

# Ground Zero



**Richard Oakes is without doubt one of the best kitcar designers of all time. His Blackjack Avion was a superb kit, but as STEVE HOLE reports his new Zero is a complete revelation.**

**H**ow many times have you heard someone say, "That wasn't a bad car – for a three-wheeler", or how about? "considering it had a wheel missing it was pretty good". Well, forget all that. I've just driven a kitcar that just happens to have three wheels that is going to change that outlook. For good. You know, it's quite possible after this experience that most four-wheelers have a wheel too many!

The car is called the Zero and it comes from the pen of acclaimed designer Richard Oakes, one of this industry's few real creators. His history has been well documented although just in case you didn't know he's been responsible for such as the Nova and GTM Libra.

Running parallel to his general design work has been Blackjack Cars and if you are familiar with the Citroën 2CV-based Avion then the Zero will look kind of similar, although doesn't share any panels with its forebear. What the Avion did though was make the almost perennial prejudice against trikes, fade slightly and of the 70 sold during its production life, a fair few went to people who wouldn't ever have considered a three-wheeler in normal circumstances. It was cute, extremely cool and beautifully executed and typical of the man who designed it. According to Richard though,

the Zero has "A bit more of everything, although is as rationalised as possible". He basically means, it's a more aggressive machine and bereft of tat!

One thing the Avion did lack though was a bit of pace and even though the 2CV has a fabled quality of ride it can't really outrun much, although of course people didn't buy it for that reason. However, Richard reckoned that there was a niche for something slightly similar with a bit more performance. He decided to use the venerable VW Beetle, not as a donor, but for its engine and gearbox. Although not blisteringly quick in standard form it does crucially have a more than healthy tuning industry built around it. Another important connection for Richard is with aviation, where the flat four air-cooled boxer engine powers a load of homebuilt planes and helicopters.

## **AERO-FASCINATION**

Richard has a fascination with aero-design, which was pretty clear with the Avion (Not the least with the name), and crystal-like with the Zero, named after a famous WW2 Japanese fighter plane.

The original intention was to keep both the Zero and Avion in production, but as a micro-manufacturer this just wasn't possible logistically and so reluctantly the Avion project was offered for sale. At the

time of writing it hasn't found a new home, but it will do I'm sure as it's simply too good to fade away.

Look closely at the neat styling touches and aviation cues and you won't fail to be enchanted. It looks a lot bigger than the Avion, but this is undoubtedly due to the wider track and delicacy is replaced by a meaner, more purposeful stance. An example of the thought that's gone into the Zero is the way the front panels are interlinked and removable. The little nosecone is a one-piece moulding, but the rear engine cover and luggage area are cleverly interlocked. There's actually room for a couple of squashy bags, making it a practical vehicle.

Interior looks typical Oakes in style. It is full of clever, functional lines but is eminently driver-friendly too. Take the lovely individual bucket seats. They are on runners and also tilt forwards, but their real party-piece is the way that the covers look expertly trimmed, but are actually little more than jackets, which can be removed in thirty seconds flat.

Gauges are made by ETB Instruments and look just so in the cockpit, while the switchgear has been carefully sourced by Richard. The thing about interiors created by decent designers is that everything works on the eye and things like switches are tactile instead of just doing the



required job. I love the indicator toggle, mounted on the dash panel rather than merely on a column stalk, which it is functional and offers resistance in use, and therefore feels lovely in action. There's nothing floppy about the Zero! Richard tells me that he deliberately wanted to keep the steering column a stalk-free zone.

Although the Zero uses the engine and gearbox from the VW Beetle, don't make the mistake of thinking it's the donor car. There isn't one. The bulk of the parts are bespoke to the car and the flat four was used because of its aviation links and also the fact that Richard liked the 2CV air-cooled twin so much he wanted to use a bigger one! The only possible 'sort of similar' unit available was the Veedub. Plus of course as mentioned there is a whole movement dedicated to wringing more power out of the 60bhp Beetle motor. A phalanx of companies can offer everything you want from a basic replacement to a whole range of big bore engines. Shop around, there's plenty of choice, and you will find a wide difference in price for what are apparently similar packages. Caveat emptor, definitely applies.

