Scandinavian Airlines System



R = REVISED, A = ADDED OR D = DELETED
F = FOLDOUT PAGE
33
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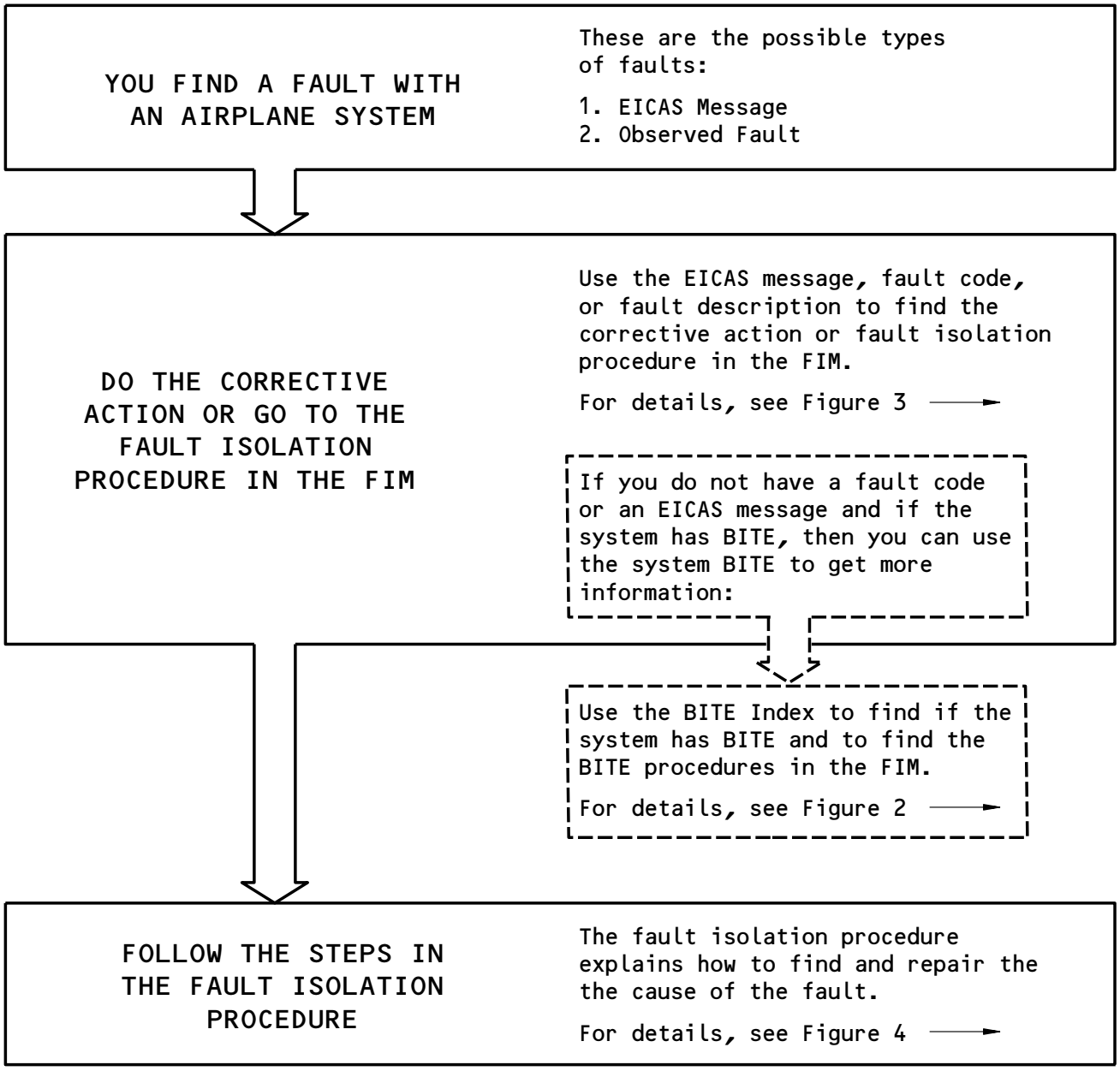
CHAPTER 38
EFFECTIVE PAGES
PAGE 1
LAST PAGE

CHAPTER 38 - WATER/WASTE

TABLE OF CONTENTS

CHAPTER 38 - WATER/WASTE

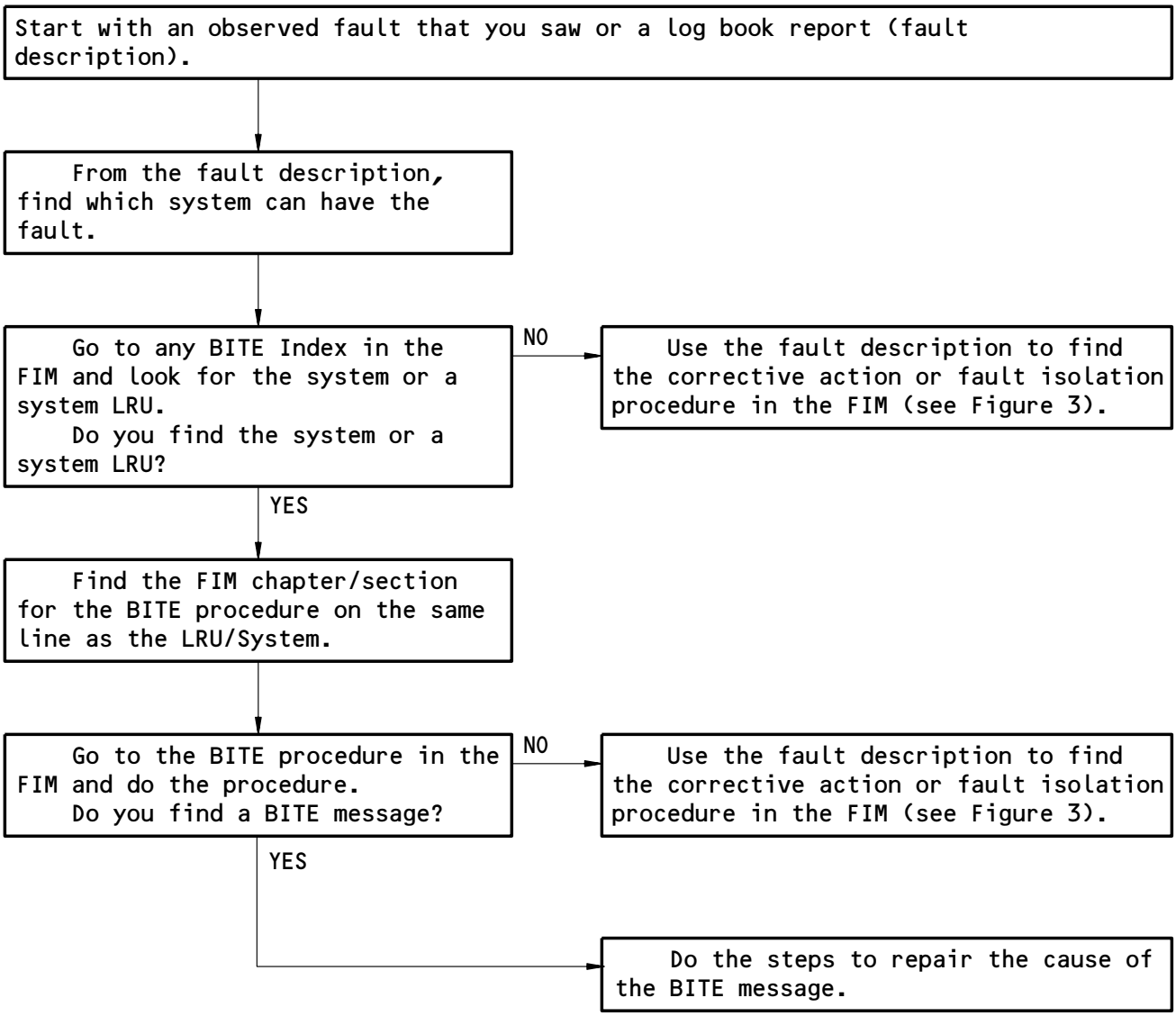
TABLE OF CONTENTS




Basic Fault Isolation Process
Figure 1



K37712




How to Get Fault Information from BITE
Figure 2

| IF YOU HAVE: | THEN DO THIS TO FIND THE CORRECTIVE ACTION OR FAULT ISOLATION PROCEDURE IN THE FIM: |
|---|---|
| FAULT CODE | 1. The first two digits of the fault code are the FIM chapter that you need. Go to the Fault Code Index in that chapter and find the fault code.<br>2. Find the Fault Isolation Reference for the fault code and do the corrective action. If there is a FIM reference, then go to that fault isolation procedure in the FIM and do the steps in the procedure (see Figure 4). |
| EICAS MESSAGE TEXT (with no fault code) | 1. If you know the chapter of the EICAS message, then go to the EICAS Messages section in that chapter and find the EICAS message.<br>If you do not know the chapter of the EICAS message, then do these steps:<br>A. Go to FIM EICAS MESSAGE LIST and find the EICAS message in the table.<br>NOTE: The list follows the INTRODUCTION to the FIM.<br>B. Find the chapter number on the same line as the EICAS message. Go to the EICAS Messages section in that chapter and find the EICAS message.<br>2. Do the corrective action in the "Procedure" column for the EICAS message. If there is a FIM reference, then go to that fault isolation procedure in the FIM and do the steps in the procedure (see Figure 4). |
| OBSERVED FAULT DESCRIPTION | 1. Go to the Fault Code Diagram for the problem in the applicable chapter.<br>2. Do the fault analysis on the diagram and find the fault code.<br>3. The first two digits of the fault code are the FIM chapter that you need. Go to the Fault Code Index in that chapter and find the fault code.<br>4. Find the Fault Isolation Reference for the fault code and do the corrective action. If there is a FIM reference, then go to that fault isolation procedure in the FIM and do the steps in the procedure (see Figure 4). |

How to Find the Corrective Action or Fault Isolation Procedure in the FIM
Figure 3

ASSUMED CONDITIONS AT START OF TASK

- External electrical power is OFF
- Hydraulic power and pneumatic power are OFF
- Engines are shut down
- Circuit breakers for the system are closed
- No equipment in the system is deactivated

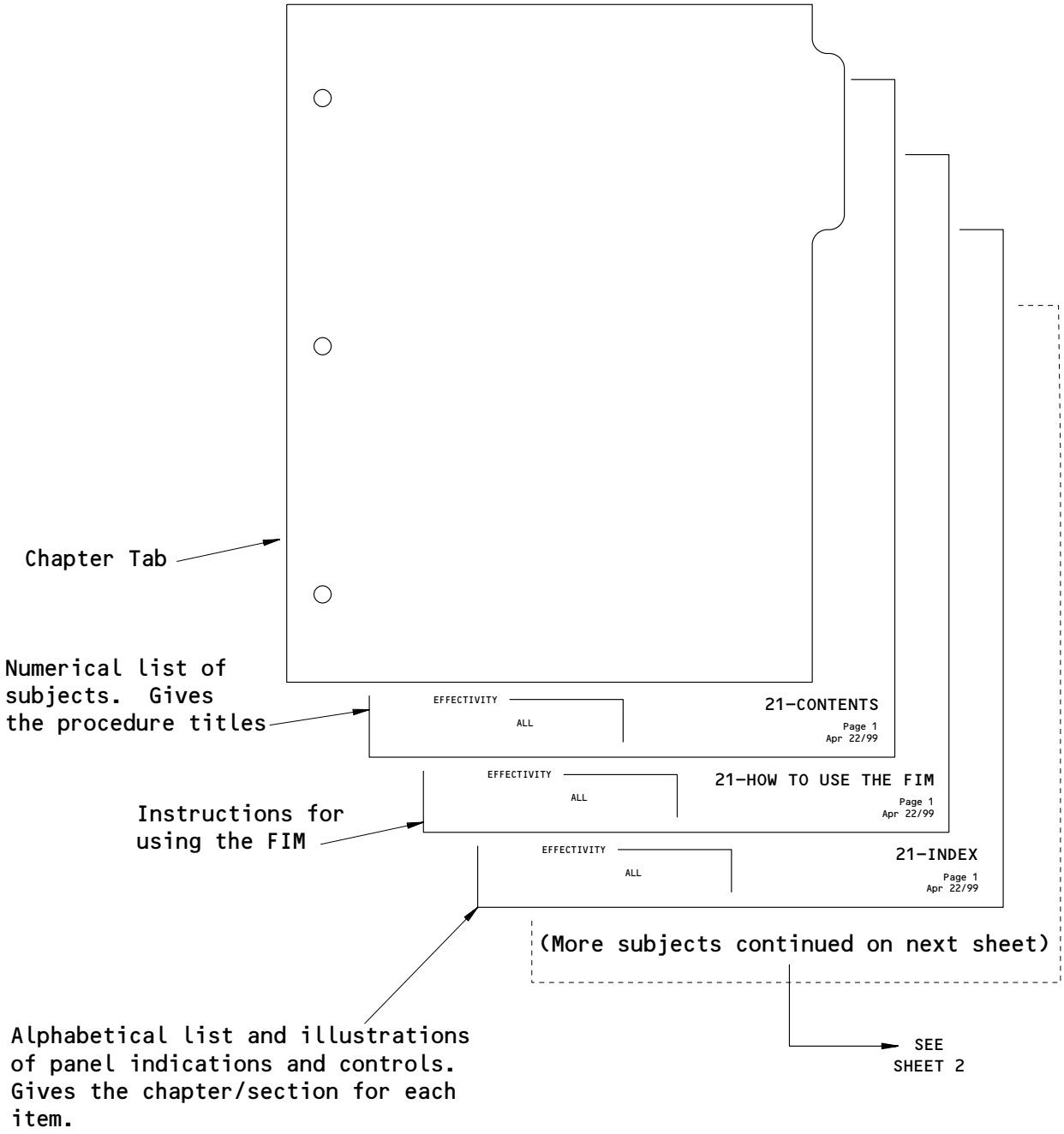
PREREQUISITES

- This box gives the steps to get the airplane from the normal shutdown condition to the configuration necessary to do the fault isolation procedure.
- The Prerequisites give procedure references, circuit breakers, and special tools and equipment requirements.

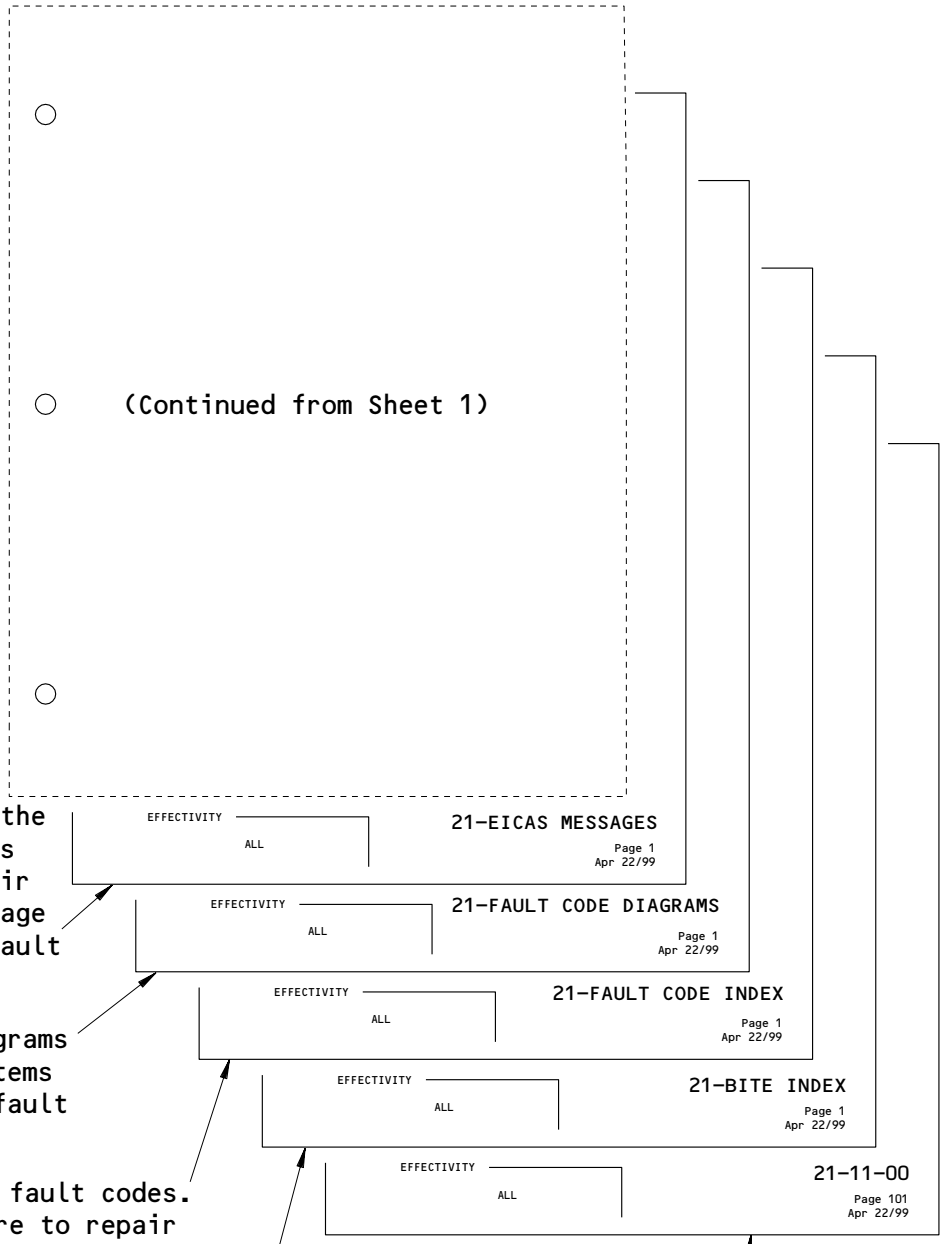
FAULT ISOLATION BLOCKS

- Start the fault isolation procedure at block 1 unless specified differently.
- Do the check to get an answer to the question in the box. Follow the arrow that applies to your answer. This will go to the next check.
- When you get to a box in the column at the right of the page, you have isolated that fault. Do the steps in that box to repair the cause of the fault.
- Make sure that fault is corrected to complete the procedure.

Do the Fault Isolation Procedure
Figure 4




Subjects in Each FIM Chapter
Figure 5 (Sheet 1)




Alphabetical list of the EICAS messages. Gives the procedure to repair the cause of the message or a reference to a fault isolation procedure.

Failure analysis diagrams for the airplane systems to find the correct fault code for the fault.

Numerical list of fault codes. Gives the procedure to repair the cause of the fault or a reference to a fault isolation procedure.

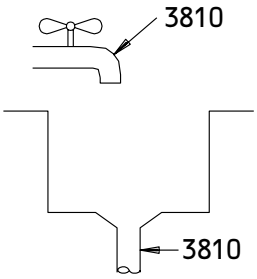
Alphabetical list of all the LRUs/systems that have BITE. Gives the chapter/section for the BITE procedure.

Component index, component location, and fault isolation procedures for the systems in the chapter.

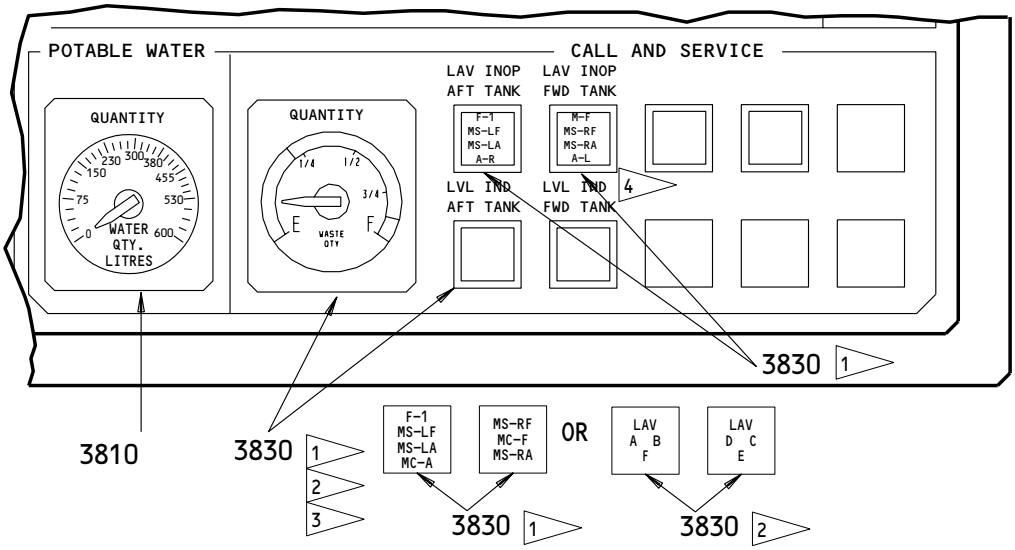
Subjects in Each FIM Chapter
Figure 5 (Sheet 2)



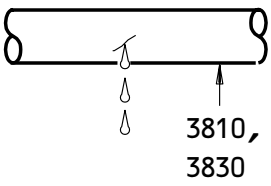
K37717

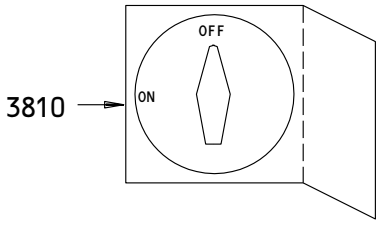



GALLEYS

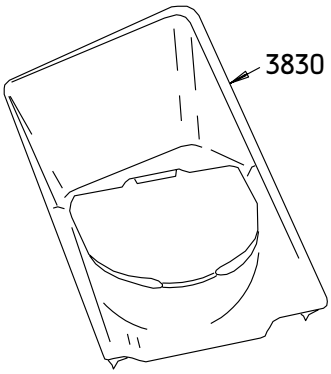



AFT CABIN ATTENDANT'S PANEL

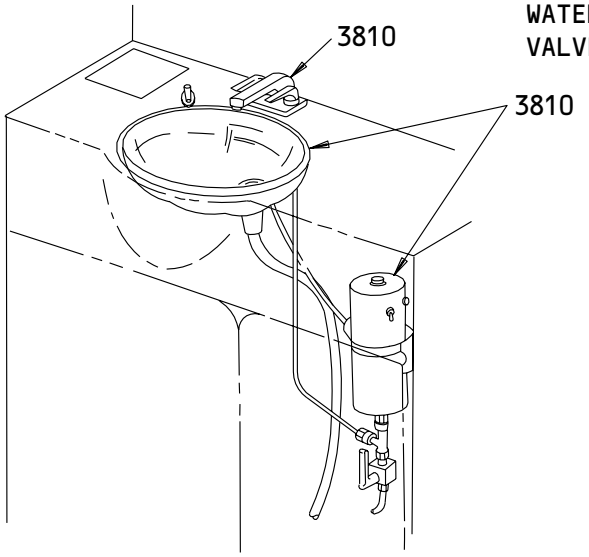


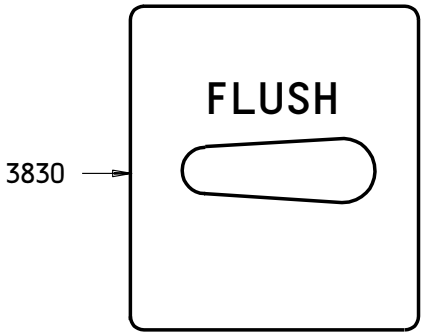

WATER SHUTOFF VALVE LOCATIONS




TOILET




LAVATORIES




1 SAS AIRPLANES
2 MTH AIRPLANES
3 IF INSTALLED
4 A–R, A–L PROVISIONS ONLY

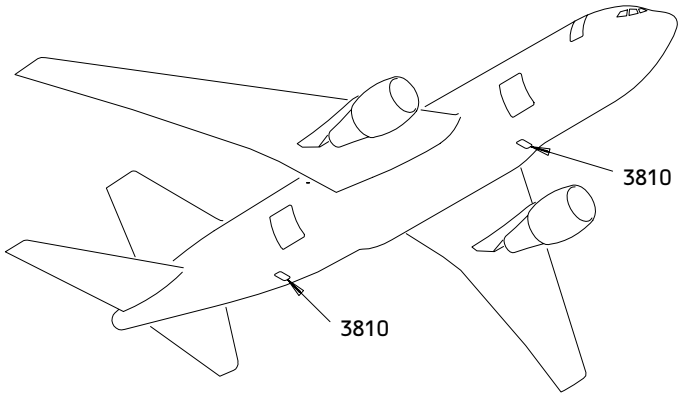
## WATER AND WASTE – INDEX

EFFECTIVITY

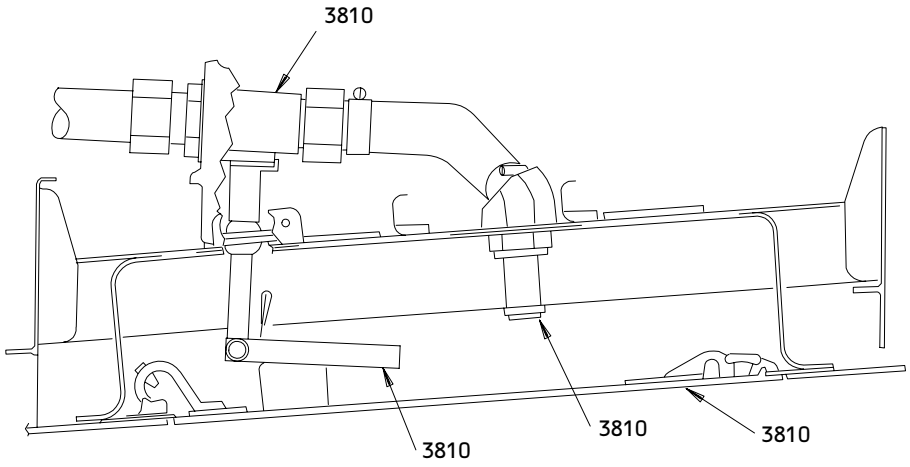
ALL

# 38-INDEX

588846



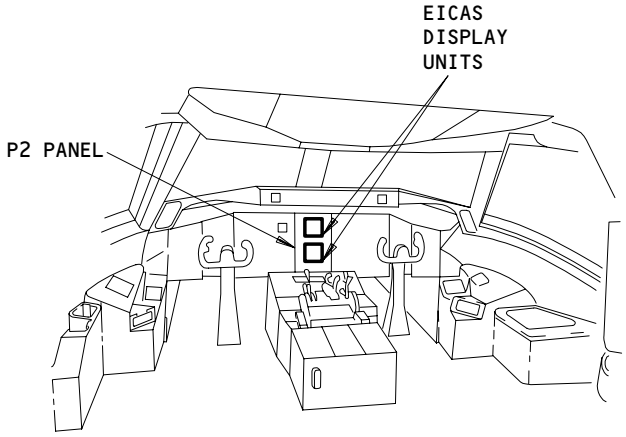


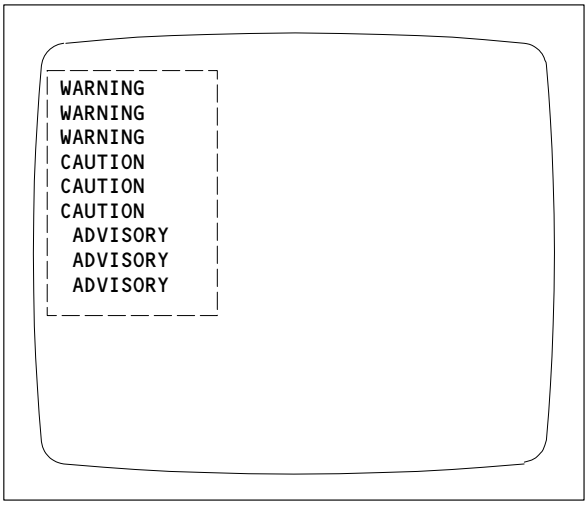

WATER AND WASTE - CONTENTS (GROUND)

