

Recommended Shop Chargers

ODYSSEY® batteries are AGM batteries with a Thin Plate Pure Lead (TPPL) design. They have very low internal resistance, which allows them to be recharged with high current. The charge requirements for the batteries are as follows:

- Minimum current = 10% of C10 rating
- Recommended current = 40% of C10 rating
- Maximum current = 100% of C10 rating

Example: ODX-AGM31 battery has a C10 rating of 98 Amp Hours (Ah)

- Minimum current = 10 Amps
- Recommended current = 40 Amps
- Maximum current = 100 Amps

The charge time required to fully charge a battery is dependent on Depth of Discharge (DOD) and available charge current.

Example: ODX-AGM31 battery that is completely discharged (Open Circuit Voltage = 11.2V), 98 Ah (C10 rating) needs to be returned to the battery.

- If charge current is 100 amps, charge time = 1 hour
- If charge current is 50 amps, charge time = 2 hours
- If charge current is 10 Amps, charge time = 10 hours

Additionally, since they are sealed batteries, the charge profile used must be appropriate for AGM batteries to be sure they are not overcharged or undercharged. A flooded charge profile should never be used on an AGM battery.

Below is a listing of shop chargers that have been validated as adequate to be used with TPPL batteries.

- ODYSSEY Shop Chargers OSC-105A (100 amps), OSC-70A (70 amps) and OSC-35A (35amps)
- Associated N6366 (4 channels X 20 amps/channel)
- Associated IBC6008 (60 amps)
- Autometer BUSPRO 420 (4 channels X 20 amps/channel)
- Autometer BPC-100 (100 amps)

Disclaimer: This listing can be modified as necessary. Contact EnerSys Technical Support at 1-800-964-2837 for more information.