### TRUSTY OLD SHED

So forget your rusty old shed of a Beetle, all you need do is source an engine and 'box for your project. The demonstrator uses a 1776cc (up from standard 1600cc) big bore unit, from a Dutch company, although with a little bit of research we found very similar units available in the UK from around £1000 right up to over £2000. These give around 100bhp, and feature uprated parts throughout such as Engle camshaft, 90.5mm Mahle Pistons and Scat crank. In addition you'll also need to

purchase a few special components from Blackjack Performance (Richard's new VW performance arm) such as the beautifully crafted manifold, which looks great and gives better clearance. Alternatively if you want to visit one of the aeroplane specialists such as Great Plains Aviation you can buy all manner of goodies that they fit to their engines. One essential item, again in the name of clearance issues, is a genuine looking 90-degree Bakelite distributor cap, with the leads coming out of the rear rather than the top. A 1776 not enough for you? Well, you can easily find 1835, 1914, 2180, 2276 units from companies such as Big Boys Toys (and their wonderfully named Thurrock Big Bores!), John Maher and Stateside Tuning.

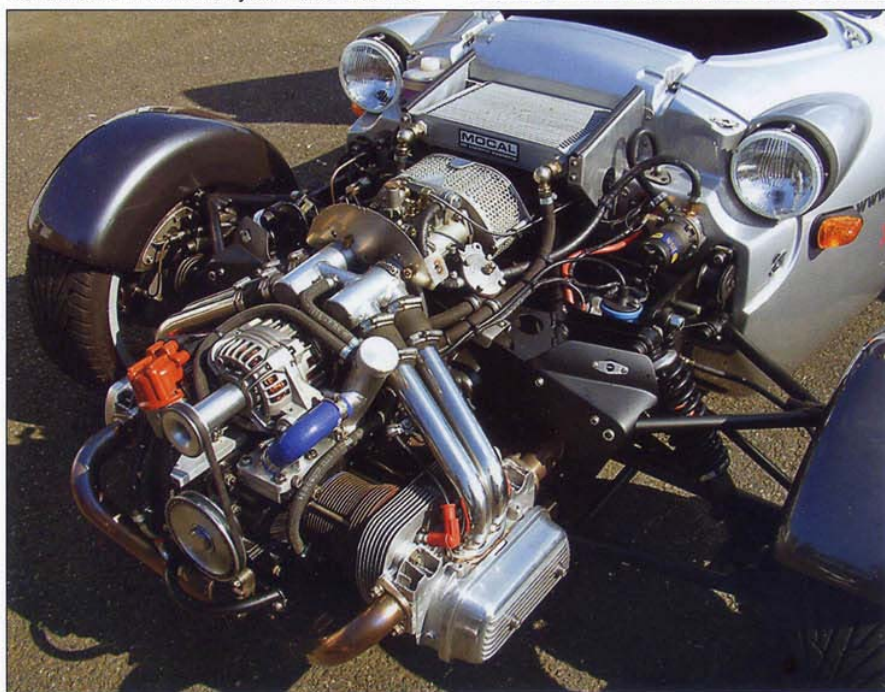
What you find with the performance orientated Beetle units, is that they need additional oil-cooling as the air alone

won't cope, and here again Richard has devised a cunning system for the Zero, while if you wanted you could look at suppliers like Melling, if you preferred to go your own way.

Whatever your thoughts on the old Beetle lump, I have to say that if you obtain one from a specialist they look superb, and as I found out with the Zero 1776 unit they work well too.

It's time for my drive of the Zero and a little jaunt a few miles from Helston to Britain's most southerly point, the Lizard Peninsula, and a little step over the doorless side panel and I'm into the cockpit. As I said earlier there's loads of space and I have to say it's a nice place to be. Thanks to the wider track there appears to be more width in the cabin than the Avion, which is great news for bigger bears.

A couple of pumps of the throttle,



engage the ignition switch and a single press of the starter button and the Beetle unit bursts into life, with a spiteful and metallic 'yagga yagga'. I wait a moment for the oil pressure to climb to its mid-gauge (around 30PSI) position and engage first gear. Although it's a Beetle gearbox, which you can get from either a 1302S or 1303 variant, Richard has cleverly improved things by adding a Ferrari-esque aluminium gearslot, which helps changes and looks great. Plus he's also devised a cunning method of 'locking-out' reverse gear, preventing inadvertent and disastrous mistakes. To engage the backward's cog you have to physically move a small lever next to the lever. Ingenious if you ask me.

