### TROUBLE SHOOTING MANUAL

### **HIGHLIGHTS**

REVISION NO. 54 May 01/08

Pages which have been revised are outlined below, together with the Highlights of the Revision

CH/SE/SU C PAGES	REASON FOR CHANGE	EFFECTIVITY

### CHAPTER 38

L.E.P. 1- 1	REVISED TO F		HIS REVISION		DICATING			
38-12-00 202	EFFECTIVITY	UPDATED	(THROUGHOUT	THE	TEXT)	227-227, 701-749,	229-275,	426-450,
38-13-00 201	EFFECTIVITY	UPDATED	(THROUGHOUT	THE	TEXT)	227-227, 701-749,	229-275,	426-450,
38-13-00	EFFECTIVITY	UPDATED						
304- 305	EFFECTIVITY	UPDATED	(THROUGHOUT	THE	TEXT)	227-227, 701-749,	229-275,	426-450,
38-31-00	EFFECTIVITY	UPDATED						
	EFFECTIVITY		(THROUGHOUT	THE	TEXT)	-	227-227, 551-599,	-
38-31-00	EFFECTIVITY	UPDATED						
303, 307	EFFECTIVITY		(THROUGHOUT	THE	TEXT)	-	227-227, 551-599,	-

38-HIGHLIGHTS Page 1 of 1 REVISION NO. 54 May 01/08

### TROUBLE SHOOTING MANUAL

### CHAPTER 38

### WATER/WASTE

#### LIST OF EFFECTIVE PAGES

N, R or D indicates pages which are New, Revised or Deleted respectively Remove and insert the affected pages and complete the Record of Revisions and the Record of Temporary Revisions as necessary

CH/SE/SU	С	PAGE	DATE	CH/SE/SU	С	PAGE	DATE	CH/SE/SU	С	PAGE	DATE
RECORD				38-31-00	R	200	May01/08	38-31-00	R	251	May01/08
OF TEMP.				38-31-00	R		May01/08	38-31-00	R		May01/08
REVISION				38-31-00			May01/08	38-31-00	R		May01/08
KEVISION				38-31-00	R		•				May01/08
	_	4 4	May 04/09		R		May01/08	38-31-00	R		
L.E.P.	K	1- 1	•	38-31-00	R		May01/08	38-31-00	R		May01/08
T. of C.			Aug01/07	38-31-00	R		May01/08	38-31-00			Aug01/07
T. of C.		2	Feb01/08	38-31-00	R		May01/08	38-31-00			Aug01/07
70 10041		404	04 / 07	38-31-00	_		Feb01/08	38-31-00			Aug01/07
38-LOCAL		101	Aug01/07	38-31-00	R		May01/08	38-31-00			Aug01/07
70 0701		404	. 04/07	38-31-00	R		May01/08	38-31-00			Aug01/94
38-0BSV			Aug01/07	38-31-00	R		May01/08	38-31-00	_		May01/06
38-0BSV		102	May01/07	38-31-00			Aug01/07	38-31-00	R		May01/08
				38-31-00			Aug01/07	38-31-00			Feb01/08
38-CFDS			Aug01/07	38-31-00			Aug01/07	38-31-00			May01/06
38-CFDS		102	Aug01/07	38-31-00	R		May01/08	38-31-00			May01/06
				38-31-00			Feb01/08	38-31-00	R		May01/08
38-12-00			Nov01/06	38-31-00	R	225	May01/08	38-31-00		308	Aug01/07
38-12-00	R		May01/08	38-31-00	R		May01/08				
38-12-00		203	Nov01/05	38-31-00			Aug01/07	38-32-00		201	Feb01/08
38-12-00		204	Feb01/07	38-31-00	R	228	May01/08				
38-12-00		205	Feb01/07	38-31-00	R	229	May01/08	38-41-00		201	May01/07
38-12-00		206	Nov01/06	38-31-00		230	Aug01/07	38-41-00		202	May01/07
				38-31-00		231	Aug01/07	38-41-00		203	May01/07
38-13-00	R	201	May01/08	38-31-00		232	Aug01/07	38-41-00		204	May01/07
38-13-00		202	Aug01/97	38-31-00		233	Aug01/07				_
38-13-00		203	Aug01/03	38-31-00		234	Aug01/07				
38-13-00			Aug01/94	38-31-00	R		May01/08				
38-13-00			Nov01/05	38-31-00	R		May01/08				
38-13-00		303	May01/96	38-31-00	R		May01/08				
38-13-00	R		May01/08	38-31-00			Nov01/07				
38-13-00	R		May01/08	38-31-00			Nov01/07				
				38-31-00	R		May01/08				
38-14-00		201	Aug01/00	38-31-00	R		May01/08				
				38-31-00			Aug01/07				
38-31-00	R	201	May01/08	38-31-00	R		May01/08				
38-31-00	R		May01/08	38-31-00	R		May01/08				
38-31-00			Aug01/07	38-31-00			Aug01/07				
38-31-00	R		May01/08	38-31-00			Aug01/07				
38-31-00	R		May01/08	38-31-00			Aug01/07				
38-31-00			Feb01/08	38-31-00			Aug01/07				
38-31-00			Feb01/08	38-31-00			Aug01/07				
38-31-00			Aug01/07	38-31-00	R		May01/08				
30 31 00		200	Augu 17 01	33 31 00	K	2,00	114 90 17 00				

38-L.E.P. Page 1 May 01/08

## TROUBLE SHOOTING MANUAL

### CHAPTER 38

### WATER/WASTE

### TABLE OF CONTENTS

SUBJECT FAULT SYMPTOMS	CH/SE/SU 38-LOCAL 38-OBSV 38-CFDS	<u>C</u>	101 101	EFFECTIVITY ALL ALL ALL
DISTRIBUTION	38-12-00			
FAULT ISOLATION PROCEDURES	30 12 00		201	ALL
No Pressurization of the Potable			201	
Water in Flight				
Water Leakage from Potable Water			204	ALL
System				
·				
QUANTITY INDICATING	38-13-00			
FAULT ISOLATION PROCEDURES			201	ALL
Water Quantity Indication Failure			_	ALL
Potable-Water Service Panel 2023VU			203	ALL
Indication Light(s) Failure				
0114117777 711570477110	70 47 00			
QUANTITY INDICATING	38-13-00		704	
TASK SUPPORTING DATA			<b>3</b> 01	ALL
WATER DRAINING (DUMP)	38-14-00			
FAULT ISOLATION PROCEDURES	30-14-00		201	ALL
Potable-Water Service panel 2023VU			201	
Indication Light(s) Failure			201	ALL
Indication Light(3) Tarture				
TOILET SYSTEM	38-31-00			
FAULT ISOLATION PROCEDURES			201	ALL
Vacuum Generator (37MG) Failure			201	ALL
Liquid Level Transmitter (40MG)			209	ALL
Failure				
Liquid Level Sensor (41MG) Failure			212	ALL
Vacuum System Controller (31MG)			215	ALL
Failure				
Altitude Pressure Switch (43MG)			218	ALL
Failure				
Fault in the Flush Control Unit			221	232-233,
(FCU)			227	
Fault in the Generator Power			223	
NO CFDIU DATA			228	
Vacuum System Controller Fault			231	,
Rinse Water keeps Flowing in Toilet Bowl			232	ALL
			233	ALL
Draining of the Vacuum Toilets is Too Slow			233	ALL
LIQUID LVL SNSR OR LIQUID LVL XMTR			235	ALL
LIMOIN FAF SHOW OF FIMOIN FAF VILLE			233	ALL

38-CONTENTS Page 1 Aug 01/07

## TROUBLE SHOOTING MANUAL

### CHAPTER 38

### WATER/WASTE

### TABLE OF CONTENTS

SUBJECT OR VAC SYS CONT Fault	CH/SE/SU	<u>c</u>	<u>PAGE</u>	EFFECTIVITY
Vacuum Toilet System does not Operate Correctly on ground			240	ALL
Toilet Assembly Failure			243	ALL
Service Door Limit Switch (44MG)				ALL
Failure				
LAV WTRV Failure				232-233,
LAV X Failure				ALL
Vacuum Toilet System Indicates INOP on FAP			254	ALL
Toilet System Shuts Down			256	ALL
Constantly				
Toilet Flushes Continuously				ALL
Vacuum Pressure of the Vacuum			258	ALL
System is Too Low				
TOILET SYSTEM	38-31-00			
TASK SUPPORTING DATA			301	ALL
WASTE WATER DRAIN	38-32-00			
FAULT ISOLATION PROCEDURES	30 32 00		201	209-225, 245-275
				285-299, 429-475
				479-499, 503-549
				551-599, 701-749
Waste Water Drain - Failure			201	
				285-299, 429-475
				479-499, 503-549
				551-599, 701-749
ATD CUDDLY CYCTEM	70 /4 00			
AIR SUPPLY SYSTEM	38-41-00		204	
FAULT ISOLATION PROCEDURES				ALL
Potable Water System -			201	ALL
Pressurization Failure			207	ALI
Potable Water System - Pressure Failure			∠∪3	ALL
Potable Water System - Relief			204	ALL
Pressure Failure			<u>د</u> 04	ALL

## TROUBLE SHOOTING MANUAL

### WATER/WASTE - FAULT SYMPTOMS

	WARNINGS/MALFUNCTIONS	L	CFDS FAULT MESSAGES					
	WARNINGS/ MALFONCTIONS	SOURCE	MESSAGE	ATA C	ISOLATION PROCEDURE			
	FLT ATTND PNL (Z221)							
R	WTR/WASTE - TOILET VAC SYS DISABLE on GRND- WTR SYS DEPRE switch ON				383100 P 240 T 810 823			
	FWD ATTND PNL (Z221)							
R	WTR/WASTE - TOILET SYSTEM INOP				383100 P 240 T 810 823			
R	WTR/WASTE - TOILET SYSTEM INOP				383100 P 254 T 810 833			
R	WTR/WASTE - TOILET LAV X INOP				383100 P 243 T 810 824			

EFF: ALL

SROS

38-LOCAL Page 101 Aug 01/07

Printed in France

## TROUBLE SHOOTING MANUAL

## WATER/WASTE - FAULT SYMPTOMS

	WARNINGS/MALFUNCTIONS	CFDS FAULT MESSAGES				FAULT ISOLATION	
	WARNINGS/MALFONCTIONS	SOURCE	MESSAGE	ATA	С	!!	
R R R	WTR/WASTE - TOILET Toilet Flushes Continuously					383100 P 257 T 810 852	
R	WTR/WASTE - TOILET Toilet System Shuts Down Constantly					383100 P 256 T 810 851	
R	WTR/WASTE - TOILET Low Pressure in the Vacuum Toilet System					383100 P 258 T 810 854	
R	WTR/WASTE - WASTE Rinse Wtr keeps Flowing in Toilet Bowl					383100 P 232 T 810 819	
	WTR/WASTE - WASTE Slow Drainage of the Lavatory Wash Basin					383200 P 201 T 810 801	
R	WTR/WASTE - WASTE VAC SYS / Not Sufficient Suction					383100 P 233 T 810 821	
R	WTR/WASTE - WASTE Vacuum Toilets Flush too Slow					383100 P 247 T 810 825	
	WTR/WASTE Potable Water No Pressurized Potable Water in Flight					381200 P 201 T 810 814	
	WTR/WASTE Potable Water Water leakage from the potable water system					381200 P 204 T 810 815	
	WTR/Waste Water quantity - indication failure					381300 P 201 T 810 801	
	WTR/WASTE-AIR SUPPLY SYS Crack press of relief valve incorrect					384100 P 204 T 810 803	

FF:	ALL		
ROS			

**38-OBSV** Page 101 Aug 01/07

Aug 01/07

## TROUBLE SHOOTING MANUAL

	     WARNINGS/MALFUNCTIONS		FAULT ISOLATION			
	WARNINGS/ MALFONCTIONS	SOURCE	MESSAGE	ATA	С	
R R R	WTR/WASTE-AIR SUPPLY SYS No pressurization of the potable water sys in FLT					384100 P 201 T 810 801
R R R	WTR/WASTE-AIR SUPPLY SYS Potable water sys press incorrect					384100 P 203 T 810 802
	WTR/Waste-Indication IND-Light/s does/do not come ON on panel 2023VU					381400 P 201 T 810 801
	WTR/Waste-Indication IND Light/s does/do not come ON on panel 2023VU					381300 P 203 T 810 803

EFF: ALL

**38-OBSV** 

Page 102 May 01/07

## TROUBLE SHOOTING MANUAL

### WATER/WASTE - FAULT SYMPTOMS

	WARNINGS/MALFUNCTIONS		CFDS FAULT MESSAGES					
	WARNINGS/ MALFONCTIONS	SOURCE	MESSAGE	ATA	С	ISOLATION PROCEDURE		
		CFDS	NO VSC DATA	383134	2	313200 P 259 T 810 848		
R		TOILET	ALT PRESS SW	383169	2	383100 P 218 T 810 808		
R		TOILET	CHECK GEN POWER	383100	2	383100 P 223 T 810 813		
R		TOILET	LAV X	383141	1	383100 P 250 T 810 827		
R		TOILET	LAV X FCU	383141	1	383100 P 221 T 810 812		
R		TOILET	LAV X WTRV	383141	1	383100 P 248 T 810 826		
R		TOILET	LIQD LVL SNSR	383163	2	383100 P 212 T 810 805		
R		TOILET	LIQD LVL XMTR	383162	2	383100 P 209 T 810 804		
R		TOILET	LIQD LVL XMTR (40MG) / LIQD LVL SNSR (41MG)	383162	2	383100 P 256 T 810 851		
R		TOILET	LIQD LVL XMTR/LIQD LVL  SNSR/VSC	383162	2	383100 P 235 T 810 822		
R		TOILET	LIQUID LVL SNSR	383163	2	383100 P 212 T 810 805		
R		TOILET	LIQUID LVL XMTR	383162	2	383100 P 209 T 810 804		
R		TOILET	LIQUID LVLSNSR OR LIQUID LVL XMTR OR VAC SYS CONT	383100	2	383100 P 235 T 810 822		
		TOILET	VAC GEN OVHT	383164	2	383100 P 201 T 810 803		
R		TOILET	VAC SYS CONT	383134	2	383100 P 215 T 810 806		

38-CFDS Page 101

Aug 01/07

## TROUBLE SHOOTING MANUAL

	WARNINGS/MALFUNCTIONS		FAULT ISOLATION			
	WARNINGS/MALFONCTIONS	SOURCE	MESSAGE	ATA	С	
		TOILET	VACU GEN	383164	2	383100 P 201 T 810 803
R		TOILET	VACU GEN SUPPLY	383100	2	383100 P 223 T 810 813
R		TOILET	vsc	383134	2	383100 P 215 T 810 806
R		TOILET	VSC FEEDBACK FAULTY LAV	383134	2	383100 P 231 T 810 818

EFF: ALL

38-CFDS

Page 102 Aug 01/07

### TROUBLE SHOOTING MANUAL

### DISTRIBUTION - FAULT ISOLATION PROCEDURES

TASK 38-12-00-810-814

No Pressurization of the Potable Water in Flight

#### 1. Possible Causes

- FILL/DRAIN VALVE (8MA)
- VALVE-OVERFLOW (8MP)
- control cable 3254MM
- aircraft wiring
- Fill limit switch 5MP
- control cable 3260MM
- control cable 3261MM

#### 2. Job Set-up Information

A. Referenced Information

REFERENCE		DESIGNATION		
AMM	12-15-38-613-001	Fill the Potable Water Tank System (Aircraft Electrical Power Available)		
AMM	38-10-00-614-001	Pressurization of the Potable Water System from a Ground Air Supply		
AMM	38-14-43-000-001	Removal of the Motorized Fill/Overflow-Drain Valve 8MA		
AMM	38-14-43-400-001	<pre>Installation of the Motorized Fill/Overflow-Drain Valve 8MA</pre>		
AMM	38-14-44-000-001	Removal of the Overflow Valve 8MP		
AMM	38-14-44-400-001	Installation of the Overflow Valve 8MP		
AMM	38-14-47-000-001	Removal of the Control Cable 3254MM		
AMM	38-14-47-400-001	Installation of the Control Cable 3254MM		
AMM	38-14-48-000-001	Removal of the Control Cable		
AMM	38-14-48-400-001	Installation of the Control Cable		
ASM	38-13/00			
ASM	38-14/00			

#### 3. Fault Confirmation

R R

- A. Aircraft configuration
  - (1) Make sure that there is water in the potable water system, if necessary do the servicing (Ref. AMM TASK 12-15-38-613-001).
  - (2) Make sure that the potable water system is pressurized (Ref. AMM TASK 38-10-00-614-001).

