

Supreme Court decision puts brake on altering your e-bike

Removing the pedals means alternative vehicles are not fit for the road

BY KIM NURSALL, VANCOUVER SUN JULY 18, 2012



Steve Miloshev with an electric bicycle and an electric scooter at his shop on Vancouver's West 2nd on Tuesday. The pedals must stay on both vehicles or owners could face
Photograph by: Ward Perrin, PNG, Vancouver Sun

When is a bike not a bike? The answer, recently determined in B.C. Supreme Court, is not as simple as you might think.

Within provincial regulations surrounding bicycles and road use, there exists a vehicle that is a bike - and yet not a bike. And it's causing confusion for riders, police, and legal professionals alike.

Electric bikes come with an electric motor as well as pedals, and can look a lot like motorized scooters and mopeds. But unlike the latter two, e-bikes are not considered motor vehicles and do not require

riders to have a licence or insurance.

This is where it gets tricky. The electric bikes are regulated by provincial legislation as "motorassisted cycles" and must have pedals. However, removing the pedals does not make them road-safe motor vehicles that simply require operators to have a licence and insurance, B.C. Supreme Court Justice Neill Brown has found.

The status of pedal-less electric bikes was confirmed by his July 12 decision, which found the machines do not fall under any category of insurable cycle - such as limited speed motorcycles (LSM) like scooters or mopeds - and are not allowed on public roadways at all.

The issue found itself before the court after Metro Vancouver resident Raymond Rei was charged with operating a motor vehicle without a driver's licence or insurance after he removed the pedals of his electric bike. Rei was found guilty on all counts and appealed the decision.

"Once Mr. Rei removed the pedals, he removed any effective way for him to propel the scooter himself," Brown wrote in his dismissal of the appeal, noting that the electric motor is supposed to "supplement, not supplant, human propulsion."

Consequently, the judge continued, there are two options for an electric bike: "to operate it with the pedals on, or take them off and confine it to private roads."

The reasons why electric bikes with-out pedals are not classified as LSMs can be difficult to understand.

Based on definitions found in provincial legislation, a pedal-less electric bike sounds like it would simply be a less-powerful scooter. However, ICBC spokesman Mark Jan Vrem wrote in an email that "motor assisted cycles are specifically excluded from the National Transportation Safety Board's definition and standards required for motorcycles - and thus will not display the National Safety Mark which indicates a vehicle is road worthy. ... Removing the pedals from a motor-assisted cycle might make it appear to look like a low-speed motor-cycle, but it will not be compliant with the federal safety standards," Vrem stated.

Vancouver police Const. Eric Doyon said that pedal-less electric bikes may seem similar to LSMs; however, there are a number of important distinctions.

Since electric bikes are classified as bicycles, he said, they do not have the same braking and lighting systems and could not pass an inspection test in order to be legally operated as motor vehicles.

Further, electric bikes are legally required not to exceed 32 km/hour, which means they cannot keep pace with car traffic and should hug the right shoulder, said E-Ride Vancouver president Steve Miloshev, whose company specializes in alternative electric vehicles.

Conversely, LSMs are allowed to travel up to 70 km/hour and are expected to move along with other motor vehicles.

As a result, although removing the pedals turns electric bikes into motor vehicles, the bikes are not considered safe to operate and riders who use them risk fines of \$276 for driving without a licence and \$598 for driving without insurance.

But Rei questioned the safety of leaving pedals on electric bikes when he defended his decision to remove his. The defendant argued the pedals installed on his scooter-like model made his bike unsafe because they dragged along the ground when he turned, causing him to fall several times.

Justice Brown acknowledged in his decision that if there are pedal safety issues with e-bikes they should be explored but he "could not meaningfully address [Rei's] concern."

In light of the confusion surrounding electric bikes, Justice Brown wrote the province should review how they are regulated.

