

Appine - the company and its cars By Andrew Shanks

S well as cross-channel ferries and war-time escapades, Dieppe is gaining a reputation today as the home of Alpine, the carproducing company that based itself on a successful rallying and racing reputation. The first Alpine-Renault was produced as far back as 1956 and set the pattern for today's cars in that it too had a glass fibre body but this first car was based on a proprietary Renault 4CV. The car was the brainchild of Jean Rédélé, a well-known rally driver of the period, who set up the Alpine company and remains today the majority shareholder.

In 1961, the Berlinette appeared, marking Alpine's start as a builder of their own chassis as well as bodies. This car featured an extremely robust steel tubular backbone chassis with welded subassemblies front and rear to carry the suspension and overhung rear engine. A prototype of this car had in fact appeared in the Tour de France in the previous year, using a Renault Dauphine engine and gearbox and such was the interest in it, that there was an immediate demand for a production version. With only minor revisions, this model has been continued to the present day. It is now known as the A110 and continues the principle established at the outset of the company in using currently available Renault engines. Thus two ver-sions are available, a 1,300 c.c. alternative using a Renault 12 engine, and the more powerful and exciting 1,600 c.c. version using a Gordini-tuned Renault 16 power unit.

The reason for the use of Renault engines stems from a commercial agreement signed between Alpine and Renault in 1965 under which Renault agreed to make available their dealership organization for the sale of Alpines, in return for an undertaking on Alpine's part to use Renault engines exclusively for both the production and competition cars. But the most valuable aspect of the agreement to the fledgling manufacturer was the offer by Renault of a guarantee, which gave the cars customer credi-bility, and really marked the start of Alpine's growth towards its present size. Produc-



The Alpine A310, a practical 2+2 coupé based, like the A110 Berlinette, on a substantial steel backbone chassis

tion in the years from 1960 to 1965 had run at an average of just under 300 cars per year. By 1970 yearly output was up to the magic 1,000 cars and in 1972 reached 1,400. The economic problems of 1973 and the necessary fuel-saving speed limits have prevented Alpine from topping the 1972 output. Demand is returning slowly but the company have been unable to re-employ 50 workers laid off during the fuel crisis.

The increase in production volumes since 1971 was brought about by the introduction in March 1971 of the A310 2+2 coupé as an additional model in the range. This car is similar in basic design to the A110 Berlinette in using the backbone chassis construction but is a more spacious configuration with a higher level of general trim and finish. The rear suspension of this car is significantly different to that of the Berlinette in that a double wishbone arrangement is employed, replacing the primitive swing axles which had been in use since the very earliest Alpines appeared.

## At the Dieppe factory

Production of both the Berlinette and A310 is carried out on twin assembly lines running down the centre of the airy modern factory. The constraints imposed by the use of a glass fibre body mean that the production line is unlike that of a conventional steel-bodied car and it is not, of course, possible to move the flimsy bodies by overhead ways. Instead, the bodies are trundled

The extensive competition workshop at Dieppe



around on dollies to be dropped on to the chassis by hand, to continue onwards for trimming and finishing. The speed of production is strictly related to the time that it takes to produce, paint and finish off the glass fibre bodies. After extraction from their moulds, the bodies are superficially cleaned up and then given the first of three "rubbing" coats. These are just to enable the finishers to gauge how much surface is being taken off by the hand rubbingdown that is used to get a smooth surface prior to final painting. Each body spends between 60 and 80 hours being prepared at this stage before moving on to mate with its chassis. At all stages, careful attention is paid to panel fits and the finished cars have a very high quality appearance. This goes part of the way to justifying their fairly high price, available the performance going the rest of the way. In France, the prices including TVA (VAT) at 33 per cent are £2,330 for the 1300 A110 Berlinette; £3,448 for the 1600 Berlinette; and £5,100 for the A310, while it is possible to buy a Group 4-prepared Berlinette between £5,172 and from £6,500 depending on specification.

At the moment, all cars produced at the Dieppe factory are left-hand-drive and none are officially imported into the UK but market assessments are being carried out. It is thought

that as few as 30 cars sold per year would justify the development work on a right-hand-drive version of either the Berlinette or the A310. It is most likely that the A310 would be the first to be offered here and although it is unlikely to be sold for less than £5,000, its combination of light weight, good aerodynamics and frugal engine all in a practical design could well attract the necessary number of buyers to make a viable exercise. On the subject of future plans, it is probable that the V6 Renault-Gordinideveloped engine will be seen in the A310 but is not likely to be seen in the Berlinette, as this car is to be phased out within three years.