EFF: ALL

38-12-00

Page 201 Nov 01/06

#### TROUBLE SHOOTING MANUAL

### 4. Fault Isolation

\*\*ON A/C 201-225, 276-299, 451-499, 503-549, 551-599,

- A. If you cannot pressurize the potable water system:
  - do a check and make sure that no air flows from the FILL/DRAIN VALVE (8MA).
  - (1) If the fill/drain and overflow valve 8MA is not closed:do a check and adjust the control cable 3254MM as necessary.
  - (2) If the fault continues:
    - do a check and make sure that the fill/drain and overflow valve 8MA control cable 3254MM moves freely. If not, replace the control cable (Ref. AMM TASK 38-14-47-000-001) and (Ref. AMM TASK 38-14-47-400-001).
  - (3) If the fault continues:
    - replace the FILL/DRAIN VALVE (8MA), (Ref. AMM TASK 38-14-43-000-001) and (Ref. AMM TASK 38-14-43-400-001).
  - (4) If the fault continues:
    - do a check and repair the aircraft wiring between the:
       CB 1MA and the connector A/C FILL/DRAIN VALVE (8MA), (Ref. ASM 38-13/00).
- R \*\*ON A/C 227-227, 229-275, 426-450, 701-749,
  - A. If you cannot pressurize the potable water system:
    - do a check and make sure that no air flows from the VALVE-OVERFLOW (8MP).
    - (1) If the over-flow valve 8MP is not closed:- do a check and adjust the Fill limit switch 5MP as necessary.
    - (2) If the fault continues:
      - do a check and make sure that the over-flow valve 8MP control cable 3260MM moves freely. If not, replace the control cable (Ref. AMM TASK 38-14-48-000-001) and (Ref. AMM TASK 38-14-48-400-001).
    - (3) If the fault continues:
      - replace the VALVE-OVERFLOW (8MP), (Ref. AMM TASK 38-14-44-000-001) and (Ref. AMM TASK 38-14-44-400-001).
    - (4) If the fault continues:
      - do a check and repair the aircraft wiring between the:
         CB 1MP and the connector A/C VALVE-OVERFLOW (8MP), (Ref. ASM 38-14/00).

EFF: ALL

38-12-00

Page 202 May 01/08

### TROUBLE SHOOTING MANUAL

R	(5)	Ιf	the	fault	conf	tinues
R		- (	do a	check	and	make

- do a check and make sure that the drain valve 14MP control cable 3261MM moves freely. If not, replace the control cable (Ref. AMM TASK 38-14-48-000-001).
- (6) If the fault continues:
  - do a check and make sure that the fill and drain valve 16MA control cable 3254MM moves freely. If not, replace the control cable (Ref. AMM TASK 38-14-47-000-001) and (Ref. AMM TASK 38-14-47-400-001).

R \*\*ON A/C ALL

R

R

R

R

R

### 5. Close-up

A. After the subsequent flight, make sure that the fault does not continue.

EFF : ALL
SROS
Printed in France

38-12-00

Page 203 Nov 01/05

### TROUBLE SHOOTING MANUAL

TASK 38-12-00-810-815

Water Leakage from Potable Water System

### 1. Possible Causes

R - water filter
R - connections

R - lines

### 2. Job Set-up Information

A. Referenced Information

	REFE	RENCE	DESIGNATION
	AMM	12-15-38-613-001	Fill the Potable Water Tank System (Aircraft Electrical Power Available)
R R	AMM	20-23-38-300-001	Repair of the Tubes Assembly of the Potable Water and the associated Air Supply System to be carried out in the Workshop
R R R	AMM	20-23-38-300-002	Repair of the Tubes of the Potable Water and the associated Air Supply System to be carried out in the Aircraft
	AMM	20-23-38-300-048	Repair of the Tubes with H-Fittings to be carried out in the Aircraft
	AMM	20-23-38-300-049	Temporary Repair of the Tube Assemblies with MS21922 Sleeves to be carried out in the Workshop
	AMM	38-10-00-614-001	Pressurization of the Potable Water System from a Ground Air Supply
	38-1	2-00-991-001	Fig. 201

### 3. Fault Confirmation

SROS

- A. Aircraft configuration
  - (1) Make sure that there is water in the potable water system, if necessary do the servicing (Ref. AMM TASK 12-15-38-613-001).
  - (2) Make sure that the potable water system is pressurized (Ref. AMM TASK 38-10-00-614-001).

EFF: ALL 38-12-00

Page 204 Feb 01/07

#### TROUBLE SHOOTING MANUAL

### 4. Fault Isolation

R

R

R

R

- A. If you see a flow of water from the potable water system:
  - do a check in the logbook to make sure if any work was performed on the system.
  - (1) If work was done in the galley do a check and make sure that:
- R The water filter does not leak.
  - All connections, lines and plugs are tightened.
  - The interface to all other users does not leak.
    - (2) If work was done in the lavatory:
- R Do a check and make sure that all connections and lines do notR leak.
  - (3) If the fault continues:
    - Use the illustration to trace for possible leaks.
       (Ref. Fig. 201/TASK 38-12-00-991-001)
  - (4) If leaks are found, tighten the connection or repair the line (Ref. AMM TASK 20-23-38-300-001), (Ref. AMM TASK 20-23-38-300-002) or (Ref. AMM TASK 20-23-38-300-049).

#### 5. Close-up

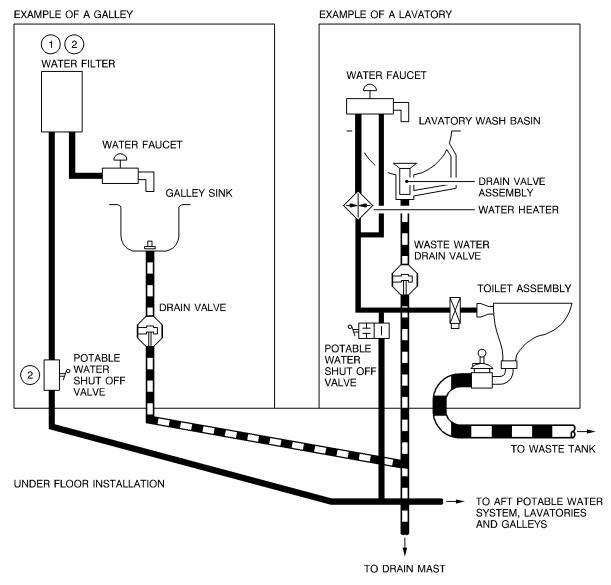
**SROS** 

A. After consequent maintenance or repair, pressurize the potable water system and make sure that the system does not leak.

EFF: ALL 38-12-00

Page 205 Feb 01/07

#### TROUBLE SHOOTING MANUAL



VACUUM WASTE LINE WASTE WATER DRAIN LINE POTABLE WATER DISTRIBUTION LINE

8

00 2 AAN0

12

38

R

R

NOTE: REFER TO YOUR RELATED CABIN LAYOUT SPECIFICATION FOR THE CORRECT CABIN LAYOUT REFER TO THE RELATED GALLEY CMM FOR INSTALLATION AND MAINTENANCE OF THE POTABLE WATER FILTER

- IF INSTALLED, REFER TO THE RELATED CUSTOMER CABIN LAYOUT FOR THE LOCATION AND ACCESS FOR THE WATER FILTER IN THE GALLEY
- PLACARDS IN THE GALLEY SHOW THE LOCATION AND THE ACCESS TO THE COMPONENTS

Routing of Potable Water Lines Figure 201/TASK 38-12-00-991-001

EFF: ALL **SROS** 

38-12-00

Page 206 Nov 01/06

Printed in France

### TROUBLE SHOOTING MANUAL

### QUANTITY INDICATING - FAULT ISOLATION PROCEDURES

TASK 38-13-00-810-801

Water Quantity Indication Failure

- 1. Possible Causes
  - GAUGE-CONTENTS (6MA)
  - XMTR-QUANTITY (3MA)
  - limit switch 5MA
  - aircraft wiring
- 2. Job Set-up Information
  - A. Referenced Information

REFERENCE		DESIGNATION		
AMM	38-13-00-710-001	Operational Test of the Quantity Indicating System		
AMM	38-13-00-710-002	Operational Test of the Door Limit Switch 5MA		
AMM	38-13-11-000-001	Removal of the Quantity Transmitter 3MA		
AMM	38-13-11-400-001	Installation of the Quantity Transmitter 3MA		
AMM	38-13-16-000-001	Removal of the Water Service-Panel Door-Switch (5MA)		
AMM	38-13-16-400-001	<pre>Installation of the Water Service-Panel Door-Switch (5MA)</pre>		
AMM	38-13-21-000-001	Removal of the Quantity Indicator 6MA		
AMM	38-13-21-400-001	Installation of the Quantity Indicator 6MA		
AMM ASM	38-14-00-710-001 38-13/00	Operational Test of the Potable Water Drain-System		

### 3. Fault Confirmation

\*\*ON A/C 201-225, 276-299, 451-499, 503-549, 551-599,

- A. Test.
  - (1) Do a test of the Quantity Indicating System (Ref. AMM TASK 38-13-00-710-001).
- R \*\*ON A/C 227-227, 229-275, 426-450, 701-749,
  - A. Test.
    - (1) Do a test of the Quantity Indication System (Ref. AMM TASK 38-13-00-710-001).

EFF: ALL SROS

38-13-00

Page 201

#### TROUBLE SHOOTING MANUAL

(2) Do a test of the Water Draining (Dump) (Ref. AMM TASK 38-14-00-710-001).

\*\*ON A/C ALL

#### 4. Fault Isolation

- A. If the test gives a different maintenance message, you can find the related trouble shooting procedure in the applicable Page Block 101.
- B. If there is no quantity indication (no LED illumination/quantity indicator) on the FORWARD ATTENDANT PANEL 120RH/SERVICE PANEL 2023VU: open and close the circuit breaker 1MA.
  - (1) If the fault continues:
    - do a check of the doorlimit switch 5MA, (Ref. AMM TASK 38-13-00-710-002).
  - (2) If the fault continues:
    - replace the door limit switch 5MA (Ref. AMM TASK 38-13-16-000-001) and (Ref. AMM TASK 38-13-16-400-001).
  - (3) If the fault continues:
    - replace the GAUGE-CONTENTS (6MA), (Ref. AMM TASK 38-13-21-000-001) and (Ref. AMM TASK 38-13-21-400-001).
  - (4) If the fault continues:
    - replace the XMTR-QUANTITY (3MA), (Ref. AMM TASK 38-13-11-000-001) and (Ref. AMM TASK 38-13-11-400-001).
  - (5) If the fault continues:
    - do a check and repair the aircraft wiring between the:
       CB 1MA and the connector A/C XMTR-QUANTITY (3MA), (Ref. ASM 38-13/00).
- C. Do the test as given in paragraph 3. A.

R

38-13-00

Page 202 Aug 01/97

#### TROUBLE SHOOTING MANUAL

TASK 38-13-00-810-803

Potable-Water Service Panel 2023VU Indication Light(s) Failure

- 1. Possible Causes
  - lamp
  - aircraft wiring
- 2. Job Set-up Information
  - A. Referenced Information

REFERENCE

DESIGNATION

AMM 38-13-00-960-001 Indication Lamps Replacement

ASM 38-13/01

3. Fault Confirmation

- A. Do the self-test (push to test) of the indication lamp, the light must
- 4. Fault Isolation
  - A. If the light does not come ON:
    - Replace the lamp (Ref. AMM TASK 38-13-00-960-001).
    - (1) If the fault continues:
      - Do a check and repair the aircraft wiring (Ref. ASM 38-13/01).
- R B. Do the test given in para. 3.

38-13-00 EFF: ALL

Page 203 Aug 01/03

**SROS** 

## TROUBLE SHOOTING MANUAL

QUANTITY INDICATING - TASK SUPPORTING DATA

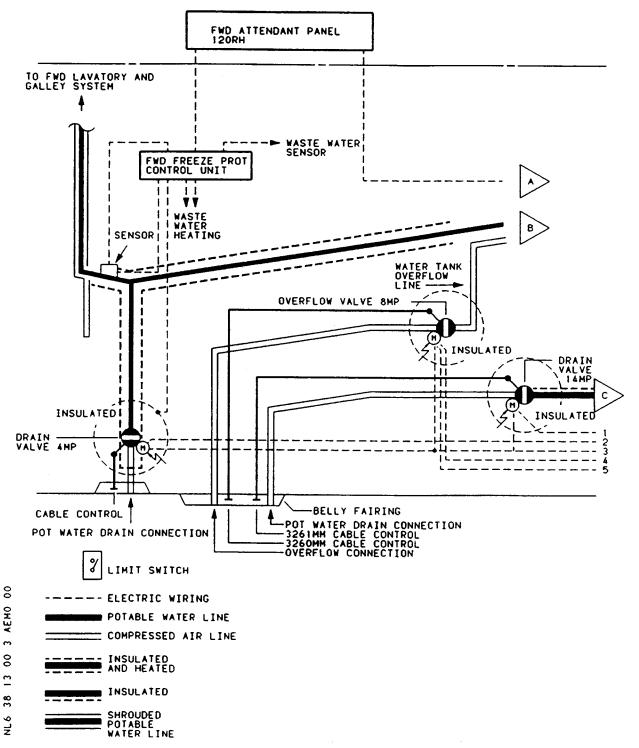
EFF: ALL

38-13-00

Page 301 Aug 01/94

### TROUBLE SHOOTING MANUAL

#### A - Potable Water Distribution



Potable Water Distribution - Schematic Figure 301

R EFF: 201-225, 276-299, 451-499, 503-549, 551-599, SROS

Printed in France

38-13-00

Page 302
Nov 01/05



TROUBLE SHOOTING MANUAL

INTENTIONALLY BLANK

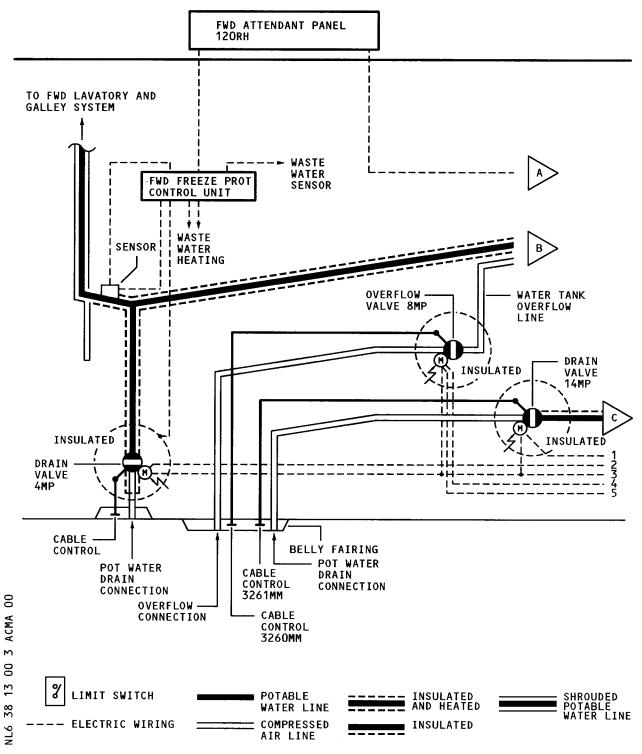
SROS

38-13-00

Page 303 May 01/96

### TROUBLE SHOOTING MANUAL

### A - Potable Water Distribution



Potable Water Distribution - Schematic Figure 301A (SHEET 1)

R EFF: 227-227, 229-275, 426-450, 701-749, SROS

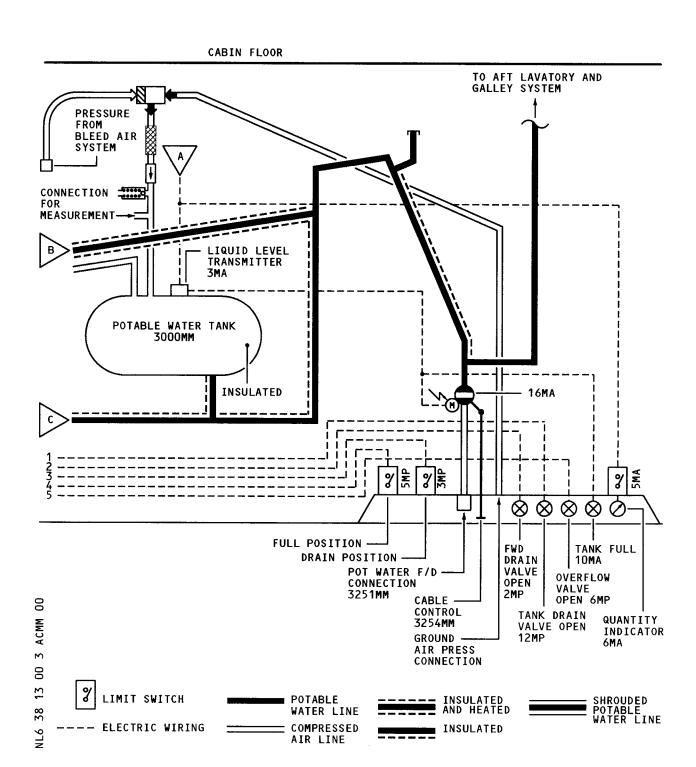
Printed in France

38-13-00

Page 304

May 01/08

### TROUBLE SHOOTING MANUAL



Potable Water Distribution - Schematic Figure 301A (SHEET 2)

R EFF: 227-227, 229-275, 426-450, 701-749, SROS

Printed in France

38-13-00

Page 305

May 01/08

### TROUBLE SHOOTING MANUAL

### WATER DRAINING (DUMP) - FAULT ISOLATION PROCEDURES

TASK 38-14-00-810-801

Potable-Water Service panel 2023VU Indication Light(s) Failure

- 1. Possible Causes
  - lamp
  - aircraft wiring
- 2. Job Set-up Information
  - A. Referenced Information

#### REFERENCE

#### **DESIGNATION**

AMM 38-14-00-960-001 Indication Lamp Replacement

ASM 38-14/01

- 3. Fault Confirmation
  - A. Do the self-test (push to test) of the indication lamp, the light must come ON.
- 4. Fault Isolation
  - A. If the light does not come ON: - Replace the lamp (Ref. AMM TASK 38-14-00-960-001).
    - (1) If the fault continues:
      - Do a check and repair the aircraft wiring (Ref. ASM 38-14/01).
  - B. Do the test as given in Para. 3.

