



Please remember to register your G-Wiz for the Congestion Charge exemption from the day of delivery. Call 0845 9001234, quote your number plate and pay the £10 annual fee.

## **Important information. Caring for your G-Wiz ac drive. (v7 20.08.07)**

The G-Wiz AEV (Automatic Electric Vehicle) is like a conventional car in many ways; however there are a few important differences. If you look after your G-Wiz you will get maximum pleasure and performance from it. This guide will help you to understand the most important things to be aware of and to do.

*You will be asked to sign that you have read and understood the following information at the end of your handover. It is important that you pay attention as you may be charged for call-outs and work arising from incorrect maintenance of your G-Wiz.*

### **1. ESSENTIAL MAINTENANCE**

- **Battery cycling and ‘running-in’**
- **Battery watering**
- **Battery equalisation**

#### **1.1 Battery cycling and ‘running-in’**

To build up range it is important to drain the batteries as low as possible into the yellow, and to charge fully. This is called ‘cycling’ the batteries. The lower you drive into the yellow zone the better, but **do not go into the red**. (Driving in to the red zone may damage the batteries and if done three times will invalidate your warranty).

When your G-Wiz is ‘running- in’ for the first 40 cycles (one cycle is a full charge and discharge), you should only drive halfway down the yellow and avoid using ‘Boost’ mode. The range will still continue to increase after this and full capacity will be reached after 60 - 80 full cycles.

But my daily driving doesn’t take me into the yellow – what can I do?

- If your daily mileage is less than 15 miles, then you should charge every two or three nights, depending on weather conditions (see “Range” section). Just be aware that the battery will discharge slightly when unplugged; so do not leave it overnight if it is already in the yellow.
- If you need to travel over 15 miles but you are still in the green, then you might not get two full days’ driving, particularly in cold weather or when the vehicle is new. In order to discharge the batteries, it is a good idea to take a detour to use up some

more power, and to turn on the lights and heater. Do NOT use boost mode to run the battery down during the running-in period (see below).

- You will get a feel quite quickly what your G-Wiz can do and then you can work out your driving pattern. Be aware that performance varies with the temperature and that in the coldest weather range can drop by up to 50%.

But I am still in the green and have to drive 20 miles this afternoon – what can I do?

- Plug it in now. *Occasional* use like this is fine, as long as you are draining to the yellow *regularly*. You can actually get an 80% charge in only 2.5 hours (after this the batteries have to charge themselves more slowly, taking another 5.5 hours to finish).

What if I have run to the bottom of the yellow and am not home?

- Call the Environmental Transport Agency on 08000 737283 (you are automatically covered by GoinGreen for your first year). They will tow you home for free (see Breakdown Recovery), but this might take longer.
- Persuade someone to let you charge for thirty minutes or more.

## **1.2 Battery watering**

The batteries need to be re-filled every two to three weeks with **de-ionised water**, which takes just a couple of minutes. De-ionised water is available from garages / motor factor suppliers such as Halfords and from GoinGreen; our engineers can deliver quantities at servicing if you request in advance.

There is a water light on the dashboard. This is not an emergency light and you can continue to drive for the rest of the day, then charge your G-Wiz fully asap and water the next morning. **Only water the vehicle after a full charge**, otherwise it may damage the batteries. Please do not ignore the water light as if you drive for three battery cycles without watering, you will invalidate your warranty. You do not have to wait for the water light to come on to water the batteries and it is good practice to get into the habit of watering every few weeks. Please do not water every week as this is too often.

**The batteries should also be watered after equalisation** (see below).

You will know the batteries are full when the red wheel in the plastic watering tube has stopped spinning. If it will not spin at all, then:

- Perhaps someone else has watered recently.
- Check that the grey nozzle is properly attached to the water port. You need to pull back the outer part and hear a 'click' as you push it in.
- Check the red tap on top of the canister is open.
- Check the canister is lifted and tilted so water can flow down the tube.
- If water will not come out, or is pouring very slowly, check that there is a small air hole in the handle of the canister. If not, you can make one easily with a sharp point such as a pin. This will release any vacuum.

Note: 1. **The water light may stay on for one battery cycle after watering.**  
2. The water level reading may be distorted if the vehicle is on a slope.

### **1.3 Battery equalisation**

The battery pack is composed of eight battery blocks, which naturally vary in voltage. Periodically, the on-board computer will automatically re-balance the blocks, a process called 'equalisation'. In certain cases you may need to start this process manually. Full details are in the Quickstart guide (which you should keep in the vehicle); we repeat them here for reference.

