

**GARMIN G1000 AIR DATA COMPUTER SYSTEM - REMOVAL/INSTALLATION****1. General**

- A. This section gives maintenance procedures for the Garmin G1000 Air Data Computer (ADC) System. For a general description of the air data computers, refer to Chapter 34, Garmin G1000 Air Data Computer System - Description and Operation and the pitot-static system, refer to Pitot/Static System - Description and Operation.

**2. Tools and Equipment**

- A. Tools and Equipment
- None.
- B. Special Consumables
- Pitot-Static Hose Caps.
- C. Reference Material
- Chapter 20, Electrostatic Discharge Components - Maintenance Practices
  - Garmin G1000 Air Data Computer System - Description and Operation
  - Pitot/Static System - Description and Operation
  - Garmin Display Unit - Removal/Installation
  - Garmin G1000 Integrated Avionics System - Adjustment/Test
  - Model 208 Wiring Diagram manual

**3. Setup**

- A. Prepare the Airplane
- (1) Put the BATTERY switch to the OFF position.
  - (2) Put the AVIONICS switches to the OFF position.
  - (3) Disconnect external electrical power from the airplane.
  - (4) Disengage the circuit breakers given in Table 401.

**Table 401. Circuit Breakers**

Component	Circuit Breaker Name	Circuit Breaker Location
Garmin ADC 1	ADC 1	Avionics Circuit Breaker Panel
Garmin ADC 2	ADC 2	Avionics Circuit Breaker Panel
Garmin ADC 1 Configuration Module	ADC 1	Avionics Circuit Breaker Panel
Garmin ADC 2 Configuration Module	ADC 2	Avionics Circuit Breaker Panel

**4. G1000 Garmin ADC Removal**

**CAUTION:** Be careful when you remove and install electronic components. Electronic components are extremely sensitive to electrostatic discharge damage. Such damage cannot be seen by visual inspection and can make the component unserviceable. Refer to Chapter 20, Electrostatic Discharge Components - Maintenance Practices and the Model 208 Wiring Diagram Manual Chapter 20, Electrical Safety Precautions - Description and Operation for procedures to correctly work with electronic components.

- A. Remove the GDC ADC (Refer to Figure 401).

**NOTE:** Removal procedures for the pilot and copilot air data computers are typical.

**NOTE:** The GDC 72 is smaller than the GDC 74A, but mounts in the same location using a different mounting rack and different retention mechanism.

- (1) Get access to the Garmin Air Data Computer as follows:
  - (a) If removing Garmin Air Data Computer (GDC) 1, remove Primary Flight Display (PFD) 1. Refer to German Display Unit - Removal/Installation.
  - (b) If removing GDC 2, remove PFD 2. Refer to Garmin Display Unit - Removal/Installation.
- (2) Loosen the thumbscrews/retention device and pull the GDC unit from the mounting tray.
- (3) Carefully remove the air data computer through the instrument panel.
- (4) Disconnect the pitot and static hose adapters from the air data computer.

(a) Put caps on the pitot and static hose adapters to prevent contamination in the pitot-static system.

(5) Disconnect the electrical connector from the GDC unit.

## 5. G1000 Garmin ADC Installation

A. Install the Garmin ADC (Refer to Figure 402).

**NOTE:** Installation procedure for the pilot and copilot air data computers are typical.

**NOTE:** The GDC 72 is smaller than the GDC 74A, but mounts in the same location using a different mounting rack and different retention mechanism.

(1) Position the GDC unit on the mounting tray, and connect the electrical connector to the GDC unit.

(2) Connect the pitot and static hoses to the GDC unit.

(3) To prevent friction welding and galling, apply Loctite 242 to the threads of both gnurled knob fasteners on the Air Data Computer (GDC) tray. Refer to Chapter 20, Anaerobic Adhesives - Maintenance Practices.

**NOTE:** Wipe off any excess Loctite 242 from the adjacent surfaces.

(4) Carefully tighten the GDC unit thumbscrews/retention mechanism.

(5) Install the correct PFD that was removed for access. Refer to Garmin Display Unit - Removal/Installation.

(6) Engage the applicable circuit breaker given in Table 401.

## 6. Garmin ADC Configuration Module Removal

A. Remove the Configuration Module (Refer to Figure 402).

**NOTE:** The removal and installation of the configuration modules is typical for the pilot's and copilot's air data computers.

**NOTE:** The configuration modules are installed in the electrical connectors of the air data computers.

(1) Remove the pilots or copilots primary flight display (PFD) to get access to the applicable air data computer. Refer to Garmin Display Unit - Removal/Installation.

**NOTE:** ADC 1 is installed forward of PFD 1. ADC 2 is installed forward of PFD 2.

(2) Remove the pilot's or copilot's air data computer to get access to the electrical connector. Refer to Garmin G1000 Air Data Computer System - Removal/Installation.

