Falcon Breeding

JBA Engineering, makers of the glamorous and very successful Falcon roadster, have risen to prominence in impressive fashion. Peter Filby investigates the reasons why.



Question: How does a new manufacturer, even one blessed with the right product and skills, successfully establish a top quality component car and gain an enviable reputation for fine engineering and a thoroughly professional approach to business within a sensibly short space of time? Answer: Only with great difficulty, utter dedication and praiseworthy patience! OK, some people might get part way there on the back of massive finance and huge slices of luck but, as ever, there's no substitute for the real thing; eagle-eyed consumers will always sift out the best deal in the end.

JBA Engineering, company responsible for a traditional sports car now rated amongst the best products of the component car industry, has done it the honourable way, using an almost bottom-less pit of honest-to-goodness effort and good northern spirit. To pinch the slogan once used regularly in advertising by a Blackpool based maker of up-market GT coupes, 'British Beef' perfectly sums up the whole approach of a solidly founded operation that knows exactly where it is going and how fast it needs to go to get there in reasonably economic time! To the experienced observer, it seems highly unlikely that JBA will ever skid off course or accelerate at the wrong rate and create danger. The lads behind the company just don't do things that way.

THE SEEDS OF AN IDEA

Today, JBA Engineering is looking forward very soon to handing over its 100th Falcon body/chassis unit to one



very proud owner. But of course there was a time when the mating of those three initials was little more than talk. That was in late 1978 and early 1979 when Ken Jones, John Barlow and Dave Ashley were all design draughtsmen working in the same office for British Leyland's bus and truck division at Leyland, Lancashire. Prior to that they'd all had shop floor experience with the company, learning useful skills like jig making, the assembly of special purpose equipment and the repair of machine tools. But, once in the drawing offices, the rot had begun to set in; the work wasn't too interesting and the prospects none too bright. And so the master plan was hatched . . .

Several years before, John Barlow had built a fairly respectable one-off special, a contemporary style sports saloon that had attracted a lot of interest. With all three men sharing a common love of enthusiast cars and having the same ideas and ambitions, a scheme for the pooling of resources and skills to build a production component car was an absolute natural. Taking deep breaths (and no doubt praying for safe delivery through the next few years!), J, B and A started work on their Falcon prototype in A's garage over the spring of 1979.

Photography by John Brandwood


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For well over two years, the three men spent most evenings and weekends slaving away in that domestic garage. Five days' work per week at British Leyland were still needed to keep financial heads above water, and only in March 1982, when the lads could see everything gelling nicely, did they elect to take redundancy payments that were on offer and invest £10,000 between them into the Falcon project. So JBA Engineering was formed that same month and 900 sq. ft. premises rented on a Greater Manchester industrial estate to finish the prototype off and inaugurate some sort of production. "By that time, we were so enthusiastic about the whole thing," says Dave Ashley, "and so sure the car was a winner that we no longer worried much about the danger of moving into the unknown, even though we all had families."

THE STARK REALITY

At that stage, there were some five months' work still to be carried out on the prototype. It was a running vehicle with all main body panels fitted and lacking only the wings, radiator shell and windscreen surround. Yes, it certainly *looked* a bit daft, but the point was that the basic concept was clearly right; it merely needed refining and dressing up. The all-important groundwork had been done properly, and that was what would provide a solid base for the future.

With the cards now down on the table in no uncertain terms, the rest of 1982 was spent finishing off the prototype, testing it and making sure all aspects were absolutely right, at the same time ironing out any little niggles. Significantly, a second prototype was also completed, this one being good enough to sell quickly in February 1983 for a tidy sum, enough to help further finance the whole project. And so it was that by March '83 the first advertising appeared and production slowly began to grind into motion. All in all, it appeared that the decision to go ahead with the Falcon, taken originally in February '79, some four years earlier, had been completely vindicated.

