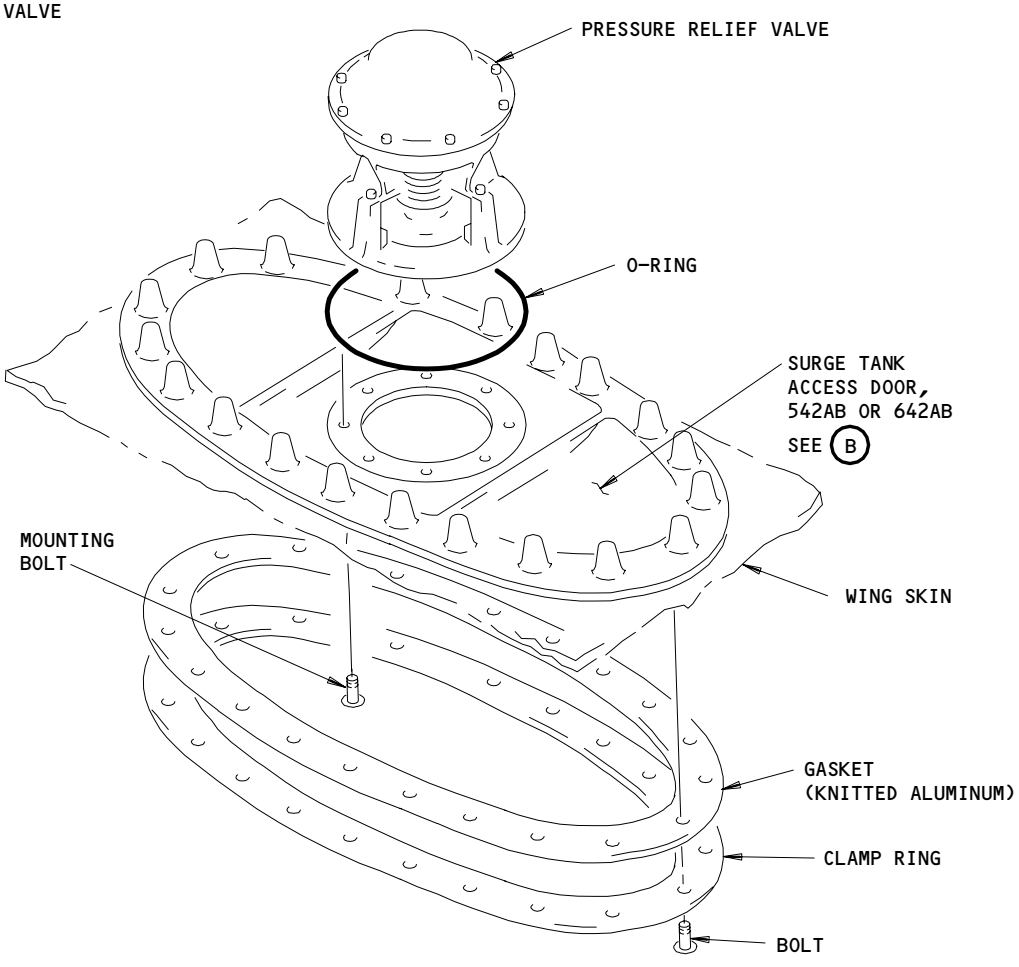
      (4) Pull the T-handle down until the pressure relief valve sets again.





SURGE TANK ACCESS DOOR, 542AB OR 642AB

B



PRESSURE RELIEF VALVE INSTALLATION

A

Surge Tank Pressure Relief Valve
Figure 201

STATION		BOEING CARD NO.
TAIL NO.	SAS BOEING 767 TASK CARD	28-005-01-1
DATE		AIRLINE CARD NO.

SKILL	WORK AREA	RELATED TASK	INTERVAL	PHASE	MPD REV	TASK CARD REVISION
AIRPL	LEFT WING		2C	12424	018	DEC 22/07

TASK	TITLE	STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE	APPLICABILITY ENGINE
CLEAN	AUTO SUMPING MOTIVE FLOW SCREENS - L		ALL	ALL

ZONES	ACCESS PANELS
531 532	531AB 532AB

MECH | INSP

MPD ITEM NUMBER

CLEAN OR REPLACE AUTO SUMPING MOTIVE FLOW SCREENS. 28-22-08-7A
(LEFT WING)

1. Clean the Motive Flow Screen (Fig. 701)

A. Equipment

(1) Brush, Soft Bristled - Commercially Available

B. Consumable Materials

(1) B00074 Solvent - Degreasing, MIL-PRF-680 (Supersedes P-D-680)

(2) G00034 Cotton Wiper - Process Cleaning Absorbent Wiper (Cheesecloth, gauze), BMS15-5

C. References

(1) AMM 28-22-03/401, Main Tank Fuel Boost Pump

(2) AMM 28-22-05/401, Center Auxiliary Tank Override Pump

CAUTION: MAKE SURE YOU REMOVE THE MOTIVE FLOW SCREEN, NOT THE DISCHARGE CHECK VALVE FOUND NEXT TO THE MOTIVE FLOW SCREEN. IF YOU REMOVE THE DISCHARGE CHECK VALVE, FUEL LEAKAGE CAN OCCUR.

(3) Remove the motive flow screen (AMM 28-22-03/401; AMM 28-22-05/401).

MECH	INSP

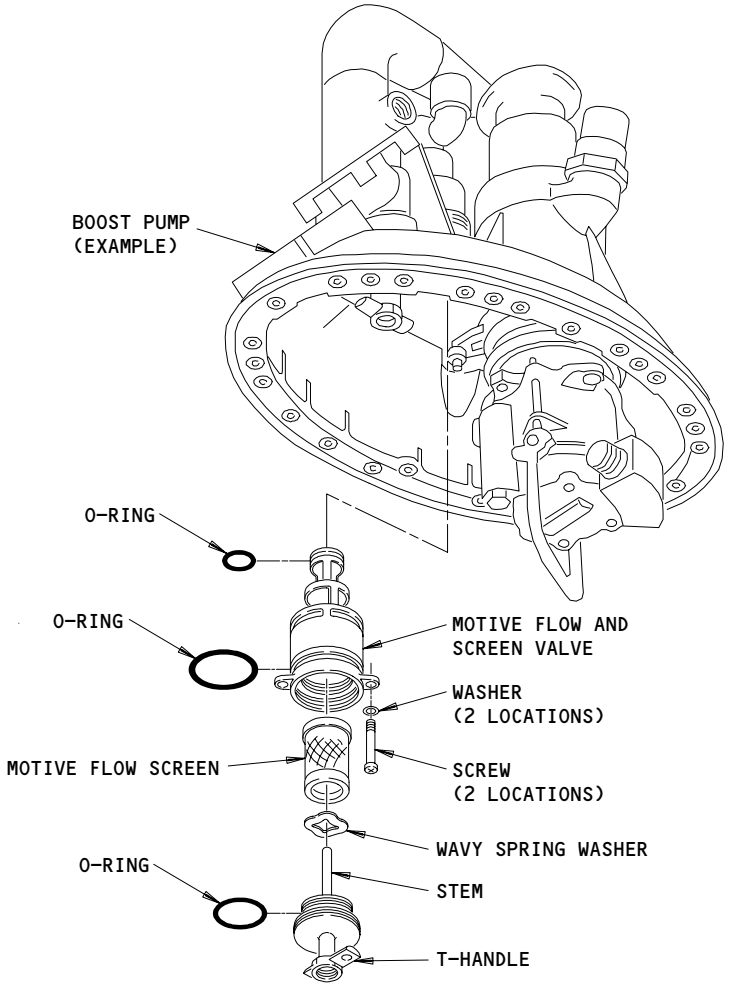
WARNING: DO NOT GET DRY-CLEANING SOLVENT IN YOUR MOUTH OR EYES, OR ON YOUR SKIN. DO NOT BREATHE THE FUMES FROM THE DRY-CLEANING SOLVENT. PUT ON A PROTECTIVE SPLASH GOGGLE AND GLOVES WHEN YOU USE THE DRY-CLEANING SOLVENT. KEEP THE DRY-CLEANING SOLVENT AWAY FROM SPARKS, FLAME AND HEAT. DRY-CLEANING SOLVENT IS A POISONOUS AND FLAMMABLE SOLVENT WHICH CAN CAUSE INJURY OR DAMAGE.

(4) Flush the motive flow screen with dry-cleaning solvent and use a small brush to remove unwanted materials.

(a) If you cannot clean the motive flow screen satisfactorily, discard the motive flow screen and get a replacement.

(5) Use a soft cotton wiper (BMS15-5) to dry the motive flow screen.

(6) Install the motive flow screen (AMM 28-22-03/401; AMM 28-22-05/401).



Motive Flow Screen Installation
Figure 701

STATION		BOEING CARD NO.
TAIL NO.	SAS BOEING 767 TASK CARD	28-005-01-2
DATE		AIRLINE CARD NO.

SKILL	WORK AREA	RELATED TASK	INTERVAL	PHASE	MPD REV	TASK CARD REVISION
AIRPL	RIGHT WING		2C	12424	018	DEC 22/07

TASK	TITLE	STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE	APPLICABILITY ENGINE
CLEAN	AUTO SUMPING MOTIVE FLOW SCREENS - R		ALL	ALL

ZONES	ACCESS PANELS
631 632	631AB 632AB

MECH	INSP	MPD ITEM NUMBER

CLEAN OR REPLACE AUTO SUMPING MOTIVE FLOW SCREENS. 28-22-08-7A
(RIGHT WING)

1. Clean the Motive Flow Screen (Fig. 701)

A. Equipment

(1) Brush, Soft Bristled - Commercially Available

B. Consumable Materials

(1) B00074 Solvent - Degreasing, MIL-PRF-680 (Supersedes P-D-680)

(2) G00034 Cotton Wiper - Process Cleaning Absorbent Wiper (Cheesecloth, gauze), BMS15-5

C. References

(1) AMM 28-22-03/401, Main Tank Fuel Boost Pump

(2) AMM 28-22-05/401, Center Auxiliary Tank Override Pump

CAUTION: MAKE SURE YOU REMOVE THE MOTIVE FLOW SCREEN, NOT THE DISCHARGE CHECK VALVE FOUND NEXT TO THE MOTIVE FLOW SCREEN. IF YOU REMOVE THE DISCHARGE CHECK VALVE, FUEL LEAKAGE CAN OCCUR.

(3) Remove the motive flow screen (AMM 28-22-03/401; AMM 28-22-05/401).

MECH	INSP

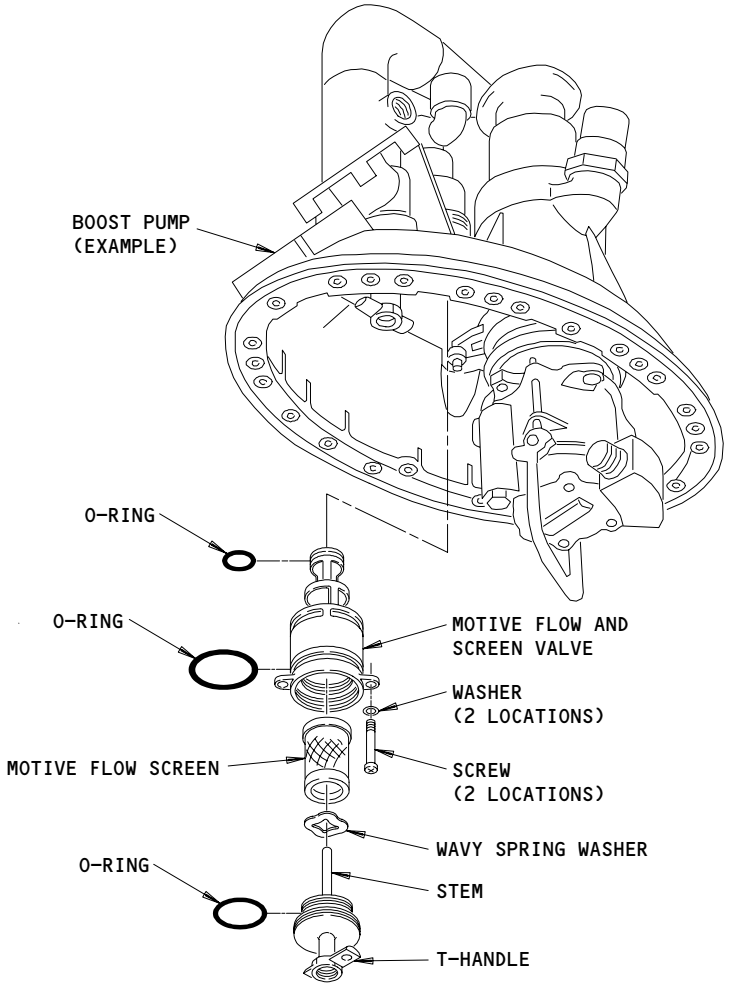
WARNING: DO NOT GET DRY-CLEANING SOLVENT IN YOUR MOUTH OR EYES, OR ON YOUR SKIN. DO NOT BREATHE THE FUMES FROM THE DRY-CLEANING SOLVENT. PUT ON A PROTECTIVE SPLASH GOGGLE AND GLOVES WHEN YOU USE THE DRY-CLEANING SOLVENT. KEEP THE DRY-CLEANING SOLVENT AWAY FROM SPARKS, FLAME AND HEAT. DRY-CLEANING SOLVENT IS A POISONOUS AND FLAMMABLE SOLVENT WHICH CAN CAUSE INJURY OR DAMAGE.

(4) Flush the motive flow screen with dry-cleaning solvent and use a small brush to remove unwanted materials.

(a) If you cannot clean the motive flow screen satisfactorily, discard the motive flow screen and get a replacement.

(5) Use a soft cotton wiper (BMS15-5) to dry the motive flow screen.

(6) Install the motive flow screen (AMM 28-22-03/401; AMM 28-22-05/401).



Motive Flow Screen Installation
Figure 701

SKILL	WORK AREA	RELATED TASK	INTERVAL	PHASE	MPD REV	TASK CARD REVISION
AIRPL	FUSELAGE		2C	12424	002	DEC 22/05

TASK	TITLE	STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE	APPLICABILITY ENGINE
FUNCTIONAL	APU FUEL SUPPLY LINE SHROUD		ALL	ALL

ZONES	ACCESS PANELS
155	

MECH | INSP

MPD ITEM NUMBER

PRESSURE DECAY CHECK APU FUEL SUPPLY LINE SHROUD. 28-25-00-5A

1. System Test - APU Shroud and APU Shroud Drain Line (Fig. 502)

A. General

(1) This procedure does a check of the APU shroud and the APU shroud drain line for leaks.

B. Equipment

(1) APU Fuel Line Shroud Test Equipment - Recommended:

(a) Adapter Assembly - A28005-24

(b) Test Hose - A28005-50

(2) APU Fuel Line Shroud Test Equipment - Alternate:

(a) Adapter Assembly - A28005-24

(b) Test Hose - A28005-42

(3) APU Fuel Line Shroud Test Equipment - Alternate:

(a) Test Equipment - A28005-35

NOTE: This test equipment is contains an adapter assembly and a test hose.

MECH | INSP

(4) Pneumatic Air Supply Equipment, capable of delivering and maintaining up to 20 psig - Commercially available

C. Test of the APU Shroud and the APU Shroud Drain Line

CAUTION: MAKE SURE YOU ADJUST THE TESTER NIPPLE CORRECTLY AND DO NOT USE TOO MUCH FORCE ON THE TESTER HANDLE. YOU CAN DAMAGE THE TUBE IN THE DRAIN MAST IF YOU USE TOO MUCH FORCE.

(1) Install the leak test hose with the adapter assembly on the APU shroud drain line at the APU drain mast (Fig. 502).

NOTE: The APU shroud drain is the bottom hole of the two holes on the drain mast.

(2) Connect the pneumatic air supply to the leak test hose.

CAUTION: DO NOT SUPPLY PRESSURE OF MORE THAN 20 PSIG. TOO MUCH PRESSURE CAN CAUSE THE APU FUEL LINE TO CLOSE AND CAUSE DAMAGE TO THE AIRPLANE.

(3) Slowly and continuously pressurize the APU shroud and the APU shroud drain line to 18 ±1 psig, or to the limit of the regulator.

(4) Make sure the pressure is stable.

(5) Close the shutoff valve on the test equipment to lock in the pressure.

(6) Make sure that the pressure does not decrease more than 0.1 psig for 5 minutes.

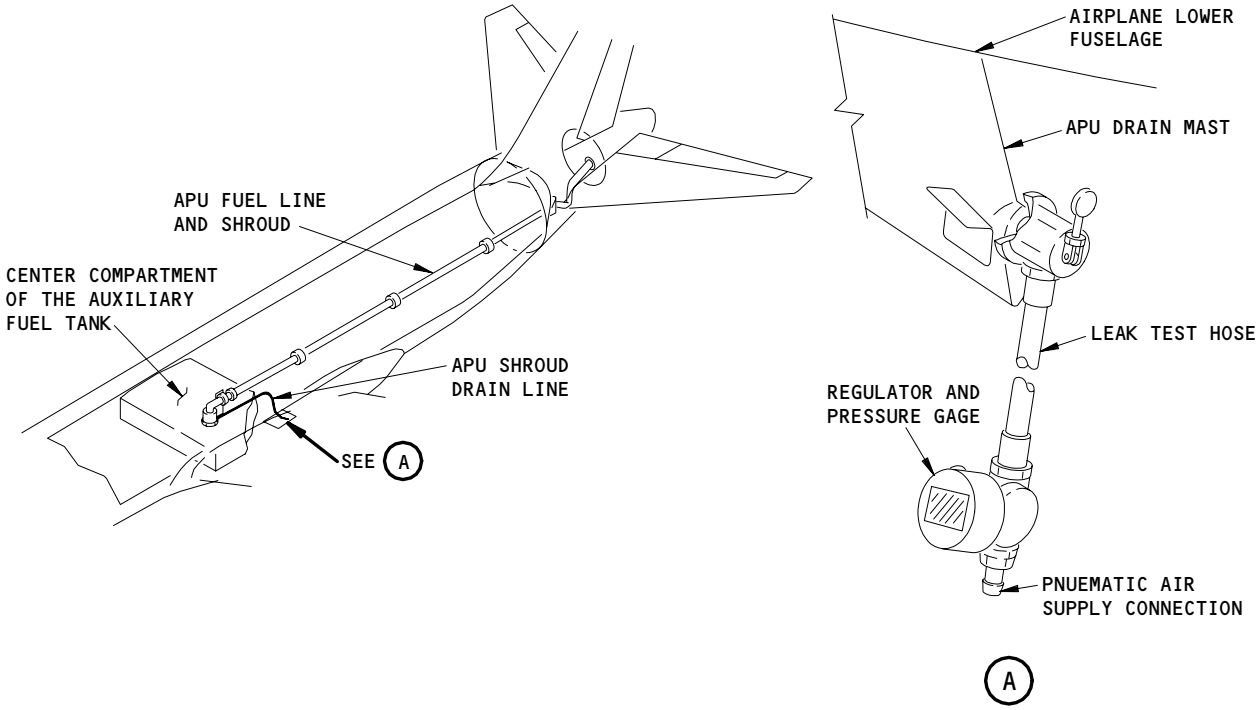
NOTE: If the pressure decreases, the seals leak or the fittings leak, or there are bad parts.

(7) Slowly and continuously decrease the pressure to ambient.

(8) Disconnect the pneumatic air supply.

MECH	INSP

(9) Disconnect the leak test hose from the APU shroud drain line at the APU drain mast.



APU Shroud and Drain Tubing Leak Test
Figure 502

STATION		BOEING CARD NO.
TAIL NO.	SAS BOEING 767 TASK CARD	28-009-01
DATE		AIRLINE CARD NO.

SKILL	WORK AREA	RELATED TASK	INTERVAL	PHASE	MPD REV	TASK CARD REVISION
ELECT	CREW CABIN		1C	11212	002	DEC 22/08

TASK	TITLE	STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE	APPLICABILITY ENGINE
OPERATIONAL	FUEL CROSSFEED VALVE		ALL	ALL

ZONES	ACCESS PANELS
212	

MECH	INSP	MPD ITEM NUMBER

CHECK OPERATION OF FUEL CROSSFEED VALVE (IF NOT CHECKED BY CREW). 28-22-00-5B

1. Operational Test - Engine Fuel Crossfeed Valve

   A. References

      (1) AMM 24-22-00/201, Electrical Power - Control

   B. Prepare to Test

      (1) Supply electrical power (AMM 24-22-00/201).

      (2) Make sure the APU master control switch on the overhead panel, P5, is in the OFF position.

      (3) Make sure these switch-lights of the fuel management panel on the P5 panel are in the position shown.

SWITCH-LIGHT	POSITION
AFT L PUMP	OFF
AFT R PUMP	OFF
FWD L PUMP	OFF
FWD R PUMP	OFF
LEFT C PUMP	OFF
RIGHT C PUMP	OFF

MECH | INSP

C. AIRPLANES WITH A SINGLE FUEL CROSSFEED VALVE;
Test of the Engine Fuel Crossfeed Valve

(1) Push the FUEL CROSSFEED switch-light of the fuel management panel on the P5 panel to the open position.

(2) Make sure the VALVE light comes on and then goes off.

(3) Push the FUEL CROSSFEED switch-light on the P5 panel to the closed position.

(4) Make sure the VALVE light comes on and then goes off.

D. AIRPLANES WITH FORWARD AND AFT FUEL CROSSFEED VALVES;
Test of the Engine Fuel Crossfeed Valves

(1) Push the AFT FUEL XFEED switch-light of the fuel management panel on the P5 panel to the open position.

(2) Make sure the VALVE light comes on and then goes off.

(3) Push the AFT FUEL XFEED switch-light on the P5 panel to the closed position.

(4) Make sure the VALVE light comes on and then goes off.

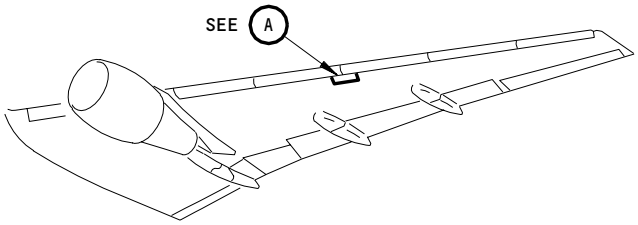
(5) Push the FWD FUEL XFEED switch-light on the P5 panel to the open position.

(6) Make sure the VALVE light comes on and then goes off.

(7) Push the FWD FUEL XFEED switch-light on the P5 panel to the closed position.

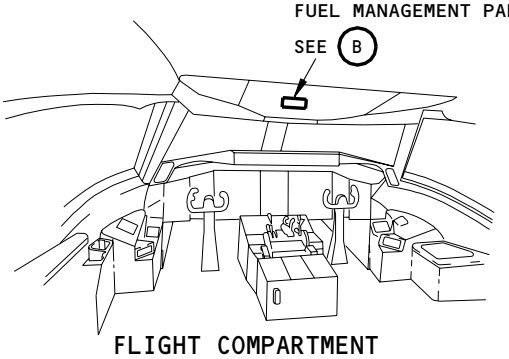
(8) Make sure the VALVE light comes on and then goes off.

FUELING CONTROL PANEL, P28
SEE (A)

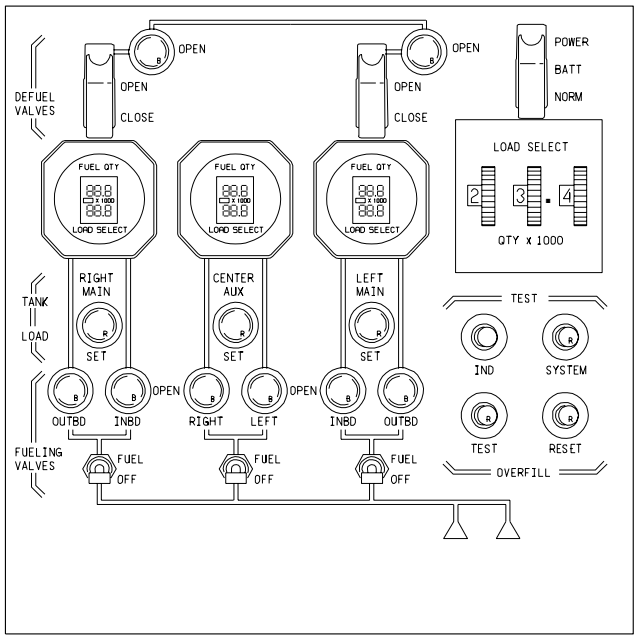


LEFT WING

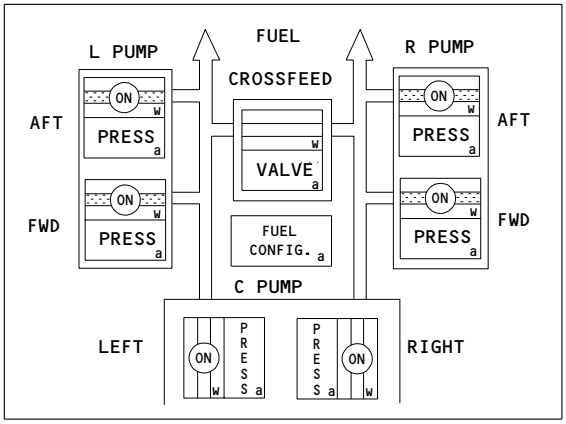
FUEL MANAGEMENT PANEL
SEE (B)



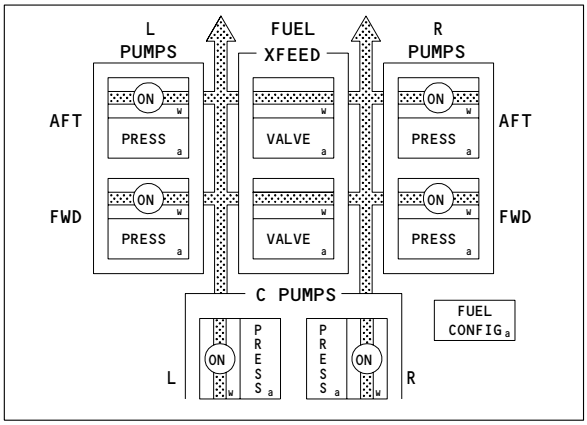
FLIGHT COMPARTMENT



FUELING CONTROL PANEL, P28
(A)



FUEL MANAGEMENT PANEL
(ON THE P5 PANEL)
(B) 1



FUEL MANAGEMENT PANEL
(ON THE P5 PANEL)
(B) 2

1 AIRPLANES WITH A SINGLE FUEL CROSSFEED VALVE

2 AIRPLANES WITH FORWARD AND AFT FUEL CROSSFEED VALVES

Engine Fuel Feed System
Figure 501

STATION		BOEING CARD NO.
TAIL NO.	SAS BOEING 767 TASK CARD	28-010-01-1
DATE		AIRLINE CARD NO.

SKILL	WORK AREA	RELATED TASK	INTERVAL	PHASE	MPD REV	TASK CARD REVISION
AIRPL	L WING TANK		4C	14848	018	DEC 10/98

TASK	TITLE	STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE	APPLICABILITY ENGINE
FUNCTIONAL	SURGE TANK PRESSURE RELIEF VALVE - L		ALL	ALL

ZONES	ACCESS PANELS
542	542AB

MECH | INSP

MPD ITEM NUMBER

CHECK RELIEF SETTING OF LEFT WING SURGE TANK PRESSURE RELIEF VALVE. 28-13-04-2A

1. Check of the Pressure Relief Settings of the Pressure Relief Valve

A. Equipment

(1) Pressure source - range 0 to +1.5 psig, commercially available.

(2) Vacuum source - range of 0 to -3.00 psig, commercially available.

(3) Check Fixture - Surge Tank Pressure Relief Valve, G28005-29 Recommended, (-14, -18, -23 optional)

B. Check of the Pressure Relief Settings of the Pressure Relief Valve

(1) Remove the four bolts from the left or right surge tank access door, 542AB or 642AB.

(2) Put and hold the check fixture on the exit of the pressure relief valve.

(3) Install the check fixture bolts.

(4) Connect the pressure source to the check fixture.

(5) Slowly and continuously supply a positive pressure of more than 1.00 psig.

(6) Make sure the pressure relief valve opens between 1.00 and 1.25 psig.

(7) Put the pressure to 0 psig.

MECH	INSP

(8) Remove the pressure source.

(9) Hold the check fixture and remove the check fixture bolts.

(10) Remove the check fixture.

(11) Pull the T-handle down until the pressure relief valve sets again.

(12) Put and hold the check fixture on the exit of the pressure relief valve.

(13) Install the check fixture bolts.

(14) Install the vacuum source on the check fixture.

(15) Slowly and continuously supply a vacuum pressure of more than -2.50 psig.

(16) Make sure the pressure relief valve opens between -2.50 and -2.75 psig.

(17) Put the pressure to 0 psig.

(18) Remove the vacuum source.

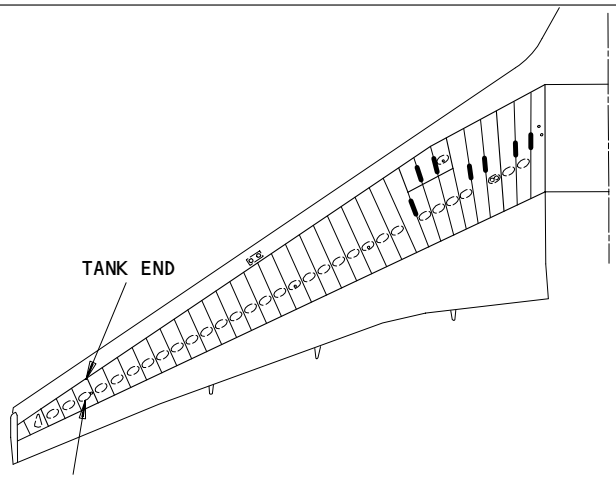
(19) Hold onto the check fixture and remove the check fixture bolts.

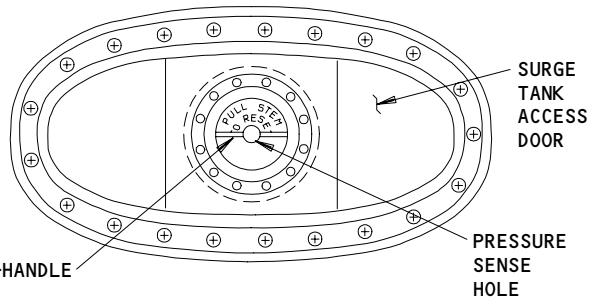
(20) Remove the check fixture.

(21) Install the four bolts on the surge tank access door.

(22) Tighten the bolts to 30-40 pound-inches.

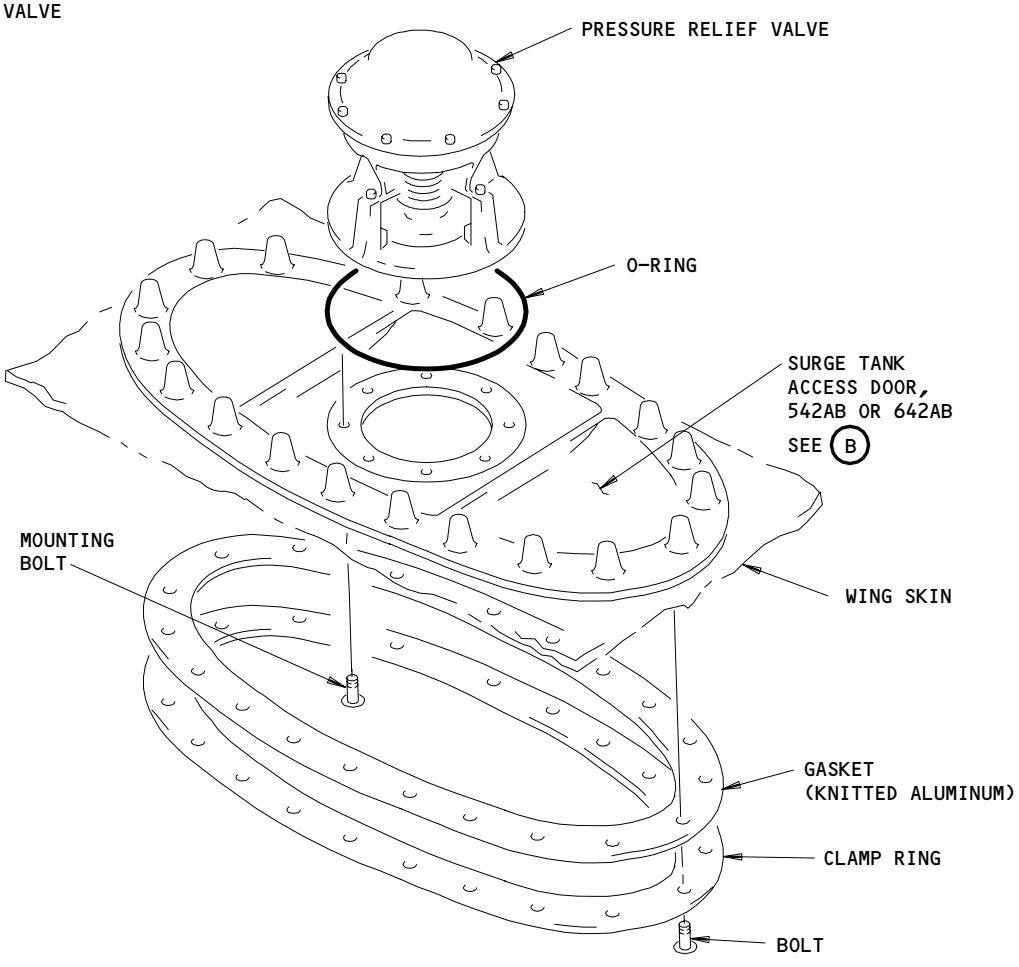
(23) Pull the T-handle down until the pressure relief valve sets again.





SURGE TANK ACCESS DOOR, 542AB OR 642AB

B



PRESSURE RELIEF VALVE INSTALLATION

A

Surge Tank Pressure Relief Valve
Figure 201

STATION		BOEING CARD NO.
TAIL NO.	SAS BOEING 767 TASK CARD	28-010-01-2
DATE		AIRLINE CARD NO.

SKILL	WORK AREA	RELATED TASK	INTERVAL	PHASE	MPD REV	TASK CARD REVISION
AIRPL	R WING TANK		4C	14848	018	DEC 10/98

TASK	TITLE	STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE	APPLICABILITY ENGINE
FUNCTIONAL	SURGE TANK PRESSURE RELIEF VALVE - R		ALL	ALL

ZONES	ACCESS PANELS
642	642AB

MECH | INSP

MPD ITEM NUMBER

CHECK RELIEF SETTING OF RIGHT WING SURGE TANK PRESSURE RELIEF VALVE. 28-13-04-2A

1. Check of the Pressure Relief Settings of the Pressure Relief Valve

A. Equipment

(1) Pressure source - range 0 to +1.5 psig, commercially available.

(2) Vacuum source - range of 0 to -3.00 psig, commercially available.

(3) Check Fixture - Surge Tank Pressure Relief Valve, G28005-29 Recommended, (-14, -18, -23 optional)

B. Check of the Pressure Relief Settings of the Pressure Relief Valve

(1) Remove the four bolts from the left or right surge tank access door, 542AB or 642AB.

(2) Put and hold the check fixture on the exit of the pressure relief valve.

(3) Install the check fixture bolts.

(4) Connect the pressure source to the check fixture.

(5) Slowly and continuously supply a positive pressure of more than 1.00 psig.

(6) Make sure the pressure relief valve opens between 1.00 and 1.25 psig.

(7) Put the pressure to 0 psig.

MECH	INSP

(8) Remove the pressure source.

(9) Hold the check fixture and remove the check fixture bolts.

(10) Remove the check fixture.

(11) Pull the T-handle down until the pressure relief valve sets again.

(12) Put and hold the check fixture on the exit of the pressure relief valve.

(13) Install the check fixture bolts.

(14) Install the vacuum source on the check fixture.

(15) Slowly and continuously supply a vacuum pressure of more than -2.50 psig.

(16) Make sure the pressure relief valve opens between -2.50 and -2.75 psig.

(17) Put the pressure to 0 psig.

(18) Remove the vacuum source.

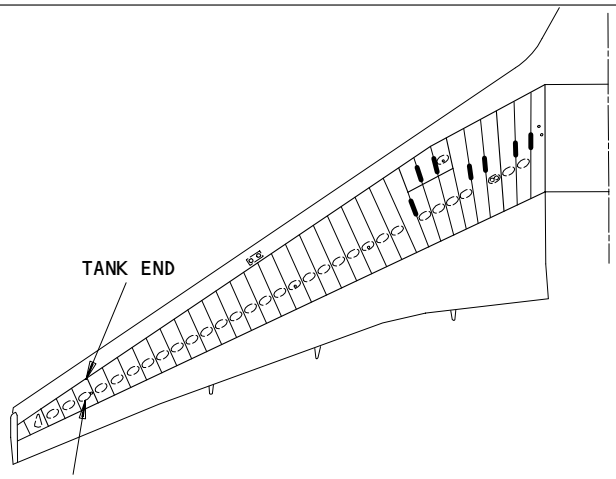
(19) Hold onto the check fixture and remove the check fixture bolts.

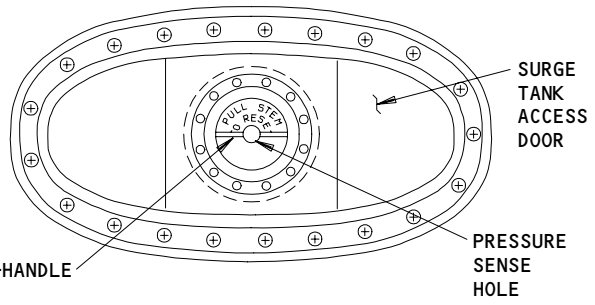
(20) Remove the check fixture.

(21) Install the four bolts on the surge tank access door.

(22) Tighten the bolts to 30-40 pound-inches.

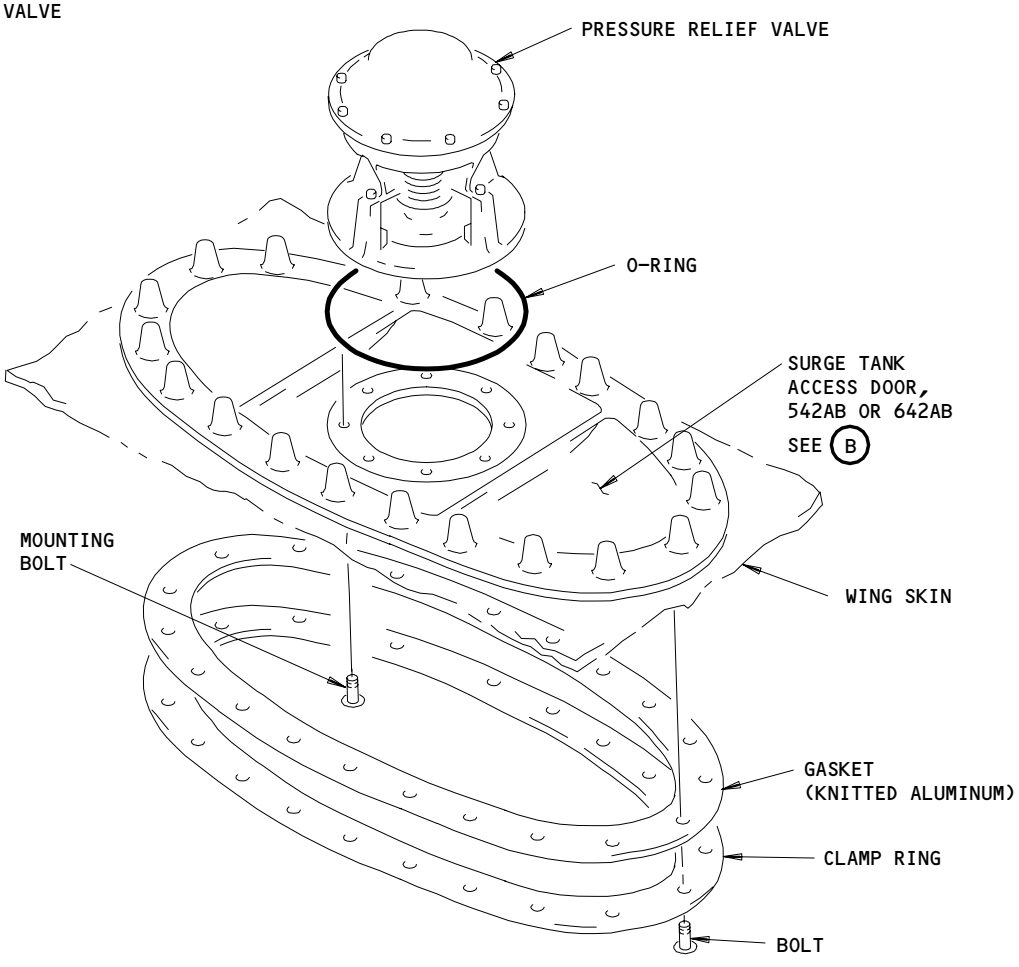
(23) Pull the T-handle down until the pressure relief valve sets again.





SURGE TANK ACCESS DOOR, 542AB OR 642AB

B



PRESSURE RELIEF VALVE INSTALLATION

A

Surge Tank Pressure Relief Valve
Figure 201

STATION		BOEING CARD NO.
TAIL NO.	SAS BOEING 767 TASK CARD	28-010-51
DATE		AIRLINE CARD NO.

SKILL	WORK AREA	RELATED TASK	INTERVAL	PHASE	MPD REV	TASK CARD REVISION
ELECT	CREW CABIN		2C	12424	004	DEC 22/08

TASK	TITLE	STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE	APPLICABILITY ENGINE
OPERATIONAL	CENTER AUX TANK FUEL SCAVENGE SYSTEM		NOTE	ALL

ZONES	ACCESS PANELS
212	

MECH	INSP	MPD ITEM NUMBER

OPERATIONALLY CHECK THE CENTER AUXILIARY TANK FUEL SCAVENGE SYSTEM. 28-22-00-5C

AIRPLANE NOTE: AIRPLANES WITH CENTER SECTION FUEL TANK.

1. System Test - Fuel Scavenge System (Fig. 501)

   A. References

      (1) AMM 12-11-01/301, Fuel Tank Pressure Fueling

      (2) AMM 24-22-00/201, Electrical Power - Control

      (3) AMM 28-26-00/201, Defueling

   B. Test of the Fuel Scavenge System

      (1) Supply electrical power (AMM 24-22-00/201).

      (2) For this test, the auxiliary fuel tank must contain at least 2200 lbs (1000 kgs) fuel, and each main fuel tank must contain less than 16,500 lbs (7500 kgs) fuel.

         NOTE: You can refuel the fuel tanks by pressure fueling (AMM 12-11-01/301) or by tank-to-tank transfer (AMM 28-26-00/201).

      (3) Make a written record of the fuel quantity in the auxiliary tank and in each main fuel tank, as shown on the fuel quantity indicators on the overhead panel, P5.

      (4) Make sure the L and R FUEL CONTROL switches of the fuel control panel on the P10 panel are at the CUTOFF position.

MECH | INSP

(5) Make sure the LEFT C PUMP, RIGHT C PUMP, FWD R PUMP, and FWD L PUMP switch-lights on the fuel management panel on the overhead panel, P5, are in the off position.

(6) Make sure the LEFT C PUMP and the RIGHT C PUMP lights of the fuel management panel on the overhead panel, P5, are off.

(7) Make sure the FWD R PUMP and the FWD L PUMP PRESS lights of the fuel management panel on the overhead panel, P5, are on.

WARNING: DO NOT OPERATE A FUEL PUMP IF THE LOW PRESSURE LIGHT COMES ON AND STAYS ON. FUEL VAPORS IN THE TANK MAY IGNITE AND CAUSE A FIRE OR EXPLOSION.

(8) To operate any of the fuel pumps, you must be in the flight compartment to continuously monitor the fuel quantity and the low pressure indication in the fuel tank.

(a) Immediately push the applicable fuel pump switch to the off position if the low PRESS light comes on and stays on.

(9) Push the AFT R PUMP and AFT L PUMP switch-lights on the fuel management panel to the ON position.

(10) Make sure the ON flowbar on the AFT R PUMP and AFT L PUMP switch-lights come on.

(11) Make sure the AFT R PUMP and AFT L PUMP PRESS lights go off.

(12) Let the aft boost pumps operate for 30 minutes.

NOTE: If the fuel temperature is below 0 deg Centigrade you may need to run the pumps for up to 60 minutes to transfer enough fuel to measure on the fuel quantity guages.

NOTE: Motive flow from the aft boost pumps operates the auxiliary tank scavenge jet pumps.

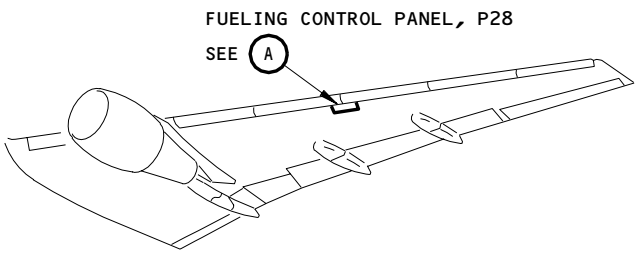
(13) Make sure the fuel quantity in the auxiliary tank decreases by 400 lbs (200 kgs) minimum, as shown on the fuel quantity indicator on the overhead panel, P5.

MECH	INSP

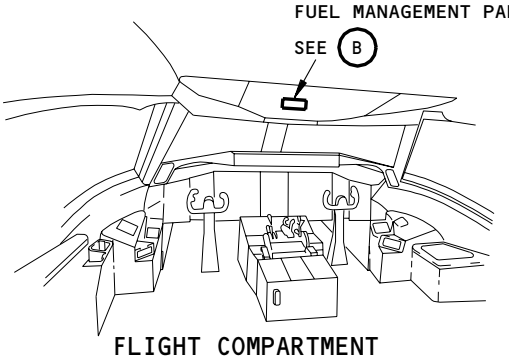
(14) Make sure the fuel quantity in each main fuel tank increases by 200 lbs (100 kgs) minimum, as shown on the fuel quantity indicators on the P5 panel.

(15) Push the AFT R PUMP and AFT L PUMP switch-lights of the fuel management panel on the P5 panel to the off position.

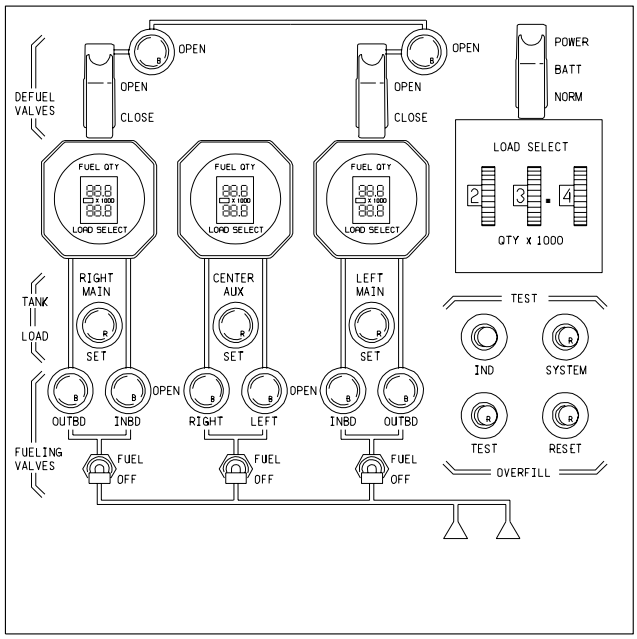
(16) Remove electrical power if it is not necessary (AMM 24-22-00/201).



LEFT WING

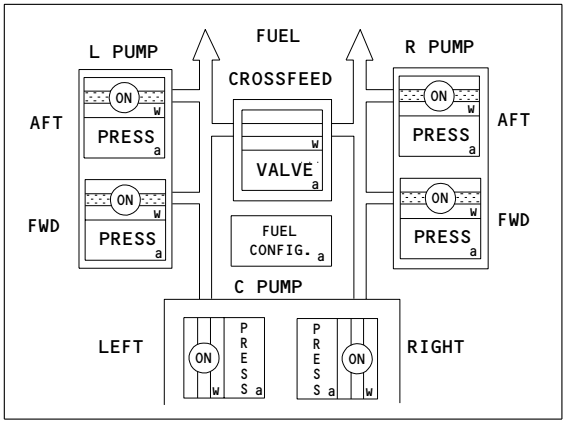


FLIGHT COMPARTMENT



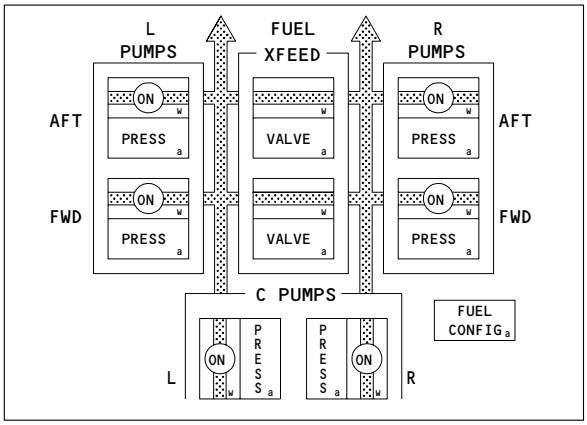
FUELING CONTROL PANEL, P28

A



FUEL MANAGEMENT PANEL
(ON THE P5 PANEL)

B 1



FUEL MANAGEMENT PANEL
(ON THE P5 PANEL)

B 2

1 AIRPLANES WITH A SINGLE FUEL CROSSFEED VALVE

2 AIRPLANES WITH FORWARD AND AFT FUEL CROSSFEED VALVES

Engine Fuel Feed System
Figure 501

STATION		BOEING CARD NO.
TAIL NO.	SAS BOEING 767 TASK CARD	28-011-51
DATE		AIRLINE CARD NO.

SKILL	WORK AREA	RELATED TASK	INTERVAL	PHASE	MPD REV	TASK CARD REVISION
AIRPL	CREW CABIN		4C	14848	004	DEC 22/08

TASK	TITLE	STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE	APPLICABILITY ENGINE
OPERATIONAL	CTR AUX TANK SCAVENGE SHUTOFF VALVE		NOTE	ALL

ZONES	ACCESS PANELS
212	

MECH	INSP	MPD ITEM NUMBER

OPERATIONALLY CHECK THE CENTER AUXILIARY TANK FUEL SCAVENGE SYSTEM TO VERIFY PROPER OPERATION OF THE FLOAT-OPERATED SHUTOFF VALVES. 28-22-00-5D

AIRPLANE NOTE: AIRPLANES WITH CENTER SECTION FUEL TANK.

1. Operational Test - Float-Operated Shutoff Valve

A. References

(1) AMM 12-11-01/301, Fuel Tank Pressure Fueling

(2) AMM 24-22-00/201, Electrical Power - Control

(3) AMM 28-26-00/201, Defueling

B. Test of the Float-Operated Shutoff Valve

(1) Supply electrical power (AMM 24-22-00/201).

(2) For this test, the auxiliary fuel tank must contain at least 2200 lbs (1000 kgs) fuel, and each main fuel tank must contain at least 18,000 lbs (8,181 kgs) fuel.

NOTE: You can refuel the fuel tanks by pressure fueling (AMM 12-11-01/301) or by tank-to-tank transfer (AMM 28-26-00/201).

(3) Make sure the L and R FUEL CONTROL switches of the fuel control panel on the P10 stand are at the CUTOFF position.

(4) Make a written record of the fuel quantity in the auxiliary fuel tank and in each main fuel tank, as shown on the fuel quantity indicators on the overhead panel, P5.

MECH | INSP

WARNING: DO NOT OPERATE A FUEL PUMP IF THE LOW PRESSURE LIGHT COMES ON AND STAYS ON. FUEL VAPORS IN THE TANK MAY IGNITE AND CAUSE A FIRE OR EXPLOSION.

(5) To operate any of the fuel pumps, you must be in the flight compartment to continuously monitor the fuel quantity and the low pressure indication in the fuel tank.

(a) Immediately push the applicable fuel pump switch to the off position if the low PRESS light comes on and stays on.

(6) Push the AFT R PUMP and AFT L PUMP switch-lights of the fuel management panel on the P5 panel to the ON position.

(7) Let the left and right aft boost pumps operate for 30 minutes.

NOTE: Motive flow from the aft boost pumps operates the scavenge jet pumps in the auxiliary fuel tank. If the main fuel tank is less that half full, the float-operated shutoff valve opens and lets fuel move from the auxiliary fuel tank to the main fuel tanks.

(8) Make sure the fuel quantity in the auxiliary fuel tank does not decrease.

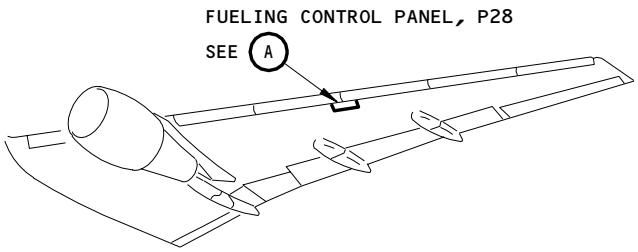
NOTE: The fuel quantity indicators on the overhead panel may change 200 lbs (100 kgs), due to system accuracy and/or ambient conditions.

(9) Make sure the fuel quantity in each main fuel tank does not increase.

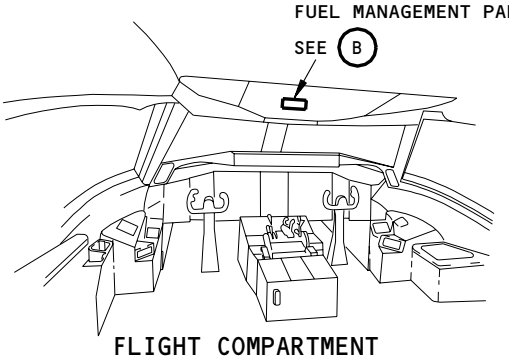
NOTE: The fuel quantity indicators on the overhead panel may change 200 lbs (100 kgs), due to system accuracy and/or ambient conditions.

(10) Push the AFT R PUMP and AFT L PUMP switch-lights of the fuel management panel on the P5 panel to the off position.

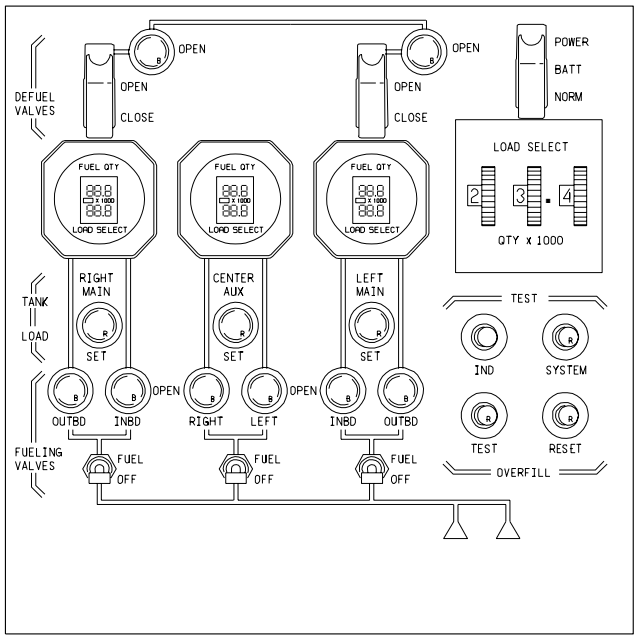
(11) Remove electrical power it if is not necessary (AMM 24-22-00/201).



LEFT WING

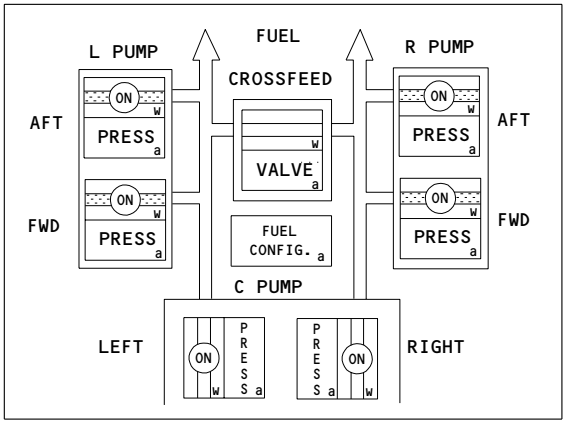


FLIGHT COMPARTMENT



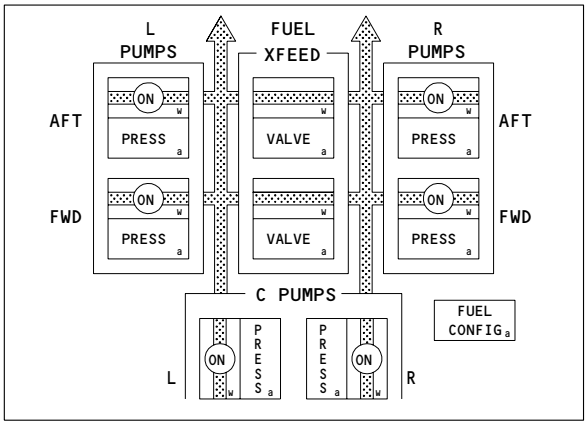
FUELING CONTROL PANEL, P28

A



FUEL MANAGEMENT PANEL
(ON THE P5 PANEL)

B 1



FUEL MANAGEMENT PANEL
(ON THE P5 PANEL)

B 2

1 AIRPLANES WITH A SINGLE FUEL CROSSFEED VALVE

2 AIRPLANES WITH FORWARD AND AFT FUEL CROSSFEED VALVES

Engine Fuel Feed System
Figure 501

STATION		BOEING CARD NO.
TAIL NO.	SAS BOEING 767 TASK CARD	28-015-01
DATE		AIRLINE CARD NO.

SKILL	WORK AREA	RELATED TASK	INTERVAL	PHASE	MPD REV	TASK CARD REVISION
AIRPL	CREW CABIN		2C	12424	018	AUG 22/08

TASK	TITLE	STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE	APPLICABILITY ENGINE
OPERATIONAL	FUEL JETTISON SYSTEM - LOW CAPACITY		NOTE	ALL

ZONES	ACCESS PANELS
210 531 541 631 641	521QB 531AB 631AB

MECH	INSP	MPD ITEM NUMBER

OPERATIONALLY CHECK THE FUEL JETTISON SYSTEM. 28-31-00-5A

AIRPLANE NOTE: APPLICABLE TO AIRPLANES WITH LOW CAPACITY FUEL JETTISON SYSTEMS THAT HAVE NOT INCORPORATED SERVICE BULLETINS SB 767-28-0025 AND SB 767-28-0038.

FUEL JETTISON SYSTEM - ADJUSTMENT/TEST

1. Operational Test - Fuel Jettison System

A. References

(1) AMM 06-44-00/201, Wing Access Doors and Panels

(2) AMM 12-11-01/301, Fuel Tank Pressure Fueling

(3) AMM 24-22-00/201, Electrical Power - Control

(4) AMM 27-51-00/201, Trailing Edge Flap System

(5) AMM 27-61-00/201, Spoiler/Speedbrake Control System

(6) AMM 28-26-00/201, Defueling

(7) AMM 32-00-15/201, Landing Gear Door Locks

(8) AMM 32-00-20/201, Landing Gear Downlocks

(9) AMM 32-09-02/201, Air/Ground Relays

B. Prepare to Do a Test

(1) Supply electrical power to the airplane (AMM 24-22-00/201).

MECH	INSP

(2) Refuel the airplane if it is necessary (AMM 12-11-01/301).

NOTE: The minimum fuel quantity necessary to make sure all of the override/jettison pumps are correctly primed is 21700 lbs (9900 kgs) in the auxiliary fuel tank.

You can refuel the auxiliary fuel tank by pressure fueling (AMM 12-11-01/301) or by tank to tank transfer (AMM 28-26-00/201).

(3) Make sure the fuel jettison switch on the overhead panel, P5, is in the OFF position.

(4) Make sure the six EICAS circuit breakers are closed.

WARNING: DO THE DEACTIVATION PROCEDURE FOR THE TRAILING EDGE FLAPS. ACCIDENTAL OPERATION OF THE TRAILING EDGE FLAPS COULD CAUSE INJURY TO PERSONS.

(5) Do the deactivation procedure for the trailing edge flaps (AMM 27-51-00/201).

(6) Make sure the downlocks are installed on the nose and main landing gear (AMM 32-00-20/201).

WARNING: USE THE PROCEDURE IN AMM 32-00-15/201 TO INSTALL THE DOOR LOCKS. THE DOORS OPEN AND CLOSE QUICKLY AND CAN CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.

(7) Open the doors for the landing gear and install the door locks (AMM 32-00-15/201).

WARNING: MAKE SURE THE SPOILERS ARE FULLY RETRACTED DURING THE FUEL JETTISON TEST. IF THE SPOILERS ARE NOT FULLY RETRACTED, THE SPOILERS CAN RETRACT SUDDENLY AND CAUSE INJURY TO PERSONS AND DAMAGE TO EQUIPMENT.

MECH | INSP

(8) Make sure all of the spoilers are in their full down positions (fully retracted) (AMM 27-61-00/201).

NOTE: Operation of the fuel jettison transfer valve can cause the air/ground system to go into air mode momentarily. This causes the spoilers to retract suddenly if they are in the up position.

(a) The speedbrake lever must be in its down-and-locked detent position.

(b) Attach a DO-NOT-OPERATE tag to the speedbrake lever.

(9) Open these circuit breakers and attach DO-NOT-CLOSE tags:

(a) On the main power distribution panel, P6:

1) 6F15, L FUEL OVRD PUMP

2) 6F21, R FUEL OVRD PUMP

(b) On the overhead circuit breaker panel, P11:

1) 11M13, LEFT JETT CONT

2) 11M22, RIGHT JETT CONT

3) 11M14, LEFT JETT NOZZLE VALVE

4) 11M15, FUEL PUMPS L

5) 11M23, RIGHT JETT NOZZLE VALVE

6) 11M24, FUEL PUMPS R

C. Test of the Transfer Valves

(1) Close these circuit breakers and remove the DO-NOT-CLOSE tags:

(a) On the overhead circuit breaker panel, P11:

1) 11M13, LEFT JETT CONT

2) 11M22, RIGHT JETT CONT

MECH	INSP

(2) Get access to the transfer valves through the wheel wells of the main landing gear.

(3) Disconnect the electrical connector from the actuator for the right transfer valve.

(a) Make sure the fuel jettison FAULT light comes on after 10 seconds.

(b) Make sure the EICAS message, R JET XFR VALVE, shows on the top display after 10 seconds.

(4) Turn the fuel jettison switch on the overhead panel, P5, to the ON position.

NOTE: When you set the fuel jettison switch to ON (in ground mode) it causes the two AFT equipment fans to stop operation. The fans will start again when you set the fuel jettison switch to OFF (AMM 21-58-00/501). If the cooling fans do not operate as expected, refer to FIM 28-31-00, Fig. 107.

(5) Make sure the manual override handle on the actuator of the left transfer valve moves to the OPEN position.

(6) Make sure the IECAS message L JET XFR VALVE, does not hsow on the top display.

(7) Turn the fuel jettison switch to the OFF position.

(8) Connect the electrical connector to the actuator of the right transfer valve.

(9) Do these checks:

(a) Make sure the fuel jettison FAULT light goes off.

(b) Make sure the EICAS message, R JET XFR VALVE, does not show on the top display.

(10) Disconnect the electrical connector from the actuator of the left transfer valve.

(a) Make sure the EICAS message, L JET XFR VALVE, shows on the top display after 10 seconds.

MECH | INSP

(b) Make sure the fuel jettison FAULT light comes on after 10 seconds.

(11) Turn the fuel jettison switch to the ON position.

(12) Make sure the manual override handle on the actuator of the right transfer valve moves to the OPEN position.

(13) Make sure the EICAS message R JET XFR VALVE, does not show on the top display.

(14) Turn the fuel jettison switch to the OFF position.

(15) Connect the electrical connector to the actuator of the left transfer valve.

(16) Do these checks:

(a) Make sure the fuel jettison FAULT light goes off.

(b) Make sure the EICAS message, L JET XFR VALVE, does not show on the top display.

(17) Turn the fuel jettison switch to the ON position.

(18) Do these checks:

(a) Make sure the fuel jettison FAULT light does not come on.

(b) Make sure the EICAS messages, L JET XFER VALVE and R JET XFER VALVE, do not show on the top display.

(19) Turn the fuel jettison switch to the OFF position.

(20) Open these circuit breakers and attach DO-NOT-CLOSE tags:

(a) On the overhead circuit breaker panel, P11:

1) 11M13, LEFT JETT CONT

2) 11M22, RIGHT JETT CONT

D. Test of the Left Nozzle Valve in the Flight Mode

(1) Make sure these circuit breakers are open:

(a) On the overhead circuit breaker panel, P11:

MECH | INSP

1) 11M13, LEFT JETT CONT

2) 11M22, RIGHT JETT CONT

(b) On the main power distribution panel, P6:

1) 6F15, L FUEL OVRD PUMP

2) 6F21, R FUEL OVRD PUMP

WARNING: DO THE DEACTIVATION PROCEDURE FOR THE SPOILERS OR MOVE ALL PERSONS AND EQUIPMENT AWAY FROM THE SPOILERS. THE SPOILERS CAN RETRACT QUICKLY AND CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.

(2) Do the deactivation procedure for the spoilers (AMM 27-61-00/201) or move all persons and equipment away from the spoilers.

WARNING: MAKE SURE YOU DO THE FLIGHT MODE SIMULATION CORRECTLY. IF THE PROCEDURE IS NOT DONE CORRECTLY, INJURY TO PERSONS OR DAMAGE TO EQUIPMENT CAN OCCUR.

(3) Do the Flight Mode Simulation procedure for the No. 1 air/ground system (AMM 32-09-02/201).

(4) Close these circuit breakers:

(a) On the overhead circuit breaker panel, P11:

1) 11M14, L JETT NOZZ VALVE

2) 11M23, R JETT NOZZ VALVE

WARNING: MAKE SURE NO PERSONS OR GROUND EQUIPMENT ARE BELOW OR NEAR THE WINGTIPS. FUEL CAN SPILL FROM THE JETTISON NOZZLE OUTLETS AND CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

MECH | INSP

CAUTION: MAKE SURE THE REFUEL/JETTISON MANIFOLD IS NOT PRESSURIZED BEFORE YOU OPEN THE JETTISON NOZZLE VALVE. THE FUEL IN THE MANIFOLD CAN BE PRESSURIZED 30 MINUTES AFTER REFUELING, DEFUELING, FUEL JETTISON OR FUEL TRANSFER OPERATIONS. IF THE JETTISON NOZZLE VALVES ARE OPENED, A FUEL SPILL FROM THE JETTISON NOZZLE OUTLETS CAN OCCUR.

(5) Do these steps to remove the pressure from the refuel/jettison manifold:

(a) On the fueling control panel P28, set the switch for the center auxiliary fueling shutoff valve to the ON position.

(b) If the fueling manifold is pressurized, make sure the blue fueling valve OPEN lights come on and then go off.

(c) Wait ten minutes to remove the pressure in the manifold.

(d) Set the switch for the auxiliary tank fueling shutoff valve to the CLOSED position

(6) Push the L NOZZLE switch-light on the fuel jettison control module to the ON position.

(7) Do these checks:

(a) Make sure the ON flowbar comes on.

(b) Get access to the left nozzle valve on the rear spar of the left wing, inboard of the outboard aileron.

1) Remove the access panel, 561UBX (AMM 06-44-00/201).

(c) Make sure the manual override handle on the actuator of the left nozzle valve moves to the OPEN position.

(d) Make sure the L NOZZLE VALVE light comes on while the left nozzle valve moves to the open position.

(8) Push the L NOZZLE switch-light to the off position.

(9) Do these checks:

(a) Make sure the ON flowbar goes off.

MECH | INSP

(b) Make sure the manual override handle on the actuator of the left nozzle valve moves to the CLOSED position.

(c) Make sure the L NOZZLE VALVE light comes on while the left nozzle valve moves to the closed position.

(10) Disconnect the electrical connector on the actuator of the left nozzle valve.

(11) After ten seconds, do the checks that follow:

(a) Make sure the L NOZZLE VALVE light comes on and stays on.

(b) Make sure the EICAS message, FUEL JET NOZ, shows on the top display.

(12) Connect the electrical connector to the actuator of the left nozzle valve.

(13) Do these checks:

(a) Make sure the L NOZZLE VALVE light goes off.

(b) Make sure the EICAS message, FUEL JET NOZ, does not show on the top display.

(14) Do these steps to do a test of the flap-angle-limit indication:

(a) Move the flaps to 0 degree position (AMM 27-51-00/201).

(b) Turn the fuel jettison switch to the ON position.

NOTE: When you set the fuel jettison switch to ON (in flight mode), it causes the two forward cooling supply fans and the two forward exhaust fans to stop operation. This causes the EICAS message, NO COOLING , after approximately one minute. These fans will start again when you set the fuel jettison switch to OFF (Ref 21-58-00/501).

(c) Move the flaps to 25 degree position (AMM 27-51-00/201).

(d) Push the L NOZZLE switch-light to the ON position.

(e) After ten seconds, make sure the EICAS message, FUEL JET NOZ, shows on the top display.

MECH | INSP

(f) Push the L NOZZLE switch-light to the off position.

(g) Make sure the EICAS message, FUEL JET NOZ, does not show on the top display.

(h) Turn the fuel jettison switch to the OFF position.

(i) Move the flaps to the 0 degree position (AMM 27-51-00/201).

(15) Install the access panel, 561UBX (AMM 06-44-00/201).

(16) Put the airplane back to the ground mode (AMM 32-09-02/201).

NOTE: It is not necessary to put the airplane back in the ground mode if you will also do the flight mode test of the right jettison nozzle valve. Put the airplane in the ground mode after you complete the test for the right jettison nozzle valve.

(17) Do the activation procedure for the spoilers if you did the deactivation procedure (AMM 27-61-00/201).

(18) Open these circuit breakers and attach DO-NOT-CLOSE tags:

(a) On the overhead circuit breaker panel, P11:

1) 11M14, L JETT NOZZ VALVE

2) 11M23, R JETT NOZZ VALVE

E. Test of the Right Nozzle Valve in the Flight Mode

(1) Make sure these circuit breakers are open:

(a) On the overhead circuit breaker panel, P11:

1) 11M13, LEFT JETT CONT

2) 11M22, RIGHT JETT CONT

(b) On the main power distribution panel, P6:

1) 6F15, L FUEL OVRD PUMP

2) 6F21, R FUEL OVRD PUMP

MECH | INSP

WARNING: DO THE DEACTIVATION PROCEDURE FOR THE SPOILERS OR MOVE ALL PERSONS AND EQUIPMENT AWAY FROM THE SPOILERS. THE SPOILERS CAN RETRACT QUICKLY AND CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.

(2) Do the deactivation procedure for the spoilers (AMM 27-61-00/201) or move all persons and equipment away from the spoilers.

WARNING: MAKE SURE YOU DO THE FLIGHT MODE SIMULATION CORRECTLY. IF THE PROCEDURE IS NOT DONE CORRECTLY, INJURY TO PERSONS OR DAMAGE TO EQUIPMENT CAN OCCUR.

(3) Do the Flight Mode Simulation procedure for the No. 1 air/ground system (AMM 32-09-02/201).

(4) Remove the DO-NOT-CLOSE tag and close these circuit breaker:

(a) On the overhead circuit breaker panel, P11:

1) 11M23, R JETT NOZZ VALVE

2) 11M14, L JETT NOZZ VALVE

WARNING: MAKE SURE NO PERSONS OR GROUND EQUIPMENT ARE BELOW OR NEAR THE WINGTIPS. FUEL CAN SPILL FROM THE JETTISON NOZZLE OUTLETS AND CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

CAUTION: MAKE SURE THE REFUEL/JETTISON MANIFOLD IS NOT PRESSURIZED BEFORE YOU OPEN THE JETTISON NOZZLE VALVE. THE FUEL IN THE MANIFOLD CAN BE PRESSURIZED 30 MINUTES AFTER REFUELING, DEFUELING, FUEL JETTISON OR FUEL TRANSFER OPERATIONS. IF THE JETTISON NOZZLE VALVES ARE OPENED, A FUEL SPILL FROM THE JETTISON NOZZLE OUTLETS CAN OCCUR.

(5) Do these steps to remove the pressure from the refuel/jettison manifold:

(a) On the fueling control panel P28, set the switch for the center auxiliary fueling shutoff valve to the ON position.

MECH	INSP

(b) If the fueling manifold is pressurized, make sure the blue fueling valve OPEN lights come on and then go off.

(c) Wait ten minutes to remove the pressure in the manifold.

(d) Set the switch for the auxiliary tank fueling shutoff valve to the CLOSED position

(6) Push the R NOZZLE switch-light on the fuel jettison control module to the ON position.

(7) Do these steps:

(a) Make sure the ON flowbar comes on.

(b) Get access to the right nozzle valve on the rear spar of the right wing, inboard of the outboard aileron.

1) Remove the access panel, 661UBX (AMM 06-44-00/201).

(c) Make sure the manual override handle on the actuator of the right nozzle valve moves to the OPEN position.

(d) Make sure the R NOZZLE VALVE light comes on while the right nozzle valve moves to the open position.

(8) Push the R NOZZLE switch-light to the off position.

(9) Do these steps:

(a) Make sure the ON flowbar goes off.

(b) Make sure the manual override handle on the actuator of the right nozzle valve moves to the CLOSED position.

(c) Make sure the R NOZZLE VALVE light comes on while the right nozzle valve moves to the closed position.

(10) Disconnect the electrical connector on the actuator of the right nozzle valve.

(11) After ten seconds, do these steps:

(a) Make sure the R NOZZLE VALVE light comes on and stays on.

(b) Make sure the EICAS message, FUEL JET NOZ, shows on the top display.

MECH | INSP

(12) Connect the electrical connector to the actuator of the right nozzle valve.

(13) Do these steps:

(a) Make sure the R NOZZLE VALVE light goes off.

(b) Make sure the EICAS message, FUEL JET NOZ, does not show on the top display.

(14) Do these steps to do a test of the flap-angle-limit indication:

(a) Move the flaps to 0 degree position (AMM 27-51-00/201).

(b) Turn the fuel jettison switch to the ON position.

NOTE: When you set the fuel jettison switch to ON (in flight mode), it causes the two forward cooling supply fans and the two forward exhaust fans to stop operation. This causes the EICAS message, NO COOLING, after approximately one minute. These fans will start again when you set the fuel jettison switch to OFF (AMM 21-58-00/501).

(c) Move the flaps to 25 degree position (AMM 27-51-00/201).

(d) Push the R NOZZLE switch-light to the ON position.

(e) After ten seconds, make sure the EICAS message, FUEL JET NOZ, shows on the top display.

(f) Push the R NOZZLE switch-light to the off position.

(g) Make sure the EICAS message, FUEL JET NOZ, does not show on the top display.

(h) Turn the fuel jettison switch to the OFF position.

(i) Move the flaps to 0 degree position (AMM 27-51-00/201).

(15) Install the access panel, 661UBX (AMM 06-44-00/201).

(16) Put the airplane back to the ground mode (AMM 32-09-02/201).

(17) Do the activation procedure for the spoilers if you did the deactivation procedure (AMM 27-61-00/201).

MECH | INSP

(18) Open these circuit breakers and attach DO-NOT-CLOSE tags:

(a) On the overhead circuit breaker panel, P11:

1) 11M23, R JETT NOZZ VALVE

2) 11M14, L JETT NOZZ VALVE

F. Test of the Left Nozzle Valve in the Ground Mode

(1) Remove the DO-NOT-CLOSE tags and close these circuit breakers:

(a) On the P11 panel:

1) 11M14, LEFT JETT NOZZLE VALVE

2) 11M23, R JETT NOZZ VALVE

WARNING: MAKE SURE NO PERSONS OR GROUND EQUIPMENT ARE BELOW OR NEAR THE WINGTIPS. FUEL CAN SPILL FROM THE JETTISON NOZZLE OUTLETS AND CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

CAUTION: MAKE SURE THE REFUEL/JETTISON MANIFOLD IS NOT PRESSURIZED BEFORE YOU OPEN THE JETTISON NOZZLE VALVE. THE FUEL IN THE MANIFOLD CAN BE PRESSURIZED 30 MINUTES AFTER REFUELING, DEFUELING, FUEL JETTISON OR FUEL TRANSFER OPERATIONS. IF THE JETTISON NOZZLE VALVES ARE OPENED, A FUEL SPILL FROM THE JETTISON NOZZLE OUTLETS CAN OCCUR.

(2) Do these steps to remove the pressure from the refuel/jettison manifold:

(a) On the fueling control panel P28, set the switch for the center auxiliary fueling shutoff valve to the ON position.

(b) If the fueling manifold is pressurized, make sure the blue fueling valve OPEN lights come on and then go off.

(c) Wait ten minutes to remove the pressure in the manifold.

(d) Set the switch for the auxiliary tank fueling shutoff valve to the CLOSED position

MECH | INSP

(3) Push the L NOZZLE switch-light on the fuel jettison control module to the ON position.

(4) Make sure the EICAS message, FUEL JET NOZ, shows on the top display after 10 seconds.

(5) Push the L NOZZLE switch-light to the off position.

(6) After 10 seconds, make sure the EICAS message, FUEL JET NOZ, does not show on the top display.

(7) Open these circuit breakers and attach DO-NOT-CLOSE tags:

(a) On the overhead circuit breaker panel, P11:

1) 11M14, LEFT JETT NOZZLE VALVE

2) 11M23, R JETT NOZZ VALVE

G. Test of the Right Nozzle Valve in the Ground Mode

(1) Close these circuit breakers:

(a) On the overhead circuit breaker panel, P11:

1) 11M23, R JETT NOZZ VALVE

2) 11M14, L JETT NOZZ VALVE

WARNING: MAKE SURE NO PERSONS OR GROUND EQUIPMENT ARE BELOW OR NEAR THE WINGTIPS. FUEL CAN SPILL FROM THE JETTISON NOZZLE OUTLETS AND CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

CAUTION: MAKE SURE THE REFUEL/JETTISON MANIFOLD IS NOT PRESSURIZED BEFORE YOU OPEN THE JETTISON NOZZLE VALVE. THE FUEL IN THE MANIFOLD CAN BE PRESSURIZED 30 MINUTES AFTER REFUELING, DEFUELING, FUEL JETTISON OR FUEL TRANSFER OPERATIONS. IF THE JETTISON NOZZLE VALVES ARE OPENED, A FUEL SPILL FROM THE JETTISON NOZZLE OUTLETS CAN OCCUR.

(2) Do these steps to remove the pressure from the refuel/jettison manifold:

MECH | INSP

(a) On the fueling control panel P28, set the switch for the center auxiliary fueling shutoff valve to the ON position.

(b) If the fueling manifold is pressurized, make sure the blue fueling valve OPEN lights come on and then go off.

(c) Wait ten minutes to remove the pressure in the manifold.

(d) Set the switch for the auxiliary tank fueling shutoff valve to the CLOSED position

(3) Push the R NOZZLE switch-light on the fuel jettison control module to the ON position.

(4) Make sure the EICAS message, FUEL JET NOZ, shows on the top display after 10 seconds.

(5) Push the R NOZZLE switch-light to the off position.

(6) After 10 seconds, make sure the EICAS message, FUEL JET NOZ, does not show on the top display.

(7) Open these circuit breakers and attach DO-NOT-CLOSE tags:

(a) On the overhead circuit breaker panel, P11:

1) 11M23, R JETT NOZZ VALVE

2) 11M14, L JETT NOZZ VALVE

H. Test of the Pressure Switches of the Jettison System

(1) Make sure these circuit breakers are open:

(a) On the main power distribution panel, P6:

1) 6F15, L FUEL OVRD PUMP

2) 6F21, R FUEL OVRD PUMP

(2) Turn the fuel jettison switch in the fuel jettison control module on the overhead panel, P5, to the ON position.

(3) Close these circuit breakers:

(a) On the overhead circuit breaker panel, P11:

MECH | INSP

1) 11M13, LEFT JETT CONT

2) 11M22, RIGHT JETT CONT

(4) After 10 seconds, do the checks that follow:

(a) Make sure the EICAS messages, L FUEL SYS PRESSURE and R FUEL SYS PRESSURE, show on the top display.

(b) Make sure the LEFT and RIGHT C PUMP PRESS lights of the fuel management control panel on the P5 panel come on.

(5) Get access to the pressure switch of the left override pump through the wheel well of the left main landing gear.

(6) Disconnect the electrical connector on the pressure switch of the left fuel override pump.

(7) Do these checks:

(a) Make sure the EICAS message, L FUEL SYS PRESSURE, does not show on the top display.

(b) Make sure the LEFT C PUMP PRESS light goes off.

(8) Get access to the pressure switch of the right override pump through the wheel well of the right main landing gear.

(9) Disconnect the electrical connector on the pressure switch of the right override pump.

(10) Do these checks:

(a) Make sure the EICAS message, R FUEL SYS PRESSURE, does not show on the top display.

(b) Make sure the RIGHT C PUMP PRESS light goes off.

(11) Connect the electrical connectors to the left pressure switches of the left and right override pumps.

(12) After 10 seconds, do the checks that follow:

(a) Make sure the EICAS messages, L FUEL SYS PRESSURE and R FUEL SYS PRESSURE, show on the top display.

MECH | INSP

(b) Make sure the LEFT and RIGHT C PUMP PRESS lights on the P5 panel come on.

(13) Open these circuit breakers and attach DO-NOT-CLOSE tags:

(a) On the overhead circuit breaker panel, P11:

1) 11M13, LEFT JETT CONT

2) 11M22, RIGHT JETT CONT

(14) Turn the fuel jettison switch to the OFF position.

I. Test of the Left Override/Jettison Pump

(1) Close these circuit breakers:

(a) On the main power distribution panel, P6:

1) 6F15, L FUEL OVRD PUMP

(b) On the overhead circuit breaker panel, P11:

1) 11M13, LEFT JETT CONT

2) 11M15, FUEL PUMPS L

(2) JETTISON PUMPS WITH A DIFFUSER INSTALLED (PN S343T002-5,-8,-12,-15); Do this step:

WARNING: DO NOT OPERATE THE FUEL JETTISON PUMP IF THE FUEL QUANTITY IN THE AUXILIARY TANK IS BELOW 1000 POUNDS (453 KILOGRAMS). DRY FUEL PUMP OPERATION MAY CAUSE FUEL VAPORS IN THE TANK TO IGNITE DUE TO THE GENERATION OF SPARKS CAUSED BY METAL TO METAL CONTACT WITHIN THE FUEL PUMPS.

(a) Make sure there is a minimum fuel quantity of 1000 pounds (453 kilograms) in the auxiliary tank.

WARNING: DO NOT OPERATE A FUEL PUMP IF THE LOW PRESSURE LIGHT COMES ON AND STAYS ON. FUEL VAPORS IN THE TANK MAY IGNITE AND CAUSE A FIRE OR EXPLOSION.

MECH	INSP

(3) To operate any of the fuel pumps, you must be in the flight compartment to continuously monitor the fuel quantity and the low pressure indication in the fuel tank.

(a) Immediately set the applicable fuel pump switch to OFF if the LOW PRESSURE light comes on and stays on.

(4) Turn the fuel jettison switch on the fuel jettison control panel to the ON position.

(5) Listen at the left access cover, 531AB, to make sure the left override pump operates (AMM 06-44-00/201).

(6) Open this circuit breaker and attach a DO-NOT-CLOSE tag:

(a) On the overhead circuit breaker panel, P11:

1) 11M13, LEFT JETT CONT

(7) Listen to make sure the left override pump stops.

(8) Remove the DO-NOT-CLOSE tag and close this circuit breaker:

(a) On the overhead circuit breaker panel, P11:

1) 11M13, LEFT JETT CONT

(9) Listen to make sure the left override pump operates.

(10) Open this circuit breaker and attach a DO-NOT-CLOSE tag:

(a) On the main power distribution panel, P6:

1) 6F15, L FUEL OVRD PUMP

(11) Open this circuit breaker and attach a DO-NOT-CLOSE tag:

(a) On the overhead circuit breaker panel, P11:

1) 11M15, FUEL PUMPS L

(12) Listen to make sure the left override pump stops.

(13) Turn the fuel jettison switch to the OFF position.

(14) Open this circuit breaker and attach a DO-NOT-CLOSE tag:

MECH	INSP

(a) On the overhead circuit breaker panel, P11:

1) 11M13, LEFT JETT CONT

J. Test of the Right Override/Jettison Pump

(1) Close these circuit breakers:

(a) On the main power distribution panel, P6:

1) 6F21, R FUEL OVRD PUMP

(b) On the overhead circuit breaker panel, P11:

1) 11M22, RIGHT JETT CONT

2) 11M24, FUEL PUMPS R

(2) JETTISON PUMPS WITH A DIFFUSER INSTALLED (PN S343T002-5,-8,-12,-15); Do this step:

WARNING: DO NOT OPERATE THE FUEL JETTISON PUMP IF THE FUEL QUANTITY IN THE AUXILIARY TANK IS BELOW 1000 POUNDS (453 KILOGRAMS). DRY FUEL PUMP OPERATION MAY CAUSE FUEL VAPORS IN THE TANK TO IGNITE DUE TO THE GENERATION OF SPARKS CAUSED BY METAL TO METAL CONTACT WITHIN THE FUEL PUMPS.

(a) Make sure there is a minimum fuel quantity of 1000 pounds (453 kilograms) in the auxiliary tank.

WARNING: DO NOT OPERATE A FUEL PUMP IF THE LOW PRESSURE LIGHT COMES ON AND STAYS ON. FUEL VAPORS IN THE TANK MAY IGNITE AND CAUSE A FIRE OR EXPLOSION.

(3) To operate any of the fuel pumps, you must be in the flight compartment to continuously monitor the fuel quantity and the low pressure indication in the fuel tank.

(a) Immediately set the applicable fuel pump switch to OFF if the LOW PRESSURE light comes on and stays on.

(4) Turn the fuel jettison switch on the fuel jettison control panel to the ON position.

MECH	INSP

(5) Listen at the right access cover, 631AB, to make sure the right override pump operates (AMM 06-44-00/201).

(6) Open this circuit breaker on the P11 panel:

(a) 11M22, RIGHT JETT CONT

(7) Listen to make sure the right override pump stops.

(8) Remove the DO-NOT-CLOSE tag and close this circuit breaker:

(a) On the overhead circuit breaker panel, P11:

1) 11M22, RIGHT JETT CONT

(9) Listen to make sure the right override pump operates.

(10) Open these circuit breakers and attach DO-NOT-CLOSE tags:

(a) On the main power distribution panel, P6:

1) 6F21, R FUEL OVRD PUMP

(b) On the overhead circuit breaker panel, P11:

1) 11M24, FUEL PUMPS R

(11) Listen to make sure the right override pump stops.

(12) Turn the fuel jettison switch to the OFF position.

(13) Open this circuit breaker and attach a DO-NOT-CLOSE tag:

(a) On the overhead circuit breaker panel, P11:

1) 11M22, RIGHT JETT CONT

K. Put the Airplane Back to Its Usual Condition

(1) Remove the DO-NOT-CLOSE tags and close these circuit breakers:

(a) On the main power distribution panel, P6:

1) 6F15, L FUEL OVRD PUMP

2) 6F21, R FUEL OVRD PUMP

MECH | INSP

(b) On the overhead circuit breaker panel, P11:

1) 11M13, LEFT JETT CONT

2) 11M22, RIGHT JETT CONT

3) 11M14, LEFT JETT NOZZLE VALVE

4) 11M15, FUEL PUMPS L

5) 11M23, RIGHT JETT NOZZLE VALVE

6) 11M24, FUEL PUMPS R

WARNING: USE THE PROCEDURE IN AMM 32-00-15/201 TO REMOVE THE DOOR LOCKS. THE DOORS OPEN AND CLOSE QUICKLY AND CAN CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.

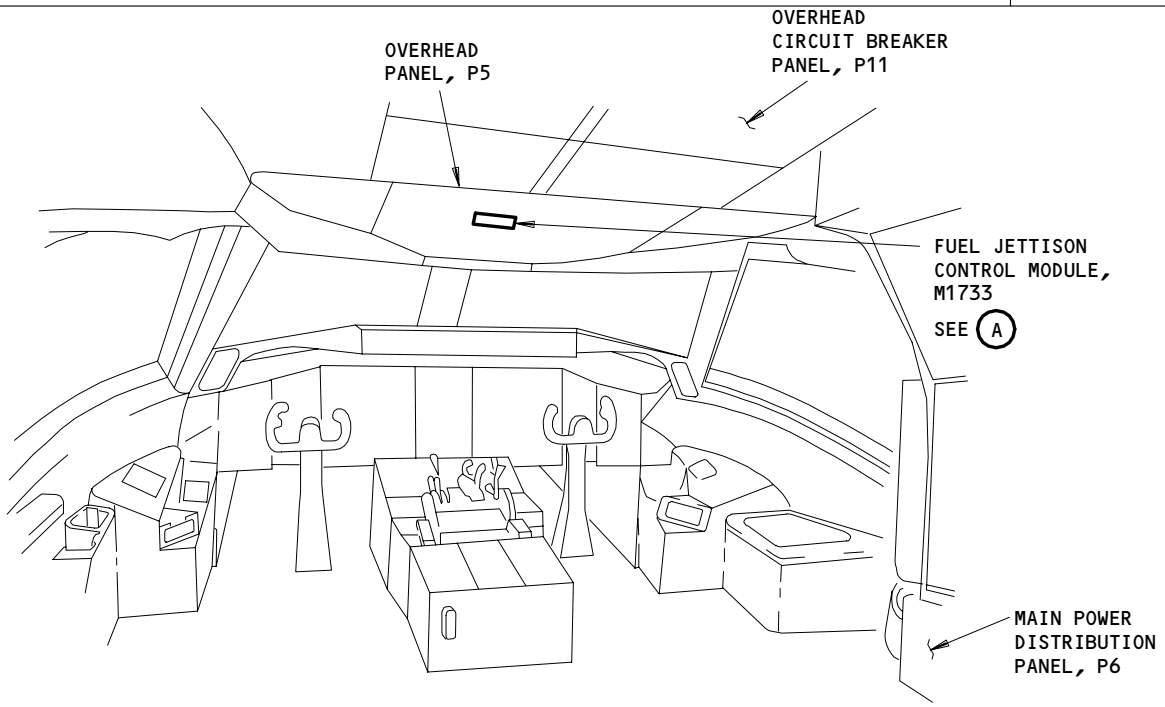
(2) Remove the door locks from the landing gear doors and close the doors (AMM 32-00-15/201).

