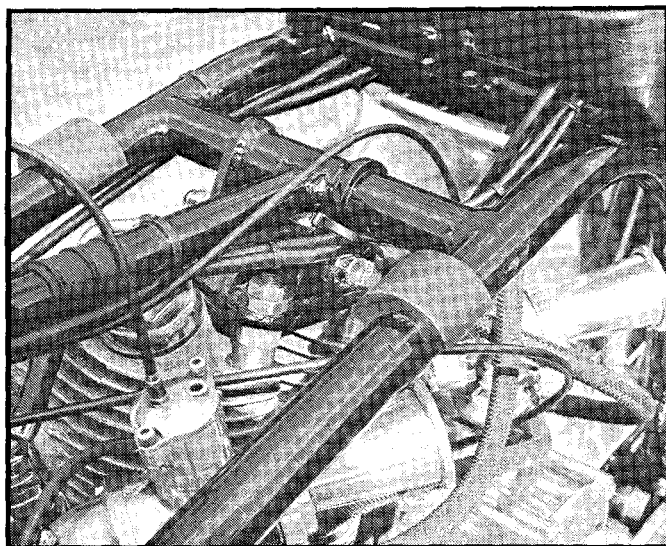
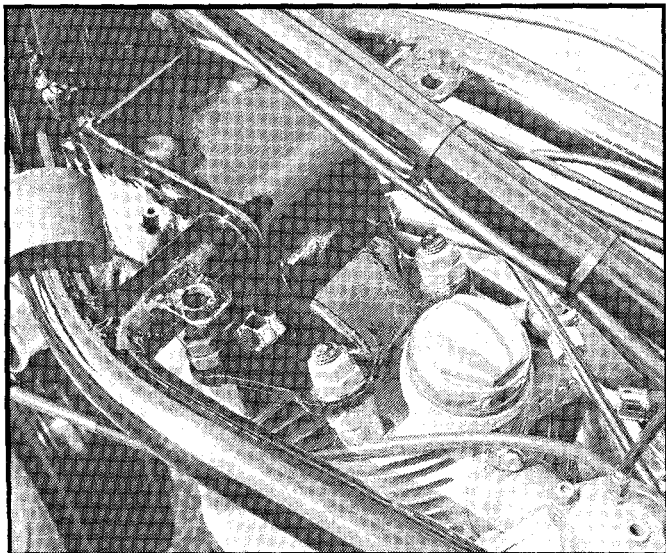


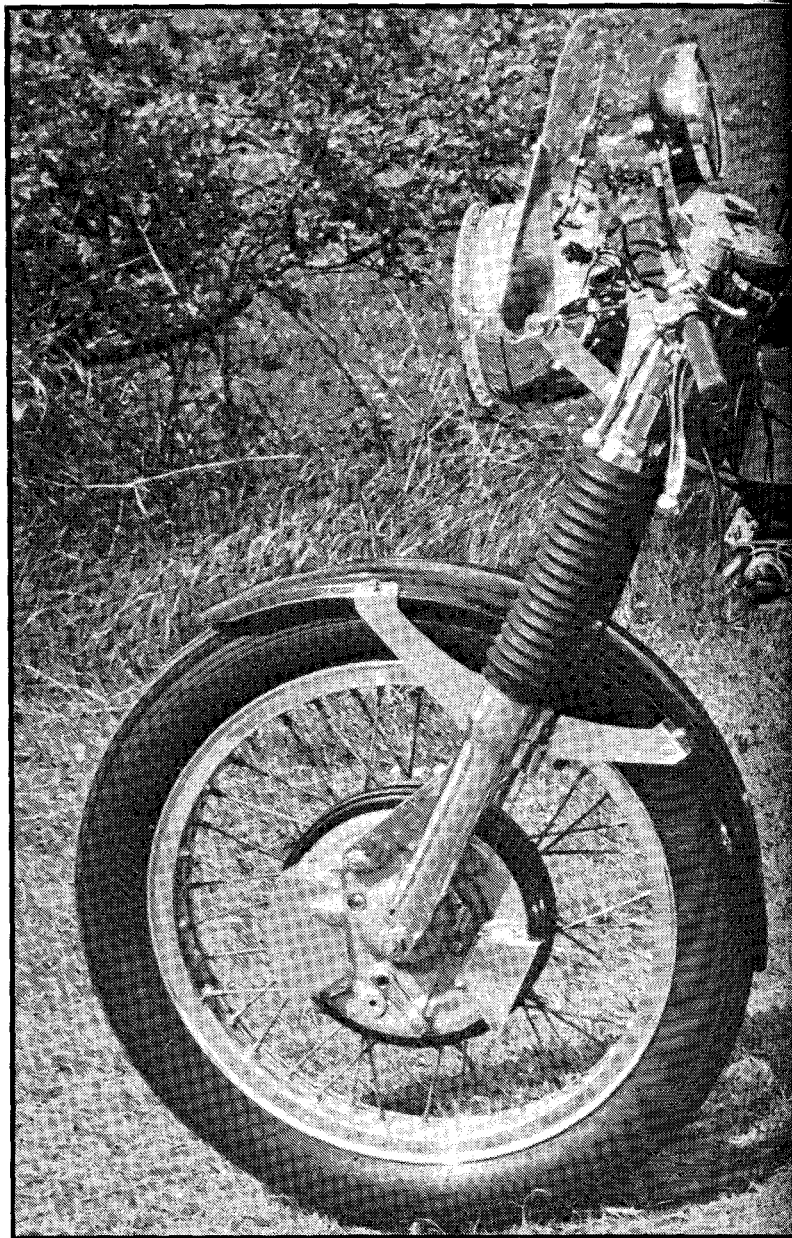
Most builders of Norvin specials butchered the Vincent engine to make it fit into a Norton frame. Tim Holmes finds an example of the species in which creative engineering has preserved that magnificent V-twin power unit in untouched external condition.

