

Four Wheels Good Three Wheels Better?

Could a Practical Trike Replace the Rhoades Car 4W1P?

I was scrolling through *Encyclopedia* a while back when I saw an entry for the [Sinner Comfort Trike](#). The Dutch are a world Super Power of bike design, and Sinner Cycles has established itself as a first-rate producer of practical recumbents. Like the Rhoades Car, the Sinner Comfort offers dual-wheel-drive. Like the Rhoades Car the Sinner Comfort seats the rider high enough to see and be seen in traffic, and like the Rhoades Car, the Sinner Comfort is fitted with a useful cargo rack.



A trike with an *aluminium frame*, decent seat height, a cargo rack and dual-wheel-drive! I was intrigued. I checked Sinner's web site and discovered that the latest Comfort models are fitted with *rear suspension – as standard equipment*. Standard equipment also includes fenders, a five-function cycle computer and a rear LED light! Disk brakes and premium Schwalbe tires are also standard!

Gorgeous red paint, rear suspension and an enclosed chain.... When unflattering comparisons remind me that the Rhoades Car is heavy and crudely made, it helps to remember why I bought it in the first place.



In Alberta, a mammoth 4X4 truck is considered the essential commuter vehicle. Many tadpole trikes have seat heights in the 24 centimetres (9-inch) range. Riding something that low around here is flirting with death.



Easyracers "X3-SX"



TerraTrike "Path"

Nice bikes, but where do the groceries go?
Most trikes make no provision for cargo.



I wanted to be able to carry stuff – especially groceries and recyclables. With the Rhoades Car, I can carry kids, dogs, furniture – even another adult!

I wanted to ride year-round. Where I live, ice – not deep snow – is the most dangerous winter hazard. Riding in icy conditions requires traction, and the optional dual-wheel-drive (“positive traction”) offered by Rhoades Car won me over.



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Intersections were the hardest part.

Dry powdery snow covered the hard frozen muck. The dual-wheel-drive powered through.

Would a one-wheel-drive trike do as well? I have my doubts.

As a practical all-rounder, the Sinner Comfort addresses three objections that keep many people off trikes: low seat height, the lack of carrying capacity, and poor handling and traction associated with one-wheel-drive. As one writer put it, “I refuse to consider any design that allows me to inspect the undersides of passing SUVs.” The Sinner cradles its rider’s butt 44cm off the ground – only a smidge lower than the Rhoades 4W1P (44.5cm.)

Recently I gave my neighbour Annie a lift home from the bank. At 80 + years-of-age, Annie’s my oldest Rhoades Car passenger to date – and my first fare (she insisted on giving me a dollar!). The Sinner’s cargo rack won’t handle an adult passenger, but according to *Encyclopedia*, it will accommodate a child seat or a 70-litre cargo box. With an optional hitch, the Sinner can pull a trailer or another trike.

Most trikes with two wheels in back drive only one rear wheel. One-wheel-drive trikes can pull or skip to one side – especially when a steep incline accentuates their rearward weight bias.



Power wheelies are fun – unless you’re climbing a steep grade or a parking ramp.

The Hase KettWiesel Ride and the Greenspeed Anura; both come fitted with a differential as standard equipment. Too bad there's no place for cargo.

KETTWIESEL RIDE



Hase KettWiesel Ride
Seat height: 40 cm
\$4,648 CDN



Greenspeed Anura
Seat height: 43 cm
\$2,627 CDN

There's more conspicuous consumption than practicality about Hase's KettWiesel Ride. The little German beauty is designed to impress your friends not haul groceries.

With a base price only \$600 more than a properly equipped Rhoades 4W1P, the Greenspeed Anura is a standout bargain.

A differential will send power to both rear wheels only when both wheels are in contact with a good surface. If you're riding up a nicely paved hill, a differential will drive both rear wheels and eliminate skipping. However, when one wheel has good traction and the other wheel doesn't, the differential sends all the power to the wheel that *slips*. All car drivers have seen this. Get stuck in a bit of snow and one wheel spins wildly; the other turns not at all. That's why they invented the "limited slip" differential.

The Rhoades Car and the Sinner Comfort both use a straight-through rear axle and double freewheels – an arrangement that sends power continuously to both rear wheels. Think of it as fulltime dual-wheel-drive. On gravel, ice or uneven ground, a differential can't match the traction of a double freewheel setup.

At €2.150 (\$3458.00 CDN) the Sinner Comfort gave me my first experience of reverse sticker shock. Of course we can't forget about shipping and customs charges, but with an aluminium frame, rear suspension and all those standard features, there's no fat in the Dutch sticker price.

The Lightfoot Greenway and the Hase Lepus: both are one-wheel-drive.



Lightfoot Greenway

**Seat height: 57cm
\$3,137 CDN**



Hase Lepus

**Adjustable Seat height: 50–70 cm
5,291 CDN**

No folding frame or rear suspension here, but no matter. The Lightfoot Greenway gives you more carrying capacity; better weight distribution and amazing 3 x 8 x 8 compound gearing for a range of 9-150 gear inches!

High-end features include a folding frame, hydraulic disc brakes and air suspension. A lowly 8-speed gear hub is standard. Adding a differential will set you back an additional \$960 CDN!
Five grand and change should buy more.

The base price for a Rhoades Car 4W1P is \$1,269 USD. That amount gets you a plastic seat unfit for use, one speed (no gears), one-wheel-drive and a brake on just one wheel. If the Rhoades Car is to function as a daily rider, it needs the optional deluxe (boat) seat, the second brake, the compound gearing (36 speed) and the dual-wheel-drive. A Rhoades Car 4W1P equipped for real-world use will cost you \$1,886 USD (\$1,986 CDN).

The Rhoades Car 4W1P is proof that you get what you pay for. The only parts of the bike that don't need upgrading are the rear axle, the freewheel hubs and the disc brakes. The basic frame & wheels layout works fine, but it *begs* for refinement: a lighter frame, alloy rims, better cycle components and a proper seat. The boys in Tennessee have had 20 years to work gradually on such improvements, but they haven't (and likely won't). Since most of their bikes are ridden once around the block – once in a while – perhaps they're right not to bother.



Rhoades Car 4W1P



Sinner Comfort

The question I set out to answer was “Could a practical trike replace the Rhoades Car 4W1P?” The Sinner Comfort matches the Rhoades Car in seat height and in year-round all-surface traction. The Sinner doesn’t have the ultra-low (15 inch) bottom gear of my Rhoades Car, but at around 16kg, the Sinner Comfort weighs *50% less*. I know which bike I’d rather pedal up hill. The Sinner’s lighter weight also makes it the obvious choice for out of town rides. The Sinner can’t match the carrying capacity of the 4W1P, but factor in the luxury of rear suspension and all those standard features and there really is no comparison.

I’m going to ask my Dutch friend Anno to help me translate the Sinner’s spec sheet into English – and I’ve already opened a savings account.

Manufacturer / Model	Seat Height	Cargo Capacity	Drive / Traction	Price
Rhoades Car 4W1P	44.5 cm	Excellent	Double Freewheel (Dual-Wheel-Drive)	\$1,986 CDN
Greenspeed Anura	43 cm	Poor	Differential	\$2,627CDN
Lightfoot Greenway	57cm	Good	One-Wheel-Drive	\$3,137 CDN
Sinner Comfort	44 cm	Good	Double Freewheel (Dual-Wheel-Drive)	\$3,458 CDN
Hase KettWiesel Ride	40 cm	Poor	Differential	\$4,648.CDN
Hase Lepus	Adjustable 50–70 cm	Limited	One-Wheel-Drive	\$5,291 CDN