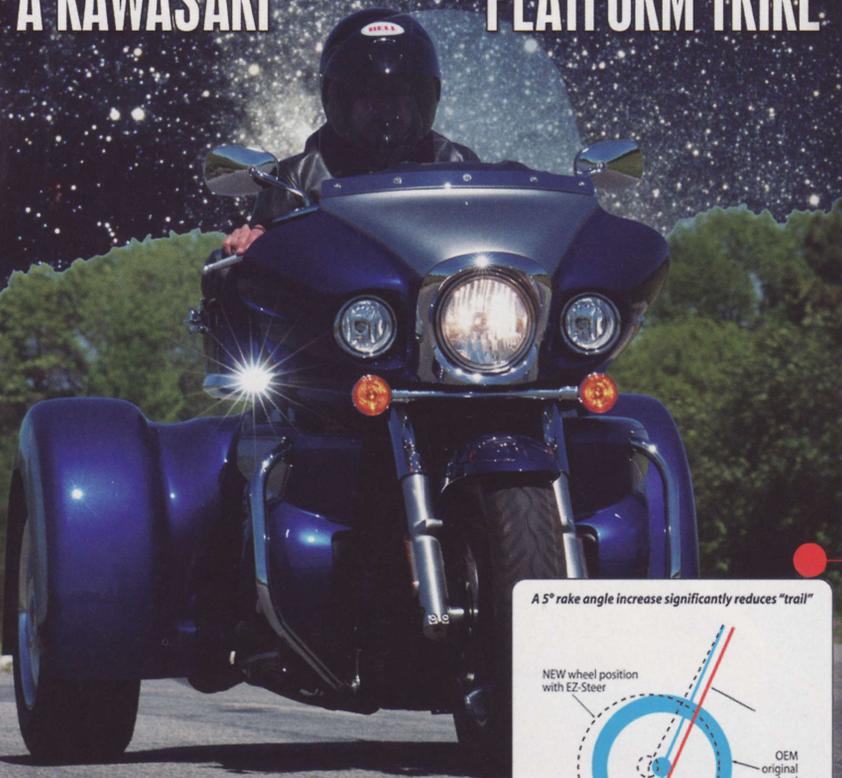


# CHAMPION VULCAN VOYAGER: A KAWASAKI PLATFORM TRIKE



I have become a real fan of Kawasaki. It all started in 2010 when I test rode the Kawasaki Vaquero. Based on the same platform as its famous Touring motorcycle, the Voyager and Nomad, I was immediately impressed; this motorcycle has it all. A 1,700cc, SOHC, 52-degree, V-Twin engine transfers power through a tall-g geared, Six-speed overdrive transmission. And power it does have: a claimed 108 lb-ft of torque; perfect for a Trike. The motor utilizes a single-pin crankshaft, like its American cousins, for a classic exhaust note.

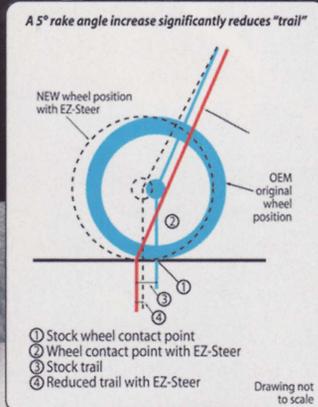
The aerodynamics of the frame-mounted, fixed fairing design coupled with the chin fairing lowers, cuts an exceptionally clean swath at speed. I am a big fan of the fixed fairing design. The fairing is mounted to the frame rather than the forks and wind buffeting isn't transmitted to the forks. That's probably why the Harley Road Glide and Honda Goldwing are often the choice for distance touring.

When The Engineering Team at Champion Trikes unveiled the Vulcan conversion I had to ride it. This new trike kit is available for 2009-later Kawasaki Vulcan 1700 Voyager, Vaquero, and Nomad models. Champion's Kawasaki Trike Kit comes with independent suspension for added performance and agility on the road and is a downright plush ride. Champion's EZ-Steer is offered as an option to the kit.

Why is this needed? In Trike and Sidecar applications, the addition of a 3rd wheel, addition of weight, and the reduction or elimination of ability to lean, will cause the vehicle to be harder to steer.

The E-Z Steer by Champion are triple clamps that position the forks in a slightly different angle producing the effect of power steering. The slight change in angle, produces a large reduction in trail. Too much trail is the cause of "Heavy Steering".

See Illustration



The engine pulls ferociously with a distinct V-twin feel. The cool, retro, analog-gauge speedometer tops out at 140 mph, but on this 1,157 lb. Trike you probably won't ever see that.

Esthetically I think this is one of the better looking conversions; the sculpted lowers flow beautifully with the rear wheel wells. From a side view the lines of the large fairing with integrated fog lights flow gracefully with the upward arc of the front fairing, matching the downward arc of the rear tour pack. A far cry from the dated Servi-Car look conversions once had.

