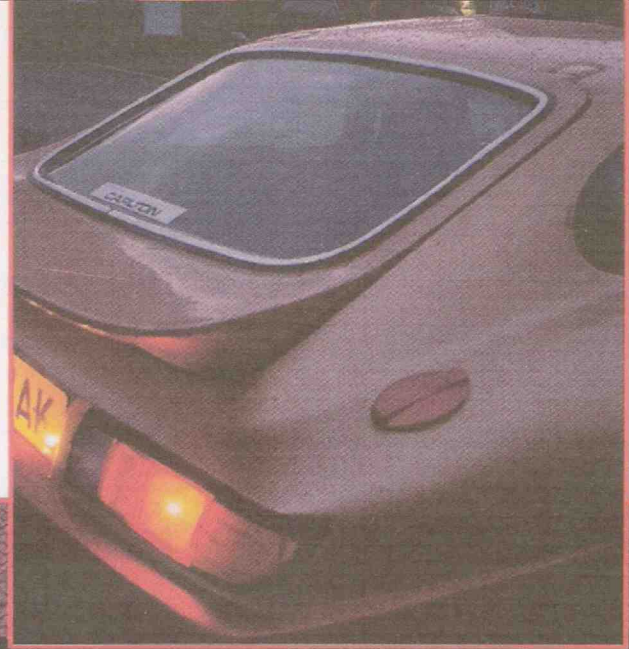


NEW ERA

CARRERA



Practical and stylish, the Carlton Carrera apparently has all the ingredients which should make it a best seller. To find out how it matches up to the expectations of a driver who is used to modern production car standards, Chris Hermann takes the car on an extended test. Pictures: Chris Hermann

One effect of the Cobra revolution that swept the industry was to raise the standards of the products on offer. When *Kitcars & Specials* ran a typical driver profile on the type of person who purchased a Countach replica a few months back, the results could hardly be described as the classical DIY car buff.

With the public at large now aware that there are some very capable cars being made by this industry, the size of the market open to kitcar manufacturers has grown quite substantially. There are a good number of people with the money to pay for a kit and have someone else build the car – for a price.

These cars can, and often do, cost their owners £20,000 or more. The people who buy their kitcar this way expect to see a demonstrator at least up to the standard of the car they will be having.

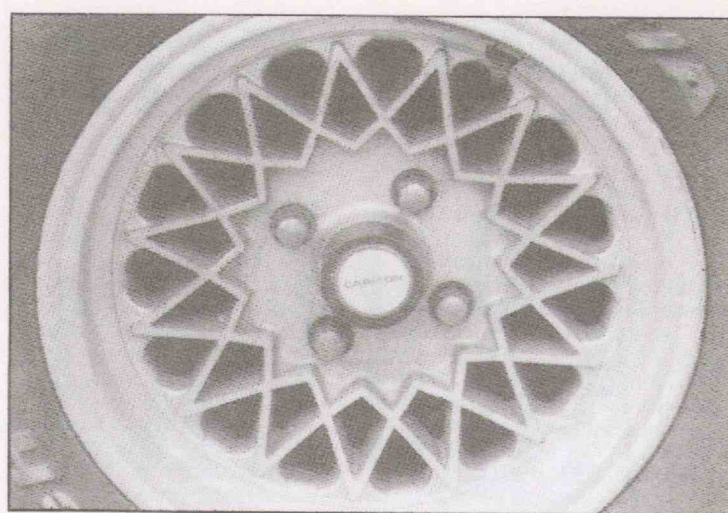
Not all of us can afford or would even want to obtain our cars in this way. The beauty of a kitcar is that with a little patience anyone can have a very desirable motor car that will not be disgraced in any company or cost the earth.

The Carlton Carrera has been around for some time now, being produced since 1985. In conjunction with its stablemate the Commando, the Carrera has earned the reputation of a quality product at a reasonable price. A market leader in its day and still a very attractive proposition, I wondered how it looked two years on. In short, was it still a market leader?

Company background

Carlton have seen their ups and downs. However, they managed to come through the difficulties of being caught up in someone else's financial problems and continue to trade. Stuart Allatt, the Managing Director of Carlton, was at pains to point out that the moulds and jigs do not belong to Carlton Automotive, so had the company ceased to trade his customers would not have been left in the lurch.

Since those troubled times a year ago, they have moved their fibreglass operations to a site they are purchasing in Royston with the intention of bringing the chassis fabrication to the same location from Featherstone.



Nor have they been idle in the development stakes. The demonstrator as tested is now the base variant with three other models to choose from, and as you will read, all the minor faults have been corrected in the kits supplied to customers.

A new Jaguar based demonstrator, at present under construction, will be a cabriolet which should be a very interesting motorcar indeed.

