

RAW



Welcome to Raw

Our aim here at Raw is to produce unbeatable performance cars and unchallengeable engine installations. We are a company driven by development and innovation, committed to serving the needs and fulfilling the expectations of our constantly increasing customer network.

We delight in our products and, from the racetrack to the road, believe that you can get more from Raw. This brochure is an introduction to our products and services. However our rural facilities, located just outside Hereford, are open six days a week and we would be delighted to show you round. We do ask, however that you call and make an appointment, as we want to give you our full attention.

You may be interested in our Striker, looking at our range of Toyota performance installations, or perhaps considering a combination of both. Whatever, we want to work with you to build a product that we are both proud of.

It has often been said that our enthusiasm is contagious. Attending one of our track day events is one way in which you can enjoy this at first hand! Please do not hesitate to contact us for information on the events diary or even look on our web site.

Irrespective of your future decisions, I wish you all the very best and hope that this contact will enable you to share our passion for the British specialist car industry!

Please take time to read this information pack. Should you have any unanswered questions or queries, don't hesitate to contact us soon!

Mel Coppock - Director

More about Raw!

A brief history.

Raw was established seven years ago to market specialist component cars. We promptly established a strong reputation within the specialist car industry for high quality vehicle assembly, excellent customer service and an innovative product range. At the heart of this range lay the Toyota 4AGE engine package as a viable performance installation for specialist application.

Pioneering this new installation challenged the status quo, yet was soon adopted by many as an unbeatable power plant, thanks to continual development, engineering excellence and the units inherent desirability. We feel proud that the 4AGE is now widely considered a superior installation option for specialist car application, illustrating the fruitfulness of our endeavour.

The next logical step was to provide a complete car and engine package. In 2002 an opportunity arose to achieve this with the purchase of the reputed Striker from Sylva Autokits. The Striker, light, agile, proven and affordable, was the natural stable-mate to our then burgeoning range of engine installation options.

The accommodation of the Striker project was promptly followed by relocation into a modern, purpose built facility, which could service the needs of our developing company and expanding customer network.

Today, Raw continues to pursue engineering excellence and to expand its position within the specialist car industry. We export all around the world, beyond our native European market, and have achieved success with an unbeatable product lineup, a skilled, enthusiastic and committed workforce, and a consistent desire to provide our customers with a totally satisfying product.

We hope in the future to service your needs too. As we are a small company, we can provide a personal, professional service and would encourage you to come along and experience our exciting product range at first hand.

We Provide.



Raw Striker

Fully built or in component form for self-assembly

"I have driven a load of Lotus seven look alike and, bar none, they have not managed to deliver in a days driving what striker managed in minutes "

Ian Stent. Kitcar world. 2003



Raw Power

Toyota engine installation packages for specialist car application

"The Toyota twin-cam is simply the most desirable kit car engine of the moment. It looks great, is easy to tune and offers bags of character. Which Kit June 2004 Powerhouse article"

A cross comparison of kit car engines available. Which Kit? June 2004



Raw Support

Bespoke assistance for customers with unique performance requirements.

"Raw's superb purpose built facility in Shelwick, just outside Hereford and the complex that they have at their disposal needs to be seen to be believed. It encompasses a large workshop, stores with a separate showroom and office area. This is no cobbled together effort, as what we have here is a cohesive whole that means business and underpins the already established excellent customer service"

Totalkitcar.com 10 October 2003

The Raw Striker

Original and unique, where form follows function

The Striker is unique. It does not seek to replicate any traditional design. It was conceived by Jeremy Phillips, a professional structural engineer, who although largely unknown beyond the club racing fraternity has become a legend in his field. His desire in the mid 1980's was to produce a small light race car with near neutral handling and tremendous traction, which could also be used safely on the road. Enter the Striker, which from that moment on has dominated multiple race series, including the prestigious 750 Motor Club. This is a popular race series, open to all manufacturers and enthusiasts, not a single make series established by a manufacturer to protect commercial interests.

