

CHAPTER

52

DOORS



**737-600/700/800/900
FAULT ISOLATION MANUAL**

**CHAPTER 52
DOORS**

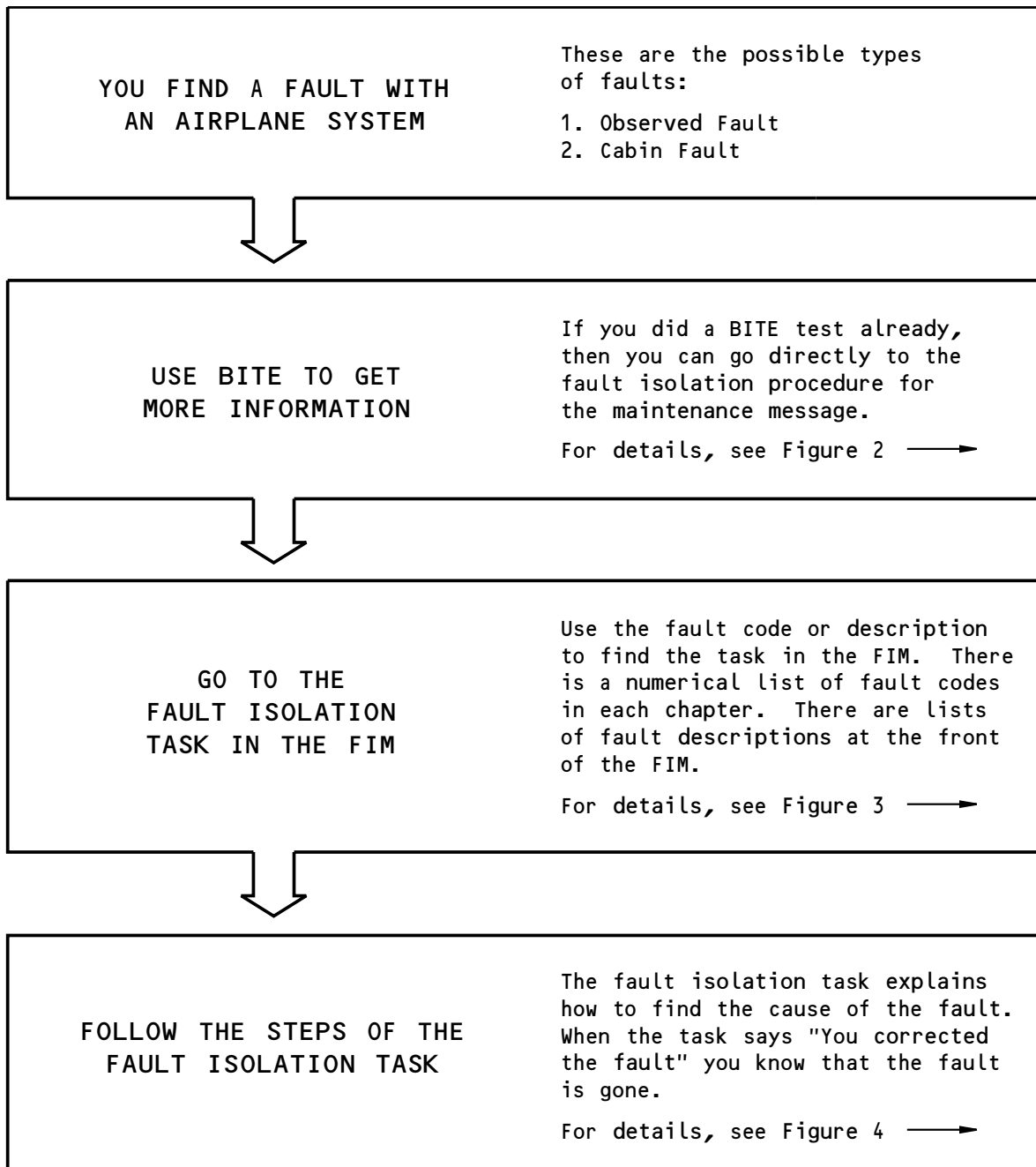
Subject/Page	Date	COC	Subject/Page	Date	COC	Subject/Page	Date	COC
52-EFFECTIVE PAGES			52-10 TASKS (cont)			52-30 TASKS (cont)		
1	Oct 15/2023		220	BLANK		205	Oct 15/2021	
2	BLANK		52-20 TASKS			206	Oct 15/2021	
52-HOW TO USE THE FIM			201	Oct 15/2021		207	Oct 15/2021	
1	Oct 15/2021		202	Oct 15/2021		208	BLANK	
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205	Oct 15/2022		221	Feb 15/2022		202	BLANK	
206	Oct 15/2021		222	Feb 15/2022				
207	Oct 15/2021		223	Feb 15/2022				
208	Oct 15/2021		224	Feb 15/2022				
209	Oct 15/2021		225	Feb 15/2022				
210	Oct 15/2021		226	Feb 15/2022				
R 211	Oct 15/2023		227	Feb 15/2022				
212	Oct 15/2021		228	Feb 15/2022				
213	Oct 15/2021		229	Feb 15/2022				
214	Oct 15/2021		230	Feb 15/2022				
215	Oct 15/2021		52-30 TASKS					
216	Oct 15/2021		201	Oct 15/2021				
217	Oct 15/2021		202	Oct 15/2021				
218	Oct 15/2021		203	Oct 15/2021				
219	Oct 15/2021		204	Oct 15/2021				

A = Added, R = Revised, D = Deleted, O = Overflow, C = Customer Originated Change

52-EFFECTIVE PAGES



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G04902 S0000148576_V1

Basic Fault Isolation Process
Figure 1

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Some airplane systems have built-in test equipment (BITE). IF the system finds a fault when you do a BITE test, it will give you a maintenance message.

A maintenance message can be any of these:

- a code
- a text message
- a light
- an indication.

To find the fault isolation task for a maintenance message, go to the Maintenance Message Index in the chapter for the applicable system.

If you do not know which chapter is the correct one, look at the list at the front of any Maintenance Message Index. For each system or component (LRU) that has BITE, this list gives the chapter number where you can find the Index that you need.

Find the maintenance message for the applicable LRU or system in the Index. Then find the task number on the same line as the maintenance message. Go to the task in the FIM and do the steps of the task (see Figure 4).

G04950 S0000148578_V1

**Getting Fault Information from BITE
Figure 2**

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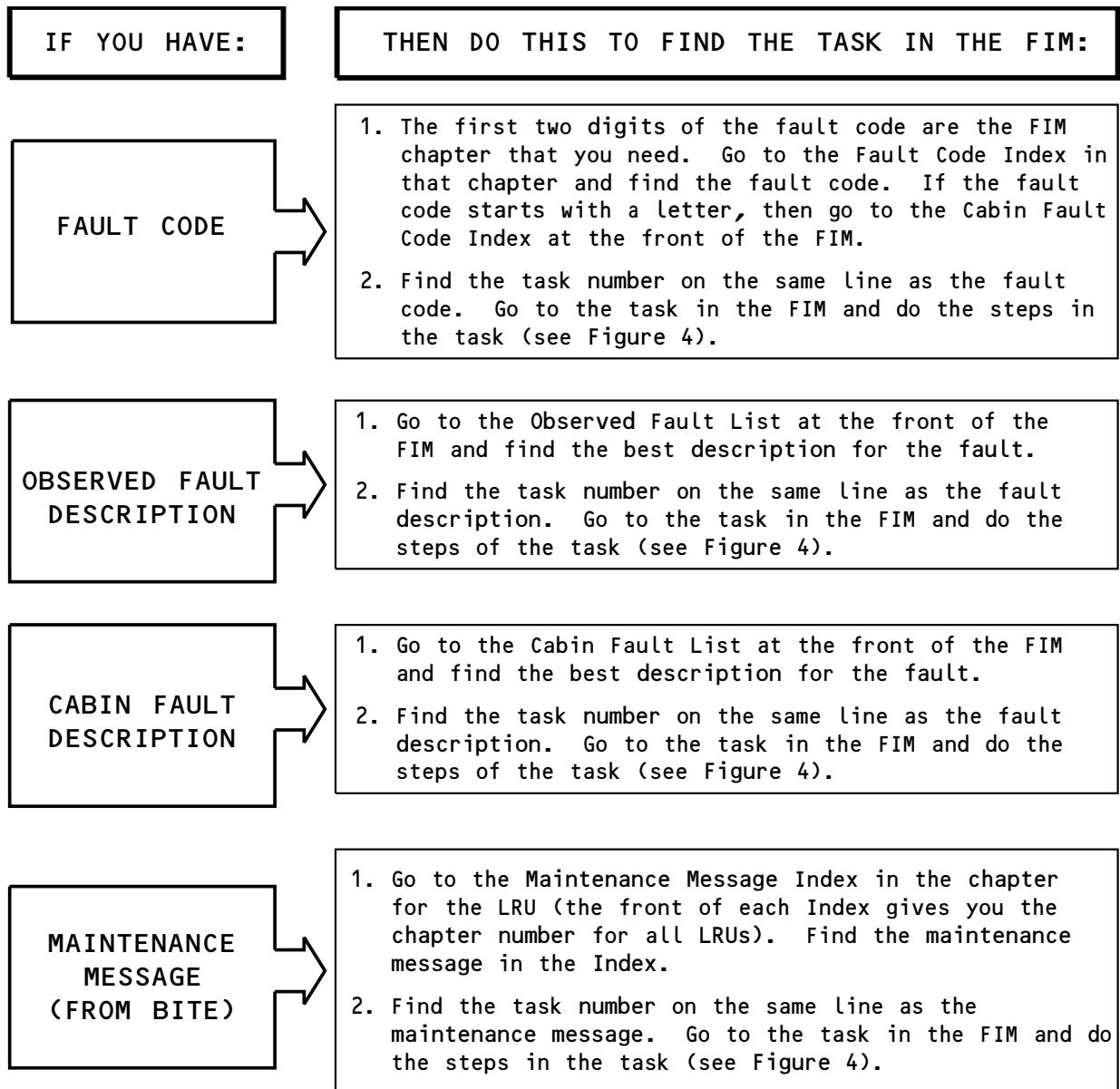
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G04979 S0000148579_V2

Finding the Fault Isolation Task in the FIM
Figure 3

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ASSUMED CONDITIONS AT START OF TASK

- External electrical power is ON
- Hydraulic power and pneumatic power are OFF
- Engines are shut down
- No equipment in the system is deactivated

POSSIBLE CAUSES

- The list of possible causes has the most likely cause first and the least likely cause last.
- You can use the maintenance records of your airline to determine if the fault occurred before. Compare the list of possible causes to the past maintenance actions. This will help prevent repetition of the same maintenance actions.

INITIAL EVALUATION PARAGRAPH

- The primary purpose of the Initial Evaluation paragraph at the start of the task is to help you find out if you can detect the fault right now:
 - If you cannot detect the fault right now, then the task cannot isolate the fault and the Initial Evaluation paragraph will say that there was an intermittent fault.
 - If you have an intermittent fault, you must use your judgement (and follow your airline's policy) to decide which maintenance action to take. Then monitor the airplane to see if the fault happens again on subsequent flights.
- The Initial Evaluation paragraph can also help you find out which Fault Isolation Procedure to use to isolate and correct the fault.

FAULT ISOLATION STEPS

- The FIM task steps are presented in a specified order. The "If... then" statements will guide you along a logical path. But if you do not plan to follow the FIM task exactly, make sure that you read it before you start to isolate the fault. Some FIM procedures start with important steps that have an effect on the other steps in the procedure.
- When you are at the endpoint of the path, the step says "...you corrected the fault." Complete the step and exit the procedure.

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Doing the Fault Isolation Task Figure 4

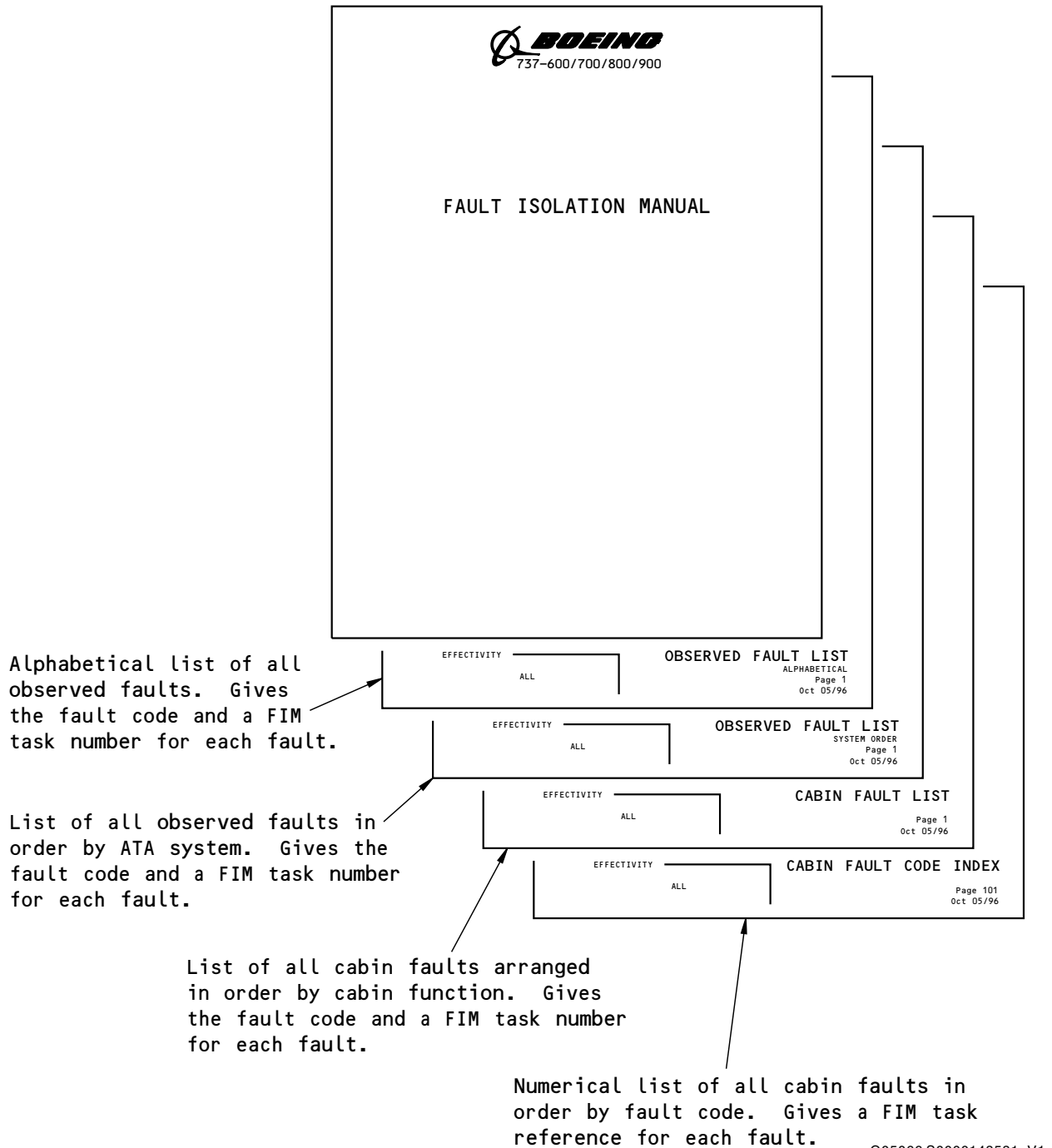
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Subjects at Front of FIM
Figure 5

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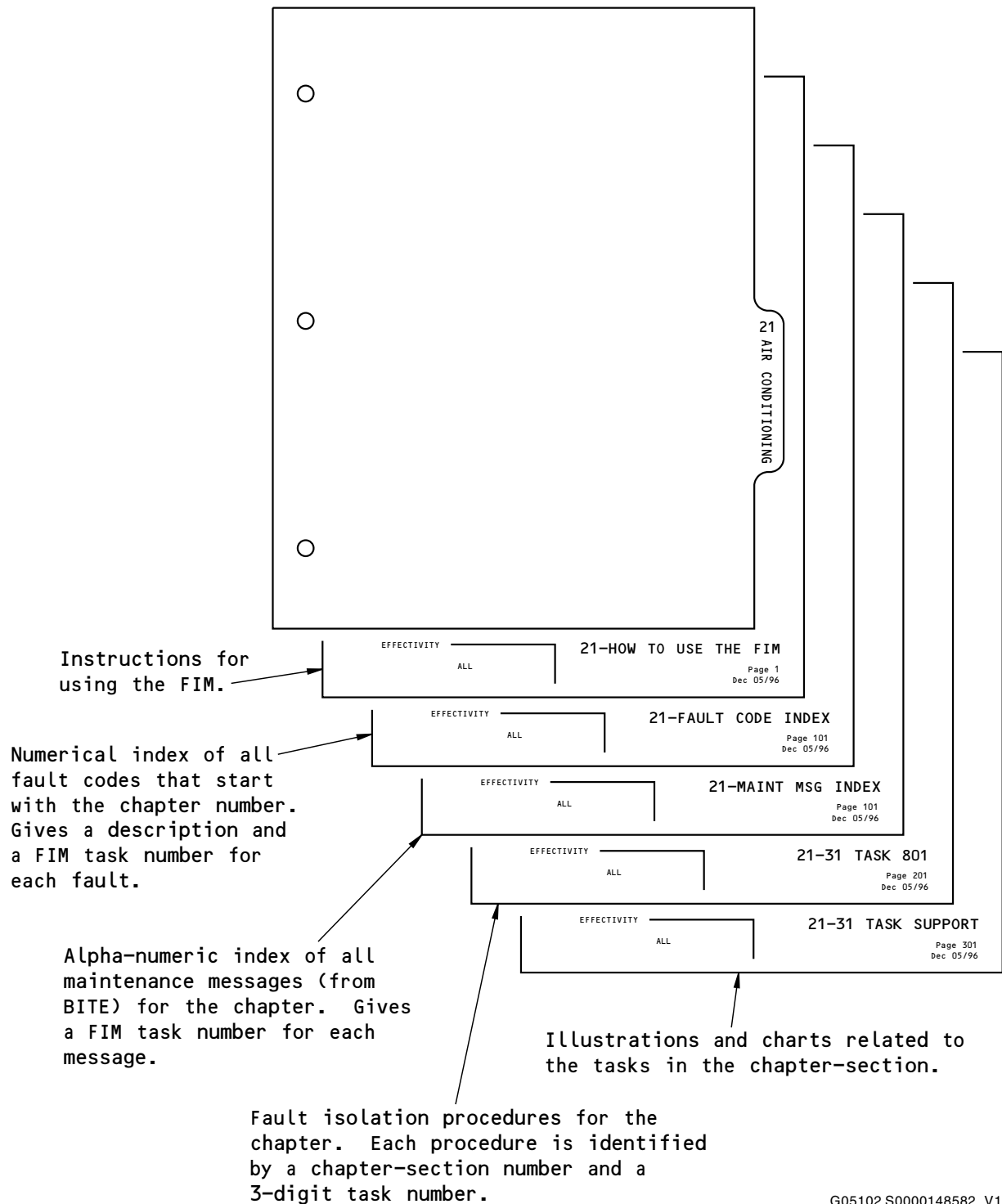
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G05102 S0000148582_V1