WARNING: DO THE ACTIVATION PROCEDURE FOR THE TRAILING EDGE FLAPS. ACCIDENTAL OPERATION OF THE TRAILING EDGE FLAPS COULD CAUSE INJURY TO PERSONS.

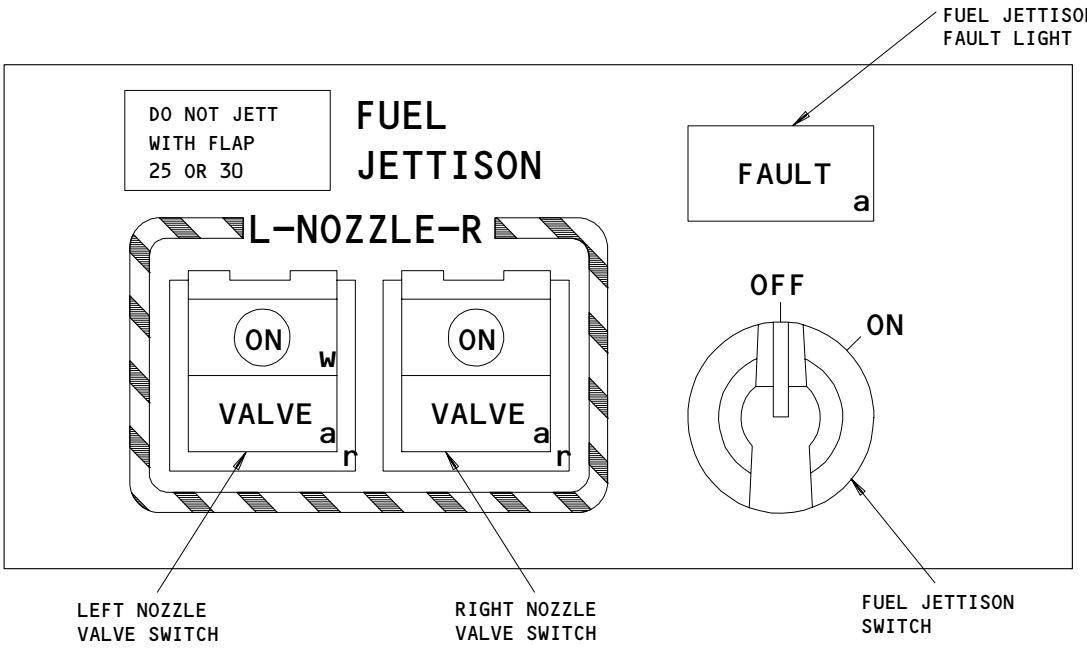
(3) Do the activation procedure for the trailing edge flaps (AMM 27-51-00/201).

(4) Remove the DO-NOT-OPERATE tag from the speedbrake lever.

(5) Remove electrical power from the airplane if it is not necessary (AMM 24-22-00/201).



FLIGHT COMPARTMENT



FUEL JETTISON CONTROL MODULE, M1733

A

Fuel Jettison Control Module
Figure 501

STATION		BOEING CARD NO.
TAIL NO.	SAS BOEING 767 TASK CARD	28-016-01
DATE		AIRLINE CARD NO.

SKILL	WORK AREA	RELATED TASK	INTERVAL	PHASE	MPD REV	TASK CARD REVISION
AIRPL	CREW CABIN		2C	12424	012	AUG 22/09

TASK	TITLE	STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE	APPLICABILITY ENGINE
OPERATIONAL	FUEL JETTISON SYSTEM - FULL CAPACITY		NOTE	ALL

ZONES	ACCESS PANELS
210 531 541 631 641	531AB 631AB

MECH	INSP	MPD ITEM NUMBER

OPERATIONALLY CHECK THE FUEL JETTISON SYSTEM. 28-31-00-5A

AIRPLANE NOTE: APPLICABLE TO AIRPLANES WITH FULL CAPACITY FUEL JETTISON SYSTEMS THAT HAVE INCORPORATED SERVICE BULLETINS SB 767-28-0025 AND SB 767-28-0038.

FUEL JETTISON SYSTEM - ADJUSTMENT/TEST

1. General

A. EFFECTIVITY

(1) SAS 150, 152-154 POST-SB 28-27;
SAS 155-157, 165-167 POST-SB 28-38;
SAS 050, 051, 162-164 POST-SB 28-25;
SAS 052-149, 158-161, 168-999;
MTH 275 POST-SB 28-27;
MTH 277-999;

These effectivities apply to the document. The text "LIMITED - SEE TOP OF FIRST PAGE" refers to these effectivities.

2. Operational Test - Fuel Jettison System

A. References

(1) AMM 06-44-00/201, Wing Access Doors and Panels

(2) AMM 12-11-01/301, Fuel Tank Pressure Fueling

(3) AMM 24-22-00/201, Electrical Power - Control

(4) AMM 27-51-00/201, Trailing Edge Flap System

MECH | INSP

(5) AMM 27-61-00/201, Spoiler/Speedbrake Control System

(6) AMM 28-26-00/201, Defueling

(7) AMM 32-00-15/201, Landing Gear Door Locks

(8) AMM 32-00-20/201, Landing Gear Downlocks

(9) AMM 32-09-02/201, Air/Ground Relays

B. Prepare to Do a Test

(1) Supply electrical power to the airplane (AMM 24-22-00/201).

(2) Refuel the airplane if it is necessary (AMM 12-11-01/301).

NOTE: The minimum fuel quantity necessary to make sure all of the override/jettison pumps are correctly primed is 21,700 lbs (9900 kgs) in the auxiliary fuel tank.

You can refuel the auxiliary fuel tank by pressure fueling (AMM 12-11-01/301) or by tank to tank transfer (AMM 28-26-00/201).

(3) Make sure the fuel jettison switch on the overhead panel, P5, is in the OFF position.

(4) Make sure the six EICAS circuit breakers are closed.

WARNING: DO THE DEACTIVATION PROCEDURE FOR THE TRAILING EDGE FLAPS. ACCIDENTAL OPERATION OF THE TRAILING EDGE FLAPS COULD CAUSE INJURY TO PERSONS.

(5) Do the deactivation procedure for the trailing edge flaps (AMM 27-51-00/201).

(6) Make sure the downlocks are installed on the nose and main landing gear (AMM 32-00-20/201).

WARNING: USE THE PROCEDURE IN AMM 32-00-15/201 TO INSTALL THE DOOR LOCKS. THE DOORS OPEN AND CLOSE QUICKLY AND CAN CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.

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(7) Open the doors for the landing gear and install the door locks (AMM 32-00-15/201).

WARNING: MAKE SURE THE SPOILERS ARE FULLY RETRACTED DURING THE FUEL JETTISON TEST. IF THE SPOILERS ARE NOT FULLY RETRACTED, THE SPOILERS CAN RETRACT SUDDENLY AND CAUSE INJURY TO PERSONS AND DAMAGE TO EQUIPMENT.

(8) Make sure all of the spoilers are in their full down positions (fully retracted) (AMM 27-61-00/201).

NOTE: Operation of the fuel jettison transfer valve can cause the air/ground system to go into air mode momentarily. This causes the spoilers to retract suddenly if they are in the up position.

(a) The speedbrake lever must be in its down-and-locked detent position.

(b) Attach a DO-NOT-OPERATE tag to the speedbrake lever.

(9) Open these circuit breakers and attach DO-NOT-CLOSE tags:

(a) P6 Main Power Distribution Panel

1) 6F15, L FUEL OVRD PUMP

2) 6F21, R FUEL OVRD PUMP

(b) P11 Overhead Circuit Breaker Panel

1) 11M13, LEFT JETT CONT

2) 11M22, RIGHT JETT CONT

3) 11M14, LEFT JETT NOZZLE VALVE

4) 11M15, FUEL PUMPS L

5) 11M23, RIGHT JETT NOZZLE VALVE

6) 11M24, FUEL PUMPS R

(c) On the left miscellaneous electrical equipment panel, P36:

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1) 36F4 or 36G7, L FUEL JETT PUMP

(d) On the right miscellaneous electrical equipment panel, P37:

1) 37F4 or 37G4, R FUEL JETT PUMP

C. Test of the Transfer Valves

(1) Remove the DO-NOT-CLOSE tags and close these circuit breakers:

(a) On the overhead circuit breaker panel, P11:

1) 11M13, LEFT JETT CONT

2) 11M22, RIGHT JETT CONT

(2) Get access to the transfer valves through the wheel wells of the main landing gear.

(3) Disconnect the electrical connectors from the pressure switches of the left and right jettison pumps.

(4) Disconnect the electrical connector from the actuator for the right transfer valve.

(a) Make sure the fuel jettison FAULT light comes on after 10 seconds.

(b) Make sure the EICAS message, R JET XFR VALVE, shows on the top display after 10 seconds.

(5) Turn the fuel jettison switch on the overhead panel, P5, to the ON position.

NOTE: When you set the fuel jettison switch to ON (in ground mode) it causes the two AFT equipment fans to stop operation. The fans will start again when you set the fuel jettison switch to OFF (AMM 21-58-00/501). If the cooling fans do not operate as expected, refer to FIM 28-31-00, Fig. 107.

(6) Make sure the manual override handle on the actuator of the left transfer valve moves to the OPEN position.

(7) Make sure the EICAS message, L JET XFR VALVE, does not show on the top display.

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(8) Turn the fuel jettison switch to the OFF position.

(9) Connect the electrical connector to the actuator of the right transfer valve.

(10) Do these checks:

(a) Make sure the fuel jettison FAULT light goes off.

(b) Make sure the EICAS message, R JET XFR VALVE, does not show on the top display.

(11) Disconnect the electrical connector from the actuator of the left transfer valve.

(a) Make sure the fuel jettison FAULT light comes on after 10 seconds.

(b) Make sure the EICAS message, L JET XFR VALVE, shows on the top display after 10 seconds.

(12) Turn the fuel jettison switch to the ON position.

(13) Do these checks:

(14) Make sure the manual override handle on the actuator of the right transfer valve moves to the OPEN position.

(15) Make sure the EICAS message R JET XFR VALVE, does not show on the top display.

(16) Turn the fuel jettison switch to the OFF position.

(17) Connect the electrical connector to the actuator of the left transfer valve.

(18) Do these checks:

(a) Make sure the fuel jettison FAULT light goes off.

(b) Make sure the EICAS message, L JET XFR VALVE, does not show on the top display.

(19) Turn the fuel jettison switch to the ON position.

(20) Make sure the manual override handle on the actuator of the left transfer valve moves to the open position.

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(21) Do these checks:

(a) Make sure the fuel jettison FAULT light does not come on.

(b) Make sure the EICAS messages, L JET XFER VALVE and R JET XFER VALVE, do not show on the top display.

(22) Turn the fuel jettison switch to the OFF position.

(23) Make sure the manual override handles on the actuators of the left and right transfer valves move to the closed position.

(a) Make sure the fuel jettison FAULT light does not come on.

(b) Make sure the EICAS messages, L JET XFER VALVE and R JET XFER VALVE, do not show on the top display.

(24) Connect the electrical connectors to the pressure switches of the left and right jettison pumps.

(25) Open these circuit breakers and attach DO-NOT-CLOSE tags:

(a) P11 Overhead Circuit Breaker Panel

1) 11M13, LEFT JETT CONT

2) 11M22, RIGHT JETT CONT

D. Test of the Left Nozzle Valve in the Flight Mode

(1) Make sure these circuit breakers are open:

(a) P11 Overhead Circuit Breaker Panel

1) 11M13, LEFT JETT CONT

2) 11M22, RIGHT JETT CONT

(b) P6 Main Power Distribution Panel

1) 6F15, L FUEL OVRD PUMP

2) 6F21, R FUEL OVRD PUMP

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WARNING: DO THE DEACTIVATION PROCEDURE FOR THE SPOILERS OR MOVE ALL PERSONS AND EQUIPMENT AWAY FROM THE SPOILERS. THE SPOILERS CAN RETRACT QUICKLY AND CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.

(2) Do the deactivation procedure for the spoilers (AMM 27-61-00/201) or move all persons and equipment away from the spoilers.

WARNING: MAKE SURE YOU DO THE FLIGHT MODE SIMULATION CORRECTLY. IF THE PROCEDURE IS NOT DONE CORRECTLY, INJURY TO PERSONS OR DAMAGE TO EQUIPMENT CAN OCCUR.

(3) Do the Flight Mode Simulation procedure for the No. 1 air/ground system (AMM 32-09-02/201).

(4) Remove the DO-NOT-CLOSE tags and close these circuit breakers:

(a) P11 Overhead Circuit Breaker Panel

1) 11M14, LEFT JETT NOZZLE VALVE

2) 11M23, RIGHT JETT NOZZLE VALVE

WARNING: MAKE SURE NO PERSONS OR GROUND EQUIPMENT ARE BELOW OR NEAR THE WINGTIPS. FUEL CAN SPILL FROM THE JETTISON NOZZLE OUTLETS AND CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

CAUTION: MAKE SURE THE REFUEL/JETTISON MANIFOLD IS NOT PRESSURIZED BEFORE YOU OPEN THE JETTISON NOZZLE VALVE. THE FUEL IN THE MANIFOLD CAN BE PRESSURIZED 30 MINUTES AFTER REFUELING, DEFUELING, FUEL JETTISON OR FUEL TRANSFER OPERATIONS. IF THE JETTISON NOZZLE VALVES ARE OPENED, A FUEL SPILL FROM THE JETTISON NOZZLE OUTLETS CAN OCCUR.

(5) Do these steps to remove the pressure from the refuel/jettison manifold:

(a) On the fueling control panel P28, set the switch for the center auxiliary fueling shutoff valve to the ON position.

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(b) If the fueling manifold is pressurized, make sure the blue fueling valve OPEN lights come on and then go off.

(c) Wait ten minutes to remove the pressure in the manifold.

(d) Set the switch for the auxiliary tank fueling shutoff valve to the CLOSED position

(6) Push the L NOZZLE switch-light on the fuel jettison control module to the ON position.

(7) Do these checks:

(a) Make sure the ON flowbar comes on.

(b) Get access to the left nozzle valve on the rear spar of the left wing, inboard of the outboard aileron.

1) Remove the access panel, 561UBX (AMM 06-44-00/201).

(c) Make sure the manual override handle on the actuator of the left nozzle valve moves to the OPEN position.

(d) Make sure the L NOZZLE VALVE light comes on while the left nozzle valve moves to the open position.

(8) Push the L NOZZLE switch-light to the off position.

(9) Do these checks:

(a) Make sure the ON flowbar goes off.

(b) Make sure the manual override handle on the actuator of the left nozzle valve moves to the CLOSED position.

(c) Make sure the L NOZZLE VALVE light comes on while the left nozzle valve moves to the closed position.

(10) Disconnect the electrical connector on the actuator of the left nozzle valve.

(11) Make sure the L NOZZLE VALVE light comes on and stays on.

(12) After six seconds, make sure the EICAS message, FUEL JET NOZ, shows on the top display.

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(13) Connect the electrical connector to the actuator of the left nozzle valve.

(14) Do these checks:

(a) Make sure the L NOZZLE VALVE light goes off.

(b) Make sure the EICAS message, FUEL JET NOZ, does not show on the top display.

(15) Install the access panel, 561UBX (AMM 06-44-00/201).

(16) Put the airplane back to the ground mode (AMM 32-09-02/201).

NOTE: It is not necessary to put the airplane back in the ground mode if you will also do the flight mode test of the right jettison nozzle valve. Put the airplane in the ground mode after you complete the test for the right jettison nozzle valve.

(17) Do the activation procedure for the spoilers if you did the deactivation procedure (AMM 27-61-00/201).

(18) Open these circuit breakers and attach DO-NOT-CLOSE tags:

(a) P11 Overhead Circuit Breaker Panel

1) 11M14, L JETT NOZZLE VALVE

2) 11M23, RIGHT JETT NOZZLE VALVE

E. Test of the Right Nozzle Valve in the Flight Mode

(1) Make sure these circuit breakers are open:

(a) P11 Overhead Circuit Breaker Panel

1) 11M13, LEFT JETT CONT

2) 11M22, RIGHT JETT CONT

(b) P6 Main Power Distribution Panel

1) 6F15, L FUEL OVRD PUMP

2) 6F21, R FUEL OVRD PUMP

MECH | INSP

WARNING: DO THE DEACTIVATION PROCEDURE FOR THE SPOILERS OR MOVE ALL PERSONS AND EQUIPMENT AWAY FROM THE SPOILERS. THE SPOILERS CAN RETRACT QUICKLY AND CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.

(2) Do the deactivation procedure for the spoilers (AMM 27-61-00/201) or move all persons and equipment away from the spoilers.

WARNING: MAKE SURE YOU DO THE FLIGHT MODE SIMULATION CORRECTLY. IF THE PROCEDURE IS NOT DONE CORRECTLY, INJURY TO PERSONS OR DAMAGE TO EQUIPMENT CAN OCCUR.

(3) Do the Flight Mode Simulation procedure for the No. 1 air/ground system (AMM 32-09-02/201).

(4) Remove the DO-NOT-CLOSE tags and close these circuit breakers:

(a) P11 Overhead Circuit Breaker Panel

1) 11M23, RIGHT JETT NOZZLE VALVE

2) 11M14, LEFT JETT NOZZLE VALVE

WARNING: MAKE SURE NO PERSONS OR GROUND EQUIPMENT ARE BELOW OR NEAR THE WINGTIPS. FUEL CAN SPILL FROM THE JETTISON NOZZLE OUTLETS AND CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

CAUTION: MAKE SURE THE REFUEL/JETTISON MANIFOLD IS NOT PRESSURIZED BEFORE YOU OPEN THE JETTISON NOZZLE VALVE. THE FUEL IN THE MANIFOLD CAN BE PRESSURIZED 30 MINUTES AFTER REFUELING, DEFUELING, FUEL JETTISON OR FUEL TRANSFER OPERATIONS. IF THE JETTISON NOZZLE VALVES ARE OPENED, A FUEL SPILL FROM THE JETTISON NOZZLE OUTLETS CAN OCCUR.

(5) Do these steps to remove the pressure from the refuel/jettison manifold:

(a) On the fueling control panel P28, set the switch for the center auxiliary fueling shutoff valve to the ON position.

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(b) If the fueling manifold is pressurized, make sure the blue fueling valve OPEN lights come on and then go off.

(c) Wait ten minutes to remove the pressure in the manifold.

(d) Set the switch for the auxiliary tank fueling shutoff valve to the CLOSED position

(6) Push the R NOZZLE switch-light on the fuel jettison control module to the ON position.

(7) Do these steps:

(a) Make sure the ON flowbar comes on.

(b) Get access to the right nozzle valve on the rear spar of the right wing, inboard of the outboard aileron.

1) Remove the access panel, 661UBX (AMM 06-44-00/201).

(c) Make sure the manual override handle on the actuator of the right nozzle valve moves to the OPEN position.

(d) Make sure the R NOZZLE VALVE light comes on while the right nozzle valve moves to the open position.

(8) Push the R NOZZLE switch-light to the off position.

(9) Do these steps:

(a) Make sure the ON flowbar goes off.

(b) Make sure the manual override handle on the actuator of the right nozzle valve moves to the CLOSED position.

(c) Make sure the R NOZZLE VALVE light comes on while the right nozzle valve moves to the closed position.

(10) Disconnect the electrical connector on the actuator of the right nozzle valve.

(11) Make sure the R NOZZLE VALVE light comes on and stays on.

(12) After six seconds, make sure the EICAS message, FUEL JET NOZ, shows on the top display.

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(13) Connect the electrical connector to the actuator of the right nozzle valve.

(14) Do these steps:

(a) Make sure the R NOZZLE VALVE light goes off.

(b) Make sure the EICAS message, FUEL JET NOZ, does not show on the top display.

(15) Install the access panel, 661UBX (AMM 06-44-00/201).

(16) Put the airplane back to the ground mode (AMM 32-09-02/201).

(17) Do the activation procedure for the spoilers if you did the deactivation procedure (AMM 27-61-00/201).

(18) Open these circuit breakers and attach DO-NOT-CLOSE tags:

(a) P11 Overhead Circuit Breaker Panel

1) 11M23, R JETT NOZZLE VALVE

2) 11M14, LEFT JETT NOZZLE VALVE

F. Test of the Left Nozzle Valve in the Ground Mode

(1) Remove the DO-NOT-CLOSE tags and close these circuit breakers:

(a) P11 Overhead Circuit Breaker Panel

1) 11M14, LEFT JETT NOZZLE VALVE

2) 11M23, RIGHT JETT NOZZLE VALVE

WARNING: MAKE SURE NO PERSONS OR GROUND EQUIPMENT ARE BELOW OR NEAR THE WINGTIPS. FUEL CAN SPILL FROM THE JETTISON NOZZLE OUTLETS AND CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

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CAUTION: MAKE SURE THE REFUEL/JETTISON MANIFOLD IS NOT PRESSURIZED BEFORE YOU OPEN THE JETTISON NOZZLE VALVE. THE FUEL IN THE MANIFOLD CAN BE PRESSURIZED 30 MINUTES AFTER REFUELING, DEFUELING, FUEL JETTISON OR FUEL TRANSFER OPERATIONS. IF THE JETTISON NOZZLE VALVES ARE OPENED, A FUEL SPILL FROM THE JETTISON NOZZLE OUTLETS CAN OCCUR.

(2) Do these steps to remove the pressure from the refuel/jettison manifold:

(a) On the fueling control panel P28, set the switch for the center auxiliary fueling shutoff valve to the ON position.

(b) If the fueling manifold is pressurized, make sure the blue fueling valve OPEN lights come on and then go off.

(c) Wait ten minutes to remove the pressure in the manifold.

(d) Set the switch for the auxiliary tank fueling shutoff valve to the CLOSED position

(3) Push the L NOZZLE switch-light on the fuel jettison control module to the ON position.

(4) Make sure the EICAS message, FUEL JET NOZ, shows on the top display after 6 seconds.

(5) Push the L NOZZLE switch-light to the off position.

(6) Make sure the EICAS message, FUEL JET NOZ, does not show on the top display.

(7) Open these circuit breakers and attach DO-NOT-CLOSE tags:

(a) P11 Overhead Circuit Breaker Panel

1) 11M14, LEFT JETT NOZZLE VALVE

2) 11M23, RIGHT JETT NOZZLE VALVE

G. Test of the Right Nozzle Valve in the Ground Mode

(1) Remove the DO-NOT-CLOSE tags and close these circuit breakers:

(a) P11 Overhead Circuit Breaker Panel

1) 11M23, RIGHT JETT NOZZLE VALVE

2) 11M14, LEFT JETT NOZZLE VALVE

WARNING: MAKE SURE NO PERSONS OR GROUND EQUIPMENT ARE BELOW OR NEAR THE WINGTIPS. FUEL CAN SPILL FROM THE JETTISON NOZZLE OUTLETS AND CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

CAUTION: MAKE SURE THE REFUEL/JETTISON MANIFOLD IS NOT PRESSURIZED BEFORE YOU OPEN THE JETTISON NOZZLE VALVE. THE FUEL IN THE MANIFOLD CAN BE PRESSURIZED 30 MINUTES AFTER REFUELING, DEFUELING, FUEL JETTISON OR FUEL TRANSFER OPERATIONS. IF THE JETTISON NOZZLE VALVES ARE OPENED, A FUEL SPILL FROM THE JETTISON NOZZLE OUTLETS CAN OCCUR.

(2) Do these steps to remove the pressure from the refuel/jettison manifold:

(a) On the fueling control panel P28, set the switch for the center auxiliary fueling shutoff valve to the ON position.

(b) If the fueling manifold is pressurized, make sure the blue fueling valve OPEN lights come on and then go off.

(c) Wait ten minutes to remove the pressure in the manifold.

(d) Set the switch for the auxiliary tank fueling shutoff valve to the CLOSED position

(3) Push the R NOZZLE switch-light on the fuel jettison control module to the ON position.

(4) Make sure the EICAS message, FUEL JET NOZ, shows on the top display after 6 seconds.

(5) Push the R NOZZLE switch-light to the off position.

(6) Make sure the EICAS message, FUEL JET NOZ, does not show on the top display.

(7) Open these circuit breakers and attach DO-NOT-CLOSE tags:

(a) P11 Overhead Circuit Breaker Panel

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1) 11M23, RIGHT JETT NOZZLE VALVE

2) 11M14, LEFT JETT NOZZLE VALVE

H. Test of the Pressure Switches of the Jettison System

(1) Make sure these circuit breakers are open:

(a) P6 Main Power Distribution Panel

1) 6F15, L FUEL OVRD PUMP

2) 6F21, R FUEL OVRD PUMP

(b) On the left miscellaneous electrical equipment panel, P36:

1) 36F4 or 36G7, L FUEL JETT PUMP

(c) On the right miscellaneous electrical equipment panel, P37:

1) 37F4 or 37G4, R FUEL JETT PUMP

(2) Turn the fuel jettison switch in the fuel jettison control module on the overhead panel, P5, to the ON position.

(3) Remove the DO-NOT-CLOSE tag and close these circuit breakers:

(a) P11 Overhead Circuit Breaker Panel

1) 11M13, LEFT JETT CONT

2) 11M22, RIGHT JETT CONT

(4) Make sure the EICAS messages, L FUEL SYS PRESS and R FUEL SYS PRESS, show on the top display.

(5) After 10 seconds, do the checks that follow:

(a) Make sure the EICAS messages, L FUEL JET PUMP and R FUEL JET PUMP, show on the top display.

(b) Make sure the fuel jettison FAULT light on the fuel jettison control module comes on.

(6) Get access to the pressure switch of the left override pump through the wheel well of the left main landing gear.

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WARNING: MAKE SURE EACH ELECTRICAL CONNECTOR HAS A TAG TO IDENTIFY THE CORRECT INSTALLATION LOCATION TO THE OVERRIDE PUMP. CROSS-CONNECTION OF THE ELECTRICAL CONNECTORS CAN CAUSE THE AIRPLANE SYSTEM TO MALFUNCTION AND THE LOSS OF SAFE FLIGHT.

(7) Disconnect the electrical connector on the pressure switch of the left fuel override pump.

(8) Make sure the EICAS message, L FUEL SYS PRESS, does not show on the top display.

(9) Get access to the pressure switch of the left jettison pump through the wheel well of the left main landing gear.

WARNING: MAKE SURE EACH ELECTRICAL CONNECTOR HAS A TAG TO IDENTIFY THE CORRECT INSTALLATION OF THE JETTISON PUMP. CROSS-CONNECTION OF THE ELECTRICAL CONNECTORS CAN CAUSE THE AIRPLANE SYSTEM TO MALFUNCTION AND THE LOSS OF SAFE FLIGHT.

(10) Disconnect the electrical connector (D12192) on the pressure switch of the left jettison pump.

(11) Make sure the EICAS message, L FUEL JET PUMP, does not show on the top display.

(12) Make sure the fuel jettison FAULT light stays on.

(13) Get access to the pressure switch of the right override pump through the wheel well of the right main landing gear.

WARNING: MAKE SURE EACH ELECTRICAL CONNECTOR HAS A TAG TO IDENTIFY THE CORRECT INSTALLATION LOCATION TO THE OVERRIDE PUMP. CROSS-CONNECTION OF THE ELECTRICAL CONNECTORS CAN CAUSE THE AIRPLANE SYSTEM TO MALFUNCTION AND THE LOSS OF SAFE FLIGHT.

(14) Disconnect the electrical connector on the pressure switch of the right override pump.

(15) Make sure the EICAS message, R FUEL SYS PRESS, does not show on the top display.

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(16) Get access to the pressure switch of the right jettison pump through the wheel well of the right main landing gear.

WARNING: MAKE SURE EACH ELECTRICAL CONNECTOR HAS A TAG TO IDENTIFY THE CORRECT INSTALLATION OF THE JETTISON PUMP. CROSS-CONNECTION OF THE ELECTRICAL CONNECTORS CAN CAUSE THE AIRPLANE SYSTEM TO MALFUNCTION AND THE LOSS OF SAFE FLIGHT.

(17) Disconnect the electrical connector (D12194) on the pressure switch of the right jettison pump.

(18) Do these checks:

(a) Make sure the EICAS message, R FUEL JET PUMP, does not show on the top display.

(b) Make sure the fuel jettison FAULT light goes off.

WARNING: MAKE SURE EACH ELECTRICAL CONNECTOR HAS A TAG TO IDENTIFY THE CORRECT INSTALLATION OF THE JETTISON PUMP. CROSS-CONNECTION OF THE ELECTRICAL CONNECTORS CAN CAUSE THE AIRPLANE SYSTEM TO MALFUNCTION AND THE LOSS OF SAFE FLIGHT.

(19) Connect the electrical connector (D12192) to the pressure switch of the left fuel jettison pump.

(20) After 10 seconds, do these steps:

(a) Make sure the EICAS message, L FUEL JET PUMP, shows on the top display.

(b) Make sure the fuel jettison FAULT light comes on.

WARNING: MAKE SURE EACH ELECTRICAL CONNECTOR HAS A TAG TO IDENTIFY THE CORRECT INSTALLATION LOCATION TO THE OVERRIDE PUMP. CROSS-CONNECTION OF THE ELECTRICAL CONNECTORS CAN CAUSE THE AIRPLANE SYSTEM TO MALFUNCTION AND THE LOSS OF SAFE FLIGHT.

(21) Connect the electrical connectors to the pressure switches of the left and right override pumps.

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(22) After 10 seconds, make sure the EICAS messages, L FUEL SYS PRESS AND R FUEL SYS PRESS, show on the top display.

WARNING: MAKE SURE EACH ELECTRICAL CONNECTOR HAS A TAG TO IDENTIFY THE CORRECT INSTALLATION OF THE JETTISON PUMP. CROSS-CONNECTION OF THE ELECTRICAL CONNECTORS CAN CAUSE THE AIRPLANE SYSTEM TO MALFUNCTION AND THE LOSS OF SAFE FLIGHT.

(23) Connect the electrical connector (D12194) to the pressure switch on the right jettison pump.

(24) After 10 seconds, do this check:

(a) Make sure the EICAS messages, R FUEL JET PUMP, shows on the top display.

(25) Open these circuit breakers and attach a DO-NOT-CLOSE tag:

(a) P11 Overhead Circuit Breaker Panel

1) 11M13, LEFT JETT CONT

2) 11M22, RIGHT JETT CONT

(26) Make sure the EICAS messages, R FUEL JET PUMP and L FUEL JET PUMP, do not show on the top display.

(27) Turn the fuel jettison switch to the OFF position.

I. Test of the Left Override/Jettison Pump

(a) P11 Overhead Circuit Breaker Panel

1) 11M13, LEFT JETT CONT

2) 11M15, FUEL PUMPS L

(1) Remove the DO-NOT-CLOSE tag and close this circuit breaker:

(a) P36 Left Miscellaneous Equipment Panel

1) 36F4 or 36G7, L FUEL JETT PUMP

(b) On the main power distribution panel, P6:

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1) 6F15, L FUEL OVRD PUMP

(2) OVERRIDE/JETTISON PUMPS WITH A DIFFUSER INSTALLED (PN S343T002-5,-8,-12,-15);
Do this step:

WARNING: DO NOT OPERATE THE OVERRIDE AND JETTISON PUMPS IF THE FUEL QUANTITY IN THE AUXILIARY TANK IS BELOW 1000 POUNDS (453 KILOGRAMS). DRY FUEL PUMP OPERATION MAY CAUSE FUEL VAPORS IN THE TANK TO IGNITE DUE TO THE GENERATION OF SPARKS CAUSED BY METAL TO METAL CONTACT WITHIN THE FUEL PUMPS.

(a) Make sure there is a minimum fuel quantity of 1000 pounds (453 kilograms) in the auxiliary tank.

WARNING: DO NOT OPERATE A FUEL PUMP IF THE LOW PRESSURE LIGHT COMES ON AND STAYS ON. FUEL VAPORS IN THE TANK MAY IGNITE AND CAUSE A FIRE OR EXPLOSION.

(3) To operate any of the fuel pumps, you must be in the flight compartment to continuously monitor the fuel quantity and the low pressure indication in the fuel tank.

(a) Immediately set the applicable fuel pump switch to OFF if the LOW PRESSURE light comes on and stays on.

(4) Turn the fuel jettison switch on the fuel jettison control panel to the ON position.

(5) Listen at the left access cover, 531AB, to make sure the left override and jettison pumps operate (AMM 06-44-00/201).

(6) Open this circuit breaker and attach a DO-NOT-CLOSE tag:

(a) On the overhead circuit breaker panel, P11:

1) 11M13, LEFT JETT CONT

(7) Listen to make sure the left override and jettison pumps stop.

(8) Remove the DO-NOT-CLOSE tag and close this circuit breaker:

(a) On the overhead panel circuit breaker panel, P11:

MECH | INSP

1) 11M13, LEFT JETT CONT

(9) Listen to make sure the left override and jettison pumps operate.

(10) Open this circuit breaker and attach DO-NOT-CLOSE tags:

(a) P6 Main Power Distribution Panel

1) 6F15, L FUEL OVRD PUMP

(b) P11 Overhead Circuit Breaker Panel

1) 11M15, FUEL PUMPS L

(11) Listen to make sure that the left override pump stops.

(12) Open this circuit breaker and attach DO-NOT-CLOSE tags:

(a) P36 Left Miscellaneous Equipment Panel

1) 36F4 or 36G7, L FUEL JETT PUMP

(13) Listen to make sure that the left jettison pump stops.

(14) Turn the fuel jettison switch to the OFF position.

(15) Open this circuit breaker and attach DO-NOT-CLOSE tags:

(a) P11 Overhead Circuit Breaker Panel

1) 11M13, LEFT JETT CONT

J. Test of the Right Override/Jettison Pump

(1) Remove the DO-NOT-CLOSE tags and close these circuit breakers:

(a) P11 Overhead Circuit Breaker Panel

1) 11M22, RIGHT JETT CONT

2) 11M24, FUEL PUMPS R

(b) P37 Right Miscellaneous Electrical Equipment Panel

1) 37F4 or 37G4, R FUEL JETT PUMP

(2) Remove the DO-NOT-CLOSE tag and close this circuit breaker:

MECH	INSP

(a) On the main power distribution panel, P6

1) 6F21, R FUEL OVRD PUMP

(3) OVERRIDE/JETTISON PUMPS WITH A DIFFUSER INSTALLED (PN S343T002-5,-8,-12,-15);
Do this step:

WARNING: DO NOT OPERATE THE OVERRIDE AND JETTISON PUMPS IF THE FUEL QUANTITY IN THE AUXILIARY TANK IS BELOW 1000 POUNDS (453 KILOGRAMS). DRY FUEL PUMP OPERATION MAY CAUSE FUEL VAPORS IN THE TANK TO IGNITE DUE TO THE GENERATION OF SPARKS CAUSED BY METAL TO METAL CONTACT WITHIN THE FUEL PUMPS.

(a) Make sure there is a minimum fuel quantity of 1000 pounds (453 kilograms) in the auxiliary tank.

WARNING: DO NOT OPERATE A FUEL PUMP IF THE LOW PRESSURE LIGHT COMES ON AND STAYS ON. FUEL VAPORS IN THE TANK MAY IGNITE AND CAUSE A FIRE OR EXPLOSION.

(4) To operate any of the fuel pumps, you must be in the flight compartment to continuously monitor the fuel quantity and the low pressure indication in the fuel tank.

(a) Immediately set the applicable fuel pump switch to OFF if the LOW PRESSURE light comes on and stays on.

(5) Turn the fuel jettison switch on the fuel jettison control panel to the ON position.

(6) Listen at the right access cover, 631AB, to make sure the right override and jettison pumps operate (AMM 06-44-00/201).

(7) Open this circuit breaker on the P11 panel:

(a) On the overhead circuit breaker panel, P11:

1) 11M22, RIGHT JETT CONT

(8) Listen to make sure the right override and jettison pumps stop.

(9) Remove the DO-NOT-CLOSE tag and close this circuit breaker:

MECH | INSP

(a) On the overhead circuit breaker panel, P11:

(b) 11M22, RIGHT JETT CONT

(10) Listen to make sure the right override and jettison pumps operate.

(11) Open these circuit breakers and attach DO-NOT-CLOSE tags:

(a) P6 Main Power Distribution Panel

1) 6F21, R FUEL OVRD PUMP

(b) P11 Overhead Circuit Breaker Panel

1) 11M24, FUEL PUMPS R

(12) Listen to make sure the right override pump stops.

(13) Open this circuit breaker and attach a DO-NOT-CLOSE tag:

(a) P37 Right Miscellaneous Electrical Equipment Panel

1) 37F4 or 37G4, R FUEL JETT PUMP

(14) Listen to make sure the right jettison pump stops.

(15) Turn the fuel jettison switch to the OFF position.

(16) Open this circuit breaker and attach a DO-NOT-CLOSE tag:

(a) P11 Overhead Circuit Breaker Panel

1) 11M22, RIGHT JETT CONT

K. Put the Airplane Back to Its Usual Condition

(1) Make sure these circuit breakers are closed with DO-NOT-CLOSE tags removed:

(a) P6 Main Power Distribution Panel

1) 6F15, L FUEL OVRD PUMP

2) 6F21, R FUEL OVRD PUMP

(b) P11 Overhead CIrcuit Breaker Panel

MECH	INSP

1) 11M13, LEFT JETT CONT

2) 11M22 RIGHT JETT CONT

3) 11M14, LEFT JETT NOZZLE VALVE

4) 11M15 FUEL PUMPS L

5) 11M23, RIGHT JETT NOZZLE VALVE

6) 11M24 FUEL PUMPS R

(c) P36 Left Miscellaneous Electrical Equipment Panel

1) 36F4 or 36G7, L FUEL JETT PUMP

(d) P37 Right Miscellaneous Electrical Equipment Panel

1) 37F4 or 37G4, R FUEL JETT PUMP

WARNING: USE THE PROCEDURE IN AMM 32-00-15/201 TO REMOVE THE DOOR LOCKS. THE DOORS OPEN AND CLOSE QUICKLY AND CAN CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.

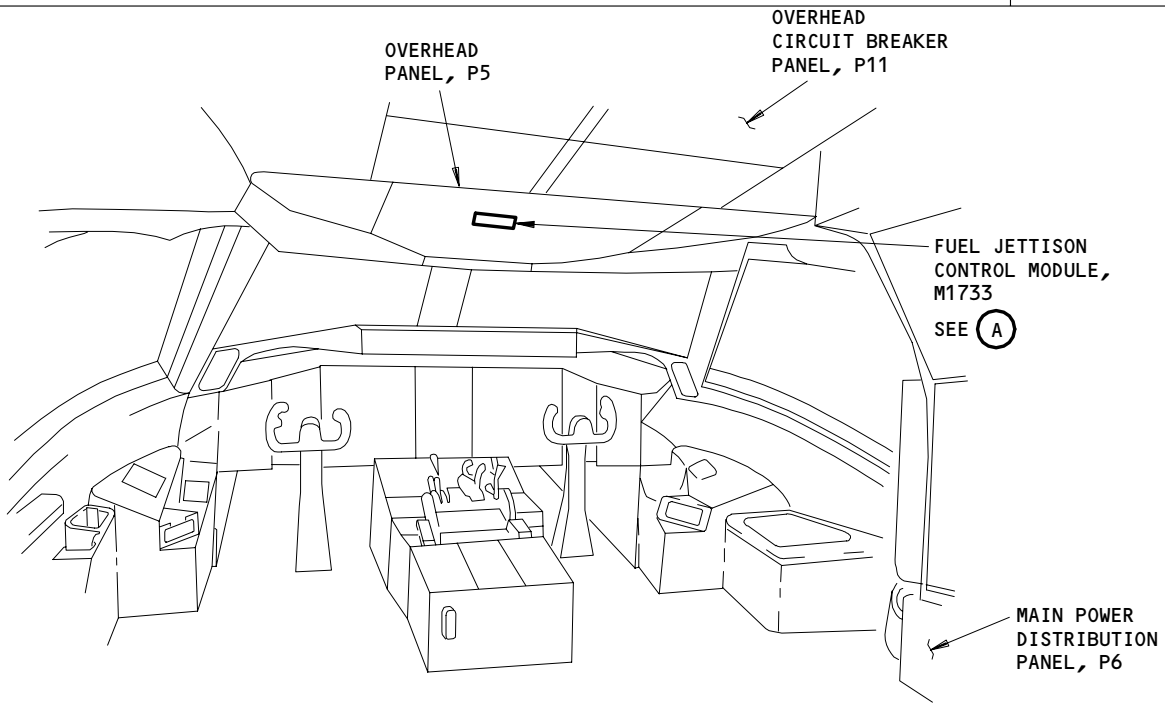
(2) Remove the door locks from the landing gear doors and close the doors (AMM 32-00-15/201).

WARNING: DO THE ACTIVATION PROCEDURE FOR THE TRAILING EDGE FLAPS. ACCIDENTAL OPERATION OF THE TRAILING EDGE FLAPS COULD CAUSE INJURY TO PERSONS.

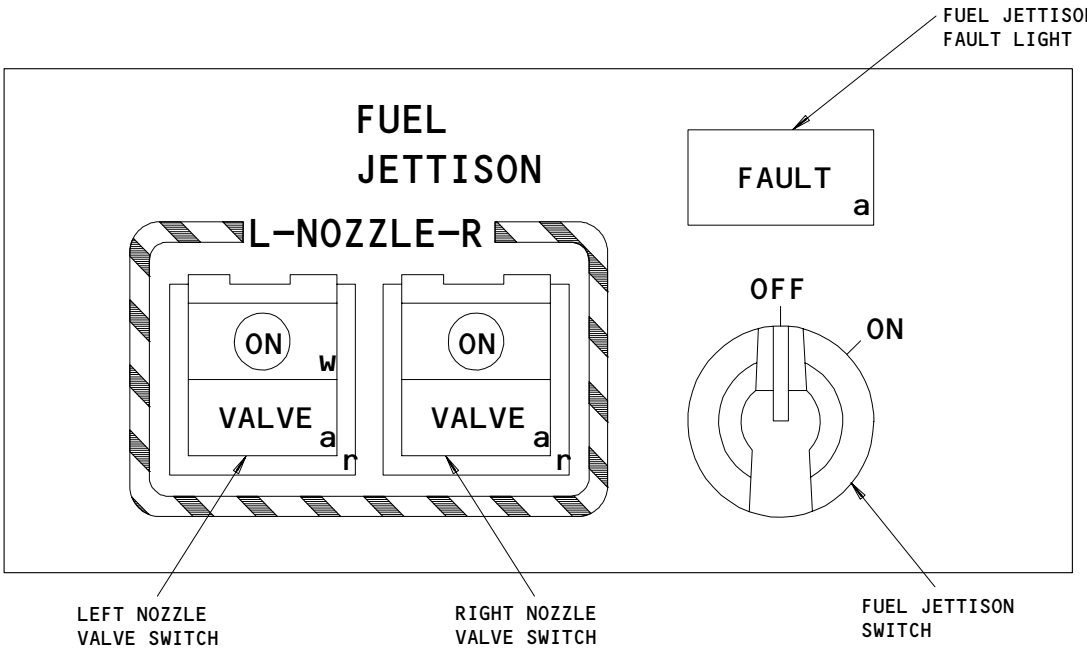
(3) Do the activation procedure for the trailing edge flaps (AMM 27-51-00/201).

(4) Remove the DO-NOT-OPERATE tag from the speedbrake lever.

(5) Remove electrical power from the airplane if it is not necessary (AMM 24-22-00/201).



FLIGHT COMPARTMENT



FUEL JETTISON CONTROL MODULE, M1733

A

Fuel Jettison Control Module
Figure 501

STATION		BOEING CARD NO.
TAIL NO.	SAS BOEING 767 TASK CARD	28-017-01-1
DATE		AIRLINE CARD NO.

SKILL	WORK AREA	RELATED TASK	INTERVAL		PHASE	MPD REV	TASK CARD REVISION
AIRPL	LEFT WING		60000 HRS	NOTE	324XX	019	DEC 22/08

TASK	TITLE	STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE	APPLICABILITY ENGINE
CHECK/INSP	LEFT BOOST, OVERRIDE/JTSN PUMPS		ALL	ALL

ZONES	ACCESS PANELS
531 532	531AB 532AB

MECH	INSP	MPD ITEM NUMBER
		28-22-00-D

INSPECT THE LEFT MAIN TANK FORWARD/AFT FUEL BOOST PUMP WIRING AND WIRE SLEEVE, AND INSPECT LEFT AUXILIARY TANK OVERRIDE/JETTISON FUEL PUMP WIRING AND WIRE SLEEVE.
INTERVAL NOTE: 60,000 FHS OR 30,000 CYCLES WHICHEVER OCCURS FIRST. (THIS TASK IS RELATED TO AD 2000-11-06)

AIRPLANE NOTE: THE PROCEDURE TO ACCOMPLISH THIS INSPECTION IS GIVEN IN SERVICE BULLETIN SB 767-28A0053.

STATION		BOEING CARD NO.
TAIL NO.	SAS BOEING 767 TASK CARD	28-017-01-2
DATE		AIRLINE CARD NO.

SKILL	WORK AREA	RELATED TASK	INTERVAL		PHASE	MPD REV	TASK CARD REVISION
AIRPL	RIGHT WING		60000 HRS	NOTE	324XX	019	DEC 22/08

TASK	TITLE	STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE	APPLICABILITY ENGINE
CHECK/INSP	RIGHT BOOST, OVERRIDE/JTSN PUMPS		ALL	ALL

ZONES	ACCESS PANELS
631 632	631AB 632AB

MECH	INSP	MPD ITEM NUMBER
		28-22-00-D

INSPECT THE RIGHT MAIN TANK FORWARD/AFT FUEL BOOST PUMP WIRING AND WIRE SLEEVE, AND INSPECT RIGHT AUXILIARY TANK OVERRIDE/JETTISON FUEL PUMP WIRING AND WIRE SLEEVE.
INTERVAL NOTE: 60,000 FHS OR 30,000 CYCLES WHICHEVER OCCURS FIRST. (THIS TASK IS RELATED TO AD 2000-11-06)

AIRPLANE NOTE: THE PROCEDURE TO ACCOMPLISH THIS INSPECTION IS GIVEN IN SERVICE BULLETIN SB 767-28A0053.

EFFECTIVITY

STATION		BOEING CARD NO.
TAIL NO.	SAS BOEING 767 TASK CARD	28-018-01
DATE		AIRLINE CARD NO.

SKILL	WORK AREA	RELATED TASK	INTERVAL	PHASE	MPD REV	TASK CARD REVISION
AIRPL	STRUTS		4C	14848	018	AUG 22/09

TASK	TITLE	STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE	APPLICABILITY ENGINE
RESTORE	REPLACE STRUT COUPLING O-RINGS		ALL	NOTE

ZONES	ACCESS PANELS
410 420 430 440 510 610	413AL 414AR 416AR 417AL 418AR 423AL 424AR 425AL 426AR 427AL 428AR 511PT 611PT

MECH | INSP

MPD ITEM NUMBER

REPLACE STRUT FUEL FEED LINE COUPLING O-RINGS, RETAINING RINGS AND RETAINING HALVES FROM THE FUEL LINE IN ENGINE STRUT AREA. 28-22-07-4A

ENGINE NOTE: TASK IS APPLICABLE TO ALL PRATT AND WHITNEY ENGINES.

1. Fuel Line in the Engine Strut - Coupling O-Ring Removal

A. General

(1) This task is for digital task card requirements.

(2) This task removes the coupling O-rings, retaining rings, and retaining halves from the fuel line in the engine strut area.

(3) This task can be done with or without fuel in the fuel tanks. If there is fuel in the fuel tanks, the engine spar valve must be closed and the fuel drained from the fuel line.

B. Equipment

(1) Container - 5 gallon (20 liter) capacity, suitable for the collection of fuel.

C. Consumable Materials

(1) G02353 Petrolatum, VV-P-236

D. References

(1) AMM 24-22-00/201, Manual Control

(2) AMM 28-22-07/601, Engine Fuel Feed lines and Couplings

(3) AMM 27-81-00/201, Leading Edge Slat System

MECH | INSP

(4) AMM 54-51-00/201, Nacelle Strut Maintenance

(5) AMM 54-52-01/401, Strut Fairings

(6) AMM 71-11-04/201, Panels - Fan Cowl

(7) AMM 71-11-06/201, Panels - Core Cowl

(8) AMM 73-11-08/401, Engine Main Fuel Supply Line

(9) AMM 78-31-00/201, Thrust Reverser System

(10) AIPC 28-22-07 FIG. 20

(11) AIPC 28-22-07 FIG. 25

(12) AIPC 28-22-07 FIG. 30

E. Access

(1) Location Zones

410	Power Plant - Engine 1
420	Power Plant - Engine 2
430	Nacelle Strut Fwd Torque Box - Engine 1
440	Nacelle Strut Fwd Torque Box - Engine 2
510	Leading Edge to Front Spar - Engine 1
610	Leading Edge to Front Spar - Engine 2

(2) Access Panels

413AL	Fan Cowl Panel - Engine 1
414AR	Fan Cowl Panel - Engine 1
415AL	Thrust Reverser Half - Engine 1
416AR	Thrust Reverser Half - Engine 1
417AL	Core Cowl Panel - Engine 1
418AR	Core Cowl Panel - Engine 1
511PT	Wing Leading Edge Cover - Engine 1
423AL	Fan Cowl Panel - Engine 2
424AR	Fan Cowl Panel - Engine 2
425AL	Thrust Reverser Half - Engine 2
426AR	Thrust Reverser Half - Engine 2
427AL	Core Cowl Panel - Engine 2
428AR	Core Cowl Panel - Engine 2
611PT	Wing Leading Edge Cover - Engine 2

F. Prepare for Removal

MECH | INSP

(1) Supply the necessary electrical power (AMM 24-22-00/201).

WARNING: MAKE SURE THAT PERSONS AND EQUIPMENT ARE CLEAR OF THE LE SLAT AND TE FLAPS AND FLAP DRIVE MECHANISMS BEFORE YOU MOVE THE FLAP CONTROL LEVER. WITH HYDRAULIC POWER REMOVED, THE FLAPS WILL MOVE AUTOMATICALLY BY ELECTRICAL POWER WHEN YOU MOVE THE FLAP CONTROL LEVER. THIS CAN CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.

WARNING: YOU MUST CAREFULLY DO THE STEPS IN THE TASK BELOW TO INSTALL THE LE SLAT SAFETY LOCKS. THE LE SLATS CAN MOVE QUICKLY IF YOU DO NOT INSTALL THE SAFETY LOCKS CORRECTLY. THIS CAN CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.

(2) Do this task: Leading Edge Slat Extension and Safety Lock Installation (AMM 27-81-00/201).

(3) Make sure all of the FUEL CONTROL switches, found on the Flight Deck Center Console, P10, are in the CUTOFF position.

(a) Attach a DO-NOT-OPERATE tag to the FUEL CONTROL switches.

(4) FOR THE APPLICABLE ENGINE;
Open these circuit breakers and attach DO-NOT-CLOSE tags:

(a) On the overhead circuit breaker panel, P11:

1) For the left and the right engine:

a) 11D7, ENGINE STBY IGN 1

b) 11D8, ENGINE STBY IGN 2

2) For the left engine:

a) 11M1, L IGN 1

b) 11M28, L IGN 2

c) 11M9, LEFT ENGINE PWR SENSE

3) For the right engine:

a) 11M2, R IGN 1

MECH | INSP

b) 11M29, R IGN 2

c) 11M36, RIGHT ENGINE PWR SENSE

(5) Do the applicable steps of Task: Engine Main Fuel Supply Line (AMM 73-11-08/401) to drain the fuel from the engine strut fuel line.

(6) Open the applicable wing leading edge cover (Fig. 404) (AMM 54-51-00/201).

(7) Open the applicable strut access panels (Fig. 404) (AMM 54-52-01/401).

G. Remove the Coupling O-rings From the Fuel Line in the Engine Strut (Fig. 405)

(1) Do these steps to remove the coupling O-rings, retaining rings and retainer halves:

(a) Loosen the fuel tube bonding clamps, as necessary, to let the coupling components be removed.

(b) Remove the lockwire from the coupling nuts.

(c) Loosen the coupling nuts.

(d) Push the coupling nut(s) away from the fuel tube ends.

(e) Remove and discard the coupling O-rings, the retaining rings, and the retaining halves.

(f) Keep the other components of the coupling for the installation.

(2) Install dust covers on all open fuel lines.

CAUTION: DO NOT REPAIR THE FUEL TUBES IN THE STRUT AREA. IF A FUEL TUBE HAS DAMAGE THAT IS NOT PERMITTED PER THE ENGINE FUEL LINE DENT CRITERIA, YOU MUST REPLACE THE FUEL TUBE. A DAMAGED FUEL TUBE CAN LEAK WHICH CAN CAUSE A FIRE IN THE STRUT AREA.

(3) Inspect the fuel tubes and the couplings for damage (AMM 28-22-07/601).

MECH | INSP

2. Fuel Line in the Engine Strut - Coupling O-ring Installation

A. General

(1) This task is for digital task card requirements.

(2) This task installs the coupling O-rings, retaining rings, and retainer halves to the fuel line in the engine strut area.

B. Equipment

(1) Bonding Meter

(2) Coupling Gage - ST8709 H

C. Consumable Materials

(1) GO2353 Petrolatum, VV-P-236

D. References

(1) AMM 12-11-01/301, Fuel Tank Pressure Fueling

(2) AMM 24-22-00/201, Manual Control

(3) AMM 28-22-07/601, Engine Fuel Feed System Fuel Line

(4) AMM 27-81-00/201, Leading Edge Slat System

(5) AMM 54-51-00/201, Nacelle Strut Maintenance

(6) AMM 54-52-01/401, Strut Fairing Removal/Installation

(7) AMM 71-00-00/201, Power Plant

(8) AMM 71-00-00/501, Power Plant

(9) AMM 71-11-04/201, Fan Cowl Panels

(10) AMM 71-11-06/201, Core Cowl Panels

(11) AMM 73-11-08/401, Engine Main Fuel Supply Line

(12) AMM 78-31-00/201, Thrust Reverser System

(13) AIPC 28-22-07 FIG. 20

MECH | INSP

(14) AIPC 28-22-07 FIG. 25

(15) AIPC 28-22-07 FIG. 30

(16) SWPM 20-20-00, Electrical Ground and Bond

E. Access

(1) Location Zones

410	Power Plant - Engine 1
420	Power Plant - Engine 2
430	Nacelle Strut Fwd Torque Box - Engine 1
440	Nacelle Strut Fwd Torque Box - Engine 2
510	Leading Edge to Front Spar - Engine 1
610	Leading Edge to Front Spar - Engine 2

(2) Access Panels

413AL	Fan Cowl Panel - Engine 1
414AR	Fan Cowl Panel - Engine 1
415AL	Thrust Reverser Half - Engine 1
416AR	Thrust Reverser Half - Engine 1
417AL	Core Cowl Panel - Engine 1
418AR	Core Cowl Panel - Engine 1
511PT	Wing Leading Edge Cover - Engine 1
423AL	Fan Cowl Panel - Engine 2
424AR	Fan Cowl Panel - Engine 2
425AL	Thrust Reverser Half - Engine 2
426AR	Thrust Reverser Half - Engine 2
427AL	Core Cowl Panel - Engine 2
428AR	Core Cowl Panel - Engine 2
611PT	Wing Leading Edge Cover - Engine 2

F. Install the Coupling O-Rings, Retaining Rings, Retainer Halves to the Fuel Line in the Engine Strut Area (Fig. 405)

CAUTION: DO NOT USE ANY TOOLS TO TIGHTEN THE FUEL LINE FITTINGS. DAMAGE TO THE FITTING COMPONENTS OR LOOSENING OF THE ADJACENT FITTINGS CAN OCCUR.

(1) Do these steps to inspect the installation of the fuel couplings:

(a) Make sure the O-rings are new and are not contaminated or damaged.

MECH | INSP

(b) Make sure the O-rings are lubricated with petrolatum before the installation.

(c) Make sure the retaining rings are new and are not deformed or bent.

(d) Make sure the retaining halves are new and are not deformed or bent.

(2) Do these steps to install the fuel couplings:

(a) Align the ends of fuel line A and fuel line B with a 0.15 ± 0.05 inch (3.81 ± 1.27 mm) clearance between the ferrules.

(b) Make sure the ends of fuel line A and fuel line B are not offset more than 0.06 inch (1.52 mm).

(c) Make sure all of the coupling components are installed and in the correct sequence.

(d) Make sure the coupling is manually tightened.

(e) Make sure the coupling is tightened as far as possible by hand.

(f) For flexible full couplings, make sure the minimum and maximum dimensions are correct (Fig. 405).

1) Measure the assembled coupling with tool ST8709H at three to four locations. Make sure the minimum and maximum dimensions are correct all the way around the coupling.

(g) Install the lockwire between the coupling nut and the coupling (AMM 20-10-23/401).

(3) Do a check of the minimum clearance between the fuel tube and the structure:

NOTE: The supported area of a tube is defined as the section of the tube that is within three inches of a bulkhead nut that attaches the tube to a rigid piece of equipment.

BETWEEN THE FUEL LINE AND ADJACENT STRUCTURE	
0.50 inch (12.70 mm)	At locations that are not supported
0.10 inch (2.54 mm)	At locations that are supported (or the thickness of the supported clamps when the fuel tubing is clamped directly to the structure)

NEAR THE POSITION OF ANY PART THAT CAN MOVE (OPERATING MECHANISM)	
0.50 inch (12.70 mm)	At locations that are not supported
0.25 inch (6.35 mm)	At locations that are supported if it is not possible for chafing or interference to occur

BETWEEN TUBES THAT CROSS OR RUN PARALLEL	
0.50 inch (12.70 mm)	Or the distance measured between tubes at clampblocks locations when the tube run is held parallel by clampblocks (whichever is smaller)
0.25 inch (6.35 mm)	Between non-parallel tubes that go through the same clampblock support, within three inches of that clampblock support

(4) Do a check of the bonding resistance between the fuel tube(s) and the airplane structure (SWPM 20-20-00).

(a) Solvent wipe the fuel tube(s) at the locations where the bonding jumper clamps are installed (SWPM 20-20-00).

NOTE: Do not apply any type of coating to the fuel tubes, couplings or clamps.

(b) Hold the bonding clamps on the fuel tube(s).

(c) Attach the bonding jumper to the bonding clamp with the bolt, washers, and nut (SWPM 20-20-00).

WARNING: MAKE SURE YOU USE AN EXPLOSION-PROOF BONDING METER TO DO A CHECK OF THE ELECTRICAL RESISTANCE. THE OPEN FUEL TANK IS AN EXPLOSIVE VAPOR AREA.

(d) Do a check of the bonding resistance between the fuel tube(s) and the airplane structure (SWPM 20-20-00).

NOTE: The resistance must not be more than 0.010 ohm.

G. Do a Leak Check for the Fuel Line in the Strut Area

NOTE: The purpose of this check is to make sure the fuel line in the strut area is installed correctly. Use one or both methods to leak check the fuel line in the strut area. A fuel pressure leak check is the preferred method, however, it is recommended that both an air pressure leak check and a fuel pressure leak check be done. If METHOD 1 is done first, it will reduce the possibility of a fuel leak and the possible time delay caused by the removal of fuel from the fuel line if maintenance action is necessary to repair a leak.

METHOD 1:
Air Pressure Leak Check. This method uses 40 psi air pressure with the fuel spar valve closed to check the fuel line in the strut area for leaks.

METHOD 2:
Fuel Pressure Leak Check. This method uses a visual inspection of

the fuel line in the strut area with the fuel spar valve open and the fuel line pressurized with fuel from the fuel tank pumps.

MECH | INSP

(1) METHOD 1;
Air Pressure Leak Check.

NOTE: Use one of these equipment set-ups:
- G28018 air pressure equipment or,
- Air pressure check equipment set-up at the engine fuel pump (Fig. 406).

(a) If it is available, install the G28018 equipment at the fuel quick-disconnect (service disconnect panel).

1) Connect the G28018 pressure check equipment to the air pressure source.

(b) To install the air pressure check equipment set-up at the applicable engine fuel pump, do these steps (AMM 73-11-08/401).

1) Remove the bolts and washers from the flange that holds the fuel supply line to the engine fuel pump.

2) Disconnect the fuel supply line from the fuel pump.

3) Remove the gasket.

4) If the gasket has no damage, keep it for the installation.

5) Connect the pressure check equipment to the air pressure source and the flange on the airplane fuel supply line on the applicable engine (Fig. 401).

(c) Use the air pressure source to apply 40 psig pressure to the fuel line from the airplane fuel supply line to the fuel spar valve.

(d) Close the shutoff valve on the pressure check equipment.

(e) Monitor the pressure gage for 10 minutes.

1) If the pressure stays the same or the pressure decreases by less than 1.5 psi in 10 minutes, the fuel line is satisfactory.

a) If the fuel line is satisfactory, remove the pressure check equipment.

2) If the pressure decreases more than 1.5 psi in 10 minutes, there is a leak in the fuel line.

a) If there is a leak, do the subsequent steps.

(f) Do a check for air leaks.

1) Use the air pressure source to apply 40 psig pressure to the fuel line from the airplane fuel supply line to the fuel spar valve.

2) Close the shutoff valve on the pressure equipment.

3) Listen for air leaks in the fuel line.

4) When you find the leak, remove the air pressure from the fuel line.

CAUTION: YOU CANNOT TIGHTEN THE FUEL LINE COUPLING AFTER THE INITIAL INSTALLATION. YOU MUST INSTALL A NEW O-RING WHEN YOU TIGHTEN THE FUEL LINE COUPLING OR A FUEL LEAK CAN OCCUR.

5) If a coupling has a leak, disconnect the coupling, replace the O-rings, and then connect the coupling again (AMM 28-22-07/401).

a) Make sure the O-ring(s) are lubricated with the petrolatum.

6) If a fuel tube has a leak, replace the fuel tube.

7) After you have repaired the leak, remove the air pressure equipment.

(g) If disconnected, install the fuel supply hose at the quick-disconnect.

(h) If disconnected, do these steps to connect the main fuel supply line to the engine fuel pump.

1) Put a gasket, main fuel supply line flange and bracket on the inlet port of the fuel pump.

2) Lubricate the threads of the bolts with engine oil.

MECH | INSP

3) Install the fuel supply line and the bracket to the inlet port of the engine fuel pump with the bolts and the washers.

4) Tighten the bolts to 180 - 200 inch-pounds (20.3-22.6 Nm).

(2) METHOD 2;
Fuel Pressure Leak Check.

(a) Make sure the fuel line from the front spar to the engine pump is completely installed.

(b) Supply the electrical power (AMM 24-22-00/201).

(c) Make sure the auxiliary tank contains enough fuel to operate an override pump (AMM 28-22-00/501).

(d) Add fuel if it is necessary (AMM 12-11-01/301).

(e) For the applicable engine, remove the DO-NOT-CLOSE tags and close these circuit breakers:

1) On the main power distribution panel, P6:

a) 6E1, FUEL VALVE L SPAR

b) 6E2, FUEL VALVE R SPAR

(f) For the applicable engine, open these circuit breakers and attach DO-NOT-CLOSE tags:

1) On the overhead circuit breaker panel, P11:

a) 11D25, CONT VLV & EEC CHAN B RESET L

b) 11D26, CONT VLV & EEC CHAN B RESET R

(g) Open these circuit breakers and attach the DO-NOT-CLOSE tags on the overhead panel, P11:

1) For the left and right engine:

a) 11D7 ENGINE STBY IGN 1

b) 11D8 ENGINE STBY IGN 2

2) For the left engine:

a) 11M1 L IGN 1

b) 11M28 L IGN 2

c) 11M9 LEFT ENGINE BUS PWR SENSE

3) For the right engine:

a) 11M2 R IGN 1

b) 11M29 R IGN 2

c) 11M36 RIGHT ENGINE BUS PWR SENSE

(h) For the applicable override pump, close the circuit breaker and remove the DO-NOT-CLOSE tag:

1) On the main power distribution panel, P6:

a) 6F15, L FUEL OVRD PUMP

b) 6F21, R FUEL OVRD PUMP

WARNING: DO NOTE KEEP THE FUEL CONTROL SWITCH IN THE RUN POSITION FOR MORE THAN 30 MINUTES. FUEL LEAKAGE INTO THE COMBUSTION CHAMBER AND TURBINE CASE CAN OCCUR IF THE FUEL CONTROL SWITCH IS IN THE RUN POSITION FOR A LONG TIME. THIS COULD CAUSE A FIRE.

(i) Put the applicable FUEL CONTROL switch to the RUN position.

(j) Put the applicable flight compartment switch for the override pump to on.

WARNING: DO NOT OPERATE A FUEL PUMP IF THE LOW PRESSURE LIGHT COMES ON AND STAYS ON. FUEL VAPORS IN THE TANK MAY IGNITE AND CAUSE A FIRE OR EXPLOSION.

(k) To operate any of the fuel pumps, you must be in the flight compartment to continuously monitor the fuel quantity and the low pressure indication in the fuel tank.

MECH	INSP

1) Immediately set the applicable fuel pump switch to OFF if the LOW PRESSURE light comes on and stays on.

(l) Do a visual inspection of the fuel line in the strut area and at the engine fuel pump with the fuel line pressurized.

NOTE: No fuel leaks are permitted.

(m) If there is a fuel leak, do these steps:

1) Put the applicable override pump switch to the off position, and the FUEL CONTROL switch to CUTOFF.

2) Do the steps in Task: Engine Main Fuel Supply Line (AMM 73-11-08/401) to remove the fuel from the fuel line in the strut area.

CAUTION: YOU CANNOT TIGHTEN THE FUEL LINE COUPLING AFTER THE INITIAL INSTALLATION. YOU MUST INSTALL A NEW O-RING WHEN YOU TIGHTEN THE FUEL LINE COUPLING OR A FUEL LEAK CAN OCCUR.

3) If a coupling has a leak, disconnect the coupling, replace the O-rings, and then connect the coupling again using the steps in this procedure.

a) Make sure the O-ring(s) are lubricated with the petrolatum.

4) If a fuel tube has a leak, replace the fuel tube.

5) Do the steps in this procedure again to pressurize the applicable fuel line and check for leaks.

(n) When the fuel line is satisfactory (no leaks), do these steps:

1) Put the applicable override pump switch to off.

2) Put the FUEL CONTROL switch to CUTOFF.

(3) Do the applicable sections of this task: Leak Check of the Strut Area (AMM 54-51-00/201).

H. Put the Airplane Back to Its Usual Condition

MECH | INSP

(1) Install the wing leading edge cover.

CAUTION: MAKE SURE ALL TOOLS, AND UNWANTED MATERIALS, ARE REMOVED FROM THE STRUT CAVITIES BEFORE YOU INSTALL THE STRUT ACCESS DOORS. THE STRUT DRAINS CAN BE BLOCKED WITH UNWANTED MATERIALS WHICH CAN CAUSE DAMAGE TO THE STRUT AREA.

(2) Do this Task: Install the Access Panels and Strut Fairings (AMM 54-52-01/401).

(3) Remove the DO-NOT CLOSE tags and close these circuit breakers on the overhead panel, P11:

(a) For the left and right engine:

1) 11D7, ENGINE STBY IGN 1

2) 11D8, ENGINE STBY IGN 2

(b) For the left engine:

1) 11M1, L IGN 1

2) 11M28, L IGN 2

3) 11M9, LEFT ENGINE BUS PWR SENSE

(c) For the right engine:

1) 11M2, R IGN 1

2) 11M29, R IGN 2

3) 11M36, RIGHT ENGINE BUS PWR SENSE

(4) Dry motor the applicable engine before the next engine start to purge all fuel that remains (AMM 71-00-00/201).

(5) Supply the electrical power if it is necessary (AMM 24-22-00/201).

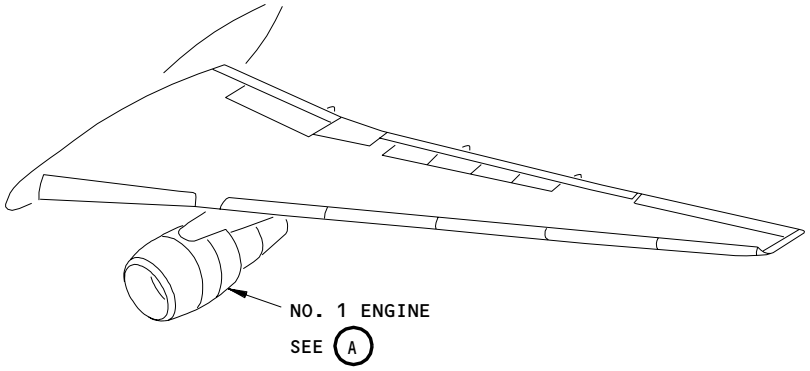
MECH	INSP

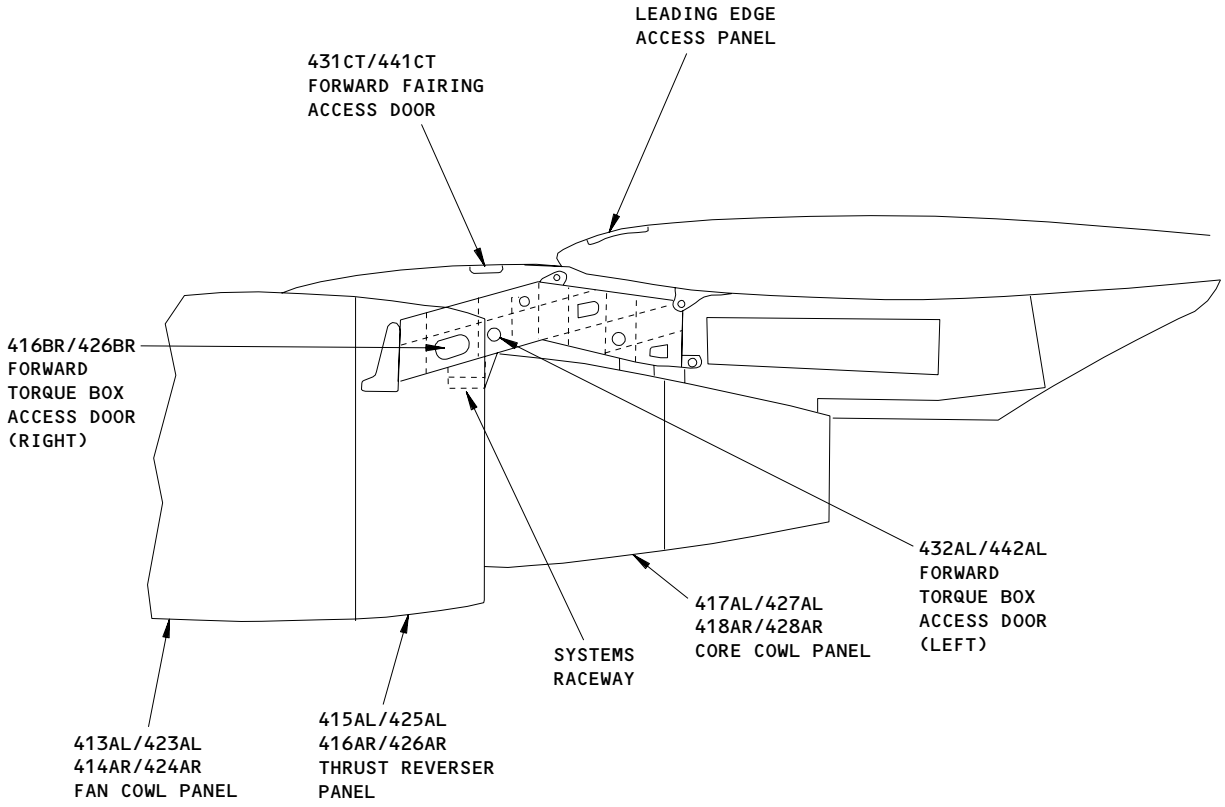
WARNING: MAKE SURE THAT PERSONS AND EQUIPMENT ARE CLEAR OF THE LE SLAT AND TE FLAPS AND FLAP DRIVE MECHANISMS BEFORE YOU MOVE THE FLAP CONTROL LEVER. WITH HYDRAULIC POWER REMOVED, THE FLAPS WILL MOVE AUTOMATICALLY BY ELECTRICAL POWER WHEN YOU MOVE THE FLAP CONTROL LEVER. THIS CAN CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.

WARNING: YOU MUST CAREFULLY DO THE STEPS IN THE TASK BELOW TO REMOVE THE LE SLAT SAFETY LOCK. THE LE SLATS CAN MOVE QUICKLY IF YOU DO NOT DO THE STEPS CORRECTLY. THIS CAN CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.

(6) Do this task: Leading Edge Slat Retraction (AMM 27-81-00/201).

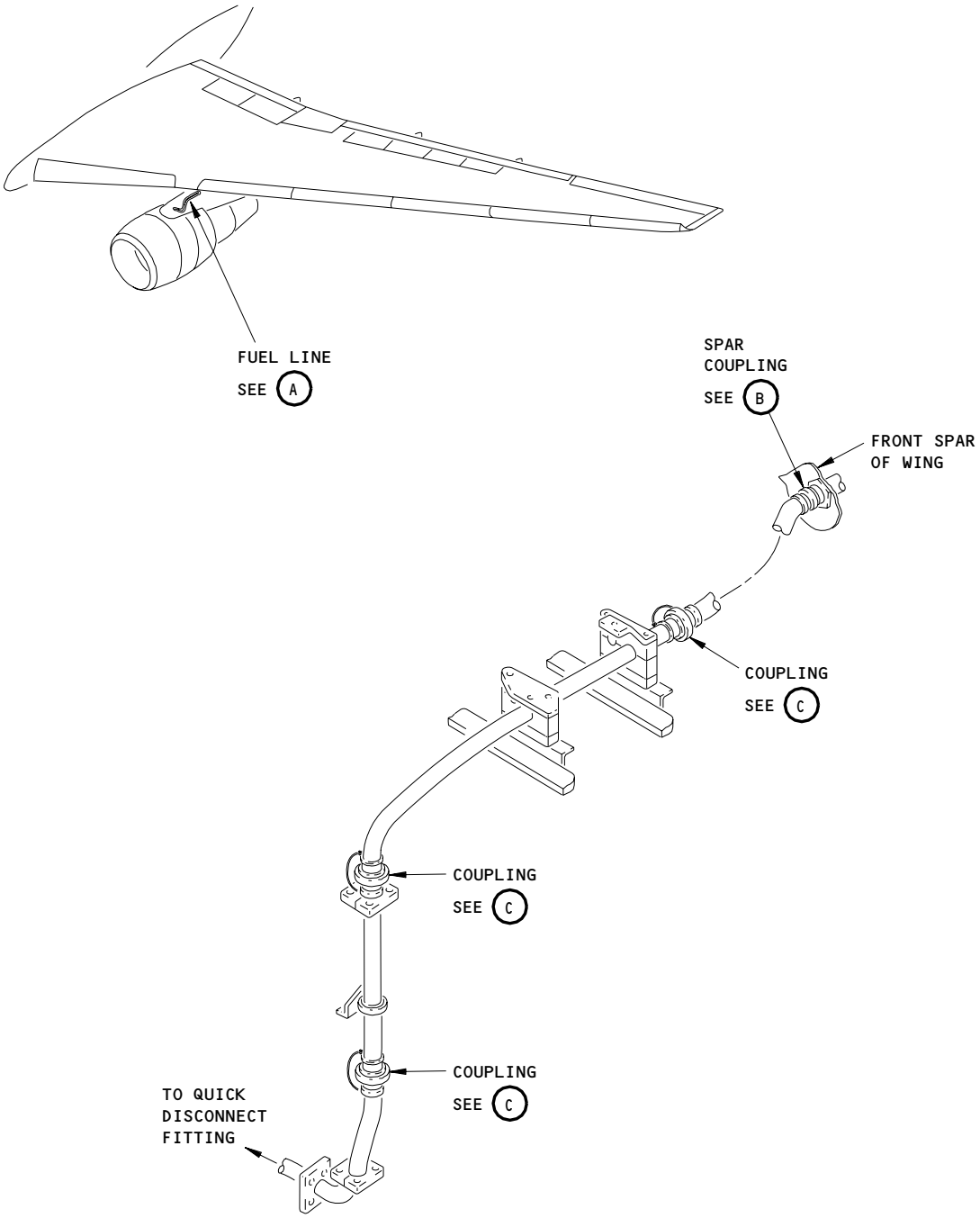
(7) Do the test of the Fuel Manifold and External Tubes that is shown in the Power Plant Test Reference Table (AMM 71-00-00/501).





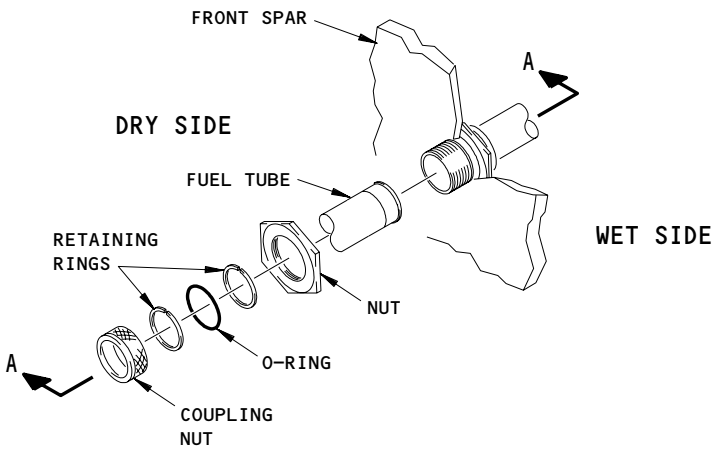
NO. 1 ENGINE
(NO. 2 ENGINE IS ALMOST THE SAME)
(A)

Fuel Line - Strut Access
Figure 404

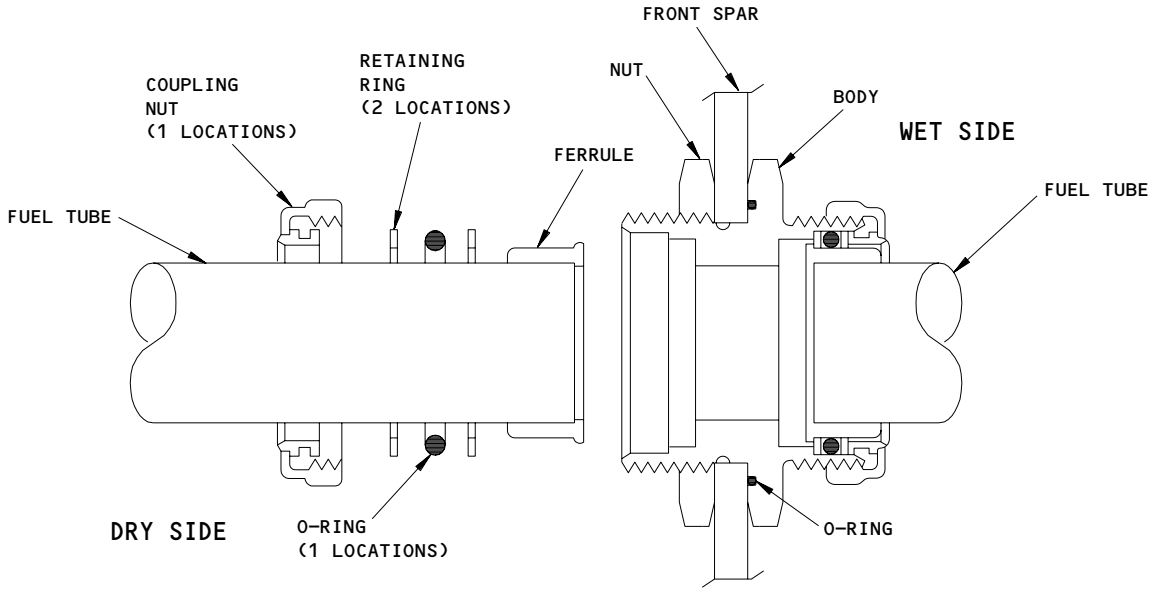


FUEL LINE
(LEFT SIDE IS SHOWN RIGHT SIDE IS ALMOST THE SAME)
A

Fuel Line – Nacelle Strut
Figure 405 (Sheet 1)

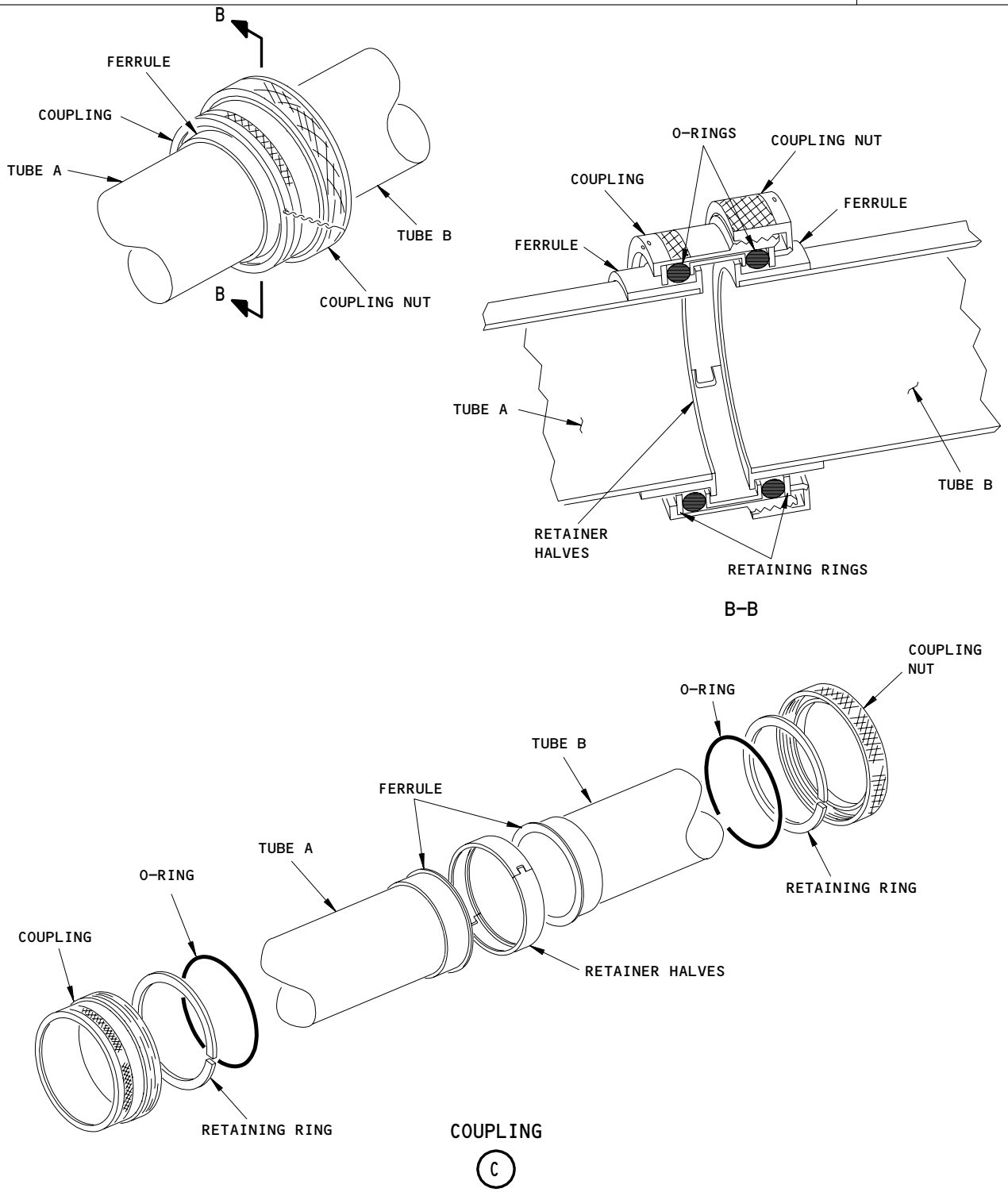


SPAR COUPLING
B

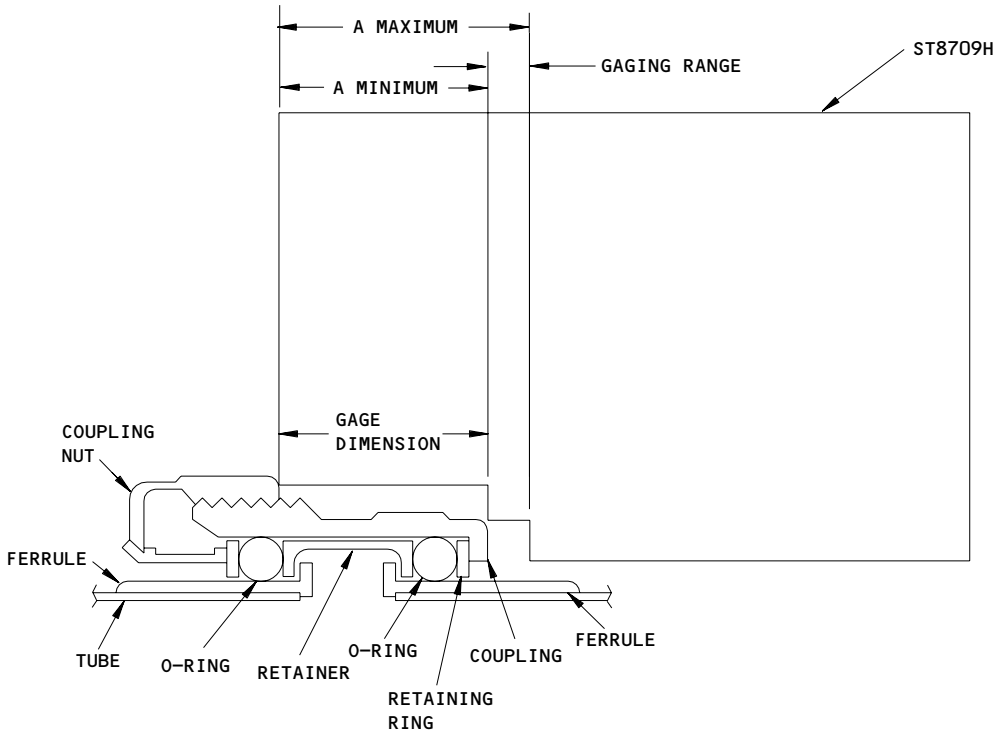


A-A

Fuel Line - Nacelle Strut
Figure 405 (Sheet 2)



Fuel Line - Nacelle Strut
Figure 405 (Sheet 3)



FLEXIBLE COUPLING WITH COUPLING GAGE

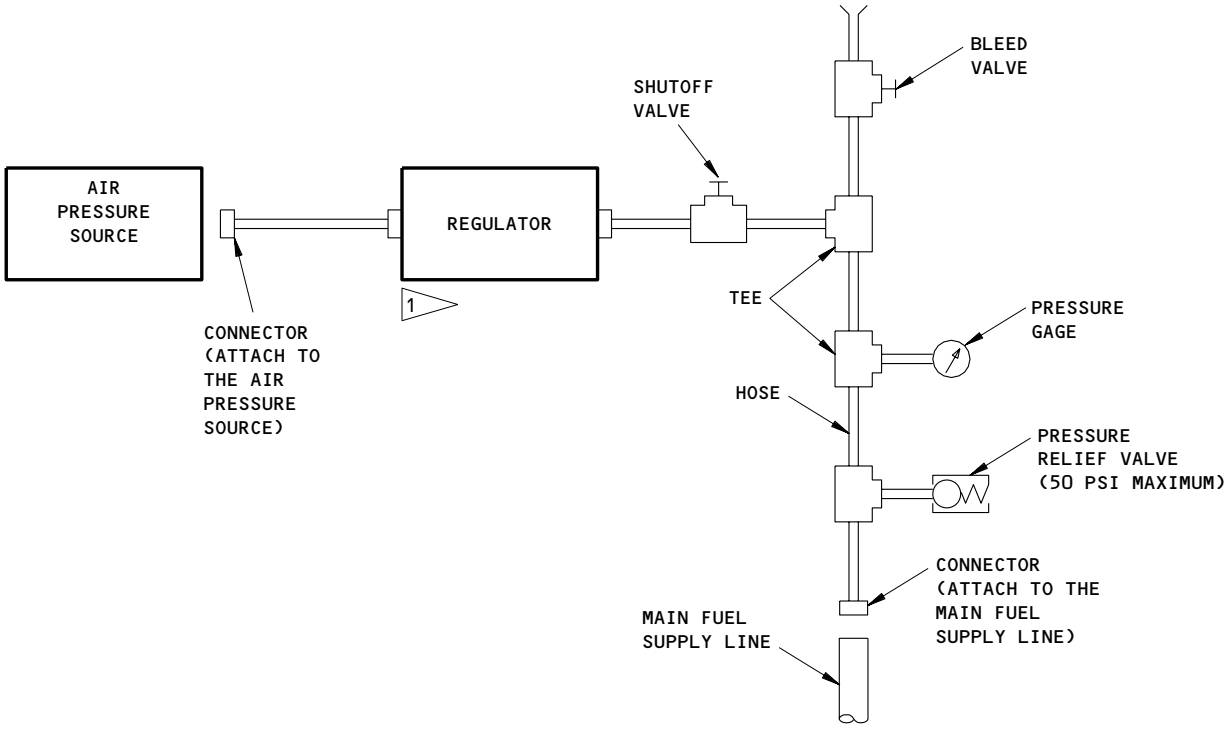
TUBE DIAMETER INCHES	BACC42R SIZE	MAX. GAGE	MIN. GAGE	GAGE NO. ST8709H
1/2	08	0.59	0.47	1
5/8	10	0.59	0.47	1
3/4	12	0.69	0.55	2
1	16	0.75	0.60	3
1-1/4	20	0.75	0.60	3
1-1/2	24	0.93	0.76	4
1-3/4	28	0.93	0.76	4
2	32	0.93	0.76	4

TUBE DIAMETER INCHES	BACC42R SIZE	MAX. GAGE	MIN. GAGE	GAGE NO. ST8709H
2-1/4	36	0.93	0.76	4
2-1/2	40	0.93	0.76	4
3	48	0.93	0.76	4
3-1/2	56	1.03	0.88	5
4	64	1.03	0.88	5
4-1/2	72	1.16	0.99	6
5	80	1.39	1.22	7
5-1/2	88	1.39	1.22	7

DIMENSIONAL REQUIREMENTS FOR ASSEMBLING FLEXIBLE FULL COUPLING

FLEXIBLE FULL COUPLING DIMENSIONS

Flexible Full Coupling Installation
Figure 405 (Sheet 4)



1 REGULATOR WHICH CAN DECREASE AIR PRESSURE TO 40 PSIG.

Pressure Check Equipment
Figure 406

STATION		BOEING CARD NO.
TAIL NO.	SAS BOEING 767 TASK CARD	28-018-02
DATE		AIRLINE CARD NO.