(3) Remove the screws from the electrical connector cover and remove the cover from the electrical connector.

(4) Disconnect the connector on the cable harness from the configuration module.

(5) Carefully remove the configuration module from the electrical connector.

## 7. Garmin ADC Configuration Module Installation

A. Install the Configuration Module (Refer to Figure 402).

**NOTE:** The removal and installation of the configuration modules is typical for the pilots and copilots air data computers.

(1) Examine the connector pins on the cable harness for damage.

(2) Carefully put the configuration module in position in the electrical connector.

(3) Connect the connector on the cable harness to the configuration module.

(4) Put the electrical connector cover in position on the electrical connector.

(5) Install the screws to hold the electrical connector cover on the electrical connector.

(6) Install the pilot's or copilot's air data computer. Refer to Garmin ADC in this document.

(7) Install the pilot's or copilot's primary flight display (PFD). Refer to Garmin Display Unit - Removal/Installation

(8) Engage the circuit breaker(s) given in Table 401.

## 8. G1000 Garmin ADC Sytem Post-Maintenance Checks

A. Do the G1000 Garmin ADC Post-Maintenance Checks.

(1) If a new Garmin ADC is installed, do the G1000 Baseline Software/Configuration Load. Refer to, Garmin G1000 Integrated Avionics System - Adjustment/Test.

(2) Do the Pitot System Inspection and Leak Test. Refer to Pitot/Static System - Adjustment/Test.

(3) Do the Pitot/Static System Functional Check. Refer to Pitot/Static System - Inspection/Check.

**9. Closeout**

- A. Put the Airplane Back to its Initial Condition.
  - (1) None.

