

THE FROGEYES



The original Austin Healey Sprite was a car that many would agree could stand some modifying. Designed to fill the gap left by the pre-war Austin seven sports cars the Sprite was not especially fast, certainly wasn't comfortable and even lacked a boot lid – you tipped the seats forward to load luggage.

So why were they so popular? A combination of chuckable handling and entertaining driving manners helped make them so endearing. A little brother to the Healey 3000, Frogeye Sprites were fun, cute and affordable – so they sold nearly forty nine thousand in the three years between 1958 and 1961. MG undertook design and development, and the Sprites were built at Abingdon alongside the MGA and Healey 100-6. The Frogeye (or 'bug-eye' in the States) moniker

came about after it was remarked that the headlights looked like the eyes of a frog poking up from just under the surface of the water – adding to the cuteness of the car. The trademark headlights were actually an afterthought as Donald Healey's original plan to have retractable

"The low purchase cost of the Sprite made it a popular choice for racing"

pop-up lights proved to be too expensive. The Frogeye became many people's first sports car and was also a popular choice for women who wanted something small and sporty of their own. The car was equally at home on either road or racetrack, the low purchase cost and

straightforward mechanical parts making the Sprite a popular choice for racers then and now. Many drivers trying to get into notoriously expensive motor sport racing found they could just about budget for a new Sprite. In the late 1950s and early 60s it was a common sight to see

a racer drive his Sprite into a club race meet. He'd then remove the four screws holding on the windscreen, empty

everything out of the interior and boot, and take to the track. True grassroots motor sport.

At one time the Healey works team had a driver named Stirling Moss racing a Sprite for them – wonder whatever happened to him?

But roadgoing Sprites were rarely quite as fast

HAVE IT!



Only made for three years, but now more popular than ever, the Austin Healey Sprite is a great basis for a fast usable sports car. Mike Renault finds four modified examples that make a good thing even better.



Photos by Phil 'they're really cute' Steinhardt

they looked. Under that curvaceous front was a 48cc in-line four engine that, along with most every other mechanical component on the car, came from BMC parts bins used for staid models like the Morris Minor and Austin A35. Aside from a little factory tuning, much of the performance came from the fact that the Sprite itself was tiny – it weighed a little over half a ton. After three years the Mk1 Sprite got a redesign with new front and rear styling, it got wind up windows, door handles and even a boot lid, but at the same time lost a lot of its character. A race-engineered version became available as the MG Midget, the cars often called 'Spridgets'. The Frogeye's 84mph top speed from just 4000rpm was credible enough at the time, but hardly a spectacular figure for today's roads. So

to keep up with modern traffic you need to indulge in a little tweaking.

ALAN COUCH - SPRITE 1098CC

"The first change you need to make to one of these," says Alan indicating his dark blue 1959

"I don't know what it is about them... I think their simplicity just appeals to me."

Frogeye, "is to upgrade the brakes." Alan has fitted discs to the front and a remote brake servo and reckons, "The stopping power is so much better now it really gives you more confidence." The Sprite is not a heavy car but in standard form the drum brakes are very prone to brake fade.

"The next improvement I made," remembers Alan, "was to fit a smaller steering wheel. The original one looked like it came out of a bus." Alan has had the new steering wheel machined so it retains the original centre. That's quite subtle, but certainly white leather wasn't

originally an option on the Sprite was it? "Well..." says Alan, "I just really liked the look."

Alan originally owned a Frogeye 34 years ago and never lost his fondness for the cars. "I don't know what it is about them," explains Alan, "I think their simplicity just appeals to me." Finding this 1959 model years later meant Alan was finally in a position to make it the car he always wanted. In ►

ALAN COUCH'S 1959 SPRITE



Frogeye Sprites suit wire wheels - these are from a later model. Interior benefits from modern additions like white leather upholstery and inertia reel seatbelts. Even in dark blue car is diminutive.



