

Richard Lamotte's ambition to own a Mk1 Cooper S can be traced back to the 1980s, when he bought an as-new Special Tuning Stage 3 cylinder head.

Words: Monty Watkins. Photos: Jim Jupp.

on Austin-Healeys and Frogeye Sprites. No staggering around the Student Union bar for him. "Then I started on Midgets. I had a company called Bits of Midgets. One year I had 27 different Midgets. That was the A-series obsession. I still have four Frogeyes, two Midgets and two Minis. My first Mini was a 1974 1275GT. I broke it, completely."

Having taught himself all the secrets of Longbridge and Abingdon's finest A-series phenomenal how much better you can make them go. The period look is important too. I'd never put wheel arches on: absolute sacrilege! The Special Tuning head I've had since the 1980s. It was basically brand new and it was always on my mind to put it on a Cooper S."

Well, that was certainly a start and he was able to spend nearly 30 years considering the Cooper S that he might one day own. By the time he could afford such a car, they were very from when he was a customer of Mainly Minis in Edinburgh. The chap who ran Mainly Minis was a friend of mine as I ran Mainly Midgets. Simon sourced the car and built it for me. I like all the period modifications such as the Shorrock superchargers and the Downton stuff. We set the specification of getting the right sort of shell. I built the engine, he built the box. He's done the detail, all of the Mini stuff, as he knows more."

Richard was pleased to hear that Simon had



found a fabulously well preserved Cooper S. "It came from an ex-mechanic in Wales, who was getting a bit old for it. It did need significant tidying up. The bare body was there, ready to be improved. It was in good condition for its age. The doors are original and didn't need repair. Outer sills needed doing to make it perfect. There were a couple of bits of rust on the inner wings that were cut out and replaced but, if you look at the car, it doesn't look like it's ever been welded anywhere. The key is to start with something that's good and reasonable and all there." In fact, the engine came from a separate source, and the gearbox was a later all-synchro S box, but the good bodyshell was a great starting point. They weren't going to restore it with its original Hydro suspension so the subframes were also replacements.

At last he was able to retrieve the new old stock ST cylinder head and build up the short block by himself. His approach was to create an A-series capable of good performance and high revs. A monster 45 DCOE 9 Weber carb is a clear statement of that intent. There are many variations on the Weber 45 DCOE theme and many of the differences are aimed at achieving refinements in tickover and part-throttle performance for different types of engine. Richard and Simon felt that the '9' variant was a good match for the Stage 3 head and the Kent 296 cam. Despite the 11:1 compression ratio, the head was not modified with hardened exhaust valve inserts so a fuel additive must be used to slow down the rate of valve seat recession.

Also in recognition of their high-revving role, the reciprocating engine components have been carefully chosen and well balanced. Arrow crank and rods, forged pistons and an Ultralight flywheel are sensible modifications for an A-series engine in race trim. The overall set-up is not something that you'd want for a Mini for frequent road driving although Richard comments that the Kent 296 is "the fastest road cam that's still driveable." Using the short inlet manifold and the MED two-stage short trumpets, the Weber could be fitted without having to remove any steel from the front bulkhead panel. "I modified the









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manifold. I think all the aftermarket linkages for Webers are really ugly so I welded these up-stands and put the bar across the top and made the linkage. I think it looks neat."

While Richard was assembling the short block, Simon was sorting out the rest of the S. "What I like about the way Simon does stuff is that he does it to the *n*th degree. The speedometer has been stripped, degreased and re-electroplated. Every nut and bolt has been electroplated or renewed so it's effectively a new car with minor changes. His attention to detail is phenomenal. There's nothing that's been put back that shouldn't have been. Every bolt has got a spring washer and a proper washer." In the cabin, all looks reassuringly standard but you'll notice the modified central dash pod. This is a Broadspeed component designed to incorporate the tachometer that many S owners originally fitted on the lower dash rail or on the steering column. A flat Springall steering wheel is the only other obvious departure from standard.