Chassis

The chassis has wrongly been called a backbone construction in the past. It is in truth a variation on that old stalwart, the ladder chassis. It is made from three smaller ladder sub-chassis. The floor pan with its two out riggers, one each side, forming a lower plane.

The engine cradle and rear supporting structure is joined by a narrow ladder section to form a second tier. The two levels are in turn joined by tubing to form a central transmission tunnel. It is this joining of the two levels that confuses the issue because it does have the appearance of a backbone.

Steel rectangular section tubing and U section of varying sizes are used in the construction. The whole structure is not particularly light, but it is simple and no obvious signs of chassis twist were detected in the two year old demonstrator bodywork. The Jaguar XJ based car has a significantly different chassis. Unfortunately I have not as yet seen this version so cannot pass a comment on it.

The mounting points for all the suspension pickups, engine, transmission, radiator and fuel tank are provided by the factory. Being made in steel, the floor pan is part of the chassis construction and adds to the strength and rigidity of the whole car.

I am not a great believer in the use of GRP for floor pans. It is not because there is any inherent problem with this material in such an application, it is merely because it makes life easier for the builder if steel is used. He need not be

concerned that seating load is adequately spread and it is also much easier to find an earth when it comes time to do the wiring.

All the welding is done using MIG, which is so common now we really ought only to be telling you when it is not used.

The suspension is from a Cortina looking for a home for its hardy mechanicals, the rustbucket bodywork having long since given up. Mark 3, 4 or 5 Cortinas are suitable to cannibalise for the necessary parts, though the Rover 3.5 litre V8 is usually used to provide the motivation. The Cortina also supplies the front cross member and various other bits and pieces such as brakes, handbrake lever and so on.

Other variants use Capri MkII and III as a source of parts except that the Cortina cross member is still required. As already stated, the Jag base version is very different with the entire suspension assemblies mounted through rubber bushes as used on the XJ saloon series. It should be a very refined car.

Engine and gearbox

As already indicated, the most common engine used so far is the Rover V8. There are a number of kits being built already using Jaguar's V12 but no one I know of has yet used the original Cortina engine from the donor car, though this is an option open to any builder. However, a number of cars have been fitted with the ever popular Capri V6.

With the mechanical components being located in conventional positions there are no particular difficulties in mating odd gearbox/engine combinations. The demonstrator uses the Rover unit with a self shifting gearbox. Nothing fancy here, though the engine has been topped off with a Holley carburettor and a larger bore exhaust to help the engine breathe a little better.

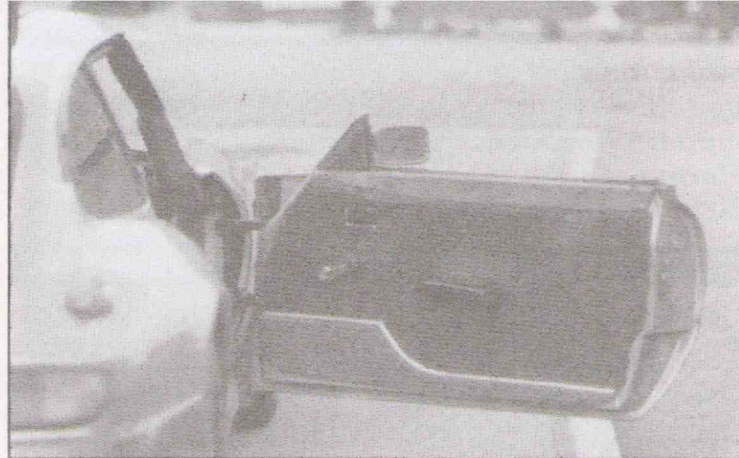
The bodywork

All the panels are supplied fitted to the bodywork making the job of building the car that much easier.



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● The interior of the Carrera was poorly finished and the plethora of red carpet did not help to create a restful atmosphere

An integral rollcage is bonded into the B pillars and this no doubt helps the rigidity of the car as a whole, in addition to improving its safety.

Shut lines on the demonstrator were for the most part even, if a little large by mass produced car standards. But then that is also a problem that Lotus have been able to overcome only recently with their plastic bodied cars. Only the driver's door had obviously variable shutlines, but they were not so bad as to detract from the overall appearance.

One nice touch was the still air box, ducted to collect fresh air for the cabin. It certainly adds to the potential available to builders to create a truly excellent car.

I found the lack of a doorlock on the passenger's side annoying, though this is easily corrected. It is these little things that detract from the overall impression the car presents. The MGB GT windowed rear hatch blends in well to the total concept and is released by a lever in the driver's door pillar. The boot is large for what is essentially a sports car and there would be no problem in taking the car away for a long weekend with two up.