Not just



Above: Special top engine mounts enabled the unknown designer to graft Vincent practice onto the Norton frame.

Right: John Hardon's Norvin, loaded with stainless steel components, is a breathtaking motorcycle.



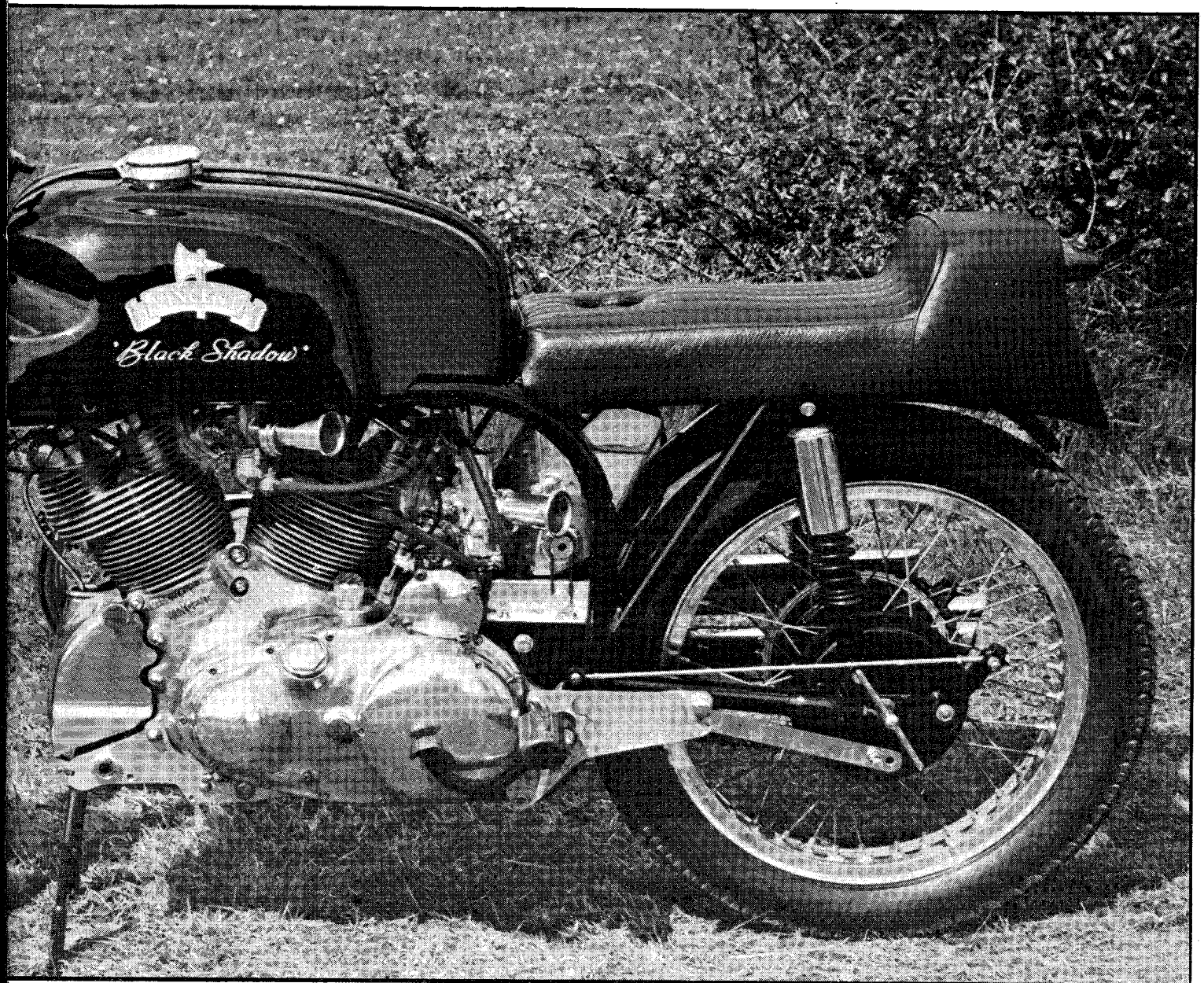
JOHN HARDON is a perfectionist. He has to his credit a long line of perfectly restored motorcycles, and until recently specialised in creating singularly tasteful Norton Gold Star specials. An engineer by trade, he has access — through schoolfriends who have grown up to run their own businesses — to all the machine tools and other equipment that a serious bike builder requires. His own workshop boasts a comprehensive array of handtools and a four-inch vice, which he uses to hold stainless steel plate while he fashions replacement parts.