38-14-00

Page 201 Aug 01/00

EFF: ALL

**SROS** 

### TROUBLE SHOOTING MANUAL

#### TOILET SYSTEM - FAULT ISOLATION PROCEDURES

TASK 38-31-00-810-803

Vacuum Generator (37MG) Failure

- 1. Possible Causes
  - GENERATOR-VACUUM (37MG)
- 2. Job Set-up Information
  - A. Referenced Information

REFERENCE		DESIGNATION		
AMM AMM	38-31-00-710-009 38-31-00-740-001 38-31-64-000-001 38-31-64-400-001	Operational Test of the Toilet Unit BITE Test of the Vacuum Toilet System Removal of the Vacuum Generator 37MG Installation of the Vacuum Generator 37MG		

R \*\*ON A/C 201-202, 227-227, 229-234, 276-281, 476-478,

38-31-00-991-001 Fig. 201

\*\*ON A/C 203-225, 235-275, 282-299, 426-450, 456-475, 479-499, 503-549, 551-599, 701-749,

38-31-00-991-001-A Fig. 201A

\*\*ON A/C ALL

#### 3. Fault Confirmation

- A. Fault Confirmation Test
  - (1) Do the operational test of the toilet unit (Ref. AMM TASK 38-31-00-710-009).
  - (2) Do the bite test of the vacuum toilet system (Ref. AMM TASK 38-31-00-740-001).

EFF: ALL 38-31-00

Page 201 May 01/08

#### TROUBLE SHOOTING MANUAL

### 4. Fault Isolation

A. If the test gives a different maintenance message, you can find the related trouble shooting procedure in the applicable Page Block 101.

\*\*ON A/C 201-225, 235-299, 426-450, 456-475, 479-499, 503-549, 551-599, 701-749,

B. If the operational test is satisfactory:Do the bite test to get the last leg report page.

\*\*ON A/C 201-202, 276-281,

(Ref. Fig. 201/TASK 38-31-00-991-001)

\*\*ON A/C 203-225, 235-275, 282-299, 426-450, 456-475, 479-499, 503-549, 551-599, 701-749,

(Ref. Fig. 201A/TASK 38-31-00-991-001-A)

\*\*ON A/C 201-225, 235-299, 426-450, 456-475, 479-499, 503-549, 551-599, 701-749,

- (1) If the LAST LEG REPORT page gives the maintenance message VACU GEN:
   do a check of the electrical connections 37MG/A and 37MG/B.
- R \*\*ON A/C 227-227, 229-234, 476-478,
  - B. If the operational test is satisfactory:
    Do the bite test to get the last leg report page.
    (Ref. Fig. 201/TASK 38-31-00-991-001)
    - (1) If the LAST LEG REPORT page gives the maintenance message VAC GEN OVHT:
      - do a check of the electrical connections 37MG/A and 37MG/B.
    - (2) If the electrical connections are correct:
      - replace the GENERATOR-VACUUM (37MG) (Ref. AMM TASK 38-31-64-000-001) and (Ref. AMM TASK 38-31-64-400-001).

EFF: ALL 38-31-00

Page 202 May 01/08

**SROS** 



TROUBLE SHOOTING MANUAL

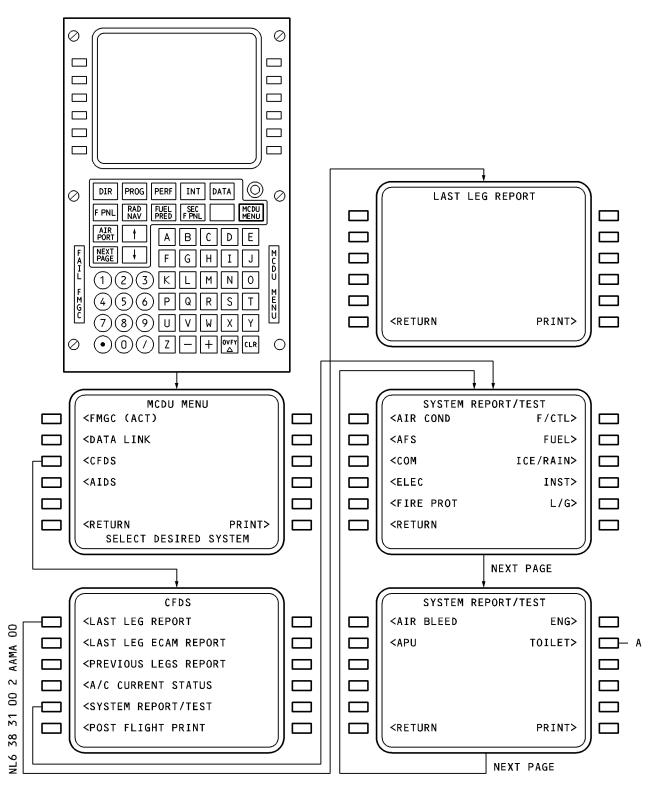
INTENTIONALLY BLANK

SROS

38-31-00

Page 203 Aug 01/07

#### TROUBLE SHOOTING MANUAL



MCDU Display Figure 201/TASK 38-31-00-991-001- 12 (SHEET 1)

```
R EFF: 201-202, 227-227, 229-234, 276-281, 476-478, SROS

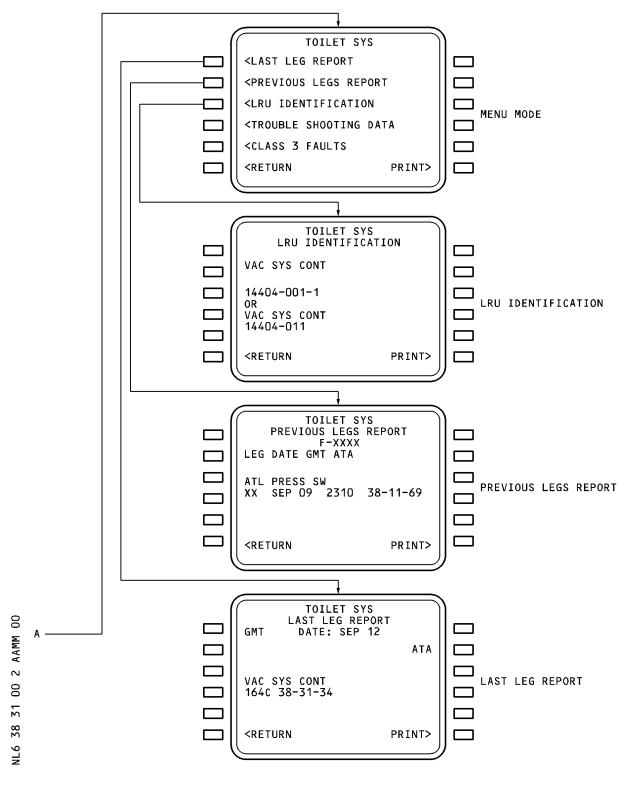
Printed in France

38-31-00

Page 204

May 01/08
```

### TROUBLE SHOOTING MANUAL



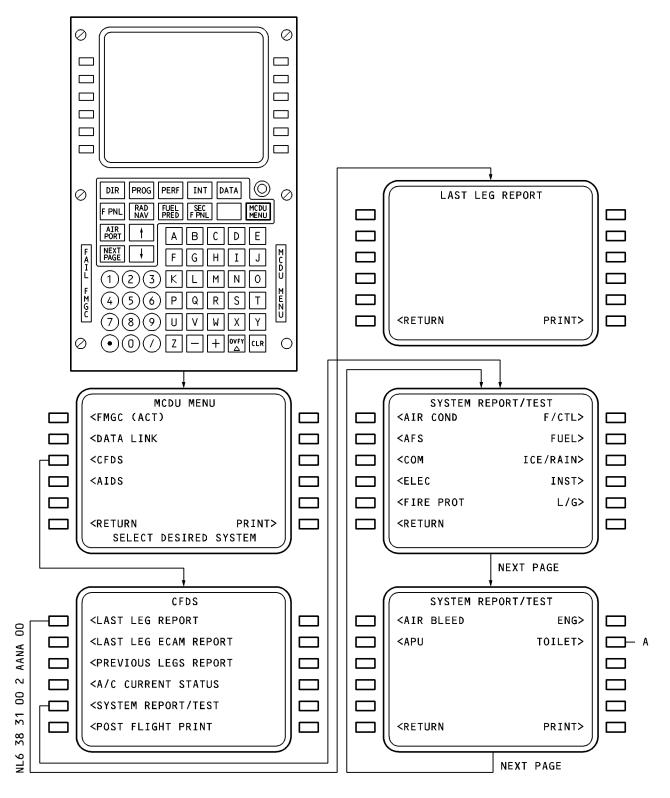
MCDU Display Figure 201/TASK 38-31-00-991-001- 22 (SHEET 2)

R EFF: 201-202, 227-227, 229-234, 276-281, 476-478, SROS

38-31-00

Page 205 May 01/08

#### TROUBLE SHOOTING MANUAL



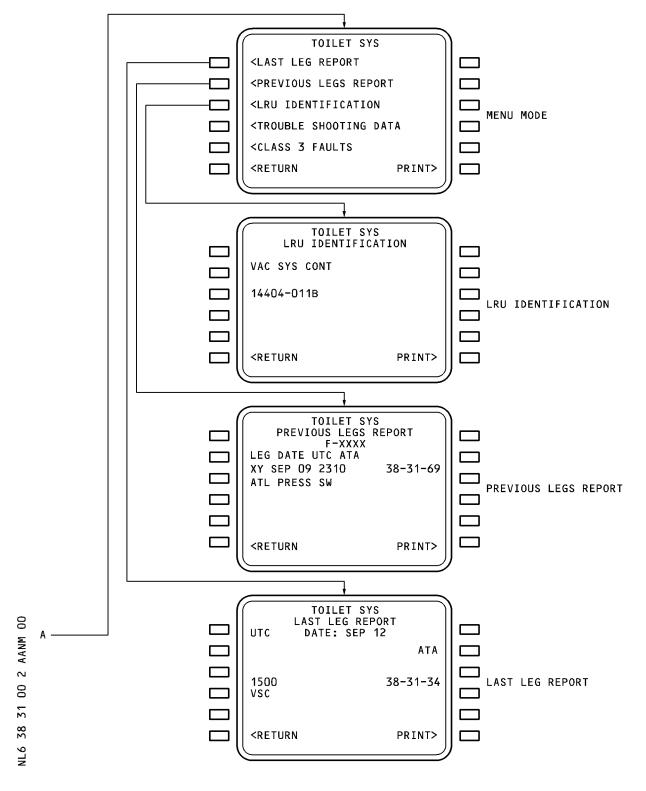
MCDU Display Figure 201A/TASK 38-31-00-991-001-A12 (SHEET 1)

R EFF: 203-225, 235-275, 282-299, 426-475, 479-499, 503-549, 551-599, 701-749, SROS

38-31-00

Page 206 Feb 01/08

### TROUBLE SHOOTING MANUAL



MCDU Display Figure 201A/TASK 38-31-00-991-001-A22 (SHEET 2)

R EFF: 203-225, 235-275, 282-299, 426-475, 479-499, 503-549, 551-599, 701-749, SROS

38-31-00

Page 207 Feb 01/08

### TROUBLE SHOOTING MANUAL

#### \*\*ON A/C ALL

- C. Do the test as given in Para. 3.
  - (1) make sure that the vacuum toilet system operates correctly (Ref. AMM TASK 38-31-00-710-009).
  - (2) After the subsequent flight, make sure that the fault does not continue.

EFF: ALL SROS 38-31-00

Page 208 Aug 01/07

#### TROUBLE SHOOTING MANUAL

TASK 38-31-00-810-804

Liquid Level Transmitter (40MG) Failure

- 1. Possible Causes
  - XMTR-LEVEL PHASE OFF (40MG)
- 2. Job Set-up Information
  - A. Referenced Information

REFERENCE	DESIGNATION		
AMM 38-31-00-710-009	Operational Test of the Toilet Unit		
AMM 38-31-00-710-009	Operational Test of the Toilet Unit		
AMM 38-31-00-740-001	BITE Test of the Vacuum Toilet System		
AMM 38-31-62-000-001	Removal of the Liquid Level Transmitter (40MG)		
AMM 38-31-62-400-001	Installation of the Liquid Level Transmitter (40MG)		

R \*\*ON A/C 201-202, 227-227, 229-234, 276-281, 476-478,

38-31-00-991-001 Fig. 201

\*\*ON A/C 203-225, 235-275, 282-299, 426-475, 479-499, 503-549, 551-599, 701-749,

38-31-00-991-001-A Fig. 201A

\*\*ON A/C ALL

### 3. Fault Confirmation

- A. Do the operational test of the vacuum toilet system (Ref. AMM TASK 38-31-00-710-009).
- B. Do the bite test (Ref. AMM TASK 38-31-00-740-001).

EFF: ALL 38-31-00

Page 209 May 01/08

**SROS** 

#### TROUBLE SHOOTING MANUAL

#### 4. Fault Isolation

\*\*ON A/C 201-225, 254-275, 451-475, 551-599,

- A. If the operational test is OK:
  - Refer bite test last leg or previous legs report.

\*\*ON A/C 201-202,

(Ref. Fig. 201/TASK 38-31-00-991-001)

\*\*ON A/C 203-225, 254-275, 451-475, 551-599,

(Ref. Fig. 201A/TASK 38-31-00-991-001-A)

\*\*ON A/C 201-225, 254-275, 451-475, 551-599,

- (1) If the LAST LEG REPORT or PREVIOUS LEG REPORT page gives the maintenance message LIQD LVL XMTR:
  - clean and fully dry the inside of the differential pressure vent line.
- (2) If the fault continues:
  - do a check of the electrical connections of the small connector 40MG/A.
- (3) If the electrical connections are OK:
  - replace the XMTR-LEVEL PHASE OFF (40MG), (Ref. AMM TASK 38-31-62-000-001) and (Ref. AMM TASK 38-31-62-400-001).
- R \*\*ON A/C 227-227, 229-234, 276-281, 476-478,
  - A. If the operational test is OK:
    - Refer bite test last leg or previous legs report.
       (Ref. Fig. 201/TASK 38-31-00-991-001)
    - (1) If the LAST LEG REPORT or PREVIOUS LEG REPORT page gives the maintenance message LIQUID LVL XMTR:
      - clean and fully dry the inside of the differential pressure vent line.
    - (2) If the fault continues:
      - do a check of the electrical connections of the small connector 40MG/A.

EFF: ALL
SROS

38-31-00

Page 210 May 01/08

#### TROUBLE SHOOTING MANUAL

\*\*ON A/C ALL

B. If the test gives a different maintenance message, you can find the related trouble shooting procedure in the applicable Page Block 101.

R \*\*ON A/C 201-202, 227-227, 229-234, 276-281, 476-478,

(Ref. Fig. 201/TASK 38-31-00-991-001)

\*\*ON A/C 203-225, 235-275, 282-299, 426-475, 479-499, 503-549, 551-599, 701-749,

(Ref. Fig. 201A/TASK 38-31-00-991-001-A)

\*\*ON A/C ALL

#### C. Test

- (1) Do the operational test of the vacuum toilet system and make sure it operates correctly (Ref. AMM TASK 38-31-00-710-009).
- (2) After the subsequent flight, make sure that the fault does not continue.

EFF: ALL 38-31-00

Page 211 May 01/08

**SROS** 

#### TROUBLE SHOOTING MANUAL

TASK 38-31-00-810-805

Liquid Level Sensor (41MG) Failure

- 1. Possible Causes
  - SENSOR-LEVEL (41MG)
- 2. Job Set-up Information
  - A. Referenced Information

REFERENCE		DESIGNATION				
A M M	38-31-00-710-009	Openational Test of the Tailet Unit				
AMM	30-31-00-710-009	Operational Test of the Toilet Unit				

AMM 38-31-00-740-001 BITE Test of the Vacuum Toilet System
AMM 38-31-63-000-001 Removal of the Liquid Level Sensor (41MG)
AMM 38-31-63-400-001 Installation of the Liquid Level Sensor (41MG)

R \*\*ON A/C 201-202, 227-227, 229-234, 276-281, 476-478,

38-31-00-991-001 Fig. 201

\*\*ON A/C 203-225, 235-275, 282-299, 426-475, 479-499, 503-549, 551-599, 701-749,

38-31-00-991-001-A Fig. 201A

\*\*ON A/C ALL

### 3. Fault Confirmation

- A. Do the operational test of the vacuum toilet system (Ref. AMM TASK 38-31-00-710-009).
- B. Do the bite test (Ref. AMM TASK 38-31-00-740-001).

