

GOLF CARTS 101 – BASIC BUYING KNOWLEDGE

What you should know about buying a Golf Car?

This article has been prepared with the first time Golf Car buyer in mind. The sub sections appear in no particular order. As they came to me, this is how you see them.

Your first decisions are the most important

Before you go any further you have to decide on the following:

Do I/we want a gas or electric golf car?

How much will charging an electric cart cost me? What type of maintenance will I need to do to it - Gas? How important is a warranty?

Buy from a dealer or private party or other?

Does the dealer make service calls?

How much will my wife let me spend?

Electric or Gas Golf Cars

Electric?

In some cases this decision is made for you. Some campgrounds/resorts/communities only allow Electric golf cars. Some allow both but do charge an additional fee for electric carts.

Do not let any dealer talk you into one or the other - this is a decision only you can make based on knowledgeable, truthful information. If a dealer is pushing you to electric, they might not even have gas to sell you.

Okay, which are better, Gas or Electric golf cars? There is no right answer to that question. This is why Golf Car manufacturers make both. It boils down to circumstance and personnel preference. The longevity of both is equally as long as you perform regular maintenance. With Club Cars, they have more value due to their aluminum frames, no rusting. With all other brands-EZ Go, Yamaha, etc...They make them with steel frames and they will rust and eventually break. Longevity ranges between 30-40 years or longer for the various manufacturers. To dispel rumors by non dealers - gas carts are not going to be done away with. To the contrary, manufacturer's such as Club car have a shortage on used gas carts and are bringing in used electric carts from lease and converting them to gas at the factory to keep up with the demand.

Lastly, think about the maintenance when it breaks down-AND THEY DO BREAK DOWN. If you buy an electric you must possess a good knowledge of electrical or 99% of the time be prepared to take it back to the dealer for service. Electric take longer to troubleshoot and thus higher labor costs. With a gas, if you or someone you know has knowledge of basic gas motors you can usually muddle through the repair(s) and save yourself some cash!

ELECTRIC CARTS AND THEIR BATTERIES-

Update – 3-4-2020.....with the prevalence of automatic battery watering systems on carts these days, it does not insure the batteries have been watered at the course where they originally had them. This has become so prevalent I had to update this post. I would estimate that 7 out of 10 fleets do not water their batteries properly. That is why you see many

carts with batteries changed after 2-3 years. That course did not water them and thus they died and needed replacement. Courses are about saving money (aren't we all) and since they lease them for a short period of time when new, the batteries are covered under warranty and many golf cart distributors replace them under warranty rather than lose their business, even though it was neglect on the courses part and not battery failure. When looking at used carts, always lift a battery caps or two and check to make sure they have been watered. Ask if you can hydrometer check the battery cells. It is a small tool that sucks up water and has a gauge that tells you the health of the battery cell on the gauge from good, fair, low and water. This is a super quick way to self test a battery yourself and a good tool to own (\$10) if you will own an electric cart.

A certain few reputable golf cart dealers will have a discharge machine (we do) which when connected to a fully charged cart will fast discharge the cart and shows the minutes of run time on the batteries. New batteries are generally in the 115-120 minute run time range, don't settle for any cart with less than half or you will be in for replacement in the near future. Also, a handful of dealers nationwide, will invest in a battery desulfating machine (we have and I believe still are the only one in SE Michigan). They are over \$10,000 so it is a major investment. They can take sulfation (a hard build up of battery acid) that builds up on the battery plates inside and will liquify it and return it to the battery as acid. Sulfation is the ultimate killer of battery life in any type of battery. This desulfation process can add years of life to the batteries.

All our carts go through a series of multiple charge, discharge and desulfation cycles. We have taken many carts from 20 minutes run time, with roughly 40 hours of desulfation/discharge cycles and brought them back to close to new. Without this machine we would have been replacing batteries. Each cart we have is sold with no less 80 minutes run time, many in the close to 100 minutes range. This just shows how different dealers may have the same batch of carts but depending on the dealers reconditioning process, some are much better in the long run for the buyer. That is the difference between true reconditioning and just reselling a cart. Buyer beware.

Golf Car Batteries

Golf car batteries come in three different voltages, 6, 8 and 12. Six -6 volt batteries will give you a 36 Volt operating system. Six -8 volt batteries will get you a 48 volt operating system and four -12 Volt batteries will give you a 48 Volt operating system. If you do not know the voltage - look at your batteries. There are 2 volts per water fill hole, so just count the holes and multiply by two. These are special deep cycle batteries designed for golf cars. Use the batteries recommended for your golf car.