Subjects in Each FIM Chapter
Figure 6

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FAULT CODE	FAULT DESCRIPTION	GO TO FIM TASK
521 010 44	Entry door exterior handle: Difficult to operate - forward.	52-10 TASK 811
521 010 45	Entry door exterior handle: Difficult to operate - aft.	52-10 TASK 811
521 015 45	Aft entry door: Difficult to operate between cocked and fully open position - door jamming or binding.	52-10 TASK 813
521 611 44	Door warning annunciator is on - FWD ENTRY.	52-10 TASK 801
521 611 45	Door warning annunciator is on - AFT ENTRY.	52-10 TASK 801
523 010 00	Cargo Door: Difficult to open/close.	52-30 TASK 801
523 020 00	Cargo Door: does not unlatch/latch.	52-30 TASK 802
523 611 44	Door warning annunciator is on - FWD CARGO.	52-30 TASK 803
523 611 45	Door warning annunciator is on - AFT CARGO.	52-30 TASK 803
524 010 00	Galley service door exterior handle: Difficult to operate.	52-10 TASK 811
524 015 45	Aft galley door: Difficult to operate between cocked and fully open position - door jamming or binding.	52-10 TASK 814
524 611 44	Door warning annunciator is on - FWD SERVICE.	52-10 TASK 801
524 611 45	Door warning annunciator is on - AFT SERVICE.	52-10 TASK 801
524 612 00	Door warning annunciator is on - EQUIP.	52-40 TASK 801 or 52-40 TASK 802
525 020 00	Control Cabin Door: Difficult to open/close.	52-50 TASK 802
525 030 00	Control Cabin Door: key is missing.	52-99 TASK 801
525 032 00	Control Cabin Door: key is damaged.	52-99 TASK 801
525 121 00	Flight deck door (enhanced security door): chime does not sound with switch set to AUTO and correct code in keypad.	52-50 TASK 808
525 131 00	Flight deck door (enhanced security door): chime sounds with switch set to DENY.	52-50 TASK 807
525 141 00	Flight deck door (enhanced security door): does not lock with switch set to AUTO.	52-50 TASK 804
525 151 00	Flight deck door (enhanced security door): does not unlock with switch set to AUTO and correct code in keypad.	52-50 TASK 806
525 161 00	Flight deck door (enhanced security door): does not unlock with switch set to UNLKD.	52-50 TASK 805
525 171 00	Flight deck door (enhanced security door): LOCK FAIL light is on.	52-50 TASK 809
525 181 00	Flight deck door (enhanced security door): unlocks with switch set to DENY.	52-50 TASK 807

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<u>LRU/SYSTEM</u>	<u>SHORT NAME</u>	<u>CHAPTER</u>
Air Data Inertial Reference System	ADIRS	34
Air Traffic Controller Transponder - 1 (Left)	ATC XPDR - 1 (L)	34
Air Traffic Controller Transponder - 2 (Right)	ATC XPDR - 2 (R)	34
Airborne Vibration Monitor System Signal Conditioner	AVM SIG COND	77
Antiskid Control Unit	ANTISKID	32
Attendant Control Panel	ACP	23
Automatic Direction Finder Receiver - 1	ADF RECVR - 1	34
Automatic Direction Finder Receiver - 2	ADF RECVR - 2	34
Autothrottle Computer	A/T COMPUTER	22
Auxiliary Power Unit	APU	49
Auxiliary Power Unit Generator Control Unit	APU GCU	24
Bus Power Control Unit	BPCU	24
Cabin Pressure Controller	CAB PRESS CON	21
Cargo Electronic Unit - Lower Aft	CEU - LWR AFT	26
Cargo Electronic Unit - Lower Forward	CEU - LWR FWD	26
Cargo Electronic Unit - Main Aft	CEU - MAIN AFT	26
Cargo Fire Control Panel	CFCP	26
Common Display System	CDS	31
Compartment Overheat Detection Control Module	WING/BODY OHT	26
Digital Flight Control System	DFCS	22
Distance Measurement Equipment Interrogator	DME INTRROGTR	34
Electrical Meters, Battery, and Galley Power Module	P5-13	24
Electronic Engine Controller - 1	ENGINE - 1	73
Electronic Engine Controller - 2	ENGINE - 2	73
Emergency Locator Transmitter	ELT	23
Engine Accessory Unit	EAU	78
Engine Accessory Unit/TR DEPLOY ENG 1	EAU/TR DPLOY-ENG 1	78
Engine Accessory Unit/TR DEPLOY ENG 2	EAU/TR DPLOY-ENG 2	78
Engine Accessory Unit/TR STOW ENG 1	EAU/TR STOW-ENG 1	78
Engine Accessory Unit/TR STOW ENG 2	EAU/TR STOW-ENG 2	78
Engine and Auxiliary Power Unit Fire Detection Control Module	ENG/APU FIRE	26
Enhanced Digital Flight Control Computer-A	EDFCC-A	22
Enhanced Digital Flight Control System	EDFCS	22
Flap/Slat Electronics Unit	FSEU	27
Flight Data Acquisition Unit	FDAU	31

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<u>LRU/SYSTEM</u>	<u>SHORT NAME</u>	<u>CHAPTER</u>
Flight Management Computer System	FMCS	34
Fuel Quantity Indicating System	FQIS	28
Generator Control Unit - 1	GCU - 1	24
Generator Control Unit - 2	GCU - 2	24
Ground Proximity Computer	GROUND PROX	34
High Frequency Transceiver	HF XCVR	23
Multi-Mode Receiver	MMR	34
Nitrogen Generation System BITE Display Unit	NGS	47
Pack Flow Temperature Controller	PFTC	21
Pack/Zone Temperature Controller - Left	PACK/ZN CON - L	21
Pack/Zone Temperature Controller - Right	PACK/ZN CON - R	21
Proximity Switch Electronics Unit	PSEU	32
Radio Altimeter Receiver/Transmitter	RADIO ALTIMTR	34
Satellite Communications System	SATCOM	23
Stall Management Yaw Damper Computer - 1	SMYD - 1	27
Stall Management Yaw Damper Computer - 2	SMYD - 2	27
Traffic Alert and Collision Avoidance System Computer	TCAS COMPUTER	34
VHF Omnidirectional Ranging Marker Beacon Receiver	VOR/MKR RCVR	34
Very High Frequency Transceiver	VHF XCVR	23
Waste Tank Logic Control Module	WASTE TANK	38
Weather Radar Receiver/Transmitter	WEATHER RADAR	34
Window Heat Control Unit - Left Forward	WHCU - L FWD	30
Window Heat Control Unit - Left Side	WHCU - L SIDE	30
Window Heat Control Unit - Right Forward	WHCU - R FWD	30
Window Heat Control Unit - Right Side	WHCU - R SIDE	30
Window Heat Control Unit 1 - Left Forward and Right Side	WHCU1 - L FWD/R SIDE	30
Window Heat Control Unit 2 - Right Forward and Left Side	WHCU2 - R FWD/L SIDE	30

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LRU/SYSTEM	MAINTENANCE MESSAGE	GO TO FIM TASK
PSEU	52-71001 FWD ENTR DR OPEN	52-10 TASK 801
PSEU	52-71002 FWD SERV DR OPEN	52-10 TASK 801
PSEU	52-71003 AFT ENTR DR OPEN	52-10 TASK 801
PSEU	52-71004 AFT SER DR OPEN	52-10 TASK 801
PSEU	52-72001 FWD CGO DR OPEN	52-30 TASK 803
PSEU	52-72002 AFT CGO DR OPEN	52-30 TASK 803
PSEU	52-72003 FWD ACC DR OPEN	52-40 TASK 801
PSEU	52-72004 EE ACC DR OPEN	52-40 TASK 802
PSEU	52-72005 L FL SW FAULT	52-20 TASK 801
PSEU	52-72006 L FWD FL SW FAULT	52-20 TASK 801
PSEU	52-72007 L FL SW FAULT	52-20 TASK 801
PSEU	52-72008 R FL SW FAULT	52-20 TASK 801
PSEU	52-72009 R FWD FL SW FAULT	52-20 TASK 801
PSEU	52-72010 L OW SW A FAULT	52-20 TASK 802
PSEU	52-72011 L OW SW B FAULT	52-20 TASK 802
PSEU	52-72012 L FWD OW SW A FLT	52-20 TASK 802
PSEU	52-72013 L FWD OW SW B FLT	52-20 TASK 802
PSEU	52-72014 R OW SW A FAULT	52-20 TASK 802
PSEU	52-72015 R OW SW B FAULT	52-20 TASK 802
PSEU	52-72016 R FWD OW SW A FLT	52-20 TASK 802
PSEU	52-72017 R FWD OW SW B FLT	52-20 TASK 802
PSEU	52-72018 ENG RUN R FAULT	52-20 TASK 803
PSEU	52-72019 OVWG OPT FAULT	52-20 TASK 804
PSEU	52-72020 L OW SW DISAGREE	52-20 TASK 805
PSEU	52-72021 L FWD OW SW DSGR	52-20 TASK 805
PSEU	52-72022 R OW SW DISAGREE	52-20 TASK 805
PSEU	52-72023 R FWD OW SW DSGR	52-20 TASK 805
PSEU	52-72024 FOUR OW OPT FLT	52-20 TASK 804
PSEU	52-72104 MD CD TOW DISABLED	31-51 TASK 823
PSEU	52-72106 L FWD FL SW FAULT	52-20 TASK 801
PSEU	52-72107 L FL SW FAULT	52-20 TASK 801
PSEU	52-72108 R FL SW FAULT	52-20 TASK 801
PSEU	52-72109 R FWD FL SW FAULT	52-20 TASK 801
PSEU	52-74001 L OVWG OPEN	52-20 TASK 806
PSEU	52-74002 L FWD OW OPEN	52-20 TASK 806

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LRU/SYSTEM	MAINTENANCE MESSAGE	GO TO FIM TASK
PSEU	52-74003 R OVWG OPEN	52-20 TASK 806
PSEU	52-74004 R FWD OW OPEN	52-20 TASK 806
PSEU	52-76001 EQPT WARN FLT	52-10 TASK 802
PSEU	52-76003 AFT CGO WARN FLT	52-10 TASK 802
PSEU	52-76004 AFT ENTR WARN FLT	52-10 TASK 802
PSEU	52-76005 AFT SERV WARN FLT	52-10 TASK 802
PSEU	52-76012 AIRSTAIR WARN FLT	52-10 TASK 802
PSEU	52-76014 FWD CGO WARN FLT	52-10 TASK 802
PSEU	52-76015 FWD ENTR WARN FLT	52-10 TASK 802
PSEU	52-76016 FWD SERV WARN FLT	52-10 TASK 802
PSEU	52-76017 FL RELAY 1 FAULT	52-20 TASK 807
PSEU	52-76018 FL RELAY 2 FAULT	52-20 TASK 807
PSEU	52-76019 LOW WARN FLT	52-20 TASK 808
PSEU	52-76020 L FWD OW WARN FLT	52-20 TASK 808
PSEU	52-76021 R OW WARN FLT	52-20 TASK 808
PSEU	52-76022 R FWD OW WARN FLT	52-20 TASK 808

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ECCN 9E991 BOEING PROPRIETARY - See title page for details

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801. PSEU Entry and Galley Service Door Monitored Problem - Fault Isolation

A. Description

(1) This task is for these maintenance messages:

- (a) 52-71001 FWD ENTR DR OPEN
- (b) 52-71002 FWD SERV DR OPEN
- (c) 52-71003 AFT ENTR DR OPEN
- (d) 52-71004 AFT SERV DR OPEN

NOTE: The PSEU does not record these messages when the airplane is on the ground.

(2) This task is for P5 Door Warning Light indication during taxi or takeoff.

(3) For a detailed description of the system refer to SDS SUBJECT 52-71-00.

B. Possible Causes

(1) Applicable sensor for the maintenance message shown above:

- (a) Forward Entry Door Indication Sensor, S199
- (b) Aft Entry Door Indication Sensor, S200
- (c) Forward Galley Service Entry Door Indication Sensor, S194
- (d) Aft Galley Service Entry Door Indication Sensor, S195

(2) Forward Entry Door Switch, S1147

(3) Entry or Galley Interior Door Handle out of position

(4) Service Door out of adjustment

- (a) Forward Entry Door
- (b) Aft Entry Door
- (c) Galley Service Door

(5) Wiring

(6) Proximity Switch Electronic Unit (PSEU), M2061

C. Related Data

(1) WDM 52-71-11

(2) SSM 52-71-11

D. Initial Evaluation

(1) For the Forward Entry Door, look for obvious damage to the Forward Entry Door Switch, S1147 and adjacent structure.

- (a) If you find damage, then do the Fault Isolation Procedure below.
- (b) If you do not find damage, then continue.

(2) Do a check at the PSEU as follows:

- (a) Make sure that the Main Entry Door is closed.

NOTE: Airplanes with Door Closed and Latched Switch, S1147:

If the Main Entry Door is not closed, the PSEU Replacement Test or Self-test will set a NO FLIGHT fault. You must erase the fault in the PSEU before a subsequent flight.

- (b) Get access to the PSEU.



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- (c) Push the MENU switch until EXISTING FAULTS shows.
- (d) Push the down switch until OTHER FUNCTNS? shows.
- (e) Push the YES switch to select OTHER FUNCTNS?.
- (f) Push the down switch until I/O MONITOR? shows.
- (g) Push the YES switch to select I/O MONITOR.
- (h) Push the down switch until SENSORS? shows.
- (i) Push the YES switch to select SENSORS.
- (j) Push the Down Switch until the applicable entry or Galley Service Door Indication Sensor shows:
 - 1) For the Forward Entry Door Sensor, S199.
 - 2) For the Aft Entry Door Sensor, S200.
 - 3) For the Forward Galley Service Door Sensor, S194.
 - 4) For the Aft Galley Service Door Sensor, S195.
- (k) Push the YES Switch to show the Sensor Status.
 - 1) If the sensor status is not FAILSAFE, then do this task: Entry and Galley Service Door Indication Sensor Adjustment (S194, S195, S199, or S200), AMM TASK 52-71-11-820-801, SUBTASK 52-71-11-820-005.
NOTE: Only completion of SUBTASK 52-71-11-820-005 is necessary.
 - 2) If the Sensor Status is FAILSAFE, then do the Fault Isolation Procedure below.

E. Fault Isolation Procedure

- (1) If you found obvious damage to the Forward Entry Door Switch, S1147, then do these steps:
 - (a) Repair the damage.
 - (b) Do a test of the Forward Entry Door Switch (Forward Entry Door Switch Test (S1147), AMM TASK 52-71-11-710-802).
 - 1) Adjust the Forward Entry Door Switch, S1147 as necessary (Forward Entry Door Switch Adjustment (S1147), AMM TASK 52-71-11-820-802).
 - (c) Open the Forward Entry Door.
 - (d) Close and latch the Forward Entry Door.
 - (e) If the maintenance message does not show, then you corrected the problem.
 - (f) If the maintenance message still shows, then do these steps:
 - 1) Replace the Forward Entry Door Switch, S1147. These are the tasks:
 - Forward Entry Door Switch Removal (S1147), AMM TASK 52-71-11-000-802
 - Forward Entry Door Switch Installation (S1147), AMM TASK 52-71-11-400-802
 - 2) Do the Repair Confirmation at the end of this task.
 - 3) If the maintenance message still shows, do the PSEU Check in the Initial Evaluation.
- (2) If you found obvious damage to the applicable Sensor, Target, and adjacent structure, then do these steps:
 - (a) Repair the damage.
 - (b) Do the PSEU Check located in the Initial Evaluation.
 - 1) If a maintenance message still shows, then continue.

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- (3) If you found that the Entry or Galley Interior Door Handle out of position:
 - (a) Do the Entry or Galley Interior Door Handle Does Not Stay In Position - Fault Isolation, 52-10 TASK 808.
- (4) If you found that a Door is out of adjustment, do the applicable task below:
 - For the Forward Entry Door, do the Forward Entry Door Adjustment, AMM TASK 52-11-00-820-801.
 - For the Aft Entry Door, do the Aft Entry Door Adjustment, AMM TASK 52-13-00-820-801.
 - For the Galley Service Door, do the Galley Service Door Adjustment, AMM TASK 52-41-00-820-801.
 - (a) Do the Repair Confirmation at the end of this task.
- (5) If the Sensor Status is TGT NEAR, with a De-actuator installed, then do these steps:
 - (a) For the Forward Entry Door, do these steps:
 - 1) Do this task: Forward Entry Door Indication Sensor Plunger Adjustment (S199), AMM TASK 52-71-11-820-803.
 - 2) Do the Repair Confirmation at the end of this task.
 - (b) Do this task: Entry and Galley Service Door Indication Sensor Adjustment (S194, S195, S199, or S200), AMM TASK 52-71-11-820-801.
 - 1) Do the Repair Confirmation at the end of this task.
 - (c) If the maintenance message still shows, then replace the Service Door Indication Sensor. These are the tasks:
 - Entry and Galley Service Door Sensor Removal (S194, S195, S199, or S200), AMM TASK 52-71-11-000-801
 - Entry and Galley Service Door Indication Sensor Installation (S194, S195, S199, or S200), AMM TASK 52-71-11-400-801
 - 1) Do the Repair Confirmation at the end of this task.
 - (d) Replace the PSEU, M2061. These are the tasks:
 - Proximity Switch Electronics Unit (PSEU) Removal, AMM TASK 32-09-10-000-801
 - Proximity Switch Electronics Unit (PSEU) Installation, AMM TASK 32-09-10-400-801
 - 1) Do the Repair Confirmation at the end of this task.
- (6) If the Sensor Status is TGT FAR without a De-actuator installed, then do these steps for the applicable Entry or Galley Service Door Indication Sensor:
 - (a) Do this task: Entry and Galley Service Door Indication Sensor Adjustment (S194, S195, S199, or S200), AMM TASK 52-71-11-820-801.
 - 1) Do the Repair Confirmation at the end of this task.
 - (b) If the maintenance message still shows, then do these steps:
 - 1) Replace the Service Door Indication Sensor. These are the tasks:
 - Entry and Galley Service Door Sensor Removal (S194, S195, S199, or S200), AMM TASK 52-71-11-000-801
 - Entry and Galley Service Door Indication Sensor Installation (S194, S195, S199, or S200), AMM TASK 52-71-11-400-801
 - 2) Do the Repair Confirmation at the end of this task.

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- (7) If the Sensor Status is FAILSAFE, then do this PSEU Wiring Check between the PSEU and the applicable Entry or Galley Service Door Indication Sensor:
- (a) Disconnect the applicable connector from the PSEU:
 - 1) Connector D10988 for the Forward Entry Door or Forward Galley Service Door.
 - 2) Connector D10986 for the Aft Entry Door or Aft Galley Service Door.
 - (b) Actuate the applicable Entry or Galley Service Door Indication Sensor.
 - (c) Find the wiring splice for the sensor.
 - (d) Do a wiring check between these pins of the applicable PSEU connector and sensor and make sure that the Resistance values are within these limits:
 - 1) Between the Blue and Yellow Leads, do these steps to measure the Resistance between the pins of the PSEU connector (D10986 or D10988):
 - a) Connect the LCR meter (Inductance, Capacitance, Resistance), COM-1741 to the Blue (White/Blue) and Yellow (White/Yellow) Sensor Leads.
 - b) Push the L/C/R Mode Switch to set the LCR meter (Inductance, Capacitance, Resistance), COM-1741 in R (Resistance Mode).
 - c) Push the 1 kHz/120 Hz button to select the 120 Hz Excitation Frequency.
 - d) Push the L/C/R meter DATA HOLD button once.
 - e) Push and hold the L/C/R button on the LCR meter (Inductance, Capacitance, Resistance), COM-1741 until the meter changes to the Series Mode.
- NOTE: "Ser" shows in the Upper Right corner of the display to indicate that the meter is in the Series Mode.
- f) Read the Resistance value on the LCR meter (Inductance, Capacitance, Resistance), COM-1741.
 - <1> The Nominal Resistance reading at Normal Room Temperature (CMM DC Resistance, Bench Test condition) is referred to as R1. R1 should be 344.5 to 351.5 Ohms.
- NOTE: The Line and Interface Resistance can add up to 2 Ohms.
- g) The permitted Resistance reading for in-service sensors exposed to varying conditions is 338 to 361 Ohms.
- NOTE: For On-wing Resistance readings deviations from the shown limits, you should consider the increased/ lower Resistance associated with a Higher/Lower Temperature of the Proximity Sensor at the time of the measurement, before you make a decision about the condition of the Proximity Sensor.

Temperatures can deviate significantly from Normal Room Temperature, which is always the case with airplanes with systems ON, or airplanes that just have landed, or airplanes that have been sitting out in Hot or Cold Weather.

You need to know that the Resistance values can vary and that the Proximity Sensor could still be in good condition.

Copper has a Temperature Coefficient of Resistance which is approximately 0.40 Ohm/ °C.

The deviation of the Coil Circuit (generally the Yellow-Red Circuit) can be calculated at the rate of 0.40 Ohm/ °C from Standard Temperature (25 °C)

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- 2) Between the Red and Yellow leads, do these steps to measure the Resistance between the pins of the PSEU connector (D10986 or D10988):
- a) Connect the LCR meter (Inductance, Capacitance, Resistance), COM-1741 to the Red (White/Red) and Yellow (White/Yellow) Sensor leads.
 - b) Push the L/C/R Mode Switch to set the LCR meter (Inductance, Capacitance, Resistance), COM-1741 in R (Resistance Mode).
 - c) Push the 1 kHz/120 Hz button to select the 120 Hz Excitation Frequency.
 - d) Push the L/C/R meter DATA HOLD button once.
 - e) Push and hold the L/C/R button on the LCR meter (Inductance, Capacitance, Resistance), COM-1741 until the meter changes to the Series Mode.

