

## e-Tuk

# **User Manual & Maintenance guide**

Keep this booklet with your vehicle

## Congratulations on purchasing your e-Tuk!

You probably cannot wait to start driving. But, before you get started, read this manual carefully. We have put together this booklet so you can take full advantage of the capabilities of the vehicle.

For your safety and the safety of your passengers, please read the instructions carefully. It provides you with helpful information, what to do in case of an error and how to get the most out of your e-Tuk. Also, if you maintain your vehicle well, this will help you in keeping your operational costs low.

Thank you and enjoy your driving experience!

- The Tuk Tuk Factory team

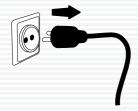
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## **QUICK START GUIDE**

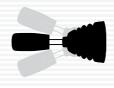
## Unplug

## Direction switch

#### Ignition



Make sure the vehicle is not being charged, the e-Tuk should not be able to drive while you are charging. Place the charging cable securely under the rear seats.



Put the direction switch in neutral  $\boxed{N}$ , and make sure the throttle is not engaged.



Turn the key clockwise.

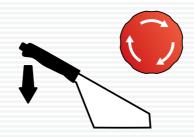
#### Display turns on



The display will switch on and you will hear two \*clicks\*, one louder than the other.

Check the state of charge and if possible the Ub or system voltage. If it is around 76V your battery is full.

## Parking brake



Make sure the park brake is released. The e-Tuk will not drive when it is engaged.

Also make sure theat the red emergency button is released

## Put in **D** of **R**

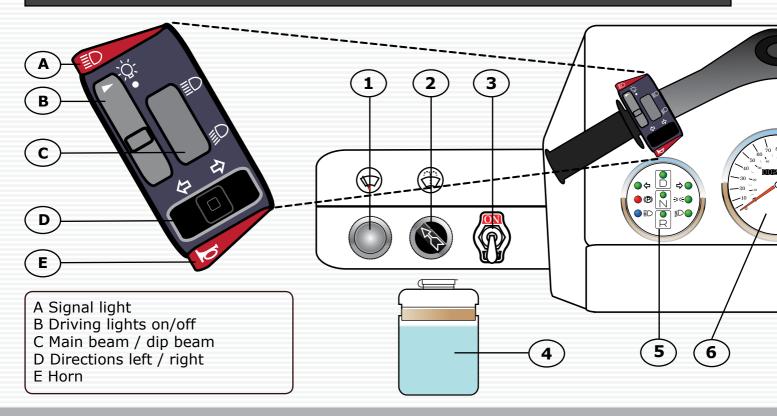


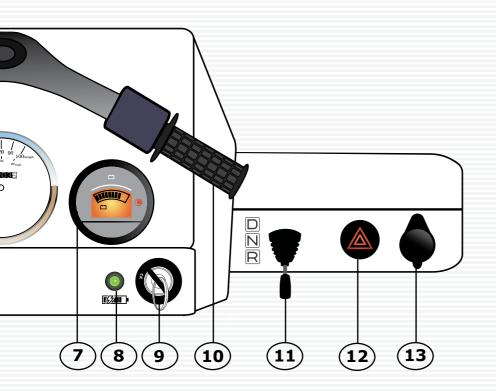
Put the direction switch in D to drive forwards and R to drive backwards.

Do not forget to put on your seatbelt before you start driving

## **GETIING FAMILIAR**

## Dashboard & handlebars





- 1 Windscreen washer
- 2 Windscreen wiper
- 3 Taxi sign light
- 4 Windscreen washer fluid
- 5 Tell-tales display
- 6 Speedo- & Odometer
- 7 Battery Display Indicator
- 8 Charger LED
- 9 Key switch
- 10 Throttle
- 11 Direction Switch
- 12 Hazard light switch
- 13 Outlet 12volt

\*2011 model. Layout may change for newer models

#### **GETTING FAMILIAR**

#### Controls



By pressing the brake pedal by your right foot you can apply mechanical stopping force on all three tyres and the motor. Braking can also be done by only the motor. You can slow down and stop without using the brake pedal too much. This will also regain energy and safe kilometers.



