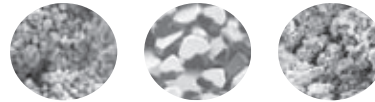


What is Sulfation (sul-fay-shun) and How Does It Affect Batteries?

When batteries are improperly maintained (over- under charged or left uncharged for extended periods) small crystals of sulfuric acid from the battery's electrolyte (liquid or paste) form on the battery's charge plates. They act as a resistor (barrier) preventing the battery from ever again accepting a full charge, no matter how long a charging source may be connected. Once this occurs, the cranking power of the battery is severely reduced, as well as its life. Aviation batteries are affected the most because they have been designed for maximum performance in the smallest-lightest size possible.

VDC Electronics has developed simple, but highly effective circuitry, able to safely dissolve sulfation, restoring much, if not all, of the lost power, providing the battery's cells are not shorted or structurally damaged. This U.S. Patented approach is believed to be the most effective method for eliminating even the oldest hardened sulfate. By generating safe, wide-band, random frequency electronic pulses, we are able to cover the full range of sulfate crystal sizes, in the shortest possible time. Depending on the amount of sulfate and its age, complete de-sulfation can occur within several days to several weeks. De-sulfation takes place automatically, while the battery is being bulk or maintenance level charged.

Note: All Aviation Specific BatteryMINDER models (12-V or 24-V) provide "full-time" de-sulfation. We guarantee to safely eliminate all sulfate from any non-commercial aviation battery meeting the criteria clearly stated in our Instruction Manuals.



1 2 3
Magnified views of battery plates

1. New battery
2. Sulfated plates - (note sulfuric acid crystals)
3. After de-sulfation (using high frequency pulses)

Sold and Serviced by:



Chance Aviation Service, Inc.
International Distributors of Aircraft Parts
4444 Decatur Blvd, Ste 1000
Indianapolis, IN USA 46241

Phone 888-823-0337
Fax 317-486-8805

<http://www.chanceaviation.com/>

BatteryMINDER® Aviation-Specific Maintenance Battery Charger - De-Sulfators



Now with NEW Plug 'n Run feature



VDC Electronics, Inc.
www.BatteryMINDers.com
techsupport@vdcelectronics.com
800-379-5579 x251 ET (M-F)



VDC Electronics now has available Aviation Specific versions of its 12-V and 24-Volt Maintenance Charger - De-Sulfator - Conditioners.

Our 12-V models 12248-AA-S2, S3 and 24-V models 24041-AA-S2, S3 are safe to use on all type and size Aviation Specific batteries, including both sealed and wet-cell constructions, contingent upon battery brand. The voltage settings and charge rates have been chosen, after conferring with leading aviation battery makers in the U.S. The 12248-AA-S3 is a specific charger-maintainer designed exclusively for Odyssey brand sealed lead-acid FAA-PMA Certified SBS-J16 and all other Odyssey 600 series sealed batteries. This model is officially approved by EnerSys, the manufacturer of the Odyssey - Hawker branded batteries. The 24041-AA-S3 is a specific charger-maintainer designed exclusively for Gill-Teledyne 24-V LT Series batteries. This model is officially approved by Gill and **MUST ONLY** be used with their LT Series and none other.

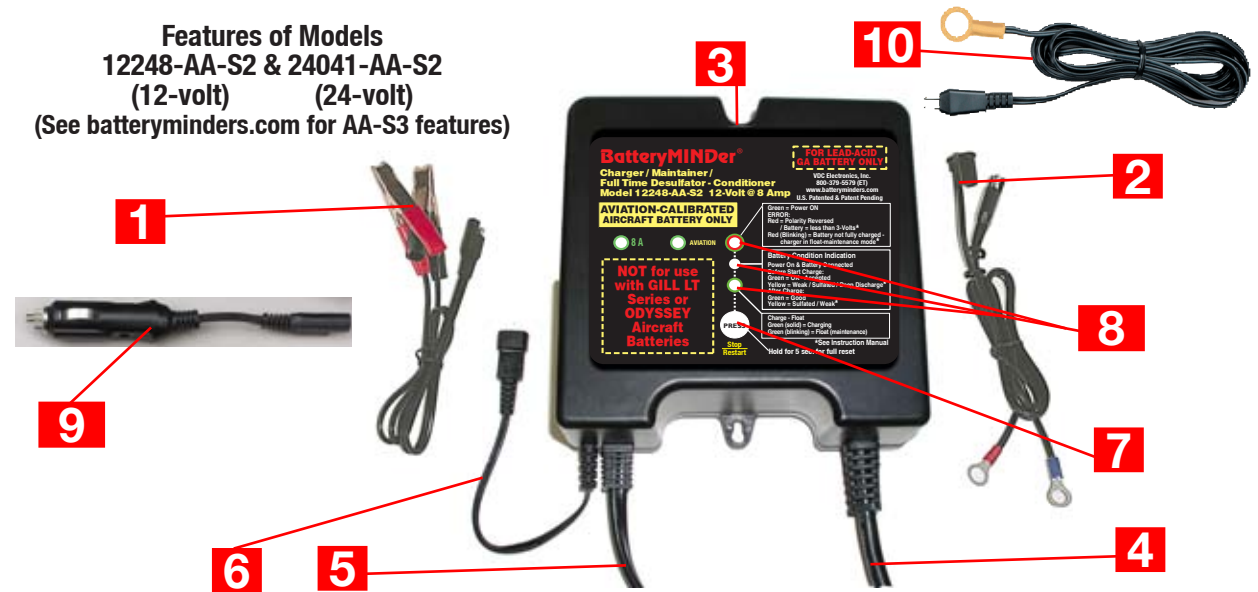
By providing each of these BatteryMINDer units with an "At-the-Battery" temperature compensating sensor, batteries can be safely charged and maintained for extended periods in temperature extremes from 32°F to 125°F. Without this type temperature sensing, batteries will be under-charged in colder temperatures (<70°F to 32°F) and over-charged in high temperatures (>80°F to 125°F).

