



What type of cells would include both lead acid and nickel cadmium cells

Secondary cons

Secondary cells

Primary cells

Alkaline cells







The internal resistance of a battery affects its overall and efficiency





What is the role of the metal container in a primary cell battery

octs as anote terminal

It acts as the cathode terminal

It acts as the anode terminal

It acts as the electrolyte









A battery is designed with a metal electrode or graphite rod acting as the cathode (+) terminal, immersed in an paste



Which statement is true about primary cells

They can be recharged multiple times.

They involve an electrochemical reaction that consumes one of the metals.

They are primarily used in high-drain devices.











When the battery is in a discharge condition, an electrochemical reaction takes place resulting in one of the metals being consumed, making the charging process not

Reversible

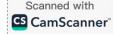


Which of the following statements about lead-acid car batteries is true

They consist of three lead-acid cells producing a total of 6 volts.

The positive electrode is lead peroxide, and the negative electrode is lithium.

Each cell produces 2 volts, so the whole battery produces a total of 12 volts.









A secondary cell is any kind of electrolytic cell in which the electrochemical reaction that releases energy is

Revessible



9. 117

What is contained within each cell of a lead-acid battery used in aircraft

Positive plates of copper and negative plates of aluminum

Positive plates of lead dioxide and negative plates of spongy lead

Positive plates of sulfuric acid and negative plates of water



The lead acid battery is constructed from a series of identical cells, each containing sets of positive and negative

What is the specific gravity of the electrolyte solution in a typical aircraft battery at 60 °F

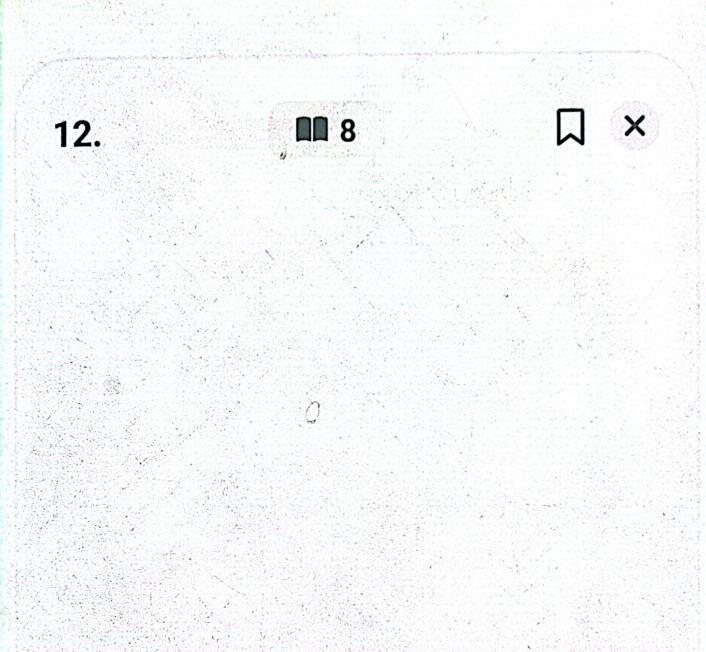
1.050

1.270

1 500

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A typical aircraft battery for starting requires a voltage of 90 or 24 volts







What happens to lead dioxide (PbO2) when the secondary cell is discharged

It remains unchanged.

It breaks down into negative oxygen ions and positive lead ions.

It converts directly into water (H2O).









When a secondary cell is discharged, electrons flow from the negative plate and cause lead dioxide (PbO2) to break down into



15.

What happens to the venting hole of a secondary cell battery during inverted flight

It allows gas to escape freely.

It is covered by the lead weight.

It becomes wider to release more gas.











In level flight, the lead weight permits venting of gases through a small

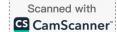
hole

What is the purpose of the vent tubes attached to the battery's nipples in an airplane

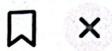
To supply electricity to the airplane

To neutralize battery gases and expel them safely

To monitor the battery's charge level



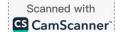




The battery is equipped with a vent tube nipple at each end, where one tube serves as the

tube exposed to the slipstream

other Exhust verit tube and attriched to frain sump







What happens to the amp-hour capacity of a battery when multiple batteries are connected in parallel

in Serves

A fortal vollage

Not increase

parallel 1 cmp-hour

It decreases

It increases

It remains the same





A battery with a capacity of 1 amp-hour should be able to continuously supply a current of 1 amp to a load for exactly

hour before becoming completely discharged





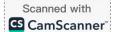


What is the term used to define the number of complete charge/discharge cycles a battery can perform before its normal charge capacity falls below 80% of its initial rated capacity

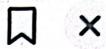
Battery life expectancy

Battery life cycle

Battery duration







Battery life cycle is defined as the number of complete charge/discharge cycles a battery can perform before its normal charge capacity falls below of its initial rated capacity

Show hint

What instrument is used to measure the specific gravity of the electrolyte in a lead-acid battery

Ammeter

Voltmeter

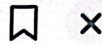
Hydrometer

to manusre Specdik gravely

The state of charge of a battery is indicated by the density of the

electrolyte





What specific gravity reading range indicates a medium state of charge in a Lead-Acid battery

A specific gravity reading of 1.300 indicates a high state of charge

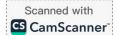


What is the current behavior in the constant voltage method during battery charging

The current remains constant throughout the process.

The current at the start is high but tapers off as charging progresses.

The current increases steadily until the battery is fully charged.









Batteries can be charged using either the constant

method or the constant current method

What is the active material in the charged positive plate of nickel-cadmium cells

Active maler, pichle hydrale (Moss)

(posnive place anose)

negative place carnel:

sponge and mirm (CS)

electrolyte potassium hydrate

(Nott)

Cadmium

Nickel hydrate

Potassium hydroxide





The electrolyte used in nickel-cadmium cells (Ni-Cad) is a

potassium hytronie (MoH) solution in a concentration of 20-34 percent by weight pure KOH in distilled water