EFF: ALL 38-31-00

**SROS** 

Page 212 May 01/08

### TROUBLE SHOOTING MANUAL

### 4. Fault Isolation

\*\*ON A/C 201-225, 235-275, 282-299, 426-475, 479-499, 503-549, 551-599, 701-749,

- A. If the operational test is OK:
  - Refer to the trouble shooting page of the bite test.
  - (1) If the LAST LEG REPORT or PEVIOUS LEGS REPORT gives the maintenance message LIQD LVL SNSR:

\*\*ON A/C 201-202,

(Ref. Fig. 201/TASK 38-31-00-991-001)

\*\*ON A/C 203-225, 235-275, 282-299, 426-475, 479-499, 503-549, 551-599, 701-749,

(Ref. Fig. 201A/TASK 38-31-00-991-001-A)

\*\*ON A/C 201-225, 235-275, 282-299, 426-475, 479-499, 503-549, 551-599, 701-749,

- do a check of the electrical connections of the connector (41MG).
- (2) If the electrical connections are OK:
  - replace the SENSOR-LEVEL (41MG), (Ref. AMM TASK 38-31-63-000-001) and (Ref. AMM TASK 38-31-63-400-001).
- R \*\*ON A/C 227-227, 229-234, 276-281, 476-478,
  - A. If the operational test is OK:
    - Refer to the bite test last leg or previous legs report.
       (Ref. Fig. 201/TASK 38-31-00-991-001)
    - (1) If the LAST LEG REPORT or PEVIOUS LEGS REPORT gives the maintenance message LIQUID LVL SNSR:
      - do a check of the electrical connections of the connector (41MG).
    - (2) If the electrical connections are OK:
      - replace the SENSOR-LEVEL (41MG), (Ref. AMM TASK 38-31-63-000-001) and (Ref. AMM TASK 38-31-63-400-001).

EFF: ALL 38-31-00

Page 213 May 01/08

### TROUBLE SHOOTING MANUAL

\*\*ON A/C ALL

B. If the test gives a different maintenance message, you can find the related trouble shooting procedure in the applicable Page Block 101.

R \*\*ON A/C 201-202, 227-227, 229-234, 276-281, 476-478,

(Ref. Fig. 201/TASK 38-31-00-991-001)

\*\*ON A/C 203-225, 235-275, 282-299, 426-475, 479-499, 503-549, 551-599, 701-749,

(Ref. Fig. 201A/TASK 38-31-00-991-001-A)

\*\*ON A/C ALL

### C. Test

- (1) Do the operational test of the vacuum toilet system and make sure it operates correctly (Ref. AMM TASK 38-31-00-710-009).
- (2) After the subsequent flight, make sure that the fault does not continue.

EFF: ALL 38-31-00

Page 214 May 01/08

### TROUBLE SHOOTING MANUAL

TASK 38-31-00-810-806

Vacuum System Controller (31MG) Failure

- 1. Possible Causes
  - CONTROLLER-VACUUM SYSTEM (31MG)
- 2. Job Set-up Information
  - A. Referenced Information

REFERENCE	DESIGNATION
24-00-00-810-818	Computer Reset
AMM 38-31-00-710-009	Operational Test of the Toilet Unit
AMM 38-31-00-740-001	BITE Test of the Vacuum Toilet System
AMM 38-31-34-000-001	Removal of the Vacuum System Controller 31MG
AMM 38-31-34-400-001	Installation of the Vacuum System Controller 31MG

R \*\*ON A/C 201-202, 227-227, 229-234, 276-281, 476-478,

38-31-00-991-001 Fig. 201

\*\*ON A/C 203-225, 235-275, 282-299, 426-475, 479-499, 503-549, 551-599, 701-749,

38-31-00-991-001-A Fig. 201A

\*\*ON A/C ALL

ASM 38-31/11

### 3. Fault Confirmation

- A. Do the operational test of the vacuum toilet system (Ref. AMM TASK 38-31-00-710-009).
- B. Do the bite test (Ref. AMM TASK 38-31-00-740-001).

EFF: ALL 38-31-00

Page 215 May 01/08

### TROUBLE SHOOTING MANUAL

### 4. Fault Isolation

A. If the test gives a different maintenance message, you can find the related trouble shooting procedure in the applicable Page Block 101.

R \*\*ON A/C 201-225, 235-275, 282-299, 426-475, 479-499, 503-549, 551-599, R 701-749,

- B. If the operational test does no operate: - refer to the bite test last leg or previous legs report.
  - (1) If the LAST LEG REPORT or PREVIOUS LEGS REPORT gives the maintenance message

\*\*ON A/C 201-202,

(Ref. Fig. 201/TASK 38-31-00-991-001)

R \*\*ON A/C 203-225, 235-275, 282-299, 426-475, 479-499, 503-549, 551-599, R 701-749,

(Ref. Fig. 201A/TASK 38-31-00-991-001-A)

\*\*ON A/C 201-225, 235-275, 282-299, 426-475, 479-499, 503-549, 551-599, 701-749,

VSC

POWER SUPPLY: or

VSC

ARINC TRANSMITTER: or

VSC RAM: or VSC EPROM: or

VSC

EEPROM: or VSC

A/D.D/A CONVERTER: or

VSC

WATCHDOG TIMER: or

VSC

FEEDBACK

FAULTY LAV X: or

VSC

**FEEDBACK** 

SYSTEM INOPERATIVE: or

VSC

FEEDBACK

LIQUID LEVEL SENSOR

TEST: or

VSC

EFF: ALL 38-31-00

Page 216 Feb 01/08

### TROUBLE SHOOTING MANUAL

FEEDBACK

PRECHARGE INDICATION: or

VSC

**FEEDBACK** 

FLUSH ENABLE LAV X: or

VSC

FEEDBACK

MOTOR STARTING RELAY:

- replace the CONTROLLER-VACUUM SYSTEM (31MG), (Ref. AMM TASK 38-31-34-000-001) and (Ref. AMM TASK 38-31-34-400-001).
- (2) If the fault continues:
  - do a check and repair the aircraft wiring (Ref. ASM 38-31/11) as necessary.

R \*\*ON A/C 227-227, 229-234, 276-281, 476-478,

- B. If the operational test does not operate:
  - refer to the bite test last leg or previous legs report.
     (Ref. Fig. 201/TASK 38-31-00-991-001)
  - (1) If the LAST LEG REPORT or PREVIOUS LEGS REPORT gives the maintenance message VAC SYS CONT:
    - open and close the circuit breaker 35MG (Ref. TASK 24-00-00-810-818).
  - (2) If the fault continues:
    - do a check at the connector AC/4 and GND.
  - (3) If the fault continues:
    - replace the CONTROLLER-VACUUM SYSTEM (31MG), (Ref. AMM TASK 38-31-34-000-001) and (Ref. AMM TASK 38-31-34-400-001).
  - (4) If the fault continues:
    - do a check and repair the aircraft wiring (Ref. ASM 38-31/11) as necessary.

\*\*ON A/C ALL

- C. Test
  - (1) Do the test as given in paragraph 3. A. to check the correct operation of the vacuum toilet system (Ref. AMM TASK 38-31-00-710-009).
  - (2) After the subsequent flight, make sure that the fault does not continue.

EFF: ALL

**SROS** 

38-31-00

Page 217 May 01/08

### TROUBLE SHOOTING MANUAL

TASK 38-31-00-810-808

Altitude Pressure Switch (43MG) Failure

- 1. Possible Causes
  - PRESS SW-ALTITUDE (43MG)
- 2. Job Set-up Information
  - A. Referenced Information

REFE	RENCE 	DESIGNATION 
AMM	38-31-00-710-009	Operational Test of the Toilet Unit
AMM	38-31-00-740-001	BITE Test of the Vacuum Toilet System
AMM	38-31-69-000-001	Removal of the Altitude Pressure Switch 43MG
AMM	38-31-69-400-001	Installation of the Altitude Pressure Switch 43MG

R \*\*ON A/C 201-202, 227-227, 229-234, 276-281, 476-478,

38-31-00-991-001 Fig. 201

\*\*ON A/C 203-225, 235-275, 282-299, 426-475, 479-499, 503-549, 551-599, 701-749,

38-31-00-991-001-A Fig. 201A

\*\*ON A/C ALL

- 3. Fault Confirmation
  - A. Test
    - (1) Do a test of the vacuum toilet system (Ref. AMM TASK 38-31-00-710-009).
  - B. Do the bite test (Ref. AMM TASK 38-31-00-740-001).

EFF: ALL 38-31-00

Page 218 May 01/08

### TROUBLE SHOOTING MANUAL

### 4. Fault Isolation

A. If the test gives a different maintenance message, you can find the related trouble shooting procedure in the applicable Page Block 101.

\*\*ON A/C 201-225, 235-275, 282-299, 426-475, 479-499, 503-549, 551-599, 701-749,

- B. If the operational test operates OK:
  - Refer to the bite test last leg or previous legs report.
  - (1) If the LAST LEG REPORT or PREVIOUS LEGS REPORT gives the maintenance message ALT PRESS SW:

\*\*ON A/C 201-202,

(Ref. Fig. 201/TASK 38-31-00-991-001)

\*\*ON A/C 203-225, 235-275, 282-299, 426-475, 479-499, 503-549, 551-599, 701-749,

(Ref. Fig. 201A/TASK 38-31-00-991-001-A)

\*\*ON A/C 201-225, 235-275, 282-299, 426-475, 479-499, 503-549, 551-599, 701-749,

- (2) do a check of the electrical connections 43MG/A.
- (3) If the electrical connections are ok:
  - replace the PRESS SW-ALTITUDE (43MG), (Ref. AMM TASK 38-31-69-000-001) and (Ref. AMM TASK 38-31-69-400-001).
  - NOTE : If the altitude pressure switch does not operate, the system will continue to operate as follows:
    - the LG signal is used to give the information ON GROUND or IN FLIGHT
    - on the ground the vacuum generator will operate,
    - in flight the vacuum generator is inhibited.
- R \*\*ON A/C 227-227, 229-234, 276-281, 476-478,
  - B. If the operational test operates OK:
    - Refer to the bite test last leg or previous legs report.
       (Ref. Fig. 201/TASK 38-31-00-991-001)
    - (1) If the LAST LEG REPORT or PREVIOUS LEGS REPORT gives the maintenance message ALT PRESS SW:
    - (2) do a check of the electrical connections 43MG/A.

SROS

38-31-00

Page 219 May 01/08

### TROUBLE SHOOTING MANUAL

- (3) If the electrical connections are OK:
  - replace the PRESS SW-ALTITUDE (43MG), (Ref. AMM TASK 38-31-69-000-001) and (Ref. AMM TASK 38-31-69-400-001).

NOTE : If the altitude pressure switch does not operate, the system will continue to operate as follows:

- the LG signal is used to give the information ON GROUND or IN FLIGHT
- on the ground the vacuum generator will operate,in flight the vacuum generator is inhibited.

\*\*ON A/C ALL

#### C. Test

- (1) Do the test given as in paragraph 3. A. to check the correct operation (Ref. AMM TASK 38-31-00-710-009).
- (2) After the subsequent flight, make sure that the fault does not continue.

EFF : ALL 38-31-00

Page 220 Aug 01/07

### TROUBLE SHOOTING MANUAL

\*\*ON A/C 232-233,

TASK 38-31-00-810-812

Fault in the Flush Control Unit (FCU)

- 1. Possible Causes
  - cable connections
  - Flush Control Unit (FCU)
- 2. Job Set-up Information
  - A. Referenced Information

REFERENCE	DESIGNATION
AMM 38-31-00-710-009 AMM 38-31-00-740-001 AMM 38-31-12-000-001 AMM 38-31-12-400-001 38-31-00-991-001	Operational Test of the Toilet Unit BITE Test of the Vacuum Toilet System Removal of the Flush Control Unit Installation of the Flush Control Unit Fig. 201

- 3. Fault Confirmation
  - A. Test
    - (1) Do a test of the vacuum toilet system (Ref. AMM TASK 38-31-00-710-009).
  - B. Do the bite test (Ref. AMM TASK 38-31-00-740-001).
- 4. Fault Isolation
  - A. If the test gives a different maintenance message, you can find the related trouble shooting procedure in the applicable Page Block 101.
  - B. If the operational test does not operate:
    - Refer to the bite test last leg or previous legs report page. (Ref. Fig. 201/TASK 38-31-00-991-001)
    - (1) If the LAST LEG REPORT or PREVIOUS LEG gives the maintenance message LAV X FCU:
      - do a check of the cable connections to the FCU and from the FCU to the assembly components.
    - (2) If the fault continues:
      - replace the Flush Control Unit (FCU), (Ref. AMM TASK 38-31-12-000-001) and (Ref. AMM TASK 38-31-12-400-001).

EFF: 232-233,

38-31-00

Page 221 Aug 01/07

# TROUBLE SHOOTING MANUAL

### C. Test

- (1) Do the test as given in paragraph 3. A. to check the correct operation.
- (2) After the subsequent flight, make sure that the fault does not continue.

EFF : 232-233,
SROS

38-31-00

Page 222 Aug 01/07

# TROUBLE SHOOTING MANUAL

\*\*ON A/C ALL

TASK 38-31-00-810-813

Fault in the Generator Power

- 1. Possible Causes
  - RELAY-MOTOR START (36MG)
  - RELAY-FAN PHASE OFF (38MG)
  - GENERATOR-VACUUM (37MG)
  - XDCR-DELTA P (42MG)
- 2. Job Set-up Information
  - A. Referenced Information

REFERENCE	DESIGNATION
24-00-00-810-818	Computer Reset
ESPM 204650	
AMM 38-31-00-710-009	Operational Test of the Toilet Unit
AMM 38-31-00-740-001	BITE Test of the Vacuum Toilet System
AMM 38-31-36-000-001	Removal of the Motor Start Relay (36MG)
AMM 38-31-36-400-001	Installation of the Motor Start Relay (36MG)
AMM 38-31-64-000-001	Removal of the Vacuum Generator 37MG
AMM 38-31-64-400-001	Installation of the Vacuum Generator 37MG
AMM 38-31-68-000-001	Removal of the Differential Pressure Transducer 42MG
AMM 38-31-68-400-001	Installation of the Differential Pressure Transducer
	42MG
ASM 38-31/10	
**ON A/C 201-202, 227-22	7, 229-234, 276-281, 476-478,

38-31-00-991-001 Fig. 201

\*\*ON A/C 203-225, 235-275, 282-299, 426-455, 479-499, 503-549, 551-599, 701-749,

38-31-00-991-001-A Fig. 201A

EFF: ALL

38-31-00

Page 223 May 01/08

### TROUBLE SHOOTING MANUAL

#### \*\*ON A/C ALL

#### 3. Fault Confirmation

- A. Test.
  - (1) Do a test of the vacuum toilet system (Ref. AMM TASK 38-31-00-710-009).
- B. Do the bite test (Ref. AMM TASK 38-31-00-740-001).

#### 4. Fault Isolation

- A. If the test gives a different maintenance message, you can find the related trouble shooting procedure in the applicable Page Block 101.
- R \*\*ON A/C 201-225, 235-275, 282-299, 426-455, 479-499, 503-549, 551-599, R 701-749,
  - B. If the operational test is not satisfactory:Refer to the bite test last leg or previous legs report.

\*\*ON A/C 201-202,

(Ref. Fig. 201/TASK 38-31-00-991-001)

R \*\*ON A/C 203-225, 235-275, 282-299, 426-455, 479-499, 503-549, 551-599, R 701-749,

(Ref. Fig. 201A/TASK 38-31-00-991-001-A)

- R \*\*ON A/C 201-225, 235-275, 282-299, 426-455, 479-499, 503-549, 551-599, R 701-749,
  - (1) If the LAST LEG REPORT or PREVIOUS LEGS REPORT page gives the maintenance message VACU GEN SUPPLY:
    - open and close the circuit breaker 35MG (Ref. TASK 24-00-00-810-818).
  - (2) If the fault continues:
    - (a) Do a check to make sure that the motor start relay 36MG functions correctly when energized:
      - make sure that the voltage at the contactor 36MG-A of the motor start relay is correct (Ref. ASM 38-31/10).
      - make sure that the circuit breakers 32MG, 33MG, 34MG are open.
      - with the circuit breakers 33MG open and 35MG closed do a continuity check between terminals L1-T1, L2-T2 and L3-T3 on the motor start relay 36MG (Ref. ASM 38-31/10).

EFF: ALL

38-31-00

Page 224 Feb 01/08

#### TROUBLE SHOOTING MANUAL

- (b) Do a check to make sure that the motor start relay 36MG functions correctly when de-energized:
  - make sure that the circuit breakers 32MG, 33MG, 34MG and 35MG are open.
  - make sure that there is no voltage at the contactor 36MG-A of the motor, do a continuity check between terminals L1-T1, L2-T2 and L3-T3 on the motor start relay 36MG (Ref. ASM 38-31/10).
- (3) If there is no continuity in step (2) (a), or continuity in step (2) (b):
  - replace the RELAY-MOTOR START (36MG), (Ref. AMM TASK 38-31-36-000-001) and (Ref. AMM TASK 38-31-36-400-001).
- (4) If the fault continues:
  - do a check of the fan phase relay (Ref. ASM 38-31/10), if necessary:
  - replace the RELAY-FAN PHASE OFF (38MG), (Ref. ESPM 204650).
- (5) If the fault continues:
  - replace the GENERATOR-VACUUM (37MG), (Ref. AMM TASK 38-31-64-000-001) and (Ref. AMM TASK 38-31-64-400-001).
- R \*\*ON A/C 227-227, 229-234, 276-281, 476-478,
  - B. If the operational test is not satisfactory:
    - Refer to the bite test last leg or previous legs report. (Ref. Fig. 201/TASK 38-31-00-991-001)
    - (1) If the LAST LEG REPORT or PREVIOUS LEGS REPORT page gives the maintenance message CHECK GEN POWER:
      - open and close the circuit breaker 35MG (Ref. TASK 24-00-00-810-818).
    - (2) If the fault continues:
      - (a) Do a check to make sure that the motor start relay 36MG functions correctly when energized:
        - make sure that the voltage at the contactor 36MG-A of the motor start relay is correct (Ref. ASM 38-31/10).
        - make sure that the circuit breakers 32MG, 33MG, 34MG are open.
        - with the circuit breakers 33MG open and 35MG closed do a continuity check between terminals L1-T1, L2-T2 and L3-T3 on the motor start relay 36MG (Ref. ASM 38-31/10).
      - (b) Do a check to make sure that the motor start relay 36MG functions correctly when de-energized:
        - make sure that the circuit breakers 32MG, 33MG, 34MG and 35MG are open.
        - make sure that there is no voltage at the contactor 36MG-A of the motor, do a continuity check between terminals L1-T1, L2-T2 and L3-T3 on the motor start relay 36MG (Ref. ASM 38-31/10).