SKILL	WORK AREA	RELATED TASK	INTERVAL	PHASE	MPD REV	TASK CARD REVISION
AIRPL	CREW CABIN		1C	11212	013	APR 22/09

TASK	TITLE	STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE	APPLICABILITY ENGINE
OPERATIONAL	ENGINE FUEL SUCTION FEED SYSTEM		ALL	ALL

ZONES	ACCESS PANELS
211 212	

MECH	INSP	MPD ITEM NUMBER

OPERATIONALLY CHECK THE ENGINE FUEL SUCTION FEED SYSTEM 28-22-00-5G

NOTE: AN OPTIONAL PROCEDURE THAT ALSO FULFILLS THE INTENT OF THIS REQUIREMENT IS TO PERFORM THE ENGINE FUEL PRESSURE LEAK CHECK PER AMM 28-22-07.

1. Engine Fuel Suction Feed - Operational Test

A. General

(1) Do this task on the ground while the engines operate at an idle.

(2) AMM 12-11-01/301, Fuel Tank Pressure Fueling

(3) AMM 28-26-00/201, Defueling

(4) AMM 71-00-00/201, Power Plant - Maintenance Procedures

(5) FIM 28-22-00/101, Engine Fuel Feed System

B. Access

(1) Location Zones
211 Control Cabin - Section 41 (Left)
212 Control Cabin - Section 41 (Right)

C. Prepare for Test

(1) Make sure that these quantities of fuel are in the fuel tanks:

NOTE: You can refuel the airplane by pressure fueling (AMM 12-11-01/301) or by tank to tank transfer (AMM 28-26-00/201).

MECH | INSP

NOTE: The fuel quantity given below may be at or below the fuel quantity needed to cover the hydraulic heat exchanger during the test.

(a) Refuel or defuel the fuel tank so the left main fuel tank contains 4,100 - 4,400 lbs (1,860 - 2,000 kgs) of fuel.

(b) Refuel or defuel the fuel tank so the right main fuel tank contains 4,100 - 4,400 lbs (1,860 - 2,000 kgs) of fuel.

(c) Make sure the auxiliary fuel tank contains 0 lbs (0 kgs) of fuel.

CAUTION: DO NOT OPERATE THE HYDRAULIC PUMPS AFTER THE HYDRAULIC TEMPERATURE INDICATION ON EICAS IS MORE THAN 100 DEGREES C (212 DEGREES F) OR AFTER THE PUMP OVERHEAT LIGHT COMES ON. IF YOU CONTINUE TO OPERATE THE PUMPS, THE HYDRAULIC FLUID CAN BECOME TOO HOT.

(2) Obey the subsequent limits during the test:

(a) Stop the operation of the hydraulic pump if the temperature indication on EICAS is more then 100 degrees C (212 degrees F).

(b) Stop the operation of the hydraulic pump if the hydraulic pump overheat light comes on.

(c) Do not operate the hydraulic pump for more than 10 minutes.

(d) After the operation of the hydraulic pump, let the temperature of the hydraulic pump decrease for 20 minutes with the hydraulic pump off.

(3) Make sure there are tire chocks in front and aft of all main landing gear tires (AMM 10-11-01/201).

(4) Make sure the switch-light(s) for the FUEL XFEED VALVE(s) on the fuel management panel (found on the overhead P5 panel) is (are) in the closed position.

(5) Make sure the switch-light for the C PUMPS L on the fuel management panel (found on the overhead P5 panel) is in the off position.

(6) Make sure the switch-light for the C PUMPS R on the fuel management panel (found on the overhead P5 panel) is in the off position.

D. Test the Engine Fuel Suction Feed

WARNING: DO NOT OPERATE A FUEL PUMP IF THE LOW PRESSURE LIGHT COMES ON AND STAYS ON. FUEL VAPORS IN THE TANK MAY IGNITE AND CAUSE A FIRE OR EXPLOSION.

(1) To operate any of the fuel pumps, you must be in the flight compartment to continuously monitor the fuel quantity and the low pressure indication of the fuel pumps.

(a) Immediately push the applicable fuel pump switch to the off position if the PRESS light comes on and stays on.

(2) Push the L PUMPS FWD switch-light on the fuel management panel (found on the P5 panel) to the ON position.

(a) Make sure the L PUMPS PRESS - FWD switch-light on the P5 panel is off.

(b) Make sure the ON flow bar on the L PUMPS FWD switch-light comes on.

(3) Push the L PUMPS AFT switch-light on the fuel management panel (found on the P5 panel) to the ON position.

(a) Make sure the L PUMPS PRESS - AFT switch-light on the P5 panel is off.

(b) Make sure the ON flow bar on the L PUMPS AFT switch-light comes on.

(4) Push the R PUMPS FWD switch-light on the fuel management panel (found on the P5 panel) to the ON position.

(a) Make sure the R PUMPS PRESS - FWD switch-light on the P5 panel is off.

(b) Make sure the ON flow bar on the R PUMPS FWD switch-light comes on.

(5) Push the R PUMPS AFT switch-light on the fuel management panel (found on the P5 panel) to the ON position.

MECH	INSP

(a) Make sure the R PUMPS PRESS - AFT switch-light on the P5 panel is off.

(b) Make sure the ON flow bar on the R PUMPS AFT switch-light comes on.

(6) Start the engines (AMM 71-00-00/201).

NOTE: Operate the engines at a minimum idle for this test.

(7) Permit the engines to operate at idle power with boost pumps on for a minimum of two minutes (this time is referred to as "the warm-up period").

NOTE: With ambient conditions of extreme cold, it can be necessary to permit the engine to warm up for more time.

(8) While the engines operate at a minimum idle, set all of the fuel pumps to the off position.

(a) If the APU was used to initially power the airplane, do one of the following steps:

1) Put the APU Master Switch on the P5 overhead panel to OFF.

2) Open these circuit breakers:

a) 6G24, L FWD FUEL BOOST PUMP (On the main power distribution panel, P6)

b) 11M25 FUEL PUMPS L FWD/R AF (On the overhead circuit breaker panel, P11)

(9) Make sure the engines operate at idle for a minimum of five minutes.

(a) If one or both of the engines stop in less than five minutes, do this procedure: Right (Left) Engine Fails the Suction Feed Test (FIM 28-22-00/101 Fig. 113).

(10) If necessary, close these circuit breakers:

(a) 6G24, L FWD FUEL BOOST PUMP (On the main power distribution panel, P6)

MECH	INSP

(b) 11M25 FUEL PUMPS L FWD/R AFT (On the overhead circuit breaker panel, P11)

(11) Stop the engines with the correct shutdown procedure (AMM 71-00-00/201).

STATION		BOEING CARD NO.
TAIL NO.	SAS BOEING 767 TASK CARD	28-018-03
DATE		AIRLINE CARD NO.

SKILL	WORK AREA	RELATED TASK	INTERVAL	PHASE	MPD REV	TASK CARD REVISION
AIRPL	L MAIN TANK		8C	24896		AUG 22/08

TASK	TITLE	STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE	APPLICABILITY ENGINE
FUNCTIONAL	OVERWING FILL PORT - L/H WING		ALL	ALL

ZONES	ACCESS PANELS
541	

MECH	INSP	MPD ITEM NUMBER

FUNCTIONALLY CHECK (RESISTANCE MEASUREMENT) THE BONDING BETWEEN THE OVERWING FILL PORTS AND THE STRUCTURE TO ENSURE IT IS WITHIN SERVICE LIMITS (SFAR 88). 28-11-04-6A

1. Overwing Fill Port - Bonding Resistance Check (Fig. 601)

A. Equipment

(1) Maintenance Mats - for wing upper surface

(2) Bonding Meter - Use one of these:

(a) Bonding Meter - T477W
Avtron Manufacturing Co.
Cleveland, OH

(b) Bonding Meter - Model M1
(Serial Number A000012 and subsequent)
BCD Electronics Ltd.
Vancouver, Canada

B. References

(1) SWPM 20-20-00, Electrical Bonds and Grounds

C. Procedure

CAUTION: PUT MAINTENANCE MATS IN THE AREAS WHERE PERSONS WORK. THE MAINTENANCE MATS PREVENT DAMAGE TO THE WING PANELS.

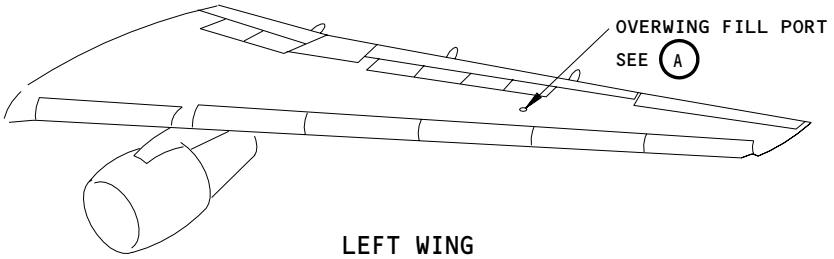
(1) Put maintenance mats in the areas you will work.

(2) Measure the electrical bonding resistance between the overwing fill port adapter and the upper wing skin (SWPM 20-20-00).

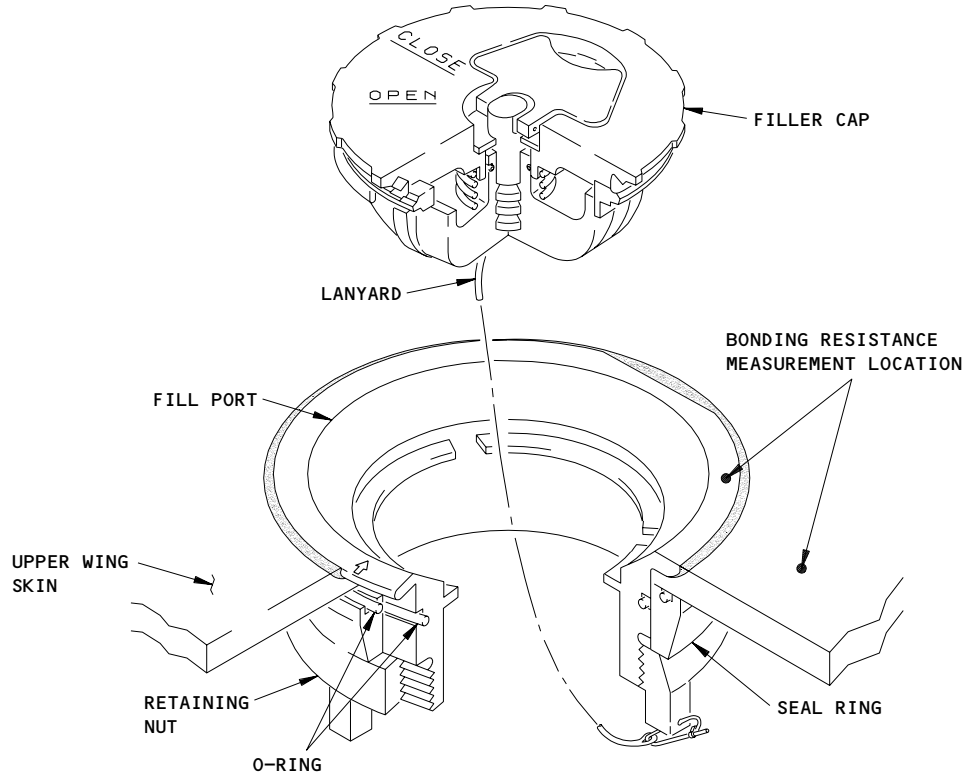
MECH	INSP

(a) Make sure the electrical bonding resistance is 0.010 ohm (10 milliohms) or less.

(3) Remove the maintenance mats.



LEFT WING
(RIGHT WING IS OPPOSITE)



OVERWING FILL PORT
(FILLER CAP SHOWN REMOVED)
A

Overwing Fill Port Inspection
Figure 601

STATION		BOEING CARD NO.
TAIL NO.	SAS BOEING 767 TASK CARD	28-018-04
DATE		AIRLINE CARD NO.

SKILL	WORK AREA	RELATED TASK	INTERVAL	PHASE	MPD REV	TASK CARD REVISION
AIRPL	R MAIN TANK		8C	24896		AUG 22/08

TASK	TITLE	STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE	APPLICABILITY ENGINE
FUNCTIONAL	OVERWING FILL PORT - R/H WING		ALL	ALL

ZONES	ACCESS PANELS
641	

MECH	INSP	MPD ITEM NUMBER

FUNCTIONALLY CHECK (RESISTANCE MEASUREMENT) THE BONDING BETWEEN THE OVERWING FILL PORTS AND THE STRUCTURE TO ENSURE IT IS WITHIN SERVICE LIMITS (SFAR 88). 28-11-04-6A

1. Overwing Fill Port - Bonding Resistance Check (Fig. 601)

A. Equipment

(1) Maintenance Mats - for wing upper surface

(2) Bonding Meter - Use one of these:

(a) Bonding Meter - T477W
Avtron Manufacturing Co.
Cleveland, OH

(b) Bonding Meter - Model M1
(Serial Number A000012 and subsequent)
BCD Electronics Ltd.
Vancouver, Canada

B. References

(1) SWPM 20-20-00, Electrical Bonds and Grounds

C. Procedure

CAUTION: PUT MAINTENANCE MATS IN THE AREAS WHERE PERSONS WORK. THE MAINTENANCE MATS PREVENT DAMAGE TO THE WING PANELS.

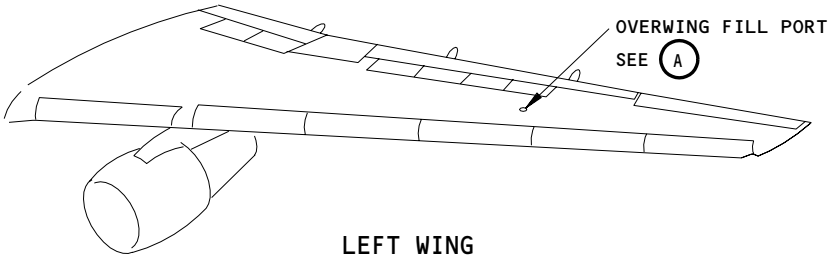
(1) Put maintenance mats in the areas you will work.

(2) Measure the electrical bonding resistance between the overwing fill port adapter and the upper wing skin (SWPM 20-20-00).

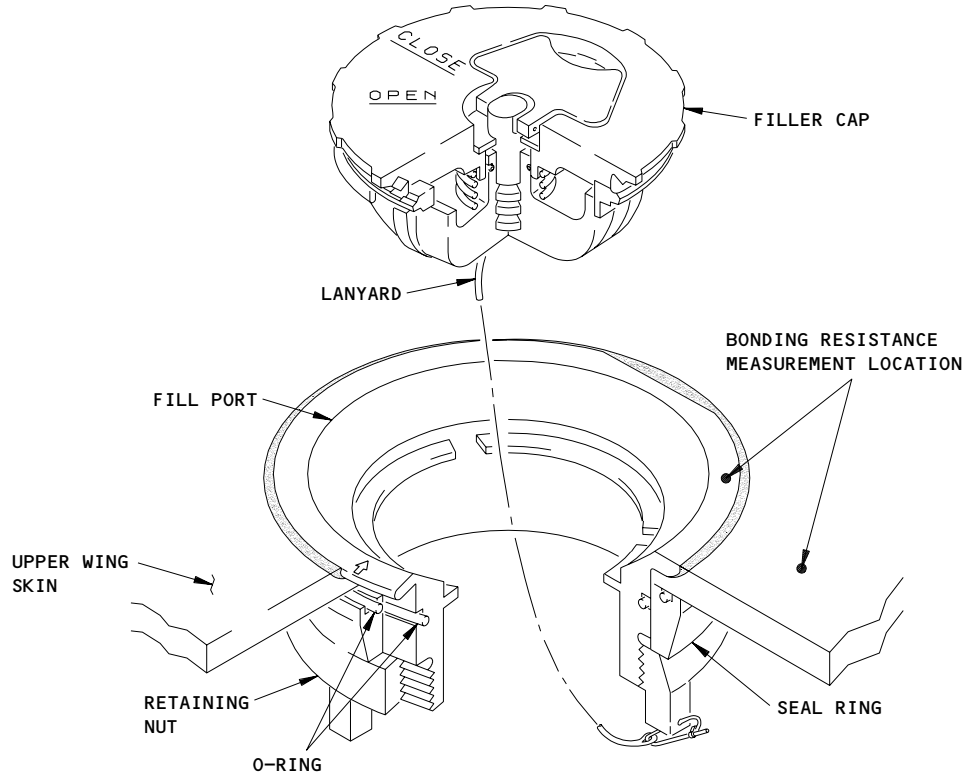
MECH	INSP

(a) Make sure the electrical bonding resistance is 0.010 ohm (10 milliohms) or less.

(3) Remove the maintenance mats.



LEFT WING
(RIGHT WING IS OPPOSITE)



OVERWING FILL PORT
(FILLER CAP SHOWN REMOVED)
A

Overwing Fill Port Inspection
Figure 601

STATION		BOEING CARD NO.
TAIL NO.	SAS BOEING 767 TASK CARD	28-020-02
DATE		AIRLINE CARD NO.

SKILL	WORK AREA	RELATED TASK	INTERVAL	PHASE	MPD REV	TASK CARD REVISION
AIRPL	L WING TANK		8C	24896		AUG 22/09

TASK	TITLE	STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE	APPLICABILITY ENGINE
CHECK/INSP	IN-TANK TUBING - LEFT MAIN FUEL TANK		ALL	ALL

ZONES	ACCESS PANELS
532 541	

MECH	INSP	MPD ITEM NUMBER

INSPECT (DETAILED) THE IN-TANK TUBING AND EQUIPMENT STATIC BONDING STRAPS AND CLAMPS FOR CONDITION, SECURITY AND OTHER DEGRADATION (SFAR 88). 28-00-00-2A

1. Inspection of the Electrical Bonding Jumpers in the Fuel System

A. General

(1) This task contains visual and mechanical inspections of the electrical bonding jumpers in the fuel system.

(2) Fuel system installation has a large number of bonding jumpers for the electrical bonding of tubing, mechanical components and electrical components. These bonding jumpers are made up of braided wire and have a mating lug on each end.

(3) The tin plating on the bonding jumper usually supplies a smooth finish. When there is deterioration of the tin plating on the bonding jumper and the copper in the wire reacts with any sulfur compounds in the tank, the finish becomes rough to the touch and the bonding jumper can show signs of fraying.

(4) Do not flex, bend or kink the bonding jumpers more than is necessary. If the bonding jumpers are moved too much, it can cause the loss of tin plating on the wire braid of the bonding jumper.

(5) When you inspect the bonding jumpers, you may see black or brown deposits on the wire braid. This can occur when there is a deterioration of the tin plating on the bonding jumper and the copper in the wire reacts with the sulfur compounds. This discoloration of the tin plating on the bonding jumper and the copper in the wire reacts with the sulfur compounds. This discoloration is not a problem unless the wire braid contains broken strands. If the bonding jumper has broken strands, then you must replace the bonding jumper.

MECH | INSP

(6) When you inspect the bonding jumpers, inspect for loose clamps and corrosion.

B. References

(1) SWPM 20-20-00, Electrical Bonds and Grounds

C. Access

(1) (Left Main Tank) Location Zones
532 Main Tank - Inboard of Rib No. 10 (Left)
541 Main Tank - Outboard of Rib No. 10 (Left)

D. Electrical Bonding Jumper Visual Inspection

(1) Visually inspect the bonding jumper and clamp for color and deterioration.

(2) If the bonding jumper is silver in color, and free from black or brown deposits, then the bonding jumper is satisfactory.

(3) If the wire braid has black or brown deposits, then inspect the bonding jumper for broken strands.

(a) If the wire braid does not have broken strands, then the bonding jumper is okay.

(b) If the wire braid has broken strands, then do this task: Electrical Bonding Jumpers in the Fuel System Replacement

E. Electrical Bonding Jumper Mechanical Inspection

(1) Try to turn the bonding jumper lugs and tube clamps, if applicable, with light finger pressure.

(2) If the bonding jumper is loose, rework the electrical bond path (SWPM 20-20-00).

2. Electrical Bonding Jumpers in the Fuel System Replacement

A. References

(1) SWPM 20-20-00, Electrical Bonds and Grounds

B. Access

(1) (Left Main Tank) Location Zones
532 Main Tank - Inboard of Rib No. 10 (Left)
541 Main Tank - Outboard of Rib No. 10 (Left)

C. Replace the Electrical Bonding Jumper

(1) Remove the bonding jumper.

(a) Keep all the parts necessary for the installation of the bonding jumper.

(2) For the bonding jumpers used to bond electrical equipment, follow the applicable installation procedure in the AMM.

(3) For the bonding jumpers used to bond mechanical equipment or tubing, install the new bonding jumper and hardware (SWPM 20-20-00).

(a) Make sure the mating surface(s) are correctly prepared.

(b) Make sure the bonding jumper installation gives adequate clearance from the structure, tubing or all fuel system parts.

NOTE: This will prevent abrasion.

(4) Do the "Electrical Integrity Check of the Fuel System Bond Path" procedure.

D. Electrical Integrity Check of the Fuel System Bond Path

NOTE: SWPM 20-20-00 defines the measurement processes necessary for installation of electrical bonding hardware. The fuel system tubing and components often incorporate multiple electrical bonds in series between the component and the primary structure. The measurement of the tubing or component bond is a separate requirement.

(1) For bonding jumper hardware installations, do the resistance measurement for electrical integrity (SWPM 20-20-00).

(2) For the fuel system tubing or components, do the subsequent steps:

(a) Measure the total resistance from the tubing or component, to the adjacent primary structure.

(b) Make sure the resistance is not more than 0.10 ohms.

3. Fuel System Static Bond Path, Left Main Tank - Inspection

A. References

(1) AMM 28-11-00/201, Fuel Tanks

(2) AMM 28-11-01/401, Main Tank Access Door

B. Access

(1) Location Zones
532 Main Tank-Inboard of Rib No. 10 (Left)
541 Main Tank Outboard of Rib No. 10 (Left)

C. Procedure

(1) For the area in the left main tank between rib No. 3 (rib at WS 226.3) and rib No.31 (rib at WS 990.2), do these steps:

(a) Remove the applicable left main tank access panels (AMM 28-11-01/401).

(b) Go into the applicable openings for the left main tank (AMM 28-11-00/201).

(c) Do this task for all bonding jumpers between rib No. 3 and rib No. 31: Inspection of the Electrical Bonding Jumpers in the Fuel System.

(d) If access is not necessary for subsequent tasks, install the access panels you removed (AMM 28-11-01/401).

STATION		BOEING CARD NO.
TAIL NO.	SAS BOEING 767 TASK CARD	28-020-03
DATE		AIRLINE CARD NO.

SKILL	WORK AREA	RELATED TASK	INTERVAL	PHASE	MPD REV	TASK CARD REVISION
AIRPL	R WING TANK		8C	24896		AUG 22/09

TASK	TITLE	STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE	APPLICABILITY ENGINE
CHECK/INSP	IN-TANK TUBING - RT MAIN FUEL TANK		ALL	ALL

ZONES	ACCESS PANELS
632 641	

MECH	INSP	MPD ITEM NUMBER

INSPECT (DETAILED) THE IN-TANK TUBING AND EQUIPMENT STATIC BONDING STRAPS AND CLAMPS FOR CONDITION, SECURITY AND OTHER DEGRADATION (SFAR 88). 28-00-00-2B

1. Inspection of the Electrical Bonding Jumpers in the Fuel System

A. General

(1) This task contains visual and mechanical inspections of the electrical bonding jumpers in the fuel system.

(2) Fuel system installation has a large number of bonding jumpers for the electrical bonding of tubing, mechanical components and electrical components. These bonding jumpers are made up of braided wire and have a mating lug on each end.

(3) The tin plating on the bonding jumper usually supplies a smooth finish. When there is deterioration of the tin plating on the bonding jumper and the copper in the wire reacts with any sulfur compounds in the tank, the finish becomes rough to the touch and the bonding jumper can show signs of fraying.

(4) Do not flex, bend or kink the bonding jumpers more than is necessary. If the bonding jumpers are moved too much, it can cause the loss of tin plating on the wire braid of the bonding jumper.

(5) When you inspect the bonding jumpers, you may see black or brown deposits on the wire braid. This can occur when there is a deterioration of the tin plating on the bonding jumper and the copper in the wire reacts with the sulfur compounds. This discoloration of the tin plating on the bonding jumper and the copper in the wire reacts with the sulfur compounds. This discoloration is not a problem unless the wire braid contains broken strands. If the bonding jumper has broken strands, then you must replace the bonding jumper.

(6) When you inspect the bonding jumpers, inspect for loose clamps and corrosion.

B. References

(1) SWPM 20-20-00, Electrical Bonds and Grounds

C. Access

(1) (Right Main Tank) Location Zones
632 Main Tank - Inboard of Rib No. 10 (Right)
641 Main Tank - Outboard of Rib No. 10 (Right)

D. Electrical Bonding Jumper Visual Inspection

(1) Visually inspect the bonding jumper and clamp for color and deterioration.

(2) If the bonding jumper is silver in color, and free from black or brown deposits, then the bonding jumper is satisfactory.

(3) If the wire braid has black or brown deposits, then inspect the bonding jumper for broken strands.

(a) If the wire braid does not have broken strands, then the bonding jumper is okay.

(b) If the wire braid has broken strands, then do this task: Electrical Bonding Jumpers in the Fuel System Replacement

E. Electrical Bonding Jumper Mechanical Inspection

(1) Try to turn the bonding jumper lugs and tube clamps, if applicable, with light finger pressure.

(2) If the bonding jumper is loose, rework the electrical bond path (SWPM 20-20-00).

2. Electrical Bonding Jumpers in the Fuel System Replacement

A. References

(1) SWPM 20-20-00, Electrical Bonds and Grounds

B. Access

MECH | INSP

(1) (Right Main Tank) Location Zones
632 Main Tank - Inboard of Rib No. 10 (Right)
641 Main Tank - Outboard of Rib No. 10 (Right)

C. Replace the Electrical Bonding Jumper

(1) Remove the bonding jumper.

(a) Keep all the parts necessary for the installation of the bonding jumper.

(2) For the bonding jumpers used to bond electrical equipment, follow the applicable installation procedure in the AMM.

(3) For the bonding jumpers used to bond mechanical equipment or tubing, install the new bonding jumper and hardware (SWPM 20-20-00).

(a) Make sure the mating surface(s) are correctly prepared.

(b) Make sure the bonding jumper installation gives adequate clearance from the structure, tubing or all fuel system parts.

NOTE: This will prevent abrasion.

(4) Do the "Electrical Integrity Check of the Fuel System Bond Path" procedure.

D. Electrical Integrity Check of the Fuel System Bond Path

NOTE: SWPM 20-20-00 defines the measurement processes necessary for installation of electrical bonding hardware. The fuel system tubing and components often incorporate multiple electrical bonds in series between the component and the primary structure. The measurement of the tubing or component bond is a separate requirement.

(1) For bonding jumper hardware installations, do the resistance measurement for electrical integrity (SWPM 20-20-00).

(2) For the fuel system tubing or components, do the subsequent steps:

(a) Measure the total resistance from the tubing or component, to the adjacent primary structure.

(b) Make sure the resistance is not more than 0.10 ohms.

3. Fuel System Static Bond Path, Right Main Tank - Inspection

A. References

(1) AMM 28-11-00/201, Fuel Tanks

(2) AMM 28-11-01/401, Main Tank Access Door

B. Access

(1) Location Zones
632 Main Tank-Inboard of Rib No. 10 (Right)
641 Main Tank-Outboard of Rib No. 10 (Right)

C. Procedure

(1) For the area in the right main tank between rib No. 3 (rib at WS 226.3) and rib No.31 (rib at WS 990.2), do these steps:

(a) Remove the applicable right main tank access panels (AMM 28-11-01/401).

(b) Go into the applicable openings for the right main tank (AMM 28-11-00/201).

(c) Do this task for all bonding jumpers between rib No. 3 and rib No. 31: Inspection of the Electrical Bonding Jumpers in the Fuel System.

(d) If access is not necessary for subsequent tasks, install the access panels you removed (AMM 28-11-01/401).

STATION		BOEING CARD NO.
TAIL NO.	SAS BOEING 767 TASK CARD	28-020-04
DATE		AIRLINE CARD NO.

SKILL	WORK AREA	RELATED TASK	INTERVAL	PHASE	MPD REV	TASK CARD REVISION
AIRPL	CTR AUX TK		8C	24896		AUG 22/09

TASK	TITLE	STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE	APPLICABILITY ENGINE
CHECK/INSP	IN-TANK TUBING - CTR AUX FUEL TANK		ALL	ALL

ZONES	ACCESS PANELS
136 194 531 631	136KZ 194HR 531BB 631BB

MECH	INSP	MPD ITEM NUMBER

INSPECT (DETAILED) THE IN-TANK TUBING AND EQUIPMENT STATIC BONDING STRAPS AND CLAMPS FOR CONDITION, SECURITY AND OTHER DEGRADATION (SFAR 88). 28-00-00-2C

1. Inspection of the Electrical Bonding Jumpers in the Fuel System

A. General

(1) This task contains visual and mechanical inspections of the electrical bonding jumpers in the fuel system.

(2) Fuel system installation has a large number of bonding jumpers for the electrical bonding of tubing, mechanical components and electrical components. These bonding jumpers are made up of braided wire and have a mating lug on each end.

(3) The tin plating on the bonding jumper usually supplies a smooth finish. When there is deterioration of the tin plating on the bonding jumper and the copper in the wire reacts with any sulfur compounds in the tank, the finish becomes rough to the touch and the bonding jumper can show signs of fraying.

(4) Do not flex, bend or kink the bonding jumpers more than is necessary. If the bonding jumpers are moved too much, it can cause the loss of tin plating on the wire braid of the bonding jumper.

(5) When you inspect the bonding jumpers, you may see black or brown deposits on the wire braid. This can occur when there is a deterioration of the tin plating on the bonding jumper and the copper in the wire reacts with the sulfur compounds. This discoloration of the tin plating on the bonding jumper and the copper in the wire reacts with the sulfur compounds. This discoloration is not a problem unless the wire braid contains broken strands. If the bonding jumper has broken strands, then you must replace the bonding jumper.

MECH | INSP

(6) When you inspect the bonding jumpers, inspect for loose clamps and corrosion.

B. References

(1) SWPM 20-20-00, Electrical Bonds and Grounds

C. Access

(1) (Center Auxiliary Tank) Location Zones
133 Wing Center Section (Left)
134 Wing Center Section (Right)
531 Center Auxiliary Tank (Left)
631 Center Auxiliary Tank (Right)

D. Electrical Bonding Jumper Visual Inspection

(1) Visually inspect the bonding jumper and clamp for color and deterioration.

(2) If the bonding jumper is silver in color, and free from black or brown deposits, then the bonding jumper is satisfactory.

(3) If the wire braid has black or brown deposits, then inspect the bonding jumper for broken strands.

(a) If the wire braid does not have broken strands, then the bonding jumper is okay.

(b) If the wire braid has broken strands, then do this task: Electrical Bonding Jumpers in the Fuel System Replacement

E. Electrical Bonding Jumper Mechanical Inspection

(1) Try to turn the bonding jumper lugs and tube clamps, if applicable, with light finger pressure.

(2) If the bonding jumper is loose, rework the electrical bond path (SWPM 20-20-00).

2. <u>Electrical Bonding Jumpers in the Fuel System Replacement</u>

A. References

(1) SWPM 20-20-00, Electrical Bonds and Grounds

MECH | INSP

B. Access

(1) (Center Auxiliary Tank) Location Zones
133 Wing Center Section (Left)
134 Wing Center Section (Right)
531 Center Auxiliary Tank (Left)
631 Center Auxiliary Tank (Right)

C. Replace the Electrical Bonding Jumper

(1) Remove the bonding jumper.

(a) Keep all the parts necessary for the installation of the bonding jumper.

(2) For the bonding jumpers used to bond electrical equipment, follow the applicable installation procedure in the AMM.

(3) For the bonding jumpers used to bond mechanical equipment or tubing, install the new bonding jumper and hardware (SWPM 20-20-00).

(a) Make sure the mating surface(s) are correctly prepared.

(b) Make sure the bonding jumper installation gives adequate clearance from the structure, tubing or all fuel system parts.

NOTE: This will prevent abrasion.

(4) Do the "Electrical Integrity Check of the Fuel System Bond Path" procedure.

D. Electrical Integrity Check of the Fuel System Bond Path

NOTE: SWPM 20-20-00 defines the measurement processes necessary for installation of electrical bonding hardware. The fuel system tubing and components often incorporate multiple electrical bonds in series between the component and the primary structure. The measurement of the tubing or component bond is a separate requirement.

(1) For bonding jumper hardware installations, do the resistance measurement for electrical integrity (SWPM 20-20-00).

(2) For the fuel system tubing or components, do the subsequent steps:

(a) Measure the total resistance from the tubing or component, to the adjacent primary structure.

(b) Make sure the resistance is not more than 0.10 ohms.

3. Fuel System Static Bond Path, Center Auxiliary Tank - Inspection

A. References

(1) AMM 28-11-00/201, Fuel Tanks

(2) AMM 28-11-02/401, Auxiliary Tank Access Door

B. Access

(1) Location Zones
136 Environmental Control System Bay (Right)
194 Wing to Body - Forward Lower Half (Right)
531 Center Auxiliary Tank (Left)
631 Center Auxiliary Tank (Right)

C. Procedure

(1) For the area in the auxiliary tank between left rib No. 3 (rib at WS 226.3) and right rib No.3 (rib at WS 226.3), do these steps:

(a) Remove the applicable auxiliary tank access panels (AMM 28-11-02/401).

(b) Go into the applicable openings for the auxiliary tank (AMM 28-11-00/201).

(c) Do this task for all bonding jumpers between left rib No. 3 and right rib No. 3: Inspection of the Electrical Bonding Jumpers in the Fuel System.

(d) If access is not necessary for subsequent tasks, install the access panels you removed (AMM 28-11-01/401).

STATION		BOEING CARD NO.
TAIL NO.	SAS BOEING 767 TASK CARD	28-021-03
DATE		AIRLINE CARD NO.

SKILL	WORK AREA	RELATED TASK	INTERVAL	PHASE	MPD REV	TASK CARD REVISION
AIRPL	L WING TANK		8C	24896		AUG 22/08

TASK	TITLE	STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE	APPLICABILITY ENGINE
FUNCTIONAL	SURGE TANK PRESSURE RELIEF VALVE-L		ALL	ALL

ZONES	ACCESS PANELS
542	542AB

MECH	INSP	MPD ITEM NUMBER

FUNCTIONALLY CHECK (RESISTANCE MEASUREMENT) THE BONDING BETWEEN THE PRESSURE RELIEF VALVES AND THE STRUCTURE (SFAR 88). 28-13-04-6A

1. Pressure Relief Valve - Bonding Resistance Check (Fig. 601)

A. References

(1) AMM 28-11-03/401, Surge Tank Access Door

(2) SWPM 20-20-00, Electrical Bonds and Grounds

B. Equipment

(1) Bonding Meter - Use one of these:

(a) Bonding Meter - T477W
Avtron Manufacturing Co.
Cleveland, OH

(b) Bonding Meter - Model M1
(Serial Number A000012 and subsequent)
BCD Electronics Ltd.
Vancouver, Canada

C. Prepare for the Procedure

(1) Remove the left or right surge tank access door, 542AB or 642AB (AMM 28-11-03/401).

D. Electrical Bonding Measurement

(1) Measure the electrical bonding resistance between the surge tank pressure relief valve and the access door (SWPM 20-20-00).

MECH	INSP

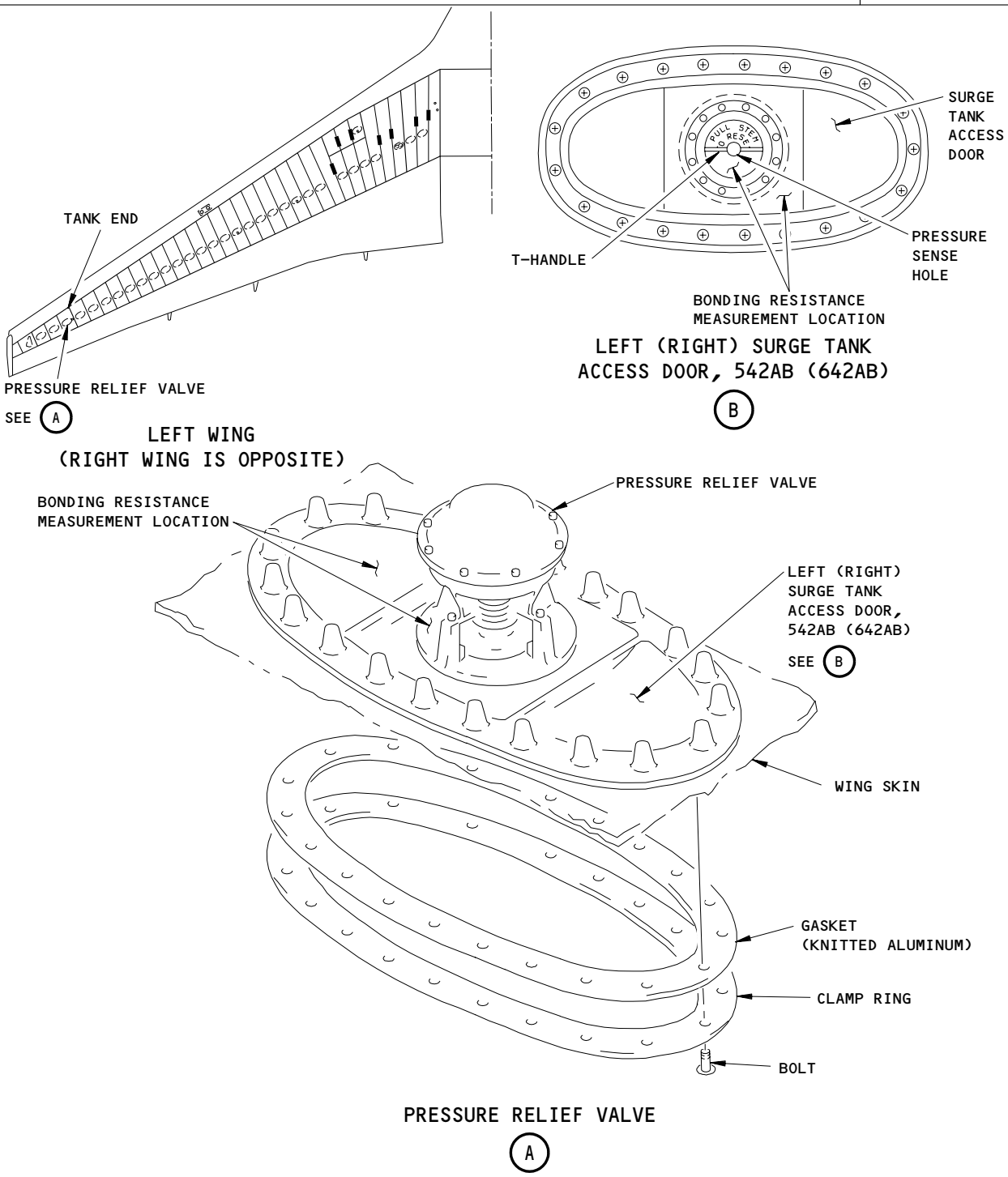
(a) Make sure the electrical bonding resistance is 0.010 ohm (10 milliohms) or less.

(2) Measure the electrical bonding resistance between the surge tank access door and the poppet face (SWPM 20-20-00).

(a) Make sure the electrical bonding resistance is 1.0 ohm (1000 milliohms) or less.

E. Put the Airplane Back to Its Usual Condition

(1) Install the left or right surge tank access door, 542AB or 642AB (AMM 28-11-03/401).



Surge Tank Pressure Relief Valve Inspection
Figure 601

STATION		BOEING CARD NO.
TAIL NO.	SAS BOEING 767 TASK CARD	28-021-04
DATE		AIRLINE CARD NO.

SKILL	WORK AREA	RELATED TASK	INTERVAL	PHASE	MPD REV	TASK CARD REVISION
AIRPL	R WING TANK		8C	24896		AUG 22/08

TASK	TITLE	STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE	APPLICABILITY ENGINE
FUNCTIONAL	SURGE TANK PRESSURE RELIEF VALVE-R		ALL	ALL

ZONES	ACCESS PANELS
642	642AB

MECH	INSP	MPD ITEM NUMBER

FUNCTIONALLY CHECK (RESISTANCE MEASUREMENT) THE BONDING BETWEEN THE PRESSURE RELIEF VALVES AND THE STRUCTURE (SFAR 88). 28-13-04-6A

1. Pressure Relief Valve - Bonding Resistance Check (Fig. 601)

A. References

(1) AMM 28-11-03/401, Surge Tank Access Door

(2) SWPM 20-20-00, Electrical Bonds and Grounds

B. Equipment

(1) Bonding Meter - Use one of these:

(a) Bonding Meter - T477W
Avtron Manufacturing Co.
Cleveland, OH

(b) Bonding Meter - Model M1
(Serial Number A000012 and subsequent)
BCD Electronics Ltd.
Vancouver, Canada

C. Prepare for the Procedure

(1) Remove the left or right surge tank access door, 542AB or 642AB (AMM 28-11-03/401).

D. Electrical Bonding Measurement

(1) Measure the electrical bonding resistance between the surge tank pressure relief valve and the access door (SWPM 20-20-00).

MECH	INSP

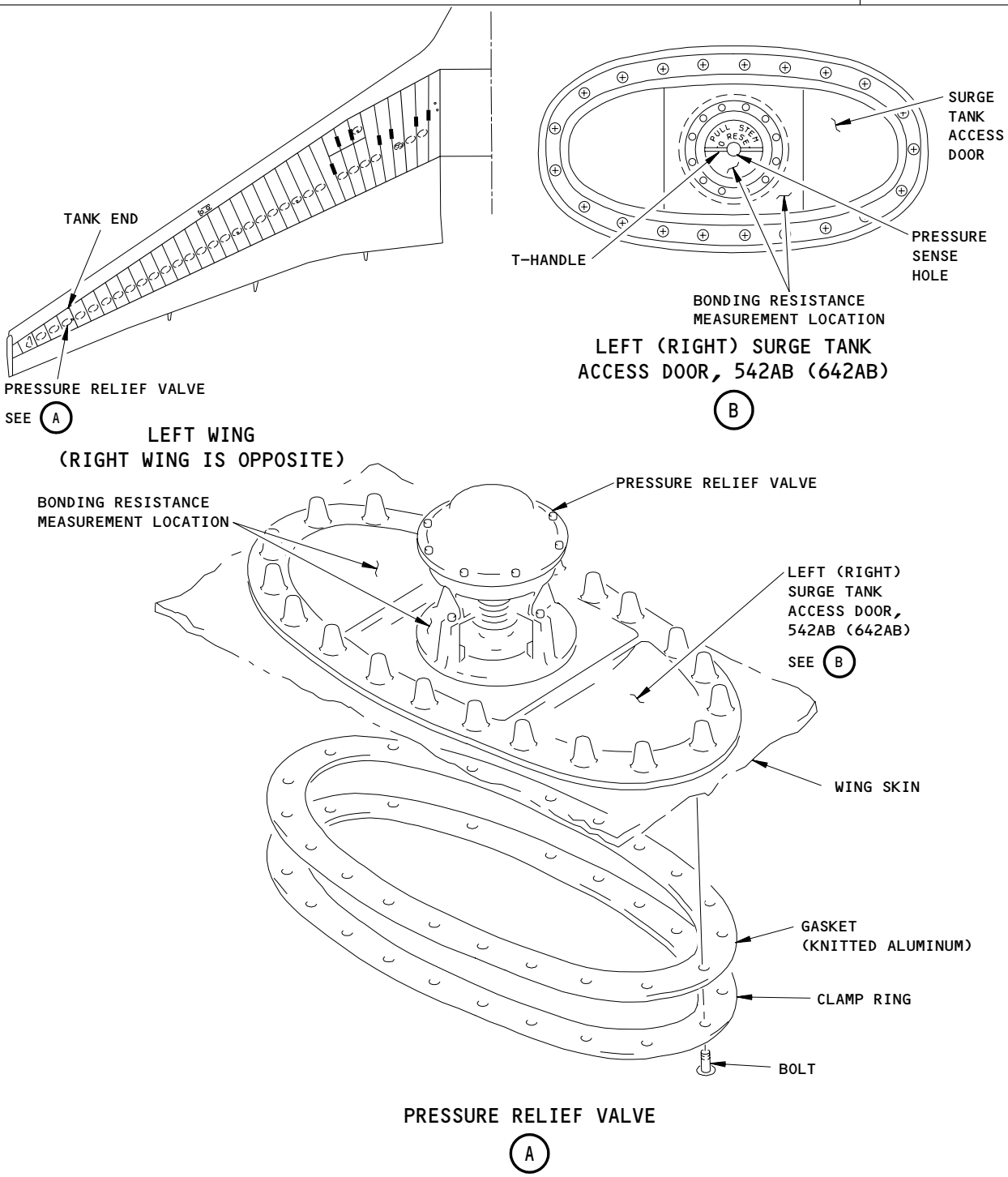
(a) Make sure the electrical bonding resistance is 0.010 ohm (10 milliohms) or less.

(2) Measure the electrical bonding resistance between the surge tank access door and the poppet face (SWPM 20-20-00).

(a) Make sure the electrical bonding resistance is 1.0 ohm (1000 milliohms) or less.

E. Put the Airplane Back to Its Usual Condition

(1) Install the left or right surge tank access door, 542AB or 642AB (AMM 28-11-03/401).



Surge Tank Pressure Relief Valve Inspection
Figure 601

STATION		BOEING CARD NO.
TAIL NO.	SAS BOEING 767 TASK CARD	28-022-01
DATE		AIRLINE CARD NO.

SKILL	WORK AREA	RELATED TASK	INTERVAL	PHASE	MPD REV	TASK CARD REVISION
AIRPL	L WING TE		8C	24896		AUG 22/08

TASK	TITLE	STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE	APPLICABILITY ENGINE
FUNCTIONAL	FUELING SHUTOFF VALVES L/H WING		ALL	ALL

ZONES	ACCESS PANELS
551 561	551TB 561FB

MECH	INSP	MPD ITEM NUMBER
		28-21-12-6A

FUNCTIONALLY CHECK (RESISTANCE MEASUREMENT) THE BONDING BETWEEN THE FUELING SHUTOFF VALVES (MOV) AND THE STRUCTURE TO ENSURE IT IS WITHIN SERVICE LIMITS (SFAR 88).

1. Fueling Shutoff Valve - Bonding Resistance Check (Fig. 601)

A. References

(1) AMM 06-44-00/201, Wing Access Doors and Panels

(2) AMM 27-51-00/201, Flight Controls

(3) AMM 32-00-15/201, Landing Gear Door Locks

(4) AMM 32-00-20/201, Landing Gear Downlocks

(5) SWPM 20-20-00, Electrical Bonds and Grounds

B. Equipment

(1) Bonding Meter - Use one of these:

(a) Bonding Meter - T477W
Avtron Manufacturing Co.
Cleveland, OH

(b) Bonding Meter - Model M1
(Serial Number A000012 and subsequent)
BCD Electronics Ltd.
Vancouver, Canada

C. Prepare for the Procedure

MECH | INSP

WARNING: DO THE DEACTIVATION OF THE FLAP SYSTEM PROCEDURE. FAILURE TO DO THE DEACTIVATION OF THE FLAP SYSTEM PROCEDURE COULD CAUSE INJURY OR DAMAGE.

(1) Do the deactivation of the flap system procedure for the trailing edge flaps (AMM 27-51-00/201).

(2) Open this circuit breaker on the APU external power panel, P34, and attach DO-NOT-CLOSE tag:

(a) 34L5, FLNG VALVES

(3) Open this circuit breaker on the main power distribution panel, P6, and attach DO-NOT-CLOSE tag:

(a) 6E6, FUELING VALVES

(4) To get access to the control unit in the left or right auxiliary fuel tank, do the steps that follow:

(a) Make sure the downlocks for the nose and main landing gear are installed (AMM 32-00-20/201).

WARNING: REFER TO AMM 32-00-15/201 FOR DOOR LOCK INSTALLATION PROCEDURE. IF THE MAIN GEAR DOORS MOVE QUICKLY, INJURY OR DAMAGE CAN OCCUR.

(b) Open the applicable left or right main gear door and install the door lock (AMM 32-00-15/201).

(5) For the control unit in the left inboard main fuel tank, open the skin panel, 551TB (AMM 06-44-00/201).

(6) For the control unit in the right inboard main fuel tank, open the skin panel, 651TB (AMM 06-44-00/201).

(7) For the control unit in the left outboard main fuel tank, open the skin panel, 561FB (AMM 06-44-00/201).

(8) For the control unit in the right outboard main fuel tank, open the skin panel, 661FB (AMM 06-44-00/201).

(9) Disconnect the electrical connector from the control unit.

MECH | INSP

D. Electrical Bonding Measurement

(1) Measure the electrical bonding resistance between the fueling shutoff valve control unit and the rear spar (SWPM 20-20-00).

(a) Make sure the electrical bonding resistance is 0.008 ohm (8 milliohms) or less.

E. Put the Airplane Back to Its Usual Condition

(1) Connect the electrical connector to the control unit.

(2) Remove the DO-NOT-CLOSE tag and close this circuit breaker on the P34 panel:

(a) 34L5, FLNG VALVES

(3) Remove the DO-NOT-CLOSE tag and close this circuit breaker on the P6 panel:

(a) 6E6, FUELING VALVES

(4) Refuel the applicable fuel tank (AMM 12-11-01/301) and make sure the fueling shutoff valve operates correctly.

(5) Make sure there are no fuel leaks at the control unit of the fueling shutoff valve.

(6) For the control unit in the left inboard main fuel tank, close the skin panel, 551TB (AMM 06-44-00/201).

(7) For the control unit in the right inboard main fuel tank, close the skin panel 651TB (AMM 06-44-00/201).

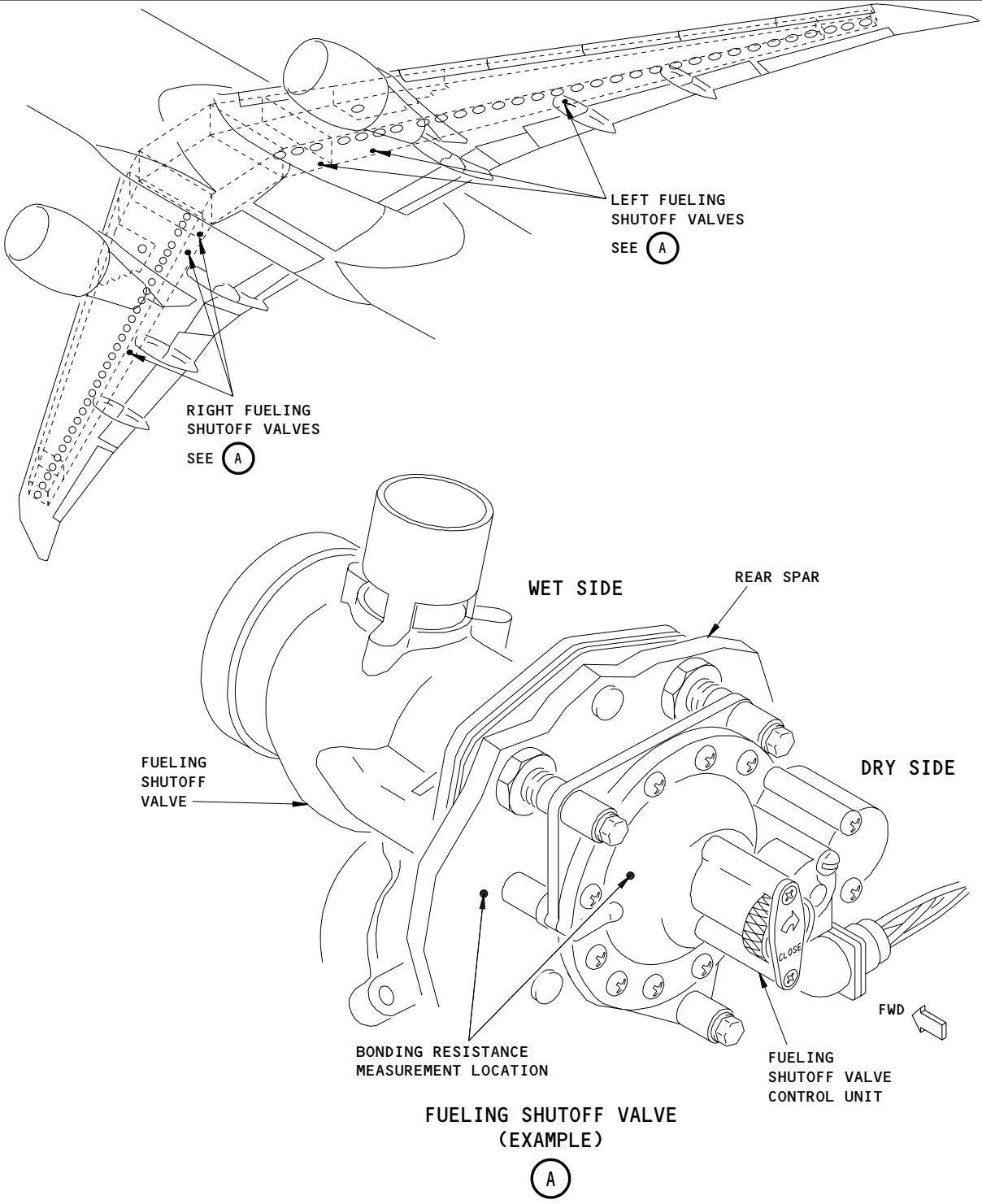
(8) For the control unit in the left outboard main fuel tank, close the skin panel, 561FB (AMM 06-44-00/201).

(9) For the control unit in the right outboard main fuel tank, close the skin panel, 661FB (AMM 06-44-00/201).

WARNING: USE THE PROCEDURE IN AMM 32-00-15/201 TO REMOVE THE DOOR LOCKS. THE DOORS OPEN AND CLOSE QUICKLY AND CAN CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.

MECH	INSP

(10) For the control unit in the left or right auxiliary fuel tank, remove the door locks from the main gear doors and close the doors (AMM 32-00-15/201).



FUELING SHUTOFF VALVE
(EXAMPLE)

A

Fueling Shutoff Valve Control Unit Inspection
Figure 601

STATION		BOEING CARD NO.
TAIL NO.	SAS BOEING 767 TASK CARD	28-022-02
DATE		AIRLINE CARD NO.

SKILL	WORK AREA	RELATED TASK	INTERVAL	PHASE	MPD REV	TASK CARD REVISION
AIRPL	R WING TE		8C	24896		AUG 22/08

TASK	TITLE	STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE	APPLICABILITY ENGINE
FUNCTIONAL	FUELING SHUTOFF VALVES R/H WING		ALL	ALL

ZONES	ACCESS PANELS
651 661	651TB 661FB

MECH	INSP	MPD ITEM NUMBER
		28-21-12-6A

FUNCTIONALLY CHECK (RESISTANCE MEASUREMENT) THE BONDING BETWEEN THE FUELING SHUTOFF VALVES (MOV) AND THE STRUCTURE TO ENSURE IT IS WITHIN SERVICE LIMITS (SFAR 88).

1. Fueling Shutoff Valve - Bonding Resistance Check (Fig. 601)

   A. References

      (1) AMM 06-44-00/201, Wing Access Doors and Panels

      (2) AMM 27-51-00/201, Flight Controls

      (3) AMM 32-00-15/201, Landing Gear Door Locks

      (4) AMM 32-00-20/201, Landing Gear Downlocks

      (5) SWPM 20-20-00, Electrical Bonds and Grounds

   B. Equipment

      (1) Bonding Meter - Use one of these:

         (a) Bonding Meter - T477W
             Avtron Manufacturing Co.
             Cleveland, OH

         (b) Bonding Meter - Model M1
             (Serial Number A000012 and subsequent)
             BCD Electronics Ltd.
             Vancouver, Canada

   C. Prepare for the Procedure

MECH | INSP

WARNING: DO THE DEACTIVATION OF THE FLAP SYSTEM PROCEDURE. FAILURE TO DO THE DEACTIVATION OF THE FLAP SYSTEM PROCEDURE COULD CAUSE INJURY OR DAMAGE.

(1) Do the deactivation of the flap system procedure for the trailing edge flaps (AMM 27-51-00/201).

(2) Open this circuit breaker on the APU external power panel, P34, and attach DO-NOT-CLOSE tag:

(a) 34L5, FLNG VALVES

(3) Open this circuit breaker on the main power distribution panel, P6, and attach DO-NOT-CLOSE tag:

(a) 6E6, FUELING VALVES

(4) To get access to the control unit in the left or right auxiliary fuel tank, do the steps that follow:

(a) Make sure the downlocks for the nose and main landing gear are installed (AMM 32-00-20/201).

WARNING: REFER TO AMM 32-00-15/201 FOR DOOR LOCK INSTALLATION PROCEDURE. IF THE MAIN GEAR DOORS MOVE QUICKLY, INJURY OR DAMAGE CAN OCCUR.

(b) Open the applicable left or right main gear door and install the door lock (AMM 32-00-15/201).

(5) For the control unit in the left inboard main fuel tank, open the skin panel, 551TB (AMM 06-44-00/201).

(6) For the control unit in the right inboard main fuel tank, open the skin panel, 651TB (AMM 06-44-00/201).

(7) For the control unit in the left outboard main fuel tank, open the skin panel, 561FB (AMM 06-44-00/201).

(8) For the control unit in the right outboard main fuel tank, open the skin panel, 661FB (AMM 06-44-00/201).

(9) Disconnect the electrical connector from the control unit.

MECH | INSP

D. Electrical Bonding Measurement

(1) Measure the electrical bonding resistance between the fueling shutoff valve control unit and the rear spar (SWPM 20-20-00).

(a) Make sure the electrical bonding resistance is 0.008 ohm (8 milliohms) or less.

E. Put the Airplane Back to Its Usual Condition

(1) Connect the electrical connector to the control unit.

(2) Remove the DO-NOT-CLOSE tag and close this circuit breaker on the P34 panel:

(a) 34L5, FLNG VALVES

(3) Remove the DO-NOT-CLOSE tag and close this circuit breaker on the P6 panel:

(a) 6E6, FUELING VALVES

(4) Refuel the applicable fuel tank (AMM 12-11-01/301) and make sure the fueling shutoff valve operates correctly.

(5) Make sure there are no fuel leaks at the control unit of the fueling shutoff valve.

(6) For the control unit in the left inboard main fuel tank, close the skin panel, 551TB (AMM 06-44-00/201).

(7) For the control unit in the right inboard main fuel tank, close the skin panel 651TB (AMM 06-44-00/201).

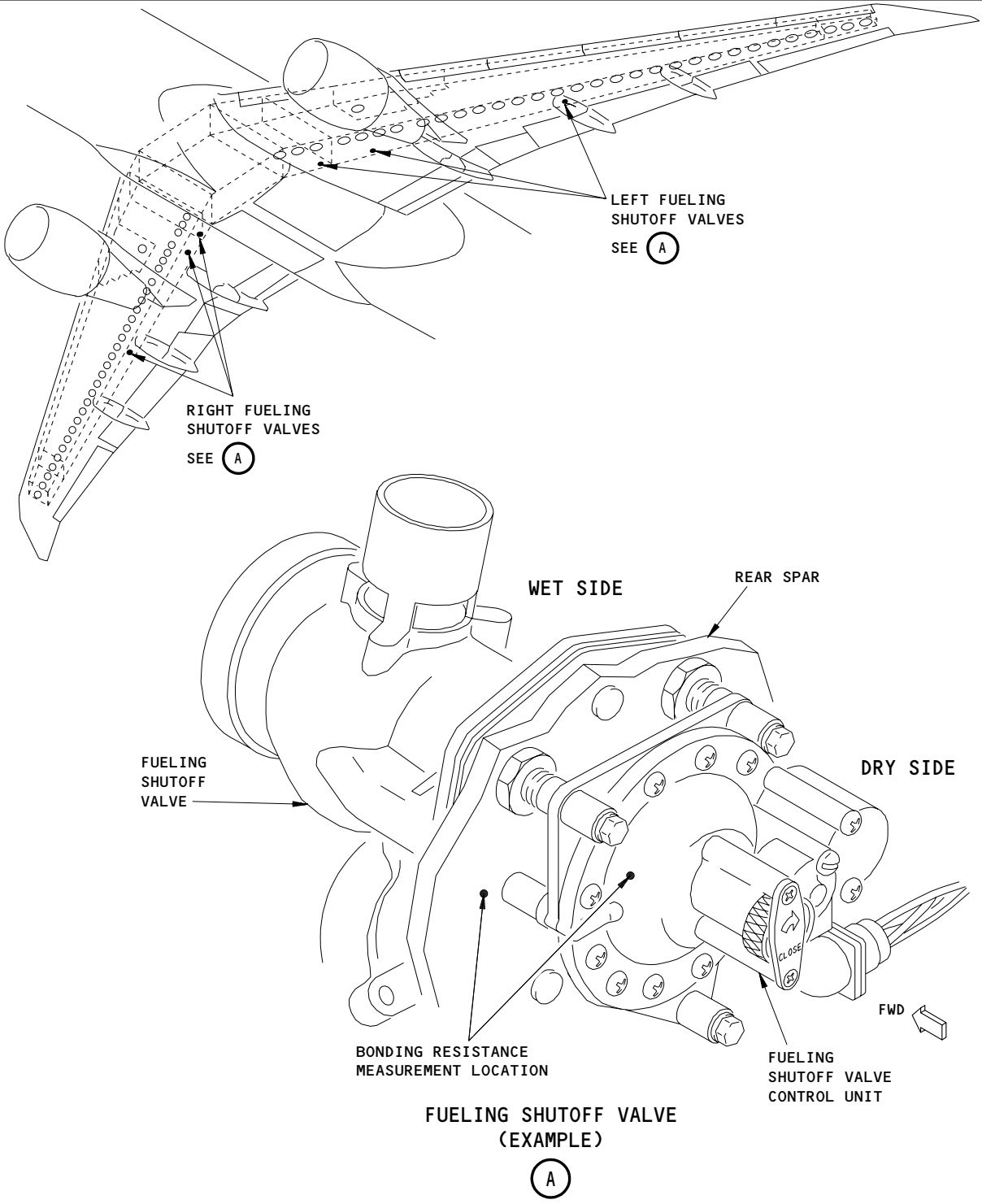
(8) For the control unit in the left outboard main fuel tank, close the skin panel, 561FB (AMM 06-44-00/201).

(9) For the control unit in the right outboard main fuel tank, close the skin panel, 661FB (AMM 06-44-00/201).

WARNING: USE THE PROCEDURE IN AMM 32-00-15/201 TO REMOVE THE DOOR LOCKS. THE DOORS OPEN AND CLOSE QUICKLY AND CAN CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.

MECH	INSP

(10) For the control unit in the left or right auxiliary fuel tank, remove the door locks from the main gear doors and close the doors (AMM 32-00-15/201).



Fueling Shutoff Valve Control Unit Inspection
Figure 601

STATION		BOEING CARD NO.
TAIL NO.	SAS BOEING 767 TASK CARD	28-023-01
DATE		AIRLINE CARD NO.

SKILL	WORK AREA	RELATED TASK	INTERVAL	PHASE	MPD REV	TASK CARD REVISION
AIRPL	L WING LE		8C	24896		AUG 22/08

TASK	TITLE	STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE	APPLICABILITY ENGINE
FUNCTIONAL	FUELING ADAPTER L/H WING		ALL	ALL

ZONES	ACCESS PANELS
521	521QB

MECH	INSP	MPD ITEM NUMBER

FUNCTIONALLY CHECK (RESISTANCE MEASUREMENT) THE BONDING BETWEEN THE L/H SIDE FUELING ADAPTER AND THE STRUCTURE TO ENSURE IT IS WITHIN IN-SERVICE LIMITS (SFAR 88). 28-21-01-6A

1. Fueling Adapter - Bonding Resistance Check (Fig. 601)

A. References

(1) AMM 06-44-00/201, Wings - Access Doors and Panels

(2) AMM 24-22-00/201, Electrical Power Control

(3) AMM 27-81-00/201, Leading Edge Slat System

(4) SWPM 20-20-00, Electrical Bonds and Grounds

B. Equipment

(1) Bonding Meter - Use one of these:

(a) Bonding Meter - T477W
Avtron Manufacturing Co.
Cleveland, OH

(b) Bonding Meter - Model M1
(Serial Number A000012 and subsequent)
BCD Electronics Ltd.
Vancouver, Canada

C. Prepare for the Procedure

(1) Make sure the airplane is grounded to an approved ground.

(2) Remove electrical power from the airplane (AMM 24-22-00/201).

MECH | INSP

WARNING: DO THE DEACTIVATION PROCEDURE OF THE LEADING EDGE SLAT (AMM 27-81-00). IF THE LEADING EDGE SLAT OPERATES ACCIDENTALLY, IT CAN CAUSE INJURY.

(3) Do the deactivation procedure of the leading edge slats (AMM 27-81-00/201).

(4) Open the fueling station door, 521QB (AMM 06-44-00/201).

D. Electrical Bonding Measurement

(1) Measure the electrical bonding resistance between the fueling adapter and the structure (SWPM 20-20-00).

(a) Make sure the electrical bonding resistance is 0.010 ohm (10 milliohms) or less.

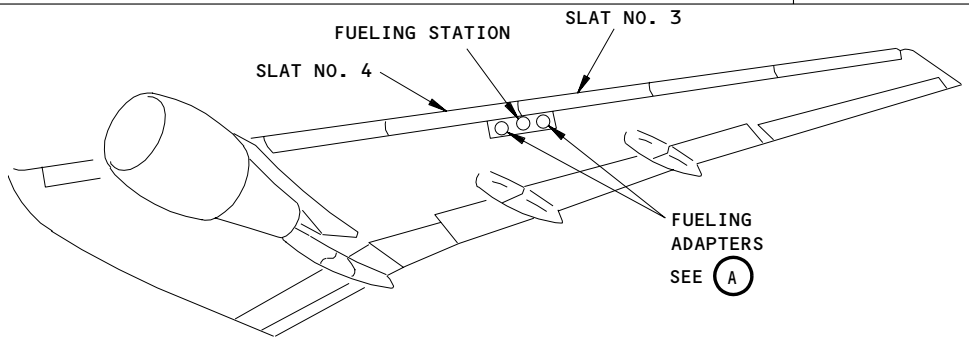
E. Put the Airplane Back to Its Usual Condition

(1) Close the fueling station door, 521QB (AMM 06-44-00/201).

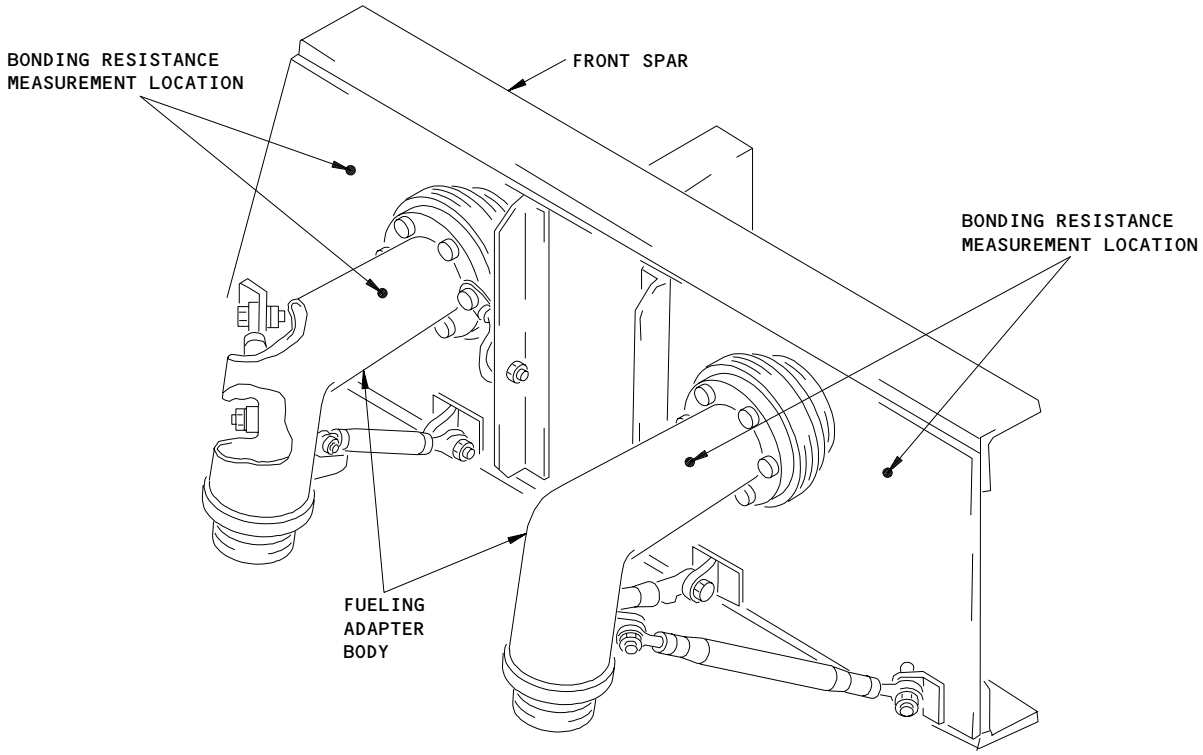
WARNING: MAKE SURE NO PERSONS ARE IN THE SLAT AREA WHEN YOU DO THE ACTIVATION PROCEDURE OF THE LEADING EDGE SLAT. IF PERSONS ARE IN THE SLAT AREA, INJURY CAN OCCUR.

(2) Do the activation procedure of the leading edge slat (AMM 27-81-00/201).

(3) Supply electrical power to the airplane (AMM 24-22-00/201).



LEFT WING
(RIGHT WING IS OPPOSITE)



FUELING ADAPTERS
A

Fueling Adapter and Poppet Assembly Inspection
Figure 601

STATION		BOEING CARD NO.
TAIL NO.	SAS BOEING 767 TASK CARD	28-025-01
DATE		AIRLINE CARD NO.

SKILL	WORK AREA	RELATED TASK	INTERVAL	PHASE	MPD REV	TASK CARD REVISION
AIRPL	L MAIN TANK		NOTE	99XXX		AUG 22/08

TASK	TITLE	STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE	APPLICABILITY ENGINE
CHECK/INSP	LEFT MAIN TANK FUEL BOOST PUMPS		ALL	ALL

ZONES	ACCESS PANELS
532 551	532AB

MECH	INSP	MPD ITEM NUMBER

INSPECT (DETAILED) THE LEFT MAIN TANK FORWARD/AFT FUEL BOOST PUMP WIRING AND WIRE SLEEVE (SFAR 88). 28-22-15-6A

INTERVAL NOTE: 30,000 FLIGHT CYCLES/60,000 FLIGHT HOURS, WHICHEVER COMES FIRST.

1. Inspect the Boost, Override/Jettison Pump Wiring (Fig. 601)

A. Consumable Materials

(1) Teflon Inner Sleeve for the main tank boost pumps - TFE-2X, Standard Wall Size #6, also (M23053/12-218C).

(2) Teflon Outer Sleeve for the main tank boost pumps - TFE-2X, Standard Wall Size #2, also (M23053/12-223C recommended), TFE-2XTW, Thin Wall (M23053/12-327C optional).

(3) Teflon Inner Sleeve for the override/jettison pumps - TFE-2X, Standard Wall Size #4, also (M23053/12-221C)

(4) Teflon Outer Sleeve for the override/jettison pumps - TFE-2X, Standard Wall Size #0, also (M23053/12-225C, -226C, -227C recommended), TFE-2XTW, Thin Wall (M23053/12-329C optional).

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Phone: (206) 575-4994
Fax: (206) 575-6920

B. References

(1) AMM 20-10-21/601, Electrical Bonding

(2) AMM 28-11-01/401, Main Tank Access Panels

MECH | INSP

(3) AMM 28-11-02/401, Auxiliary Tank Access Panels

(4) AMM 28-22-00/501, Engine Fuel Feed System

(5) AMM 28-31-00/501, Fuel Jettison System

(6) SWPM 20-10-13

(7) SWPM 20-10-18

C. Access

(1) Location Zones

531	Center Auxiliary Tank (Left)
532	Main Tank - Inboard of Rib No. 10 (Left)
551	Rear Spar to MLG Support Beam (Left)
631	Center Auxiliary Tank (Right)
632	Main Tank - Inboard of Rib No. 10 (Right)
651	Rear Spar to MLG Support Beam (Right)

(2) Access Panels

531AB	Access Cover (Left)
532AB	Access Cover (Left)
631AB	Access Cover (Right)
632AB	Access Cover (Right)

D. Prepare for the Boost, Override/Jettison Pump Wiring Inspection

(1) If you will remove a main tank boost pump wire bundle, remove the applicable access cover 532AB or 632AB (AMM 28-11-01/401).

(2) If you will remove an auxiliary tank override/jettison pump wire bundle, remove the applicable access cover 531AB or 631AB (AMM 28-11-02/401).

(3) If you will remove a main tank boost pump wire bundle, make sure the applicable circuit breakers are open:

(a) Main Power Distribution Panel, P6:

1) 6G24, L FWD FUEL BOOST PUMP

2) 6G15, L AFT FUEL BOOST PUMP

3) 6G18, R FWD FUEL BOOST PUMP

MECH	INSP

4) 6G21, R AFT FUEL BOOST PUMP

(b) Overhead Circuit Breaker Panel, P11:

1) 11M16, FUEL PUMPS R FWD/L AFT

2) 11M25, FUEL PUMPS L FWD/R AFT

(4) If you will remove an auxiliary tank override/jettison pump wire bundle, make sure the applicable circuit breakers are open:

(a) Main Power Distribution Panel, P6:

1) 6F15, L FUEL OVRD PUMP

2) 6F21, R FUEL OVRD PUMP

(b) Overhead Circuit Breaker Panel, P11:

1) 11M15, L CTR FUEL PUMPS

2) 11M24, R CTR FUEL PUMPS

(c) If the fuel jettison pumps are installed, make sure the applicable circuit breakers are open:

1) Overhead Circuit Breaker Panel, P11:

a) 11M13, L FUEL JTSN CONT

b) 11M22, R FUEL JTSN CONT

2) Miscellaneous Electrical Equipment Panel, P36:

a) 36F4 or 36G7, L FUEL JETT PUMP

3) Miscellaneous Electrical Equipment Panel, P37:

a) 37F4 or 37G4, R FUEL JETT PUMP

(5) Install temporary indentification tags to the electrical connector(s) in the pump housing.

(6) Disconnect the electrical connector from the applicable boost, override/jettison pump.

MECH | INSP

(7) Make sure the inner and outer Teflon sleeves extend out the conduit and are attached under the electrical connector backshell.

NOTE: If the inner and outer Teflon sleeves are not long enough to extend through the electrical connector backshell, then the sleeve(s) are too short and must be replaced.

(8) Remove the wire bundle clamp inside the boost, override/jettison pump housing.

(9) Temporarily wrap and attach the connector(s) with a protective sheet of plastic to prevent damage to the conduit.

(10) Attach a cord to the wire bundle at the boost pump end.

NOTE: The cord length must be sufficient to go through the conduit from the main tank fuel boost pump to the rear spar. You will use the cord to pull the wiring back through the conduit.

(11) Go to the exit point of the wire bundle at the rear spar.

(12) Make sure the inner and outer Teflon sleeves extend out of the conduit and are attached under the wire bundle clamp at the rear spar.

NOTE: If the inner and outer Teflon sleeves are not long enough to extend through the wire bundle clamp, then the sleeves are too short and must be replaced.

(13) Remove the wire bundle clamp at the rear spar.

(14) Carefully pull the wiring through the conduit.

NOTE: It is possible for the boost pump connector to go through the conduit.

E. Inspect the Teflon Sleeves

(1) Make sure the wiring is covered with inner and outer Teflon sleeves, which are each one continous piece all the way through the conduit.

MECH | INSP

(2) Examine the Teflon sleeves for ties:

NOTE: Ties are not permitted at any other location except the ends of the sleeves. Ties attached at locations along the length of the sleeves can damage the sleeves and the wiring.

(a) Make sure ties are attached at each end of the Teflon sleeves.

(b) Make sure ties are not installed at other locations on top of the Teflon sleeves.

(3) Inspect the Teflon sleeves for this type of damage:

(a) Worn or chafed areas

(b) Cuts

(c) Splits

(d) Small pin size holes (possible wiring arcing damage)

(e) Melting or discoloration caused by too much heat.

(4) If the Teflon sleeves are not long enough (or not continuous), are damaged or have ties installed at locations other than the ends, then do these steps:

(a) Remove and discard the inner and outer Teflon sleeves.

(b) Do this procedure: Inspect the Boost, Override/Jettison Pump Wiring.

(c) After the inspection, replace the Teflon sleeves with two continuous Teflon sleeves (SWPM 20-10-18).

(5) If the inner and outer Teflon sleeves are satisfactory, then do this procedure: Install the Boost, Override/Jettison Pump Wiring.

NOTE: The inspection is complete.

F. Inspect the Boost, Override/Jettison Pump Wiring

(1) Make sure there are no ties on the wiring.

(2) Inspect the wiring for this type of damage:

MECH | INSP

(a) Worn or chafed wiring

(b) Physical damage

(c) Damage to the wiring under the ties (if they were present)

(d) Wire splices (no wire splices are permitted in the conduit)

(e) Discoloration from too much heat

(f) Wire damage caused by arcing.

NOTE: Arcing can show as very small blackened holes in the insulation or as deformation or pitting of the wire. Worn areas with a black material around the edge is not a sign of arcing (black material is aluminum oxide).

(3) If the wiring is chafed, physically damaged or there is a wire splice, then do these steps:

(a) Repair or replace the damaged wiring (SWPM 20-10-13).

(b) Replace any wiring that has a wire splice (in the conduit).

(c) After the repairs, do this procedure: Install the Boost, Override/Jettison Pump Wiring.

(4) If the wiring has discoloration from too much heat or electrical arcing, then do these steps:

(a) Repair or replace all damaged wiring (SWPM 20-10-13).

(b) Replace the inner and outer Teflon sleeves on the wiring (SWPM 20-10-18).

(c) Do this task: Inspect the Boost, Override/Jettison Pump Conduit.

NOTE: You must replace the pump conduit. If however, the conduit passes the inspection, then it is not necessary to replace the conduit immediately.

(5) If the wiring is satisfactory, then do this procedure: Install the Boost, Override/Jettison Pump Wiring.

MECH	INSP

G. Install the Boost, Override/Jettison Pump Wiring

(1) Install the inner and outer Teflon sleeves on the wiring for the boost, override/jettison pump.

(a) Make sure the inner and outer Teflon sleeves are each one continuous piece all the way through the conduit.

(b) Make sure there are no splices or ties on the wiring under the Teflon sleeves.

(c) Install ties only at the end of the Teflon sleeves.

(d) Make sure the inner and outer Teflon sleeves extend to the first breakout after the conduit exit point on the rear spar.

(2) Tie the shield ground wire to the pump power wires before you put the wiring into the conduit.

(3) Temporarily wrap and attach each electrical connector with a protective sheet of plastic to prevent damage to the conduit.

(4) Use the cord at the pump location to pull the wiring through the conduit.

(5) Remove the plastic sheets from the electrical connectors.

(6) Remove the tie from the shield ground wire.

(7) Install the clamps and fasteners at each end of the conduit.

NOTE: Both sleeves must go through the clamps.

(8) Inspect the Teflon sleeves to make sure both sleeves are visible at each end of the wiring installation.

(9) Cut the installed Teflon sleeves just after the clamp or at the shield termination on the pump end (View B).

(10) Install inner and outer Teflon sleeves on the pump power wires from the ground shield termination or the clamp to the electrical connector.

(11) Make sure the inner and outer Teflon sleeves are under the electrical connector backshell.

MECH	INSP

(12) Install the pump shield ground wire (Views C and D).

(13) Make sure the bonding resistance between the wire shield and the structure is 0.005 ohm (5 millohms) or less (AMM 20-10-21/601).

(14) Connect the electrical connector to the pump.

(15) Remove the temporary identication tags from the electrical connector(s).

(16) If you installed a main tank boost pump wire bundle, make sure the applicable circuit breakers are closed:

(a) Main Power Distribution Panel, P6:

1) 6G24, L FWD FUEL BOOST PUMP

2) 6G15, L AFT FUEL BOOST PUMP

3) 6G18, R FWD FUEL BOOST PUMP

4) 6G21, R AFT FUEL BOOST PUMP

(b) Overhead Circuit Breaker Panel, P11:

1) 11M16, FUEL PUMPS R FWD/L AFT

2) 11M25, FUEL PUMPS L FWD/R AFT

(17) If you installed an auxiliary tank override/jettison pump wire bundle, make sure the applicable circuit breakers are closed:

(a) Main Power Distribution Panel, P6:

1) 6F15, L FUEL OVRD PUMP

2) 6F21, R FUEL OVRD PUMP

(b) Overhead Circuit Breaker Panel, P11:

1) 11M15, L CTR FUEL PUMPS

2) 11M24, R CTR FUEL PUMPS

(c) If the fuel jettison pumps are installed, make sure the applicable circuit breakers are closed:

MECH | INSP

1) Overhead Circuit Breaker Panel, P11:

a) 11M13, L FUEL JTSN CONT

b) 11M22, R FUEL JTSN CONT

2) Miscellaneous Electrical Equipment Panel, P36:

a) 36F4 or 36G7, L FUEL JETT PUMP

3) Miscellaneous Electrical Equipment Panel, P37:

a) 37F4 or 37G4, R FUEL JETT PUMP

(18) If you installed a jettison pump wire bundle, do the Phase Check of the Jettison Pump Wiring procedure (AMM 28-31-00/501).

(19) If you installed a fuel boost or override pump wire bundle, do the Phase Check of the Fuel Pump Wiring procedure (AMM 28-22-00/501).

(20) If you installed a main tank boost pump wire bundle, install the applicable access cover 532AB or 632AB (AMM 28-11-01/401).

(21) If you installed an auxiliary tank override/jettison pump wire bundle, install the applicable access cover 531AB or 631AB (AMM 28-11-02/401).

(22) Do an operational test for the applicable boost, override/jettison pump(s) (AMM 28-22-00/501).

2. Inspect the Boost, Override/Jettison Pump Conduit (Fig. 601)

A. References

(1) AMM 12-11-01/301, Fuel Tank Pressure Fueling

(2) AMM 28-11-00/601, Fuel Tanks

(3) AMM 28-11-01/401, Main Tank Access Panels

(4) AMM 28-11-02/401, Auxiliary Tank Access Panels

(5) AMM 28-22-15/401, Boost, Override/Jettison Wire Conduit

B. Access

MECH | INSP

(1) Location Zones
531 Center Auxiliary Tank (Left)
532 Main Tank - Inboard of Rib No. 10 (Left)
551 Rear Spar to MLG Support Beam (Left)
631 Center Auxiliary Tank (Right)
632 Main Tank - Inboard of Rib No. 10 (Right)
651 Rear Spar to MLG Support Beam (Right)

(2) Access Panels
531AB Access Cover (Left)
532AB Access Cover (Left)
631AB Access Cover (Right)
632AB Access Cover (Right)

C. Boost, Override/Jettison Pump Conduit Inspection Preparation

(1) If you will inspect a main tank boost pump conduit, remove the applicable access cover 532AB or 632AB (AMM 28-11-01/401).

(2) If you will inspect an auxiliary tank override/jettison pump conduit, remove the applicable access cover 531AB or 631AB (AMM 28-11-02/401).

(3) Make sure the steps to prepare and remove the pump wiring in the conduit in the task: Inspect the Boost, Override/Jettison Pump Wiring, are completed.

D. Inspect the Applicable Boost, Override/Jettison Pump Conduit

(1) Do one of these tests to find if there is a fuel leak in the conduit:

(a) Use the backblowing procedure to do a leak check (AMM 28-11-00/601).

1) Use the necessary fittings to plug one end of the conduit.

2) Find the Internal Leaks.

(b) Pressurize the electrical conduit.

1) Use the necessary fittings to plug one end of the conduit.

2) Connect a pressure gage and air supply to the other end of the conduit.

3) Pressurize the electrical conduit to 20 PSIG.

4) Shut off the air supply and wait 5 minutes to examine the pressure gage.

5) Make sure the pressure has not decreased more than 0.5 PSIG.

(c) Fill the applicable fuel tank with fuel (AMM 12-11-01/301).

1) Wait 5 minutes, make sure there is no fuel leakage at the ends of the conduit.

2) Examine both the end of the electrical conduit at the spar and the end near the fuel pump.

3) Pull a clean cloth through the electrical conduit with a string.

4) Make sure there is no fuel on the cloth.

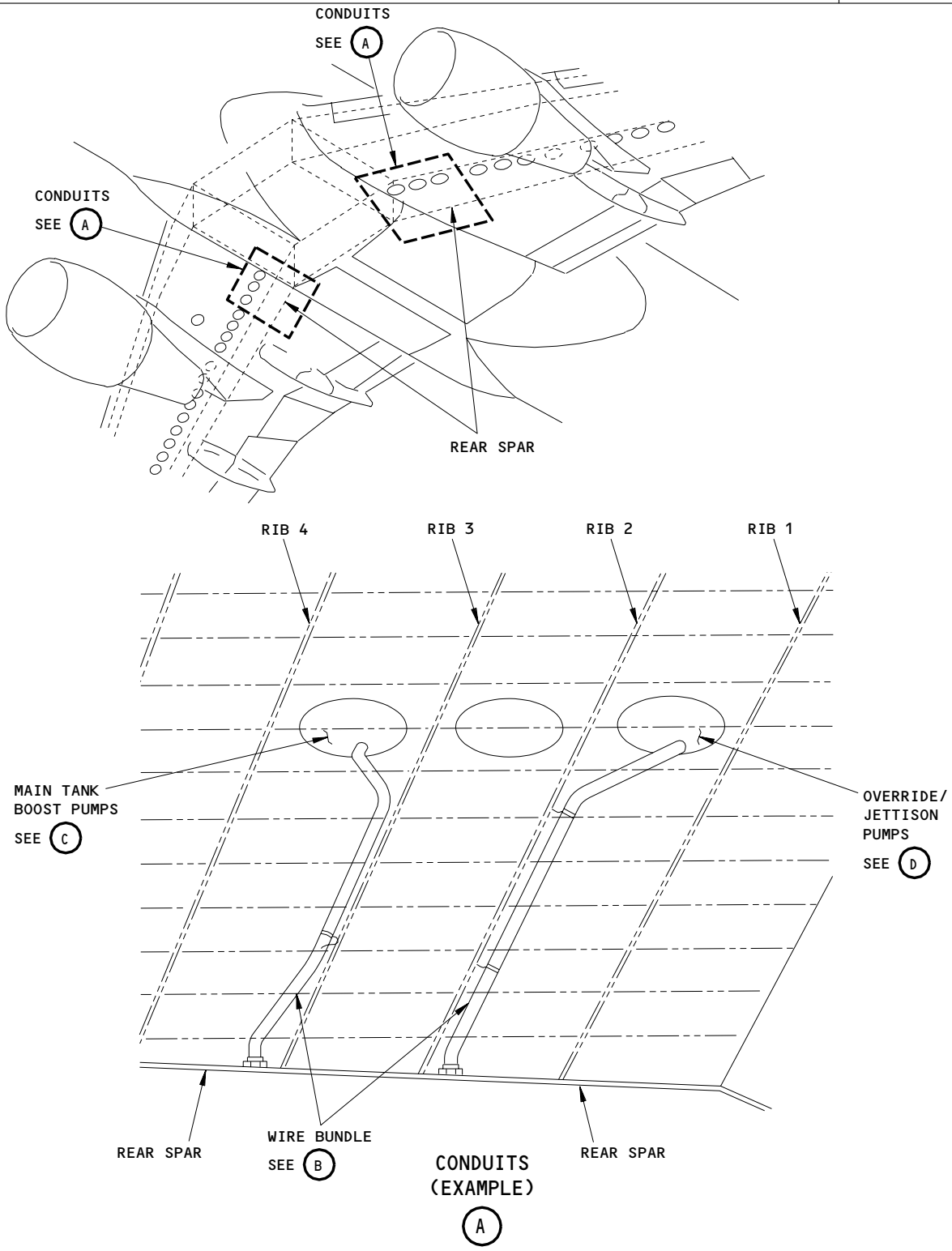
(2) Remove and replace any damaged conduit (AMM 28-22-15/401).