Turn the gas handle to accelerate. By releasing the gas handle the vehicle will automatically use the motor to slow down and stop. The easier you are on the throttle and brakes, the further one battery charge will take you.



Familiarize yourself with the controls on the steer switch before you start driving. Be sure you know where the horn is and use it every 10 seconds if you want to drive Thai-style.



Please note that, for safety reasons, the park lights are always on. Don't worry, they use very little energy and will not affect your vehicle's range. You'll notice that the centre headlight cannot be swithed on. EU-regulations state that you are not allowed to drive on public roads with three head lights.

#### BDI



This is the Battery Display Indicator (BDI). It shows you the battery level and up to date driving information. The number of bars on the display is an estimation of the battery level, not an exact calculation.

The display alternates between 4 values: Ub, r, A and H. You can use the display button to select the a parameter if it does not scroll autamatically

Ub	The	amount	of	volts	drawn	from	the	battery
r	RPM	(Rotatio	ns	Per	Minute)	of	the	engine
A	Total	number	of	ampere	e drawn	from	the	battery
h	Total	driving	ti	me of	the	vehicle	e in	hours
T	Temp	erature	of t	the cor	ntroller	(on so	ome	models)
0	Total	mileage	of th	ne vehic	cle in kn	n (on s	some	models)

The BDI also displays codes in case of an error. To know what these error codes mean, please refer to troubleshoot section in this manual.



There is a 12 Volt outlet on the dashboard that is compatible with any 12 Volt car appliance. Be carefull with any wires that might get entangled in the steering wheel. Please note that the range of your vehicle may be influenced by the type of device that is being used. A phone charger will hardly affect the range, but a heater will be a drain on the battery. There is a 12V outlet in the back of the vehicle too, next to the bench.

#### **GETTING FAMILIAR**

#### Maximum load

Please do not exceed the indicated load capacity of the e-Tuk. Doing so may cause damage to the vehicle and could be dangerous to you and your fellow passengers.

Please be aware that your eTuks driving behaviour and range change when driving around with more passengers or higher loads.



• Driver plus passenger seats for 3 adults

- Driver plus passenger seats for 4 adults
- or 3 adults & 3 children
- or 6 children

Driver only

## Safety



Please note there is a emergency switch located left of the driver seat. Pressing it will disable all electrical systems and will make the e-Tuk shut down immediately. Keep in mind that this will not stop the vehicle. You will still have to use the manual brake for that.



This Vehicle Identification Number Plate can be found above the brake pedal. This plate contains the e-Tuk's serial number and other manufactoring information. The serial number is the number that is stamped into the plate. When contacting your service engineer, make sure you have the serial number ready.



Your e-Tuk is equipped with a steering column lock. To engage the lock, turn the handlebars all the way to the right, then turn the key all the way to the left (counter clock wise). Now remove the key and the handlebars are locked into position.



Wear your seat belt at all times. We know it is more comfortable to drive withou t, but you are obligated to wear one, just like in a car. Make sure your passengers wear them too because the ride can get bumpy, especially in the back. And hey, it is the law.

If you want to use a child seat in your e-Tuk, first read your child seat manual to see if it can be secured using 3-point seat belt.

## **DRIVING CONDITIONS**

#### **Temperatures**



Weather conditions may have affect on performance and vehicle range. High temperatures (35+  $^{\circ}$ C) combined with high payloads may cause the motor and controller to get very warm. Drive calmly and at a steady pace and give the motor time to cool down every now and again.

Very cold weather may reduce the range of your vehicle slightly, as cold batteries hold less energy. Your vehicle will drive normally but keep in mind that you may get a few kilometers less on a single charge. Tuk Tuk Factory recommends you park your vehicle inside and in a warm envirmonment.

#### Hill inclination



Driving uphill draws more juice from the batteries and requires more power from the motor. Keep in mind that while driving in a hilly area, the range of your vehicle can be a little shorter than usual. Your vehicle will get you up a hill inclination of 20%. When you are stationary on a hill, do not use the throttle to prevent the vehicle from rolling down the hill. This will cause the controller to get very hot. Instead, use the brake pedal as you would in a normal car.

