

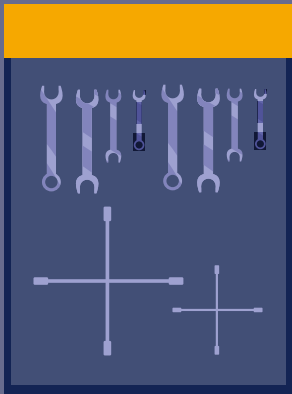


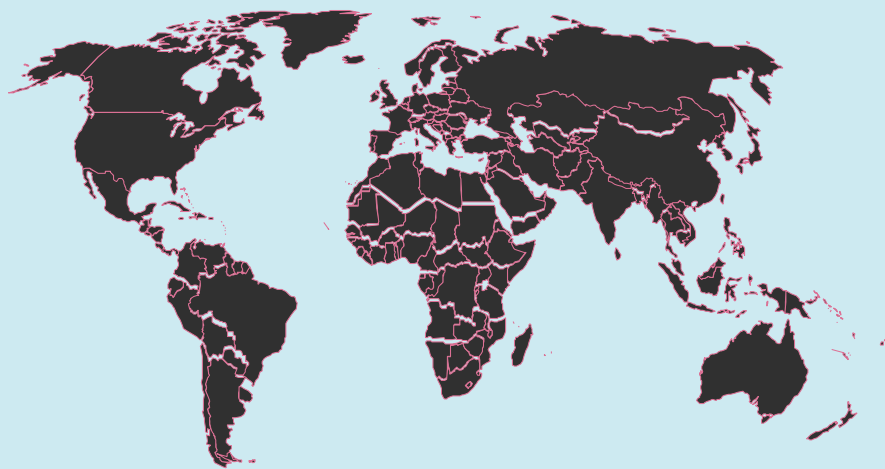
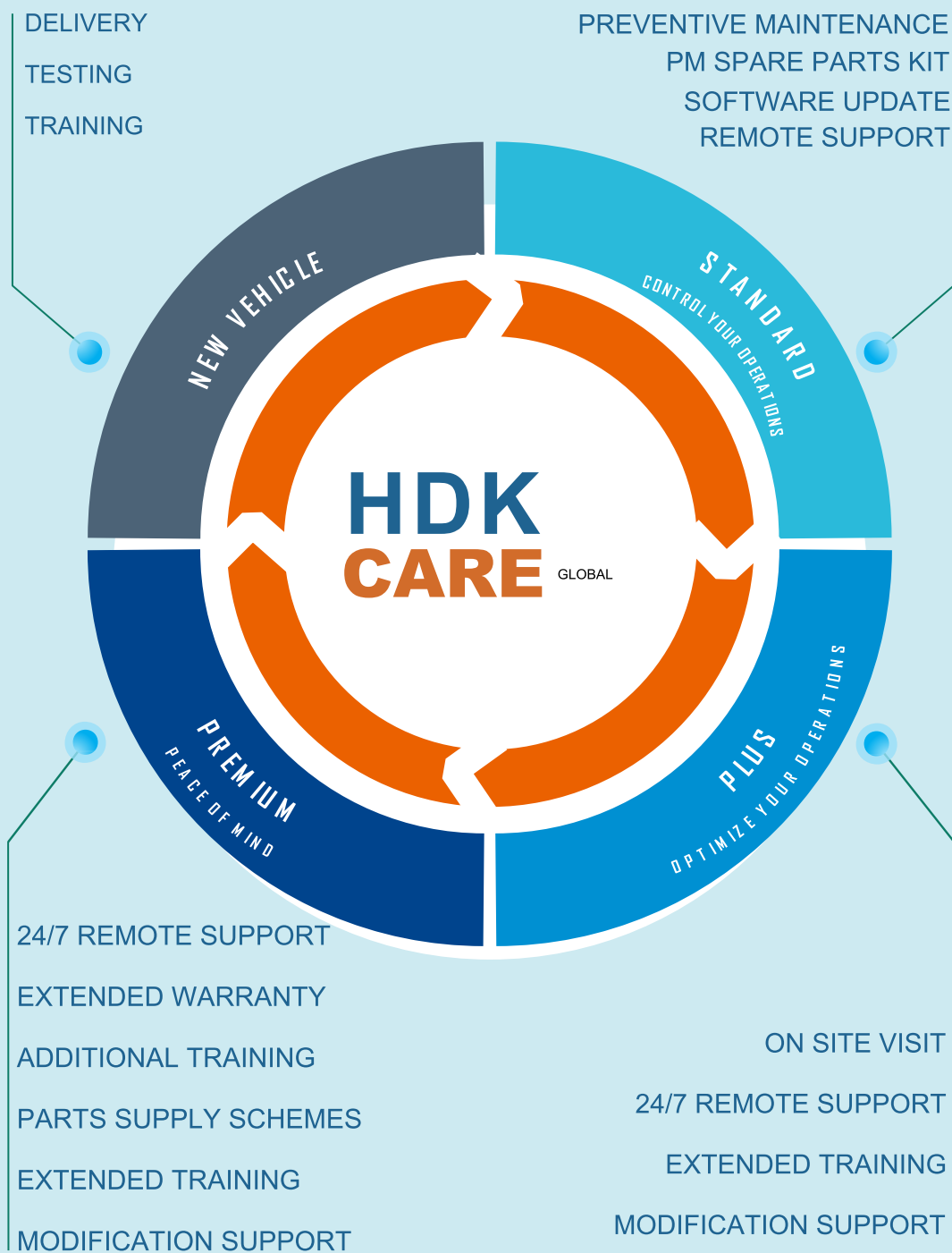
HDK PLASTIC FACTORY LTD USA

