

JBA FALCON HIGHLANDER CORTINA



Following its 1983 debut the JBA Falcon immediately established an excellent reputation as a top flight Cortina based car. Since then it has been refined and developed to a stage where the company now offer three top flight cars. We try to help you choose the right one.

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The JBA Falcon made its debut in 1983 and represented something special in a market largely populated by 'here today, gone tomorrow' manufacturers who might have been high on enthusiasm but were unfortunately low on design engineering, quality and an eye to the future.

The car achieved instant acclaim and JBA Engineering very soon grew to be recognised as one of the small band of manufacturers producing a new breed of kit car that represented the future of the specialist car industry and which has stood the test of time. Not only that but the Falcon has changed with the times.

Although stylistically similar to the current range of models bearing the JBA badge, the early cars were very different under the skin. A twin rail steel square tube chassis was augmented by a full lesser gauge tubular structure that accepted the individual aluminium body panels. From there development progressed to the box section cruciform chassis in service today along with the GRP central body tub or CBU as the company refer to it. While many may mourn the passing of an aluminium

body, the new formula greatly simplified production and thereby allowed JBA to keep the price competitive, while it also greatly simplified the task of enthusiasts who undertook to build themselves a car. In addition, the styling was gradually modified and refined to the point where two distinctly different models emerged in the low slung, aggressive and rakish lines of the two seater sports and the taller, elegant and more practical form of the Tourer offering genuine 2+2 accommodation.

Both cars have enjoyed steady and sustained sales success but, like many companies producing kits for construction on the abandoned carcass of a Ford Cortina, JBA recognised that Cortina donor vehicles would not last forever. In addition, they wanted a donor mechanical package that was more modern and consequently effective on the road both to enhance the performance of their car as well as to offer the option of all new components. This latter aspect allows brand new cars to be built in keeping with changing market trends. It also makes the car more attractive to

export markets as well as allowing JBA to follow the path that has opened up to low volume type approval. They found the car they wanted in the Ford Sierra and the result of their development programme is the current Sierra based SR.

Although currently, the company have made no announcement in respect of the JBA's type approval, they have put the Falcon through various tests for overseas markets in order to comply with necessary regulations.

In addition, the company are founder members of the SCMG (Specialist Car Manufacturer's Group) within the SMMT (Society of Motor Manufacturers and Traders) and as such, along with their SCMG partners, have played a key role in formulating the current regulations and the direction the industry will take in the future.

Today, JBA Engineering, founded by three ex Leyland design draughtsmen, stands as a leading light within the kit car industry and demand is as strong as ever for their range of three similar but very different cars.

JBA Tourer



The Tourer is JBA's answer to all those potential customers whose combined appeals prompted the two seat rag top makers to modify their cars for the family man with 2.4 children. 2+2 models were definitely the order of the day but where many were merely stretched versions of the base two seater resulting in not a great deal more space gained at the expense of the destruction of styling balance, JBA, who entered the market with a two seater, went back

to the drawing board. The resultant Tourer is a triumph as not only does it retain the styling flow and the Falcon's traditional driver appeal, but it also offers rear seat space that is far more generous than a 2+2 description normally conveys. In addition, where rear seat passengers are normally catered for merely by making space to fit them in, JBA afforded them every consideration and created comfort and a pleasant place from which to watch the world go by.

The Tourer is the more practical proposition but loses none of its flowing shape or capacity for driver appeal in providing additional seating.

In creating a car with sporting character that is capable of transporting a family and a reasonable amount of their luggage from A to B, JBA have also produced a remarkably practical car that, with the addition of the hard top, is eminently suitable for everyday use.

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The Sports has the low slung, aggressive stance that readily identifies it as the tearaway of the trio. The 2 litre injection engine gives it the power to match its looks.



Although stylistically similar to its stablemates, the SR is a thoroughly different design. Its perimeter frame chassis accepts the more refined and effective Sierra components to excellent effect.



The JBA interiors are comfortable and well equipped although the narrow seats lack a bit of lateral support. Dashboards are available in a choice of wood veneer finishes.



The engine bay is specifically intended to accommodate Ford four cylinder engines in OHV, OHC and CVH up to 2 litres form with either carburettors or injection.

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So what lies beneath the flowing body and what is it like to drive?

The chassis is a heavy gauge box section cruciform that accepts standard Cortina suspension assemblies at either end, a choice of Ford four cylinder engines in the middle and a one piece GRP central body tub on top. But such a simplistic assessment of the Tourer fails to do justice to its high standards of design and execution.