When driving away on a hill, apply throttle and release the footbrake. Your vehicle may roll back slightly before taking off.

#### Tips to extend your range



further

takes you Take a break every once in a while. Your battery pack is just like the human body. You can go further if you rest every now and then. Give the battery some time to recover.



Properly inflated tires reduce road friction. The recommended tire pressure is 3bar / 44psi. Check your eTuks tire pressure every month.



More weight means more power from the batteries. For maximum range, leave stuff you do not need at home.



Driving to a place with electricity? Charge on the spot!



Lower your maximum speed and acceleration, the batteries will last longer if you take it easy on the throttle.



By anticipating traffic you can make the ride more comfortable for your passengers and perserve energy.

#### **BATTERY INFORMATION**

## Battery health

Your eTuk's battery is one of the major components of the vehicle. It gives you the energy to get wehere you need to go. If you can rely on your battery, you can rely on your vehicle.

To keep your battery in the best condition you need to take good care of it. Following some basic maintenance rules keeps your battery in good shape and increases its lifetime.

These rules have been set up by the battery manufacturer\*. Not following them will void battery warranty

### Safety

 All battery maintenance, exept for cleaning and watering, should be done by an authorised service mechanic. Always wear protective clothing, gloves and goggles when handling batteries

- Keep flames, sparks or metal objects away from batteries (use insulated tools)
- Neutralize acid spills with baking soda immediately
- Charge with vent caps securely in place
- Provide proper ventilation during charging to prevent explosive gas build up.

## Inspection & Cleaning

- Keep batteries clean and dry
- Check that all vent caps are tight
- Check that all connections are tight (see recommended torque values)
- Use a solution of baking soda and water to clean if there is acid residue on batteries or corrosion on the terminals
- Terminal protectors or protectant spray can be applied to reduce corrosion

#### Storage

- Batteries should be fully charged prior to and during storage
- Never store discharged batteries
- Store batteries in a cool, dry place to minimize self-discharge
- Recharge batteries prior to putting them back into service to ensure they are fully charged

## Watering

- Add distilled water to cells
- Never add acid to cells this is dangerous and will alter the chemistry
- Only add water to fully charged batteries.
   Let the batteries cool down after charging before adding water
- Add water to the maximum level indicator
- Do not overfill the batteries

 If the plates are exposed in discharged batteries, add water to a level just above the lead plates

## Charging

- Batteries should be charged after every use to ensure they are never stored in a discharged condition
- If batteries are stored for extended periods of time they should be charged approximately every 6 weeks
- Lead-acid batteries DO NOT have a memory affect (they do not need to be fully discharged prior to charging)
- The charging cycle should always be finished completely to ensure battery life
- If charging cycles have been cut off, equalization should be done. Fully charge the batteries and keep the charger powered for at least 8 hours after the cycle.

#### **BATTERY INFORMATION**

#### **Battery specs**

Your e-Tuk has been fitted with 12 Lead-Acid Deep Cycle batteries. Each battery produces 6Volt and around 185Ah. The total battery pack gives your vehicle 72V to power the motor and electronics.



## Watering the battery manually

- Make sure your vehicle is turned off
- Make sure that your batteries are fully charged and cooled down
- Remove the rubber mat and floorplate in the passenger compartment
- Open the vent caps and look inside the fill wells
- Check the liquid level; the lead plates in the battery should be submerged.
- If necessary, add water until the liquid level is 0.3cm below the bottom of the fill well
- A piece of rubber can be used safely as a dip stick to help determine this level
- Clean, refit, and tighten all vent caps



Never add acid to a battery.



Battery fluid is hazardous! always protect your clothes, skin and eyes.



Always use destilled or de-ionized water to refill the battery.













#### **BATTERY INFORMATION**

## Refilling the battery using the water filling system



If your e-Tuk is fitted with a water filling system. This system lets you fills all batteries at once through a single hose.