EFF: 201-225, 227-227, 229-299, 426-455, 476-499, 503-549, 551-599, 701-749,

38-31-00

Page 225 May 01/08

#### TROUBLE SHOOTING MANUAL

- (3) If there is no continuity in step (2) (a), or continuity in step (2) (b):
  - replace the RELAY-MOTOR START (36MG), (Ref. AMM TASK 38-31-36-000-001) and (Ref. AMM TASK 38-31-36-400-001).
- (4) If the fault continues:
  - do a check of the fan phase relay (Ref. ASM 38-31/10), if necessary:
  - replace the RELAY-FAN PHASE OFF (38MG), (Ref. ESPM 204650).
- (5) If the fault continues:
  - replace the GENERATOR-VACUUM (37MG), (Ref. AMM TASK 38-31-64-000-001) and (Ref. AMM TASK 38-31-64-400-001).

\*\*ON A/C 456-475,

- B. If the operational test is not satisfactory:
  - Refer to the bite test last leg or previous legs report.
  - (1) If the LAST LEG REPORT or PREVIOUS LEGS REPORT page gives the maintenance message CHECK GEN POWER:
    - open and close the circuit breaker 35MG (Ref. TASK 24-00-00-810-818).
  - (2) If the fault continues:
    - remove and clean the XDCR-DELTA P (42MG), (Ref. AMM TASK 38-31-68-000-001) and (Ref. AMM TASK 38-31-68-400-001).
  - (3) If the fault continues:
    - replace the XDCR-DELTA P (42MG), (Ref. AMM TASK 38-31-68-000-001)
       and (Ref. AMM TASK 38-31-68-400-001).
  - (4) If the fault continues:
    - (a) do a check to make sure that the motor start relay **36MG** functions correctly when energized:
      - make sure that the voltage at the contactor 36MG-A of the motor start relay is correct (Ref. ASM 38-31/10).
      - make sure that the circuit breakers 32MG, 33MG, 34MG are open.
      - with the circuit breakers 33MG open and 35MG closed do a continuity check between terminals L1-T1, L2-T2 and L3-T3 on the motor start relay 36MG (Ref. ASM 38-31/10).
    - (b) Do a check to make sure that the motor start relay 36MG functions correctly when de-energized:
      - make sure that the circuit breakers 32MG, 33MG, 34MG and 35MG are open.
      - make sure that there is no voltage at the contactor 36MG-A of the motor, do a continuity check between terminals L1-T1, L2-T2 and L3-T3 on the motor start relay 36MG (Ref. ASM 38-31/10).

38-31-00

EFF: 227-227, 229-234, 276-281, 456-478,

Page 226 May 01/08

### TROUBLE SHOOTING MANUAL

- (5) If there is no continuity in step (4) (a), or continuity in step (4)
  (b):
  - replace the RELAY-MOTOR START (36MG), (Ref. AMM TASK 38-31-36-000-001) and (Ref. AMM TASK 38-31-36-400-001).
- (6) If the fault continues:
  - do a check of the fan phase relay (Ref. ASM 38-31/10), if necessary:
  - replace the RELAY-FAN PHASE OFF (38MG), (Ref. ESPM 204650).
- (7) If the fault continues:
  - replace the GENERATOR-VACUUM (37MG), (Ref. AMM TASK 38-31-64-000-001) and (Ref. AMM TASK 38-31-64-400-001).

#### \*\*ON A/C ALL

# C. Test

- (1) Do the test as given in paragraph 3. A. to check the correct operation.
- (2) After the subsequent flight, make sure that the fault does not continue.

EFF: ALL

38-31-00

Page 227 Aug 01/07

### TROUBLE SHOOTING MANUAL

TASK 38-31-00-810-817

NO CFDIU DATA

- 1. Possible Causes
  - CFDIU (1TW)
  - wiring
- 2. Job Set-up Information
  - A. Referenced Information

REFE	RENCE	DESIGNATION
AMM	31-32-00-710-002	Operational Test of the Back-up Mode
AMM	31-32-34-000-001	Removal of the CFDIU (1TW)
AMM	31-32-34-400-001	Installation of the CFDIU (1TW)
AMM	38-31-00-710-009	Operational Test of the Toilet Unit
ASM	31-32/00	·

38-31-00-991-001 Fig. 201

\*\*ON A/C 203-225, 235-275, 282-299, 426-475, 479-499, 503-549, 551-599, 701-749,

38-31-00-991-001-A Fig. 201A

\*\*ON A/C ALL

### 3. Fault Confirmation

- A. Test
  - (1) Do a test of the vacuum toilet system (Ref. AMM TASK 38-31-00-710-009).
  - (2) Do a test of the centralized fault display interface unit (CFDIU) (Ref. AMM TASK 31-32-00-710-002).

38-31-00 EFF: ALL

Page 228 May 01/08

### TROUBLE SHOOTING MANUAL

### 4. Fault Isolation

A. If the test gives a different maintenance message, you can find the related trouble shooting procedure in the applicable Page Block 101.

\*\*ON A/C 201-225, 235-299, 426-499, 503-549, 551-599, 701-749,

B. If the LAST LEG REPORT or PREVIOUS LEGS REPORT page gives the maintenance message CFDIU/VSC NO DATA:

\*\*ON A/C 201-202, 276-281, 476-478,

(Ref. Fig. 201/TASK 38-31-00-991-001)

\*\*ON A/C 203-225, 235-275, 282-299, 426-475, 479-499, 503-549, 551-599, 701-749,

(Ref. Fig. 201A/TASK 38-31-00-991-001-A)

\*\*ON A/C 201-225, 235-299, 426-499, 503-549, 551-599, 701-749,

- do a check and repair the wiring between the:
  - CFDIU connector AB/3A / AB/4A and the vacuum system controller 31MG connector AB/2H / AB/2J
  - (Ref. ASM 31-32/00).
- (1) If the fault continues:
  - replace the CFDIU (1TW), (Ref. AMM TASK 31-32-34-000-001) and (Ref. AMM TASK 31-32-34-400-001).
- R \*\*ON A/C 227-227, 229-234,
  - B. If the LAST LEG REPORT or PREVIOUS LEGS REPORT page gives the maintenance message NO CFDIU DATA:

(Ref. Fig. 201/TASK 38-31-00-991-001)

- do a check and repair the wiring between the:
  - CFDIU connector AB/3A / AB/4A and the vacuum system controller 31MG connector AB/2H / AB/2J
  - (Ref. ASM 31-32/00).
- (1) If the fault continues:
  - replace the CFDIU (1TW), (Ref. AMM TASK 31-32-34-000-001) and (Ref. AMM TASK 31-32-34-400-001).

EFF: ALL 38-3

38-31-00 Page 229
May 01/08

# TROUBLE SHOOTING MANUAL

### \*\*ON A/C ALL

### C. Test

- (1) Do the test as given in paragraph 3. A. to check the correct operation.
- (2) After the subsequent flight, make sure that the fault does not continue.

EFF: ALL
SROS

38-31-00

Page 230 Aug 01/07

# TROUBLE SHOOTING MANUAL

\*\*ON A/C 233-233,

TASK 38-31-00-810-818

Vacuum System Controller Fault

- 1. Possible Causes
- 2. Job Set-up Information

Not Applicable

- 3. Fault Confirmation
  - A. Not applicable
- 4. Fault Isolation
  - A. If the Maintenance Message VSC FEEDBACK FAULTY LAV 'X' or VSC FEEDBACK ENABLE LAV 'X' is shown on the CFDS:
     no action is necessary if the toilets function correctly

NOTE: The VSC will be modified to correct this failure.

EFF: 233-233, 38-31-00

**SROS** 

Page 231

Aug 01/07

### TROUBLE SHOOTING MANUAL

\*\*ON A/C ALL

TASK 38-31-00-810-819

Rinse Water keeps Flowing in Toilet Bowl

- 1. Possible Causes
  - RINSE VALVE
- 2. Job Set-up Information
  - A. Referenced Information

REFERENCE	DESIGNATION
AMM 38-31-00-710-009 AMM 38-31-55-100-001	Operational Test of the Toilet Unit Cleaning of the Water Valve (Rinse Valve) FORWARD of the Wing

### 3. Fault Confirmation

- A. Test
  - (1) Do a test of the vacuum toilet system (Ref. AMM TASK 38-31-00-710-009).
- 4. Fault Isolation
  - A. If the test gives a different maintenance message, you can find the related trouble shooting procedure in the applicable Page Block 101.
  - B. If water keeps flowing into the toilet bowl after the flush cycle is over:
    - Remove and clean the RINSE VALVE (Ref. AMM TASK 38-31-55-100-001).
  - C. Do the test as given in paragraph 3. A. and check the correct operation of the toilet.

EFF: ALL 38-31-00

Page 232 Aug 01/07

### TROUBLE SHOOTING MANUAL

TASK 38-31-00-810-821

Draining of the Vacuum Toilets is Too Slow

- 1. Possible Causes
  - toilet waste lines
  - flow diverter
- 2. Job Set-up Information
  - A. Referenced Information

REFE	RENCE	DESIGNATION
AMM	38-30-00-615-002	Blockage Removal (Orbital Flush Valve)
AMM	38-31-00-100-004	Cleaning of the Toilet Waste Lines with High Pressure Equipment
AMM	38-31-00-100-005	Cleaning of the Toilet Waste Lines with Crushed Ice
AMM	38-31-00-100-006	Cleaning of the Flow Diverter in the Waste Holding Tank
AMM	38-31-00-100-007	Removal of Blockages at the Inlet Area of the Waste Holding Tank
AMM	38-31-00-710-002	Operational Test of the Vacuum Toilet System

- 3. Fault Confirmation
  - A. Test
    - (1) Do a test of the vacuum toilet system (Ref. AMM TASK 38-31-00-710-002)
- 4. Fault Isolation
  - A. If the test gives a different maintenance message, you can find the related trouble shooting procedure in the applicable Page Block 101.
  - B. If the toilet(s) does (do) not flush normally:
    - Do the blockage removal task (Ref. AMM TASK 38-30-00-615-002).
    - (1) If the fault continues:
      - Remove the blockage from the inlet area of the waste tank (Ref. AMM TASK 38-31-00-100-007).
      - NOTE : The most possible areas for blockage build-up in the waste lines are:
        - at the "Y" duct near the tank,
        - at the tank inlet ducts.
          - It is recommended to inspect these areas first.

EFF: ALL

38-31-00

Page 233 Aug 01/07

### TROUBLE SHOOTING MANUAL

- (2) If the fault continues:
  - Clean the toilet waste lines (Ref. AMM TASK 38-31-00-100-004).
- (3) If the fault continues:
  - Clean the toilet waste lines with crush ice (Ref. AMM TASK 38-31-00-100-005).
- (4) If the fault continues:
  - Clean the flow diverter in the waste holding tank (Ref. AMM TASK 38-31-00-100-006).

NOTE: It is recommended to clean the waste tank and the waste lines more often to improve the reliability of the system (Ref: AIB-SIL 38-020).

C. Do the test as given in paragraph 3. A. and check the correct operation of the toilet system.

EFF: ALL

38-31-00

Page 234 Aug 01/07

### TROUBLE SHOOTING MANUAL

TASK 38-31-00-810-822

LIQUID LVL SNSR OR LIQUID LVL XMTR OR VAC SYS CONT Fault

### 1. Possible Causes

- WATER SEPERATOR (3302MM)
- GENERATOR, VACUUM (37MG)
- XMTR-LEVEL PHASE OFF (40MG)
- SENSOR-LEVEL (41MG)
- CONTROLLER-VACUUM SYSTEM (31MG)
- Liquid Level Transmitter (LLT) reference line

### 2. Job Set-up Information

A. Referenced Information

REFERENCE	DESIGNATION
24-00-00-810-818	Computer Reset
AMM 38-13-67-610-001	
AMM 38-31-00-100-009	Cleaning of the Liquid Level Transmitter (LLT)
	Reference Line
AMM 38-31-00-710-002	Operational Test of the Vacuum Toilet System
AMM 38-31-00-740-001	BITE Test of the Vacuum Toilet System
AMM 38-31-34-000-001	Removal of the Vacuum System Controller 31MG
AMM 38-31-34-400-001	Installation of the Vacuum System Controller 31MG
AMM 38-31-62-000-001	Removal of the Liquid Level Transmitter (40MG)
AMM 38-31-62-400-001	Installation of the Liquid Level Transmitter (40MG)
AMM 38-31-63-000-001	Removal of the Liquid Level Sensor (41MG)
AMM 38-31-63-400-001	Installation of the Liquid Level Sensor (41MG)
AMM 38-31-64-000-001	Removal of the Vacuum Generator 37MG
AMM 38-31-64-400-001	Installation of the Vacuum Generator 37MG

R \*\*ON A/C 227-227, 229-234, 276-281, 476-478,

38-31-00-991-001 Fig. 201

\*\*ON A/C 203-225, 235-275, 282-299, 426-475, 479-499, 503-549, 551-599, 701-749,

38-31-00-991-001-A Fig. 201A

EFF: ALL 38-31-00

Page 235 May 01/08

### TROUBLE SHOOTING MANUAL

#### \*\*ON A/C ALL

### 3. Fault Confirmation

- A. Test
  - (1) Do a test of the vacuum toilet system (Ref. AMM TASK 38-31-00-710-002).
- B. Do the bite test (Ref. AMM TASK 38-31-00-740-001).
- 4. Fault Isolation
  - A. If the test gives a different maintenance message, you can find the related trouble shooting procedure in the applicable Page Block 101.
- R \*\*ON A/C 203-225, 229-281, 426-455, 477-478, 551-599, 701-749,
  - B. If the operational test operates OK:Refer to the bite test last leg or previous leg report page.
- R \*\*ON A/C 229-234, 276-281, 477-478,

(Ref. Fig. 201/TASK 38-31-00-991-001)

\*\*ON A/C 203-225, 235-275, 426-455, 551-599, 701-749,

(Ref. Fig. 201A/TASK 38-31-00-991-001-A)

- R \*\*ON A/C 203-225, 229-281, 426-455, 477-478, 551-599, 701-749,
  - (1) If the LAST LEG or PREVIOUS LEG REPORT gives the maintenance message LIQD LVL XMTR/ LIQD LVL SNSR/VSC:
    - do the procedure to reset the VSC (Ref. TASK 24-00-00-810-818).
  - (2) If the fault continues:
    - do a check and clean the Liquid Level Transmitter (LLT) reference line (Ref. AMM TASK 38-31-00-100-009).
  - (3) If the LLT reference line is contaminated,
    - do a check and clean the WATER SEPERATOR (3302MM) as necessary (Ref. AMM TASK 38-13-67-610-001).
    - replace the GENERATOR, VACUUM (37MG), (Ref. AMM TASK 38-31-64-000-001) and (Ref. AMM TASK 38-31-64-400-001).

EFF: ALL

38-31-00

Page 236 May 01/08

#### TROUBLE SHOOTING MANUAL

- (4) If the fault continues:
  - replace the XMTR-LEVEL PHASE OFF (40MG), (Ref. AMM TASK 38-31-62-000-001) and (Ref. AMM TASK 38-31-62-400-001).
- (5) If the fault continues:
  - replace the SENSOR-LEVEL (41MG), (Ref. AMM TASK 38-31-63-000-001) and (Ref. AMM TASK 38-31-63-400-001).
- (6) If the fault continues:
  - replace the CONTROLLER-VACUUM SYSTEM (31MG), (Ref. AMM TASK 38-31-34-000-001) and (Ref. AMM TASK 38-31-34-400-001).

\*\*ON A/C 227-227,

- B. If the operational test operates OK:
  - Refer to the bite test last leg or previous leg report page. (Ref. Fig. 201/TASK 38-31-00-991-001)
  - (1) If the LAST LEG REPORT or PREVIOUS LEG REPORT gives the maintenance message

LIQUID LVL SNSR OR

LIQUID LVL XMTR OR

VAC SYS CONT:

- do the procedure to reset the VSC (Ref. TASK 24-00-00-810-818).
- (2) If the fault continues:
  - do a check and clean the Liquid Level Transmitter (LLT) reference line (Ref. AMM TASK 38-31-00-100-009).
- (3) If the LLT reference line is contaminated,
  - do a check and clean the WATER SEPERATOR (3302MM) as necessary (Ref. AMM TASK 38-13-67-610-001).
  - replace the GENERATOR, VACUUM (37MG), (Ref. AMM TASK 38-31-64-000-001) and (Ref. AMM TASK 38-31-64-400-001).
- (4) If the fault continues:
  - replace the XMTR-LEVEL PHASE OFF (40MG), (Ref. AMM TASK 38-31-62-000-001) and (Ref. AMM TASK 38-31-62-400-001).
- (5) If the fault continues:
  - replace the SENSOR-LEVEL (41MG), (Ref. AMM TASK 38-31-63-000-001) and (Ref. AMM TASK 38-31-63-400-001).
- (6) If the fault continues:
  - replace the CONTROLLER-VACUUM SYSTEM (31MG), (Ref. AMM TASK 38-31-34-000-001) and (Ref. AMM TASK 38-31-34-400-001)

203-225, 227-227, 229-281, 426-455, 477-478, 551-599, 701-749,

38-31-00

Page 237 May 01/08

#### TROUBLE SHOOTING MANUAL

\*\*ON A/C 282-299, 456-476, 479-499, 503-549,

B. If the operational test operates OK:

Refer to the bite test last leg or previous leg report page.