NOTE: "Ser" appears in the Upper Right corner of the display to indicate that the meter is in the Series Mode.

- f) Read the Resistance value on the LCR meter (Inductance, Capacitance, Resistance), COM-1741.
- g) The Nominal Resistance reading at Normal Room Temperature (CMM DC Resistance, Bench Test condition) referred to as L1. L1 should be 27 to 33 Ohms.

NOTE: The Line and Interface Resistance can add up to 2 Ohms.

- h) The permitted Resistance reading for in-service sensors exposed to varying conditions is 24 to 38 Ohms.

NOTE: For On-wing Resistance readings deviations from the shown limits, you should consider the increased/ lower Resistance associated with a Higher/Lower Temperature of the Proximity Sensor at the time of the measurement, before you make a decision about the condition of the Proximity Sensor.

Temperatures can deviate significantly from Normal Room Temperature, which is always the case with airplanes with systems ON, or airplanes that just have landed, or airplanes that have been sitting out in Hot or Cold Weather.

You need to know that the Resistance values can vary and that the Proximity Sensor could still be in good condition.

Copper has a Temperature Coefficient of Resistance which is approximately 0.40 Ohm/ °C.

The deviation of the Coil Circuit (generally the Yellow-Red Circuit) can be calculated at the rate of 0.40 Ohm/ °C from Standard Temperature (25 °C)

D10988	S199
pin 19	Red
pin 36	Blue
Ground	Yellow

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D10986	S200
pin 19	Red
pin 36	Blue
Ground	Yellow

D10988	S194
pin 58	Red
pin 57	Blue
Ground	Yellow

D10986	S195
pin 58	Red
pin 57	Blue
Ground	Yellow

- (f) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
 - 2) Re-connect the applicable connector to the PSEU.
 - 3) Re-actuate the sensor.
 - 4) Do the Repair Confirmation at the end of this task.

F. Repair Confirmation

- (1) Open the applicable FWD Entry (AFT Entry, Galley Service) Door.
- (2) Close and latch the applicable Door.
- (3) If the maintenance message does not show, then you corrected the problem.
- (4) If the maintenance message still shows, then continue the Fault Isolation Procedure at the subsequent step.

———— **END OF TASK** ————

802. PSEU Door Warning Light Monitored Problem - Fault Isolation

A. Description

- (1) This task is for these maintenance messages:
 - (a) 52-76001 EQPT WARN FLT
 - (b) 52-76003 AFT CARGO WARN FLT
 - (c) 52-76004 AFT ENTR WARN FLT
 - (d) 52-76005 AFT SERV WARN FLT
 - (e) 52-76014 FWD CGO WARN FLT
 - (f) 52-76015 FWD ENTR WARN FLT
 - (g) 52-76016 FWD SERV WARN FLT
- (2) These maintenance messages show only after the PSEU replacement test or self test is done.
- (3) (SDS SUBJECT 52-71-00)

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B. Possible Causes

- (1) The applicable light for the maintenance message listed above:
 - (a) Forward cargo door light, L1
 - (b) Aft cargo door light, L2
 - (c) Forward service galley door light, L3
 - (d) Aft service galley door light, L4
 - (e) Equipment access door light, L5
 - (f) Forward entry door light, L7
 - (g) Aft entry door light, L8
- (2) Entry or galley interior door handle out of position
- (3) Service door out of adjustment
 - (a) Forward entry door
 - (b) Aft entry door
 - (c) Galley service door
- (4) Wiring
- (5) Proximity switch electronics unit (PSEU), M2061

C. Related Data

- (1) (SSM 52-71-11)
- (2) (SSM 52-71-12)
- (3) (WDM 52-71-11)
- (4) (WDM 52-71-12)

D. Initial Evaluation

- (1) Do the PSEU replacement test or self test.
 - (a) Make sure that the main entry door is closed.

NOTE: On airplanes with door closed and latched switch S1147;
If the main entry door is not closed the PSEU replacement test or self test will set a no flight fault. The fault in the PSEU must be erased before subsequent flight.
 - (b) Do this task: Proximity Switch Electronics Unit (PSEU) - Operational Test, AMM TASK 32-09-10-710-801.
- (2) If the maintenance message does not show, then there was an intermittent fault.
- (3) If the maintenance message shows, then do the Fault Isolation Procedure below.

E. Fault Isolation Procedure

- (1) Do this check of the door warning light on the forward overhead panel, P5:
 - (a) Push the applicable door warning light on the forward overhead panel, P5:
 - 1) 52-76001 EQPT WARN FLT/EQUIP, L5.
 - 2) 52-76003 AFT CGO WARN FLT/AFT CARGO, L2.
 - 3) 52-76004 AFT ENTR WARN FLT/AFT ENTRY, L8.
 - 4) 52-76005 AFT SERV WARN FLT/AFT SERVICE, L4.
 - 5) 52-76014 FWD CGO WARN FLT/FWD CARGO, L1.

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- 6) 52-76015 FWD ENTR WARN FLT/FWD ENTRY, L7.
- 7) 52-76016 FWD SERV WARN FLT/FWD SERVICE, L3.
- (b) Make sure the lamps in the indicator come on.
- (c) If both lamps do not come on, then do these steps:
 - 1) Do this task: Indicator Light - Lamp Replacement, AMM TASK 33-18-00-960-801.
 - 2) Do the PSEU replacement test or self test. To do this, do this task: Proximity Switch Electronics Unit (PSEU) - Operational Test, AMM TASK 32-09-10-710-801.
 - 3) If the maintenance message does not show, then you corrected the fault.
 - 4) If the maintenance message shows, then do these steps:
 - a) Replace the applicable door warning light. To replace it, do this task: Indicator Light - Light Assembly Replacement, AMM TASK 33-18-00-960-802.
 - b) Do the PSEU replacement test or self test. To do this, do this task: Proximity Switch Electronics Unit (PSEU) - Operational Test, AMM TASK 32-09-10-710-801.
 - c) If the maintenance message does not show, then you corrected the fault.
- (d) If either lamp or both lamps do come on, then continue.
- (2) Do this check of the wiring:
 - (a) Disconnect the applicable connector from the PSEU:
NOTE: The PSEU is in the forward electrical equipment bay.
 - (b) Disconnect the applicable connector from the door warning light.
 - (c) Do a wiring check between these pins of the applicable connector at the PSEU and the applicable connector at the door warning light:

Table 201

DOOR WARNING LIGHT	PSEU CONNECTOR	LIGHT CONNECTOR
EQUIPMENT, L5	D10986	D1406
	pin 37	pin 6
AFT CARGO, L2	D10986	D482
	pin 33	pin 12
AFT ENTRY, L8	D10986	D1406
	pin 60	pin 5
AFT SERVICE, L4	D10986	D1406
	pin 59	pin 3
FWD CARGO, L1	D10988	D1406
	pin 33	pin 1
FWD ENTRY, L7	D10988	D1406
	pin 20	pin 8
FWD SERVICE, L3	D10988	D1406
	pin 59	pin 2

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- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-connect the connector to the PSEU.
 - 3) Re-connect the connector to the door warning light.
 - 4) Do the PSEU replacement test or self test. To do this, do this task: Proximity Switch Electronics Unit (PSEU) - Operational Test, AMM TASK 32-09-10-710-801.
 - 5) If the maintenance message does not show, then you corrected the fault.
 - 6) If the maintenance message does show, then continue.
- (e) If you did not find a problem with the wiring, then continue.
- (3) If you found that the entry or galley interior door handle out of position:
 - (a) Do the Entry or Galley Interior Door Handle Does Not Stay In Position - Fault Isolation, 52-10 TASK 808.
- (4) If you found that a service door is out of adjustment:
 - (a) For the forward entry door, do the Forward Entry Door Adjustment, AMM TASK 52-11-00-820-801.
 - (b) For the aft entry door, do the Aft Entry Door Adjustment, AMM TASK 52-13-00-820-801.
 - (c) For the galley service door, do the Galley Service Door Adjustment, AMM TASK 52-41-00-820-801.
- (5) Replace the PSEU, M2061.

These are the tasks:

Proximity Switch Electronics Unit (PSEU) Removal, AMM TASK 32-09-10-000-801,

Proximity Switch Electronics Unit (PSEU) Installation, AMM TASK 32-09-10-400-801.

- (a) If the maintenance message does not show after the PSEU replacement test, then you corrected the fault.

————— **END OF TASK** —————

807. Entry or Galley Door Cannot Be Opened or Closed Easily - Fault Isolation

A. Description

- (1) (SDS SUBJECT 52-10-00)

B. Possible Causes

- (1) Lubrication
- (2) Door Adjustment
- (3) Snubber
- (4) Hinge arms
- (5) Fuselage hinge torque tube

C. Fault Isolation Procedure

- (1) Do the visual inspection of the applicable door:
 - (a) Do this task: Forward Entry Door Check, AMM TASK 52-11-00-200-801.
 - (b) Do this task: Aft Entry Door Check, AMM TASK 52-13-00-200-801.
 - (c) Do this task: Galley Service Door Check, AMM TASK 52-41-00-200-801.
 - (d) If a problem is found, repair it.

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- 1) Do the Repair Confirmation at the end of this task.
 - 2) If the Repair Confirmation is not satisfactory, then continue.
- (2) Lubricate the applicable door:
- (a) Do this task: Forward Entry Door Servicing - Mechanism, AMM TASK 12-25-11-640-802.
 - (b) Do this task: Aft Entry Door Servicing - Mechanism, AMM TASK 12-25-12-640-802.
 - (c) Do this task: Galley Service Door Lubrication - Mechanism, AMM TASK 12-25-13-640-802.
 - 1) Do the Repair Confirmation at the end of this task.
 - 2) If the Repair Confirmation is not satisfactory, then continue.
- (3) Do the applicable door adjustment:
- (a) Do this task: Forward Entry Door Adjustment, AMM TASK 52-11-00-820-801.
 - (b) Do this task: Aft Entry Door Adjustment, AMM TASK 52-13-00-820-801.
 - (c) Do this task: Galley Service Door Adjustment, AMM TASK 52-41-00-820-801.
 - (d) If a problem is found, repair it.
 - 1) Do the Repair Confirmation at the end of this task.
 - 2) If the Repair Confirmation is not satisfactory, then continue.
- (4) Do this check of the snubber:
- (a) Examine the snubber.
 - 1) Look for damage or leaks.
 - 2) If you find a problem, repair it.
 - a) Do the Repair Confirmation at the end of this task.
 - b) If the Repair Confirmation is not satisfactory, then continue.
- (5) Do this check of the hinge arms:
- (a) Examine the guide arm and roller.
 - 1) Look for corrosion or too much wear.
 - 2) If you find a problem, repair it.
 - a) Do the Repair Confirmation at the end of this task.
 - b) If the Repair Confirmation is not satisfactory, then continue.
 - (b) Examine the hinge arms.
 - 1) Look for corrosion or too much wear.
 - 2) If you find a problem, repair it.
 - a) Do the Repair Confirmation at the end of this task.
 - b) If the Repair Confirmation is not satisfactory, then continue.
 - (c) Examine the door hinge torque tube.
 - 1) Look for corrosion or too much wear.
 - 2) If you find a problem, repair it.
 - a) Do the Repair Confirmation at the end of this task.
 - b) If the Repair Confirmation is not satisfactory, then continue.
- (6) Do this check of the fuselage hinge torque tube:

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- (a) Examine the fuselage hinge torque tube.
 - 1) Look for corrosion or too much wear.
 - 2) If you find a problem, repair it.
 - a) Do the Repair Confirmation steps below.

D. Repair Confirmation

- (1) Open and close the door.
- (2) If it is easy to open and close the door, you have corrected the fault.

———— **END OF TASK** ————

808. Entry or Galley Interior Door Handle Does Not Stay In Position - Fault Isolation

A. Description

- (1) Interior entry door does not stay in correct position when latched.
- (2) Interior galley door does not stay in correct position when latched.

B. Possible Causes

- (1) Handle Box Assembly

C. Fault Isolation Procedure

- (1) Remove the applicable Door Lining. These are the tasks:
 - Forward Entry Door Lining - Removal, AMM TASK 52-11-31-000-802
 - Aft Entry Door Lining Removal, AMM TASK 52-13-31-000-802
 - Galley Service Door Lining Removal, AMM TASK 52-41-31-000-802
- (2) Do this visual inspection of the Handle Box Assembly as follows:
 - (a) Make sure that the two Cam Follower Crank Assemblies are correctly installed.
 - (b) Make sure that all Handle Fasteners to the Hub are installed and tight.
 - (c) Make sure that Hub Fasteners to the Cam Plate are installed and tight.
 - (d) Make sure that the Cam Plate is correctly connected to the Cam Follower Crank Assemblies.
 - (e) If a problem is found, then repair it.
 - (f) Do the Repair Confirmation steps below.

D. Repair Confirmation

- (1) Install the applicable Door Lining. These are the tasks:
 - Forward Entry Door Lining - Installation, AMM TASK 52-11-31-400-802
 - Aft Entry Door Lining Installation, AMM TASK 52-13-31-400-802
 - Galley Service Door Lining Installation, AMM TASK 52-41-31-400-802
- (2) LATCH and UNLATCH the Door with the Interior Handle.
- (3) If the Interior Handle stays in position for both LATCH and UNLATCHED positions, you have corrected the problem.

———— **END OF TASK** ————

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809. Door Hold Open Latch Hard To Operate - Fault Isolation

A. Description

- (1) Refer to SDS SUBJECT 52-10-00 for a detailed description of the Passenger/Crew Doors.

B. Possible Causes

- (1) Guide Arm
(2) Snubber

C. Fault Isolation Procedure

- (1) To fault isolate the Hold Open Latch for the Forward Entry Door, do these steps:
- (a) Open the door fully to engage the Door Hold Open Latch.
 - (b) Push the Yellow Release Lever on the Guide Arm to release the Hold Open Latch.
 - 1) If the Hold Open Latch operates easily, then the fault was intermittent.
 - 2) If the Hold Open Latch is hard to operate, then continue.
 - (c) Remove or disassemble the Hold Open Mechanism, This is the task: Forward Entry Door Guide Arm and Roller Removal, AMM TASK 52-11-21-000-802.
 - 1) Look for wear or damage to the Hold Open Mechanism or the Roller.
 - 2) Make sure that the Hold Open Mechanism Spring is correctly installed.
 - a) If you find a problem, repair as necessary and then install the Fwd Entry Door Guide Arm and Roller and adjust the Guide Arm. These are the applicable tasks:
NOTE: Only do the Guide Arm adjustment.
 - Forward Entry Door Guide Arm and Roller Installation, AMM TASK 52-11-21-400-802
 - Forward Entry Door Adjustment, AMM TASK 52-11-00-820-801
- <1> Do the Repair Confirmation at the end of this task.
- (2) To fault isolate the Hold Open Latch for the Aft Entry Door or the Galley Door, do these steps:
- (a) Open the door fully to engage the Door Hold Open Latch.
 - (b) Push the Yellow Release button on the Guide Arm to release the Hold Open Latch.
 - 1) If the Hold Open Latch operates easily, then the fault was intermittent.
 - 2) If the Hold Open Latch is hard to operate, then continue.
 - (c) Remove the Roller for the applicable Aft Entry (Galley) Door. These are the applicable tasks:
 - Aft Entry Door Guide Arm and Roller Removal, AMM TASK 52-13-21-000-802
 - Galley Service Door Guide Arm and Roller Removal, AMM TASK 52-41-21-000-801
 - (d) Remove the Snubber for the applicable Aft Entry (Galley) Door. These are the applicable tasks:
 - Aft Entry Door Snubber Removal, AMM TASK 52-13-51-000-801
 - Galley Service Door Snubber Removal, AMM TASK 52-41-51-000-801
 - (e) Look for wear or damage to the Roller Assembly.
 - (f) Make sure that the Snubber is not bottomed out.
 - (g) If you find a problem, repair as necessary and then install the Roller for the applicable Aft Entry (Galley) Door. These are the tasks:

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- Aft Entry Door Guide Arm and Roller Installation, AMM TASK 52-13-21-400-802
- Galley Service Door Guide Arm and Roller Installation, AMM TASK 52-41-21-400-801
- (h) Install the Snubber for the applicable Aft Entry (Galley) Door. These are the applicable tasks:
 - Aft Entry Door Snubber Installation, AMM TASK 52-13-51-400-801
 - Galley Service Door Snubber Installation, AMM TASK 52-41-51-400-801
- (i) Adjust the Aft Entry Door. This is the task:
 - Aft Entry Door Adjustment, AMM TASK 52-13-00-820-801
- (j) Adjust the Galley Door Guide Arm and Roller. This is the task:
NOTE: Only do the Guide Arm and Snubber adjustment.
 - Galley Service Door Adjustment, AMM TASK 52-41-00-820-801

D. Repair Confirmation

- (1) Open the door fully, until the Hold Open Latch engages.
- (2) On the Forward Entry Door, push the Yellow Lever on the Guide Arm.
- (3) On Aft Entry Door or Galley Door, push the Yellow Release button on the Guide Arm.
- (4) If the Hold Open Latch operates correctly, you corrected the problem.
- (5) If the Hold Open Latch does not operate correctly, continue the Fault Isolation Procedure at the subsequent step.

————— END OF TASK —————

810. Door Latch Mechanism Hard To Operate - Fault Isolation

A. Description

- (1) (SDS SUBJECT 52-10-00)

B. Possible Causes

- (1) Adjustment
- (2) Handle box

C. Fault Isolation Procedure

- (1) Do the adjustment for the applicable door:
 - (a) Do this task: Forward Entry Door Adjustment, AMM TASK 52-11-00-820-801.
 - (b) Do this task: Aft Entry Door Adjustment, AMM TASK 52-13-00-820-801.
 - (c) Do this task: Galley Service Door Adjustment, AMM TASK 52-41-00-820-801.
NOTE: Only do latch and horizontal control rod adjustment.
 - (d) Do the Repair Confirmation at the end of this task.
 - (e) If the Repair Confirmation is not satisfactory, then continue.
- (2) Do a check on the handle box:
 - (a) Remove the applicable door lining:
 - 1) Do this task: Forward Entry Door Lining - Removal, AMM TASK 52-11-31-000-802.
 - 2) Do this task: Aft Entry Door Lining Removal, AMM TASK 52-13-31-000-802.
 - 3) Do this task: Galley Service Door Lining Removal, AMM TASK 52-41-31-000-802.
 - (b) Look for wear or damage on the latch crank and the latch crank bearings.

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- (c) Look for wear or damage on the horizontal control rod.
- (d) If a problem is found, repair it.
- (e) Install the applicable door lining:
 - 1) Do this task: Forward Entry Door Lining - Installation, AMM TASK 52-11-31-400-802.
 - 2) Do this task: Aft Entry Door Lining Installation, AMM TASK 52-13-31-400-802.
 - 3) Do this task: Galley Service Door Lining Installation, AMM TASK 52-41-31-400-802.
- (f) Do the Repair Confirmation steps below.

D. Repair Confirmation

- (1) Try to latch and unlatch the door.
- (2) If it is easy to latch and unlatch the door, then you have corrected the fault.

————— **END OF TASK** —————

811. Forward Entry, Aft Entry, Forward Galley, or Aft Galley Doors Exterior Handle Difficult to Operate - Fault Isolation

A. Description

- (1) Exterior handle is hard to pull out.
- (2) Exterior handle is hard to turn.
- (3) Exterior handle does not stow.

