FALCON BUILD

Parkinsons law is at work as the boys at Yorkshire Kit Cars hurry to complete the car for the Stoneleigh Show. Time is short and the Falcon has to be trimmed, fitted out and registered. This last installment is nail-biting stuff

Words and pictures: Arnold Wilson

In the past few issues we have been following the build-up of the JBA Falcon at the premises of Yorkshire Kit Cars. Last month we reached the stage where the almost finished car had been wired and painted and this month we complete the build-up which involves fitting the remaining mechanical parts, trimming the interior and registering the car.

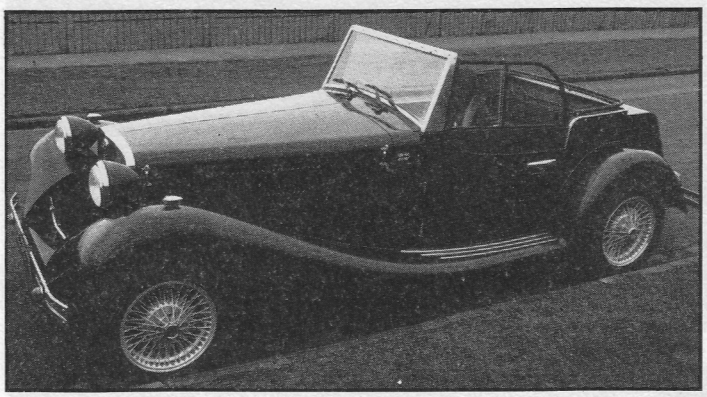
Mechanical components

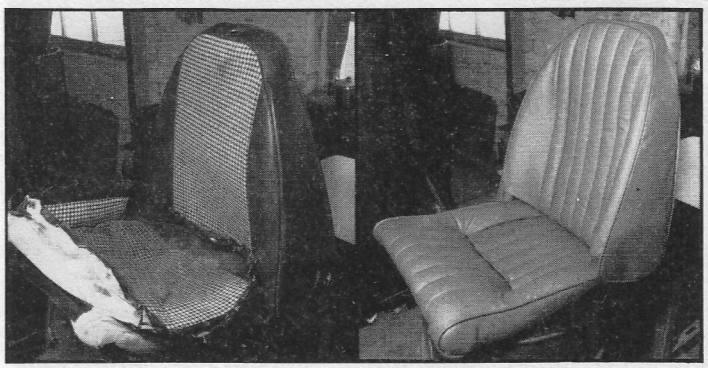
The build-up manual described the fitting of the standard Cortina exhaust system in three short statements amounting to only 42 words, but it just wasn't very clear. Some dimensions were given but others were omitted and more detailed instructions would have been welcome. There were two problems. Firstly, the second Cortina box, the rear muffler (baffle box), is too large to fit under the car and JBA suggest using a small 'Cherry Bomb' silencer which will certainly fit, but the system is then under-silenced because the first box (from the Cortina) is a straight-through resonator.

Our car had to run quietly and, therefore, it was decided to fit a Capri baffle box immediately behind the Cortina resonator box, and this proved quite satisfactory. The main problem, however, was re-shaping the rear pipe to clear the back axle and its associated parts, particularly when the suspension was fully 'bottomed' and down onto the bump stops. The space available was not great and several attempts were made to re-shape the rear pipe to clear all the obstructions.

A final comment, which applies only to the fitting of the five-speed Sierra gearbox, was that an extra 4' was required to allow the front pipe to clear the gearbox mounting points. I have just heard from JBA that they are considering having a special exhaust system made up for the Falcon.

Other parts which had to be fitted included the propshaft, back axle and radiator, and none of these caused any problems at all. This is worth emphasising because we have tended to concentrate on the difficult parts of the build and quickly pass over the components which drop readily into place.





Top: the finished car – proof that all that preparation work and attention to detail really does pay off

