

CHAPTER

05

TIME LIMITS/ MAINTENANCE CHECKS



737-600/700/800/900

FAULT ISOLATION MANUAL

CHAPTER 05 TIME LIMITS/MAINTENANCE CHECKS

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

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YOU FIND A FAULT WITH
AN AIRPLANE SYSTEM

These are the possible types
of faults:

1. Observed Fault
2. Cabin Fault



USE BITE TO GET
MORE INFORMATION

If you did a BITE test already,
then you can go directly to the
fault isolation procedure for
the maintenance message.

For details, see Figure 2 →



GO TO THE
FAULT ISOLATION
TASK IN THE FIM

Use the fault code or description
to find the task in the FIM. There
is a numerical list of fault codes
in each chapter. There are lists
of fault descriptions at the front
of the FIM.

For details, see Figure 3 →



FOLLOW THE STEPS OF THE
FAULT ISOLATION TASK

The fault isolation task explains
how to find the cause of the fault.
When the task says "You corrected
the fault" you know that the fault
is gone.

For details, see Figure 4 →

Basic Fault Isolation Process
Figure 1

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05-HOW TO USE THE FIM

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).

Getting Fault Information from BITE
Figure 2

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IF YOU HAVE:

THEN DO THIS TO FIND THE TASK IN THE FIM:

FAULT CODE

1. The first two digits of the fault code are the FIM chapter that you need. Go to the Fault Code Index in that chapter and find the fault code. If the fault code starts with a letter, then go to the Cabin Fault Code Index at the front of the FIM.
2. Find the task number on the same line as the fault code. Go to the task in the FIM and do the steps in the task (see Figure 4).

OBSERVED FAULT DESCRIPTION

1. Go to the Observed Fault List at the front of the FIM and find the best description for the fault.
2. Find the task number on the same line as the fault description. Go to the task in the FIM and do the steps of the task (see Figure 4).

CABIN FAULT DESCRIPTION

1. Go to the Cabin Fault List at the front of the FIM and find the best description for the fault.
2. Find the task number on the same line as the fault description. Go to the task in the FIM and do the steps of the task (see Figure 4).

MAINTENANCE MESSAGE (FROM BITE)

1. Go to the Maintenance Message Index in the chapter for the LRU (the front of each Index gives you the chapter number for all LRUs). Find the maintenance message in the Index.
2. Find the task number on the same line as the maintenance message. Go to the task in the FIM and do the steps in the task (see Figure 4).

Finding the Fault Isolation Task in the FIM
Figure 3

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05-HOW TO USE THE FIM

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

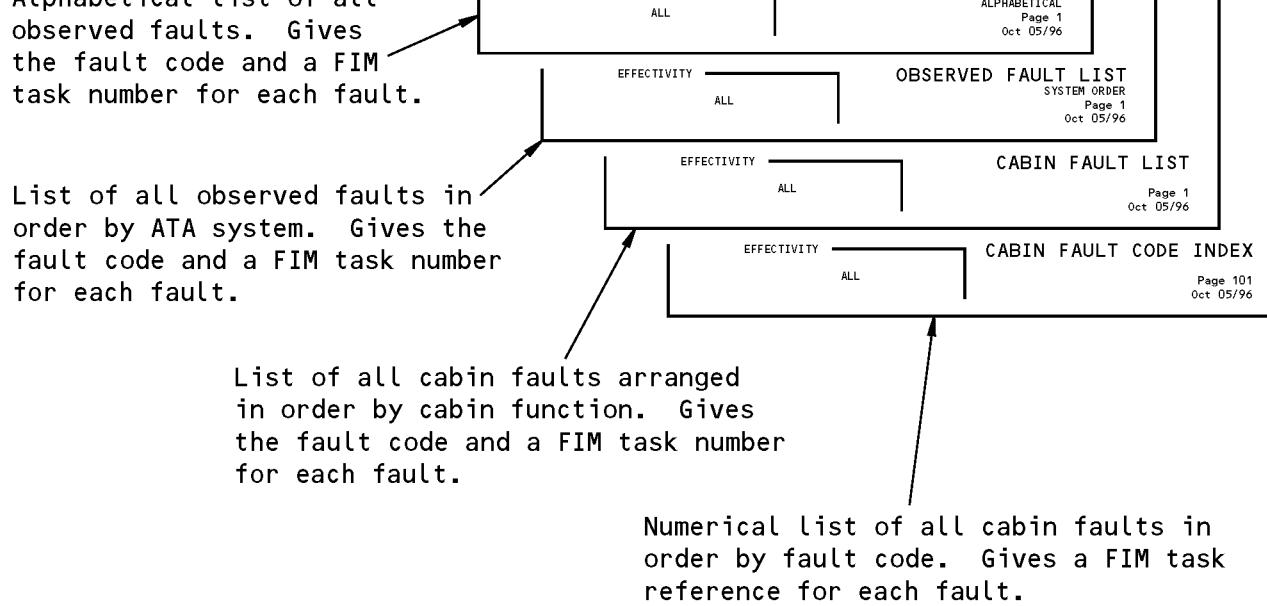
- Do the steps of the task in the specified order. The "If ... then" statements that you see will guide you along the correct path.
- When you are at the endpoint of the path, the step says "...you corrected the fault." Complete the step and exit the procedure.