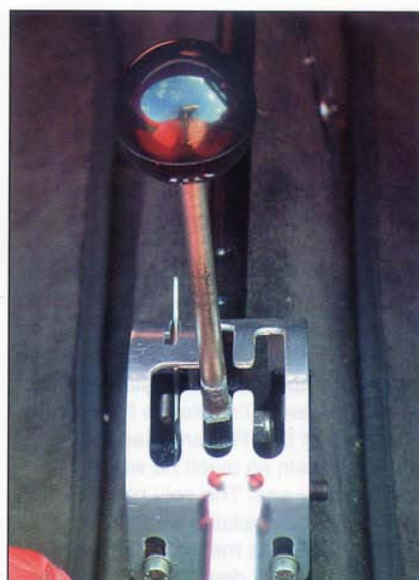
The gearshift doesn't feel like a stick in a bucket of porridge Beetle and first is engaged with a reassuring snick of the long lever. Revs rise and we're off to see the Lizard! (sorry – Ed.). The engine note is brilliant and more air-cooled flat-six Porsche than gutless Beetle four, and





sounds menacing even at town speeds. I quickly notice that it's totally effortless to keep up with traffic and a gap in traffic reveals a completely linear power delivery. I drove a seventies 911 a while ago, and the way the Zero performs is actually quite similar. A stab of the throttle and acceleration is instant. This is the sort of car that just makes one laugh out loud. If I'm impressed by the go, I'm not prepared for the go-kart handling. Usually with a three-wheeler you get understeer if you push them hard. Not with this one you don't! Attack the corner and the little car tucks in, hugging the inside line as it goes. Also impressive is the almost total lack of bodyroll.

If you know the A3083 from Helston to The Lizard, then you'll know it has some lovely adverse camber uphill twisty bends, that flow quite nicely. After the second sections of these I confess to emitting a "F\*\*king hell!" retort as the Zero displays consummate roadholding, handling, performance and get this,



torque. It would best any three-wheeler I've driven (plus most four wheelers too.) and I end up intoxicated by the thing.

### **SPOT-ON SUSPENSION**

A couple of times I have to find the brake pedal sharply to avoid obstacles and again I'm hugely pleased with the way the Zero anchors up. The pedal feels nice and compliant with the stopping power coming courtesy of a 280mm cross-drilled stainless disc and four-pot caliper sourced from a Kawasaki ZX-9 motorbike, while a Mk 2 VW Golf GTi rear disc handles the rear complete with handbrake mechanism.

Suspension is almost spot-on to my taste and isn't overly firm or wallowy. It's just right. At the front are Blackjack's bespoke unequal length double wishbones with AVO adjustable dampers. Undoubtedly aiding the sharp cornering is a unique bulkhead mounted 22mm anti-roll bar, which operates off the lower wishbones via long push rods. At the





rear-end is a cool trailing single swingarm (a la Ducati) and AVO damper.

I really like the incisive steering, and find it to be razor sharp. Aim the Zero where you want to go and you'll end up there. The rack itself is pretty quick, being just 2¼ turns lock-to-lock.

Underpinning the Zero is a clever full length CDS steel tube subframe chassis, with all holes pre-drilled and laser cut brackets and yokes mounted ready to accept the body tub. It also has a sort of built-in 'sub' subframe to which the engine is mounted. Talking of the body. This is a kind of GRP monocoque structure with built-in stressed bulkheads. It also features a bonded-in fascia and luggage compartment at the front and a rear diaphragm. It's a quality moulding that comes supplied in grey gelcoat ready to accept paint, and is also extremely strong and stiff.

As a package this is hard to beat regardless of how many wheels it has. It's a triumph of design, with so many delightful touches so typical of the perfectionist that is Richard Oakes. I've