B. Possible Causes

- (1) Lubrication
- (2) Dirt and unwanted material
- (3) Worn/Defective O-rings
- (4) Horizontal Control Rod
- (5) Bearing
- (6) Spring

C. Related Data

- (1) Forward Entry Door (SDS SUBJECT 52-10-00)
- (2) Aft Entry Door (SDS SUBJECT 52-10-00)
- (3) Galley Doors (SDS SUBJECT 52-40-00)

D. Fault Isolation Procedure

- (1) Do this check of the exterior door handle:
 - (a) Remove the applicable door lining. These are the tasks:
 - Forward Entry Door Lining - Removal, AMM TASK 52-11-31-000-802.
 - Aft Entry Door Lining Removal, AMM TASK 52-13-31-000-802.
 - Galley Service Door Lining Removal, AMM TASK 52-41-31-000-802.
 - (b) Examine the handle box and exterior handle assembly for damage or loose hardware.
 - (c) Remove dirt and unwanted material from the handle box.
 - (d) If the exterior handle is hard to pull out, then do these steps:
 - 1) Lubricate the applicable handle shaft. These are the tasks:

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- Forward Entry Door Servicing - Mechanism, AMM TASK 12-25-11-640-802.
- Aft Entry Door Servicing - Mechanism, AMM TASK 12-25-12-640-802.
- Galley Service Door Lubrication - Mechanism, AMM TASK 12-25-13-640-802.
 - a) Do the Repair Confirmation at the end of this task.
 - b) If the Repair Confirmation is not satisfactory, then continue.
- 2) Remove the applicable exterior door handle. These are the tasks:
 - Forward Entry Door Hinge Arm Removal, AMM TASK 52-11-11-000-802.
 - Aft Entry Door Hinge Arm Removal, AMM TASK 52-13-11-000-802.
 - Galley Service Door Hinge Arm Removal, AMM TASK 52-41-11-000-801.
- 3) Do a check of both handle housing O-rings for wear, damage and correct installation.
 - a) If necessary, adjust or replace the handle housing O-rings.
 - b) Do the Repair Confirmation at the end of this task.
 - c) If the Repair Confirmation is not satisfactory, then continue.
- 4) Do a check of the handle shaft spring for damage and release force and replace the spring if it is necessary.
 - a) Do the Repair Confirmation at the end of this task.
- (e) If the exterior handle is hard to turn, then do these steps:
 - 1) Examine the handle shaft bearing.
 - a) Make sure that the shaft turns freely in the bearing and replace the bearing if necessary.
 - b) Do the Repair Confirmation at the end of this task.
 - c) If the Repair Confirmation is not satisfactory, then continue.
 - 2) Do the centering guide adjustment for the applicable door. These are the tasks:
 - Forward Entry Door Adjustment, AMM TASK 52-11-00-820-801.
 - Aft Entry Door Adjustment, AMM TASK 52-13-00-820-801.
 - Galley Service Door Adjustment, AMM TASK 52-41-00-820-801.
 - a) Do the Repair Confirmation at the end of this task.
 - b) If the Repair Confirmation is not satisfactory, then continue.
 - 3) Do an inspection of the mating surfaces between the centering cam on the handle assembly and the handle housing. Repair or replace as necessary.
 - a) Do the Repair Confirmation at the end of this task.
- (f) If the exterior handle does not stow, then do these steps:
 - 1) Do a check of the exterior handle O-rings for wear, damage and correct installation.
 - a) If necessary, adjust or replace the exterior handle O-rings.
 - b) Do the Repair Confirmation at the end of this task.
 - c) If the Repair Confirmation is not satisfactory, then continue.
 - 2) Do a check of the handle shaft spring for compression and replace the spring if necessary.
 - a) Do the Repair Confirmation at the end of this task.

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- b) If the Repair Confirmation is not satisfactory, then continue.
- 3) Do the horizontal rod adjustment for the applicable door. These are the tasks:
 - Forward Entry Door Adjustment, AMM TASK 52-11-00-820-801.
 - Aft Entry Door Adjustment, AMM TASK 52-13-00-820-801
 - Galley Service Door Adjustment, AMM TASK 52-41-00-820-801
- a) Do the Repair Confirmation at the end of this task.
- b) If the Repair Confirmation is not satisfactory, then continue.
- 4) Do an inspection of the mating surfaces between the centering cam on the handle shaft assembly and the handle housing. Repair or replace as necessary.
- 5) Install the applicable exterior door handle. These are the tasks:
 - Forward Entry Door Hinge Arm Installation, AMM TASK 52-11-11-400-802.
 - Aft Entry Door Hinge Arm Installation, AMM TASK 52-13-11-400-802.
 - Galley Service Door Hinge Arm Installation, AMM TASK 52-41-11-400-801.
- a) Do the Repair Confirmation steps below.

E. Repair Confirmation

- (1) Pull out the exterior handle.
- (2) Open the door with the exterior handle.
- (3) Close the door with the exterior handle.
- (4) Stow the exterior handle.
- (5) If it is easy to operate the exterior handle, you have corrected the problem.
 - (a) Install the applicable door lining. These are the tasks:
 - Forward Entry Door Lining - Installation, AMM TASK 52-11-31-400-802.
 - Aft Entry Door Lining Installation, AMM TASK 52-13-31-400-802.
 - Galley Service Door Lining Installation, AMM TASK 52-41-31-400-802.

————— **END OF TASK** —————

812. Door Seal Leaking, Noisy, Torn - Fault Isolation

A. Description

- (1) (SDS SUBJECT 52-09-00)

B. Possible Causes

- (1) Delamination of a seal or joint.
- (2) Cut or split in the seal joint or in the blade or bulb section of the seal.
- (3) Damage of seal flanges or seal splices.
- (4) Separation of splice bonds.

C. Fault Isolation Procedure

- (1) Do the visual inspection of the seal as follows:
 - (a) Unlock, open partially, close and lock the door, and do these checks:
 - 1) Make sure the seals are clear of the edge of all surrounding structure when the door opens and closes.

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- 2) Make sure that the blades of the seals touch the seal depressors around the edge of the door when the door closes.
 - 3) Make sure that the seal does not flip outboard at the corners when the door closes.
 - 4) Make sure there are no cuts, delamination, or damage to the seal.
- (2) Repair the applicable seals if it is necessary. To do this, do this task: Seal Repair Procedures For Specified Types of Seal Damage, AMM TASK 52-09-10-350-801.
- (3) Replace the blade seal if it is necessary.
- These are the tasks:
- Blade Seals Removal, AMM TASK 52-09-11-000-801,
Blade Seals Installation, AMM TASK 52-09-11-400-801.
- (4) Replace the blade and diaphragm seal if it is necessary.
- These are the tasks:
- Blade and Diaphragm Seals Removal, AMM TASK 52-09-12-000-801,
Blade and Diaphragm Seals Installation, AMM TASK 52-09-12-400-801.
- (5) Replace the bulb and diaphragm seal if it is necessary.
- These are the tasks:
- Bulb and Diaphragm Seal Removal, AMM TASK 52-09-14-000-801,
Bulb and Diaphragm Seal Installation, AMM TASK 52-09-14-400-801.
- (6) Replace the aerodynamic seal if it is necessary.
- These are the tasks:
- Aerodynamic Seals Removal, AMM TASK 52-09-15-000-801,
Aerodynamic Seals Installation, AMM TASK 52-09-15-400-801.
- (7) Replace the acoustic seal if it is necessary.
- These are the tasks:
- Acoustic Seal Removal, AMM TASK 52-09-16-000-801,
Acoustic Seal Installation, AMM TASK 52-09-16-400-802.
- (8) Replace the light seal if it is necessary.
- These are the tasks:
- Light Seals Removal, AMM TASK 52-09-17-000-801,
Light Seal Installation, AMM TASK 52-09-17-400-801.

————— **END OF TASK** —————

813. Aft Entry Door Difficult to Operate Between Cocked and Fully Open Position, Door Jamming or Binding - Fault Isolation

A. Description

- (1) Aft entry door difficult to operate between cocked and fully open position
- (2) Aft entry door jamming or binding

B. Possible Causes

- (1) Aft Entry Door Bumper

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C. Related Data

- (1) Aft Entry Door (SDS SUBJECT 52-10-00)

D. Fault Isolation Procedure

- (1) Do a visual inspection of the bumpers. This is the task:
 - Aft Entry Door Bumper - Inspection, AMM TASK 52-13-51-200-801
- (2) If the bumpers are missing or the position is incorrect, remove them. These are the tasks:
 - Aft Entry Door Bumper - Removal, AMM TASK 52-13-51-000-802
 - Aft Entry Door Bumper - Installation, AMM TASK 52-13-51-400-802
- (a) Do the Repair Confirmation at the end of this task.

E. Repair Confirmation

- (1) Pull out the exterior handle.
- (2) Open the door with the exterior handle.
- (3) Close the door with the exterior handle.
- (4) Stow the exterior handle.
- (5) If it is easy to operate the exterior handle, you have corrected the problem.

————— **END OF TASK** —————

814. Aft Galley Door Difficult to Operate Between Cocked and Fully Open Position, Door Jamming or Binding - Fault Isolation

A. Description

- (1) Aft galley door difficult to operate between cocked and fully open position
- (2) Aft galley door jamming or binding

B. Possible Causes

- (1) Aft Galley Door Bumper

C. Related Data

- (1) Aft Galley Door (SDS SUBJECT 52-40-00).

D. Fault Isolation Procedure

- (1) Do a visual inspection of the bumpers. This is the task:
 - Galley Service Door Bumper - Inspection, AMM TASK 52-41-51-200-801
- (2) If the bumpers are missing or the position is incorrect, remove them. These are the tasks:
 - Galley Service Door Bumper - Removal, AMM TASK 52-41-51-000-802
 - Galley Service Door Bumper - Installation, AMM TASK 52-41-51-400-802
- (a) Do the Repair Confirmation at the end of this task.

E. Repair Confirmation

- (1) Pull out the exterior handle.
- (2) Open the door with the exterior handle.
- (3) Close the door with the exterior handle.
- (4) Stow the exterior handle.

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- (5) If it is easy to operate the exterior handle, you have corrected the problem.

———— **END OF TASK** ————

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801. Overwing Exit Door Flight Lock Switch Problem - Fault Isolation

A. Description

- (1) This task is for these maintenance messages:
 - (a) 52-72005 L FL SW FAULT
 - (b) 52-72007 L FL SW FAULT
 - (c) 52-72107 L FL SW FAULT
 - (d) 52-72006 L FWD FL SW FAULT
 - (e) 52-72106 L FWD FL SW FAULT
 - (f) 52-72008 R FL SW FAULT
 - (g) 52-72108 R FL SW FAULT
 - (h) 52-72009 R FWD FL SW FAULT
 - (i) 52-72109 R FWD FL SW FAULT
- (2) These maintenance messages show when there are all of these conditions:
 - (a) A minimum of one engine is on.
 - (b) The Engine Thrust Lever is set at more than 53 degrees.
 - (c) The Overwing Exit Doors are closed.
 - (d) The applicable Flight Lock Switch indicates open.
- (3) (SDS SUBJECT 52-22-00)

B. Possible Causes

- (1) Left (Right) Flight Lock Solenoid, M2219 (M2221)
- (2) Left Forward (Right Forward) Flight Lock Solenoid, M2220 (M2222)
- (3) Wire problem
- (4) Left (Right) Flight Lock Switch, S1112 (S1114)
- (5) Left Forward (Right Forward) Flight Lock Switch, S1113 (S1115)
- (6) Proximity Switch Electronic Unit (PSEU), M2061

C. Circuit Breakers

- (1) These are the primary circuit breakers related to the fault:

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<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	1	C00458	ENGINE 1 IGNITION RIGHT
A	3	C00153	ENGINE 1 IGNITION LEFT

F/O Electrical System Panel, P6-1

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	13	C00120	WEATHER RADAR RT

F/O Electrical System Panel, P6-2

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	1	C01515	OVERWING FLIGHT LOCK-RIGHT
D	2	C01514	OVERWING FLIGHT LOCK-LEFT
D	4	C00459	ENGINE 2 IGNITION RIGHT

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F/O Electrical System Panel, P6-2

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C00151	ENGINE 2 IGNITION LEFT

F/O Electrical System Panel, P6-3

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	3	C00360	FUEL SPAR VALVE ENG 2
B	4	C00359	FUEL SPAR VALVE ENG 1

D. Related Data

- (1) SSM 52-71-13
- (2) SSM 52-71-14
- (3) WDM 52-71-13
- (4) WDM 52-71-14

E. Initial Evaluation

- (1) Do these steps to prepare for the Initial Evaluation:

NOTE: Two persons are necessary to do parts of this task: one person in the control compartment and one person in the passenger compartment.

- (a) Open these circuit breakers:

F/O Electrical System Panel, P6-2

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	1	C01515	OVERWING FLIGHT LOCK-RIGHT
D	2	C01514	OVERWING FLIGHT LOCK-LEFT

- (b) Stop for a minimum of ten seconds.
- (c) Close these circuit breakers:

F/O Electrical System Panel, P6-2

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	1	C01515	OVERWING FLIGHT LOCK-RIGHT
D	2	C01514	OVERWING FLIGHT LOCK-LEFT

- (d) Open these circuit breakers and install safety tags:

CAPT Electrical System Panel, P18-2

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	1	C00458	ENGINE 1 IGNITION RIGHT
A	3	C00153	ENGINE 1 IGNITION LEFT

F/O Electrical System Panel, P6-1

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	13	C00120	WEATHER RADAR RT

F/O Electrical System Panel, P6-2

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	4	C00459	ENGINE 2 IGNITION RIGHT

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F/O Electrical System Panel, P6-2

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	6	C00151	ENGINE 2 IGNITION LEFT

F/O Electrical System Panel, P6-3

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	3	C00360	FUEL SPAR VALVE ENG 2
B	4	C00359	FUEL SPAR VALVE ENG 1

- (e) Make sure that a minimum of 3 out of 4 entry/service doors are closed.
 - (f) Make sure that the airplane is in ground mode.
 - (g) Make sure that the Engine Start Switches on the P5-20 Panel are in the OFF position.
 - (h) Move the Engine Start Levers on the Control Stand to IDLE.
 - (i) Stop for 5 minutes.
 - (j) Move the Engine Thrust Levers to the fully forward position.
- (2) Do this task: Proximity Switch Electronics Unit (PSEU) BITE Procedure, 32-09 TASK 801.
- (a) If the maintenance message does not show, then there was an intermittent fault.
 - (b) If the maintenance message shows, then do these steps:

NOTE: Use these steps to isolate the door problem to the door indication circuit or the Flight Lock Solenoid circuit.



MAKE SURE THAT THE DOOR OPENING PATH IS CLEAR BEFORE YOU RELEASE THE DOOR HANDLE. THE DOOR IS SPRING-LOADED TO OPEN AUTOMATICALLY AND INJURIES COULD OCCUR.

- 1) Make sure that the Flight Lock Solenoid is in the locked position:
 - a) Pull the Overwing Exit Door handle to open the door.
 - b) Make sure that the Overwing Wing Exit Door does not open.
- 2) Move the Engine Thrust Levers to idle.
- 3) The following steps must occur at the same time:
 - a) Stand by the Overwing Doors and prepare to listen for a delay between the left door and right door flight lock actuation.
 - b) Move the Thrust Levers forward.
 - c) Listen for the left and right door flight lock actuation to occur at the same time.
 - <1> If a flight lock actuates 1 or more seconds after the others, replace the slow Actuating Solenoid Assembly.
- 4) Move the Engine Thrust Levers back to idle.
- 5) Move the Engine Start Levers to CUTOFF.

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MAKE SURE THAT THE DOOR OPENING PATH IS CLEAR BEFORE YOU RELEASE THE DOOR HANDLE. THE DOOR IS SPRING-LOADED TO OPEN AUTOMATICALLY AND INJURIES COULD OCCUR.

- 6) Make sure that the Flight Lock Solenoid is not in the locked position:
 - a) Pull the Overwing Exit Door handle to open the door.
 - b) Make sure the Overwing Exit Door will open.
- 7) Do the Fault Isolation Procedure below.
 - a) Make sure that the problem is identified as a door indication problem or a Flight Lock Solenoid problem before you continue.

F. Fault Isolation Procedure

- (1) If you identified the fault as a Flight Lock Solenoid mechanical problem, then do these steps:
 - (a) Remove the door lining to get access to the Flight Lock Solenoid. This is the task: Emergency Exit Door Lining Removal, AMM TASK 52-22-51-000-801.
 - (b) Do a continuity check between the terminals of the applicable Flight Lock Solenoid.

NOTE: Over time, moisture with possible freezing can affect the ground termination. When checking the wiring, it is recommended to inspect the applicable ground blocks for signs of corrosion.

Table 201

MAINTENANCE MESSAGE	SOLENOID	TERMINALS
52-72005 L FL SW FAULT 52-72007 L FL SW FAULT 52-72107 L FL SW FAULT	M2219	A, B
52-72006 L FWD FL SW FAULT 52-72106 L FWD FL SW FAULT	M2220	A, B
52-72008 R FL SW FAULT 52-72108 R FL SW FAULT	M2221	A, B
52-72009 R FWD FL SW FAULT 52-72109 R FWD FL SW FAULT	M2222	A, B

- 1) If there is no continuity, then replace the Flight Lock Solenoid. These are the tasks:
 - Emergency Exit Door Flight Lock Solenoid Removal, AMM TASK 52-22-41-000-802
 - Emergency Exit Door Flight Lock Solenoid Installation, AMM TASK 52-22-41-400-802
 - a) Do the Repair Confirmation at the end of this task.
- 2) If there is continuity, then continue.
- (c) Do this wire check between the Flight Lock Relay and the Flight Lock Solenoid:
 - 1) Remove the applicable Flight Lock Relay.
 - 2) Disconnect the connector for the applicable Flight Lock Solenoid.

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- (d) Do a wire check between these pins of the connector for the Flight Lock Relay and the connector for the Flight Lock Solenoid:

NOTE: Over time, moisture with possible freezing can affect the ground termination. When checking the wiring, it is recommended to inspect the applicable ground blocks for signs of corrosion.

Table 202

MAINTENANCE MESSAGE NUMBER	RELAY CONNECTOR		SOLENOID CONNECTOR
52-72005	D12756	-----	D40196P
52-72007	pin A1		pin 18
52-72107			
52-72006	D12756	-----	D40196P
52-72106	pin B1		pin 22
52-72008	D12758	-----	D40296P
52-72108	pin A1		pin 24
52-72009	D12758	-----	D40296P
52-72109	pin B1		pin 27

- 1) If you find a problem with the wire, then do these steps:
 - a) Repair or replace the wire.
 - b) Re-install the applicable Flight Lock Relay.
 - c) Re-connect the electrical connector for the applicable Flight Lock Solenoid.
 - d) Do the Repair Confirmation at the end of this task.

- 2) If you do not find a problem with the wires, then continue.

- (e) Examine the Engine 1 (2) Running Relays, R737 (R738):

NOTE: The Engine 1 Running Relay, R737, is found in the J22 Junction Box.

The Engine 2 Running Relay, R738, is found in the J24 Junction Box.

- 1) Do the Emergency Exit Door Flight Lock Mechanical Switch Operational Test. This is the task: Emergency Exit Door Flight Lock Mechanical Switch Operational Test, AMM TASK 52-22-00-710-802.
- 2) If the operational test is not in the limits, then examine the wires for the applicable Engine Running Relay:
 - a) Disconnect the connector for the applicable Flight Lock Solenoid.
 - b) Remove the applicable Engine Running Relay.
 - c) Do a wire check between the applicable Flight Lock Solenoid and the applicable relay:

NOTE: Over time, moisture with possible freezing can affect the ground termination. When checking the wiring, it is recommended to inspect the applicable ground blocks for signs of corrosion.

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Table 203

MAINTENANCE MESSAGE NUMBER	SOLENOID CONNECTOR		R737 CONNECTOR
52-72005	D40196P	-----	D12538
52-72007	pin 17		pin A1
52-72107			
52-72006	D40196P	-----	D12538
52-72106	pin 17		pin A1
52-72008	D40296P	-----	D12538
52-72108	pin 23		pin A1
52-72009	D40296P	-----	D12538
52-72109	pin 23		pin A1

Table 204

MAINTENANCE MESSAGE NUMBER	SOLENOID CONNECTOR		R738 CONNECTOR
52-72005	D40196P	-----	D12540
52-72007	pin 17		pin B1
52-72107			
52-72006	D40196P	-----	D12540
52-72106	pin 17		pin B1
52-72008	D40296P	-----	D12540
52-72108	pin 23		pin B1
52-72009	D40296P	-----	D12540
52-72109	pin 23		pin B1

- <1> If you find a problem with the wires, then do these steps:
- <a> Repair or replace the wires.
 - Re-connect the connector for the applicable Flight Lock Solenoid.
 - <c> Re-install the applicable Engine Running Relay.
 - <d> Do the Repair Confirmation at the end of this task.
- <2> If you do not find a problem with the wires, then replace the Engine 1 (2) Running Relay, R737 (R738).
- <a> Do the Repair Confirmation at the end of this task.