Designed with a light yet strong chassis, the engine and gearbox is offset as a counterweight to the driver, creating differential foot-wells to accommodate a 6' 4" driver yet maintaining comfortable

passenger space. The conventional out-board, coil-over shock absorbers and springs were moved in-board, improving aerodynamics and damping efficiency as they operate at 90° to the rocker arms. This unique layout is the key to the Striker's brilliant handling and turn in abilities.

Form continues to follow function with a steel scuttle and raked back windscreen improving aerodynamics and creating a unique mid rife safety firewall, designed to offer additional occupant protection in the event of an accident, addressing obvious safety issues. A welded RAC race roll bar in cds tube, with the option of a full cage and side impact bar, offers additional roll over protection. This is considerably stronger than the conventional single roll bar which is susceptible to collapse when most needed.

The racing experience has emphasised the need for wishbone adjustment, which has been designed into all Strikers thereby offering the near perfect setup for any driver.

What is the result of such thorough design? A safe and aerodynamic car that is finely balanced, hugely refined, short, stiff and light. The Striker has provided endless enjoyment to many drivers, won countless accolades and is highly reputed by those in the know.

At Raw, we have engaged in a program of modernisation, taking an unbeatable product, a thoroughbred design, increasing the quality of components at both manufacture and assembly, and adding the refinements necessary to make the Striker a class leader. Branding and marketing has been made easier, thanks to a large, dedicated customer network and the Striker's unshakeable reputation for performance and handling. As we now conclude our intensive three-year program of investment and development, we feel confident that we have a valuable product to be considered alongside, if not ahead of, leading British track and road performance cars.

Why the Striker?

- **Handling** - *Unique chassis with excellent geometry from the simple inboard rocker front suspension and double wishbone rear tested to perfection on the track, benefits the whole range.*
- **Suspension setup** - *The unique fully adjustable suspension system, designed and perfected for track success is available on all Strikers. This is combined with a professional car and engine set-up service from Raw.*
- **Fully Upgradeable** - *A unique feature as the chassis is unchanged throughout the range. Want more performance? Simply upgrade!*
- **Value for money** - *Flexibility with donor parts, an easy self build option starting with a rolling chassis and a pay as you build option provides an attractive proposition for those who don't have an excessive budget but want a highly competitive and enjoyable car capable of matching the very best.*
- **Safety** - *Professional structural design with high torsional rigidity, unique midriff firewall, roll over protection in cds tube and a built in prop restraint enhance occupant protection and safety. Safety has become a high priority and is taken very seriously by Raw to ensure as much protection as possible for our clients*
- **Ease of build** – *You don't need to be a skilled mechanic or electrician. A full professionally prepared CD manual is provided, detailing every aspect of the build process supported with over 400 photographs. Profile cut aluminium panels, a prelabelled Raw wiring loom, fitting kits for items such as the fuel tank and a build pack make the build more like an assembly of parts rather than a manufacture of a car.*
- **Power** - *Accommodates practically all engine options including performance bike power, Toyota, Honda, Ford, Vauxhall and various V8 installations.*





Striker Road!

100% Striker heritage and 100% Striker handling, available on the road from as little as £5000! Using a Ford Sierra donor vehicle it is possible to self-assemble a Striker to varying specifications.

The Striker Road has to be experienced to be believed. Not only is it a very effective head turner it is also capable of out performing some of the quickest mainstream cars and, incidentally, super bikes on the road! All this is available for a small investment, unbelievably low insurance and almost negligible depreciation.

Partaken by men and women alike of all ages and walks of life. Uniquely English and ever so slightly eccentric. What life is all about!

- **Track features as standard** - All the safety and handling features developed for track performance are still available for the road version providing a safe and compliant road car with unbeatable driving experience.
- **Screen** - A large raked back screen provides good visibility and less air turbulence especially with the purpose built side screens.
- **Weather gear** - Full weather gear available for touring. Adequate boot space also available for storage.
- **Comfort** - Light agile car with light controls and excellent driving position provides a tireless long distance driving experience for occupants of up to 6 foot 4 inches!
- **Maintenance** - Light easily removable panels provide good access for maintenance procedures
- **Upgradability** - Completely upgradeable for performance enhancements
- **Residual value** - With a reputation for excellence and high level of owner satisfaction, all Strikers enjoy strong residual values. Supply for pre-owned Strikers rarely meets demand, setting the budget Striker apart from the saturated markets of our budget competition

Right

Owner: Les Phillips. Occupation - Retired Bank Manager.