E. Put the Airplane Back to Its Usual Condition

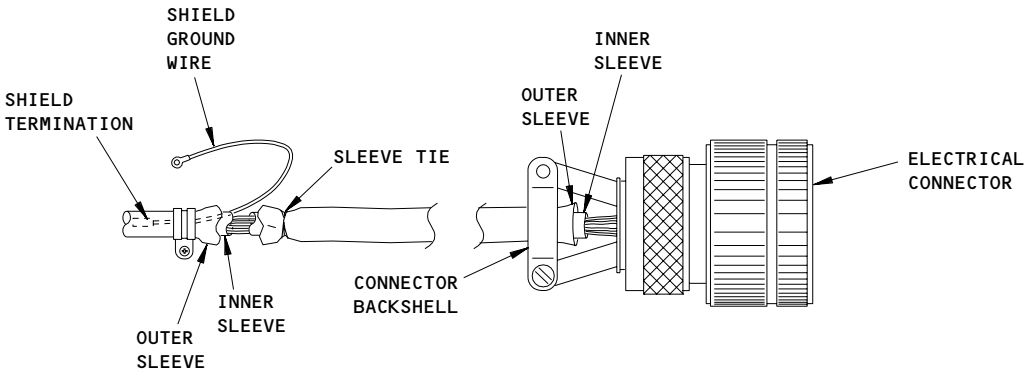
(1) If the conduit is not replaced, make sure the steps to install the pump wiring in the conduit in the task: Inspect the Boost, Override/Jettison Pump Wiring, are completed.

(2) If you inspected a main tank boost pump wire conduit, install the applicable access cover 532AB or 632AB (AMM 28-11-01/401).

(3) If you inspected an auxiliary tank override/jettison pump wire conduit, install the applicable access cover 531AB or 631AB (AMM 28-11-02/401).

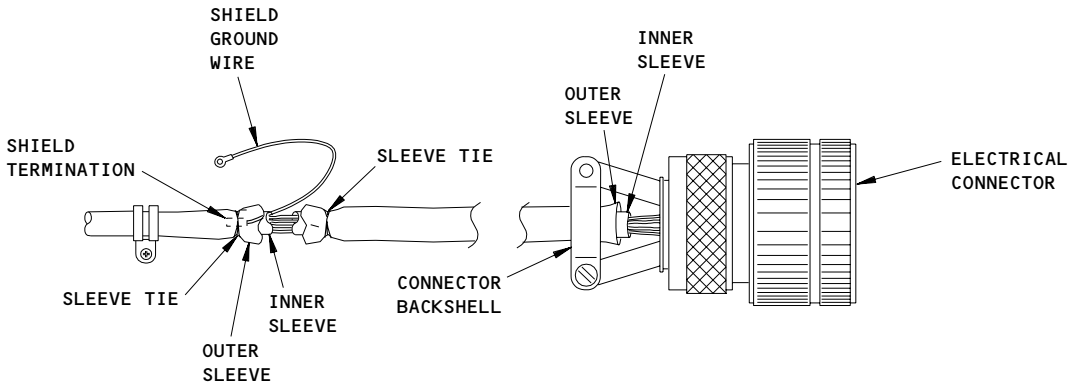


Boost, Override/Jettison Pump Wire Bundle
Figure 601 (Sheet 1)



WIRE BUNDLE
(SHIELD TERMINATION BEFORE CLAMP)

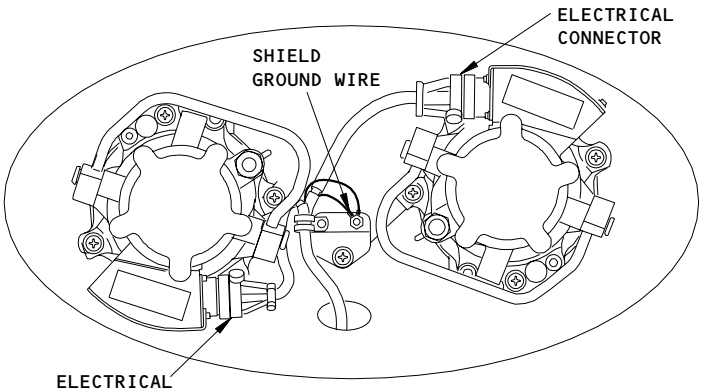
B



WIRE BUNDLE
(SHIELD TERMINATION AFTER CLAMP)

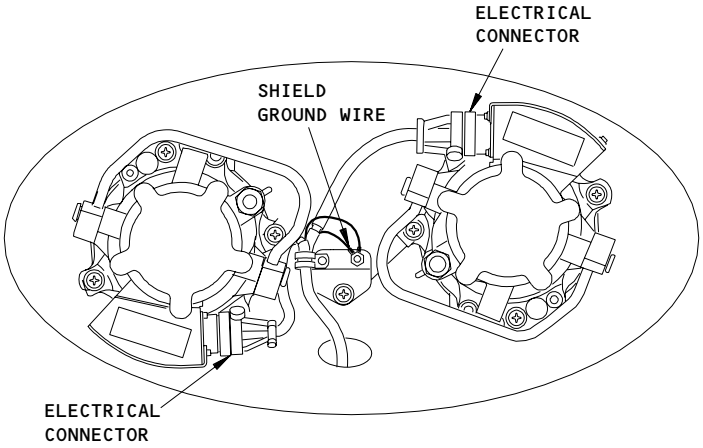
B

Boost, Override/Jettison Pump Wire Bundle
Figure 601 (Sheet 2)



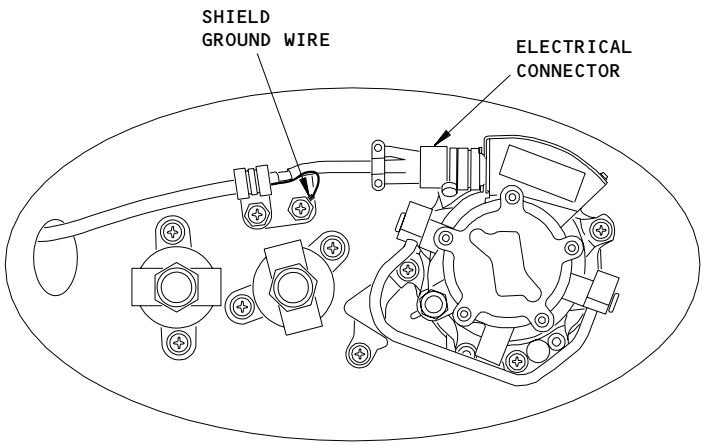
MAIN TANK BOOST PUMPS

C



OVERRIDE/JETTISON PUMPS
(AIRPLANES WITH JETTISON PUMPS)

D



OVERRIDE PUMP
(AIRPLANES WITHOUT JETTISON PUMPS)

D

Boost, Override/Jettison Pump Wire Bundle
Figure 601 (Sheet 3)

STATION		BOEING CARD NO.
TAIL NO.	SAS BOEING 767 TASK CARD	28-025-02
DATE		AIRLINE CARD NO.

SKILL	WORK AREA	RELATED TASK	INTERVAL	PHASE	MPD REV	TASK CARD REVISION
AIRPL	R MAIN TANK		NOTE	99XXX		AUG 22/08

TASK	TITLE	STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE	APPLICABILITY ENGINE
CHECK/INSP	RIGHT MAIN TANK FUEL BOOST PUMPS		ALL	ALL

ZONES	ACCESS PANELS
632 651	632AB

MECH	INSP	MPD ITEM NUMBER

INSPECT (DETAILED) THE RIGHT MAIN TANK FORWARD/AFT FUEL BOOST PUMP WIRING AND WIRE SLEEVE (SFAR 88). 28-22-15-6A

INTERVAL NOTE: 30,000 FLIGHT CYCLES/60,000 FLIGHT HOURS, WHICHEVER COMES FIRST.

1. Inspect the Boost, Override/Jettison Pump Wiring (Fig. 601)

A. Consumable Materials

(1) Teflon Inner Sleeve for the main tank boost pumps - TFE-2X, Standard Wall Size #6, also (M23053/12-218C).

(2) Teflon Outer Sleeve for the main tank boost pumps - TFE-2X, Standard Wall Size #2, also (M23053/12-223C recommended), TFE-2XTW, Thin Wall (M23053/12-327C optional).

(3) Teflon Inner Sleeve for the override/jettison pumps - TFE-2X, Standard Wall Size #4, also (M23053/12-221C)

(4) Teflon Outer Sleeve for the override/jettison pumps - TFE-2X, Standard Wall Size #0, also (M23053/12-225C, -226C, -227C recommended), TFE-2XTW, Thin Wall (M23053/12-329C optional).

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Phone: (206) 575-4994
Fax: (206) 575-6920

B. References

(1) AMM 20-10-21/601, Electrical Bonding

(2) AMM 28-11-01/401, Main Tank Access Panels

MECH | INSP

(3) AMM 28-11-02/401, Auxiliary Tank Access Panels

(4) AMM 28-22-00/501, Engine Fuel Feed System

(5) AMM 28-31-00/501, Fuel Jettison System

(6) SWPM 20-10-13

(7) SWPM 20-10-18

C. Access

(1) Location Zones

531	Center Auxiliary Tank (Left)
532	Main Tank - Inboard of Rib No. 10 (Left)
551	Rear Spar to MLG Support Beam (Left)
631	Center Auxiliary Tank (Right)
632	Main Tank - Inboard of Rib No. 10 (Right)
651	Rear Spar to MLG Support Beam (Right)

(2) Access Panels

531AB	Access Cover (Left)
532AB	Access Cover (Left)
631AB	Access Cover (Right)
632AB	Access Cover (Right)

D. Prepare for the Boost, Override/Jettison Pump Wiring Inspection

(1) If you will remove a main tank boost pump wire bundle, remove the applicable access cover 532AB or 632AB (AMM 28-11-01/401).

(2) If you will remove an auxiliary tank override/jettison pump wire bundle, remove the applicable access cover 531AB or 631AB (AMM 28-11-02/401).

(3) If you will remove a main tank boost pump wire bundle, make sure the applicable circuit breakers are open:

(a) Main Power Distribution Panel, P6:

1) 6G24, L FWD FUEL BOOST PUMP

2) 6G15, L AFT FUEL BOOST PUMP

3) 6G18, R FWD FUEL BOOST PUMP

4) 6G21, R AFT FUEL BOOST PUMP

(b) Overhead Circuit Breaker Panel, P11:

1) 11M16, FUEL PUMPS R FWD/L AFT

2) 11M25, FUEL PUMPS L FWD/R AFT

(4) If you will remove an auxiliary tank override/jettison pump wire bundle, make sure the applicable circuit breakers are open:

(a) Main Power Distribution Panel, P6:

1) 6F15, L FUEL OVRD PUMP

2) 6F21, R FUEL OVRD PUMP

(b) Overhead Circuit Breaker Panel, P11:

1) 11M15, L CTR FUEL PUMPS

2) 11M24, R CTR FUEL PUMPS

(c) If the fuel jettison pumps are installed, make sure the applicable circuit breakers are open:

1) Overhead Circuit Breaker Panel, P11:

a) 11M13, L FUEL JTSN CONT

b) 11M22, R FUEL JTSN CONT

2) Miscellaneous Electrical Equipment Panel, P36:

a) 36F4 or 36G7, L FUEL JETT PUMP

3) Miscellaneous Electrical Equipment Panel, P37:

a) 37F4 or 37G4, R FUEL JETT PUMP

(5) Install temporary indentification tags to the electrical connector(s) in the pump housing.

(6) Disconnect the electrical connector from the applicable boost, override/jettison pump.

MECH | INSP

(7) Make sure the inner and outer Teflon sleeves extend out the conduit and are attached under the electrical connector backshell.

NOTE: If the inner and outer Teflon sleeves are not long enough to extend through the electrical connector backshell, then the sleeve(s) are too short and must be replaced.

(8) Remove the wire bundle clamp inside the boost, override/jettison pump housing.

(9) Temporarily wrap and attach the connector(s) with a protective sheet of plastic to prevent damage to the conduit.

(10) Attach a cord to the wire bundle at the boost pump end.

NOTE: The cord length must be sufficient to go through the conduit from the main tank fuel boost pump to the rear spar. You will use the cord to pull the wiring back through the conduit.

(11) Go to the exit point of the wire bundle at the rear spar.

(12) Make sure the inner and outer Teflon sleeves extend out of the conduit and are attached under the wire bundle clamp at the rear spar.

NOTE: If the inner and outer Teflon sleeves are not long enough to extend through the wire bundle clamp, then the sleeves are too short and must be replaced.

(13) Remove the wire bundle clamp at the rear spar.

(14) Carefully pull the wiring through the conduit.

NOTE: It is possible for the boost pump connector to go through the conduit.

E. Inspect the Teflon Sleeves

(1) Make sure the wiring is covered with inner and outer Teflon sleeves, which are each one continous piece all the way through the conduit.

MECH | INSP

(2) Examine the Teflon sleeves for ties:

NOTE: Ties are not permitted at any other location except the ends of the sleeves. Ties attached at locations along the length of the sleeves can damage the sleeves and the wiring.

(a) Make sure ties are attached at each end of the Teflon sleeves.

(b) Make sure ties are not installed at other locations on top of the Teflon sleeves.

(3) Inspect the Teflon sleeves for this type of damage:

(a) Worn or chafed areas

(b) Cuts

(c) Splits

(d) Small pin size holes (possible wiring arcing damage)

(e) Melting or discoloration caused by too much heat.

(4) If the Teflon sleeves are not long enough (or not continuous), are damaged or have ties installed at locations other than the ends, then do these steps:

(a) Remove and discard the inner and outer Teflon sleeves.

(b) Do this procedure: Inspect the Boost, Override/Jettison Pump Wiring.

(c) After the inspection, replace the Teflon sleeves with two continuous Teflon sleeves (SWPM 20-10-18).

(5) If the inner and outer Teflon sleeves are satisfactory, then do this procedure: Install the Boost, Override/Jettison Pump Wiring.

NOTE: The inspection is complete.

F. Inspect the Boost, Override/Jettison Pump Wiring

(1) Make sure there are no ties on the wiring.

(2) Inspect the wiring for this type of damage:

MECH | INSP

(a) Worn or chafed wiring

(b) Physical damage

(c) Damage to the wiring under the ties (if they were present)

(d) Wire splices (no wire splices are permitted in the conduit)

(e) Discoloration from too much heat

(f) Wire damage caused by arcing.

NOTE: Arcing can show as very small blackened holes in the insulation or as deformation or pitting of the wire. Worn areas with a black material around the edge is not a sign of arcing (black material is aluminum oxide).

(3) If the wiring is chafed, physically damaged or there is a wire splice, then do these steps:

(a) Repair or replace the damaged wiring (SWPM 20-10-13).

(b) Replace any wiring that has a wire splice (in the conduit).

(c) After the repairs, do this procedure: Install the Boost, Override/Jettison Pump Wiring.

(4) If the wiring has discoloration from too much heat or electrical arcing, then do these steps:

(a) Repair or replace all damaged wiring (SWPM 20-10-13).

(b) Replace the inner and outer Teflon sleeves on the wiring (SWPM 20-10-18).

(c) Do this task: Inspect the Boost, Override/Jettison Pump Conduit.

NOTE: You must replace the pump conduit. If however, the conduit passes the inspection, then it is not necessary to replace the conduit immediately.

(5) If the wiring is satisfactory, then do this procedure: Install the Boost, Override/Jettison Pump Wiring.

MECH | INSP

G. Install the Boost, Override/Jettison Pump Wiring

(1) Install the inner and outer Teflon sleeves on the wiring for the boost, override/jettison pump.

(a) Make sure the inner and outer Teflon sleeves are each one continuous piece all the way through the conduit.

(b) Make sure there are no splices or ties on the wiring under the Teflon sleeves.

(c) Install ties only at the end of the Teflon sleeves.

(d) Make sure the inner and outer Teflon sleeves extend to the first breakout after the conduit exit point on the rear spar.

(2) Tie the shield ground wire to the pump power wires before you put the wiring into the conduit.

(3) Temporarily wrap and attach each electrical connector with a protective sheet of plastic to prevent damage to the conduit.

(4) Use the cord at the pump location to pull the wiring through the conduit.

(5) Remove the plastic sheets from the electrical connectors.

(6) Remove the tie from the shield ground wire.

(7) Install the clamps and fasteners at each end of the conduit.

NOTE: Both sleeves must go through the clamps.

(8) Inspect the Teflon sleeves to make sure both sleeves are visible at each end of the wiring installation.

(9) Cut the installed Teflon sleeves just after the clamp or at the shield termination on the pump end (View B).

(10) Install inner and outer Teflon sleeves on the pump power wires from the ground shield termination or the clamp to the electrical connector.

(11) Make sure the inner and outer Teflon sleeves are under the electrical connector backshell.

MECH	INSP

(12) Install the pump shield ground wire (Views C and D).

(13) Make sure the bonding resistance between the wire shield and the structure is 0.005 ohm (5 millohms) or less (AMM 20-10-21/601).

(14) Connect the electrical connector to the pump.

(15) Remove the temporary identication tags from the electrical connector(s).

(16) If you installed a main tank boost pump wire bundle, make sure the applicable circuit breakers are closed:

(a) Main Power Distribution Panel, P6:

1) 6G24, L FWD FUEL BOOST PUMP

2) 6G15, L AFT FUEL BOOST PUMP

3) 6G18, R FWD FUEL BOOST PUMP

4) 6G21, R AFT FUEL BOOST PUMP

(b) Overhead Circuit Breaker Panel, P11:

1) 11M16, FUEL PUMPS R FWD/L AFT

2) 11M25, FUEL PUMPS L FWD/R AFT

(17) If you installed an auxiliary tank override/jettison pump wire bundle, make sure the applicable circuit breakers are closed:

(a) Main Power Distribution Panel, P6:

1) 6F15, L FUEL OVRD PUMP

2) 6F21, R FUEL OVRD PUMP

(b) Overhead Circuit Breaker Panel, P11:

1) 11M15, L CTR FUEL PUMPS

2) 11M24, R CTR FUEL PUMPS

(c) If the fuel jettison pumps are installed, make sure the applicable circuit breakers are closed:

MECH | INSP

1) Overhead Circuit Breaker Panel, P11:

a) 11M13, L FUEL JTSN CONT

b) 11M22, R FUEL JTSN CONT

2) Miscellaneous Electrical Equipment Panel, P36:

a) 36F4 or 36G7, L FUEL JETT PUMP

3) Miscellaneous Electrical Equipment Panel, P37:

a) 37F4 or 37G4, R FUEL JETT PUMP

(18) If you installed a jettison pump wire bundle, do the Phase Check of the Jettison Pump Wiring procedure (AMM 28-31-00/501).

(19) If you installed a fuel boost or override pump wire bundle, do the Phase Check of the Fuel Pump Wiring procedure (AMM 28-22-00/501).

(20) If you installed a main tank boost pump wire bundle, install the applicable access cover 532AB or 632AB (AMM 28-11-01/401).

(21) If you installed an auxiliary tank override/jettison pump wire bundle, install the applicable access cover 531AB or 631AB (AMM 28-11-02/401).

(22) Do an operational test for the applicable boost, override/jettison pump(s) (AMM 28-22-00/501).

2. Inspect the Boost, Override/Jettison Pump Conduit (Fig. 601)

A. References

(1) AMM 12-11-01/301, Fuel Tank Pressure Fueling

(2) AMM 28-11-00/601, Fuel Tanks

(3) AMM 28-11-01/401, Main Tank Access Panels

(4) AMM 28-11-02/401, Auxiliary Tank Access Panels

(5) AMM 28-22-15/401, Boost, Override/Jettison Wire Conduit

B. Access

(1) Location Zones

531	Center Auxiliary Tank (Left)
532	Main Tank - Inboard of Rib No. 10 (Left)
551	Rear Spar to MLG Support Beam (Left)
631	Center Auxiliary Tank (Right)
632	Main Tank - Inboard of Rib No. 10 (Right)
651	Rear Spar to MLG Support Beam (Right)

(2) Access Panels

531AB	Access Cover (Left)
532AB	Access Cover (Left)
631AB	Access Cover (Right)
632AB	Access Cover (Right)

C. Boost, Override/Jettison Pump Conduit Inspection Preparation

(1) If you will inspect a main tank boost pump conduit, remove the applicable access cover 532AB or 632AB (AMM 28-11-01/401).

(2) If you will inspect an auxiliary tank override/jettison pump conduit, remove the applicable access cover 531AB or 631AB (AMM 28-11-02/401).

(3) Make sure the steps to prepare and remove the pump wiring in the conduit in the task: Inspect the Boost, Override/Jettison Pump Wiring, are completed.

D. Inspect the Applicable Boost, Override/Jettison Pump Conduit

(1) Do one of these tests to find if there is a fuel leak in the conduit:

(a) Use the backblowing procedure to do a leak check (AMM 28-11-00/601).

1) Use the necessary fittings to plug one end of the conduit.

2) Find the Internal Leaks.

(b) Pressurize the electrical conduit.

1) Use the necessary fittings to plug one end of the conduit.

2) Connect a pressure gage and air supply to the other end of the conduit.

3) Pressurize the electrical conduit to 20 PSIG.

4) Shut off the air supply and wait 5 minutes to examine the pressure gage.

5) Make sure the pressure has not decreased more than 0.5 PSIG.

(c) Fill the applicable fuel tank with fuel (AMM 12-11-01/301).

1) Wait 5 minutes, make sure there is no fuel leakage at the ends of the conduit.

2) Examine both the end of the electrical conduit at the spar and the end near the fuel pump.

3) Pull a clean cloth through the electrical conduit with a string.

4) Make sure there is no fuel on the cloth.

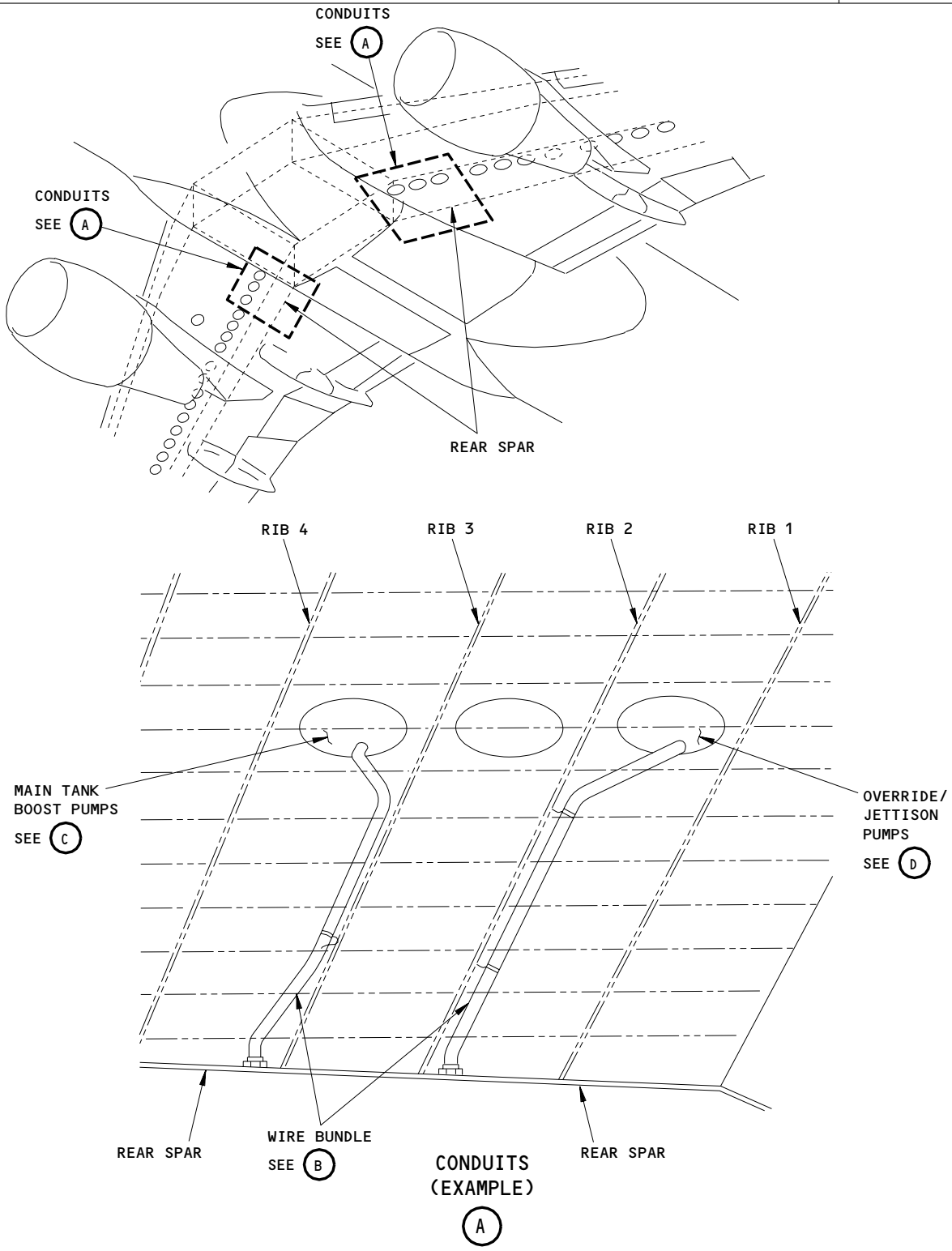
(2) Remove and replace any damaged conduit (AMM 28-22-15/401).

E. Put the Airplane Back to Its Usual Condition

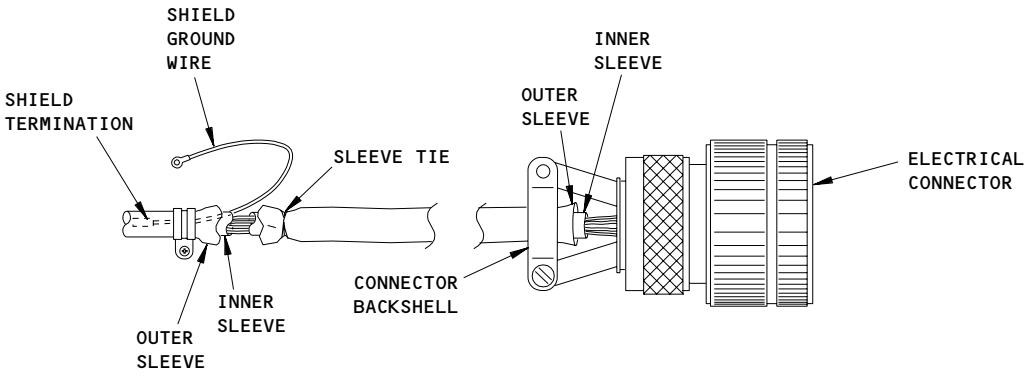
(1) If the conduit is not replaced, make sure the steps to install the pump wiring in the conduit in the task: Inspect the Boost, Override/Jettison Pump Wiring, are completed.

(2) If you inspected a main tank boost pump wire conduit, install the applicable access cover 532AB or 632AB (AMM 28-11-01/401).

(3) If you inspected an auxiliary tank override/jettison pump wire conduit, install the applicable access cover 531AB or 631AB (AMM 28-11-02/401).

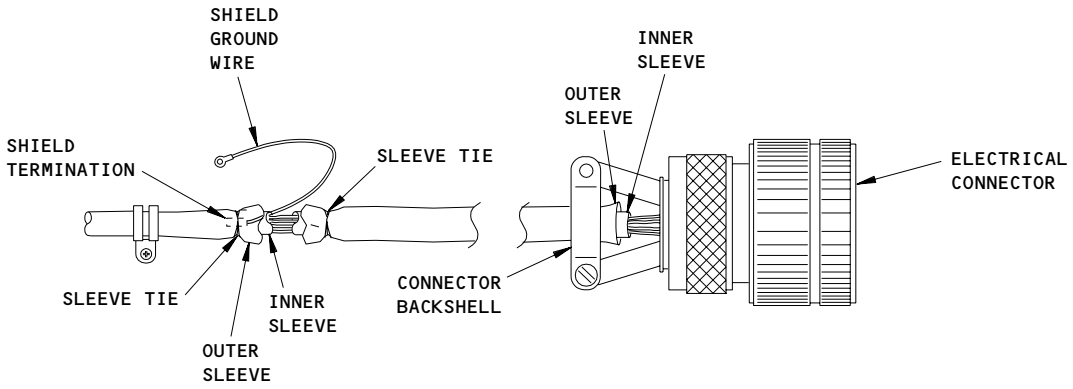


Boost, Override/Jettison Pump Wire Bundle
Figure 601 (Sheet 1)



WIRE BUNDLE
(SHIELD TERMINATION BEFORE CLAMP)

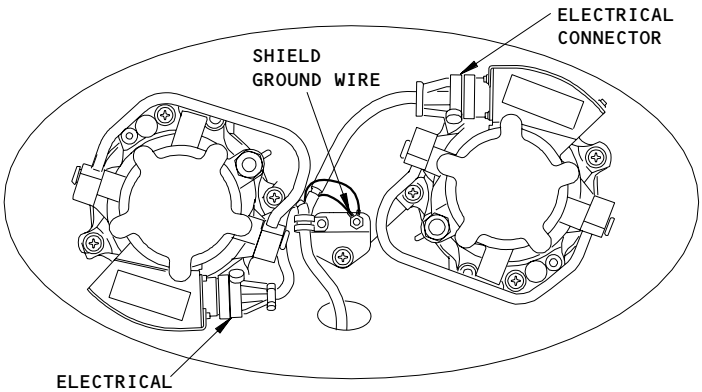
B



WIRE BUNDLE
(SHIELD TERMINATION AFTER CLAMP)

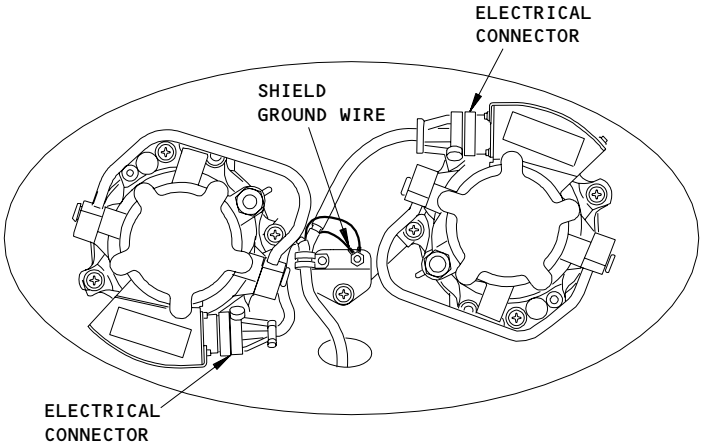
B

Boost, Override/Jettison Pump Wire Bundle
Figure 601 (Sheet 2)



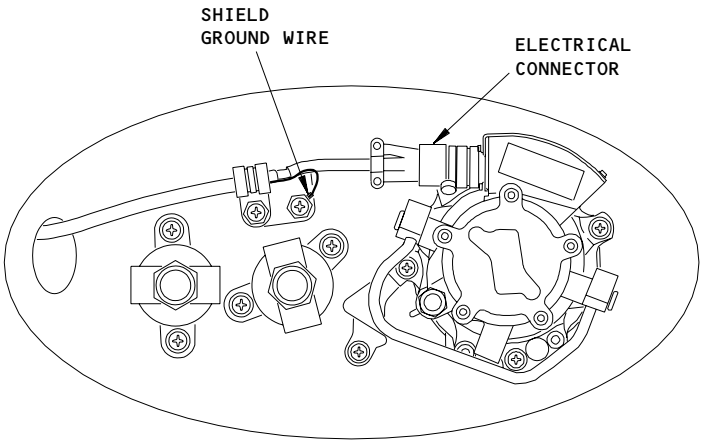
MAIN TANK BOOST PUMPS

C



OVERRIDE/JETTISON PUMPS
(AIRPLANES WITH JETTISON PUMPS)

D



OVERRIDE PUMP
(AIRPLANES WITHOUT JETTISON PUMPS)

D

Boost, Override/Jettison Pump Wire Bundle
Figure 601 (Sheet 3)

STATION		BOEING CARD NO.
TAIL NO.	SAS BOEING 767 TASK CARD	28-025-03
DATE		AIRLINE CARD NO.

SKILL	WORK AREA	RELATED TASK	INTERVAL	PHASE	MPD REV	TASK CARD REVISION
AIRPL	CTR AUX TK		NOTE	99XXX		AUG 22/08

TASK	TITLE	STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE	APPLICABILITY ENGINE
CHECK/INSP	OVERRIDE/JETTISON FUEL PUMP WIRING		ALL	ALL

ZONES	ACCESS PANELS
531	531AB

MECH	INSP	MPD ITEM NUMBER

INSPECT (DETAILED) THE LEFT AUXILIARY TANK OVERRIDE/JETTISON FUEL PUMP WIRING AND WIRE SLEEVE (SFAR 88). 28-22-15-6A

INTERVAL NOTE: 30,000 FLIGHT CYCLES/60,000 FLIGHT HOURS, WHICHEVER COMES FIRST.

1. Inspect the Boost, Override/Jettison Pump Wiring (Fig. 601)

A. Consumable Materials

(1) Teflon Inner Sleeve for the main tank boost pumps - TFE-2X, Standard Wall Size #6, also (M23053/12-218C).

(2) Teflon Outer Sleeve for the main tank boost pumps - TFE-2X, Standard Wall Size #2, also (M23053/12-223C recommended), TFE-2XTW, Thin Wall (M23053/12-327C optional).

(3) Teflon Inner Sleeve for the override/jettison pumps - TFE-2X, Standard Wall Size #4, also (M23053/12-221C)

(4) Teflon Outer Sleeve for the override/jettison pumps - TFE-2X, Standard Wall Size #0, also (M23053/12-225C, -226C, -227C recommended), TFE-2XTW, Thin Wall (M23053/12-329C optional).

Port Plastics Incorporated
1228 Andover Park East
Tukwila, Washington 98188
Phone: (206) 575-4994
Fax: (206) 575-6920

B. References

(1) AMM 20-10-21/601, Electrical Bonding

(2) AMM 28-11-01/401, Main Tank Access Panels

MECH | INSP

(3) AMM 28-11-02/401, Auxiliary Tank Access Panels

(4) AMM 28-22-00/501, Engine Fuel Feed System

(5) AMM 28-31-00/501, Fuel Jettison System

(6) SWPM 20-10-13

(7) SWPM 20-10-18

C. Access

(1) Location Zones

531	Center Auxiliary Tank (Left)
532	Main Tank - Inboard of Rib No. 10 (Left)
551	Rear Spar to MLG Support Beam (Left)
631	Center Auxiliary Tank (Right)
632	Main Tank - Inboard of Rib No. 10 (Right)
651	Rear Spar to MLG Support Beam (Right)

(2) Access Panels

531AB	Access Cover (Left)
532AB	Access Cover (Left)
631AB	Access Cover (Right)
632AB	Access Cover (Right)

D. Prepare for the Boost, Override/Jettison Pump Wiring Inspection

(1) If you will remove a main tank boost pump wire bundle, remove the applicable access cover 532AB or 632AB (AMM 28-11-01/401).

(2) If you will remove an auxiliary tank override/jettison pump wire bundle, remove the applicable access cover 531AB or 631AB (AMM 28-11-02/401).

(3) If you will remove a main tank boost pump wire bundle, make sure the applicable circuit breakers are open:

(a) Main Power Distribution Panel, P6:

1) 6G24, L FWD FUEL BOOST PUMP

2) 6G15, L AFT FUEL BOOST PUMP

3) 6G18, R FWD FUEL BOOST PUMP

MECH	INSP

4) 6G21, R AFT FUEL BOOST PUMP

(b) Overhead Circuit Breaker Panel, P11:

1) 11M16, FUEL PUMPS R FWD/L AFT

2) 11M25, FUEL PUMPS L FWD/R AFT

(4) If you will remove an auxiliary tank override/jettison pump wire bundle, make sure the applicable circuit breakers are open:

(a) Main Power Distribution Panel, P6:

1) 6F15, L FUEL OVRD PUMP

2) 6F21, R FUEL OVRD PUMP

(b) Overhead Circuit Breaker Panel, P11:

1) 11M15, L CTR FUEL PUMPS

2) 11M24, R CTR FUEL PUMPS

(c) If the fuel jettison pumps are installed, make sure the applicable circuit breakers are open:

1) Overhead Circuit Breaker Panel, P11:

a) 11M13, L FUEL JTSN CONT

b) 11M22, R FUEL JTSN CONT

2) Miscellaneous Electrical Equipment Panel, P36:

a) 36F4 or 36G7, L FUEL JETT PUMP

3) Miscellaneous Electrical Equipment Panel, P37:

a) 37F4 or 37G4, R FUEL JETT PUMP

(5) Install temporary indentification tags to the electrical connector(s) in the pump housing.

(6) Disconnect the electrical connector from the applicable boost, override/jettison pump.

MECH | INSP

(7) Make sure the inner and outer Teflon sleeves extend out the conduit and are attached under the electrical connector backshell.

NOTE: If the inner and outer Teflon sleeves are not long enough to extend through the electrical connector backshell, then the sleeve(s) are too short and must be replaced.

(8) Remove the wire bundle clamp inside the boost, override/jettison pump housing.

(9) Temporarily wrap and attach the connector(s) with a protective sheet of plastic to prevent damage to the conduit.

(10) Attach a cord to the wire bundle at the boost pump end.

NOTE: The cord length must be sufficient to go through the conduit from the main tank fuel boost pump to the rear spar. You will use the cord to pull the wiring back through the conduit.

(11) Go to the exit point of the wire bundle at the rear spar.

(12) Make sure the inner and outer Teflon sleeves extend out of the conduit and are attached under the wire bundle clamp at the rear spar.

NOTE: If the inner and outer Teflon sleeves are not long enough to extend through the wire bundle clamp, then the sleeves are too short and must be replaced.

(13) Remove the wire bundle clamp at the rear spar.

(14) Carefully pull the wiring through the conduit.

NOTE: It is possible for the boost pump connector to go through the conduit.

E. Inspect the Teflon Sleeves

(1) Make sure the wiring is covered with inner and outer Teflon sleeves, which are each one continous piece all the way through the conduit.

MECH | INSP

(2) Examine the Teflon sleeves for ties:

NOTE: Ties are not permitted at any other location except the ends of the sleeves. Ties attached at locations along the length of the sleeves can damage the sleeves and the wiring.

(a) Make sure ties are attached at each end of the Teflon sleeves.

(b) Make sure ties are not installed at other locations on top of the Teflon sleeves.

(3) Inspect the Teflon sleeves for this type of damage:

(a) Worn or chafed areas

(b) Cuts

(c) Splits

(d) Small pin size holes (possible wiring arcing damage)

(e) Melting or discoloration caused by too much heat.

(4) If the Teflon sleeves are not long enough (or not continuous), are damaged or have ties installed at locations other than the ends, then do these steps:

(a) Remove and discard the inner and outer Teflon sleeves.

(b) Do this procedure: Inspect the Boost, Override/Jettison Pump Wiring.

(c) After the inspection, replace the Teflon sleeves with two continuous Teflon sleeves (SWPM 20-10-18).

(5) If the inner and outer Teflon sleeves are satisfactory, then do this procedure: Install the Boost, Override/Jettison Pump Wiring.

NOTE: The inspection is complete.

F. Inspect the Boost, Override/Jettison Pump Wiring

(1) Make sure there are no ties on the wiring.

(2) Inspect the wiring for this type of damage:

(a) Worn or chafed wiring

(b) Physical damage

(c) Damage to the wiring under the ties (if they were present)

(d) Wire splices (no wire splices are permitted in the conduit)

(e) Discoloration from too much heat

(f) Wire damage caused by arcing.

NOTE: Arcing can show as very small blackened holes in the insulation or as deformation or pitting of the wire. Worn areas with a black material around the edge is not a sign of arcing (black material is aluminum oxide).

(3) If the wiring is chafed, physically damaged or there is a wire splice, then do these steps:

(a) Repair or replace the damaged wiring (SWPM 20-10-13).

(b) Replace any wiring that has a wire splice (in the conduit).

(c) After the repairs, do this procedure: Install the Boost, Override/Jettison Pump Wiring.

(4) If the wiring has discoloration from too much heat or electrical arcing, then do these steps:

(a) Repair or replace all damaged wiring (SWPM 20-10-13).

(b) Replace the inner and outer Teflon sleeves on the wiring (SWPM 20-10-18).

(c) Do this task: Inspect the Boost, Override/Jettison Pump Conduit.

NOTE: You must replace the pump conduit. If however, the conduit passes the inspection, then it is not necessary to replace the conduit immediately.

(5) If the wiring is satisfactory, then do this procedure: Install the Boost, Override/Jettison Pump Wiring.

MECH | INSP

G. Install the Boost, Override/Jettison Pump Wiring

(1) Install the inner and outer Teflon sleeves on the wiring for the boost, override/jettison pump.

(a) Make sure the inner and outer Teflon sleeves are each one continuous piece all the way through the conduit.

(b) Make sure there are no splices or ties on the wiring under the Teflon sleeves.

(c) Install ties only at the end of the Teflon sleeves.

(d) Make sure the inner and outer Teflon sleeves extend to the first breakout after the conduit exit point on the rear spar.

(2) Tie the shield ground wire to the pump power wires before you put the wiring into the conduit.

(3) Temporarily wrap and attach each electrical connector with a protective sheet of plastic to prevent damage to the conduit.

(4) Use the cord at the pump location to pull the wiring through the conduit.

(5) Remove the plastic sheets from the electrical connectors.

(6) Remove the tie from the shield ground wire.

(7) Install the clamps and fasteners at each end of the conduit.

NOTE: Both sleeves must go through the clamps.

(8) Inspect the Teflon sleeves to make sure both sleeves are visible at each end of the wiring installation.

(9) Cut the installed Teflon sleeves just after the clamp or at the shield termination on the pump end (View B).

(10) Install inner and outer Teflon sleeves on the pump power wires from the ground shield termination or the clamp to the electrical connector.

(11) Make sure the inner and outer Teflon sleeves are under the electrical connector backshell.

MECH	INSP

(12) Install the pump shield ground wire (Views C and D).

(13) Make sure the bonding resistance between the wire shield and the structure is 0.005 ohm (5 millohms) or less (AMM 20-10-21/601).

(14) Connect the electrical connector to the pump.

(15) Remove the temporary identication tags from the electrical connector(s).

(16) If you installed a main tank boost pump wire bundle, make sure the applicable circuit breakers are closed:

(a) Main Power Distribution Panel, P6:

1) 6G24, L FWD FUEL BOOST PUMP

2) 6G15, L AFT FUEL BOOST PUMP

3) 6G18, R FWD FUEL BOOST PUMP

4) 6G21, R AFT FUEL BOOST PUMP

(b) Overhead Circuit Breaker Panel, P11:

1) 11M16, FUEL PUMPS R FWD/L AFT

2) 11M25, FUEL PUMPS L FWD/R AFT

(17) If you installed an auxiliary tank override/jettison pump wire bundle, make sure the applicable circuit breakers are closed:

(a) Main Power Distribution Panel, P6:

1) 6F15, L FUEL OVRD PUMP

2) 6F21, R FUEL OVRD PUMP

(b) Overhead Circuit Breaker Panel, P11:

1) 11M15, L CTR FUEL PUMPS

2) 11M24, R CTR FUEL PUMPS

(c) If the fuel jettison pumps are installed, make sure the applicable circuit breakers are closed:

MECH	INSP

1) Overhead Circuit Breaker Panel, P11:

a) 11M13, L FUEL JTSN CONT

b) 11M22, R FUEL JTSN CONT

2) Miscellaneous Electrical Equipment Panel, P36:

a) 36F4 or 36G7, L FUEL JETT PUMP

3) Miscellaneous Electrical Equipment Panel, P37:

a) 37F4 or 37G4, R FUEL JETT PUMP

(18) If you installed a jettison pump wire bundle, do the Phase Check of the Jettison Pump Wiring procedure (AMM 28-31-00/501).

(19) If you installed a fuel boost or override pump wire bundle, do the Phase Check of the Fuel Pump Wiring procedure (AMM 28-22-00/501).

(20) If you installed a main tank boost pump wire bundle, install the applicable access cover 532AB or 632AB (AMM 28-11-01/401).

(21) If you installed an auxiliary tank override/jettison pump wire bundle, install the applicable access cover 531AB or 631AB (AMM 28-11-02/401).

(22) Do an operational test for the applicable boost, override/jettison pump(s) (AMM 28-22-00/501).

2. Inspect the Boost, Override/Jettison Pump Conduit (Fig. 601)

A. References

(1) AMM 12-11-01/301, Fuel Tank Pressure Fueling

(2) AMM 28-11-00/601, Fuel Tanks

(3) AMM 28-11-01/401, Main Tank Access Panels

(4) AMM 28-11-02/401, Auxiliary Tank Access Panels

(5) AMM 28-22-15/401, Boost, Override/Jettison Wire Conduit

B. Access

MECH | INSP

(1) Location Zones
531 Center Auxiliary Tank (Left)
532 Main Tank - Inboard of Rib No. 10 (Left)
551 Rear Spar to MLG Support Beam (Left)
631 Center Auxiliary Tank (Right)
632 Main Tank - Inboard of Rib No. 10 (Right)
651 Rear Spar to MLG Support Beam (Right)

(2) Access Panels
531AB Access Cover (Left)
532AB Access Cover (Left)
631AB Access Cover (Right)
632AB Access Cover (Right)

C. Boost, Override/Jettison Pump Conduit Inspection Preparation

(1) If you will inspect a main tank boost pump conduit, remove the applicable access cover 532AB or 632AB (AMM 28-11-01/401).

(2) If you will inspect an auxiliary tank override/jettison pump conduit, remove the applicable access cover 531AB or 631AB (AMM 28-11-02/401).

(3) Make sure the steps to prepare and remove the pump wiring in the conduit in the task: Inspect the Boost, Override/Jettison Pump Wiring, are completed.

D. Inspect the Applicable Boost, Override/Jettison Pump Conduit

(1) Do one of these tests to find if there is a fuel leak in the conduit:

(a) Use the backblowing procedure to do a leak check (AMM 28-11-00/601).

1) Use the necessary fittings to plug one end of the conduit.

2) Find the Internal Leaks.

(b) Pressurize the electrical conduit.

1) Use the necessary fittings to plug one end of the conduit.

2) Connect a pressure gage and air supply to the other end of the conduit.

MECH	INSP

3) Pressurize the electrical conduit to 20 PSIG.

4) Shut off the air supply and wait 5 minutes to examine the pressure gage.

5) Make sure the pressure has not decreased more than 0.5 PSIG.

(c) Fill the applicable fuel tank with fuel (AMM 12-11-01/301).

1) Wait 5 minutes, make sure there is no fuel leakage at the ends of the conduit.

2) Examine both the end of the electrical conduit at the spar and the end near the fuel pump.

3) Pull a clean cloth through the electrical conduit with a string.

4) Make sure there is no fuel on the cloth.

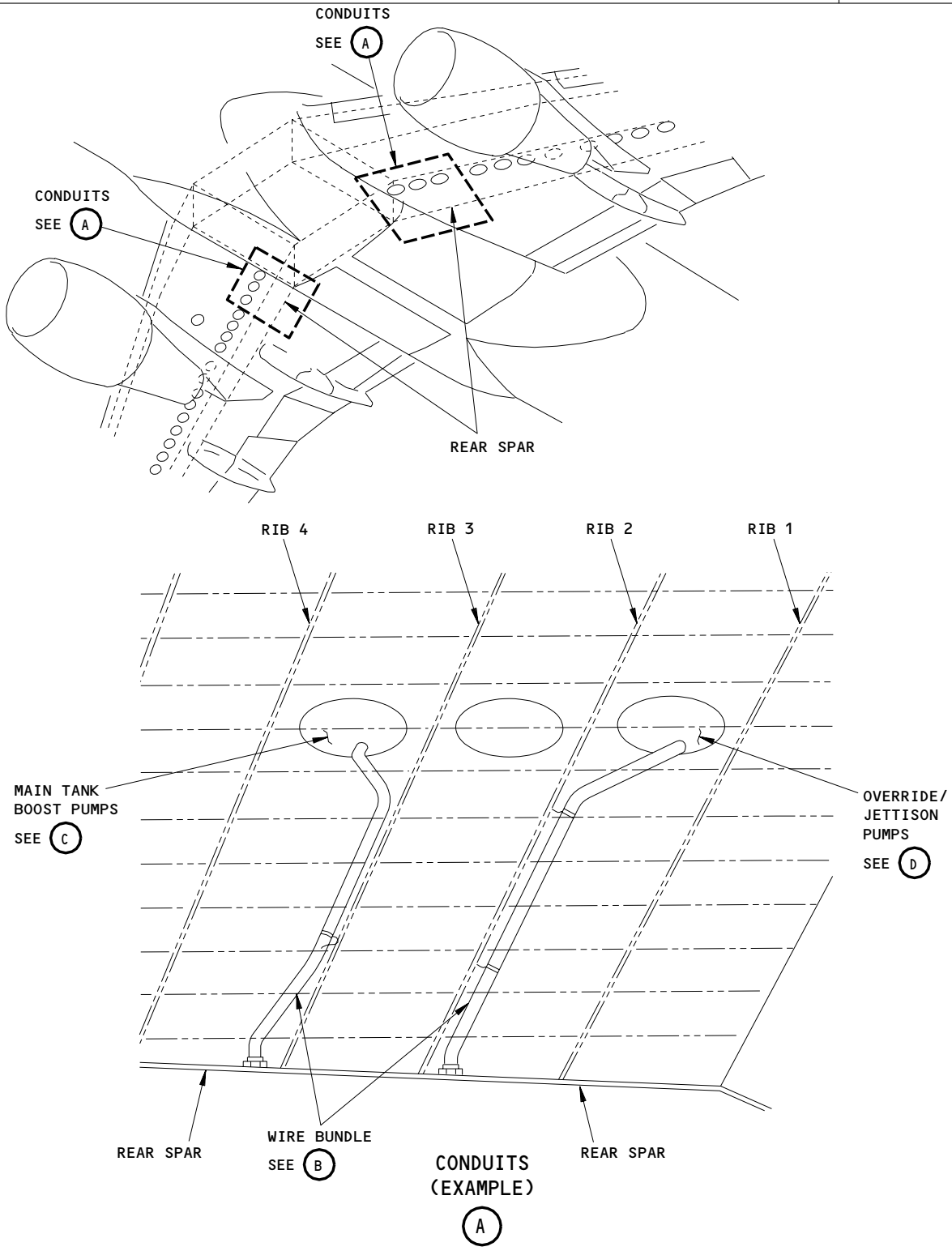
(2) Remove and replace any damaged conduit (AMM 28-22-15/401).

E. Put the Airplane Back to Its Usual Condition

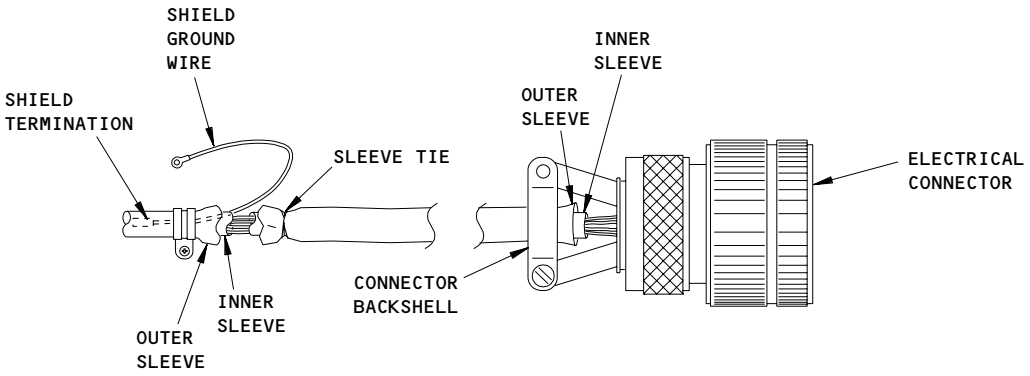
(1) If the conduit is not replaced, make sure the steps to install the pump wiring in the conduit in the task: Inspect the Boost, Override/Jettison Pump Wiring, are completed.

(2) If you inspected a main tank boost pump wire conduit, install the applicable access cover 532AB or 632AB (AMM 28-11-01/401).

(3) If you inspected an auxiliary tank override/jettison pump wire conduit, install the applicable access cover 531AB or 631AB (AMM 28-11-02/401).

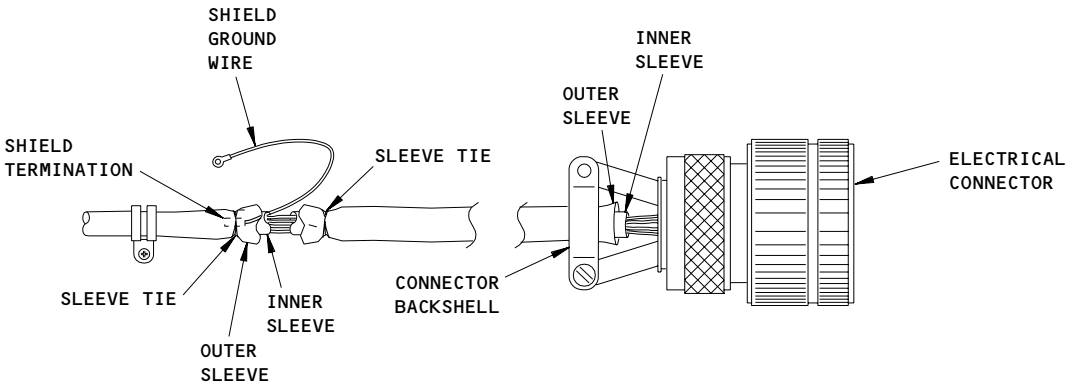


Boost, Override/Jettison Pump Wire Bundle
Figure 601 (Sheet 1)



WIRE BUNDLE
(SHIELD TERMINATION BEFORE CLAMP)

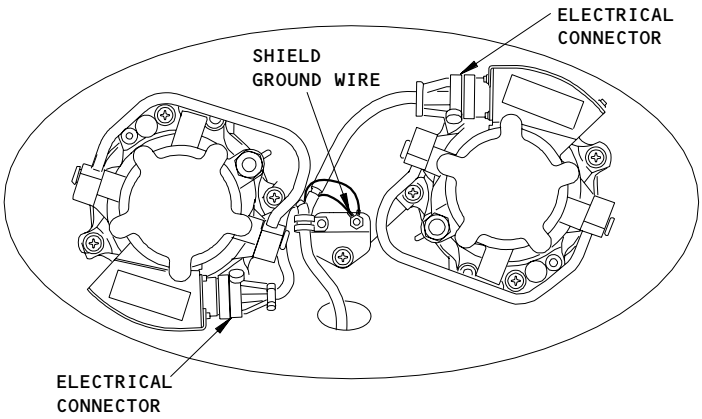
B



WIRE BUNDLE
(SHIELD TERMINATION AFTER CLAMP)

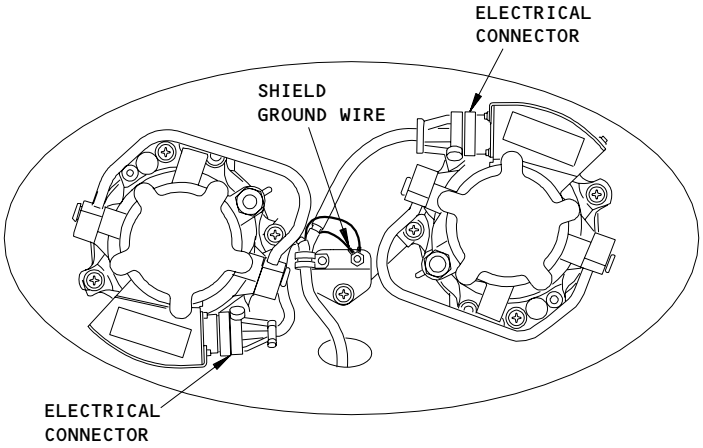
B

Boost, Override/Jettison Pump Wire Bundle
Figure 601 (Sheet 2)



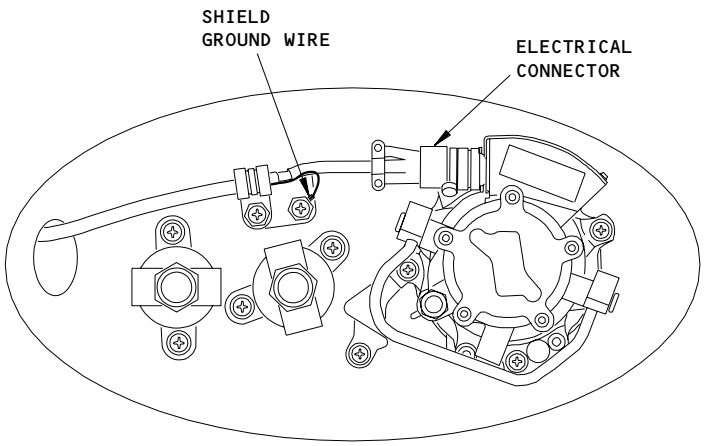
MAIN TANK BOOST PUMPS

C



OVERRIDE/JETTISON PUMPS
(AIRPLANES WITH JETTISON PUMPS)

D



OVERRIDE PUMP
(AIRPLANES WITHOUT JETTISON PUMPS)

D

Boost, Override/Jettison Pump Wire Bundle
Figure 601 (Sheet 3)

STATION		BOEING CARD NO.
TAIL NO.	SAS BOEING 767 TASK CARD	28-025-04
DATE		AIRLINE CARD NO.

SKILL	WORK AREA	RELATED TASK	INTERVAL	PHASE	MPD REV	TASK CARD REVISION
AIRPL	CTR AUX TK		NOTE	99XXX		AUG 22/08

TASK	TITLE	STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE	APPLICABILITY ENGINE
CHECK/INSP	OVERRIDE/JETTISON FUEL PUMP WIRING		ALL	ALL

ZONES	ACCESS PANELS
631	631AB

MECH	INSP	MPD ITEM NUMBER

INSPECT (DETAILED) THE RIGHT AUXILIARY TANK OVERRIDE/ JETTISON FUEL PUMP WIRING AND WIRE SLEEVE (SFAR 88). 28-22-15-6A

INTERVAL NOTE: 30,000 FLIGHT CYCLES/60,000 FLIGHT HOURS, WHICHEVER COMES FIRST.

1. Inspect the Boost, Override/Jettison Pump Wiring (Fig. 601)

A. Consumable Materials

(1) Teflon Inner Sleeve for the main tank boost pumps - TFE-2X, Standard Wall Size #6, also (M23053/12-218C).

(2) Teflon Outer Sleeve for the main tank boost pumps - TFE-2X, Standard Wall Size #2, also (M23053/12-223C recommended), TFE-2XTW, Thin Wall (M23053/12-327C optional).

(3) Teflon Inner Sleeve for the override/jettison pumps - TFE-2X, Standard Wall Size #4, also (M23053/12-221C)

(4) Teflon Outer Sleeve for the override/jettison pumps - TFE-2X, Standard Wall Size #0, also (M23053/12-225C, -226C, -227C recommended), TFE-2XTW, Thin Wall (M23053/12-329C optional).

Port Plastics Incorporated
1228 Andover Park East
Tukwila, Washington 98188
Phone: (206) 575-4994
Fax: (206) 575-6920

B. References

(1) AMM 20-10-21/601, Electrical Bonding

(2) AMM 28-11-01/401, Main Tank Access Panels

MECH | INSP

(3) AMM 28-11-02/401, Auxiliary Tank Access Panels

(4) AMM 28-22-00/501, Engine Fuel Feed System

(5) AMM 28-31-00/501, Fuel Jettison System

(6) SWPM 20-10-13

(7) SWPM 20-10-18

C. Access

(1) Location Zones

531	Center Auxiliary Tank (Left)
532	Main Tank - Inboard of Rib No. 10 (Left)
551	Rear Spar to MLG Support Beam (Left)
631	Center Auxiliary Tank (Right)
632	Main Tank - Inboard of Rib No. 10 (Right)
651	Rear Spar to MLG Support Beam (Right)

(2) Access Panels

531AB	Access Cover (Left)
532AB	Access Cover (Left)
631AB	Access Cover (Right)
632AB	Access Cover (Right)

D. Prepare for the Boost, Override/Jettison Pump Wiring Inspection

(1) If you will remove a main tank boost pump wire bundle, remove the applicable access cover 532AB or 632AB (AMM 28-11-01/401).

(2) If you will remove an auxiliary tank override/jettison pump wire bundle, remove the applicable access cover 531AB or 631AB (AMM 28-11-02/401).

(3) If you will remove a main tank boost pump wire bundle, make sure the applicable circuit breakers are open:

(a) Main Power Distribution Panel, P6:

1) 6G24, L FWD FUEL BOOST PUMP

2) 6G15, L AFT FUEL BOOST PUMP

3) 6G18, R FWD FUEL BOOST PUMP

MECH	INSP

4) 6G21, R AFT FUEL BOOST PUMP

(b) Overhead Circuit Breaker Panel, P11:

1) 11M16, FUEL PUMPS R FWD/L AFT

2) 11M25, FUEL PUMPS L FWD/R AFT

(4) If you will remove an auxiliary tank override/jettison pump wire bundle, make sure the applicable circuit breakers are open:

(a) Main Power Distribution Panel, P6:

1) 6F15, L FUEL OVRD PUMP

2) 6F21, R FUEL OVRD PUMP

(b) Overhead Circuit Breaker Panel, P11:

1) 11M15, L CTR FUEL PUMPS

2) 11M24, R CTR FUEL PUMPS

(c) If the fuel jettison pumps are installed, make sure the applicable circuit breakers are open:

1) Overhead Circuit Breaker Panel, P11:

a) 11M13, L FUEL JTSN CONT

b) 11M22, R FUEL JTSN CONT

2) Miscellaneous Electrical Equipment Panel, P36:

a) 36F4 or 36G7, L FUEL JETT PUMP

3) Miscellaneous Electrical Equipment Panel, P37:

a) 37F4 or 37G4, R FUEL JETT PUMP

(5) Install temporary indentification tags to the electrical connector(s) in the pump housing.

(6) Disconnect the electrical connector from the applicable boost, override/jettison pump.

MECH | INSP

(7) Make sure the inner and outer Teflon sleeves extend out the conduit and are attached under the electrical connector backshell.

NOTE: If the inner and outer Teflon sleeves are not long enough to extend through the electrical connector backshell, then the sleeve(s) are too short and must be replaced.

(8) Remove the wire bundle clamp inside the boost, override/jettison pump housing.

(9) Temporarily wrap and attach the connector(s) with a protective sheet of plastic to prevent damage to the conduit.

(10) Attach a cord to the wire bundle at the boost pump end.

NOTE: The cord length must be sufficient to go through the conduit from the main tank fuel boost pump to the rear spar. You will use the cord to pull the wiring back through the conduit.

(11) Go to the exit point of the wire bundle at the rear spar.

(12) Make sure the inner and outer Teflon sleeves extend out of the conduit and are attached under the wire bundle clamp at the rear spar.

NOTE: If the inner and outer Teflon sleeves are not long enough to extend through the wire bundle clamp, then the sleeves are too short and must be replaced.

(13) Remove the wire bundle clamp at the rear spar.

(14) Carefully pull the wiring through the conduit.

NOTE: It is possible for the boost pump connector to go through the conduit.

E. Inspect the Teflon Sleeves

(1) Make sure the wiring is covered with inner and outer Teflon sleeves, which are each one continous piece all the way through the conduit.

MECH | INSP

(2) Examine the Teflon sleeves for ties:

NOTE: Ties are not permitted at any other location except the ends of the sleeves. Ties attached at locations along the length of the sleeves can damage the sleeves and the wiring.

(a) Make sure ties are attached at each end of the Teflon sleeves.

(b) Make sure ties are not installed at other locations on top of the Teflon sleeves.

(3) Inspect the Teflon sleeves for this type of damage:

(a) Worn or chafed areas

(b) Cuts

(c) Splits

(d) Small pin size holes (possible wiring arcing damage)

(e) Melting or discoloration caused by too much heat.

(4) If the Teflon sleeves are not long enough (or not continuous), are damaged or have ties installed at locations other than the ends, then do these steps:

(a) Remove and discard the inner and outer Teflon sleeves.

(b) Do this procedure: Inspect the Boost, Override/Jettison Pump Wiring.

(c) After the inspection, replace the Teflon sleeves with two continuous Teflon sleeves (SWPM 20-10-18).

(5) If the inner and outer Teflon sleeves are satisfactory, then do this procedure: Install the Boost, Override/Jettison Pump Wiring.

NOTE: The inspection is complete.

F. Inspect the Boost, Override/Jettison Pump Wiring

(1) Make sure there are no ties on the wiring.

(2) Inspect the wiring for this type of damage:

(a) Worn or chafed wiring

(b) Physical damage

(c) Damage to the wiring under the ties (if they were present)

(d) Wire splices (no wire splices are permitted in the conduit)

(e) Discoloration from too much heat

(f) Wire damage caused by arcing.

NOTE: Arcing can show as very small blackened holes in the insulation or as deformation or pitting of the wire. Worn areas with a black material around the edge is not a sign of arcing (black material is aluminum oxide).

(3) If the wiring is chafed, physically damaged or there is a wire splice, then do these steps:

(a) Repair or replace the damaged wiring (SWPM 20-10-13).

(b) Replace any wiring that has a wire splice (in the conduit).

(c) After the repairs, do this procedure: Install the Boost, Override/Jettison Pump Wiring.

(4) If the wiring has discoloration from too much heat or electrical arcing, then do these steps:

(a) Repair or replace all damaged wiring (SWPM 20-10-13).

(b) Replace the inner and outer Teflon sleeves on the wiring (SWPM 20-10-18).

(c) Do this task: Inspect the Boost, Override/Jettison Pump Conduit.

NOTE: You must replace the pump conduit. If however, the conduit passes the inspection, then it is not necessary to replace the conduit immediately.

(5) If the wiring is satisfactory, then do this procedure: Install the Boost, Override/Jettison Pump Wiring.

MECH | INSP

G. Install the Boost, Override/Jettison Pump Wiring

(1) Install the inner and outer Teflon sleeves on the wiring for the boost, override/jettison pump.

(a) Make sure the inner and outer Teflon sleeves are each one continuous piece all the way through the conduit.

(b) Make sure there are no splices or ties on the wiring under the Teflon sleeves.

(c) Install ties only at the end of the Teflon sleeves.

(d) Make sure the inner and outer Teflon sleeves extend to the first breakout after the conduit exit point on the rear spar.

(2) Tie the shield ground wire to the pump power wires before you put the wiring into the conduit.

(3) Temporarily wrap and attach each electrical connector with a protective sheet of plastic to prevent damage to the conduit.

(4) Use the cord at the pump location to pull the wiring through the conduit.

(5) Remove the plastic sheets from the electrical connectors.

(6) Remove the tie from the shield ground wire.

(7) Install the clamps and fasteners at each end of the conduit.

NOTE: Both sleeves must go through the clamps.

(8) Inspect the Teflon sleeves to make sure both sleeves are visible at each end of the wiring installation.

(9) Cut the installed Teflon sleeves just after the clamp or at the shield termination on the pump end (View B).

(10) Install inner and outer Teflon sleeves on the pump power wires from the ground shield termination or the clamp to the electrical connector.

(11) Make sure the inner and outer Teflon sleeves are under the electrical connector backshell.

MECH	INSP

(12) Install the pump shield ground wire (Views C and D).

(13) Make sure the bonding resistance between the wire shield and the structure is 0.005 ohm (5 millohms) or less (AMM 20-10-21/601).

(14) Connect the electrical connector to the pump.

(15) Remove the temporary identication tags from the electrical connector(s).

(16) If you installed a main tank boost pump wire bundle, make sure the applicable circuit breakers are closed:

(a) Main Power Distribution Panel, P6:

1) 6G24, L FWD FUEL BOOST PUMP

2) 6G15, L AFT FUEL BOOST PUMP

3) 6G18, R FWD FUEL BOOST PUMP

4) 6G21, R AFT FUEL BOOST PUMP

(b) Overhead Circuit Breaker Panel, P11:

1) 11M16, FUEL PUMPS R FWD/L AFT

2) 11M25, FUEL PUMPS L FWD/R AFT

(17) If you installed an auxiliary tank override/jettison pump wire bundle, make sure the applicable circuit breakers are closed:

(a) Main Power Distribution Panel, P6:

1) 6F15, L FUEL OVRD PUMP

2) 6F21, R FUEL OVRD PUMP

(b) Overhead Circuit Breaker Panel, P11:

1) 11M15, L CTR FUEL PUMPS

2) 11M24, R CTR FUEL PUMPS

(c) If the fuel jettison pumps are installed, make sure the applicable circuit breakers are closed:

MECH | INSP

1) Overhead Circuit Breaker Panel, P11:

a) 11M13, L FUEL JTSN CONT

b) 11M22, R FUEL JTSN CONT

2) Miscellaneous Electrical Equipment Panel, P36:

a) 36F4 or 36G7, L FUEL JETT PUMP

3) Miscellaneous Electrical Equipment Panel, P37:

a) 37F4 or 37G4, R FUEL JETT PUMP

(18) If you installed a jettison pump wire bundle, do the Phase Check of the Jettison Pump Wiring procedure (AMM 28-31-00/501).

(19) If you installed a fuel boost or override pump wire bundle, do the Phase Check of the Fuel Pump Wiring procedure (AMM 28-22-00/501).

(20) If you installed a main tank boost pump wire bundle, install the applicable access cover 532AB or 632AB (AMM 28-11-01/401).

(21) If you installed an auxiliary tank override/jettison pump wire bundle, install the applicable access cover 531AB or 631AB (AMM 28-11-02/401).

(22) Do an operational test for the applicable boost, override/jettison pump(s) (AMM 28-22-00/501).

2. Inspect the Boost, Override/Jettison Pump Conduit (Fig. 601)

A. References

(1) AMM 12-11-01/301, Fuel Tank Pressure Fueling

(2) AMM 28-11-00/601, Fuel Tanks

(3) AMM 28-11-01/401, Main Tank Access Panels

(4) AMM 28-11-02/401, Auxiliary Tank Access Panels

(5) AMM 28-22-15/401, Boost, Override/Jettison Wire Conduit

B. Access

MECH | INSP

(1) Location Zones
531 Center Auxiliary Tank (Left)
532 Main Tank - Inboard of Rib No. 10 (Left)
551 Rear Spar to MLG Support Beam (Left)
631 Center Auxiliary Tank (Right)
632 Main Tank - Inboard of Rib No. 10 (Right)
651 Rear Spar to MLG Support Beam (Right)

(2) Access Panels
531AB Access Cover (Left)
532AB Access Cover (Left)
631AB Access Cover (Right)
632AB Access Cover (Right)

C. Boost, Override/Jettison Pump Conduit Inspection Preparation

(1) If you will inspect a main tank boost pump conduit, remove the applicable access cover 532AB or 632AB (AMM 28-11-01/401).

(2) If you will inspect an auxiliary tank override/jettison pump conduit, remove the applicable access cover 531AB or 631AB (AMM 28-11-02/401).

(3) Make sure the steps to prepare and remove the pump wiring in the conduit in the task: Inspect the Boost, Override/Jettison Pump Wiring, are completed.

D. Inspect the Applicable Boost, Override/Jettison Pump Conduit

(1) Do one of these tests to find if there is a fuel leak in the conduit:

(a) Use the backblowing procedure to do a leak check (AMM 28-11-00/601).

1) Use the necessary fittings to plug one end of the conduit.

2) Find the Internal Leaks.

(b) Pressurize the electrical conduit.

1) Use the necessary fittings to plug one end of the conduit.

2) Connect a pressure gage and air supply to the other end of the conduit.

MECH | INSP

3) Pressurize the electrical conduit to 20 PSIG.

4) Shut off the air supply and wait 5 minutes to examine the pressure gage.

5) Make sure the pressure has not decreased more than 0.5 PSIG.

(c) Fill the applicable fuel tank with fuel (AMM 12-11-01/301).

1) Wait 5 minutes, make sure there is no fuel leakage at the ends of the conduit.

2) Examine both the end of the electrical conduit at the spar and the end near the fuel pump.

3) Pull a clean cloth through the electrical conduit with a string.

4) Make sure there is no fuel on the cloth.

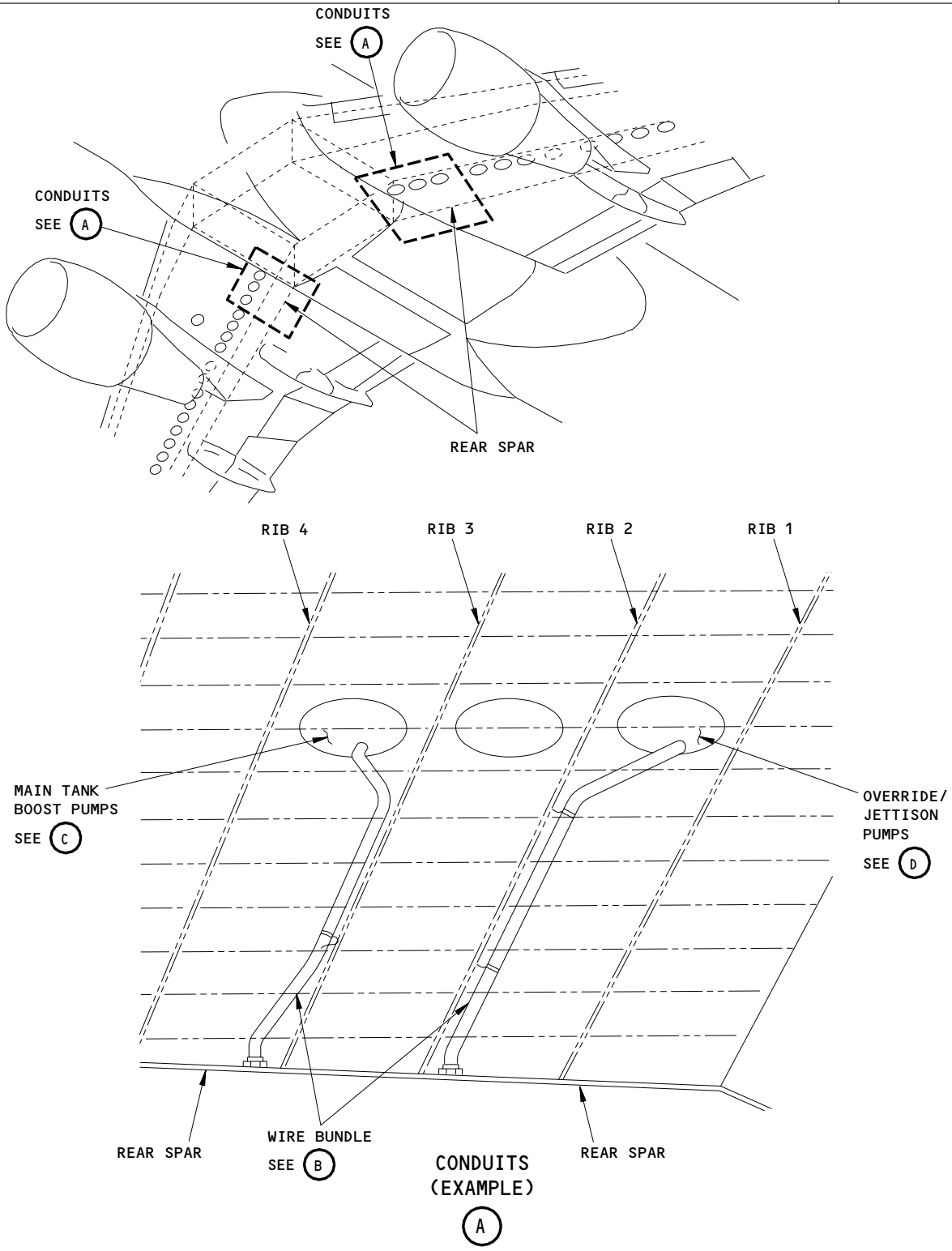
(2) Remove and replace any damaged conduit (AMM 28-22-15/401).

E. Put the Airplane Back to Its Usual Condition

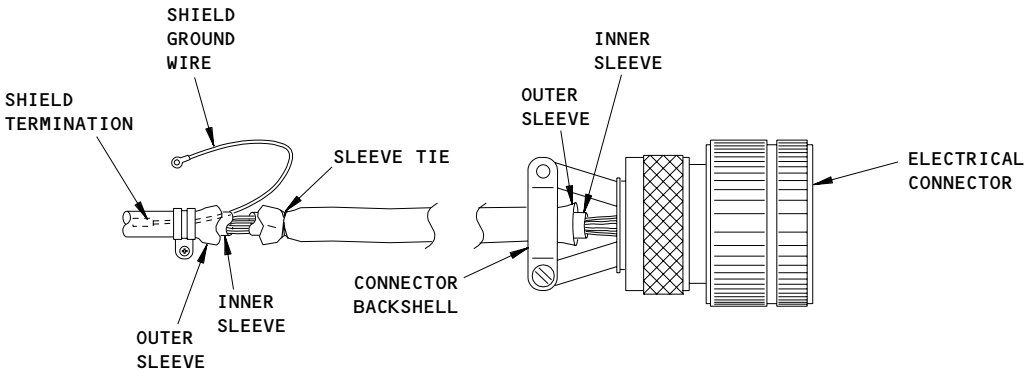
(1) If the conduit is not replaced, make sure the steps to install the pump wiring in the conduit in the task: Inspect the Boost, Override/Jettison Pump Wiring, are completed.

(2) If you inspected a main tank boost pump wire conduit, install the applicable access cover 532AB or 632AB (AMM 28-11-01/401).

(3) If you inspected an auxiliary tank override/jettison pump wire conduit, install the applicable access cover 531AB or 631AB (AMM 28-11-02/401).

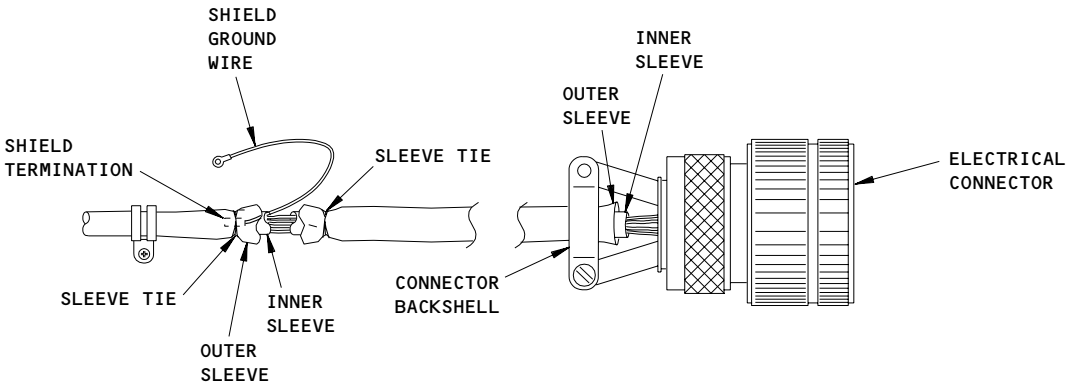


Boost, Override/Jettison Pump Wire Bundle
Figure 601 (Sheet 1)



WIRE BUNDLE
(SHIELD TERMINATION BEFORE CLAMP)

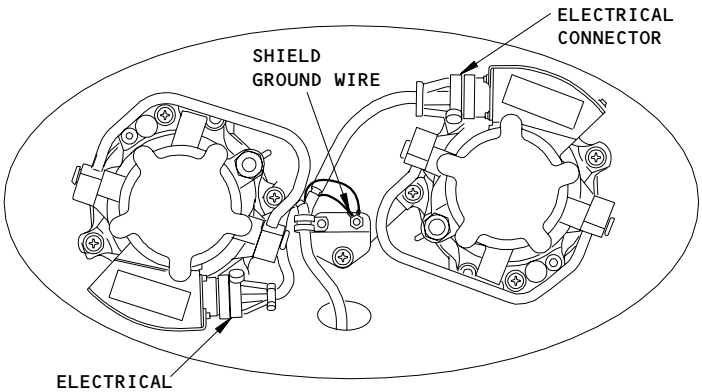
B



WIRE BUNDLE
(SHIELD TERMINATION AFTER CLAMP)

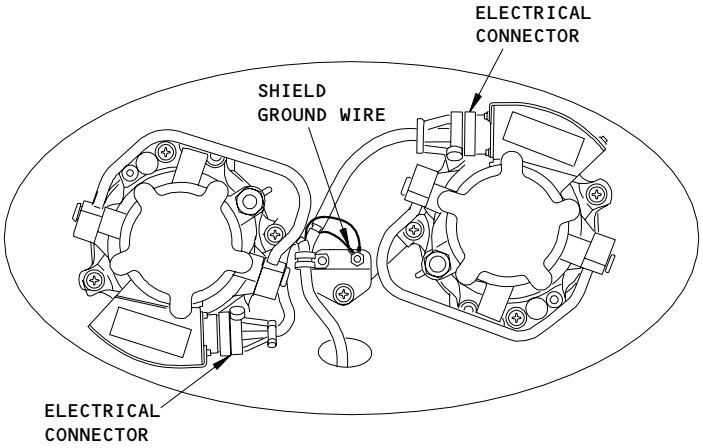
B

Boost, Override/Jettison Pump Wire Bundle
Figure 601 (Sheet 2)



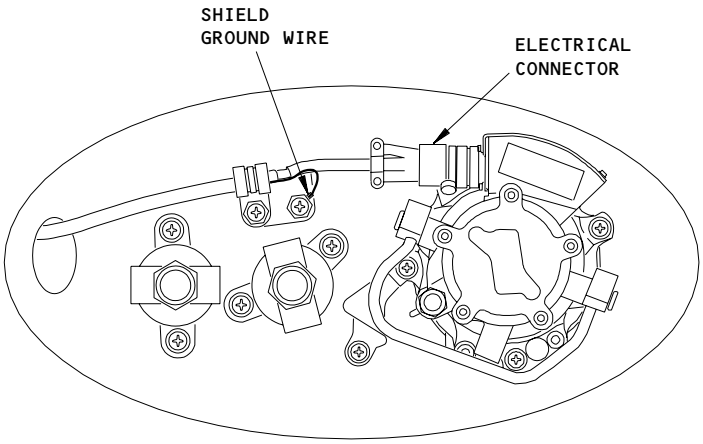
MAIN TANK BOOST PUMPS

C



OVERRIDE/JETTISON PUMPS
(AIRPLANES WITH JETTISON PUMPS)

D



OVERRIDE PUMP
(AIRPLANES WITHOUT JETTISON PUMPS)

D

Boost, Override/Jettison Pump Wire Bundle
Figure 601 (Sheet 3)

STATION		BOEING CARD NO.
TAIL NO.	SAS BOEING 767 TASK CARD	28-026-01
DATE		AIRLINE CARD NO.

SKILL	WORK AREA	RELATED TASK	INTERVAL	PHASE	MPD REV	TASK CARD REVISION
AIRPL	L MAIN TANK		8C	24896		APR 22/09

TASK	TITLE	STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE	APPLICABILITY ENGINE
FUNCTIONAL	FUEL BOOST PUMP MOTOR HOUSING BOND		ALL	ALL

ZONES	ACCESS PANELS
532	532AB

MECH	INSP	MPD ITEM NUMBER
		28-22-03-6A

FUNCTIONALLY CHECK (RESISTANCE MEASUREMENT) THE BONDING BETWEEN THE L MAIN TANK FWD/AFT FUEL BOOST PUMP MOTOR HOUSING AND THE STRUCTURE TO ENSURE IT IS WITHIN SERVICE LIMITS (SFAR 88).

1. Boost Pump - Bonding Resistance Check (Fig. 602)

A. References

(1) SWPM 20-20-00, Electrical Bonding and Grounding

B. Equipment

(1) Bonding Meter - Use one of these:

(a) Bonding Meter - T477W
Avtron Manufacturing Co.
Cleveland, OH

(b) Bonding Meter - Model M1
(Serial Number A000012 and subsequent)
BCD Electronics Ltd.
Vancouver, Canada

C. Prepare for the Procedure

(1) Remove the applicable left or right access cover, 532AB or 632AB.

(a) Hold the access cover and remove the mounting bolts.

NOTE: It is not necessary to remove the mounting ring or the gasket.

(b) Lower the access cover until the lanyard holds the access cover.

MECH | INSP

D. Bonding Resistance Check

(1) Measure the bonding resistance between each boost pump and the wing structure (SWPM 20-20-00).

(a) Make sure the resistance is 0.65 milliohm (0.00065 ohm) or less.

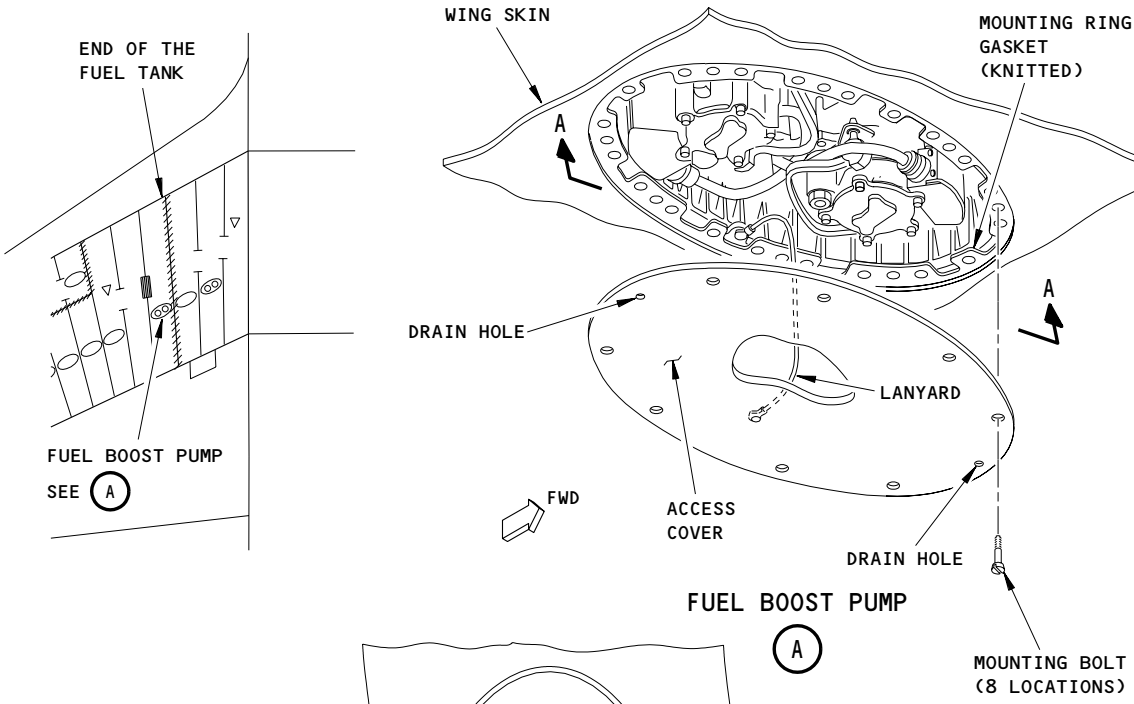
E. Put the Airplane Back to Its Usual Condition

(1) Install the applicable left or right access cover, 532AB or 632AB.

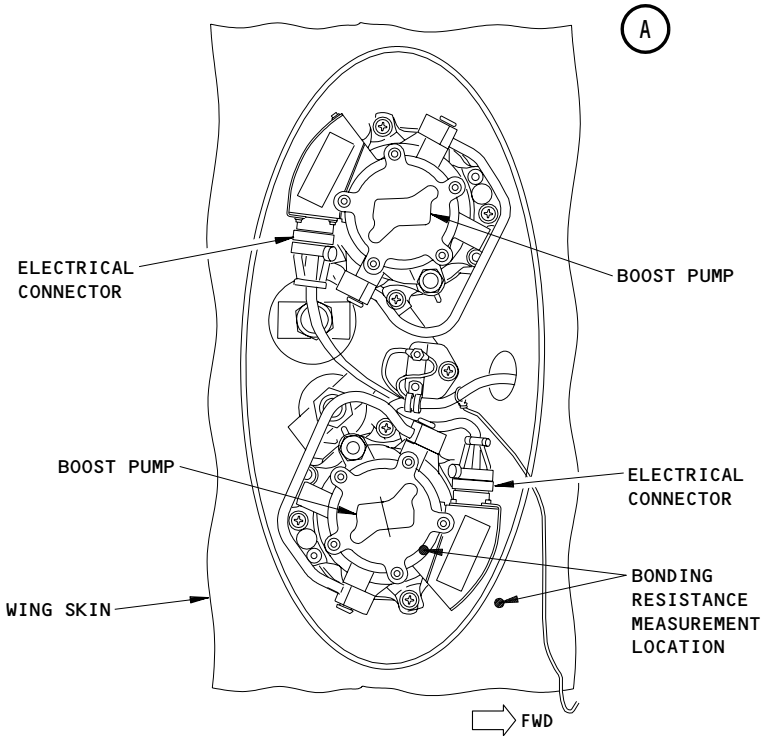
(a) Put and hold the access cover against the lower wing surface.