Water filling system product number: 3P-031-101

- Make sure your vehicle is turned
- Make sure that your batteries are charged and cooled down
- Locate the filling hose
- Connect the hose of your filling tank to the battery hose. Fill your filling tank with deionised or destilled water.
- Place the filling tank high above the batteries. The eTuk's roof is a good location for this. Gravity will pour the watter in the batteries.
- When the liquid stops flowing the batteries are full

with a de-ionizing unit you can make your own pure water directly from the water from your tap.

De-ionizing Unit product number: 3P-051-101

The De-ionizing unit uses cartridges to purify the water. Each disposable cartridge purifies about 2400 litres of water.

De-ionizing Cartridge product number: 3P-051-102



## Using the water gun

The de-Ionizing unit can be used directly with battery watering guns. Connect the watering gun the the hose of the de-ionizing unit. Put the nozzle of the watering gun in the battery fill wells and squize the trigger. It stops automatically when the battery liquid has reached the correct level.



## Temperature & performance

At higher temperatures (above 25°C) battery capacity generally increases, usually at the cost of battery life. Higher temperatures also increase the self-discharge characteristic. Colder temperatures (below 25°C) will

lower battery capacity and prolong battery life. Cooler temperatures will slow self-discharge. Therefore, operating batteries at temperatures at or slightly below 25°C will optimize both performance and life.

The only way that a battery can freeze is if it is left in a state of partial or complete discharged. As the state of charge in a battery decreases, the electrolyte becomes more like water and the freezing temperature increases. The freezing temperature of the electrolyte in a fully charged battery is -69° Celcius. At a 40% state of charge, electrolyte will freeze if the temperature reaches approximately -8° Celcius.

#### **CHARGING STANDARD CHARGER**

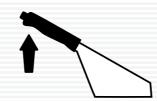
## Standard charging sequence

#### Turn off



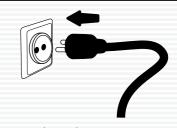
Remove the key from the keylock.

## Parking brake



Apply the parking brake to make sure your vehicle does not roll away.

## Plug in



Insert the plug into your home socket.

The electrical plug that is needed to charge your e-Tuk can be found underneath the rear seats. It is connected to the yellow/black charger box.

Wait at least 15 minutes before driving off after charging, your batteries need to cool down. Driving immediately after charging will damage your batteries and affects range.

Always finish the charging sequence. Cutting off a sequence will damage batteries and affects range.

**TIP** If you use an extension cord, make sure it's completely unwound. Rolled up cords can generate heat.

## Time to charge

The Delta Q 72V @ 12Amp is standard equipment on every e-Tuk. You can find it underneath the rear bench. The charge your e-Tuk from 0 to 100% takes about 14 hours. That long? Yes, it takes a while to charge such a huge battery. Tuk Tuk factory offers faster chargers, which are listed below.



On-board speed charger 30A

- $\sim$  5 hours to 80%
- $\sim$  9 hours to full charge

Optional:

External speed charger 60A

- ~ 2,5 hour to 80%
- ~ 6 hours to full charge

**TIP** Charging your eTuk requires high current. Make sure each socket has has its own power 'group'.





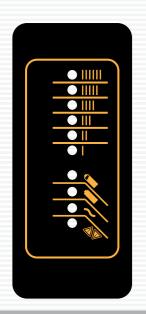
Is it not charging?

Check for red lights on the charger Check your outlet/plug connection fuse.

#### **CHARGING STANDARD CHARGER**

## The Charger display

The eTuk's standard charger is located underneath the rear bench. It has a display on which you can check the progress of the charging sequence. Cutting off an unfinished charging sequence wil lower your battery lifetime. So, waiting for the 100% green light to turn on is the best thing to do.





Ampère meter	Solid:	Displays approximate scale of charge during the first 80%.
	Flashing:	High internal charger temperature. Charging speed is reduced
80%	Solid:	First 80% charged, the last 20% will go more slowely
	Flashing:	Contact your service supplier
100%	Solid:	Fully charged
	Flashing:	Charging almost complete, finishing
Charger	Solid:	AC power good
turned on	Flashing:	Low AC Voltage, check voltage and extension cord length
Error	Flashing:	Charger error. Reset charger pocontact your service provider

## Dashboard charging LED

If you do not need detailed charging information, but just want to know if the charging sequence is finished, you can easily check the charging LED on the dashboard. It is located next to the key switch.







