



AIRCRAFT MAINTENANCE MANUAL

ENGINE - MAINTENANCE PRACTICES

EFFECTIVITY: ALL

1. General

- A. This section gives the procedures to do the engine trend download/analysis procedures. These procedures are applicable to the two engines.
- B. The procedures in this section are given in the sequence below. The tasks identified with (♦) are part of the Scheduled Maintenance Requirements Document (SMRD).

TASK NUMBER	DESCRIPTION	EFFECTIVITY
72-00-00-970-801-A ♦	ENGINE TREND DOWNLOAD/ANALYSIS	ALL



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TASK 72-00-00-970-801-A

EFFECTIVITY: ALL

2. ENGINE TREND DOWNLOAD/ANALYSIS

A. General

- (1) To do the engine trend download/analysis procedures, do the procedures that follow and refer to the instructions contained in the latest revision of RR MM CSP34022 (Chapter 05-21-00).

B. References

REFERENCE	DESIGNATION
AMM TASK 45-45-00-970-802-A/200	CMC DOWNLOADING WITH THE PERSONAL COMPUTER
RR MM CSP34022 (Chapter 05-21-00)	-

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
223		Maintenance panel

D. Tools and Equipment

Not Applicable

E. Auxiliary Items

Not Applicable

F. Consumable Materials

Not Applicable

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	Cockpit

I. Preparation ([Figure 201](#))

SUBTASK 841-002-A

- (1) Install a personal computer to download the engine trend data ([AMM TASK 45-45-00-970-802-A/200](#)).

J. Engine Trend Download/Analysis ([Figure 201](#))

SUBTASK 970-002-A

- (1) For aircraft with serviceable CMC, do the engine trend download/analysis (with a personal computer) as follows:



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- From the menu bar of the DAS program, choose the "TREND & EXCEED" option and download the engine trend data ([AMM TASK 45-45-00-970-802-A/200](#)).
 - Do an engine trend analysis with the Rolls-Royce Compass Navigator Trend Program. Refer to the latest revision of the RR MM CSP34022 (Chapter 05-21-00).
- (2) For aircraft with the CMC not serviceable, Embraer recommends that the trend data recording be done in flight, manually, by the flight crew, once a day, and be reported to the maintenance personnel for the necessary analysis. For the manual recording of the trend data, the aircraft must be stabilized above 20,000 feet, the TLA (Thrust Lever Angle) must be in steady condition, the anti-icing system must be OFF, there must be no altitude changes, and there must be no Mach number change for five (5) minutes. In these conditions, the engine parameter values that follow must be written down:
- Aircraft serial number/Identification.
 - Time of record.
 - Date of record.
 - N1 (%).
 - ITT (Degrees °C).
 - FADEC in control.
 - TAT (Degrees °C).
 - Engine Position.
 - N2 (%).
 - Fuel Flow (lb/hr or Kg/hr).
 - Mach number.
 - Aircraft altitude (feet or meters).
 - VB1 (ips)
 - VB2 (ips)
- NOTE: Embraer recommends the use of a form as shown in table 201 or an equivalent form to write down the values found.
- (3) Use this table to write down the aircraft/engine data.



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Table 201 - ENGINE TREND DOWNLOAD/ANALYSIS DATA COLLECT FORM

FLIGHT DATA		
Aircraft S/N or Identification_____	Data of record: ___ / ___ / ___	
TAT (Degrees °C)_____	Time of record: _____	
Mach number:_____	Aircraft altitude: _____	
Engine Data	LEFT ENGINE	RIGHT ENGINE
N1 (%)		
FADEC in control		
ITT (Degrees °C)		
N2 (%)		
Fuel flow (lb/hr or Kg/hr)		
VB1 (ips)		
VB2 (ips)		