\*\*ON A/C 476-476,

(Ref. Fig. 201/TASK 38-31-00-991-001)

\*\*ON A/C 282-299, 456-475, 479-499, 503-549,

(Ref. Fig. 201A/TASK 38-31-00-991-001-A)

\*\*ON A/C 282-299, 456-476, 479-499, 503-549,

(1) If the LAST LEG or PREVIOUS LEG REPORT gives the maintenance message LIQUID LVL SNSR OR LIQUID LVL XMTR OR VAC SYS CONT:

NOTE : This is when the VSC with the P/N 14404-001-1 or P/N 14404-11 is installed.

- do the procedure to reset the VSC (Ref. TASK 24-00-00-810-818).
- (2) If the fault continues:
  - do a check and clean the Liquid Level Transmitter (LLT) reference line (Ref. AMM TASK 38-31-00-100-009).
- (3) If the LLT reference line is contaminated,
  - do a check and clean the WATER SEPERATOR (3302MM) as necessary (Ref. AMM TASK 38-13-67-610-001).
  - replace the GENERATOR, VACUUM (37MG), (Ref. AMM TASK 38-31-64-000-001) and (Ref. AMM TASK 38-31-64-400-001).
- (4) If the fault continues:
  - replace the XMTR-LEVEL PHASE OFF (40MG), (Ref. AMM TASK 38-31-62-000-001) and (Ref. AMM TASK 38-31-62-400-001).
- (5) If the fault continues:
  - replace the SENSOR-LEVEL (41MG), (Ref. AMM TASK 38-31-63-000-001) and (Ref. AMM TASK 38-31-63-400-001).
- (6) If the fault continues:
  - replace the CONTROLLER-VACUUM SYSTEM (31MG), (Ref. AMM TASK 38-31-34-000-001) and (Ref. AMM TASK 38-31-34-400-001)

EFF: 282-299, 456-476, 479-499, 503-549,

38-31-00

Page 238 Nov 01/07

**SROS** 

R

#### TROUBLE SHOOTING MANUAL

- (7) If the THROUBLE SHOOTING DATA page gives the maintenance message LIQD LVL XMTR/ LIQD LVL SNSR/VSC:
  - NOTE: This is when the VSC with the P/N 14404-011A, P/N 14404-11B or P/N 1404-010 is installed.
  - do the procedure to reset the VSC (Ref. TASK 24-00-00-810-818).
- (8) If the fault continues:
  - do a check and clean the Liquid Level Transmitter (LLT) reference line (Ref. AMM TASK 38-31-00-100-009).
- (9) If the LLT reference line is contaminated,
  - do a check and clean the WATER SEPERATOR (3302MM) as necessary (Ref. AMM TASK 38-13-67-610-001).
  - replace the GENERATOR, VACUUM (37MG), (Ref. AMM TASK 38-31-64-000-001) and (Ref. AMM TASK 38-31-64-400-001).
- (10) If the fault continues:
  - replace the XMTR-LEVEL PHASE OFF (40MG), (Ref. AMM TASK 38-31-62-000-001) and (Ref. AMM TASK 38-31-62-400-001).
- (11) If the fault continues:
  - replace the SENSOR-LEVEL (41MG), (Ref. AMM TASK 38-31-63-000-001) and (Ref. AMM TASK 38-31-63-400-001).
- (12) If the fault continues:
  - replace the CONTROLLER-VACUUM SYSTEM (31MG), (Ref. AMM TASK 38-31-34-000-001) and (Ref. AMM TASK 38-31-34-400-001).

### \*\*ON A/C ALL

R

- C. Test
  - (1) Do the test as given in paragraph 3. A. to check the correct operation.
  - (2) After the subsequent flight, make sure that the fault does not continue.

EFF: ALL

**SROS** 

38-31-00

Page 239 Nov 01/07

# TROUBLE SHOOTING MANUAL

TASK 38-31-00-810-823

Vacuum Toilet System does not Operate Correctly on ground

### 1. Possible Causes

- GENERATOR-VACUUM (37MG)
- RELAY-MOTOR START (36MG)
- membrane switch, WTR SYSTEM DEPRE
- limit switch 44MG
- CHECK VALVE 3320MM

### 2. Job Set-up Information

A. Referenced Information

REFE	RENCE 	DESIGNATION
AMM	38-30-00-010-002	Removal of the Toilet Drain Lines
AMM AMM	38-30-00-410-002 38-31-00-710-008	Installation of the Toilet Drain Lines
AMM		Operational Test of the Door Limit Switch 44MG Operational Test of the Toilet Unit
AMM	38-31-00-740-001	BITE Test of the Vacuum Toilet System
AMM	38-31-00-790-002	Leak Test of the Vacuum Toilet System
AMM	38-31-00-820-001	Adjustment of the Contact Point of the Waste Service-Panel-Door Limit-Switch (44MG)
AMM	38-31-13-000-001	Removal of the Waste Service-Panel Door Limit-Switch (44MG)
AMM	38-31-13-400-001	Installation of the Waste Service-Panel Door Limit-Switch (44MG)
AMM	38-31-64-000-001	Removal of the Vacuum Generator 37MG
AMM	38-31-64-400-001	Installation of the Vacuum Generator 37MG
AMM	38-31-65-000-001	Removal of the Check Valve 3320MM
AMM	38-31-65-400-001	Installation of the Check Valve 3320MM
ASM	38-31/10	

R \*\*ON A/C 201-202, 227-227, 229-234, 276-281, 476-478,

38-31-00-991-001 Fig. 201

\*\*ON A/C 203-225, 235-275, 282-299, 426-475, 479-499, 503-549, 551-599, 701-749,

38-31-00-991-001-A Fig. 201A

EFF: ALL

38-31-00

Page 240 May 01/08

### TROUBLE SHOOTING MANUAL

\*\*ON A/C ALL

### 3. Fault Confirmation

\*\*ON A/C 254-275,

A. Make sure that the light in the membrane switch, WTR SYSTEM DEPRE on the FAP is OFF.

\*\*ON A/C ALL

- B. Fault Confirmation Test
  - (1) Make sure that the circuit breakers of the Vacuum toilet system are closed.
  - (2) Do an operational test of the vacuum toilet system (Ref. AMM TASK 38-31-00-710-009).
- C. Do the bite test (Ref. AMM TASK 38-31-00-740-001).

### 4. Fault Isolation

- A. If the FAP gives the maintenance message SYSTEM INOP:
  - Refer to the LAST LEG REPORT or PREVIOUS LEGS REPORT page of the bite test.
- R \*\*ON A/C 201-202, 227-227, 229-234, 276-281, 476-478,

(Ref. Fig. 201/TASK 38-31-00-991-001)

\*\*ON A/C 203-225, 235-275, 282-299, 426-475, 479-499, 503-549, 551-599, 701-749,

(Ref. Fig. 201A/TASK 38-31-00-991-001-A)

\*\*ON A/C ALL

- (1) If there is NO FAULTS indication on the LAST LEG REPORT or PREVIOUS LEGS REPORT page:
  - Operate the flush switches to flush the toilets.
- (2) If the toilets rinse but do not flush:
  - open and close the circuit breaker 33MG.

EFF: ALL **SROS** 

38-31-00

Page 241

### TROUBLE SHOOTING MANUAL

- (3) If the fault continues:
  - replace the GENERATOR-VACUUM (37MG), (Ref. AMM TASK 38-31-64-000-001) and (Ref. AMM TASK 38-31-64-400-001).
- (4) If the fault continues:
  - replace the RELAY-MOTOR START (36MG)
  - do a check and repair the aircraft wiring (Ref. ASM 38-31/10).
- B. If the vacuum toilet system does not flush on the ground:
  - do a check of the door limit switch 44MG (Ref. AMM TASK 38-31-00-710-008).
  - do a check of the switch adjustment and adjust as necessary (Ref. AMM TASK 38-31-00-820-001).
  - (1) If the fault continues:
    - replace the door limit switch 44MG, (Ref. AMM TASK 38-31-13-000-001) and (Ref. AMM TASK 38-31-13-400-001).
  - (2) If the fault continues:
    - do a check of the aircraft wiring and repair as necessary (Ref. ASM 38-31/10).
- C. If the vacuum generator operates, but there is not sufficient vacuum:
  - do a leak check of the vacuum toilet system (Ref. AMM TASK 38-31-00-790-002).
  - replace the O-rings and or the vacuum toilet line as necessary (Ref. AMM TASK 38-30-00-010-002) and (Ref. AMM TASK 38-30-00-410-002).
  - (1) If the fault continues:
    - replace the CHECK VALVE 3320MM, (Ref. AMM TASK 38-31-65-000-001)
       and (Ref. AMM TASK 38-31-65-400-001).
- D. Test
  - (1) Do the test given as in paragraph 3. A. to check the correct operation.
  - (2) After the subsequent flight, make sure that the fault does not continue.

EFF: ALL

38-31-00

Page 242 Aug 01/07

# *GA319/A320/A321*

# TROUBLE SHOOTING MANUAL

TASK 38-31-00-810-824

Toilet Assembly Failure

### 1. Possible Causes

- Water Quantity
- Water Line Connections
- flush switch
- Flush Control Unit (FCU)
- Water Valve
- Blockage
- Flush Valve
- Flush Ring
- Water Valve Screen
- Potable Water Line Connections

### 2. Job Set-up Information

A. Referenced Information

REFE	RENCE	DESIGNATION
AMM	12-15-38-613-001	Fill the Potable Water Tank System (Aircraft Electrical Power Available)
AMM	38-30-00-615-001	Blockage Removal from the Toilet Flush Valve
AMM	38-31-00-710-009	Operational Test of the Toilet Unit
AMM		BITE Test of the Vacuum Toilet System
AMM		Removal of the Flush Control Unit
AMM		Installation of the Flush Control Unit
	38-31-19-000-001	Removal of the Toilet Flush Switch
AMM		Installation of the Toilet Flush Switch
AMM		Removal of the Water Valve
AMM	38-31-55-400-001	Installation of the Water Valve
AMM	38-31-57-000-001	Removal of the Flush Valve
AMM	38-31-57-400-001	Installation of the Flush Valve
ASM	38-31/11	
**0N	A/C 201-202, 227-22	7, 229-234, 276-281, 476-478,
38-3	1-00-991-001	Fig. 201
**0N 701-		5, 282-299, 426-475, 479-499, 503-549, 551-599,
38-3	1-00-991-001-A	Fig. 201A

EFF: ALL

38-31-00

Page 243 May 01/08

R

### TROUBLE SHOOTING MANUAL

#### \*\*ON A/C ALL

### 3. Fault Confirmation

- A. Fault Confirmation
  - (1) Make sure that the circuit breakers of the vacuum toilet system are closed.
  - (2) Do an operational test of the toilet assembly (Ref. AMM TASK 38-31-00-710-009).
- B. Do the bite test (Ref. AMM TASK 38-31-00-740-001).

#### 4. Fault Isolation

- A. If the FAP gives the maintenance message LAV X INOP:
  - (1) Refer to the LAST LEG REPORT or PREVIOUS LEGS REPORT page of the bite test.
- R \*\*ON A/C 201-202, 227-227, 229-234, 276-281, 476-478,

(Ref. Fig. 201/TASK 38-31-00-991-001)

\*\*ON A/C 203-225, 235-275, 282-299, 426-475, 479-499, 503-549, 551-599, 701-749,

(Ref. Fig. 201A/TASK 38-31-00-991-001-A)

\*\*ON A/C ALL

- B. If the toilet will not rinse or flush when the flush switch is pushed:do a check on all the other toilets.
  - (1) If the other toilets also do not rinse or flush:
    - do a check of the Water Quantity on the forward attendant panel
       120RH.
  - (2) If the water level is low or the tank is empty:
    - fill the potable water tank 3000MM (Ref. AMM TASK 12-15-38-613-001).
  - (3) If the fault continues:
    - Open and close the circuit breaker 32MG or 34MG.
    - do a check of the potable Water Line Connections.

NOTE: Make sure that the shut off valve 3025MM is open.

EFF: ALL

38-31-00

Page 244 May 01/08

### TROUBLE SHOOTING MANUAL

- (4) If the fault continues:
  - do a check for continuity between pins B and K of the plug 50MG1/A, 50MG2/A, 50MG3/A, 50MG4/A or 50MG7/A with the flush switch pushed (Ref. ASM 38-31/11).
  - if there is continuity with the flush switch release:
  - replace the flush switch, (Ref. AMM TASK 38-31-19-000-001) and (Ref. AMM TASK 38-31-19-400-001).
- (5) If the fault continues:
  - replace the Flush Control Unit (FCU), (Ref. AMM TASK 38-31-12-000-001) and (Ref. AMM TASK 38-31-12-400-001).
- (6) If the fault continues:
  - replace the Water Valve, (Ref. AMM TASK 38-31-55-000-001) and (Ref. AMM TASK 38-31-55-400-001).
- (7) If the toilet outlet stays open:
  - do a check of the flush valve for Blockage
  - remove and clean as necessary (Ref. AMM TASK 38-30-00-615-001).
  - (a) If the fault continues:
    - replace the Flush Valve, (Ref. AMM TASK 38-31-57-000-001) and (Ref. AMM TASK 38-31-57-400-001).
  - (b) If the fault continues:
    - replace Flush Control Unit (FCU), (Ref. AMM TASK 38-31-12-000-001) and (Ref. AMM TASK 38-31-12-400-001).
- (8) If toilet bowl is constantly rinsed:
  - disconnect the electrical connector of the water valve from the flush control unit (FCU).
  - (a) If the fault continues:
    - replace the Water Valve, (Ref. AMM TASK 38-31-55-000-001) and (Ref. AMM TASK 38-31-55-400-001).
- (9) If the water stops:
  - replace the Flush Control Unit (FCU), (Ref. AMM TASK 38-31-12-000-001) and (Ref. AMM TASK 38-31-12-400-001).
- C. If the flush cycle does not continue for 4 s when the flush switch is pushed:
  - replace the Flush Control Unit (FCU), (Ref. AMM TASK 38-31-12-000-001) and (Ref. AMM TASK 38-31-12-400-001).
  - (1) If the rinse water during flush is not sufficient when the flush switch is pushed:
    - do a check of the Flush Ring and clean if necessary.

NOTE: Make sure that the shut off valve 3025MM is open.

EFF: ALL

38-31-00

Page 245 Aug 01/07

### TROUBLE SHOOTING MANUAL

- (a) If the fault continues:
  - do a check of the Water Valve Screen and clean if necessary.
- (b) If the fault continues:
  - replace the Water Valve, (Ref. AMM TASK 38-31-55-000-001) and (Ref. AMM TASK 38-31-55-400-001).
- (c) If the fault continues:
  - do a check of the Potable Water Line Connections.

### 5. Close-up

- A. Close Access
  - (1) Do the test given in para. 3.
  - (2) After the subsequent flight, make sure that the fault does not continue.

38-31-00

К

Page 246 Aug 01/07

EFF :

### TROUBLE SHOOTING MANUAL

TASK 38-31-00-810-825

Service Door Limit Switch (44MG) Failure

- 1. Possible Causes
  - SW-SVCE PNL (44MG)
  - Service Panel Door (172AR)
- 2. Job Set-up Information
  - A. Referenced Information

REFERENCE	DESIGNATION
AMM 38-31-00-710-009	Operational Test of the Toilet Unit
AMM 38-31-00-820-001	Adjustment of the Contact Point of the Waste
	Service-Panel-Door Limit-Switch (44MG)
AMM 38-31-13-000-001	Removal of the Waste Service-Panel Door Limit-Switch
	(44MG)
AMM 38-31-13-400-001	Installation of the Waste Service-Panel Door
	Limit-Switch (44MG)

### 3. Fault Confirmation

- A. Test
  - (1) Do a test of the vacuum toilet system (Ref. AMM TASK 38-31-00-710-009).
- 4. Fault Isolation
  - A. If the test gives a different maintenance message, you can find the related trouble shooting procedure in the applicable Page Block 101.
  - B. If the test is not satisfactory:
    - open and close the Service Panel Door (172AR).
    - (1) If the fault continues:
      - do a check and adjust the SW-SVCE PNL (44MG) (Ref. AMM TASK 38-31-00-820-001).
    - (2) If the fault continues:
      - replace the SW-SVCE PNL (44MG). (Ref. AMM TASK 38-31-13-000-001) and (Ref. AMM TASK 38-31-13-400-001).
  - C. Do the test as given in paragraph 3. A. to check the correct operation.

38-31-00

R

Page 247 Aug 01/07

EFF :

ALL

### TROUBLE SHOOTING MANUAL

\*\*ON A/C 232-233,

TASK 38-31-00-810-826

LAV WTRV Failure

- 1. Possible Causes
  - Water Valve
- 2. Job Set-up Information
  - A. Referenced Information

REFERENCE	DESIGNATION
AMM 38-31-00-710-009	Operational Test of the Toilet Unit
AMM 38-31-00-740-001	BITE Test of the Vacuum Toilet System
AMM 38-31-55-000-001	Removal of the Water Valve
AMM 38-31-55-400-001	Installation of the Water Valve
38-31-00-991-001	Fig. 201

#### 3. Fault Confirmation

- A. Do the operational test of the vacuum toilet system (Ref. AMM TASK 38-31-00-710-009).
- B. Do the bite test (Ref. AMM TASK 38-31-00-740-001).