Spec: Striker Toyota 16v - 160 bhp - built 2003 - 5 speed Ford gearbox - 3.9 differential - Disc brakes all round - Built with new components therefore new registration plate

Quote: "Great to build, even better to drive. Totally smitten!"





***"It's got a brilliant feel to it and terrific reaction in all the controls.... An inspiration"
KitCar Magazine. September 2002***

***"It makes a corking Sunday morning car and a very effective method of covering the
standing mile." Ben Oliver Autocar, September 2002***



Striker Track!

With the advent of track day activity many have found that the expensive mainstream sports car options are not only expensive to use and risk on the track but also inevitably become frequently outclassed by small purpose built track cars.

The Striker Track is aimed for those who wish to purchase a hugely enjoyable sports car for the road but also wish to drive to a track and embarrass the myriad of expensive formidable sports cars that are always partaking in such an event. With race experience we at Raw can advise and recommend a specification suitable for your personal track requirements.

The Striker is light, agile and with its race bred heritage and a moderately powered engine can provide a hugely entertaining day on the track. Performance upgrades are not only easy to fit but are also inexpensive to buy. The Striker Track therefore offers an unbeatable combination of performance, reliability, heritage and value!

Performance

With numerous engine options and upgrades available, there are too many permutations to list. The examples stated give an indication of the exciting acceleration you can experience by driving a Striker. However, acceleration is only a part of the overall performance. Where the Striker excels is in its incredible road holding and handling which has to be experienced to be appreciated.

Striker Road standard 16v Toyota -	0 to 62 mph	5.1 sec (Autocar test Sept 25th 2002)
Striker Track 20v Toyota -	0 to 62 mph	4.5 sec (In car data logger)
Striker Race Hayabusa -	0 to 62 mph	3.2 sec (In car data logger)

Striker Race Hayabusa - Brands Hatch Indy circuit 50 seconds and Mallory long 49 seconds.

The Striker Track offers an unbeatable package to those seeking reputed road manners and pace winning performance in a single, affordable package.

Right

Owner: Gary Goodyear. Occupation - Businessman.

Spec: Striker Toyota 16v - 170 bhp race spec engine - Built 2002 - 5 speed close ratio Tran-x gearbox and 4.4 differential. Disc brakes all round - Used on track days and for racing = Winner 750 MC Kit car class A race series 2004

Quote: "Unbelievable handling, frequently the quickest car at track days, embarrassing very powerful cars"





***"So much fun is the Striker that I stayed out for virtually the whole session picking up more and more speed... The Striker was hugely entertaining at Silverstone"
Steve Bennett. Circuit Driver Magazine. September 2002***



Striker Race!

True to its race-winning heritage, the Striker remains a formidable challenger in racing series across the globe. Here in the UK alone, we have a large contingent of vehicles competing in various championships. For almost two decades, the Striker has led the pack and it was from this position that it became a key contender as a road going, self-assembly performance car. The latest generation Striker chassis is a natural competitor, strong, rigid, light and roomy, encouraging an array of different engine installation and set up options. Whilst many customers compete using this standard chassis, we have thrown our efforts into developing a supplementary chassis, professionally designed for racetrack application.

The new full competition Striker Race chassis is our latest offering, boasting a range of enhancements including:

- **Fully lowered** - 75mm track height
- **Professionally designed** - Extensively tested statically and in competition
- **Adjustment** - Rose jointed wishbones for full race adjustment.
- **Agility** - Roller bearing rockers with caster adjustment for true handling agility
- **Power** - Bespoke build service to suit your engine, differential or regulation requirements
- **Bodywork** - Lightweight bodywork, quick attach, with three-piece rear to suit wide tyres.
- **Safety** - Full range of safety upgrades available including side impact bar and race cage.