Outdoors, there are a few nods to the Works-look, with a bonnet sticker instead of a number plate and the Lucas spotlamp on the boot lid for reverse. Emphasising the racing identity of this S, and Richard's abhorrence of wheel arch extensions, Mini Spares Rose Petal alloys have been fitted. These are 4.75x10 so they are about as wide as you can go without requiring arch extensions. Yoko A008s complete the subtle race transformation. »





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It was completed in the Spring of 2012 but there had been a few slight complications behind the scenes. "I didn't tell my wife, Fiona, I had this for about two years. I think she thought I was having an affair in Edinburgh with all the money I was taking out the cash machine. She likes driving it but I'm not sure she likes it. I promised her a road trip to Europe and she was delighted, as long as it wasn't in the Mini." And one or two mechanical problems surfaced initially. "Some of the aftermarket parts, like the synchro rings on the gearbox, caused us some problems but now it's going OK. I've blown three flasher units."

He has chosen to install a lambda sensor takeoff on the exhaust manifold so the mixture can
be analysed in real road conditions. "I might put
a sump guard on to save the underneath and I
am fitting Contour seats – Microcells. I've had
them done in leather for comfort." The restored
S achieved Car of the Day at the Prescott
Hillclimb and Richard can be very pleased with
the Cooper S that he always wanted. And now
he has somewhere to keep that ST cylinder
that was knocking around for so long.

**MiniWorld** would like to thank: Richard and Fiona Lamotte, and Simon Drew for their help with this feature.

## **Technical Specification**

Modified Mk1 Austin Cooper S

- **▶▶ Engine:** 1310cc (bored +0.040-inch) Cooper S A-series 11-stud head . 12G940/12G1805 BL ST Stage 3 S cylinder head. ARP head/thermostat stud/bolt kit. Keith Dodd 1.3:1 rockers, steel spacers. MED steel pushrods. 11:1 compression ratio.single Weber 45 DCOE 9 carb. modified Maniflow short inlet manifold, servo take-off.custom throttle linkage system. MED dual-stage trumpets, no filters. braided fuel hose. no PCV system. rocker cover vented to offside. Kent MD296 camshaft . Maniflow Stage 2 LCB, lambda sensor socket. Maniflow single-box side-exit system. Australianmade lightweight offset-key timing gear assembly . Arrow steel crank. Arrow steel H-beam connecting rods. Omega forged pistons, matched to 0.01g. MED Ultralight flywheel. 13-row oil cooler. Lucas points ignition. later type S radiator. 4-blade steel radiator fan . Lucas C40 dynamo . negative earth , prepared by Richard Lamotte
- **>> Gearbox:** Manual all-synchro four-speed S remote shift box . straight-cut gear set . standard skew-cut drop gears . cross-pin differential . 3.76:1 final drive ratio . Hardy Spicer universal joints . AP bonded race clutch, diaphragm type . prepared by The Mini Works
- **>> Brakes:** Cooper S standard single-circuit Lockheed brake master cylinder. Lockheed Type 5.5 vacuum servo. copper brake pipes. Aeroquip hoses. DOT4 conventional brake fluid.

- Front S-spec solid 7.5-inch discs . Lockheed twin-pot calipers . EBC Green Stuff Kevlar pads . Rear: S-spec spacer drums . standard brake shoes
- >> Suspension: converted from Hydrolastic to dry rubber suspension . Hi-Los . Koni adjustable gas dampers . 1.5-degree negative camber front lower arms . poly bushes . replacement dry subframes . suspension components powder coated
- **Wheels/Tyres:** Mini Spares Rose Petal alloys 4.75x10. Yokohama A008 165/70x10 72H tyres
- ▶ Interior: Red trim and carpets . grey/gold brocade . black vinyl for dash area, A-pillars . fresh air heater . Broadspeed enlarged dash centre pod . standard S instruments: 130mph speedometer, water temp, oil pressure . additional Smiths 8000rpm electronic tachometer . standard S non-recliner front seats . lap/diagonal non-inertia seatbelts . Springall three-spoke leather-bound steering wheel . new S-pattern wiring loom . twin fuel tanks . S boot board . Works-style plastic rear screen demist panel
- **>> Exterior:** 1967-registered Mk1 Cooper S bodyshell . minor rust repairs . outer sills replaced . standard S brightwork . quick-release grille buttons . Lucas reverse/spot lamp . front number plate sticker . stonechip . Tartan Red (RD9), black roof (BK1) . 3M Cavity Wax rust-proofing . restoration by The Mini Works near Edinburgh, Scotland