The cruciform chassis is very stiff on its own; not the stiffest structure in the world but certainly much more resistant to torsional deflection than the original ladder frame. The Cortina mechanics again, are not the most accomplished available but they are robust and workmanlike. Put the two together and you have a sound basis on which to work. Mechanical alterations concern the substitution of JBA's own coil springs and a switch to 14" or 15" wheels fitted with 185/70 tyres. Put the body on and the whole structure assumes an excellent degree of beam and torsional rigidity that combines with the low centre of gravity and a greatly improved weight distribution to deliver a car capable of being driven hard and rewarding the driver for competent effort.

In respect of the demonstrator, the cream on the cake is the 2 litre 150 bhp OHC engine. Its ability to bring over 170 bhp per ton to the task of moving the Tourer's 17 cwt between A and B may be a little out of keeping with the rather more laid back tourer philosophy but it certainly serves admirably to illustrate the all round integrity of the design.

The Tourer is a very attractive car which has been no simple task to achieve. Four seats, two doors and the traditional styling attributes of a long bonnet, radiator shell right on the front axle line and an acceptably large boot are awkward aspects to incorporate within a pleasing shape that retains its proportions and flow. But JBA have done it and the proportions are maintained by raising the height of the waistline. At the same time they have provided good sized doors that grant decent access to both front and rear seats, they have achieved internal space that makes the +2 bit capable of accommodating passengers bigger than the average eight year old as well as generous space for the driver and front seat passenger. Finally, they have given the car a boot that can swallow a surprising amount of soft luggage.

It retains the distinctive solid framed, sliding glass JBA sidescreens that mate well with the hood to afford excellent weather protection and, if you want to drive the car all year round, the factory hard top makes it a

perfectly practical proposition. But at the end of the day, people buy Falcons for the open air motoring they make possible so throwing the hood back, I took the driver's seat to have a bash.

The Falcon suffers in the same way as many Cortina based traditionally styled roadsters in that the provision of running boards takes a big chunk out of the available interior width resulting in narrow seat wells that offer limited space for the front seats. There are seats that will fit but they all lack the sort of lateral support I enjoy in a car as well as the sort you need if you are to make full use of the available power; especially when they are trimmed in cream leather! That aside, the driving position is comfortable and offers a well thought out control and instrument arrangement that puts everything within reach and visible.

Starting up the 2 litre motor whispered through the JBA exhaust as one would expect from the tail pipe of a refined conveyance but that slight hint of performance wasn't entirely concealed by the subdued note.

As you roll out of the industrial estate that is home to Falcon manufacture, you have to cross a few sleeping policemen and some pretty rough roads thus the first impression is of an excellent ride quality that cossets you without over insulating you from the car's 'feel'.

Once free of the urban sprawl, pressure on the right pedal quickly summons the motor's urge which really makes its presence felt as the rev counter swings through the 2500 rpm mark. From there it pulls with increasing urgency towards the red line with power delivery tailing off at around 5500 rpm. Even so, going up the four speed box, the Tourer's gearing offers excellent acceleration and a quickly attained cruising speed that doesn't batter you to death in the slipstream. This is in no small part due to the excellent sidescreens but there's power in reserve if you either need or want it.

Due to the provision of four seats, the Tourer has a slightly longer wheelbase than the sportier Sports and SR models and while it gives good stability on the straights, it doesn't seem to detract from its agility

round the corners. On the approach the servoed disc drum system scrubs off speed with commendable efficiency due to its significant weight advantage over the donor Cortina and the pedal conveys good information and 'feel' for what's going on. The Ford four speed boxes have always given a really quick, precise and positive change and you can whip up and down the box with real panache; fourth to second being greatly aided by the spot on throttle response from the tweaked engine.

The steering feels far more positive than the system ever did in any Cortina and nosing into the bends the lower centre of gravity makes its presence felt through dramatically reduced roll. There's also bags of grip from the bigger tyres and you can really push the nose round without it wanting to run wide. The back end is similarly well behaved although with 150 bhp on tap, an injudicious prod on the loud pedal will certainly dislodge it. For my part it did step out once and proved easy to recover with a quick twitch of the 13" wood rimmed wheel. That said, it's not one of those lightweight screamers that fishtail round the B road bends; it's a bit heavy for those sort of antics. But there again, you don't need it as the Tourer has commendable cornering ability with all four tyres in firm contact with the tarmac. What's more, driven in that way, it still has the capacity for real driver enjoyment and used in earnest it can temporarily assume the mantle of a true sports car before you have to tone it down a bit to take the wife and kids to MacDonalds.