- (2) If you identified the fault as an indication problem, then do these steps:
- (a) Do these steps to do a check of the applicable Flight Lock Switch:
 - 1) If it is necessary, remove the lining from the door. This is the task: Emergency Exit Door Lining Removal, AMM TASK 52-22-51-000-801.
 - 2) Disconnect the electrical connector from the applicable Flight Lock Switch.
 - 3) Manually operate the Flight Lock Switch while you do the continuity check.
 - 4) Do a continuity check of the connectors splices and the ground.

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- 5) Do a continuity check between terminals of the Flight Lock Switch:

NOTE: Over time, moisture with possible freezing can affect the ground termination. When checking the wiring, it is recommended to inspect the applicable ground blocks for signs of corrosion.

Table 205

MAINTENANCE MESSAGE	SWITCH	TERMINALS
52-72005 L FL SW FAULT 52-72007 L FL SW FAULT 52-72107 L FL SW FAULT	S1112	A, B
52-72008 R FL SW FAULT 52-72108 R FL SW FAULT	S1114	A, B

- a) If the continuity check is not correct, then replace the applicable Flight Lock Switch. These are the tasks:
- Flight Lock Switch Removal, AMM TASK 52-22-41-020-802
 - Flight Lock Switch Installation, AMM TASK 52-22-41-420-802
- <1> Make sure that the electrical connector is correctly installed on the Flight Lock Switch.
- <2> Do the Repair Confirmation at the end of this task.
- b) If the continuity check is correct, then continue.
- (b) Do this wire check between the Flight Lock Switch and the PSEU:
- 1) Disconnect the applicable electrical connector from the PSEU.
 - 2) Do a wire check between the ground of the Flight Lock Switch and the connector for the PSEU:

NOTE: Over time, moisture with possible freezing can affect the ground termination. When checking the wiring, it is recommended to inspect the applicable ground blocks for signs of corrosion.

Table 206

MAINTENANCE MESSAGE NUMBER	PSEU CONNECTOR		GROUND AT SWITCH
52-72005 52-72007 52-72107	D10986 pin 20	-----	S1112
52-72006 52-72106	D10986 pin 53	-----	S1113
52-72008 52-72108	D10988 pin 2	-----	S1114
52-72009 52-72109	D10988 pin 52	-----	S1115

- a) If you find a problem with the wire, then do these steps:
- <1> Repair or replace the wire.
- <2> Re-connect the electrical connector to the Flight Lock Switch.

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- <3> Re-connect the electrical connector to the PSEU.
- <4> Do the Repair Confirmation at the end of this task.
- b) If you do not find a problem with the wiring, then replace the PSEU, M2061. These are the tasks:
 - Proximity Switch Electronics Unit (PSEU) Removal, AMM TASK 32-09-10-000-801
 - Proximity Switch Electronics Unit (PSEU) Installation, AMM TASK 32-09-10-400-801
- <1> Do the Repair Confirmation at the end of this task.

G. Repair Confirmation

NOTE: You must do the steps to prepare for the Initial Evaluation before you do these steps.

- (1) Make sure that these circuit breakers are closed:

F/O Electrical System Panel, P6-2

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	1	C01515	OVERWING FLIGHT LOCK-RIGHT
D	2	C01514	OVERWING FLIGHT LOCK-LEFT

- (2) Make sure that the connector for the applicable Flight Lock Switch is installed.
- (3) Make sure that the applicable Flight Lock Relay is installed.
- (4) Make sure that the connector for the applicable Flight Lock Solenoid is installed.
- (5) Make sure that the applicable Engine Running Relay is installed.
- (6) Do this task: Proximity Switch Electronics Unit (PSEU) BITE Procedure, 32-09 TASK 801.
 - (a) If the maintenance message does not show, then you corrected the problem.
 - 1) Put the airplane back to its usual condition.
 - a) Move the Engine Start Levers to CUTOFF.
 - b) Move the Engine Thrust Levers to idle.
 - c) Make sure that the Engine Start Switches are in the OFF/AUTO position.
 - d) Remove the safety tags and close these circuit breakers:

CAPT Electrical System Panel, P18-2

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	1	C00458	ENGINE 1 IGNITION RIGHT
A	3	C00153	ENGINE 1 IGNITION LEFT

F/O Electrical System Panel, P6-1

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	13	C00120	WEATHER RADAR RT

F/O Electrical System Panel, P6-2

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	4	C00459	ENGINE 2 IGNITION RIGHT
D	6	C00151	ENGINE 2 IGNITION LEFT

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F/O Electrical System Panel, P6-3

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	3	C00360	FUEL SPAR VALVE ENG 2
B	4	C00359	FUEL SPAR VALVE ENG 1

- e) Make sure that the door linings are correctly installed. This is the task: Emergency Exit Door Lining Installation, AMM TASK 52-22-51-400-801.
- (b) If the maintenance message shows, then continue the Fault Isolation Procedure at the subsequent step.

———— **END OF TASK** ————

802. Overwing Exit Door Indication Switch Problem - Fault Isolation

A. Description

- (1) This task is for these maintenance messages:
 - (a) 52-72010 L OW SW A FAULT
 - (b) 52-72011 L OW SW B FAULT
 - (c) 52-72012 L FWD OW SW A FLT
 - (d) 52-72013 L FWD OW SW B FLT
 - (e) 52-72014 R OW SW A FAULT
 - (f) 52-72015 R OW SW B FAULT
 - (g) 52-72016 R FWD OW SW A FLT
 - (h) 52-72017 R FWD OW SW B FLT
- (2) This maintenance message shows when there are all of these conditions:
 - (a) The airplane is in flight.
 - (b) Any one of the door switches indicates open.

B. Possible Causes

- (1) Left Overwing Exit Door Indication Switch, S1104 or S1105
- (2) Left Forward Overwing Exit Door Indication Switch, S1108 or S1109
- (3) Right Overwing Exit Door Indication Switch, S1106 or S1107
- (4) Right Forward Overwing Exit Door Indication Switch, S1110 or S1111
- (5) Wiring problem
- (6) PSEU, M2061

C. Related Data

- (1) SSM 52-71-13
- (2) SSM 52-71-14
- (3) WDM 52-71-13
- (4) WDM 52-71-14

D. Initial Evaluation

- (1) Do these steps to prepare for the Initial Evaluation:
 - (a) Make sure that a minimum of 3 out of 4 entry/service doors are closed.
 - (b) Make sure all the Overwing Exit Doors are closed, latched and locked.

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- (c) Do this task: Put the Airplane in the Air Mode, AMM TASK 32-09-00-860-801.
- (2) Do this task: Proximity Switch Electronics Unit (PSEU) BITE Procedure, 32-09 TASK 801.
 - (a) If the maintenance message does not show, then there was an intermittent fault.
 - (b) If the maintenance message shows, then do these steps:
 - 1) Do this task: Return the Airplane to the Ground Mode, AMM TASK 32-09-00-860-802.
 - 2) Do the Fault Isolation Procedure below.

E. Fault Isolation Procedure

- (1) Adjust the applicable switch. This is the task: Emergency Exit Door Indication Switch Adjustment, AMM TASK 52-71-22-820-805.

Table 207

MAINTENANCE MESSAGE	SWITCH
52-72010 L OW SW A FAULT	S1104
52-72011 L OW SW B FAULT	S1105
52-72012 L FWD OW SW A FLT	S1108
52-72013 L FWD OW SW B FT	S1109
52-72014 R OW SW A FAULT	S1106
52-72015 R OW SW B FAULT	S1107
52-72016 R FWD OW SW A FLT	S1110
52-72017 R FWD OW SW B FLT	S1111

- (a) Do the Repair Confirmation at the end of this task.
- (2) Replace the applicable switch.
 - (a) Do the Repair Confirmation at the end of this task.
- (3) Do this wiring check between the Indication Switch and the PSEU:
 - (a) Disconnect the applicable connector from the PSEU.
 - (b) Do a wiring check between the Indication Switch ground and the connector for the PSEU:
 - 1) With all of the Overwing Exit Doors closed, make sure that there is continuity between the Indication Switch ground and the PSEU connector:

NOTE: Over time, moisture with possible freezing can affect the ground termination. When checking the wiring, it is recommended to inspect the applicable ground blocks for signs of corrosion.

Table 208

MAINTENANCE MESSAGE NUMBER	GROUND AT SWITCH	PSEU CONNECTOR
52-72010	S1104	D10986 pin 8
52-72011	S1105	D10988 pin 21

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Table 208 (Continued)

MAINTENANCE MESSAGE NUMBER	GROUND AT SWITCH	PSEU CONNECTOR
52-72012		D10986
	S1108	pin 52
52-72013		D10988
	S1109	pin 35
52-72014		D10986
	S1106	pin 61
52-72015		D10988
	S1107	pin 1
52-72016		D10986
	S1110	pin 15
52-72017		D10988
	S1111	pin 30

a) If you find a problem with the wiring, then do these steps:

- <1> Repair the wiring.
- <2> Re-connect the connector to the applicable switch.
- <3> Re-connect the applicable connector to the PSEU.
- <4> Do the Repair Confirmation at the end of this task.

b) If you do not find a problem with the wiring, then continue.

(4) Replace the PSEU, M2061. These are the tasks:

- Proximity Switch Electronics Unit (PSEU) Removal, AMM TASK 32-09-10-000-801
- Proximity Switch Electronics Unit (PSEU) Installation, AMM TASK 32-09-10-400-801

(a) Do the Repair Confirmation at the end of this task.

F. Repair Confirmation

NOTE: You must do the steps to prepare for the Initial Evaluation before you do these steps.

- (1) Make sure the connector for the applicable Indication Switch is installed.
- (2) Do this task: Proximity Switch Electronics Unit (PSEU) BITE Procedure, 32-09 TASK 801.
 - (a) If the maintenance message does not show, then you corrected the problem.
 - 1) Put the airplane back to its usual condition. This is the task: Return the Airplane to the Ground Mode, AMM TASK 32-09-00-860-802.
 - (b) If the maintenance message shows, then continue the Fault Isolation Procedure at the subsequent step.

————— **END OF TASK** —————

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803. Right Engine Running Signal to PSEU Problem - Fault Isolation

A. Description

- (1) This task is for this maintenance message:
 - (a) 52-72018 ENG RUN R FAULT
- (2) This maintenance message shows when these conditions occur:
 - (a) The right engine is on, but the right engine-running relay is not providing a ground signal to the Proximity Sensor Electronics Unit (PSEU) input.
 - (b) The right engine thrust lever is advanced more than 64 degrees.

B. Possible Causes

- (1) Right engine-running relay, R563
- (2) Proximity switch electronics unit (PSEU), M2061
- (3) Hydraulic Shutoff Valve, V33 (Eng 1) V34 (Eng2)
- (4) Bleed Air Shutoff Valve, V17 (Eng 1) V16 (Eng 2).

C. Circuit Breakers

- (1) This is the primary circuit breaker related to the fault:

F/O Electrical System Panel, P6-2

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	5	C01313	ENGINE 2 RUN/PWR

D. Related Data

- (1) SSM 29-11-11
- (2) WDM 29-11-11
- (3) SSM 31-62-24
- (4) WDM 31-62-24
- (5) SSM 36-11-11
- (6) WDM 36-11-11
- (7) SSM 52-71-14
- (8) WDM 52-71-14
- (9) SSM 73-22-31
- (10) WDM 73-22-31

E. Initial Evaluation

- (1) Do these steps to prepare for the initial evaluation:
 - (a) Open these circuit breakers and install safety tags:

CAPT Electrical System Panel, P18-2

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	1	C00458	ENGINE 1 IGNITION RIGHT
A	3	C00153	ENGINE 1 IGNITION LEFT

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F/O Electrical System Panel, P6-1

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	13	C00120	WEATHER RADAR RT

F/O Electrical System Panel, P6-2

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	4	C00459	ENGINE 2 IGNITION RIGHT
D	6	C00151	ENGINE 2 IGNITION LEFT

F/O Electrical System Panel, P6-3

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	3	C00360	FUEL SPAR VALVE ENG 2
B	4	C00359	FUEL SPAR VALVE ENG 1

- (b) Make sure that a minimum of 3 out of 4 entry/service doors are closed.
 - (c) Make sure that the airplane is in ground mode.
 - (d) Make sure that the engine start switches on the P5-20 panel are in the OFF position.
 - (e) Move the engine start levers on the control stand to IDLE.
 - (f) Wait for 5 minutes, then move the engine thrust levers on the control stand to the fully advanced position.
- (2) Do this task: Proximity Switch Electronics Unit (PSEU) BITE Procedure, 32-09 TASK 801.
- (a) If the maintenance message does not show, then there was an intermittent fault.
 - (b) If the maintenance message shows, do these steps then do the Fault Isolation Procedure below:
 - 1) Move the engine thrust levers to idle.
 - 2) Move the engine start levers to CUTOFF.

F. Fault Isolation Procedure

- (1) Open this circuit breaker and install safety tag:

F/O Electrical System Panel, P6-2

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	5	C01313	ENGINE 2 RUN/PWR

- (2) Replace the right engine-running relay R563.

NOTE: The right engine-running relay is installed in junction box J24.

- (a) Do the Repair Confirmation at the end of this task.
 - 1) If the Repair Confirmation is not satisfactory, then continue.
- (3) Do this wiring check:
 - (a) Disconnect connector D10986 from the PSEU.
 - (b) Remove the right engine-running relay R563 from the J24 junction box.
 - (c) Do a wiring check between these pins of connector D10986 and connector D10916 at the J24 junction box:
 - (d) Do a wiring check between the relay and the PSEU.

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D10986

pin 47 pin A1

D10916

- (e) If you find a problem with the wiring, then do these steps:
- 1) Repair the wiring.
 - 2) Reinstall the right engine-running relay R563.
 - 3) Reconnect connector D10986 to the PSEU.
 - 4) Do the Repair Confirmation at the end of this task.
- (f) If you do not find a problem with the wiring, then continue.
- (4) Replace the PSEU, M2061. These are the tasks:
- Proximity Switch Electronics Unit (PSEU) Removal, AMM TASK 32-09-10-000-801
 - Proximity Switch Electronics Unit (PSEU) Installation, AMM TASK 32-09-10-400-801
- (a) Do the Repair Confirmation at the end of this task.

G. Repair Confirmation

- (1) Remove the safety tag and close this circuit breaker:

F/O Electrical System Panel, P6-2

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	5	C01313	ENGINE 2 RUN/PWR

- (2) Do these steps to prepare for the Repair Confirmation:
- (a) Make sure that these circuit breakers are open and have safety tags:

CAPT Electrical System Panel, P18-2

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	1	C00458	ENGINE 1 IGNITION RIGHT
A	3	C00153	ENGINE 1 IGNITION LEFT

F/O Electrical System Panel, P6-1

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	13	C00120	WEATHER RADAR RT

F/O Electrical System Panel, P6-2

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	4	C00459	ENGINE 2 IGNITION RIGHT
D	6	C00151	ENGINE 2 IGNITION LEFT

F/O Electrical System Panel, P6-3

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	3	C00360	FUEL SPAR VALVE ENG 2
B	4	C00359	FUEL SPAR VALVE ENG 1

- (b) Make sure that the right-engine running relay, R563 is installed.
- (c) Make sure that a minimum of 3 out of 4 entry/service doors are closed.
- (d) Make sure that the airplane is in ground mode.

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- (e) Make sure that the engine start switches on the P5-20 panel are in the OFF position.
 - (f) Move the engine start levers on the control stand to IDLE.
 - (g) Wait for 5 minutes, then move the engine thrust levers on the control stand to the fully advanced position.
- (3) Do this task: Proximity Switch Electronics Unit (PSEU) BITE Procedure, 32-09 TASK 801.
- (a) If the maintenance message shows, then continue the Fault Isolation Procedure at the subsequent step.
 - (b) If the maintenance message does not show, then you corrected the fault, continue to the procedure below.

H. Put the Airplane in its Usual Condition

- (1) Do these steps to put the airplane back to its usual condition.
- (a) Move the engine start levers to CUTOFF.
 - (b) Move the engine thrust levers to idle.
 - (c) Make sure the engine start switches are OFF.
 - (d) Remove the safety tags and close these circuit breakers:

CAPT Electrical System Panel, P18-2

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	1	C00458	ENGINE 1 IGNITION RIGHT
A	3	C00153	ENGINE 1 IGNITION LEFT

F/O Electrical System Panel, P6-1

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	13	C00120	WEATHER RADAR RT

F/O Electrical System Panel, P6-2

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	4	C00459	ENGINE 2 IGNITION RIGHT
D	6	C00151	ENGINE 2 IGNITION LEFT

F/O Electrical System Panel, P6-3

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	3	C00360	FUEL SPAR VALVE ENG 2
B	4	C00359	FUEL SPAR VALVE ENG 1

————— END OF TASK —————

804. Overwing Exit Door Option Problem - Fault Isolation

A. Description

- (1) This task is for these maintenance messages:
- (a) 52-72019 OVWG OPT FAULT
 - (b) 52-72024 FOUR OW OPT FLT
- (2) These maintenance messages show when there are all of these conditions:
- (a) The OVERWING OPT pin on the PSEU is not grounded.
 - (b) The FOUR OVERWING OPT pin on the PSEU is not grounded.

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(c) The left and right flight lock switches indicate closed.

B. Possible Causes

- (1) Wiring problem
- (2) Proximity switch electronics unit (PSEU), M2061

C. Related Data

- (1) (SSM 52-71-13)
- (2) (SSM 52-71-14)
- (3) (WDM 52-71-13)
- (4) (WDM 52-71-14)

D. Initial Evaluation

- (1) Do this task: Proximity Switch Electronics Unit (PSEU) BITE Procedure, 32-09 TASK 801.
- (2) If the maintenance message does not show, then there was an intermittent fault.
- (3) If the maintenance message shows, then do the Fault Isolation Procedure below.

E. Fault Isolation Procedure

- (1) Do this wiring check:
 - (a) Disconnect connector D10986 from the PSEU.
 - (b) Make sure the applicable pin of connector D10986 goes to ground (WDM 52-71-13).

Table 209

MAINTENANCE MESSAGE	CONNECTOR	PIN NUMBER
52-72019 OVWG OPT FAULT	D10986	10
52-72024 FOUR OVWG OPT FLT	D10986	11

- (c) If the pin does not go to ground, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-connect connector D10986 to the PSEU.
 - 3) Do the Repair Confirmation at the end of this task.
- (d) If the pin goes to ground, then continue.
- (2) Replace the PSEU, M2061.

These are the tasks:

Proximity Switch Electronics Unit (PSEU) Removal, AMM TASK 32-09-10-000-801,
Proximity Switch Electronics Unit (PSEU) Installation, AMM TASK 32-09-10-400-801.

 - (a) Do the Repair Confirmation at the end of this task.

F. Repair Confirmation

- (1) Do this task: Proximity Switch Electronics Unit (PSEU) BITE Procedure, 32-09 TASK 801.
- (2) If the maintenance message does not show, then you corrected the fault.

———— **END OF TASK** ————

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805. Overwing Exit Door Switch Disagreement Problem - Fault Isolation

A. Description

- (1) This task is for these maintenance messages:
 - (a) 52-72020 L OW SW DISAGREE
 - (b) 52-72021 L FWD OW SW DSGR
 - (c) 52-72022 R OW SW DISAGREE
 - (d) 52-72023 R FWD OW SW DSGR
- (2) These maintenance messages show when one of the two indication switches for an overwing exit door indicates open and the other indicates closed.

B. Possible Causes

- (1) Left Overwing Exit Door Indication Switch, S1104 or S1105
- (2) Left Forward Overwing Exit Door Indication Switch, S1108 or S1109
- (3) Right Overwing Exit Door Indication Switch, S1106 or S1107
- (4) Right Forward Overwing Exit Door Indication Switch, S1110 or S1111
- (5) Wiring problem
- (6) PSEU, M2061

C. Related Data

- (1) SSM 52-71-13
- (2) SSM 52-71-14
- (3) WDM 52-71-13
- (4) WDM 52-71-14

D. Initial Evaluation

- (1) Make sure that all the overwing exit doors are closed, latched and locked.
- (2) Do this task: Proximity Switch Electronics Unit (PSEU) BITE Procedure, 32-09 TASK 801.
- (3) If the maintenance message shows, then do the Fault Isolation Procedure below.
- (4) If the maintenance message does not show, open all the overwing exit doors.
- (5) Do this task: Proximity Switch Electronics Unit (PSEU) BITE Procedure, 32-09 TASK 801.
- (6) If the maintenance message shows, then do the Fault Isolation Procedure below.
- (7) If the maintenance message does not show, then there was an intermittent fault.