Basic Steps For a Golf Cart Maintenance

HOW TO MAINTAIN A GOLF CART?

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The condition of your golf cart at the end of the ownership helps determine its trade value. It's also one of the key factors that affects how HDK and other golf car manufacturers set the retail price for your next golf cart. Additionally, golf cart condition contributes to the experience you offer your members and customers. That's why it makes sense to keep your golf cart looking and performing at its best.

DAILY PRE-OPERATION INSPECTION

Before every customer gets behind the wheel of a golf car, ask yourself the following questions. In addition, review the HDK-CARE guidelines, listed here, to ensure superior golf cart performance:

- > Have you performed a daily inspection ?
- > Is the golf cart fully charged ?
- > Is the steering responding properly ?
- > Are the brakes activating properly ?
- > Is the accelerator pedal free from obstruction ? Does it return to it's upright position ?
- > Are all the nuts, bolts and screws tight ?
- > Do the tires have proper pressure ?
- > Have the batteries been filled to proper level(lead-acid battery only)?
- > Are the wires tightly connected the battery post and free of corrosion ?
- > Does any of the wiring show cracks or fraying ?
- > Are the brake fluid (hydraulic brake system) at right levels ?
- > Are the lubricant of rear axle at right levels ?
- > Are the joints/knobs being properly greased ?
- > Have you checked for leaks of oil/water ;etc ?

TIRE PRESSURE

>Maintaining proper tire pressure in your personal golf cars is as important as it is with your family car.If tire pressure is too low, your car will use more gas or electrical energy.Check your tire pressure monthly, because dramatic fluctuations in daytime and nighttime temperatures can cause tire pressure to fluctuate. Tire pressure varies from tires to tires .

>Maintain tire pressure within 1-2 psi of the recommended pressure marked on tires at all times.

BATTERIES

>(LEAD ACID BATTERY)Like most things, batteries need clean water to survive. Improper fluid levels can cause batteries to fail prematurely. While insufficient water can adversely affect battery life and performance, overfilling can be just as harmful.Proper battery watering is always performed after the batteries are charged, not before the charging .To maintain proper fluid levels, a single-point watering system is essential and it is a standard feature on new electric vehicles. These systems eliminate the time-consuming process of removing battery caps to add water. After the proper amount of water is dispensed through a valve system,the flow of water to individual cells shuts off automatically. Make sure to use a deionizer water purifier and replace the filter cartridges regularly. This will ensure your batteries are getting the best quality water.Have a trained technician wash battery tops and clean terminals with baking soda/water solution monthly. Also apply authorized battery terminal protector spray to battery terminals.

>(LITHIUM BATTERY)Attach the battery to a 2-phase charger, ensuring that the charger's positive lead is attached to the battery's red or positive pole and negative lead is joined with the negative pole. It's also prudent to charge the battery after every time the golf cart is used.

CHARGING

>Properly charged batteries are one of the most important factors in the performance of your golf cars. By the same token, improperly charged batteries can shorten the lifespan and adversely affect your cart's performance.

>Batteries should be fully charged before a new vehicle is first used; after vehicles have been stored; and before vehicles are released for use each day. All cars should be plugged into chargers overnight for storage, even if the car has only been used for a short time during the day. To charge batteries, insert the charger's AC plug into the vehicle receptacle.

>However, if you have lead-acid batteries in your golf cart before you charge any vehicles, be sure to adhere to important precautions:

- Since lead-acid batteries contain explosive gases, always keep sparks and flames away from vehicles and the service area.
- Never allow staff to smoke while batteries are charging.
- Everyone who works around batteries should wear protective clothing, including rubber gloves, safety glasses, and a face shield.