John has a thing about stainless steel. If you examine the photographs of his beautiful Norvin, that special sheen will become apparent. On a bike that others would prefer to adorn with lightweight alloy, John is prepared to put up with the present 410lb wet weight or even add to it because, he says, 'My objective has always been to put something together that would last a long time.' Since these photographs were taken he has obtained stainless spokes and nipples to lace into the original Dunlop alloy rims.

There's only one thing John regrets about his bike — he didn't build it all himself. The frame was originally a technical college project (there was talk at one time of it being a Lancaster University production, since discounted), and it has been crafted with great care and skill. The basis is a wideline Norton Featherbed, but the complete engine cradle and front downtubes have been cut away. Below the steering head a fabricated box supports a Vincent engine mount (from which the motor is suspended), an arrangement duplicated at the rear. Underneath the gearbox cut tubes are braced and welded to take the lower engine mount.

This — which virtually replicates both Vincent and Egli practice — is a most unusual format for a Norvin, and one which shows true engineering skill — and perhaps a bias in favour of the Vincent half of the hybrid. The simple fact is that the Vincent engine will not fit into the Norton frame. One or the other must be cut, and the most common cut was made to the rear engine mounting, which protrudes from the rear of the cases. Whoever

another Norvin



PHOTOGRAPHY ROD SLOANE

designed this frame decided that it was better to cut that component and support the motor in the manner to which it was accustomed. It also means that John can use the V-twin engine in a standard Vincent if he wishes.

There are other benefits — the original front stands can be retained, along with the cover (kept in place, of course, by a stainless bolt). Since there must have been more Norton frames manufactured than Vincent engines, it is the lesser of two evils — though doubtless ardent Nortophiles will disagree.