The other aspect that is currently unique to JBA is the provision of a hard top that combines with the excellent sidescreens to create a truly practical year round car. Nor is the hard top simply a GRP cover that is bunged on to keep the wind noise down and the worst of the rain out. It is a well moulded, perfect fitting piece of equipment that does a 100% effective job. Not only that but it is fully lined and, like the hood, maintains interior headroom for both front and rear seat passengers. Finally it really complements the Falcon's style. What with that, a decent boot and total security, the Tourer has a great deal going for it.

Sports

Despite its lower and more rakish lines, the JBA Sports employs an almost identical chassis and mechanical package to the Tourer that should render it a very similar car to drive but slip into the grey cloth seat and fire up the 2 litre fuel injected

motor and it soon demonstrates that it has its own very distinctive identity.

Cosmetically, the Sports is surely the belle of the bunch even if it has the strongest possible family resemblance. The dimensional differences are pretty insignificant but

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their combined effect is to create a car that has all the flow, elegance and proportion of its sisters but combined with an aggression and purpose that the others slightly lack and taking the driver's seat only serves to underline the fact.

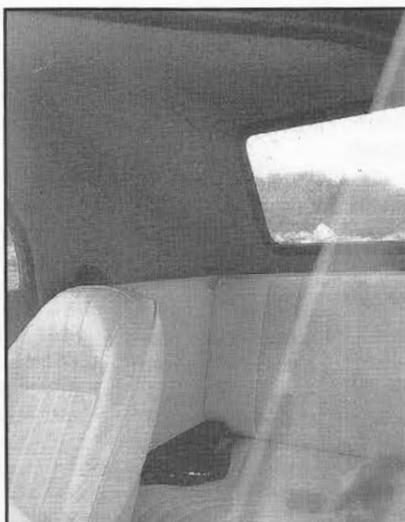
You sit lower in a far more purposeful, yet still eminently comfortable, driving position. The cockpit is smaller without being at all restrictive, the seats grip you well and offer excellent all round support and the view down the tapered bonnet between the headlamp pods suggests a wide track that will grip the road with tenacity.

In truth, at 4 ft. 8 ins., the track, both front and rear is identical to the Tourer but the Sports does have a 5 ins. shorter wheelbase and 1 cwt less to carry. Front and rear suspension is also identical but again rides on special JBA springs allied to standard Cortina dampers. The rear trailing arms are fitted with solid bushes although, if you find these wear out too quickly try the two piece nylon replacements available from Trans Auto Sport. Tel. 0772 561550. They are more expensive but pay excellent dividends in greatly improved axle location.

Finally the car rides on 14" wheels fitted with 185/70 tyres driven through a 3.75:1 differential by a five speed box. The engine bay has room for the full range of Ford four pot motors but the Sports demonstrator is characterised by the 2 litre injection unit from the Sierra. The 130 odd bhp combines with the lighter 16 cwt to give a power to weight ratio over 150 bhp per ton and though that's not as much as the Tourer's 150 bhp motor brought to the task, the key to the Sports' greatly increased agility is the flexibility of the injection motor and its much enhanced torque.

In this form the Sports can cover ground at an impressive rate of knots whilst delighting the press ahead driver. I first drove it as a member of Team Knife Edge Tours taking part in the 1988 Performance Car Treasure Hunt that criss crossed northern France before ending up at Mirapolis theme park just outside Paris. That was a thoroughly enjoyable event that really allowed the Falcon Sports to underline its ability on France's long, straight and fast A roads as well as the infinitely more tortuous and testing B roads. Gripping the wheel and reaching for the key brought it all back and suddenly I was keen to again sample the sportiest Falcon's charm.

Out of the estate and you immediately get the same impression of an excellent ride that irons out the bumps whilst keeping you well in touch with events underfoot but come the open road, the Sports accelerates



The solid framed sidescreens with sliding windows are a distinctive feature of the Falcons. With the hard tops available for all models, they make very practical all year round cars.

away with a much smoother power delivery that spans almost the entire rev range. The 5 speed box is the pre MT 75 one that has a far more positive change than the new 'soup stirrers' and the cogs are well spaced to take the car from a standstill to the ton and beyond in a very respectable time. That said, it will clip along at 70 mph with a scant 3200 rpm in evidence and from there, you have a very sizeable reserve of power on which to call should you feel the need.

Make no mistake, the Falcon Sports in this guise is a quick car even if it's not particularly fast but what it may lack in outright power, it certainly makes up for in about the best handling and roadholding a pretty standard Cortina based machine has so far served up.