How was it, you might ask, that everything apparently went so smoothly and successfully for what was, in truth, one of the most ambitious projects to join the industry for some time? Well, in reality, of course, things *didn't* go smoothly. There were plenty of big hiccups, problems and hold-ups along the way. But the first key factor was that the three partners had carefully assessed the market and bullseyed on *exactly* the right overall concept for their car.

THE RECIPE'S INGREDIENTS

To succeed, the product had to be good and, first and foremost it had to look right. Traditionally styled cars were on the crest of a wave back in '79, and so it was decided to build a sports car

Top left: Falcon's styling is beautifully traditional and is basically the epitome of the British sports car.
Bottom left: Characteristic grille and stunning chromework are shown to good effect. Top marks for detail.

dimensionally similar to the famous Jaguar SS100 but slightly lower overall. "John had already come up with the overall theme of the car," recalls Dave Ashley, "and he'd also done a few sketches. After that, we all developed it as a team. We feel we got it more or less right". Gazing along the car from that lovely chrome radiator shell to the traditional slab-tank rear end, few connoisseurs of car styling would disagree.

Next came the concept; that had to be spot-on, too. "We always intended it as a proper production car and not as a kit car," says Dave, "so we tried hard to engineer it and finish it to production car standards. It had to have suitable and reliable mechanicals, ease of maintenance, longevity, quality, a smooth ride and practicality. We intentionally engineered-in a lot of extra cost to ourselves as we felt this would pay off for customers in the end".

Apart from general engineering quality, the correct choice of donor vehicle was vital. Even today, too many new manufacturers still choose the wrong basis and then wonder why their car is not selling well. For the Falcon, it had to be Cortina Mk 3/4, a power unit and suspension layout that offered the lot — good performance, various engine sizes, reliability, minimal maintenance, readily available spares and, of course, economy of cost.

Apart from the exhaust system needing a simple few inches chopped from its front section, only the steering shaft, pedal assembly and propshaft needed modification, but as the factory was to offer this work on an exchange basis, there would be no problems for the customer. The last thing needed by the builder of a modern component car is hassle; JBA made sure there was none of it. Fast, simple assembly is one of the essential keys to the industry's successful future, and few cars would go very far without it.

Of course, all this 'proper' running gear would only assemble straightforwardly to a properly designed base. Dave explains the Falcon chassis' emergence: "We paid a lot of attention to chassis design, quietly doing much of the initial work on our Leyland drawing boards during lunch hours! We decided on a straightforward ladder design but included a steel tunnel backbone to stiffen it up. Not wanting to compromise on anything, we even made a wooden mock-up of the chassis, applying forces in different areas to see how it reacted. Even though it was only wood, we could see where it was moving and determine the reasons why."

"Finally," continues Dave, "we built the first steel chassis, added the backbone, added the body frame which is an integral part of the structure and then measured all the strains and deflections with gear borrowed from Leyland. Yet the *real* test was always going to be actually *driving* it, so you can imagine how pleased we were when we discovered it only needed one important modification. This concerned the front end of the main rails where they step up vertically to hang the suspension; our design allowed too much flexing so we added supportive steel webbing to beef the area up."

By the start of 1982, an incredible amount of painstaking and gradual development saw J, B and A happy with the important structural areas of their still embryonic sports car. They had also OK'd the Cortina power unit's siting well back in the chassis (20" rearwards of 'normal') after careful work to ensure the springing was going to work correctly. In fact, the only modifications to the springing were at the front end where they were shortened slightly to stiffen them up.

THE FIRST TASTE

Towards the end of that year, Falcon number one was shaping up nicely. The first test of what looked like a complete car involved a thrash around the industrial estate's rough roads and, at that stage, the only complaint was that the GRP wings were rocking around with gay abandon — not a difficult job to correct. Not surprisingly, tension was starting to mount. The time was nearing for the public to be told of this carefully developed new sports car. But before that, it had to be productionised. No component car can be financially successful these days unless it can be made quickly and efficiently.

