KITCARS AND SPECIALS





Fast Lane Falcon

erry Grimwood ets his hands n the JBA alcon V8 rototype

Last summer I had the opportunity to drive the prototype JBA Falcon in 2-litre Cortina SOHC form and was moved to comment: '. . . this is possibly the best kit car I have ever driven – not the cheapest; not the fastest; not necessarily the best finished (although hard to fault in that respect); but certainly a remarkable blend of those factors combined with the practicality of a sensible base vehicle, the Cortina MkIII or IV.'

With that first experience having made such a favourable impression it was with considerable anticipation that I recently visited JBA at their works near Wigan to see how the kits are produced and to test drive their new V8-powered version of the Falcon.

The JBA name is derived from the initials of the surnames of the company founders: Ken Jones, John Barlow and Dave Ashley. They met while working as design draughtsmen with British Leyland, and all three took voluntary redundancy to pursue the creation of the car they had designed in their spare time, a car codenamed Falcon.

'We spent a long, long time getting the design right,' explained Dave Ashley, 'then took 10 months building the prototype.' The time taken working on the design and sorting out the engineering details on paper would seem to have been time well spent, for since the construction of that prototype only minor changes to the original specification have proven necessary.

Once built the chassis was checked out for deflection and stress using auto-engineering strain gauges (borrowed from a certain well-known manufacturer), a precautionary measure which resulted in detail changes to the forward ends of the longitudinal chassis rails. Customer feedback has subsequently inspired a considerably simplified means of assembling the windscreen frame, and apart from this and one or two almost imperceptible alterations to trim, the design and construction remains as the original.

That the Falcon concept works so well in dynamic terms can be attributed primarily to the construction of the chassis and body frame. Basis of this is a ladder type chassis unit, jig-fabricated from 10 gauge steel and then beefed up by the addition of a steel front bulkhead and transmission tunnel. Further rigidity comes from an extensive framework made in 1 inch square 12 gauge steel. This whole structure results in an unusual combination of ladder, backbone and spaceframe chassis which combine to make an immensely rigid structure on which to mount the body panels and running gear.

The detail of the chassis really is most impressive, with all location points and brackets jigged and pre-drilled: JBA claim that the only drilling required of the home builder is for the installation of some external fittings. Points which I noted as being particularly praiseworthy when examining one of the chassis undergoing final preparation at the JBA works, included the provision of a short length of tubular channel set into the front bulkhead at the correct angle to take the clutch cable, and mounting pins at the rear end to take the standard Cortina suspension bump rubbers. Small, inconspicuous touches but indicative of a particular attitude towards kit construction. As another point of interest, JBA have their own castings made of the spiral-type spring top mounts which duplicate exactly those found on the Cortina; not only do these facilitate easy spring installation, they also prevent spring wind-up which would be likely were a simpler, fabricated top mount used.

Several small jigs are used for the assembly of particular sections on the chassis, then all parts are brought together – along with the main chassis structure – on the master jig where final chassis assembly takes place and where engine mounts, seat belt mounts, spare wheel brackets and so on are added. JBA assured me that this jig enables fine degrees of tolerance in placing these components with spot on accuracy.

The bulk of body panels are formed from aluminium, blind riveted to the extensive spaceframe structure mentioned earlier. This form of construction mirrors the assembly of many classic sports cars except that in the case of the JBA a much sturdier steel framework is used instead of the traditional ash wood of the early days.

The doors are also constructed in this manner, with a steel framework curved on a special rolling machine to assume the contours required and then skinned in aluminium. Each door is actually tailored to its own opening,



The Rover V8 fits snugly within the spotless engine bay. Aluminium panels skin the steel chassis. Seats could do with more lateral support

which explains the coachbuilding standard of fit. Another benefit of this assembly technique is that it produces a good, solid door with a bit of weight to it; a door which slams shut with a reassuring clunk.

The coachwork is all aluminium, other than the elegantly moulded wings, the scuttle, the rear floor panel and the radiator shell; these are moulded in glassfibre, as is the heater box which is specially made to house the standard Cortina heater components.