Unlike the Cortina which understeers when pushed, has a lacklustre feel to the steering and a wayward back end, the Falcon Sports feels grippy at the front, the steering feels firm and positive and the back end stays in firm contact with the tarmac even when being vigorously squirted out of a bend. In addition it has good solid feeling and progressive brakes, a lack of roll in the corners and a balance that results in neutral handling that is a joy to exploit.

Through it all, you gain an increasing respect for a chassis that seems too simple to cope with the task it has been set. It is hard to detect any movement in it at all with the result that you feel confident in its ability to handle a good deal more power than the 130 bhp currently being pumped through its tubes. Indeed, I would imagine 2 litre fuel injected motors to be a rare sight beneath a Sports bonnet due to comparatively high cost and the fact

that the plethora of sealed systems denies the enthusiast the opportunity to engage in the tinkering that forms such an enjoyable part of owning a self built car. In addition, the OHC engines on carburetors are cheaper and can easily be breather upon to deliver substantially more power.

I really liked the Sports; I liked its shape, its style and above all, its sheer ability. No wonder it is the top seller among a choice trio.

SR

The JBA Falcon SR represents more than just another JBA model offering the choice of Sierra componentry beneath its similarly styled skin. Although it maintains the strong 'JBA family' styling influences, beneath its two tone body tub, lies a completely new chassis with much more modern, refined and capable suspension assemblies at either end.

The purpose has been threefold. First to counter the effects of a dwindling supply of Cortinas and replacement parts although this is not likely to become a problem for a good few years yet, secondly to create a car with far more modern levels of performance, handling and roadholding ability, and thirdly to create a car that will put the company in a position to capitalise on the changing legislation affecting kit form cars and the commercial opportunities this will present.

The chassis is a perimeter frame in heavy box section steel. It retains the centre cruciform which, with its greater width, produces enhanced torsional rigidity. At the front, the McPherson struts have been reduced to their stub axles and a rubber mounted upper wishbone made to marry the stub axle to the standard Sierra track control arm and anti roll bar. The coil spring damper unit is mounted above the upper wishbone. At the back, the chassis accepts the Sierra system complete with its carrier and the only modification is the fitting of shorter telescopic dampers. Thereafter the car is constructed in identical manner to its sisters with a GRP central body tub bolted down on top.

In terms of its looks, it has the same low, sleek appearance of the Sports and all the driver attraction that goes with it but where the Sports is great to drive and an extremely competent machine for a Cortina based car, the SR shows drivers just what they have been missing.

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The engine is a standard 1.8 CVH unit on carburettors driving a five speed box. It produces around 100 bhp and has an additional half hundredweight to carry about over the Sports. But you don't need bags of power to be aware of the SR's handling and roadholding panache even if a good deal more urge would greatly add to the joy of exploiting it.

You first notice the sheer excellence of the ride. With anti roll bars front and rear the road springs are soft and the SR glides along in regal splendour with little or nothing to ruffle its composure. The CVH engine doesn't have anything particularly noteworthy about it from a sports car point of view but it is very smooth and endows the SR with a decent turn of speed and acceleration that stops short of any performance superlatives. But wind it up and it does possess the necessary attributes to highlight the suspension's performance. Push it into a corner and the slightly wider track combines with the refined system to create grip and stability with negligible roll whilst maintaining

excellent directional control through the long Sierra rack and pinion. Nor is there any trace of bump steer or understeer or anything else undesirable even when driven at enthusiastic speed.

The back end is similarly obedient, the independent system generating far more grip than the live axle Cortina can muster. With an engine of modest power output, it's never going to break any speed records but it does mean that the suspension can operate well within its limits even when the engine is operating at the extremes of its own. Following a good thrash, you cannot help but reflect upon the fact that the SR will handle a good deal more power without compromising its ability to grip the road or its ability to stop when necessary.

This particular car is equipped with a servo assisted Sierra disc drum system but depending on the donor car's equipment, you can fit the all disc system and even wire in the ABS for good measure.

In this, I feel the JBA SR really shows the way ahead. In the past,

manufacturers have traditionally based their cars on what has been readily available in the scrap yards and the fact that there has been a good scrap population has indicated that the cars are long in the tooth both in terms of pure age as well as mechanical refinement. With the Sierra, that problem does not exist and all the latest gadgetry and suspension refinements are available together with a mechanical specification able to meet current legislation throughout Europe. Granted, building a high specification car will result in additional cost but you don't have to go the whole hog to benefit from the very real advantages the SR offers.

On top of its dynamic excellence, it retains the civility and practicality of the JBA family and I feel it will serve the company and the kit building public very well indeed.