All models include full-time pulsed de-sulfation circuitry designed to safely dissolve sulfation build-up on the battery's storage plates, restoring lost cranking power and extending life. Our de-sulfation method is fully automatic, does not use potentially damaging high voltage and is exclusively protected by two U.S. patents.

BatteryMINDer Aviation-Specific Models

- 12248-AA-S2: 12 Volt Plug 'n Run
- 12248-AA-S3: 12 Volt Plug 'n Run, exclusively for Odyssey
- 24041-AA-S2: 24 Volt Plug 'n Run
- 24041-AA-S3: 24 Volt Plug 'n Run, exclusively for Gill-Teledyne 24-V LT Series

Features of Models 12248-AA-S2 & 24041-AA-S2 (12-volt) (24-volt) (See batteryminders.com for AA-S3 features)



- 1) Battery clip cordset with quik-connect plug (fused)
- 2) Ring terminal cordset with quik-connect plug (fused)
- 3) Mounting tabs
- 4) Input power cordset
- 5) Output cord with quik-connect plug
- 6) Temperature sensor input connector
- 7) STOP/RESTART selection button
- 8) LED indicators for power, connection, fault, battery condition, charge status
- 9) 12/24 Volt Power Plug (Optional)
- 10) Temperature sensor with cord and ring terminal (supplied)

PLUG 'N RUN FEATURES:

- For all size and type 12-Volt and 24-Volt aviation batteries (or two 12-V in series = 24-V) including sealed AGM-maintenance-free and filler cap maintenance type
- Guaranteed never to over-charge, regardless of time or temperature (32°F - 125°F) with ABS-248 temperature sensor correctly installed
- Auto-selection for charge rate and battery types ensures 100% compliance with major aviation battery makers' specifications
- Auto-restart after a power failure
- Safely charges up to 200% faster than conventional chargers
- Maintains from 1 - 6 batteries at a time (parallel connected)
- Automatically dissolves power-robbing sulfation using safe low voltage pulse technology (U.S. Patented)
- Microprocessor controlled pulsed output ensures 100% full charge

- Temperature compensation extends battery life by more than 200 Cycles (full charge-discharge cycles) with ABS temperature sensor¹
 - High efficiency design = low monthly operating cost of less than 50¢²
 - Weather-proof enclosures
 - Optional 12 or 24 Volt PowerPlug (fused) allows charger to be easily connected to battery via input 12-V or 24-V power receptacles
 - 1 year 100% money-back guarantee + five (5) year "no hassle" warranty³
- Size/Weight: 5-1/2" L x 5-1/2" W x 2 1/4" H / 3.0 lbs.

¹ When compared to chargers without an "at-the-battery" sensor

² Based on running 24-7 at an electricity cost of 18 cents / Kilowatt Hr.

³ We guarantee to significantly increase both your battery's life and performance or we will refund 100% of the price you paid, including tax, shipping and handling

What is Sulfation (sul-fay-shun) and How Does It Affect Batteries?

When batteries are improperly maintained (over-
under charged or left uncharged for extended
periods), small crystals of sulfuric acid from the
battery's electrolyte (liquid or paste) form on the
battery's charge plates. They act as a resistor
(barrier) preventing the battery from ever again
accepting a full charge, no matter how long a
charging source may be connected. Once this
occurs, the cranking power of the battery is
severely reduced, as well as its life. Aviation
batteries are affected the most because they have
been designed for maximum performance in the
smallest - lightest size possible.