During equalisation the green charge light and the red battery light will flash alternately. The G-Wiz will finish charging first, then the equalisation process will take 10 hours, so up to 18 hours in total after plugging in. The good news is that this doesn't need to be done all in one go. You can in fact interrupt it (and drive off) up to five times and the computer will pick up where it left off the next time it is plugged in (again, after charging is complete). Any more interruptions and you will have to complete the process manually (see below). Equalisation uses up water so you should water afterwards unless you have already done so recently.

**Generally you leave your G-Wiz to equalise automatically; only do a manual equalisation if advised by a GG engineer or if your G-Wiz has been prevented from completing an automatic equalisation.**

The computer automatically equalises approximately every 500 miles. It is good practice to check the dashboard before unplugging, to see if equalisation is taking place. If you feel your mileage is low, you should equalise once a month.

#### **Manual equalisation:**

- Unplug your G-Wiz
- Sit inside, close all doors
- Make sure all electrics such as lights, radio etc are turned off
- Turn the ignition on and off three times. Each time, **wait for the needle to flick up** before you turn off.
- You should hear a two second chime. **You must hear this or equalisation will not start.** If you do not, try a fourth on/off.
- Get out, lock and then plug the vehicle in. It will charge to 100% and then go into equalise mode. No further action is needed.
- If you think your G-Wiz will only have a short time equalising before its next drive, then repeat next day as necessary.
- Water when equalisation is complete.

## 2. ESSENTIAL KNOWLEDGE

### 2.1 Boost mode

Driving in Boost mode gives you greater acceleration and top speed (45mph instead of 40mph); however it is also more demanding on the battery.

- After 40 cycles, you can use Boost but be aware that it is more draining on your charge. It is more likely to unbalance the battery cells, particularly when the charge is less than 50%. Equalisation is therefore even more important if you frequently use boost mode.
- Constant use of Boost mode will reduce the life of your battery back.
- Avoid Boost mode when you are in the yellow zone unless required by road conditions e.g. a steep hill start in traffic.

### 2.2 Charging

- **G-Wiz can be charged from any standard 13 amp indoor or outdoor electric socket although we recommend that a 16 amp charging point is fitted by a qualified electrician. All sockets must be switchable (on/off); RCD (Residual Current Device) protected, that is, fitted with surge protection (a 'trip' device); and a circuit breaker must be fitted at the local distribution board.** If you are in any doubt contact a qualified electrician.
- Charging should be performed on flat ground, not on a slope.
- Make sure the electricity is switched off before you plug in or unplug. Plug the vehicle end of the lead in first, and then the mains second and vice versa for unplugging.
- **Make sure the charging cable is pushed all the way in to the charge port.** If it is loosely connected, it can generate heat, ultimately causing melting of the lead and disruption of charging.
- Before use the charge lead should be checked for fraying, cuts or blackening of the contacts etc, in which case it must be replaced immediately.
- Check that the green charge light on the dashboard is flashing before leaving your G-Wiz. If it is not, you are not charging. Check your connections and power supply.
- When returning to your G-Wiz check the charge light is solid green and the SOC gauge shows full charge.
- Always unplug the charge lead before unlocking the doors with the remote, otherwise charging may be interrupted.
- If you have not used your G-Wiz for a few days and it has not been on charge, please note that the actual battery charge may be less than that displayed. The computer will re-calculate the actual SOC after ten minutes of driving.
- If you are about to charge after several days without use or charging, turn the key on and drive a short distance first. This will enable the computer to recalculate the correct charge level before charging commences.
- Do not charge the vehicle if the power socket and / or the charge port are exposed to rain or water. The G-Wiz is designed to charge when it is raining, however if the vehicle is plugged or unplugged during this time, then the mains should be switched off before plugging/unplugging, then turned on afterwards.
- If you are planning to use an extra extension lead to charge your G-Wiz it must be of a suitable rating and for outdoor / wet weather use. We recommend that you buy

any extension lead from GoinGreen as if you use an unsuitable lead you may find your G-Wiz will not charge. The rating of the cable should be at least 13amps, some extension leads are only rated at 10amps. Furthermore you should never use a coiled up extension lead as it may overheat. Always unravel fully any extension lead before use.