Our professional design and manufacturing process has already paid dividends, with our own Works Striker Race car winning 6 out of 14 races outright and narrowly missing the overall championship of the 2004 season 750 Motor Club, Road-Going-Bike Series. With a record of never coming lower than second and completing all races the dependability, quality and handling accuracy of our Striker Race chassis is assured. In addition, Raw provides a laser controlled suspension and electronic corner weight set up service, to facilitate immediate track pace! Our own test vehicle achieved a 50 second lap on its debut at Brands Hatch Indy, reiterating its blistering credentials!

Right

Owner: *The Raw works race car - Driver, Andy Charsley.*

Spec: *Fully lowered, independant race chassis - rose jointed wish bones - Hi Spec race brakes - Freelander 3.1 limited slip diff - Hayabusa 180bhp - dry sump - electric reverse - race light body*



“Totally outclassed all other equivalent cars and almost beat the full-bodied mid engine racecar that won the series! Must be one of the quickest of its kind around.” Andy Charsley “Race Driver”

“It’s the real deal – more than capable of holding its own against any of the top flight lotus sevens” Which Kit. November 2002

Raw Power.

Back in the late 90's we were installing Ford Pinto engines into most of the kit cars we were building, as was the norm in the industry. Then the bike phenomena broke and there was much discussion suggesting that the bike engines would overwhelm the car options. We came to the conclusion that although the bike engines were very exciting and quick on the track they did not necessarily fulfill all the requirements for a good well-mannered road car.



The Pinto although plentiful in supply, torquey and reliable, was heavy and with its long stroke did not readily rev like its predecessor the Cross-flow. Due to the fact that Ford have such a strong brand presence in this market customers naturally chose the Zetec as the next step and have found that although it was more refined it had a similar nature.

Much of the excitement surrounding the bike option was to do with the revability of the units and the emotional rush that followed. We at Raw considered that the market would require a car engine that possessed some of the best qualities of the bike and car options. The revability of the bikes but the torque and drivability of the car option.

We looked at all the 16v car engine options available and compared them against criteria of size, revability, availability, robustness, tuneability, power, pre'92 for SVA simplicity and weight.

The only engine that fulfilled all the criteria was the Toyota 4age 1600 16v

engine of MR2 mark one fame. When we bought our first engine and sat it in an engine bay of a small open wheeled car we were convinced that this beautiful little unit would eventually become very popular. Of course we had much installation development to do. A bell housing, clutch, inlet manifold for side draft carburetors, engine management and exhaust system etc etc as well as power upgrades! In fact no less than 18 months of hard work was poured into this project before launch. However our hunch has paid off. Now literally hundreds of these units have been fitted in almost every Lotus inspired sportscar with every driver hugely excited and protective of their gutsy little unit that frequently embarrasses its bigger, weightier rivals for performance and reliability.

Raw has now developed a strong brand association with this Toyota engine, which is now considered a mainstream rival in this market. Also as the racing potential now being realized in particular in the 750 MC Race series the popularity of this remarkable unit can only continue to grow.

Toyota 4age 1600 16v engine

4AGE 16v - This is the unit used in the Toyota mk1 MR2 and Corolla Gti. This unit can be removed in its entirety and installed into a specialist car with the incumbent electronic control unit and fuel injection system. Alternatively side draft throttle bodies and mapped ignition can be fitted to enhance looks, improve existing performance and facilitate performance upgrades. Although it has a steel block with an aluminum head it is light, powerful, very robust and revs to 8000rpm in standard form.

<i>Power in standard form</i>	<i>125 bhp</i>
<i>Power with throttle bodies and mapped ignition</i>	<i>135 bhp</i>
<i>Power with standard trac pac one upgrade</i>	<i>155 bhp</i>
<i>Power fully built for track or competition</i>	<i>180 bhp</i>



4AGE 20v vvti - This unit was the next generation 4age engine that was not installed in UK Toyota cars. It is a very high spec engine with side draft throttle bodies and variable valve timing as standard. This engine possesses all the advantages of the 16v but it is more refined and offers more power in standard form. We provide this engine with mapped ignition to facilitate ease of installation and improve after sales service.

