

WHY BATTERIES FAIL

When a lead acid battery is discharged either from use or simply sitting idle, a soft lead sulfate material forms on the battery plates. During the battery's recharge, this material is lifted off the plates and recombined into the battery's electrolyte solution. If, however the battery is left in a partial state of discharge for as short as 70 hours, the lead sulfate begins to harden and crystalize forming a permanent insulative barrier. As this barrier becomes thicker and thicker, the battery's ability to accept a charge or delivery energy is drastically diminished, resulting in the PERCEPTION that the battery is no longer useable. The accumulation of such deposits, otherwise know as *sulfation* is the most preventable destructive process in the useful life of lead acid batteries. Eighty percent of all lead acid battery failures are a direct result of *sulfation*.

ELIMINATE SULFATION AND EXTEND BATTERY LIFE

Finally a real solution to the wasting of MILLIONS of dollars on unnecessary replacements of lead acid batteries. It's the DeSulfator Sweeping Pulse Process from IES.

Using it's patented SWEEPING PULSE process, the T-360 DeSulfator will electronically condition new and old batteries keeping them free of sulfation and in peak operating condition. This greatly extends the life of all your 12 volt batteries.

2 YEAR LIMITED WARRANTY

Built tough for high reliability DeSulfator Battery Conditioners have no moving parts to wear and are warranted on performance and against defects for two years. This device generates no heat, high voltage danger, audible noise, and can in no way harm the battery itself.

T-360 is designed for use on any 12 volt battery that is not used on a regular basis.



“Every year thousands of batteries are replaced unnecessarily because they are thought to be defective when in fact they are simply suffering from the capacity robbing effects of sulfation.”

APPLICATIONS

RECREATIONAL VEHICLES
 FARM TRACTORS
 LAWN & GARDEN EQUIPMENT
 WHEEL CHAIRS
 CONSTRUCTION EQUIPMENT
 FISHING BOATS
 PERSONAL WATERCRAFT
 SPORT BOATS
 MOTORCYCLES & ATVs
 ELECTRIC VEHICLES
 COLLECTORS CARS



T-360

BATTERY CONDITIONER/MAINTAINER

The DeSulfator T-360 is the portable member of the DeSulfator family of products from Innovative Energy Systems. It's patented "Sweeping Pulse Technology" dissolves sulfation in all lead acid batteries while providing a maintenance charge to help assure not only a fully DeSulfated battery but a fully charged one as well. Every year thousands of batteries are prematurely replaced because of the performance robbing effects of sulfation.

Use of the T-360 will enable weak and dead batteries to regain their performance levels and provide a longer service life in all your lead acid batteries.

THE PROBLEM:

As a battery sits idle, it discharges between 5 to 20 percent of its capacity per month. As it discharges, it sulfates. In as little as 70 hours in a discharged state, the sulfation begins to harden and form an insulating barrier on the battery plates. The longer the battery sits the thicker this barrier becomes thus limiting its ability to accept or deliver energy. Eventually the battery will only have a small percentage of the power it did when it was new.

THE FIX:

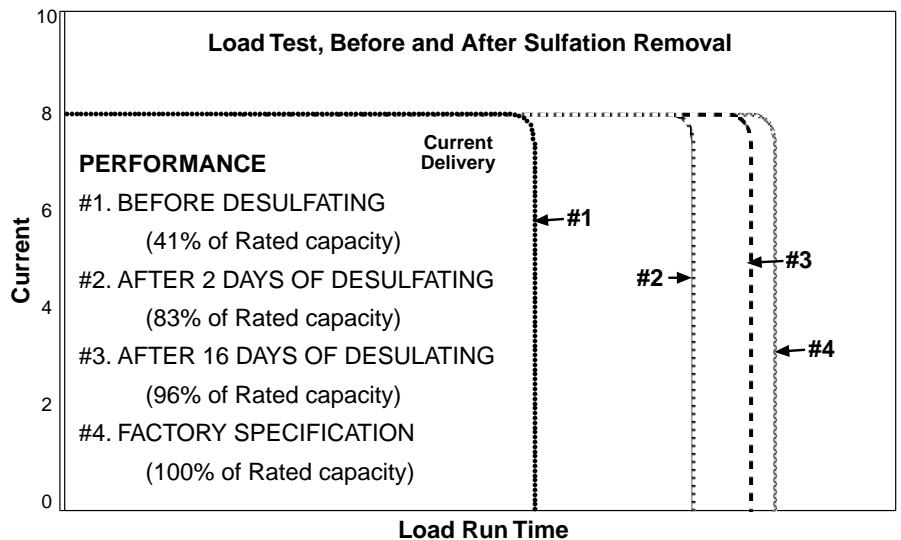
By installing the DeSulfator T-360, a sweeping pulse of energy is emitted into the battery. The frequency at which these pulses are emitted are tuned to excite the structural components of the sulfate deposits. This process enables the sulfation to revert back into the electrolyte solution. NO OTHER PROCESS EXISTS TO ACCOMPLISH THIS TASK.

In as little as 48 hours the batteries potential to accept and deliver energy is significantly improved. Most all of the batteries available capacity is restored after 16 days.

USE OF THE DeSULFATOR WILL:

- Condition battery without the damaging effects of equalization
- Increase battery life
- Increase battery performance
- Increase reliability of equipment
- Decrease battery replacement costs

Typical Performance Increase of a Heavily Sulfated Battery



T-360 SPECIFICATIONS

PULSE FREQUENCY (Hz): 10,000 - 100,000

VOLTAGE (input): 120 VAC (220V available)

POWER OUTPUT (max): 200 milliamps @
12 Volts

Available in 12, 24 & 36 VDC

LEAD LENGTH (output): 6 feet
(input): 25 feet

INNOVATIVE ENERGY SYSTEMS

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