1) Make sure the lanyard is in the fuel tank.

(b) Install the mounting bolts on the access cover.



FUEL BOOST PUMP
A



BOOST PUMPS
A-A

Main Tank Fuel Boost Pump Inspection
Figure 602

STATION		BOEING CARD NO.
TAIL NO.	SAS BOEING 767 TASK CARD	28-026-02
DATE		AIRLINE CARD NO.

SKILL	WORK AREA	RELATED TASK	INTERVAL	PHASE	MPD REV	TASK CARD REVISION
AIRPL	R MAIN TANK		8C	24896		APR 22/09

TASK	TITLE	STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE	APPLICABILITY ENGINE
FUNCTIONAL	FUEL BOOST PUMP MOTOR HOUSING BOND		ALL	ALL

ZONES	ACCESS PANELS
632	632AB

MECH	INSP	MPD ITEM NUMBER
		28-22-03-6A

FUNCTIONALLY CHECK (RESISTANCE MEASUREMENT) THE BONDING BETWEEN THE R MAIN TANK FWD/AFT FUEL BOOST PUMP MOTOR HOUSING AND THE STRUCTURE TO ENSURE IT IS WITHIN SERVICE LIMITS (SFAR 88).

1. Boost Pump - Bonding Resistance Check (Fig. 602)

A. References

(1) SWPM 20-20-00, Electrical Bonding and Grounding

B. Equipment

(1) Bonding Meter - Use one of these:

(a) Bonding Meter - T477W
Avtron Manufacturing Co.
Cleveland, OH

(b) Bonding Meter - Model M1
(Serial Number A000012 and subsequent)
BCD Electronics Ltd.
Vancouver, Canada

C. Prepare for the Procedure

(1) Remove the applicable left or right access cover, 532AB or 632AB.

(a) Hold the access cover and remove the mounting bolts.

NOTE: It is not necessary to remove the mounting ring or the gasket.

(b) Lower the access cover until the lanyard holds the access cover.

MECH | INSP

D. Bonding Resistance Check

(1) Measure the bonding resistance between each boost pump and the wing structure (SWPM 20-20-00).

(a) Make sure the resistance is 0.65 milliohm (0.00065 ohm) or less.

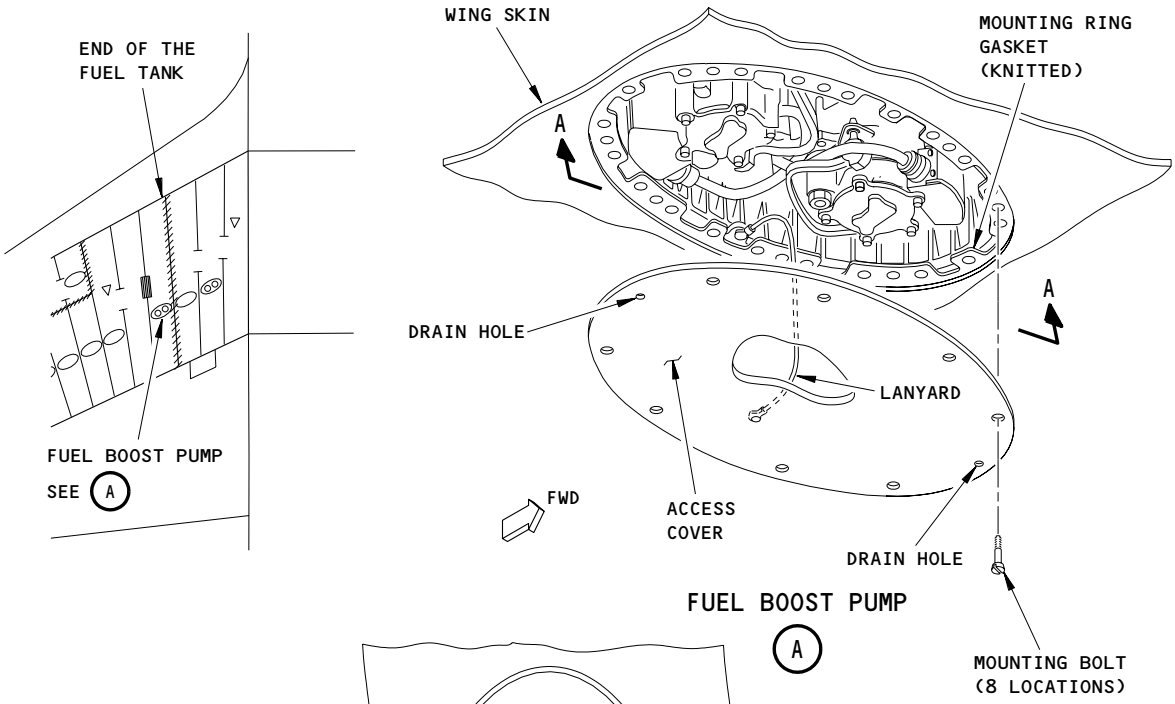
E. Put the Airplane Back to Its Usual Condition

(1) Install the applicable left or right access cover, 532AB or 632AB.

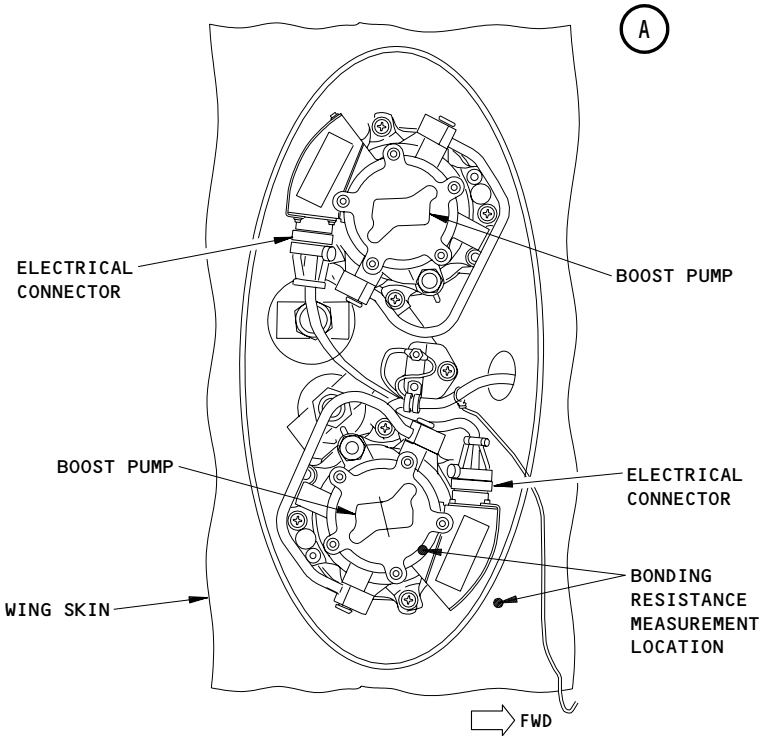
(a) Put and hold the access cover against the lower wing surface.

1) Make sure the lanyard is in the fuel tank.

(b) Install the mounting bolts on the access cover.



FUEL BOOST PUMP
A



BOOST PUMPS
A-A

Main Tank Fuel Boost Pump Inspection
Figure 602

STATION		BOEING CARD NO.
TAIL NO.	SAS BOEING 767 TASK CARD	28-026-07
DATE		AIRLINE CARD NO.

SKILL	WORK AREA	RELATED TASK	INTERVAL	PHASE	MPD REV	TASK CARD REVISION
AIRPL	CTR AUX TK		8C	24896		AUG 22/08

TASK	TITLE	STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE	APPLICABILITY ENGINE
FUNCTIONAL	OVERRIDE/JETTISON PUMP HOUSING BOND		ALL	ALL

ZONES	ACCESS PANELS
531	531AB

MECH	INSP	MPD ITEM NUMBER

FUNCTIONALLY CHECK (RESISTANCE MEASUREMENT) THE BONDING BETWEEN THE L/H CTR AUX TANK OVERRIDE/JETTISON PUMP MOTOR HOUSING AND THE STRUCTURE (SFAR 88). 28-22-05-6A

1. Center Auxiliary Tank Override Pump - Bonding Resistance Check (Fig. 601)

A. Equipment

(1) Bonding Meter - Use one of these:

(a) Bonding Meter - T477W
Avtron Manufacturing Co.
Cleveland, OH

(b) Bonding Meter - Model M1
(Serial Number A000012 and subsequent)
BCD Electronics Ltd.
Vancouver, Canada

B. References

(1) SWPM 20-20-00, Electrical Bonding and Grounds

C. Prepare for the Procedure

(1) For the left override pump, remove the left access cover, 531AB.

(a) Hold the access cover and remove the mounting bolts.

NOTE: It is not necessary to removethe mounting ring or the gasket.

(b) Lower the access cover until the lanyard holds the access cover.

MECH | INSP

(2) For the right override pump, remove the right access cover, 631AB.

(a) Hold the access cover and remove the mounting bolts.

NOTE: It is not necessary to remove the mounting ring or the gasket.

(b) Lower the access cover until the lanyard holds the access cover.

D. Bonding Resistance Check

(1) Measure the bonding resistance between the override pump and the wing structure (SWPM 20-20-00).

(a) Make sure the resistance is 0.65 milliohm (0.00065 ohm) or less.

E. Put the Airplane Back to Its Usual Condition

(1) Install the left access cover, 531AB.

(a) Put and hold the access cover against the lower wing surface.

1) Make sure the lanyard is in the fuel tank.

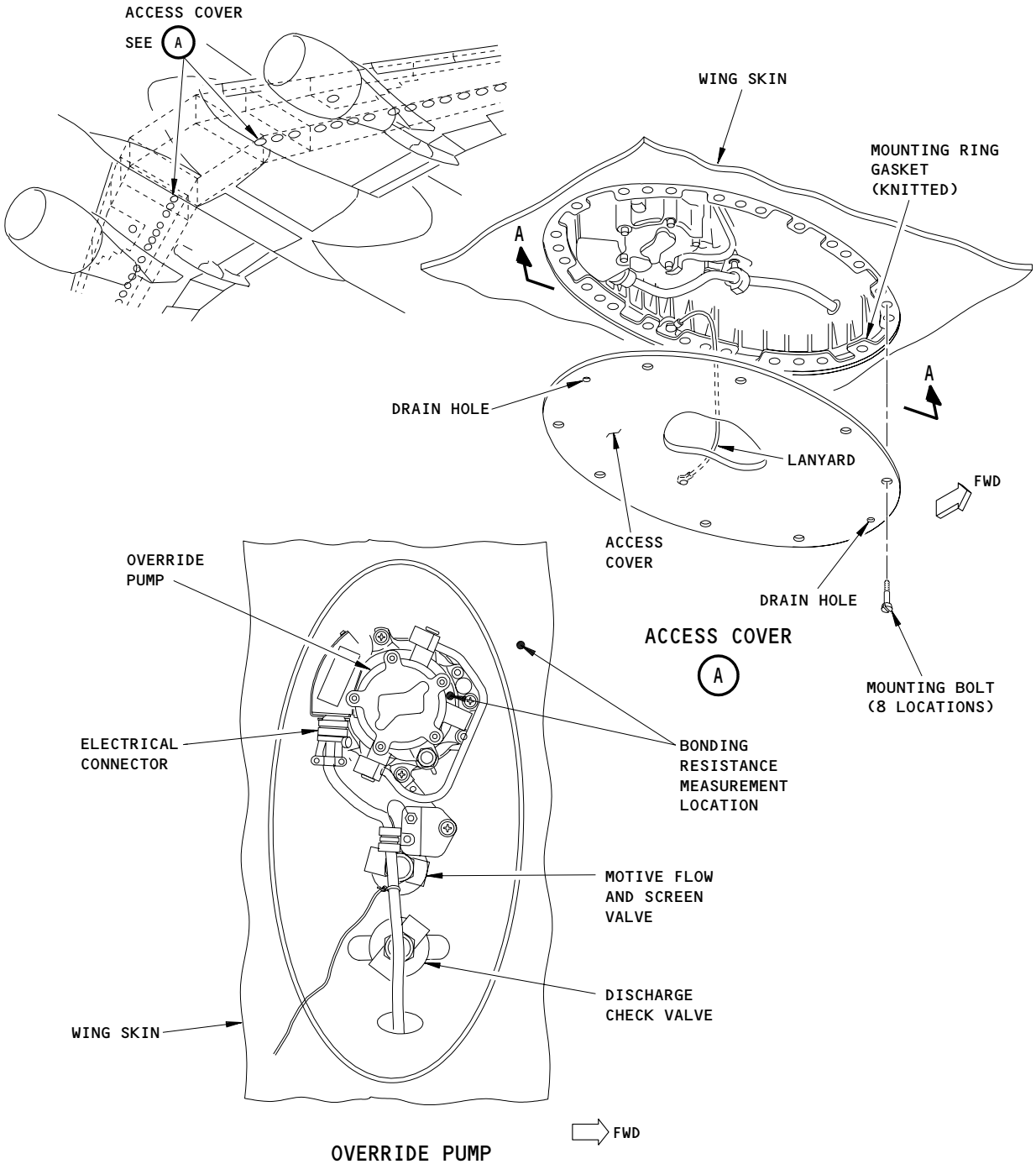
(b) Install the mounting bolts on the access cover.

(2) Install the right access cover, 631AB.

(a) Put and hold the access cover against the lower wing surface.

1) Make sure the lanyard is in the fuel tank.

(b) Install the mounting bolts on the access cover.



Override Pump Inspection
Figure 601

STATION		BOEING CARD NO.
TAIL NO.	SAS BOEING 767 TASK CARD	28-026-08
DATE		AIRLINE CARD NO.

SKILL	WORK AREA	RELATED TASK	INTERVAL	PHASE	MPD REV	TASK CARD REVISION
AIRPL	CTR AUX TK		8C	24896		AUG 22/08

TASK	TITLE	STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE	APPLICABILITY ENGINE
FUNCTIONAL	OVERRIDE/JETTISON PUMP HOUSING BOND		ALL	ALL

ZONES	ACCESS PANELS
631	631AB

MECH	INSP	MPD ITEM NUMBER

FUNCTIONALLY CHECK (RESISTANCE MEASUREMENT) THE BONDING BETWEEN THE R/H CTR AUX TANK OVERRIDE/JETTISON PUMP MOTOR HOUSING AND THE STRUCTURE (SFAR 88). 28-22-05-6A

1. Center Auxiliary Tank Override Pump - Bonding Resistance Check (Fig. 601)

A. Equipment

(1) Bonding Meter - Use one of these:

(a) Bonding Meter - T477W
Avtron Manufacturing Co.
Cleveland, OH

(b) Bonding Meter - Model M1
(Serial Number A000012 and subsequent)
BCD Electronics Ltd.
Vancouver, Canada

B. References

(1) SWPM 20-20-00, Electrical Bonding and Grounds

C. Prepare for the Procedure

(1) For the left override pump, remove the left access cover, 531AB.

(a) Hold the access cover and remove the mounting bolts.

NOTE: It is not necessary to removethe mounting ring or the gasket.

(b) Lower the access cover until the lanyard holds the access cover.

MECH | INSP

(2) For the right override pump, remove the right access cover, 631AB.

(a) Hold the access cover and remove the mounting bolts.

NOTE: It is not necessary to remove the mounting ring or the gasket.

(b) Lower the access cover until the lanyard holds the access cover.

D. Bonding Resistance Check

(1) Measure the bonding resistance between the override pump and the wing structure (SWPM 20-20-00).

(a) Make sure the resistance is 0.65 milliohm (0.00065 ohm) or less.

E. Put the Airplane Back to Its Usual Condition

(1) Install the left access cover, 531AB.

(a) Put and hold the access cover against the lower wing surface.

1) Make sure the lanyard is in the fuel tank.

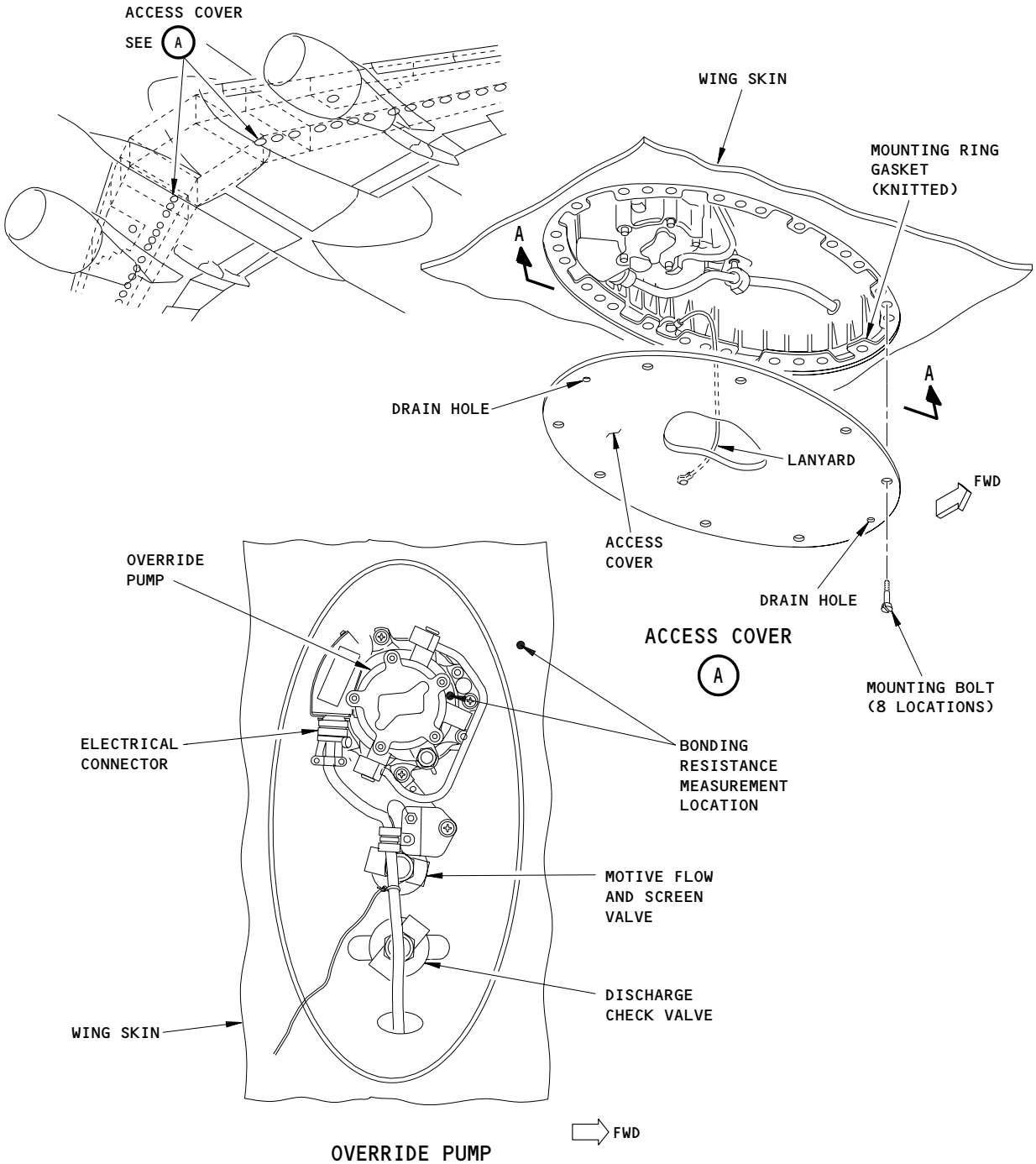
(b) Install the mounting bolts on the access cover.

(2) Install the right access cover, 631AB.

(a) Put and hold the access cover against the lower wing surface.

1) Make sure the lanyard is in the fuel tank.

(b) Install the mounting bolts on the access cover.



Override Pump Inspection
Figure 601

STATION		BOEING CARD NO.
TAIL NO.	SAS BOEING 767 TASK CARD	28-026-09
DATE		AIRLINE CARD NO.

SKILL	WORK AREA	RELATED TASK	INTERVAL	PHASE	MPD REV	TASK CARD REVISION
AIRPL	CTR AUX TK		8C	24896		APR 22/09

TASK	TITLE	STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE	APPLICABILITY ENGINE
FUNCTIONAL	OVERRIDE/JETTISON PUMP HOUSING BOND		ALL	ALL

ZONES	ACCESS PANELS
531	531AB

MECH	INSP	MPD ITEM NUMBER

FUNCTIONALLY CHECK (RESISTANCE MEASUREMENT) THE BONDING BETWEEN THE L/H CTR AUX TANK OVERRIDE/JETTISON PUMP MOTOR HOUSING AND THE STRUCTURE (SFAR 88). 28-22-05-6A

1. Override/Jettison Pump - Bonding Resistance Check (Fig. 601)

A. Equipment

(1) Bonding Meter - Use one of these:

(a) Bonding Meter - T477W
Avtron Manufacturing Co.
Cleveland, OH

(b) Bonding Meter - Model M1
(Serial Number A000012 and subsequent)
BCD Electronics Ltd.
Vancouver, Canada

B. References

(1) SWPM 20-20-00, Electrical Bonding and Grounds

C. Prepare for the Procedure

(1) Remove the applicable left or right tank access cover, 531AB or 631AB.

(a) Hold the access cover and remove the mounting bolts.

NOTE: It is not necessary to remove the mounting ring or the gasket.

(b) Lower the access cover until the lanyard holds the access cover.

MECH	INSP

D. Bonding Resistance Check

(1) Measure the bonding resistance between the override pump and the wing structure and between the jettison pump and the wing structure (SWPM 20-20-00).

(a) Make sure the resistance is 0.65 milliohm (0.00065 ohm) or less.

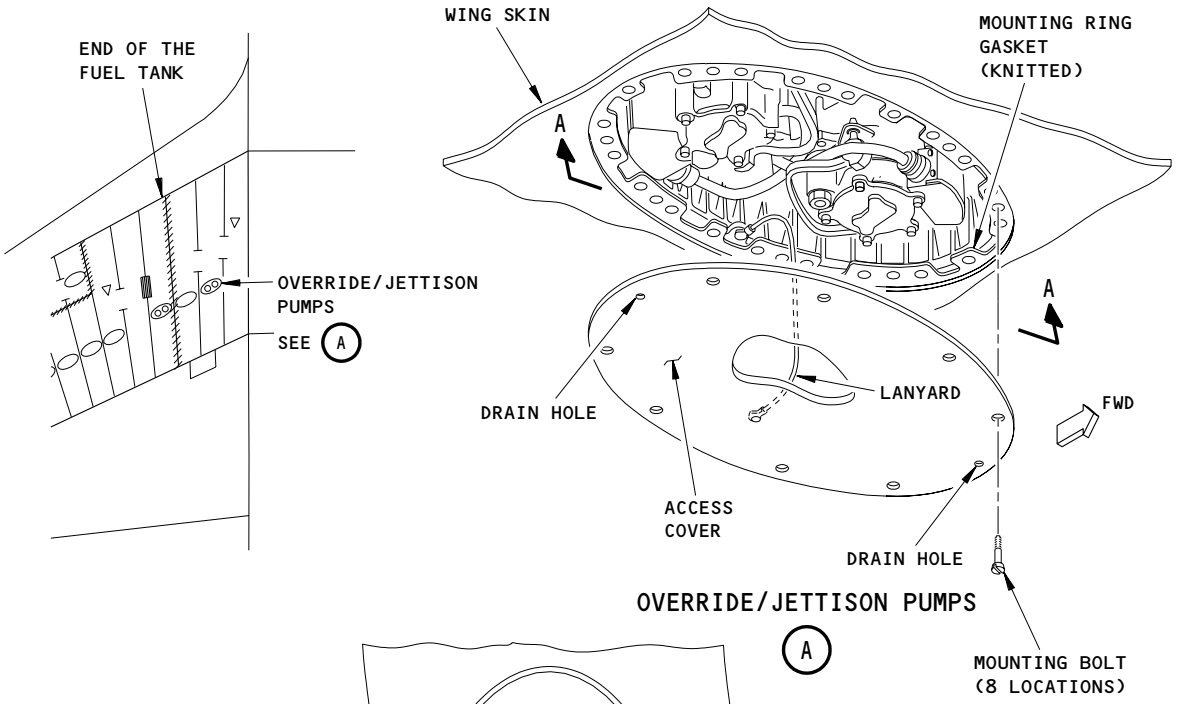
E. Put the Airplane Back to Its Usual Condition

(1) Install the applicable left or right tank access cover, 531AB or 631AB.

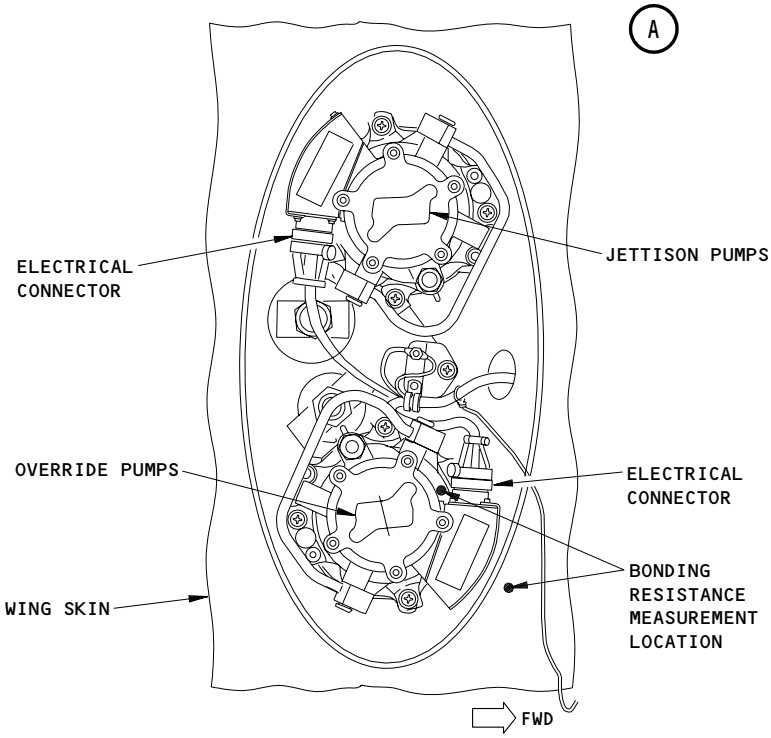
(a) Put and hold the access cover against the lower wing surface.

1) Make sure the lanyard is in the fuel tank.

(b) Install the mounting bolts on the access cover.



OVERRIDE/JETTISON PUMPS
A



OVERRIDE/JETTISON PUMPS
A-A

Override/Jettison Pump Inspection
Figure 601

STATION		BOEING CARD NO.
TAIL NO.	SAS BOEING 767 TASK CARD	28-026-10
DATE		AIRLINE CARD NO.

SKILL	WORK AREA	RELATED TASK	INTERVAL	PHASE	MPD REV	TASK CARD REVISION
AIRPL	CTR AUX TK		8C	24896		APR 22/09

TASK	TITLE	STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE	APPLICABILITY ENGINE
FUNCTIONAL	OVERRIDE/JETTISON PUMP HOUSING BOND		ALL	ALL

ZONES	ACCESS PANELS
631	631AB

MECH	INSP	MPD ITEM NUMBER

FUNCTIONALLY CHECK (RESISTANCE MEASUREMENT) THE BONDING BETWEEN THE R/H CTR AUX TANK OVERRIDE/JETTISON PUMP MOTOR HOUSING AND THE STRUCTURE (SFAR 88). 28-22-05-6A

1. Override/Jettison Pump - Bonding Resistance Check (Fig. 601)

A. Equipment

(1) Bonding Meter - Use one of these:

(a) Bonding Meter - T477W
Avtron Manufacturing Co.
Cleveland, OH

(b) Bonding Meter - Model M1
(Serial Number A000012 and subsequent)
BCD Electronics Ltd.
Vancouver, Canada

B. References

(1) SWPM 20-20-00, Electrical Bonding and Grounds

C. Prepare for the Procedure

(1) Remove the applicable left or right tank access cover, 531AB or 631AB.

(a) Hold the access cover and remove the mounting bolts.

NOTE: It is not necessary to remove the mounting ring or the gasket.

(b) Lower the access cover until the lanyard holds the access cover.

MECH	INSP

D. Bonding Resistance Check

(1) Measure the bonding resistance between the override pump and the wing structure and between the jettison pump and the wing structure (SWPM 20-20-00).

(a) Make sure the resistance is 0.65 milliohm (0.00065 ohm) or less.

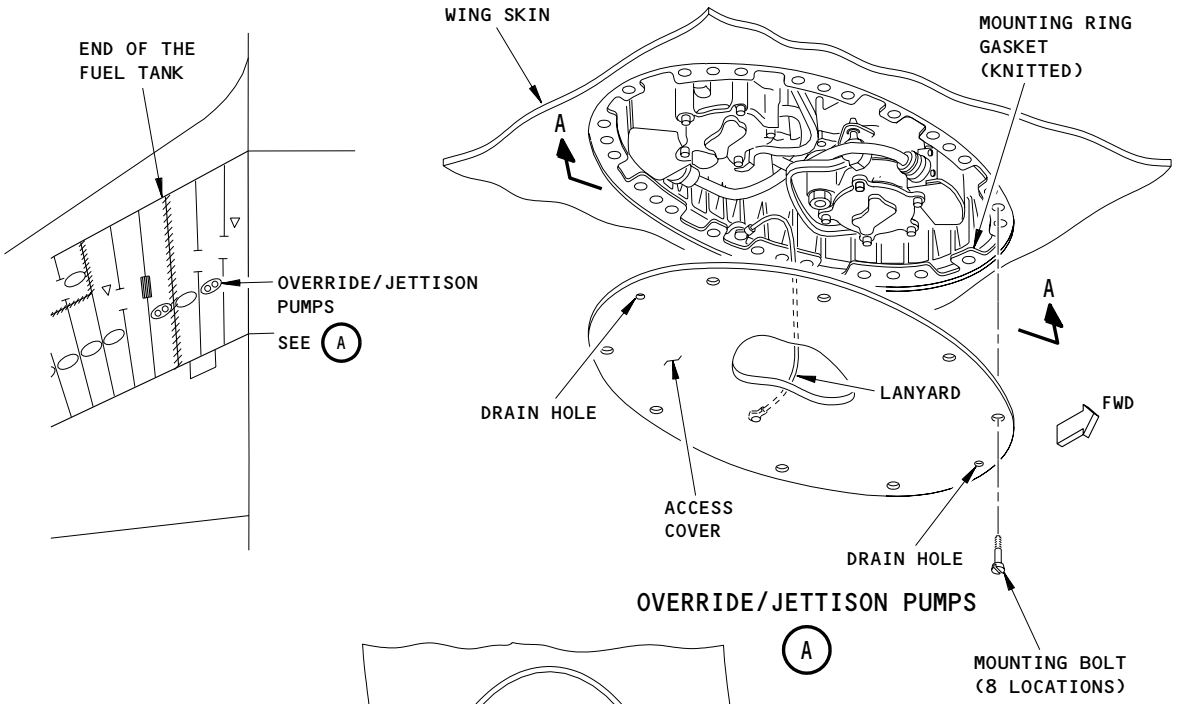
E. Put the Airplane Back to Its Usual Condition

(1) Install the applicable left or right tank access cover, 531AB or 631AB.

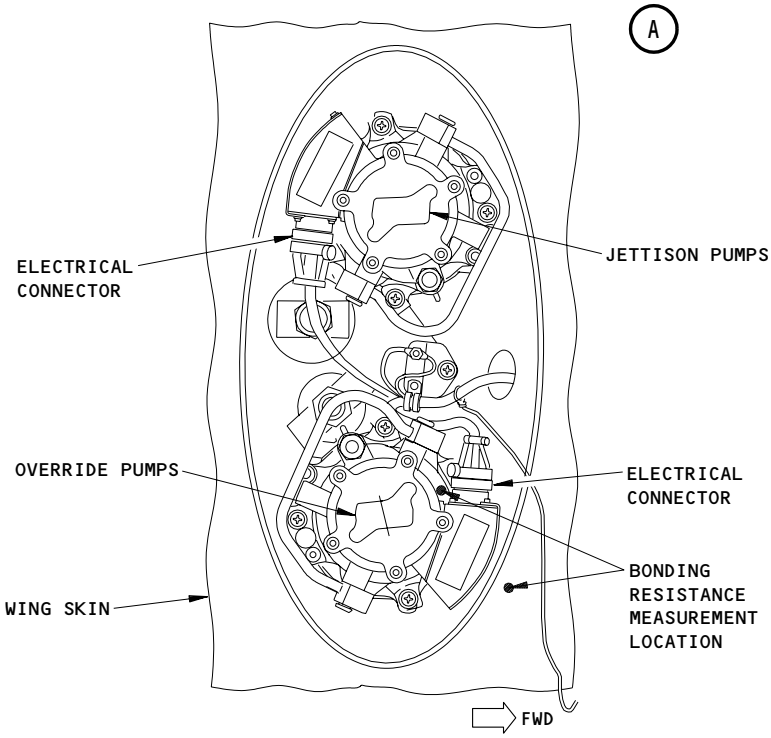
(a) Put and hold the access cover against the lower wing surface.

1) Make sure the lanyard is in the fuel tank.

(b) Install the mounting bolts on the access cover.



OVERRIDE/JETTISON PUMPS
A



OVERRIDE/JETTISON PUMPS
A-A

Override/Jettison Pump Inspection
Figure 601

STATION		BOEING CARD NO.
TAIL NO.	SAS BOEING 767 TASK CARD	28-027-01
DATE		AIRLINE CARD NO.

SKILL	WORK AREA	RELATED TASK	INTERVAL	PHASE	MPD REV	TASK CARD REVISION
AIRPL	L MAIN TANK		8C	24896		AUG 22/09

TASK	TITLE	STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE	APPLICABILITY ENGINE
FUNCTIONAL	FUEL SHUTOFF VALVE BOND		ALL	ALL

ZONES	ACCESS PANELS
551	551TB

MECH	INSP	MPD ITEM NUMBER

FUNCTIONALLY CHECK (RESISTANCE MEASUREMENT) THE BONDING BETWEEN THE ENGINE FUEL SHUTOFF VALVE (MOV) AND THE STRUCTURE TO ENSURE IT IS WITHIN SERVICE LIMITS (SFAR 88). 28-22-11-6A

1. Engine Fuel Shutoff Valve - Bonding Resistance Check (Fig. 601, 601A)

A. Equipment

(1) Bonding Meter - Use one of these:

(a) Bonding Meter - T477W
Avtron Manufacturing Co.
Cleveland, OH

(b) Bonding Meter - Model M1
(Serial Number A000012 and subsequent)
BCD Electronics Ltd.
Vancouver, Canada

B. Consumable Materials

(1) G00034 Cotton Wiper, Process Cleaning Absorbent Wiper (Cheesecloth, gauze) BMS 15-5

(2) Sealant, BMS 5-142

(3) B01008 Solvent - Series 88

C. References

(1) AMM 06-44-00/201, Wing Access Doors and Panels

(2) AMM 20-30-88/201, Airplane Structure Cleaning Solvents (Series 88)

(3) AMM 32-00-15/201, Landing Gear Door Locks

MECH | INSP

(4) AMM 32-00-20/201, Landing Gear Downlocks

(5) SWPM 20-20-00, Electrical Bonding and Grounds

D. Prepare for the Procedure

(1) Open these circuit breakers on the main power distribution panel, P6, and attach a DO-NOT-CLOSE tags:

(a) 6E1, FUEL VALVES L SPAR

(b) 6E2, FUEL VALVES R SPAR

WARNING: MAKE SURE THAT THE DOWNLOCKS ARE INSTALLED IN ALL OF THE LANDING GEAR. WITHOUT THE DOWNLOCKS, THE LANDING GEAR CAN RETRACT AND CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

(2) Make sure the downlocks are installed in the nose and main landing gear (AMM 32-00-20/201).

WARNING: OBEY THE INSTALLATION PROCEDURE FOR THE DOOR LOCK. THE DOORS OPEN AND CLOSE QUICKLY. THE MOVEMENT OF THE DOORS CAN CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

(3) Open the doors for the landing gear and install the door locks (AMM 32-00-15/201).

(4) For the left actuator (1), remove the left trailing edge skin panel, 551TB (AMM 06-44-00/201).

(5) For the right actuator (1), remove the right trailing edge skin panel, 651TB (AMM 06-44-00/201).

(6) Disconnect the electrical connector (5) from the actuator.

E. AIRPLANES WITHOUT ACTUATOR MA20A2027 OR MA30A1001;
Electrical Bonding Measurement

(1) Disconnect the bonding jumper (2) from the actuator (1).

(2) Measure the bonding resistance between the actuator (1) and the rear spar (SWPM 20-20-00).

(a) Make sure the resistance is 0.005 ohm (5 milliohms) or less.

(3) Connect the screw (4), washers (3), and nut to attach the bonding jumper (2) to the actuator (1).

(4) AIRPLANES WITH A REDUNDANT WIRE PATH TO OPEN AND CLOSE THE ENGINE-FUEL-SHUTOFF VALVE (POST-SB 28-66 OR PRR B12901-13S);
Do a check for continuity between pin 5 and pin 6 in the electrical connector (5).

(a) Repair the wire if there is no continuity.

F. AIRPLANES WITH ACTUATOR MA20A2027 OR MA30A1001;
Electrical Bonding Measurement

(1) Disconnect the bonding jumper (2) from the actuator (1).

(2) Measure the bonding resistance between the actuator (1) and the rear spar (SWPM 20-20-00).

(a) Make sure the resistance is 0.005 ohm (5 milliohms) or less.

(3) Do these steps to install the bonding jumper (2) to the actuator (1).

(a) Clean the contact surfaces with a cotton wiper soaked with Series 88 solvent (AMM 20-30-88/201).

1) Clean the surface until the cotton wiper is clean.

(b) Apply a thin continuous layer of sealant to both surfaces of the bonding jumper (2) and the washers (3).

1) Use BMS 5-142 sealant for the faying surface seal.

(c) Install the screw (4), washers (3), and nut to attach the bonding jumper (2) to the actuator (1).

(d) AIRPLANES WITHOUT ACTUATOR MA30A1001;
Tighten the screw (4) to 20 in-lb (2.3 Nm).

(e) AIRPLANES WITH ACTUATOR MA30A1001;
Tighten the screw (4) to 35 in-lb (4.0 Nm).

(f) Measure the elecrtical bonding resistance between the upper housing of the actuator (1) and the attached bonding jumper (2) terminal (SWPM 20-20-00).

1) Do not touch the screw (4) when you do the bonding measurement.

2) Make sure the bonding resistance is 0.001 ohm (1 milliohm) or less.

NOTE: CDCCL - Refer to the task: Airworthiness Limitation Precautions (AMM 28-00-00/201), for important information on Critical Design Configuration Control Limitations (CDCCLs).

NOTE: This is applicable to Airworthiness Limitation 28-AWL-23.

(g) Apply a cap seal of BMS 5-142 sealant over the terminal of the bonding jumper (2) and screw (4).

G. Put the Airplane Back to Its Usual Condition

(1) Connect the electrical connector (5) on the actuator (1).

(2) Install the applicable left or right trailing edge skin panel, 551TB or 651TB (AMM 06-44-00/201).

(3) Remove the DO-NOT-CLOSE tags, and close these circuit breakers:

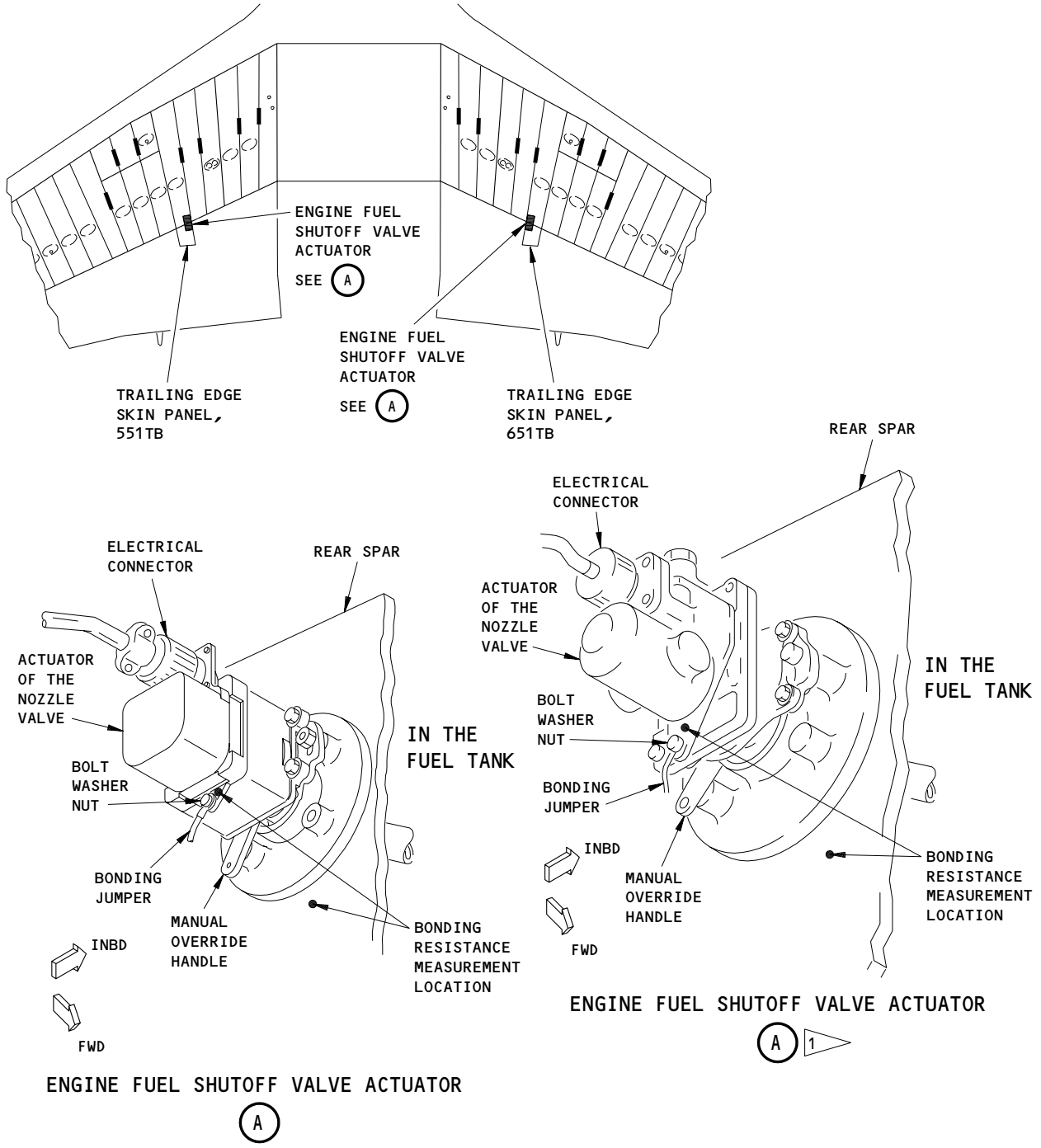
(a) On the P6 panel:

1) 6E1, FUEL VALVES L SPAR

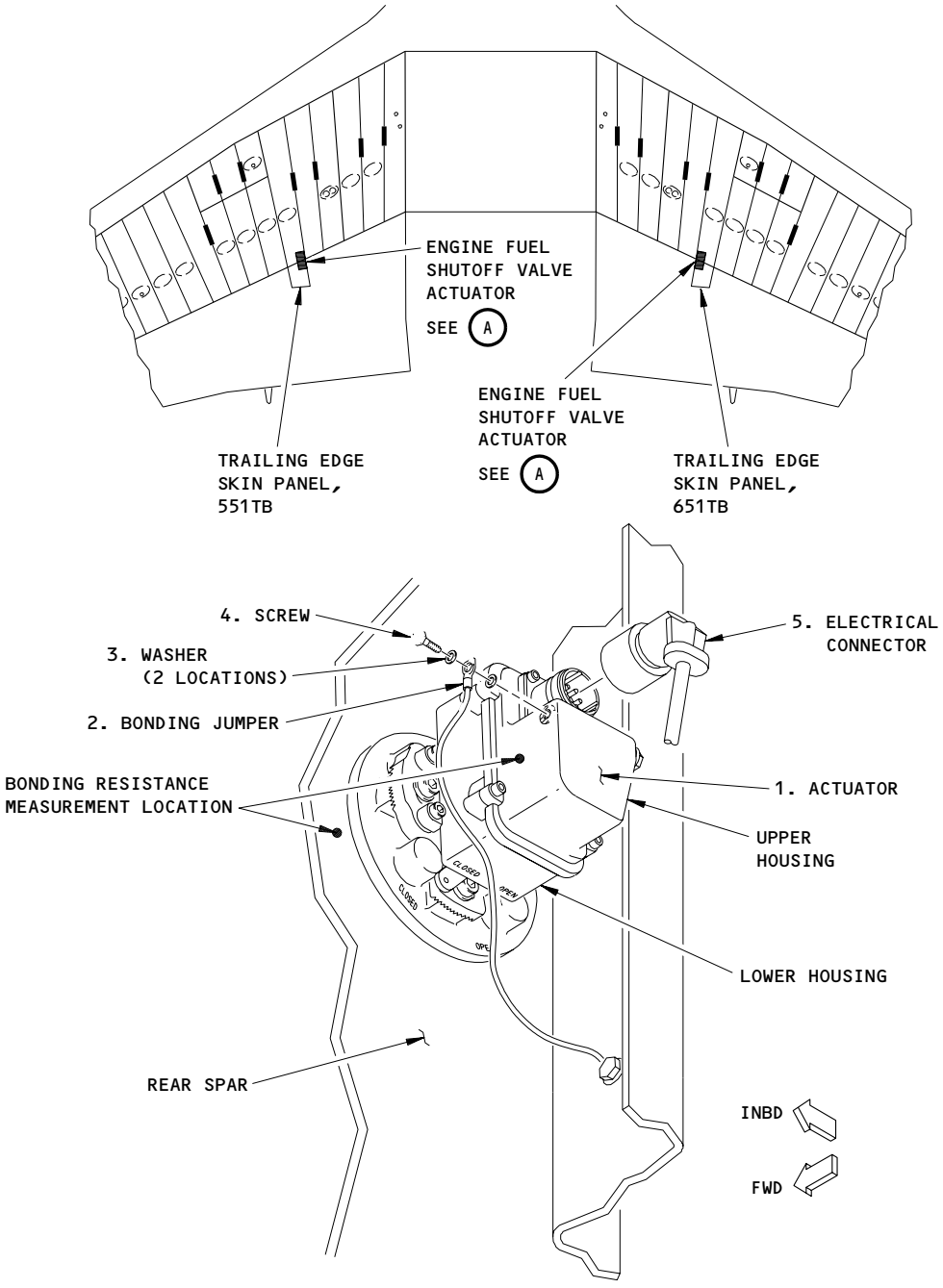
2) 6E2, FUEL VALVES R SPAR

WARNING: OBEY THE REMOVAL PRECEDURE FOR THE DOOR LOCKS. THE DOORS OPEN AND CLOSE QUICKLY. THE MOVEMENT OF THE DOORS CAN CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

(4) Remove the door locks from the main gear doors and close the doors (AMM 32-00-15/201).



Engine Fuel Shutoff Valve Actuator Inspection
Figure 601



ENGINE FUEL SHUTOFF VALVE ACTUATOR
(EXAMPLE)

A

Engine Fuel Shutoff Valve Actuator Inspection
Figure 601A

STATION		BOEING CARD NO.
TAIL NO.	SAS BOEING 767 TASK CARD	28-027-02
DATE		AIRLINE CARD NO.

SKILL	WORK AREA	RELATED TASK	INTERVAL	PHASE	MPD REV	TASK CARD REVISION
AIRPL	R MAIN TANK		8C	24896		AUG 22/09

TASK	TITLE	STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE	APPLICABILITY ENGINE
FUNCTIONAL	FUEL SHUTOFF VALVE BOND		ALL	ALL

ZONES	ACCESS PANELS
651	651TB

MECH	INSP	MPD ITEM NUMBER

FUNCTIONALLY CHECK (RESISTANCE MEASUREMENT) THE BONDING BETWEEN THE ENGINE FUEL SHUTOFF VALVE (MOV) AND THE STRUCTURE TO ENSURE IT IS WITHIN SERVICE LIMITS (SFAR 88). 28-22-11-6A

1. Engine Fuel Shutoff Valve - Bonding Resistance Check (Fig. 601, 601A)

A. Equipment

(1) Bonding Meter - Use one of these:

(a) Bonding Meter - T477W
Avtron Manufacturing Co.
Cleveland, OH

(b) Bonding Meter - Model M1
(Serial Number A000012 and subsequent)
BCD Electronics Ltd.
Vancouver, Canada

B. Consumable Materials

(1) G00034 Cotton Wiper, Process Cleaning Absorbent Wiper (Cheesecloth, gauze) BMS 15-5

(2) Sealant, BMS 5-142

(3) B01008 Solvent - Series 88

C. References

(1) AMM 06-44-00/201, Wing Access Doors and Panels

(2) AMM 20-30-88/201, Airplane Structure Cleaning Solvents (Series 88)

(3) AMM 32-00-15/201, Landing Gear Door Locks

MECH | INSP

(4) AMM 32-00-20/201, Landing Gear Downlocks

(5) SWPM 20-20-00, Electrical Bonding and Grounds

D. Prepare for the Procedure

(1) Open these circuit breakers on the main power distribution panel, P6, and attach a DO-NOT-CLOSE tags:

(a) 6E1, FUEL VALVES L SPAR

(b) 6E2, FUEL VALVES R SPAR

WARNING: MAKE SURE THAT THE DOWNLOCKS ARE INSTALLED IN ALL OF THE LANDING GEAR. WITHOUT THE DOWNLOCKS, THE LANDING GEAR CAN RETRACT AND CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

(2) Make sure the downlocks are installed in the nose and main landing gear (AMM 32-00-20/201).

WARNING: OBEY THE INSTALLATION PROCEDURE FOR THE DOOR LOCK. THE DOORS OPEN AND CLOSE QUICKLY. THE MOVEMENT OF THE DOORS CAN CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

(3) Open the doors for the landing gear and install the door locks (AMM 32-00-15/201).

(4) For the left actuator (1), remove the left trailing edge skin panel, 551TB (AMM 06-44-00/201).

(5) For the right actuator (1), remove the right trailing edge skin panel, 651TB (AMM 06-44-00/201).

(6) Disconnect the electrical connector (5) from the actuator.

E. AIRPLANES WITHOUT ACTUATOR MA20A2027 OR MA30A1001;
Electrical Bonding Measurement

(1) Disconnect the bonding jumper (2) from the actuator (1).

(2) Measure the bonding resistance between the actuator (1) and the rear spar (SWPM 20-20-00).

(a) Make sure the resistance is 0.005 ohm (5 milliohms) or less.

(3) Connect the screw (4), washers (3), and nut to attach the bonding jumper (2) to the actuator (1).

(4) AIRPLANES WITH A REDUNDANT WIRE PATH TO OPEN AND CLOSE THE ENGINE-FUEL-SHUTOFF VALVE (POST-SB 28-66 OR PRR B12901-13S);
Do a check for continuity between pin 5 and pin 6 in the electrical connector (5).

(a) Repair the wire if there is no continuity.

F. AIRPLANES WITH ACTUATOR MA20A2027 OR MA30A1001;
Electrical Bonding Measurement

(1) Disconnect the bonding jumper (2) from the actuator (1).

(2) Measure the bonding resistance between the actuator (1) and the rear spar (SWPM 20-20-00).

(a) Make sure the resistance is 0.005 ohm (5 milliohms) or less.

(3) Do these steps to install the bonding jumper (2) to the actuator (1).

(a) Clean the contact surfaces with a cotton wiper soaked with Series 88 solvent (AMM 20-30-88/201).

1) Clean the surface until the cotton wiper is clean.

(b) Apply a thin continuous layer of sealant to both surfaces of the bonding jumper (2) and the washers (3).

1) Use BMS 5-142 sealant for the faying surface seal.

(c) Install the screw (4), washers (3), and nut to attach the bonding jumper (2) to the actuator (1).

(d) AIRPLANES WITHOUT ACTUATOR MA30A1001;
Tighten the screw (4) to 20 in-lb (2.3 Nm).

(e) AIRPLANES WITH ACTUATOR MA30A1001;
Tighten the screw (4) to 35 in-lb (4.0 Nm).

(f) Measure the elecrtical bonding resistance between the upper housing of the actuator (1) and the attached bonding jumper (2) terminal (SWPM 20-20-00).

1) Do not touch the screw (4) when you do the bonding measurement.

2) Make sure the bonding resistance is 0.001 ohm (1 milliohm) or less.

NOTE: CDCCL - Refer to the task: Airworthiness Limitation Precautions (AMM 28-00-00/201), for important information on Critical Design Configuration Control Limitations (CDCCLs).

NOTE: This is applicable to Airworthiness Limitation 28-AWL-23.

(g) Apply a cap seal of BMS 5-142 sealant over the terminal of the bonding jumper (2) and screw (4).

G. Put the Airplane Back to Its Usual Condition

(1) Connect the electrical connector (5) on the actuator (1).

(2) Install the applicable left or right trailing edge skin panel, 551TB or 651TB (AMM 06-44-00/201).

(3) Remove the DO-NOT-CLOSE tags, and close these circuit breakers:

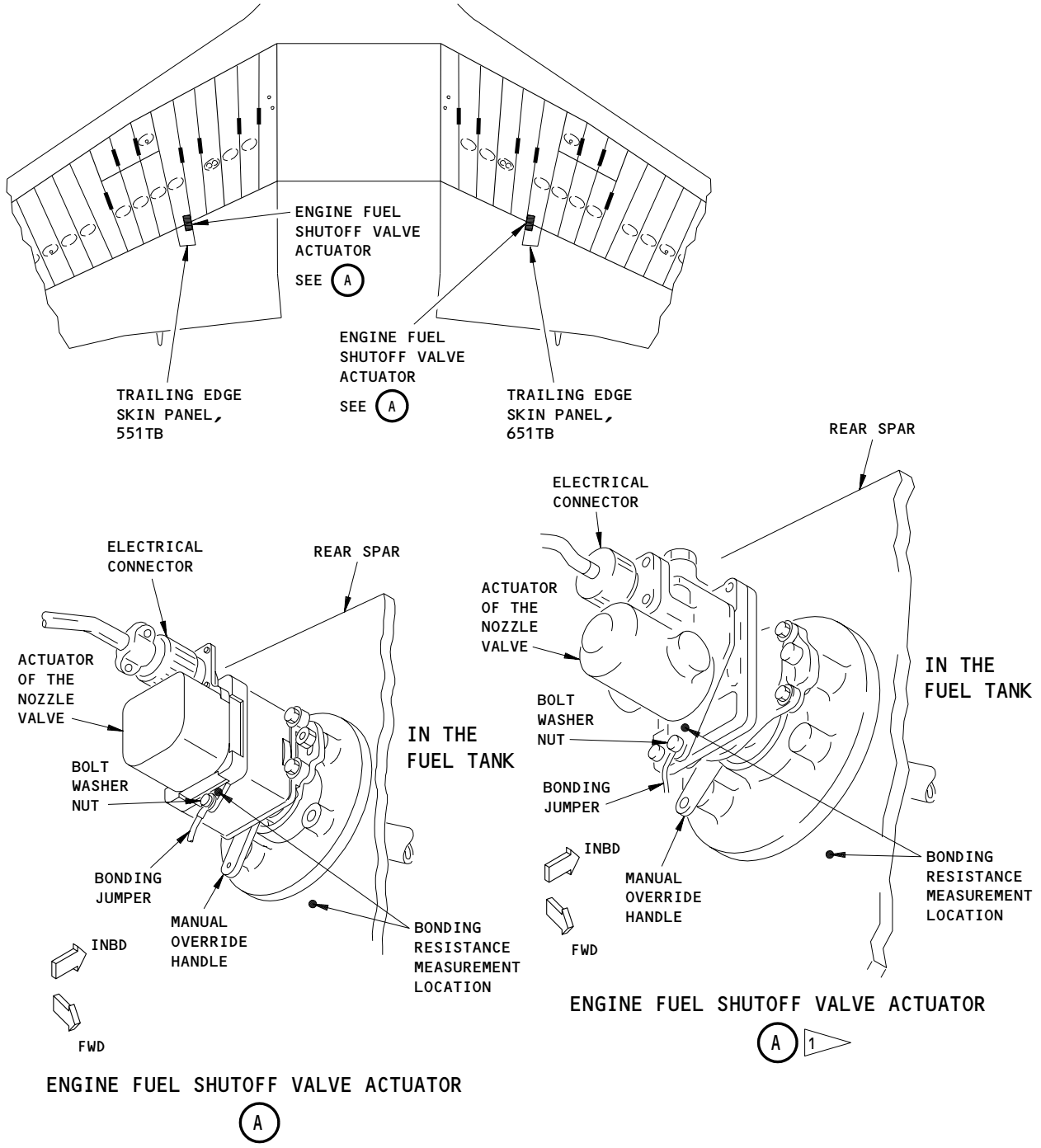
(a) On the P6 panel:

1) 6E1, FUEL VALVES L SPAR

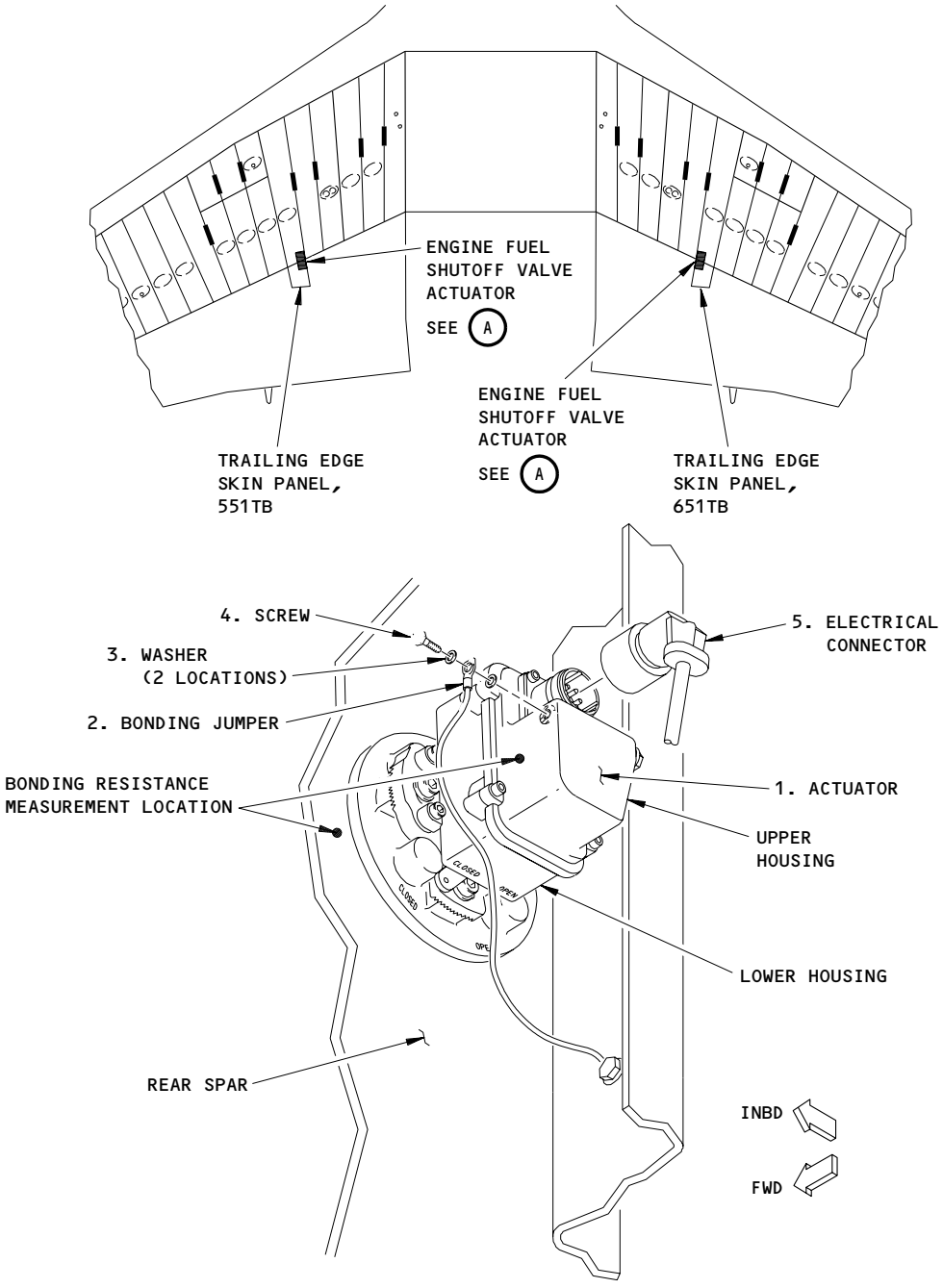
2) 6E2, FUEL VALVES R SPAR

WARNING: OBEY THE REMOVAL PRECEDURE FOR THE DOOR LOCKS. THE DOORS OPEN AND CLOSE QUICKLY. THE MOVEMENT OF THE DOORS CAN CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

(4) Remove the door locks from the main gear doors and close the doors (AMM 32-00-15/201).



Engine Fuel Shutoff Valve Actuator Inspection
Figure 601



ENGINE FUEL SHUTOFF VALVE ACTUATOR
(EXAMPLE)

A

Engine Fuel Shutoff Valve Actuator Inspection
Figure 601A

STATION		BOEING CARD NO.
TAIL NO.	SAS BOEING 767 TASK CARD	28-028-01
DATE		AIRLINE CARD NO.

SKILL	WORK AREA	RELATED TASK	INTERVAL	PHASE	MPD REV	TASK CARD REVISION
AIRPL	CTR AUX TK		8C	24896		AUG 22/09

TASK	TITLE	STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE	APPLICABILITY ENGINE
FUNCTIONAL	FUEL CROSSFEED VALVE BOND		ALL	ALL

ZONES	ACCESS PANELS
133 531	

MECH	INSP	MPD ITEM NUMBER

FUNCTIONALLY CHECK (RESISTANCE MEASUREMENT) THE BONDING BETWEEN THE CROSSFEED VALVE (MOV) AND THE STRUCTURE TO ENSURE IT IS WITHIN SERVICE LIMITS (SFAR 88). 28-22-12-6A

1. Engine Fuel Crossfeed Valve Actuator - Bonding Resistance Check (Fig. 601)

A. Equipment

(1) Bonding Meter - Use one of these:

(a) Bonding Meter - T477W
Avtron Manufacturing Co.
Cleveland, OH

(b) Bonding Meter - Model M1
(Serial Number A000012 and subsequent)
BCD Electronics Ltd.
Vancouver, Canada

B. Consumable Materials

(1) G00034 Cotton Wiper, Process Cleaning Absorbent Wiper (Cheesecloth, gauze) BMS 15-5

(2) Sealant, BMS 5-142

(3) B01008 Solvent - Series 88

C. References

(1) AMM 20-30-88/201, Airplane Structure Cleaning Solvents (Series 88)

(2) AMM 32-00-15/201, Landing Gear Door Locks

(3) AMM 32-00-20/201, Landing Gear Downlocks

MECH | INSP

(4) SWPM 20-20-00, Electrical Bonding and Grounds

D. Prepare for the Procedure

(1) AIRPLANES WITH A SINGLE ENGINE FUEL CROSSFEED VALVE
Open this circuit breaker on the overhead circuit breaker panel, P11, and attach a DO-NOT-CLOSE tag:

(a) 11D36, FUEL CROSSFEED VALVE

(2) AIRPLANES WITH FORWARD AND AFT ENGINE FUEL CROSSFEED VALVES
Open these circuit breakers on the overhead circuit breaker panel, P11, and attach DO-NOT-CLOSE tags:

(a) 11M20, FWD FUEL CROSSFEED VALVE

(b) 11M21, AFT FUEL CROSSFEED VALVE

(c) 11D36, CROSSFEED IND

WARNING: MAKE SURE THAT THE DOWNLOCKS ARE INSTALLED IN ALL OF THE LANDING GEAR. WITHOUT THE DOWNLOCKS, THE LANDING GEAR CAN RETRACT AND CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

(3) Make sure the downlocks are installed in the nose and main landing gear (AMM 32-00-20/201).

WARNING: OBEY THE INSTALLATION PROCEDURE FOR THE DOOR LOCKS. THE DOORS OPEN AND CLOSE QUICKLY. THE MOVEMENT OF THE DOORS CAN CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

(4) Open the doors for the landing gear and install the door locks (AMM 32-00-15/201).

(5) Disconnect the electrical connector from the actuator.

E. AIRPLANES WITHOUT ACTUATOR MA20A2027 OR MA30A1001;
Bonding Resistance Check

(1) Disconnect the bonding jumper from the actuator.

(2) Measure the electrical bonding resistance between the actuator and the structure (SWPM 20-20-00).

(a) Make sure the bonding resistance is 0.005 ohm (5 milliohms) or less.

(3) Install the screw, washers, and nut to attach the bonding jumper to the actuator.

F. AIRPLANES WITH ACTUATOR MA20A2027 OR MA30A1001;
Bonding Resistance Check

(1) Disconnect the bonding jumper from the actuator.

(2) Measure the electrical bonding resistance between the actuator and the structure (SWPM 20-20-00).

(a) Make sure the bonding resistance is 0.005 ohm (5 milliohms) or less.

(3) Do these steps to install the bonding jumper to the actuator:

(a) Clean the contact surfaces with a cotton wiper soaked with Series 88 solvent (AMM 20-30-88/201).

1) Clean and dry the surface until the cotton wiper stays clean.

(b) Apply a thin continuous layer of sealant to both surfaces of the bonding jumper and the washers.

1) Use BMS 5-142 sealant for the faying surface seal.

(c) Install the screw, washers, and nut to attach the bonding jumper to the actuator.

(d) AIRPLANES WITHOUT ACTUATOR MA30A1001;
Tighten the screw to 20 in-lb (2.3 Nm).

(e) AIRPLANES WITH ACTUATOR MA30A1001;
Tighten the screw to 35 in-lb (4.0 Nm).

(f) Measure the electrical bonding resistance between the upper housing of the actuator and the attached bonding jumper terminal (SWPM 20-00-00).

1) Do not touch the screw when you make the bonding measurement.

2) Make sure the bonding resistance is 0.001 ohm (1 milliohm) or less.

NOTE: CDCCL - Refer to the task: Airworthiness Limitation Precautions (AMM 28-00-00/201), for important information on Critical Design Configuration Control Limitations (CDCCLs).

NOTE: This is applicable to Airworthiness Limitation 28-AWL-23.

3) Apply a cap seal of BMS 5-142 sealant over the terminal of the bonding jumper and screw.

G. Put the Airplane Back to Its Usual Condition

(1) Connect the electrical connector to the actuator.

(2) AIRPLANES WITH A SINGLE ENGINE FUEL CROSSFEED VALVE; Remove the DO-NOT-CLOSE tag, and close this circuit breaker on the overhead circuit breaker panel, P11:

(a) 11D36, FUEL CROSSFEED VALVE

(3) AIRPLANES WITH FORWARD AND AFT ENGINE FUEL CROSSFEED VALVES; Remove the DO-NOT-CLOSE tags, and close these circuit breakers on the overhead circuit breaker panel, P11:

(a) 11M20, FWD FUEL CROSSFEED VALVE

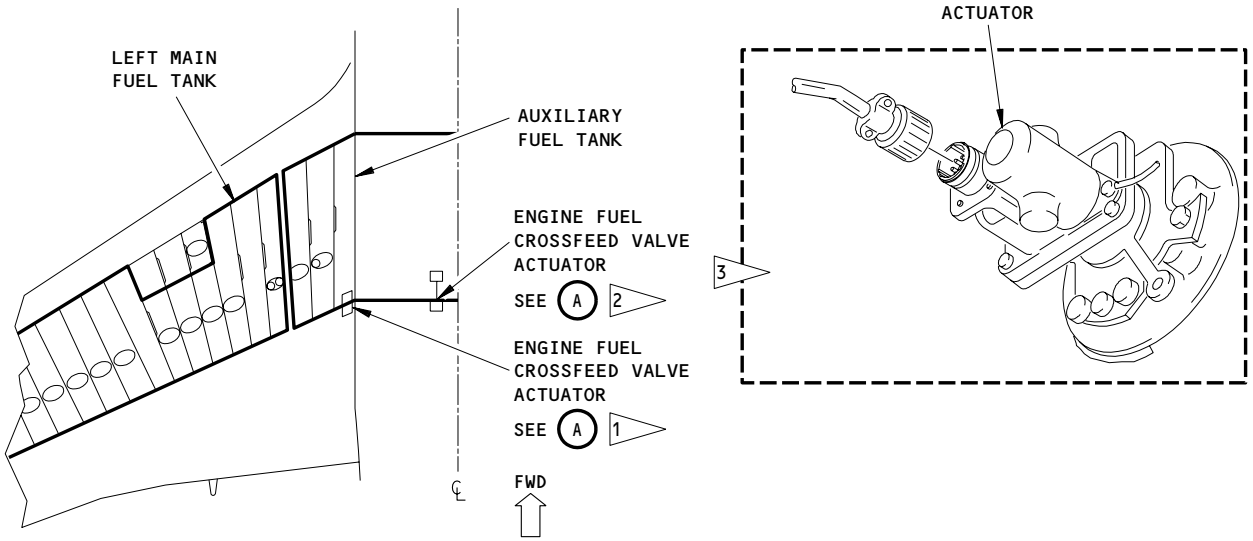
(b) 11M21, AFT FUEL CROSSFEED VALVE

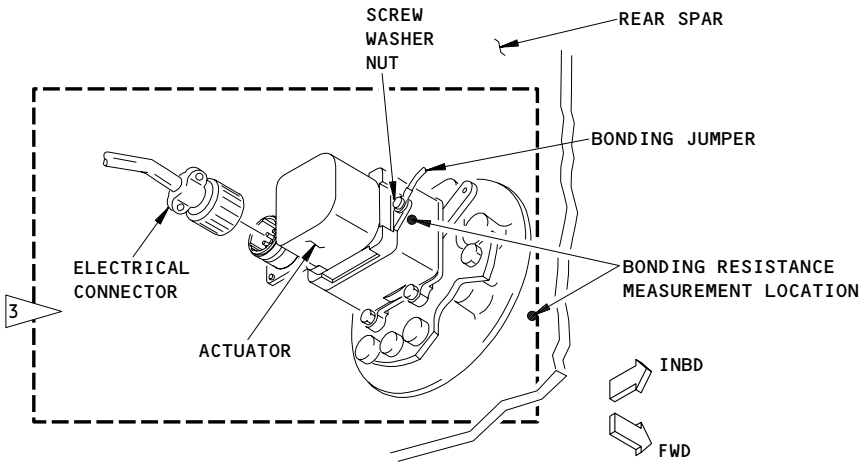
(c) 11D36, CROSSFEED IND

WARNING: OBEY THE REMOVAL PRECEDURE FOR THE DOOR LOCKS. THE DOORS OPEN AND CLOSE QUICKLY. THE MOVEMENT OF THE DOORS CAN CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

(4) Remove the door locks (AMM 32-00-15/201).

(5) When the maintenance and servicing of the airplane is complete, remove the downlocks from the landing gear (AMM 32-00-20/201).





ENGINE FUEL CROSSFEED VALVE ACTUATOR
(EXAMPLE)

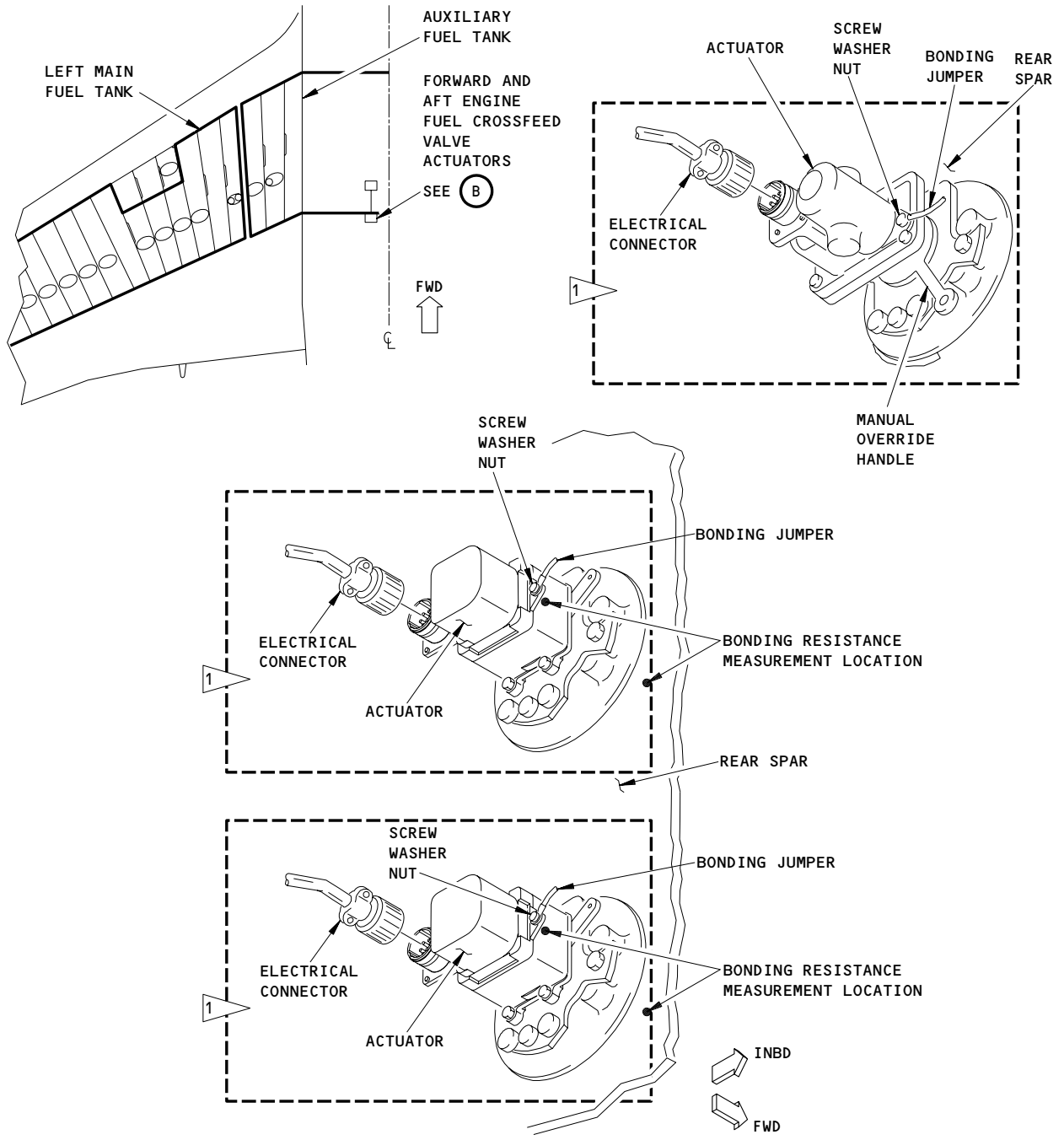
A

1 AIRPLANES WITH ENGINE FUEL CROSSFEED VALVE ACTUATOR IN LEFT AUXILIARY FUEL TANK

2 AIRPLANES WITH ENGINE FUEL CROSSFEED VALVE ACTUATOR IN CENTER AUXILIARY FUEL TANK

3 ALTERNATE

Engine Fuel Crossfeed Valve Actuator Inspection
Figure 601 (Sheet 1)

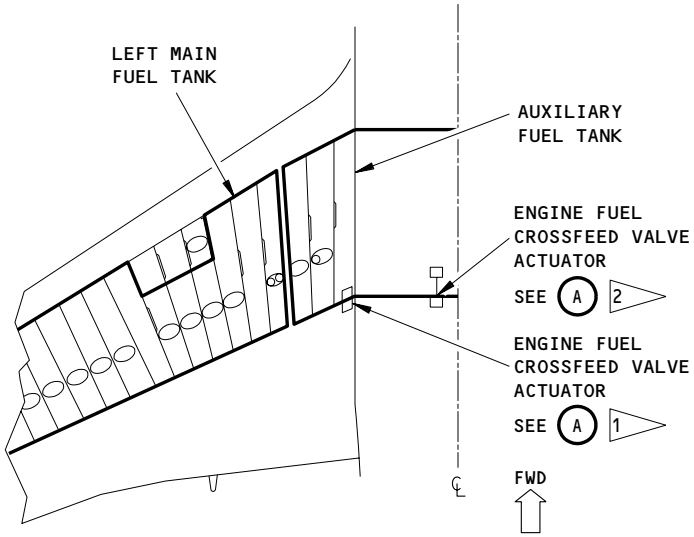


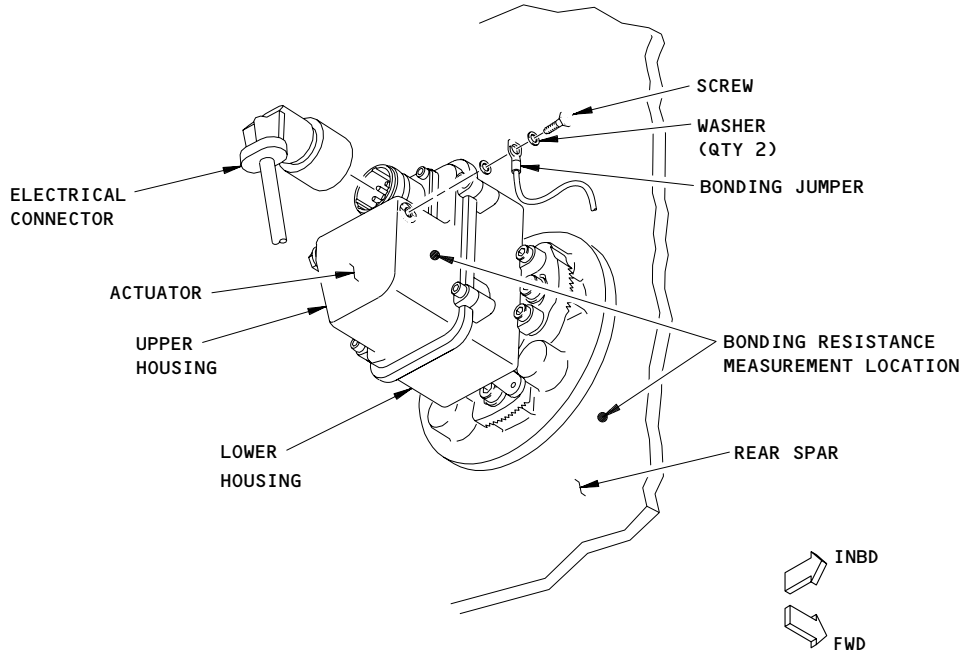
FORWARD AND AFT ENGINE FUEL CROSSFEED VALVE ACTUATORS
(EXAMPLE)

1 ALTERNATE

B

Engine Fuel Crossfeed Valve Actuators Inspection
Figure 601 (Sheet 2)





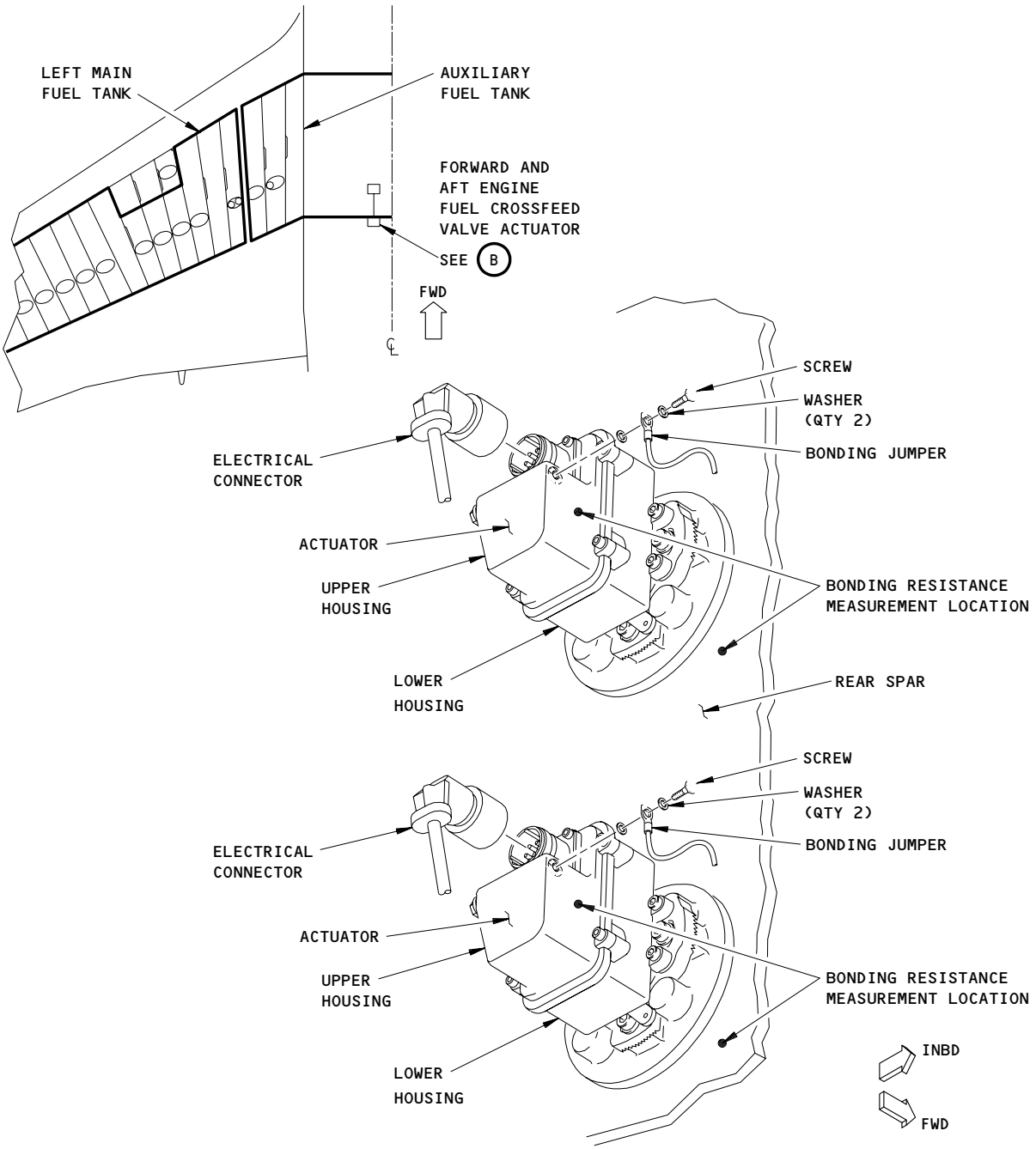
ENGINE FUEL CROSSFEED VALVE ACTUATOR
(EXAMPLE)

A

1 AIRPLANES WITH ENGINE FUEL CROSSFEED VALVE ACTUATOR IN LEFT AUXILIARY FUEL TANK

2 AIRPLANES WITH ENGINE FUEL CROSSFEED VALVE ACTUATOR IN CENTER AUXILIARY FUEL TANK

Engine Fuel Crossfeed Valve Actuator Inspection
Figure 601A (Sheet 1)



FORWARD AND AFT ENGINE FUEL CROSSFEED VALVE ACTUATOR
(EXAMPLE)

B

Engine Fuel Crossfeed Valve Actuator Inspection
Figure 601A (Sheet 2)

STATION		BOEING CARD NO.
TAIL NO.	SAS BOEING 767 TASK CARD	28-029-01
DATE		AIRLINE CARD NO.

SKILL	WORK AREA	RELATED TASK	INTERVAL	PHASE	MPD REV	TASK CARD REVISION
AIRPL	C WING TANK		8C	24896		AUG 22/08

TASK	TITLE	STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE	APPLICABILITY ENGINE
FUNCTIONAL	APU DC FUEL PUMP MOTOR HOUSING BOND		ALL	ALL

ZONES	ACCESS PANELS
531	531BB

MECH	INSP	MPD ITEM NUMBER
		28-25-01-6A

FUNCTIONALLY CHECK (RESISTANCE MEASUREMENT) THE BONDING BETWEEN THE APU FUEL PUMP MOTOR HOUSING AND STRUCTURE TO ENSURE IT IS WITHIN SERVICE LIMITS (SFAR 88).

1. APU DC Fuel Pump - Bonding Resistance Check (Fig. 601)

A. Equipment

(1) Bonding Meter - Use one of these:

(a) Bonding Meter - T477W
Avtron Manufacturing Co.
Cleveland, OH

(b) Bonding Meter - Model M1
(Serial Number A000012 and subsequent)
BCD Electronics Ltd.
Vancouver, Canada

B. References

(1) AMM 06-44-00/201, Wing Access Doors and Panels

(2) AMM 28-11-00/201, Fuel Tanks

(3) AMM 28-11-02/401, Center Auxiliary Tank Access Door

(4) AMM 28-26-00/201, Defueling

(5) SWPM 20-20-00, Electrical Bonding and Grounds

C. Prepare for Examination

(1) Defuel the auxiliary and left main fuel tanks (AMM 28-26-00/201).

(2) Drain and purge the auxiliary fuel tank (AMM 28-11-00/201).

(3) Open these circuit breakers and attach DO-NOT-CLOSE tags:

(a) On the overhead circuit breaker panel, P11:

1) 11D34, FUEL DC PUMP PWR

2) 11D35, FUEL DC PUMP CONT

(4) Remove the left auxiliary tank access door, 531BB (AMM 28-11-02/401).

WARNING: OBEY THE FUEL TANK ENTRY PRECAUTIONS. FAILURE TO OBEY THE FUEL TANK ENTRY PRECAUTIONS COULD CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.

(5) Obey the fuel tank entry precautions (AMM 28-11-00/201).

D. Bonding Resistance Check

(1) Use a bonding meter to measure the bonding resistance between the housing (1) and the rear spar (SWPM 20-20-00).

(a) Make sure the electrical bonding resistance is 0.003 ohm (3 milliohms) or less.

E. Put the Airplane Back to Its Usual Condition

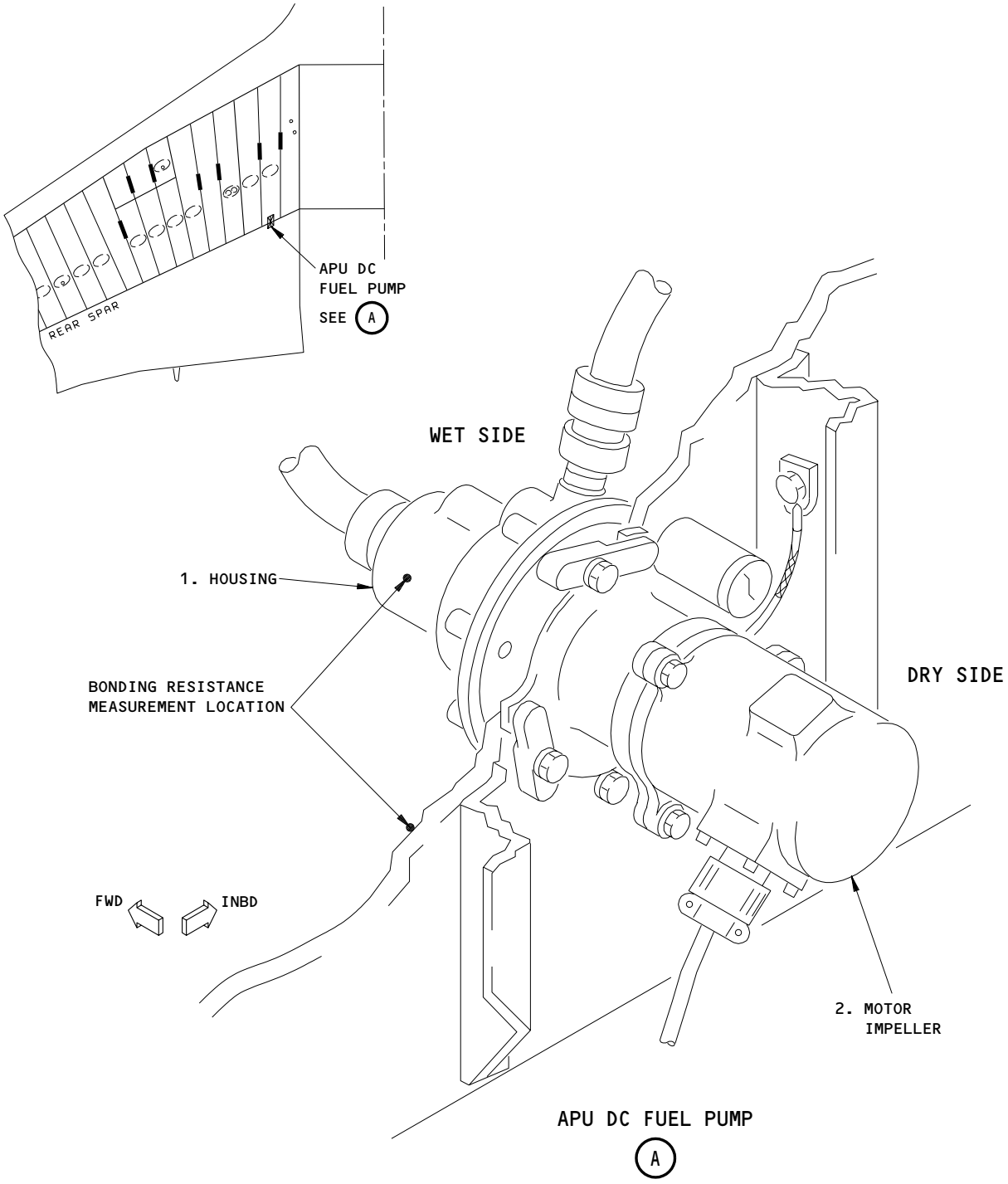
(1) Remove the DO-NOT-CLOSE tags and close these circuit breakers:

(a) On the overhead circuit breaker panel, P11:

1) 11D34, FUEL DC PUMP PWR

2) 11D35, FUEL DC PUMP CONT

(2) Install the left auxiliary tank access door, 531BB (AMM 28-11-02/401).



