

Snakebites

Classic road racer Olly Duke has always lusted after Roy Alexander's Velocette Viper Clubman. Roy lets him test the 350 single round Mallory Park. Jeff Thomson's standard Viper provides the yardstick

OLLY DUKE

photography: John Overton

Every detail of Roy's Clubman has been thoroughly thought out, right down to the drilled bolts and lightened rear brake torsion arm. This machine looks so cosseted you'd only expect it to be carefully ridden on dry, sunny days.

But Roy is no poseur and is prepared to crash in the pursuit of victory. To prove the point, the aircraft engineer shows me a bag full of trophies that he and his 1958 Clubmans Viper have picked up from race meetings. He's also prepared to take the concours winning Viper on the road come rain or shine.

To put Roy's pride and joy in perspective we're comparing it with fellow Scot Jeff Thomson's standard roadgoing 1960 Viper to show what improvements can be made.

On the track

THE ONLY MODIFICATION Roy needs to make before we are ready for the track session is to remove the fairing's trans-

parent nose cone and replace it with a race legal black nose that acts as a number plate. For race meetings he also removes the side stand.

A tickle of the carb, a twist of the air lever, a swing of the kickstart, and the high camshaft Clubman single starts pok-pok-pokking away. Despite increasing engine compression from the standard Viper 8.5:1 to 9.5:1, the powerplant is easy to prod into life from cold. "Keep it spinning at around six-and-a-half," shouts Roy as I pull off, "but when the red mist comes down I take it to seven!"

The first thing I appreciate about the Clubman is how user friendly the controls are. The clutch is light, the throttle responsive, the gearchange super-slick. And the engine is so smooth that as soon as the revs build up you forget you're on a single. This personalised package puts many modern, production singles to shame.

Although the engine has only been mildly tweaked, it's respectably fast for a 350. The speedo nudges past 90mph on the Stebbe Straight, the quickest part of Mallory Park. It takes time for the long stroke motor to build up steam and for racing purposes there's no

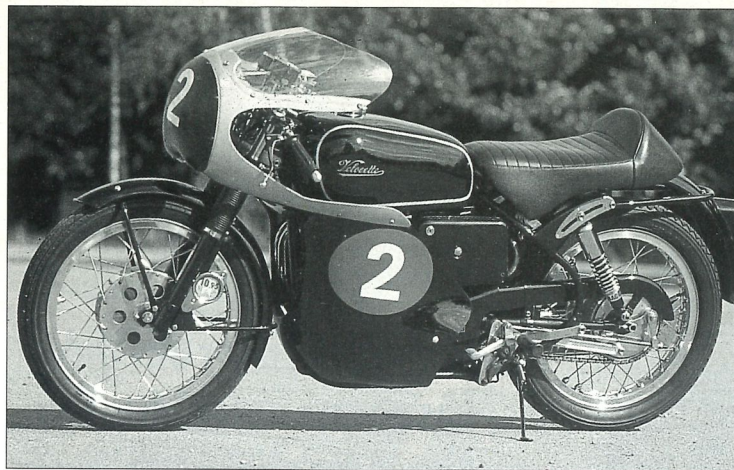
I've always wanted to ride Roy Alexander's Velocette Viper Clubman because his bike is impeccable and no other machine at Velo race meetings attracts so much attention as this 350.

We've competed against each other. Me on a borrowed 350 MAC with insufficient ground clearance, Roy on the Clubman. We finished first and second 350s in an event which also included 500cc Velocette Venoms.



Is the Velocette Viper Clubman (below) so very different from its standard stablemate? CB puts its hand in the Vipers' nest

◆ Velo Vipers road and race



Velo Viper Clubman flourishes under a keen throttle hand. But for pottering...

worthwhile power below 5000rpm, while the uphill gradients at the end of the long right-hander of Gerards and the exit to Lake Esses slow the bike appreciably.

Roy's Velo has to be ridden smoothly to get the best from it. The racer steers slowly but neutrally and predictably. Hagon shocks and double-damped forks cope well with the bike's limited braking ability and narrow tyres.

