



**DOWNLOAD THIS IMAGE  
TO YOUR MOBILE**

Simply text MINIPIC followed  
by a space and the order code  
672262 to 86611 (ie, MINIPIC  
672262 to 86611).

Texts cost £1.50 per download  
plus standard network charges.  
To check compatibility, go to [www.  
checkyourphone.co.uk](http://www.checkyourphone.co.uk).



It's got the  
**WORKS!**



Simon Drew has owned his '64 Cooper S since 1989 and carefully hunted for bargain BMC Works parts to turn it into a period-looking replica on a very tight budget

**Words and photos: Rob Hawkins** ↘

**OWNER** Simon Drew

**Occupation:** Engineer and car restorer.  
**Dream job:** To open a Mini restoration centre.

**Dream cars:** Works Mini and Audi RS6.

**First car:** '66 Mini Cooper (MUP 283D) for £2,000. Sold it and don't know what happened to it. Anyone know?

**Previous cars:** Too many Minis and Citroëns!

**Current collection:** '62 997 Cooper, August '59 Morris Mini 850, '60 Downton 850, original '64 Cooper S, '63 1071 Cooper S, '72 Pick-up.

**Car related skills:** Engineering degree.

**Partner's opinion on Minis:** I thought Minis were uncomfortable until I took a trip to Aberdeen in this one. It was like a mini-cockpit, and I even fell asleep!

**Worst job on a Mini:** Front suspension rubbers.

**Next job on your Mini:** Lower the suspension and sort the brakes.

**Member of a Mini club?** Mini Cooper Register.

**Favourite car chase film:** *Goodbye Pork Pie* (filmed in New Zealand and all about a stolen Mini).

**Favourite TV channel?** Discovery.

**Favourite Mini suppliers?** Mini Machine and Mini Spares.

Period Irvin four-point harness for the navigator. Driver has a lap and diagonal. Below: co-pilot's lamp and other navigation aids



Works Lucas washer bottle sits in passenger footwell area



Scotsman Simon Drew's once-'64 Cooper S has yet to be restored, thanks to a 'shell full of Waxoyl. Despite such originality, he hasn't been put off from venturing down the Works replica route and adding as many period items as possible. The attention to detail is impressive. Take the rear subframe, for instance. It's double-skinned and seam-welded, and has a towing hook, just in case he should get too close to a ditch!

The 200kmh Smiths speedo features an early style of needle that was designed to dampen vibrations. Similarly, the gearstick is covered with rubber, also to absorb vibrations.

If you look inside the passenger's door pocket, you'll find a switch panel with a map light, wiper and washer switches, cigar lighter and two-pin plug. All the Works rally accessories are present, including the now-expensive Heuer stopwatches and Halda Tripmaster.

So what's the final bill for such a high spec? He bought the Cooper

S in December 1989 for £2,500. He reckons he's spent no more than £3,000 on maintenance and parts over the last 16 years. But how? The initial purchase price was cheap and was accompanied by some of the existing race parts. "It was supposed to have been raced in the Seventies, as it still carried the original Aley Bars three-point rollage," Simon explains. "I still have the old FIA certificate dating back to that era. It already had the correct reverse light and sump guard and was shod with rally tyres." The Works seed was well and truly sewn, and over the years, the quest to get it as close as possible bit hard.

Bargain buys over the years include the Heuers, a Halda and the Irvin harnesses, which came from London in 1991. At just over £200 for the lot, "I promptly drove straight down and bought them with my first student grant cheque," recalls Simon. "The clocks and genuine Irvin harness are rumoured to have come out of a Works Mini that was

campaigning in New Zealand."

Those Microcell seats were a swap for a Special Tuning lamp bar with spots. Autojumbles have also been a good source, along with his friend Dave Greaves, who can identify a Works part blindfolded!

Where genuine parts could not be found, Simon resorted to making his own: "The dash panels were measured off Works originals. Some of the bits were fiddly, like the front subframe, with its special beefed-up tie-bar mounts which are all skidded to prevent them being ripped by rocks when you are hooking those rough corners."

Simon also made up his own handbrake skid shields and drilled out the rear drums and backplates. These are said to be typical Works mods. "One job that did take a long time was getting the best out of the H4 carbs and manifold," he remembers. "Big improvements to the flow of the SU can be made internally, as can the manifold. A lot of hours were spent with a die grinder, sculpting internal porting



Simon Drew would like to thank his family for putting up with him and his Minis over the years; his girlfriend for suffering it day in and day out; and Dave Greaves, Kevin Murray, Graeme Allan and Aldrian for their help along the way.  
 MiniWorld would like to thank Knockhill Racing Circuit [+44 (0)1383 723337, www.knockhill.com] for the use of their track to photograph Simon's Works lookalike.



