

## 12-VOLT DIRECT CURRENT POWER OUTLET SYSTEM - MAINTENANCE PRACTICES

### 1. General

- A. This section gives information about the removal and installation of the power outlets and power converter assembly for the 12-Volt Direct Current (VDC) power outlet system. This installation is standard for Model 208 Airplanes 20800396 and On, and 208B1171 and On.

### 2. Power Outlet Removal/Installation

**NOTE:** The removal and installation procedures for the power outlet in the pedestal, are different than the power outlet(s) in the cabin. Procedures are typical for the pilot and copilot side power outlets.

- A. Remove the Power Outlet (Refer to Figure 201).
- (1) Disengage the AUX 12VDC PWR circuit breaker on the pilot's circuit breaker panel.
  - (2) For the power outlets found in the cabin, do the steps that follow:
    - (a) Remove the screws that attach the power outlet mounting plate to the airplane.
    - (b) Carefully pull the power outlet away from the airplane to get access to the electrical connector.
  - (3) For the power outlet found in the pedestal, remove the access panel (226D) to get access to the power outlet wires. Refer to Chapter 6, Access Plates and Panels Identification - Description and Operation.
  - (4) Disconnect the electrical connector.
  - (5) Turn the backshell counterclockwise to remove it from the power outlet.
  - (6) Remove the power outlet from the mounting plate.
- B. Install the Power Outlet (Refer to Figure 201).
- (1) For the power outlets found in the cabin, do the steps that follow:
    - (a) Put the power outlet in place, then turn the backshell clockwise to attach the power outlet to the mounting plate.
    - (b) Connect the electrical connector.
    - (c) Put the power outlet and mounting plate in place, then attach the mounting plate with the screws.
    - (d) Make sure that the retaining strap on the cap is in position between the outlet and the mounting plate.
  - (2) For the power outlet found in the pedestal, do the steps that follow:
    - (a) Put the power outlet in place, then turn the backshell clockwise to attach the power outlet to the pedestal.
    - (b) Connect the electrical connector.
    - (c) Install the access panel (226D). Refer to Chapter 6, Access Plates and Panels Identification - Description and Operation.
  - (3) Engage the AUX 12VDC PWR circuit breaker on the pilot's circuit breaker panel.
  - (4) Do a check of the 12VDC power outlet system. Refer to 12VDC Power Outlet System Check.

### 3. Power Converter Assembly Removal/Installation

**NOTE:** The removal and installation procedures are typical for both Power Converter Assemblies.

- A. Remove the Power Converter Assembly (Refer to Figure 201).
- (1) Disengage the AUX 12VDC PWR circuit breaker on the pilot's circuit breaker panel.
  - (2) Remove access panel (232AC) to get access to the DC-DC converter. Refer to Chapter 6, Access Plates and Panels Identification - Description and Operation.
  - (3) Disconnect the electrical connector (J1) from the wire bundle.
  - (4) Remove the screw(s) that attach(es) the ground wire(s) to the airplane.
  - (5) Remove the screws that attach the DC-DC converter to the airplane.
  - (6) Remove the DC-DC converter from the airplane.
- B. Install the Power Converter Assembly (Refer to Figure 201).
- (1) Set the DC-DC converter in position in the floor compartment aft of the pedestal.
  - (2) Attach the DC-DC converter in the airplane with the screws.
  - (3) Install the screw(s) that attach(es) the ground wire(s) to the airplane.

- (4) Connect the electrical connector to the wire bundle.
- (5) Install the access panel (232AC) in the airplane. Refer to Chapter 6, Access Plates and Panels Identification - Description and Operation.
- (6) Engage the AUX 12VDC PWR circuit breaker on the pilot's circuit breaker panel.
- (7) Do a check of the 12VDC power outlet system. Refer to 12VDC Power Outlet System Check.

**4. 12VDC Power Outlet System Check**

A. Do a check of the 12VDC power outlet system.

- (1) Do a preliminary visual check of the connectors and components to make sure they are attached correctly.
- (2) Connect the Ground Power Unit (GPU) to the airplane.

**NOTE:** Do the power outlet system check with the GPU set to the airplane voltage of +28.5VDC +0.5 or -0.5VDC, with a current capacity of at least 400 amps.

- (3) Put the EXTERNAL POWER switch in the BUS position.
- (4) Engage the AUX 12VDC PWR circuit breaker on the pilot's circuit breaker panel.
- (5) Put the VEC008 LCD Voltage Meter (power outlet tester) into each of the installed power outlets.

**NOTE:** If a power outlet tester is not available, use a Digital Multi-Meter (DMM). The red (+) lead must be put in the center terminal of the power outlet.