NOTE: If this message occurs frequently, then the fault can be a loose connection at the indication switch.

E. Fault Isolation Procedure

- (1) Adjust the applicable indication switch, do this task: Emergency Exit Door Indication Switch Adjustment, AMM TASK 52-71-22-820-805.

Table 210

MAINTENANCE MESSAGE	SWITCHES
52-72020 L OW SW DISAGREE	S1104, S1105
52-72021 L FWD OW SW DSGR	S1108, S1109

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Table 210 (Continued)

MAINTENANCE MESSAGE	SWITCHES
52-72022 R OW SW DISAREE	S1106, S1107
52-72023 R FWD OW SW DSGR	S1110, S1111

- (a) Do the Repair Confirmation at the end of this task.
- (2) Do these steps from the PSEU BITE Display to check the exit door indication switches inputs to the PSEU:
- (a) Push the ON button.
- (b) Push the NO button until OTHER FUNCTNS? shows.
- (c) Push the YES button.
- (d) Push the NO button until I/O MONITOR? shows.
- (e) Push the YES button until SENSORS? shows.
- (f) Push the NO button until INPUTS? shows.
- NOTE: Use the arrow down button if INPUT INACTIVE shows.
- (g) Push the YES button.
- (h) Select a connector.
- NOTE: Use the arrow buttons to move to the desired connector, then push the YES button to select a connector.
- (i) Select a pin.
- NOTE: Use the arrow buttons to move to the desired pin, then push the YES button to select the pin.
- (j) Do a check of the applicable exit door indication switches inputs to the PSEU:

Table 211

MAINTENANCE MESSAGE NUMBER	SWITCH	CONNECTOR	PIN	TEST CONDITION	PSEU BITE DISPLAY
52-72020	S1104	D10986	8	DOOR LOCKED	GND
		D10986	8	DOOR NOT LOCKED	NO GND
	S1105	D10988	21	DOOR LOCKED	GND
		D10988	21	DOOR NOT LOCKED	NO GND
52-72021	S1108	D10986	52	DOOR LOCKED	GND
		D10986	52	DOOR NOT LOCKED	NO GND
	S1109	D10988	35	DOOR LOCKED	GND
		D10988	35	DOOR NOT LOCKED	NO GND
52-72022	S1106	D10986	61	DOOR LOCKED	GND
		D10986	61	DOOR NOT LOCKED	NO GND
	S1107	D10988	1	DOOR LOCKED	GND
		D10988	1	DOOR NOT LOCKED	NO GND

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Table 211 (Continued)

MAINTENANCE MESSAGE NUMBER	SWITCH	CONNECTOR	PIN	TEST CONDITION	PSEU BITE DISPLAY
52-72023	S1110	D10986	15	DOOR LOCKED	GND
		D10986	15	DOOR NOT LOCKED	NO GND
	S1111	D10988	30	DOOR LOCKED	GND
		D10988	30	DOOR NOT LOCKED	NO GND

- 1) If you find a problem with the inputs for the test conditions in the table, then continue with the exit door indication switch replacement or wiring check.
- 2) If you do not find a problem with the inputs for the test conditions in the table, then continue with the PSEU replacement.
- (3) Replace the applicable indication switch. These are the tasks:
 - Emergency Exit Door Indication Switch Removal, AMM TASK 52-71-22-000-803
 - Emergency Exit Door Indication Switch Installation, AMM TASK 52-71-22-420-801
- (a) Do the Repair Confirmation at the end of this task.
- (4) Do this wiring check:
 - (a) Make sure that the applicable overwing exit door is closed, latched and locked.
 - (b) Disconnect the connector for the applicable indication switch from the PSEU.
 - (c) Do a wiring check between the ground of the connector for the indication switch and the connector for the PSEU:

Table 212

MAINTENANCE MESSAGE NUMBER	GROUND AT SWITCH	PSEU CONNECTOR
52-72020	S1104	D10986
		pin 8
52-72020	S1105	D10988
		pin 21
52-72021	S1108	D10986
		pin 52
52-72021	S1109	D10988
		pin 35
52-72022	S1106	D10986
		pin 61
52-72022	S1107	D10988
		pin 1
52-72023	S1110	D10986
		pin 15
52-72023		D10988

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Table 212 (Continued)

MAINTENANCE MESSAGE NUMBER	GROUND AT SWITCH	PSEU CONNECTOR
	S1111	pin 30

- 1) If you find a problem with the wiring, then do these steps:
 - a) Repair the wiring.
 - b) Re-install the applicable switch.
 - c) Re-connect the applicable connector to the PSEU.
 - d) Do the Repair Confirmation at the end of this task.
- 2) If you do not find a problem with the wiring, then continue.
- (5) Replace the PSEU, M2061. These are the tasks:
 - Proximity Switch Electronics Unit (PSEU) Removal, AMM TASK 32-09-10-000-801
 - Proximity Switch Electronics Unit (PSEU) Installation, AMM TASK 32-09-10-400-801
 - (a) Do the Repair Confirmation at the end of this task.

F. Repair Confirmation

- (1) Make sure that the connector for the applicable switch is installed.
- (2) Do this task: Proximity Switch Electronics Unit (PSEU) BITE Procedure, 32-09 TASK 801.
 - (a) If the maintenance message does not show, then you corrected the problem.
 - (b) If the maintenance message shows, then continue the Fault Isolation Procedure at the subsequent step.

————— **END OF TASK** —————

806. Overwing Exit Door Open Problem - Fault Isolation

A. Description

- (1) This task is for these maintenance messages:
 - (a) 52-74001 L OVWG OPEN
 - (b) 52-74002 L FWD OW OPEN
 - (c) 52-74003 R OVWG OPEN
 - (d) 52-74004 R FWD OW OPEN
- (2) This maintenance message shows when both overwing exit door indication switches indicate open.

B. Possible Causes

- (1) Left overwing exit door indication switch, S1104 or S1105
- (2) Left forward overwing exit door indication switch, S1108 or S1109
- (3) Right overwing exit door indication switch, S1106 or S1107
- (4) Right forward overwing exit door indication switch, S1110 or S1111
- (5) Wiring problem
- (6) Proximity switch electronics unit (PSEU), M2061

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C. Related Data

- (1) (SSM 52-71-13)
- (2) (SSM 52-71-14)
- (3) (WDM 52-71-13)
- (4) (WDM 52-71-14)

D. Initial Evaluation

- (1) Make sure all the overwing exit doors are closed, latched and locked.
- (2) Do this task: Proximity Switch Electronics Unit (PSEU) BITE Procedure, 32-09 TASK 801.
- (3) If the maintenance message does not show, then there was an intermittent fault.

NOTE: If this message occurs frequently, then the fault can be a loose connection at the switch.

- (4) If the maintenance message shows, then do the Fault Isolation Procedure below.

E. Fault Isolation Procedure

- (1) Adjust the applicable switch. To adjust it, do this task: Emergency Exit Door Indication Switch Adjustment, AMM TASK 52-71-22-820-805.

Table 213

MAINTENANCE MESSAGE	SWITCHES
52-74001 L OVWG OPEN	S1104, S1105
52-74002 L FWD OW OPEN	S1108, S1109
52-74003 R OVWG OPEN	S1106, S1107
52-74004 R FWD OW OPEN	S1110, S1111

- (a) Do the Repair Confirmation at the end of this task.
 - 1) If the Repair Confirmation is not satisfactory, then continue.
- (2) Replace the applicable switch.

These are the tasks:
Emergency Exit Door Indication Switch Removal, AMM TASK 52-71-22-000-803,
Emergency Exit Door Indication Switch Installation, AMM TASK 52-71-22-420-801.

 - (a) Do the Repair Confirmation at the end of this task.
 - 1) If the Repair Confirmation is not satisfactory, then continue.
- (3) Do a check of the wiring:
 - (a) Disconnect the connector for the applicable indication switch from the PSEU.
 - (b) Do this wiring check between the indication switch ground and the PSEU:

Table 214

MAINTENANCE MESSAGE NUMBER	GROUND AT SWITCH	PSEU CONNECTOR
52-74001		D10986
	S1104	pin 8
52-74001		D10988

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Table 214 (Continued)

MAINTENANCE MESSAGE NUMBER	GROUND AT SWITCH	PSEU CONNECTOR
52-74002	S1105	pin 21 D10986
52-74002	S1108	pin 52 D10988
52-74003	S1109	pin 35 D10986
52-74003	S1106	pin 61 D10988
52-74004	S1107	pin 1 D10986
52-74004	S1110	pin 15 D10988
	S1111	pin 30

(c) If you find a problem with the wiring, then do these steps:

- 1) Repair the wiring.
- 2) Re-install the applicable switch.
- 3) Reconnect the applicable connector to the PSEU.
- 4) Do the Repair Confirmation at the end of this task.

(d) If you do not find a problem with the wiring, then continue.

(4) Replace the PSEU, M2061.

These are the tasks:

Proximity Switch Electronics Unit (PSEU) Removal, AMM TASK 32-09-10-000-801,
Proximity Switch Electronics Unit (PSEU) Installation, AMM TASK 32-09-10-400-801.

(a) Do the Repair Confirmation at the end of this task.

F. Repair Confirmation

- (1) Make sure the connector for the applicable switch is installed.
- (2) Do this task: Proximity Switch Electronics Unit (PSEU) BITE Procedure, 32-09 TASK 801.
- (3) If the maintenance message does not show, then you corrected the fault.

————— END OF TASK —————

807. Overwing Exit Door Flight Lock Relay Problem - Fault Isolation

A. Description

- (1) This task is for these maintenance messages:
 - (a) 52-76017 FL RELAY 1 FAULT.
 - (b) 52-76018 FL RELAY 2 FAULT.

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- (2) These maintenance messages show when the PSEU does not sense the expected load from the coil of relay R742 (left) or R743 (right) during the PSEU power-on-self-test.
- (3) (SDS SUBJECT 52-22-00)

B. Possible Causes

- (1) Flight lock relay, R742 (left)
- (2) Flight lock relay, R743 (right)
- (3) Wiring problem
- (4) Proximity switch electronics unit (PSEU), M2061
- (5) Proximity switch electronics unit (PSEU) nuisance message.

C. Circuit Breakers

- (1) These are the primary circuit breakers related to the fault:

F/O Electrical System Panel, P6-2

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	1	C01515	OVERWING FLIGHT LOCK-RIGHT
D	2	C01514	OVERWING FLIGHT LOCK-LEFT

D. Related Data

- (1) (SSM 52-71-13)
- (2) (SSM 52-71-14)
- (3) (WDM 52-71-13)
- (4) (WDM 52-71-14)

E. Initial Evaluation

- (1) Do these steps to determine if the flight lock relay message is a PSEU nuisance indication:

NOTE: These nuisance indications are caused during airplane power transfers or system power-up.

- (a) Make sure all Repair Confirmations for this task are complete.
- (b) Open these circuit breakers:

F/O Electrical System Panel, P6-3

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	1	C01399	PSEU PRI
D	2	C01400	PSEU ALTN

- (c) Do this step after 10 seconds:

- 1) Close these circuit breakers:

F/O Electrical System Panel, P6-3

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	1	C01399	PSEU PRI
D	2	C01400	PSEU ALTN

- (d) After approximately 3 seconds, make sure the three landing gear green lights come on.

NOTE: The PSEU self test is complete when the landing gear lights illuminate.

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- (e) If the PSEU fault light does not come on, the previous flight lock relay message is a nuisance message.
- (2) Do the EXISTING FAULTS test at the PSEU BITE. To do the test, do this task: Proximity Switch Electronics Unit (PSEU) BITE Procedure, 32-09 TASK 801.
- (3) If the maintenance message shows, then do the Fault Isolation Procedure below.

F. Fault Isolation Procedure

- (1) Do these steps to prepare for the procedure:
 - (a) Open these circuit breakers and install safety tags:

CAPT Electrical System Panel, P18-2

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	1	C00458	ENGINE 1 IGNITION RIGHT
A	3	C00153	ENGINE 1 IGNITION LEFT

F/O Electrical System Panel, P6-1

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	13	C00120	WEATHER RADAR RT

F/O Electrical System Panel, P6-2

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	4	C00459	ENGINE 2 IGNITION RIGHT
D	6	C00151	ENGINE 2 IGNITION LEFT

F/O Electrical System Panel, P6-3

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	3	C00360	FUEL SPAR VALVE ENG 2
B	4	C00359	FUEL SPAR VALVE ENG 1

- (b) Make sure that a minimum of 3 out of 4 entry/service doors are closed.
 - (c) Make sure all overwing exit doors are fully closed, locked and latched.
 - (d) Make sure that the airplane is in ground mode.
 - (e) Make sure that the engine start switches on the P5-20 panel are in the OFF position.
 - (f) Move the engine start levers on the control stand to IDLE.
 - (g) Wait for 5 minutes, then move the engine thrust levers on the control stand to the fully advanced position.
 - (2) Replace the applicable overwing exit door flight lock relay: R742 or R743.
 - (a) Do the Repair Confirmation at the end of this task.
 - 1) If the Repair Confirmation is not satisfactory, then continue.
 - (3) Do this check for 28 VDC at the flight lock relay:
 - (a) Remove the applicable flight lock relay R742 (left) or R743 (right)
NOTE: R742 is in junction box J22. R743 is in junction box J24.
 - (b) Do a check for 28 VDC between pin X1 of connector D12756 (left) or D12758 (right) and structure ground.
 - (c) If there is not 28 VDC at pin X1, then do these steps:

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- 1) Do a wiring check between these pins of the connector for the flight lock relay and the circuit breaker:

Table 215

MAINTENANCE MESSAGE NUMBER	RELAY CONNECTOR		CIRCUIT BREAKER
52-76017	D12756		C1514
	pin X1	-----	term L
52-76018	D12758		C1515
	pin X1	-----	term L

- 2) If you find a problem with the wiring, then do these steps:
 - a) Repair the wiring.
 - b) Re-install the flight lock relay.
 - c) Do the Repair Confirmation at the end of this task.
- (d) If there is 28 VDC at pin X1, then continue.
- (4) Do this check of the ground circuit between the flight lock relay and the PSEU:
 - (a) Disconnect the applicable connector, D10986 (left) or D10988 (right) from the PSEU.
 - (b) Make sure pin X2 of connector D12756 (left) or D12758 (right) goes to ground.
 - (c) If pin X2 does not go to ground, then do these steps:
 - 1) Do a wiring check between these pins on the connector for the applicable flight lock relay and the connector for the PSEU:

Table 216

MAINTENANCE MESSAGE NUMBER	RELAY CONNECTOR		PSEU CONNECTOR
52-76017	D12756		D10986
	pin X2	-----	pin 40
52-76018	D12758		D10988
	pin X2	-----	pin 53

- (d) If you find a problem with the wiring, then do these steps:
 - 1) Repair the wiring.
 - 2) Re-install the flight lock relay.
 - 3) Re-connect the connector at the PSEU.
 - 4) Do the Repair Confirmation at the end of this task.
- (e) If you do not find a problem with the wiring, then re-install the flight lock relay and continue.
- (5) Replace the PSEU, M2061.
These are the tasks:
Proximity Switch Electronics Unit (PSEU) Removal, AMM TASK 32-09-10-000-801,
Proximity Switch Electronics Unit (PSEU) Installation, AMM TASK 32-09-10-400-801.

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- (a) Do the Repair Confirmation at the end of this task.

G. Repair Confirmation

- (1) Make sure that these circuit breakers are closed:

F/O Electrical System Panel, P6-2

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	1	C01515	OVERWING FLIGHT LOCK-RIGHT
D	2	C01514	OVERWING FLIGHT LOCK-LEFT

- (2) Make sure the connector for the applicable circuit breaker is installed.
(3) Make sure the applicable flight lock relay is installed.
(4) Make sure the applicable connector is connected to the PSEU.
(5) Move the power switch for the PSEU to the OFF position and then move it to the ON position.

NOTE: This will start the power-on-self-test.

- (6) Do the EXISTING FAULTS test at the PSEU BITE. To do the test, do this task: Proximity Switch Electronics Unit (PSEU) BITE Procedure, 32-09 TASK 801.
(7) If the maintenance message does not show, then you corrected the fault.
(8) Put the airplane back to its usual condition.
(a) Move the engine start Levers to CUTOFF.
(b) Move the engine thrust levers to idle.
(c) Make sure the engine start switches are OFF.
(d) Remove the safety tags and close these circuit breakers:

CAPT Electrical System Panel, P18-2

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	1	C00458	ENGINE 1 IGNITION RIGHT
A	3	C00153	ENGINE 1 IGNITION LEFT

F/O Electrical System Panel, P6-1

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	13	C00120	WEATHER RADAR RT

F/O Electrical System Panel, P6-2

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	4	C00459	ENGINE 2 IGNITION RIGHT
D	6	C00151	ENGINE 2 IGNITION LEFT

F/O Electrical System Panel, P6-3

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	3	C00360	FUEL SPAR VALVE ENG 2
B	4	C00359	FUEL SPAR VALVE ENG 1

————— **END OF TASK** —————

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808. Overwing Exit Door Warning Light Problem - Fault Isolation

A. Description

- (1) This task is for these maintenance messages:
 - (a) 52-76019 L OV WARN FLT
 - (b) 52-76020 L FWD OW WARN FLT
 - (c) 52-76021 R OW WARN FLT
 - (d) 52-76022 R FWD OW WARN FLT
- (2) These maintenance messages show if the PSEU does not sense the expected load from the overwing exit door warning lights during the PSEU power-on-self-test.
- (3) (SDS SUBJECT 52-22-00)

B. Possible Causes

- (1) Overwing exit door warning light, L6 (left) or L10 (right)
- (2) Forward overwing exit door warning light, L11 (left) or L12 (right)
- (3) Wiring problem
- (4) Proximity switch electronics unit (PSEU), M2061

C. Circuit Breakers

- (1) This is the primary circuit breaker related to the fault:

F/O Electrical System Panel, P6-3

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
F	14	C01180	INDICATOR MASTER DIM SECT 8

D. Related Data

- (1) (SSM 33-18-35)
- (2) (SSM 52-71-13)
- (3) (SSM 52-71-14)
- (4) (WDM 33-18-35)
- (5) (WDM 52-71-13)
- (6) (WDM 52-71-14)

E. Initial Evaluation

- (1) Do the EXISTING FAULTS test at the PSEU BITE. To do the test, do this task: Proximity Switch Electronics Unit (PSEU) BITE Procedure, 32-09 TASK 801.
- (2) If the maintenance message shows, then do the Fault Isolation Procedure below.

F. Fault Isolation Procedure

- (1) Do these steps to prepare for the procedure:
 - (a) Open these circuit breakers and install safety tags:

CAPT Electrical System Panel, P18-2

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	1	C00458	ENGINE 1 IGNITION RIGHT
A	3	C00153	ENGINE 1 IGNITION LEFT

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<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	13	C00120	WEATHER RADAR RT

F/O Electrical System Panel, P6-2

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	4	C00459	ENGINE 2 IGNITION RIGHT
D	6	C00151	ENGINE 2 IGNITION LEFT

F/O Electrical System Panel, P6-3

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	3	C00360	FUEL SPAR VALVE ENG 2
B	4	C00359	FUEL SPAR VALVE ENG 1

- (b) Make sure that a minimum of 3 out of 4 entry/service doors are closed.
 - (c) Make sure all overwing exit doors are fully closed, locked and latched.
 - (d) Make sure that the airplane is in ground mode.
 - (e) Make sure that the engine start switches on the P5-20 panel are in the OFF position.
 - (f) Move the engine start levers on the control stand to IDLE.
 - (g) Wait for 5 minutes, then move the engine thrust levers on the control stand to the fully advanced position.
- (2) Push the applicable door warning light on the P5 forward overhead panel.
- (a) If the light does not come on, then do these steps:
 - 1) Do this task: Flight Compartment Lighting Problem - Fault Isolation, 33-10 TASK 801.
 - 2) Do the Repair Confirmation at the end of this task.
 - (b) If the light comes on, then continue.
- (3) Do this wiring check between the overwing exit door warning light and the PSEU:
- (a) Remove the door warning annunciator panel, P5-20.
 - (b) Disconnect the applicable connector from the PSEU.
 - (c) Do a wiring check between these pins of the connector for the at the door warning light and the connector at the PSEU:

Table 217

MAINTENANCE MESSAGE NUMBER	WARNING LIGHT CONNECTOR	PSEU CONNECTOR
52-76019	D1406	D10982
	pin 10	pin 5
52-76020	D482	D11138
	pin 4	pin 9
52-76021	D1406	D10988
	pin 7	pin 31

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Table 217 (Continued)

MAINTENANCE MESSAGE NUMBER	WARNING LIGHT CONNECTOR	PSEU CONNECTOR
52-76022	D482	D10984
	pin 11	pin 54

- 1) If you find a problem with the wiring, then do these steps:
 - a) Repair the wiring.
 - b) Re-install the door warning annunciator panel, P5-20.
 - c) Re-connect the applicable connector at the PSEU.
 - d) Do the Repair Confirmation at the end of this task.
- 2) If you do not find a problem with the wiring, then continue.
- (4) Replace the PSEU, M2061.
These are the tasks:
Proximity Switch Electronics Unit (PSEU) Removal, AMM TASK 32-09-10-000-801,
Proximity Switch Electronics Unit (PSEU) Installation, AMM TASK 32-09-10-400-801.
(a) Do the Repair Confirmation at the end of this task.