Doing the Fault Isolation Task
Figure 4

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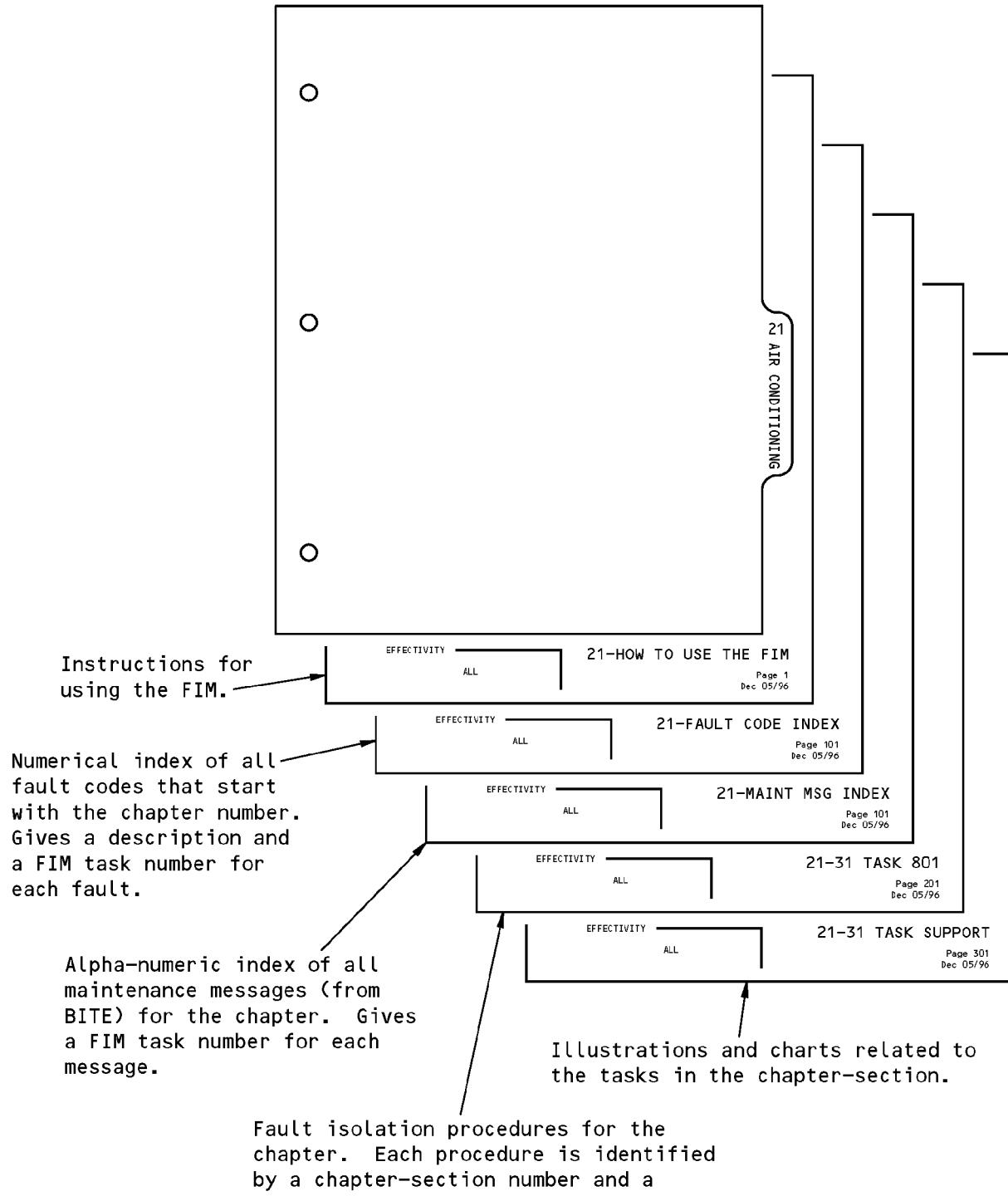


Subjects at Front of FIM
Figure 5



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Subjects in Each FIM Chapter
 Figure 6