<i>Power in standard form</i>	<i>150 bhp</i>
<i>Power with standard trac pac one upgrade</i>	<i>165 bhp.</i>

More from Raw - Additional Services

- ***Track Days*** - We hold a large number of track days, both for demonstration purposes and to provide a safe, challenging and stimulating environment for owners to enjoy their Strikers to the full. Whilst many such events are organized in house, we also encourage customers to organise such events and are always keen to promote these.
- ***Track driving instruction*** - Driving on a track can be an awesome experience for the first time. We can arrange track-driving instruction for those who are new and wish to enjoy this experience safely without embarrassment! This is frequently arranged on a one to one basis and can be combined with professional tuition on car setup. This support enables our clients to gain the very best enjoyment and satisfaction from their acquisition. Highly recommended!
- ***Arrive and drive service*** - So you want to get behind the wheel, are keen to compete, but do not have the time to build and maintain your own vehicle? Raw has the solution. With arrive and drive, we match the driver to a vehicle that fulfills their needs, whether new or pre-owned. Raw can maintain and deliver such vehicles to race events, taking the stress out of high-performance competition ownership and ensuring a high level of competitiveness. Arrive and drive service also available for track day and driver training activity.
- ***Specialist builds*** - Raw have provided Strikers for specialist applications and are open to all requests. One such successful requirement was to provide a car to withstand high track mileage reliably and with little maintenance, for a corporate entertainment company. We are also keen to work alongside consortiums and companies to facilitate individual requirements for corporate promotion.
- ***Repair Service*** - Raw has gained an excellent reputation for its accident repair work. Whilst accidents are always unfortunate, when the unexpected does happen we will always step in. Having completed a large number of insurance repairs, we are always keen to quote, and have facilities to collect, store, repair and test accident damaged vehicles.
- ***Syndicate ownership*** - One man, one car track day activity is exhilarating but can be expensive. Raw has the answer! Syndicate purchase of two cars by up to six people. Much more fun with two mates on the track together! Add the service of storage and arrive and drive with a specialist engineer on hand and it can still be cheaper! Ideal for the stressed out busy executive, so don't buy your expensive track day car before you consider our comparative costings.

- **Open days and corporate events** - In order to promote the work we do here at Raw, we are always keen to host open days and corporate events. Since relocating to purpose built facilities, we have hosted a large number of visits by professional bodies, companies and motor clubs. Such an event usually includes a multimedia introduction to the work we do, opportunity to see, hear and touch the vehicles we manufacture, refreshments, and can be finished off with dinner in a local country pub. These events have proven to be hugely successful.



Frequently asked questions

Q. THE STRIKER HAS A REPUTATION FOR RACING; I JUST WANT A ROAD CAR.

A - The Striker makes an excellent road car that has been enhanced by race activity. Much of the safety detail and suspension setup has been honed through racing. BMW and Mercedes Benz invest heavily in Formula One racing in order to form a bedrock of basic development that can be used in their road cars! All our road cars benefit from the racing heritage.

Q - WILL A SIX-FOOT PERSON FIT IN THE STRIKER?

A - Because of the differential foot well a six foot four inch person will fit in. We used to have a works driver who was 22 stone in weight and he never complained about the driver space! The Striker has been described as a Tardis, small on the outside and big on the inside!

Q - AS THIS IS A RAPID CAR IS THE INSURANCE PREMIUM HIGH?

A - No remarkably low in fact. A typical premium for someone over thirty years, is £ 200.

Q. DO YOU OFFER A BIKE ENGINE OPTION?

A - Yes the Striker makes an ideal bike car, as it is light and agile.



Q - YOUR MORE EXPENSIVE MAINSTREAM COMPETITORS DEPRECIATE VERY LITTLE.