G. Repair Confirmation

- (1) Make sure that this circuit breaker is closed:

F/O Electrical System Panel, P6-3

Row	Col	Number	Name
F	14	C01180	INDICATOR MASTER DIM SECT 8

- (2) Make sure the door warning annunciator panel, P5-20 is installed.
- (3) Make sure the applicable connector at the PSEU is installed.
- (4) Move the power switch for the PSEU to the OFF position and then move it to the ON position.
NOTE: This will start the power-on-self-test.
- (5) Do the EXISTING FAULTS test at the PSEU BITE. To do the test, do this task: Proximity Switch Electronics Unit (PSEU) BITE Procedure, 32-09 TASK 801.
- (6) If the maintenance message does not show, then you corrected the fault.
- (7) Put the airplane back to its usual condition.
 - (a) Move the engine start levers to CUTOFF.
 - (b) Move the engine thrust levers to idle.
 - (c) Make sure the engine start switches are OFF.
 - (d) Remove the safety tags and close these circuit breakers:

CAPT Electrical System Panel, P18-2

Row	Col	Number	Name
A	1	C00458	ENGINE 1 IGNITION RIGHT
A	3	C00153	ENGINE 1 IGNITION LEFT

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F/O Electrical System Panel, P6-1

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	13	C00120	WEATHER RADAR RT

F/O Electrical System Panel, P6-2

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
D	4	C00459	ENGINE 2 IGNITION RIGHT
D	6	C00151	ENGINE 2 IGNITION LEFT

F/O Electrical System Panel, P6-3

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	3	C00360	FUEL SPAR VALVE ENG 2
B	4	C00359	FUEL SPAR VALVE ENG 1

———— **END OF TASK** ————

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801. Cargo Door Difficult to Open or Close - Fault Isolation

A. Description

- (1) (SDS SUBJECT 52-30-00)

B. Possible Causes

- (1) Counterbalance mechanism
- (2) Hinge arms
- (3) Snubber

C. Fault Isolation Procedure

- (1) Do these checks of the counterbalance mechanism:
 - (a) Remove the door lining.
 - (b) Look for a broken counterbalance cable.
 - 1) If the cable is broken, then do these steps:
 - a) Repair the cable. To repair it, do this task: Broken Cargo Door Counterbalance Cable Replacement, AMM TASK 52-31-12-000-802.
 - b) Do the Repair Confirmation at the end of this task.
 - 2) If the cable is not broken, then continue.
 - (c) Examine the counterbalance cable for wear or damage.
 - 1) If the cable is worn or damaged, then do these steps:
 - a) Replace the cable.
These are the tasks:
Cargo Door Counterbalance Removal, AMM TASK 52-31-12-000-801,
Cargo Door Counterbalance Installation, AMM TASK 52-31-12-400-801.
 - b) Do the Repair Confirmation at the end of this task.
 - c) If the Repair Confirmation is not satisfactory, then continue.
 - 2) If the cable is not worn or damaged, then continue.
 - (d) Make sure the cable is installed correctly on the cargo compartment ceiling, over the pulley, and to the counterbalance.
 - 1) If the cable is not installed correctly, then do these steps:
 - a) Re-install the cable.
These are the tasks:
Cargo Door Counterbalance Removal, AMM TASK 52-31-12-000-801,
Cargo Door Counterbalance Installation, AMM TASK 52-31-12-400-801.
 - b) Do the Repair Confirmation at the end of this task.
 - 2) If the cable is installed correctly, then continue
 - (e) Look for debris in the counterbalance mechanism.
 - 1) If there is debris, then do these steps:
 - a) Remove the debris.
 - b) Do the Repair Confirmation at the end of this task.
 - c) If the Repair Confirmation is not satisfactory, then continue.

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- 2) If there is no debris, then continue.
- (f) Examine the counterbalance mechanism for wear or damage.
 - 1) If the mechanism is worn or damaged, then do these steps:
 - a) Replace the counterbalance mechanism.
These are the tasks:
Cargo Door Counterbalance Removal, AMM TASK 52-31-12-000-801,
Cargo Door Counterbalance Installation, AMM TASK 52-31-12-400-801.
 - b) Do the Repair Confirmation at the end of this task.
 - c) If the Repair Confirmation is not satisfactory, then continue.
 - 2) If the mechanism is not worn or damaged, then continue.
- (g) Make sure the counterbalance idler crank is lubricated. To lubricate it, do this task: Cargo Door Servicing, AMM TASK 12-25-31-640-801.
 - 1) Do the Repair Confirmation at the end of this task.
 - 2) If the Repair Confirmation is not satisfactory, then continue.
- (h) Adjust the counterbalance mechanism. To adjust it, do this task: Cargo Door Adjustment, AMM TASK 52-31-00-820-801.
 - 1) Do the Repair Confirmation at the end of this task.
 - 2) If the Repair Confirmation is not satisfactory, then continue.
- (2) Do this check of the hinge arms:
 - (a) Examine the hinge arms for wear, damage, and loose fasteners.
 - 1) If a problem is found, then do these steps:
 - a) Repair the hinge arms.
 - b) Do the Repair Confirmation at the end of this task.
 - c) If the Repair Confirmation is not satisfactory, then continue.
 - 2) If you do find a problem, then continue.
- (3) Do this check of the snubber:
 - (a) Examine the snubber for damage and leaks.
 - 1) If a problem is found, then do these steps:
 - a) Replace the snubber.
These are the tasks:
Cargo Door Snubber Removal, AMM TASK 52-31-13-000-801,
Cargo Door Snubber Installation, AMM TASK 52-31-13-400-801.
 - b) Do the Repair Confirmation at the end of this task.

D. Repair Confirmation

- (1) Do these steps to confirm the repair:
 - (a) Try to open and close the door.
 - (b) If it is easy to open and close the door, then you corrected the fault. Re-install the door lining.

———— **END OF TASK** ————

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802. Cargo Door Difficult to Unlatch or Latch - Fault Isolation

A. Description

- (1) This task is for this Observed Fault:
 - (a) Cargo door difficult to unlatch or latch.

B. Possible Causes

- (1) Blockage of the handle of the latch mechanism
- (2) Latch mechanism and handle
- (3) Handle spring
- (4) Hinge arms
- (5) Interference with fuselage frame

C. Related Data

- (1) SDS SUBJECT 52-30-00

D. Fault Isolation Procedure

- (1) Do this check for a blockage of the handle of the latch mechanism inside the airplane:
 - (a) If unable to unlatch the forward cargo door, get access to the forward cargo bay as follows:
 - 1) Open the access panel that is on the right side of the airplane, at approximately the tenth window cutout from the front.
NOTE: The panel is approximately 20 inches long and 20 inches wide, (508 mm by 508 mm) with a serge around the edges of the carpet.
 - (b) If unable to unlatch the aft cargo door, get access to the aft cargo bay as follows:
 - 1) Open the access panel that is on the right side of the airplane with its aft edge at STA 767.
NOTE: The panel is approximately 20 inches long and 20 inches wide, (508 mm by 508 mm) with a serge around the edges of the carpet. The access panel is aft of another panel of approximately the same size.
 - (c) If a blockage is found inside the cargo area at the handle of the latch assembly, move the blockage.
 - (d) Make sure that the cargo nets are installed correctly to prevent blockage due to cargo.
 - (e) Remove any cargo that is inside the area enclosed by the cargo nets.
 - (f) Do the Repair Confirmation at the end of this task.
- (2) Do this check of the latch mechanism and handle:
 - (a) Remove the door lining.
 - (b) Remove the panel over the latch mechanism.
 - (c) Examine the latch mechanism and handle.
 - 1) Look for debris in the latch mechanism or wear or damage. This is the task: Cargo Door Check, AMM TASK 52-31-00-200-801.
 - a) If you find a problem, then repair it.
<1> Do the Repair Confirmation at the end of this task.
 - 2) Examine the handle spring for damage. This is the task: Cargo Door Check, AMM TASK 52-31-00-200-801.

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- a) If you find a problem, replace handle spring. These are the tasks:
 - Cargo Door Handle Mechanism Removal, AMM TASK 52-31-14-000-801
 - Cargo Door Handle Mechanism Installation, AMM TASK 52-31-14-400-801<1> Do the Repair Confirmation at the end of this task.
- 3) Make sure that the latch torque tube is lubricated. This is the task: Cargo Door Servicing, AMM TASK 12-25-31-640-801.
 - a) Do the Repair Confirmation at the end of this task.
- (d) Adjust the latch mechanism. This is the task: Cargo Door Adjustment, AMM TASK 52-31-00-820-801.
 - 1) Do the Repair Confirmation at the end of this task.
- (3) Do this check of the hinge arms:
 - (a) Examine the hinge arms.
 - 1) Look for wear or damage.
 - 2) Look for loose fasteners.
 - 3) If you find a problem, then repair it.
 - a) Do the Repair Confirmation at the end of this task.
- (4) Do this check for interference between the door and the fuselage frame:
 - (a) Try to unlatch, open, close, and latch the door.
 - 1) Look and listen for points of interference between the door and fuselage frame.
 - a) Make sure that the door seal does not cause interference.
<1> If the door seal causes interference, replace the blade seal. These are the tasks:
 - Blade Seals Removal, AMM TASK 52-09-11-000-801
 - Blade Seals Installation, AMM TASK 52-09-11-400-801
 - b) Repair the problems that you find.
<1> Do this task: Cargo Door Adjustment, AMM TASK 52-31-00-820-801.
<2> Do the Repair Confirmation at the end of this task.

E. Repair Confirmation

- (1) Try to unlatch and latch the door.
 - (a) If it is easy to unlatch and latch the door, then you corrected the problem.
 - 1) Re-install the door lining, if it is necessary.
 - (b) If it is difficult to unlatch and latch the door, then continue the Fault Isolation Procedure at the subsequent step.

————— END OF TASK —————

803. PSEU Cargo Door Monitored Problem - Fault Isolation

A. Description

- (1) This task is for these maintenance messages:
 - (a) 52-72001 FWD CGO DR OPEN

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- (b) 52-72002 AFT CGO DR OPEN

NOTE: The Proximity Switch Electronic Unit (PSEU) does not record these messages when the airplane is on the ground.

- (2) This task is also for FWD CARGO and AFT CARGO Door Warning Lights (P5) Indication during taxi or takeoff.
- (3) For a detail description of the Door Warning System, refer to SDS SUBJECT 52-71-00.

B. Possible Causes

- (1) Cargo Door out of adjustment
- (2) Forward (Aft) Cargo Door Warning Switch, S960 (S961)
- (3) Wiring
- (4) PSEU, M2061

C. Related Data

- (1) WDM 52-71-12
- (2) SSM 52-71-12

D. Initial Evaluation

- (1) Open the applicable FWD (AFT) Cargo Door.
- (2) Close, latch and lock the applicable Cargo Door.
- (3) Do this task: Proximity Switch Electronics Unit (PSEU) BITE Procedure, 32-09 TASK 801
- (a) If the maintenance message does not show in EXISTING FAULTS, then there was an intermittent fault.
- (b) If the maintenance message shows in EXISTING FAULTS, then do the Fault Isolation Procedure below.

E. Fault Isolation Procedure

- (1) Do a check of the applicable Cargo Door adjustment. This is the task: Cargo Door Adjustment, AMM TASK 52-31-00-820-801.
- (a) Do the Repair Confirmation at the end of this task.
- (2) Do this check of the applicable FWD (AFT) Cargo Door Warning Switch, S960 (S961) adjustment. This is the task: Cargo Door Indication Switch - Adjustment, AMM TASK 52-71-31-820-801.
- (a) Do the Repair Confirmation at the end of this task.
- (3) Do this check of the PSEU:
- (a) Disconnect the applicable connector for the FWD (AFT) Cargo Door Warning Switch from the PSEU (WDM 52-71-12).

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CARGO DOOR	PSEU CONNECTOR
Forward Cargo Door	D10988
Aft Cargo Door	D10986

- (b) Close, latch and lock the applicable FWD (AFT) Cargo Door.
- (c) Do a continuity check between pin 56 of the applicable connector and Structure Ground.

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- 1) If you find continuity between pin 56 and Structure Ground, then replace the PSEU, M2061. These are the tasks:
 - Proximity Switch Electronics Unit (PSEU) Removal, AMM TASK 32-09-10-000-801
 - Proximity Switch Electronics Unit (PSEU) Installation, AMM TASK 32-09-10-400-801
 - a) Do the Repair Confirmation at the end of this task.
 - 2) If you do not find continuity between pin 56 and Structure Ground, then continue.
- (4) Do this check of the applicable FWD (AFT) Cargo Door Warning Switch, S960 (S961) Wiring (WDM 52-71-12):

FWD CRG DR WARN SWITCH

PSEU	S960
D10988	Terminal
pin 56	term NO

S960
Terminal
term C GD84-DC

AFT CRG DR WARN SWITCH

PSEU	S961
D10986	Terminal
pin 56	term NO

S961
Terminal
term C GD11794-DC

- (a) If you find a problem in the wiring, then do these steps:
 - 1) Repair the wiring as necessary.
 - 2) Connect the applicable connector D10988 (D10986) to the PSEU.
 - 3) Do the Repair Confirmation at the end of this task.
- (b) If you do not find a problem in the wiring, then replace the applicable FWD (AFT) Cargo Door Warning Switch, S960 (S961) Switch. These are the tasks:
 - Forward Cargo Door Indication Switch - Removal, AMM TASK 52-71-31-000-801
 - Forward Cargo Door Indication Switch - Installation, AMM TASK 52-71-31-400-801
 - 1) Connect the applicable connector D10988 (D10986) to the PSEU.
 - 2) Do the Repair Confirmation at the end of this task.

F. Repair Confirmation

- (1) Close, latch and lock the applicable FWD (AFT) Cargo Door.
- (2) Do this task: Proximity Switch Electronics Unit (PSEU) BITE Procedure, 32-09 TASK 801.
 - (a) If the maintenance message does not show in EXISTING FAULTS then you corrected the problem.

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- (b) If the maintenance message still shows in EXISTING FAULTS, then continue the Fault Isolation Procedure at the subsequent step.

———— **END OF TASK** ————

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801. PSEU Forward Access Door Monitored Problem - Fault Isolation

A. Description

- (1) This task is for these maintenance messages:
 - (a) 52-72003 FWD ACC DR OPEN
- (2) This task is also for EQUIP Door Warning Light (P5) Indication during taxi or takeoff.
- (3) For a detail description of the Door Warning System, refer to SDS SUBJECT 52-71-00.

B. Possible Causes

- (1) Forward Access Door Indication Switch, S196
- (2) Wiring
- (3) Proximity Switch Electronic Unit (PSEU), M2061

C. Related Data

- (1) WDM 52-71-12
- (2) SSM 52-71-12

D. Initial Evaluation

- (1) Close, latch and lock the Forward Access Door.
- (2) Do this task: Proximity Switch Electronics Unit (PSEU) BITE Procedure, 32-09 TASK 801
 - (a) If the maintenance message does not show in EXISTING FAULTS, then there was an intermittent fault.
 - (b) If the maintenance message shows in EXISTING FAULTS, then do the Fault Isolation Procedure below.

E. Fault Isolation Procedure

- (1) Do this check of the PSEU:
 - (a) Disconnect the connector D10988 from the PSEU.
 - (b) With the door closed, latched and locked, do a continuity check between pin 6 of connector D10988 and Structure Ground.
 - 1) If you find continuity between pin 6 and Structure Ground, then replace the PSEU, M2061. These are the tasks:
 - Proximity Switch Electronics Unit (PSEU) Removal, AMM TASK 32-09-10-000-801
 - Proximity Switch Electronics Unit (PSEU) Installation, AMM TASK 32-09-10-400-801
 - a) Do the Repair Confirmation at the end of this task.
 - 2) If you do not find continuity between pin 6 and Structure Ground, then continue.
- (2) De-actuate the Forward Access Door Indication Switch.
- (3) Do this check of the Forward Access Door Indication Switch Wiring (WDM 52-71-12):

FWD ACCESS DOOR IND SW WIRING

PSEU	S196
D10988	Terminal
pin 6	term C

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S196

Terminal

term NO GD1210-DC

- (a) If you find a problem in the wiring, then do these steps:
 - 1) Repair the wiring as necessary.
 - 2) Connect the connector D10988 to the PSEU.
 - 3) Do the Repair Confirmation at the end of this task.
- (b) If you do not find a problem in the wiring, then replace the Forward Access Door Indication Switch, S196. These are the tasks:
 - Forward Access Door Indication Switch Removal, AMM TASK 52-71-41-000-801
 - Forward Access Door Indication Switch Installation, AMM TASK 52-71-41-400-801
 - 1) Connect the connector D10988 to the PSEU.
 - 2) Do the Repair Confirmation at the end of this task.

F. Repair Confirmation

- (1) Close, latch and lock the Forward Access Door.
- (2) Do this task: Proximity Switch Electronics Unit (PSEU) BITE Procedure, 32-09 TASK 801.
 - (a) If the maintenance message does not show in EXISTING FAULTS then you corrected the problem.
 - 1) Close and latch the access panel:

<u>Number</u>	<u>Name/Location</u>
112A	Forward Access Door
 - (b) If the maintenance message still shows in EXISTING FAULTS, then continue the Fault Isolation Procedure at the subsequent step.

————— **END OF TASK** —————

802. PSEU Electronic Equipment Access Door Monitored Problem - Fault Isolation

A. Description

- (1) This task is for these maintenance messages:

NOTE: The PSEU does not record this message when the airplane is on the ground.

 - (a) 52-72004 EE ACC DR OPEN
- (2) This task is also for EQUIP Door Warning Light (P5) Indication during taxi or takeoff.
- (3) For a detail description of the Door Warning System, refer to SDS SUBJECT 52-71-00.

B. Possible Causes

- (1) Electronic Equipment Access Door Indication Switch, S197
- (2) Wiring
- (3) PSEU, M2061

C. Related Data

- (1) WDM 52-71-12
- (2) SSM 52-71-12

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D. Initial Evaluation

- (1) Close and latch the Electronic Equipment Access Door.
- (2) Do this task: Proximity Switch Electronics Unit (PSEU) BITE Procedure, 32-09 TASK 801
 - (a) If the maintenance message does not show in EXISTING FAULTS, then there was an intermittent fault.
 - (b) If the maintenance message shows in EXISTING FAULTS, then do the Fault Isolation Procedure below.

E. Fault Isolation Procedure

- (1) Do this check of the PSEU:
 - (a) Disconnect the connector D10986 from the PSEU.
 - (b) With the door closed, latched and locked, do a continuity check between pin 6 of the connector D10986 and Structure Ground.
 - 1) If you find continuity between pin 6 and Structure Ground, then replace the PSEU, M2061. These are the tasks:
 - Proximity Switch Electronics Unit (PSEU) Removal, AMM TASK 32-09-10-000-801
 - Proximity Switch Electronics Unit (PSEU) Installation, AMM TASK 32-09-10-400-801
 - a) Do the Repair Confirmation at the end of this task.
 - 2) If you do not find continuity between pin 6 and Structure Ground, then continue.
- (2) De-actuate the Electronic Equipment Access Door Switch.
- (3) Do this check of the Electronic Equipment Access Door Indication Switch Wiring (WDM 52-71-12):

EE ACCESS DOOR IND SW WIRING

PSEU	S197
D10986	Terminal
pin 6	term C

S197	
Terminal	
term NO	GD1322-DC

- (a) If you find a problem in the wiring, then do these steps:
 - 1) Repair the wiring as necessary.
 - 2) Connect the connector D10986 to the PSEU.
 - 3) Do the Repair Confirmation at the end of this task.
- (b) If you do not find a problem in the wiring, then replace the Electronic Equipment Access Door Indication Switch, S197. These are the tasks:
 - Electronic Equipment Access Door Indication Switch Removal, AMM TASK 52-71-42-000-801
 - Electronic Equipment Access Door Indication Switch Installation, AMM TASK 52-71-42-400-801
 - 1) Connect the connector D10986 to the PSEU.

