

SUPPLEMENTAL AIRPLANE MAINTENANCE MANUAL

DA 42

INSTALLATION INSTRUCTIONS FOR SYSTEM S10

FLIGHT DATA LOGGING DEVICE

This supplemental AMM is approved in conjunction with the Optional Design Change Advisory OÄM 42-178 and is valid in conjunction with the basic Airplane Maintenance Manual (AMM).

The limitations and information contained herein either supplement or, in the case of conflict, override those in the AMM.

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This document must be carried in the Airplane Maintenance Manual (AMM) at all times. It describes the maintenance procedures.

The technical information contained in this document has been approved under the authority of DOA No. EASA.21J.052.

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TABLE OF CONTENTS

CHAPTER 03 – GENERAL DESCRIPTION..... 1

- 1. Description..... 1
- 2. Equipment Data..... 1

CHAPTER 05 – TIME LIMITS AND MAINTENANCE CHECKS..... 1

- 4. Maintenance Checklist Zones..... 1

CHAPTER 31 – Indicating / Recording System 1

- 1. General..... 1
- 2. Description..... 1

Maintenance Practices.....201

- 1. General.....201
- 2. Remove/Install the Flight Data Logging Device201

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CHAPTER 03 – GENERAL DESCRIPTION

1. Description

The DA 42 can be equipped with an optional Flight Data Logging Device. The Flight Data Logging Device is installed in the aft baggage compartment under the floor panel via brackets and screws

Note: All measures must be carried out by a certified airplane maintenance station or a certified airplane mechanic.

2. Equipment Data

ATA Chapter	Equipment/System	Manufacturer/Address	Direct Shipping Approved
31-30	Flight Data Logging Device	iAero – i2A SAS 12b route de Troyes F-21121 Darois France Tel: +33 380 736 026 Fax: +33 380 356 409 Email: info@iaero.fr Website: www.iaero.fr	yes

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CHAPTER 05 –TIME LIMITS AND MAINTENANCE CHECKS

Section 05-20

Scheduled Maintenance Checks

Maintenance Practices

Maintenance Checklist DA 42

4. Maintenance Checklist Zones

D. Interior of the Rear Fuselage

(4) Miscellaneous Items in Rear Fuselage

	Inspection Items	Interval					Time	Initials
		50	100	200	1000	2000		
4.	Examine wiring of Flight Data Logging Device. Look especially for: - uninsulated wires - insecure attachment Refer to manufacturer's documentation.			X	X	X		
5.	Check recording function of Flight Data Logging Device with post flight analysis software. (Most recent recordings have to be uncompromised). Refer to manufacturer's documentation.			X	X	X		

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CHAPTER 31–INDICATING / RECORDING SYSTEMS

1. General

If OÄM-42-178/d is installed, the DA 42 is equipped with a Flight Data Logging Device. The system consists of a Memory and Data Processing Unit, a Power Supply Unit, a Sensor Interface Unit, a CAN/ARINC Interface Unit and a Data Retrieval Unit, which is installed in the aft baggage compartment under the floor panel, just behind the left passenger seat.

2. Description

Figure 1 shows the installation of the Flight Data Logging Device, installed with OÄM 42-178/d.

The Flight Data Logging Device consists of a Memory and Data Processing Unit, a Power Supply Unit, a Sensor Interface Unit, a CAN/ARINC Interface Unit and a Data Retrieval Unit, which are installed in the aft baggage compartment under the floor panel via brackets and screws.