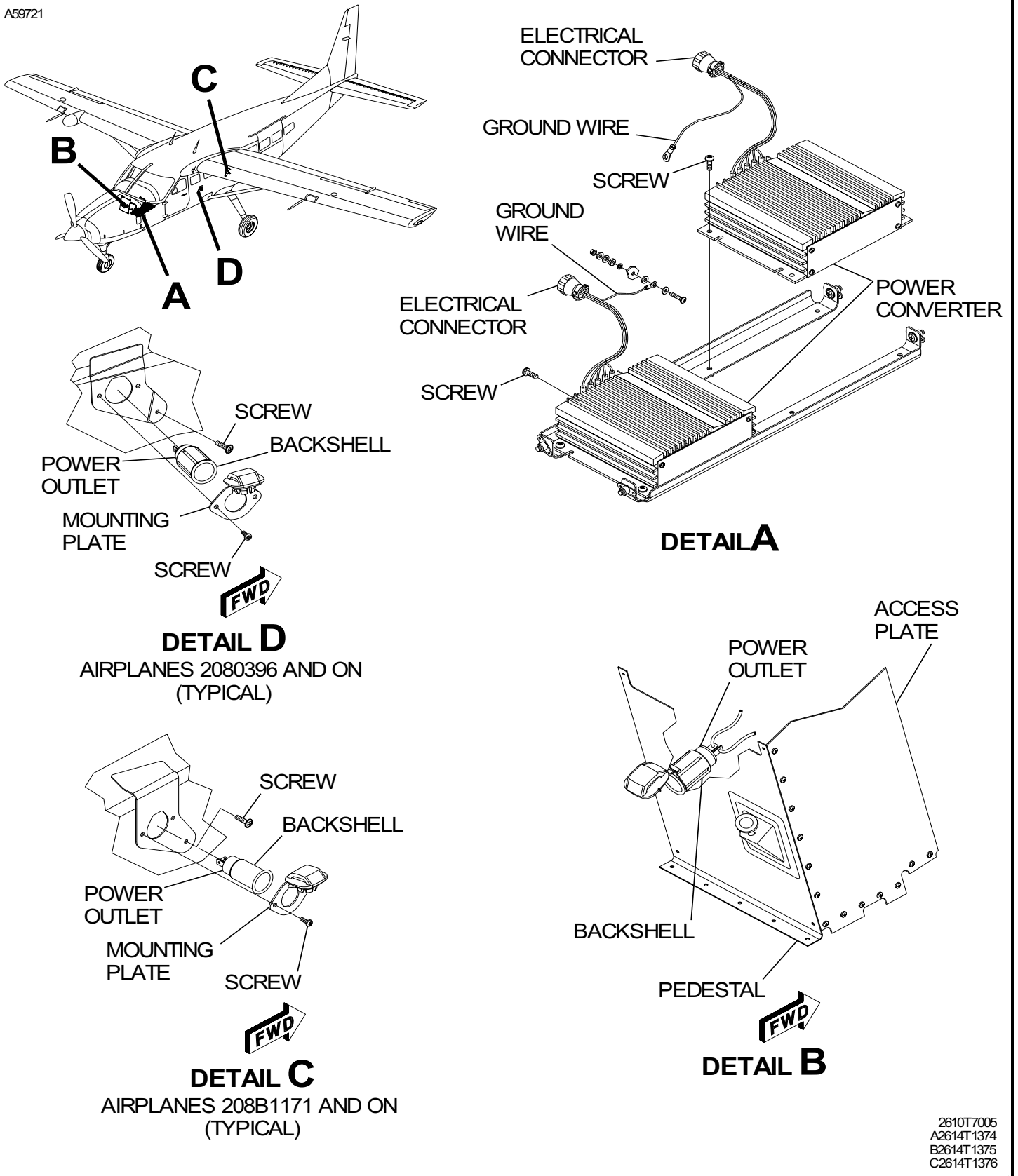
- (6) Operate the POWER OUTLET switch to each of its three positions.
- (7) Make sure the voltage polarity is positive for all the test steps followed in the power outlet system check.
- (8) Make sure the voltage output is correct. Refer to Table 201.

**Table 201. Switch Positions**

Switch Position	Pedestal Outlet (standard)	Passenger Outlet - Left Side (optional)	Passenger Outlet - Right Side (optional)
OFF	0VDC	0VDC	0VDC
CREW	12.5 - 14.5VDC	0VDC	0VDC
ALL	12.5 - 14.5VDC	12.5 - 14.5VDC	12.5 - 14.5VDC

Figure 201 : Sheet 1 : 12VDC Power Outlet Components

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2610T7005  
 A2614T1374  
 B2614T1375  
 C2614T1376