

ELECTRIC BIKES

All vehicles pictured and outlined in this document are electric powered.

Electrically Assisted Pedal Cycle (EAPC)

- the cycle must be fitted with pedals that can be used to propel it;
- the electric motor must not exceed a maximum continuous rated power of 250W; and
- the electric motor must not offer electrical assistance beyond a speed 15.5mph (a conversion of the 25kph limit used in Europe), and therefore cut-off when the cycle reaches this speed.

EAPCs also need to meet other relevant regulations and standards before they can be used or sold for use on a public road, such as;

- The Pedal Cycles (Construction and Use) (Amendment) Regulations 2015; and
- The Road Vehicles Lighting (Amendment) Regulations 2005 (the requirements for EAPCs are no different to normal pedal cycles).
- Section 32 of the Road Traffic Act 1988 also restricts EAPCs from being "driven on a road" by anyone under 14 years of age.



Electrically Assisted Pedal Cycle (EAPC) With Twist and Go

- the cycle must be fitted with pedals that can be used to propel it;
- the electric motor must not exceed a maximum continuous rated power of 250W; and
- the electric motor must not offer electrical assistance beyond a speed 15.5mph (a conversion of the 25kph limit used in Europe), and therefore cut-off when the cycle reaches this speed.

EAPCs also need to meet other relevant regulations and standards before they can be used or sold for use on a public road, such as;

- The Pedal Cycles (Construction and Use) (Amendment) Regulations 2015; and

- The Road Vehicles Lighting (Amendment) Regulations 2005 (the requirements for EAPCs are no different to normal pedal cycles).
- Section 32 of the Road Traffic Act 1988 also restricts EAPCs from being "driven on a road" by anyone under 14 years of age.

Because of the particular benefits for elderly and disabled users, pedal cycles providing electrical assistance without use of the pedals - usually called "Twist and Goes" - are included in the above GB classification provided they are capable of pedal operation and comply with the above restrictions on maximum motor power and assistance cut-off speed.


However, under European law new "Twist and Go" vehicles did, from January 2016, have to meet a range of technical requirements before they can be used on roads.

This will normally be established by "type approval" at the manufacturing stage but importers and individuals will be able to seek an individual approval for vehicles that have not been type approved.

What this means is vehicle used prior to January 2016 fall into the category of EAPC and can be ridden by persons 14 and over.

Those used after January 2016 and type approved fall into the category of EAPC and can be ridden by persons 14 and over.

Those used after January 2016 and not type approved do not fall into the category of EAPC and revert to being motor vehicles with all that entails.



Legal

- Anyone 14 years or older can ride the E RIDER Model 18 on the road
- Younger riders may use the Model 18 off road
- The E RIDER Model 18 is not subject to Vehicle Excise Duty
- A driving licence is not required to operate the bike
- The E RIDER Model 18 does not require an MOT
- Insurance is not legally required
- The E RIDER Model 18 does not need to be registered with the DVLA
- It may be used in bus lanes and on cycle paths
- A helmet is not legally required
- It is not liable to parking fines or congestion charges
- The operator of an E RIDER Model 18 is not required to provide a breath or blood sample

An EAPC which complies with the above is not considered to be a motor vehicle within the meaning of the 'Road traffic regulation act 1984' and the 'Road traffic act 1988'. As a result, it is not required to be registered or subject to vehicle excise duty (road tax), and does not have to be insured as a motor vehicle. However, EAPCs must not be ridden by anyone under the age of 14 years.

The term 'motor vehicle' is defined in section 185(1) of the Road Traffic Act 1988 and section 136(1) of the Road Traffic Regulation Act 1984 as "a mechanically propelled vehicle, intended or adapted for use on roads".

Although this is the legal definition, ultimately it is a matter of fact and degree for a court to interpret as to whether or not a vehicle is a motor vehicle at the time of the incident.

The term "mechanically propelled vehicle" is not defined in the Road Traffic Acts. It is ultimately a matter of fact and degree for the court to decide. At its most basic level it is a vehicle which can be propelled by mechanical means. It can include both electrically and steam powered vehicles.

"Intended or adapted for use on roads" is also not defined by statute and again is ultimately a matter for the court to decide based on the evidence before it.

Electrically Assisted Pedal Cycle (EAPC) With Off Road Assistance

We are aware of some electric cycles that have a switch offering a temporary increase in top speed that is often advertised as an "off road" facility. When the switch is pressed the vehicle can be propelled by the motor at a speed greater than 15.5 mph. Vehicles with this feature fitted do not, in our opinion, comply with the GB EAPC regulations.

Therefore they revert to being motor vehicles.

Electrically Assisted Pedal Cycle (EAPC) Not Meeting EAPC Regulations

An electric powered cycle that does not comply with the above EAPC classification will need to be registered, insured and taxed (Vehicle Excise Duty) as a motor vehicle. The rider will need an appropriate driving licence and will have to wear an approved motorcycle safety helmet.

Such vehicles might need to be type, or individually, approved before they can be registered (and will almost certainly need to be approved if first used after January 2016).



Electrically Assisted Pedal Cycle (EAPC) That Has Been Modified or Adapted

An electric powered cycle that has been modified or adapted so as it does not comply with the above EAPC classification will need to be registered, insured and taxed (Vehicle Excise Duty) as a motor vehicle. The rider will need an appropriate driving licence and will have to wear an approved motorcycle safety helmet.

Such vehicles might need to be type, or individually, approved before they can be registered (and will almost certainly need to be approved if first used after January 2016).



Moped

Over the years there have been a number of relevant changes to what exactly constitutes a moped.

First used before 1 September 1977.

Engine capacity no greater than 50 cubic centimetres (cc) and can be moved by pedals.



As of 19th January 2013

A moped (driving licence category AM) is defined as having a maximum design speed over 25km/h (15.5mph) but not exceeding 45 km/h (28 mph);



or a light quadricycle with an unladen weight not more than 350kg and up to 45km/h (28mph)



Then there are mopeds that fall within driving licence category P.

2-wheeled vehicles

maximum design speed of over 45km/h (28mph) but not more than 50km/h (31mph).

Its engine size must not be more than 50cc if powered by an internal combustion engine.

Can be electric.



Vehicles that fall within driving licence category Q.

2-wheeled and 3-wheeled vehicles without pedals with:

an engine size not more than 50cc if powered by an internal combustion engine

a maximum design speed of no more than 25km/h (15.5mph)

This category also includes trial e-scooters.



Motorcycle

“motor cycle” means a mechanically propelled vehicle, not being an invalid carriage, with less than four wheels and the weight of which unladen does not exceed 410 kilograms,

Motor cycles do however come in different categories ordered by driving licence category.

Driving licence category A1

light motorbikes with:

- an engine size up to 125cc
- a power output of up to 11kW
- a power to weight ratio not more than 0.1kW/kg

This category also includes motor tricycles with power output up to 15kW.



Driving licence category A2

- power output up to 35kW
- power to weight ratio not more than 0.2kW/kg

The motorbike must also not be derived from a vehicle of more than double its power.



Driving licence category A

- motorbikes with a power output more than 35kW or a power to weight ratio more than 0.2kW/kg
- motor tricycles with a power output more than 15kW