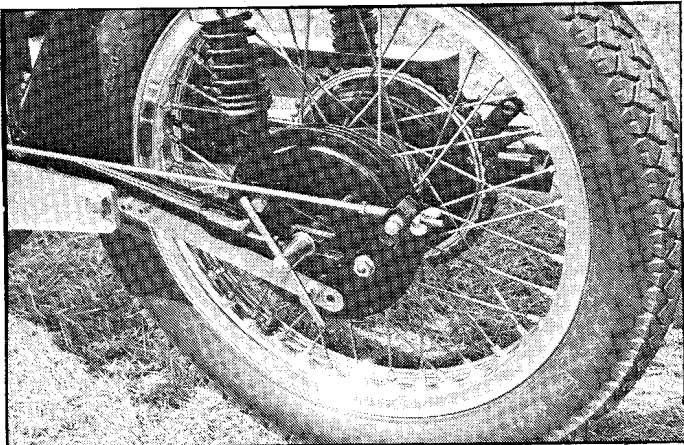
The owner does not let such trifles bother him — the attraction of such a machine is that it does not have to be original, because it is unique. Although he did not begin it, he has made this Norvin all his own, starting by rescuing it from a very dilapidated condition.

The bike came to him after years in storage. When the previous owner acquired it, it was in cracking condition, but then went through a sort of dark age; that owner will not talk about it, but it is believed that no-one could get the thing to start. A local

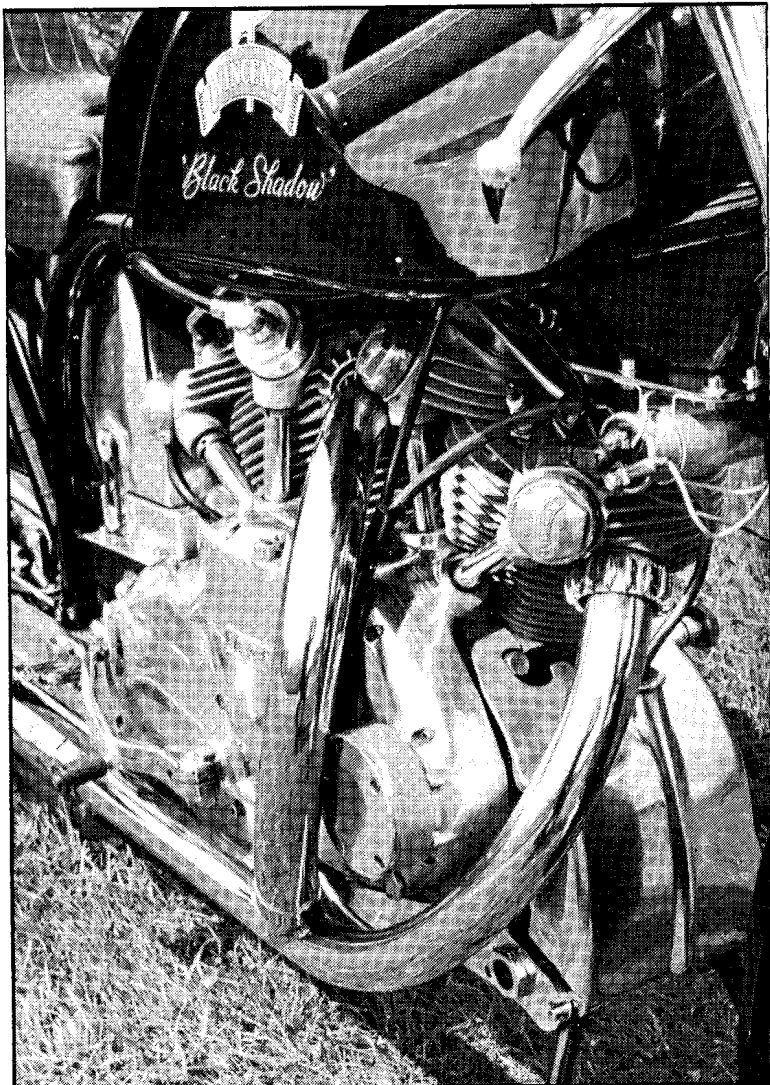
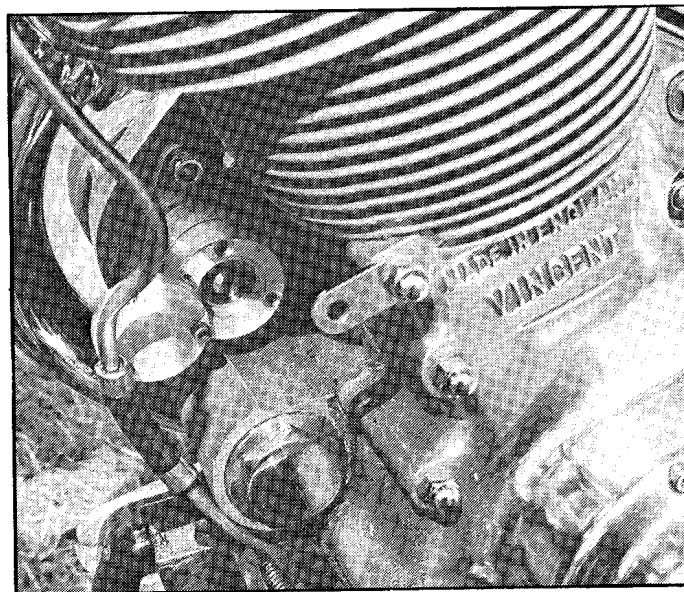
Jack-the-Lad had a go, putting twelve volts through the six-volt system, and even towing the beast behind a car, but in the six years of darkness it never once fired. Thrown to the back of the garage, it was spotted by John, and after a very protracted period of negotiation, the owner was persuaded to part with it.

