



DEALER REFERENCE GUIDE

AGM vs. Flooded Batteries for Hydraulic Boat Lifts

Why upgrading from standard flooded lead-acid to AGM is one of the best dollar-for-dollar improvements you can recommend to your boat lift customers.

The Upgrade That Pays for Itself

For only **\$50–\$75 more** than a standard flooded battery, an AGM deep cycle delivers dramatically better performance for hydraulic boat lifts. Faster recharge from solar, higher voltage under heavy pump loads, deeper usable capacity, and zero maintenance. It's not a luxury upgrade — it's the right battery for the job.



150–300A

Hydraulic pump demand



2–3x

Faster solar recharge



60%

More usable power



Zero

Maintenance required



Spill-Proof

Sealed — no acid leaks



3–5 Seasons

Typical AGM lifespan

Why This Matters for Your Customers

Hydraulic boat lifts are demanding. The pump motor draws 150–300A in short, intense bursts. Standard flooded batteries struggle — voltage sags, solar recharge is slow, water levels get neglected, acid can leak. AGM solves every one of these problems at a price that's easy to recommend.

Why AGM Outperforms Flooded Lead-Acid

Performance at a Glance

	AGM	Flooded
Voltage Under Load	9/10	5/10
Solar Recharge Speed	8.5/10	4/10
Usable Capacity (DOD)	8/10	5/10
Vibration Resistance	9/10	5/10
Maintenance Ease	10/10	4/10
Spill Safety	10/10	3/10

The Details



Superior High-Current Discharge

AGM holds voltage much more steadily under heavy loads. When a hydraulic pump pulls 150–300A, a flooded battery sags dramatically. AGM delivers consistent power — the motor runs faster, cooler, and more efficiently. Your customers will notice the difference immediately.



Faster Solar Recharge — Like a Bigger Panel

AGM's lower internal resistance means it accepts charge more efficiently. **The same 20W or 30W solar panel brings an AGM to full charge 2–3x faster than flooded.** It's effectively like upgrading the solar panel without spending a dime more on equipment.



60% More Usable Power

AGM can safely discharge to 80% DOD vs. only ~50% for flooded. A 100Ah AGM gives you ~80Ah usable. A 100Ah flooded gives you only ~50Ah. Same size battery, dramatically more usable energy.



Zero Maintenance — Install and Forget

No water checks, no acid topping, no corroded terminals. Completely sealed. In a dock-mounted pump box customers rarely open, this means the battery actually lasts its full rated life instead of dying from neglect.

Usable Capacity: Why Size Isn't Everything

Both batteries are rated 100Ah. But how much can you actually use?



AGM delivers **60% more usable energy** from the same rated capacity because it tolerates deeper discharge without damage.

■ The Solar Charging Reality

When using solar panels on boat lifts — even without a charge controller — the output stays within the **trickle charge range**. You're charging at roughly 1/75th to 1/100th of capacity. Precise voltage regulation isn't critical at these rates.

Don't get hung up on voltage differences between AGM and flooded for solar. Those matter with high-powered AC chargers, not gentle dock panels. AGM's lower internal resistance captures that trickle **more efficiently** — that's the real advantage.

Solar Recharge Speed Comparison



Approximate time to full charge from 50% SOC with a typical 20–30W dock-mounted solar panel.

Additional AGM Advantages

- ✓ Spill-proof — no liquid acid, even if case cracks
- ✓ Mount in any orientation — even on sides in tight pump boxes
- ✓ Vibration resistant — compressed glass mat holds plates firm
- ✓ No off-gassing — safe in enclosed pump box
- ✓ Lower self-discharge — holds charge longer between uses

★ Skip the Markup, Keep the Performance

Major brands like Optima and Duracell charge **\$300–\$400+**, backed by pro-rated warranties that deliver very little real value. Meanwhile, **WEIZE** and **Mighty Max** on Amazon offer Group 24/27 AGM for **\$130–\$190**. For only \$50–\$75 more than flooded, the performance gains are massive.

Cost Comparison by Brand Tier

WEIZE / Mighty Max (AGM)		~\$130–\$190
Standard Flooded		~\$80–\$120
Premium AGM (Optima, etc.)		~\$300–\$400+

What Your Customer Saves

VS FLOODED	VS PREMIUM AGM	10-YEAR SAVINGS
\$50–\$75	\$150–\$250	\$300–\$600+
More upfront — that's it	Saved per battery	Over premium AGM brands

A Note on the Industry

Many dealers don't recommend AGM — not because of performance, but because of **profit margins**. Premium batteries carry significant markup. Some suppliers benefit when a standard battery fails just past warranty, generating a repeat sale.

Pro-rated warranties protect the manufacturer, not the consumer. A battery failing at 18 months into a 36-month warranty nets the customer \$50–\$75 back after hassle. A \$150 WEIZE AGM lasting 4 seasons has already paid for itself.

Quick Facts: AGM for Boat Lifts

- AGM internal resistance is as low as **2%** vs. **10–15%** for flooded batteries
- Industry sources report AGM can charge **up to 5x faster** than flooded with high-powered chargers; with solar trickle charging expect **2–3x faster**
- AGM tolerates **80% depth of discharge** vs. 50% for flooded — that's 60% more usable energy from the same battery
- Sealed construction means **no acid leaks, no watering, no off-gassing** — safe for enclosed pump boxes over water
- Value brands (WEIZE, Mighty Max) deliver the same AGM technology as \$400 premium brands for **\$130–\$190**

Real Cost Over Time

	AGM (Value)	Flooded	AGM (Premium)
Price	\$130–\$190	\$80–\$120	\$300–\$400+
Life	3–5 seasons	2–3 seasons	3–5 seasons
Usable Ah	~80%	~50%	~80%
Maintenance	None	Water checks	None
10-Yr Cost	\$260–\$570	\$270–\$600	\$600–\$1,200+
Cost/Season	~\$35–\$50	~\$40–\$60	~\$75–\$130

Talking Points

“Why Should I Upgrade to AGM?”

- Your hydraulic pump needs consistent voltage — AGM holds up better under heavy loads
- Your solar panel recharges the battery 2–3x faster — like a free panel upgrade
- You get 60% more usable power from the same size battery
- No more checking water levels — sealed and maintenance-free
- No risk of acid leaking into your pump box or the lake
- For only \$50–\$75 more, it's one of the best upgrades you can make

On Brands:

- WEIZE and Mighty Max on Amazon — \$130–\$190 for Group 24/27 AGM
- Same core technology as \$400 premium brands, without the markup
- Proven reliability over multiple seasons in boat lift applications

The Bottom Line: For hydraulic boat lifts, AGM is the right call. Recommend **WEIZE** or **Mighty Max** — premium performance at a fraction of the dealer price.

THE VERDICT: AGM Wins for Hydraulic Boat Lifts

Better performance • Lower total cost • Zero hassle

9/10

Performance

Voltage, recharge, capacity

9/10

Value

\$35–\$50 per season

10/10

Reliability

Sealed, zero maintenance

Verify battery group size for the specific pump box. Pricing approximate. Brand recommendations based on field experience.

[Lake Lifter — Dealer Reference Document](#)