WATER/WASTE - EICAS MESSAGE LIST

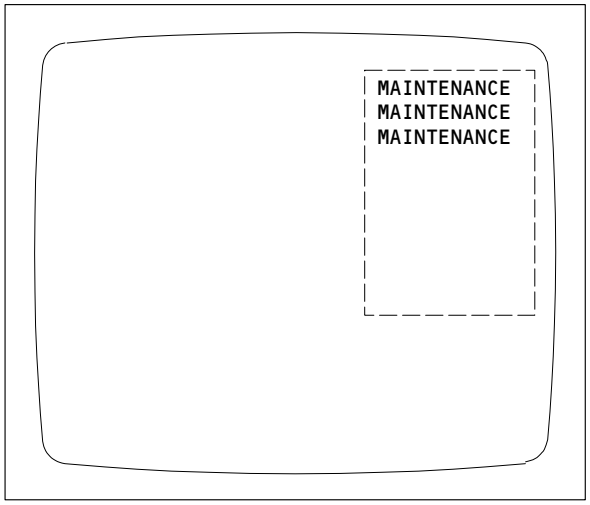
1. General
   A. This procedure shows the EICAS message locations and gives a list of procedures to find the solution for each message.
      (1) EICAS Message Locations (Fig. 1)
         (a) Figure 1 shows the location of the display units and the area where the messages show on the display units.
         (b) Each message level has a different location. The location and color of each message level is also shown.
      (2) The EICAS MESSAGE LIST gives the message, level, and procedure for each message.
         (a) The EICAS MESSAGE column lists the messages alphabetically. Messages which start with L, R, or C are put together and alphabetized at L.
         (b) The LEVEL column gives all levels for each message as follows:
            A - Warning messages
            B - Caution messages
            C - Advisory messages
            S - Status messages
            M - Maintenance messages
         (c) The PROCEDURE column gives the steps that are necessary to remove the message and includes one or more of the procedures that follow:
            1) A Fault Isolation Manual procedure reference
            2) A Maintenance Manual procedure and reference
            3) Wiring checks and a Wiring Diagram Manual reference
            4) A reference to an EICAS message list in a different chapter.
            5) A reference to a FAULT CODE INDEX and specified fault codes
            6) A step to change the airplane configuration



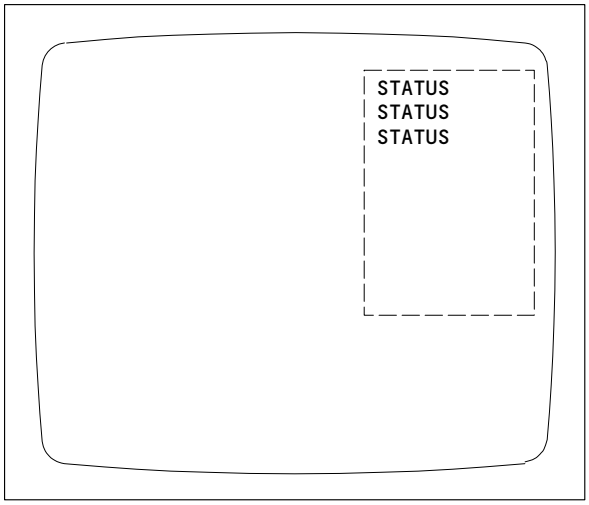

FLIGHT COMPARTMENT




ENGINE PRIMARY PAGE OR COMPACTED PAGE
(TOP DISPLAY UNIT)




ECS/MSG PAGE
(BOTTOM DISPLAY UNIT)

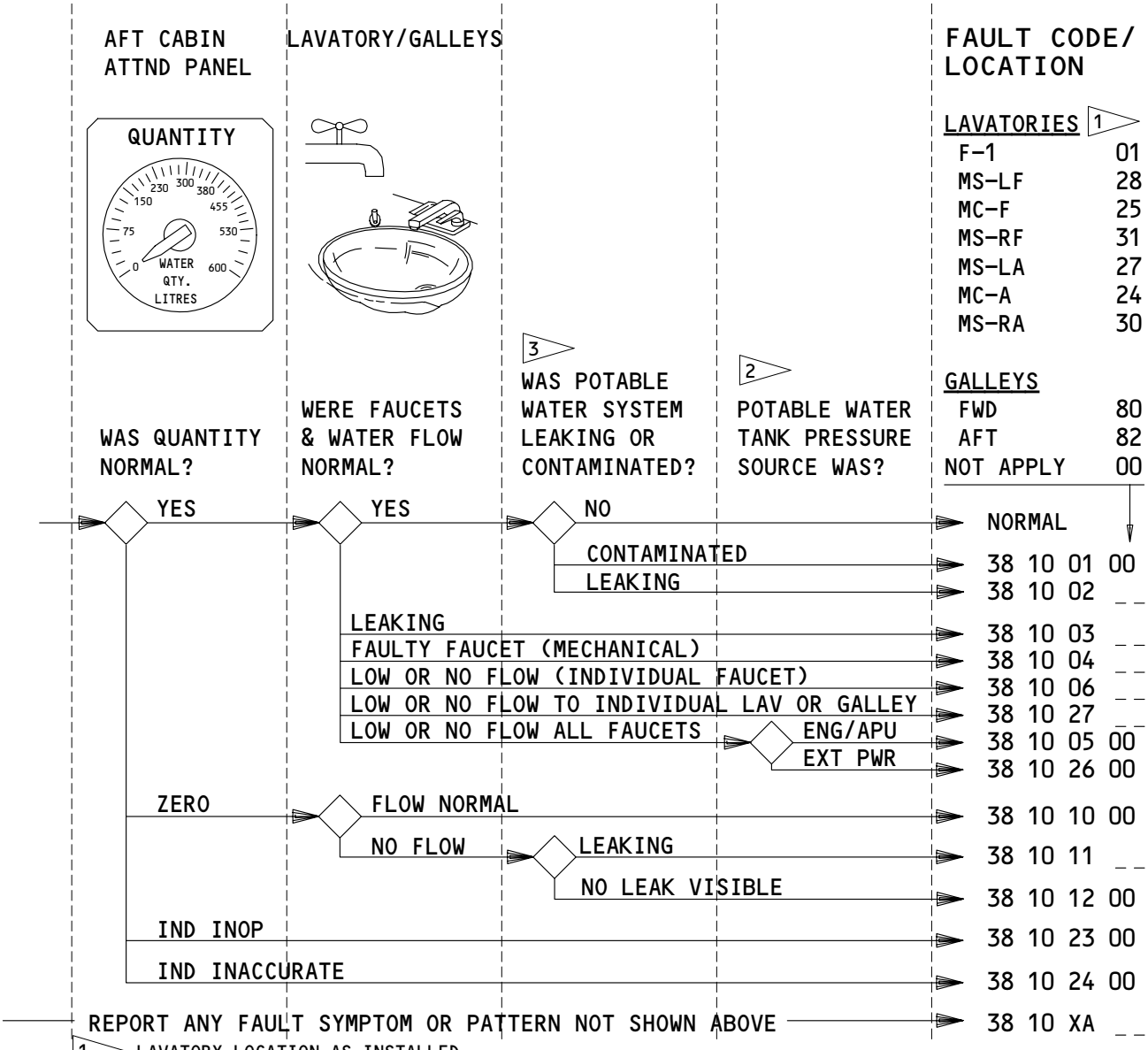



STATUS PAGE
(BOTTOM DISPLAY UNIT)

| LEVEL | COLOR |
|---|---|
| A–WARNING | RED |
| B–CAUTION | YELLOW |
| C–ADVISORY | YELLOW |
| S–STATUS | WHITE |
| M–MAINTENANCE | WHITE |

EICAS Message Locations
Figure 1

| EICAS MESSAGE LIST | | |
|---|---|---|
| EICAS MESSAGE | LEVEL | PROCEDURE |
| FWD (AFT) WASTE SNSR | M | AIRPLANES WITHOUT CONTINUOUS LEVEL SENSORS; clean the point level sensors in the forward (aft) waste tank (AMM 12-17-01/301 and AMM 38-33-01/701).<br><br>AIRPLANES WITH CONTINUOUS LEVEL SENSORS; push and hold the LAV INOP FWD (AFT) TANK switch on the aft attendant panel. Hold it in for a minimum of six seconds then release it. If the problem continues, clean the point level sensors for the forward (aft) waste tank (AMM 12-17-01/301 and AMM 38-33-01/701). |

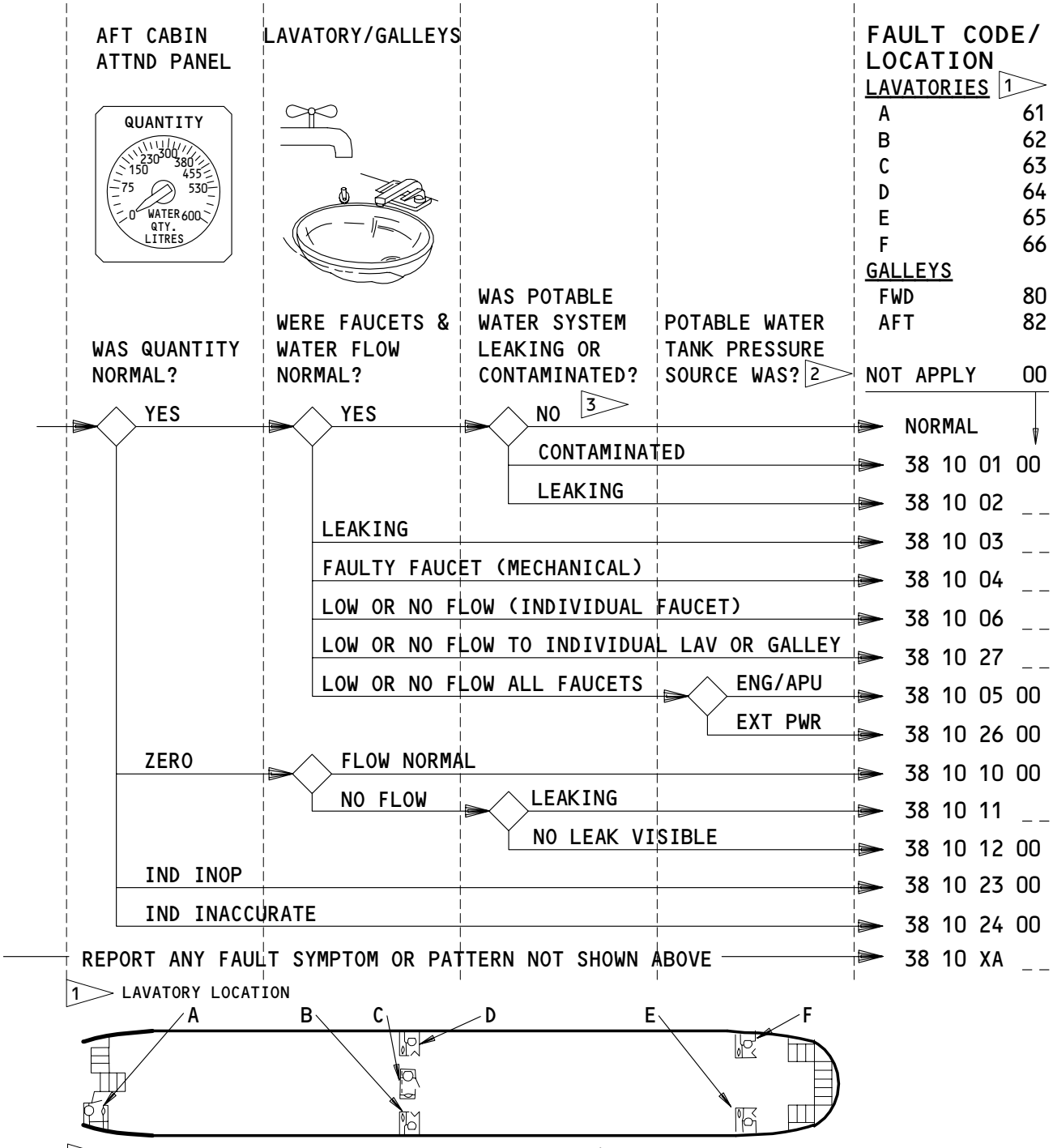



POTABLE WATER – FAULT CODES

EFFECTIVITY
SAS AIRPLANES

# 38-FAULT CODE DIAGRAM

588850




APPLICABLE CIRCUIT BREAKERS

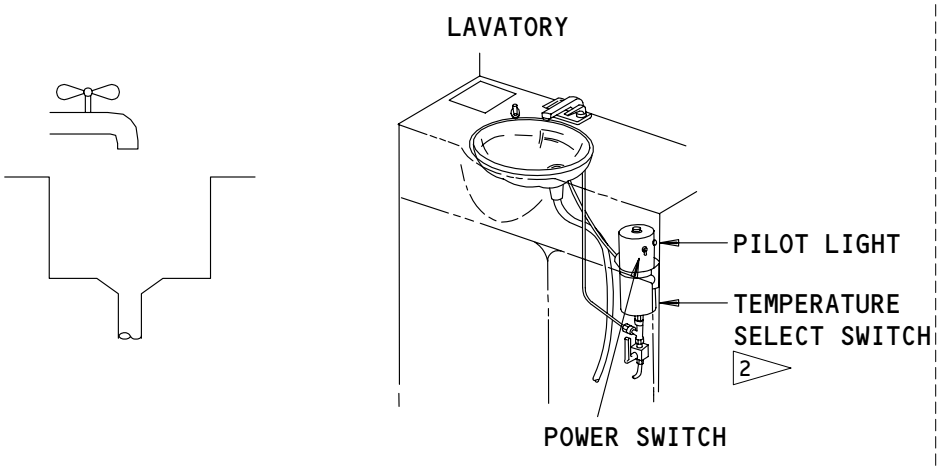
| | |
|---|---|
| 11U28 | ENT LTS/POT WATER |

POTABLE WATER – FAULT CODES

EFFECTIVITY
MTH AIRPLANES

# 38-FAULT CODE DIAGRAM

677747

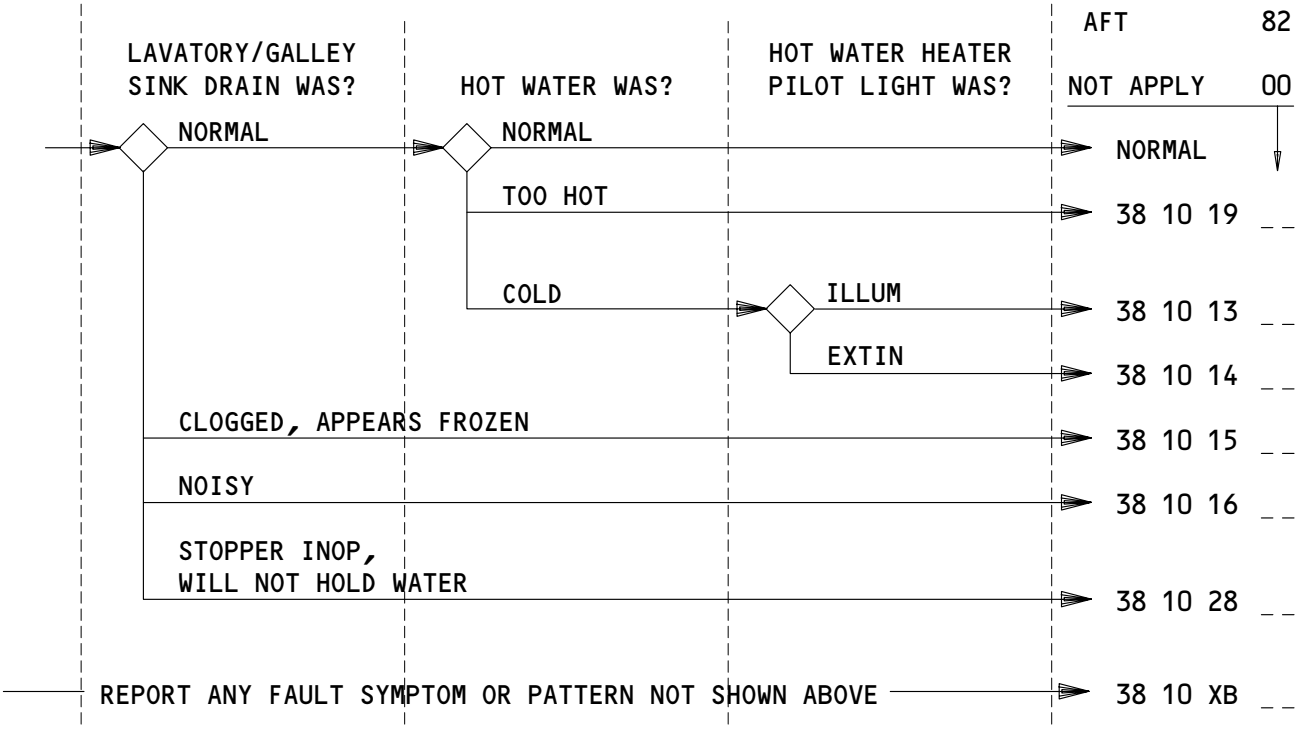



FAULT CODE/ LOCATION

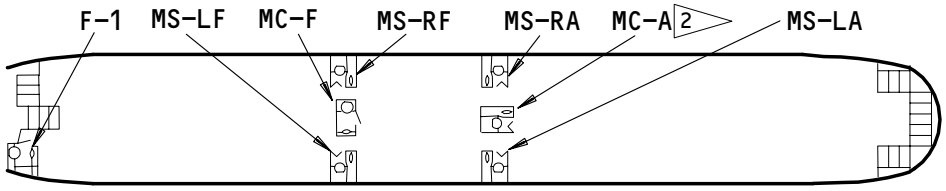
| LAVATORIES 1 | |
|---|---|
| F-1 | 01 |
| MS-LF | 28 |
| MC-F | 25 |
| MS-RF | 31 |
| MS-LA | 27 |
| MC-A | 24 |
| MS-RA | 30 |

| GALLEYS | |
|---|---|
| FWD | 80 |
| AFT | 82 |

NOT APPLY 00




1 LAVATORY LOCATION  2 IF INSTALLED



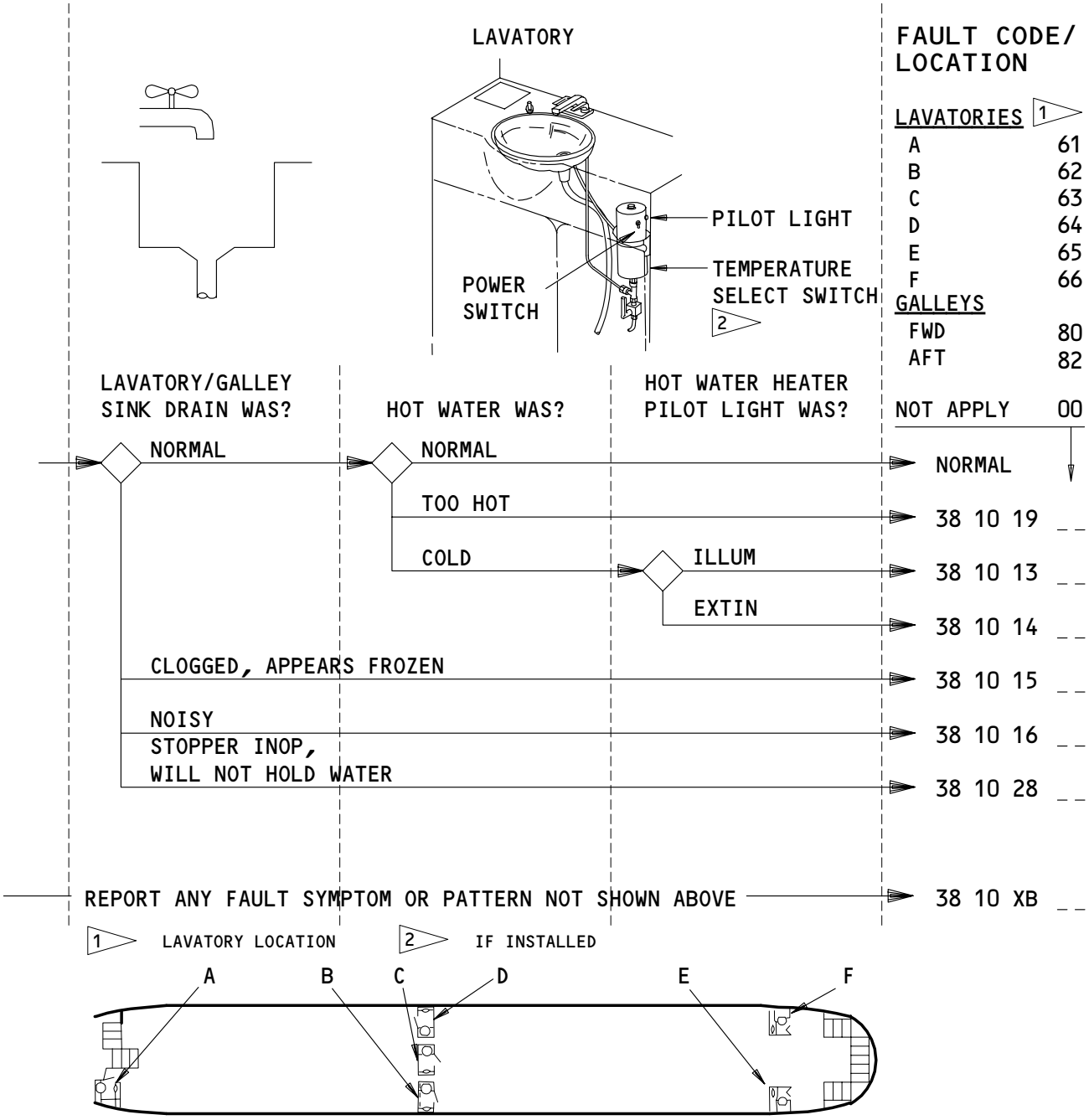

APPLICABLE CIRCUIT BREAKERS

NONE

LAVATORY/GALLEY DRAINS AND HOT WATER HEATERS - FAULT CODES



588852

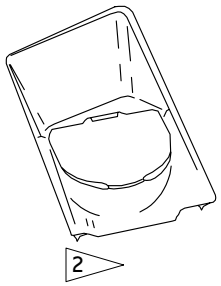



APPLICABLE CIRCUIT BREAKERS

NONE

LAVATORY/GALLEY DRAINS AND HOT WATER HEATERS – FAULT CODES

TOILET



2

DID TOILET HAVE LOUD AIR NOISE, LEAK OR FILL WITH WATER?

FAULT CODE/ LOCATION

| LAVATORIES 1 | |
|---|---|
| F-1 | 01 |
| MS-LF | 28 |
| MC-F | 25 |
| MS-RF | 31 |
| MS-LA | 27 |
| MC-A | 24 |
| MS-RA | 30 |
| ALL | 99 |
| NOT APPLY | 00 |

NO → TO SHEET 2

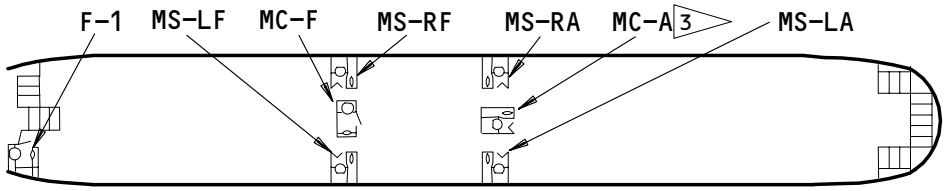
LOUD AIR NOISE → 38 30 10 _ _

TOILET LEAKS WATER → 38 30 11 _ _

TOILET FILLS WITH WATER → 38 30 12 _ _

REPORT ANY FAULT SYMPTOM OR PATTERN NOT SHOWN ABOVE → 38 30 XA _ _

1 LAVATORY LOCATION.



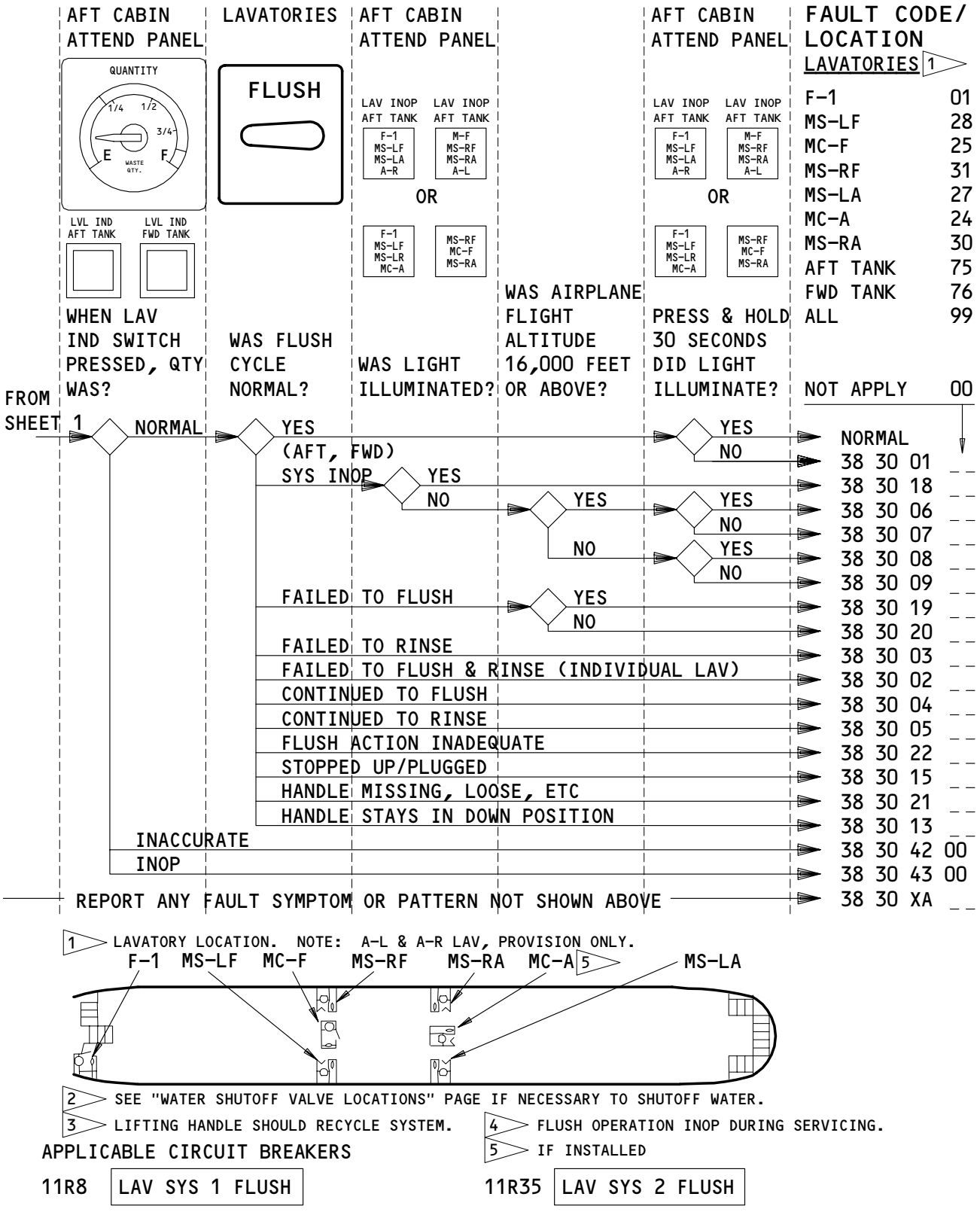

2 SEE "WATER SHUTOFF VALVE LOCAIONS" PAGE IF NECESSARY TO SHUTOFF WATER.

3 IF INSTALLED

APPLICABLE CIRCUIT BREAKERS

NONE

LAVATORY WASTE (SHEET 1) - FAULT CODES



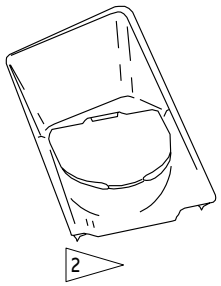

LAVATORY WASTE (SHEET 2) – FAULT CODES

EFFECTIVITY
SAS AIRPLANES

# 38-FAULT CODE DIAGRAM

588855

TOILET



2

DID TOILET HAVE LOUD AIR NOISE,
LEAK OR FILL WITH WATER?