Works timing essentials include Halda Tripmaster and Heuer clocks



Smiths speedo has markings for mph. Early needle is designed to dampen vibrations

## "I still have the old FIA certificate"



### NEED TO KNOW

**Works Minis:** If you want one, be prepared to pay in excess of £40,000.

**Get the knowledge:** Join Mini Cooper Register [www.minicooper.org](http://www.minicooper.org) and ask their Works experts.

**What's that thing stuck on to the rear glass above?** The ingenious BMC anti-mist panel is plastic or acetate stuck to the inside of the screen with draught excluder or two-sided tape.



Simon has saved, scrounged and collected for years to construct his Works interior



Both front Microcell seats cost Simon a Special Tuning lamp bar

## WRITER'S OPINION

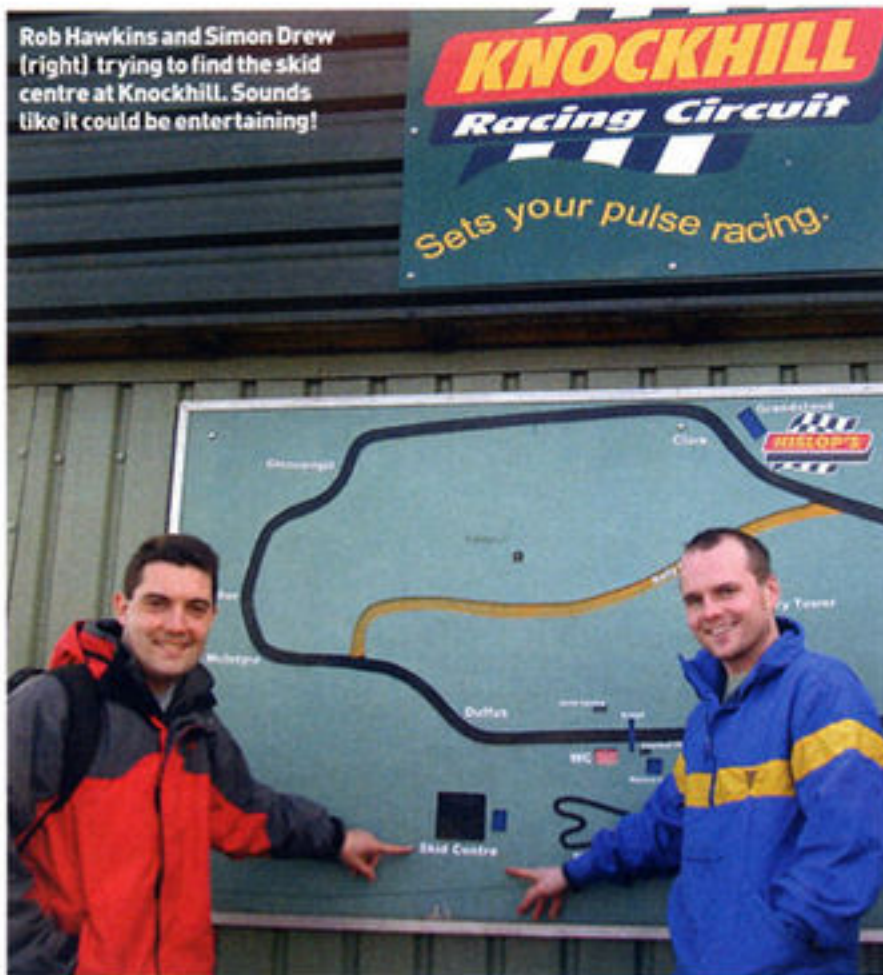


"If I had the time and resources, a Works lookalike such as

Simon Drew's has got to be one of my ultimate must-haves. Simon has created a nostalgic work of art that drives as good as it looks."

to increase airflow to some 20cfm or more. Well worth the effort."

The biggest struggle was the wiring loom. He wanted to use 16 or more fuses so he had to take his time. "Gradually, I laid the loom out wire by wire from the original Lucas wires and pieced together the great mystery of a Works wiring loom," he admits. "Every spade and bullet is not only crimped, but soldered for extra reliability. Once the loom is in the car, it does not come out unless you cut it out!"



Rob Hawkins and Simon Drew (right) trying to find the skid centre at Knockhill. Sounds like it could be entertaining!

