



Before (inset); an old saloon... and after, a very stylish convertible.

A PETROL HEAD'S DAY OUT

Dave Fenner visits Classic Restorations (Scotland) Ltd.

Alyth is a small town in rural Perthshire, not exactly the place you might expect to find several million pounds worth of classic cars. From the outside, the premises of Classic Restorations are stone buildings probably dating back to the Victorian era, with origins in farming or other rural industry.

On arrival, I was greeted by Stewart Reid, the production director, and then by Bob Fisher, whose primary role is storekeeper. Bob's length of service has given him extensive experience and a deep insight into the workings of the business, so therefore, he is an ideal guide.

One might make the mistake of thinking that this would be a business serving predominantly local or even UK, customers. Nothing could be further from the truth. Many of the clients are based abroad, and the story was told of one customer who arranged to ship his car to Scotland for restoration, and on completion, flew across from Germany to undertake a UK motoring tour.

It then transpired that he needed a driving lesson on the foibles of this particular model as he had never previously set eyes

on the car, having purchased it sight unseen in yet another country.

The premises contain a vast array of classic cars and commercial vehicles, many dating back to the early part of the 20th century (**photo 1**).

Subcontracted out

A few processes are subcontracted to other firms, notably the bead blasting of the body shells to remove rust, certain engine machining work, and the chrome plating. Almost all the other work is undertaken in house, which involves many different skills. Naturally, parts for exotic old vehicles can be hard to find, but over the thirty odd years since their start up by Charles Palmer, *Classic Restorations* have built up a network of international contacts to help find that elusive spare part. Furthermore, in some cases, they buy in complete cars, such as Rolls-Royce, to break for spares.

As well as restoring cars for customers, several vehicles, typically Rolls-Royces, are owned by the company, and hired out for occasions such as weddings. One of these cars features an innovation designed by one of the company mechanics. Neil Tuer has produced a fuel injection system

for these older vehicles which has the effect of giving a fuel economy improvement of seven miles per gallon. Now that may not sound dramatic, but the change approximates to a 50% improvement, from thirteen to twenty mpg. **Photograph 2** shows the installation. Another modification, designed in house, is a power steering system, powered by an electrically driven hydraulic pump, thus obviating the need to make obtrusive changes under the bonnet. This enables heavyweight historic vehicles to be more effortlessly driven by those who lack a weight-lifter physique.

The tour

The first stage of the tour took in a large warehouse where the eye was met by a mouthwatering variety of cars, at differing stages of work in progress. A couple of body shells (including the Japanese Toyota Celica and Jaguar E type (**photo 3**)) had just come back from a subcontractor, freshly bead blasted and coated with anti-corrosion primer paint. Occasionally, this part of the process throws up the odd surprise, and, as an example, I was shown a Mercedes coupe, where the blasting had not only removed the paint, but also layers



2
The fuel injection system fitted to a Rolls-Royce. The set-up procedure uses a laptop to adjust the parameters.



3
Two body shells in the foreground, Toyota Celica (left) and E Type Jaguar (right) have been blasted and primed.



4
Engines in store include the Rolls-Royce V8 to the fore and a numerous variety of other examples from Rolls-Royce, Bentley and Jaguar.



5
A line of Carcoons, the one to the right, awaiting the return of its occupant.



6
A Rolls-Royce 25-30 Sedan De Ville.



7
This Bentley Three Litre now awaits its bodywork.

of filler, exposing earlier substandard repairs, and areas of 'metal lace'.

We then passed the engine pound (**photo 4**) where various engines, ranging from Hillman to Jaguar to Rolls-Royce, were parked on pallets awaiting the go ahead for rework.

Making our way towards the paint shop took us through another storage area where some owners have their pride and joy kept in Carcoons (**photo 5**). I had previously seen these devices advertised, but never actually set eyes on one 'in the flesh'. The idea is that the car is kept dust free, in air conditioned comfort, with a regular battery top up and is thus ready to roll at a moment's notice. Also here, were a Rolls-Royce 25-30 Sedan De Ville (**photo 6**) and a partly restored Bentley Three litre (**photo 7**).