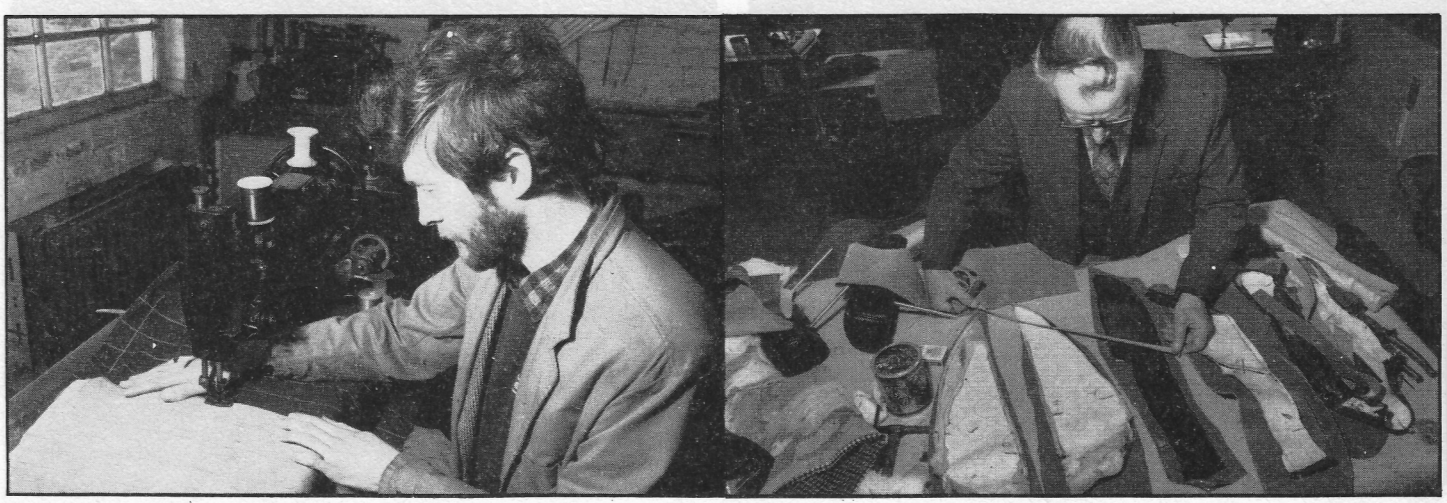
Above: before and after. This original Spitfire seat was in a very sorry state and it took the skill of a trimmer, and some expensive hide, to transform it for use. Below: a domestic sewing machine is not man enough to cope with leather. Adrian Windsor pictured here, is using a heavy duty machine to sew the pleated section of the seat. The old seat panels were used as templates for measuring the leather replacements. Each panel was carefully marked to ensure assembly in the correct order

Trimming the car

The front and rear seats were trimmed in leather by a professional motor body trimmer in nearby Harrogate, and the panelwork and hood fitting were done by Nigel at Yorkshire Kit Cars. I visited the trimmer in Harrogate to discuss the re-build of the seats. Gibson's Car Trimmers is run by Adrian Windsor with able assistance, when required, from the now retired octogenarian, Mr Gibson himself. I was fortunate to see the seats in all stages of construction and the re-trimming procedure was as follows,

The original Spitfire seats were in a sorry state and the transformation to a pair of high class leather units was nothing short of amazing.

The seat covers were carefully removed, turned inside out and every panel was then marked before the stitching was unpicked, to release a dozen or so variously shaped panels. These were then arranged on the new hide, making due allowance for sewing, pleating etc. The panels were then marked for ease of assembly and carefully cut out using a large pair of scissors. The new seat was going to be pleated, to be more in keeping with a 30's style roadster, and this required the use of a good quality







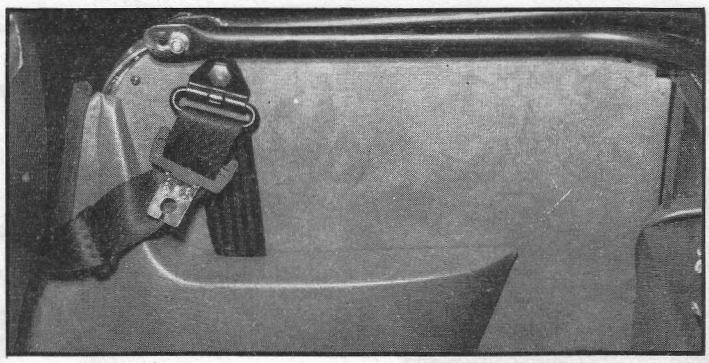
backing material, such as calico or canvas, and a quantity of cotton wadding.

After the leather panels had been sewn together, with the backing cloth and cotton wadding in the appropriate areas, the two covers were then ready to be transferred back onto the original seat frame. However, before doing this, the interior rubbers (polyurethane) were checked and found to be in good order, after which, by using a combination of glue, fasteners, clips and a lot of manual manipulation, the covers were put back onto the seat.

The small bench seat at the back was rather a difficult proposition in that it consisted of only a fairly rudimentary glassfibre moulding and therefore it had to be built up from scratch, but Adrian took this in his stride and the finished seat looked quite superb.

I asked Adrian about his technique for panel trimming and the type of adhesive he used. He replied that he never sticks leather or leather-cloth directly onto a trim panel because it would highlight any 'indiscretions' on the panel surface – he always uses either ¼ inch foam or cottom wadding. On the question of adhesives, Adrian recommended using Dunlop S 758 MG which is an impact adhesive. The technique, and I quote him, is 'to put it on both surfaces very, very thinly, virtually so you can't see it, allow it to dry and then hit them together hard and they will stay together – but if you put too much on, it can become tacky and will come apart in hot weather. If the material is fairly thick, put on two very thin layers, rather than one thicker layer'. Adrian uses short ⅛ inch staples fired from a staple gun, although very short ⅛ inch or ¼ inch upholstery tacks can be used if a staple gun is not available.