05-HOW TO USE THE FIM



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FAULT CODE	FAULT DESCRIPTION	GO TO FIM TASK
055 010 00	Lightning strike.	05-51 TASK 801
055 020 00	Dust (extreme) condition.	05-51 TASK 802
055 030 00	Brakes: overheated during stop.	05-51 TASK 805
055 040 00	Hard landing or high drag/side load landing.	05-51 TASK 806
055 050 00	Volcanic ash condition.	05-51 TASK 803
055 060 00	Overweight landing.	05-51 TASK 807
055 070 00	Turbulence (severe), stall, buffet, or overspeed.	05-51 TASK 808
055 080 00	Overspeed: with landing gear down.	05-51 TASK 809
055 090 00	Overspeed: with flaps/slats extended.	05-51 TASK 810
055 100 51	Engine nacelle or strut dragged or damaged - engine 1.	05-51 TASK 811
055 100 52	Engine nacelle or strut dragged or damaged - engine 2.	05-51 TASK 811
055 110 00	Tail dragged.	05-51 TASK 812
055 120 51	Engine seizure - engine 1.	05-51 TASK 811
055 120 52	Engine seizure - engine 2.	05-51 TASK 811
055 130 00	Birdstrike/FOD: on airframe/area unknown, engine parameters normal.	05-51 TASK 804
055 170 00	Airframe: vibration or lateral oscillation is excessive.	05-51 TASK 813



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801. Lightning Strike - Fault Isolation

A. Fault Isolation Procedure

(1) Do this task: Examine External and Internal Areas for Lightning Strike Damage, AMM TASK 05-51-19-210-801 or Inspection and Operational Check of Radio and Navigation Systems, AMM TASK 05-51-19-710-801.

————— END OF TASK —————

802. Dust Condition (Extreme) - Fault Isolation

A. Fault Isolation Procedure

(1) Do this task: Extreme Dust Conditional Inspection, AMM TASK 05-51-27-210-801.

————— END OF TASK —————

803. Volcanic Ash Condition - Fault Isolation

A. Fault Isolation Procedure

(1) Do this task: Volcanic Ash Conditional Inspection, AMM TASK 05-51-31-210-801.

————— END OF TASK —————

804. Bird/Hail Strike (Except Engine Inlet) - Fault Isolation

A. Fault Isolation Procedure

(1) Do this task: Bird/Hail Strike Conditional Inspection, AMM TASK 05-51-18-210-801.

————— END OF TASK —————

805. High Energy Stop - Fault Isolation

A. Fault Isolation Procedure

(1) Do this task: High Energy Stop, AMM TASK 05-51-07-210-801.

————— END OF TASK —————

806. Hard Landing or High Drag/Side Load Landing - Fault Isolation

A. Fault Isolation Procedure

(1) Do this task: Phase I Inspection, AMM TASK 05-51-01-210-801.

————— END OF TASK —————

807. Overweight Landing - Fault Isolation

A. Fault Isolation Procedure

(1) Do this task: Phase I Inspection, AMM TASK 05-51-35-210-801.

————— END OF TASK —————



05-51 TASKS 801-807



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808. Turbulence (Severe), Stall, Buffet, or Overspeed - Fault Isolation

A. Fault Isolation Procedure

- (1) Do this task: Severe or Unusual Turbulence, Stall, Buffet, or Speeds More than the Design Limits Conditional Inspection, AMM TASK 05-51-04-210-801.

————— END OF TASK —————

809. Overspeed with Landing Gear Down - Fault Isolation

A. Fault Isolation Procedure

- (1) Do this task: Landing Gear Operation Above Design Speed Condition, Conditional Inspection, AMM TASK 05-51-47-210-801.

————— END OF TASK —————

810. Flaps/Slats Down Overspeed - Fault Isolation

A. Fault Isolation Procedure

- (1) Do this task: Phase I Inspection, AMM TASK 05-51-08-210-801.
and, do this task: Phase II Inspection, AMM TASK 05-51-08-210-802
as required.

————— END OF TASK —————

811. Dragged Engine Nacelle/Engine Seizure/Engine and Strut Damaged - Fault Isolation

A. Fault Isolation Procedure

- (1) Do this task: Dragged Engine Nacelle/Fan Blade Out/Engine Seizure/Engine and Strut Damage Conditional Inspection, AMM TASK 05-51-10-210-801.

————— END OF TASK —————

812. Tail Dragged - Fault Isolation

A. Fault Isolation Procedure

- (1) Do this task: Tail Strike Inspection, AMM TASK 05-51-32-210-801.

————— END OF TASK —————

813. Airframe Excessive Vibration or Lateral Oscillation - Fault Isolation

A. Fault Isolation Procedure

- (1) Do this task: Conditional Inspection, AMM TASK 05-51-67-280-801.

————— END OF TASK —————



05-51 TASKS 808-813