While I have to feed the front end into Gerards, the Esses and the Hairpin, the bike is easy to flick through the Bus Stop chicane and almost keeps pace with modern machinery through the slower bends. Roy's home made rearsets mean that lack of ground clearance is never a problem.

After four or five laps both the Avon racing rubber and the ventilated front brake overheat. The rear tyre starts squirming through the Esses, while the twin leading shoe set up becomes a means of slowing rather than stopping. The powerful but sensitive rear brake is a must when barrelling into the first gear Hairpin.

Roy has converted the four speed gearbox to race spec, with a tall first ratio that pulls the Viper

cleanly round the Hairpin, through the Bus Stop and on to Devil's Elbow. I don't hook up to fourth until about 100 yards from the entry into Gerards and then only change down one for the Esses, which carries me up to the Hairpin. Despite the Viper's lack of ratios, the broad spread of torque means the motor need never drop out of the power band.

Clip on handlebars, narrow fairing and a low seat make the bike feel like a real racer, the distinctive aroma of Castrol R means it smells like one, and the induction rasp and mechanical clatter make it sound like one. And in common with many highly strung race bikes, the Velo Clubman has its foibles — it sulks when hot and refuses to start.

On the road

"THIS ONE'S A GENTLE pussy cat," says Roy as he coaxes Jeff's standard Viper into life. Velocettes have a notoriously long winded starting procedure thanks to a quirky gearbox design where the kick-start lever connects with the layshaft rather than the mainshaft. Turning the engine through a high gear means it's difficult to get the flywheels spinning fast.

Roy Alexander claims his Velo has never been passed by a Goldie. Olly Duke tries to hold off a modern bike round Mallory Hairpin

Looking for points of comparison with the Clubman on Jeff Thomson's standard Viper

With its tighter tolerances the roadster sounds more muffled than Roy's Viper. There is no mechanical clatter and no induction rasp, and it is surprisingly quiet for an air cooled engine. It's also torquey and the bike gets under way swiftly thanks to a relatively short first gear.

This Viper is happy tooting along at low revs. Twist open the throttle and the 350 begins to behave more like a 500; push it hard and it gets into a revvy, sporty stride. Vipers will nudge 90mph on a good day, making them almost as fast as Velocette's larger Venom.

And just like Roy's engine, the standard unit is unusually smooth, with just a slight tingle in the handlebars. Narrow engine cases and the crank's large taper roller bearings make for a rigid bottom end, along with the heavy frame — identical to that of the larger Venom — helping to eliminate vibration. But unlike Roy's oiltight motor, Jeff's 350 sprays my left boot with a smattering of oil.

Vipers are always admired for their performance, but the softly sprung and

underdamped suspension of Jeff's standard bike is a drawback to riding fast down country roads. The forks have no rebound damping. Both front and rear suspension bounces around and upset the steering — ponderous and inaccurate at the best of times — through bumpy bends.

Jeff's Viper feels like a soft, touring version of Roy's machine. The 7in single leading shoe brakes are useful but not sharp, none of the controls are as light or precise, the engine is not as free revving. You sit on the bike rather than in it.

While Roy's Clubman likes nothing more than a good thrash, Jeff's bike is happier pottering through scenic countryside. So if you like sedate Sunday afternoon runs, the standard machine is the better option — it even starts in front of a crowd.

Speed merchants will prefer Roy's Clubman. With stunning looks, go faster goodies and lively performance, it's this boy racer's dream.

But there's a price to pay. The Viper



...the standard 350cc single makes a much better choice. Take your pick

Clubman is uncomfortable and suspension is unyielding on rough roads. You feel every bump. The riding position is cramped compared to the standard bike, but the Clubman is considerably faster and better braked. Roy says his machine will cruise all day at over 70mph, but admits that distances of over 50 miles are back breaking.

Snake charming

WHEN ROY STARTED racing in 1957, most lads rode to and from their meetings on their race bikes. "My first racer was a Velocette MkII KSS," says the 58 year old from Woodley in Berkshire. "But luckily I never had to use my bike both for the road and for racing. When I began this project I wanted to build a Clubman, because it epitomises the era."