Inside the fairing, large, round dials and aluminum dashboard trim are reminiscent of a '67 Caddy. The largest two analog dials give riders speed and rpm. Two smaller dials serve as a fuel gauge and display coolant temperature. A center, multi-function LCD display's gear position, time, odometer, dual trip meters as well as readouts for remaining range and average fuel consumption. Switches on the right handlebar control display functions. You'll also find switches for the electronic cruise control (a Standard feature) mounted on the right handlebar that is usable between 30 and 85 mph. The Voyager also sports an audio system with AM/FM/WX and is compatible with iPod, an XM tuner or CB radio units. It sounds fantastic and the 40 watt dual speaker system is no problem to hear at speed. A real bonus is how easy all the radio controls are to access at the grips. I didn't like the horn button placement; it's to the right of the light switch and should be reversed for easier access. There are small storage areas in the fairing, which require the key to open, as does the gas cap.



An innovative Kawasaki Air Management System (KAMS) on the Voyager was designed to fight off those annoying engine heat problems present on the V-Twin due to high temps from the exhaust and rear cylinder. The first to use an air management system, Kawasaki designed the KAMS to increase comfort for riders on the 1700 Voyager, especially while at a stop. Kawasaki says, "The primary part of the KAMS routes radiator heat to the ground, below the engine, while the secondary part of the system draws heat away from the rear cylinder and exhaust pipe and directs it to the ground on the left side of the motorcycle. This system is particularly effective in warm weather while stopped in traffic or for extended periods of low-speed operation, such as during staging for group rides or parades."

Riding position is extremely comfortable and well triangulated. The passenger rear seating is also very comfortable though there are no hand grips. The trunk accommodates full faced helmets, as does the rear storage compartment. Rear storage also has two hidden storage areas, which accommodate items like my tripod perfectly. Champion includes two small zippered storage bags to take advantage of this extra space.

The Six-speed transmission with overdrive operates smoothly with a positive neutral finder. Personally, I am not a fan of a heel-toe shifter and if you don't use one, the heel shifter gets in the way when stopped. The Vulcan Voyager also has a 5.3 gallon gas tank, but sorry, I didn't keep track of the mileage.

Almost everything about this marriage is perfect. The main issues I have are endemic to most trike manufacturers and that has to do with gearing. Gearing can have more impact than engine upgrades and is often overlooked because legally, the conversion must marry with a "Stock as Tested" drivetrain and transmission to maintain its CARB certification. The result is that 6<sup>th</sup> gear runs at low rpm, too low. At 70 miles an hour the engine is operating at around 2600 rpm and settles in at 3500 at about 85mph; so at the lower freeway speeds you don't feel like you have enough torque. This is a common issue. Many times this can be remediated by simply putting on smaller, low profile rear tires on your existing rim and will increase rpms which in turn give you more horsepower at higher speeds. Then of course the speedometer will need to be recalibrated.

Riding Champion's CRT (Comfort Ride Trike) independent suspension one is immediately impressed at how forgiving an independent suspension is. Changing lanes at high speed, cornering and hitting rough freeway patches, the independent seemed more tolerant of the inherent side-to-side motion (Pogo Effect) associated with three wheels. This observation is later confirmed spinning her through a parking lot with speed bumps and slow speed maneuvers. CRT features high-pressure gas shock absorbers, forged upper and lower control arms and high-pressure cast components, all adding strength and reliability while reducing weight. Champion Trikes also employ their EZ-Steer, a rake kit (a triple tree change out) that adds between 4.5 and 6.0 degrees (depending on the motorcycle make) to the stock rake of the motorcycle. This accessory significantly lightens steering, making it "quicker", by reducing trail. VSC (Variable Sway Control) systems allow the rider the ability to change the handling characteristics of the Trike. Therefore, adding to the performance for curves or comfort for Highways and city driving Champion also chose to increase the width of the rear wheelbase to 57.75 inches as opposed to say the H-D Tri Glide's 43.88 inches, claiming this geometry also improves stability. Champion claims that using automotive type brake caliper's and rotors improves braking but we didn't to any braking distance tests.

Do the math: the bottom line is you can find a 2009 Kawasaki Vulcan 1700 Voyager at \$10,995 or a 2011 with ABS at \$13,995. Add the package below and you can have a luxury touring Trike with almost all amenities, at a price point that is pretty damn compelling.

<b>Champion IRS Kit</b>	<b>\$8,145</b>
<b>Ez-steer</b>	<b>\$1,095</b>
<b>two-tone paint</b>	<b>\$925</b>
<b>pinstriping (painted)</b>	<b>\$195</b>
<b>carpeted trunk Kit</b>	<b>\$155</b>
	<hr/>
	<b>\$10,515</b>
<b>Install Kit and EZ-Steer - Labor</b>	<b>\$1,895</b>

*Of course Champion does Harley trikes as well, several of them, and their dealers can fill you in on all the options. You may be wondering - can this all be financed? Well that's where the dealerships and shops who carry Champion come in. If they carry the fully-converted bike or will do the work for you, they can sell it as a finished product and probably finance it. Again, a pretty compelling deal if you're ready for a trike, and if made by Champion, one of the best trikes out there.*