On the road, he isn't shy about pushing this Mini to the limit. The suspension has been refined with Bilstein dampers and standard rubber so it doesn't crunch over the rougher Scottish country lanes. He confidently winds the highly tuned 1330cc A-Series up to 7,000rpm in each gear [the Works rally cars were usually 1293cc]. He approaches corners at an alarming rate before he stabs hard on the brakes but the servo-assisted Cooper S discs up front are enough. As we head over a crest,

he knows this road well and tries for a take-off. We manage a slight stomach drop and we try again.

It's only later that I discover that he hasn't always been so lucky in the 16 years he's developed and driven this Works lookalike. With two Monte Carlo trips and a lap or two of the Nürburgring, this Mini has seen some action. On the 'Ring, "It span out and went on two wheels, which scared my dad to death, as he was co-piloting at the time," says Simon. "Other near misses include a near somersault at 90mph over a jump on the A93, where the car landed so hard on its nose that it bent the steel sump guard hard against the front panel and snapped the exhaust."

Simon's currently doing battle with his brakes, which don't feel as good as expected, despite having stripped everything down, including the servo. "It feels a bit light on its loafers at present," he comments.

Living with Scottish weather, he has been lucky to escape a restoration. Credit is also due as a result of his attention to detail with period modifications. "I have tried to keep the car how it would have been back in the Sixties," he explains. "It certainly proves difficult getting the best out of period parts, but that's part of the challenge."

## WORKS INSPIRED



Discussions still echo up and down the dusty corridors of the Mini Cooper Register about what is and isn't genuine on a Works Mini, but Simon has simply gone for the look and sourced some of the right bits as and when he could find them. Aesthetically, it's a very pleasing car.

## 1964 Cooper S Works replica

**Engine:** 1275cc A-Series . 60-thou overbore to 1330cc . +0.060" Omega offset-dish pistons . balanced 1275 S crankshaft . con-rods . 649 camshaft . Special Tuning Cooper S lightened timing gear . race-spec MED AEG 163 cylinder head . 1.5:1 Mini Spares roller rockers . bronze valve guides . race valve springs . twin H4 SU fully worked carburetors . Works steel ram pipes . Cooper S alloy inlet manifold modified to fit 1.5in carburetors . twin electric SU fuel pumps . Downton exhaust manifold . single 'box' Janspeed centre rear exit . skid plates on manifold join . Cooper S high-capacity water pump . enlarged ports . two-blade metal mechanical cooling fan . Mini Spares Super-cool two-core radiator . Cooper S 13-row oil cooler . HA 12 coil . Lucas 23D4 40979 competition distributor . Lumenition Magnetric ignition . Lucas competition copper-core HT leads . Works-type plug caps . Champion N64Y spark plugs

**Gearbox:** four-speed, straight-cut . no synchromesh in first . central oil pick-up pipe . 3.76:1 final drive ratio . cross-pin diff . MED billet steel lightened flywheel . backplate . AP bonded clutch . stronger diaphragm

**Brakes:** Cooper S servo-assisted . silicone brake fluid . internal brake lines . front Cooper S grooved discs . Cooper S two-pot callipers . EBC Green Stuff pads . Cooper S drilled drums . backplates . standard brake shoes . skidplates fitted to handbrake brackets

**Suspension:** Bilstein dampers . rubber cones . front subframe fully skidded . strengthened to fit Scottish Rally sump guard . front Special Tuning negative camber bottom arms . standard Cooper S top arms . tie-rods . double-skinned . seam-welded rear subframe . towing eye . standard radius arms

**Wheels and tyres:** 4.5x10 Magnesium Minilites . Yokohama A008 165/70x10

**Interior:** Microcell fixed bucket driver's seat . reclining navigator's seat . red/grey/gold rear seat . red felt carpets . Irvin lap/diagonal seatbelt for driver . four-point harness for navigator . fly-off handbrake . Works 200kmh Smiths speedo . 10,000rpm Smiths tachometer . 30-30 ammeter . twin Heuer eight-day rally clocks . Halda Twinmaster . Moto-Lita flat 14in steering wheel . duplicate switches for navigator . additional cigar lighters . column-mounted headlight dip switch . dash-mounted headlight flash switch . foot-operated horn switch for navigator . intercom system for inboard communication . Helphos navigator's searchlight . Aley Bars three-point rollcage

**Exterior:** Mk1 Cooper S 'shell painted in cellulose Red with black roof . two Lucas Continental 7in-diameter . three 5in-diameter fog lights . quartz iodine bulbs . boot-mounted Lucas reversing light . chrome sill strips . Stadium clip on overtaking mirror . heated Triplex windscreen . BMC 'no mist' panel on rear window