8
As with many things, someone has done it before; here inboard springs on a 1935 Mercedes Benz.



9
This Atkinson lorry cab demonstrates the marriage of skills in wood and metalwork.



10
A body tub for Panther 730J.



11
An Alvis TE21.



12
This wheeling machine is used to form double curvature panels.



13
This set of rolls is rather larger than those used in model engineering.

Photograph 8 underlines how some 'innovations' in motor car development are anything but new. Inboard suspension units became the in thing in Formula One some relatively few years ago, but here is the same concept on a Mercedes 290 dating back to 1935.

In an adjoining hall, we passed the cab section of an Atkinson truck (**photo 9**) which was a first taste of the multiplicity of skills employed. Here was superb quality craftsmanship in wood, allied to metal, and on a mere lorry.

In the paint shop several cars were visible in different stages of preparation. It was a case of look one way and see a

Panther 730J (**photo 10**) but look the other and there was an Alvis TE21 (**photo 11**).

Sheet metal working

The sheet metal shop was dominated by three principal items of equipment. A wheeling machine or English wheel (**photo 12**), a hefty set of rolls (**photo 13**), a guillotine (**photo 14**) and a folder (**photo 15**). Also in evidence was the Pullmax machine (**photo 16**) which is mainly used to form louvres. **Photograph 17** shows a louvered panel fitted. Some machining work is undertaken in house, using the Harrison lathe shown in **photo 18**.

The interior trim

Creating quality interior trim is one of those skills that many amateur car restorers can only dream about. The trim shop is looked after by Ashley Harding, and just about the only piece of mechanisation on view was the long arm sewing machine shown in **photo 19**. **Photograph 20** gives some indication of the quality of leather and wood trim that is achieved, in this case on a Rolls-Royce Phantom Two open tourer.

Re-assembly

At the mechanical assembly stage, it was interesting to contrast the rear axle of a Phantom Two Rolls (**photo 21**) with that



14
The power operated guillotine.



15
A box and pan folder.



16
This Pullmax machine is used mainly to form louvres but can be fitted with other dies.



17
A louvered panel fitted to a Rolls-Royce.



18
A Harrison lathe fulfills general turning duties.



19
This long arm sewing machine admits wider fabric than regular machines.



20
Example of interior trim with polished wood and exquisite leather.



21
This rear axle assembly is for a Rolls-Royce Phantom Two.



22
A rear suspension sub-assembly for an E Type Jaguar.



23
A detail view of a Rolls-Royce brake shoe showing the pivoted anti-grab section.



24
A Jaguar XK150 awaits final preparation prior to painting.



25
A resplendent 3.8 Litre Jaguar Mark Two.

of an E Type Jaguar from roughly three decades later (**photo 22**). **Photograph 23** shows the detail of the Rolls-Royce brake shoe, which has a separate hinged section towards the leading edge to eliminate 'grab' on application. The later Jaguar arrangement has independent suspension and inboard disc brakes.

Photos 24, 25 and 26 show two Jaguars, an XK150 and a Mark Two, then an MG C, these cars being at various stages of rebuild. I had always assumed that the MG B and C were virtually identical apart from the engine. Not so, the coil spring front suspension of the B is replaced by torsion bars and a different cross member. The torsion bars run back under the floor and the stresses transferred to that area can lead to problems, if the metal becomes corroded.

As well as restoration work, Classic Restorations also undertake extensive coachwork manufacture and modification. This may take the form of creating a drop head from a saloon or even a hearse.

Photograph 27 shows an open Bentley in the 1930s style built using a 1950s Mark 6 as a basis. Aside from producing the open body, Classic Restorations shortened the chassis by around twelve inches.

Conversion to soft tops

At the time of the visit, work was progressing on a Rolls-Royce Silver Cloud 1 which was being converted to a soft top. **Photos 28 and 29** give a general view of the car and of the hood framing. The hood operation will be actuated by electro-hydraulics.

To further illustrate this work, in the best traditions of 'here is one I made earlier', Charles Palmer opened up two photos which dramatically show the kind of change that may be effected. In this case it was a Bentley S3 saloon which was converted to the open form shown in photo 1.

Towards the end of the visit, I asked Charles Palmer how he managed to recruit craftsmen with the skill levels needed for this quality of work. Charles said "In many cases, they have joined the firm at an early age as apprentices and have been 'Brought up in the faith'". ■

Photograph 1, and inset, are courtesy of Classic Restorations.



26
A body shell for an MG C.



27
An open Bentley created from a Mark Six saloon.



28
A general view of a Silver Cloud 1 in the process of modification to a convertible.



29
A view of the interior metalwork and the hood mechanism.