Service Bulletin

Bulletin No.: 23-NA-044
Date: August, 2024

INFORMATION

Subject: **AGM Battery Frequently Asked Questions (FAQs)**

Brand:	Model:	Model Year:		VIN Breakpoint:		Engine:	Transmission:
		from	to	from	to		
Buick	GM Passenger Cars and Trucks (including Medium Duty)	2013	2025	—	—	All	All
Cadillac							
Chevrolet							
GMC							

Involved Region or Country	North America

Summary

Important: Service agents must comply with all International, Federal, State, Provincial, and/or Local laws applicable to the activities it performs under this bulletin, including but not limited to handling, deploying, preparing, classifying, packaging, marking, labeling, and shipping dangerous goods. In the event of a conflict between the procedures set forth in this bulletin and the laws that apply to your dealership, you must follow those applicable laws.
The AGM battery is maintenance free, lighter, has a longer life, and provides more electrical reliability in comparison to a flooded battery. GM primarily uses this battery in Stop/Start applications as these benefits provide ideal durability against the repeated on/off vehicle cycling.

Additionally, AGM batteries require less frequent charging in storage. While flooded batteries need a topping charge every six months if out of vehicle to prevent the buildup of sulfation, AGM batteries can sit in storage longer and are less susceptible to stratification before charging is required. AGM batteries charge at a lower voltage than flooded by normally 2V less. Only use a charger with an AGM setting to avoid over-charging an AGM battery.

Frequently Ask Questions (FAQs)

Q1. What does AGM Stand for?

A1. Absorbent Glass Mat.

Q2. Can an AGM battery leak?

A2. AGM batteries are spill-proof. An AGM battery electrolyte solution is kept in place, being absorbed by the glass mat which prevents it from flowing freely.

Q3. What is the benefit of a spill-proof design?

A3. AGM can be installed in more confined spaces or applications with more intense vibrations.

Q4. What if I believe an AGM is leaking?

A4. Liquid near the vent hole may seem like it is leaking due to condensation, but this would not be the result of a manufacturing defect.

Q5. Where is the vent hole located?

A5. It can be on either side of the battery.

Q6. What is considered normal venting?

A6. Lead (Pb) acid batteries always vent Hydrogen (H) gas, it is a normal part of the charging process. When the battery gets hot that electrolyte vapor also escapes past the vent valve and out the hole, also a normal result of a hot battery.

Q7. What if it's leaking near a post?

A7. Technicians may want to check the battery post for damage due to excessive torque of the battery post(s). AGM is under pressure and works with a couple pounds per square inch (PSI) and if a cell has been comprised, it will go dead soon.

Q8. Does GM approve warranty replacement of leaking AGM batteries?

A8. Per design, GM does not recognize an AGM battery as capable of leaking.

Q9. How are AGM batteries better than flooded?

A9. AGM batteries have a low internal resistance which helps maintain voltage output for longer periods of time. Other battery types lose power when resistance is high and excessive heat is generated.

Q10. What is the charge time of an AGM VS Lead Acid?

A10. AGM batteries have been found to charge faster than flooded Lead (Pb) acid batteries. Since power is not dissipated due to the low internal resistance in AGM batteries, these batteries reach full charge quicker.

Q11. What is the expected service life?

A11. In comparison to flooded batteries, customers can expect longer service life in an AGM battery. Service life will vary depending on the application. For example, AGM batteries in a Stop/Start application will likely have a shorter service life than in a non-Start/Stop application.

Q12. What is an AGM's cold temperature tolerance?

A12. AGM batteries are more susceptible to cold temperatures compared to flooded batteries.

An AGM battery freezes easier at lower state of charge (SOC). Depending on battery size, anything under 50% SOC is prone to freezing.

Q13. What causes an AGM to fail?

A13. One of the main reasons is undercharging, and long-term discharge that can cause Hydration Failure. Overcharging and heat is also a common failure. Ensure your diagnostic charger is in the right mode for AGM.

When charging/testing with a diagnostic charger (e.g., DCBS), be sure to correctly select the AGM battery type and enter the AGM battery's CCA to prevent overcharging.

When AGM batteries are overcharged, the electrolyte is consumed. Overcharging causes the temperature to rise, which can easily affect the electrolyte saturation level and make the separator less efficient, damaging the battery.

Q14. Is Hydration an issue with AGM?

A14. Yes, Hydration is the result of an AGM battery sitting for extended periods at a low state of charge. The rate at which Hydration sets in depends on the depth of discharge and ambient temperature.

Q15. Can Hydration be reversed?

A15. No, once Hydration is present in a battery the condition cannot be reversed and the battery must be replaced.

Warranty Coverage is ineligible for batteries that fail because the dealership did not properly maintain inventory vehicles as per Service Bulletin 21-NA-043 within a timely manner.

Q16. Any other disadvantage to an AGM Battery?

A16. These batteries are sensitive to charging and heat. It is important to keep the state of charge of the battery above 80% and use the correct mode on the diagnostic charger.

Q17. Do pre-sale inventory with AGM batteries still need to be maintained?

A17. Yes. For dealers in the U.S., charge the battery only if a charge is required per your Battery Maintenance Report. Refer to Service Bulletin #22-NA-115: Battery Maintenance Report FAQs for further information. For Dealers in Canada, follow procedure outlined in Service Bulletin #21-NA-043: Properly Maintaining Vehicles in Dealer Inventory.

AGM Battery Example

Below is an example of a good AGM Battery that the dealership replaced because they felt it was leaking.

- The battery was visually inspected for cracks around the post and bushing. No cracks were found.
- During inspection, battery tested good and cell 6 was pressurized with 3 psi; no leaks were detected.

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- The negative post is next to the battery exhaust port for all 6 cells. Moderate acid staining was found around the negative post, which is plausible due to gas emitted from the vent port, creating acid staining around the post as shown in the picture above.

Version	2
Modified	Released March 10, 2023 Revised August 16, 2024 – Added the 2024-2025 Model Years and added information under Summary.