The Sprite was a very basic car. Note the complete lack of door handles - you leaned in and pulled a handle to gain access. Even front bumpers were an optional extra. MG

raided the Lucas parts bins for lenses so the tail-lights are the same as those fitted to the MGA, and the indicators are identical to those on the Triumph TR3A and London taxis to name but two.

PERFORMANCE

Power	59 bhp
Torque	65 lb ft
0-60 mph	13 sec (est)
Top Speed	95 mph

Modifications

Higher ratio differential, later model close ratio gearbox. Modified camshaft, freeflow exhaust manifold. Disc brakes on the front, remote brake servo, Kenlowe adjustable electric fan. Mk2 wire wheels.



1998 this car underwent a complete rebuild. "Literally every nut and bolt was replaced," explains Alan proudly. Essentially this car is a Mk2 Sprite with a Mk1 body, although it has been breathed on with an uprated camshaft, free flow exhaust manifold and higher ratio differential to dramatically improve acceleration.

Also improving the 0-60mph times is a close ratio gearbox. Improving the looks, meanwhile, is a set of 13 inch wire wheels from an MG Midget. "The beauty of these cars," explains Alan, "is that so many parts are available off the shelf and lots of newer cars contain parts that just bolt in." Other additions to this Frogeye include front bumper, tachometer, screen washers and a heater - but these were non-standard specification

options that were dealer-fitted when the car was new. That's a stark reminder of just how basic these little cars were when new.

JOHN CARRINGTON - 1293CC SPRITE

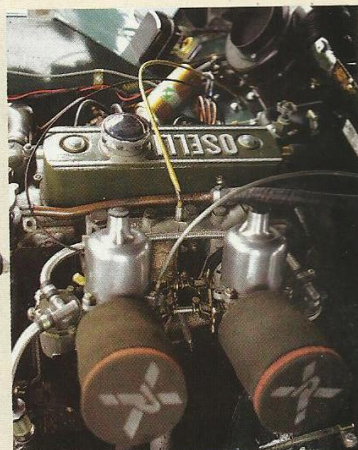
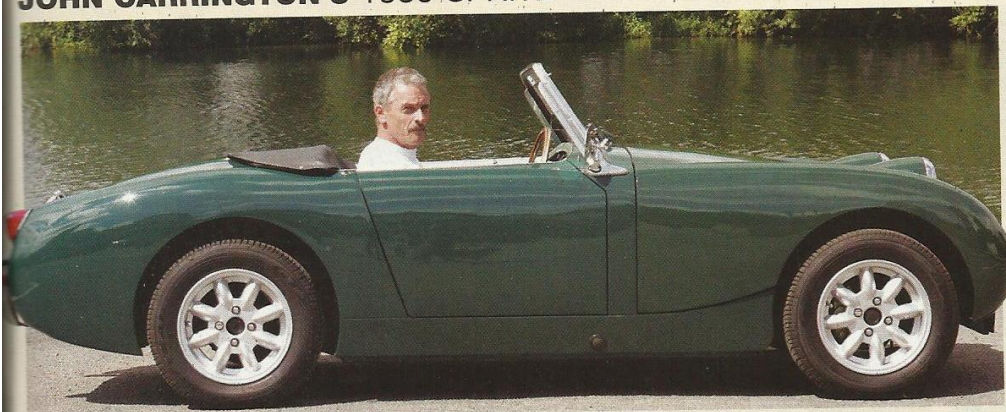
"It fills with water when it rains..." grins John, "and turns into a duck pond. Compared to a modern car it's very basic, and it really skips around on the bumps." I've just asked John if there's anything that he's not happy with on his 1959 Sprite, and after long consideration that was really all he could find to fault.

The 1293cc A-series Mini engine under the bonnet benefits from a fast road cam and stage two large valve head. Fully balanced it also has a lightened bottom end. The exhaust is an LCB

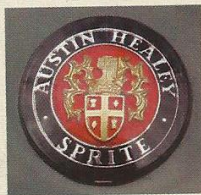
extractor system. As well as electronic ignition the Sprite has an electric fuel pump and Hi-torque starter. In common with the other car here a Kenlowe electric fan has been fitted.

