

FLOODED LEAD-ACID BATTERY - SERVICING

1. General

- A. Some airplanes may be equipped with a 24.0 VDC, 45 ampere-hour lead-acid battery.

2. Description

- A. The battery is comprised of lead compound plates immersed in a diluted solution of sulfuric acid and water (electrolyte). Each cell has a nominal voltage of approximately 2.0 volts when fully charged. The cells are connected in series.
- B. The battery is equipped with overboard vent lines which connect to the vent fittings on the battery case.
 - (1) The battery case is located on the right side of the forward firewall. This case incorporates integral firewall hinges which allow the battery (and case) to swing out from the firewall.

3. Servicing

- A. Servicing of the flooded lead-acid battery is limited to adding distilled water to the individual cells and cleaning the battery box. For battery removal/installation, inspection, charging and cleaning procedures, refer to Chapter 24, Flooded Lead-Acid Battery - Maintenance Practices.

- (1) Adding Electrolyte.

WARNING: Do not allow lead acid deposits to come in contact with skin or clothing. Serious burns may result unless the affected area is washed immediately with soap and water. Clothing will be ruined upon contact with battery acid.

CAUTION: Do not add any type of battery rejuvenator to the electrolyte. When electrolyte has been spilled from a battery, the electrolyte balance may be adjusted by following instructions in the gill battery maintenance manual for lead-acid batteries.

- (a) Remove flooded lead-acid battery. Refer to Chapter 24, Flooded Lead-Acid Battery - Maintenance Practices.
 - (b) Remove battery caps.
 - (c) Observe electrolyte level in cells. Electrolyte level should be even with the horizontal baffle plate or split ring at bottom of the filler neck.
 - (d) If fluid level is low, add distilled water to obtain proper level.
 - (e) Replace battery caps.
 - (f) Inspect and clean battery box as outlined in step (2).
 - (g) Reinstall battery to airplane. Refer to Chapter 24, Flooded Lead-Acid Battery - Maintenance Practices.
 - (2) Cleaning The Battery Box.
 - (a) The battery box should be inspected and cleaned periodically. Use a strong solution of baking soda and water to clean the battery box. Remove hard deposits with a brush and flush thoroughly with clean water. The box should be thoroughly dried before installing battery.