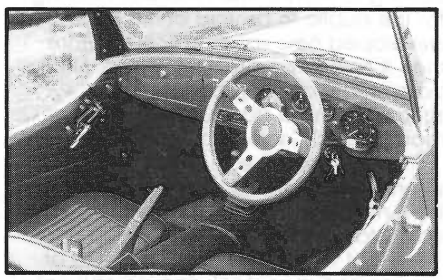
The first prototype, a bright red stunner, was used to make any jigs and tools not already in existence. "The advantage here," remembers Dave, "was that we'd already made most of our jigs and manufacturing equipment with the money we'd earned from squeezing-in to our already tight schedule a lot of general engineering work for other people. By the time we were ready to go, we had more than £14,000's worth of manufacturing jigs in our workshop, all made by our own fair hands."

Into 1983, JBA Engineering's main worry was whether the car would sell; the public still had to want it badly enough to hand over their money (around £2000 of it and not to be sneezed at!) and give the Falcon the final seal of approval. And, quite amazingly, only a short time had passed when, during the summer of 1983, things went alarmingly quiet. A trickle of sales had come in from discerning buyers, but then a slump . . . until, thankfully, no less than five orders materialised within only ten days during September! Show appearances, local TV appearances, a short slot on the national TV *News at Ten*, mentions in *The Times* plus other newspapers, and magazine features had all obviously done their job. At last!

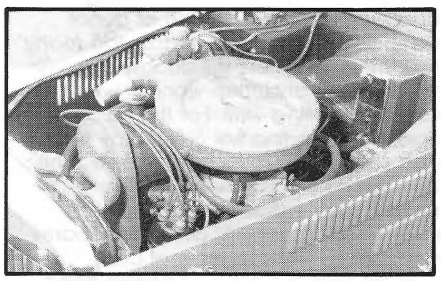
Up until early 1984, over 30 Falcons were sold with production running at the rate of about 2½ units per month — not an outstanding success but still pretty rewarding just the same, and certainly just dessert for all the effort put in. Dave Ashley again: "All we really wanted was to *establish* the car at that time and start making one per week as soon as possible. We were, and still are, merely after good, enjoyable jobs plus a reasonable standard of living. We certainly don't want to become millionaires out of it. We don't even want to have too big a team of staff doing all the grind and thus become too remote from the actual task in hand". A praiseworthy attitude, for sure, but one that is very necessary in today's climate of public awareness. People *know* when there's no solid substance in a product.



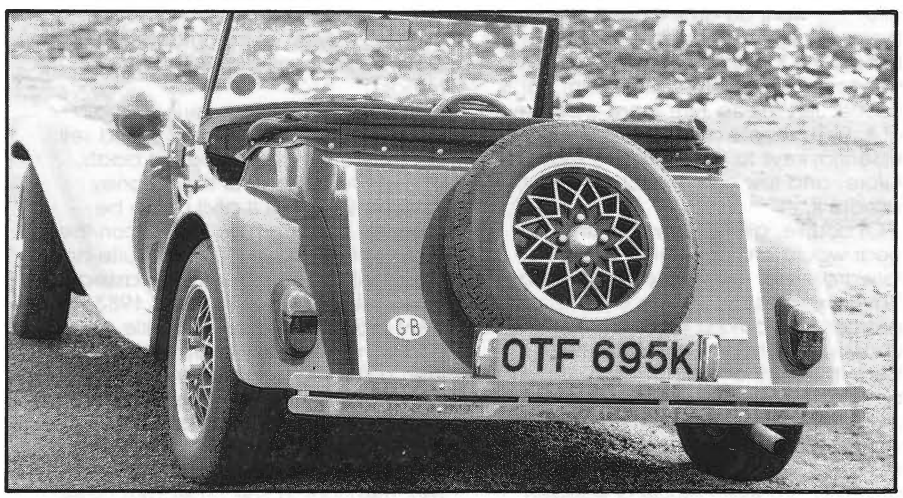
The craftsmanship that goes into the construction of a JBA Falcon is evident in the quality of the finished article. The car is one of the best in the business.