A - Our mainstream rivals charge twice as much if not more for fully built cars of similar specification. Our experience is that all factory built cars depreciate to sixty percent of the original value within 5 years. You don't need to be a mathematician to establish who loses the most! Incidentally a self-build car generally assumes the value of the parts that have been used. Hence a hobby in car building can be considered as an investment!

Q - CAN I HAVE A TEST DRIVE?

A - Please ring to make arrangements. We can take you for a drive but the safest method is to visit us at a track day when you can test drive the car in safer circumstances.

Q - DO YOU PROVIDE COLOURED SIDES?

A - Yes, some people spray them the same colour as the gel coat body. Stickers are also available for the aluminum sides

Q - WOULDN'T A FULL-BODIED CAR GIVE ME MORE PROTECTION?

A - Depends on your view; much of the perceived protection is just fibreglass. They do tend to be heavier and more time consuming to build.

Q - I WANT MORE POWER SO I WILL FIT A 2-LITRE ENGINE.

A - A 2-litre engine does not necessarily produce more performance, as it can be heavier with a shorter rev band.

Q - THE STRIKER IS THE CAR WITH THE TOYOTA ENGINE, WHAT ABOUT OTHER ENGINE OPTIONS?

A - We at Raw encourage you to put whatever engine you want even though we are Toyota specialists

Q - . THERE ARE CHEAPER COMPREHENSIVE PACKAGES ON THE MARKET. WHY SHOULD I BUY A STRIKER?

A - Be careful; these packages are often not as comprehensive as they appear and so do not reflect the true cost of the build. Also they tend to stifle choice so all cars look similar and many cannot easily be upgraded.

Q - YOU DON'T SEE MANY STRIKERS FOR SALE SECOND HAND. JUST HOW POPULAR ARE THEY?

A - There are over 700 Strikers out there but not many for sale. Does that say something about customer satisfaction?

Q - DO YOU PROVIDE AN AFTER SALES SERVICE FOR THE STRIKER AND THE TOYOTA ENGINE?

A - Striker and Toyota parts are available from our parts department. A mail order system is also available. In addition we provide a full car setup facility, a computerised engine diagnostic service and an installation and repair service.

Single Vehicle Approval

All Strikers have to undergo an SVA test. For those that have been factory built the test will be organised by Raw. For home assembled cars the owner has to apply for this test for themselves after completion of the build. This is often a source of worry but we at Raw can guide you through the process. We also offer a pretest examination to insure the car is built to the required standard. We should view this test in a positive manner, as it should be no longer possible to build and register a substandard car that is unsafe. We have a good rapport with DVLA and the SVA personnel. Our first time pass success rate is over 90%. Just don't consider this to be a problem!

Registration

Once the Striker has successfully passed the SVA test you will need to acquire an MOT certificate which is a matter of course after the SVA test and then apply for the registration documents from your local DVLA station.

The DVLA station will probably require you to take the car to them for a simple inspection of the components used. If you don't mind a Q plate then you do not have to provide any form of identification of the donor vehicle. An age related plate could be requested if you have the V5 of the donor vehicle. You will also have to provide receipts for the new components from Raw and identify the donor items. One foreign item such as the engine is also permitted. Should you require a new registration you will have to show purchase receipts for the transmission system, normally the gearbox and differential which have to be brand new.

Raw can guide you through this process at the onset of your purchase so you will be able to collect the required information that makes this process straightforward. All this information is on the build CD. After this process you will be able to enjoy your Striker on the road and track.



"This car represents the marque superbly, displaying a fine level of build and a tastefully completed interior. Less is definitely more with the Striker."

