



## FAULT ISOLATION MANUAL

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### TASK 24-20-00-810-802

#### #1 AC GEN HOT (Caution) – Fault Isolation

##### 1. General

- A. The fault isolation procedure is for when the #1 AC GEN HOT caution light on the Caution and Warning Panel (CAWP) is on.
- B. The #1 AC GEN HOT caution light on the CAWP comes on when the #1 AC generator temperature is more than 166°C (330.8°F).
- C. There are no related Central Diagnostic System (CDS) or Electrical Power Control Unit (EPCU) Continuous Built-In Test (CBIT) fault review status messages.
- D. Refer to Fault Tree for overview of the task (Refer to Figure 202).

##### 2. Job Set-Up Information

Subtask 24-20-00-946-004

##### A. Reference Information

REFERENCE	DESIGNATION
AMM20-30-11-760-801	Electrical Test of the Aircraft Wiring
AMM24-00-00-861-801	Energize the Electrical System
AMM24-00-00-861-802	De-energize the Electrical System
AMM24-00-00-910-801	Electrical/Electronic Safety Precautions
AMM24-21-00-710-801	Operational Test of the AC Variable Frequency Generation System
AMM24-21-01-000-801	Removal of the AC Generator
AMM24-21-01-400-801	Installation of the AC Generator
AMM31-51-01-000-801	Removal of the Caution and Warning Panel
AMM31-51-01-400-801	Installation of the Caution and Warning Panel
FIM73-20-00-810-881.	A/C Generator Chip Detector – Fault Isolation.
WM24-21-00	AC Variable Frequency System
WM24-21-01	AC Variable Frequency System (With Galley AC Outlet Options)



## FAULT ISOLATION MANUAL

### 3. Job Set-Up

Subtask 24-20-00-910-010

**WARNING:** OBEY ALL THE SAFETY PRECAUTIONS WHEN YOU DO MAINTENANCE ON OR NEAR ELECTRICAL/ELECTRONIC EQUIPMENT. IF YOU DO NOT DO THIS, YOU CAN CAUSE INJURIES TO PERSONS AND DAMAGE TO THE EQUIPMENT.

- A. Obey all the electrical/electronic safety precautions (Refer to AMM24-00-00-910-801).

Subtask 24-20-00-810-022

- B. Before you carry out the Fault Isolation procedure inspect all the related connectors for the recessed pins, signs of pitting or arching, corrosion, discoloration (heat damage), fluid contamination or presence of foreign material and physical damage. If damage is found, repair the damage.

### 4. Fault Confirmation

Subtask 24-20-00-810-003

- A. Do the fault confirmation as follows:
- (1) Energize the aircraft electrical system (Refer to AMM24-00-00-861-801).
  - (2) If the #1 AC GEN HOT light comes on, refer to Subtask 24-20-00-810-004 for the Fault Isolation.
  - (3) If the #1 AC GEN HOT light does not come on, refer to Subtask 24-20-00-810-021 for the Fault Isolation.

### 5. Fault Isolation

Subtask 24-20-00-810-004

- A. Check the #1 AC Generator magnetic chip detector prior to performing any action ( Refer to FIM73-20-00-810-881)
- NOTE:** When you do a check for the ground faults, you must do the check with the airframe ground and the connector backshell shield ground points.
- B. Remove the electrical connector 2421-P1 from the #1 AC generator.
- C. If the #1 AC GEN HOT light goes off, remove and replace the #1 AC generator (Refer to AMM24-21-01-000-801 and AMM24-21-01-400-801). Do the Close Out.
- D. If the #1 AC GEN HOT light does not go off, remove the electrical connector 3312-P3 from the CAWP.
- E. Check the wiring for the ground faults and isolation resistance between the #1 AC generator and the CAWP (Refer to WM24-21-00 or WM24-21-01 and AMM20-30-11-760-801):



**FAULT ISOLATION MANUAL**

2421-P1 (#1 AC Generator)	3312-P3 (CAWP)
10	28

- F. If the isolation resistance value is not within the limit, repair the wiring.
- G. Install the electrical connectors 2421-P1 to the #1 AC generator and 3312-P3 to the CAWP.
- H. If the #1 AC GEN HOT light still comes on, remove and replace the CAWP (Refer to AMM31-51-01-000-801 and AMM31-51-01-400-801). Do the Close Out.

Subtask 24-20-00-810-021

- I. If the #1 AC GEN HOT light does not come on when the aircraft electrical system is energized, Do an operational test of the AC variable frequency generation system (Refer to AMM24-21-00-710-801).
- J. If the #1 AC GEN HOT light does not come on, do the Close Out.
- K. If the #1 AC GEN HOT light comes on, remove and replace the # 1 AC generator (Refer to AMM24-21-01-000-801 and AMM24-21-01-400-801). Do the Close Out.

