

Service Bulletin: SHS-2020-001 Rev: 01

30100 Cabot Drive Novi, MI 48377 USA Phone: (248) 553-1000 www.daifuku.com

Date: 11-05-2021

Dear Customer,

This memo covers the Long Term Storage procedure in the event your AGC/AGV system is out of use for longer than 2 weeks. Please refer to your O & M Manual, Manufacturer manuals and the text below to properly store your vehicles (or carts). In some cases, the text below may provide additional information not included in your current documentation.

Long Term Storage of AGCs & AGVs

Follow the recommendations below if your AGC or AGV is not to be used for an extended period (i.e. longer than two weeks):

- Fully charge the batteries, and then disconnect and lock out the batteries from the vehicle.
 Removing the batteries from the vehicle is not mandatory, but they can be used as replacements for another vehicle.
- Batteries should be checked for voltage every week using a multimeter and without connecting the batteries to the vehicle. Periodic maintenance charging may be required to maintain a proper storage voltage of:
 - o Minimum of 25.2V for 24V systems
 - o Minimum of 50.4V for 48V systems
 - o Minimum of 100.8V for 96V systems
- If proper care is not taken, batteries can be permanently damaged.
- Check batteries connected in vehicle every 15 days, charge as necessary.



Vehicles in storage should be fully charged and operated once every six months.

- Lubricate the vehicle as described in the Operators and Maintenance manual.
- Cover the vehicle with plastic or other suitable covering material, being careful to allow sufficient airflow to prevent condensation.
- Safely lift the cart/vehicle high enough off the floor to clear the wheels by at least 1". Block the vehicle, making sure it is stable; getting the vehicle off the floor is necessary to avoid flat spots from developing on the tires/casters.



Check all wheels, as spring loaded wheels may not lift with the rest of the vehicle.

For questions or concerns regarding this service bulletin, call Webb Customer Service at 877-JBWEBB1 (877-529-3221) or email at webbservice@jerviswebb.com.

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The warranty is void if the battery is not properly maintained.

NexSys Batteries:

- Batteries are dispatched from the manufacturer in a fully charged state. The state of charge will decrease with storage.
- All batteries lose their stored energy when allowed to stand open-circuit, due to parasitic chemical reactions.
- Self-discharge is also strongly influenced by temperature; high temperatures greatly reduce storage
- It is recommended that the fully charged battery should be stored in a cool dry place, ideally below 68°F (20°C).

DEKA Batteries:

- When the battery is fully charged, and the electrolyte is at the proper level, the battery can be stored for up to a year.
- It should be stored in a cool, dry, well-ventilated area away from direct sunlight, ideally below 68°F (20°C).

Delco Batteries:

- Fully charged ACDelco Batteries (OCV is ≥12.7) should be stored in an upright position at temperatures between 32°F (0°C) and 70°F (21.1°C).
- When a battery is stored, a very slow chemical reaction takes place between the plate materials and the electrolyte, causing a slow discharge. This reaction, called a self-discharge, occurs more rapidly at higher temperatures.