APU DC Fuel Pump Inspection
Figure 601

STATION		BOEING CARD NO.
TAIL NO.	SAS BOEING 767 TASK CARD	28-030-01
DATE		AIRLINE CARD NO.

SKILL	WORK AREA	RELATED TASK	INTERVAL	PHASE	MPD REV	TASK CARD REVISION
AIRPL	L/H WING		8C	24896		AUG 22/09

TASK	TITLE	STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE	APPLICABILITY ENGINE
FUNCTIONAL	APU FUEL SHUTOFF VALVE BOND		ALL	ALL

ZONES	ACCESS PANELS
551	

MECH	INSP	MPD ITEM NUMBER

FUNCTIONALLY CHECK (RESISTANCE MEASUREMENT) THE BONDING BETWEEN THE APU FUEL SHUTOFF VALVE (MOV) AND THE STRUCTURE TO ENSURE IT IS WITHIN SERVICE LIMITS (SFAR 88). 28-25-02-6A

1. <u>APU Fuel Shutoff Valve - Bonding Resistance Check</u> (Fig. 601)

A. Equipment

(1) Bonding Meter - Use one of these:

(a) Bonding Meter - T477W
Avtron Manufacturing Co.
Cleveland, OH

(b) Bonding Meter - Model M1
(Serial Number A000012 and subsequent)
BCD Electronics Ltd.
Vancouver, Canada

B. Consumable Materials

(1) G00034 Cotton Wiper, Process Cleaning Absorbent Wiper (Cheesecloth, gauze) BMS 15-5

(2) Sealant, BMS 5-142

(3) B01008 Solvent - Series 88

C. References

(1) AMM 20-30-88/201, Airplane Structure Cleaning Solvent (Series 88)

(2) AMM 32-00-15/201, Landing Gear Door Locks

(3) AMM 32-00-20/201, Landing Gear Downlocks

MECH	INSP

(4) SWPM 20-20-00, Electrical Bonds and Grounds

D. Prepare for Examination

WARNING: MAKE SURE THAT THE DOWNLOCKS ARE INSTALLED IN ALL OF THE LANDING GEAR. WITHOUT THE DOWNLOCKS, THE LANDING GEAR CAN RETRACT AND CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

(1) Make sure the downlocks are installed in the nose and main landing gear (AMM 32-00-20/201).

WARNING: OBEY THE INSTALLATION PROCEDURE FOR THE DOOR LOCKS. THE DOORS OPEN AND CLOSE QUICKLY. THE MOVEMENT OF THE DOORS CAN CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

(2) Open the doors for the landing gear and install the door locks (AMM 32-00-15/201).

(3) Open this circuit breakers and attach DO-NOT-CLOSE tags:

(a) On the main power distribution panel, P6:

1) 6E3, APU FUEL VALVES

(4) Disconnect the electrical connector (7) from the actuator (1).

E. AIRPLANES WITHOUT ACTUATOR MA20A2027 OR MA30A1001;
Bonding Resistance Check

(1) Remove the bolt (3), washer (4), and nut (5) to disconnect the bonding jumper (2) from the actuator (1).

(2) Use a bonding meter to measure the bonding resistance between the actuator (1) and the rear spar (SWPM 20-20-00).

(a) Make sure the resistance is 5 milliohms (0.005 ohm) or less.

(3) Install the bolt (3), washers (4), and nut (5) to connect the bonding jumper (2) to the actuator (1).

F. AIRPLANES WITH ACTUATOR MA20A2027 OR MA30A1001;
Bonding Resistance Check

MECH | INSP

(1) Remove the bolt (3), washer (4), and nut (5) to disconnect the bonding jumper (2) from the actuator (1).

(2) Use a bonding meter to measure the bonding resistance between the actuator (1) and the rear spar (SWPM 20-20-00).

(a) Make sure the resistance is 5 milliohms (0.005 ohm) or less.

(3) Do these steps to install the bonding jumper (2) to the actuator (1):

(a) Clean the contact surfaces with a cotton wiper soaked with Series 88 solvent (AMM 20-30-88/201).

1) Clean and dry the surface until the cotton wiper stays clean.

(b) Apply a thin continuous layer of sealant to both surfaces of the bonding jumper (2) and the washers (4).

1) Use BMS 5-142 sealant for the faying surface seal.

(c) Install the bolt (3), washers (4), and nut (5) to attach the bonding jumper (2) to the actuator (1).

1) AIRPLANES WITHOUT ACTUATOR MA30A1001;
Tighten the bolt (3) to 20 in-lb (2.3 Nm).

2) AIRPLANES WITH ACTUATOR MA30A1001;
Tighten the bolt (3) to 35 in-lb (4.0 Nm).

(d) Measure the electical bonding resistance between the upper housing of the actuator (1) and the attached bonding jumper (2) terminal (SWPM 20-20-00).

1) Do not touch the bolt (3) when you make the bonding measurement.

2) Make sure the bonding resistance is 0.001 ohm (1 milliohm) or less.

NOTE: CDCCL - Refer to the task: Airworthiness Limitation Precautions (AMM 28-00-00/201), for important information on Critical Design Configuration Control Limitations (CDCCLs).

NOTE: This is applicable to Airworthiness Limitation 28-AWL-23.

(e) Apply a cap seal of BMS 5-142 selant over the terminal of the bonding jumper (2) and the bolt (3).

G. Put the Airplane Back to Its Usual Condition.

(1) Connect the electrical connector (7) to the actuator (1).

(2) Remove the DO-NOT-CLOSE tags and close this circuit breaker:

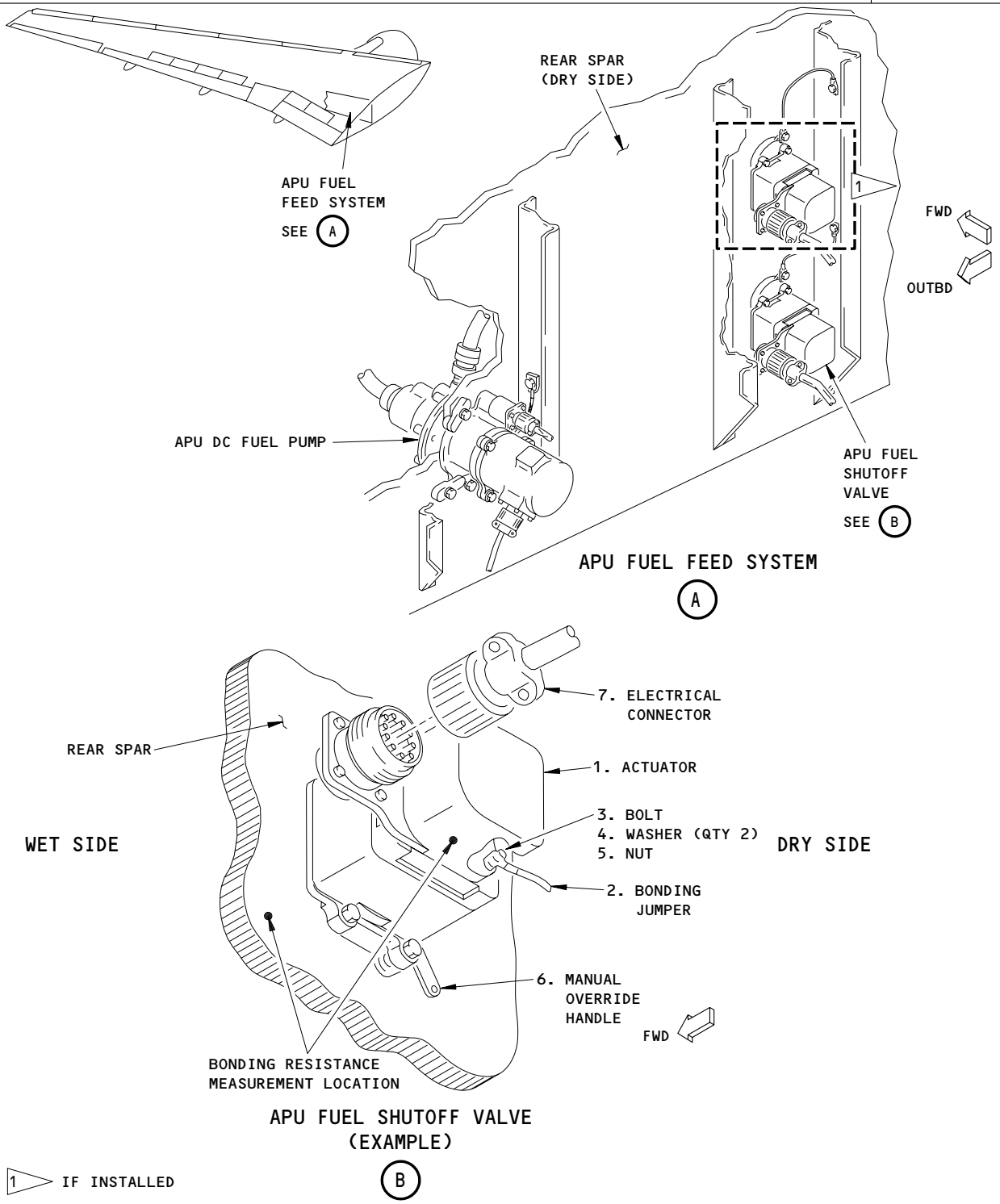
(a) On the main power distribution panel, P6:

1) 6E3, APU FUEL VALVE

WARNING: OBEY THE REMOVAL PRECEDURE FOR THE DOOR LOCKS. THE DOORS OPEN AND CLOSE QUICKLY. THE MOVEMENT OF THE DOORS CAN CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

(3) Remove the door locks from the landing gear doors and close the doors (AMM 32-00-15/201).

(4) When the maintenance and servicing of the airplane is complete, remove the downlocks from the landing gear (AMM 32-00-20/201).



APU Fuel Shutoff Valve Inspection
Figure 601

STATION		BOEING CARD NO.
TAIL NO.	SAS BOEING 767 TASK CARD	28-031-01
DATE		AIRLINE CARD NO.

SKILL	WORK AREA	RELATED TASK	INTERVAL	PHASE	MPD REV	TASK CARD REVISION
AIRPL	L/H WING		8C	24896		AUG 22/09

TASK	TITLE	STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE	APPLICABILITY ENGINE
FUNCTIONAL	APU FUEL ISOLATION VALVE BOND		NOTE	ALL

ZONES	ACCESS PANELS
551	

MECH	INSP	MPD ITEM NUMBER

FUNCTIONALLY CHECK (RESISTANCE MEASUREMENT) THE BONDING BETWEEN THE APU FUEL ISOLATION VALVE (MOV) AND THE STRUCTURE TO ENSURE IT IS WITHIN SERVICE LIMITS (SFAR 88). 28-25-04-6A

AIRPLANE NOTE: APPLICABLE TO AIRPLANES WITH INSTALLED APU ISOLATION VALVES.

1. <u>APU Fuel Isolation Valve - Bonding Resistance Check</u> (Fig. 601)

A. Equipment

(1) Bonding Meter - Use one of these:

(a) Bonding Meter - T477W
Avtron Manufacturing Co.
Cleveland, OH

(b) Bonding Meter - Model M1
(Serial Number A000012 and subsequent)
BCD Electronics Ltd.
Vancouver, Canada

(2) Consumable Materials

(a) G00034 Cotton Wiper, Process Cleaning Absorbent Wiper (Cheese cloth, gauze) BMS 15-5

(b) Sealant, BMS 5-142

(c) B01008 Solvent - Series 88

B. References

(1) AMM 20-30-88/201, Airplane Structure Cleaning Solvents (Series 88)

(2) AMM 32-00-15/201, Landing Gear Door Locks

MECH | INSP

(3) AMM 32-00-20/201, Landing Gear Downlocks

(4) SWPM 20-20-00, Electrical Bonding and Grounds

C. Prepare for the Procedure

(1) Open this circuit breaker and attach a DO-NOT-CLOSE tag:

(a) On the overhead circuit breaker panel, P11:

1) 11D35, FUEL DC PUMP CONT

WARNING: MAKE SURE THAT THE DOWNLOCKS ARE INSTALLED IN ALL OF THE LANDING GEAR. WITHOUT THE DOWNLOCKS, THE LANDING GEAR CAN RETRACT AND CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

(2) Make sure the downlocks are installed in the nose and main landing gear (AMM 32-00-20/201).

WARNING: OBEY THE INSTALLATION PROCEDURE FOR THE DOOR LOCK. THE DOORS OPEN AND CLOSE QUICKLY. THE MOVEMENT OF THE DOORS CAN CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

(3) Open the doors for the landing gear and install the door locks (AMM 32-00-15/201).

(4) Disconnect the electrical connector from the actuator.

D. AIRPLANES WITHOUT ACTUATOR MA20A2027 OR MA30A1001;
Electrical Bonding Measurement

(1) Disconnect the bonding jumper from the actuator.

(2) Measure the bonding resistance between the actuator and the rear spar (SWPM 20-20-00).

(a) Make sure the bonding resistance is 5 milliohms (0.005 ohm) or less.

(3) Install the bolt, washers, and nut to attach the bonding jumper to the actuator.

MECH | INSP

E. AIRPLANES WITH ACTUATOR MA20A2027 OR MA30A1001;
Electrical Bonding Measurement

(1) Disconnect the bonding jumper from the actuator.

(2) Measure the bonding resistance between the actuator and the rear spar (SWPM 20-20-00).

(a) Make sure the bonding resistance is 5 milliohms (0.005 ohm) or less.

(3) Do these steps to install the bonding jumper to the actuator:

(a) Clean the contact surfaces with a cotton wiper soaked with Series 88 solvent (AMM 20-30-88/201).

1) Clean the surface until the dry cotton wiper stays clean.

(b) Apply a thin continuous layer of sealant to both surfaces of the bonding jumper and the washer.

1) Use the BMS 5-142 sealant for the faying surface seal.

(c) Install the bolt, washers, and nut to attach the bonding jumper to the actuator.

1) AIRPLANES WITHOUT ACTUATOR MA30A1001;
Tighten the bolt to 20 in-lb (2.3 Nm).

2) AIRPLANES WITH ACTUATOR MA30A1001;
Tighten the bolt to 35 in-lb (4.0 Nm).

(d) Measure the electrical bonding resistance between the upper housing of the actuator and the attached bonding jumper terminal (SWPM 20-20-00).

1) Do not touch the bolt when you make the bonding measurement.

2) Make sure the bonding resistance is 0.001 ohm (1 milliohm) or less.

NOTE: CDCCL - Refer to the task: Airworthiness Limitation Precautions (AMM 28-00-00/201), for important information on Critical Design Configuration Control Limitations (CDCCLs).

NOTE: This is applicable to Airworthiness Limitation 28-AWL-23.

(e) Apply a cap seal of BMS 5-142 sealant over the terminal of the bonding jumper and the bolt.

F. Put the Airplane Back to Its Usual Condition

(1) Connect the electrical connector to the actuator.

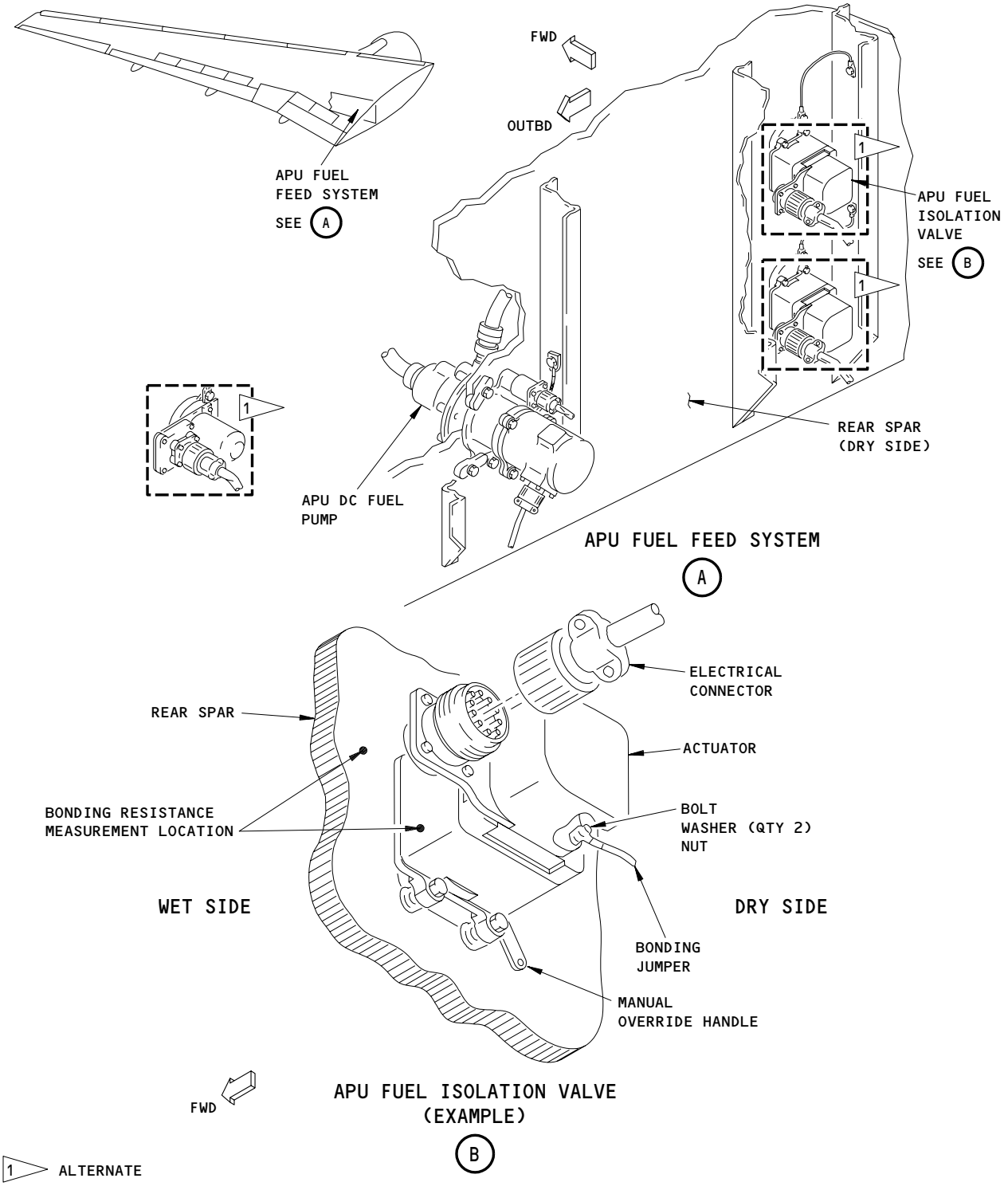
(2) Remove the DO-NOT-CLOSE tag and close this circuit breaker:

(a) On the overhead circuit breaker panel, P11:

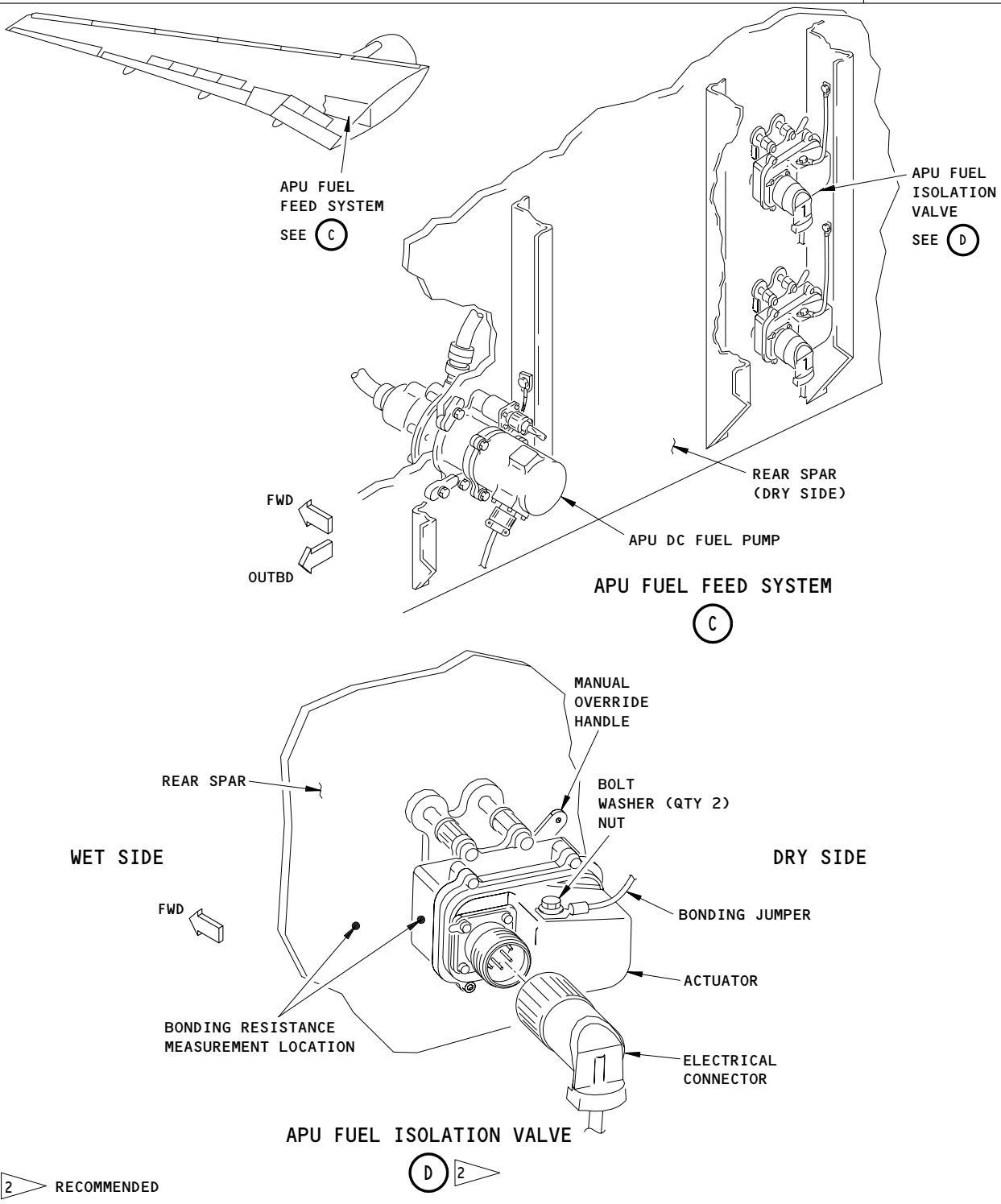
1) 11D35, FUEL DC PUMP CONT

WARNING: OBEY THE REMOVAL PRECEDURE FOR THE DOOR LOCKS. THE DOORS OPEN AND CLOSE QUICKLY. THE MOVEMENT OF THE DOORS CAN CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

(3) Remove the door locks and close the landing gear doors (AMM 32-00-15/201).



APU Isolation Valve Inspection
Figure 601 (Sheet 1)



APU Isolation Valve Inspection
Figure 601 (Sheet 2)

STATION		BOEING CARD NO.
TAIL NO.	SAS BOEING 767 TASK CARD	28-032-01
DATE		AIRLINE CARD NO.

SKILL	WORK AREA	RELATED TASK	INTERVAL	PHASE	MPD REV	TASK CARD REVISION
AIRPL	L WING TE		8C	24896		AUG 22/09

TASK	TITLE	STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE	APPLICABILITY ENGINE
FUNCTIONAL	DEFUELING VALVE ACTUATOR BOND		ALL	ALL

ZONES	ACCESS PANELS
551	551TB

MECH	INSP	MPD ITEM NUMBER

FUNCTIONALLY CHECK (RESISTANCE MEASUREMENT) THE BONDING BETWEEN THE L/H MAIN TANK DEFUELING VALVE AND THE STRUCTURE TO ENSURE IT IS WITHIN IN-SERVICE LIMITS (SFAR 88). 28-26-11-6A

1. Defueling Valve Actuator - Bonding Resistance Check (Fig. 601, 601A)

A. Equipment

(1) Bonding Meter - Use one of these:

(a) Bonding Meter - T477W
Avtron Manufacturing Co.
Cleveland, OH

(b) Bonding Meter - Model M1
(Serial Number A000012 and subsequent)
BCD Electronics Ltd.
Vancouver, Canada

B. Consumable Materials

(1) G00034 Cotton Wiper, Process Cleaning Absorbent Wiper (Cheese cloth, gauze) BMS 15-5

(2) Sealant, BMS 5-142

(3) B01008 Solvent - Series 88

C. References

(1) AMM 20-30-88/201, Airplane Structure Cleaning Solvents (Series 88)

(2) AMM 06-44-00/201, Wings Access Doors and Panels

(3) AMM 32-00-15/201, Landing Gear Door Locks

MECH | INSP

(4) AMM 32-00-20/201, Landing Gear Downlocks

(5) SWPM 20-20-00, Electrical Bonding and Grounds

D. Prepare for the Procedure

WARNING: MAKE SURE THAT THE DOWNLOCKS ARE INSTALLED IN ALL OF THE LANDING GEAR. WITHOUT THE DOWNLOCKS, THE LANDING GEAR CAN RETRACT AND CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

(1) Make sure the downlocks are installed in the nose and main landing gear (AMM 32-00-20/201).

WARNING: OBEY THE INSTALLATION PROCEDURE FOR THE DOOR LOCK. THE DOORS OPEN AND CLOSE QUICKLY. THE MOVEMENT OF THE DOORS CAN CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

(2) Open the doors for the landing gear and install the door locks (AMM 32-00-15/201).

(3) Open these circuit breakers and attach DO-NOT-CLOSE tags:

(a) On the main power distribution panel, P6:

1) 6E7, DEFUEL VALVES

(b) On the APU external power panel, P34:

1) 34L4, DEFUELING VALVES

(4) To get access to the defueling valve actuator in the left main fuel tank, remove the left trailing edge skin panel, 551TB (AMM 06-44-00/201).

(5) To get access to the defueling valve actuator in the right main fuel tank, remove the right trailing edge skin panel, 651TB (AMM 06-44-00/201).

(6) Disconnect the electrical connector from the actuator.

E. AIRPLANES WITHOUT ACTUATOR MA20A2027 OR MA30A1001;
Electrical Bonding Measurement

(1) Disconnect the bonding jumper from the actuator.

(2) Measure the bonding resistance between the actuator and the rear spar (SWPM 20-20-00).

(a) Make sure the resistance is 5 milliohms (0.005 ohm) or less.

(3) Install the screw, washers, and nut to attach the bonding jumper to the actuator.

F. AIRPLANES WITH ACTUATOR MA20A2027 OR MA30A1001;
Electrical Bonding Measurement

(1) Disconnect the bonding jumper from the actuator.

(2) Measure the bonding resistance between the actuator and the rear spar (SWPM 20-20-00).

(a) Make sure the resistance is 5 milliohms (0.005 ohm) or less.

(3) Do these steps to install the bonding jumper to the actuator:

(a) Final clean the contact surfaces with a cotton wiper soaked with Series 88 solvent (AMM 20-30-88/201).

1) Clean the surface until the dry cotton wiper stays clean.

(b) Apply a thin continuous layer of sealant to both surfaces of the bonding jumper and the washers.

1) Use the BMS 5-142 sealant for the faying surface seal.

(c) Install the screw, washers, and nut to attach the bonding jumper to the actuator.

1) AIRPLANES WITHOUT ACTUATOR MA30A1001;
Tighten the screw to 20 in-lb (2.3 Nm).

2) AIRPLANES WITH ACTUATOR MA30A1001;
Tighten the screw to 35 in-lb (4.0 Nm).

(d) Measure the electrical bonding resistance between the upper housing of the actuator and the attached bonding jumper terminal (SWPM 20-20-00).

1) Do not touch the screw when you make the bonding measurement.

2) Make sure the bonding resistance is 0.001 ohm (1 milliohm) or less.

NOTE: CDCCL - Refer to the task: Airworthiness Limitation Precautions (AMM 28-00-00/201), for important information on Critical Design Control Configuration Limitations (CDCCLs).

NOTE: This is applicable to Airworthiness Limitation 28-AWL-23.

(e) Apply a cap seal of BMS 5-142 sealant over the terminal of the bonding jumper and the screw.

G. Put the Airplane Back to Its Usual Condition

(1) Connect the electrical connector on the actuator.

(2) Install the applicable left or right trailing edge skin panel, 551TB or 651TB (AMM 06-44-00/201).

(3) Remove the DO-NOT-CLOSE tags and close these circuit breakers:

(a) On the main power distribution panel, P6:

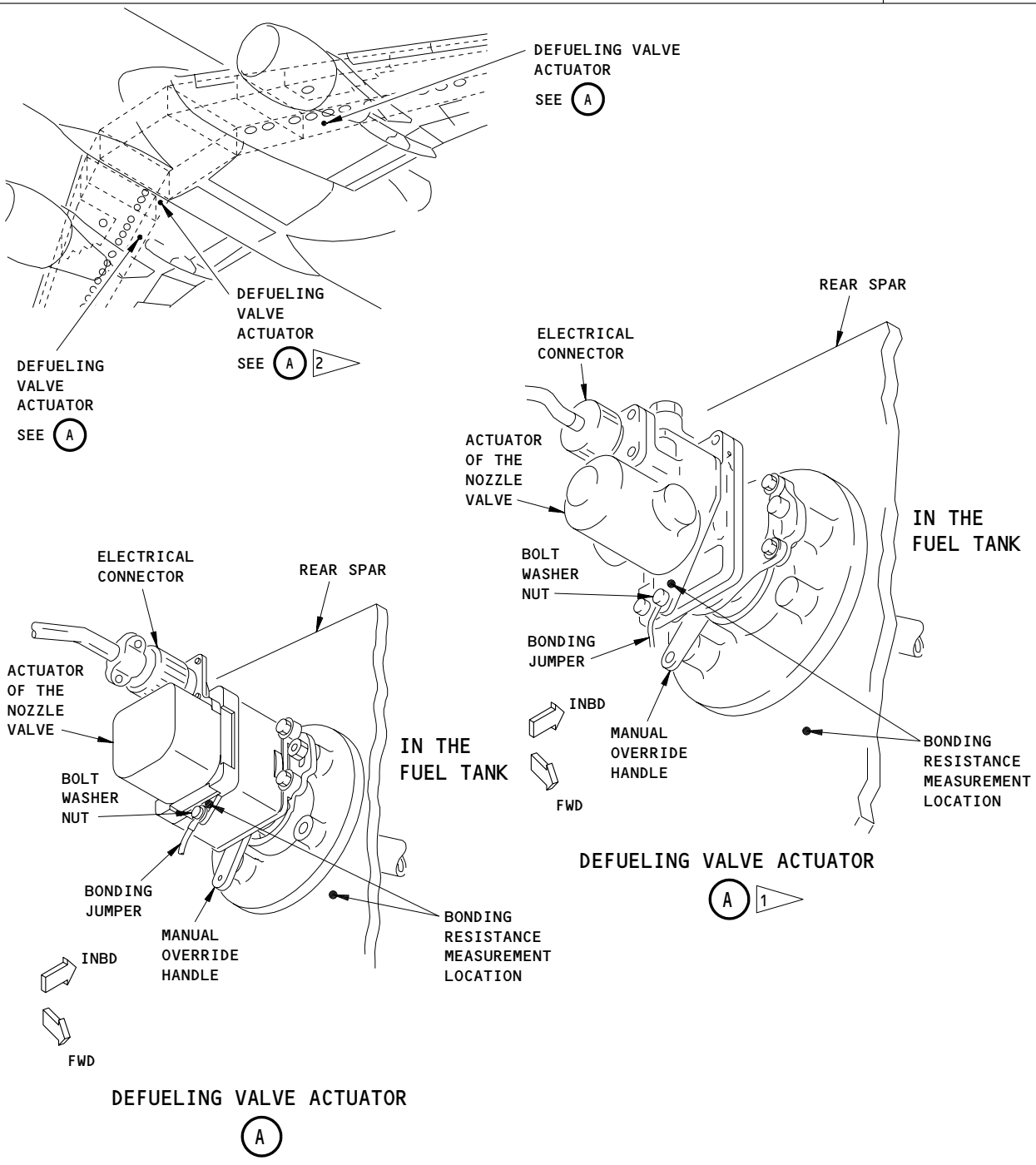
1) 6E7, DEFUELING VALVES

(b) On the APU external power panel, P34:

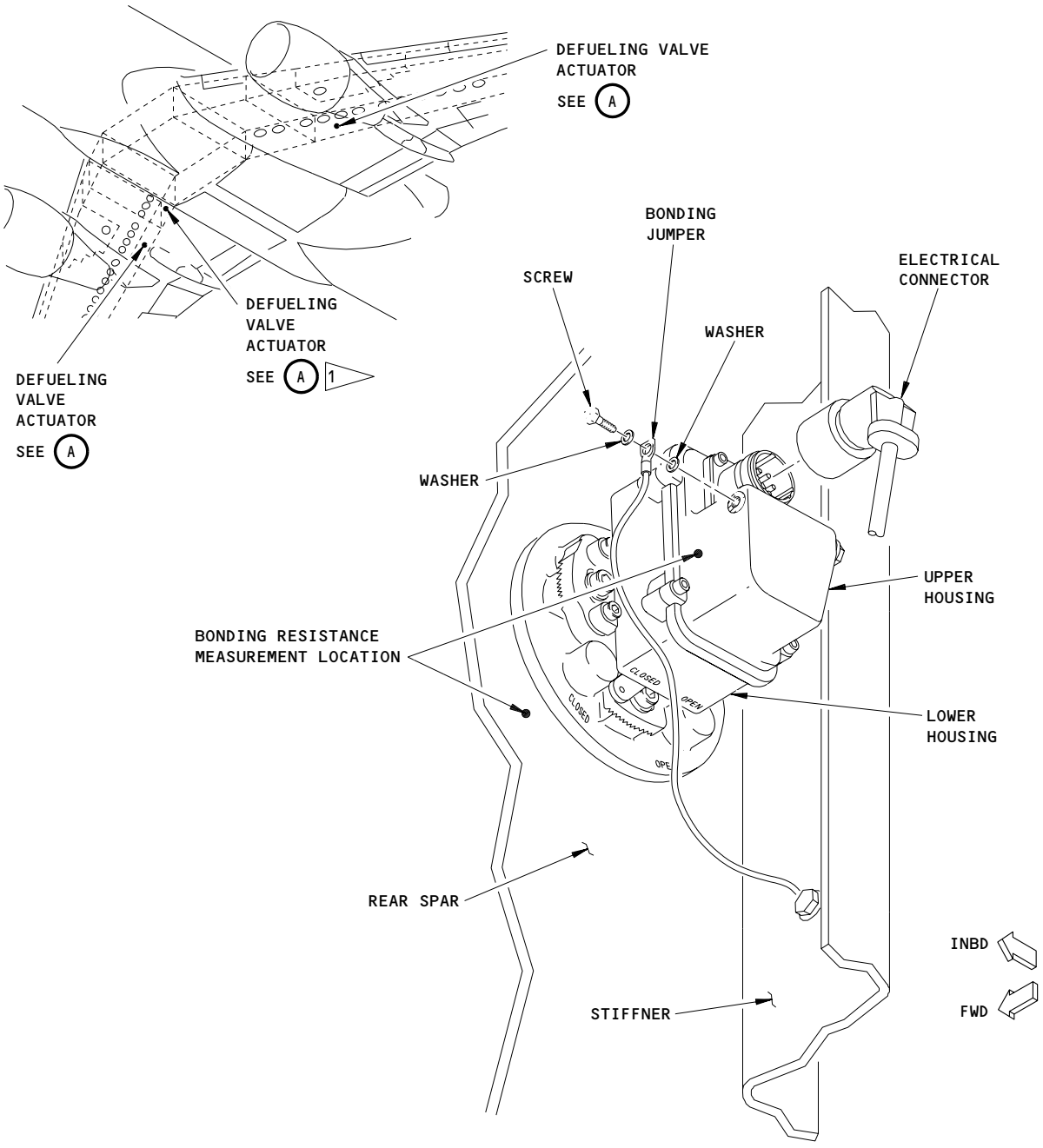
1) 34L4, DEFUELING VALVES

WARNING: OBEY THE REMOVAL PRECEDURE FOR THE DOOR LOCKS. THE DOORS OPEN AND CLOSE QUICKLY. THE MOVEMENT OF THE DOORS CAN CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

(4) Remove the door locks from the main gear doors and close the doors (AMM 32-00-15/201).



Defueling Valve Actuator Inspection
Figure 601



DEFUELING VALVE ACTUATOR
(EXAMPLE)
A

1 AIRPLANES WITH AN AUXILIARY TANK DEFUELING VALVE.

Defueling Valve Actuator Inspection
Figure 601A

STATION		BOEING CARD NO.
TAIL NO.	SAS BOEING 767 TASK CARD	28-032-02
DATE		AIRLINE CARD NO.

SKILL	WORK AREA	RELATED TASK	INTERVAL	PHASE	MPD REV	TASK CARD REVISION
AIRPL	CTR AUX TK		8C	24896		AUG 22/09

TASK	TITLE	STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE	APPLICABILITY ENGINE
FUNCTIONAL	DEFUELING VALVE ACTUATOR BOND		NOTE	ALL

ZONES	ACCESS PANELS
631	551CB

MECH	INSP	MPD ITEM NUMBER

FUNCTIONALLY CHECK (RESISTANCE MEASUREMENT) THE BONDING BETWEEN THE CTR AUX TANK DEFUELING VALVE AND THE STRUCTURE TO ENSURE IT IS WITHIN IN-SERVICE LIMITS (SFAR 88). 28-26-11-6A

AIRPLANE NOTE: TASK APPLICABLE TO 767 AIRPLANES THAT HAVE THE CTR AUX TANK DEFUELING VALVE INSTALLED.

1. Defueling Valve Actuator - Bonding Resistance Check (Fig. 601, 601A)

A. Equipment

(1) Bonding Meter - Use one of these:

(a) Bonding Meter - T477W
Avtron Manufacturing Co.
Cleveland, OH

(b) Bonding Meter - Model M1
(Serial Number A000012 and subsequent)
BCD Electronics Ltd.
Vancouver, Canada

B. Consumable Materials

(1) G00034 Cotton Wiper, Process Cleaning Absorbent Wiper (Cheese cloth, gauze) BMS 15-5

(2) Sealant, BMS 5-142

(3) B01008 Solvent - Series 88

C. References

(1) AMM 20-30-88/201, Airplane Structure Cleaning Solvents (Series 88)

MECH | INSP

(2) AMM 06-44-00/201, Wings Access Doors and Panels

(3) AMM 32-00-15/201, Landing Gear Door Locks

(4) AMM 32-00-20/201, Landing Gear Downlocks

(5) SWPM 20-20-00, Electrical Bonding and Grounds

D. Prepare for the Procedure

WARNING: MAKE SURE THAT THE DOWNLOCKS ARE INSTALLED IN ALL OF THE LANDING GEAR. WITHOUT THE DOWNLOCKS, THE LANDING GEAR CAN RETRACT AND CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

(1) Make sure the downlocks are installed in the nose and main landing gear (AMM 32-00-20/201).

WARNING: OBEY THE INSTALLATION PROCEDURE FOR THE DOOR LOCK. THE DOORS OPEN AND CLOSE QUICKLY. THE MOVEMENT OF THE DOORS CAN CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

(2) Open the doors for the landing gear and install the door locks (AMM 32-00-15/201).

(3) Open these circuit breakers and attach DO-NOT-CLOSE tags:

(a) On the main power distribution panel, P6:

1) 6E7, DEFUEL VALVES

(b) On the APU external power panel, P34:

1) 34L4, DEFUELING VALVES

(4) To get access to the defueling valve actuator in the left main fuel tank, remove the left trailing edge skin panel, 551TB (AMM 06-44-00/201).

(5) To get access to the defueling valve actuator in the right main fuel tank, remove the right trailing edge skin panel, 651TB (AMM 06-44-00/201).

(6) Disconnect the electrical connector from the actuator.

MECH | INSP

E. AIRPLANES WITHOUT ACTUATOR MA20A2027 OR MA30A1001;
Electrical Bonding Measurement

(1) Disconnect the bonding jumper from the actuator.

(2) Measure the bonding resistance between the actuator and the rear spar (SWPM 20-20-00).

(a) Make sure the resistance is 5 milliohms (0.005 ohm) or less.

(3) Install the screw, washers, and nut to attach the bonding jumper to the actuator.

F. AIRPLANES WITH ACTUATOR MA20A2027 OR MA30A1001;
Electrical Bonding Measurement

(1) Disconnect the bonding jumper from the actuator.

(2) Measure the bonding resistance between the actuator and the rear spar (SWPM 20-20-00).

(a) Make sure the resistance is 5 milliohms (0.005 ohm) or less.

(3) Do these steps to install the bonding jumper to the actuator:

(a) Final clean the contact surfaces with a cotton wiper soaked with Series 88 solvent (AMM 20-30-88/201).

1) Clean the surface until the dry cotton wiper stays clean.

(b) Apply a thin continuous layer of sealant to both surfaces of the bonding jumper and the washers.

1) Use the BMS 5-142 sealant for the faying surface seal.

(c) Install the screw, washers, and nut to attach the bonding jumper to the actuator.

1) AIRPLANES WITHOUT ACTUATOR MA30A1001;
Tighten the screw to 20 in-lb (2.3 Nm).

2) AIRPLANES WITH ACTUATOR MA30A1001;
Tighten the screw to 35 in-lb (4.0 Nm).

(d) Measure the electrical bonding resistance between the upper housing of the actuator and the attached bonding jumper terminal (SWPM 20-20-00).

1) Do not touch the screw when you make the bonding measurement.

2) Make sure the bonding resistance is 0.001 ohm (1 milliohm) or less.

NOTE: CDCCL - Refer to the task: Airworthiness Limitation Precautions (AMM 28-00-00/201), for important information on Critical Design Control Configuration Limitations (CDCCLs).

NOTE: This is applicable to Airworthiness Limitation 28-AWL-23.

(e) Apply a cap seal of BMS 5-142 sealant over the terminal of the bonding jumper and the screw.

G. Put the Airplane Back to Its Usual Condition

(1) Connect the electrical connector on the actuator.

(2) Install the applicable left or right trailing edge skin panel, 551TB or 651TB (AMM 06-44-00/201).

(3) Remove the DO-NOT-CLOSE tags and close these circuit breakers:

(a) On the main power distribution panel, P6:

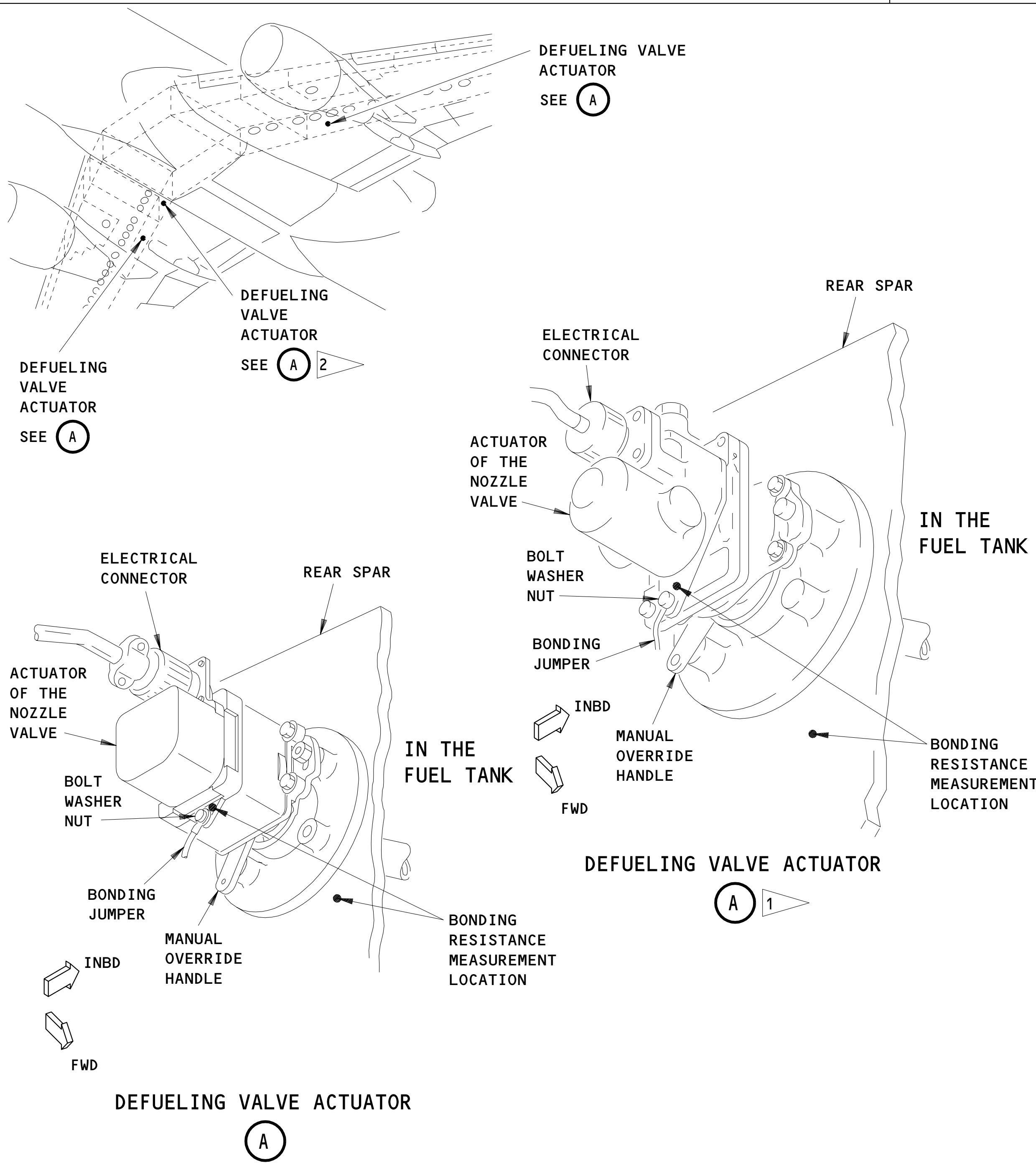
1) 6E7, DEFUELING VALVES

(b) On the APU external power panel, P34:

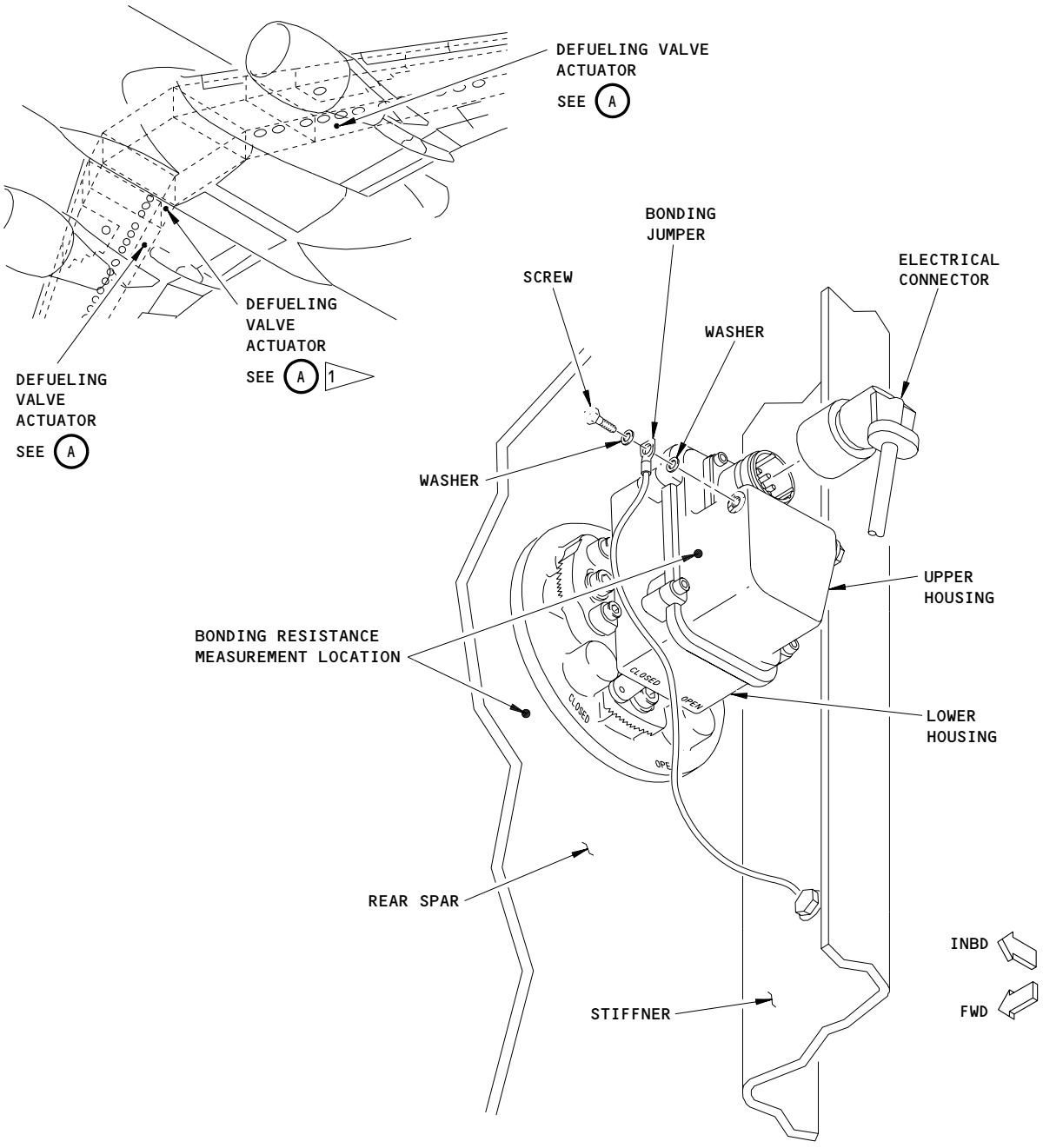
1) 34L4, DEFUELING VALVES

WARNING: OBEY THE REMOVAL PRECEDURE FOR THE DOOR LOCKS. THE DOORS OPEN AND CLOSE QUICKLY. THE MOVEMENT OF THE DOORS CAN CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

(4) Remove the door locks from the main gear doors and close the doors (AMM 32-00-15/201).



Defueling Valve Actuator Inspection
Figure 601



DEFUELING VALVE ACTUATOR
(EXAMPLE)
A

1 AIRPLANES WITH AN AUXILIARY TANK DEFUELING VALVE.

Defueling Valve Actuator Inspection
Figure 601A

STATION		BOEING CARD NO.
TAIL NO.	SAS BOEING 767 TASK CARD	28-032-03
DATE		AIRLINE CARD NO.

SKILL	WORK AREA	RELATED TASK	INTERVAL	PHASE	MPD REV	TASK CARD REVISION
AIRPL	R WING TE		8C	24896		AUG 22/09

TASK	TITLE	STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE	APPLICABILITY ENGINE
FUNCTIONAL	DEFUELING VALVE ACTUATOR BOND		ALL	ALL

ZONES	ACCESS PANELS
651	651TB

MECH | INSP

MPD ITEM NUMBER

FUNCTIONALLY CHECK (RESISTANCE MEASUREMENT) THE BONDING BETWEEN THE R/H MAIN TANK DEFUELING VALVE AND THE STRUCTURE TO ENSURE IT IS WITHIN IN-SERVICE LIMITS (SFAR 88). 28-26-11-6A

1. Defueling Valve Actuator - Bonding Resistance Check (Fig. 601, 601A)

A. Equipment

(1) Bonding Meter - Use one of these:

(a) Bonding Meter - T477W
Avtron Manufacturing Co.
Cleveland, OH

(b) Bonding Meter - Model M1
(Serial Number A000012 and subsequent)
BCD Electronics Ltd.
Vancouver, Canada

B. Consumable Materials

(1) G00034 Cotton Wiper, Process Cleaning Absorbent Wiper (Cheese cloth, gauze) BMS 15-5

(2) Sealant, BMS 5-142

(3) B01008 Solvent - Series 88

C. References

(1) AMM 20-30-88/201, Airplane Structure Cleaning Solvents (Series 88)

(2) AMM 06-44-00/201, Wings Access Doors and Panels

(3) AMM 32-00-15/201, Landing Gear Door Locks

MECH | INSP

(4) AMM 32-00-20/201, Landing Gear Downlocks

(5) SWPM 20-20-00, Electrical Bonding and Grounds

D. Prepare for the Procedure

WARNING: MAKE SURE THAT THE DOWNLOCKS ARE INSTALLED IN ALL OF THE LANDING GEAR. WITHOUT THE DOWNLOCKS, THE LANDING GEAR CAN RETRACT AND CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

(1) Make sure the downlocks are installed in the nose and main landing gear (AMM 32-00-20/201).

WARNING: OBEY THE INSTALLATION PROCEDURE FOR THE DOOR LOCK. THE DOORS OPEN AND CLOSE QUICKLY. THE MOVEMENT OF THE DOORS CAN CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

(2) Open the doors for the landing gear and install the door locks (AMM 32-00-15/201).

(3) Open these circuit breakers and attach DO-NOT-CLOSE tags:

(a) On the main power distribution panel, P6:

1) 6E7, DEFUEL VALVES

(b) On the APU external power panel, P34:

1) 34L4, DEFUELING VALVES

(4) To get access to the defueling valve actuator in the left main fuel tank, remove the left trailing edge skin panel, 551TB (AMM 06-44-00/201).

(5) To get access to the defueling valve actuator in the right main fuel tank, remove the right trailing edge skin panel, 651TB (AMM 06-44-00/201).

(6) Disconnect the electrical connector from the actuator.

E. AIRPLANES WITHOUT ACTUATOR MA20A2027 OR MA30A1001;
Electrical Bonding Measurement

(1) Disconnect the bonding jumper from the actuator.

(2) Measure the bonding resistance between the actuator and the rear spar (SWPM 20-20-00).

(a) Make sure the resistance is 5 milliohms (0.005 ohm) or less.

(3) Install the screw, washers, and nut to attach the bonding jumper to the actuator.

F. AIRPLANES WITH ACTUATOR MA20A2027 OR MA30A1001; Electrical Bonding Measurement

(1) Disconnect the bonding jumper from the actuator.

(2) Measure the bonding resistance between the actuator and the rear spar (SWPM 20-20-00).

(a) Make sure the resistance is 5 milliohms (0.005 ohm) or less.

(3) Do these steps to install the bonding jumper to the actuator:

(a) Final clean the contact surfaces with a cotton wiper soaked with Series 88 solvent (AMM 20-30-88/201).

1) Clean the surface until the dry cotton wiper stays clean.

(b) Apply a thin continuous layer of sealant to both surfaces of the bonding jumper and the washers.

1) Use the BMS 5-142 sealant for the faying surface seal.

(c) Install the screw, washers, and nut to attach the bonding jumper to the actuator.

1) AIRPLANES WITHOUT ACTUATOR MA30A1001; Tighten the screw to 20 in-lb (2.3 Nm).

2) AIRPLANES WITH ACTUATOR MA30A1001; Tighten the screw to 35 in-lb (4.0 Nm).

(d) Measure the electrical bonding resistance between the upper housing of the actuator and the attached bonding jumper terminal (SWPM 20-20-00).

1) Do not touch the screw when you make the bonding measurement.

2) Make sure the bonding resistance is 0.001 ohm (1 milliohm) or less.

NOTE: CDCCL - Refer to the task: Airworthiness Limitation Precautions (AMM 28-00-00/201), for important information on Critical Design Control Configuration Limitations (CDCCLs).

NOTE: This is applicable to Airworthiness Limitation 28-AWL-23.

(e) Apply a cap seal of BMS 5-142 sealant over the terminal of the bonding jumper and the screw.

G. Put the Airplane Back to Its Usual Condition

(1) Connect the electrical connector on the actuator.

(2) Install the applicable left or right trailing edge skin panel, 551TB or 651TB (AMM 06-44-00/201).

(3) Remove the DO-NOT-CLOSE tags and close these circuit breakers:

(a) On the main power distribution panel, P6:

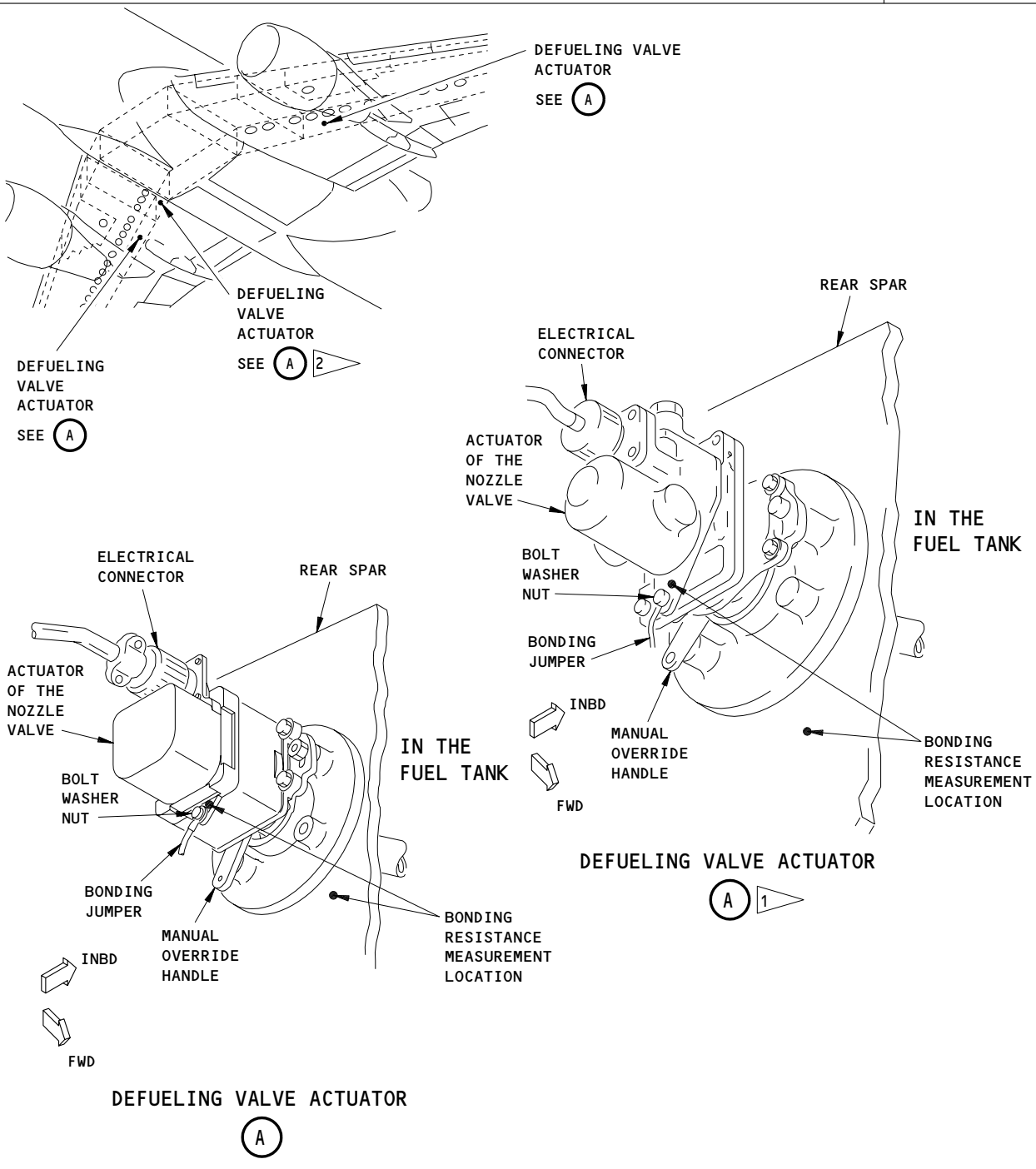
1) 6E7, DEFUELING VALVES

(b) On the APU external power panel, P34:

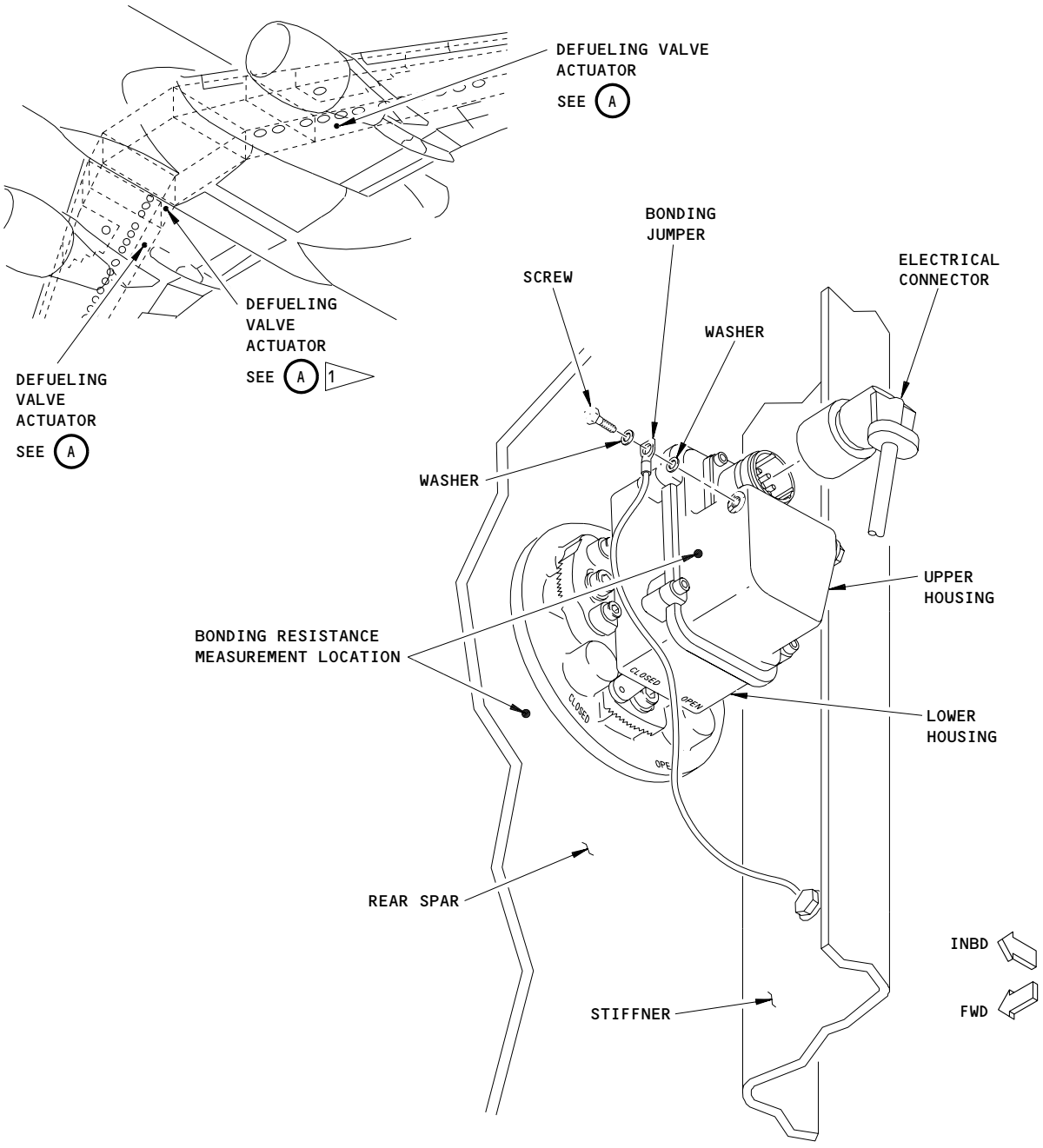
1) 34L4, DEFUELING VALVES

WARNING: OBEY THE REMOVAL PRECEDURE FOR THE DOOR LOCKS. THE DOORS OPEN AND CLOSE QUICKLY. THE MOVEMENT OF THE DOORS CAN CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

(4) Remove the door locks from the main gear doors and close the doors (AMM 32-00-15/201).



Defueling Valve Actuator Inspection
Figure 601



DEFUELING VALVE ACTUATOR
(EXAMPLE)
A

1 AIRPLANES WITH AN AUXILIARY TANK DEFUELING VALVE.

Defueling Valve Actuator Inspection
Figure 601A

STATION		BOEING CARD NO.
TAIL NO.	SAS BOEING 767 TASK CARD	28-033-01
DATE		AIRLINE CARD NO.

SKILL	WORK AREA	RELATED TASK	INTERVAL	PHASE	MPD REV	TASK CARD REVISION
AIRPL	L MAIN TANK		8C	24896		AUG 22/09

TASK	TITLE	STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE	APPLICABILITY ENGINE
FUNCTIONAL	JETTISON NOZZLE VALVE BOND		NOTE	ALL

ZONES	ACCESS PANELS
561	

MECH	INSP	MPD ITEM NUMBER

FUNCTIONALLY CHECK (RESISTANCE MEASUREMENT) THE BONDING BETWEEN THE JETTISON NOZZLE VALVE (MOV) AND THE STRUCTURE TO ENSURE IT IS WITHIN SERVICE LIMITS (SFAR 88). 28-31-05-6A

NOTE: APPLICABLE TO AIRPLANES WITH JETTISON SYSTEMS.

1. Fuel Jettison Nozzle Valve Actuator - Bonding Resistance Check
(Fig. 601, 601A)

A. Equipment

(1) Bonding Meter - Use one of these:

(a) Bonding Meter - T477W
Avtron Manufacturing Co.
Cleveland, OH

(b) Bonding Meter - Model M1
(Serial Number A000012 and subsequent)
BCD Electronics Ltd.
Vancouver, Canada

B. Consumable Materials

(1) G00034 Cotton Wiper, Process Cleaning Absorbent Wiper (Cheesecloth, gauze) BMS 15-5

(2) Sealant, BMS 5-142

(3) B01008 Solvent - Series 88

C. References

(1) AMM 06-44-00/201, Wings Access Doors

(2) AMM 20-30-88/201, Airplane Structure Cleaning Solvents (Series 88)

MECH | INSP

(3) AMM 27-51-00/201, Flight Controls

(4) SWPM 20-20-00, Electrical Bonding and Grounds

D. Prepare for the Procedure

WARNING: DO THE DEACTIVATION PROCEDURE FOR THE TRAILING EDGE FLAPS. ACCIDENTAL OPERATION OF THE TRAILING EDGE FLAPS COULD CAUSE INJURY TO PERSONS.

(1) Deactivate the trailing edge flaps (AMM 27-51-00/201).

(2) Open these circuit breakers and attach DO-NOT-CLOSE tags:

(a) On the overhead circuit breaker panel, P11:

1) 11M14, LEFT JETT NOZZLE VALVE

2) 11M23, RIGHT JETT NOZZLE VALVE

(3) Open the applicable access panel (AMM 06-44-00/201).

(4) Disconnect the electrical connector from the actuator.

E. AIRPLANES WITHOUT ACTUATOR MA20A2027 OR MA30A1001;
Bonding Resistance Check

(1) Remove the bolt, washer, and nut to disconnect the bonding jumper from the actuator.

(2) Measure the bonding resistance between the actuator and the rear spar (SWPM 20-20-00).

(a) Make sure the bonding resistance is 5 milliohms (0.005 ohm) or less.

(3) Install the bolt, washers, and nut to connect the bonding jumper to the actuator.

F. AIRPLANES WITH ACTUATOR MA20A2027 OR MA30A1001;
Bonding Resistance Check

(1) Remove the bolt, washer, and nut to disconnect the bonding jumper from the actuator.

MECH | INSP

(2) Measure the bonding resistance between the actuator and the rear spar (SWPM 20-20-00).

(a) Make sure the bonding resistance is 5 milliohms (0.005 ohm) or less.

(3) Do these steps to install the bonding jumper to the actuator.

(a) Clean the contact surfaces with a cotton wiper soaked with Series 88 solvent (AMM 20-30-88/201).

1) Clean and dry the surface until the cotton wiper stays clean.

(b) Apply a thin continuous layer of sealant to both surfaces of the bonding jumper and the washers.

1) Use BMS 5-142 sealant for the faying surface seal.

(c) Install the screw, washers, and nut to attach the bonding jumper to the actuator.

1) AIRPLANES WITHOUT ACTUATOR MA30A1001;
Tighten the screw to 20 in-lb (2.3 Nm).

2) AIRPLANES WITH ACTUATOR MA30A1001;
Tighten the screw to 35 in-lb (4.0 Nm).

(d) Measure the bonding resistance between the upper housing of the actuator and the attached bonding jumper terminal (SWPM 20-20-00).

1) Do not touch the screw when you make the bonding measurement.

2) Make sure the bonding resistance is 0.001 ohm (1 milliohm) or less.

NOTE: CDCCL - Refer to the task: Airworthiness Limitation Precautions (AMM 28-00-00/201), for important information on Critical Design Control Configuration Limitations (CDCCLs).

NOTE: This is applicable to Airworthiness Limitation 28-AWL-23.

MECH | INSP

3) Apply a cap seal of BMS 5-142 sealant over the terminal of the bonding jumper and the screw.

G. Put the Airplane Back to Its Usual Condition

(1) Connect the electrical connector on the actuator.

(2) Close the applicable access panel (AMM 06-44-00/201).

(3) Remove the DO-NOT-CLOSE tags and close these circuit breakers:

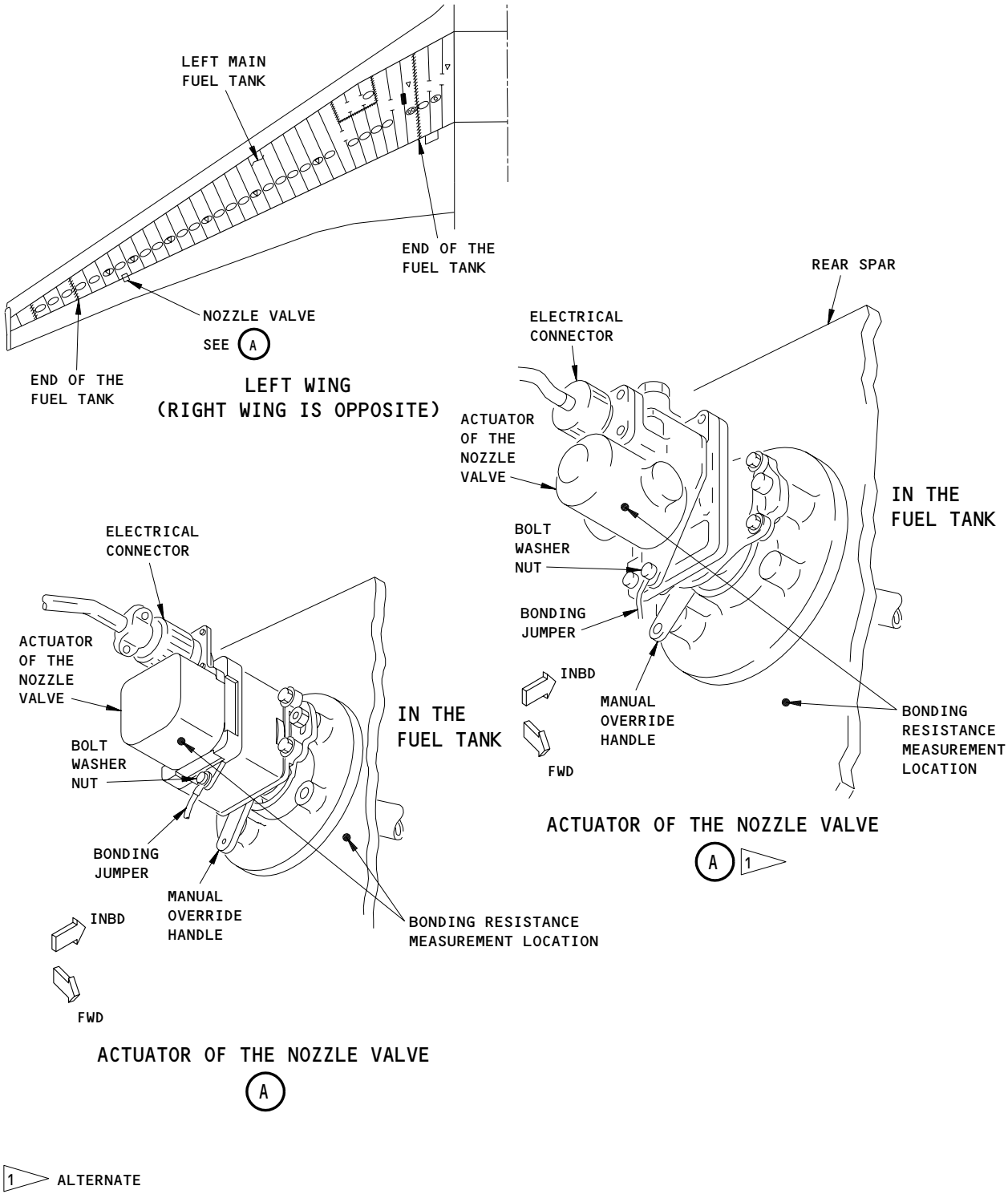
(a) On the overhead circuit breaker panel, P11:

1) 11M14, LEFT JETT NOZZLE VALVE

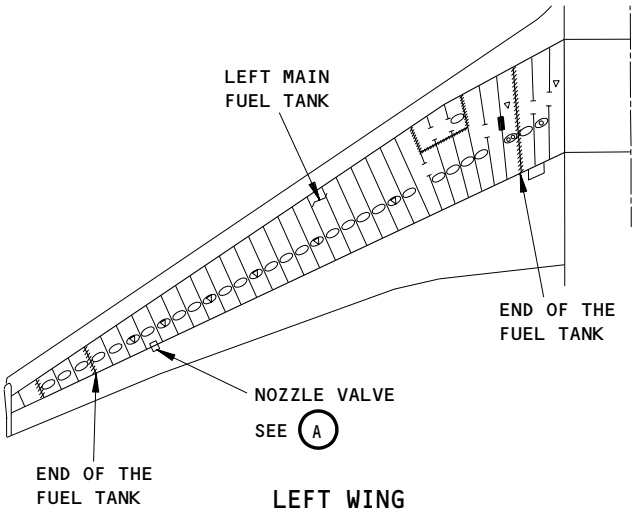
2) 11M23, RIGHT JETT NOZZLE VALVE

WARNING: DO THE ACTIVATION PROCEDURE FOR THE TRAILING EDGE FLAPS. ACCIDENTAL OPERATION OF THE TRAILING EDGE FLAPS COULD CAUSE INJURY TO PERSONS.

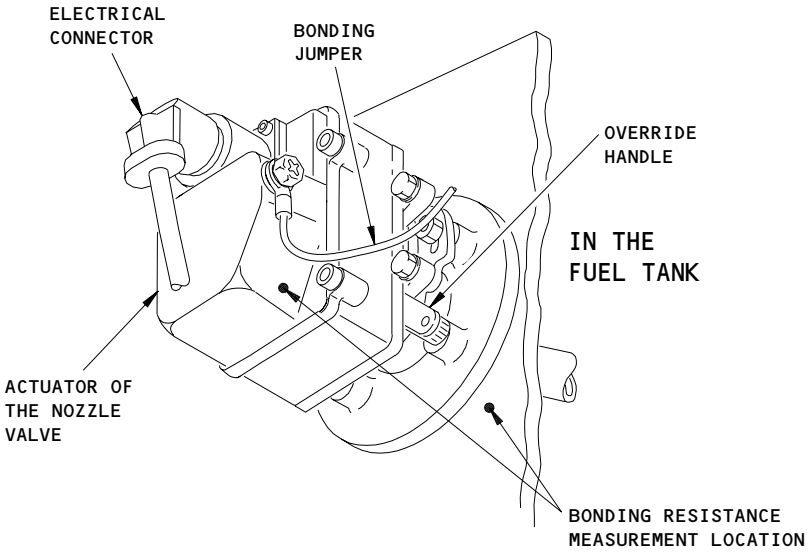
(4) Do the activation procedure for the trailing edge flaps (AMM 27-51-00/201).



Fuel Jettison Nozzle Valve Actuator Inspection
Figure 601



LEFT WING
(RIGHT WING IS OPPOSITE)



ACTUATOR OF THE NOZZLE VALVE

A

Fuel Jettison Nozzle Valve Actuator Inspection
Figure 601A

STATION		BOEING CARD NO.
TAIL NO.	SAS BOEING 767 TASK CARD	28-033-02
DATE		AIRLINE CARD NO.

SKILL	WORK AREA	RELATED TASK	INTERVAL	PHASE	MPD REV	TASK CARD REVISION
AIRPL	R MAIN TANK		8C	24896		AUG 22/09

TASK	TITLE	STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE	APPLICABILITY ENGINE
FUNCTIONAL	JETTISON NOZZLE VALVE BOND		NOTE	ALL

ZONES	ACCESS PANELS
661	

MECH	INSP	MPD ITEM NUMBER

FUNCTIONALLY CHECK (RESISTANCE MEASUREMENT) THE BONDING BETWEEN THE JETTISON NOZZLE VALVE (MOV) AND THE STRUCTURE TO ENSURE IT IS WITHIN SERVICE LIMITS (SFAR 88). 28-31-05-6A

NOTE: APPLICABLE TO AIRPLANES WITH JETTISON SYSTEMS.

1. Fuel Jettison Nozzle Valve Actuator - Bonding Resistance Check
(Fig. 601, 601A)

A. Equipment

(1) Bonding Meter - Use one of these:

(a) Bonding Meter - T477W
Avtron Manufacturing Co.
Cleveland, OH

(b) Bonding Meter - Model M1
(Serial Number A000012 and subsequent)
BCD Electronics Ltd.
Vancouver, Canada

B. Consumable Materials

(1) G00034 Cotton Wiper, Process Cleaning Absorbent Wiper (Cheesecloth, gauze) BMS 15-5

(2) Sealant, BMS 5-142

(3) B01008 Solvent - Series 88

C. References

(1) AMM 06-44-00/201, Wings Access Doors

(2) AMM 20-30-88/201, Airplane Structure Cleaning Solvents (Series 88)

MECH | INSP

(3) AMM 27-51-00/201, Flight Controls

(4) SWPM 20-20-00, Electrical Bonding and Grounds

D. Prepare for the Procedure

WARNING: DO THE DEACTIVATION PROCEDURE FOR THE TRAILING EDGE FLAPS. ACCIDENTAL OPERATION OF THE TRAILING EDGE FLAPS COULD CAUSE INJURY TO PERSONS.

(1) Deactivate the trailing edge flaps (AMM 27-51-00/201).

(2) Open these circuit breakers and attach DO-NOT-CLOSE tags:

(a) On the overhead circuit breaker panel, P11:

1) 11M14, LEFT JETT NOZZLE VALVE

2) 11M23, RIGHT JETT NOZZLE VALVE

(3) Open the applicable access panel (AMM 06-44-00/201).

(4) Disconnect the electrical connector from the actuator.

E. AIRPLANES WITHOUT ACTUATOR MA20A2027 OR MA30A1001;
Bonding Resistance Check

(1) Remove the bolt, washer, and nut to disconnect the bonding jumper from the actuator.

(2) Measure the bonding resistance between the actuator and the rear spar (SWPM 20-20-00).

(a) Make sure the bonding resistance is 5 milliohms (0.005 ohm) or less.

(3) Install the bolt, washers, and nut to connect the bonding jumper to the actuator.

F. AIRPLANES WITH ACTUATOR MA20A2027 OR MA30A1001;
Bonding Resistance Check

(1) Remove the bolt, washer, and nut to disconnect the bonding jumper from the actuator.

MECH | INSP

(2) Measure the bonding resistance between the actuator and the rear spar (SWPM 20-20-00).

(a) Make sure the bonding resistance is 5 milliohms (0.005 ohm) or less.

(3) Do these steps to install the bonding jumper to the actuator.

(a) Clean the contact surfaces with a cotton wiper soaked with Series 88 solvent (AMM 20-30-88/201).

1) Clean and dry the surface until the cotton wiper stays clean.

(b) Apply a thin continuous layer of sealant to both surfaces of the bonding jumper and the washers.

1) Use BMS 5-142 sealant for the faying surface seal.

(c) Install the screw, washers, and nut to attach the bonding jumper to the actuator.

1) AIRPLANES WITHOUT ACTUATOR MA30A1001;
Tighten the screw to 20 in-lb (2.3 Nm).

2) AIRPLANES WITH ACTUATOR MA30A1001;
Tighten the screw to 35 in-lb (4.0 Nm).

(d) Measure the bonding resistance between the upper housing of the actuator and the attached bonding jumper terminal (SWPM 20-20-00).

1) Do not touch the screw when you make the bonding measurement.

2) Make sure the bonding resistance is 0.001 ohm (1 milliohm) or less.

NOTE: CDCCL - Refer to the task: Airworthiness Limitation Precautions (AMM 28-00-00/201), for important information on Critical Design Control Configuration Limitations (CDCCLs).

NOTE: This is applicable to Airworthiness Limitation 28-AWL-23.

MECH | INSP

3) Apply a cap seal of BMS 5-142 sealant over the terminal of the bonding jumper and the screw.

G. Put the Airplane Back to Its Usual Condition

(1) Connect the electrical connector on the actuator.

(2) Close the applicable access panel (AMM 06-44-00/201).

(3) Remove the DO-NOT-CLOSE tags and close these circuit breakers:

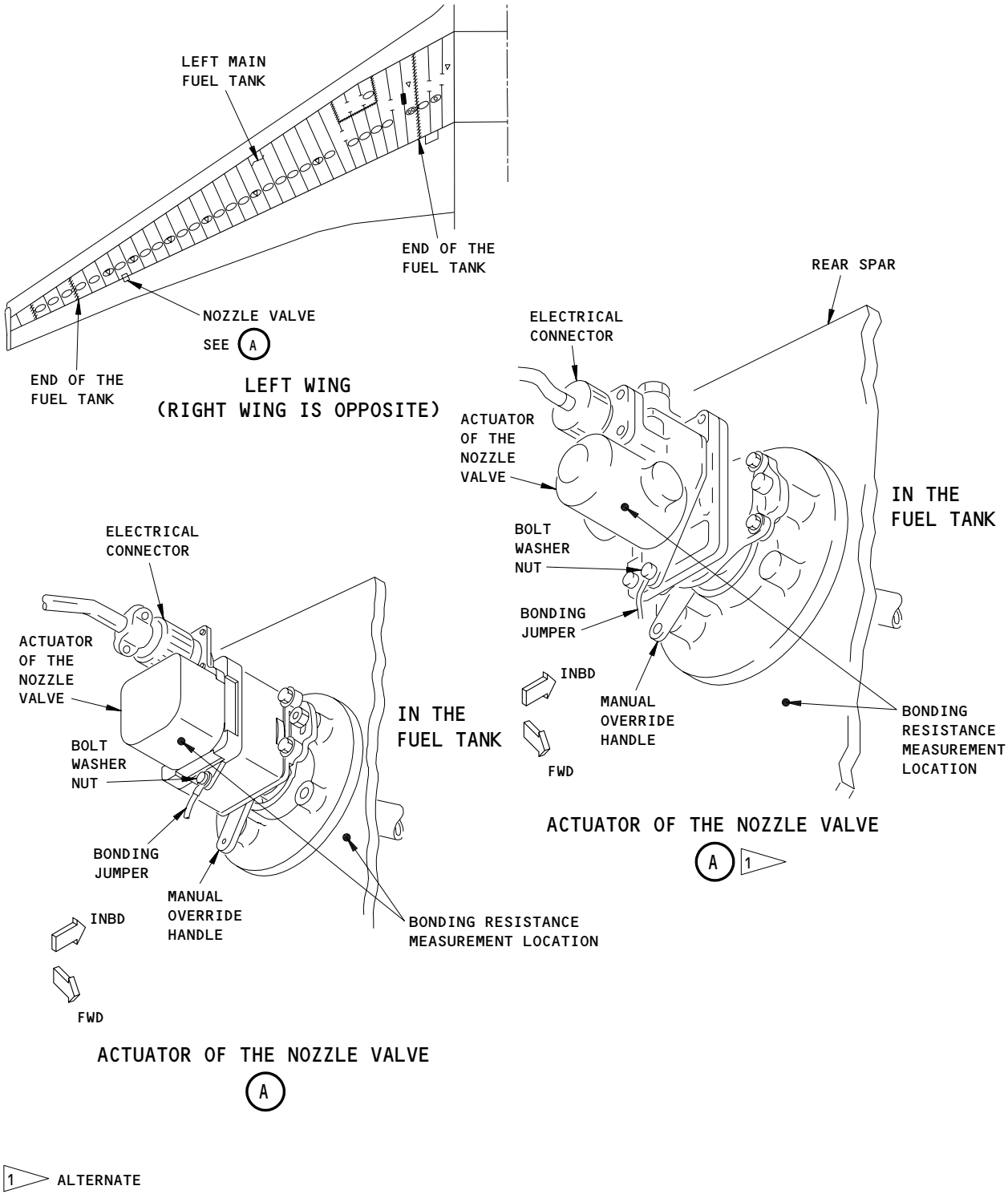
(a) On the overhead circuit breaker panel, P11:

1) 11M14, LEFT JETT NOZZLE VALVE

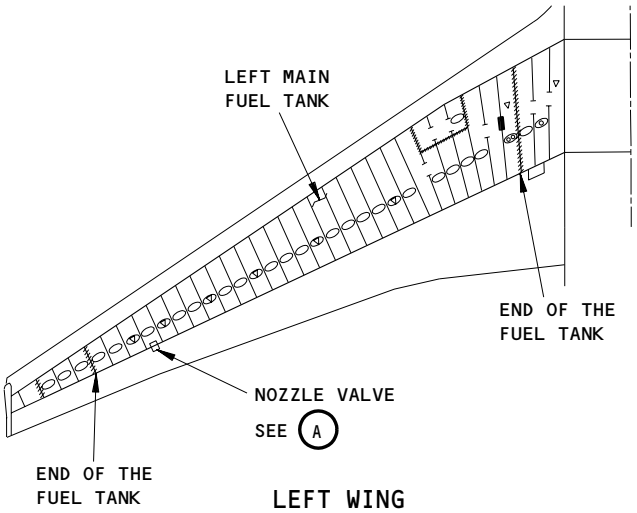
2) 11M23, RIGHT JETT NOZZLE VALVE

WARNING: DO THE ACTIVATION PROCEDURE FOR THE TRAILING EDGE FLAPS. ACCIDENTAL OPERATION OF THE TRAILING EDGE FLAPS COULD CAUSE INJURY TO PERSONS.

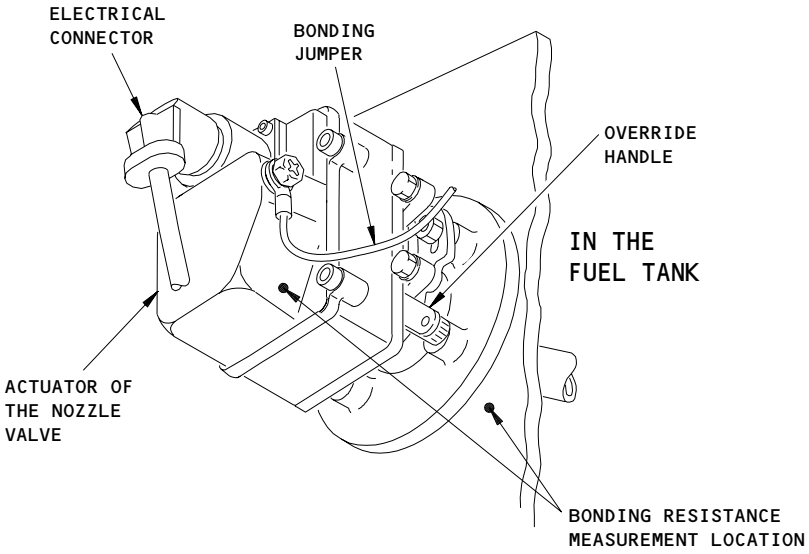
(4) Do the activation procedure for the trailing edge flaps (AMM 27-51-00/201).



Fuel Jettison Nozzle Valve Actuator Inspection
Figure 601



LEFT WING
(RIGHT WING IS OPPOSITE)



ACTUATOR OF THE NOZZLE VALVE
A

Fuel Jettison Nozzle Valve Actuator Inspection
Figure 601A

STATION		BOEING CARD NO.
TAIL NO.	SAS BOEING 767 TASK CARD	28-034-01
DATE		AIRLINE CARD NO.