I know what is going through your mind; I'll get 3 - 12 volt batteries, or 4-12 volt batteries from the auto supply for my 36 or 48 Volt car and save some money. Don't try and reinvent the wheel here, it will not work. You will get frustrated, say a lot of things you did not mean (most people will be amazed at the range of your vocabulary) and spend a lot of money that was not necessary. Automotive or marine batteries are not meant to be constantly recharged like golf carts batteries and do not have the run time like specific golf cart batteries are. Golf cart batteries are built for that specific purpose. If manufacturer's could get away with using cheaper batteries they would in a heartbeat! See battery care and maintenance in this site or your local dealer. It's important you do this one right.

Some electric golf cars have made tremendous advances in the last decade. Computers run them, have about 50 moving parts, very little down time and a pleasure to drive. One manufacture, Club Car, has cart models called IQ models. These carts are capable of going 19.8 mph straight from the factory, whereas most golf cars run about 12 MPH.

36 or 48 volt? A 48 volt cart will run twice as long as a 36 volt on a charge. That equates to longer run time and less time being charged. Golf carts have deep cycle batteries so they require an overnight charge. Keep this in mind after a long day of driving, it will have to sit and get charged, as with a gas cart - it keeps going until the gas tank is empty. On a new

set of batteries you should average about 20-25 miles to a charge. Figure in the charging cost of approx. \$10-20 a month. Also, many campgrounds charge extra for electric carts.

Now let's look at when you will need batteries. This is a science here and this is one aspect of the old adage - "YOU GET WHAT YOU PAY FOR". The whole science behind a deep cycle battery is the lead in it. The more lead, the more charging capability, the more run time. Cheaper batteries like the Sam's club battery (cheapest on the market at this writing) have less lead than the Cadillac of batteries- Trojan batteries. A Sam's Club Battery can weigh almost 15 pounds lighter than a Trojan. This equates to less run time and less power to all the electrical components. This means that the cheaper batteries put more of a strain on the electrical components and they wear out faster. But more important - they will only last between 2-3 years and the medium is usually 2 years. Whereas a Trojan Battery will last between 7-9 years. Next do the math - a cheap battery set will run you approximately \$550, a set of Trojan Batteries - \$900 a set. I'll show you an example of a Trojan Battery and Club Car (longest lasting because of the aluminum frame). Let's use the 30 year average life. You will need to buy 4 sets of Trojan Batteries @ 900/set=\$3600.00. The Sam's Club Battery you would need to buy 10 sets @ \$550/set=\$5500. Let's factor in also - these batteries weight between 48-63 pounds each and this job is not fun to do since it is a back breaker! To equal a set of Trojan batteries at \$900, you would have to buy 3 sets of Sam's Club batteries at \$1650. The other leading brands of batteries - Deka, Interstate, Crown and US Battery will last approx. 5-6 years. Any other batteries are branded under one of these major manufacturers's name. There are also batteries called black box, it is a generic battery made by all the manufacturers and they are cheaply made and nothing but a glorified Sam's club battery. They will only last 2-3 years. All these cheap batteries do not have the lead content, thus weight, as Trojan's do so that equals less run time. All the major manufacturers offer a 1 year guarantee that is pro-rated. The older the battery the less they pay on a warranty claim. The warranty does not cover improper maintenance so make sure you check them and put in distilled water every 2-3 weeks. Running a battery dry and having the plates show can shorten the life by half or more!

Too many people are under the assumption that there is no maintenance with an electric-FALSE!! You will still have to grease the front end, check the rear end bi-annually or yearly and every 2-3 weeks check the batteries and water if needed. Also tighten and clean the electric posts and cables, keep them free from corrosion or your cables will get weak and break and the cart won't run! The chargers will also have to be repaired occasionally as they have wear out parts also.

Chargers

Most of today's chargers are fully automatic, which means they will discontinue charging when the batteries are at full capacity. Golf cars use special chargers that have a matched output to the golf cars electrical system. Never use a charger that is not made for a golf car.

Club Car is the only golf car manufacture that uses a charger that is controlled by an On Board Computer (OBC). The OBC controls all the charging function of the Golf Car. Thus enabling it to be left plugged in 365/24/7.

