BEAVERETTE MK 1V

Phil Homer, historian of the Standard Motor Club, was fortunate enough to be offered a drive in a 1944 Mk IV Standard Beaverette so he went to Holland to enjoy this rare experience

is employed together with the four-speed

and reverse gearbox. A double-reduction

gearbox has been added in front of the

The Mk IV is the last and most sophisticated of the Beaverette range. The main difference over the Mk III is the redesigned Glacis armour to improve visibility for the driver. This example has been completely restored by Martin Ijdo at Historic Engineering b.v. in the small town of Hazerswoude-dorp, about 20 minutes drive from Leiden in the rural Netherlands. As a complete and running vehicle it is quite rare; a number of Mk IV survivors have been cut down by the Irish Army and subsequently used as scout cars. However, I do not know of another that is running and on the road.

The 1776cc four-cylinder side-valve engine

DRIVING A BEAVERETTE

Mechanically, the Beaverette is based on, and very similar to the Standard Flying 14.

differential which helps pull the weight along although it means that the vehicle is straining at high revs whilst not making a lot of forward progress. The single rear gear makes for not a very hasty retreat!

It's quite difficult to get in. I duck my head to enter through the heavy door at the rear centre of the vehicle and then have to negotiate a route over the hump enclosing the differential and reduction gearing to reach the front of the cabin. There's







Above: Forward visibility for the driver is surprisingly good but becomes severely hindered when the dual front slots are closed. There's also a vision slot each side.

Left: Driver sits on the right, of course, and controls are very much like a car. Top speed is officially 40mph (64km/h), but that's possibly optimistic.

Below: Low bonnet means air cleaner has to be relocated elsewhere.



Above: 1776cc four-cylinder side-valve engine is taken from the Standard Flying 14. The Solex carb is specific to the Beaverette.

a canvas driver's chair with a lightweight tubular frame to sit on, but no passenger seat. The turret occupies most of the rest of the cabin, the only part that isn't occupied by the turret is the square petrol tank sitting in the front left corner. I suppose the occupants were glad it was inside the armour, not outside!

The Beaverette starts quite easily with the choke control operated, then settles down to a loud bubbling roar which is less intrusive than I expected, for there is positively no sound-deadening. It has a bespoke Solex carburettor with a built-in governor, to prevent over-revving. The driver sits on the

right and has conventional car controls. There are two slots in the armour up front and one either side all at high

level. Each can be closed but visibility, which is otherwise acceptable, becomes nil at that point. Someone ought to have provided a periscope! There is a small dashboard to the driver's right with just two instruments, one displays speed, the other fuel, oil pressure and ammeter. There is no rev-counter.

I set off to do a circuit of the industrial estate on which Historic Engineering has



its workshops. The gearbox is surprisingly crisp and the synchromesh works well. The revs build up very quickly and the vehicle encourages one to move up smartly through the gears. I soon find myself in top, but that is at no more than 20mph (32km/h). I am very conscious that there are three tons of armour to pull along and the top speed

"The Beaverette starts quite easily with the choke control operated, then settles down to a loud bubbling roar."

is less than 40mph (64km/h). I suspect it would be quite noisy if I were ever to attain that speed. Of course, I am conscious that other traffic will be keeping out of the way (wouldn't you, when seeing a war-time and mean-looking camouflaged armoured car approaching you?) The semi-elliptical springs in all four corners are doing a good job at keeping the Beaverette flat when

cornering and the ride is none too harsh, in fact it's really surprisingly supple. The Marles-Weller steering is understandably heavier than the car version and there is no power assistance. The wheel can't be moved when the vehicle is stationary, but it's perfectly acceptable when on the move. The brakes are almost unnecessary,

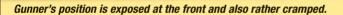
which is just as well, as soon as one's foot is taken off the accelerator all forward momentum is

lost almost immediately and the Beaverette comes quickly to a halt without application of the brakes.

I must say I am enjoying it and having to give it back all too soon is a chore.

CONSTRUCTION OF THE MK IV
The Beaverette is fabricated from square
sheets of heavy armoured steel plate,





cut in simple shapes with welded joints between all of them. The structure consists of two main parts: the main hull being one complete welded box, which makes the driving compartment. The underside, however, is not armoured. The front bonnet comes as a separate item, comprising a second welded structure consisting of the two side wings and the front panel between them, forming a U shape. The U is bolted to the main hull in the front corners. There are four heavy panels on top of the bonnet, all hinged for access. The two middle panels

are hinged down the centre and give access to the engine. The

engine compartment sides and the panels on top of the wheel arches are much thinner gauge and provide no structural strength. The carburettor sits on the very top of the engine, but the height of the bonnet is relatively low, so the air cleaner has to sit above the front wing and is connected to the carburettor body by a long convoluted

rubber pipe, passing through the inner wing.

There is a chassis frame at the front, but it is too light gauge to carry the front suspension loads. Instead, the front springs are hung off the main hull at the rear and the heavy panel at the front, those same attachment bolts also usefully form the anchors for two towing eyes.

In our Beaverette there is the original and fully functioning turret and gun-mounting. The circular turret is continuously rotatable, achieved by the operative sitting in a fold-down seat within the turret itself and



Fuel tank sits conveniently in the front left corner of the cabin.

in all directions - up, down or around. It is believed that the original fitting was twin Vickers machine guns and it would be impressive if that installation could be reproduced. There was another smaller type of turret fitted to some Beaverettes which was enclosed for protection of the gunner and came equipped with a Bren gun.