When the reupholstered front and rear seats were ready they were collected by Steve and whisked back to Yorkshire Kit Cars in York where Nigel was busy completing the internal panel trimming. He had covered the GRP donor panels with cotton wadding and then covered them with matching leather cloth, more or less as Adrian had described. Instead of using exposed self-tapping screws Nigel opted for concealed fastenings as used on



A professionally made seat in leather does not come cheap but the results usually justify the cost, as can be verified by this picture of the completed rear seat. The well designed trim panel at the rear conceals the seat belt bobbin and also provides an armrest. The Falcon proved to be one of the most straight forward build-ups that Yorkshire Kit Cars have undertaken

production cars. These obviously took longer to fit but the result was a very professional looking door trim. The footwell and behind-the-door areas were trimmed in the same vinyl but conventional black trim screws were used.

The mohair hood came ready made and I was impressed with its quality, although fitting it took quite some time because all the press studs had to be carefully positioned and fixed in place. However, there was a small problem because either the hood was too small or the new rear hoop was too large; whichever it was, the solution was to lower the hoop a fraction.

The hood works on the pram-hood principle, in that it is attached permanently to the hood frame so lowering the hood only involves unclipping the leading edge along the top of the windscreen frame and folding it neatly back. However, when putting up the hood, it does require a lot of effort to pull the hood edge over the windscreen top rail and onto the fastening studs, although once done the tension is obviously very good. What the hood lacks is an after-tensioning device so that it could be erected with ease and then tensioned.

Race to the finish

Two days before the Stoneleigh Show, which began on April 28, and the car was still not ready, although everyone was optimistic that it would make it.

Steve had the local police in to do their inspection. They were basically interested in checking the origin of the major mechanical parts to ensure that they had not been stolen; they noted the engine and chassis numbers and examined the receipts for the major components. The police then submitted their report to Leeds where the car would be registered. On Thursday afternoon after collecting the seats from Harrogate, the car went on trade plates to the local garage for alignment of the steering, after which it was successfully MOT'd. Clutching the MOT certificate and an insurance cover note, Steve Himsworth dashed off to Leeds to register the car and obtain a registration number, which he 'phoned back to York so that a pair of number plates could be made up.

On Steve's return, the car was taken out on its shake-down run. Fortunately there was nothing to report – no exhaust knocking and no spillage of fluids. The dampers were too soft, but being Spax adjustables it was merely a matter of a small adjustment. A smell of petrol was traced to a pipe clip, which needed another half turn of the screwdriver.

When I left Yorkshire Kit Cars at about 5.00 pm on Thursday evening Neil Sterriker, the sprayer, had arrived and was starting the lengthy process of buffing and polishing the car. Apparently, after a short break for tea, the polishing went on into the late evening. On the morning of Friday April 25 the car was completed and driven the 150 miles to Stoneleigh. When I arrived at the Show on Saturday the car had been cleaned and polished again and looked quite superb as the central attraction on the Yorkshire Kit Cars Stand. The race against time had been won—but only just. On Sunday afternoon the new owner collected his car.

There are just one or two loose ends to tie up and final comments to make before signing off.

Final comments

How did Steve rate the quality of the JBA Falcon kit, bearing in mind his wide experience of kitcars? 'Absolutely first class', was his immediate reply. 'It's probably the best kit we've come across to date – really excellent'.

As build-up manuals go, I think JBA's is one of the best. It consists of 18 pages of typed instructions, 20 photographs which have reproduced quite well and 23 helpful diagrams. Of course it's a little too brief in places and slightly misleading in other areas, and there are no instructions for fitting the hood. But overall, its a good manual and it is backed up by a 'help service' from the JBA factory.

What does it cost to have a car like this built by professionals so that your only tasks are to decide on the specification at the outset of the project and pick up the keys for the new car some two months later? Obviously it depends on the specification, but for a car with a good quality exchange engine, a five-speed Sierra gearbox and leather upholstery, the price would be in the £8,000 to £9,000 bracket.

Finally, my sincere thanks to Steve Himsworth and his team for spending a lot of their valuable time discussing the project with me, and for allowing me to photograph the various stages, and of course to Maurice Sadler, the owner of the car. My visits to York were all very pleasant occasions spent among friendly, helpful people and if you are wanting a part or complete build-up, then Yorkshire Kit Cars will be happy to help you ■

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