On getting it home, John's first job was to see if he could make it cough at all. Jury-rigging the burned-out wiring loom, he managed — after trying for a long, long time — to get a bark from the motor; a very sick bark. He stripped the engine and discovered the piston in number one pot was breaking up. Fortunately, the rest of the unit had been put together with the same skill as the frame, so John had a sound base to work on, including Alpha bearing big-ends. The flywheels and rods were lightened and balanced, with pistons to match, these being Omegas giving a compression ratio of 7.5:1. 9:1s were tried for a while, but John found they took too much of the pleasant smoothness away — more horsepower at the top end, but less torque. He also tried out different cams, but finally settled on

Norvin



The standard Vincent rear wheel is retained, with its double-sided brake, operated by the original crossover system.



Above and left: Both sides of the Dolfin twin coil conversion, with manual timing control. A rev counter can be taken off the 'dead' side.

Above right: John is proud of his Norvin, which is unusual in that the standard rear engine mount has been retained.

Right and far right: Another goody is the footrest-cum-kickstart. Everything that can be, has been copied in stainless steel.

standard Mark Three items as the best compromise for power and flexibility.

The valves were left alone, but two front heads were fitted and gas-flowed: as Vincent buffs know, the standard rear head is a little thin around the exhaust port, and over-zealous flowing can break through the casting wall. Feeding the tracts is a matched pair of 32mm Amal Concentric (Mark 1) carburetors. These have been painted with a special gold paint, intended to keep expensive jet fighters from oxidising. John just happened to have some of this after his time in the Middle East, where he was tending same fighters, which he applied to the carbs, oil-lines and front brake.

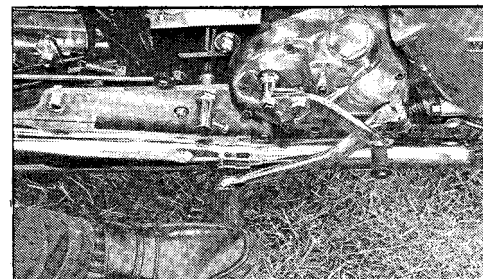
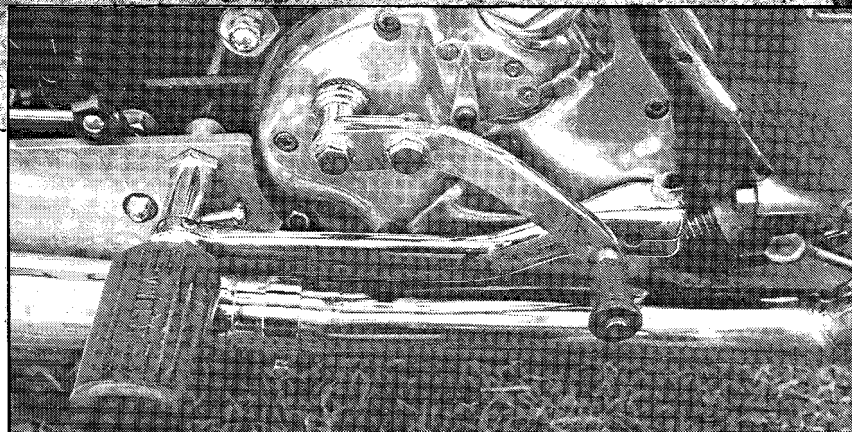
There are several unusual parts on this Norvin which John thinks were probably commercially available bolt-on goodies designed to appeal to the rockers who built these specials. The kickstart, for example, doubles as the right-hand footrest. Move a securing bolt to the left and the lever drops slightly, ready to pump the twin into life. Originally a chromed steel item, John copied it in stainless.