NO → TO SHEET 2

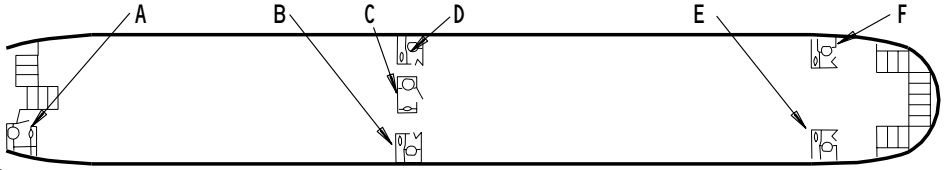
LOUD AIR NOISE → 38 30 10 _ _

TOILET LEAKS WATER → 38 30 11 _ _

TOILET FILLS WITH WATER → 38 30 12 _ _

REPORT ANY FAULT SYMPTOM OR PATTERN NOT SHOWN ABOVE → 38 30 XA _ _

1 LAVATORY LOCATION




2 SEE "WATER SHUTOFF VALVE LOCATION" PAGE IF NECECCARY TO SHUTOFF WATER.

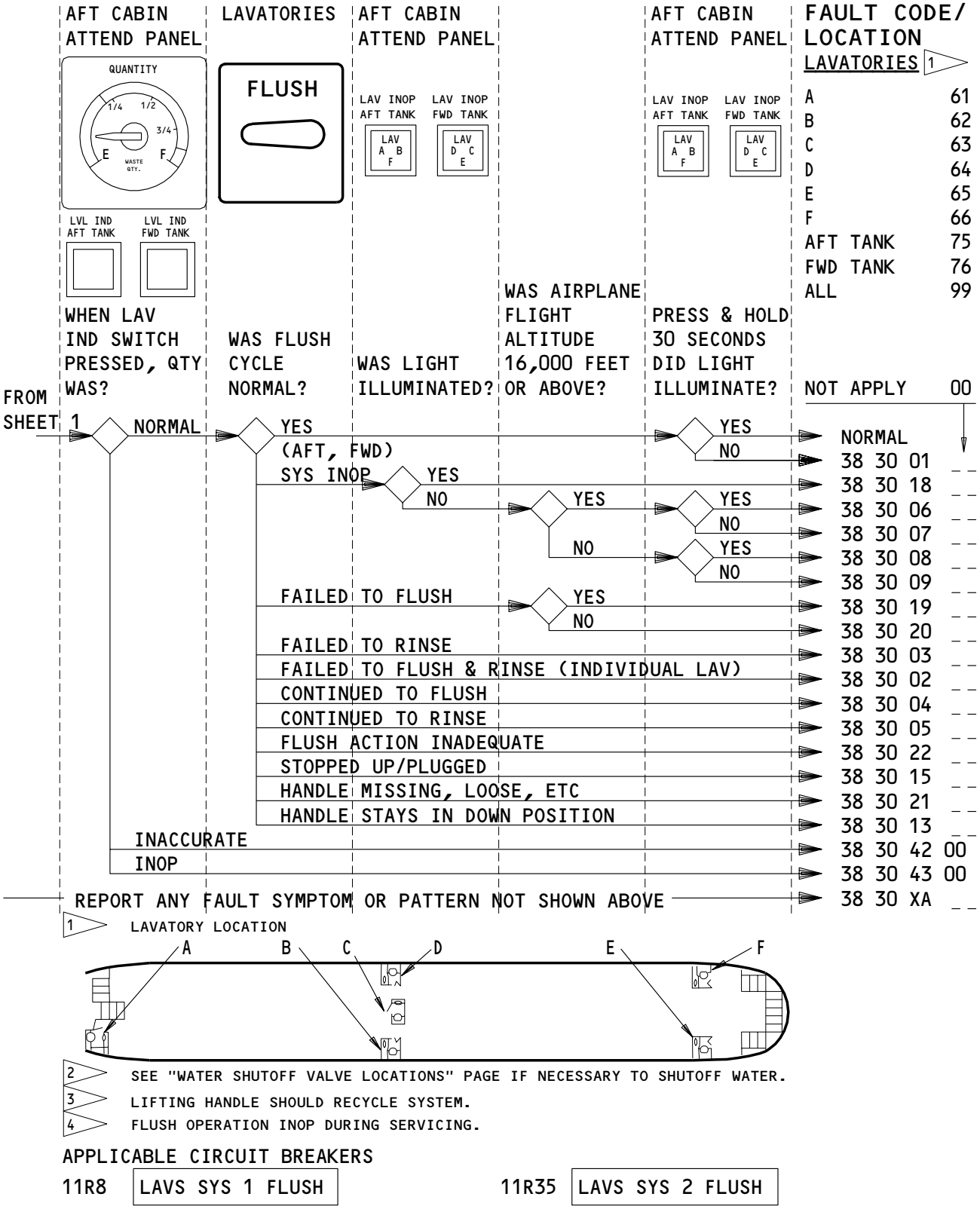
APPLICABLE CIRCUIT BREAKERS

| FAULT CODE/ LOCATION | |
|---|---|
| LAVATORIES 1 | |
| A | 61 |
| B | 62 |
| C | 63 |
| D | 64 |
| E | 65 |
| F | 66 |
| ALL | 99 |
| NOT APPLY | 00 |

LAVATORY WASTE(SHEET 1) – FAULT CODES



677756



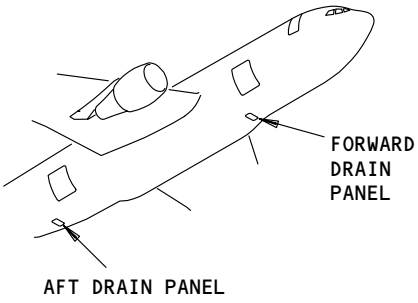

LAVATORY WASTE (SHEET 2) – FAULT CODES

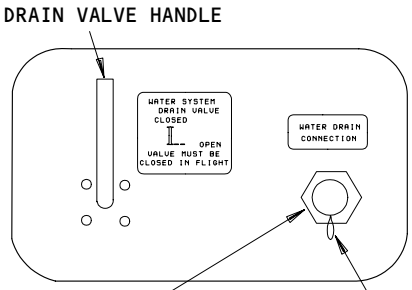
EFFECTIVITY
MTH AIRPLANES

# 38-FAULT CODE DIAGRAM

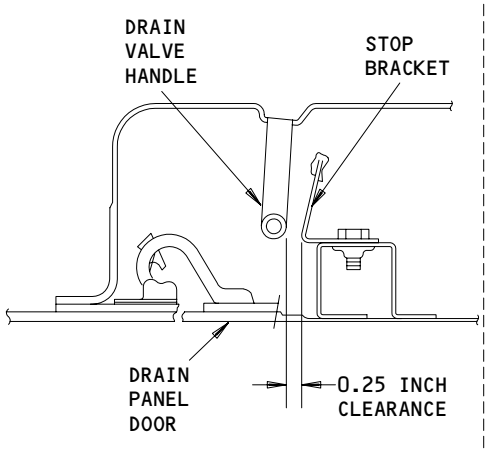


677758




FWD DRAIN PANEL SHOWN




FAULT CODE/
LOCATION

FWD DRAIN CONNECTION 01

AFT DRAIN CONNECTION 02

IS POTABLE WATER LEAKING THROUGH WATER DRAIN CONNECTION?

NO → NOT APPLY 00

YES → DOES STOP BRACKET ON DRAIN PANEL DOOR KEEP DRAIN VALVE HANDLE CLOSED?

YES → 38 10 17 __

NO → 38 10 18 __

REPORT ANY FAULT SYMPTOM OR PATTERN NOT SHOWN ABOVE → 38 10 XC __

POTABLE WATER – FAULT CODES (GROUND)

EFFECTIVITY

ALL

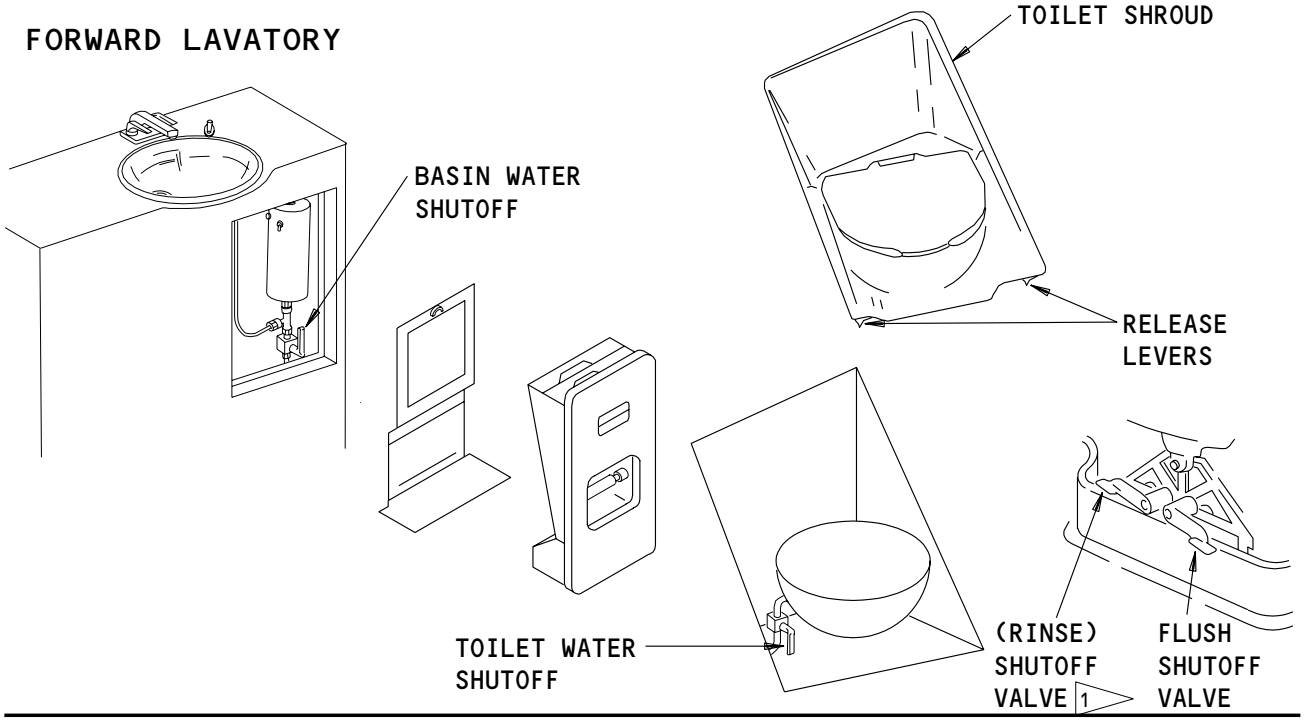
# 38-FAULT CODE DIAGRAM

01

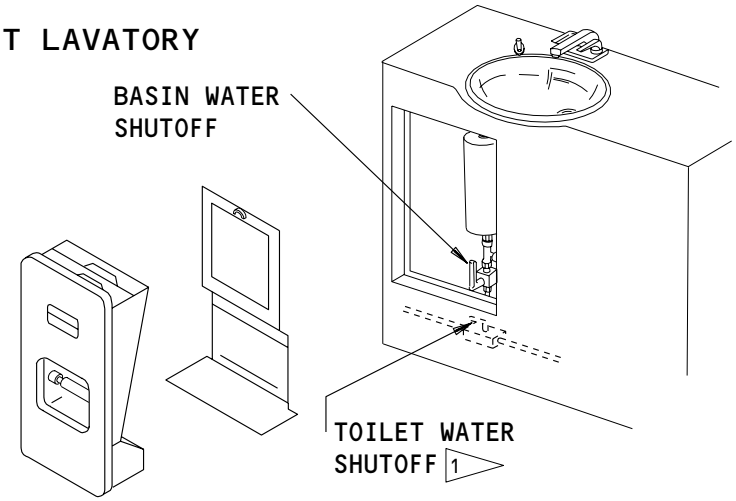


94478

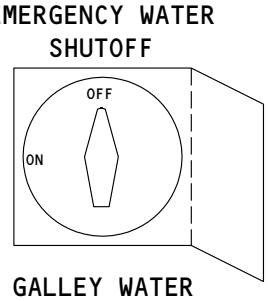
## FORWARD LAVATORY




## MID AND AFT LAVATORY




## GALLEYS




1 IF INSTALLED

WATER SHUTOFF VALVE LOCATIONS

1. General
   A. Fault Code Location Identifier:
      (1) Use the identifiers that follow for fault codes that end with --:
      (01=F-1, 24=MC-A, 25=MC-F, 27=MS-LA, 28=MS-LF, 30=MS-RA, 31=MS-RF, 61=A, 62=B, 63=C, 64=D, 65=E, 66=F, 75=Aft Tank, 76=Fwd Tank, 80=Fwd Galley, 82=Aft Galley, 99=ALL)

| FAULT CODE | 1. LOG BOOK REPORT<br>2. FAULT ISOLATION REFERENCE |
|---|---|
| 38 10 XA -- | 1. Report potable water symptoms or patterns along with fault code.<br>2. SSM 38-10-01. |
| 38 10 XB -- | 1. Report Lavatory/Galley drain and hot water heater symptoms or patterns along with fault code.<br>2. SSM 38-10-02. |
| 38 10 XC -- | 1. A potable water system drain valve problem was encountered which is not covered in the fault code diagrams. (Ref Fault Code Diagrams for actions taken).<br>2. SSM 38-10-01. |
| 38 30 XA -- | 1. Report Lavatory waste symptoms or patterns along with fault code.<br>2. SSM 38-30-01. |
| 38 30 XB -- | 1. Report Lavatory waste symptoms or patterns along with fault code.<br>2. SSM 38-30-01. |
| 38 10 01 00 | 1. Potable water is contaminated.<br>2. Disinfect potable water system (AMM 38-10-00). |
| 38 10 02 -- | 1. The potable water leaks at (See above for the fault code location indicator).<br>2. Close the water shutoff valve in the lavatory or the galley and fix the leak. |
| 38 10 03 -- | 1. A water leak at the faucet (See above for the fault code location indicator).<br>2. Replace the '0' rings in the faucet cartridge (AMM 38-11-06). |
| 38 10 04 -- | 1. The water faucet is faulty (describe fault) at (See above for the fault code location indicator).<br>2. Replace the potable water faucet (AMM 38-11-06). |
| 38 10 05 00 | 1. (Low, No) water flow from all faucets during (eng, APU) operation. Quantity was normal.<br>2. FIM 38-10-00/101, Fig. 103A, Block 1 |
| 38 10 06 -- | 1. (Low, No) water flow from the faucet at (See above for the fault code location indicator).<br>2. Replace the water faucet (AMM 38-11-06). |
| 38 10 07 00 | Not Used. |
| 38 10 08 00 | Not Used. |
| 38 10 09 00 | Not Used |

| FAULT CODE | 1. LOG BOOK REPORT<br>2. FAULT ISOLATION REFERENCE |
|---|---|
| 38 10 10 00 | 1. The quantity indicator for the potable water show zero with the water flow from the faucets normal.<br>2. Replace the water quantity indicator (AMM 38-14-02/401). |
| 38 10 11 -- | 1. A potable water leak at (See above for the fault code location indicator).<br>2. FIM 38-10-00/101, Fig. 105, Block 1 |
| 38 10 12 00 | 1. Potable water quantity dropped to zero with no water flow. Water leak was not visible.<br>2. Locate and fix leak. |
| 38 10 13 -- | 1. (See above for the fault code location indicator) The lavatory water is not hot. The Heater power switch is ON, and the heater pilot light is ON. Temperature Select Switch adjustments did not affect the temperature.<br>2. Replace the water heater (AMM 38-13-01/401). |
| 38 10 14 -- | 1. (See above for the fault code location indicator) The lavatory water is not hot. The Heater power switch is ON, and the heater pilot light is not ON.<br>2. Remove the water heater cover and depress the manual reset switch. |
| 38 10 15 -- | 1. (See above for the fault code location indicator) The sink drain is (clogged, appears frozen).<br>2. Unclog the drain. If the fault continues see FIM 30-71-00/101, Fig. 103. |
| 38 10 16 -- | 1. (See above for the fault code location indicator) The sink drain is noisy.<br>2. Check the drain tube for leaks or replace the muffler. |
| 38 10 17 -- | 1. The potable water leaks at the drain connection. The drain valve handle is held in the closed position by the stop bracket on the drain panel door.<br>2. Adjust or replace the drain valves. |
| 38 10 18 -- | 1. The drain valve handle is not held in the closed position by the stop bracket on the drain panel door.<br>2. Adjust the stop bracket on the drain panel door. |

| FAULT CODE | 1. LOG BOOK REPORT<br>2. FAULT ISOLATION REFERENCE |
|---|---|
| 38 10 19 -- | 1. (See above for the fault code location indicator) The water in the lavatory is too hot. Temperature Select Switch adjustments did not affect the temperature.<br>2. Replace the water heater (AMM 38-13-01/401). |
| 38 10 20 00 | Not Used |
| 38 10 21 00 | Not Used |
| 38 10 22 00 | Not Used |
| 38 10 23 00 | 1. The water quantity indicator is inoperative.<br>2. Replace the water quantity indicator. (AMM 38-14-02) |
| 38 10 24 00 | 1. The water quantity indicator is inaccurate.<br>2. FIM 38-10-00/101, Fig. 106, Block 1 |
| 38 10 25 00 | Not Used |
| 38 10 26 00 | 1. Potable water press (low, zero) with only ext pwr established. Water flow from faucets was also (low, zero).<br>2. FIM 38-10-00/101, Fig. 103, Block 1 |
| 38 10 27 -- | 1. There is (Low, No) water flow to the lavatory or the galley (See above for the fault code location indicator). Flow normal to other areas.<br>2. FIM 38-10-00/101, Fig. 104, Block 1 |
| 38 10 28 -- | 1. (See above for the fault code location indicator) The sink drain will not hold water.<br>2. Clean the sink drain and the stopper. If the fault continues, adjust or replace the drain actuator linkage (AMM 38-11-06). |
| 38 30 01 -- | 1. (See above for the fault code location indicator) The LAV INOP switch at the aft cabin attendant panel failed to test.<br>2. FIM 38-30-00/101, Fig. 104, Block 1 |
| 38 30 02 -- | 1. (See above for the fault code location indicator) The Toilet does not flush and rinse.<br>2. Replace the toilet flush switch (AMM 38-32-04). If the fault continues, replace the logic control module (WDM 38-32-11). |
| 38 30 03 -- | 1. (See above for the fault code location indicator) The toilet does not rinse.<br>2. FIM 38-30-00/101, Fig. 107, Block 1 |

| FAULT CODE | 1. LOG BOOK REPORT<br>2. FAULT ISOLATION REFERENCE |
|---|---|
| 38 30 04 -- | 1. (See above for the fault code location indicator) The toilet continues to flush.<br>2. Replace the flush valve or the flush control module (AMM 38-32-01). |
| 38 30 05 -- | 1. (See above for the fault code location indicator) The toilet continues to rinse.<br>2. Replace the rinse valve (AMM 38-32-01). |
| 38 30 06 -- | 1. (See above for the fault code location indicator) The toilets do not flush or rinse. The LAV INOP light(s) at aft cabin attendant panel are OFF. The airplane altitude was above 16,000 ft.<br>2. Replace the logic control module M964 or M965 (AMM 38-32-11). |
| 38 30 07 -- | 1. (See above for the fault code location indicator) The toilets do not flush or rinse. The LAV INOP light(s) at aft cabin attendant panel failed to test. The airplane altitude was above 16,000 ft.<br>2. FIM 38-30-00/101, Fig. 104, Block 1 |
| 38 30 08 -- | 1. (See above for the fault code location indicator) The toilets do not flush or rinse. The LAV INOP light(s) at aft cabin attendant panel test normal. The airplane altitude was below 16,000 ft.<br>2. FIM 38-30-00/101, Fig. 106, Block 1 |
| 38 30 09 -- | 1. (See above for the fault code location indicator) The toilets do not flush or rinse. The LAV INOP light(s) at aft cabin attendant panel failed to test. The airplane altitude was below 16,000 ft.<br>2. FIM 38-30-00/101, Fig. 104, Block 1 |
| 38 30 10 -- | 1. (See above for the fault code location indicator) The toilet has a loud air noise.<br>2. Replace the flush valve (AMM 38-32-01). |
| 38 30 11 -- | 1. (See above for the fault code location indicator) The Toilet has a water leak.<br>2. Replace the antisiphon valve or the vacuum break (AMM 38-32-01). |
| 38 30 12 -- | 1. (See above for the fault code location indicator) The toilet fills with water.<br>2. FIM 38-30-00/101, Fig. 104A, Block 1 |

| FAULT CODE | 1. LOG BOOK REPORT<br>2. FAULT ISOLATION REFERENCE |
|---|---|
| 38 30 13 -- | 1. (See above for the fault code location indicator) The toilet flush handle stays in the down position. Lifting handle (does/does not) recycle system.<br>2. Repair the toilet flush handle assembly. If the fault continues, replace the flush switch, S2 (AMM 38-32-04). |
| 38 30 14 00 | Not Used |
| 38 30 15 -- | 1. (See above for the fault code location indicator) The toilet is stopped up.<br>2. FIM 38-30-00/101, Fig. 108, Block 1. See also AMM 38-32-00/201, Vacuum Waste System - Maintenance Practices. |
| 38 30 16 00 | Not Used |
| 38 30 17 00 | Not Used |
| 38 30 18 -- | 1. (See above for the fault code location indicator) The toilets do not flush or rinse. The LAV INOP light is ON.<br>2. Service appropriate waste tank (AMM 12-17-01). If fault continues, inspect and clean interior of waste tank (AMM 38-32-11). |
| 38 30 19 -- | 1. (See above for the fault code location indicator). The toilet failed to flush. The airplane was above 16,000 ft.<br>2. FIM 38-30-00/101, Fig. 109, Block 1 |
| 38 30 20 -- | 1. (See above for the fault code location indicator). The toilet failed to flush. The airplane was below 16,000 ft.<br>2. FIM 38-30-00/101, Fig. 109, Block 1 |
| 38 30 21 -- | 1. (See above for the fault code location indicator) the toilet flush handle is (missing, loose, etc.).<br>2. Repair or replace the handle (AMM 38-32-04) |
| 38 30 22 -- | 1. (See above for the fault code location indicator) the toilet flushing action is inadequate.<br>2. FIM 38-30-00/101, Fig. 105, Block 1 |
| 38 30 42 00 | 1. Waste quantity indicator inaccurate.<br>2. Replace the waste quantity indicator. |
| 38 30 43 00 | 1. Waste quantity indicator inoperative.<br>2. Replace the waste quantity indicator. |

| FAULT CODE | 1. LOG BOOK REPORT<br>2. FAULT ISOLATION REFERENCE |
|---|---|
| 38 30 44 00 | 1. AFT WASTE SNSR - EICAS message.<br>2. Do LEVEL SENSING SYSTEM TROUBLESHOOTING FIM 38-30-00/101 FIG 110. |
| 38 30 45 00 | 1. FWD WASTE SNSR - EICAS message.<br>2. Do LEVEL SENSING SYSTEM TROUBLESHOOTING FIM 38-30-00/101 FIG 110. |

# BITE Index

1. General
   A. Use this index to find the BITE procedure for the applicable LRU/System.
   B. The BITE procedure will provide the fault isolation instructions for the fault indications/LRU maintenance messages.

| LRU/System Name | Acronym | FIM Reference |
|---|---|---|
| ACARS Management Unit | | 23-22 |
| Air Data Computer | ADC | 34-12 |
| Air Data Inertial Reference Unit | ADIRU | 34-26 |
| Air Supply Control and Test Unit | ASCTU | 36-20 |
| Air Traffic Control Transponder | ATC | 34-53 |
| Airborne Vibration Monitor Signal Conditioner | AVM | 77-31 |
| Antiskid/Autobrake Control Unit | AACU | 32-42 |
| APU Fire Detection System | | 26-15 |
| Automatic Direction Finder Receiver | ADF | 34-57 |
| APU Control Unit (or Electronic Control Unit) | ECU | 49-11 |
| Autopilot/Flight Director | AFDS | 22-00 |
| Auxiliary Zone Temperature Controller | AZTC | 2160/21-61 |
| Brake Temperature Monitor Unit | BTMU | 32-46 |
| Bus Power Control Unit | BPCU | 24-20 |
| Cabin Pressure Controller | CPC | 21-30/21-31 |
| Cabin Temperature Controller | CTC | 21-61 |
| Digital Flight Data Acquisition Unit | DFDAU | 31-31 |
| Distance Measuring Equipment Interrogator | DME | 34-55 |
| Duct Leak (Wing and Body) | | 26-18 |
| E/E Cooling Control Card (If cards installed) | | 21-58 |
| ECS Bleed Configuration Card | | 36-10 |
| Electronic Control Unit | ECU | 49-11 |
| Electronic Engine Control Monitor Unit (Non-FADEC Engines) | EECM | 71-EECM Message Index |
| Electronic Flight Instrument System | EFIS | 34-22 |

Bite Index
Figure 1 (Sheet 1)


K42785

| LRU/System Name | Acronym | FIM Reference |
|---|---|---|
| Engine Fire/Overheat Detection System | | 26-11 |
| Engine Indication and Crew Alerting System Computer | EICAS | 31-41 |
| Enhanced Ground Proximity Warning Computer | EGPWC | 34-46 |
| Equipment Cooling Systen Controller | | 21-58 |
| Equipment Cooling Temperature Controller | | 21-58 |
| Flap/Slat Electronic Unit | FSEU | 27-51 |
| Flap/Stabilizer Position Module | FSPM | 27-58 |
| Flight Management Computer | FMC | 34-61 |
| Fuel Quantity Indicating System Processor | FQIS | 28-41 |
| Ground Proximity Warning Computer | GPWC | 34-46 |
| HF (High Frequency) Communication | | 23-11 |
| In-Flight Entertainment Equipment Cooling Card | | 21-58 |
| Inertial Reference Unit | IRU | 34-21 |
| Instrument Comparator Unit | ICU | 34-25 |
| Instrument Landing System Receiver | ILS | 34-31 |
| Large Format Display System | LFDS | 31-63 |
| Lower Cargo Compartment Smoke Detection System | | 26-16 |
| Maintenance Control Display Panel | MCDP | 22-00 |
| Multi-Mode Receiver | MMR | 34-31 |
| PA (Passenger Address) Amplifier | | 23-31 |
| Pack Standby Temperature Controller | PSTC | 21-51 |
| Pack Temperature Controller | PTC | 21-51 |
| Passenger Entertainment System | PES | 23-34 |
| Power Supply Module (Control System Electronics Units) | PSM | 27-09 |
| Propulsion Interface and Monitor Unit (FADEC Engines) | PIMU | 71-PIMU Message Index |
| Proximity Switch Electronics Unit | PSEU | 32-09 |

Bite Index
Figure 1 (Sheet 2)

| LRU/System Name | Acronym | FIM Reference |
|---|---|---|
| Radio Altimeter Transmitter/Receiver | RA | 34-33 |
| Rudder Ratio Changer Module | RRCM | 27-09 |
| Satellite Data Unit | SDU | 23-25 |
| Spoiler Control Module | SCM | 27-09 |
| Stabilizer Trim/Elevator Asymmetry Limit Module | SAM | 27-09 |
| Stall Warning Computer/Module (in Warning Electronic Unit) | SWC | 27-32 |
| Strut Overheat Detection System (RR Engines) | | 26-12 |
| Thrust Management Computer/Autothrottle | TMC | 22-00 |
| Traffic Alert and Collision Avoidance Computer | TCAS | 34-45 |
| VHF (Very High Frequency) Communication | | 23-12 |
| VOR/Marker Beacon Receiver | VOR/MKR | 34-51 |
| Warning Electronic Unit BITE Module (Stall Warning) | WEU | 27-32 |
| Weather Radar Transceiver | WXR | 34-43 |
| Wheel Well Fire Detection | | 26-17 |
| Window Heat Control Unit | WHCU | 30-41 |
| Yaw Damper Module | YDM | 22-21 |
| Yaw Damper/Stabilizer Trim Module | YSM | 27-09 |
| Zone Temperature Controller | ZTC | 21-60/21-61 |

Bite Index
Figure 1 (Sheet 3)

POTABLE WATER

| COMPONENT | FIG. 102 SHT | QTY | ACCESS/AREA | AMM REFERENCE |
|---|---|---|---|---|
| CIRCUIT BREAKER – | | | FLT COMPT, P11 | |
| ENT LTS POT WATER, C1355 | | 1 | 11U28 | * |
| CIRCUIT BREAKER – | | | 119AL, MAIN EQUIP CTR, P33 | |
| AIR CPRSR WATER SYS, C397 | | 1 | 33H6 | * |
| CIRCUIT BREAKER – | | | 119AL, MAIN EQUIP CTR, P34 | |
| POT WATER/ENTRY LTS, C1354 | | 1 | 34P11 | * |
| CIRCUIT BREAKER – | | | 119AL, MAIN EQUIP CTR, P36 | |
| WATER/WASTE LAV WH SYS 1, C1365 5 | | | 36D7 | * |
| WATER/WASTE WTR HTR LAV SYS 1, C1365 6 | | 1 | 36E7 | * |
| CIRCUIT BREAKER – | | | 119AL, MAIN EQUIP CTR, P37 | |
| WATER/WASTE LAV WH SYS 2, C1366 5 | | 1 | 37H7 | * |
| WATER/WASTE WTR HTR LAV SYS 2, C1366 6 | | 1 | 37E7 | * |
| COMPRESSOR – AIR, M142 | 1 | 1 | 811, AFT OF BULK CARGO COMPT | 38-15-01 |
| FAUCET – LAVATORY WASHBASIN 1 | 4 | 7 | LAV | 38-11-06 |
| FAUCET – LAVATORY WASHBASIN 2 | 4 | 6 | LAV | 38-11-06 |
| FILTER – AIR 3 | 2 | 3 | 811, AFT OF BULK CARGO COMPT | 38-15-02 |
| FILTER – AIR 4 | 2 | 2 | 811, AFT OF BULK CARGO COMPT | 38-15-02 |
| FILTER – WATER 2 | 4 | 6 | LAV, BELOW WASHBASIN | 38-10-00 |
| HEATER – WATER, M8 1 | 4 | 7 | LAV, BELOW WASHBASIN | 38-13-01 |
| HEATER – WATER, M8 2 | 4 | 6 | LAV, BELOW WASHBASIN | 38-13-02 |
| INDICATOR – WATER QUANTITY, N108 | 3 | 1 | 155AL, AFT SVC AND DRAIN PANEL | 38-14-02 |
| INDICATOR – WATER QUANTITY, YBIN1 | 2 | 1 | AFT ATTENDANT STA, P22 | 38-14-02 |
| MUFFLER – DRAIN LINE 1 | 4 | 7 | LAV, BELOW WASHBASIN | 38-10-00 |
| MUFFLER – DRAIN LINE 2 | 4 | 6 | LAV, BELOW WASHBASIN | 38-10-00 |
| RELAY – (FIM 31-01-49/101) | | | 822, AFT CARGO DOOR, E6 RACK, P49 | |
| WATER PRESS SYS, K6 | | | | |
| WATER SYS 28V PWR, K174 | | | | |
| SWITCH – COMPRESSOR INTERLOCK, S333 1 | 2 | 1 | AFT ATTENDANT STA | 38-15-03 |
| SWITCH – COMPRESSOR INTERLOCK, S553 | 1 | 1 | 811, AFT OF BULK CARGO COMPT | 38-15-03 |
| SWITCH – PRESSURE ACTUATED COMPRESSOR, S332 | 2 | 1 | 811, AFT OF BULK CARGO COMPT | 38-15-05 |
| TANK – POTABLE WATER, AUXILIARY | 1 | 1 | 811, BULK CARGO COMPT SIDEWALL | 38-11-01 |
| TANK – POTABLE WATER, MAIN | 1 | 1 | 811, AFT OF BULK CARGO COMPT | 38-11-01 |
| TRANSMITTER – WATER QTY, T167 | 1 | 1 | 811, AFT OF BULK CARGO COMPT | 38-14-01 |
| VALVE – FILL/OVERFLOW | 1 | 1 | 811, AFT OF BULK CARGO COMPT | 38-11-03 |
| VALVE – PRESSURE RELIEF | 2 | 1 | 811, AFT OF BULK CARGO COMPT | 38-15-06 |