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IN THE SUPREME COURT OF BRITISH COLUMBIA

Citation: *R. v. Rei*,
2012 BCSC 1028

Date: 20120712
Docket: 59874
Registry: Chilliwack

Between:

Regina

Crown/Respondent

And

Raymond Rei

Accused/Appellant

**Corrected Judgment: The text of the judgment was corrected at
Paragraph 7 on July 13, 2012**

Before: The Honourable Mr. Justice N. Brown

**On appeal from Provincial Court of British Columbia,
decision dated January 6, 2012 File No. AH55974557-1
and March 9, 2012 File No. AH53062396**

Reasons for Judgment

Counsel for Accused/Appellant:

In person

Counsel for Crown/Respondent:

P. Blessin

Place and Date of Hearing:

Chilliwack, B.C.
July 3 and 5, 2012

Place and Date of Judgment:

Chilliwack, B.C.
July 12, 2012

[1] Mr. Rei appeals his convictions for

§ operating a motor vehicle on the highway without a driver's licence on March 7, 2011 and on April 25, 2011, contrary to s. 24(1) of the *Motor Vehicle Act*, R.S.B.C. 1996, c. 318 [*MVA*]; and

§ operating a motor vehicle on a highway without insurance on March 7, 2011 and April 24, 2011, contrary to s. 24(3)(b) of the *MVA*.

[2] These are separate offences. Two Judicial Justices heard the two sets of charges. On January 6, 2012, Judicial Justice Blackstone heard the first two charges and convicted the appellant on both counts. Judicial Justice Hayes heard the second set of two charges on March 9, 2012, and convicted the appellant on both counts.

[3] In both the March and April incidents, Mr. Rei, the Appellant, was operating what the *MVA* and *MVA* regulations define as a Motor Assisted Cycle ("MAC"). Section 1, the definition section of the *MVA*, defines a MAC as follows:

"motor assisted cycle" means a device

- (a) to which pedals or hand cranks are attached that will allow for the cycle to be propelled by human power,
- (b) on which a person may ride,
- (c) to which is attached a motor of a prescribed type that has an output not exceeding the prescribed output, and
- (d) that meets the other criteria prescribed under section 182.1 (3)

[4] Section 182.1 gives the Insurance Corporation of British Columbia ("ICBC") authority to make regulations for operators of MACs and equipment attached to them. The *Motor Assisted Cycle Regulation*, B.C. Reg. 151/2002 [*MAC Regulation*], proclaimed pursuant to that authorization includes the following criteria:

Motor Assisted Cycle

1 (1) A motor assisted cycle must have no more than one motor for propulsion.

(2) The motor of a motor assisted cycle must

- (a) be an electric motor,
- (b) have a continuous power output rating of not more than 500 watts, and
- (c) not be capable of propelling the motor assisted cycle at a speed greater than 32 km/hr on level ground.

Wheels

2 (1) The wheels of a motor assisted cycle must be 350 mm or more in diameter.

(2) A motor assisted cycle must not have more than 3 wheels in contact with the ground.

Motor shut-off requirement

3 (1) A motor assisted cycle must be equipped with a mechanism, separate from the accelerator controller, that

- (a) allows the driver to turn the motor on and off from a normal seated position while operating the motor assisted cycle, or
 - (b) prevents the motor from turning on or engaging before the motor assisted cycle attains a speed of 3 km/hr.
- (2) The motor of a motor assisted cycle must turn off or disengage if
- (a) the operator stops pedaling,
 - (b) an accelerator controller is released, or
 - (c) a brake is applied.

[5] A MAC can be visualized as either a light scooter with pedals or as a regular bicycle with a small electric motor attached to the frame, near the pedals. The cycle Mr. Rei was riding on both days looks like a light scooter with bike-style pedals attached.

[6] A cycle meeting all these criteria falls outside the s. 1 definition of “motor vehicle” in the *MVA* and requires no insurance.

[7] The regulations also define other classes of cycles, including traditional motorcycles. But one other class of cycle relevant here for comparative purposes is what the legislation calls a Limited Speed Motorcycle (“LSM”).

[8] Section 1 of the *Motor Vehicle Act Regulations*, B.C. Reg. 26/58 defines an LSM this way:

"limited speed motorcycle" means a motorcycle that

- (a) is equipped with a motor having
 - (i) a piston displacement of not more than 50 cc, or
 - (ii) a power source that produces a maximum of 1.5 kW,
- (b) has a power drive system that does not require clutching or shifting by the operator after the drive system is engaged,
- (c) has a maximum attainable speed on level ground, with or without pedals, of 70 km/hr,
- (d) has a maximum weight of 95 kg excluding fuel or batteries used to store energy for vehicle propulsion, and
- (e) has wheels of a diameter of 254 mm or more;

[9] A cycle matching these criteria is classified as a motor vehicle. Anyone driving one, therefore, must have a driver's licence and the owner has to register and insure it.