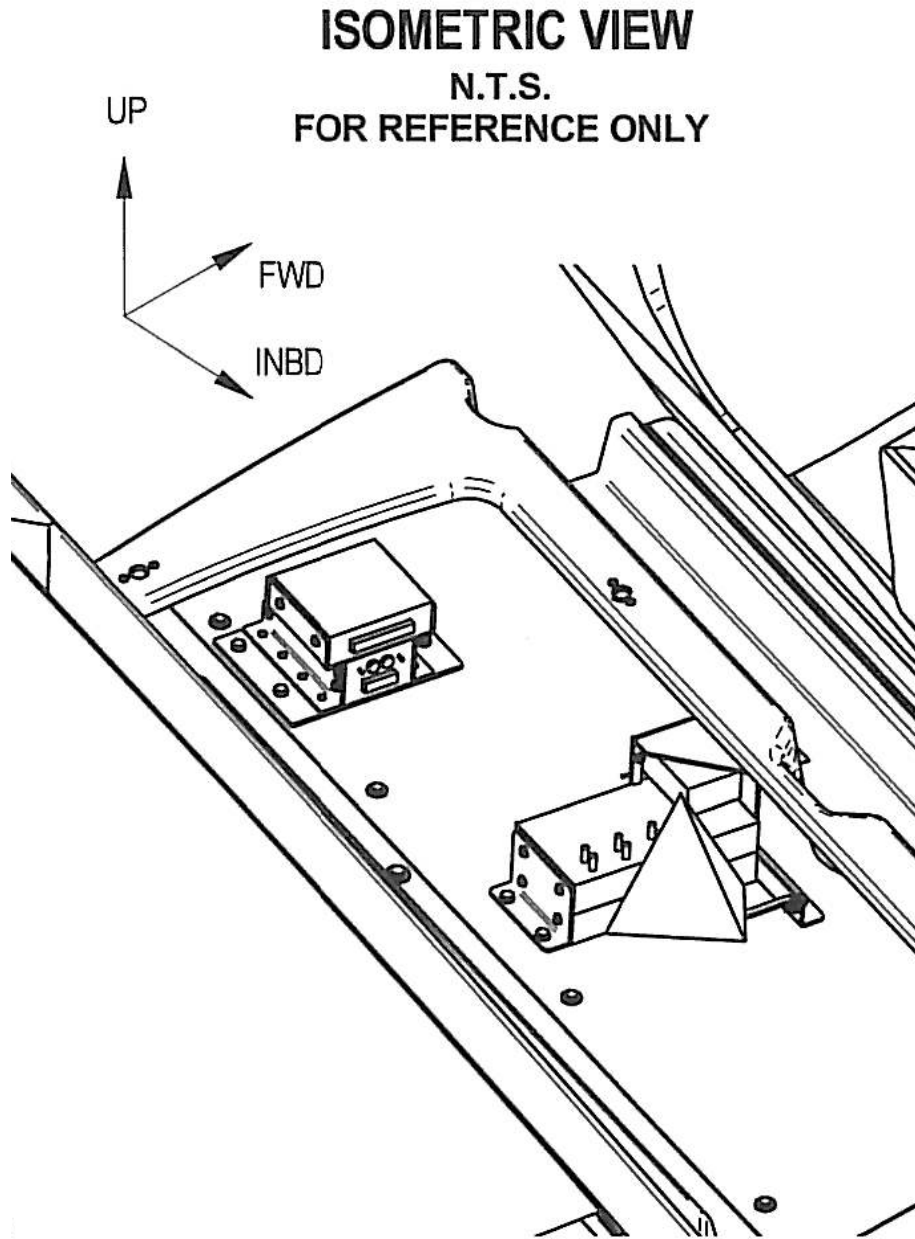


Figure 1: Flight Data Logging Device Installation (if OÄM 42-178 is installed)

Maintenance Practices

1. General

These Maintenance Practices tell you how to remove and install the Flight Data Logging Device.

2. Remove/Install the Flight Data Logging Device

WARNING: MAKE SURE THAT ALL MASTER SWITCHES ARE OFF, BEFORE REMOVING THE LOGGING DEVICE. IF THE MASTER SWITCH IS ON THE ELECTRICAL POWER CAN CAUSE DAMAGE TO THE EQUIPMENT.

A. Remove the Flight Data Logging Device

	Detail Steps/Work Items	Key Items/References
(1)	Make sure that the electric system is safe: - Set the ELECT. MASTER switch to OFF. - Set the ENGINE MASTER switch to OFF. - Set the power lever to 0%.	
(2)	Disconnect the airplane main battery.	Refer to Section 24-34.
(3)	Unlock and unplug connectors.	
(4)	Remove the Flight Data Logging Device: - Remove the 2 screws that attach APISD to the aircraft. Remove the 17 screws that attach the APIV2, APICAP-003, i2060-002 and APIPWR to their bracket. - Remove the 12 screws that attach the brackets to the aircraft.	Refer to Figure 1.

B. Install the Flight Data Logging Device

	Detail Steps/Work Items	Key Items/References
(1)	Install the Flight Data Logging Device: <ul style="list-style-type: none">- Move the brackets into position.- Install the 12 screws that attach the brackets to the aircraft.- Move the APIV2, APICAP-003, i2060-002 and APIPWR into their positions and install the 17 screws.- Move the APISD into position.- Install the 2 screws that attach the APISD to the aircraft.	Refer to Figure 1. Tighten screws with 3.25 Nm torque. Tighten screws with 3.25 Nm torque. Tighten screws with 3.25 Nm torque.
(2)	Plug and lock each connector.	
(3)	Connect the airplane main battery.	Refer to Section 24-34.
(4)	Do the setup procedure.	Refer to manufacturer's documentation.
(5)	Do the barometry test.	Check sealings. Refer to manufacturer's documentation.
(6)	Do a flight test.	Refer to manufacturer's documentation.