* SEE THE WDM EQUIPMENT LIST

1 ALL SAS AIRPLANES

2 ALL MTH AIRPLANES

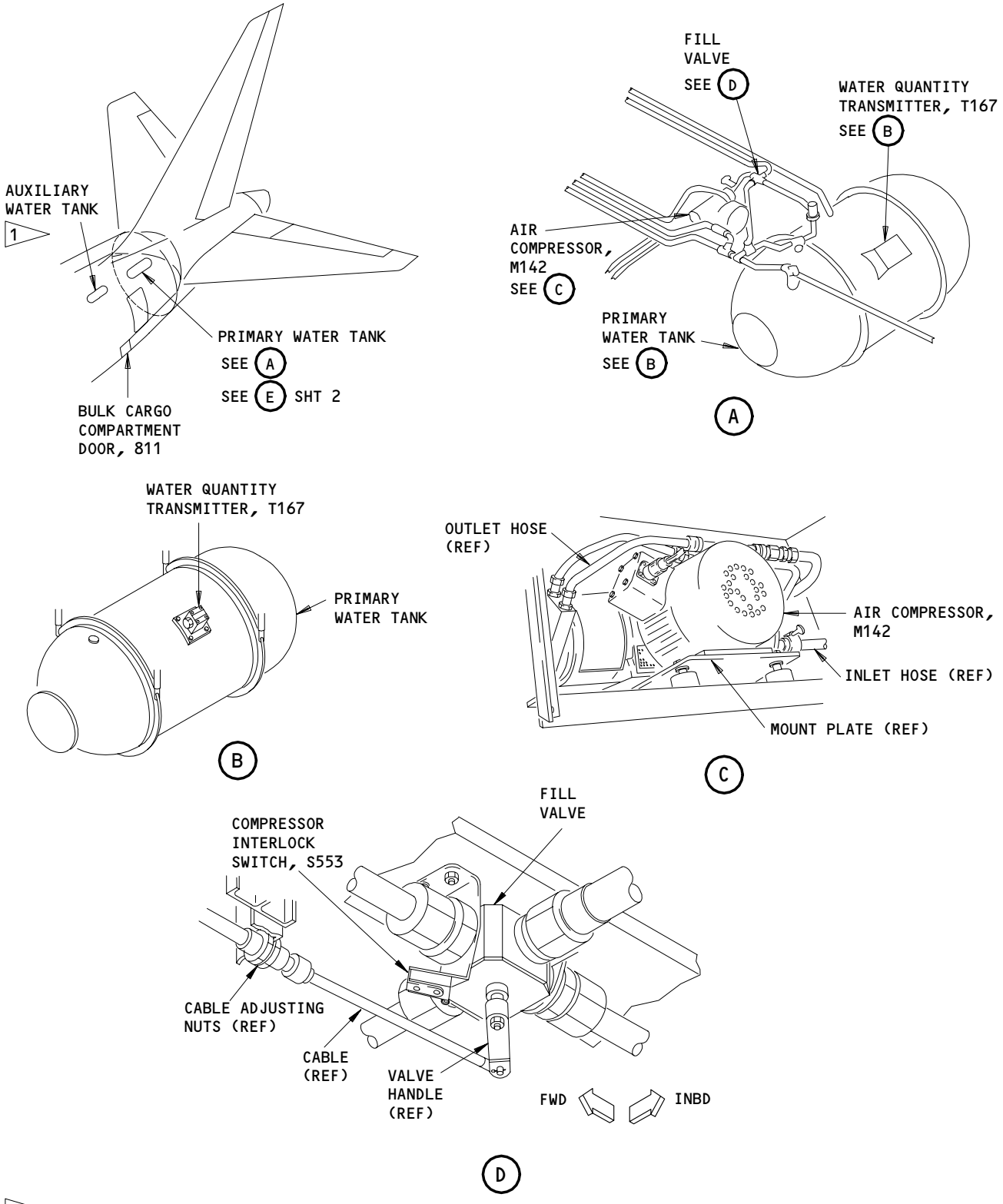
3 SAS 050, 051, 150–155, 162–165 MTH 275, 276

4 ALL EXCEPT SAS 050, 051, 150–155, 162–165;
ALL EXCEPT MTH 275, 276

5 SAS 001–167;
MTH 275–280

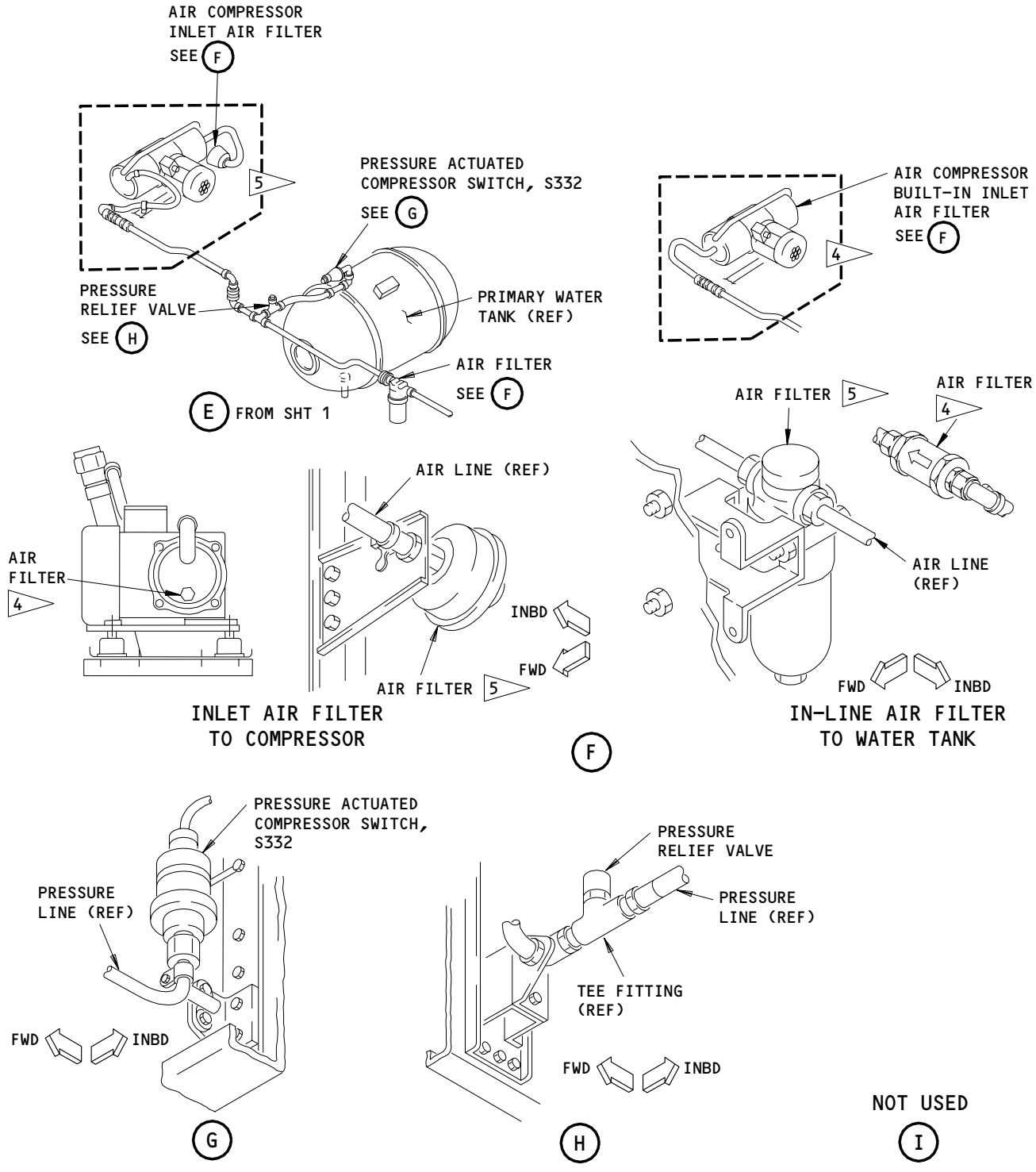
6 SAS 168–999;
MTH 281–999

Potable Water – Component Index
Figure 101




1 AIRPLANES WITH AN AUXILIARY WATER TANK

Potable Water - Component Location
Figure 102 (Sheet 1)

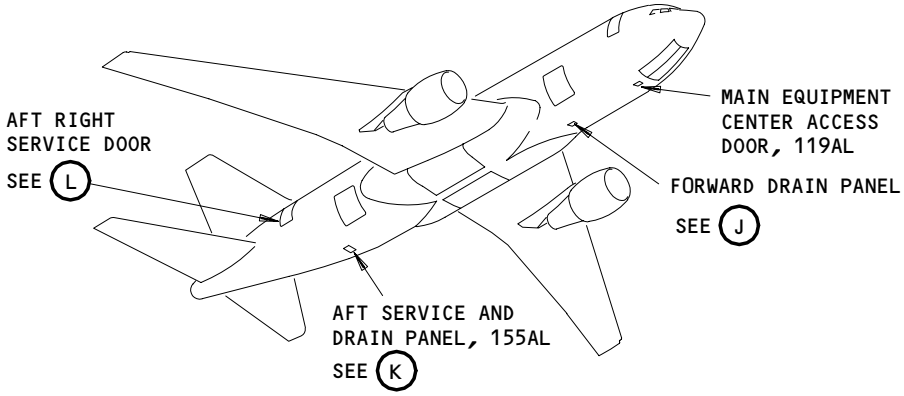


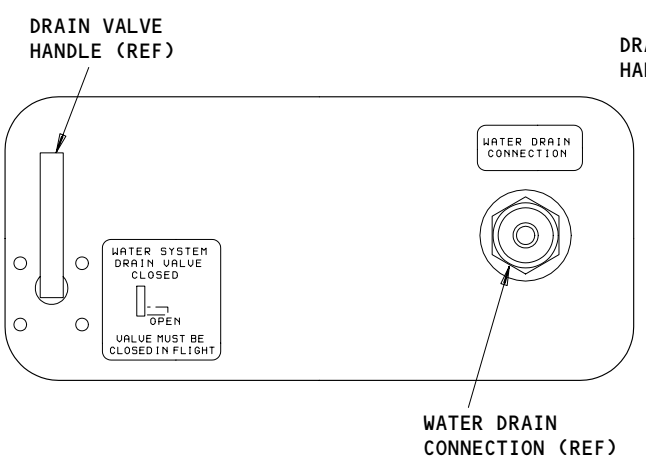

4 AIR COMPRESSORS WITH BUILT-IN FILTER

5 AIR COMPRESSORS WITH EXTERNAL INLET FILTER

6 NOT USED

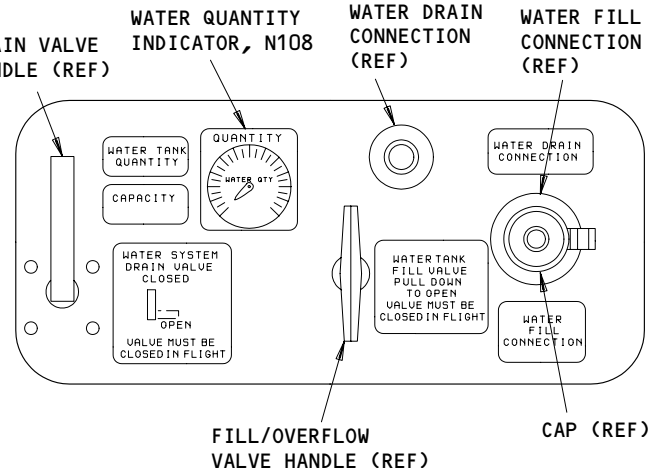
Potable Water - Component Location
Figure 102 (Sheet 2)



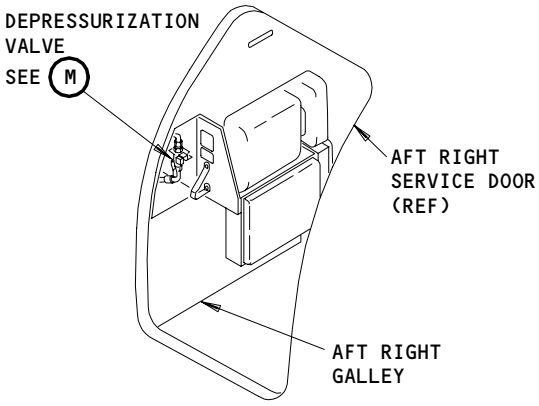

FORWARD DRAIN PANEL

J



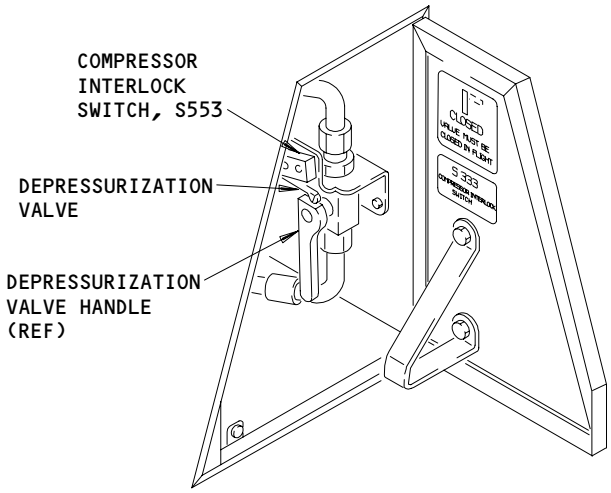

AFT SERVICE AND DRAIN PANEL

K




AFT RIGHT SERVICE DOOR

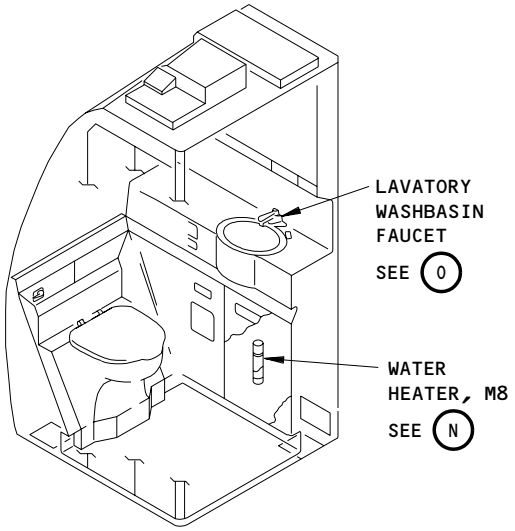
L



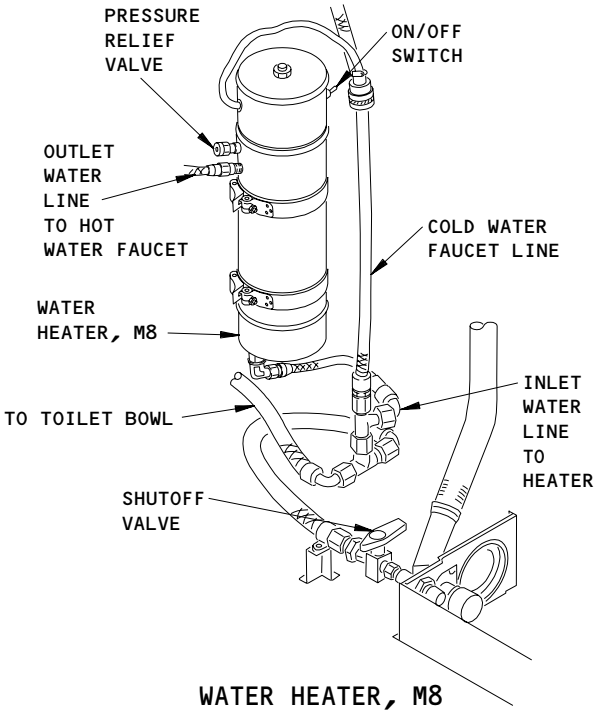

DEPRESSURIZATION VALVE

M

Potable Water - Component Location
Figure 102 (Sheet 3)

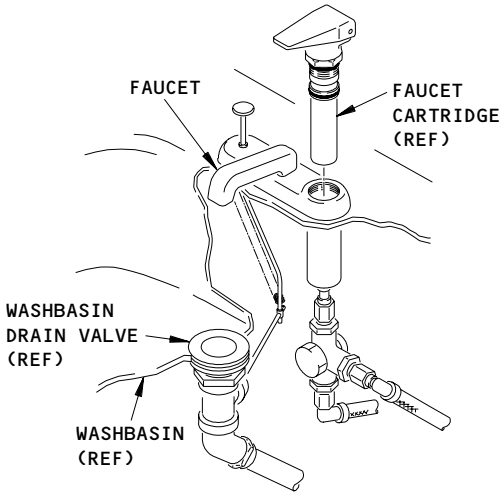



LAVATORIES
(EXAMPLE)



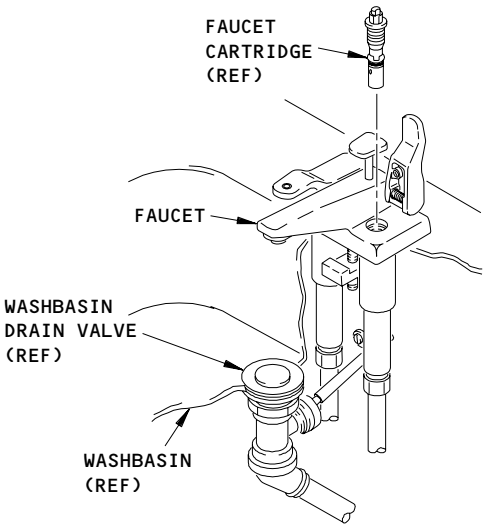

WATER HEATER, M8

N




LAVATORY WASHBASIN FAUCET

0 2




LAVATORY WASHBASIN FAUCET

0 3

2 ALL SAS AIRPLANES

3 ALL MTH AIRPLANES

Potable Water – Component Location
Figure 102 (Sheet 4)



752084

LOW OR NO WATER FLOW FROM ALL FAUCETS WITH ONLY EXTERNAL POWER ESTABLISHED

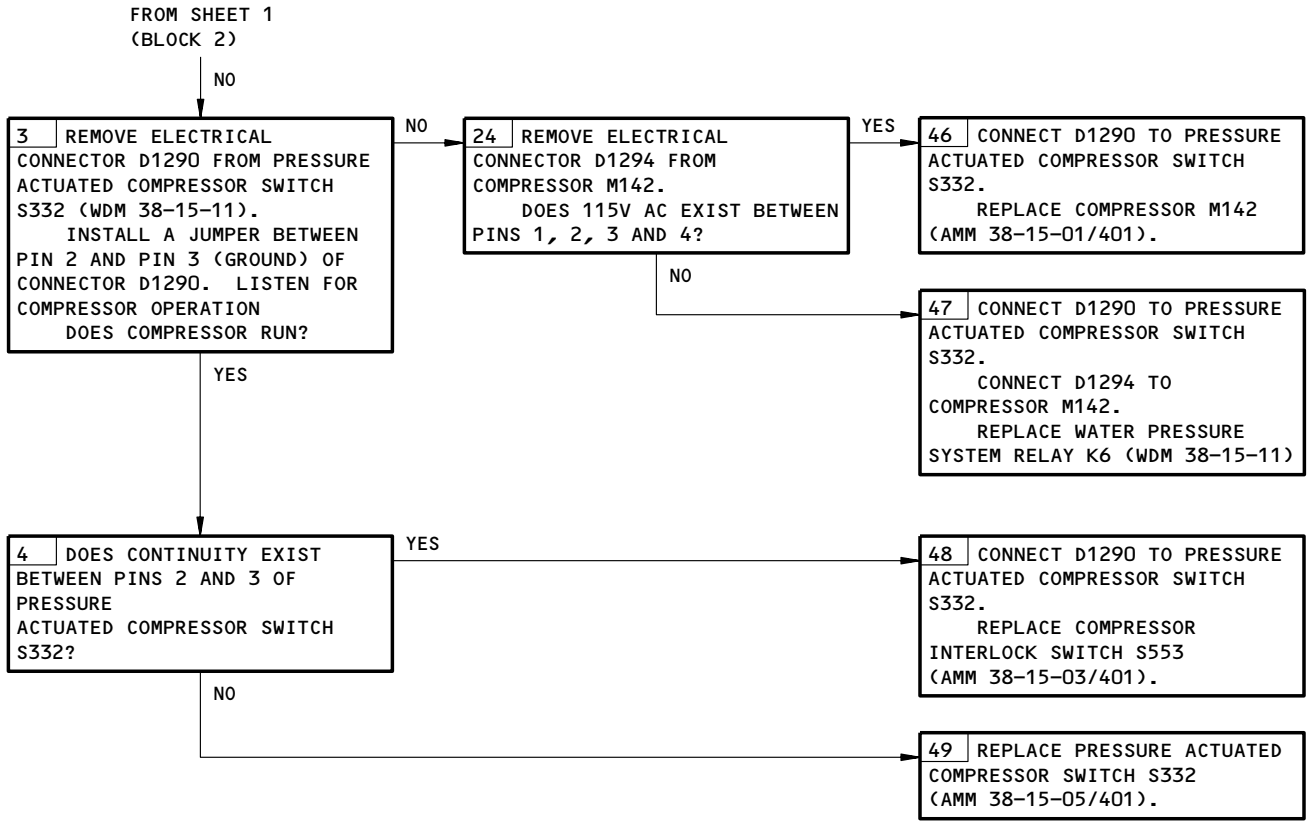
**PREREQUISITES**

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:
11U30, 33H6, 34P11

MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION:
APU AND ENGINES NOT RUNNING
ELECTRICAL POWER IS ON (AMM 24-22-00/201)
POTABLE WATER TANK FULL (AMM 12-14-01/301)

1 ARE FILL OVERFLOW VALVES CLOSED?
- NO → 40 CLOSE FILL OVERFLOW VALVES.
- YES → 2 CRACK OPEN FILL OVERFLOW VALVE UNTIL POTABLE WATER SYSTEM IS DEPRESSURIZED, THEN CLOSE VALVE.
LISTEN FOR POTABLE WATER AIR COMPRESSOR OPERATION.
DOES COMPRESSOR RUN?
  - NO → SEE SHEET 2 (BLOCK 3)
  - YES → 20 CHECK POTABLE WATER TANK INLETS AND OUTLETS FOR ICE.
DOES ICE EXIST?
    - YES → 41 PERFORM POTABLE WATER TANK HEATER BLANKET/HEATER TAPE PROCEDURE (AMM 30-71-00/501).
    - NO → 21 LISTEN FOR AIR COMING OUT OF PRESSURE RELIEF VALVE.
IS AIR COMING OUT OF PRESSURE RELIEF VALVE?
      - YES → 42 REPLACE PRESSURE RELIEF VALVE (AMM 38-15-06/201).
      - NO → 22 CHECK AIR SUPPLY LINES BETWEEN AIR COMPRESSOR AND POTABLE WATER TANK FOR AIR LEAKS.
IS THERE AN AIR LEAK IN THE AIR SUPPLY LINES?
        - YES → 43 REPAIR AIR LEAK IN AIR SUPPLY LINES.
        - NO → 23 DOES AIR COMPRESSOR OPERATE LONGER THAN 5 MINUTES BEFORE IT STOPS?
          - YES → 44 REPLACE AIR COMPRESSOR AIR FILTERS (AMM 38-15-02/401).
IF FAULT PERSISTS, REPLACE AIR COMPRESSOR (AMM 38-15-01/401).
          - NO → 45 REPLACE PRESSURE ACTUATED COMPRESSOR SWITCH, S332 (AMM 38-15-05/401).