Figure 401 : Sheet 1 : Garmin Air Data Computer Installation

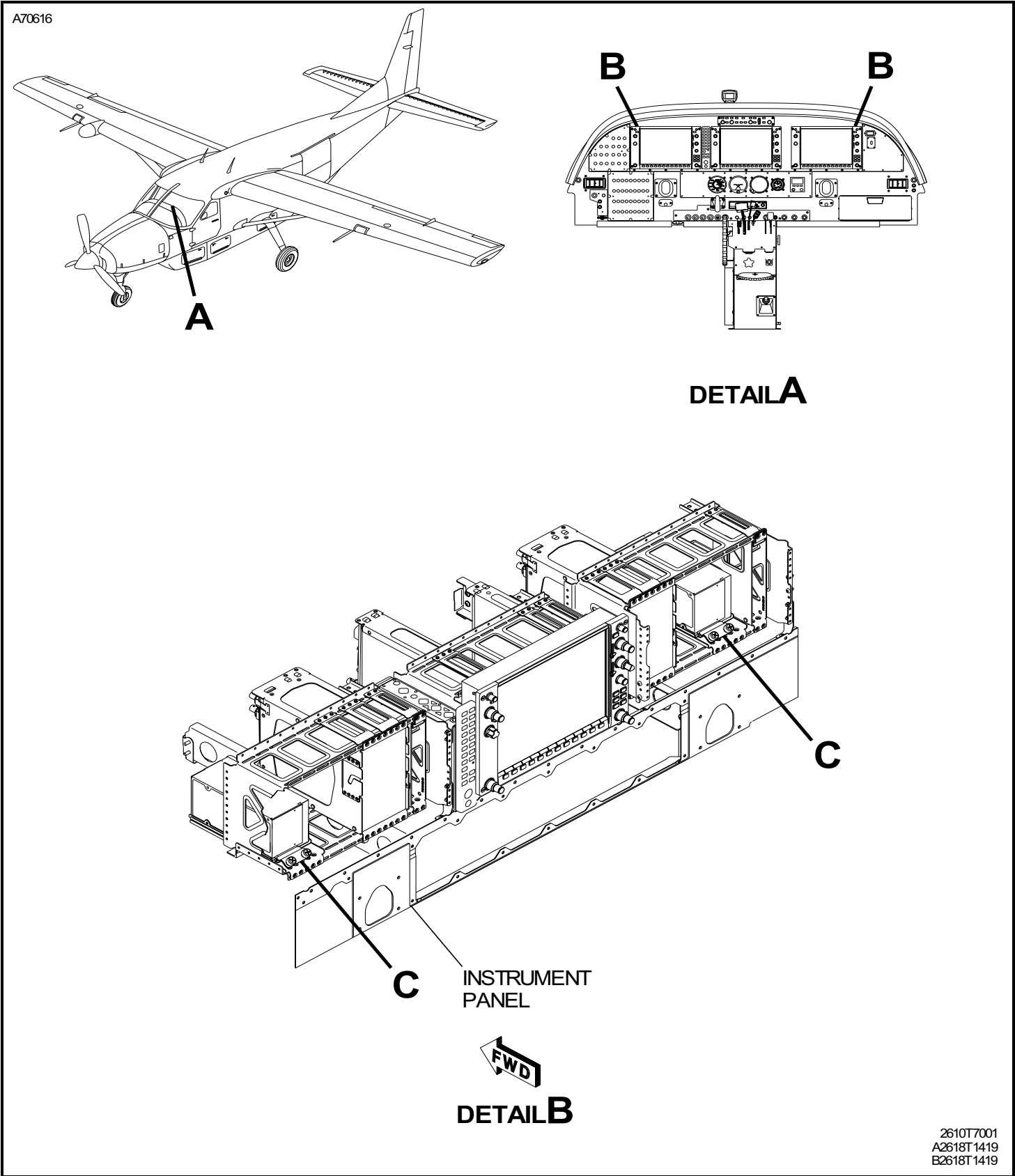
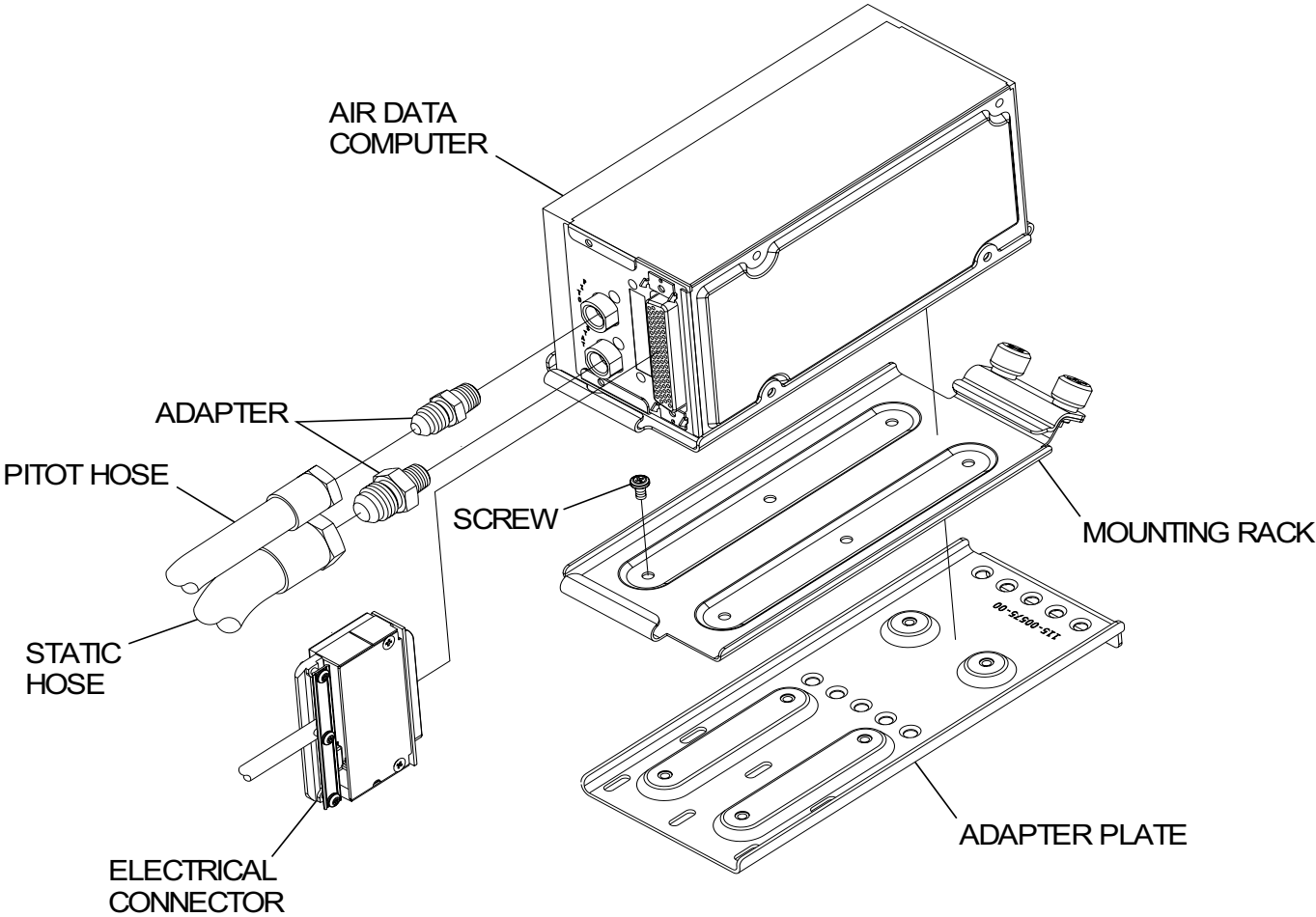


Figure 401 : Sheet 2 : Garmin Air Data Computer Installation

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**DETAIL C**

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Figure 402 : Sheet 1 : Garmin ADC Configuration Module