Alpine are fortunate in that development of their the engines is carried out for them by Amedée Gordini's company at Viry-Châtillon outside Paris. Here the 1,800 c.c. engines for the rally Berlinettes are built as well as those for the Renault 17 coupés which are also entered by Alpine in certain rallies. While we were at Dieppe, preparation of four of these cars was under way for the North American Press-on-Regardless Rally. The entry of Renault 17s in this rally gives a clue to the principle of Alpine's rally involvement for this year - to give promotional support to the normal Renault trading effort in markets where this is considered necessary. This principle applied to the entry of Alpine Berlinettes in this year's East African Safari, which on the face of it seemed illogical in that the car is not available for sale in this market. However, East Africa is a big market for selling Renault.

## Alpine competition plans

When you approach the Alpine factory at Dieppe, you could be excused for thinking that the whole factory is occupied with the preparation of competition cars. This is because the full length of the front of the building is given over to the competition workshop, and while we were there the full range of Alpine's offerings were on show. The four works cars for the Ronde Cevenole, a sort of closed road race in the South of France, were all being prepared and included examples of all the strings that Alpine have to their rallying bow. They included an ordinary Group 4 Berlinette with original swing axle suspension for Jean-Pierre Nicolas, a much lower Berlinette with A310-type double wishbone rear suspension for Bernard Darniche, an A310 for Jean-Luc Therier, and a Renault 17 for Jean-François Piot. All four

of these cars will use the 1,800 c.c. Lucas fuel injection version of the Renault 16 engine which gives 180 bhp.

Alongside these cars was a single A441 2-litre sports prototype that is contesting the FIA European 2-litre Championship for the second time. The interest in this car is in its use of a dohc V6 engine whose cylinder block is the basis of a European passenger car engine which will be seen in new cars from Peugeot, Volvo and Renault themselves. Like the formula 3 cars which were also being prepared, the A441 uses a space-frame chassis and conventional suspension and owes much of its speed to careful aerodynamic design. So far this year, the Alpine 2-litre has won the only round of the Championship to be contested, and Alpine are putting a great deal of effort into winning the series to add to their World Rally Championship gained with the Berlinettes last year. The engine used in this car will be available for formula 2 in 1976, and as it produces 280 bhp, it should provide good competition for BMW in this class of racing. As well as the cars mentioned, there were at least another 30 Berlinettes in various stages of tune and preparation for private customers as well as several spare works cars.

## Driving the A310 coupé

One of the high spots of my visit to Alpine was the opportunity to drive the A310 albeit for only a few miles. However, even on such a brief acquaintanceship, I gained a most favourable impression of this good-looking and practi-cal 2+2 coupé. The position of the engine in its overhung position at the rear of the car allows greater scope for a 2+2configuration than is possible in a mid-engined design. As a result, there is plenty of room around the front seat pas-sengers and reasonable space in the rear for two adults. If travelling two-up, the rear seats form a spacious luggage area. There is no separate luggage boot.

The driving position is most comfortable once one has manoeuvred one's feet round the pedals. The view out over



A310 body shells in the building – it will require between 60 and 80 hours of further finishing and painting before these shells can meet their chassis



The Alpine A441 2-litre sports car on which hopes are pinned for the 2-litre prototype championship the short bonnet is commanding and there is just about adequate vision to the three-quarter rear through the small quarterlights and deep rear window. Although it was raining heavily, the rear window did not become too opaque.

On the move, the lightness of the rack and pinion steering was immediately welcome de-spite its high gearing of  $2\frac{1}{2}$  turns for a 34ft turning circle. Also impressive was the lightness of the gear change for the 5-speed Renault gearbox. As the box is in the middle of the car, the linkage length of the change is short, allowing short precise travels through the gears. The change pattern is the familiar H-pattern with the geared-up 5th gear out to the right and forward. The gearing is high, 5th gear giving 23 mph/ 1,000 rpm resulting in relaxed high speed touring, but a lack "thump-in-the-back" type of acceleration. This is also due to the wide power band of the fuel-injected Renault engine which gives good power from low revs, and has no obviously discernible point at which the car comes "on the cam". All the available power can be poured on to the road as the traction given by a 60:40 weight distribution makes wheelspin negligible.

Although the A310 is light in weight at only 16<sup>1</sup>/<sub>2</sub>cwt, the ride is surprisingly good at all speeds and good wheel travel enabled it to soak up some really heavy undulations without any sign of reaching the limit of travel. With so much weight at the back of the car, it was a surprise to find that the natural stability of the car is good, and it was possible to drive "hands off" in cross winds and over indifferent road surfaces without any tendency of the car to wander. Un-doubtedly, the low build of the car helps in this as well as contributing to roll-free cornering.

Unlike some glass fibre cars with which we are more familiar, there were no signs of rattles or noise from either the body or the suspension, a fact due largely to the immense strength of the backbone chassis. The interior of the car is tastefully trimmed and there are absolutely no signs of the body material in view. The standard of the trim is also high, justifying the relatively high price (in France) for a car of only 1,600 c.c. Should the A310 be imported into the UK, there would be certain to be a ready market, as unlike cars of a similar type, the Alpine has the benefit of a wide service network which generally helps to stabilize the second-hand value of such cars.