A lot of thought has gone into styling the Falcon in such a way that it evokes the classic lines of the thirties and forties. This is seen in the shape of the wings, the cutaway of the doors and – in particular – the long bonnet/short rear end of the traditional sports car. JBA were particularly keen on ensuring that the radiator grille should come no further forward than the axle line of the front wheels, thereby preserving a lunging, aggressive profile. Interestingly enough, the Falcon presents two slightly conflicting images; from the side the lines are light, refined and rakish, yet looking from the front the character is entirely different thanks to the distinctive radiator grille. This chrome-on-brass unit gives a far more masculine look to the car, and tempts one reluctantly into using that overworked word, handsome. A cliché it may be, but the Falcon is – from the front or three-quarter aspect – a handsome brute of a car; a gallant little sportster from the side, a gutsy roadster from the front.

It is intended that the engine options available shall be Ford 4-cylinder 1600 and 2000, Ford V6 2.8 and 3-litre, plus the Rover 3.5 V8 at the top of the range. At the time of our visit the V8 prototype had only recently been completed, while a V6 engine and transmission were sitting on a workbench awaiting a chassis.

The engine of the prototype was a rather ageing pre-SD1 Rover 3.5 unit coupled to an automatic gearbox and driving through the standard Cortina 2-litre 3.7:1 axle.

This car also sported a couple of recent modifications, including rigid side screens with sliding windows and a stainless steel windscreen surround replacing the original chromium plated version. The 2-litre car I drove last year was on 15 inch diameter wire wheels and 165-section G800s, whereas this more recent manifestation sat on attractive 14 inch diameter Compomotive wheels with 185/70 Firestone S11 radials, a tyre of which I have had no previous experience.

The coachwork was painted immaculately in white, and the interior trimmed in light blue; a pair of prototype seats were installed, and the back ledge – it can't, by any stretch of the imagination, be referred to as a seat – was padded and upholstered to match. The simple wooden dashboard was set off by one of Mountney's attractive yet inexpensive woodrim steering wheels. Very sporty and traditional looking. The cockpit was topped off by a tight, well fitting hood – the culmination, apparently, of much shopping around to find a hoodmaker capable of workmanship to the required standard.

The Rover V8 fits well within the fairly roomy engine compartment, allowing for ample working space around it. However, I would imagine access to be somewhat limited by the high sides of the car and the width of the front wings.

The Rover engine weighs only about half a hundredweight more than the 2-litre Cortina unit, so the front suspension demands nothing more than a pair of mildly uprated springs as a concession to the larger capacity unit.

I was pleased to note the provision of soundproofing material under the strong and rigid bonnet, and the use of the substantial Cortina hinges and secondary locking catch; primary fastening is by means of four spring-hook clips, a pair on either side of the car.

Out on the road, two things immediately became apparent: first, that like the 2-litre version the suspension of the V8 Falcon was based on a combination of soft springs and firm damping, a formula much loved by the late Colin Chapman and one which, if properly executed and combined with sufficient suspension travel, results in a comfortable yet well-controlled ride. The second point was that when the rear suspenson was fully compressed – such as when riding into dips in the road – a loud graunching could be heard from the vicinity of the rear axle. It transpired that this was caused by the propshaft clouting a pair of small brackets provided to carry the handbrake cable along the transmission tunnel, and would later be solved by grinding the corner off these brackets. It proved to be a niggling annoyance, nonetheless.



The seats were rather too firmly upholstered and provided negligible lateral support – a real handicap in a car with such high cornering capabilities, for the driver should not be left hanging on to the steering wheel for support if he is to get the best from the machine. My only other criticisms of the accommodation were the awkward siting of the speedometer and tacho (dictated, apparently, by the positioning of the heater controls) and the lack of simple grab straps for pulling shut the doors.

That heater, by the way, was absolutely first rate; coupled with the well fitting and draught-free hoo made driving around the Lanca hills in the middle of winter an a sybaritic occupation. As a matte fact I experienced a wide variet weather conditions in the Falcor ranging from shunshine through to icy sleet, and throughout it all car proved to be a most civilised beast. The fellows at JBA were gratified to learn that in heavy ra and at 70mph on the Motorway, a few drops of water managed t penetrate the leading edge of th hood regardless of the fact that customary rubber sealing strip h not been fitted at that stage. I wa interested to note that under the same conditions (well, a little fas the truth were told) my passenge I could carry out a conversation normal voice levels.