SKILL	WORK AREA	RELATED TASK	INTERVAL	PHASE	MPD REV	TASK CARD REVISION
AIRPL	L MAIN TANK		8C	24896		AUG 22/09

TASK	TITLE	STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE	APPLICABILITY ENGINE
FUNCTIONAL	JETTISON TRANSFER VALVE BOND		NOTE	ALL

ZONES	ACCESS PANELS
551	

MECH	INSP	MPD ITEM NUMBER

FUNCTIONALLY CHECK (RESISTANCE MEASUREMENT) THE BONDING BETWEEN THE JETTISON TRANSFER VALVE (MOV) AND THE STRUCTURE TO ENSURE IT IS WITHIN SERVICE LIMITS (SFAR 88). 28-31-04-6A

NOTE: APPLICABLE TO AIRPLANES WITH JETTISON SYSTEMS.

1. Fuel Jettison Transfer Valve Actuator - Bonding Resistance Check
(Fig. 601, Fig. 601A)

A. References

(1) AMM 20-30-88/201, Airplane Structure Cleaning Solvents (Series 88)

(2) AMM 32-00-15/201, Landing Gear Door Locks

(3) AMM 32-00-20/201, Landing Gear Downlocks

(4) SWPM 20-20-00, Electrical Bonding and Grounds

B. Consumable Materials

(1) G00034 Cotton Wiper, Process Cleaning Absorbent Wiper (cheesecloth, gauze) BMS 15-5

(2) Sealant, BMS 5-142

(3) B01008 Solvent - Series 88

C. Procedure

(1) Open these circuit breakers, and attach DO-NOT-CLOSE tags:

(a) On the overhead equipment panel, P11:

1) 11M13, LEFT JETT CONT

MECH | INSP

2) 11M22, RIGHT JETT CONT

WARNING: MAKE SURE THAT THE DOWNLOCKS ARE INSTALLED IN ALL OF THE LANDING GEAR. WITHOUT THE DOWNLOCKS, THE LANDING GEAR CAN RETRACT AND CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

(2) Make sure the downlocks are installed in the nose and main landing gear (AMM 32-00-20/201).

WARNING: OBEY THE INSTALLATION PROCEDURE FOR THE DOOR LOCK. THE DOORS OPEN AND CLOSE QUICKLY. THE MOVEMENT OF THE DOORS CAN CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

(3) Open the doors for the landing gear and install the door locks (AMM 32-00-15/201).

(4) Disconnect the electrical connector from the actuator of the transfer valve.

D. AIRPLANES WITHOUT ACTUATOR MA20A2027 OR MA30A1001;
Bonding Resistance Check

(1) Remove the bonding jumper from the actuator.

(2) Measure the bonding resistance between the actuator and the rear spar (SWPM 20-20-00).

(a) Make sure the resistance is 5 milliohms (0.005 ohm) or less.

(3) Connect the screw, washers, and nut to attach the bonding jumper to the actuator.

E. AIRPLANES WITH ACTUATOR MA20A2027 OR MA30A1001;
Bonding Resistance Check

(1) Remove the bonding jumper from the actuator.

(2) Measure the bonding resistance between the actuator and the rear spar (SWPM 20-20-00).

(a) Make sure the resistance is 5 milliohms (0.005 ohm) or less.

(3) Do these steps to install the bonding jumper to the actuator:

MECH	INSP

(a) Clean the contact surfaces with a cotton wiper soaked with Series 88 solvent (AMM 20-30-88/201).

1) Clean and dry the surface until the cotton wiper stays clean.

(b) Apply a thin continuous layer of sealant to both surfaces of the bonding jumper and the washers.

1) Use BMS 5-142 sealant for the faying surface seal.

(c) Install the screw, washers, and nut to attach the bonding jumper to the actuator.

1) AIRPLANES WITHOUT ACTUATOR MA30A1001;
Tighten the screw to 20 in-lb (2.3 Nm).

2) AIRPLANES WITH ACTUATOR MA30A1001;
Tighten the screw to 35 in-lb (4.0 Nm).

(d) Measure the electrical bonding resistance between the upper housing of the actuator and the attached bonding jumper terminal (SWPM 20-20-00).

1) Do not touch the screw when you make the bonding resistance measurement.

2) Make sure the bonding reisistance is 0.001 ohm (1 milliohm) or less.

NOTE: CDCCL - Refer to the task: Airworthiness Limitation Precautions (AMM 28-00-00/201), for important information on Critical Design Configuration Control Limitations (CDCCLs).

NOTE: This is applicable to Airworthiness Limitation 28-AWL-23.

(e) Apply a cap seal of BMS 5-142 sealant over the terminal of the bonding jumper and screw.

F. Put the Airplane Back to Its Usual Condition

(1) Connect the electrical connector to the actuator.

(2) Remove the DO-NOT-CLOSE tags, and close these circuit breakers:

MECH	INSP

(a) On the P11 panel:

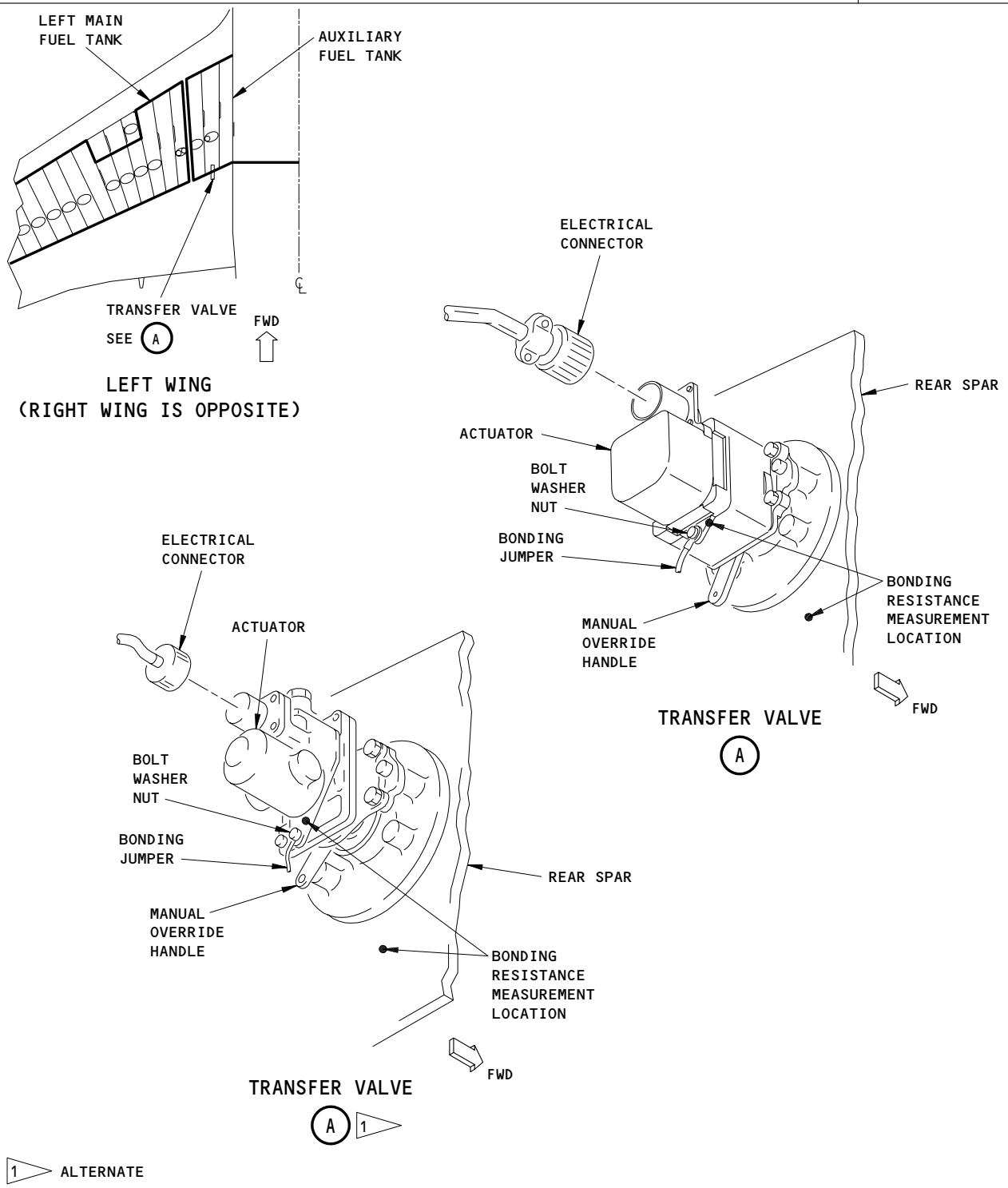
1) 11M13, LEFT JETT CONT

2) 11M22, RIGHT JETT CONT

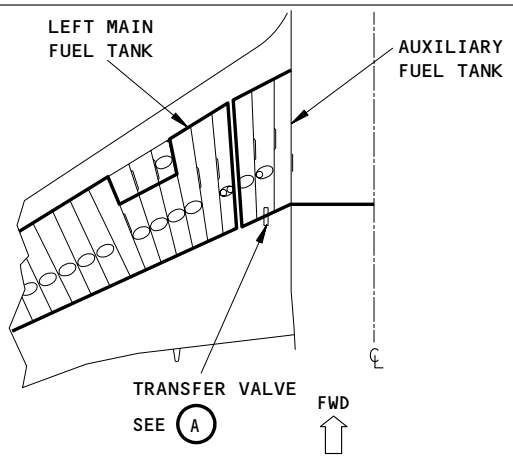
WARNING: OBEY THE REMOVAL PRECEDURE FOR THE DOOR LOCKS. THE DOORS OPEN AND CLOSE QUICKLY. THE MOVEMENT OF THE DOORS CAN CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

(3) Remove the door locks from the main gear doors and close the doors (AMM 32-00-15/201).

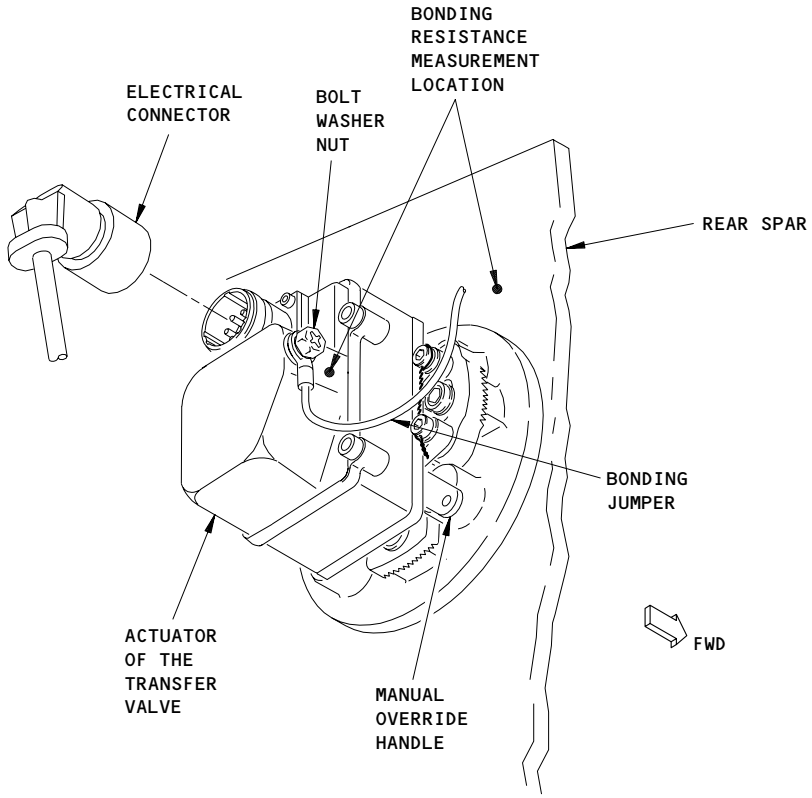
(4) When the maintenance and servicing of the airplanes is complete, remove the downlocks from the landing gear (AMM 32-00-20/201).



Fuel Jettison Transfer Valve Actuator Inspection
Figure 601



LEFT WING
(RIGHT WING IS OPPOSITE)



TRANSFER VALVE
A

Fuel Jettison Transfer Valve Actuator Inspection
Figure 601A

STATION		BOEING CARD NO.
TAIL NO.	SAS BOEING 767 TASK CARD	28-034-02
DATE		AIRLINE CARD NO.

SKILL	WORK AREA	RELATED TASK	INTERVAL	PHASE	MPD REV	TASK CARD REVISION
AIRPL	R MAIN TANK		8C	24896		AUG 22/09

TASK	TITLE	STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE	APPLICABILITY ENGINE
FUNCTIONAL	JETTISON TRANSFER VALVE BOND		NOTE	ALL

ZONES	ACCESS PANELS
651	

MECH	INSP	MPD ITEM NUMBER

FUNCTIONALLY CHECK (RESISTANCE MEASUREMENT) THE BONDING BETWEEN THE JETTISON TRANSFER VALVE (MOV) AND THE STRUCTURE TO ENSURE IT IS WITHIN SERVICE LIMITS (SFAR 88). 28-31-04-6A

NOTE: APPLICABLE TO AIRPLANES WITH JETTISON SYSTEMS.

1. Fuel Jettison Transfer Valve Actuator - Bonding Resistance Check
(Fig. 601, Fig. 601A)

A. References

(1) AMM 20-30-88/201, Airplane Structure Cleaning Solvents (Series 88)

(2) AMM 32-00-15/201, Landing Gear Door Locks

(3) AMM 32-00-20/201, Landing Gear Downlocks

(4) SWPM 20-20-00, Electrical Bonding and Grounds

B. Consumable Materials

(1) G00034 Cotton Wiper, Process Cleaning Absorbent Wiper (cheesecloth, gauze) BMS 15-5

(2) Sealant, BMS 5-142

(3) B01008 Solvent - Series 88

C. Procedure

(1) Open these circuit breakers, and attach DO-NOT-CLOSE tags:

(a) On the overhead equipment panel, P11:

1) 11M13, LEFT JETT CONT

MECH | INSP

2) 11M22, RIGHT JETT CONT

WARNING: MAKE SURE THAT THE DOWNLOCKS ARE INSTALLED IN ALL OF THE LANDING GEAR. WITHOUT THE DOWNLOCKS, THE LANDING GEAR CAN RETRACT AND CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

(2) Make sure the downlocks are installed in the nose and main landing gear (AMM 32-00-20/201).

WARNING: OBEY THE INSTALLATION PROCEDURE FOR THE DOOR LOCK. THE DOORS OPEN AND CLOSE QUICKLY. THE MOVEMENT OF THE DOORS CAN CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

(3) Open the doors for the landing gear and install the door locks (AMM 32-00-15/201).

(4) Disconnect the electrical connector from the actuator of the transfer valve.

D. AIRPLANES WITHOUT ACTUATOR MA20A2027 OR MA30A1001;
Bonding Resistance Check

(1) Remove the bonding jumper from the actuator.

(2) Measure the bonding resistance between the actuator and the rear spar (SWPM 20-20-00).

(a) Make sure the resistance is 5 milliohms (0.005 ohm) or less.

(3) Connect the screw, washers, and nut to attach the bonding jumper to the actuator.

E. AIRPLANES WITH ACTUATOR MA20A2027 OR MA30A1001;
Bonding Resistance Check

(1) Remove the bonding jumper from the actuator.

(2) Measure the bonding resistance between the actuator and the rear spar (SWPM 20-20-00).

(a) Make sure the resistance is 5 milliohms (0.005 ohm) or less.

(3) Do these steps to install the bonding jumper to the actuator:

MECH	INSP

(a) Clean the contact surfaces with a cotton wiper soaked with Series 88 solvent (AMM 20-30-88/201).

1) Clean and dry the surface until the cotton wiper stays clean.

(b) Apply a thin continuous layer of sealant to both surfaces of the bonding jumper and the washers.

1) Use BMS 5-142 sealant for the faying surface seal.

(c) Install the screw, washers, and nut to attach the bonding jumper to the actuator.

1) AIRPLANES WITHOUT ACTUATOR MA30A1001;
Tighten the screw to 20 in-lb (2.3 Nm).

2) AIRPLANES WITH ACTUATOR MA30A1001;
Tighten the screw to 35 in-lb (4.0 Nm).

(d) Measure the electrical bonding resistance between the upper housing of the actuator and the attached bonding jumper terminal (SWPM 20-20-00).

1) Do not touch the screw when you make the bonding resistance measurement.

2) Make sure the bonding reisistance is 0.001 ohm (1 milliohm) or less.

NOTE: CDCCL - Refer to the task: Airworthiness Limitation Precautions (AMM 28-00-00/201), for important information on Critical Design Configuration Control Limitations (CDCCLs).

NOTE: This is applicable to Airworthiness Limitation 28-AWL-23.

(e) Apply a cap seal of BMS 5-142 sealant over the terminal of the bonding jumper and screw.

F. Put the Airplane Back to Its Usual Condition

(1) Connect the electrical connector to the actuator.

(2) Remove the DO-NOT-CLOSE tags, and close these circuit breakers:

MECH	INSP

(a) On the P11 panel:

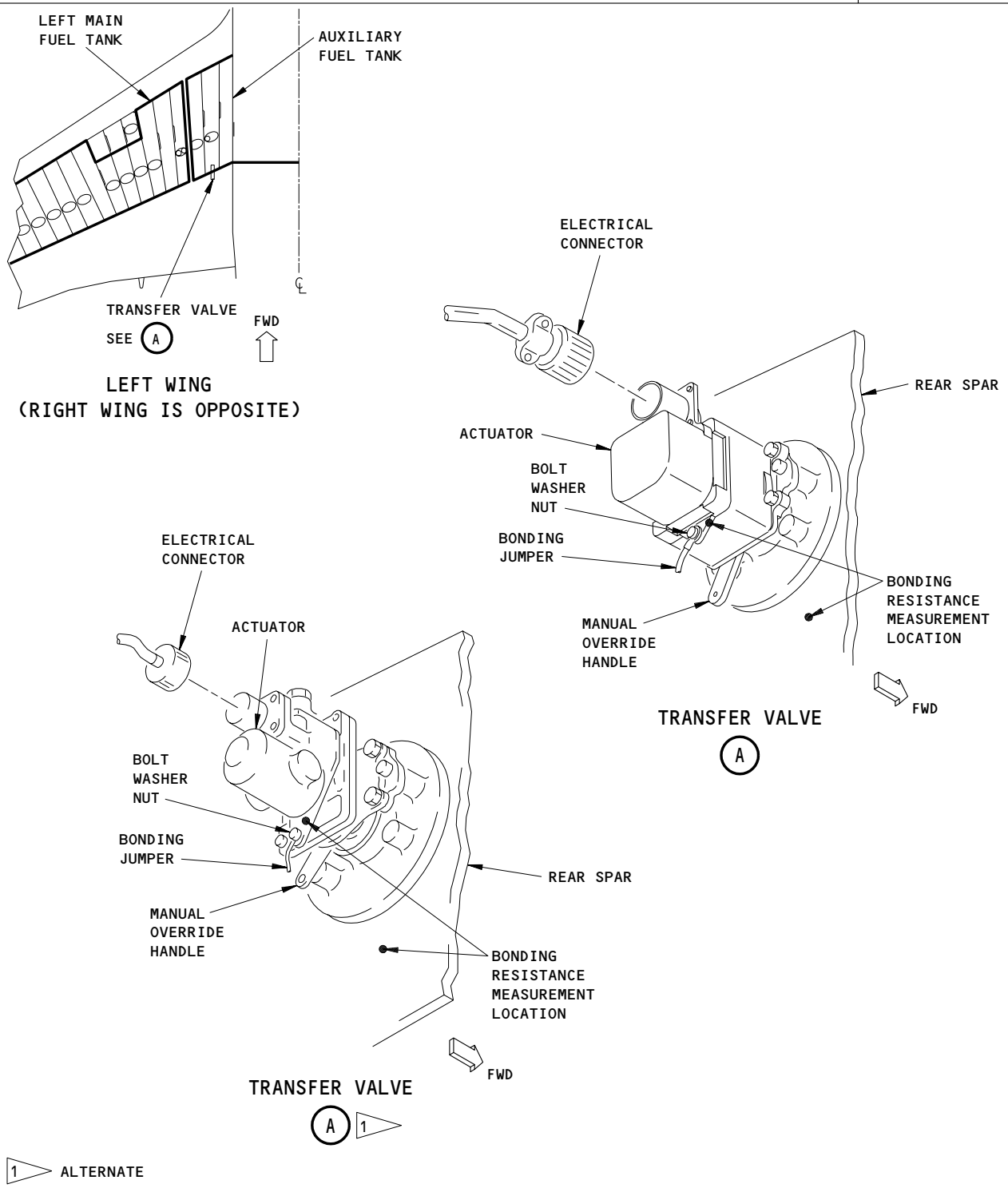
1) 11M13, LEFT JETT CONT

2) 11M22, RIGHT JETT CONT

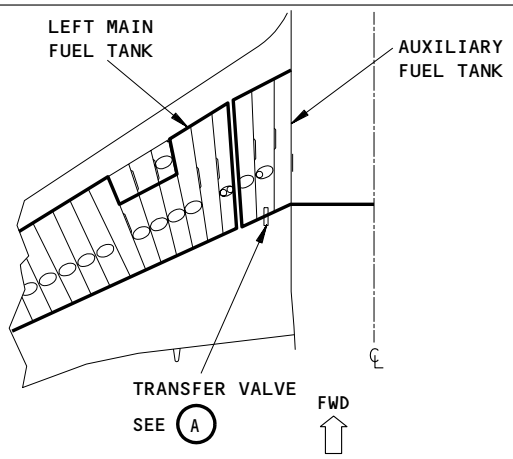
WARNING: OBEY THE REMOVAL PRECEDURE FOR THE DOOR LOCKS. THE DOORS OPEN AND CLOSE QUICKLY. THE MOVEMENT OF THE DOORS CAN CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

(3) Remove the door locks from the main gear doors and close the doors (AMM 32-00-15/201).

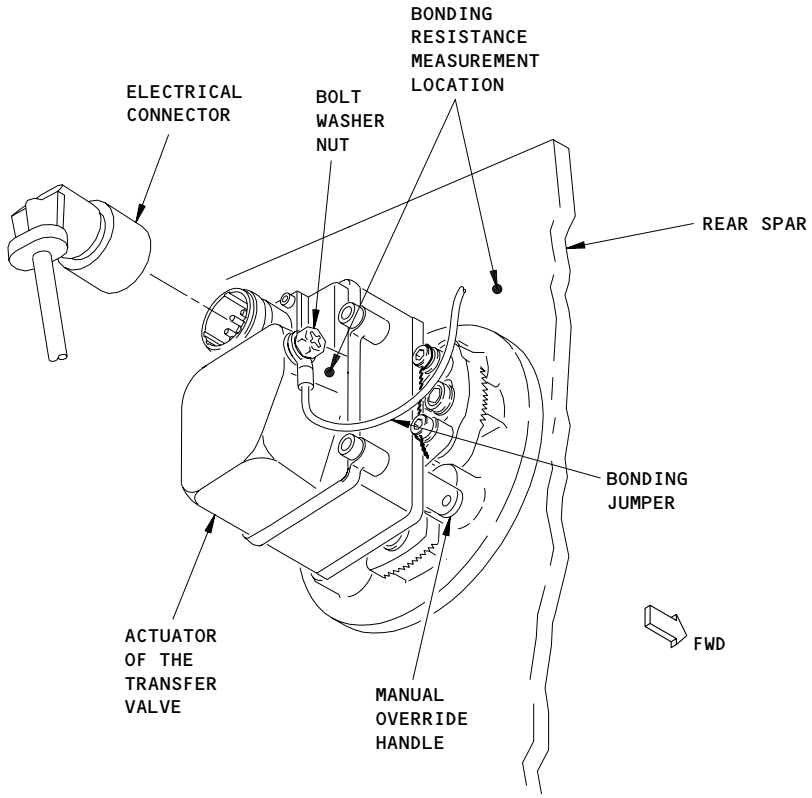
(4) When the maintenance and servicing of the airplanes is complete, remove the downlocks from the landing gear (AMM 32-00-20/201).



Fuel Jettison Transfer Valve Actuator Inspection
Figure 601



LEFT WING
(RIGHT WING IS OPPOSITE)



TRANSFER VALVE
A

Fuel Jettison Transfer Valve Actuator Inspection
Figure 601A

STATION		BOEING CARD NO.
TAIL NO.	SAS BOEING 767 TASK CARD	28-035-01
DATE		AIRLINE CARD NO.

SKILL	WORK AREA	RELATED TASK	INTERVAL	PHASE	MPD REV	TASK CARD REVISION
AIRPL	L MAIN TK		8C	24896		AUG 22/09

TASK	TITLE	STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE	APPLICABILITY ENGINE
CHECK/INSP	FQIS IN-TANK WIRE HARNESS SUPPORT		ALL	ALL

ZONES	ACCESS PANELS
532 541	552HB

MECH | INSP

MPD ITEM NUMBER

INSPECT (DETAILED) THE IN-TANK FQIS WIRE HARNESS SUPPORT FOR DAMAGE AND PROPER SECURITY (SFAR 88). 28-41-09-6A

1. Inspect the Tank Wiring Harness (Fig. 601)

A. References

(1) AMM 28-11-00/201, Fuel Tanks (Purging and Entry)

(2) AMM 28-11-01/401, Main Tank Access Doors

(3) AMM 28-11-02/401, Auxiliary Tank Access Doors

(4) AMM 28-26-00/201, Defueling

B. Access

(1) Location Zones

133	Wing Center Section (Left)
134	Wing Center Section (Right)
531	Center Auxiliary Tank (Left)
532	Main Tank - Inboard of Rib No. 10 (Left)
541	Main Tank - Outboard of Rib No. 10 (Left)
631	Center Auxiliary Tank (Right)
632	Main Tank - Inboard of Rib No. 10 (Right)
641	Main Tank - Outboard of Rib No. 10 (Right)

C. Procedure

(1) Defuel the applicable fuel tank (AMM 28-26-00/201).

(2) Drain and purge the applicable fuel tank (AMM 28-11-00/201).

MECH | INSP

(3) Remove the applicable main or center tank access doors (AMM 28-11-01/401 or AMM 28-11-02/401).

WARNING: OBEY THE FUEL TANK ENTRY PRECAUTIONS (AMM 28-11-00/201). FAILURE TO OBEY THE FUEL TANK ENTRY PRECAUTIONS COULD CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.

(4) Obey the fuel tank entry precautions (AMM 28-11-00/201).

(5) Go into the applicable fuel tank.

(6) Visually inspect the FQIS tank wiring harness for these problems:

(a) Insulation that is abraded, cracked, or over-stressed.

(b) Conductors or shields that are broken or exposed.

(c) Clearance from the structure or fuel tubing that is not sufficient.

(d) Support clamps that are broken, loose, or missing.

(e) Wiring that is routed incorrectly.

(7) Visually inspect the compensators, tank units, and densitometers for these problems:

(a) Wiring that is not correctly attached to the terminals.

(b) Wiring to the terminal HI-Z or LO-Z that has damage or is incorrectly routed.

(c) An end cap that is missing (tank unit or compensator).

(d) Clearance from the structure that is not sufficient.

(e) Mounting brackets and hardware that are loose.

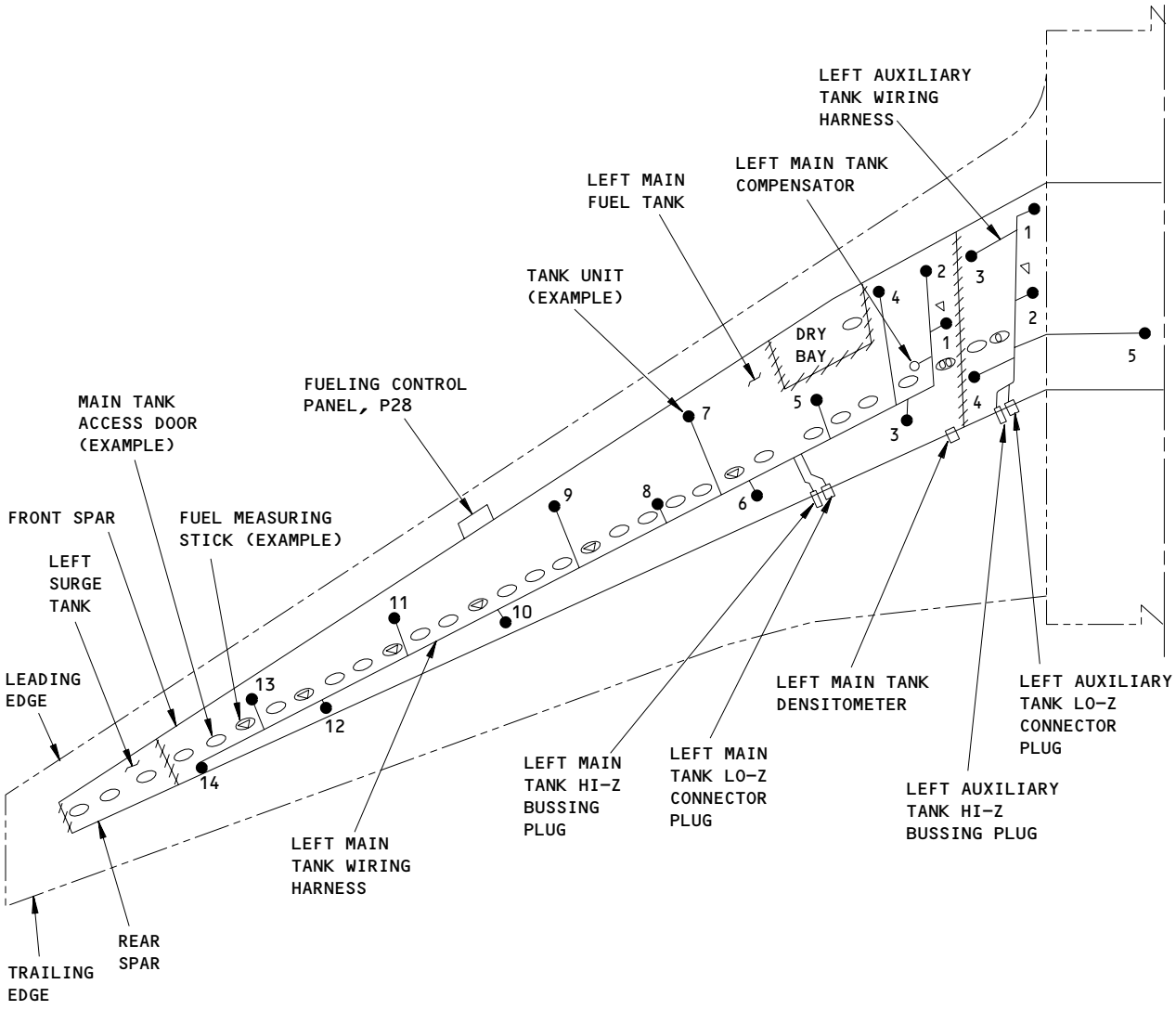
(f) Terminals that are bent.

(8) Inspect the electrical connectors and seals for damage, wear, or fuel leakage.

MECH	INSP

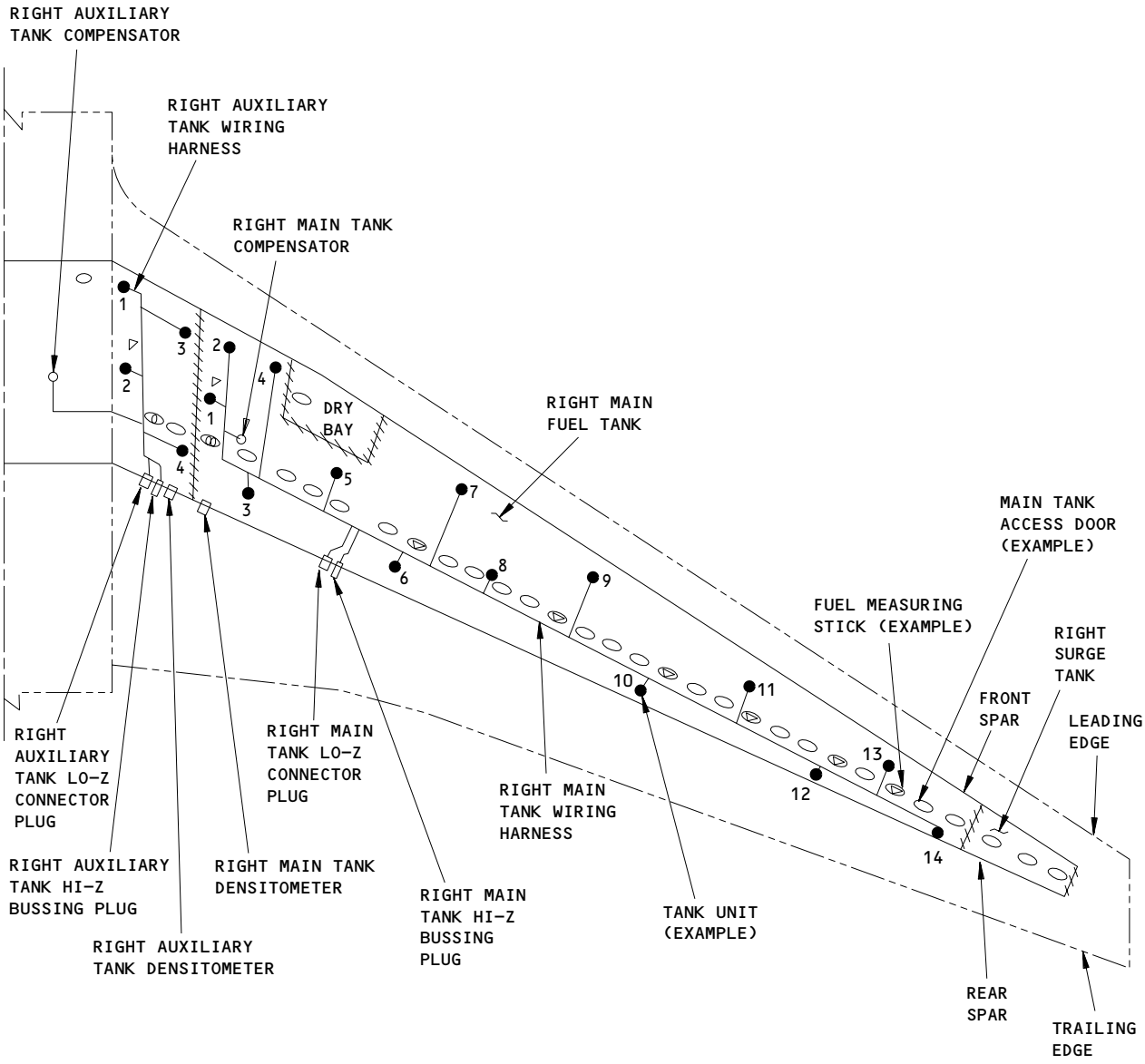
(9) Go out of the fuel tank (AMM 28-11-00/201).

(10) Install the applicable main or center tank access doors (AMM 28-11-01/401 or AMM 28-11-02/401).



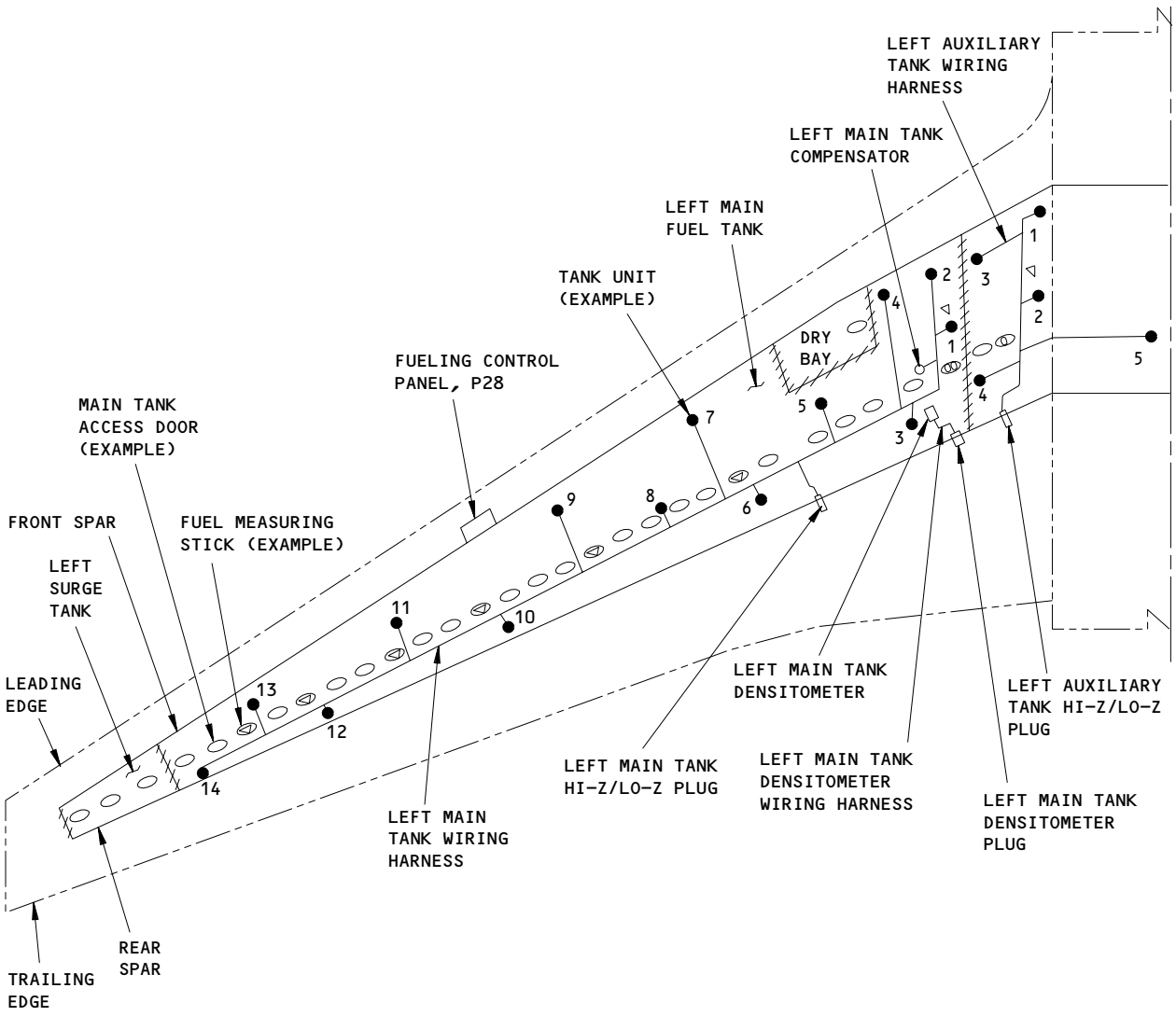
LEFT WING

Tank Wiring Harness
Figure 601 (Sheet 1)



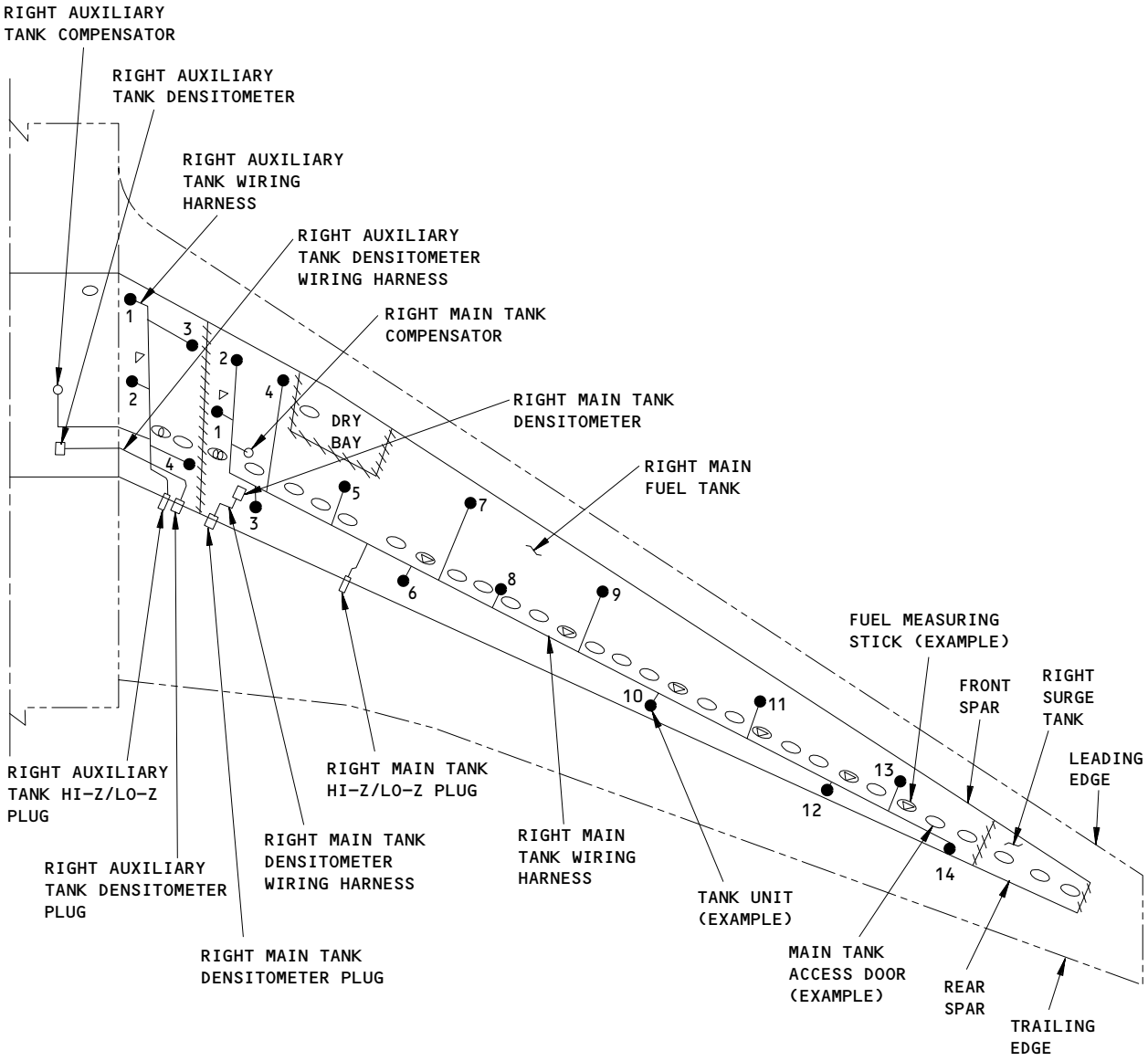
RIGHT WING

Tank Wiring Harness
Figure 601 (Sheet 2)



LEFT WING

Tank Wiring Harness
Figure 601 (Sheet 3)



RIGHT WING

Tank Wiring Harness
Figure 601 (Sheet 4)

STATION		BOEING CARD NO.
TAIL NO.	SAS BOEING 767 TASK CARD	28-035-02
DATE		AIRLINE CARD NO.

SKILL	WORK AREA	RELATED TASK	INTERVAL	PHASE	MPD REV	TASK CARD REVISION
AIRPL	R MAIN TK		8C	24896		AUG 22/09

TASK	TITLE	STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE	APPLICABILITY ENGINE
CHECK/INSP	FQIS IN-TANK WIRE HARNESS SUPPORT		ALL	ALL

ZONES	ACCESS PANELS
632 641	652HB

MECH | INSP

MPD ITEM NUMBER

INSPECT (DETAILED) THE IN-TANK FQIS WIRE HARNESS SUPPORT FOR DAMAGE AND PROPER SECURITY (SFAR 88). 28-41-09-6A

1. Inspect the Tank Wiring Harness (Fig. 601)

A. References

(1) AMM 28-11-00/201, Fuel Tanks (Purging and Entry)

(2) AMM 28-11-01/401, Main Tank Access Doors

(3) AMM 28-11-02/401, Auxiliary Tank Access Doors

(4) AMM 28-26-00/201, Defueling

B. Access

(1) Location Zones

133	Wing Center Section (Left)
134	Wing Center Section (Right)
531	Center Auxiliary Tank (Left)
532	Main Tank - Inboard of Rib No. 10 (Left)
541	Main Tank - Outboard of Rib No. 10 (Left)
631	Center Auxiliary Tank (Right)
632	Main Tank - Inboard of Rib No. 10 (Right)
641	Main Tank - Outboard of Rib No. 10 (Right)

C. Procedure

(1) Defuel the applicable fuel tank (AMM 28-26-00/201).

(2) Drain and purge the applicable fuel tank (AMM 28-11-00/201).

MECH | INSP

(3) Remove the applicable main or center tank access doors (AMM 28-11-01/401 or AMM 28-11-02/401).

WARNING: OBEY THE FUEL TANK ENTRY PRECAUTIONS (AMM 28-11-00/201). FAILURE TO OBEY THE FUEL TANK ENTRY PRECAUTIONS COULD CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.

(4) Obey the fuel tank entry precautions (AMM 28-11-00/201).

(5) Go into the applicable fuel tank.

(6) Visually inspect the FQIS tank wiring harness for these problems:

(a) Insulation that is abraded, cracked, or over-stressed.

(b) Conductors or shields that are broken or exposed.

(c) Clearance from the structure or fuel tubing that is not sufficient.

(d) Support clamps that are broken, loose, or missing.

(e) Wiring that is routed incorrectly.

(7) Visually inspect the compensators, tank units, and densitometers for these problems:

(a) Wiring that is not correctly attached to the terminals.

(b) Wiring to the terminal HI-Z or LO-Z that has damage or is incorrectly routed.

(c) An end cap that is missing (tank unit or compensator).

(d) Clearance from the structure that is not sufficient.

(e) Mounting brackets and hardware that are loose.

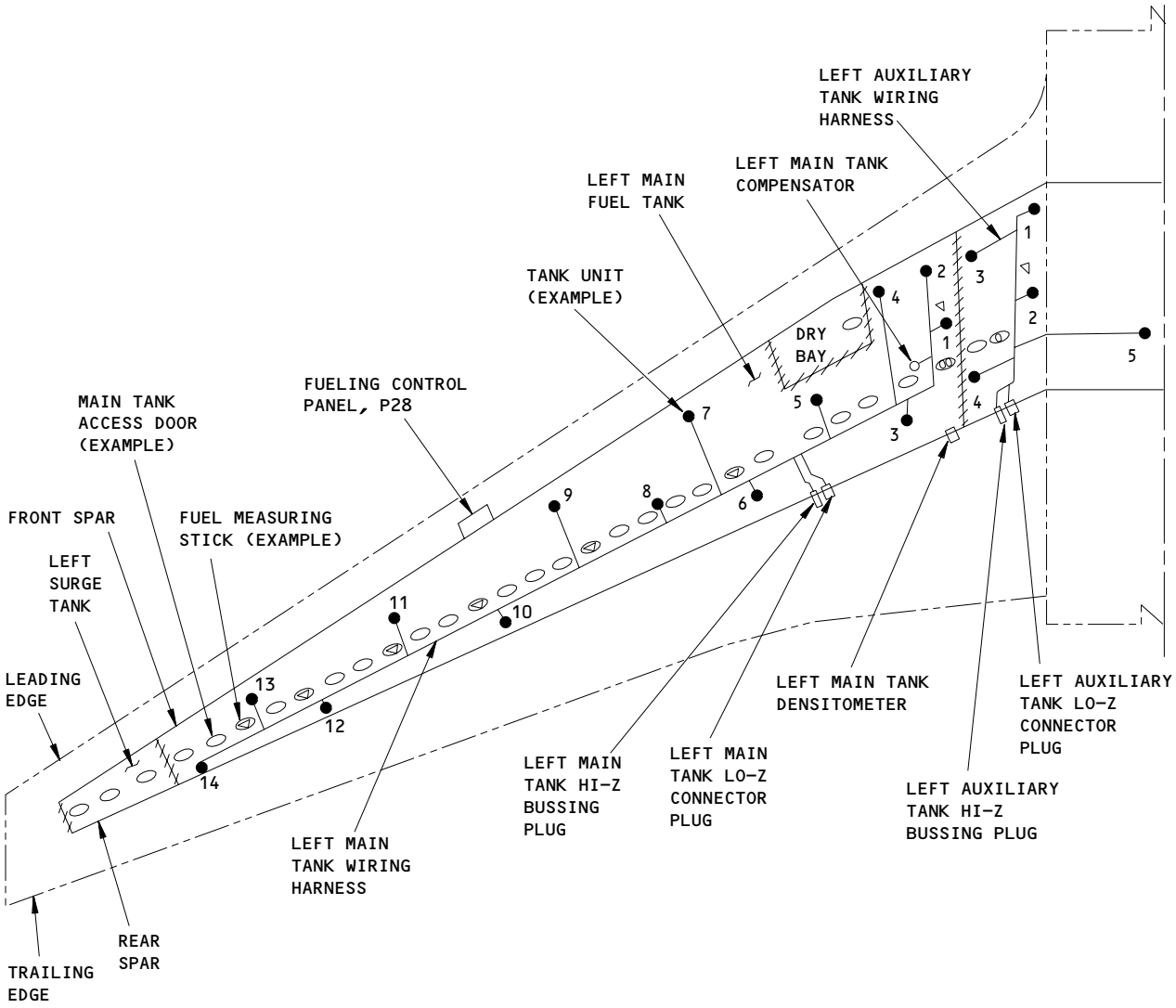
(f) Terminals that are bent.

(8) Inspect the electrical connectors and seals for damage, wear, or fuel leakage.

MECH	INSP

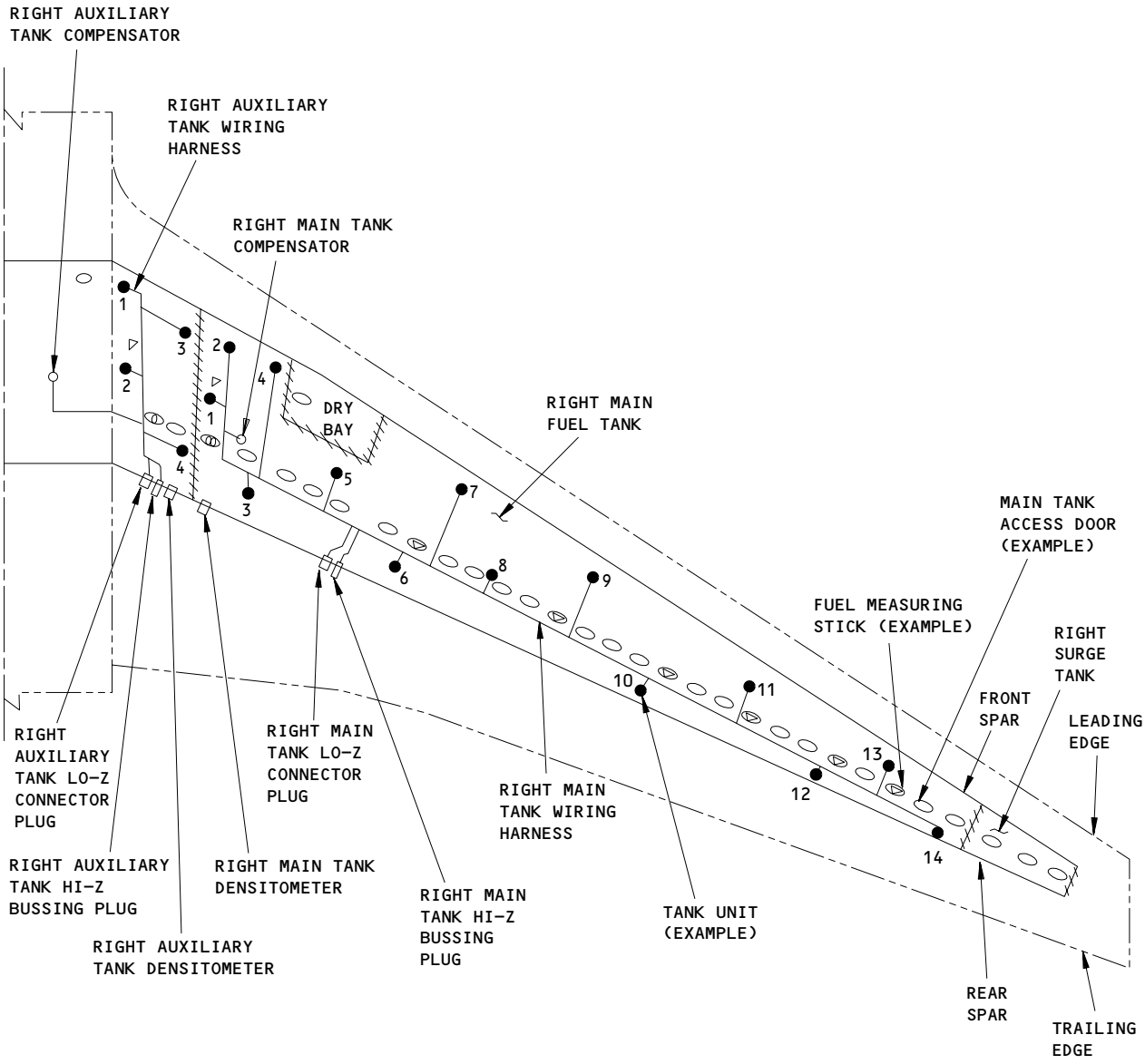
(9) Go out of the fuel tank (AMM 28-11-00/201).

(10) Install the applicable main or center tank access doors (AMM 28-11-01/401 or AMM 28-11-02/401).



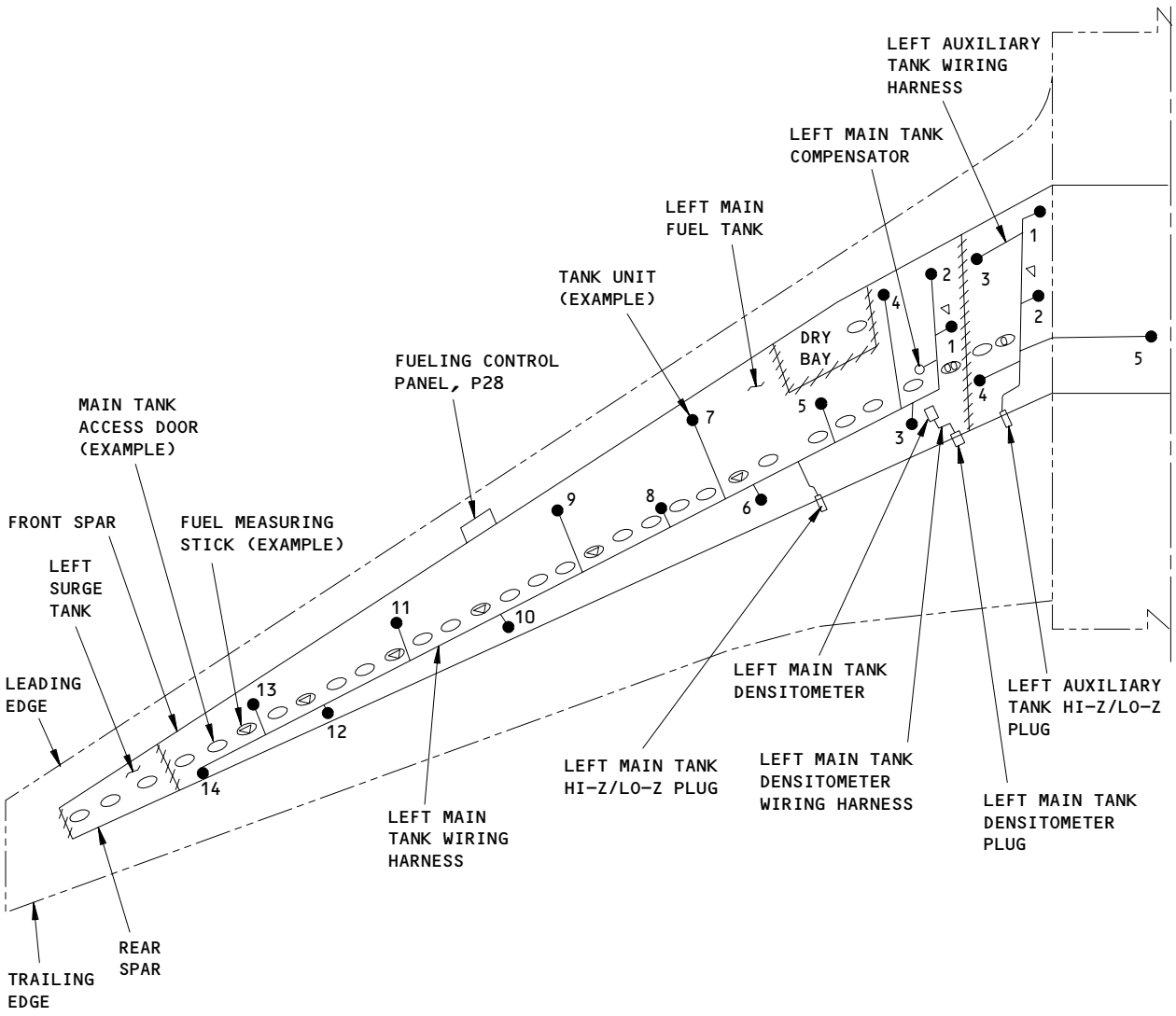
LEFT WING

Tank Wiring Harness
Figure 601 (Sheet 1)



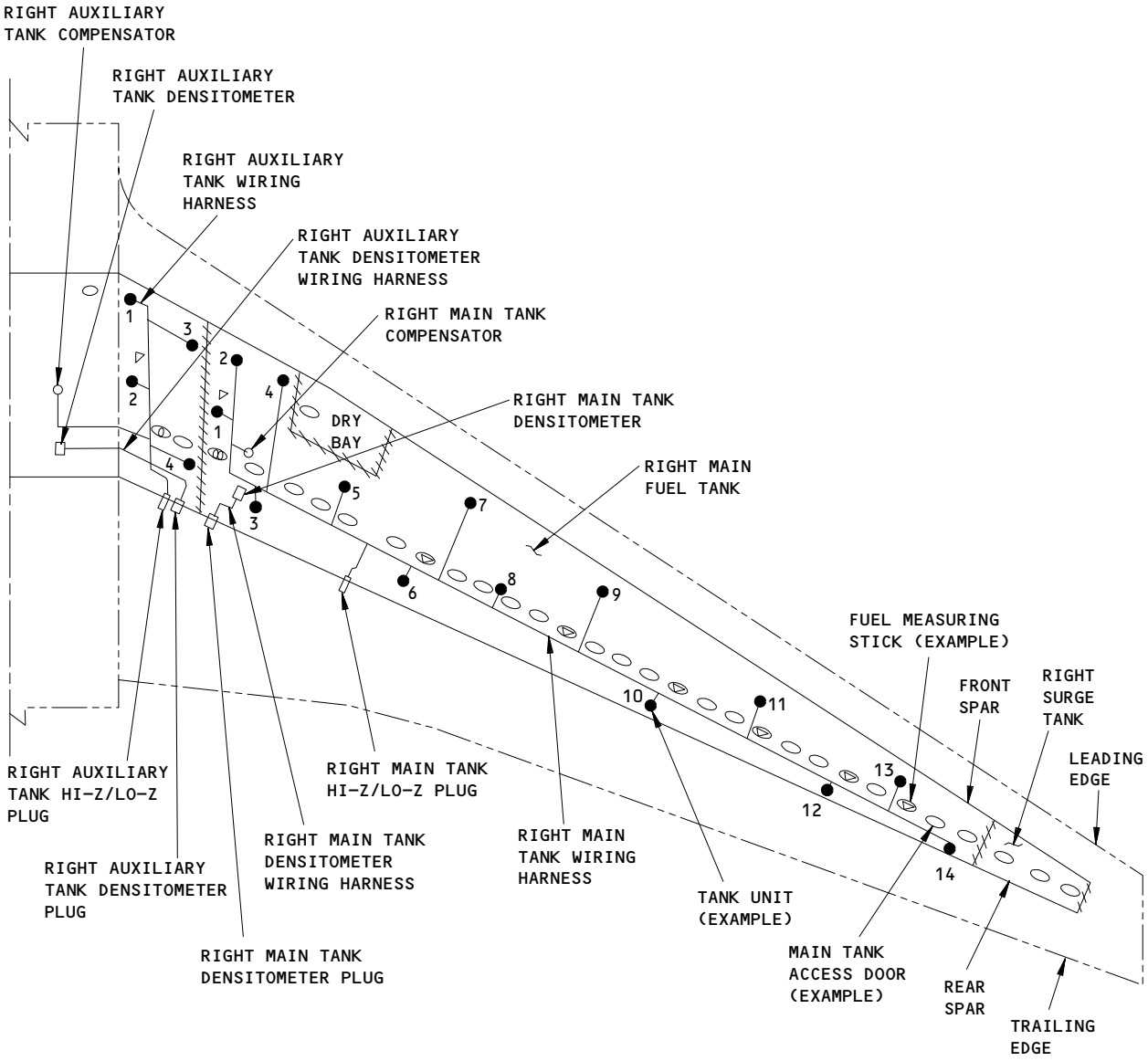
RIGHT WING

Tank Wiring Harness
Figure 601 (Sheet 2)



LEFT WING

Tank Wiring Harness
Figure 601 (Sheet 3)



RIGHT WING

Tank Wiring Harness
Figure 601 (Sheet 4)

STATION		BOEING CARD NO.
TAIL NO.	SAS BOEING 767 TASK CARD	28-035-03
DATE		AIRLINE CARD NO.

SKILL	WORK AREA	RELATED TASK	INTERVAL	PHASE	MPD REV	TASK CARD REVISION
AIRPL	CTR AUX TK		8C	24896		AUG 22/09

TASK	TITLE	STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE	APPLICABILITY ENGINE
CHECK/INSP	FQIS IN-TANK WIRE HARNESS SUPPORT		ALL	ALL

ZONES	ACCESS PANELS
133 531	

MECH	INSP	MPD ITEM NUMBER
		28-41-09-6A

INSPECT (DETAILED) THE IN-TANK FQIS WIRE HARNESS SUPPORT FOR DAMAGE AND PROPER SECURITY (SFAR 88).

1. Inspect the Tank Wiring Harness (Fig. 601)

A. References

(1) AMM 28-11-00/201, Fuel Tanks (Purging and Entry)

(2) AMM 28-11-01/401, Main Tank Access Doors

(3) AMM 28-11-02/401, Auxiliary Tank Access Doors

(4) AMM 28-26-00/201, Defueling

B. Access

(1) Location Zones

133	Wing Center Section (Left)
134	Wing Center Section (Right)
531	Center Auxiliary Tank (Left)
532	Main Tank - Inboard of Rib No. 10 (Left)
541	Main Tank - Outboard of Rib No. 10 (Left)
631	Center Auxiliary Tank (Right)
632	Main Tank - Inboard of Rib No. 10 (Right)
641	Main Tank - Outboard of Rib No. 10 (Right)

C. Procedure

(1) Defuel the applicable fuel tank (AMM 28-26-00/201).

(2) Drain and purge the applicable fuel tank (AMM 28-11-00/201).

MECH | INSP

(3) Remove the applicable main or center tank access doors (AMM 28-11-01/401 or AMM 28-11-02/401).

WARNING: OBEY THE FUEL TANK ENTRY PRECAUTIONS (AMM 28-11-00/201). FAILURE TO OBEY THE FUEL TANK ENTRY PRECAUTIONS COULD CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.

(4) Obey the fuel tank entry precautions (AMM 28-11-00/201).

(5) Go into the applicable fuel tank.

(6) Visually inspect the FQIS tank wiring harness for these problems:

(a) Insulation that is abraded, cracked, or over-stressed.

(b) Conductors or shields that are broken or exposed.

(c) Clearance from the structure or fuel tubing that is not sufficient.

(d) Support clamps that are broken, loose, or missing.

(e) Wiring that is routed incorrectly.

(7) Visually inspect the compensators, tank units, and densitometers for these problems:

(a) Wiring that is not correctly attached to the terminals.

(b) Wiring to the terminal HI-Z or LO-Z that has damage or is incorrectly routed.

(c) An end cap that is missing (tank unit or compensator).

(d) Clearance from the structure that is not sufficient.

(e) Mounting brackets and hardware that are loose.

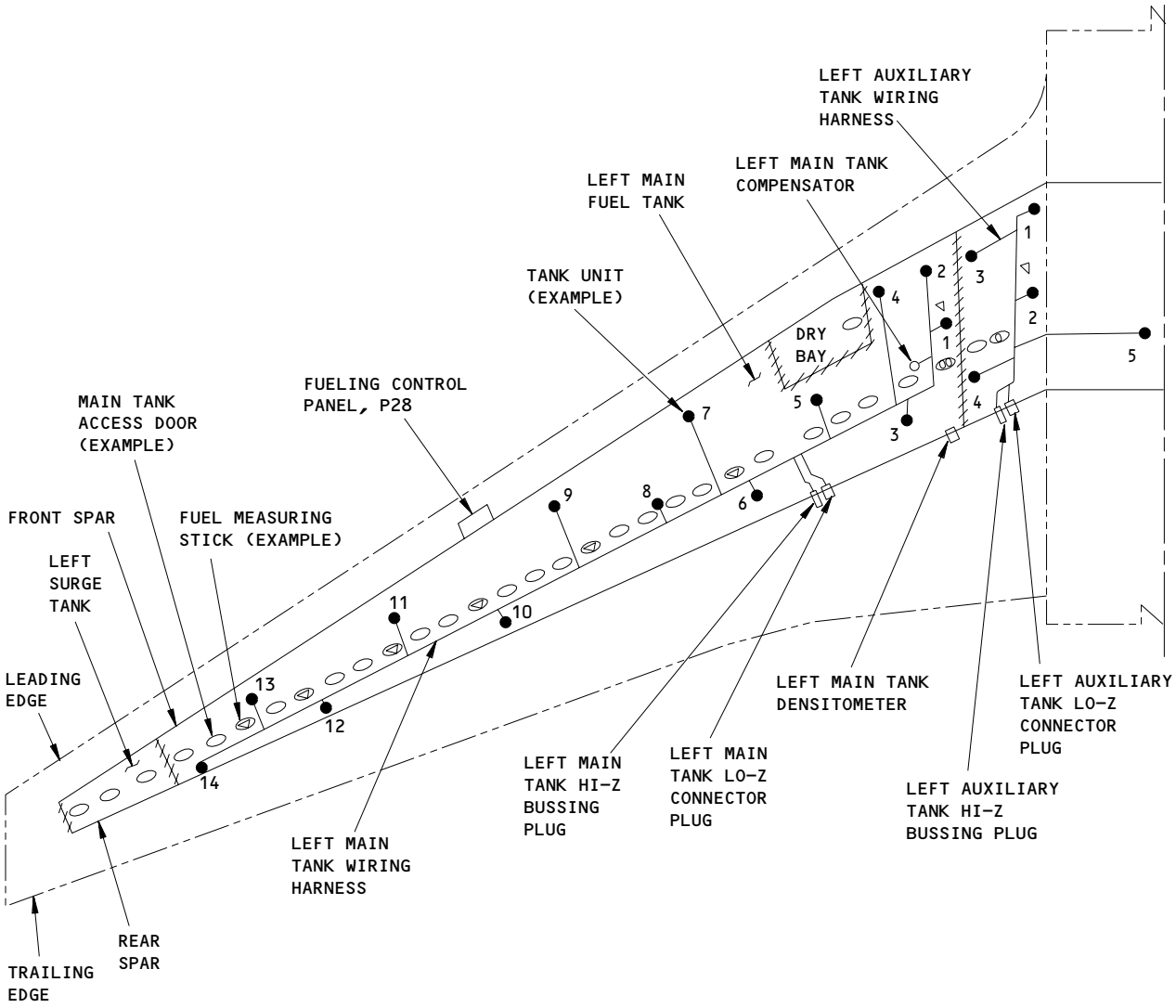
(f) Terminals that are bent.

(8) Inspect the electrical connectors and seals for damage, wear, or fuel leakage.

MECH	INSP

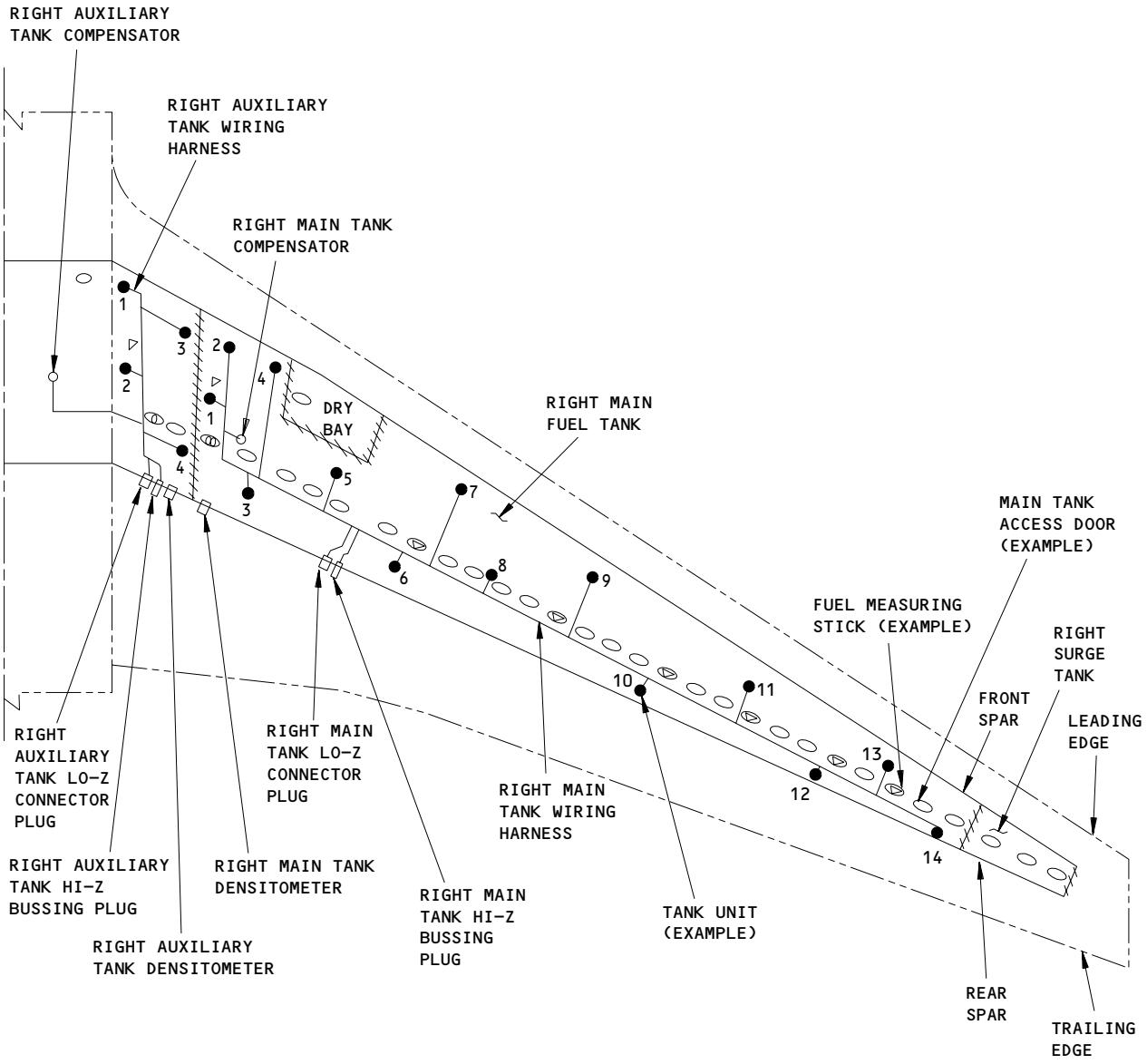
(9) Go out of the fuel tank (AMM 28-11-00/201).

(10) Install the applicable main or center tank access doors (AMM 28-11-01/401 or AMM 28-11-02/401).



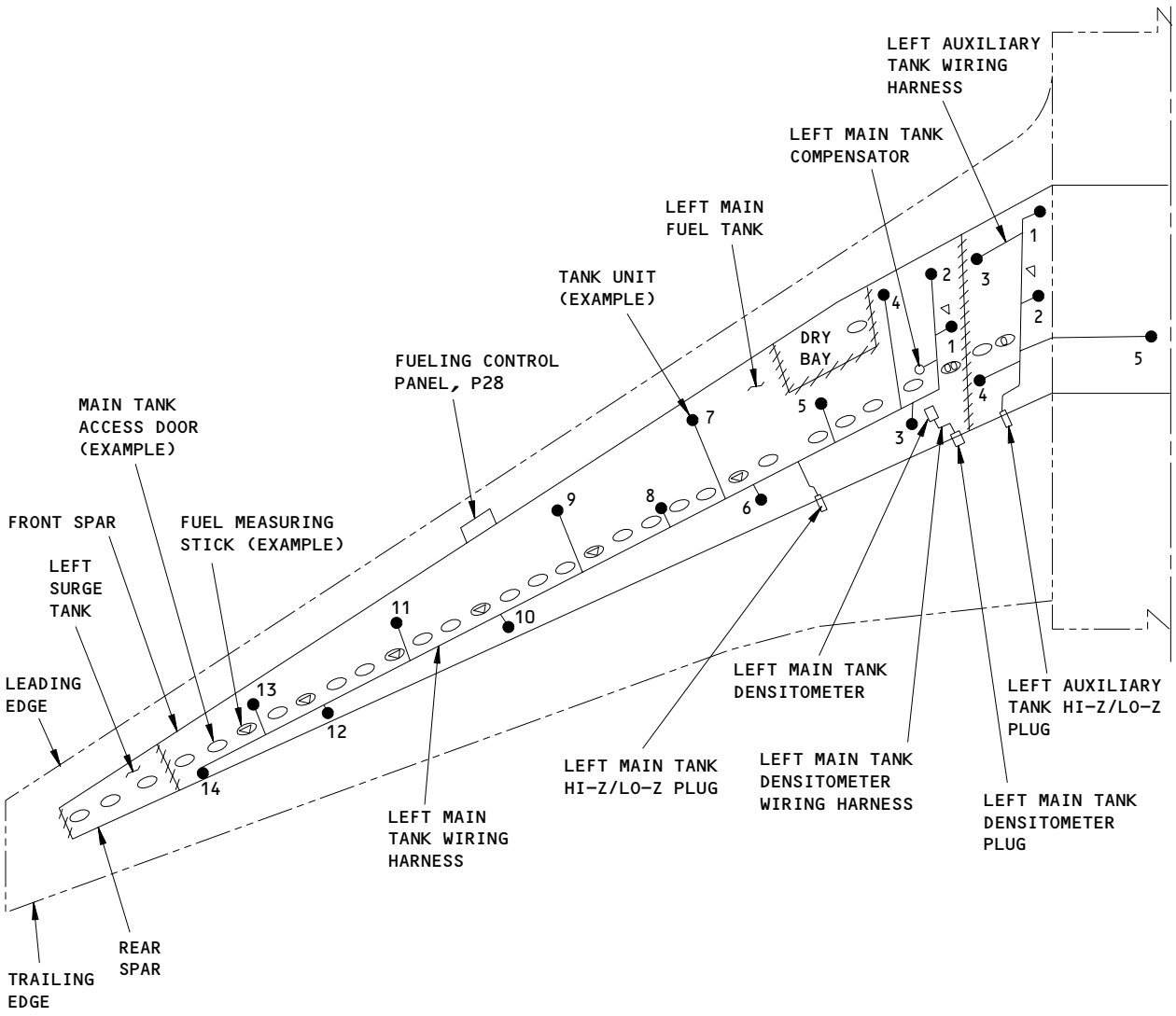
LEFT WING

Tank Wiring Harness
Figure 601 (Sheet 1)



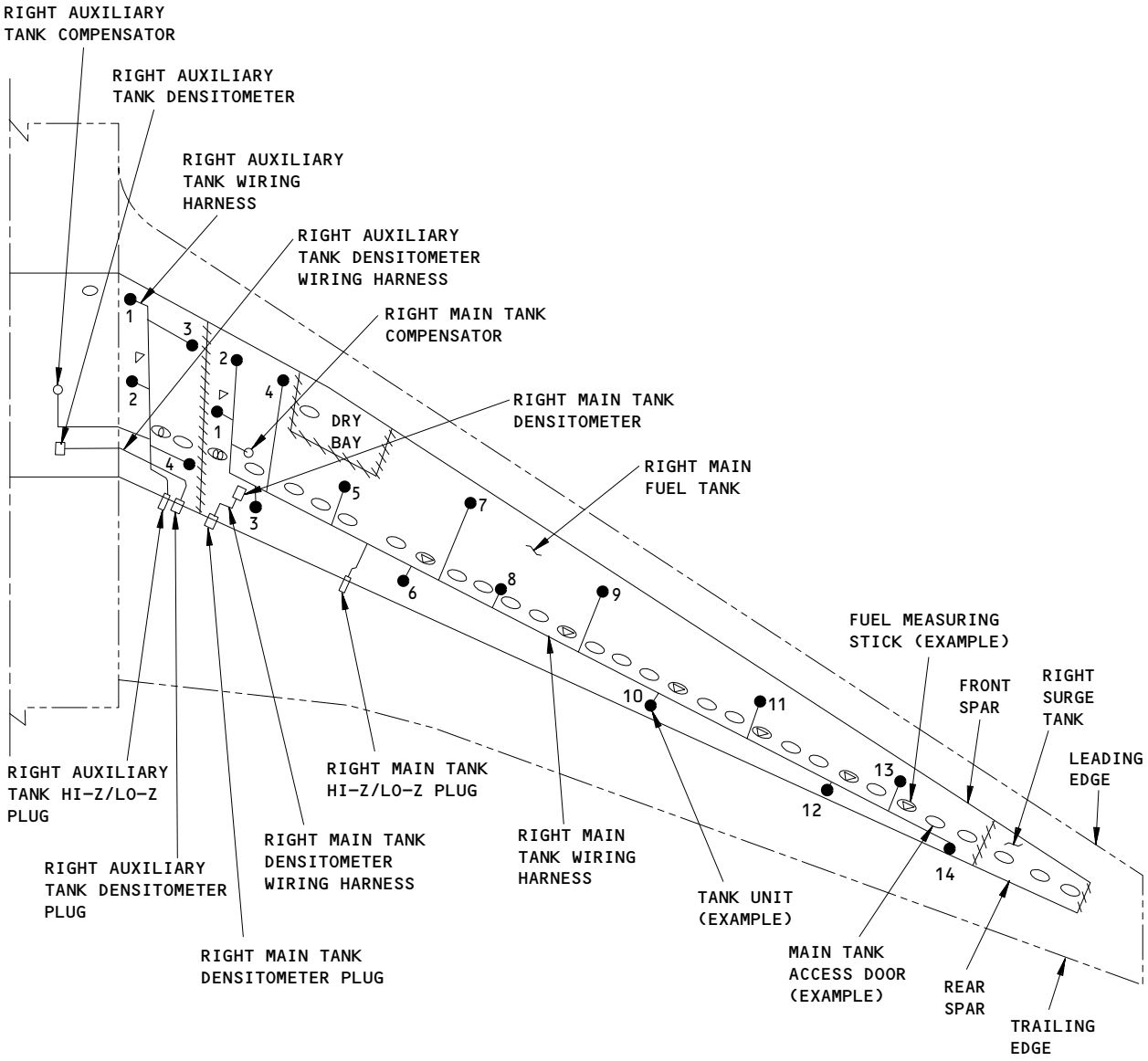
RIGHT WING

Tank Wiring Harness
Figure 601 (Sheet 2)



LEFT WING

Tank Wiring Harness
Figure 601 (Sheet 3)



RIGHT WING

Tank Wiring Harness
Figure 601 (Sheet 4)

STATION		BOEING CARD NO.
TAIL NO.	SAS BOEING 767 TASK CARD	28-035-04
DATE		AIRLINE CARD NO.

SKILL	WORK AREA	RELATED TASK	INTERVAL	PHASE	MPD REV	TASK CARD REVISION
AIRPL	CTR AUX TK		8C	24896		AUG 22/09

TASK	TITLE	STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE	APPLICABILITY ENGINE
CHECK/INSP	FQIS IN-TANK WIRE HARNESS SUPPORT		ALL	ALL

ZONES	ACCESS PANELS
134 631	

MECH	INSP	MPD ITEM NUMBER

INSPECT (DETAILED) THE IN-TANK FQIS WIRE HARNESS SUPPORT FOR DAMAGE AND PROPER SECURITY (SFAR 88). 28-41-09-6A

1. Inspect the Tank Wiring Harness (Fig. 601)

A. References

(1) AMM 28-11-00/201, Fuel Tanks (Purging and Entry)

(2) AMM 28-11-01/401, Main Tank Access Doors

(3) AMM 28-11-02/401, Auxiliary Tank Access Doors

(4) AMM 28-26-00/201, Defueling

B. Access

(1) Location Zones

133	Wing Center Section (Left)
134	Wing Center Section (Right)
531	Center Auxiliary Tank (Left)
532	Main Tank - Inboard of Rib No. 10 (Left)
541	Main Tank - Outboard of Rib No. 10 (Left)
631	Center Auxiliary Tank (Right)
632	Main Tank - Inboard of Rib No. 10 (Right)
641	Main Tank - Outboard of Rib No. 10 (Right)

C. Procedure

(1) Defuel the applicable fuel tank (AMM 28-26-00/201).

(2) Drain and purge the applicable fuel tank (AMM 28-11-00/201).

MECH | INSP

(3) Remove the applicable main or center tank access doors (AMM 28-11-01/401 or AMM 28-11-02/401).

WARNING: OBEY THE FUEL TANK ENTRY PRECAUTIONS (AMM 28-11-00/201). FAILURE TO OBEY THE FUEL TANK ENTRY PRECAUTIONS COULD CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.

(4) Obey the fuel tank entry precautions (AMM 28-11-00/201).

(5) Go into the applicable fuel tank.

(6) Visually inspect the FQIS tank wiring harness for these problems:

(a) Insulation that is abraded, cracked, or over-stressed.

(b) Conductors or shields that are broken or exposed.

(c) Clearance from the structure or fuel tubing that is not sufficient.

(d) Support clamps that are broken, loose, or missing.

(e) Wiring that is routed incorrectly.

(7) Visually inspect the compensators, tank units, and densitometers for these problems:

(a) Wiring that is not correctly attached to the terminals.

(b) Wiring to the terminal HI-Z or LO-Z that has damage or is incorrectly routed.

(c) An end cap that is missing (tank unit or compensator).

(d) Clearance from the structure that is not sufficient.

(e) Mounting brackets and hardware that are loose.

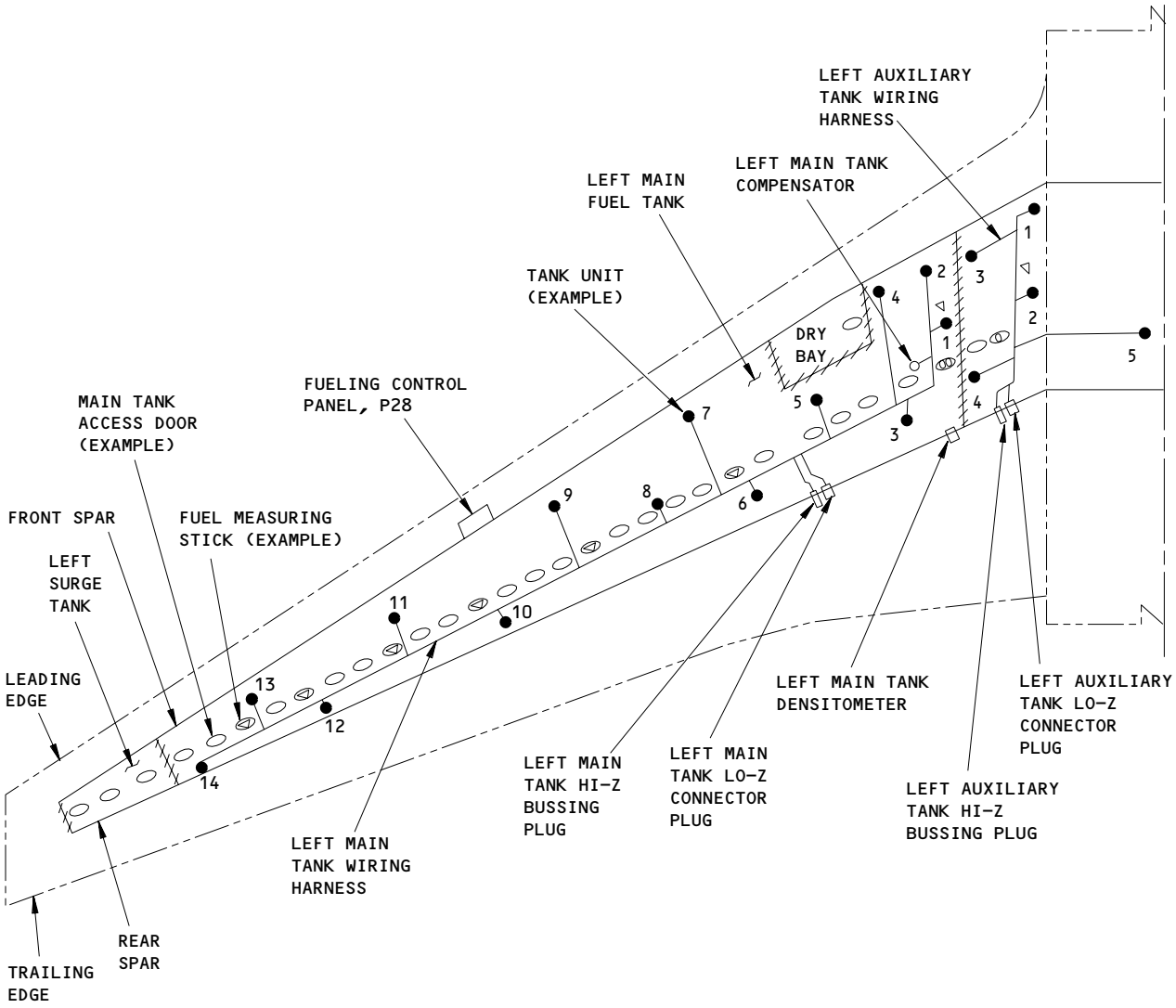
(f) Terminals that are bent.

(8) Inspect the electrical connectors and seals for damage, wear, or fuel leakage.

MECH	INSP

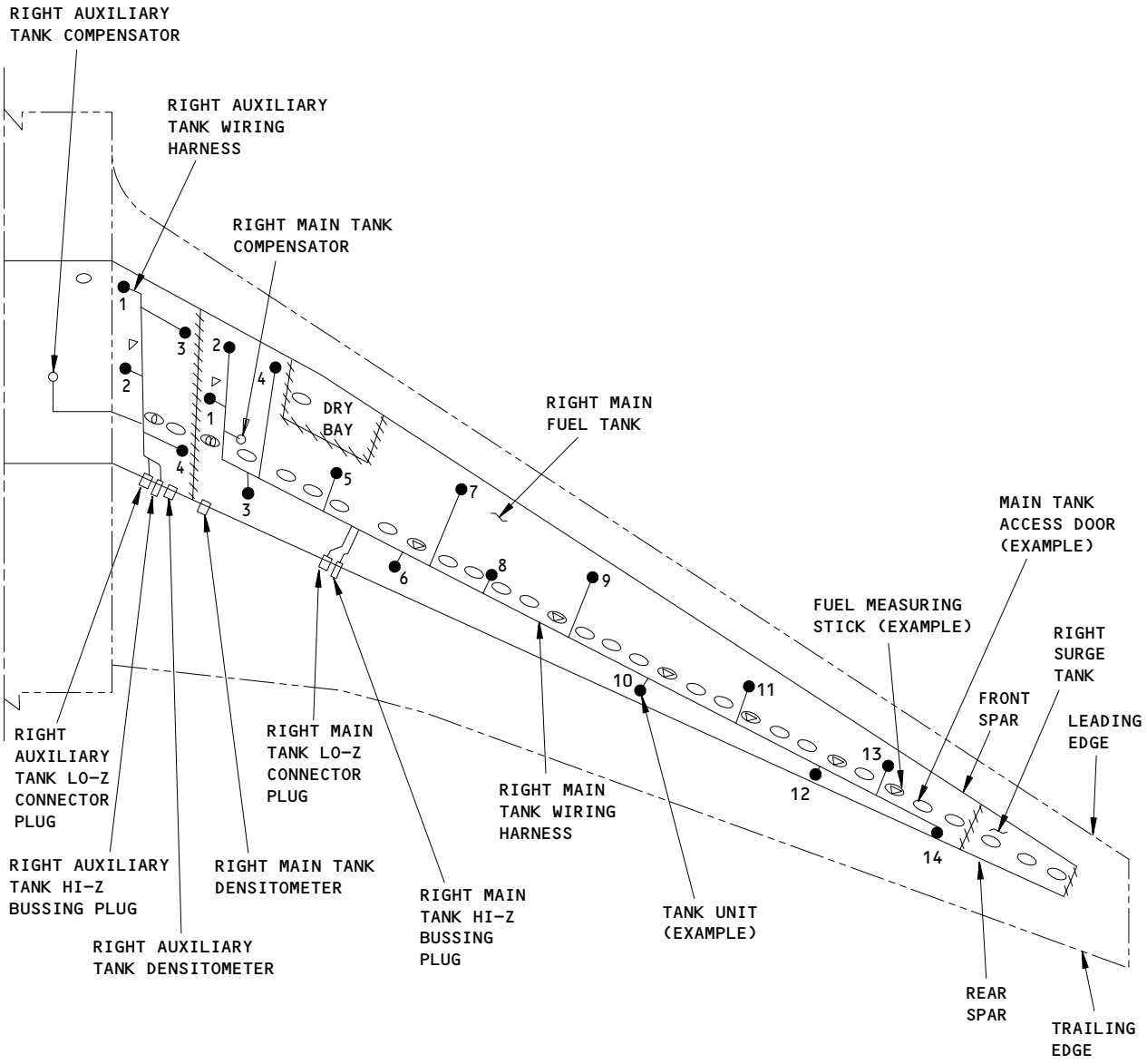
(9) Go out of the fuel tank (AMM 28-11-00/201).