VDC Electronics has developed simple, but
highly effective circuitry, able to safely dissolve
sulfation, restoring much, if not all, of the lost
power, providing the battery's cells are not
shorted or structurally damaged. This U.S.
Patented approach is believed to be the most
effective method for eliminating even the oldest
hardened sulfate. By generating safe, wide-band,
random frequency electronic pulses, we are able to
cover the full range of sulfate crystal sizes, in the
shortest possible time. Depending on the amount
of sulfate and its age, complete de-sulfation can
occur within several days to several weeks.

OUR GUARANTEE: We guarantee to safely
eliminate all sulfate from any non-commercial
aviation battery meeting the criteria clearly stated
in our Instruction Manuals.



Magnified views (588X) of battery plates

1. New battery
2. Sulfated plates - (note sulfuric acid crystals)
3. After de-sulfation (using high frequency pulses)

Sold and Serviced by:

BatteryMINDer®

28252-AA

28-Volt @ 25 Amp Avionic Power Supply / Charger - Maintainer - Desulfator



VDC Electronics, Inc., USA
www.BatteryMINDers.com
techsupport@vdcelectronics.com
800-379-5579 x201 ET (M-F)
Outside of U.S. & Canada:
+1 631-445-1064 ET (M-F)



This newest BatteryMINDer allows the "full on" use of glass panel avionics continuously, without ever draining the batteries. Its high efficiency design supplies full voltage (28-V) even when connect to a 200' #16 gauge extension cord. In the battery charge mode it is capable of recharging a "flat", fully discharged, 30 AH battery in as little as one (1) hour".

Because it truly charges aviation specific batteries to 100% capacity, they have the very best chance of passing their annual airworthiness test. With the optional high frequency pulse type desulfation feature, marginal batteries can be safely improved, sufficient to ensure their passing as well.

Its ease of operation (plug 'n run) will be appreciated by both owners and mechanics. Auto input voltage selection, detachable input cord set receptacle and Power Factor Correction (PFC) efficiency allows unit to be used worldwide, automatically adapting to any country's voltage system.

Lightweight (< 8 lbs.), small footprint, large backlit LCD display, cord storage arms and multiple output plug attachment options, make this the easiest to use device of its kind.

We think it is noteworthy to point out the 28252-AA was designed in very close concert with the world's leading aircraft battery manufacturer, here in the U.S.A.

Lastly it is backed by a 5-Year "no hassle" 100% parts and labor warranty.



BatteryMINDer® Model 28252-AA



1. Lightweight (<8 lbs.) Heavy Duty Construction
2. Large LCD Screen Display
3. Cord Storage For Both Input & Output Cords
4. 14' Output Cord with Anderson-type 50 Amp Connector
5. Easy Plug 'N Run Operation

Battery Connectors



1. **ABS-2825:** Temperature/Voltage Sensor (At-the-Battery Sensor) (included)
2. **A2ELCON:** Anderson SB-50 Gray to ELCON (optional)
3. **A2RT:** 11/32" Ring Terminals (optional)
4. **ELCTC:** ELCON Type Connector (optional)
5. **A2GPU-1:** Anderson SB-50 to Cessna style GPU Plug (optional)

PLUG 'N RUN FEATURES:

- 28-Volt Power Supply - eliminates battery drain when operating all glass panel avionics.
- Supplies full power to all electronics to ensure correct outputs, even when connected to a 200' #16 gauge extension cord.
- Ensures fast, yet safe, full charge to aviation specific batteries'.
- Capable of charging a fully discharged 30 AH battery in one (1) hour".
- Plug 'n Run - no need to set charging parameters. Auto Restart if power fails.
- "At-the Battery" temperature sensor - ensures full charge regardless of temperature (0 - 125°F). Allows unit to be left connected to batteries for extended use or maintenance storage, without overcharge.
- High Frequency desulfation mode - dissolves sulfate without deteriorating battery plates.
- Uses high frequency, not high voltage, current pulses".
- Configured for Standard Aviation Batteries with additional precision settings for Concorde, Gill 7000 Series, Odyssey and Hawker Batteries.
- Large LCD Screen (white backlit) displays all important status information.
- ECO Mode reduces electrical consumption when in maintenance - float charge mode.
- Worldwide capability - with auto input of 108-230 Vac 50/60 Hz. w/Power Factor Correction (PFC). Detachable input cord receptacle allows choice of country specific cord-plug sets.
- Voltage balancing for two (2) 12-V series-connected batteries, preventing under-overcharge of either.
- Modified cell equalization Stage 4 (Pat. Pending) conditions battery prior to capacity testing.
- Recovers deeply discharged batteries and many of those failing FAA 80% capacity test.
- Multiple safety protection against output short circuit, reverse polarity, thermal runaway.
- Extremely lightweight; < 8 lbs.
- Designed to UL, CE, FCC, EMC safety agency standards.
- Five (5) year 100% parts and labor "no hassle" warranty.

* FAA-PMA Certified Lead-Acid
 ** To 85% of rated capacity
 *** U.S. Patented.