Made from a compound moulding, the doors use Capri internals. This area needs some attention as the windows can be neither wound up nor down when the doors are closed. I do not like the idea of having to open the door on the motorway for any reason, let alone that one.

Stuart tells me that the dash in the demonstrator was the first moulding made and subsequent versions have been altered to allow the windows to be wound up and down. Electric windows would be one answer and it would fit in with the image the car portrays. Again Stuart tells me this is planned.

One further complaint is the way the rain gutter stops at the leading edge of the side windows. It looks very odd.

I am writing this at the beginning of August and thanks to the excellent summer of '87, did not need to put the car through a carwash to discover that it leaks — though not from the places you

would expect. No water came in from the windows or sunroof, but the drivers side footwell was soaked through after only two hours on the motorway.

It would seem some Silastic is called for around some panel joints. Again not a fault that a builder cannot fix but it detracts from first impressions. One thing I can confirm is that the wipers cover a very good area sweeping wide and leaving no blindspots.

The bodywork exhibited minor rippling and there was evidence of variable layup thickness on exposed edges such as the trailing edge of the bonnet. Though not in itself a problem, this edge is clearly visible while driving and really

should have a return edge on it. For the most part, these faults would probably go unnoticed, but if the Carrera is to aspire to be a market leader it must move in line with the increasing quality demands of the market.

On the other hand the kit prices are low enough to be able spend the difference in finishing off the rough edges to the standard required should you so wish, and with most of the faults apparently already corrected there may be no need to do anything.

Construction

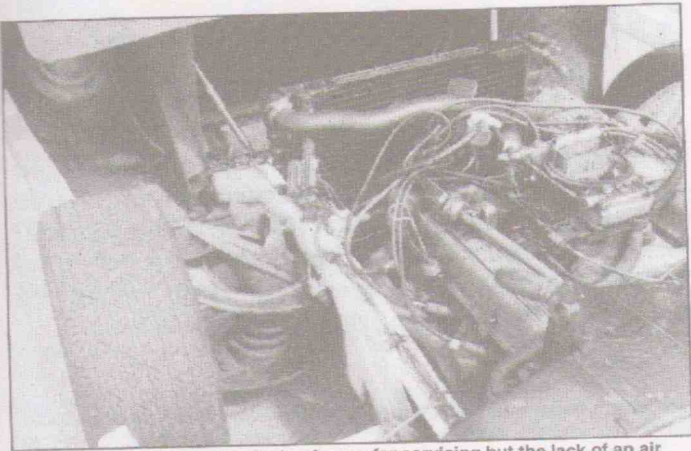
This car seems to be

straightforward to build. The chassis is not intricate neither are the mechanicals. Indeed, I spoke with someone who is building a Carrera and the biggest problem seems to be deciding on a satisfactory route for the exhaust pipe. I am not saying you could give it to your mother-in-law to build to get her out of the way, but it is not in the same class as a GTD40 for example.

One very curious point is that Stuart tells me most of his customers are also considering a GT40 copy. Rather odd considering the Carrera's real competition must be the Marcos and the E-Type replicas. The Carrera is certainly in a different price bracket to a



● Despite being something of an ergonomic disaster, the interior of the test car could easily be improved and the home builder would surely attend to this



● The Rover V8 fits in with plenty of room for servicing but the lack of an air cleaner made the engine noisier than it need have been

GT40 replica.

A build manual is available but due to a rush of orders, there was not one for me to view. The company have in fact recently been selling kits at six times the rate they need to cover costs.

Rolling chassis are not available at present as they have too much reorganisation to do following their move. Carlton can, however, recommend someone to do the work for you if that is what you want. It is intended to make rolling chassis available at a later date.

Driving Impressions

The very first impression was just looking at the car. It was sleek and beautiful but at the same time, very aggressive. Easy to start, the engine produced a throaty beat that promised much.

Unfortunately it all started to go sour when I sat in the car. To begin with the seats slope forward and for that reason alone are terribly uncomfortable though there is plenty of leg and elbow room. The steering wheel is offset to the left a comfortable reach away and the instrument cluster is further offset to the left.

The steering wheel had not been centred and is turned through about 30 degrees to the right when travelling in a straight line. Another problem was that the automatic gearbox acted as if only 2nd and 3rd existed. As a result, the performance was not particularly startling, in fact 'sluggish around town' would be an apt description. Using the manual over-ride improved the performance significantly so the potential is there and a manual gearbox would make a big difference.

At motorway speeds there is a lot of wind, road and engine noise, with a resonance at what I guess would be 50mph which feeds through the steering column. I cannot be sure it was around 50mph because the speedo was either wildly optimistic or I was passed doing 120+ mph by a Vauxhall Nova doing 140+ mph!

