

BATTERY KNOWLEDGE boost

DID YOU KNOW?

High Temperatures Can Cause Premature Battery Failure



Batteries that are exposed to high temperatures often experience failure due to accelerated internal corrosion of the battery and evaporative electrolyte loss through increased off-gassing.

Here are some common scenarios that can cause battery failure from high temperatures:

- **Vehicle operation during times of high ambient temperatures (heat waves).**

- **Overcharging of the battery from faulty charging system.**

- **Lack of proper heat shielding for the battery.**

FUN FACT

Average under hood temperatures are higher than they used to be due to the wide implementation of smaller engine compartments and forced induction systems (turbo/superchargers) in many vehicles. These changes provide better fuel economy and power output at the expense of increased heat under the hood; this is why many batteries may require heat shielding or remote placement.

Have you seen one of these before and wondered what its purpose was?



This is a **Thermal Wave Barrier**; it helps reflect engine heat away from the battery to ensure the anticipated life expectancy from the battery. **If you see a thermal wave barrier on the old battery, it is important to transfer it over to the new battery you are installing.**

If a manufacturer has placed a thermal wave barrier on the battery, it means the battery's position in the vehicle requires it to have additional protection from high temperatures. This barrier prevents the battery from unnecessary exposure to extreme heat under the hood.