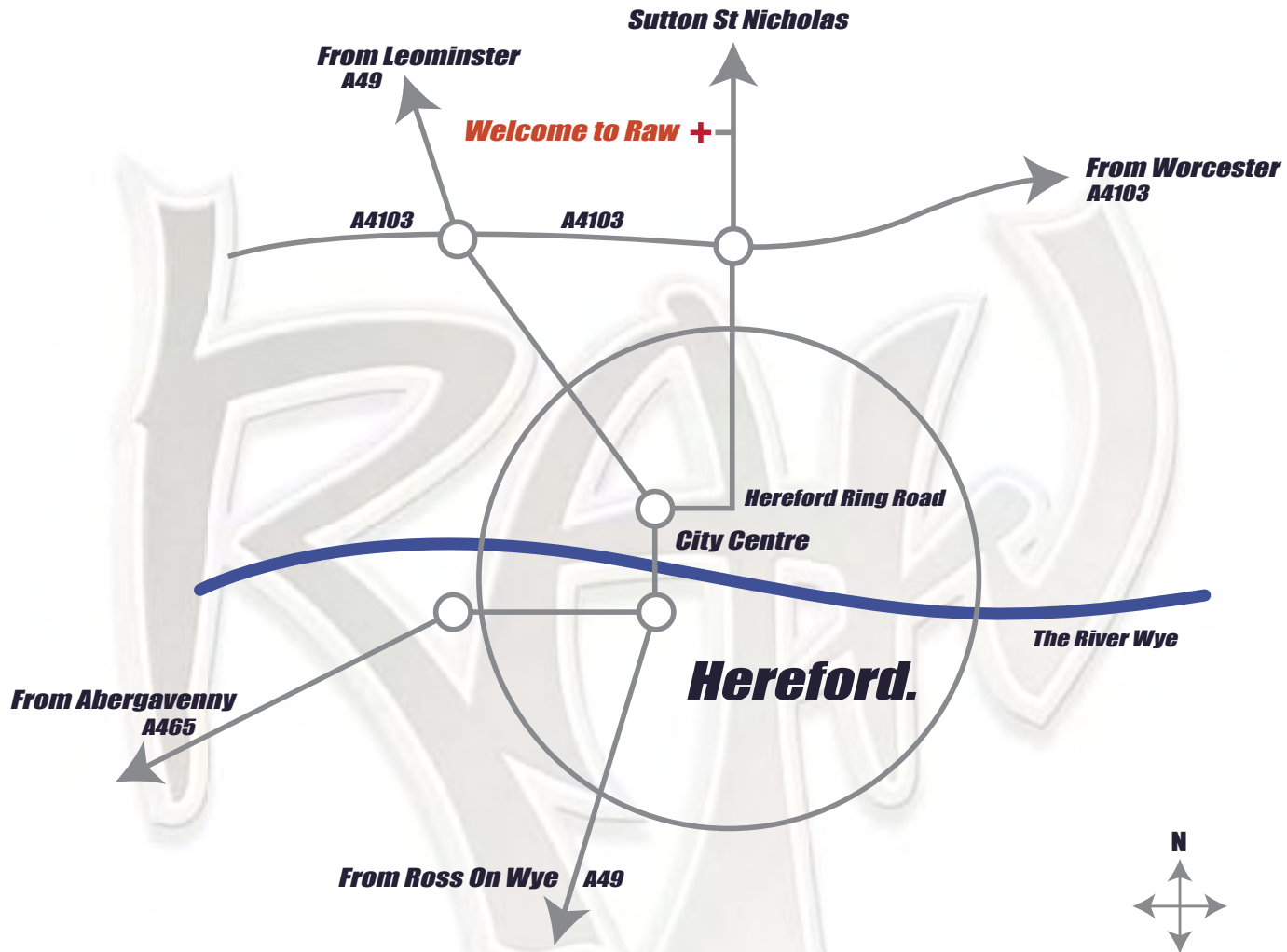
Steve Hole Totalkitcar Autumn 2004

"I find myself in the embarrassing position of not really being able to find anything to criticise. The base package is superlative, the range of engines and tuning options are dizzying and definitely suit all tastes and pockets, while the company are first class and have a very happy band of customers."

"I was really impressed by this car and believe that anyone with even a little bit of soul, wouldn't fail to be moved by such an instinctive machine as the Striker, and despite it being highly rated by those in the know, I reckon it's now ready for the masses." - Steve Hole Totalkitcar Autumn 2004



Finding Raw



Contacting Raw

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