>Some people might not realize it, but new batteries require a break-in period. They must be significantly recharged at least 50 times before they can deliver their full capabilities. To be significantly discharged, batteries must be discharged, and not merely unplugged and plugged back in to perform one cycle.

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CLEANING

>When you clean cars, be sure to use the products recommended in the owner's manual. Refrain from using silicone-based products on floor mats, pedals, and seats; silicone-based products can leave surfaces slippery and lead to accidents.

>Although a pressure washer is undoubtedly the fastest way to remove dirt and debris from golf cars, it can sometimes do as much harm as good. We find that a garden hose at normal pressure is adequate for most clean-up jobs while stopping short of damaging the car's paint and clear coat.

STORAGE

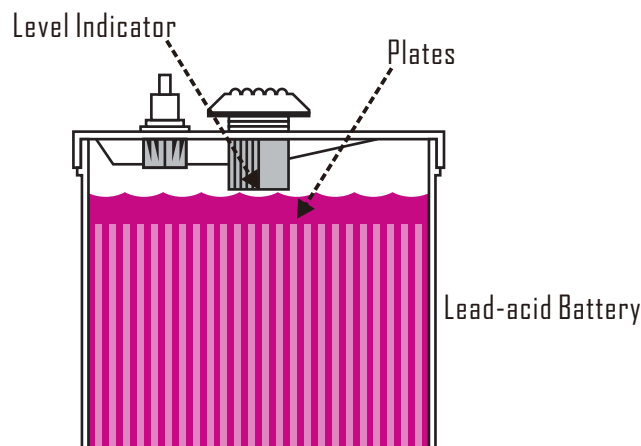
A EVOLUTION ELECTRIC VEHICLE gives you years of trouble-free service when properly maintained. Please follow the recommended long-term storage checklist. For more information on overall vehicle maintenance, consult the owner's manual.

TWO WEEKS PRIOR TO THE STORAGE

Perform the following procedure at least two weeks prior to long-term storage to ensure proper mixing of water and electrolyte. It takes approximately five charge cycles with a minimum of 10 EUs removed to properly mix the water with electrolyte. DO NOT water batteries immediately prior to storage. This will not provide sufficient charge time to mix the water with the electrolyte. Freezing can occur when batteries are stored in this condition.

- **(For Lead-acid Battery)** Make sure the vehicle is plugged in and that the proper electrolyte level is maintained throughout the entire storage period. Perform the following procedure at least two weeks prior to long-term storage to ensure proper mixing of water and electrolyte. It takes approximately five charge cycles with a minimum of 10 Eus removed to properly mix the water with electrolyte. DO NOT water batteries immediately prior to storage. This will not provide sufficient charge time to mix the water with the electrolyte. Freezing can occur when batteries are stored in this condition.

Check the water levels in each battery cell. If water is required, fill the cells to cover the plates, charge the set and use distilled water to top off each cell. Electrolyte levels should be from 1/2-inch (13 mm) above plates to 1/4-inch (6 mm) below the level indicator. (See illustration.)



- **(For Lithium Battery)** Make sure the vehicle battery is plugged in for charging throughout the entire storage period.

JOBS TO BE DONE PRIOR TO THE STORAGE

>Put golf cart under shelter, keep the golf cart in dry and ventilated space. Optimal temperature 14°F to 95°F (-10°C to 35°C). Maximum storage temperature should not be higher than 122°F (50°C).

>Turn the key switch to the OFF position, remove the key and leave the forward/reverse switch in the NEUTRAL position during storage.

>Power down all accessories.

>Clean the battery packs, tops and terminals using a battery acid neutralizer (1 cup baking soda per 1 gallon water). Check, clean and treat battery terminal connections with a battery terminal protector spray.

>If your vehicle is equipped with a Single Point Watering System (for golf carts with lead-acid battery), place the fill tube on top of the battery. This allows any water in the tube to drain back into the batteries.

>Disconnect batteries per owner manual ensuring that the cables do not come into contact with a terminal (Disconnect the 48V Main power outlet cables from battery pack, insulate the cable).

>Connect Battery cables back to system, charge the battery to full state every 1-3 months to keep battery alive without damages caused by self discharge/over-discharge; etc.

>Check Tire pressure and inflate the tires to standard pressure level as values presented on tires.

>Perform all semi-Annual Lubrications.

>Thoroughly clean the front and rear body, seats, battery compartment and underside of the vehicle.

>DO NOT engage the park brakes, but secure the golf cart from rolling. Check the wheels with wheel stopper or something similar.

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