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2) Do the Repair Confirmation at the end of this task.

F. Repair Confirmation

- (1) Close, latch and lock the Electronic Equipment Access Door Switch.
- (2) Do this task: Proximity Switch Electronics Unit (PSEU) BITE Procedure, 32-09 TASK 801.
 - (a) If the maintenance message does not show in EXISTING FAULTS then you corrected the problem.
 - (b) If the maintenance message still shows in EXISTING FAULTS, then continue the Fault Isolation Procedure at the subsequent step.

———— **END OF TASK** ————

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802. Control Cabin Door Difficult to Open/Close - Fault Isolation

A. Description

- (1) (SDS SUBJECT 52-51-00)

B. Possible Causes

- (1) Header
- (2) Trim angle
- (3) Hinge
- (4) Control cabin door lock

C. Fault Isolation Procedure

- (1) If the door is difficult to open or close, then do this check:
 - (a) Look for unwanted material on door lock and hinges.
 - (b) Look for worn areas and damage.
 - (c) Look and listen for points of interference between door and frame.
 - 1) Do the steps to adjust the door header and the trim angle.
 - a) For the adjustment, refer to Flight Compartment Door - Installation, AMM TASK 52-51-01-400-801.
 - 2) Do the Repair Confirmation at the end of this task.

D. Repair Confirmation

- (1) Open and close the control cabin door.
- (2) If it is easy to open and close the control cabin door, you have corrected the fault.

————— **END OF TASK** —————

804. Door Does Not Lock in the AUTO Position - Fault Isolation

A. Description

- (1) (SDS SUBJECT 52-51-00)

B. Possible Causes

- (1) Electric Strike, M2538
- (2) Flight Compartment Door Lock Switch S2, P8-47 Panel
- (3) Door Access Controller/Chime Module, M2537
- (4) Wiring

C. Circuit Breakers

- (1) This is the circuit breaker:

F/O Electrical System Panel, P6-3

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	1	C00137	DOOR LOCK

D. Related Data

- (1) (SSM 52-51-11)
- (2) (WDM 52-51-11)

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E. Initial Evaluation

- (1) Open the flight compartment door.
- (2) Put the power switch on the chime module, M2537 to the NORM position.
- (3) Operate flight compartment door lock switch S2 to the UNLOCK and then to the AUTO positions.
- (4) Make sure that the electric strike, M2538 releases and engages.
- (5) If the electric strike, M2538 did not go to the engage position, then do the Fault Isolation Procedure-Electrical Problem.
- (6) If the electric strike, M2538 did go to the engage position, then do these steps:
 - (a) Make sure that the flight compartment door lock switch S2, is in the AUTO position.
 - (b) Close the flight compartment door.



CAUTION

DO NOT FORCE THE DOOR OPEN. IF YOU FORCE THE DOOR OPEN YOU CAN CAUSE DAMAGE TO THE EQUIPMENT.

- (c) Carefully try to open the flight compartment door without turning the handle.
- (d) If the flight compartment door did open, then do the Fault Isolation Procedure-Out of Tolerance.
- (e) If the flight compartment door did not open, then there was an intermittent fault.

F. Fault Isolation Procedure-Out of Tolerance

- (1) Close the flight compartment door.
- (2) Make sure that the flight compartment door lock switch S2, is in the AUTO position.
- (3) If the electric strike, M2538 is in the engage position, do these steps:
 - (a) Make sure that the electric strike and door latch engagement is 0.330-0.360 inch (8.382-9.144 mm).
 - (b) If the electric strike/door latch engagement is correct, then replace the electric strike, M2538.

These are the tasks:

Electric Strike Removal, AMM TASK 52-51-03-000-801,

Electric Strike Installation, AMM TASK 52-51-03-400-801.

- 1) If the flight compartment door locks with the door lock switch, S2 in the AUTO position you have corrected the problem.

G. Fault Isolation Procedure-Electrical Problem

- (1) Look at the LOCK FAIL light on the Switch/Light Module, P8-47.
- (2) If the LOCK FAIL LIGHT is on, then replace the electric strike, M2538.

These are the tasks:

Electric Strike Removal, AMM TASK 52-51-03-000-801,

Electric Strike Installation, AMM TASK 52-51-03-400-801.

- (a) If the electric strike engages with the door switch, S2 in the AUTO position you have corrected the problem.

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- (b) If the electric strike did not engage with the door switch, S2 in the AUTO position, install a new chime module, M2537. To install a new chime module, These are the tasks:
Chime Module Removal, AMM TASK 52-51-06-000-801,
Chime Module Installation, AMM TASK 52-51-06-400-801.
- 1) If the electric strike engages with the flight compartment door switch in the AUTO position you have corrected the problem.
 - 2) If the electric strike did not engage with the flight compartment door switch in the AUTO position, repair the wiring between the electric strike, M2538 and the chime module, M2537, (WDM 52-51-11).
 - a) Install the chime module, M2537. To install the chime module, do this task: Chime Module Installation, AMM TASK 52-51-06-400-801.
 - b) Install the electric strike, M2538. To install the electric strike, do this task: Electric Strike Removal, AMM TASK 52-51-03-000-801
- (3) If the LOCK FAIL LIGHT is not on, then do these steps:
- (a) Remove the Chime Module, M2537. To remove the chime module, do this task: Chime Module Removal, AMM TASK 52-51-06-000-801.
 - (b) Do a check for 28V DC between Pin 1 and structure ground of connector D13730.
 - (c) If there is not 28V DC between Pin 1 and structure ground, then do this step:
 - 1) Repair the wiring.
 - 2) If the flight compartment door locks with the door lock switch, S2 in the AUTO position you have corrected the problem.
 - (d) If there is 28V DC between Pin 1 and structure ground of connector D13730, then continue.
 - (e) Install a new chime module M2537. To install the chime module, do this task: Chime Module Installation, AMM TASK 52-51-06-400-801.
 - 1) If the flight compartment door locks with the door lock switch, S2 in the AUTO position you have corrected the problem.
 - 2) If the flight compartment door does not lock with the door lock switch, S2 in the AUTO position, then continue.
 - (f) Replace the flight compartment door lock switch, S2. To replace the switch, These are the tasks:
Cockpit Control Panel Switch/Light (P8-47) Removal, AMM TASK 52-51-07-020-801,
Cockpit Control Panel Switch/Light (P8-47) Installation, AMM TASK 52-51-07-420-801.
 - 1) If the flight compartment door locks with the door lock switch, S2 in the AUTO position you have corrected the problem.
 - 2) If the flight compartment door does not lock with the door lock switch, S2 in the AUTO position, then continue.
 - (g) Repair the wiring between connector D2 on the chime module, M2537 and the electric strike, M2538 (WDM 52-51-11).
 - 1) If the flight compartment door locks with the control switch, S2 in the AUTO position, you have corrected the problem.

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- 2) If the flight compartment door does not lock with the door lock switch, S2 in the AUTO position, then continue.
- (h) Do a check for continuity in the wiring that goes between the stab trim/light module, P8-47 and the chime module, M2537.
 - 1) If you find a problem with wiring then repair the wiring (WDM 52-51-11).

———— **END OF TASK** ————

805. Door Does Not Unlock in the UNLOCK Position - Fault Isolation

A. Description

- (1) (SDS SUBJECT 52-51-00)

B. Possible Causes

- (1) Control Panel Switch/Light Module, P8-47
- (2) Door Access Controller/Chime Module, M2537
- (3) Wiring

C. Circuit Breakers

- (1) This is the circuit breaker:

F/O Electrical System Panel, P6-3

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	1	C00137	DOOR LOCK

D. Related Data

- (1) (SSM 52-51-11)
- (2) (WDM 52-51-11)

E. Initial Evaluation

- (1) Open the flight compartment door.
- (2) Put the power switch on the chime module, M2537 to the NORM position.
- (3) Put the flight compartment door lock switch, S2, to the UNLOCK position.
- (4) Make sure that the electric strike M2538 goes to the release position.
- (5) If the electric strike did not go to the release position, then do the Fault Isolation Procedure below.
- (6) If the electric strike did go to the release position, then there was an intermittent fault.

F. Fault Isolation Procedure

- (1) Install a new switch/light module, P8-47.

These are the tasks:

Cockpit Control Panel Switch/Light (P8-47) Removal, AMM TASK 52-51-07-020-801,
Cockpit Control Panel Switch/Light (P8-47) Installation, AMM TASK 52-51-07-420-801.

- (2) Put the flight compartment door lock switch, S2, to the UNLOCK position.
 - (a) If the electric strike, M2538 went to the release position you have corrected the problem.
 - (b) If the electric strike, M2538, did not go to the to the release position then continue.
- (3) Do these steps to do a check for continuity between Pin 10 on connector D3428 and Pin 3 on connector D13730.

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- (a) Remove connector D3428 from the switch/light module, P8-47.
- (b) Remove connector D13730 from the chime module M2537. To remove connector D13730 from the chime module, do this task: Chime Module Installation, AMM TASK 52-51-06-400-801
- (c) Do a check for continuity between Pin 10 on connector D3428 and Pin 3 on connector D13730. (WDM 52-51-11)
- (d) If there is not continuity between Pin 10 on connector D3428 and Pin 3 on connector D13730, do these steps:
 - 1) Repair the wire, (WDM 52-51-11).
 - 2) Install the chime module, M2537. To install the chime module, do this task: Chime Module Installation, AMM TASK 52-51-06-400-801
 - 3) Install the switch/light module, P8-47. To install the P8-47 panel, do this task: Cockpit Control Panel Switch/Light (P8-47) Installation, AMM TASK 52-51-07-420-801
- (e) If there is continuity between Pin 10 on connector D3428 and Pin 3 on connector D13730, then do these steps:
 - 1) Install a new chime module, M2537. To install a new chime module, do this task: Chime Module Installation, AMM TASK 52-51-06-400-801.
 - 2) Install the switch/light module P8-47. To install the P8-47 module, do this task: Cockpit Control Panel Switch/Light (P8-47) Installation, AMM TASK 52-51-07-420-801

————— **END OF TASK** —————

806. Door Does Not Unlock in the AUTO Position After The Correct Code Has Been Entered - Fault Isolation

A. Description

- (1) (SDS SUBJECT 52-51-00)

B. Possible Causes

- (1) Keypad, M2536
- (2) Door Access Controller/Chime Module, M2537
- (3) Wiring

C. Circuit Breakers

- (1) This is the circuit breaker:

F/O Electrical System Panel, P6-3

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	1	C00137	DOOR LOCK

D. Related Data

- (1) (SSM 52-51-11)
- (2) (WDM 52-51-11)

E. Initial Evaluation

- (1) Open the flight compartment door.
- (2) Put the power switch on the chime module, M2537 to the NORM position.

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- (3) Make sure that the flight compartment door lock switch, S2 is in the AUTO position.
- (4) Make sure the electric strike M2538 is in the engage position.
- (5) Enter the correct access code on the keypad, M2536 and push the ENT button.
- (6) If the electric strike M2538 did not go to the release position, then do the Fault Isolation Procedure below.
- (7) If the electric strike M2538 did go to the release position, then there was an intermittent fault.

F. Fault Isolation Procedure

- (1) Make sure that the flight compartment door lock switch, S2 is in the AUTO position.
- (2) Put the flight compartment door lock switch, S2 to the UNLOCK position.
- (3) If the electric strike, M2538 did not go to the release position, do this task: Door Does Not Unlock in the UNLOCK Position - Fault Isolation, 52-50 TASK 805.
- (4) If the electric strike, M2538 did go to the release position, do these steps:
 - (a) Program a new access code in the keypad. To program a new access code in the keypad, do this task: Program the Access Code, AMM TASK 52-51-00-900-801
 - (b) Enter the new code and press the ENT button.
 - (c) If the electric strike went to the release position you have corrected the problem.
 - 1) Make sure that the keypad is set to the correct access code.
 - (d) If the electric strike did not go to the release position, then continue.
 - (e) If the amber light on the keypad came on after the correct code was entered, install a new chime module M2537.

These are the tasks:

Chime Module Removal, AMM TASK 52-51-06-000-801,

Chime Module Installation, AMM TASK 52-51-06-400-801.

- 1) If the electric strike went to the release position you have corrected the problem.
- (f) If the amber light on the keypad did not come on after the correct code was entered, install a new keypad M2536.

These are the tasks:

Keypad Removal, AMM TASK 52-51-05-000-801,

Keypad Installation, AMM TASK 52-51-05-400-801.

- 1) If the electric strike went to the release position you have corrected the problem.
 - 2) If the electric strike did not go to the release position, do this step:
 - a) Repair the wiring between the chime module M2537 and the keypad M2536. (WDM 52-51-11)

————— **END OF TASK** —————

807. Door Unlocks or Chime Sounds in the DENY Position - Fault Isolation

A. Description

- (1) (SDS SUBJECT 52-51-00)

B. Possible Causes

- (1) Control Panel Switch/Light Module P8-47
- (2) Door Access Controller/Chime Module, M2537

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- (3) Wiring

C. Circuit Breakers

- (1) This is the circuit breaker:

F/O Electrical System Panel, P6-3

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	1	C00137	DOOR LOCK

D. Related Data

- (1) (SSM 52-51-11)
(2) (WDM 52-51-11)

E. Initial Evaluation

- (1) Open the flight compartment door.
- (2) Put the power switch on the chime module, M2537 to the NORM position.
- (3) Make sure that the flight compartment door lock switch, S2 is in the AUTO position.
- (4) Check that electric strike M2538 is in the engage position.
- (5) Put the flight compartment door lock switch, S2 to the DENY position.
- (6) If the electric strike M2538 went to the release position or the chime sounds, then do the Fault Isolation Procedure below.
- (7) If the electric strike M2538 did not go to the release position and the chime module, M2537 did not sound, then there was an intermittent fault.

F. Fault Isolation Procedure

- (1) Install a new control panel switch/light module, P8-47.

These are the tasks:

Cockpit Control Panel Switch/Light (P8-47) Removal, AMM TASK 52-51-07-020-801,

Cockpit Control Panel Switch/Light (P8-47) Installation, AMM TASK 52-51-07-420-801.

- (2) If the electric strike, M2538 did not go to the release position and the chime module, M2537 did not sound you have corrected the problem.
- (3) If the electric strike M2538 went to the release position or the chime sounds, then do these steps:
 - (a) Remove connector D3428 from the switch/light module, P8-47.
 - (b) Remove connector D13730 from the chime module, M2537.
 - (c) Check the continuity between pin 13 of connector D3428 and pin 4 of connector D13730.
 - (d) If there is not continuity between pin 13 of connector D3428 and pin 4 of connector D13730, repair the wiring. (WDM 52-51-11)
 - 1) Install the chime module, M2537. To install the chime module, do this task: Chime Module Installation, AMM TASK 52-51-06-400-801
 - (e) If there is continuity between pin 13 of connector D3428 and pin 4 of connector D13730, install a new chime module, M2537.
 - 1) To install a new chime module, do this task: Chime Module Installation, AMM TASK 52-51-06-400-801

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- (f) Install the control panel switch/light, P8-47. To install the P8-47 panel, do this task:
Cockpit Control Panel Switch/Light (P8-47) Installation, AMM TASK 52-51-07-420-801

END OF TASK

808. Chime Does Not Sound When the Correct Code is Entered on the Keypad in the AUTO Mode - Fault Isolation

A. Description

- (1) (SDS SUBJECT 52-51-00)

B. Possible Causes

- (1) Keypad, M2536
(2) Door Access Controller/Chime Module, M2537
(3) Wiring

C. Circuit Breakers

- (1) This is the circuit breaker:

F/O Electrical System Panel, P6-3

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	1	C00137	DOOR LOCK

D. Related Data

- (1) (SSM 52-51-11)
(2) (WDM 52-51-11)

E. Initial Evaluation

- (1) Open the flight compartment door.
(2) Put the power switch on the chime module, M2537 to the NORM position.
(3) Make sure that the flight compartment door lock switch, S2 is in the AUTO position.
(4) Check that electric strike M2538 is in the engage position.
(5) Enter the correct access code on the keypad, M2536 and push the ENT button.
(6) If the chime module did not sound, then do the Fault Isolation Procedure below.

NOTE: The chime and the keypad can be disabled for up to 30 minutes after the door lock switch is turned to the DENY position. The DENY mode can be ended by turning the door lock switch to the UNLOCK position.

- (7) If the chime module did sound, then there was an intermittent fault.

F. Fault Isolation Procedure

- (1) Make sure that the flight compartment door lock switch, S2 is in the AUTO position.
(2) Enter the correct access code on the keypad, M2537.
(3) If the electric strike, M2538 did not go to the release position, do this task: Door Does Not Unlock in the AUTO Position After The Correct Code Has Been Entered - Fault Isolation, 52-50 TASK 806
(4) If the electric strike, M2538 did go to the release position, do this step:
(a) Install a new chime module, M2537. To install a new chime module,
These are the tasks:

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AMM TASK 52-51-06-000-801,
Chime Module Installation, AMM TASK 52-51-06-400-801,

————— **END OF TASK** —————

809. Flight Compartment Door LOCK FAIL light is On - Fault Isolation

A. Description

- (1) (SDS 52-50-00)

B. Possible Causes

- (1) Electric Strike, M2538
- (2) Door Access Controller/Chime Module, M2537
- (3) Control Panel Switch/Module, P8-47
- (4) Wiring

C. Circuit Breakers

- (1) This is the circuit breaker:

F/O Electrical System Panel, P6-3

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	1	C00137	DOOR LOCK

D. Related Data

- (1) (SSM 52-51-11)
- (2) (WDM 52-51-11) (WDM 52-51-11)

E. Initial Evaluation

- (1) Open the flight compartment door.
- (2) Put the power switch on the chime module, M2537 to the NORM position.
- (3) Make sure that the flight compartment door lock switch, S2 is in the AUTO position.
- (4) Make sure that the LOCK FAIL light on the P8-47 panel is on.
- (5) If the LOCK FAIL light is on, then do the Fault Isolation Procedure below.
- (6) If the LOCK FAIL light is not on, then there was an intermittent fault.

F. Fault Isolation Procedure

- (1) Make sure that the flight compartment door lock switch, S2 is in the AUTO position.
- (2) If the electric strike, M2538 is in the release position, do this step:
 - (a) Do this task: Door Does Not Lock in the AUTO Position - Fault Isolation, 52-50 TASK 804.
- (3) If the electric strike, M2538 is in the engage position, do these steps:
 - (a) Install a new control panel switch/light module, P8-47. These are the tasks:
Cockpit Control Panel Switch/Light (P8-47) Removal, AMM TASK 52-51-07-020-801,
Cockpit Control Panel Switch/Light (P8-47) Installation, AMM TASK 52-51-07-420-801.
 - (b) If the LOCK FAIL light went out with the door lock control switch in the AUTO position, you have corrected the problem.

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- (c) If the LOCK FAIL light did not go out with the door lock control switch in the AUTO position, continue:
- (d) Install a new chime module, M2537. To install a new chime module. These are the tasks:
Chime Module Removal, AMM TASK 52-51-06-000-801,
Chime Module Installation, AMM TASK 52-51-06-400-801.
- (e) If the LOCK FAIL light did not go out with the door lock control switch in the AUTO position, do these steps:
 - 1) Repair the wiring between the chime module, M2537 and the control panel switch/light, P8-47 (WDM 52-51-11).
 - 2) Install the chime module, M2537. To install the chime module, do this task: Chime Module Installation, AMM TASK 52-51-06-400-801.
 - 3) Install the control panel switch/light module, P8-47. To install the P8-47 panel, do this task: Cockpit Control Panel Switch/Light (P8-47) Installation, AMM TASK 52-51-07-420-801.

———— **END OF TASK** ————

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801. Airline Method Procedure - Fault Isolation

A. Initial Evaluation

NOTE: Use the standard method of your airline to correct this fault.

————— END OF TASK —————

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52-99 TASK 801

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