

General information for service staff on AGM batteries

The note the following points when handling AGM batteries:

- Charging
- Installation location
- Housing
- Battery renewal

Charging

Caution: Do not charge AGM batteries with ≥ 14.8 volts. Do not use rapid-charging programs!

When recharging batteries that have been removed (so-called stand-alone batteries), the maximum charge voltage of 14.8 volts at room temperature must not be exceeded. Similarly, when recharging using a battery-positive support point, the maximum charge voltage of 14.8 volts at room temperature must not be exceeded.

Applying a charge voltage greater than 14.8 volts to recharge an AGM battery, even only briefly, will result in concealed damage to the battery. A charge voltage greater than 14.8 volts is mainly used in quick-charge programs.

Only recharge the battery with a battery charger that has been approved by BMW.

If the battery is to be recharged while it is still installed, it must be recharged using the battery-positive support point. On vehicles with intelligent battery sensor, it is then certain that recharging is correctly recognised by the vehicle electronics.

On vehicles with intelligent battery sensor, the battery charge state could be misinterpreted if the battery is recharged directly at the battery terminals. Under certain circumstances, it may even happen that unnecessary Check-Control messages appear or that fault memory entries are stored.

The battery temperature should be between 15 °C and 25 °C during recharging. Under these conditions, the battery is adequately charged when the charge current drops below 2.5 amps.

If the battery is recharged at low temperatures, recharging must not be ended until the charge current drops below 1.5 amps.

Installation location

Caution: Do not install AGM batteries in the engine compartment.

Because of the great temperature differences, AGM batteries must not be installed in the engine compartment. This would result in a significant reduction in the battery's service life.

Housing

Caution: Do not open AGM batteries.

On no account may AGM batteries be opened, as the ingress of oxygen from the atmosphere would cause the battery to lose its chemical balance, rendering it unserviceable.

Battery renewal

In principle, any conventional lead-calcium battery can be exchanged for an AGM battery. The use of an AGM battery has no consequence for the vehicle's electrical circuit.

Note: AGM batteries are especially recommended for "problem customers".

"Problem customers" have a very high energy throughput through the battery. The high energy throughput is caused by auxiliary consumers (TV, independent heating, etc.) and a use profile that is

unfavourable for the battery ("chauffeur operations", short distance driving, "stop-and-go" driving). AGM batteries are recommended for such problem customers.

In principle, the battery must be registered with the BMW diagnosis system after every battery change.

Note: After changing the battery, register the new battery with the BMW diagnosis system.

If the service function "Register battery change" is not run after changing the battery, the data stored in the power management will not be reset. The battery quality will then correspond to an older battery. The value for the battery quality is insufficient for the battery installed. The battery charge state may then be misinterpreted and unnecessary Check-Control messages may appear or fault memory entries may be stored (e.g. the Check-Control message "Recharge battery" even though the battery fitted is new and fully charged).