(10) Install the applicable main or center tank access doors (AMM 28-11-01/401 or AMM 28-11-02/401).



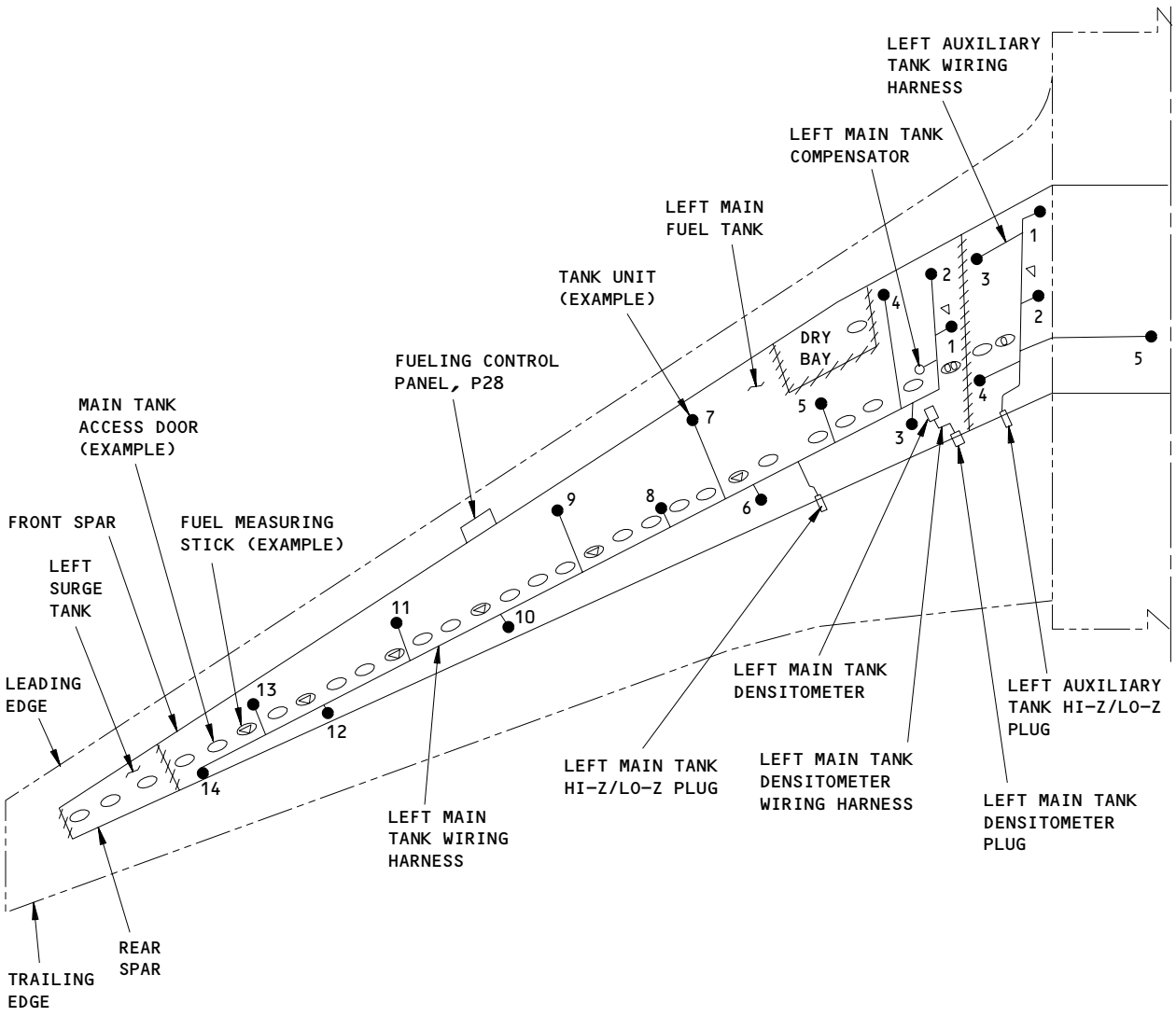
LEFT WING

Tank Wiring Harness
Figure 601 (Sheet 1)



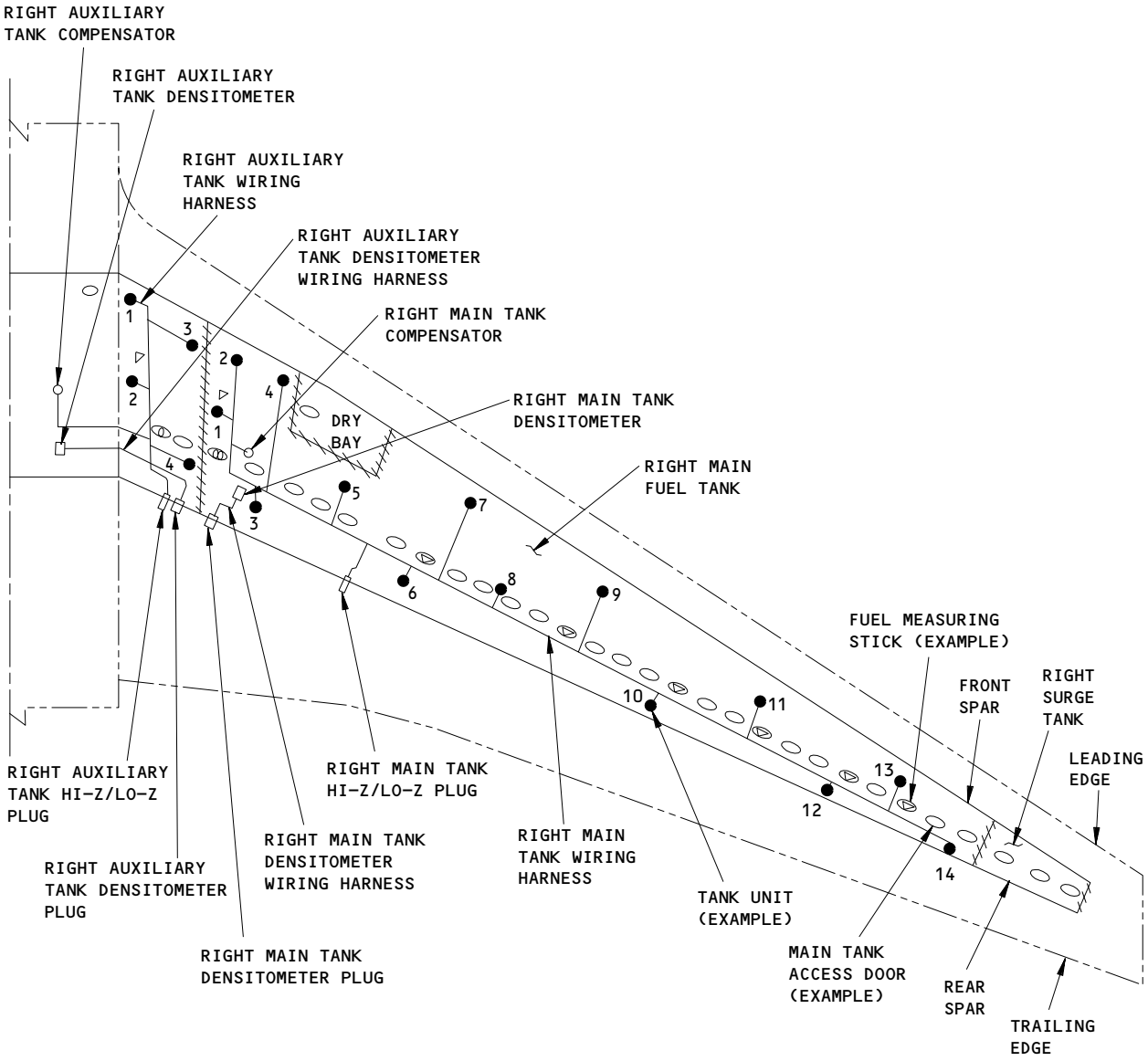
RIGHT WING

Tank Wiring Harness
Figure 601 (Sheet 2)



LEFT WING

Tank Wiring Harness
Figure 601 (Sheet 3)



RIGHT WING

Tank Wiring Harness
Figure 601 (Sheet 4)

STATION		BOEING CARD NO.
TAIL NO.	SAS BOEING 767 TASK CARD	28-036-01
DATE		AIRLINE CARD NO.

SKILL	WORK AREA	RELATED TASK	INTERVAL	PHASE	MPD REV	TASK CARD REVISION
AIRPL	L MAIN TANK		8C	24896		AUG 22/09

TASK	TITLE	STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE	APPLICABILITY ENGINE
CHECK/INSP	FQIS IN-TANK COMPONENTS		ALL	ALL

ZONES	ACCESS PANELS
532 541	552HB

MECH | INSP

MPD ITEM NUMBER

INSPECT (DETAILED) THE IN-TANK FQIS COMPONENTS FOR CHAFFING, CONDITION/SECURITY, RUBBING, AND ADEQUATE SEPARATION FROM STRUCTURE (SFAR 88). 28-41-09-6A

1. Inspect the Tank Wiring Harness (Fig. 601)

A. References

(1) AMM 28-11-00/201, Fuel Tanks (Purging and Entry)

(2) AMM 28-11-01/401, Main Tank Access Doors

(3) AMM 28-11-02/401, Auxiliary Tank Access Doors

(4) AMM 28-26-00/201, Defueling

B. Access

(1) Location Zones

133	Wing Center Section (Left)
134	Wing Center Section (Right)
531	Center Auxiliary Tank (Left)
532	Main Tank - Inboard of Rib No. 10 (Left)
541	Main Tank - Outboard of Rib No. 10 (Left)
631	Center Auxiliary Tank (Right)
632	Main Tank - Inboard of Rib No. 10 (Right)
641	Main Tank - Outboard of Rib No. 10 (Right)

C. Procedure

(1) Defuel the applicable fuel tank (AMM 28-26-00/201).

(2) Drain and purge the applicable fuel tank (AMM 28-11-00/201).

MECH | INSP

(3) Remove the applicable main or center tank access doors (AMM 28-11-01/401 or AMM 28-11-02/401).

WARNING: OBEY THE FUEL TANK ENTRY PRECAUTIONS (AMM 28-11-00/201). FAILURE TO OBEY THE FUEL TANK ENTRY PRECAUTIONS COULD CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.

(4) Obey the fuel tank entry precautions (AMM 28-11-00/201).

(5) Go into the applicable fuel tank.

(6) Visually inspect the FQIS tank wiring harness for these problems:

(a) Insulation that is abraded, cracked, or over-stressed.

(b) Conductors or shields that are broken or exposed.

(c) Clearance from the structure or fuel tubing that is not sufficient.

(d) Support clamps that are broken, loose, or missing.

(e) Wiring that is routed incorrectly.

(7) Visually inspect the compensators, tank units, and densitometers for these problems:

(a) Wiring that is not correctly attached to the terminals.

(b) Wiring to the terminal HI-Z or LO-Z that has damage or is incorrectly routed.

(c) An end cap that is missing (tank unit or compensator).

(d) Clearance from the structure that is not sufficient.

(e) Mounting brackets and hardware that are loose.

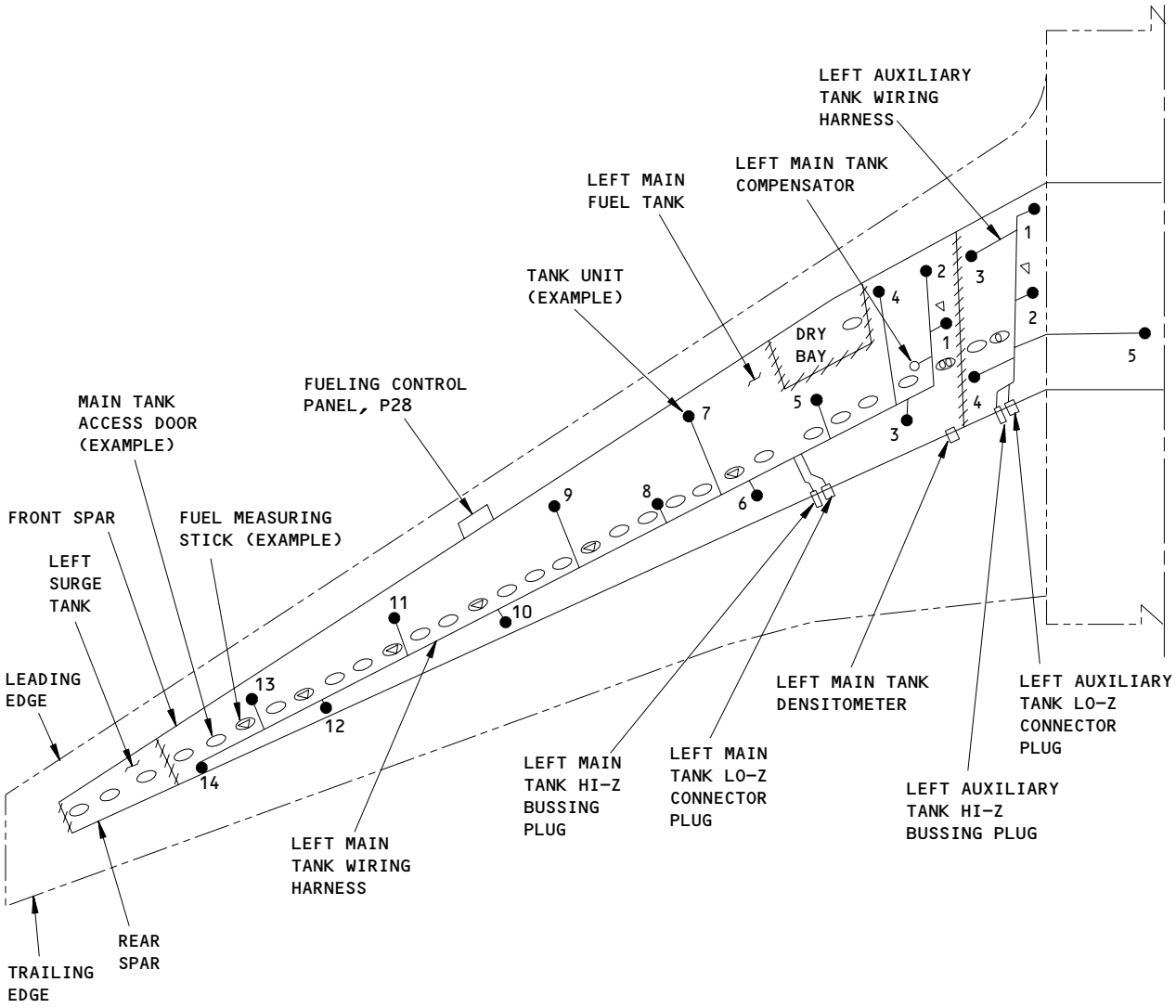
(f) Terminals that are bent.

(8) Inspect the electrical connectors and seals for damage, wear, or fuel leakage.

MECH	INSP

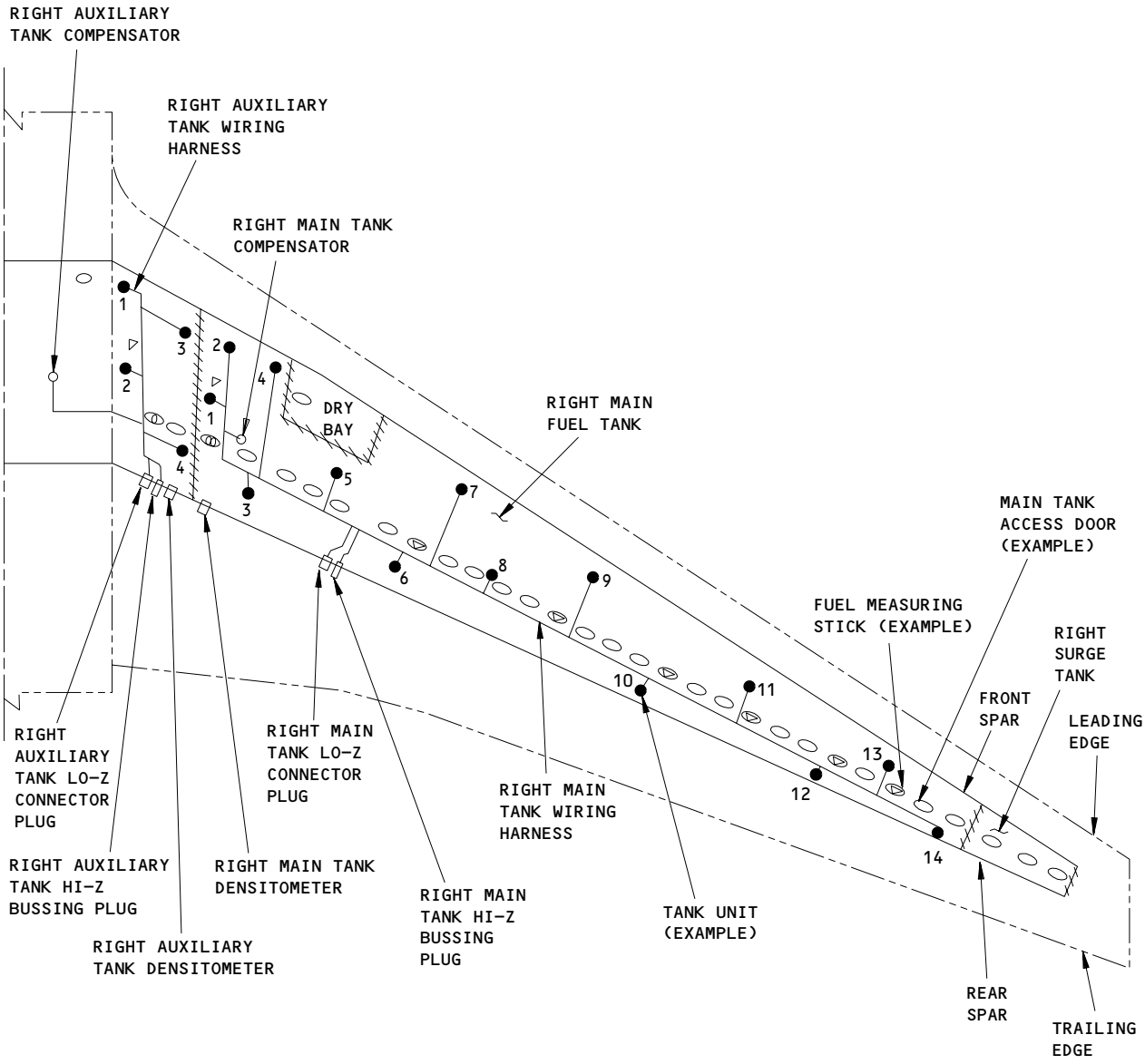
(9) Go out of the fuel tank (AMM 28-11-00/201).

(10) Install the applicable main or center tank access doors (AMM 28-11-01/401 or AMM 28-11-02/401).



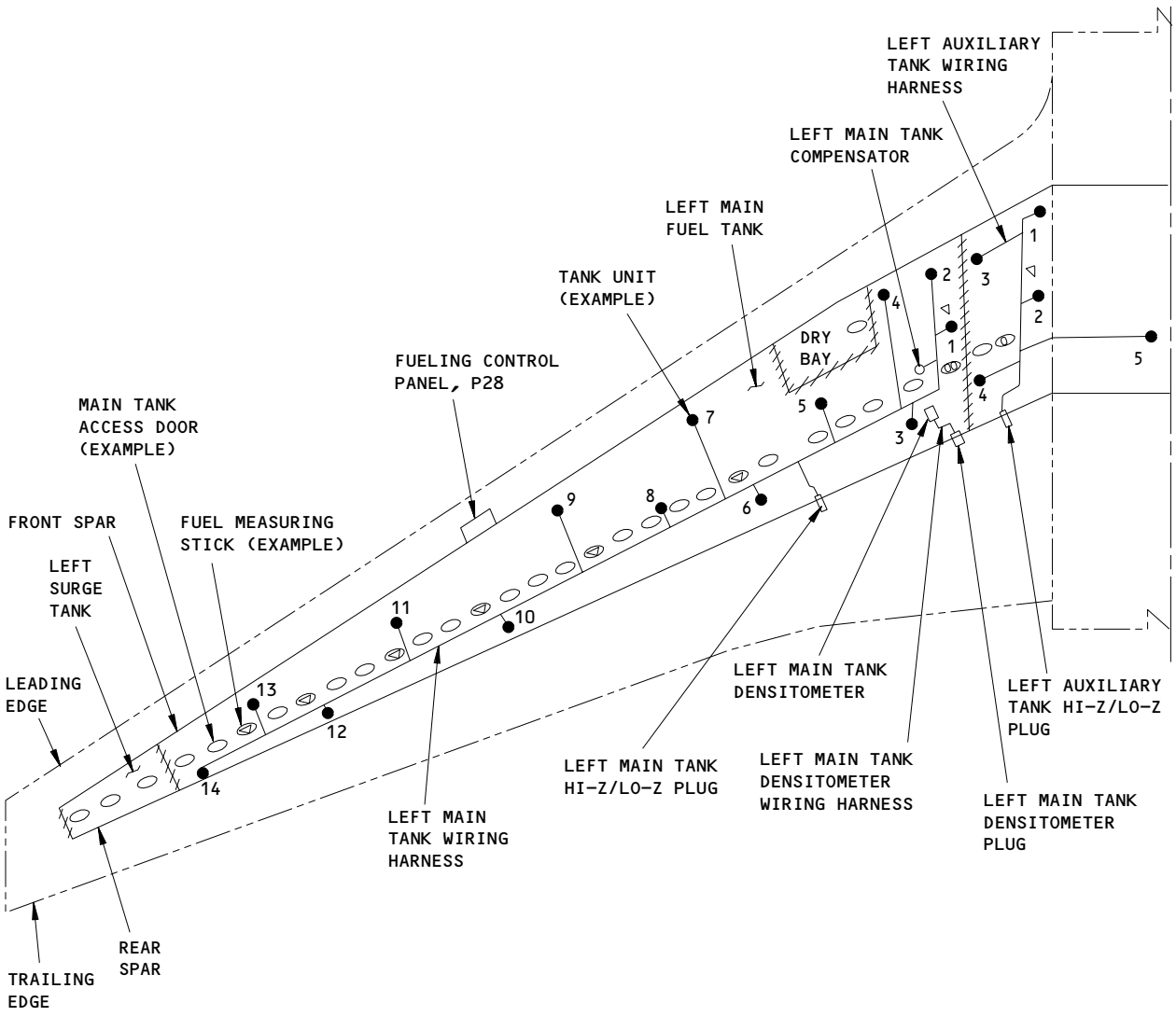
LEFT WING

Tank Wiring Harness
Figure 601 (Sheet 1)



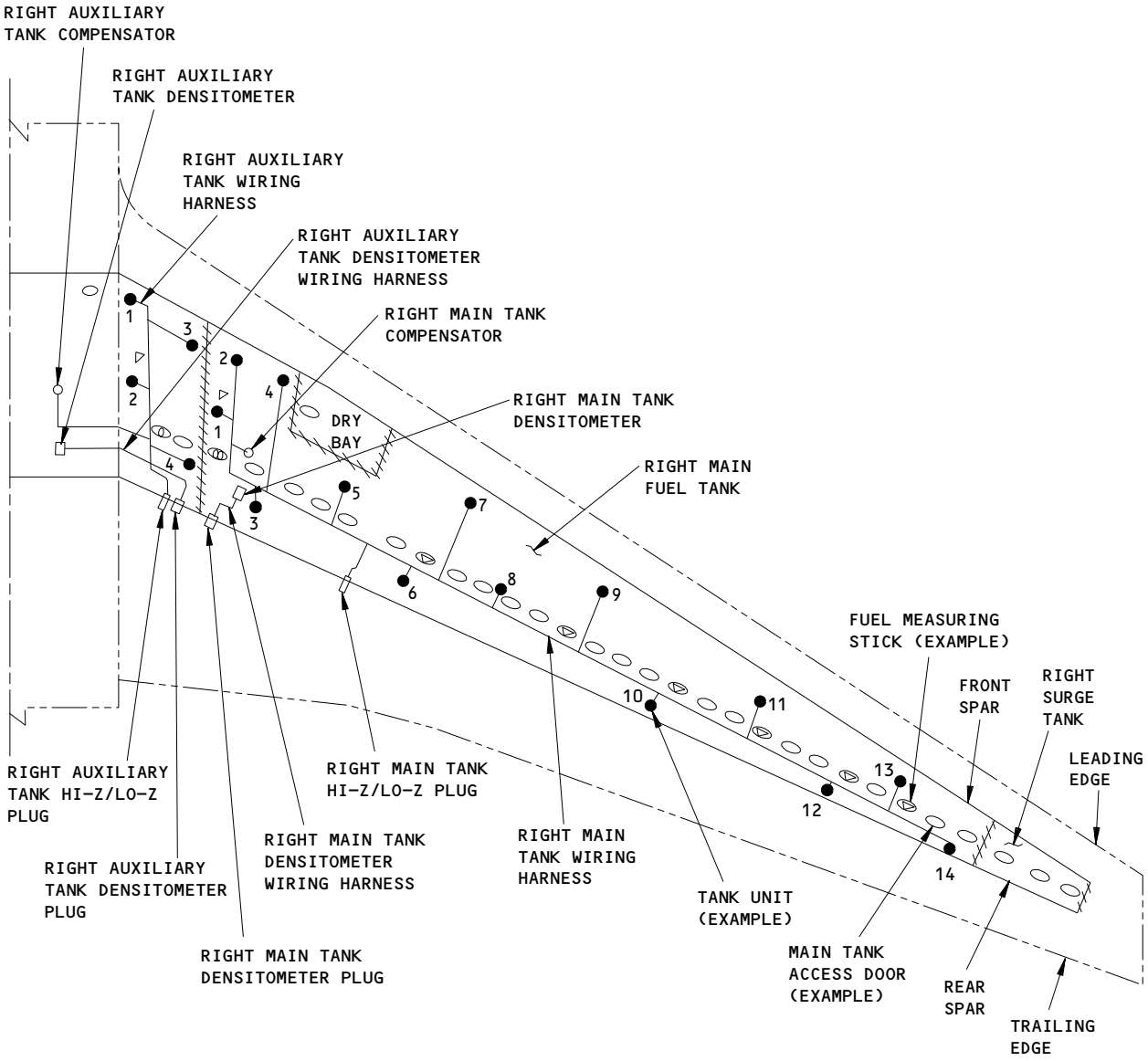
RIGHT WING

Tank Wiring Harness
Figure 601 (Sheet 2)



LEFT WING

Tank Wiring Harness
Figure 601 (Sheet 3)



RIGHT WING

Tank Wiring Harness
Figure 601 (Sheet 4)

STATION		BOEING CARD NO.
TAIL NO.	SAS BOEING 767 TASK CARD	28-036-02
DATE		AIRLINE CARD NO.

SKILL	WORK AREA	RELATED TASK	INTERVAL	PHASE	MPD REV	TASK CARD REVISION
AIRPL	R MAIN TANK		8C	24896		AUG 22/09

TASK	TITLE	STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE	APPLICABILITY ENGINE
CHECK/INSP	FQIS IN-TANK COMPONENTS		ALL	ALL

ZONES	ACCESS PANELS
632 641	652HB

MECH | INSP

MPD ITEM NUMBER

INSPECT (DETAILED) THE IN-TANK FQIS COMPONENTS FOR CHAFFING, CONDITION/SECURITY, RUBBING, AND ADEQUATE SEPARATION FROM STRUCTURE (SFAR 88). 28-41-09-6A

1. Inspect the Tank Wiring Harness (Fig. 601)

A. References

(1) AMM 28-11-00/201, Fuel Tanks (Purging and Entry)

(2) AMM 28-11-01/401, Main Tank Access Doors

(3) AMM 28-11-02/401, Auxiliary Tank Access Doors

(4) AMM 28-26-00/201, Defueling

B. Access

(1) Location Zones

133	Wing Center Section (Left)
134	Wing Center Section (Right)
531	Center Auxiliary Tank (Left)
532	Main Tank - Inboard of Rib No. 10 (Left)
541	Main Tank - Outboard of Rib No. 10 (Left)
631	Center Auxiliary Tank (Right)
632	Main Tank - Inboard of Rib No. 10 (Right)
641	Main Tank - Outboard of Rib No. 10 (Right)

C. Procedure

(1) Defuel the applicable fuel tank (AMM 28-26-00/201).

(2) Drain and purge the applicable fuel tank (AMM 28-11-00/201).

MECH | INSP

(3) Remove the applicable main or center tank access doors (AMM 28-11-01/401 or AMM 28-11-02/401).

WARNING: OBEY THE FUEL TANK ENTRY PRECAUTIONS (AMM 28-11-00/201). FAILURE TO OBEY THE FUEL TANK ENTRY PRECAUTIONS COULD CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.

(4) Obey the fuel tank entry precautions (AMM 28-11-00/201).

(5) Go into the applicable fuel tank.

(6) Visually inspect the FQIS tank wiring harness for these problems:

(a) Insulation that is abraded, cracked, or over-stressed.

(b) Conductors or shields that are broken or exposed.

(c) Clearance from the structure or fuel tubing that is not sufficient.

(d) Support clamps that are broken, loose, or missing.

(e) Wiring that is routed incorrectly.

(7) Visually inspect the compensators, tank units, and densitometers for these problems:

(a) Wiring that is not correctly attached to the terminals.

(b) Wiring to the terminal HI-Z or LO-Z that has damage or is incorrectly routed.

(c) An end cap that is missing (tank unit or compensator).

(d) Clearance from the structure that is not sufficient.

(e) Mounting brackets and hardware that are loose.

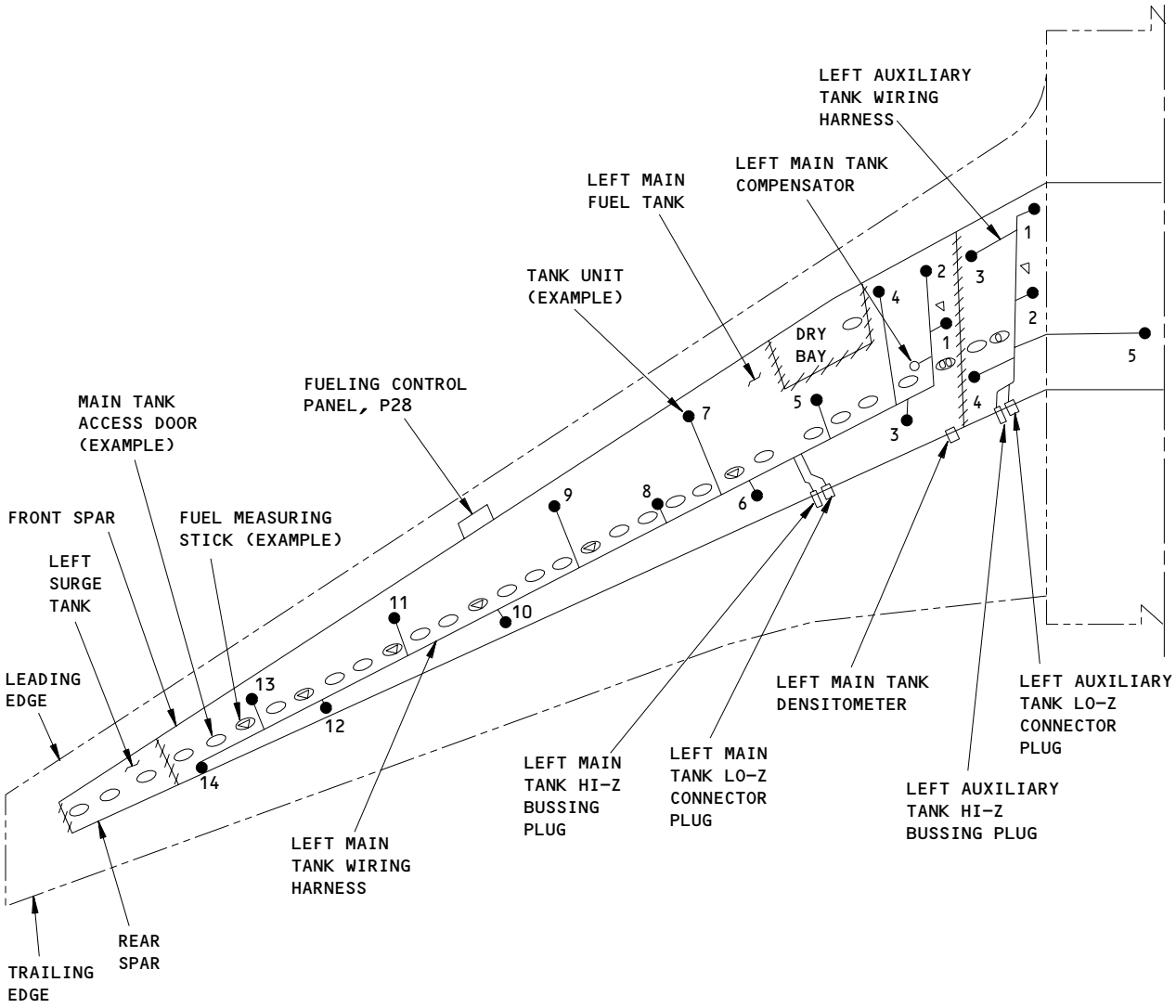
(f) Terminals that are bent.

(8) Inspect the electrical connectors and seals for damage, wear, or fuel leakage.

MECH	INSP

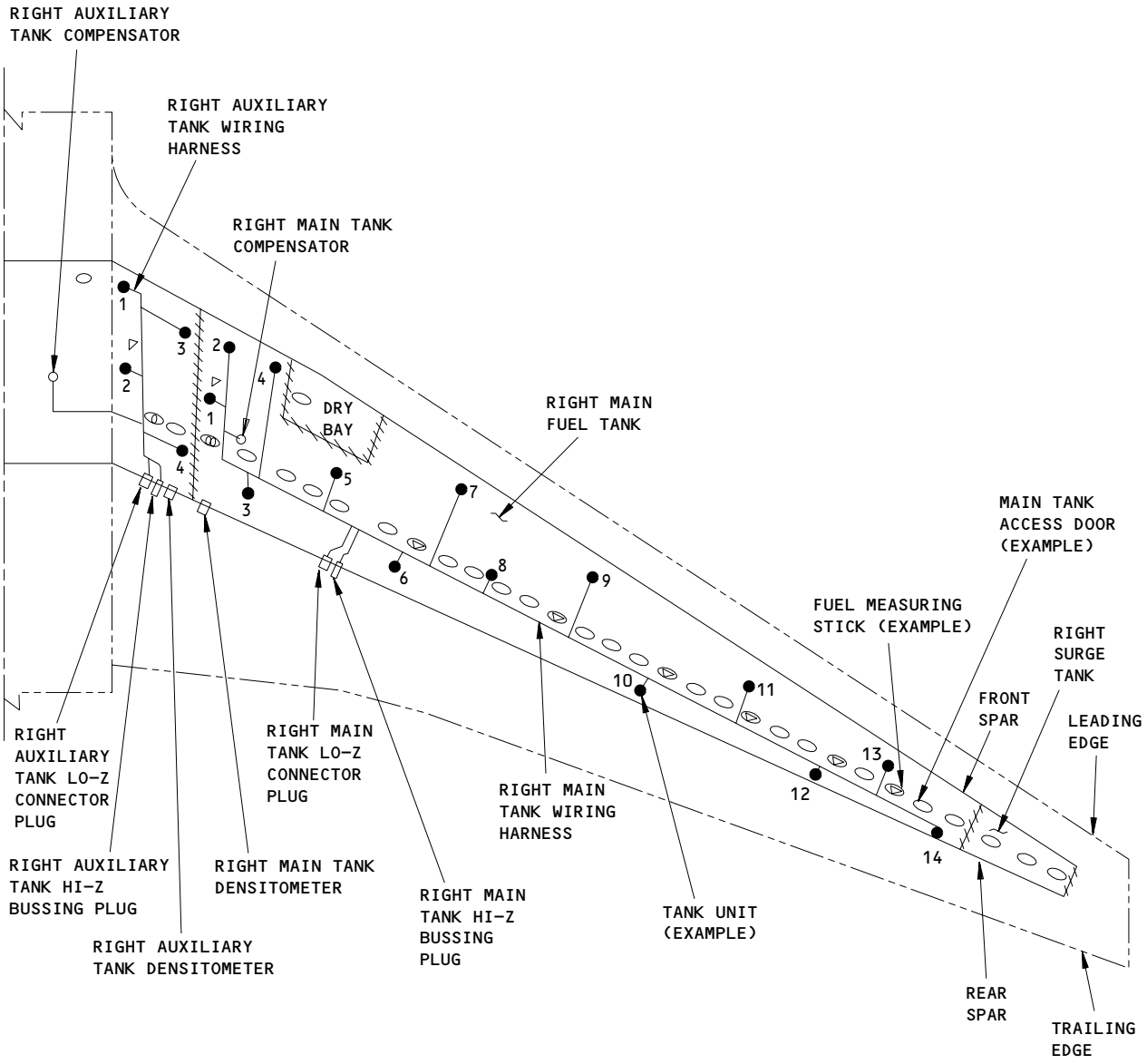
(9) Go out of the fuel tank (AMM 28-11-00/201).

(10) Install the applicable main or center tank access doors (AMM 28-11-01/401 or AMM 28-11-02/401).



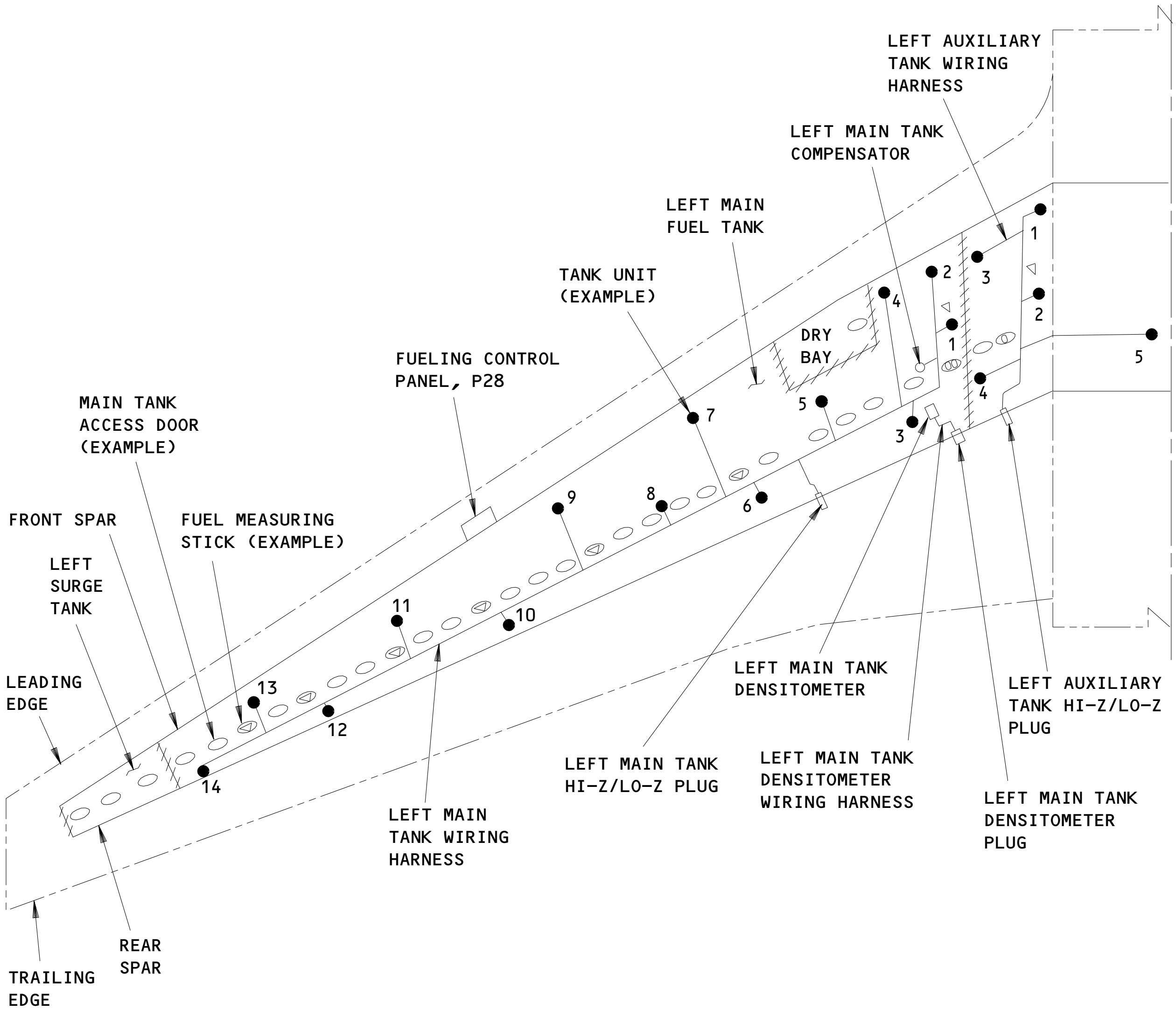
LEFT WING

Tank Wiring Harness
Figure 601 (Sheet 1)



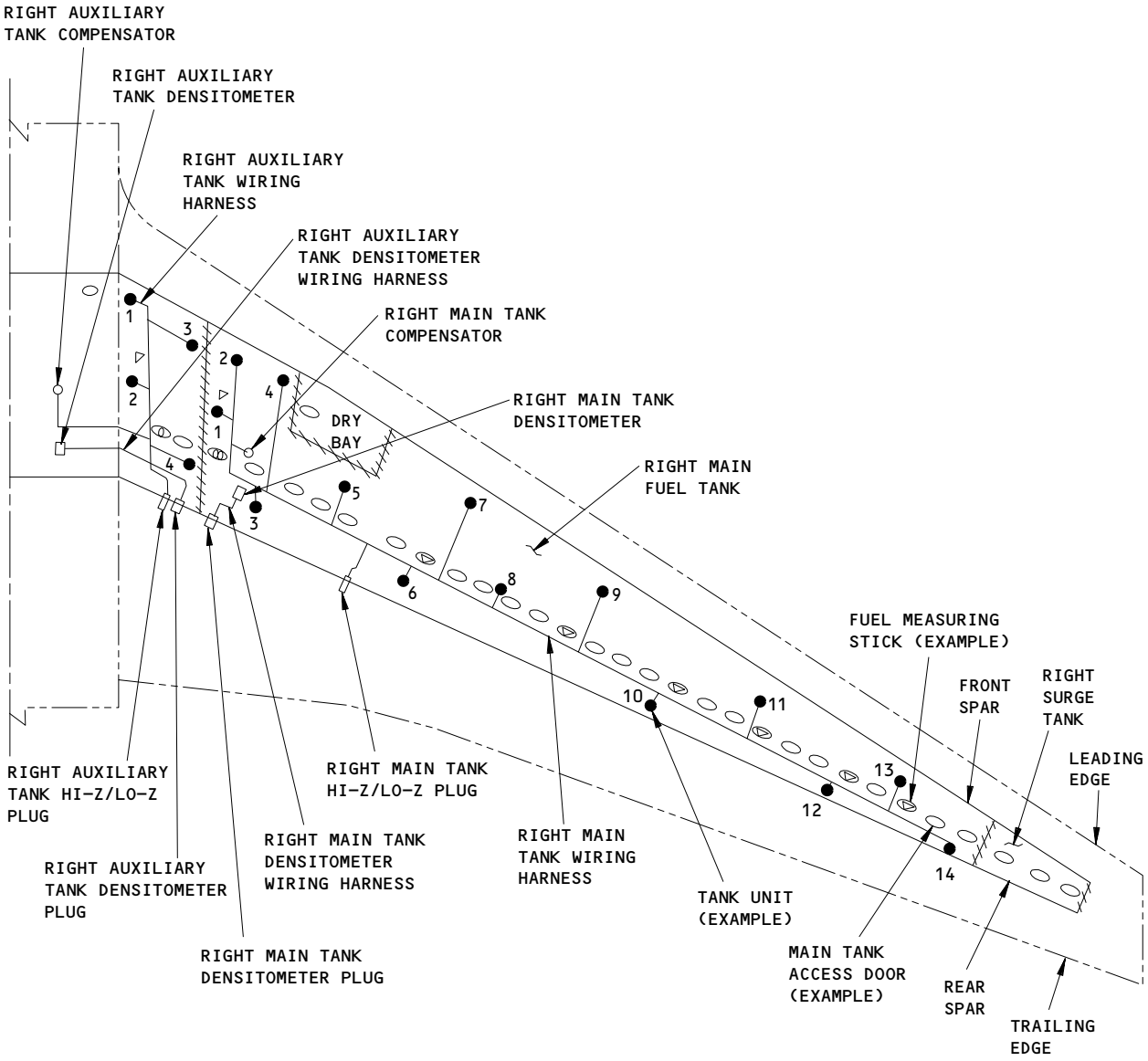
RIGHT WING

Tank Wiring Harness
Figure 601 (Sheet 2)



LEFT WING

Tank Wiring Harness
Figure 601 (Sheet 3)



RIGHT WING

Tank Wiring Harness
Figure 601 (Sheet 4)

STATION		BOEING CARD NO.
TAIL NO.	SAS BOEING 767 TASK CARD	28-036-03
DATE		AIRLINE CARD NO.

SKILL	WORK AREA	RELATED TASK	INTERVAL	PHASE	MPD REV	TASK CARD REVISION
AIRPL	CTR AUX TK		8C	24896		AUG 22/09

TASK	TITLE	STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE	APPLICABILITY ENGINE
CHECK/INSP	FQIS IN-TANK COMPONENTS		ALL	ALL

ZONES	ACCESS PANELS
133 531	

MECH | INSP

MPD ITEM NUMBER

INSPECT (DETAILED) THE IN-TANK FQIS COMPONENTS FOR CHAFFING, CONDITION/SECURITY, RUBBING, AND ADEQUATE SEPARATION FROM STRUCTURE (SFAR 88). 28-41-09-6A

1. Inspect the Tank Wiring Harness (Fig. 601)

A. References

(1) AMM 28-11-00/201, Fuel Tanks (Purging and Entry)

(2) AMM 28-11-01/401, Main Tank Access Doors

(3) AMM 28-11-02/401, Auxiliary Tank Access Doors

(4) AMM 28-26-00/201, Defueling

B. Access

(1) Location Zones

133	Wing Center Section (Left)
134	Wing Center Section (Right)
531	Center Auxiliary Tank (Left)
532	Main Tank - Inboard of Rib No. 10 (Left)
541	Main Tank - Outboard of Rib No. 10 (Left)
631	Center Auxiliary Tank (Right)
632	Main Tank - Inboard of Rib No. 10 (Right)
641	Main Tank - Outboard of Rib No. 10 (Right)

C. Procedure

(1) Defuel the applicable fuel tank (AMM 28-26-00/201).

(2) Drain and purge the applicable fuel tank (AMM 28-11-00/201).

MECH | INSP

(3) Remove the applicable main or center tank access doors (AMM 28-11-01/401 or AMM 28-11-02/401).

WARNING: OBEY THE FUEL TANK ENTRY PRECAUTIONS (AMM 28-11-00/201). FAILURE TO OBEY THE FUEL TANK ENTRY PRECAUTIONS COULD CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.

(4) Obey the fuel tank entry precautions (AMM 28-11-00/201).

(5) Go into the applicable fuel tank.

(6) Visually inspect the FQIS tank wiring harness for these problems:

(a) Insulation that is abraded, cracked, or over-stressed.

(b) Conductors or shields that are broken or exposed.

(c) Clearance from the structure or fuel tubing that is not sufficient.

(d) Support clamps that are broken, loose, or missing.

(e) Wiring that is routed incorrectly.

(7) Visually inspect the compensators, tank units, and densitometers for these problems:

(a) Wiring that is not correctly attached to the terminals.

(b) Wiring to the terminal HI-Z or LO-Z that has damage or is incorrectly routed.

(c) An end cap that is missing (tank unit or compensator).

(d) Clearance from the structure that is not sufficient.

(e) Mounting brackets and hardware that are loose.

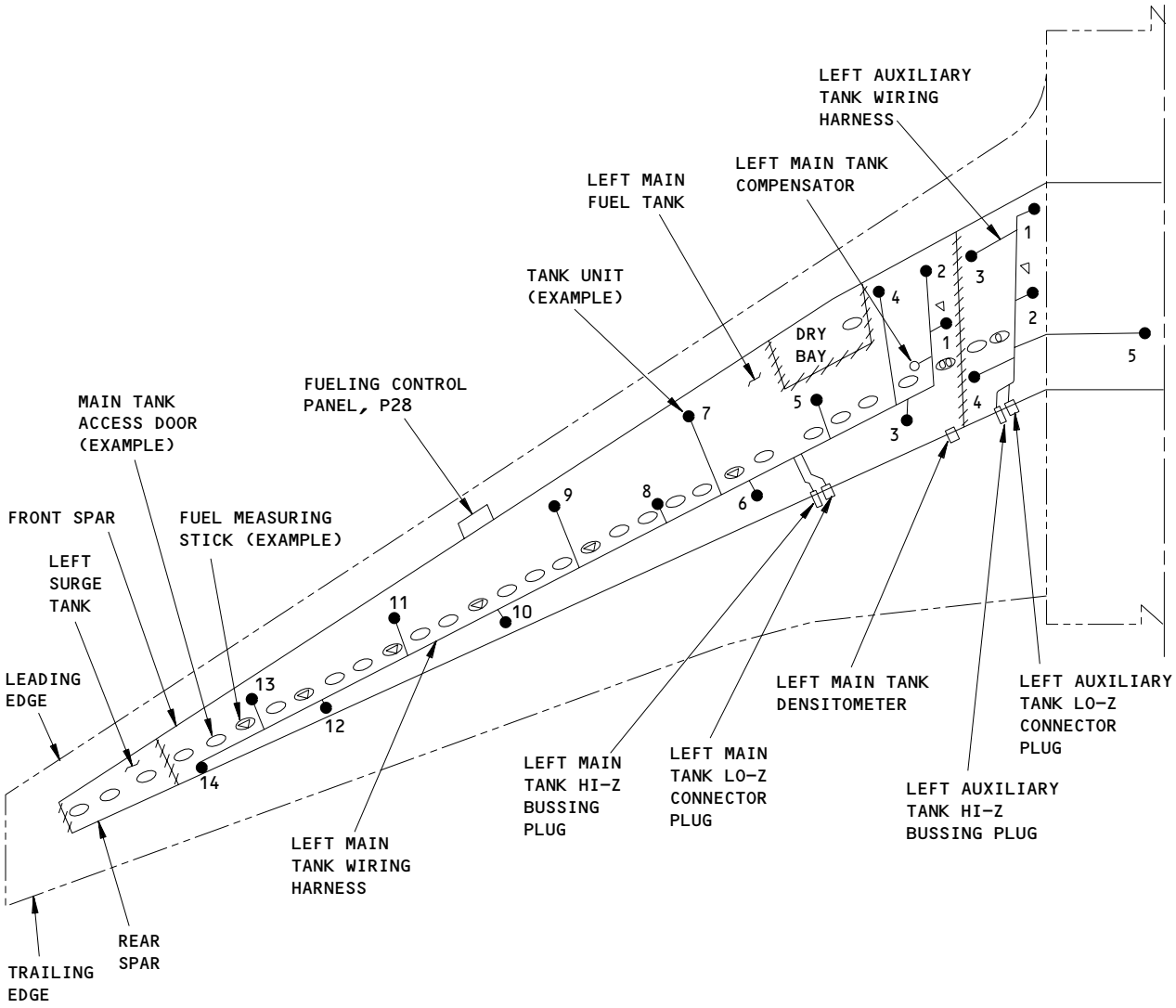
(f) Terminals that are bent.

(8) Inspect the electrical connectors and seals for damage, wear, or fuel leakage.

MECH	INSP

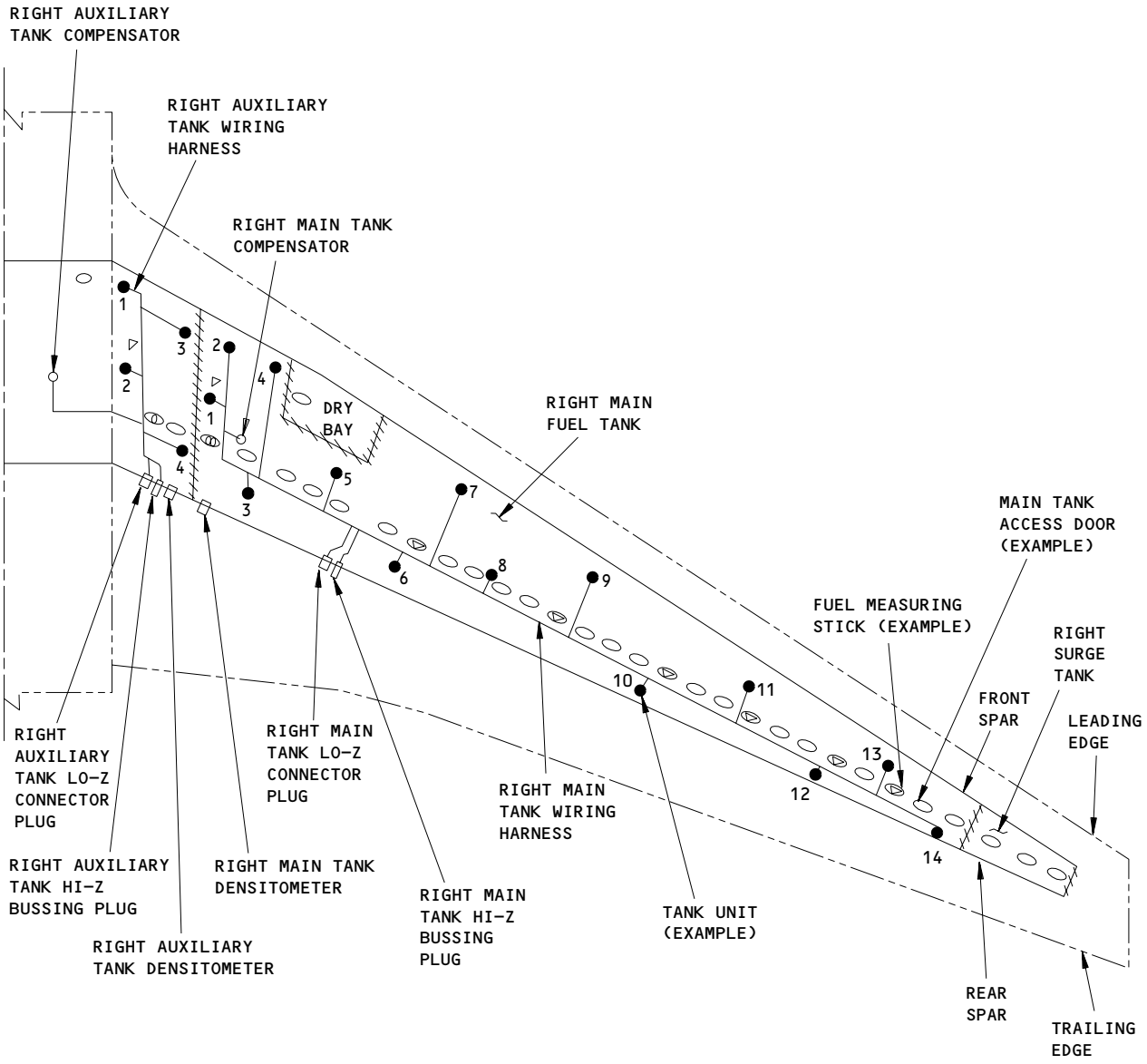
(9) Go out of the fuel tank (AMM 28-11-00/201).

(10) Install the applicable main or center tank access doors (AMM 28-11-01/401 or AMM 28-11-02/401).



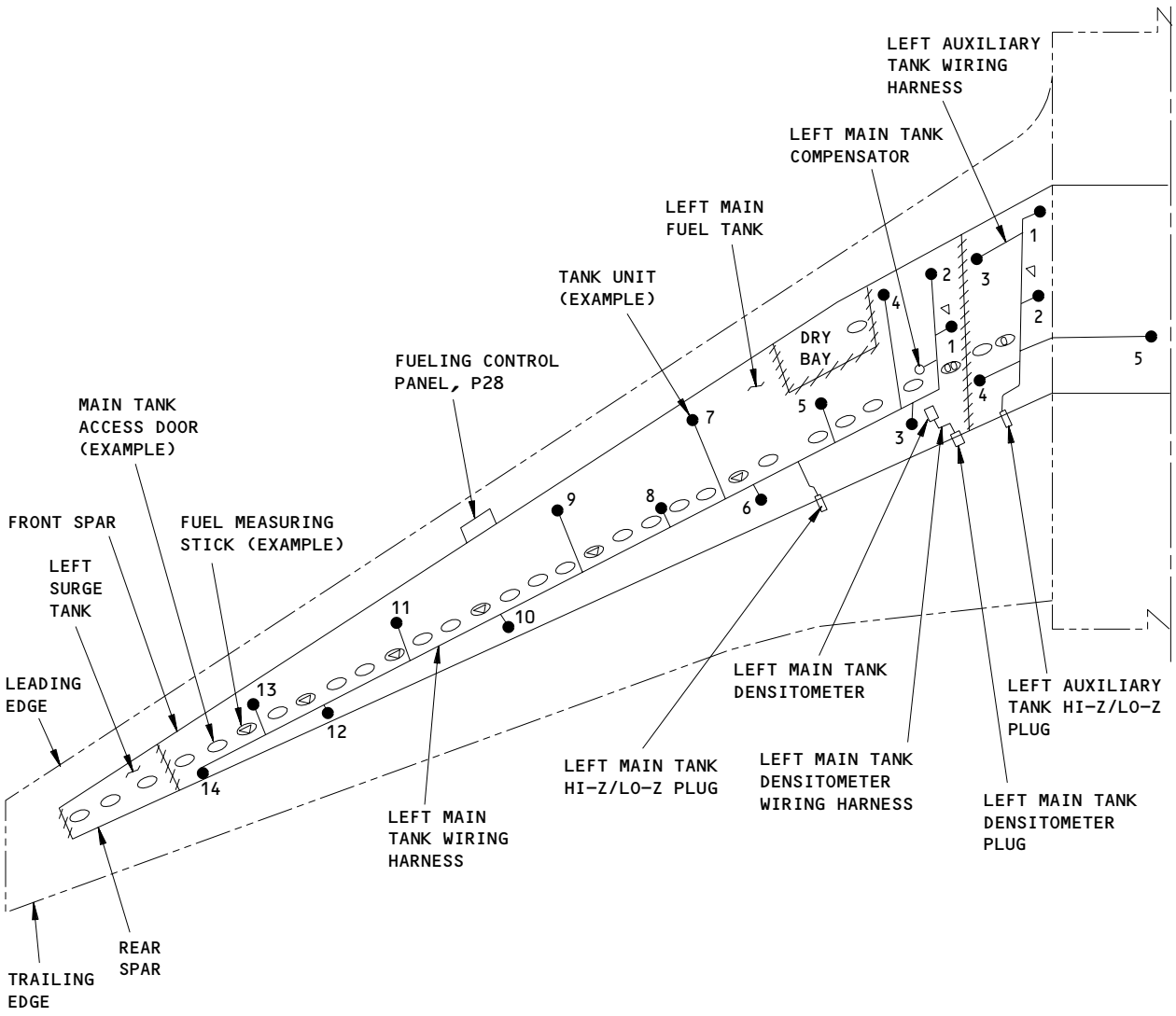
LEFT WING

Tank Wiring Harness
Figure 601 (Sheet 1)



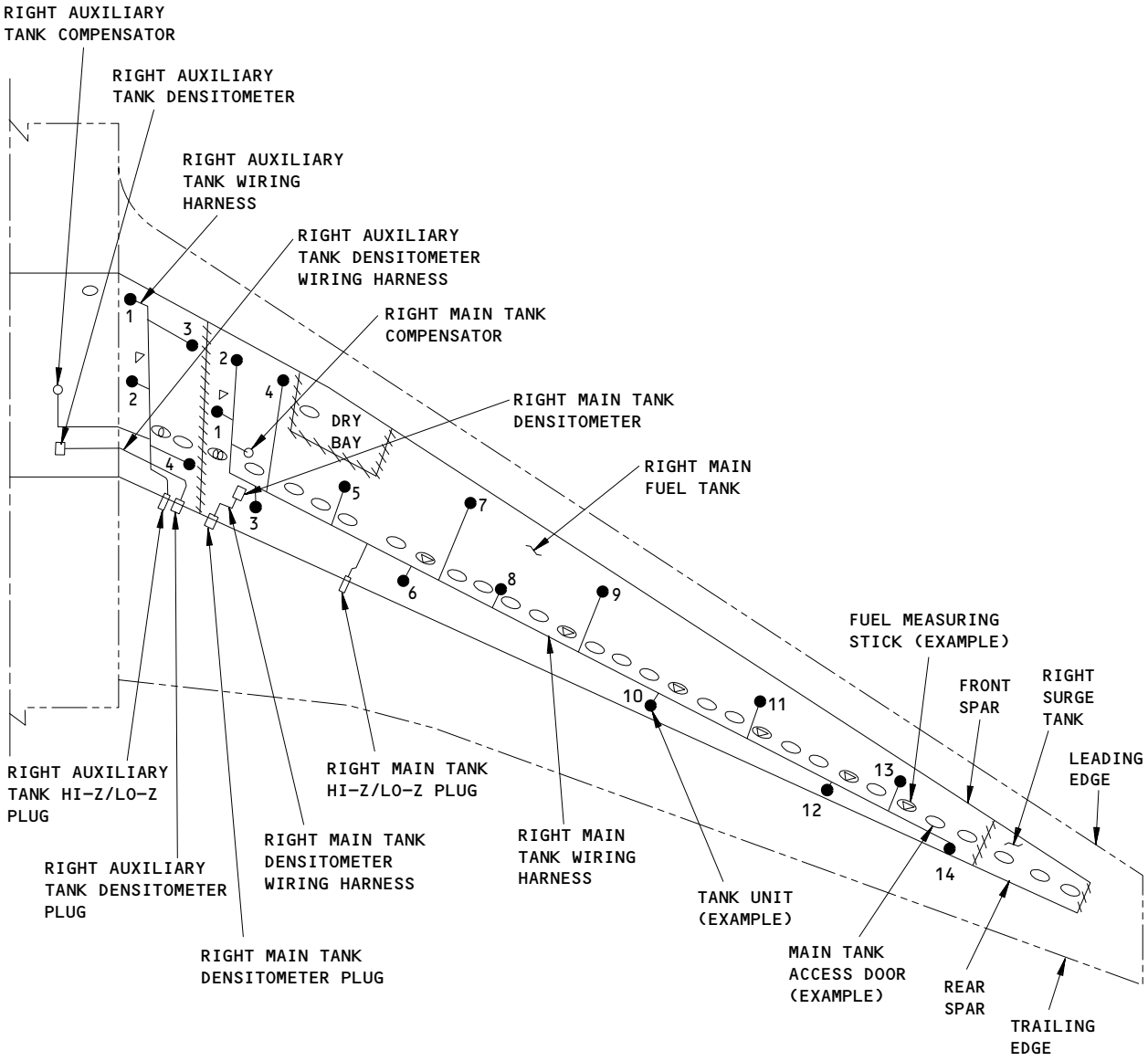
RIGHT WING

Tank Wiring Harness
Figure 601 (Sheet 2)



LEFT WING

Tank Wiring Harness
Figure 601 (Sheet 3)



RIGHT WING

Tank Wiring Harness
Figure 601 (Sheet 4)

STATION		BOEING CARD NO.
TAIL NO.	SAS BOEING 767 TASK CARD	28-036-04
DATE		AIRLINE CARD NO.

SKILL	WORK AREA	RELATED TASK	INTERVAL	PHASE	MPD REV	TASK CARD REVISION
AIRPL	CTR AUX TK		8C	24896		AUG 22/09

TASK	TITLE	STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE	APPLICABILITY ENGINE
CHECK/INSP	FQIS IN-TANK COMPONENTS		ALL	ALL

ZONES	ACCESS PANELS
134 631	

MECH	INSP	MPD ITEM NUMBER
		28-41-09-6A

INSPECT (DETAILED) THE IN-TANK FQIS COMPONENTS FOR CHAFFING, CONDITION/SECURITY, RUBBING, AND ADEQUATE SEPARATION FROM STRUCTURE (SFAR 88).

1. Inspect the Tank Wiring Harness (Fig. 601)

A. References

(1) AMM 28-11-00/201, Fuel Tanks (Purging and Entry)

(2) AMM 28-11-01/401, Main Tank Access Doors

(3) AMM 28-11-02/401, Auxiliary Tank Access Doors

(4) AMM 28-26-00/201, Defueling

B. Access

(1) Location Zones

133	Wing Center Section (Left)
134	Wing Center Section (Right)
531	Center Auxiliary Tank (Left)
532	Main Tank - Inboard of Rib No. 10 (Left)
541	Main Tank - Outboard of Rib No. 10 (Left)
631	Center Auxiliary Tank (Right)
632	Main Tank - Inboard of Rib No. 10 (Right)
641	Main Tank - Outboard of Rib No. 10 (Right)

C. Procedure

(1) Defuel the applicable fuel tank (AMM 28-26-00/201).

(2) Drain and purge the applicable fuel tank (AMM 28-11-00/201).

MECH | INSP

(3) Remove the applicable main or center tank access doors (AMM 28-11-01/401 or AMM 28-11-02/401).

WARNING: OBEY THE FUEL TANK ENTRY PRECAUTIONS (AMM 28-11-00/201). FAILURE TO OBEY THE FUEL TANK ENTRY PRECAUTIONS COULD CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.

(4) Obey the fuel tank entry precautions (AMM 28-11-00/201).

(5) Go into the applicable fuel tank.

(6) Visually inspect the FQIS tank wiring harness for these problems:

(a) Insulation that is abraded, cracked, or over-stressed.

(b) Conductors or shields that are broken or exposed.

(c) Clearance from the structure or fuel tubing that is not sufficient.

(d) Support clamps that are broken, loose, or missing.

(e) Wiring that is routed incorrectly.

(7) Visually inspect the compensators, tank units, and densitometers for these problems:

(a) Wiring that is not correctly attached to the terminals.

(b) Wiring to the terminal HI-Z or LO-Z that has damage or is incorrectly routed.

(c) An end cap that is missing (tank unit or compensator).

(d) Clearance from the structure that is not sufficient.

(e) Mounting brackets and hardware that are loose.

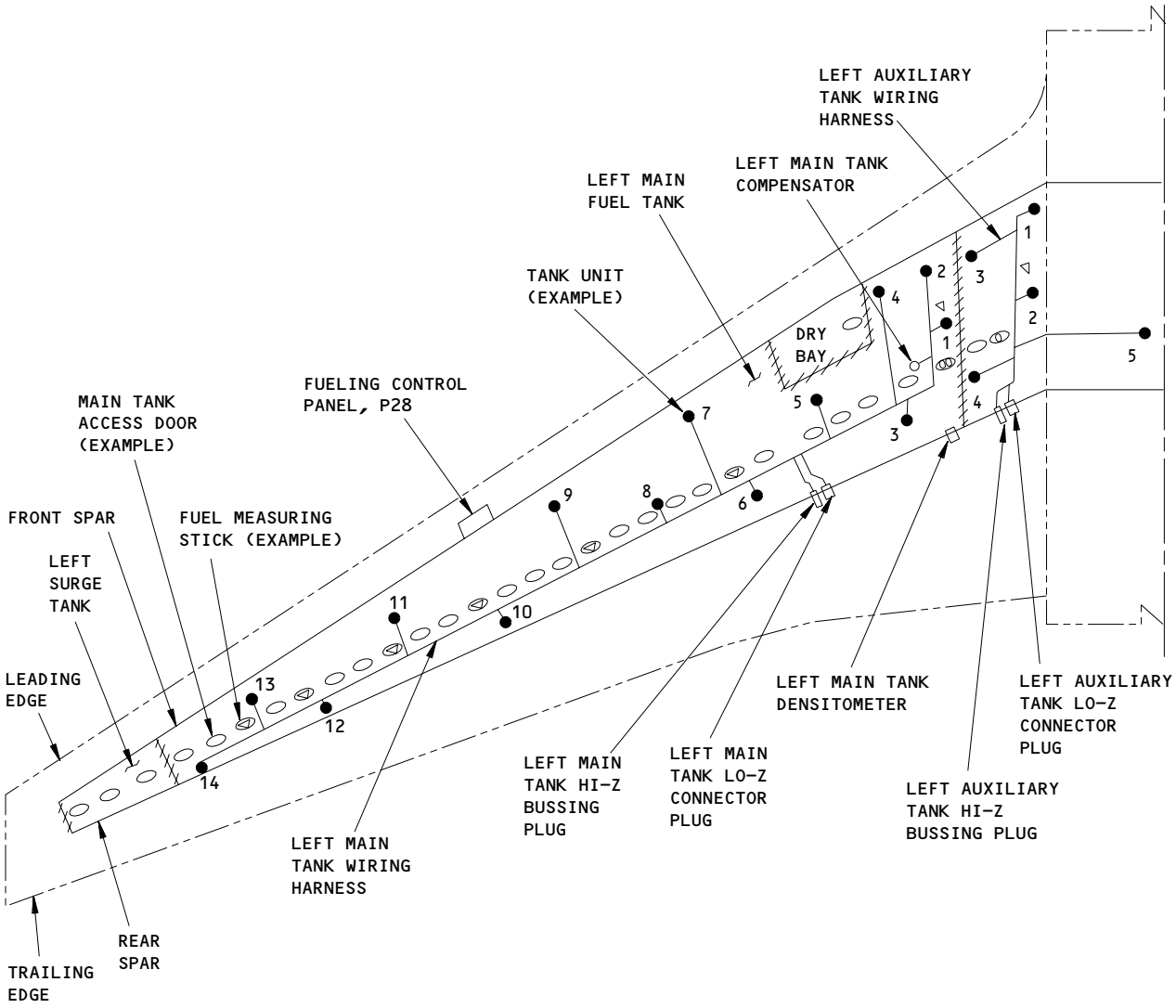
(f) Terminals that are bent.

(8) Inspect the electrical connectors and seals for damage, wear, or fuel leakage.

MECH	INSP

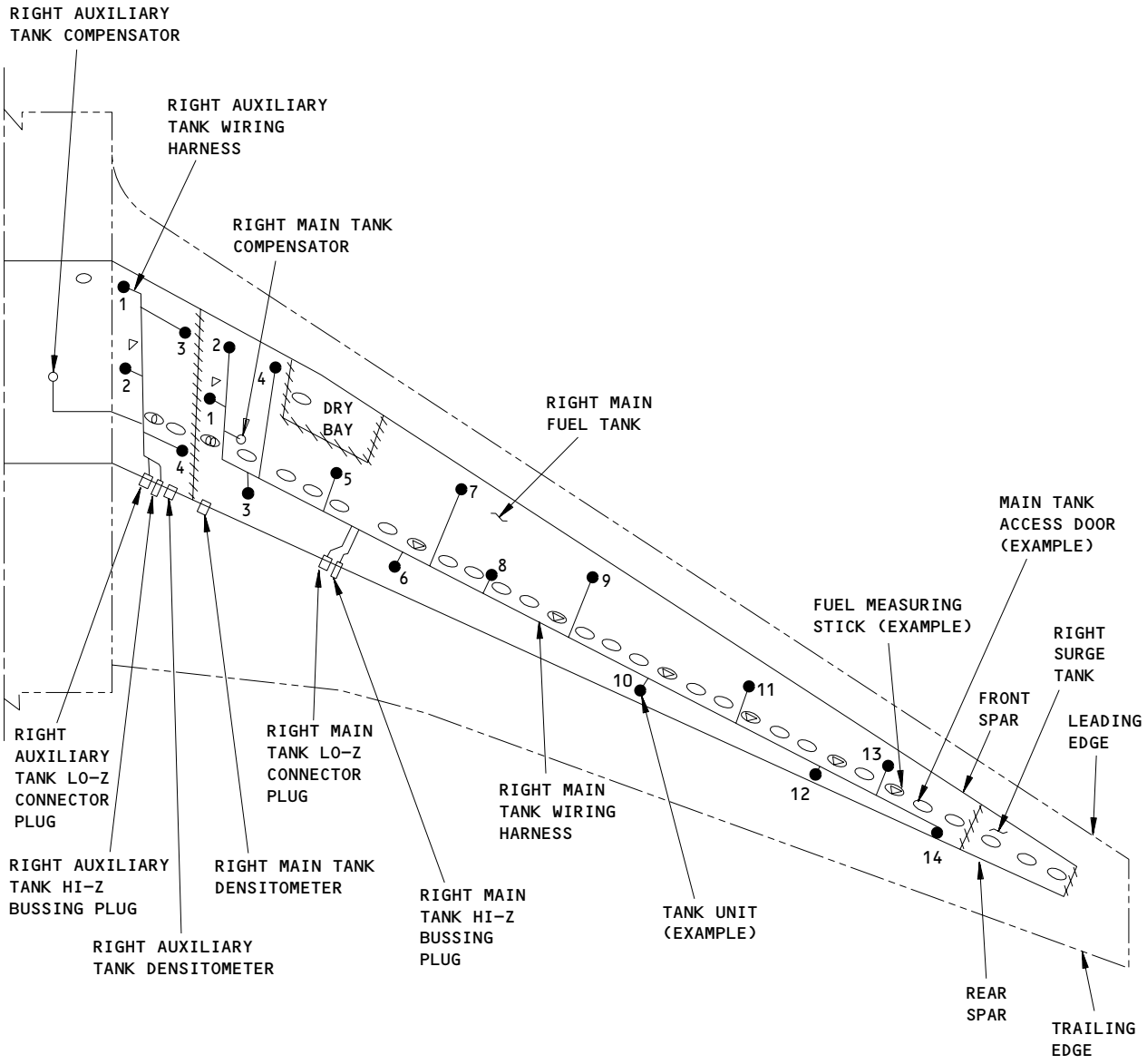
(9) Go out of the fuel tank (AMM 28-11-00/201).

(10) Install the applicable main or center tank access doors (AMM 28-11-01/401 or AMM 28-11-02/401).



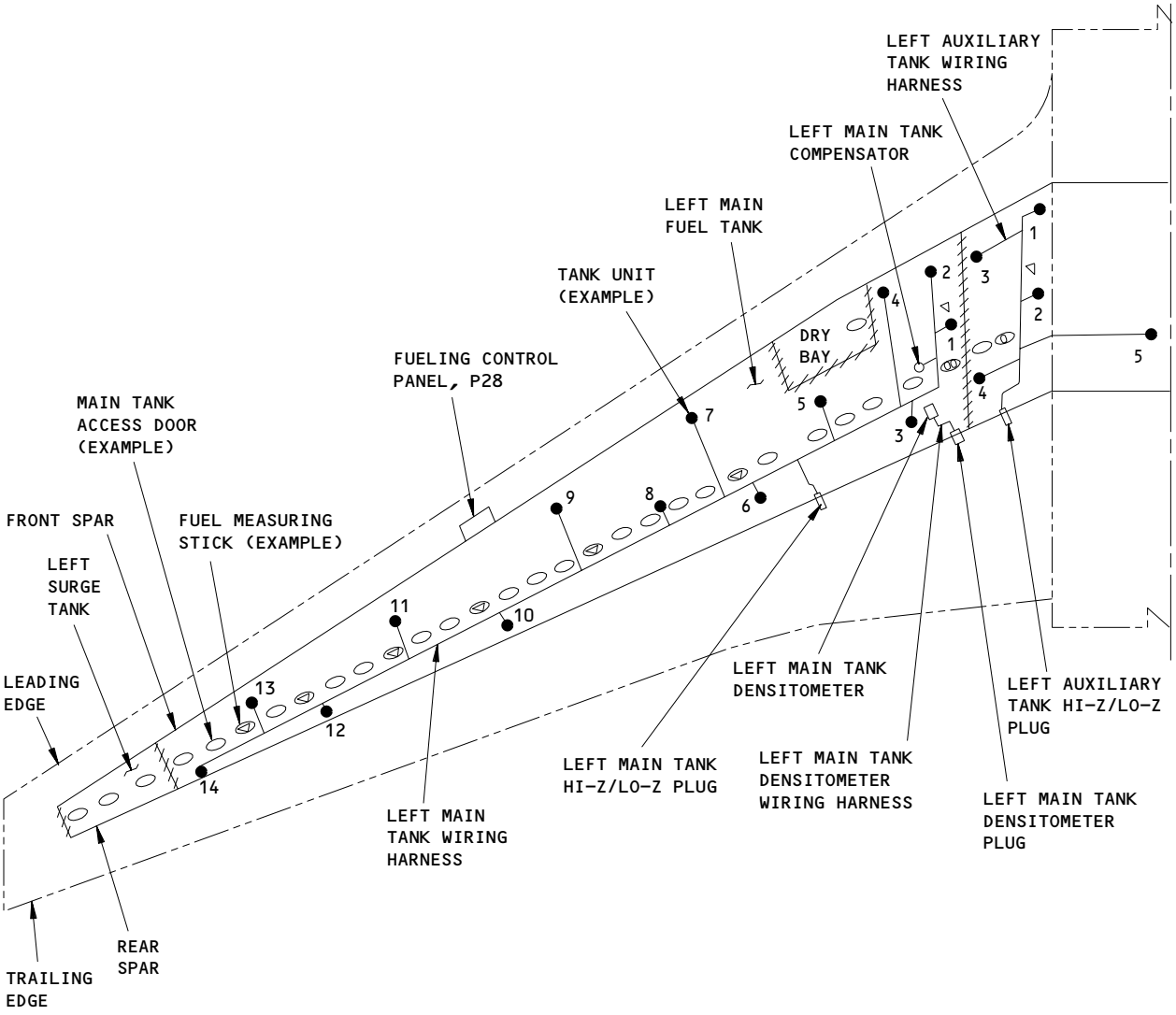
LEFT WING

Tank Wiring Harness
Figure 601 (Sheet 1)



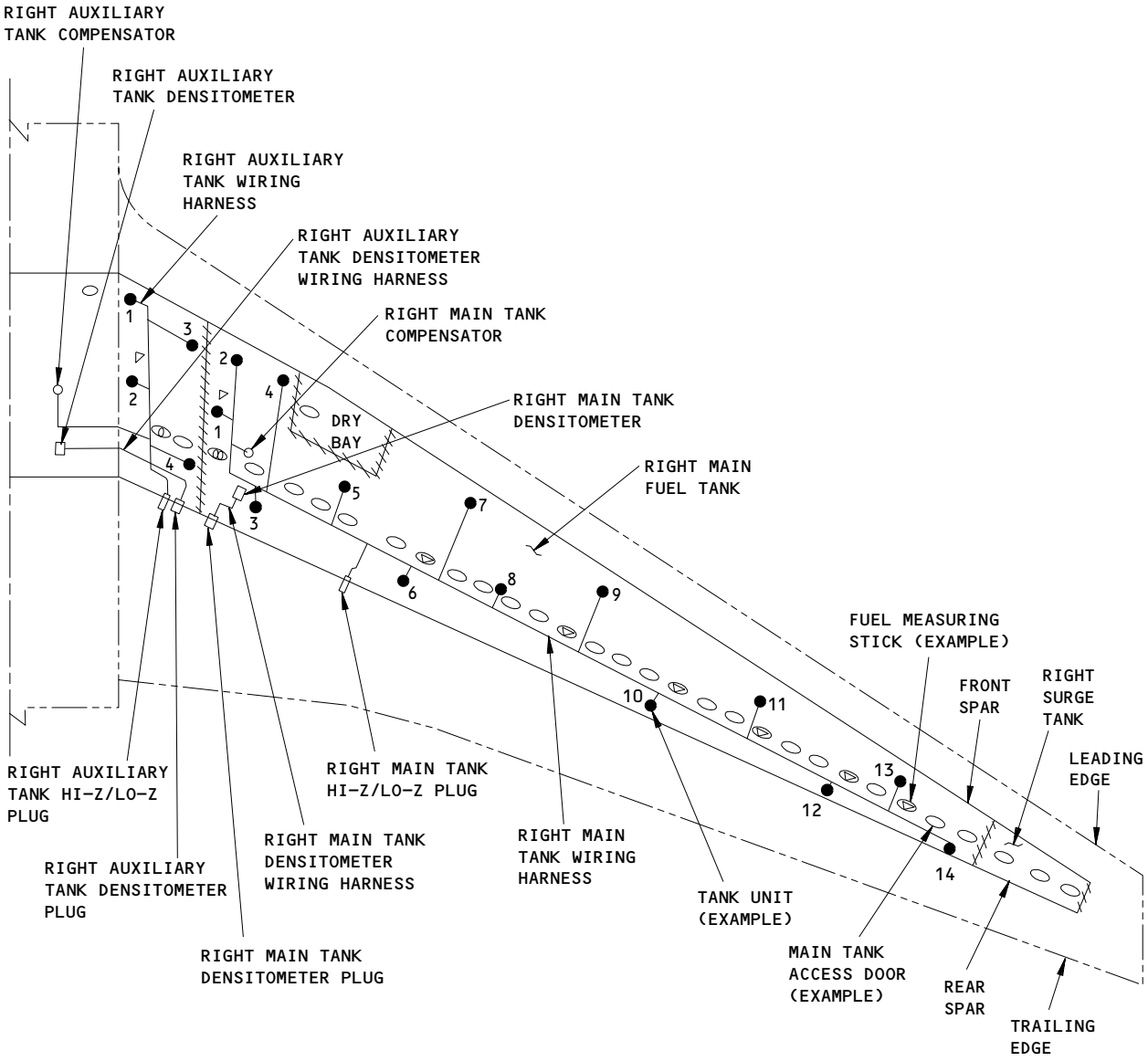
RIGHT WING

Tank Wiring Harness
Figure 601 (Sheet 2)



LEFT WING

Tank Wiring Harness
Figure 601 (Sheet 3)



RIGHT WING

Tank Wiring Harness
Figure 601 (Sheet 4)

STATION		BOEING CARD NO.
TAIL NO.	SAS BOEING 767 TASK CARD	28-037-01
DATE		AIRLINE CARD NO.

SKILL	WORK AREA	RELATED TASK	INTERVAL	PHASE	MPD REV	TASK CARD REVISION
AIRPL	CTR AUX TK		8C	24896		APR 22/08

TASK	TITLE	STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE	APPLICABILITY ENGINE
CHECK/INSP	DENSITOMETER HSP CHECK/INSPECTION		NOTE	ALL

ZONES	ACCESS PANELS
631	

MECH	INSP	MPD ITEM NUMBER

INSPECT (DETAILED) THE DENSITOMETER HOT SHORT PROTECTOR (HSP) BONDING STRAPS LOCATED EXTERNAL TO THE CENTER WING FUEL TANK (SFAR 88). 28-41-24-2A

AIRPLANE NOTE: TASK APPLICABLE TO AIRPLANE LINE NUMBERS 938, 951 AND ON, AND TO ALL 767 AIRPLANES INCORPORATING SERVICE BULLETIN 767-28A0094.

1. Densitometer Hot Short Protector Ground Strap - Detail Inspection

A. Access

(1) Location Zones
631 Center Auxiliary Tank (Right)

B. Procedure

(1) Get access to the densitometer hot short protector that is on the aft side of the right wing rear spar near Rib #1.

(2) Look at and feel the ground straps (bonding jumpers) on the densitometer hot short protector.

(a) Make sure that the wire braid on the ground straps does not have broken strands.

(b) Make sure that the ground strap attachments are not loose.

STATION		BOEING CARD NO.
TAIL NO.	SAS BOEING 767 TASK CARD	28-038-01
DATE		AIRLINE CARD NO.

SKILL	WORK AREA	RELATED TASK	INTERVAL	PHASE	MPD REV	TASK CARD REVISION
AIRPL	R/H WING		8C	24896		AUG 22/08

TASK	TITLE	STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE	APPLICABILITY ENGINE
FUNCTIONAL	DENSITOMETER HSP BOND CHECK		NOTE	ALL

ZONES	ACCESS PANELS
651	

MECH	INSP	MPD ITEM NUMBER

FUNCTIONALLY CHECK (RESISTANCE MEASUREMENT) THE BONDING BETWEEN THE DENSITOMETER HOT SHORT PROTECTOR (HSP) FASTENERS AND THE STRUCTURE TO ENSURE IT IS WITHIN IN-SERVICE LIMITS (SFAR 88). 28-41-24-6A

AIRPLANE NOTE: TASK APPLICABLE TO AIRPLANE LINE NUMBERS 938, 951 AND ON, AND TO ALL 767 AIRPLANES INCORPORATING SERVICE BULLETIN 767-28A0094.

1. Densitometer Hot Short Protector - Bonding Resistance Check (Fig. 601)

A. Equipment

(1) Bonding Meter - Use one of these:

(a) Bonding Meter - T477W
Avtron Manufacturing Co.
Cleveland, OH

(b) Bonding Meter - Model M1
(Serial Number A000012 and subsequent)
BCD Electronics Ltd.
Vancouver, Canada

B. Reference

(1) AMM 32-00-15/201, Landing Gear Door Locks

(2) AMM 32-00-20/201, Landing Gear Downlocks

(3) SWPM 20-20-00, Electrical Bonds and Grounds

C. Prepare for the Procedure

MECH	INSP

WARNING: MAKE SURE THAT THE DOWNLOCKS ARE INSTALLED IN ALL OF THE LANDING GEAR. WITHOUT THE DOWNLOCKS, THE LANDING GEAR CAN RETRACT AND CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

(1) Make sure the downlocks are installed in the nose and main landing gear (AMM 32-00-20/201).

WARNING: OBEY THE INSTALLATION PROCEDURE FOR THE DOOR LOCK. THE DOORS OPEN AND CLOSE QUICKLY. THE MOVEMENT OF THE DOORS CAN CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

(2) Open the doors for the landing gear and install the door locks (AMM 32-00-15/201).

D. Bonding Resistance Check

(1) Measure the bonding resistance between the bonding jumper fastener and the rear spar (SWPM 20-20-00).

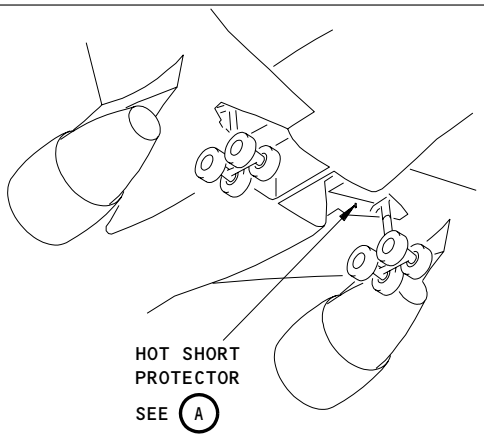
NOTE: Bonding measurement is taken at both bonding jumper (2) locations.

(a) Make sure the resistance is 10 milliohms (0.010 ohm) or less.

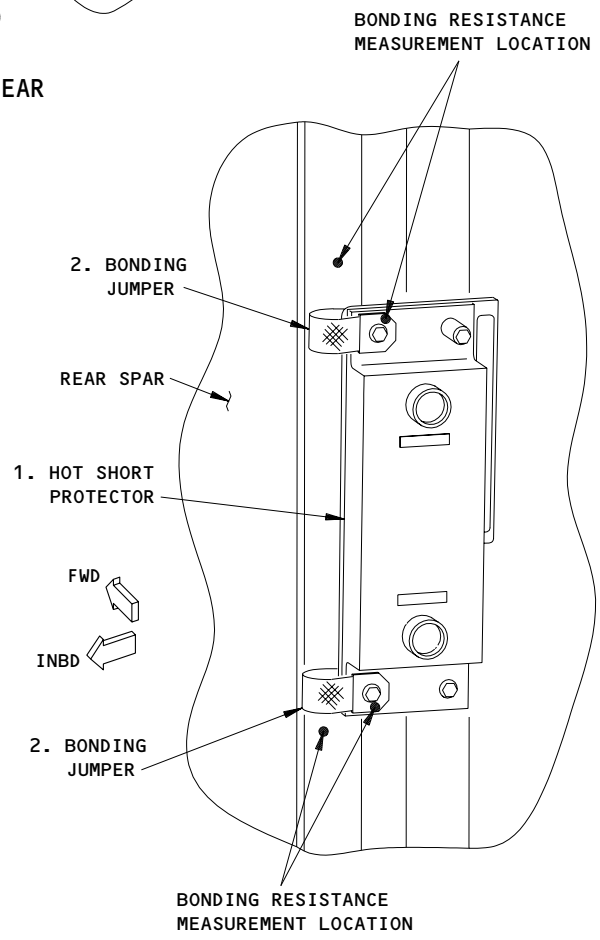
E. Put the Airplane Back to Its Usual Condition

WARNING: OBEY THE REMOVAL PRECEDURE FOR THE DOOR LOCKS. THE DOORS OPEN AND CLOSE QUICKLY. THE MOVEMENT OF THE DOORS CAN CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

(1) Remove the door locks from the main gear doors and close the doors (AMM 32-00-15/201).



MAIN LANDING GEAR
WHEEL WELL



HOT SHORT PROTECTOR
A

Hot Short Protector Inspection
Figure 601