[10] The cycle Mr. Rei was riding both times corresponds to how the regulations define a MAC, except in two significant ways.

[11] First, its pedals were detached. Judicial Justice Blackstone, who presided over the January 6, 2012 hearing, which dealt with the March 2011 charges, rejected Mr. Rei's suggestion that the pedals were knocked off his scooter when he had an accident. I cannot fault the Judicial Justice of

the Peace's reasons for reaching that conclusion.

[12] Second, the cycle did not comply with the definitions set out in s. 3(2) of the *MAC Regulation*, which require that the electric motor disengage or stop running when the operator stops pedalling, releases the accelerator or applies a brake. Obviously, without a pedal to push, there is no way to stop the motor from running.

[13] I note the Judicial Justices focused on the motor vehicle definition. I understand the regulations were not canvassed.

[14] Mr. Rei explained he takes the pedals off because he finds them unsafe. When he leans a little when turning a corner, he complained, the pedals, being too low, scrape the pavement. He has fallen over this way several times, so he does not feel safe riding his scooter with the pedals attached. He drives his scooter using just the electric motor; but a MAC is supposed to be incapable of running on the electric motor without some pedal propulsion. In any case, Mr. Rei said he has heard of other people riding this type of scooter complain about unsafe pedals; and he has seen others riding around on them without pedals. If there is a safety issue, it should be delved into, but I cannot meaningfully address that concern here.

[15] Mr. T. Carpinetti, a manager employed by ICBC, testified. He gave the Court useful insights into the origins of the legislation. He also showed the Court a copy of information about MACs that is readily obtainable on ICBC's website.

[16] The provincial regulations derive from federal government Transport Canada provisions, with minor modifications. For example, the federal regulations refer to propulsion coming from muscle power whereas the provincial regulations illustrate the same concept by stating MACs must have a hand crank or pedal attached to them. It is not the difference in wording that is worth noticing but the concept common between them, human propulsion. This is an essential component of a MAC. This is what sets it apart from all other classes of motorized cycles. The electric motor on Mr. Rei's scooter is supposed to supplement, not supplant, human propulsion.

[17] Mr. Carpinetti explained how ICBC views MACs. ICBC is the liability insurer of every motor vehicle in B. C. and drafted the *MAC Regulation* relevant here. He explained that a person riding a MAC with the pedals attached (and presumably engaged correctly with the electric motor) does not require registration, insurance or a driver's licence. If someone removes the pedals, however, which apparently is easy to do, a cycle that was once a MAC is no longer a MAC, as far as ICBC is concerned. Further, because it then would no longer fall within any recognized class of cycle, it remains unregistrable and uninsurable, even if the operator wished to register and insure it. Without pedals, from the Corporation's perspective, it should not be on a public roadway.

[18] As it is, the essence of how the insurer views MACs without pedals agrees with the decisions of the two Judicial Justices, the submissions of the respondent and with my interpretation

of the *MVA and MAC Regulation*.

[19] Once Mr. Rei removed the pedals, he removed any effective way for him to propel the scooter himself, and it no longer fell within the class of a MAC. He has two options, to operate it with the pedals on, or take them off and confine it to private roads. It is not necessary to determine whether it would have complied with the definition, had the pedals been attached – i.e. whether the pedal mechanism was properly connected to the operation of the electric motor.

[20] At first look, the police officers' ticketing of Mr. Rei might seem a case of overly zealous policing or bureaucracy run amok. But the dividing line between cycles that should be registered and insured and their operation confined to licensed drivers, and those that do not, has to be marked in some way. As the legislation stands, it has marked out the dividing lines between cycles that do not need registration, insurance and a licensed operator and those that do; and one of those essential markers for a MAC being pedals or hand cranks attached to the cycle and usable for their intended purposes.

[21] Perhaps the regulations would benefit from a review. Judicial Justice Blackstone commented in his reasons on the uncertainty surrounding legal uses of MACs, mentioning his reading about related concerns in a Vancouver Province newspaper article. Although the *MAC Regulation* in my view is clear, given the possible validity of safety concerns relating to pedal placement, the increasing numbers of scooters of various kinds travelling public roads in B.C. communities and the fact there appears to be some uncertainty surrounding the legal definition of MACs, a review could benefit the public, and the operators of MACs in particular.

[22] That said, it is clear both appeals should be dismissed. In my view, both Judicial Justices decided correctly.

“N. Brown J.”