### 4. Fault Isolation

- A. If the test gives a different maintenance message, you can find the related trouble shooting procedure in the applicable Page Block 101.
- B. If the operational test does not operate:
  - Refer to the bite test last leg or previous leg report page.
     (Ref. Fig. 201/TASK 38-31-00-991-001)
  - (1) If the LAST LEG REPORT or PREVIOUS LEG REPORT give the maintenance message

LAV WTR V:

- do a check of the electrical connection of the water valve connector 50MG-A pins A and L.
- (2) If there is continuity:
  - replace the Water Valve, (Ref. AMM TASK 38-31-55-000-001) and (Ref. AMM TASK 38-31-55-400-001).

**38-31-00** 

D

232-233,

Page 248 Aug 01/07

EFF :

### TROUBLE SHOOTING MANUAL

### C. Test

- (1) Do the test as given in paragraph 3. A. to check the correct operation.
- (2) After the subsequent flight, make sure that the fault does not continue.

EFF : 232-233, SROS 38-31-00

Page 249 Aug 01/07

### TROUBLE SHOOTING MANUAL

\*\*ON A/C ALL

TASK 38-31-00-810-827

LAV X Failure

- 1. Possible Causes
  - FCU
  - wiring
  - WATER VALVE
  - FLUSH VALVE
- 2. Job Set-up Information
  - A. Referenced Information

REFERENCE	DESIGNATION
AMM 38-30-00-615-002 AMM 38-31-00-710-009 AMM 38-31-00-740-001 AMM 38-31-12-000-001 AMM 38-31-12-400-001 AMM 38-31-55-000-001 AMM 38-31-55-400-001	Blockage Removal (Orbital Flush Valve) Operational Test of the Toilet Unit BITE Test of the Vacuum Toilet System Removal of the Flush Control Unit Installation of the Flush Control Unit Removal of the Water Valve Installation of the Water Valve
AMM 38-31-57-000-001 AMM 38-31-57-400-001 AMM 38-31-57-820-001 ASM 38-31/14	Removal of the Flush Valve Installation of the Flush Valve Adjustment of the Open and Close Limit Switches

R \*\*ON A/C 201-202, 227-227, 229-234, 276-281, 476-478,

38-31-00-991-001 Fig. 201

\*\*ON A/C 203-225, 235-275, 282-299, 426-475, 479-499, 503-549, 551-599, 701-749,

Printed in France

38-31-00-991-001-A Fig. 201A

\*\*ON A/C ALL

- 3. Fault Confirmation
  - A. Do a test of the vacuum toilet system (Ref. AMM TASK 38-31-00-710-009).
  - B. Do the bite test (Ref. AMM TASK 38-31-00-740-001).

EFF: ALL
SROS

38-31-00

Page 250 May 01/08

### TROUBLE SHOOTING MANUAL

### 4. Fault Isolation

- A. If the test gives a different maintenance message, you can find the related trouble shooting procedure in the applicable Page Block 101.
- B. If the operational test does not operate:Refer to the bite test last leg or previous leg report.
- R \*\*ON A/C 201-202, 227-227, 229-234, 276-281, 476-478,

(Ref. Fig. 201/TASK 38-31-00-991-001)

\*\*ON A/C 203-225, 235-275, 282-299, 426-475, 479-499, 503-549, 551-599, 701-749,

(Ref. Fig. 201A/TASK 38-31-00-991-001-A)

\*\*ON A/C ALL

- (1) If the LAST LEG or PREVIOUS LEG REPORT give the maintenance message LAV X FCU:
  - replace the FCU (Ref. AMM TASK 38-31-12-000-001) and (Ref. AMM TASK 38-31-12-400-001).

If the fault continues:

- do a check and repair the wiring between the:
   FCU connector J2/B / J2/A / J2/C and flush valve motor (Ref. ASM 38-31/14).
- C. If the operational test does not operate:
  - Refer to the bite test last leg or previous leg report page.
- R \*\*ON A/C 201-202, 227-227, 229-234, 276-281, 476-478,

(Ref. Fig. 201/TASK 38-31-00-991-001)

\*\*ON A/C 203-225, 235-275, 282-299, 426-475, 479-499, 503-549, 551-599, 701-749,

(Ref. Fig. 201A/TASK 38-31-00-991-001-A)

\*\*ON A/C ALL

- (1) If the LAST LEG or PREVIOUS LEG REPORT give the maintenance message LAV X WATER VALVE:
  - replace the WATER VALVE, (Ref. AMM TASK 38-31-55-000-001) and (Ref. AMM TASK 38-31-55-400-001).

EFF: ALL

38-31-00

Page 251 May 01/08

SROS

#### TROUBLE SHOOTING MANUAL

- D. If the operational test does not operate:
  - Refer to the bite test last leg or previous leg report.

R \*\*ON A/C 201-202, 227-227, 229-234, 276-281, 476-478,

(Ref. Fig. 201/TASK 38-31-00-991-001)

\*\*ON A/C 203-225, 235-275, 282-299, 426-475, 479-499, 503-549, 551-599, 701-749,

(Ref. Fig. 201A/TASK 38-31-00-991-001-A)

\*\*ON A/C ALL

- (1) If the LAST LEG REPORT or PREVIOUS LEG REPORT gives the maintenance message LAV X FLUSH VALVE MOTOR:
  - make sure that the flush valve is not blocked.
  - if blocked, remove the blockage (Ref. AMM TASK 38-30-00-615-002).
- (2) If the fault continues:
  - replace the FLUSH VALVE, (Ref. AMM TASK 38-31-57-000-001) and (Ref. AMM TASK 38-31-57-400-001).
- E. If the operational test does not operate:
  - Refer to the bite test last leg or previous leg report page.
- R \*\*ON A/C 201-202, 227-227, 229-234, 276-281, 476-478,

(Ref. Fig. 201/TASK 38-31-00-991-001)

\*\*ON A/C 203-225, 235-275, 282-299, 426-475, 479-499, 503-549, 551-599, 701-749,

(Ref. Fig. 201A/TASK 38-31-00-991-001-A)

\*\*ON A/C ALL

- (1) If the LAST LEG REPORT or PREVIOUS LEG REPORT gives the maintenance message LAV X FLUSH VALVE CLOSED LIMIT SWITCH: or LAV X FLUSH VALVE OPEN LIMIT SWITCH:
  - adjust the closed or the open limit switch (Ref. AMM TASK 38-31-57-820-001).
- (2) If the fault continues:
  - replace the FLUSH VALVE, (Ref. AMM TASK 38-31-57-000-001) and (Ref. AMM TASK 38-31-57-400-001).

EFF: ALL

38-31-00

Page 252 May 01/08

SROS

### TROUBLE SHOOTING MANUAL

R \*\*ON A/C 201-225, 227-227, 229-275, 426-478, 551-599, 701-749,

### F. Test

- (1) Do the test as given in paragraph 3. A. to check the correct operation.
- (2) After the subsequent flight, make sure that the fault does not continue.

EFF: 201-225, 227-227, 229-275, 426-478, 551-599, 701-749,

SROS

38-31-00

Page 253 May 01/08

### TROUBLE SHOOTING MANUAL

\*\*ON A/C ALL

TASK 38-31-00-810-833

Vacuum Toilet System Indicates INOP on FAP

- 1. Possible Causes
  - XMTR-LEVEL PHASE OFF (40MG)
  - membrane switch, WTR SYSTEM DEPRE
  - Liquid Level Transmitter (LLT) REFERENCE LINE
- 2. Job Set-up Information
  - A. Referenced Information

REFERENCE		DESIGNATION
AMM	38-31-00-100-009	Cleaning of the Liquid Level Transmitter (LLT) Reference Line
AMM	38-31-00-710-009	Operational Test of the Toilet Unit
AMM	38-31-00-740-001	BITE Test of the Vacuum Toilet System
AMM	38-31-62-000-001	Removal of the Liquid Level Transmitter (40MG)
AMM	38-31-62-400-001	Installation of the Liquid Level Transmitter (40MG)

R \*\*ON A/C 201-202, 227-227, 229-234, 276-281, 476-478,

38-31-00-991-001 Fig. 201

\*\*ON A/C 203-225, 235-275, 282-299, 426-475, 479-499, 503-549, 551-599, 701-749,

38-31-00-991-001-A Fig. 201A

\*\*ON A/C ALL

### 3. Fault Confirmation

\*\*ON A/C 254-275,

A. Make sure that the light in the membrane switch, WTR SYSTEM DEPRE on the FAP is OFF.

EFF: ALL

38-31-00

Page 254 May 01/08

### TROUBLE SHOOTING MANUAL

#### \*\*ON A/C ALL

- B. Fault Confirmation Test
  - (1) Make sure that the circuit breakers of the vacuum toilet system are closed.
  - (2) Do an operational test of the vacuum toilet system (Ref. AMM TASK 38-31-00-710-009).

### 4. Fault Isolation

- A. Do the bite test (Ref. AMM TASK 38-31-00-740-001).
- B. If the FAP gives the maintenance message SYSTEM INOP:
  - Refer to the LAST LEG REPORT or PREVIOUS LEGS REPORT page of the bite test.
- R \*\*ON A/C 201-202, 227-227, 229-234, 276-281, 476-478,

(Ref. Fig. 201/TASK 38-31-00-991-001)

\*\*ON A/C 203-225, 235-275, 282-299, 426-475, 479-499, 503-549, 551-599, 701-749,

(Ref. Fig. 201A/TASK 38-31-00-991-001-A)

\*\*ON A/C ALL

- (1) If there is NO FAULTS indication on the LAST LEG REPORT or PREVIOUS LEGS REPORT page:
  - Operate the flush switches to flush the toilets.
- (2) If the toilets do not flush:
  - open and close the circuit breaker 33MG.
- (3) If the fault continues:
  - remove and clean the Liquid Level Transmitter (LLT) REFERENCE LINE, (Ref. AMM TASK 38-31-00-100-009).
  - replace the XMTR-LEVEL PHASE OFF (40MG), (Ref. AMM TASK 38-31-62-000-001) and (Ref. AMM TASK 38-31-62-400-001).

#### C. Test

- (1) Do the test as given in paragraph 3. A. to check the correct operation.
- (2) After the subsequent flight, make sure that the fault does not continue.

EFF: ALL

38-31-00

Page 255 May 01/08

### TROUBLE SHOOTING MANUAL

TASK 38-31-00-810-851

Toilet System Shuts Down Constantly

- 1. Possible Causes
  - vacuum leakage
- 2. Job Set-up Information
  - A. Referenced Information

REFERENCE	DESIGNATION
AMM 38-31-00-710-009 AMM 38-31-00-740-001	Operational Test of the Toilet Unit
AMM 38-31-00-740-001 AMM 38-31-00-790-002	BITE Test of the Vacuum Toilet System Leak Test of the Vacuum Toilet System

#### 3. Fault Confirmation

- A. Do a test of the vacuum toilet system (Ref. AMM TASK 38-31-00-710-009).
- B. Do the procedure to get access to the CFDS SYSTEM REPORT/TEST menu PAGE (Ref. AMM TASK 38-31-00-740-001).

#### 4. Fault Isolation

- A. If the test gives a different maintenance message, you can find the related trouble shooting procedure in the applicable Page Block 101.
  - (1) If the LAST/PREVIOUS LEGS Report constantly gives the maintenance message LIQD LVL SNSR or LIQD LVL XMTR and

the FAP constantly gives the maintenance message SYSTEM INOP:
- do the check for vacuum leakage in the vacuum toilet system (Ref. AMM TASK 38-31-00-790-002).

### B. Test

(1) Do the test as given in paragraph 3. A. to check the correct operation of the system.

EFF: ALL 38-31-00

Page 256 Aug 01/07

### TROUBLE SHOOTING MANUAL

TASK 38-31-00-810-852

- R Toilet Flushes Continuously
  - 1. Possible Causes
  - 2. Job Set-up Information
    - A. Referenced Information

REFERENCE		DESIGNATION
AMM AMM	38-31-00-710-009 38-31-00-740-001 38-31-19-000-001 38-31-19-400-001	Operational Test of the Toilet Unit BITE Test of the Vacuum Toilet System Removal of the Toilet Flush Switch Installation of the Toilet Flush Switch

- 3. Fault Confirmation
  - A. Do a test of the vacuum toilet system (Ref. AMM TASK 38-31-00-710-009).
  - B. Do the procedure to get access to the CFDS SYSTEM REPORT/TEST menu PAGE (Ref. AMM TASK 38-31-00-740-001).
- 4. Fault Isolation
  - A. If the test gives a different maintenance message, you can find the related trouble shooting procedure in the applicable Page Block 101.
    - (1) If the toilet is continuously flushing:
      - Pull the circuit breaker of the related toilet assembly and wait approximately 30 s.
      - Close the circuit breaker again.
    - (2) If the fault continues:
      - Replace the toilet flush switch (Ref. AMM TASK 38-31-19-000-001) and (Ref. AMM TASK 38-31-19-400-001).
  - B. Test
    - (1) Do the test as given in paragraph 3. A. to check the correct operation of the system.

EFF: ALL 38-31-00

Page 257 Aug 01/07

### TROUBLE SHOOTING MANUAL

TASK 38-31-00-810-854

Vacuum Pressure of the Vacuum System is Too Low

#### 1. Possible Causes

- GENERATOR-VACUUM (37MG)
- toilet drain lines
- tank drain line
- component of the vacuum toilet system

### 2. Job Set-up Information

A. Referenced Information

REFERENCE		DESIGNATION
AMM	38-30-00-010-002	Removal of the Toilet Drain Lines
AMM AMM	38-30-00-410-002 38-31-00-790-002	Installation of the Toilet Drain Lines Leak Test of the Vacuum Toilet System
	38-31-64-000-001	Removal of the Vacuum Generator 37MG
AMM AMM	38-31-64-400-001 38-31-76-000-001	Installation of the Vacuum Generator 37MG Removal of the Flush Line Check Valves 3322MM/3323MM
AMM	38-31-76-400-001	Installation of the Flush Line Check Valves 3322MM/3323MM

### 3. Fault Confirmation

- A. Fault Confirmation Test
  - (1) Do the leak check of the Vacuum Toilet System (Ref. AMM TASK 38-31-00-790-002).

### 4. Fault Isolation

- A. If the required negative differential pressure (Ref. to the GRAPH 1 and GRAPH 2 in figure 503 of the AMM TASK 38-31-00-790-002) is lower than the measured value:
  - examine the toilet drain lines for leaks with the vacuum system under pressure.
  - (1) If you find leaks, repair or replace the defective toilet drain lines (Ref. AMM TASK 38-30-00-010-002) and (Ref. AMM TASK 38-30-00-410-002).
  - (2) If the fault continues:
    - examine the tank drain line for leaks, if leaks are found:
    - repair or replace the tank drain line, (Ref. AMM TASK 38-31-76-000-001) and (Ref. AMM TASK 38-31-76-400-001).

EFF: ALL

38-31-00

Page 258 Aug 01/07

### TROUBLE SHOOTING MANUAL

- (3) If you have replaced a component of the vacuum toilet system:
  - examine the installed component(s) for the correct installation.
  - make sure that the component(s) does (do) not leak.
- (4) If the fault continues:
  - replace the GENERATOR-VACUUM (37MG), (Ref. AMM TASK 38-31-64-000-001) and (Ref. AMM TASK 38-31-64-400-001).

### B. Test

- (1) Do the test given in para. 3.
- (2) Make sure that the vacuum toilet system operates correctly.