GAS CARTS-

Today's gas carts are not the gas cars of yesterday. Gone are days of a blue trail of smoke going down the fairway backfiring and sputtering. They are quite and reliable. Most of the major manufactures use a 4-stroke engine that has oil in the crankcase and regular unleaded gas in the gas tank, no need to mix the two anymore. Many manufacturers have starting using the EFI motors (fuel injected). These carts average about 7 miles to the gallon and most tanks on the average are about 7 gallons. Most people that use their carts just on a weekend at a campground or cottage, driving casually will go through 1-2 tanks of gas a summer. Even at \$4.00/gallon you are only going to spend between \$28-56. If

you are an occasional driver, you won't go through one tank a summer. Heavy drivers will probably go through 3-4 tankfuls and this is heavy non-stop driving, always on it cruising.

Other than that, a tune up and oil change every 300 hours or once a year (approx. value \$30), check the belts for wear, grease the front end, and check transmission level.

ELECTRIC CARTS

Electric carts are not maintenance free! You will have to check all the battery for cells one a month and fill with distilled water only. Recheck on tighten all battery connection because they do loosen up. Clean any corrosion off the cables so they do not corrode and break and leave you stranded. Corrosion on your cables can affect the way your cart operates. Charge cart after every use. This keeps the batteries optimal. Know how to store your cart in winter. You can not just walk away from it in the fall or you might have battery damage in the spring.

Tune-ups/Maintenance

Tune-ups for both Gas & Electric are an important annual function. An annual inspection on your golf car is much the same as going to your Dentist. Not only will the Dentist clean your teeth, they find out if something is wrong when it is small and easy to fix. Getting your golf car inspected once a year can be a very inexpensive way to maintain your golf car and fix any problems when they are small. And it's painless.

Gas & Electric cars annually require the following:

Pressure wash car, undercarriage, batteries, Brakes inspected, cleaned and adjusted Increase tire pressure
Grease points greased

Check differential oil levels

Check steering for tightness and wear

Tighten all front suspension and check for wear on springs, spindles, bushings, etc.

Specific to electric golf cars:

Clean all battery tops with water and baking soda Remove and clean all battery cables, change as required Top up water levels in batteries

Re-tighten all cables

Spray battery cables with Battery Protective Spray

Charge batteries, inspect battery charger for proper operation

Check battery trays for rotting/corrosion due to overfilling

Every 8-12 years chargers do have parts that wear out and will need to be rebuilt when they quit working

Specific to Gas golf cars:

Oil change and filter
Air filter change
Fuel filters and spark plug changed as required
Check and change all belts as required
Check battery charging
Inspect Starter Generator brushes
Inspect fuel pump for leaks
Inspect clutch for wear or rattling
Inspect carburetors for proper operation and clean if necessary
Refer to your owner's manual or local dealer for specifics about your car.

Determining Value

The value of a golf car is determined by the age and condition of the golf car. Gas always brings more resale value than electric. The battery age on an electric also dictates price. The older the car, the less value it has. However that is not to say a 10-year-old car, well maintained, could not have as much value as a poorly maintained (condition) 5-year-old car.

The overall condition of the golf car has to be taken into consideration in determining its value. Body, canopy, tires, batteries/charger, oil leaks, curb side appeal is all assessed to determine value.

The number of rounds on the car is a big factor. A good example of this is cars from Canada and the Northern United States command more money on resale, then cars from the southern states. The reason is simple, usage. Cars from the southern states will have 2 times and possibly 3 times the amount of rounds then a car from Canada or the Northern states. Which golf car would have more value to you, the one doing 150 rounds per year or the one closing in on 450 rounds per year?

Why is there such a range of prices on golf cars?

It could be the way they are sold. Here are some examples:

“As is”, means exactly that, what you see is what you get, no more. It is the least expensive way to get into a golf car but the most work required on your part.

“Reconditioned Golf Cars”, this one is very hard to nail down because my definition of reconditioned and yours may not be the same. A reconditioned golf car should include the following: washed from top and bottom, body with very little scratches and all scratches touched up or new/painted front and rear bodies, excellent tires and brakes, batteries and cables in excellent condition, tune up and oil change, new drive and starter belts, clutches checked and rebuilt/replaced - no rattling, starters checked and replaced-no grinding noises, all front suspension greased, tight, not leaning (sign of worn out springs), no missing/damaged parts, check frame for damage or broken welds (many times frames are bent due to collisions on the golf course). Dealer should repair frame if this is the case so other components do not wear out due to this, no torn or loose seats, any worn, weathered or damage part replaced/repared. This type of cart should look showroom condition. A warranty should be in place.