### Holidays

- There is no risk of overcharging. If you are going away for holiday, leave the vehicle plugged in.
- If you do not, you risk the batteries going flat, becoming damaged, and invalidating your warranty. We recommend that you do not leave your G-Wiz unplugged for more than 5 days; **it is a warranty condition that you do not leave it unplugged for more than seven days. Also, do not leave your G-Wiz unplugged for 24 hours if it is in the yellow.** (See more below under "Range").
- If you are going away for longer periods, you can leave your G-Wiz on charge for up to 45 days.
- However, if you are away for more than a week, we recommend that you ask someone to check regularly in case you experience interruptions in your electricity to supply.
- If you are away for more than 2 weeks, we recommend the following procedure on return:
  - Drive for 10 minutes or leave the heater and lights on for 20 minutes in order to reset the charge cycle. Leave on charge.
  - Water then put on manual equalisation.
  - Drive to 50% on your next two cycles, then drive as normal. Range will be reduced at first but will build up gradually.

### 2.3 Range

Your G-Wiz will travel up to 48 miles on a single charge (35-40 miles under normal mixed driving conditions) depending on the way you maintain it, the temperature, road conditions, what weight of load is carried (total weight of passengers and / or luggage), use of accessories and your driving style.

New vehicles will give reduced mileage, which will increase gradually during the running-in period of 40 battery cycles (see above for more information), and continue to increase, reaching full capacity after 60-80 full cycles.

The optimum working temperature of the battery pack is 20-30°C. In hot countries a range of 55 miles per charge is common. In cold English weather a reduction in range to 20 miles is common, particularly when the heater is used.

The batteries are fitted with battery heaters which will minimise range loss. However, these only operate when plugged in. If you are not sure whether to plug in because of the cold, or not plug in because your battery is not in the yellow yet, please contact GoinGreen for assistance.

During normal weather, if your G-Wiz has only been driven a small distance since its last charge, it should not be plugged in merely to heat the batteries up. However in colder

conditions (below 10 degrees) it is advisable to plug it in at any state of charge. If you are driving short distances each day, try to discharge into the yellow at least once per week.

Hot temperatures above 30 degrees C may affect charging. For example, if your G-Wiz has just been driven for a long journey on a hot summer's day, the batteries will already be very warm. If the vehicle is then plugged in for charging, the charger will automatically slow down, and if the battery temperature reaches 50°C the charger will shut down completely until the battery pack has cooled. For this reason, it is recommended that the vehicle be charged in a cool, shady area when the weather is very hot. Charging under these conditions can be expected to take longer.

Just like a normal vehicle, if you press the accelerator to the floor the power consumption will be significantly greater and charge will be used more quickly. Constant hard acceleration and steep hills may reduce the range by around 50%.

Your G-Wiz has electric regenerative brakes which put energy back into the battery. This accounts for the first 30% of braking; there are also mechanical brakes which operate if the pedal is pressed harder. Gentle braking will maximise your range.

If you do not drive your G-Wiz for several days, it will not immediately achieve the same range as you have been previously getting. You may have to cycle the vehicle a few times for the range to pick up again. This effect will become more pronounced the longer the vehicle is unused. If you are going away on holiday for more than two weeks, it is recommended that you ask someone to take your G-Wiz for a short drive (a few hundred metres), and then plug it in again, every two weeks. This is necessary to reset the charging cycle and prevent drain.

Factors that will reduce range temporarily (all numbers approximate):

Radio, CD player	1 mile
Fan	1 - 2 miles
Headlights	2 - 3 miles
Windscreen wipers	2 - 3 miles
Climate controlled seats (CCS)	2 - 3 miles
Incorrect tyre pressure	4 miles
Heater on continuously	10 miles
Air conditioning (if fitted) on continuously	12 miles
Cold weather	up to 20 miles
Infrequent usage	up to 20 miles
Hard acceleration	up to 20 miles
Steep hills	up to 20 miles

## **2.4 Dashboard Lights.**

Please pay attention to the lights on the Instrument Panel as they are important indicators of the status of your G-Wiz. Familiarise yourself with the meaning of each light and regularly check the dash after you have put your G-Wiz on charge and before you unplug at full charge.

- A flashing temperature light during drive in cold weather indicates low battery temperature and reduced range.
- A flashing temperature light during charge is most likely indicating high battery temperature.
- A flashing or continuous temperature light during drive in warm weather is indicating high motor temperature. Slow down or stop for a while. In extreme conditions the vehicle may stop, if this happens allow the vehicle to cool before driving off again.

### **Note:**

The following actions can damage your G-Wiz and leave you with a nasty bill and a void warranty:

- Drive without watering for 3 battery cycles after the water light comes on.
- Leave your G-Wiz unplugged for more than 7 days.
- Allow the State of Charge (SOC) to go below 20% (the top of the red zone) 3 times.
- Allow the SOC to go below 5% once.
- Fail to equalise on a regular basis.
- Charge on a slope.
- Fail to have your G-Wiz serviced at the required intervals.