EFF: ALL 38-31-00

Page 259 Aug 01/07

SROS

### TROUBLE SHOOTING MANUAL

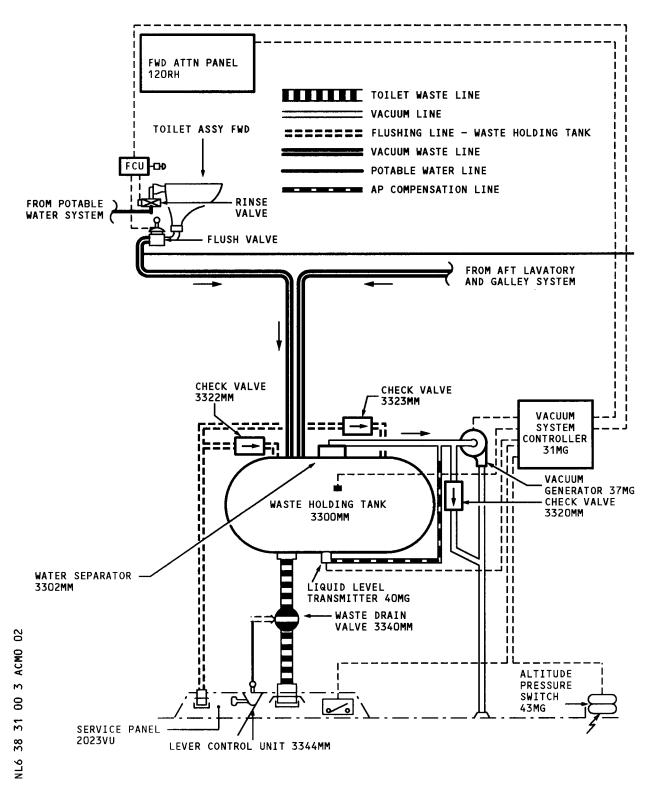
TOILET SYSTEM - TASK SUPPORTING DATA

EFF : ALL

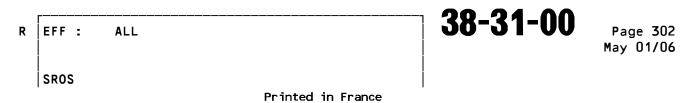
38-31-00

Page 301 Aug 01/94

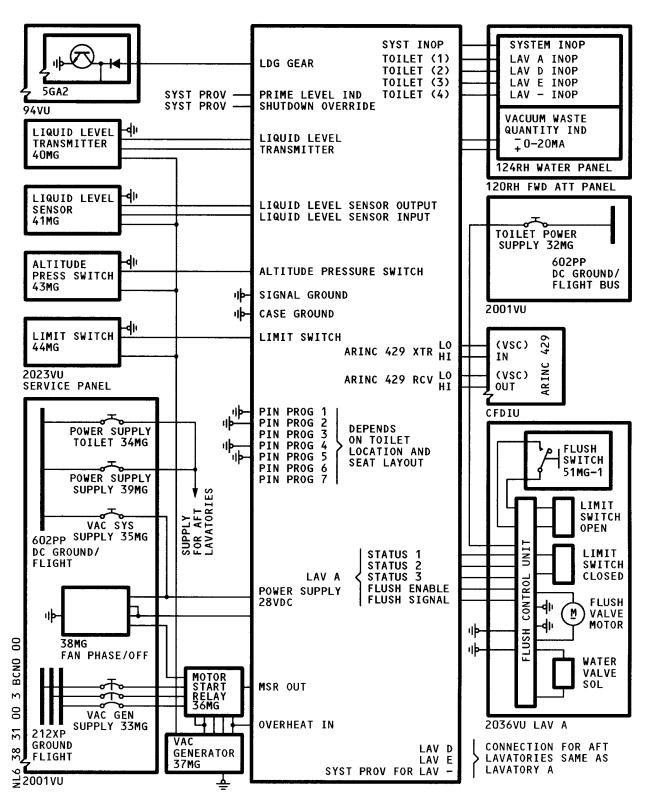
### TROUBLE SHOOTING MANUAL



Toilet System - Schematic Figure 301



#### TROUBLE SHOOTING MANUAL



Toilet System - Electrical Schematic Figure 302

R EFF: 201-225, 227-227, 229-245, 456-475, SROS

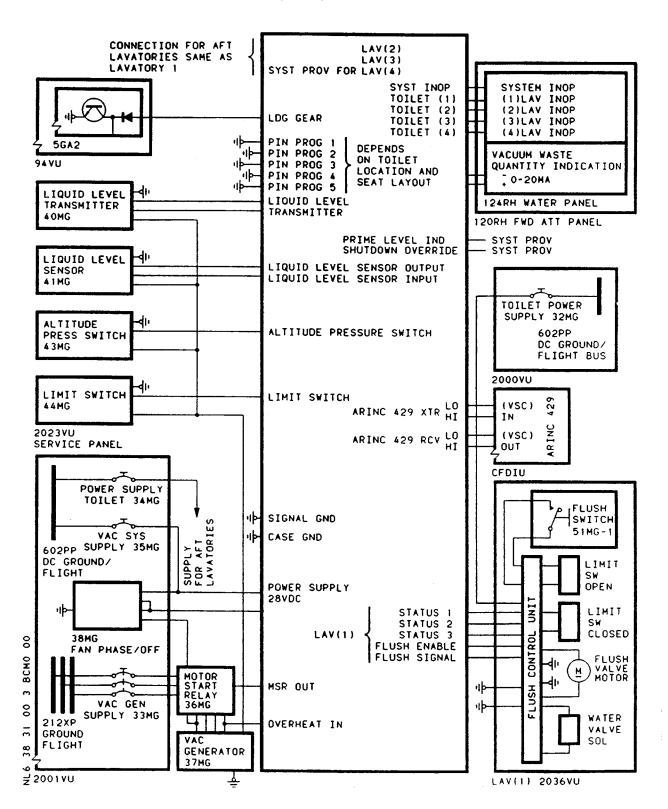
Printed in France

38-31-00

Page 303

May 01/08

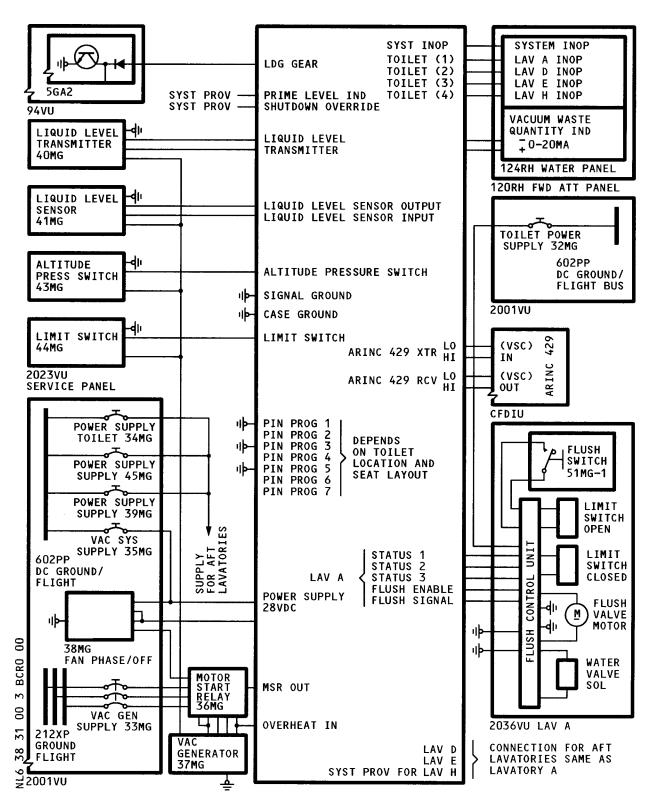
#### TROUBLE SHOOTING MANUAL



Toilet System - Electrical Schematic Figure 302A

R EFF: 247-275, 426-450, 701-749, Page 304 Feb 01/08 SROS

#### TROUBLE SHOOTING MANUAL

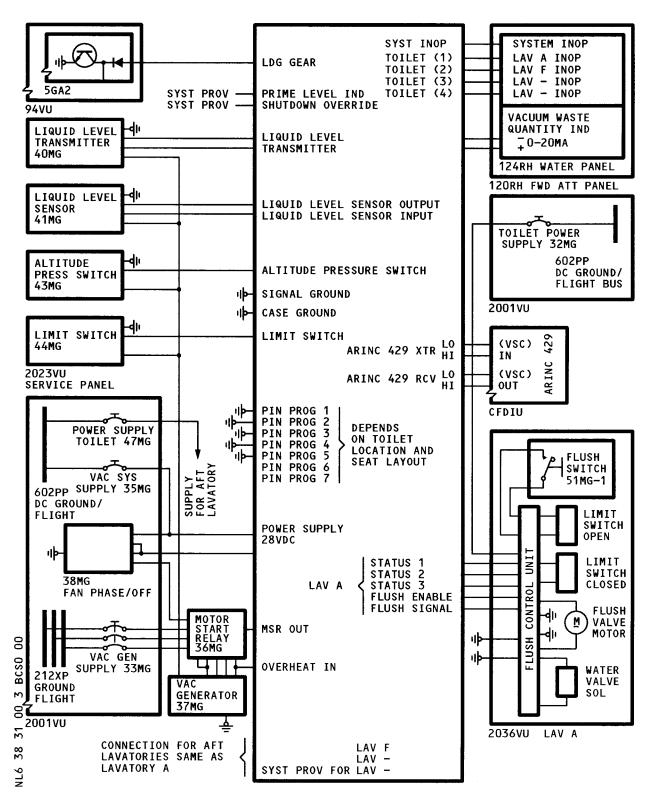


Toilet System - Electrical Schematic Figure 302B

R EFF: 276-299, 476-499, 503-549,
SROS
Printed in France

38-31-00
Page 305
May 01/06

#### TROUBLE SHOOTING MANUAL



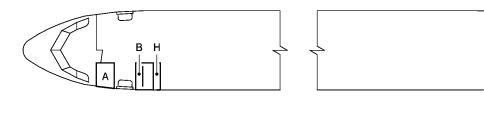
Toilet System - Electrical Schematic Figure 302C

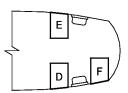
R EFF: 451-455, 551-599, Page 306 May 01/06 SROS

Printed in France

### TROUBLE SHOOTING MANUAL

#### A318/A319/A320 LAVATORY LOCATION DESIGNATIONS FOR CIDS PROGRAMMING





COMBINED WITH HALF SIZE GALLEY

М

Lavatory Location Figure 303

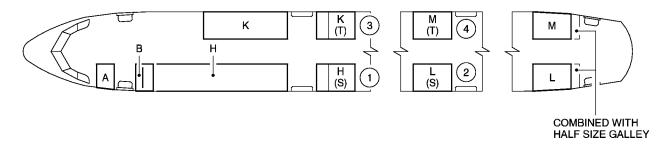
R EFF: 201-225, 227-227, 229-275, 426-475, 551-599, 701-749, SROS

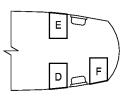
38-31-00

Page 307 May 01/08

### TROUBLE SHOOTING MANUAL

#### A321 LAVATORY LOCATION DESIGNATIONS FOR CIDS PROGRAMMING





### NOTE:

- (1) IF 2 LAVATORIES H ARE INSTALLED, THE UNIT AFT OF FWD EMERGENCY EXIT DOOR WILL CALL S.
- (2) IF 2 LAVATORIES L ARE INSTALLED, THE UNIT FWD OF AFT EMERGENCY EXIT DOOR WILL CALL S.
- ig(3ig) IF 2 LAVATORIES K ARE INSTALLED, THE UNIT AFT OF FWD EMERGENCY EXIT DOOR WILL CALL T.
- (3) IF 2 LAVATORIES M ARE INSTALLED, THE UNIT FWD OF AFT EMERGENCY EXIT DOOR WILL CALL T.

Lavatory Location Figure 303A

R R

EFF: 276-299, 476-499, 503-549,

38-31-00

Page 308 Aug 01/07

Printed in France

### TROUBLE SHOOTING MANUAL

### WASTE WATER DRAIN - FAULT ISOLATION PROCEDURES

TASK 38-32-00-810-801

Waste Water Drain - Failure

- 1. Possible Causes
  - washbasin filter
  - drain valve
- 2. Job Set-up Information
  - A. Referenced Information

REFERENCE		DESIGNATION
AMM AMM	38-32-00-100-001 38-32-00-100-002	Cleaning of the Waste Water Drain Lines Cleaning of the Filter-Element of the Washbasin
AMM AMM AMM	38-32-00-710-002 38-32-41-000-001 38-32-41-400-001	Drain-Valve Assembly Operational Test of the Waste/Water Drain System Removal of the Drain Valve (Air Stop Valve) Installation of the Drain Valve (Air Stop Valve)

- 3. Fault Confirmation
  - A. Test
    - (1) Do a test of the waste water drain system (Ref. AMM TASK 38-32-00-710-002).
- 4. Fault Isolation
  - A. If the water drains too slow from the washbasin:
    - Remove and clean the washbasin filter, (Ref. AMM TASK 38-32-00-100-002).
    - (1) If the fault continues:
      - Replace the drain valve, (Ref. AMM TASK 38-32-41-000-001) and (Ref. AMM TASK 38-32-41-400-001).
    - (2) If the fault continues:
      - Do the cleaning of the waste water lines (Ref. AMM TASK 38-32-00-100-001).
  - B. Do the test as given in paragraph 3. A. and check the correct operation of the waste water drain system.

EFF: 209-225, 245-275, 285-299, 429-475, 479-499, 503-549, 551-599, 701-749,

38-32-00

Page 201 Feb 01/08

### TROUBLE SHOOTING MANUAL

### AIR SUPPLY SYSTEM - FAULT ISOLATION PROCEDURES

TASK 38-41-00-810-801

Potable Water System - Pressurization Failure

- 1. Possible Causes
  - SHUTTLE VALVE-AIR (4215MM)
  - FILTER-AIR (4210MM)
- 2. Job Set-up Information
  - A. Referenced Information

REFERENCE		DESIGNATION	
AMM	12-15-38-613-001	Fill the Potable Water Tank System (Aircraft	
		Electrical Power Available)	
AMM	38-10-00-613-001	Potable Water-Servicing Procedure	
AMM	38-10-00-613-002		
AMM	38-10-00-614-001	Pressurization of the Potable Water System from a Ground Air Supply	
AMM	38-10-00-614-002	Depressurization of the Potable Water System	
AMM	38-41-00-100-001		
AMM	38-41-00-610-001	Replacement of the Cartridge of the Air Filter 4210MM	
AMM	38-41-44-000-001	Removal of the Shuttle Valve 4215MM	
AMM	38-41-44-400-001	Installation of the Shuttle Valve 4215MM	

- 3. Fault Confirmation
  - A. Aircraft configuration
    - (1) Make sure that there is water in the potable water system, if necessary do the servicing (Ref. AMM TASK 12-15-38-613-001).
- 4. Fault Isolation
  - A. Operate the APU and pressurized the potable water system (Ref. AMM TASK 38-10-00-613-002).
    - (1) If the potable water system does not pressurize:
      - do the pressurization from the ground service panel (Ref. AMM TASK 38-10-00-613-001).

EFF: ALL 38-41-00

Page 201 May 01/07

### TROUBLE SHOOTING MANUAL

- (2) If the potable water system pressurizes from the ground service
  - remove and clean the SHUTTLE VALVE-AIR (4215MM), (Ref. AMM TASK 38-41-00-100-001) or
  - replace the shuttle valve (Ref. AMM TASK 38-41-44-000-001) and (Ref. AMM TASK 38-41-44-400-001).
- (3) If the shuttle valve is found contaminated:
  - replace the cartridge filter of the FILTER-AIR (4210MM), (Ref. AMM TASK 38-41-00-610-001).

### 5. Close-up

- A. Do a check and make sure that the system operates correctly with:
  - (1) From the ground service panel (Ref. AMM TASK 38-10-00-614-001)
  - (2) From the APU (Ref. AMM TASK 38-10-00-614-002)

38-41-00

ALL

Page 202 May 01/07

EFF:

### TROUBLE SHOOTING MANUAL

TASK 38-41-00-810-802

Potable Water System - Pressure Failure

- 1. Possible Causes
  - FILTER-AIR (4210MM)
  - VALVE-PRESSURE REDUCING (4200MM)
- 2. Job Set-up Information
  - A. Referenced Information

REFERENCE		DESIGNATION
AMM	38-41-00-680-001	
AMM	38-41-00-710-001	Operational Test of the Air Supply System (with ground air supply)
AMM	38-41-00-820-001	Adjustment of the Pressure Reducing and Relief Valve 4200MM
AMM	38-41-43-000-001	Removal of the Pressure Reducing Valve 4200MM
AMM	38-41-43-400-001	Installation of the Pressure Reducing Valve 4200MM

#### 3. Fault Confirmation

A. Do the test of the potable water- air supply system (Ref. AMM TASK 38-41-00-710-001).

#### 4. Fault Isolation

- A. If the system pressure is not satisfactory:
  - replace the cartridge of the FILTER-AIR (4210MM), (Ref. AMM TASK 38-41-00-680-001):
  - (1) If the fault continues:
    - do the adjustment of the VALVE-PRESSURE REDUCING (4200MM), (Ref. AMM TASK 38-41-00-820-001).
  - (2) If the fault continues:
    - replace the VALVE-PRESSURE REDUCING (4200MM), (Ref. AMM TASK 38-41-43-000-001) and (Ref. AMM TASK 38-41-43-400-001).

### 5. Close-up

A. Do the test as given in paragraph 3. A. and make sure that system operates correctly.

EFF: ALL 38-41-00

Page 203 May 01/07

**SROS** 

### TROUBLE SHOOTING MANUAL

TASK 38-41-00-810-803

Potable Water System - Relief Pressure Failure

### 1. Possible Causes

- VALVE-PRESSURE REDUCING (4200MM)
- 2. Job Set-up Information
  - A. Referenced Information

REFERENCE		DESIGNATION	
AMM	38-41-00-710-001	Operational Test of the Air Supply System (with ground air supply)	
AMM	38-41-00-820-001	Adjustment of the Pressure Reducing and Relief Valve 4200MM	
AMM AMM	38-41-43-000-001 38-41-43-400-001	Removal of the Pressure Reducing Valve 4200MM Installation of the Pressure Reducing Valve 4200MM	

### 3. Fault Confirmation

A. Do the test of the potable water- air supply system (Ref. AMM TASK 38-41-00-710-001).

### 4. Fault Isolation

- A. If the cracking pressure of the VALVE-PRESSURE REDUCING (4200MM) is incorrect:
  - do the adjustment of the relief valve (Ref. AMM TASK 38-41-00-820-001).
  - (1) If the fault continues:
    - replace the VALVE-PRESSURE REDUCING (4200MM), (Ref. AMM TASK 38-41-43-000-001) and (Ref. AMM TASK 38-41-43-400-001).

### 5. Close-up

A. Do the test as given in paragraph 3. A. and make sure that system operates correctly.

EFF: ALL 38-41-00

Page 204 May 01/07