But it's behind the engine that probably the most unusual part lurks. After some research amongst American Sprite specialists John found that the five speed gearbox from a Datsun 1000 would bolt into place with very little effort. The box even has the gearlever gate in the same place so the stick uses the existing hole in the floor - very useful to know. John reports no problems all using the Datsun box although he does point out that the Datsun parts are not as plentiful as they once were.

"But," explains John, "the Datsun unit is much

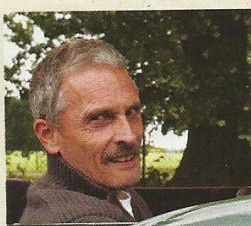
JOHN CARRINGTON'S 1959 SPRITE

Minilite wheels are a popular addition. Well thought out modifications mean John is not concerned about driving his Sprite long distances. Amongst other trips he has been to Vienna and Florence with the Euroclassic tour.



One unforeseen advantage of the Sprite's tiny size came on a club trip to France when John discovered the Sprite windscreen was

lower than the height of the barrier at a tollbooth. "No one was about and we couldn't see a camera," smiles John. "So under we went."

**Modifications**

The 1293cc A series engine has fully lightened and balanced bottom end, stage 2 large valve head, a fast road cam, twin 1.5 inch SU carbs, electronic ignition, electric fuel pump and a Hi-torque starter. An electric fan has been fitted. Standard suspension with 9/16 inch anti roll bar. Datsun 120Y five speed gearbox gives an 0.821 final drive ratio.

PERFORMANCE

Power	78 bhp
Torque	Not given
0-60 mph	Not given
Top Speed	scary above 90 mph



lighter than the equivalent Sierra one so unsprung weight is reduced, and I find that the Japanese box has a much smoother action."

And is John happy with the car's performance? "Well it accelerates fast enough but I'm not sure of the top speed," confesses John. "I start to get scared in it above 90mph."

CHRIS YATES - SUPERCHARGED SPRITE

It's got a van engine (a 1098cc from an Austin A35 van) and it's modified using almost entirely period parts. Chris' attractive Iris blue Frogeye might well look factory standard from outside, even down to retaining the original steel pierced disc wheels, but look a little closer and you'll spot a rare Shorrock boost gauge in the dashboard

that's a clue to the real nature of the car. Another giveaway is that winged badge on the front - a replica of the original Donald Healey supercharged one Chris bought from Australia.

This 1961 Sprite started its new life back in 1992

"a rare Shorrock boost gauge in the dashboard gives a clue to the real nature of the car"

with an almost complete Wheeler & Davies Stage 2 bodysell. Underneath, the modifications include the later 'ribbed' Mk2 spec gearbox and 3.9:1 final drive, front anti-roll bar, front disc brakes, and a 12G295 (Cooper) head. A specially fabricated exhaust manifold aides engine

breathing but the biggest change is of course the supercharger that runs in conjunction with a 1.5 inch SU Carburettor. Chris found that dropping the engine's compression ratio to 8.5 psi avoids any danger of detonation, and the blower runs most effectively with around four pounds per square inch of boost. Although the blow off valve kicks in if pressure ever exceeds seven PSI.

Chris revealed period sales literature showing the original cost of the supercharger was £122 - plus a £34 fitting fee. "They advertised it as turning the 1098cc performance into the equivalent of a 1500cc," reckons Chris.

Chris has also made an effective lockable

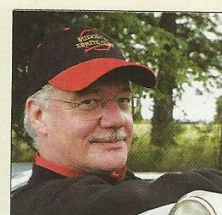
CHRIS YATES' 1961 SUPERCHARGED SPRITE



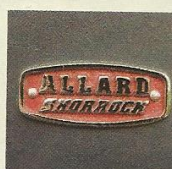
Supercharged badge (above) is replica of an original. Smaller Motolita wheel now fitted.