Green	Constant:	Fully charged					
	Flashing:	Short: <80% Charge					
		Long: >80% Charge					
		Not constant: Contact your service supplier					
Yellow	Flashing:	Reduced Power Mode: Low AC Voltage or High internal charger temperature. Use a shorter extension cord					
Red	Flashing:	Charging error. Replug the charger plug in the socket or contact your service supplier					

#### **ELECTRICS**

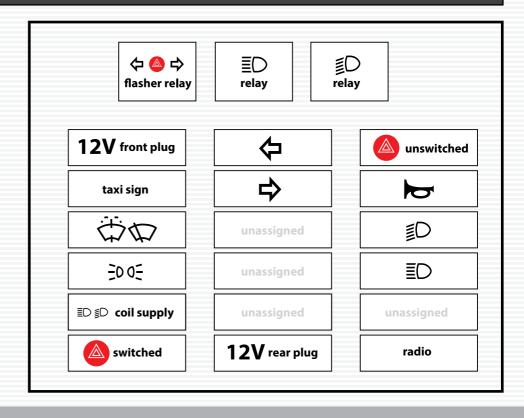
#### The Fusebox

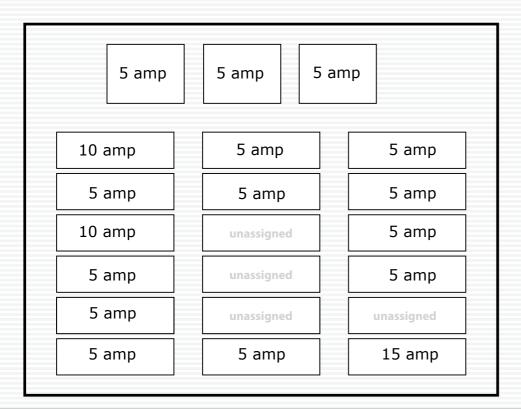
The e-Tuk contains several fuses.

All of the 12V fuses are located in the fusebox underneath the driver seat.

To reach the fusebox you will have to remove the driver seat and the cover below it.

The illustration shows the location and function of the fuses.





When you are replacing fuses, only use blade fuses with amps according to the schedule below.

In order to check if a fuse is broken, carefully remove it from the fusebox. If the metal wire between the 2 poles is broken, it means the fuse is blown.



Blown fuse



Ok to use!

#### **ELECTRICS**

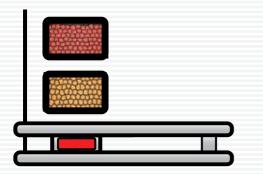
#### 12V Battery

The 12V battery can be found underneath the driver's seat, in front of the fusebox. The battery should give at least 11Volt. When measuring the voltage, make sure the vehicle is switched off. If the battery voltage is 10V or less, it is time to replace the battery.



The 12Volt battery and the 72V battery have common ground.

## Tail lights



The tail lights and are highly durable LED light units. If they are not working, please make sure to check the connections and fuse first. If the light is indeed broken, you need to replace the whole unit.

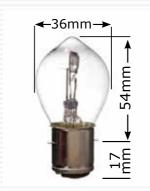
The rear direction indicators are the same highly durable LED units. If they are not working and the problem cannot be linked to the fuse or the connections, replace the unit.

## Changing front light bulbs

If one of your lights is not working, first check if the wiring is properly connected and that the fuse is not broken. To replace the light bulb in the headlights, first remove the entire headlight assembly:

- Unscrew the two screws inside the dashboard that holds the headlight in place.
- Slide the black rubber protection cap back to seveal the white fitting.
- Rotate the white fitting to remove it from the metal housing.
- Do not touch the bulb with your hands, wear gloves or use a handcerchief to unscrew the bulb
- Press and turn the light bulb clockwise to remove the bulb from its fitting.





Use a **BA20D 12V 35/35W** bulb.