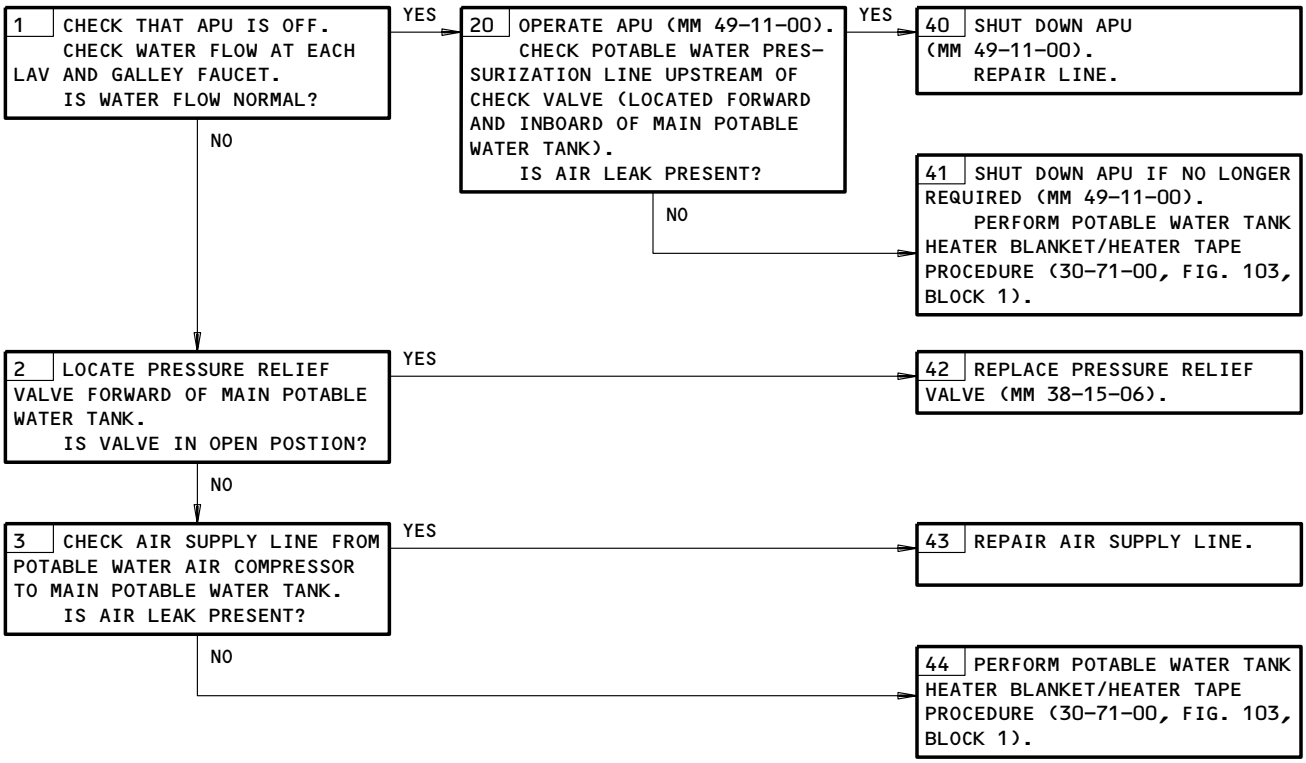
Low or No Water Flow From All Faucets With Only External Power Established
Figure 103 (Sheet 1)




Low or No Water Flow From All Faucets With Only External Power Established
Figure 103 (Sheet 2)

**LOW OR NO WATER FLOW FROM ALL FAUCETS DURING ENG OR APU OPERATION. QUANTITY WAS NORMAL.**

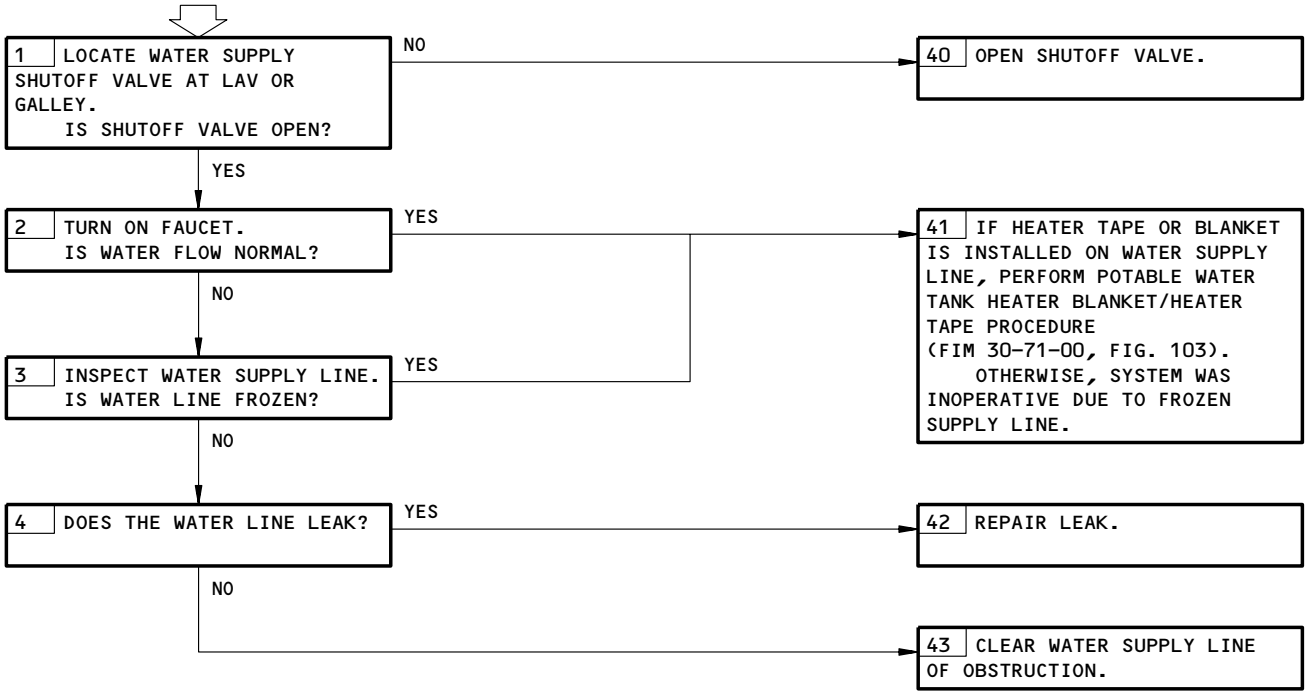
**PREREQUISITES**
ENGINES OFF
ELECTRICAL POWER (MM 24-00-00)
CB'S: 11U28,33H6,34P11




Low or No Water Flow From All Faucets During Eng or APU Operation.
Quantity was Normal.
Figure 103A

## LOW OR NO FLOW IN INDIVIDUAL LAV OR GALLEY. WATER QUANTITY NORMAL. FLOW NORMAL TO OTHER AREAS.

**PREREQUISITES**
NONE




Low or No Flow in Individual Lav or Galley. Water Quantity Normal.
Flow Normal to Other Areas.
Figure 104

**PREREQUISITES**

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:
11U28,33H6

MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION:
ELECTRICAL POWER IS ON (AMM 24-22-00/201)

**POTABLE WATER IS LEAKING**

1 SERVICE POTABLE WATER SYSTEM (AMM 12-14-01/301). LOCATE AND FIX LEAK (AMM 38-10-00/501).

Potable Water is Leaking
Figure 105

## POTABLE WATER QUANTITY READS ZERO WITH WATER FLOW FROM FAUCETS NORMAL

**PREREQUISITES**

MAKE SURE THIS CIRCUIT BREAKER IS CLOSED:
34P11

MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION:
ELECTRICAL POWER IS ON (AMM 24-22-00/201)

1 FILL POTABLE WATER TANK (AMM 12-14-01/301).
CHECK READING ON WATER QUANTITY INDICATORS AT POTABLE WATER SERVICE PANEL AND AFT ATTENDANT PANEL, P22.
DO ALL WATER QUANTITY INDICATORS READ ZERO?

NO → 41 REPLACE WATER QUANTITY INDICATOR THAT READS ZERO (AMM 38-14-02/401).

YES

2 DO A CHECK FOR CONTINUITY OF THE BONDING STRAP BETWEEN THE TANK FITTING AND THE STRUCTURE GROUND STUD.
IS THERE CONTINUITY?

NO → 42 REPLACE THE BONDING STRAP (AMM 20-10-21/401).

YES

3 REMOVE CONNECTOR D3446 FROM WATER QUANTITY TRANSMITTER, TS167 (WDM 38-14-11) IS THERE 28V DC AT CONNECTOR D3446, PIN 3 (PINS 4 AND 5 GND)?

NO → 43 INSTALL CONNECTOR D3446 ON WATER QUANTITY TRANSMITTER, TS167 (WDM 38-14-11).
REPLACE WATER SYSTEM RELAY, K174, ON P49 (WDM 38-14-11).

YES

4 REMOVE THE WATER QUANTITY TRANSMITTER, TS167.
CLEAN THE TRANSMITTER CONNECTIONS ON THE WATER TANK AND INSTALL IT 180° FROM ITS ORIGINAL POSITION TO CONTACT THE SECONDARY SENSOR CONNECTOR (AMM 38-14-01/401).
DOES THE PROBLEM CONTINUE?

NO → 44 THE WATER QUANTITY TRANSMITTER, TS167, PRIMARY CONNECTOR HAS FAILED.
CONTINUE THE AIRPLANE IN SERVICE.

YES

5 REMOVE THE WATER QUANTITY TRANSMITTER, TS167.
DO A CHECK OF THE CAPACITANCE AT THE WATER TANK CONNECTIONS.
IS THE CAPACITANCE 3600-5400 PICOFARADS?

YES → 45 REPLACE THE WATER QUANTITY TRANSMITTER (AMM 38-14-01/401).

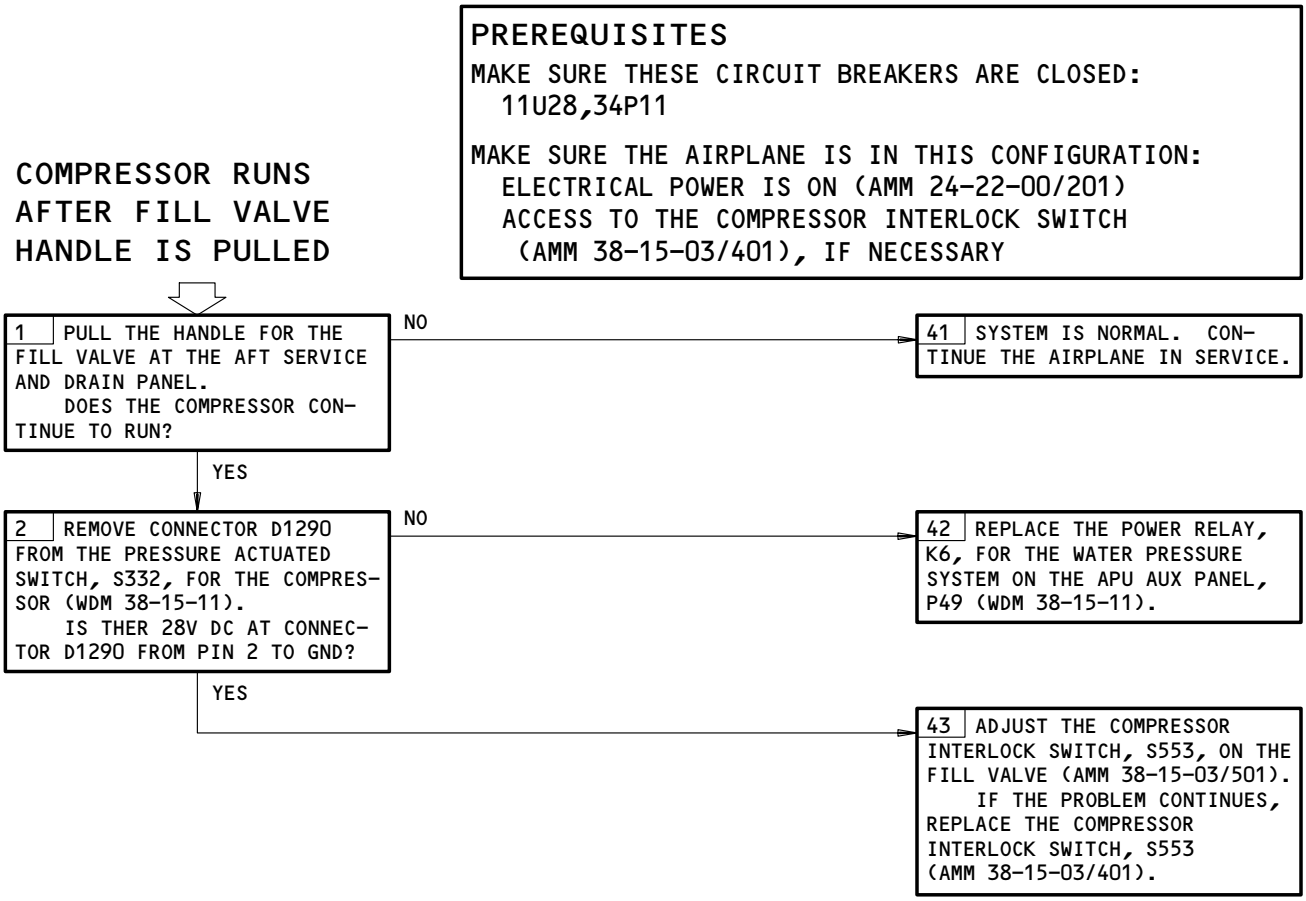
NO → 46 REPLACE THE POTABLE WATER TANK (AMM 38-11-01/201).

Potable Water Quantity Reads Zero with Water Flow from Faucets Normal
Figure 106

**PREREQUISITES**

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:
11U28,34P11

MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION:
ELECTRICAL POWER IS ON (AMM 24-22-00/201)
ACCESS TO THE COMPRESSOR INTERLOCK SWITCH (AMM 38-15-03/401), IF NECESSARY




Compressor Runs After Fill Valve Handle Is Pulled
Figure 107

## WASTE DISPOSAL

| COMPONENT | FIG. 102 SHT | QTY | ACCESS/AREA | AMM REFERENCE |
|---|---|---|---|---|
| ASSEMBLY – TOILET | 5 | | INSIDE LAVATORY | 38-32-01 |
| BLOWER – VACUUM, AFT WASTE TANK, M598 | 2 | 1 | 822, AFT OF BULK CARGO COMPT | 38-32-06 |
| BLOWER – VACUUM, FWD WASTE TANK, M599 | 2 | 1 | 822, AFT OF BULK CARGO COMPT | 38-32-06 |
| CIRCUIT BREAKER – | | | FLT COMPT, P11 | |
| LAVS SYSTEM 1, FLUSH, C1367 | | 1 | 11R8 | * |
| LAVS SYSTEM 2, FLUSH, C1368 | | 1 | 11R35 | * |
| CIRCUIT BREAKER – | | | 119AL, MAIN EQUIP CTR, P36 | |
| VACUUM BLOWER, LAVS SYSTEM 1, C389 4 | | 1 | 36F6 | * |
| VACUUM BLOWER, LAVS SYSTEM 1, C389 5 | | 1 | 36G1 | * |
| CIRCUIT BREAKER – | | | 119AL, MAIN EQUIP CTR, P37 | |
| VACUUM BLOWER LAVS SYSTEM 2, C388 | | 1 | 37G7 | * |
| FILTER – RINSE LINE 1 | 1 | 2 | 822, AFT OF BULK CARGO COMPT | 38-32-18 |
| LIGHT – SENSOR FOUL, AFT TANK | 4 | 1 | WASTE TANK SERVICE PANEL, 163AL | * |
| LIGHT – SENSOR FOUL, FWD TANK | 4 | 1 | WASTE TANK SERVICE PANEL, 163AL | * |
| MODULE – SENSOR CONTROL AND LOGIC, AFT WASTE TANK, M965 | 3 | 1 | 822, AFT OF BULK CARGO COMPT | 38-33-03 |
| MODULE – SENSOR CONTROL AND LOGIC, FWD WASTE TANK, M964 | 3 | 1 | 822, AFT OF BULK CARGO COMPT | 38-33-03 |
| NOZZLE – RINSE | 1 | 4 | 822, AFT OF BULK CARGO COMPT | 38-32-17 |
| NOZZLE – RINSE 2 | 1 | 2 | 822, AFT OF BULK CARGO COMPT | 38-32-17 |
| RELAY – (FIM 31-01-36/101) | | | | |
| LAVATORY FLUSH CONTROL, SYSTEM 1, K2310 | | | | |
| LAVATORY FLUSH CONTROL, SYSTEM 2, K2311 | | | | |
| VACUUM BLOWER, K172 | | | | |
| RELAY – (FIM 31-01-49/101) | | | | |
| VACUUM BLOWER, K173 | | | | |
| SENSOR A – LEVEL, AFT WASTE TANK, TS1 | 1, 2 | 1 | 822, AFT OF BULK CARGO COMPT | 38-33-01 |
| SENSOR A – LEVEL, FWD WASTE TANK, TS1 | 1, 2 | 1 | 822, AFT OF BULK CARGO COMPT | 38-33-01 |
| SENSOR B – LEVEL, AFT WASTE TANK, TS2 | 1, 2 | 1 | 822, AFT OF BULK CARGO COMPT | 38-33-01 |
| SENSOR B – LEVEL, FWD WASTE TANK, TS2 | 1, 2 | 1 | 822, AFT OF BULK CARGO COMPT | 38-33-01 |
| SENSOR C – CONTINUOUS LEVEL SENSOR, TS3 6 | 1 | 2 | 822, AFT OF BULK CARGO COMPT | 38-33-02 |
| SEPARATOR – WATER, AFT WASTE TANK | 1, 2 | 1 | 822, AFT OF BULK CARGO COMPT | 38-32-02 |
| SEPARATOR – WATER, FWD WASTE TANK | 1, 2 | 1 | 822, AFT OF BULK CARGO COMPT | 38-32-02 |

* SEE THE WDM EQUIPMENT LIST

1 AIRPLANES WITH A WASTE WATER FILTER IN THE RINSE NOZZLE TUBE (SB 767-38-0014)

2 AIRPLANES WITH ONE RINSE NOZZLE PER TANK (SB 767-38-0018)

3 AIRPLANES WITH THE WASTE SENSOR OFF SWITCH FOUND ON THE AFT ATTENDANT PANEL

4 SAS 001-167, 275-280

5 SAS 168-999, 281-999

6 SAS 052-099, 156-199, 277-999

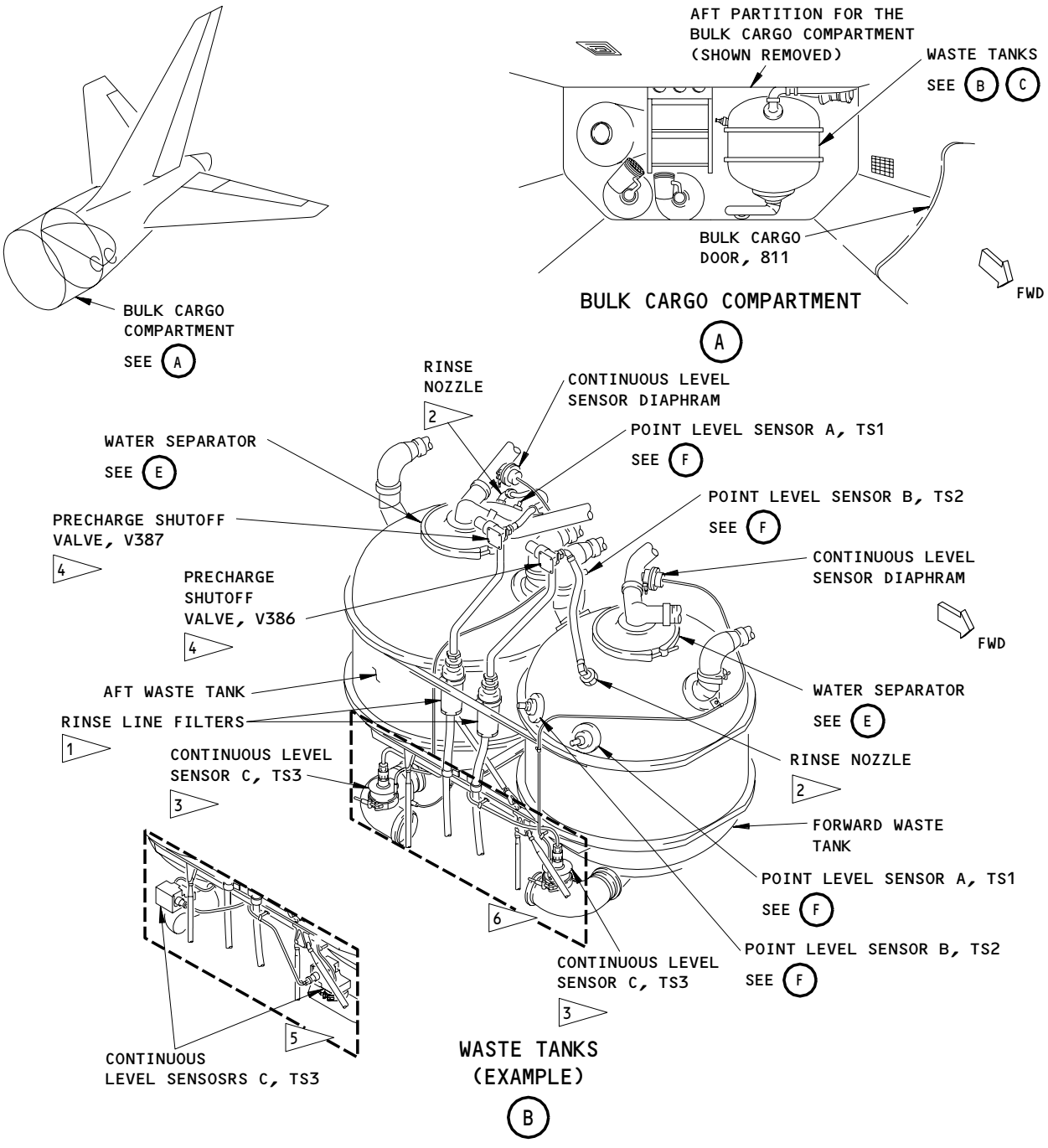
7 SAS 052, 156, 157, 166, 167, 277-281

Waste Disposal – Component Index
Figure 101 (Sheet 1)

| COMPONENT | FIG. 102 SHT | QTY | ACCESS/AREA | AMM REFERENCE |
|---|---|---|---|---|
| SWITCH – ALTITUDE PRESSURE, S343 | 6 | 1 | 311BL, STAB. JACKSCREW COMPT | 38-32-51 |
| SWITCH – ALTITUDE PRESSURE, S344 | 6 | 1 | 311BL, STAB. JACKSCREW COMPT | 38-32-51 |
| SWITCH – FLUSH, S2 | | | INSIDE LAVATORY | 38-32-04 |
| SWITCH – LAV INOP, AFT TANK, S17 | 4 | 1 | AFT ATTENDANT PANEL, P22 | * |
| SWITCH – LAV INOP, FWD TANK, S16 | 4 | 1 | AFT ATTENDANT PANEL, P22 | * |
| SWITCH – SENSOR FOUL, AFT TANK, S15 | 4 | 1 | AFT ATTENDANT PANEL, P22 | * |
| SWITCH – SENSOR FOUL, FWD TANK, S14 | 4 | 1 | AFT ATTENDANT PANEL, P22 | * |
| SWITCH – SENSOR OFF, AFT TANK, S22 3 | | 1 | AFT ATTENDANT PANEL, P22 | * |
| SWITCH – SENSOR OFF, FWD TANK, S21 3 | | 1 | AFT ATTENDANT PANEL, P22 | * |
| SWITCH – SERVICE PANEL DOOR, S352 | 4 | 1 | WASTE TANK SERVICE PANEL, 163AL | * |
| SWITCH – SERVICE PANEL DOOR, S353 | 4 | 1 | WASTE TANK SERVICE PANEL, 163AL | * |
| TANK – WASTE, AFT | 1 | 1 | 822, AFT OF BULK CARGO COMPT | 38-32-11 |
| TANK – WASTE, FWD | 1 | 1 | 822, AFT OF BULK CARGO COMPT | 38-32-11 |
| VALVE – DRAIN, AFT TOILET TANK | 2 | 1 | 822, AFT OF BULK CARGO COMPT | 38-32-03 |
| VALVE – DRAIN, FWD TOILET TANK | 2 | 1 | 822, AFT OF BULK CARGO COMPT | 38-32-03 |
| VALVE – PRECHARGE SHUTOFF, V386, V387 7 | 1 | 2 | 822, AFT OF BULK CARGO COMPT | 38-32-19 |

* SEE THE WDM EQUIPMENT LIST

Waste Disposal – Component Index
Figure 101 (Sheet 2)




1 AIRPLANES WITH THE RINSE LINE FILTERS (SB 767-38-0014)

2 AIRPLANES WITH ONE RINSE NOZZLE ON EACH WASTE TANK

3 AIRPLANES WITH THE CONTINUOUS LEVEL SENSORS

4 AIRPLANES WITH THE PRECHARGE SHUTOFF VALVE

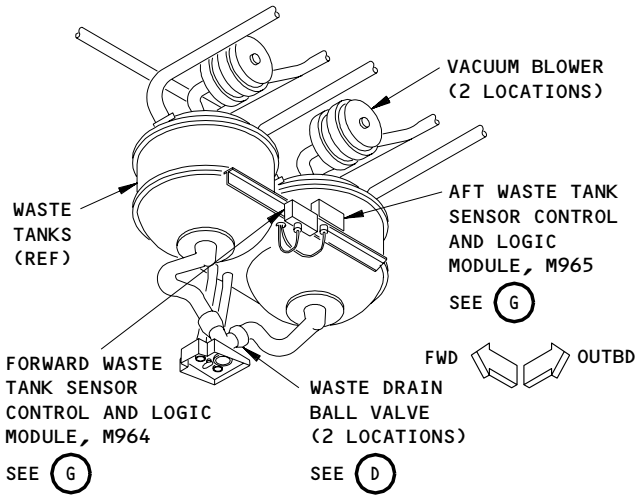
5 AIRPLANES WITH THE CONTINUOUS LEVEL SENSORS WITH L-SHAPE PROFILE

6 AIRPLANES WITH THE CONTINUOUS LEVEL SENSORS WITH CYLINDRICAL SENSOR MODULE

Waste Disposal - Component Location
Figure 102 (Sheet 1)

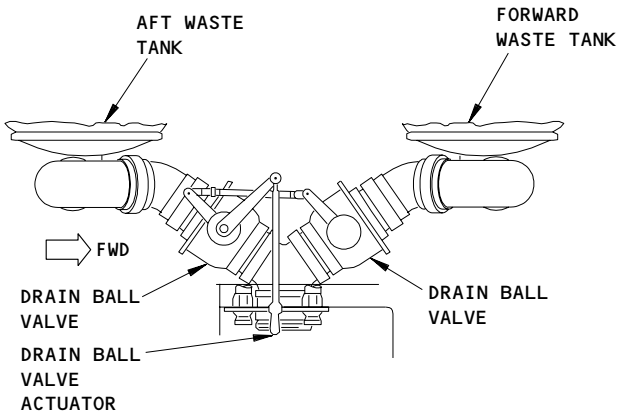


M08364



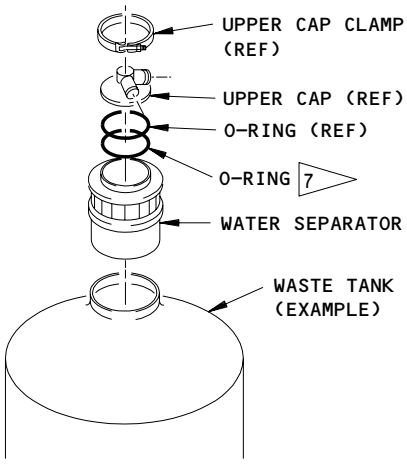

WASTE TANKS

C



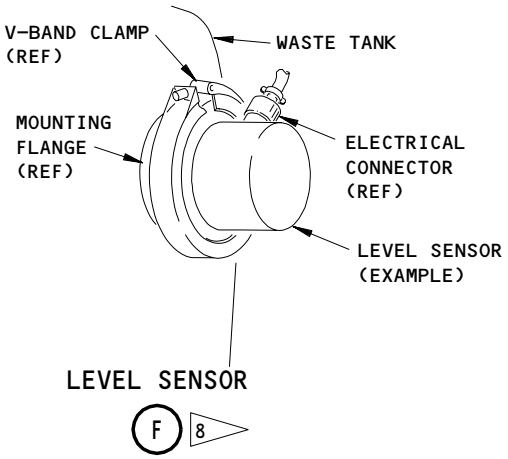

WASTE DRAIN BALL VALVE

D



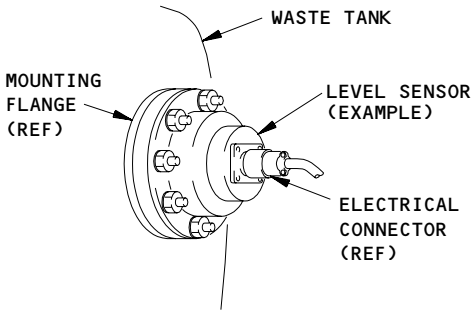

WATER SEPARATOR

E




LEVEL SENSOR

F 8




LEVEL SENSOR

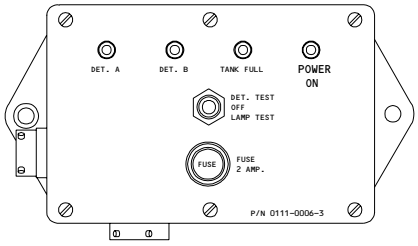
F 9

7 AIRPLANES WITH TWO O-RINGS

8 RECOMMENDED CONFIGURATION

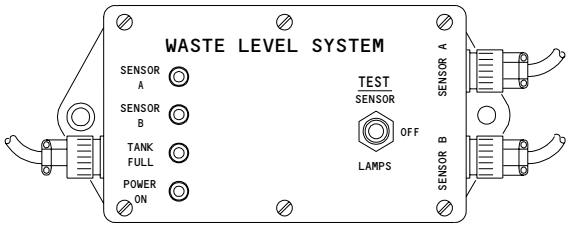
9 ALTERNATIVE CONFIGURATION

Waste Disposal - Component Location
Figure 102 (Sheet 2)