## **3. OTHER INFORMATION**

### **3.1 Quickstart Guide**

Keep the Quickstart Guide found in the handover pack in the sun visor of your vehicle for easy reference.

### **3.2 G-Wiz Delivery Mileage**

Your G-Wiz may have a delivery mileage of up to 100 miles on the clock. This is normal due the specific pre-delivery battery testing your G-Wiz has before delivery.

### **3.3 Battery Life**

If correctly looked after, your G-Wiz batteries will last for up to 3 years based on average usage and correct maintenance, or, more technically, 600-800 cycles of discharge down to 20 % (top of the red zone).

### **3.4 Tyre Pressure**

Your G-Wiz is fitted with tubeless low rolling resistance tyres. The normal tyre pressure is 35 psi (front) and 40 psi (rear). In winter tyre pressure naturally drops and an under-inflation of 5 psi can reduce range by a few miles, so it is important to check your tyre pressure every couple of weeks and in cold weather.

### **3.5 Servicing**

Your G-Wiz can only be serviced and maintained by our specially trained engineers. Normal service intervals for your G-Wiz are after 30 days / 500 miles and then subsequently every 6 months or 4000 miles. Please note that having your vehicle serviced at the required intervals is required under the terms of the warranty and any repair costs incurred as a result of leaving your service overdue will not be covered by the warranty.

To book your service please email [service@goinggreen.co.uk](mailto:service@goinggreen.co.uk). Our service centre location is: GoinGreen, 201 Beaconsfield Rd, Southall, Middlesex. UB1 1DA. The Contact Us page of our web site has a link to a location map (<http://www.goinggreen.co.uk/?PageID=ContactUs>).

When you purchased your G-Wiz you will have selected one of the following service options:

**Option S1: Service Centre.** Bring your G-Wiz to our Service Centre for servicing in Southall.

**Option S2: Mobile.** Our engineers visit your designated home or off-road work location to service your vehicle, saving you the hassle and cost of driving to and from our Service Centre. A flat driveway or garage on hard ground (not gravel or dirt) away from other moving vehicles with 3 x 3 m of space is required. Car parks are not suitable for servicing or warranty work. We also need space to park our van nearby.

**Option S3: Collection & Delivery.** Outside of the Service Areas you will need a trailer in order to bring your G-Wiz to our Southall Service Centre, or you can choose our collection and delivery service (price on request).

### **3.6 Breakdown Recovery**

All new G-Wiz are covered by one year's 24 hour roadside vehicle recovery, thereafter there is an optional annual cost. Cover is arranged with the Environmental Transport Association (ETA) and includes roadside assistance to repair the vehicle, or vehicle recovery to a nominated destination. This exclusive service includes a night-time home recovery service with next day onward recovery to our Service Centre in Southall as standard.

You will be entitled to recovery in the event of a breakdown providing any incident occurred more than 1 mile from your home address. If your vehicle requires recovery it can be recovered to either GG or your home address where we will endeavour to fix any problem as quickly as possible. If your vehicle is being recovered to GG it must arrive within GG access times (8am-5pm). If your vehicle requires recovery outside of GG office hours then your vehicle can be recovered to your home address and then returned to GG the following day/during GG access times.

Please note that breakdown recovery does not cover breakdown from your home address if the initial incident occurred less than one mile from your home address. Please read the terms and conditions which you will receive in the post from the ETA. Please also note that the ETA is an external service provider and not part of GoinGreen.

### **3.7 Warranty**

2 yrs/16,000 miles from new for all direct labour and parts, excluding consumables (brake pads, windscreen wipers etc) plus one year 24 hour roadside recovery / breakdown assistance. G-Wiz batteries are covered by a 1 yr full replacement, plus 1 yr pro rata warranty.

**Option 1:** Simply bring your G-Wiz to our workshop in Southall, where we will undertake warranty work and provide replacement parts covered by warranty free of charge.

**Option 2:** Alternatively one of our engineers can attend your vehicle at your location. There is a call-out charge and if required, a collection and delivery charge. All warranty work and warranty parts will be provided free of charge. Price on request and on the website.

**Option 3: Total Commuter Cover.** Our keep-you-on-the-road service ensures a GoinGreen engineer will priority attend your G-Wiz on a Mobile basis between 0800 and 1800 Monday to Friday. Should your G-Wiz not be repairable on the spot, we will recover your G-Wiz to our Service Centre, provide you with a courtesy vehicle within 24 hours whilst it is being repaired, and return your vehicle to you on completion. With the hassle and expense of car hire, congestion charging, parking etc this option can easily save you time and money as well as provide peace of mind and a simple, elegant solution. Price on request and on the website.