Another unusual part supplies the sparks. This is a Dolfin six-volt/twin-coil conversion, which has a manual advance/retard control and a rev-counter drive facility on the back. Once John had sorted the wiring and points, he discovered the Dolfin system works very well.

Taking the exhaust away is a siamesed stainless pipe, but the silencer is a chromed steel item, intended for a Moto Cuzzi. Armours of Bournemouth are currently considering making up a special silencer (in *that* material again) to John's specification.

Slotted into the Norton Roadholder fork is an AMC conical racing hub. The mudguard provides another instance of John's perfectionism. Originally plastic retained for its looks, John built a replica from an old alloy 'guard and two pieces of 6mm bar. This was twice as thick as the original — which had cracked several times across its mounting points — and reinforced with stainless steel plates. The result, according to its deviser, is excellent and no further problems have been encountered. 'It's a long way round to obtain a decent guard,' he commented, 'but mine must be better than anything mass-produced for pounds, shillings and pence.'

For a man with that attitude, this is the ideal bike. Not only can he continue to improve it in his way, he can also admire the way it was put together in the first place. The speedo drive arrangement is a good example. To retain the convenience of a quickly detachable rear wheel, the creator made up suitable spacers and simply slotted the thing in. But instead of leaving it there, he fitted Vincent front brake plates to the twin seven-inch rear drums, allowing the conventional Vincent speedometer drive to be taken off the rear wheel.



Twin drums obviously require twin operating rods, and the Black Shadow crossover system has been adopted. As with all good specials, details like this can be easily overlooked because they appear original. The brake pedal can be adjusted to almost any angle thanks to the serrated fitting. Incidentally, the footrest hangers are the one area where John discarded the idea of using stainless — the weight penalty would have been just too great on such a large sheet of metal.

Fear of upsetting purists is not one of John's attributes — which explains the contradictory (to those who have The Knowledge) tank transfers. These happened to be left over from two separate rebuilds and John fancied using them on his black, glass-fibre Manx-style fuel tank. Although this one looks nice enough, he has a pukka alloy tank finished in silver-grey, but it is slightly dented and therefore not good enough.

The crowning glory of the front end has to be that gigantic Vincent speedo, reconditioned and zeroed. It sits in a hand-made bracket, fabricated from John's favourite material just behind a neat flyscreen — also hand-made from perspex and — well, need I tell you?

The dual seat came with the bike, but it was re-covered by Reg Beale of Stroud. Situated near the front of the seat is a bung concealing the central oil tank filler, while the major part of the electrical system — which has been kept at six volts — lives in

the hump at the other end.

A weight of 410lb propelled by a tweaked Vincent twin should make for very exciting motorcycling. John professes to have been through the roadburning stage in his youth, but comments wryly that 100mph comes up easily and rapidly. 'Roadholding and handling's the name of the game,' he says, the understatement shining through in a broad grin. 'That's what it was built for, along with strong power and acceleration that leaves a black strip of rubber down the road.'

The black strip comes from an Avon blocktread Safety Mileage (or is it Speed Master?) Mark Two — a strange choice of tyre in these days of high-performance rubber. It is coupled with the traditional ribbed front tyre, a Dunlop. These tyres are in the true spirit of the machine no doubt, but personally I would feel happier with something a bit more grippy under me.

Sadly, I had no chance to try the handling for myself as the bike has been off the road for a while, untaxed. The reason is that John had a bad accident at work — he fell down a manhole. While that may conjure up visions of Laurel and Hardy movies, it was very serious, resulting in several broken ribs and a long period of taking things easy. Since starting a Vincent is hard at the best of times, John decided to give it a miss until fully mended. With luck the Norvin will be crobbing around the Lakeland fells this summer, dazzling in its stainless splendour.