Shorrock supercharger is a positive oil fed C75B model. Modern ones are still available but originals rare.



"I do find people in modern cars want to race me."



Chris' Sprite works well because it has subtle period modifications, so to the uninitiated the car appears to be very standard. Even the supercharger is not as noisy as one might expect - you have to listen carefully to detect the blower's whine as the car zooms past. Chris has even elected to keep the original steel wheels.

Modifications

Chris' Sprite has a 1098cc engine with a period Shorrock C75B supercharger. It has a stainless steel exhaust and specially fabricated manifold. The brakes are uprated with 8.25 inch discs on the front and seven inch drums on the rear, there is also an 0.875 inch bore tandem master cylinder. The handling is tightened up with an anti roll bar on the front and rubber bushed mounts front and rear.

PERFORMANCE

Power	63bhp @ 4934 rpm
Torque	78lb ft @ 3200rpm
0-60 mph	15 sec
Top Speed	92 mph

compartment cover that fits behind the seats offering security for anything that has been left in the boot, which seems sensible idea for a car that spends so much time with the roof down.

The front suspension is the wishbone type with single armed double acting Armstrong lever arm dampers. Chris has added a 9/16 inch diameter anti-rollbar on rubber-bushed mounts. Keeping it all square to the road at the rear are quarter elliptic leaf springs suspended from the rear bulkhead mounting, again with double acting Armstrong dampers and rubber bushed radius arms. The car may be subtle but the performance isn't and it certainly holds the road well.

So are there any downsides to the car Chris? "I do find people in modern cars want to race me."

ALAN ANSTEAD - SPRINZEL SEBRING

There were only six coupes originally built by John Sprinzel, though only one of those is thought to have survived. John Sprinzel's Speedwell tuning company developed the aluminium bodied Sebring Sprite fixed head coupe. The cars competed in various races at Sebring and many rallies, including the Monte Carlo, during the early 1960s.

Built by Alan as a retirement project this Sprinzel coupe is a replica, but Alan has gone to great lengths to make it a convincing one - even down to the Sprinzel manufacturer plates on the sills. "I found them on eBay," smiles Alan. Alan's car has a fibreglass top that has been moulded off an original piece. "I waited two years for that

to arrive," remembers Alan, "and I hadn't realised how much it looks like the top from a Mk1 Lotus Elite. You can't help wondering if there was a Lotus parked nearby during the design process." The windscreen is unique to the Sprinzel and had to be specially made by Pilkington Glass. "I've got another one in the loft just in case," says Alan. Photographer Phil has taken a shine to the coupe suggesting "it looks like a little TVR."

On the front end is a fibreglass flip-front bonnet (the original Sebrings also had a fibreglass bonnet.) Differing from the original specifications is a five-speed gearbox from a Ford Sierra. "You really need that fifth gear on the motorway," explains Alan, and under the bonnet is a 1350cc A-series engine.

ALAN ANSTEAD'S SPRINZEL SEBRING COUPE REPLICA

This is a slightly more extreme example of what you can do to a Frogeye but it certainly is different and attracts attention. Alan's car has more of a race car feel

about it than the others but it is still a competent fully legal fast road car with excellent handling. The amount of fibreglass makes it comparably light in spite of the coupe roof.