#### **FLUIDS**

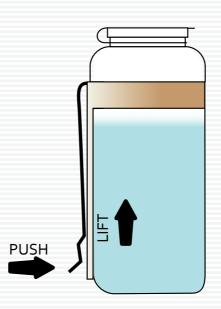
#### Oil

Your e-Tuk uses different types of oil for different parts of the vehicle.

Regularly check the ground underneath your vehicle for any traces of fluid that may have leaked. Communicate any leakage to your local service provider immidiately.

	·
Differential oil	Check the state of your differential oil every 3 years and replace if necessary.  Use about 750ml of 85W90 oil to fill the differential.
Brake fluid	Check the level of brake fluid every year. Unscrew the body panel that covers the brake pedal. This gives you easy access to the two reservoirs that hold the brake fluid. Check if the level of fluid is between the indicated levels on the reservoirs. Check for any visable leaks.  Use DOT 3 or DOT 4 type fluid.
Front fork	Visually check for any leakage. Replace the oil in the forefork when necessary.

#### Refill the washer reservoir

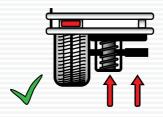


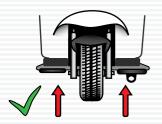
Your windscreen washer can easily befilled with washer fluid. Best way to do it is to lift it out of its holder. This way the opening cap is easy to reach and you won't spill a drop.

#### **TROUBLESHOOTING**

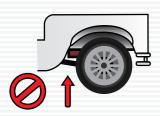
#### Jacking

Jack up the vehicle only underneath the rear suspension spring or rear axle.





Only jack up the vehicle on the allocated jacking points. These are the cylindrical blocks underneath the frame.



Never jack up the vehicle on the diagonal beam near the rear axle. This can damage the suspension.

## Changing tires

To change one of the rear tires, first jack up your vehicle. Remove the screw of the plastic wheel cover. Then, remove the 4 nuts that hold the wheel in place. Take off the wheel. Make sure you put the new wheel in place and secure the bolts while the vehicle is still jacked up.

Use a threadlocking material on all the bolts before putting the new wheel back in place. We advice using Loctite Blue 242 Nut & Bolt Locker.

To change the front tire, first jack up the vehicle. Remove the brake caliber and loosen the bolt of the front axle. Remove the front axle to release the front wheel. Pay attention to the right assembly order of the several spacers and other parts. Reassemble in the opposite order of removal.

## Vibrating front wheel

Try to adjust the steering damper if your front wheel is vibrating while driving. The steering damper is located on the right side of the front fork underneath the front fender.

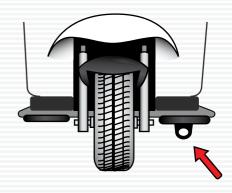
There are 7 settings in total. Rotate the adjuster on the end counter clockwise to switch to a heavier setting. A heavier setting means less 'wobbling' and more stability, but also means heavier steering.



## Towing

In case your vehicle needs to be towed, only use the towing ring at the front of the vehicle. Switch on the vehicle and press the red emergency switch located left of the driver's seat to disable motor resistance. Make sure your hazard lights are turned on while being towed.

If you being towed at night, make sure your tail lights are turned on as well.



#### **TROUBLESHOOTING**

## It's not working!



Check the charger cable. Whenever it is plugged in the eTuk will not drive.



Make sure that the red emergency button is not pressed. Rotate the botton clockwise to release.



Do a re-run of the starting sequence. Check if the direction switch is in  $\boxed{\mathsf{N}}$ 

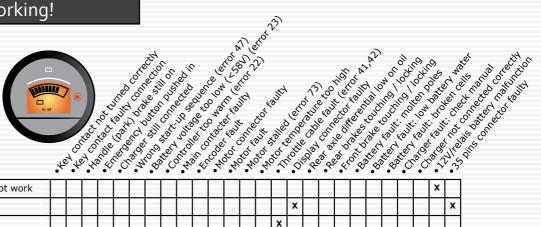


Check the battery display for the battery level. Remember that the indication bars are an estimation, not an exact representation of your battery's charge.

## It's still not working!

Check the battery display for errors, write them down and communicate them to your service engineer.