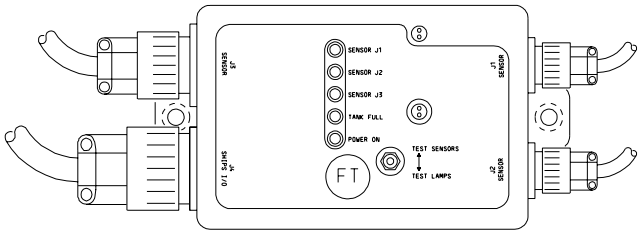

FORWARD/AFT LOGIC CONTROL MODULE

G 10



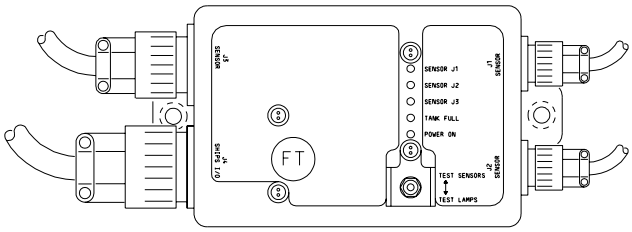

FORWARD/AFT LOGIC CONTROL MODULE

G 11




FORWARD/AFT LOGIC CONTROL MODULE

G 12




FORWARD/AFT LOGIC CONTROL MODULE

G 13

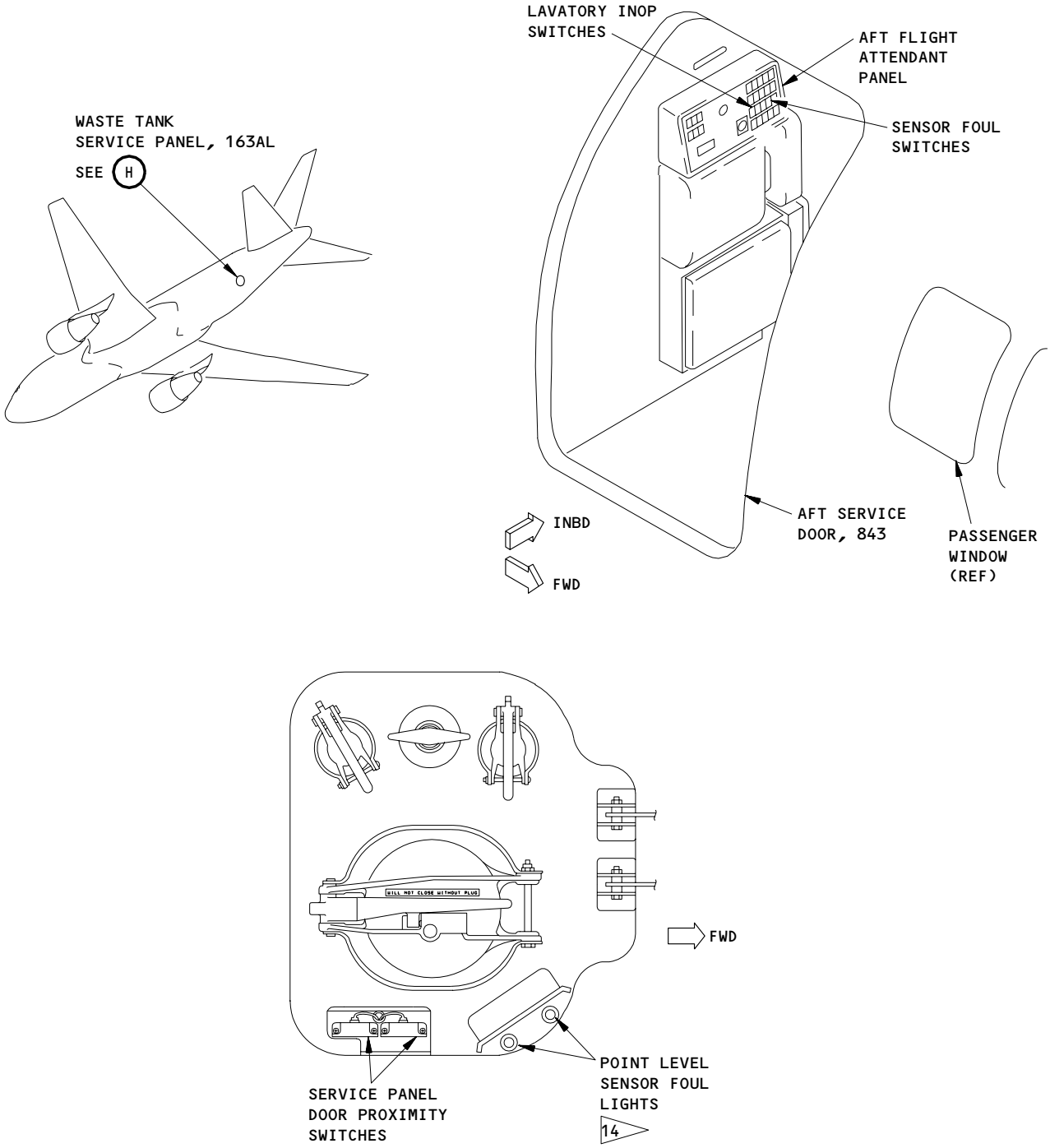
10 AIRPLANES WITH THE KAISER LOGIC CONTROL MODULE

11 AIRPLANES WITH THE DREXELBROOK LOGIC CONTROL MODULE

12 AIRPLANES WITH ROSEMOUNT LOGIC CONTROL MODULE WITHOUT A GUARD ON THE TEST SWITCH

13 AIRPLANES WITH ROSEMOUNT LOGIC CONTROL MODULE WITH A GUARD ON THE TEST SWITCH

Waste Disposal - Component Location
Figure 102 (Sheet 3)

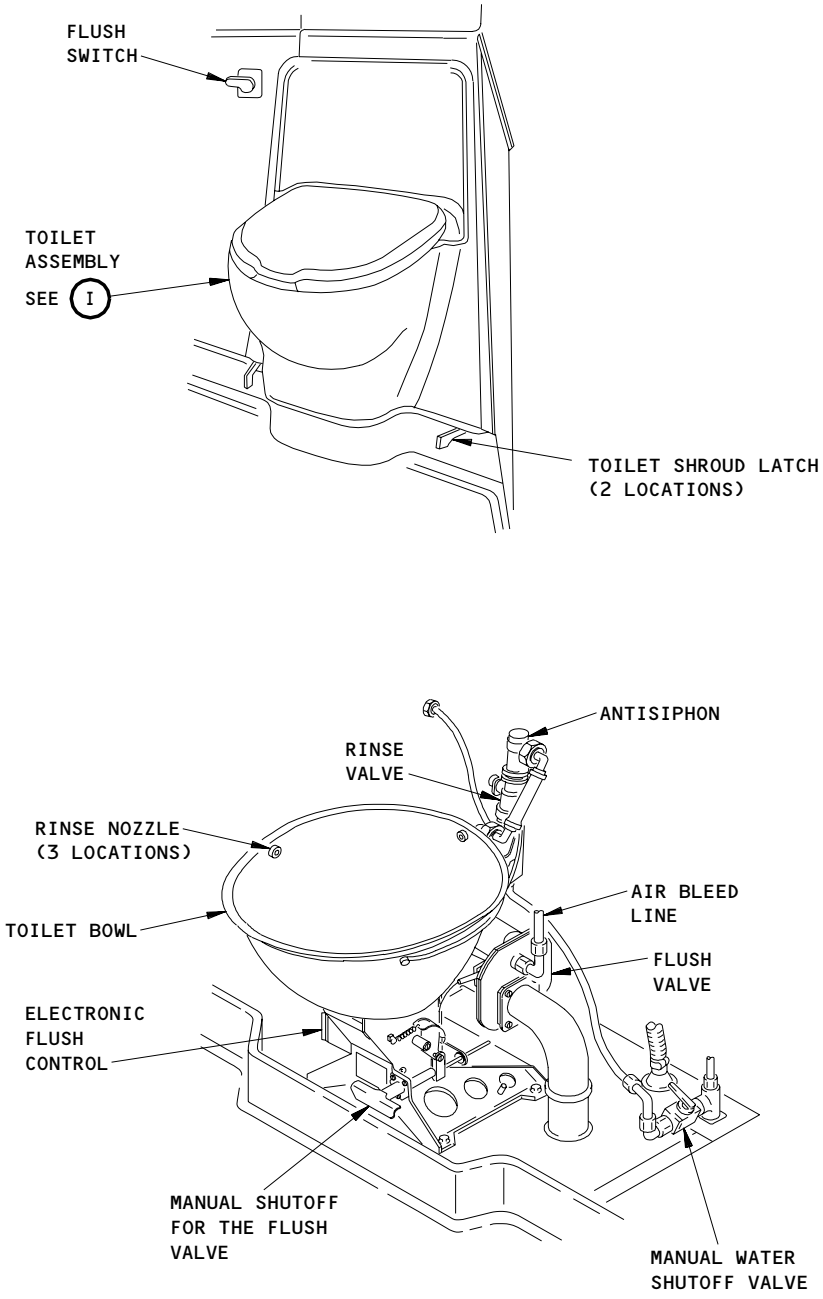



WASTE TANK SERVICE PANEL, 163AL

H

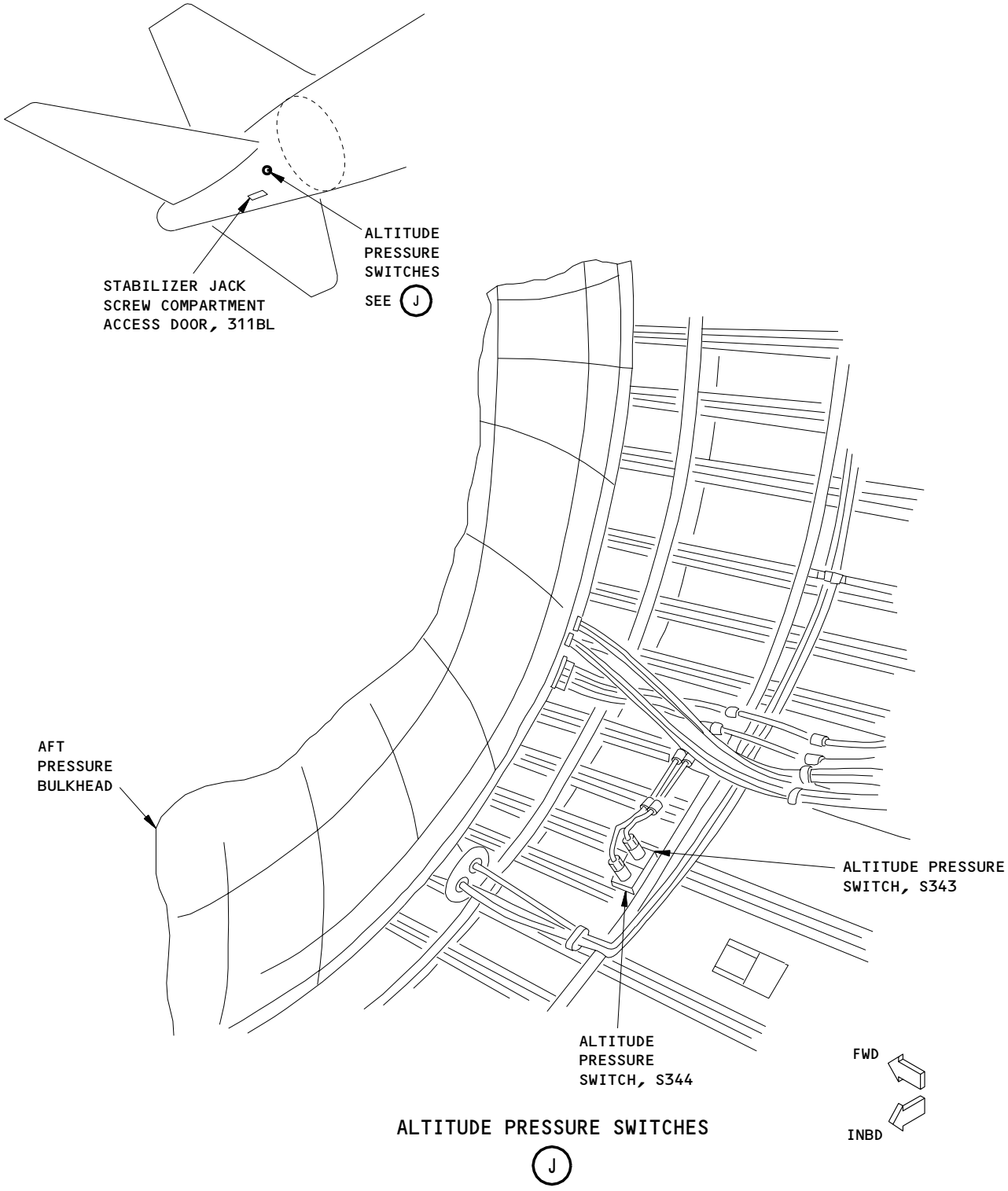
14 NOT ON ALL AIRPLANES

Waste Disposal - Component Location
Figure 102 (Sheet 4)




TOILET ASSEMBLY
(ENVIROVAC)
I

Waste Disposal - Component Location
Figure 102 (Sheet 5)




Waste Disposal - Component Location
Figure 102 (Sheet 6)

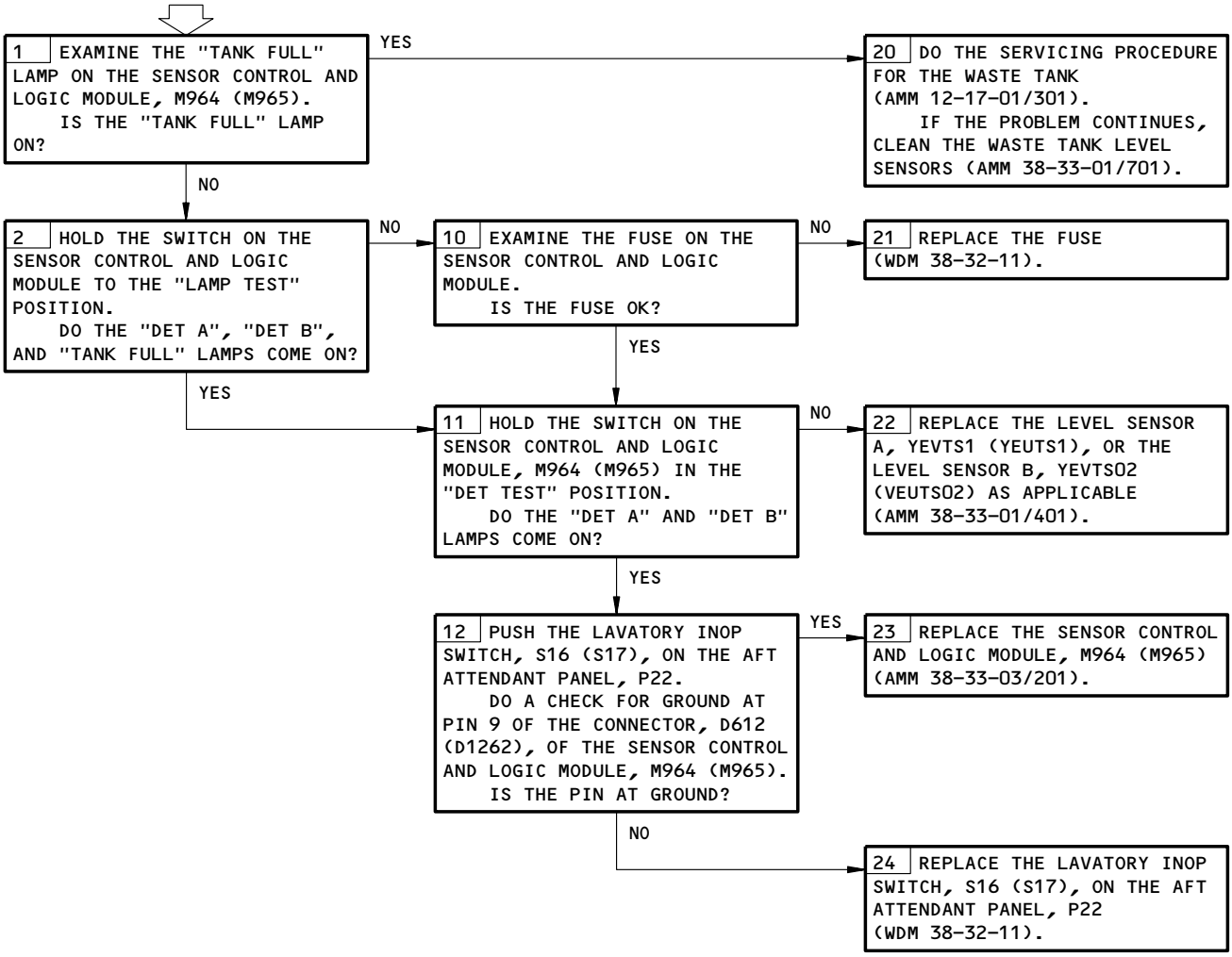
Not Used
Figure 103

## "LAV INOP" TEST AT AFT CABIN ATTND PANEL FAILED TO TEST

**PREREQUISITES**

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:
11R8, 11R35, 11U2, 36F6, 36F7 OR 36G1 (VAC BLWR SYS 1); 37G7

MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION:
ELECTRICAL POWER IS ON (AMM 24-22-00/201)




LAV INOP Test at Aft Cabin Attnd Panel Failed to Test
Figure 104 (Sheet 1)



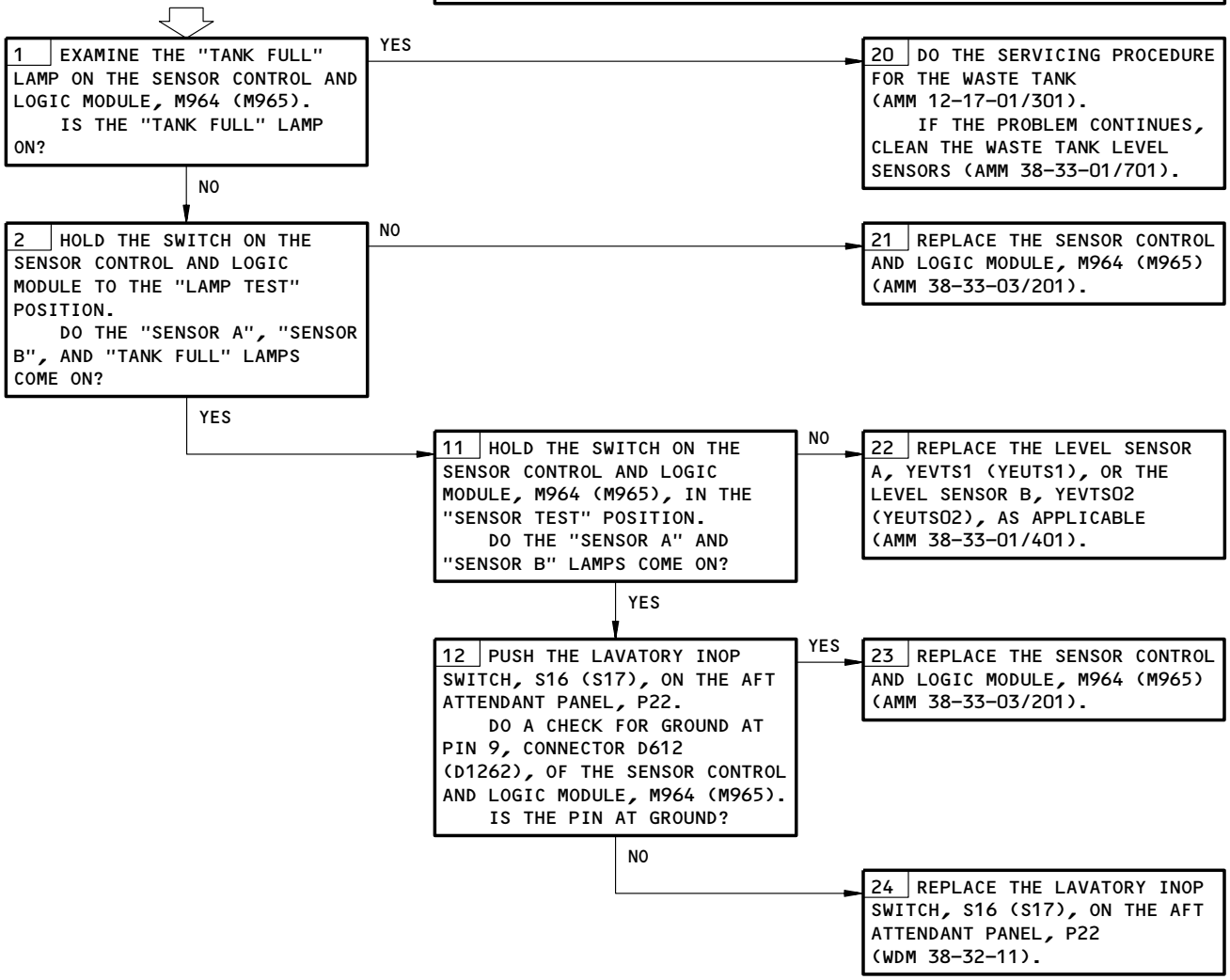
671224

## "LAV INOP" TEST AT AFT CABIN ATTND PANEL FAILED TO TEST

**PREREQUISITES**

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:
11R8, 11R35, 11U2, 36F6, 36F7 OR 36G1 (VAC BLWR SYS 1); 37G7

MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION:
ELECTRICAL POWER IS ON (AMM 24-22-00/201)



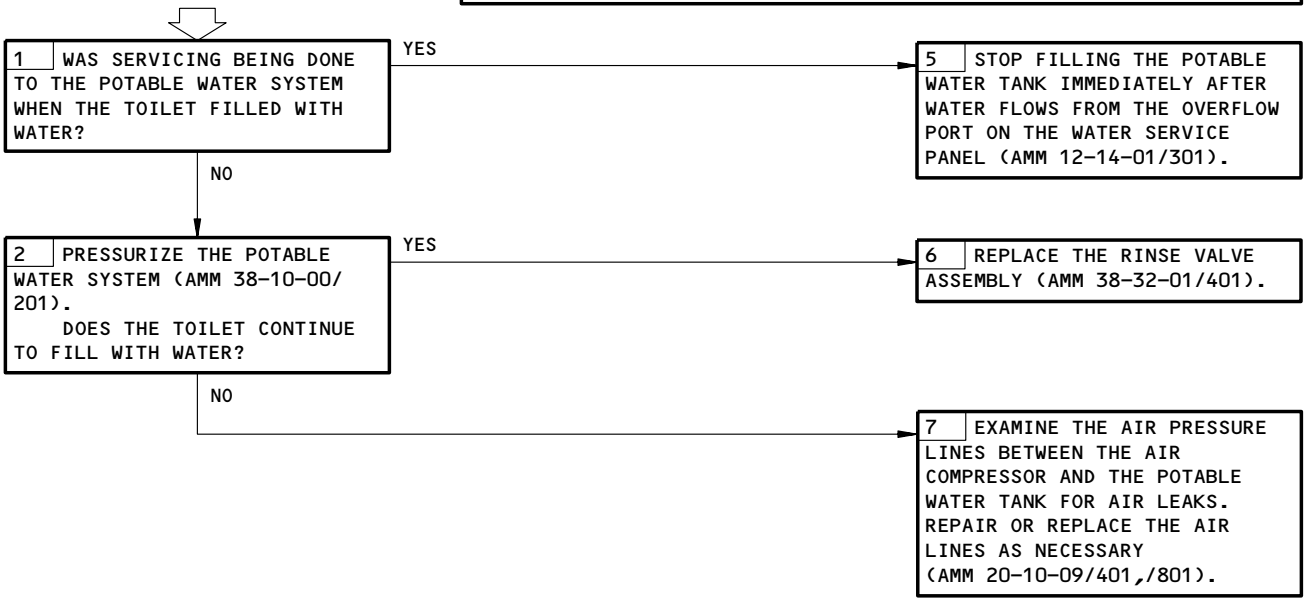

LAV INOP Test at Aft Cabin Attnd Panel Failed to Test
Figure 104 (Sheet 2)

**PREREQUISITES**

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:
11R8, 11R35, 36F6, 36F7 OR 36G1 (VAC BLWR SYS 1);
37G7

MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION:
ELECTRICAL POWER IS ON (AMM 24-22-00/201)

## TOILET FILLS WITH WATER




Toilet Fills With Water
Figure 104A

## TOILET FLUSHING ACTION INADEQUATE

**PREREQUISITES**

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:
11R8, 11R35, 36F6, 36F7 OR 36G1 (VAC BLWR SYS 1), 37G7

MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION:
ELECTRICAL POWER IS ON (AMM 24-22-00/201)
SERVICE ACCESS DOOR FOR WASTE TANK IS CLOSED

1 PUSH THE FLUSH SWITCH ON THE TOILET THAT USES THE SAME WASTE TANK AS THE TOILET WITH THE PROBLEM. MAKE SURE THE TOILET FLUSHES CORRECTLY:

LISTEN FOR A FAIRLY LOUD POP, FOLLOWED BY A RUSH OF AIR FLOW, THEN A SECOND POP.

DOES THE TOILET WITHOUT THE PROBLEM FLUSH CORRECTLY?

NO → 11 CHECK THE WATER SEPARATOR FOR A BLOCKAGE OR SATURATION. (AMM 38-32-02/201).
DOES THE PROBLEM CONTINUE?

NO → 21 THE SYSTEM IS OK.

YES → 12 REMOVE THE VACUUM WASTE DRAIN LINE FROM THE WASTE TANK INLET (AMM 38-32-11/401).
DO A CHECK FOR AN OBSTRUCTION IN THE TANK AT THE INLET.
IS THERE AN OBSTRUCTION?

NO → 22 INSTALL THE VACUUM WASTE DRAIN LINE TO THE WASTE TANK (AMM 38-32-11/401).
DO THE WASTE SYSTEM LEAKAGE TEST (AMM 38-32-00/501) AND REPAIR THE VACUUM LEAK.

YES → 23 REMOVE THE OBSTRUCTION FROM THE WASTE TANK AT THE INLET.
INSTALL THE VACUUM WASTE DRAIN LINE TO THE WASTE TANK (AMM 38-32-11/401).

YES → 1

2 PUSH THE FLUSH SWITCH ON THE TOILET THAT USES THE SAME WASTE TANK AS THE TOILET WITH THE PROBLEM.
IS THE AIRFLOW HEARD IN THE TOILET WITH THE PROBLEM WHEN THE OTHER TOILET IS FLUSHED?

YES → 24 REPLACE THE FLUSH CONTROL MODULE (AMM 38-32-01/401).

NO → 25 REMOVE THE BLOCKAGE OF THE TOILET LINE AT THE TOILET WASTE EXIT TUBE (AMM 38-32-00/201).
IF THE PROBLEM CONTINUES, REPLACE THE FLUSH CONTROL MODULE (AMM 38-32-01/401).

Toilet Flushing Action Inadequate
Figure 105



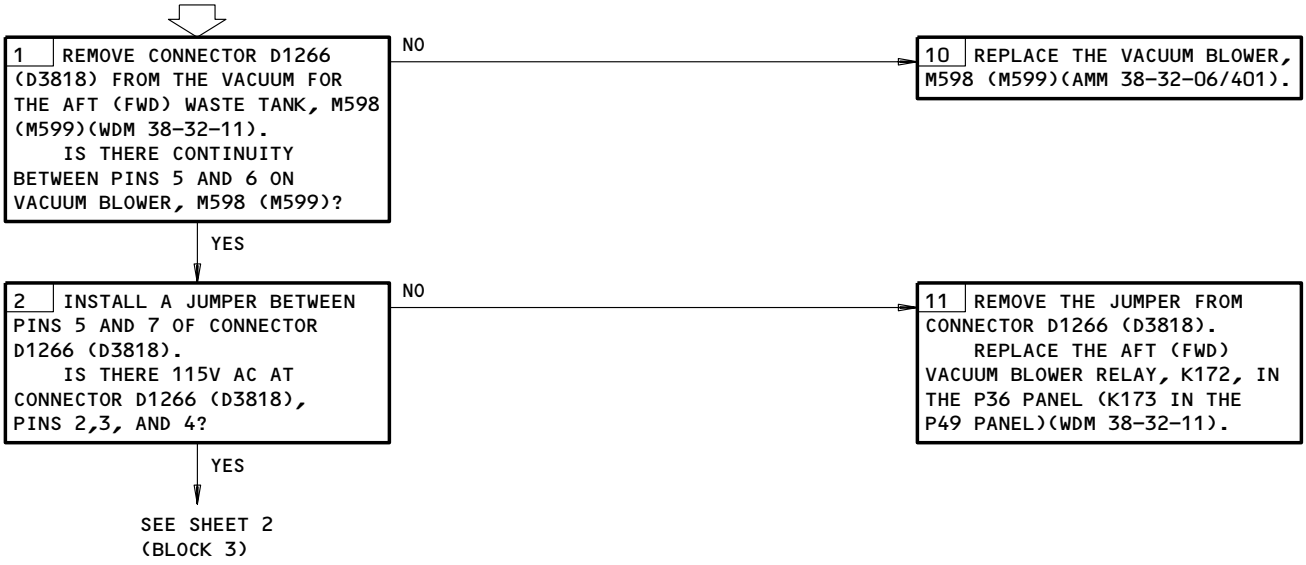
N89441

ALL TOILETS ON A WASTE SYSTEM DO NOT FLUSH. LAV OP LIGHT(S) AT AFT CABIN ATTND PANEL TEST NORMAL AND ARE NOT ILLUMINATED. AIRPLANE IS ON THE GROUND OR AT AIRPLANE ALTITUDE BELOW 16,000 FT.

