AGM Batteries are
Clearly marked on case.

Asleep at the Switch or how I learned about AGM Batteries!

Sometimes after a big meal I will put my feet up and miss a big chunk of a movie. It appears that I may have put my feet up when they passing out the information on AGM Batteries.

Todays Vehicles have a much larger electrical infrastructure to support than those of their predecessors. They have an lot of stuff that keeps on going even after you turn the Vehicle off. This dictated the use of the AGM Batteries. Typically they have more capacity, are more rugged, can cycle deeper, and last longer. They are totally sealed and that gives Car Builders the opportunity to mount them in the worst place possible and build a car around them.

AGM stands for Absorbed Glass Mat, which describes the fundamental difference in the way they are made. Instead of plates suspended in a bath of Acid, you have more plates isolated by Glass Mats which are saturated with Acid. This means more plates can be installed in the same area as the tractional flooded Battery. If you have ever picked one of these Batteries up you will notice that they are heavier than their flooded counterparts. This all sounds wonderful however this does not come without a bit of unique quirks.

Probably the most concerning of these quirks is the fact that if you draw them down to a very low state of charge, they don't want to charge back up. This can be vey concerning when you have $150 tied up in a Battery. The recommended fix is to jumper them to a charged Battery and then connect the Charger across both. This fix has more to do with the Battery Charger than the Batteries. The majority of todays Chargers employ some form of pre programmed control and they will not charge when connected to a Battery below a certain level of charge. This little Tap Dance fools the Charger into going into the Charge Mode. You might think that connecting up to Grandpa's old fashioned Battery Charger might do the trick however that may not be the case. These Batteries liked to be charged a bit differently and todays Vehicles and Chargers have specific methods for charging AGM Batteries. If you are in the Market for a new Charger be sure to get one that has a mode for charging the AGM style batteries.

If there is good news here it may be in the fact that the new generation of "Smart Chargers" are not particularly expensive and many of them have built in features that can actually repair batteries that may have Sulfated. Recently I connected one of these Smart Chargers to a Battery I though that I might have to replace. It took several days however after doing whatever it does it finally came up to a full charge.

Testing has seen a new wrinkle or two, I like the old school Load Test where you connect the battery to a device with a big resistor inside. You measure the Voltage with and without the load, pretty much the end of story. However many folks now days use the Open Circuit Voltage test by simply measuring across the terminals of the battery. I will include a chart for that.

% Charge	Flooded	AGM
100	12.7-12.6	12.8 or >
75	12.4	12.6
50	12.2	12.3
25	12.0	12.0
0	11.8	11.8

It looks we need to get use to this type of Battery since it is the way the industry is headed. I hope this article sheds a bit of light on the AGM battery.