K. Follow-on

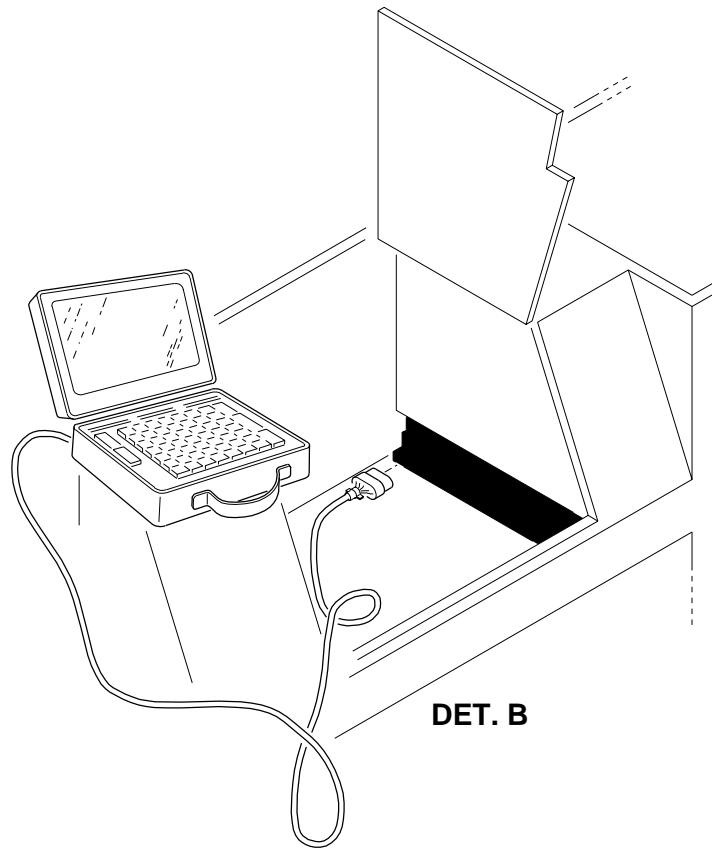
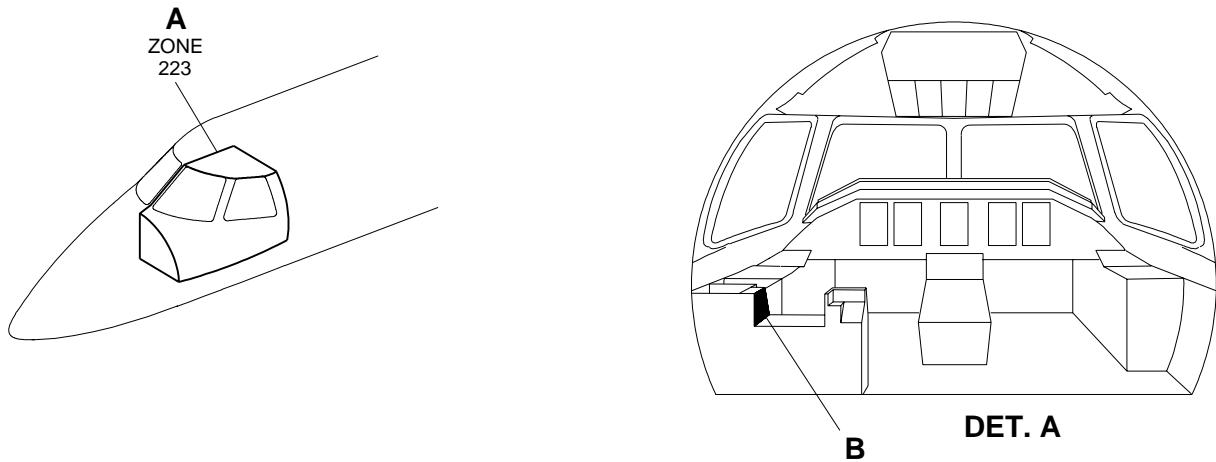
SUBTASK 842-002-A

- (1) Remove the Personal Computer ([AMM TASK 45-45-00-970-802-A/200](#)), if applicable.

EFFECTIVITY: ALL

Engine Trend Download/Analysis - Component Locations

Figure 201



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