BACKGROUND TO THE BEAVERETTE

Beaverettes were named after Lord Beaverbrook the newspaper magnate, and were issued to the Home Guard for civil defence and training. Beaverettes came in four flavours. The Mk I was put together in pretty short order and consisted of a steel plated hull mounted on the Flying 12 chassis but fitted with the Flying 14 engine. The 12hp chassis was chosen over the 14hp because it had a simpler frame supported on semi-elliptical springs all round, rather than the more complex Independent front suspension of the 14. The body used leftover front wings from car production. It was charming, but pretty ineffective as a fighting machine.

The Mk II was much as before, except this time the front panel was armoured to

> prevent bullets entering the radiator, a noted deficiency of the Mk I.

There was no roof on either model and there was no door, the occupants having to exit over a lowered rear panel. As before, the steel armour was backed by oak planking.

The Mk III was shortened, the chassis and the rear extension being dispensed with. Having run out of car wing pressings,

"The brakes are almost unnecessary, which is just as well."

pushing himself around with his feet on the floor. His head sticks out of the top of the turret. The gun carrier rotates with the turret on rollers around its edge. This is spring loaded by eight coil springs which are positioned to counteract the weight of the guns and their carrier. That means they were balanced for ease of movement

E REST

Fortunately, the Beaverette was well documented by Standard at the time, in the form of a comprehensive workshop manual. Martin is the proud owner of a copy. The main work carried out was a disassembly and a repaint in the correct colours, but there was much work besides for which the manual proved invaluable. The radiator required a re-core and the starter motor and voltage regulator had to be rebuilt.

The aluminium head was removed from the engine, albeit with some difficulty, and skimmed. There were a couple of valves stuck and all the valves had to be reground. The plugs, points condenser and rotor were all of course replaced. The only other engine work required was a new head gasket. All of these components are the same as the Flying Standard 14 saloon.

A new wiring loom was made to the diagram in the manual. The vehicle came without side or headlights but the restoration budget unfortunately did not stretch to finding the correct replacement items.

The carburettor, which was sourced from Solex, appears to be unique to the Beaverette and contains both an accelerator pump and a governor, fortunately this required no work beyond a clean-up as spares are pretty unavailable.

When the Beaverette came in for restoration it was green with brown camouflage, but it has now been repainted in its correct original colours of black over dark brown. The interior colour has not been replaced, this is a pale beige in colour.

The easiest part of the restoration was the balloon tyres. Much to Martin's surprise, indeed astonishment, he found they are still commonly fitted to agricultural vehicles and thus were available off the shelf from a tyre fitter near to his premises, in the same industrial estate!





it had fully armour-plated wings. It was totally enclosed and carried a gun turret on top. The Flying 12 car underpinnings were discarded, the hull itself supporting the rear of the vehicle and a purpose-built





Gunner's seat helpfully tips up when not in use.

Rare 1944 Mk IV Standard Beaverette is thought to be the only one actually on the road.

HISTORY OF THIS MK IV

The background history is rather sketchy. It is commonly thought that Beaverettes were used mainly by the Home Guard for protecting home airfields and for driver training, and not risked in foreign conflicts. One wonders how this one came to be in Holland?

Into our story now comes the Princess Irene Brigade. This was a fighting unit that was formed exclusively of Dutch soldiers who escaped to the UK during the Dunkirk evacuations. The Brigade was collected together and headquartered at Wrottesley Park in Wolverhampton and comprised some 1500 personnel. They were re-armed and re-equipped with British vehicles and sent into Europe following the D-Day invasion. Now I am not trying to imply that Beaverettes were involved in the landings, they must have been supplied later, since it is known from Dutch Army records that by 1951 the Dutch Army equipment list comprised no fewer than 11 of them. It is therefore logical that our subject vehicle was one of that batch given to, or acquired by the Dutch Army post the declaration of peace.

Some time later, our Beaverette ended up in Leiden in a military collection belonging to the Dutch Army. However, it was never displayed there, held in reserve, then loaned to the Wings of Liberation Museum in Best, near Eindhoven, where it was put on display. However, by then it had acquired the wrong camouflage colour scheme. About 10 years ago it went back into storage at the Dutch Army Museum. The Dutch Army and Aviation Museums combined to become the National Military Museum about five years ago and it is they that have thankfully commissioned this restoration.

It is encouraging to note that the Beaverette is now in full running order and will not be just a static exhibit, since it is fully intended for it to participate in demonstrations, rallies and re-enactments. That includes a celebration for the centenary of the birth of the tank, which the museum will be organising over the summer.

My grateful thanks go to Martin Ijdo, Historic Engineering b.v. and the archives of the Standard Motor Club.

front chassis, though the 14 engine and gearbox were retained.

The Mk IV is the last and most sophisticated of the range, the main difference over the

Mk III being the redesigned Glacis armour to improve visibility for the driver — and this is the example that Historic Engineering has completely restored. It's thought that

around 3800 Beaverettes were built at the Standard Works at Canley in Coventry but few have survived, making this runner a real rarity.