It became apparent fairly early the test that the Rover V8 was somewhat lacking in grunt, but nevertheless – and despite the performance limitations of autom transmission – we found it capabl punting the car from zero to 60mp a matter of about 10 seconds. Th potential performance with a Rov Vitesse engine and 5-speed man 'box installed would be rather exc to say the least, although a more suitable axle/final drive combinat would no doubt be necessary. Sti *any* V8 engine has a sort of magic about it and I would propose that of life's great pleasures must sure be to cruise country lanes, hood d to let in the thin rays of winter

shine, while the fat twin exhausts V8 engine mutter and grumble somewhere behind one's head. though tamed to a degree by the matic, the Rover still managed to er a healthy amount of smooth, ıp-pulling power which the Falcon smitted effortlessly to the road. ed, unless it's out-and-out ormance you're after the auto s isn't such a bad idea when led to 3½ litres; it certainly es for rapid and effortless ing performance, even if it ands restraint when twirling nd the back doubles.

lking of restraint, the servo-less es result in a heavy pedal action. the V8 installed there's no room servo so a smaller bore master der is used; as it happens I quite a heavy pedal, and the stopping er was, at worst, perfectly quate.

n the Motorway or on twisting, oled country roads the Falcon taut, safe and well mannered. ıing rattled, nothing flapped, and scuttle remained unshaken. The ng and damper ratings ensured a controlled and comfortable ride, ring only when outpaced by ed and untypical surface ulations yet constantly promised by that annoying inch from the propshaft.

s mentioned earlier, the Firestone s were an unknown quantity but gave progressive feel and ped well in the rain, leading me to k I must try them out on ıething more conventional in re.

s one might expect, the figuration of the Falcon leads to essentially understeering vehicle ch in this instance showed a slight ctance to turn into the bends, ough this swiftly settled down to tle and safe understeer almost ore one had time to register its urence. Minor adjustment of tor angle (quite considerable in Cortina) and toe-in would surely o the car to turn in a bit more erly, although it's possible that a asurable result could be achieved fiddling with tyre pressures or even oing the wheel rim diameter in er to use lower profile tyres with s sidewall compliance. Mind you, s latter solution would compromise traditional looks of the car, haps to a greater than acceptable gree.

With a steady throttle the dersteer remained constant and d, and very controllable. More termined application of the celerator would bring the tail gently o line until the car was settled into a edictable slide of the old-fashioned ır-wheel-drift variety. On htening-radius bends the dersteer could similarly be minated by lifting off the gas. This edictable power on/power off ersteer makes for an easily ntrolled sports car and one which sponds well to sudden and frequent rectional changes, enabling rapid ınsit along winding B-roads. It's ded greatly by positive steering and a total absence of bump steer or poor tracking. This stability was equally evident under motorway conditions, where the car would drive steadily hands-off at 80mph.

In summary, with their new V8 model JBA have managed to take the refined Falcon concept a stage further and produced a comprehensive high-quality kit which assembles quite easily to create an exceptionally powerful yet civilised motor car, which is equally at home cruising long distances on motorways as it is nipping hood-down and fleet-footed around the countryside.

At a basic £1950 ex. VAT for the complete kit less donor parts, the Falcon is not prohibitively expensive. It should be possible to complete a V8 version for as little as £3500; to put that price into proper perspective it must be borne in mind that the Morgan Plus 8, against which the Falcon can easily be compared, will set you back a cool £11,651 . . . and, among its many other attributes, the JBA at least features intelligible suspension. ■



PRICES

Kit Price	**£1950**
De-Luxe Double Duck Hood	**£98**
Hood Frame (tubular steel folding) including fasteners	**£18.50**
Sliding windows (door fixing) – stove enamelled – including fasteners	**£49 each**

ACCESSORIES

Bumper Kit (stainless steel)	**£29.50 each**
Radiator Grille (chrome)	**£106**
Fuel tank (incl. lockable chrome cap, filler pipe, etc)	**£68**
Wiring Harness	**£65**
Windscreen Glass (Kite Marked)	**£28**
Headlight Mouldings	**£9 each**
Headlight Brackets (chrome on brass)	**£12 each**
Rear Light Mouldings	**£3 each**
Chrome Door Handles	**£5 each**
Door Catchings	**£3.50 each**
Wing Piping	**£4.80**
Seat Shells	**£17 each**
Carpet Set	**£65**
Trim Set	**£80**
Hard Top	**Available shortly**
Complete Cars	**From £4950**

Prices subject to VAT at current rate


WNK 568M