Modifications

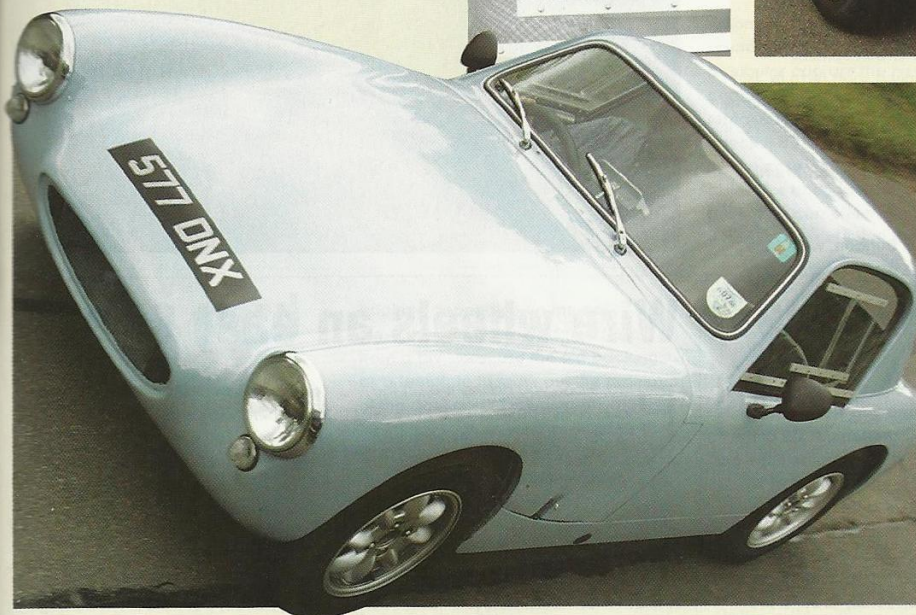
Alan's Sprinzel Sebring replica has a 1330cc with twin inch and a half SU carbs. Alan had added an Aldon distributor, plus a Manifold LCB manifold and exhaust system. The gearbox is a five speed Ford Sierra unit. Front brakes are vented discs and Greenstuff pads. The rear brakes are drums with a Sebring pedal box installed. The front is standard except for an anti roll bar, the rear suspension has lowered springs and Spax telescopic shocks.

PERFORMANCE

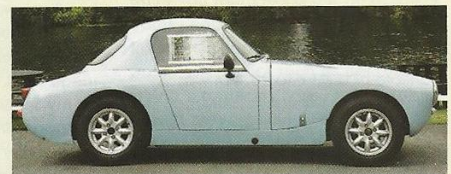
Power	92 bhp (est)
Torque	Not known
0-60 mph	Not known
Top Speed	approx 120 mph



The bonnet on Alan's coupe flips forward rather than being hinged at the windscreen cowl as on the standard Sprite, but there is still ample access to the engine. Sliding windows make toll booths fun.



Sprinzel coupe offers protection from the weather but is always going to be a hot, snug fit inside.



The best addition Alan has made is uprating the non servo assisted brakes "I used to get serious brake fade," laughs Alan, "and all through the build my wife was asking to have a drive of the car. When she finally did she screamed 'there's no brakes!' - well that put her off driving it." But Alan is not scared of using the car, even having taken it around the official Ferrari test track in Fiorano.

On the day it was all we could do to keep Alan and his Speedwell Blue coupe in a straight line. "He has a reputation for getting the back end out," laughs fellow club member John.

So it's a bit of a surprise to find that Alan has

never tested his Frogeye's top speed.

"I get 20mph per 1,000rpm," reckons Alan. "So, if we assume I generally rev it to 6,000rpm then, theoretically, I might get 120mph. I really must try it one day."

And as for a 0-60mph time? "Well a pukka

"But Alan is not scared of using the car, having taken it around the Ferrari test track in Fiorano."

Sebring did it in 10.8 seconds so I'd hope for a time only a little slower than that."

Certainly the coupe top greatly aided aerodynamics on the original Sebring race cars, so who knows?

CONCLUSION

Watching these tiny vehicles hurtle down the country roads I can really see the appeal of the Frogeye - they are fast and attractive and, with some modification, very usable. Chris compares the Frogeye to a modern Mazda MX-5: sporty, popular, tuneable and affordable. If you are not afraid to use modern parts there is a real wealth of readily available bits you can fit or adapt. 🏁

Thanks to:

The four Frogeye Sprite owners. Terry Horler & David Wright of the Midget and Sprite Club (www.mgcars.org.uk/midgetspriteclub) The St. George & Dragon public house, Henley on Thames for the main location.