The more a dealer has to put into a car, the more you will have to pay, but the more golf car you will have.

BUY FROM A DEALER OR PRIVATE PARTY?

First and foremost-would you buy a cart from a golf car dealer, other type of retail business or private party? If you have knowledge of mechanics and can thoroughly evaluate a cart - by all means buy from a private party-there are many good deals out there. If you cannot assess a cart and are not mechanical you are best to go to a reputable full time golf cart dealer and, preferably an authorized dealer of the brand of cart you are looking for. As much as there are good deals out there by private parties there are MORE not so good deals out there. Buyer beware! Not everyone tells the truth. Many small dealers have popped up recently and do nothing but wash a cart, add rear seat and lights and call it reconditioned. Many do not check all the components before selling and though somewhat safe to drive are not 100% in good mechanical condition, as a matter of fact, very few from the courses are. Don't be afraid to ask your dealer exactly how they recondition their carts.

Now just because you sell some golf carts don't make you a golf cart dealer! Would you have a golf cart company repair your windshield or glass?? Why would you buy a car from a non golf cart dealer?? A legitimate golf cart dealer will have knowledge and trained sales staff, full running year round retail facility, maintenance shop, large inventory of carts and also large inventory of parts and accessories. They will accept all forms of payment including all major credit cards and offer financing and will have been in business for many years. In addition to that, an Authorized dealer is backed by the full sales, service, and tech support of the factory brand they support. The factory also provides many yearly classes in sales and technical service for their dealers. So called "Sub Dealers" are not factory authorized dealers. They just buy from a distributor and are not backed at all or supported by the factory.

Authorized dealers have earned the "authorized" status by proving and adhering to strict manufacturer policies for their retail facility standards, shop facility standards, inventory of carts, parts and accessories, and mechanical staff. Mechanics go through ongoing training every year. Valuable to you when you need it! Authorized dealers are also required to carry liability insurance against theft, loss and liability.

Dealers have a lot invested in their facilities, inventory and employees. See if the dealer has a large parts department, because this will come in handy when you need a repair. After all, let's face it - you never expect a breakdown and with the summer being so short you do want your cart up and running as fast as possible. Find a dealer that has all this to offer and you can be assured that you will get knowledgeable service when you need it. Remember, small business is what keeps America working. If we lose businesses who will we take our carts to for repair? parts? Ever tried having someone over the internet fix your broke down golf cart?

Ask your dealer if they will service your car after the sale. Some "dealers" DO NOT offer service after the sale. If they won't service it then, so what makes you think they serviced it before the sale? If you think this will not be an issue, wait until it breaks down and you call all around and then try to find someone reputable to work on it. Dealers are more likely inclined to put priority on their past customers repair than a non customers repair.

Check your dealer's hours and make sure they are an all year round operation. Check if they open after 5pm, open weekends, holidays? Do they offer service during these hours also - not always are the service hours the same as sales hours. You'll be likely to be on your cart on the weekend or holiday - what good is it if you can't get parts or repairs? Your weekend just took a nose dive!

Will they do road service to your cart location and the cost of a service call? This proves invaluable if you get stranded needing a repair especially once again on the weekend or holiday especially. And don't think you won't need it, it is a mechanical vehicle and IT WILL break down even though it is "just a golf cart"!

Custom and very fast Golf Cars.

Customizing a golf car is the neatest thing you can do to a golf car. It takes and changes the whole golf car from something everybody has, to something only you have.

You add the big tires and aluminum wheels, 6" lift kit, fancy paint, stainless or diamond plate accessories, and the list goes on and on. It can be addicting and expensive!

Just because a golf car is smaller than your automobile, does not mean the price will be smaller to customize. It does cost a lot of money to do custom work.

If you get into fast golf cars you are going to have to come to the table with a few more \$\$\$\$\$. After you have done the Pimping to your car, you have to add the performance end, new motor, heavy-duty batteries and cables, larger controller and the list continues. When you finish (can you ever finish?) you will have a work of art. Have fun with it and enjoy.

Buying a golf car is no different than buying anything else, common sense should prevail. Now get out there, enjoy the fresh air and have fun on your golf cart.

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