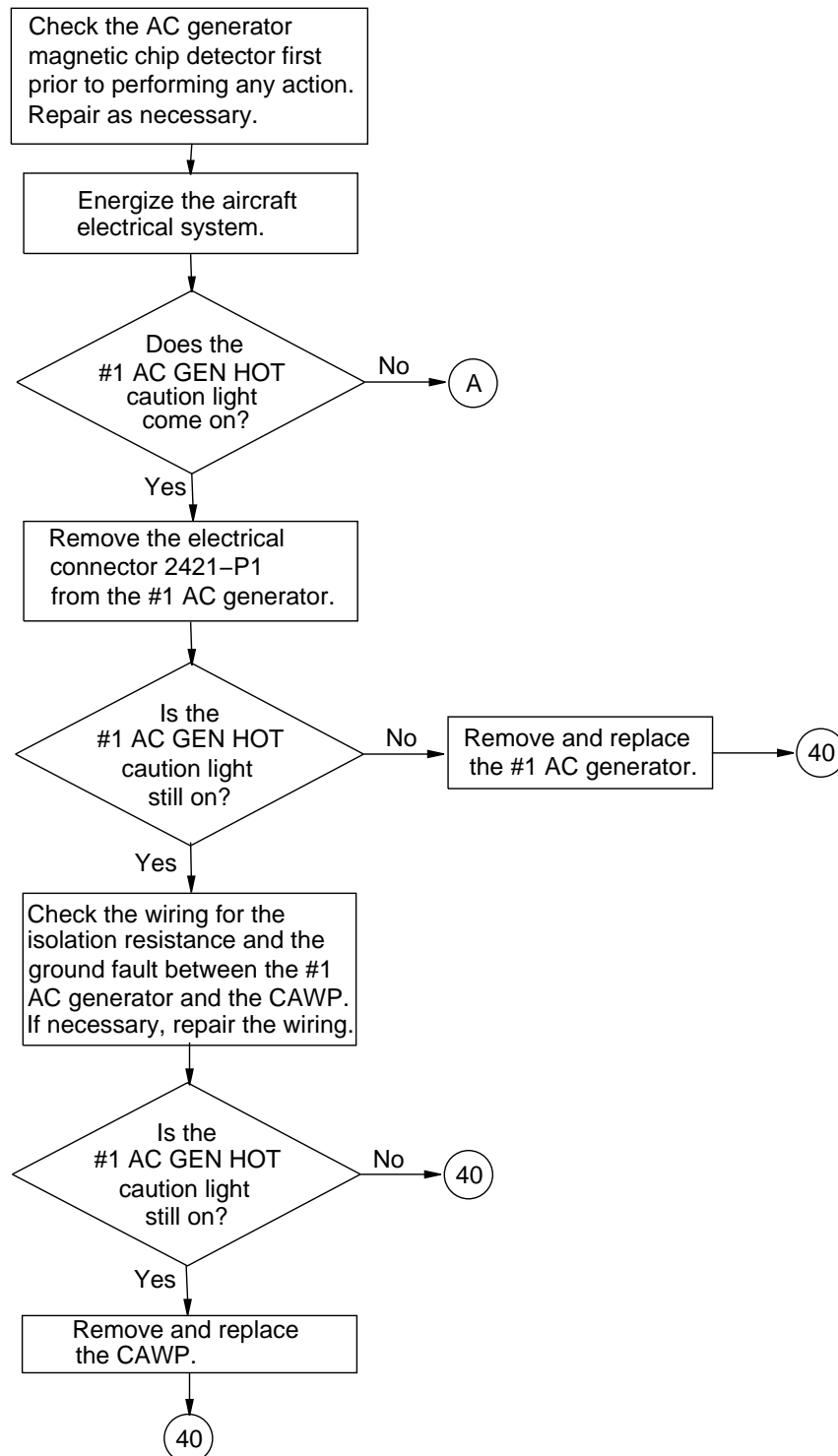
6. Close Out

Subtask 24-20-00-941-004

- A. Do an operational test of the AC variable frequency generation system (Refer to AMM24-21-00-710-801).
- B. Make sure that the #1 AC GEN HOT light on the CAWP is not on.
- C. De-energize the aircraft electrical system (Refer to AMM24-00-00-861-802).
- D. Remove all the tools, equipment and unwanted materials from the work area.



## FAULT ISOLATION MANUAL

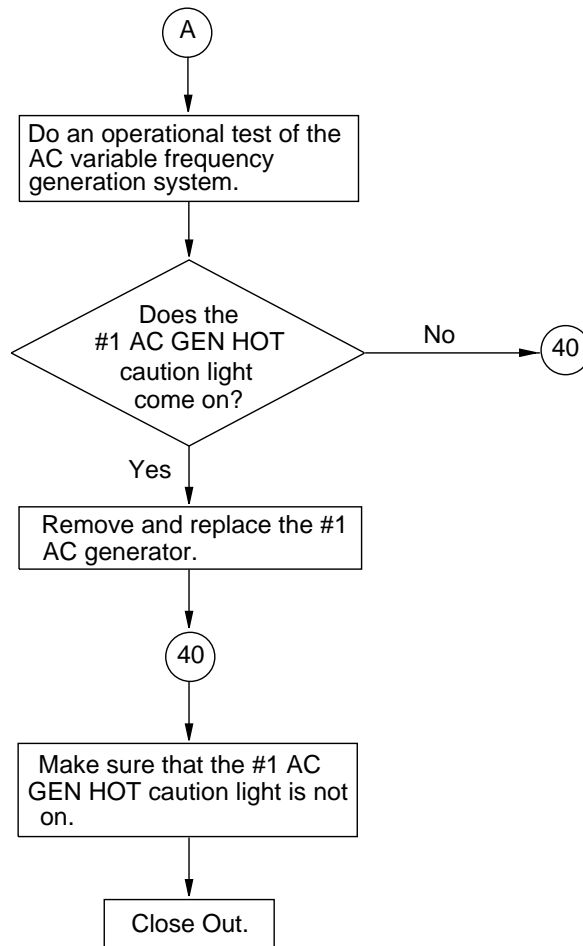


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#1 AC GEN HOT (Caution) – Fault Isolation  
Figure 202 (Sheet 1 of 2)



FAULT ISOLATION MANUAL



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#1 AC GEN HOT (Caution) – Fault Isolation  
Figure 202 (Sheet 2 of 2)