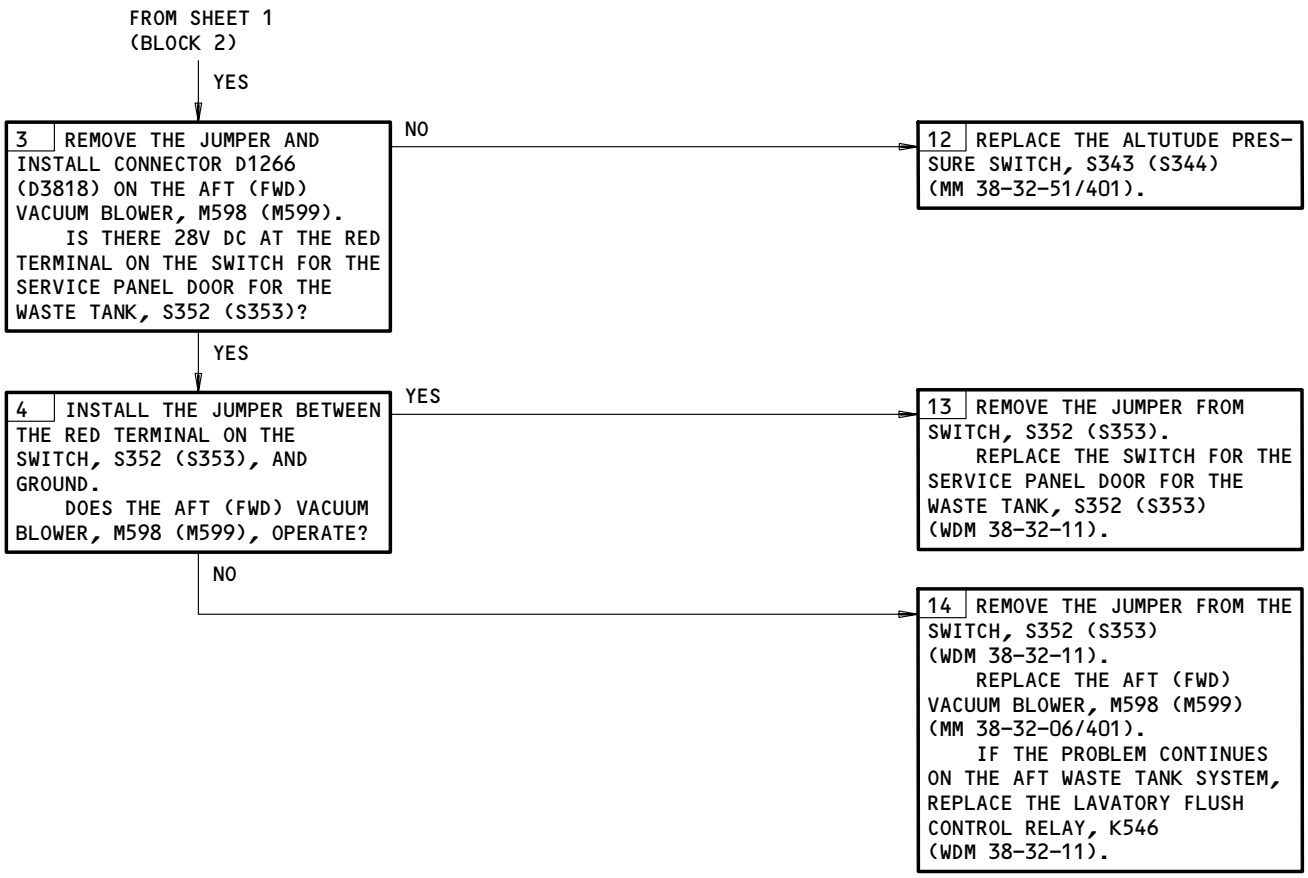
**PREREQUISITES**

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:
11R8; 11R35; 36F6, 36F7 OR 36G1 (VAC BLWR SYS 1); 37G7

MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION:
ELECTRICAL POWER IS ON (AMM 24-22-00/201)
SERVICE ACCESS DOOR FOR WASTE TANK IS CLOSED




All Toilets on a Waste System Do Not Flush. LAV OP Light(s) at Aft Cabin Attnd Panel Test Normal and Are Not Illuminated. Airplane Is on the Ground or at Airplane Altitude Below 16,000 Feet
Figure 106 (Sheet 1)



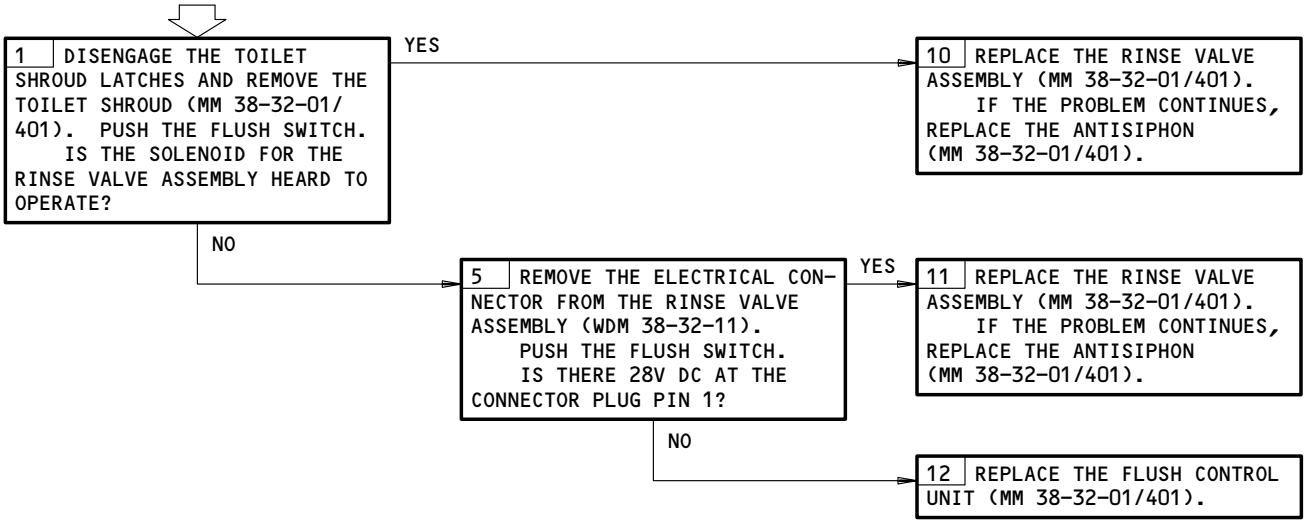

All Toilets on a Waste System Do Not Flush. LAV OP Light(s) at Aft Cabin Attnd Panel Test Normal and Are Not Illuminated. Airplane Is on the Ground or at Airplane Altitude Below 16,000 Feet
Figure 106 (Sheet 2)

**PREREQUISITES**

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:
11R8,11R35

MAKE SURE THE AIRPLANE IS IN THE CONFIGURATION THAT FOLLOWS:
ELECTRICAL POWER IS ON (MM 24-22-00/201)
POTABLE WATER SYSTEM IS PRESSURIZED (MM 38-10-00/201)

## LAV DOES NOT RINSE



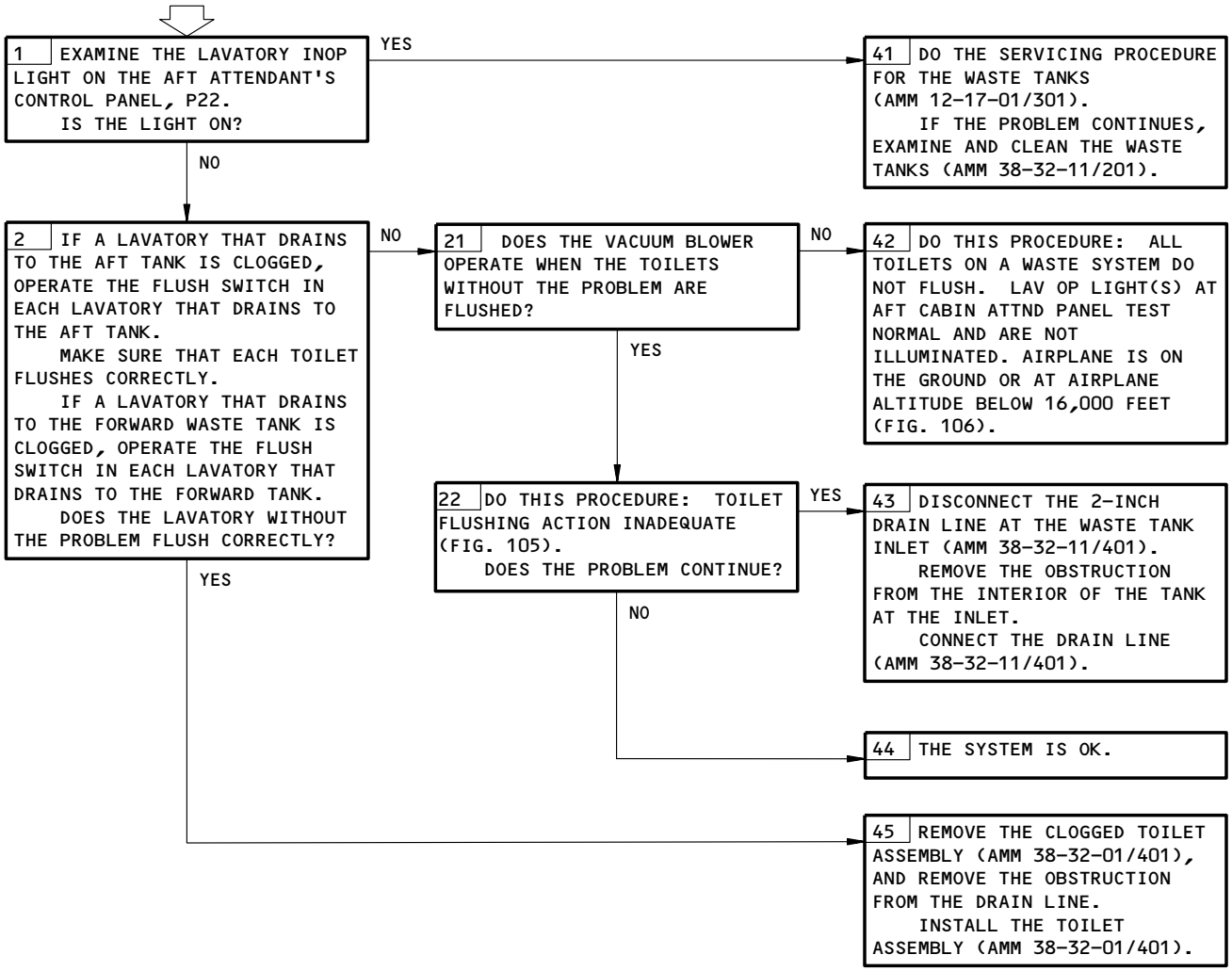

Lav Does Not Rinse
Figure 107

**PREREQUISITES**

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:
11R8, 11R35, 36F6, 36F7 OR 36G1 (VAC BLWR SYS 1), 37G7

MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION:
ELECTRICAL POWER IS ON (AMM 24-22-00/201)
POTABLE WATER SYSTEM IS PRESSURIZED (AMM 38-10-00/201)
SERVICE ACCESS DOOR FOR WASTE TANK IS CLOSED

## TOILET IS CLOGGED



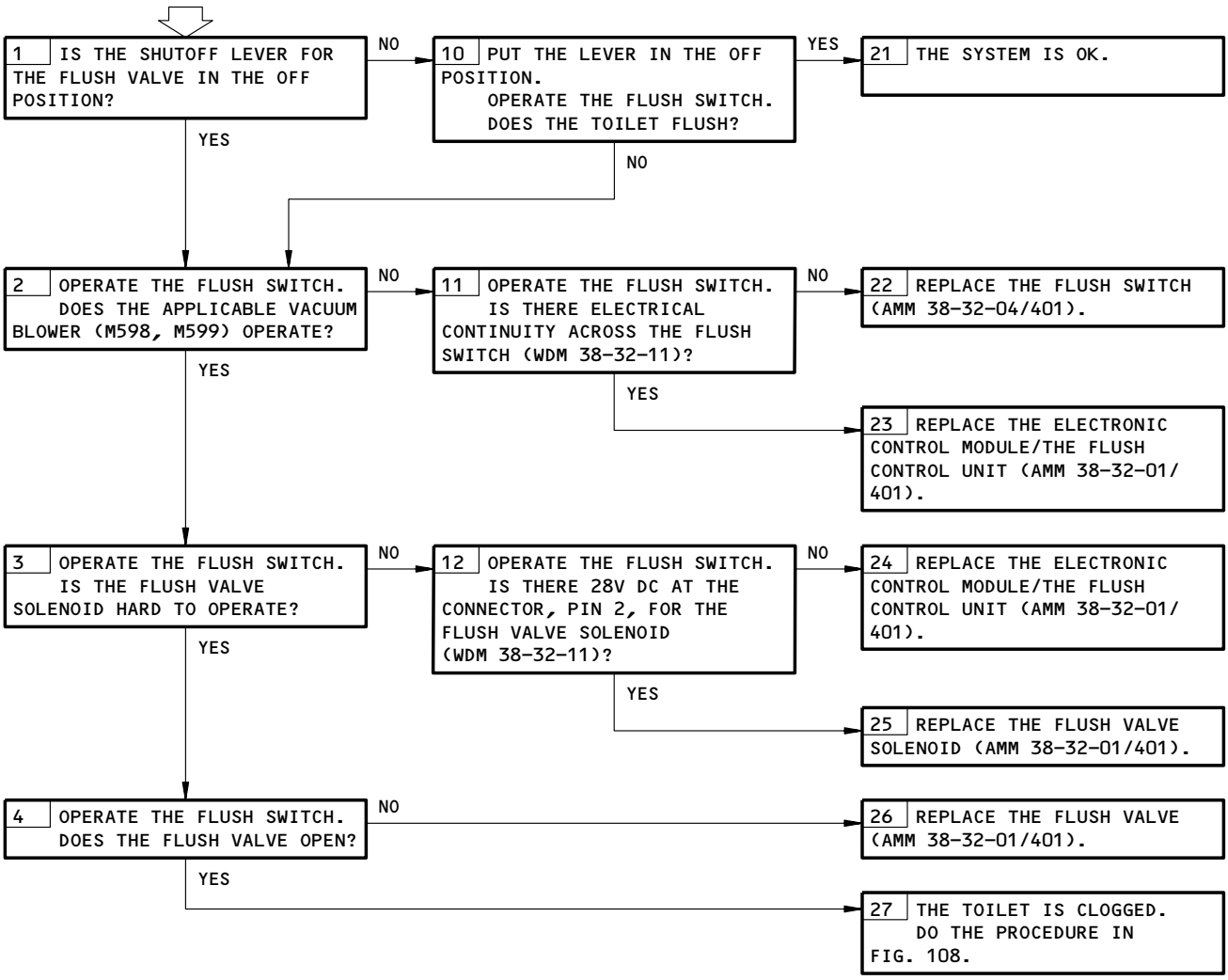

Toilet Is Clogged
Figure 108

**PREREQUISITES**

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:
11R8, 11R35, 36F6, 36F7 OR 36G1 (VAC BLWR SYS 1);
37G7

MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION:
ELECTRICAL POWER IS ON (AMM 24-22-00/201)
SERVICE ACCESS DOOR FOR WASTE TANK IS CLOSED

## TOILET DOES NOT FLUSH




Toilet Does Not Flush
Figure 109

**PREREQUISITES**

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:
11R8, 11R35, 34N10, 34N11, 36F6, 36F7 OR 36G1 (VAC BLWR SYS 1); 37G7

MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION:
ELECTRICAL POWER IS ON (AMM 24-22-00/201)
WASTE TANK DRAIN VALVES AND SERVICE PANEL DOOR CLOSED
WASTE QUANTITY SELECT SWITCH ON THE LAVATORY OPERATION MODULE IS SET TO THE APPLICABLE WASTE TANK

## LEVEL SENSING SYSTEM TROUBLESHOOTING - ROSEMOUNT "LCM"

NOTE: ABBREVIATIONS: CLS - CONTINUOUS LEVEL SENSOR
LCM - LEVEL SENSOR LOGIC CONTROL MODULE
PLS - POINT LEVEL SENSOR

| FAULT SYMPTOM | CORRECTIVE ACTION |
|---|---|
| WASTE DISPOSAL PROBLEMS<br>SYMPTOM A<br>PRECHARGE SHUTOFF VALVE DOES NOT OPERATE | NOTE: WHEN THE PRECHARGE SHUTOFF VALVE OPERATES CORRECTLY, STOP THE PROCEDURE AND CONNECT THE CABLES.<br>A. MAKE SURE THE WASTE TANK IS EMPTY (AMM 12-17-01/301).<br>B. MAKE SURE THE VACUUM BLOWERS FOR THE WASTE TANKS ARE OFF.<br>C. DO A BITE CHECK FROM THE ATTENDANT PANEL (PUSH THE LAV INOP LIGHT SWITCH).<br>D. MAKE SURE THE GREEN LED ON THE LCM IS ON.<br>(1) IF THE GREEN LED IS OFF OR FLASHES; DO A CHECK OF THE LISTED CIRCUIT BREAKERS AND POWER CIRCUITS IN THE AIRPLANE.<br>NOTE: TOO MUCH ELECTRICAL NOISE OR CYCLING ON THE 28V DC BUS CAN CAUSE THE LCM TO STOP THE OPERATION OF THE PRECHARGE VALVE. THE GREEN LED DOES NOT ALWAYS SHOW THIS NOISE.<br>E. PUSH THE SWITCH ON THE LCM TO THE TEST SENSORS POSITION MOMENTARILY.<br>(1) MAKE SURE ALL FOUR RED LEDS COME ON FOR 3 SECONDS.<br>(2) IF THE FOUR RED LEDS DO NOT COME ON, REPLACE THE LCM (AMM 38-33-03/201).<br>F. WAIT 5 SECONDS AND LOOK AT THE RED LCM LEDS.<br>(1) IF ONE OR MORE RED LEDS ARE ON OR FLASHES, DO THE LED TROUBLESHOOTING BELOW.<br>(2) IF ALL FOUR RED LEDS FLASH IN A 1.6 SECOND CYCLE, REPLACE THE LCM (AMM 38-33-03/201).<br>G. DO THE AUTO-ZERO PROCEDURE (AMM 38-33-00/501).<br>H. IF THE PRECHARGE SHUTOFF VALVE DOES NOT OPERATE CORRECTLY AFTER YOU DO THE AUTOZERO PROCEDURE, DISCONNECT CABLE J4 SHIPS I/O FROM THE LCM. |

LEVEL SENSING SYSTEM TROUBLESHOOTING
TABLE A

Level Sensing System Troubleshooting - Rosemount LCM
Figure 110 (Sheet 1)



F14990

| FAULT SYMPTOM | CORRECTIVE ACTION |
|---|---|
| WASTE DISPOSAL PROBLEMS | |
| SYMPTOM A | |
| PRECHARGE SHUTOFF VALVE DOES NOT OPERATE (CONT) | I. CONNECT A JUMPER FROM PIN 12 TO PIN 7 OF CABLE J4.<br>NOTE: THE PRECHARGE SHUTOFF VALVE MUST OPEN.<br>J. DISCONNECT THE JUMPER FROM PIN 12 TO PIN 7 OF CABLE J4.<br>NOTE: THE PRECHARGE SHUTOFF VALVE MUST CLOSE.<br>(1) IF THE PRECHARGE SHUTOFF VALVE OPENS AND CLOSES CORRECTLY, REPLACE THE LCM (AMM 38-33-03/201).<br>(2) IF THE PRECHARGE SHUTOFF VALVE DOES NOT OPEN AND CLOSE CORRECTLY, MAKE SURE THE PRECHARGE VALVE CONTROL RELAY AND ELECTRIC CIRCUITS OPERATE CORRECTLY.<br>(3) IF THE PRECHARGE SHUTOFF VALVE CONTROL RELAY AND ELECTRIC CIRCUITS OPERATE CORRECTLY, REPLACE THE PRECHARGE SHUTOFF VALVE (AMM 38-32-19/401).<br>K. CONNECT CABLE J4 SHIPS I/O TO LCM. |
| SYMPTOM B | |
| ALL TOILETS CONNECTED TO ONE WASTE TANK DO NOT OPERATE<br>NOTE<br>IF ONE OR MORE OF THE TOILETS CONNECTED TO A WASTE TANK OPERATE, THE LCM IS OPERATING CORRECTLY AND IS NOT THE CAUSE OF THE PROBLEM. | A. MAKE SURE THE WASTE TANK IS EMPTY (AMM 12-17-01/301).<br>B. MAKE SURE THE VACUUM BLOWERS FOR THE WASTE TANKS ARE OFF.<br>C. MAKE SURE THE GREEN LED ON THE LCM IS ON.<br>(1) IF THE GREEN LED IS OFF OR FLASHES, DO A CHECK OF THE LISTED CIRCUIT BREAKERS AND POWER CIRCUITS IN THE AIRPLANE.<br>D. PUSH THE SWITCH ON THE LCM TO THE TEST SENSORS POSITION MOMENTARILY.<br>(1) MAKE SURE ALL FOUR LEDs COME ON FOR 3 SECONDS.<br>(2) IF THE FOUR LEDs DO NOT COME ON, REPLACE THE LCM (AMM 38-33-03/201).<br>E. AFTER 5 SECONDS, LOOK AT THE RED LEDs.<br>(1) IF ONE OR MORE RED LEDs ARE ON OR FLASH, DO LED TROUBLESHOOTING BELOW.<br>(2) IF ALL FOUR RED LEDs FLASH IN A 1.6-SECOND CYCLE, REPLACE THE LCM (AMM 38-33-03/201).<br>F. DISCONNECT CABLE J4 SHIPS I/O FROM THE LCM.<br>G. CONNECT A JUMPER FROM PIN 1 TO PIN 2 OF CABLE J4.<br>(1) IF THE TOILETS OPERATE CORRECTLY, REPLACE THE LCM (AMM 38-33-03/201).<br>(2) IF THE TOILETS DO NOT OPERATE CORRECTLY, MAKE SURE THE PIN 1 OF CABLE J4 HAS 28V DC. MAKE SURE THAT THE AIRPLANE WIRING AND THE FLUSH CONTROLLERS ON THE TOILETS OPERATE CORRECTLY.<br>H. REMOVE THE JUMPER FROM CONNECTOR AND CONNECT CABLE J4 SHIPS I/O TO THE LCM. |
| SYMPTOM C | |
| LIGHTS ON THE ATTENDANT AND/OR SERVICE PANELS FLASH | A. MAKE SURE THE WASTE TANK IS EMPTY (AMM 12-17-01/301).<br>B. MAKE SURE THE VACUUM BLOWERS FOR THE WASTE TANKS ARE OFF.<br>C. MAKE SURE THE GREEN LED ON THE LCM IS ON.<br>(1) IF THE GREEN LED IS OFF OR FLASHES, DO A CHECK OF THE LISTED CIRCUIT BREAKERS AND POWER CIRCUITS IN THE AIRPLANE.<br>D. PUSH THE SWITCH ON THE LCM TO THE TEST SENSORS POSITION.<br>(1) IF ALL FOUR RED LEDs GO ON FOR 3 SECONDS, RELEASE THE SWITCH AND DO LED TROUBLESHOOTING BELOW.<br>(2) IF ALL FOUR LEDs ARE NOT ON FOR 3 SECONDS, REPLACE THE LCM (AMM 38-33-03/201). |

LEVEL SENSING SYSTEM TROUBLESHOOTING
TABLE A

Level Sensing System Troubleshooting - Rosemount LCM
Figure 110 (Sheet 2)



F14992

| FAULT SYMPTOM | CORRECTIVE ACTION |
|---|---|
| SYMPTOM C<br><br>LIGHTS ON THE ATTENDANT AND/OR SERVICE PANELS FLASH (CONT) | (3) IF ALL FOUR RED LEDs BLINK IN A 1.6-SECOND CYCLE, REPLACE THE LCM (AMM 38-33-03/201).<br>(4) IF THE PROBLEM CONTINUES AFTER YOU REPLACE THE LCM, DO A CHECK OF THE 28V DC WIRING ON THE AIRPLANE.<br>E. DISCONNECT CABLE J4 SHIPS I/O FROM THE LCM.<br>F. CONNECT A VOLTMETER FROM PIN 6 TO PIN 7 ON CABLE J4.<br>G. MAKE SURE THE VOLTAGE MEASURES 28V DC.<br>(1) IF THE VOLTAGE IS BELOW 20V DC OR CYCLES BELOW 20V DC, DO A CHECK OF THE LISTED CIRCUIT BREAKERS AND POWER CIRCUITS IN THE AIRPLANE.<br>H. CONNECT CABLE J4 SHIPS I/O TO THE LCM.<br>I. DISCONNECT CABLE J1,J2, AND J3 ONE AT A TIME TO SEE IF THE CLS OR ONE OF THE POINT LEVEL SENSORS DOES NOT OPERATE CORRECTLY.<br>J. LOOK AT THE LIGHT ON THE ATTENDANT PANEL OR SERVICE PANEL.<br>(1) IF THE LIGHT THAT FLASHES GOES OFF AFTER CABLE J1 IS DISCONNECTED, REPLACE THE POINT LEVEL SENSOR CONNECTED TO CABLE J1 (AMM 38-33-01/401).<br>(2) IF THE LIGHT THAT FLASHES GOES OFF AFTER CABLE J2 IS DISCONNECTED, REPLACE THE POINT LEVEL SENSOR CONNECTED TO CABLE J2 (AMM 38-33-01/401).<br>(3) IF THE LIGHT THAT FLASHES GOES OFF AFTER CABLE J3 IS DISCONNECTED, REPLACE THE CLS (AMM 38-33-02/401).<br>(4) IF THE LIGHT THAT FLASHES DOES NOT GO OFF AFTER YOU DISCONNECT THE THREE CABLES, REPLACE THE LCM (AMM 38-33-03/201).<br>K. MAKE SURE THAT CABLES J1,J2, AND J3 ARE CONNECTED TO THE LCM AGAIN. |
| SYMPTOM D<br><br>INACCURATE WASTE QUANTITY INDICATOR | A. MAKE SURE THE WASTE TANK IS EMPTY (AMM 12-17-01/301).<br>B. MAKE SURE THE VACUUM BLOWERS FOR THE WASTE TANKS ARE OFF.<br>C. DO THE AUTO-ZERO PROCEDURE (AMM 38-33-00/501).<br>(1) IF THE QUANTITY INDICATOR IS NOT CORRECT AFTER YOU DO THE AUTO-ZERO PROCEDURE, REPLACE THE LCM (AMM 38-33-03/201).<br>D. IF THE PROBLEM CONTINUES AFTER YOU REPLACE THE LCM REPLACE THE CLS (AMM 38-33-02/401). |

LEVEL SENSING SYSTEM TROUBLESHOOTING
TABLE A

Level Sensing System Troubleshooting - Rosemount LCM
Figure 110 (Sheet 3)



F14994

| LCM LED | INDICATION | TROUBLESHOOTING PROCEDURE |
|---|---|---|
| SENSOR J1 ON<br>OR<br>SENSOR J2 ON | J1 PLS SHOWS FULL<br><br>J2 PLS SHOWS FULL | A. MAKE SURE THE WASTE TANK IS DRAINED (AMM 12-17-01/301).<br>B. MAKE SURE CABLE J1 AND J2 ARE CONNECTED TO THE LCM.<br>C. IF SENSOR J1 LED AND J2 LED ARE OFF, DO THESE STEPS:<br>(1) DISCONNECT CABLE J1 AND J2 FROM THE LCM.<br>(2) CONNECT CABLE J1 TO CONNECTOR J2 OF THE LCM.<br>(3) CONNECT CABLE J2 TO CONNECTOR J1 OF THE LCM.<br>(4) WAIT 20 SECONDS.<br>(a) IF THE SENSOR J1 LED IS ON AND THE SENSOR J1 LED WAS ON BEFORE YOU CONNECTED THE CABLES, REPLACE THE LCM (AMM 38-33-03/201).<br>(b) IF THE SENSOR J1 LED IS ON AND THE SENSOR J2 LED WAS ON BEFORE YOU CONNECTED THE CABLES:<br>1) CLEAN THE PLS THAT IS NOW CONNECTED TO LCM CONNECTOR J1 (AMM 38-33-01/701).<br>2) WAIT 20 SECONDS.<br>3) IF THE SENSOR J1 LED IS STILL ON, REPLACE THE PLS THAT IS CONNECTED TO LCM, CONNECTOR J1 (AMM 38-33-01/401).<br>4) MAKE SURE THAT CABLE J2 IS NOT DAMAGED OR BROKEN.<br>(c) IF THE SENSOR J2 LED IS ON AND THE SENSOR J2 LED WAS ON BEFORE YOU CONNECTED THE CABLES, REPLACE THE LCM (AMM 38-33-03/201).<br>(d) IF THE SENSOR J2 LED IS ON AND THE SENSOR J1 LED WAS ON BEFORE YOU RECONNECTED THE CABLES:<br>1) CLEAN THE PLS THAT IS NOW CONNECTED TO LCM, CONNECTOR J2 (AMM 38-33-01/701).<br>2) WAIT 20 SECONDS.<br>3) IF THE SENSOR J2 LED IS STILL ON, REPLACE THE PLS THAT IS CONNECTED TO LCM, CONNECTOR J2 (AMM 38-33-01/401).<br>4) MAKE SURE THAT CABLE J1 IS NOT DAMAGED OR BROKEN.<br>(e) CONNECT CABLE J1 TO CONNECTOR J1 OF THE LCM AND CONNECT CABLE J2 TO CONNECTOR J2 OF THE LCM.<br>D. IF SENSOR J1 LED AND SENSOR J2 LED ARE ON, DO THESE STEPS:<br>(1) CLEAN THE TWO PLS (AMM 38-33-01/701) AND DO A VISUAL INSPECTION FOR DAMAGE.<br>(2) IF DAMAGED, REPLACE THE PLS; IF NOT DAMAGED, INSTALL THE USED PLS (AMM 38-33-01/401).<br>(3) WAIT 20 SECONDS.<br>(4) IF THE LEDs STAY ON, MAKE SURE THE CABLES FOR J1 AND J2 ARE NOT DAMAGED.<br>(5) REPLACE ANY CABLE THAT HAS DAMAGE.<br>(6) WAIT 20 SECONDS.<br>(7) IF THE LEDs STAY ON, REPLACE THE LCM (AMM 38-33-03/201).<br>(8) IF ONLY ONE J1 OR J2 LED STAYS ON, DO THE STEPS THAT FOLLOW C. |