Most common errors are shown on page 34



Lights, horn, display, wiper, washer do not work																									х	
Display does not function																х										х
Vehicle starts moving by itself															X											
Vehicle rear axle makes a lot of noise																	х	х	х							
Battery does not charge																				х	Х	Х	х	x		
Motor stops while driving (bump)				х					х	Х	х	х	х	х												
Vehicle drives jolty at slow and fast speed							х							х						х	х	х				
Vehicle does not go up to high speed							х	х						X						Х	Х	Х				
Vehicle turns on & clicks but drives only 2 meters										х	х	х	х	х						х						
Vehicle turns on & clicks but does not drive					х	х									X					х						х
Vehicle turns on, but no click and does not drive			х	х	х	х	х		х					х						х						х
Vehicle does not start, no lights, no click	х	х																		х						Х

## **TROUBLESHOOTING**

## BDI error messages

Error	What does it mean?	What happened?	What do I do?
16	Extreme overheating of the controller. Vehicle will not drive.		Prevent aggressive driving. Allow the controller to cool down.
17	Battery indicates that it is almost empty. Driving speed is reduced.		Get to a power outlet and recharge immediately.
22	The controller is overheated. Driving speed is reduced.	Heat sink temperature reached +85°C.	Drive slowly. Accelarate & deccelarate little by little. The controller will slowly cool down.
23	Battery power is getting low. Driving speed is reduced.	Battery power is getting low.	Get to a power outlet and recharge soon.
28	The motor is too hot. Driving speed is reduced.	The motor is overworked. There was too much weight on the vehicle or the hill inclination was too steep.	on the vehicle or take a

29	The motor temperature sensor is not connected. The vehicle will not drive.	The motor temperature sensor is loose.	Check the 2 pin connection by the motor.					
36	Encoder error.	The encoder is loose.	Check the 4 pin connection by the motor.					
37	The motor face is open. Vehicle shuts down.	There was a short circuit in the wiring of the motor.	Check the wiring of the motor.					
38	The main contactor is welded shut. Vehicle shuts down.	The main contactor does not open anymore.	Replace the main contactor.					
39	The main contactor did not close. Vehicle shuts down.	The main contactor did not close or the tips are oxidized.	Check pins on contactors or replace main contactor.					
44	There is an error in the throttle.	The throttle broke or the wiring is faulty.	Check wiring on the throttle, or replace throttle.					
47	Vehicle will not drive while direction switch is in D or R.	You started the vehicle without putting the direction switch in neural.	Shut down the vehicle, put the direction switch in neural (N) and start it again.					
73	Stall detected. The motor is stalled. The vehicle will not drive.	Something blocks the motor and prevents it from turning.	Check if something is blocking the motor, wheels or drive train. Check the 4 pin connection on the motor. The driving angle is too steep.					

## **VEHICLE INFO**

		3+1	Stretched	Cargo & Vendo	Cargo & Vendo XL
Vehicle	Driver comfort seat	•	•	•	•
	Passenger seats	3	6	•	-
	Cargo space (ltr)	-	-	2000	3000
	Maximum payload (kg)	300	300	380	300
	Maximum speed (km/h)	45	45	45	45
	Range** (km)	70-80	60-70	70-80	60-70
	EU vehicle category	L5	L5	L50	L5
Battery	Deep cycle Lead-Acid	•	•	•	•
	Capacity (kWh)	15	15	15	15
	Charging time 0-100% (hrs)	14	14	14	14
	Lifetime (years / km)	3/100.000	3/100.000	3/100.000	3/100.000
	Charger type <i>Delta Q</i>	•	•	•	•

- Standard
- Not available
- \* Vendo height may differ
- \*\* In a standard eTuk city cycle