Once through this resonance the car smooths out but is never relaxed. The faster you go the

better it becomes however, so the cause of the harshness is probably due to the mechanicals which felt very tired. I am sure the dampers were partly to blame and need looking at. On the positive side, there are new door seals which I am told reduce the whistling at speed.

With the exception of the gearbox problems the car is very pleasant around town. The steering feels quite dead but is quicker than the 3/4 turns lock to lock suggests. Parking the car presents no problem except that the front of the car cannot be seen.

The ride is best described as on the harsh side of firm. Little or no roll was encountered but in my opinion the car would benefit from softer springing and firmer dampers with a heavy duty roll bar. It also displayed some odd handling quirks. Pushing a little bit on a traffic free roundabout the car switched quickly from understeer to neutral and back again repeatedly.

It did nothing to encourage confidence and as I was heading to the Yorkshire Dales, with its narrow twisty roads, I was less than pleased. Despite this we still found ourselves travelling faster than all the other traffic on those winding roads we encountered so it was not all bad. It does however suffer the same tendency to shift about over bumps as the donor Cortina. The Jag based version should be better.

Terminal understeer is the natural tendency displayed by the Carrera. The car is quite affected by entry speeds and throttle into a corner. Hitting a roundabout hard only induces dramatic understeer. A slightly slower entry speed coupled with a momentary backing off to settle the car will dramatically transform the car to a far more neutral attitude.

I was not able to induce oversteer by either backing off or using the throttle. Not even braking mid corner caused the rear to let go — not that I was game to really jump on the brakes on account of the fact they pulled sharply to the right.

The Carrera rather surprisingly perhaps is excellent in cross winds. The Orion I arrived in was blown all over the road on the way to collect

the Carrera, but on the return journey the Carrera showed not the slightest tendency to move off line. The spoilers, it would seem, do their stuff.

While much improved on the old Cortina facia, the MkIV Escort dash is still not really up to the task. The instruments were badly obscured by the steering wheel and it did not fit well, the exaggerated offset did not help matters either. Another limitation was that the parcel shelf was unusable because the whole dash was sloping toward the passenger compartment, compounding the difficulty in reading the instruments.

In fact the worst part of the whole car was the way it was trimmed. Quite frankly I cannot help but feel that it must be losing the company sales, which is a shame because there is a lot of potential there and with some care the interior could be made really smart. Maybe the new demonstrator will be better fitted to be more representative of what the car can look like.

In contrast the column mounted indicator, light and wiper controls all worked well though the left hand indicator had a tendency not to cancel itself.

Conclusion

The three days I spent with the car were very saddening. There is so much right about this car yet it is only evident to those who have the ability or experience to see past the

demonstrator to find its potential.

This car could be the answer to the man with a couple of small kids who wants something a little exotic but suitable for running to the shops and taking on general trips. The other versions are full four seaters, adding to their practicality, and the good news is that the styling is largely unchanged.

The demonstrator at present lands between two stools. Were it to have a manual gearbox its present harshness and noise would be much more acceptable. As it stands the car is far too crude for the civility of an automatic and in either case the seating and general ergonomics need attention.

Nearly all the faults have nothing to do with the car as a kit and anybody building a Carrera could, and probably would, simply assemble the car differently. The seats only require a few spacers under the front mountings for example to make them quite acceptable for most people.

What this demonstrator shows is that no matter how competent the engineering, using worn out parts without reconditioning them will lead to a disappointing result. Do not be put off by the demo car, if the concept suits you and you like the styling (as I do) the finished result need be no worse than any other car on offer. I am sure that the new V12 demonstrator will correct the faults of the current car and I am very much looking forward to making its acquaintance. ■

KIT SPECIFICATIONS

MAKE/MODEL: Carlton/Carrera

Body Type: Coupe

Seating Capacity: 2+2/4

Kit price (base): From £1799 + VAT to £2799 + VAT

(rolling base): Cortina Mk III, IV, V

Capri Mk II, III

Jaguar XJ series

ENGINE: Rover/Capri/Cortina/Jaguar

Type: Alloy VB/V12, cast V6/In-line 4

TRANSMISSION: Automatic/Manual

SUSPENSION:

Front: Cortina Mk III, IV, V

Capri Mk II, III

Jaguar XJ

Rear: As for Front

BRAKES:

Front: As for Suspension

Rear: As for Suspension

Wheels: 14x6 inch recommended max

Tyres: 215/60 recommended max

DIMENSIONS (inches)

Wheelbase: 114 3/4

Track (front): 58

(rear): 58 1/2

Length: 173 1/2

Width: 70

Height: 52 1/2

Kerb Weight: N/A

● Carlton Mouldings, Midland Works, Filey Avenue, Royston, Barnsley S77 4PX