Roy spent a year collecting bits at auto-jumbles. The frame came from a fellow Velocette club member, while the flywheels and conrod were given as payment for a job.

"The person who truly inspired me was Geoff Dodkin, who built the Dodkin Viper Special," adds Roy. "I used to take parts to him and he'd tell me what to do with them. Geoff is generous — he never

withheld information."

The complete build took Roy two years and his Viper was ready to race in 1987 for the annual Velocette club meeting, held at Cadwell Park. Here's what he did:

Powerplant

The standard Viper engine is a single cylinder, 349cc four-stroke, with a gear driven camshaft set high, short pushrods and twin overhead valves. It breathes through an Amal Monobloc carburettor and produces a claimed 27bhp.

Hairpin valve springs, rather than coil springs, are used to reduce the height of the tall engine and for ease of maintenance. If one spring breaks it can be changed at the roadside.

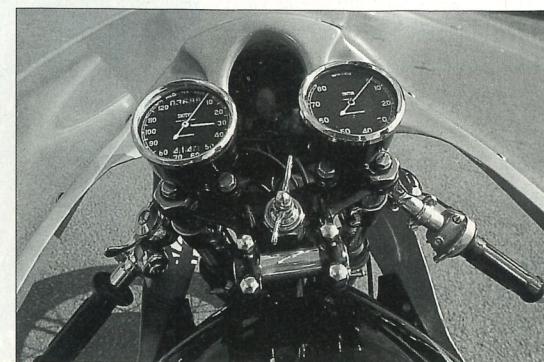
Roy lightened and polished his valve gear and fitted coil springs and Thruxton cam followers. Combined with fractionally lighter than standard one-piece pushrods, this gives better valve control so higher revs can be attained.

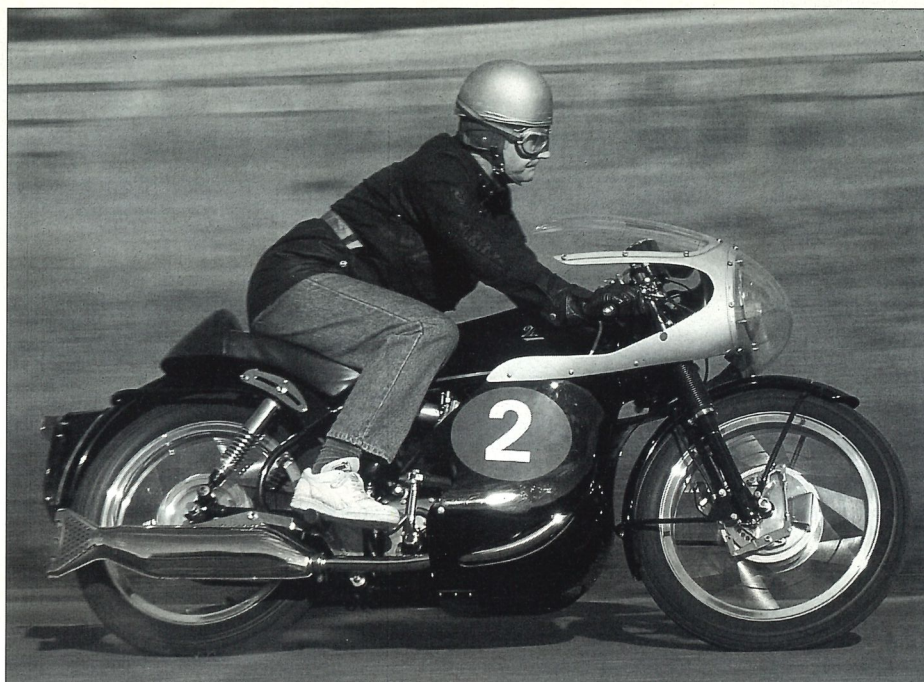
The conversion to coil springs is simple. Small grooves must be machined on the top of the cylinder head to accept the bottom of the springs, and top collars and collets have to be fitted.