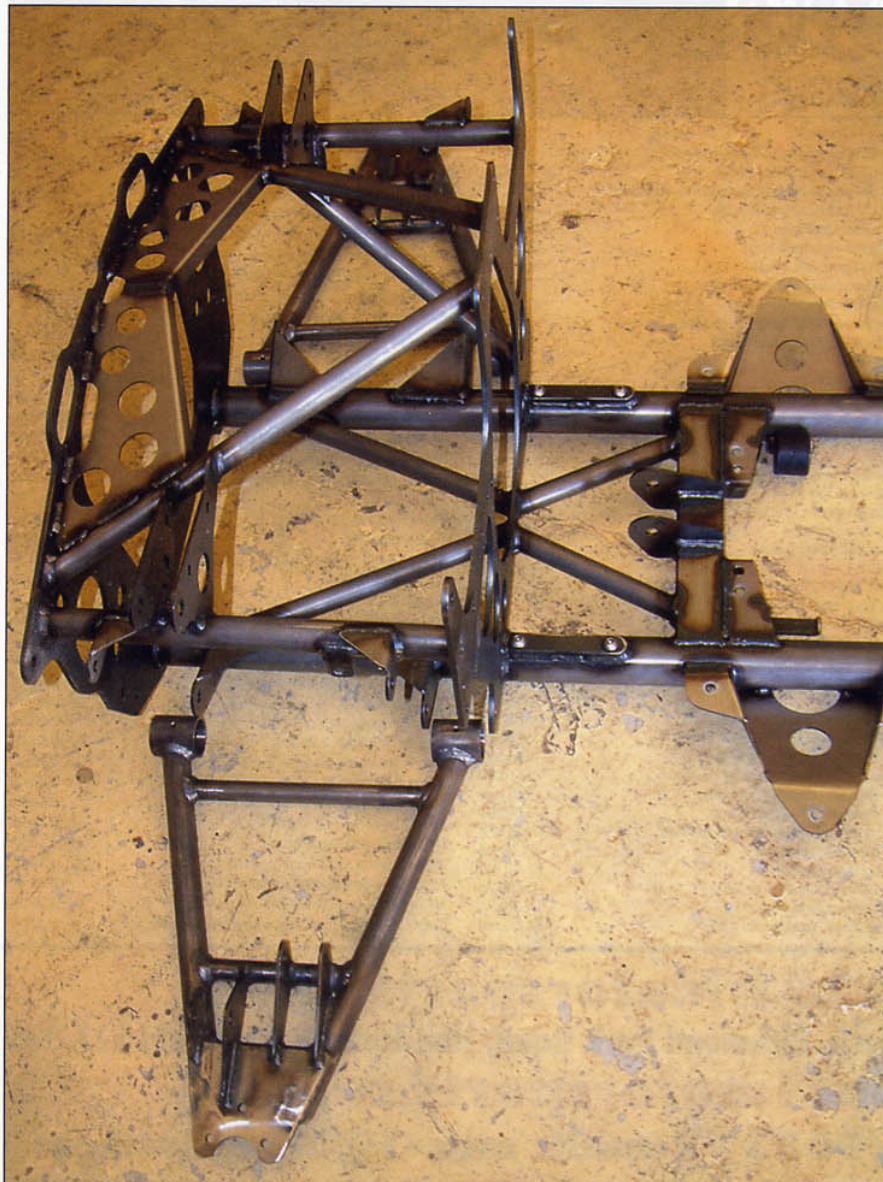
known the man for a long time and have marvelled at most of his kitcar designs. Believe me. This is his best yet. Gripes? Well, none really being honest. I guess the only thing I could comment on would be the stylish shroud over the steering wheel. For someone like me with sausage fingers and bucket hands I caught my knuckles between wheel and underside of the shroud a couple of times, if I held the wheel at the 'ten to two' position. Although I mention it, I never really found it too big a problem.

So, what's the kit going to cost you? It's actually available in eight individual modules. The first of which comprises the main GRP, chassis and suspension parts and costs £4280 inc VAT. Pack two is the brake components at £1000 inc VAT. Next come Exhaust and steering parts at £974 inc VAT; Fuel system (£1470); Electrics (£1000); Lighting (£588); Interior kit (£904) and Oil parts/Miscellaneous at £530. The individual packages total £10,584 inc VAT, and although this is clearly not for the faint of heart, we're



talking top quality here and that always costs a little more. The old adage 'you get what you pay for' is very applicable here. To build a car to the standard of the demo will cost you around £14,000, although use a billy basic standard Beetle engine with the essential mods and it could be done at a push for £12,000. As mentioned that pricing level will put some off, but the allure of the car will attract people all the same.

The Zero is a cracking piece of kit and the punk kid with attitude sibling of the Avion!



## ZERO TECHSPEC:

**MODEL TESTED:** Blackjack Zero

**CHASSIS:** Full-length subframe made from CDS tube.

**BODY:** GRP semi-monocoque structure with stressed bulkheads. Supplied in grey gelcoat.

**ENGINE OPTIONS:** VW Type 1 air-cooled flat four boxer. 1300cc-2400cc. 50-120bhp. Infinite tuning options. Either Weber 40DCOE or Dellorto 40 DHLA carb mounted to bespoke Blackjack inlet manifold.

**GEARBOX:** VW Type 1 from 1302 or 1303 Beetle. Four-speed. Standard final drive ratio 3.8:1. FWD via VW Golf steering uprights.

**SUSPENSION:** *Front:* Unequal length double wishbones with AVO adjustable dampers. 22mm Anti-roll bar operated by lower wishbones via pushrods.

*Rear:* Unique trailing swing-arm with AVO adjustable damper.

**BRAKES:** *Front:* Kawasaki 280mm cross-drilled disc with four-pot caliper. *Rear:* VW Golf GTi rear disc with handbrake mechanism.

**KIT PRICE:** From £4108 inc VAT. Eight packs total £10,584 inc VAT

**DIY BUILD (AS TESTED):** £14,000.

**BUDGET BUILD:** from £12,000.

For more information contact:

Blackjack Cars;

Unit 5, Water-ma-Trout Industrial Estate, Helston, Cornwall TR3 0LW. Tel: 01326 574 464

Website: [www.blackjackzero.com](http://www.blackjackzero.com)