Smart veneer dash looks very good and is ergonomically sound. Mountney steering wheel sets it off nicely.



It all fits in, but only just! Engine bay is dominated by huge air filter yet remains easily accessible.



The rear of the car is neat and tidy and is finished off nicely by the chrome bumper. Falcon badge is a nice detail, as are the JBA wheel centres.

THE EVENTUAL OUTCOME

Today, the situation at JBA Engineering is that well over 70 Falcon body/chassis units have gone out of the factory doors, about half of them made over the last six months of 1984 alone. Indeed, 1984 was the year when the company really established itself, occasionally achieving an impressive production rate of seven units per month and never going below five per month.

With a fine motor car that is accepted as one of the best in the business and customers cancelling their orders for Panthers and Morgans (regularly), JBA Engineering is hopefully here to stay. The current staff of nine (including the three founders) will increase to eleven next month, an all-new model is about to be launched (see *News* at the front of this magazine) and an extra 1000 sq. ft. of workshop space was acquired last December for expansion.

The old showroom area has now become a fibreglass laminating shop, one of the staff there being an ex-TVR development and research man, while the new area has allowed the construction of a new more luxurious showroom and office with a stores facility above. The company is also now a member of the SMMT — an important point in relation to future trends on the 'official' front.

The Falcon itself is also well proven. Its combination of steel chassis, steel body frame, aluminium body panels and GRP wings forms a strong, solid and durable structure. Its use of chrome hardware adds the sparkle. Its Cortina basis is easily purchased and offers sensibly varied levels of performance. The options of V6 or V8 power units, introduced in spring 1984, cater for *real* sports car performance. There's handling and roadholding to match. The car is comfortable to drive and fully practical, too; a hardtop also became available last year. And lastly it looks good; it all hangs together with a clever combination of traditional charm and muscular purpose.

Apart from all that, the customer has been made aware, by JBA's reputation, that if he buys a Falcon body/chassis unit, there are men at the factory who will supply him with the stage of assembly he wants and then be available to help in case of any problems. In short, the Falcon is precision designed with the customer at heart. No doubt about it, a happy customer spreads the word.

THE REASONS WHY

Looking back over the Falcon's long gestation period, it is clear that the *attitude* of Ken Jones, John Barlow and Dave Ashley to their project was absolutely correct from start to finish. When asked for his views, Dave said: "The main reasons for our establishment are the right style of car, good quality and decent after-sales service. Most people who come to our factory have a look round, check our set-up, realise the quality and value-for-money in the car, and are quickly convinced of its worth". But of course there's more to it than that. . .

Right from the beginning, J, B and A decided to take their project slowly, carefully and methodically. Using great patience, they approached all aspects with the right attitude and engineered every detail *properly*. They took the scientific approach and generally got it right first time. They held on to their full-time jobs for as long as possible, did most of the essential work in their spare time, kept their budget down by doing almost everything themselves and even earned bread-and-butter money by handling lucrative engineering work for others. They were never in a hurry to start selling the car too soon and always stuck rigidly to their guns: the Falcon was to be a thoroughly engineered, craftsman-built, high quality component car selling at a realistic price. And only that.

The lads even got their attitude right when it came to publicity and promotion. Perhaps they could work still harder at this side of things, but they've never shied away from a decent advertising budget, the right publicity approach and that all-important space within the workshops in which to display a clean, attractive and desirable demonstration car. Yes, JBA Engineering is quite an asset to the component car industry.

N.B. It wasn't our intention to provide prices and full details of the Falcon assembly in this feature. If you're tempted to find out more, send £1 for a full colour brochure to ***JBA Engineering (PF), Unit 56B, Bradley Hall Trading Estate, Standish, nr. Wigan. Tel: 0257 424549.***