			3+1	Stretched	Cargo & Vendo	Cargo & Vendo XL
Drive	Motor type AC		•	•	•	•
train	Motor power (kW)		7	7	7	7
	Reverse speed (km/h)		10	10	10	10
	Controller type Curtis AC		•	•	•	•
Size	Size	Length (mm)	2980	3980	2980	3980
and		Width (mm)	1410	1410	1410	1410
weight		Height (mm)	1850	1850	1850	1850
	Cargo space	Length (mm)	-	-	850	1850
			-	-	1400	1400
		Height (mm)	-	-	1200*	1200*
	Track (mm)		1255	1255	1255	1255
	Wheelbase (mm)		2270	2700	2270	2700
	Kerb weight (kg)		700	850	700	850
	Tyre size rear wheels		155/80R13	155/80R13	155/80R13	155/80R13
	Tyre size front wheel		145/70R12	145/70R12	145/70R12	145/70R12

### **MAINTENACE SCHEDULE**

Proper maintenance is an important factor of your vehicle. For normal performance and use of the vehicle, stick to this maintenance schedule.	Tyre pressure check**	Clean steer damper	Apply silicone lubricant on rain cover zippers	Tyre profile check	Lights check***	Water batteries*	Brake pads and shoes check	Fully charge batteries after full discharge	Clean motor	Flush brake fluid	
Mainenance done by	U	U	U	U	U	U	U	U	M	M	
Weekly or 200km	Х	Х				х					
Monthly or every 800km	Х	Х	Х	Х	Х	х	х	Х			
Yearly or every 12.500km	Х	Х	Х	Х	Х	х	х	Х	Х		
Every 2 years or 25.000km	Х	х	Х	Х	Х	Х	х	Х	Х	Х	

#### Storing the vehicle

Make sure your vehicle is stored indoors, in a dry environment. Make sure any water left on the vehicle is dried off before storing the vehicle. These are the best conditions for keeping the body and roof cover as good as new.

- U You can do this yourselft with some basic technical skills
- M This needs to be done by an authorized service and maintenance engineer

<sup>\*</sup>The battery manufacturer recommends that batteries be checked once a month. Check the water level of the batteries monthly until you get a feel for how thirsty your batteries are. Also, check all battery pole connections for corrosion. Only fill batteries one hour after charging them.

<sup>\*\*</sup>The optimal tire pressure is 3bar / 44 psi.

<sup>\*\*\*</sup>Check to see if all the lights (front, rear, direction indicators) work every week.

## YOUR ETUK'S DNA

VIN Type Color Licence plate nr. Installed Options	Classico/Limo/Cargo/CargoXL/Vendo/VendoXL
Country Distributer stamp	

# Maintenance

### **SERVICE & MAINTENANCE HISTORY**

In this section we have reserved space for your servce and maintenance provider to keep track of service and repairs on your eTuk. Please keep in mind that your vehicle needs regular maintenance. Regular checks need to be done on your battey. You can find the maintenance schedule on page 38.

We advice you to keep all invoices you receive for these repairs. They will give additional insight in your vehicle's history.

Date/km
Comments
Service stamp:
Next service km/date

Date//	km
Comments	
Service stamp:	
Next service km/date	<i></i>

## **SERVICE & MAINTENANCE HISTORY**

Date / / km	Date / / km
Comments	Comments
Service stamp:	Service stamp:
Next service km/date	Next service km/date
Date / / km	Date / km
Comments	Comments
Service stamp:	Service stamp:
Next service km/date	Next service km/date

Date/km	Date/km
Comments	Comments
Service stamp:	Service stamp:
Next service km/date	Next service km/date
Date/km	Date/ km
Comments	Comments
Service stamp:	Service stamp:
Next service km/date	Next service km/date

## **SERVICE & MAINTENANCE HISTORY**

Date / / km	Date / / km
Comments	Comments
Service stamp:	Service stamp:
Next service km/date	Next service km/date
Date / / km	Date / km
Comments	Comments
Service stamp:	Service stamp:
Next service km/date	Next service km/date

Date/ km	Date/ km
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Service stamp:	Service stamp:
Next service km/date	Next service km/date
Date/km	Date/km
Comments	Comments
Service stamp:	Service stamp:
Next service km/date	Next service km/date

Notes

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If you are having issues with you vehicle, please contact your local service provider. Before you do, please make sure you have read this manual carefully. If the manual does not give you an answer to your problem, please contact the following:

Your local service provider:					



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