The compression ratio of Roy's Clubman has been raised to 9.5:1, the maximum possible with a standard piston. The cylinder head is gas flowed and the inlet port is up from 1 1/4in to 1 1/2in. Roy uses a 50/50 four star and Avgas mix for racing, which he says makes a noticeable difference. I rode the bike on four star at Mallory Park.

The bottom end remains standard, although the flywheel and conrod assembly are balanced and polished, and the engine casings crack checked.

Smiths clocks sit on home made brackets. Speedo often sees the ton and rev counter seven grand





Roy's engine breathes through an Amal MkII Concentric, which is mounted on a 2in spacer for optimum gas flow. The exhaust system, complete with that beautiful fishtail silencer, is standard.

The wet clutch has been fitted with a roller thrust bearing rather than the usual ball bearing system — a common Velo-cette modification — and the 0.5 x 0.305in primary chain runs in a standard pressed steel oil bath. Roy built up a Velo-cette close ratio, four speed gearbox.

"I don't know how much power my engine puts out, but it's certainly a lot more than standard," says Roy. "The engine breathes better and it's much freer revving. And it has been utterly reliable. If you prepare your machine properly it should never break down."

Rolling chassis

ROY BOUGHT THE standard brazed lug Viper frame at an autojumble, but uprated the standard suspension. He fitted Hagon shocks and converted the telescopic forks to both rebound and compression damping, a normal Clubman conversion. The over the counter damping rods, which cost around £60, slot straight into the forks and allow the fluid to run both ways.

The fairing was made by a friend, who used an original Clubman fairing to make a mould and another mate copied a 4½ gallon Velo tank, as Roy was unable to buy one.

The rear brake remains standard, while

the front has been converted to twin leading shoe with an air scoop for extra cooling. Roy has fitted AM4 race linings in the front drum. The hubs were spoked to 19in WM2 alloy rims. Avon tyres are race compound; the rear is a GP 3.50 x 19in and the front is a Roadrunner.

Smiths revcounter and speedo decorate the top yoke and are mounted on black enamelled brackets, made by Roy. He also designed and fashioned the fairing bracketry, clever chap.

Roy crafted the rearsets and a lightened steel rear brake torque arm. And not satisfied with that, he countersunk and drilled most of the bolts, both to save weight and for looks.

The Clubman is beautifully finished, with great attention to detail. There isn't a speck of rust, a chip of paint, a stray wire. It's a work of art, a labour of love. Ray may be a perfectionist, but he likes his Velo-cette to live and be seen, and for that he will readily push it to the limits on the race track. Good man!

By contrast Jeff's road going Viper remains in standard trim, and without a massive rebuild behind it. It's all original and is in excellent condition.

Jeff, from Aldermaston in Hants, bought the bike three years ago and paid £2950 for it. "A lot of cosmetic work had been done, so it looked good," explains the 55 year old, "but I had to recondition the gearbox and I replaced the alloy cylinder with an iron pot."

Roy Alexander demonstrates his form on the Viper Clubman he built from spare parts



Try and find a speck of rust or chipped paint on this cosseted Clubman. Brake torque arm and rearsets are owner made

Other work needed to be carried out: new valve guides were fitted, and the compression was lowered to make the engine less stressed. "My Viper has been totally reliable," adds Jeff. "It's easy to start, ticks over nicely and the Miller electrics have been faultless."

Conclusion

IT MAY BE EASY to trot out superlatives, but Roy's Clubman deserves them. It looks the part and is thrilling to ride. It will top the ton and handles well until the tyres go off. It's a bike I'd be proud to own. Jeff's Viper is a sound, standard example. It doesn't turn heads, but for road riding it's a far more pleasant experience.

The Viper Clubman has never had the kudos of BSA's 350 Gold Star. Admittedly it is not as attractive and it lacks the same pose value, but the two machines are pretty equal in performance and reliability. Roy claims that he has never been overtaken by a Gold Star while racing, but that his Clubman has outperformed several Goldies.

I may love Roy's Viper, but I'm damned if I'm going to let him beat me when we next race! 

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