If you have a query or problem with your G-Wiz please email us at [service@goinggreen.co.uk](mailto:service@goinggreen.co.uk). We will answer your query as soon as possible and always within 24 hrs once we have discussed any issues with our engineers and decided on the most effective course of action. For immediate assistance during office hours (Monday to Friday 8am – 6pm) call 0208 574 3232 / 020 8843 0846.

Our engineers will monitor your usage pattern by downloading data from the vehicle during service and warranty visits. This helps us to advise you of any driving habit or maintenance changes necessary to obtain maximum performance and longevity from your G-Wiz and assists in warranty clarification.

### **3.8 Pedestrians**

Because electric vehicles are quieter than most petrol/diesel cars please take extra precaution when near pedestrians, especially when turning left or right. The G-Wiz is particularly quiet at low speeds. Make use of your horn if necessary.

### **3.9 Children And Infants**

Do not leave children unattended in the vehicle. In particular, please ensure that children do not release the handbrake when parked. A childproof handbrake is available as an optional extra. A baby seat may be fitted to the front seat and booster seats used throughout.

### **3.10 Website and Customer Newsletter**

Our website has a copy of the Quickstart Guide, a more detailed Manual, and Warranty Manuals at [http://www.goinggreen.co.uk/store/content/customer\\_support/](http://www.goinggreen.co.uk/store/content/customer_support/).

In addition we update the site with the latest developments on parking and charging in London as a complimentary service to our customers. Whilst we lobby central and local government on an ongoing basis, please remember that they are outside of our control and we cannot be held responsible for any changes that they make to parking and charging policy.

Look out for email Newsletter, with up to date information and tips.

### **3.11 Applying for Exemptions and Discounts**

In the handover pack we provide forms and information to you to help you to apply for the excellent discounts that are available. Please note that it is your responsibility to apply for these. Your G-Wiz is exempt from road tax (the road fund licence) however a disc still needs to be applied for. GoinGreen provide your G-Wiz with a disc valid for one year, thereafter it is your responsibility to reapply.

### **3.12 Westminster City Council MasterPark Parking 2006 / to 31 March 2007**

Annual administration fee: £200 for one designated MasterPark car park (an average discount of 96% on a standard annual season ticket).

Details: Anyone joining the scheme 3 months or less before the new financial year on 1 April, will not be required to pay the full annual fee of £200, but will be charged £100, renewable at £200 on 1 April. 360 Green cards are available at the above rate on a first come first served basis. There are currently 106 Green card holders who are expected to renew their subscription, leaving approximately 250 available. Please note however that each car park has a capped number and the more popular car parks will be fully utilised

more quickly. GoinGreen are helping Westminster Council to administer the Green Card scheme, by issuing application forms and dealing with enquiries. Green cards and windscreen identification badges will continue to be issued by MasterPark, and payments invoiced and collected by the car park contractor.

### **3.13 Safe driving tips**

Finally, GoinGreen encourages environmentally and socially responsible driving. For the health and safety of everyone here are our top ten safe driving tips:

1. Always make sure everyone is wearing a seatbelt.
2. Drive a safe breaking distance behind the car in front & use headlights whenever possible.
3. Do not exceed the speed limit, avoid motorways and fast roads.
4. Do not drink or take drugs that may impair your driving.
5. Pay attention to the road and do not be distracted by passengers.
6. Ensure that the doors are fully closed and drive with the front seat pushed as far back as possible.
7. Use booster seats and / or fit adjustable rear seat belts for young children.
8. Never use your mobile phone unless hands free and preferably do not use your phone at all whilst driving.
9. Have your G-Wiz serviced at the manufacturer's recommended intervals - first service at 30 days, thereafter every six months / 4,000 miles, whichever is the sooner.
10. Follow the correct charging procedure - switched off at the mains before plugging in, then turned on afterwards. Similarly, when unplugging the charging lead, turn off at the mains first. Always replace frayed or suspect charging leads.

*Best wishes from the GoinGreen Team*

**GoinGreen, Green Station, 201 Beaconsfield Rd, Southall, Middlesex, UB1 1DA**

**(a) [service@goinggreen.co.uk](mailto:service@goinggreen.co.uk) or (t) 020 8843 0846 for technical and after sales enquiries**

**(b) [ask@goinggreen.co.uk](mailto:ask@goinggreen.co.uk) for general enquiries**