LED TROUBLESHOOTING
TABLE B

Level Sensing System Troubleshooting - Rosemount LCM
Figure 110 (Sheet 4)



F14995

| LCM LED | INDICATION | TROUBLESHOOTING PROCEDURE |
|---|---|---|
| SENSOR J1 FLASHES<br>OR<br>SENSOR J2 FLASHES | J1 PLS FAILED BITE OR FOULED<br><br>J2 PLS FAILED BITE OR FOULED | A. LOOK AT THE SENSOR FOULED INDICATOR AT THE SERVICE PANEL.<br>(1) IF THE SENSOR FOULED INDICATOR IS ON AND SENSOR J1 LED FLASHES, CLEAN THE PLS CONNECTED TO CABLE J1 (AMM 38-33-01/701).<br>(2) IF THE SENSOR FOULED INDICATOR IS ON AND SENSOR J2 LED FLASHES, CLEAN THE PLS CONNECTED TO CABLE J2 (AMM 38-33-01/701).<br>B. DISCONNECT THE CABLE FOR THE LED THAT FLASHES.<br>C. PUSH THE SWITCH ON THE LCM TO THE TEST SENSORS POSITION MOMENTARILY. |
| SENSOR J1 FLASHES<br>OR<br>SENSOR J2 FLASHES (CONT) | | D. AFTER 5 SECONDS, LOOK AT THE RED LCM LEDs.<br>(1) IF THE SENSOR J1 OR J2 LED CONTINUES TO FLASH, REPLACE THE LCM (AMM 38-33-03/201).<br>(2) IF THE SENSOR J1 OR J2 LED IS ON CONTINUOUSLY, CONNECT THE J1 OR J2 CABLE TO THE LCM.<br>E. PUSH THE SWITCH ON THE LCM TO THE TEST SENSORS POSITION MOMENTARILY.<br>F. AFTER 5 SECONDS, LOOK AT THE RED LCM LEDs.<br>(1) IF THE SENSOR J1 OR J2 LED CONTINUES TO FLASH, REPLACE THE PLS FOR THE LED THAT FLASHES (AMM 38-33-01/401).<br>(2) IF THE SENSOR J1 OR J2 LED IS ON CONTINUOUSLY, CONNECT THE J1 OR J2 CABLE TO THE LCM AND REPEAT THE ABOVE 2 STEPS. |
| SENSOR J3 ON<br>OR<br>SENSOR J3 FLASHES | CLS SHOWS FULL<br><br>CLS FAILED BITE OR NOT CORRECTLY AUTO-ZEROED | A. DO THE AUTO-ZERO PROCEDURE (AMM 38-33-00/501).<br>(1) IF THE SENSOR J3 LED STAYS ON OR FLASHES AFTER THE AUTO-ZERO, MAKE SURE THE CABLE J3 HAS CONTINUITY, THEN CONNECT THE CABLE.<br>B. DO THE AUTO-ZERO PROCEDURE AGAIN (AMM 38-33-00/501).<br>(1) IF SENSOR J3 LED IS ON OR FLASHES AFTER THE AUTO-ZERO, REPLACE THE CLS (AMM 38-33-02/401). |
| TANK FULL ON | LCM INDICATING FULL TANK | A. MAKE SURE WASTE TANK IS DRAINED (AMM 12-17-01/301).<br>B. LOOK AT THE RED LEDs ON THE LCM AND THE SENSOR FOULED INDICATOR ON THE SERVICE PANEL.<br>(1) IF THE SENSOR J1 LED AND J2 LED ON THE LCM ARE ON OR FLASH, AND THE SENSOR FOULED INDICATOR IS OFF, CLEAN SENSORS J1 AND J2 (AMM 38-33-01/701).<br>(2) IF THE J1 LED AND J2 LED STAY ON, DO A VISUAL CHECK FOR DAMAGE TO THE CABLES.<br>(3) REPLACE ANY CABLE THAT HAS DAMAGE.<br>(4) IF THE J1 LED AND J2 LED STAY ON, REPLACE THE LCM (AMM 38-33-03/201). |
| TANK FULL FLASHES | INTERNAL LCM ERROR DETECTED | A. PUSH THE SWITCH ON THE LCM TO THE TEST SENSORS POSITION.<br>B. AFTER 5 SECONDS, RELEASE THE SWITCH.<br>C. LOOK AT THE RED LCM LEDs.<br>(1) IF THE TANK FULL LED CONTINUES TO FLASH, REPLACE THE LCM (AMM 38-33-03/201).<br>(2) IF THE TANK FULL LED FLASHES AFTER YOU REPLACE THE LCM, DO A CHECK OF THE SENSOR FOULED AND PRECHARGE CIRCUITS TO MAKE SURE THEY ARE NOT LOADING THE LCM.<br>(3) DO A CHECK FOR TOO MUCH ELECTRICAL NOISE OR CYCLING ON THE 28V DC BUS. |

LED TROUBLESHOOTING
TABLE B

Level Sensing System Troubleshooting - Rosemount LCM
Figure 110 (Sheet 5)



F14998

## THE WASTE QUANTITY INDICATOR ON THE ATTENDANT PANEL READS LOW AFTER ADDING LIQUID PRECHARGE

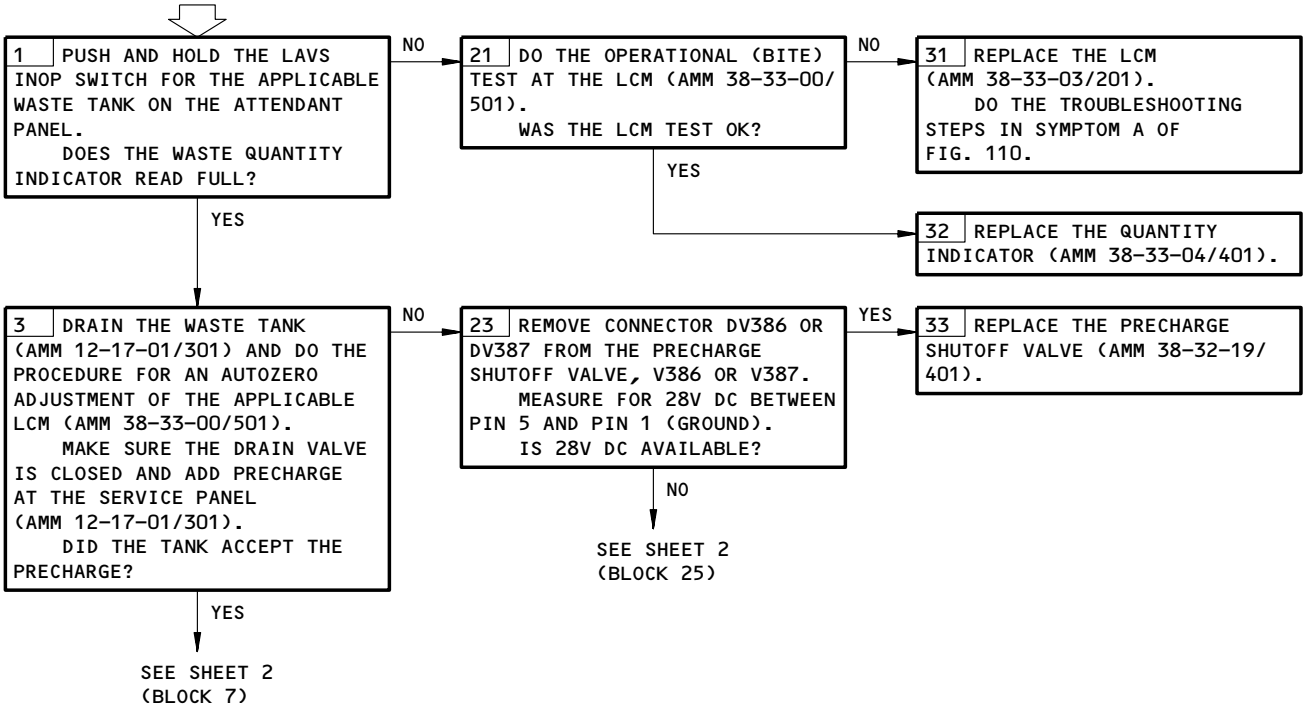
**PREREQUISITES**

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:
11R8, 11R35, 34N10, 34N11, 36F6, 36F7 OR 36G1 (VAC BLWR SYS 1); 37G7

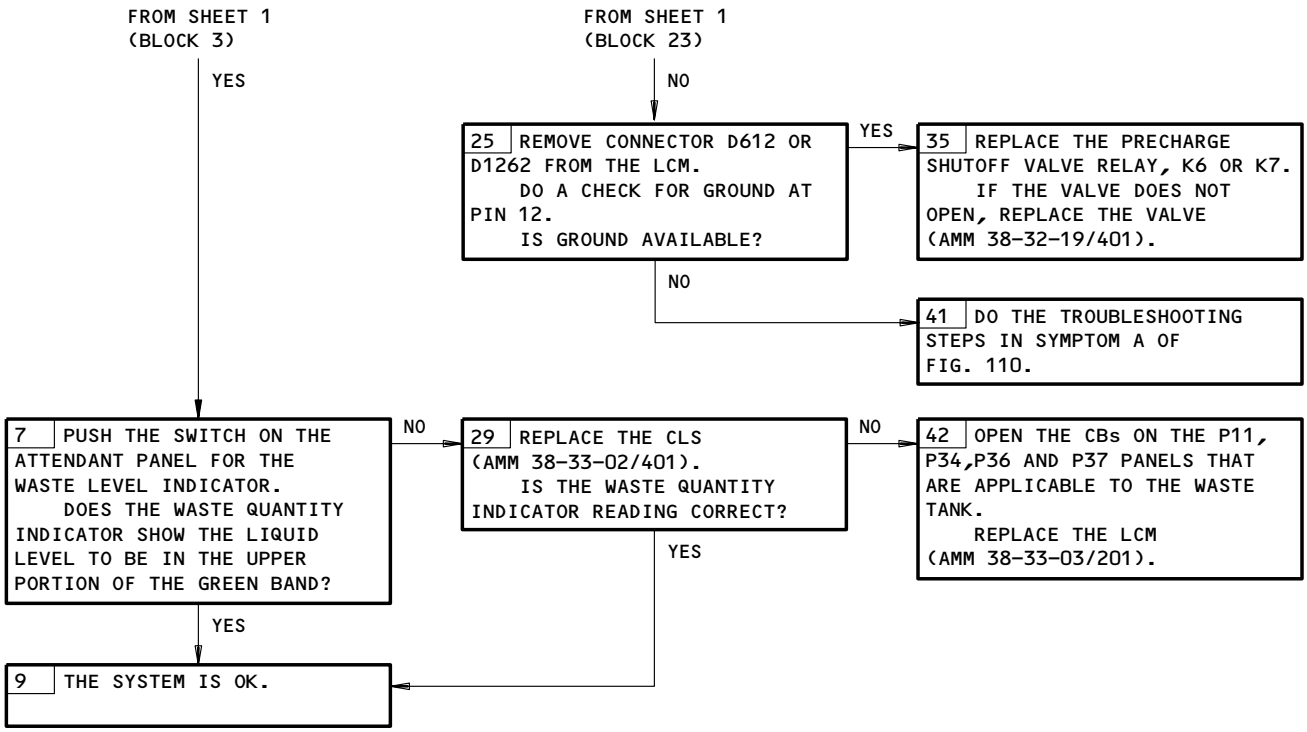
MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION:
ELECTRICAL POWER IS ON (AMM 24-22-00/201)

NOTE: ABBREVIATIONS: CLS - CONTINUOUS LEVEL SENSOR
LCM - LOGIC CONTROL MODULE

PUSH THE TANK LEVEL INDICATOR SWITCH TO READ THE WASTE QUANTITY INDICATOR.




The Waste Quantity Indicator on the Attendant Panel Reads Low After Adding Liquid Precharge
Figure 111 (Sheet 1)




The Waste Quantity Indicator on the Attendant Panel
Reads Low After Adding Liquid Precharge
Figure 111 (Sheet 2)

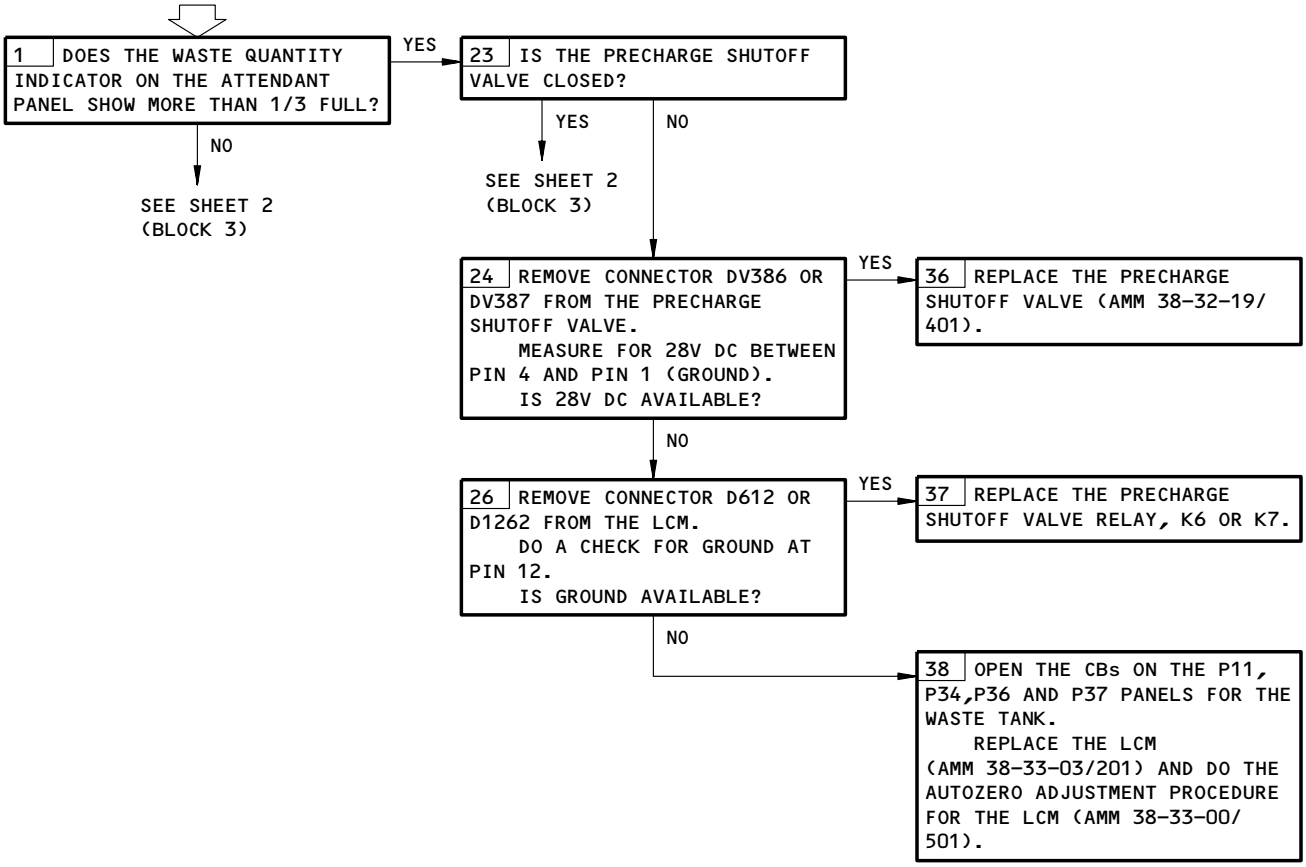
**PREREQUISITES**

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:
11R8, 11R35, 34N10, 34N11, 36F6, 36F7 OR 36G1 (VAC BLWR SYS 1); 37G7

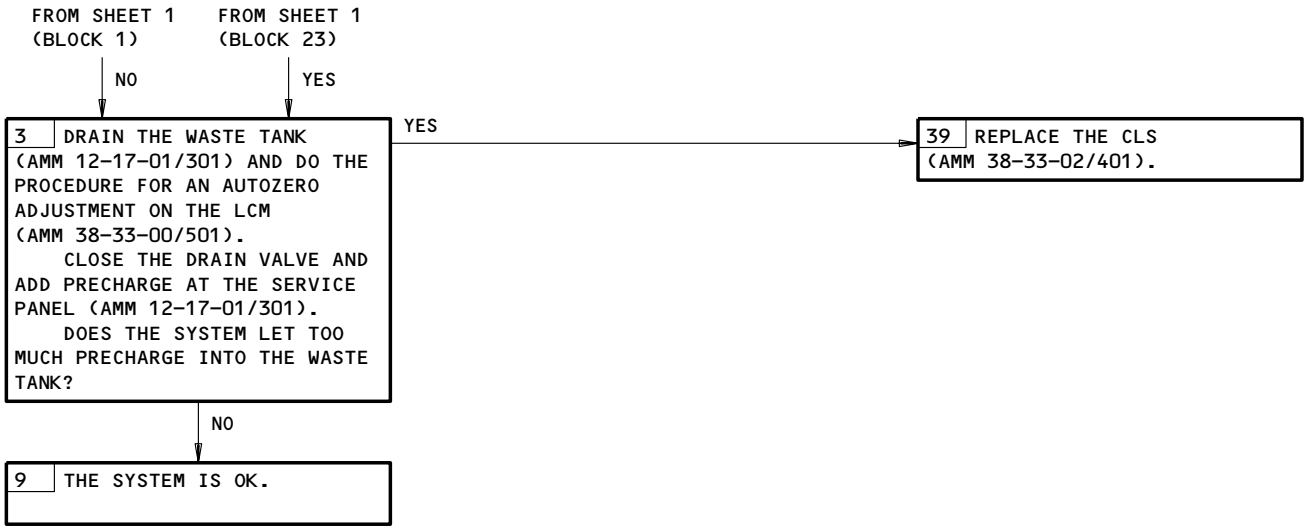
MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION:
ELECTRICAL POWER IS ON (AMM 24-22-00/201)
WASTE TANK DRAIN VALVES AND SERVICE PANEL DOOR CLOSED
WASTE QUANTITY SELECT SWITCH ON THE LAVATORY OPERATION MODULE IS SET TO THE APPLICABLE WASTE TANK

NOTE: ABBREVIATIONS: CLS - CONTINUOUS LEVEL SENSOR
LCM - LOGIC CONTROL MODULE

TOO MUCH PRECHARGE WAS LET INTO THE TANK (VALVE DID NOT CLOSE AFTER 4-1/2 TO 8 GALLONS WERE ADDED)




Too Much Precharge Was Let into the Tank
(Valve Did Not Close After 4-1/2 to 8 Gallons Were Added)
Figure 112 (Sheet 1)




Too Much Precharge Was Let into the Tank
(Valve Did Not Close After 4-1/2 to 8 Gallons Were Added)
Figure 112 (Sheet 2)

## CONTINUOUS VACUUM BLOWER OPERATION

**PREREQUISITES**

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:
11R8, 11R35, 36F6, 36F7 OR 36G1 (VAC BLWR SYS 1);
37G7

MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION:
ELECTRICAL POWER IS ON (AMM 24-22-00/201)

1 OPEN CIRCUIT BREAKERS 11R8,36F6 (11R35,37G7) FOR THE FLUSH CONTROL, LAV SYSTEM 1 (2).
DOES THE VACUUM BLOWER CONTINUE TO OPERATE?

YES → 21 REPLACE SYSTEM 1 (2) VACUUM BLOWER RELAY, K172 (K173)(WDM 38-32-11).

NO ↓

2 CLOSE CIRCUIT BREAKERS 11R8,36F6 (11R35,37G7) FOR THE FLUSH CONTROL, LAV SYSTEM 1 (2).
DOES THE VACUUM BLOWER START WITHOUT THE FLUSH OF A TOILET?

YES → 11 DISCONNECT THE TOILET FLUSH CONTROL UNITS ONE AT A TIME.
DOES THE VACUUM BLOWER CONTINUE TO OPERATE?

NO → 22 REPLACE THE FLUSH CONTROL UNIT FOR THE TOILET DISCONNECTED WHEN THE VACUUM BLOWER OPERATION STOPS (AMM 38-32-01/401).

YES → 23 REPLACE SYSTEM 1 (2) VACUUM BLOWER RELAY, K172 (K173)(WDM 38-32-11).

NO ↓

3 FLUSH A TOILET ON SYSTEM 1 (2).
DOES THE OPERATION OF THE VACUUM BLOWER START AND THEN STOP AFTER APPROXIMATELY 15 SECONDS?

NO → 24 REPLACE SYSTEM 1 (2) VACUUM BLOWER RELAY, K172 (K173)(WDM 38-32-11).

YES ↓

4 THERE IS NO FAULT.
THE SYSTEM OPERATION IS OK.

Continuous Vacuum Blower Operation
Figure 113

## TOILET FAILS TO RINSE OR FLUSH

**PREREQUISITES**

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:
11R8, 11R35, 36F6, 36F7 OR 36G1 (VAC BLWR SYS 1);
37G7

MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION:
ELECTRICAL POWER IS ON (AMM 24-22-00/201)

1 DO A CHECK OF THE TANK FULL INDICATOR ON THE ATTENDANT PANEL.
IS THE TANK FULL LIGHT ON?

YES → 11 SERVICE THE WASTE TANK (AMM 12-17-01/301).
PUSH THE FLUSH SWITCH FOR A TOILET ON SYSTEM 1 (2).
IS THE TOILET RINSE AND FLUSH SATISFACTORY?

YES → 21 THERE IS NO FAULT.
THE SYSTEM OPERATION IS OK.

NO → 12 MAKE SURE THE WASTE TANK IS EMPTY.
DOES THE WASTE TANK INDICATOR SHOW EMPTY?

NO → 22 REMOVE THE BLOCKAGE FROM THE TANK OUTLET AND DRAIN THE WASTE TANK (AMM 38-32-00/201).

YES → 23 CLEAN THE POINT LEVEL SENSORS (AMM 38-33-01/701).

NO → 2 DISCONNECT AND THEN CONNECT THE ELECTRICAL CONNECTOR TO THE FLUSH CONTROL UNIT FOR EACH TOILET.
PUSH THE TOILET FLUSH SWITCH.
IS THE TOILET RINSE AND FLUSH SATISFACTORY?

YES → 24 THERE IS NO FAULT.
THE SYSTEM OPERATION IS OK.

NO → 13 PUSH THE FLUSH SWITCH IN A TOILET AND DO A CHECK FOR ELECTRICAL CONTINUITY OF THE FLUSH SWITCH.
IS THERE ELECTRICAL CONTINUITY WHEN YOU PUSH THE FLUSH SWITCH?

NO → 25 REPLACE THE FLUSH SWITCH (AMM 38-32-04/401).

YES → 26 REPLACE THE TOILET ASSEMBLY (AMM 38-32-01/401).

Toilet Fails to Rinse or Flush
Figure 114

## TOILET RINSES BUT FAILS TO FLUSH

**PREREQUISITES**

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:
11R8, 11R35, 36F6, 36F7 OR 36G1 (VAC BLWR SYS 1);
37G7

MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION:
ELECTRICAL POWER IS ON (AMM 24-22-00/201)

1 PUSH THE FLUSH SWITCH FOR A TOILET ON SYSTEM 1 (2).
CAN YOU HEAR THE TOILET FLUSH VALVE OPEN AND THEN CLOSE APPROXIMATELY 3 TO 6 SECONDS AFTER YOU PUSH THE FLUSH SWITCH?

NO → 21 REPLACE THE TOILET ASSEMBLY (AMM 38-32-01/401).

YES

2 PUSH THE FLUSH SWITCH FOR A TOILET ON SYSTEM 1 (2).
DOES THE SYSTEM 1 (2) VACUUM BLOWER OPERATE?

YES → 22 DO THIS TASK: "TOILET FLUSHING ACTION INADEQUATE", FIG. 105.

NO

3 MAKE SURE THE VACUUM BLOWER CIRCUIT BREAKER 36F6 (37G7) IS CLOSED.
DOES THE CIRCUIT BREAKER OPEN WHEN YOU PUSH THE FLUSH SWITCH?

YES → 23 REPLACE THE VACUUM BLOWER (AMM 38-32-06/401).

NO

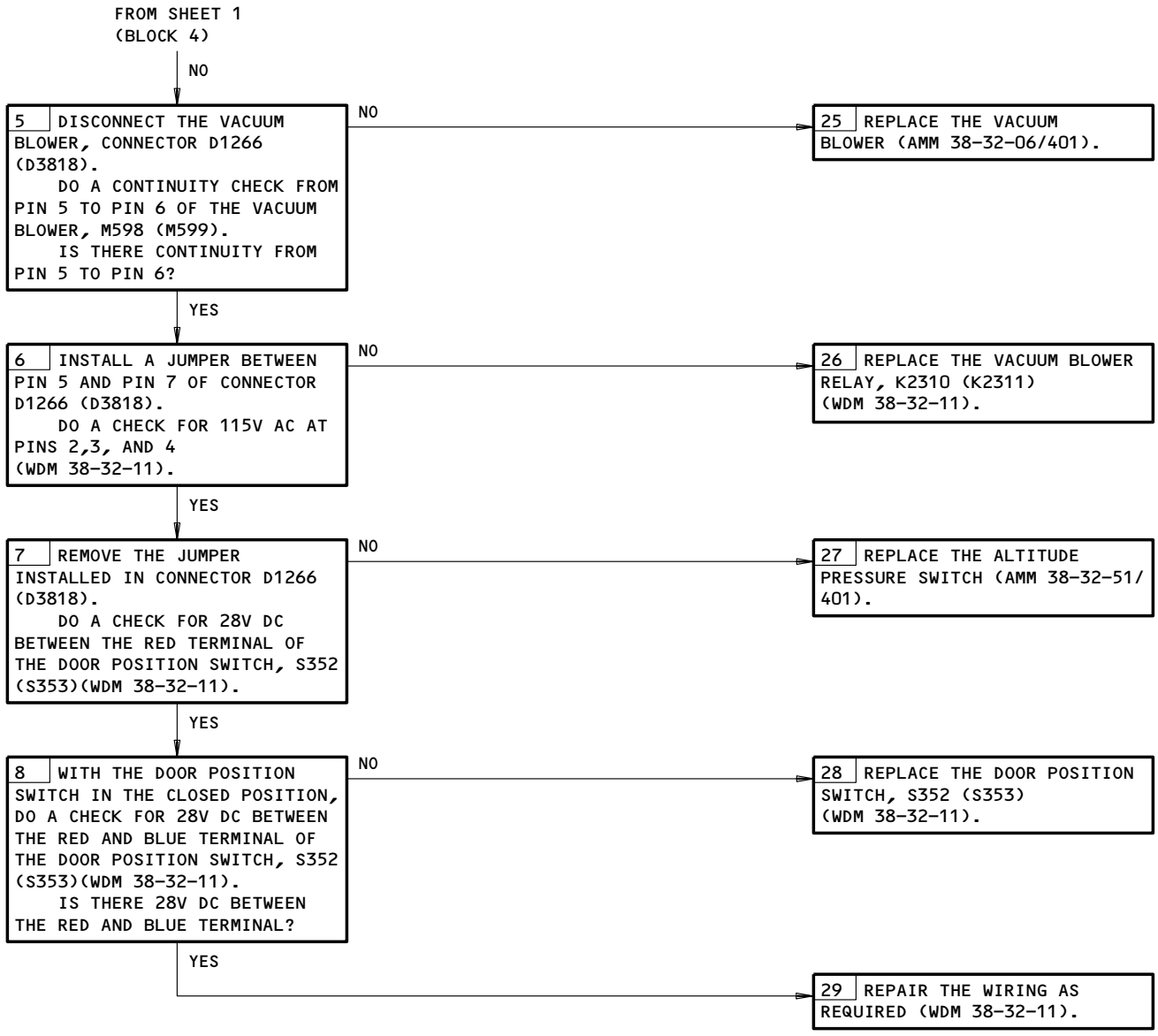
4 MAKE SURE THE WASTE TANK SERVICE DOOR IS CLOSED.
PUSH THE FLUSH SWITCH FOR A TOILET ON SYSTEM 1 (2).
IS THE TOILET FLUSH SATISFACTORY?

YES → 24 REPLACE THE DOOR POSITION SWITCH, S352 (S353) (WDM 38-32-11).

NO

SEE SHEET 2
(BLOCK 5)

Toilet Rinses but Fails to Flush
Figure 115 (Sheet 1)




Toilet Rinses but Fails to Flush
Figure 115 (Sheet 2)